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SAR EVALUATION REPORT

Applicant Name:
Samsung Electronics Co., Ltd.
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Gyeonggi-do, 16677, Korea

Date of Testing:
05/18/20 – 07/11/20
Test Site/Location:
PCTEST, Columbia, MD, USA
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1M2005040080-01-R1.A3L

FCC ID: **A3LSMF707U**

APPLICANT: **SAMSUNG ELECTRONICS CO., LTD.**

DUT Type:	Portable Handset
Application Type:	Certification
FCC Rule Part(s):	CFR §2.1093
Model:	SM-F707U
Additional Models:	SM-F707U1, SM-F707W

Equipment Class	Band & Mode	Tx Frequency	SAR			
			1g Head (W/kg)	1g Body-Worn (W/kg)	1g Hotspot (W/kg)	10g Phablet (W/kg)
PCE	GSM/GPRS/EDGE 850	824.20 - 848.80 MHz	0.20	0.30	0.72	N/A
PCE	GSM/GPRS/EDGE 1900	1850.20 - 1909.80 MHz	< 0.1	0.27	1.08	2.11
PCE	UMTS 850	826.40 - 846.60 MHz	0.46	0.50	0.83	N/A
PCE	UMTS 1750	1712.4 - 1752.6 MHz	0.16	0.74	0.79	1.83
PCE	UMTS 1900	1852.4 - 1907.6 MHz	< 0.1	0.86	1.09	2.61
PCE	CDMA/EVDO BC10 (§90S)	817.90 - 823.10 MHz	0.42	0.52	0.77	N/A
PCE	CDMA/EVDO BC0 (§22H)	824.70 - 848.31 MHz	0.45	0.52	0.93	N/A
PCE	PCS CDMA/EVDO	1851.25 - 1908.75 MHz	< 0.1	0.55	0.76	1.85
PCE	LTE Band 71	665.5 - 695.5 MHz	0.24	0.31	0.47	N/A
PCE	LTE Band 12	699.7 - 715.3 MHz	0.29	0.34	0.52	N/A
PCE	LTE Band 13	779.5 - 784.5 MHz	0.28	0.31	0.48	N/A
PCE	LTE Band 14	790.5 - 795.5 MHz	0.26	0.24	0.42	N/A
PCE	LTE Band 5 (Cell)	824.7 - 848.3 MHz	0.31	0.44	0.72	N/A
PCE	LTE Band 26 (Cell)	814.7 - 848.3 MHz	0.33	0.39	0.62	N/A
PCE	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	0.16	0.78	0.83	2.08
PCE	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A	N/A	N/A	N/A
PCE	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	0.11	0.90	1.03	2.05
PCE	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	N/A	N/A	N/A	N/A
PCE	LTE Band 30	2307.5 - 2312.5 MHz	< 0.1	0.42	1.35	2.13
PCE	LTE Band 7	2502.5 - 2567.5 MHz	< 0.1	0.39	0.67	1.31
CBE	LTE Band 48	3552.5 - 3697.5 MHz	0.56	0.20	0.46	N/A
PCE	LTE Band 41	2498.5 - 2687.5 MHz	0.12	0.36	0.63	0.88
PCE	LTE Band 38	2572.5 - 2617.5 MHz	N/A	N/A	N/A	N/A
PCE	NR Band n71	665.5 - 695.5 MHz	0.18	0.25	0.38	N/A
PCE	NR Band n5	826.5 - 846.5 MHz	0.27	0.34	0.47	N/A
PCE	NR Band n66	1712.5 - 1777.5 MHz	0.16	0.75	0.86	2.17
PCE	NR Band n25	1852.5 - 1912.5 MHz	0.10	0.53	0.67	1.15
PCE	NR Band n2	1852.5 - 1907.5 MHz	N/A	N/A	N/A	N/A
PCE	NR Band n41	2506.02 - 2679.99 MHz	0.41	0.12	0.37	N/A
DTS	2.4 GHz WLAN	2412 - 2462 MHz	0.70	0.15	0.62	N/A
NII	U-NII-1	5180 - 5240 MHz	N/A	N/A	N/A	N/A
NII	U-NII-2A	5260 - 5320 MHz	0.27	< 0.1	N/A	1.20
NII	U-NII-2C	5500 - 5720 MHz	0.37	0.19	N/A	1.45
NII	U-NII-3	5745 - 5825 MHz	0.34	0.19	0.40	N/A
DSS/DTS	Bluetooth	2402 - 2480 MHz	0.43	< 0.1	0.22	N/A
Simultaneous SAR per KDB 690783 D01v01r03:			1.54	1.55	1.59	3.99

Note: This revised Test Report (S/N: 1M2005040080-01-R1.A3L) supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE C95.1-1992 and has been tested in accordance with the measurement procedures specified in Section 1.8 of this report; for North American frequency bands only.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them. Test results reported herein relate only to the item(s) tested.

Randy Ortanez
President

The SAR Tick is an initiative of the Mobile & Wireless Forum (MWF). While a product may be considered eligible, use of the SAR Tick logo requires an agreement with the MWF. Further details can be obtained by emailing: sartick@mwfai.info.

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1 DEVICE UNDER TEST

1.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
GSM/GPRS/EDGE 850	Voice/Data	824.20 - 848.80 MHz
GSM/GPRS/EDGE 1900	Voice/Data	1850.20 - 1909.80 MHz
UMTS 850	Voice/Data	826.40 - 846.60 MHz
UMTS 1750	Voice/Data	1712.4 - 1752.6 MHz
UMTS 1900	Voice/Data	1852.4 - 1907.6 MHz
CDMA/EVDO BC10 (§90S)	Voice/Data	817.90 - 823.10 MHz
CDMA/EVDO BC0 (§22H)	Voice/Data	824.70 - 848.31 MHz
PCS CDMA/EVDO	Voice/Data	1851.25 - 1908.75 MHz
LTE Band 71	Voice/Data	665.5 - 695.5 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 14	Voice/Data	790.5 - 795.5 MHz
LTE Band 5 (Cell)	Voice/Data	824.7 - 848.3 MHz
LTE Band 26 (Cell)	Voice/Data	814.7 - 848.3 MHz
LTE Band 66 (AWS)	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4 (AWS)	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25 (PCS)	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2 (PCS)	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 30	Voice/Data	2307.5 - 2312.5 MHz
LTE Band 7	Voice/Data	2502.5 - 2567.5 MHz
LTE Band 48	Voice/Data	3552.5 - 3697.5 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
LTE Band 38	Voice/Data	2572.5 - 2617.5 MHz
NR Band n71	Data	665.5 - 695.5 MHz
NR Band n5 (Cell)	Data	826.5 - 846.5 MHz
NR Band n66 (AWS)	Data	1712.5 - 1777.5 MHz
NR Band n25 (PCS)	Data	1852.5 - 1912.5 MHz
NR Band n2 (PCS)	Data	1852.5 - 1907.5 MHz
NR Band n41	Data	2506.02 - 2679.99 MHz
2.4 GHz WLAN	Voice/Data	2412 - 2462 MHz
U-NII-1	Voice/Data	5180 - 5240 MHz
U-NII-2A	Voice/Data	5260 - 5320 MHz
U-NII-2C	Voice/Data	5500 - 5720 MHz
U-NII-3	Voice/Data	5745 - 5825 MHz
Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
MST	Data	555 Hz - 8.33 kHz

1.2 Power Reduction for SAR

This device utilizes a power reduction mechanism for some wireless modes and bands for SAR compliance under portable hotspot conditions and under some conditions when the device is being used in close proximity to the user's hand and when headphones are inserted. All hotspot SAR evaluations for this device were performed at

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the maximum allowed output power when hotspot is enabled. FCC KDB Publication 616217 D04v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device when being used in phablet use conditions. Detailed descriptions of the power reduction mechanism are included in the operational description.

This device uses an independent fixed level power reduction mechanism for WLAN operations when 5G NR is active and also during all voice or VoIP held to ear scenarios. Per FCC Guidance, the held-to-ear exposure conditions were evaluated at reduced power according to the head SAR positions described in IEEE 1528-2013. Detailed descriptions of the power reduction mechanism are included in the operational description.

1.3 Nominal and Maximum Output Power Specifications

This device operates using the following maximum and nominal output power specifications. SAR values were scaled to the maximum allowed power to determine compliance per KDB Publication 447498 D01v06.

1.3.1 2G/3G/4G/5G Output Power

GSM/GPRS/EDGE 850										
Power Level		Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Max	Max allowed power	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	22.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	21.0
RCV Mode Active	Max allowed power	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	22.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	21.0
Hotspot Mode Active	Max allowed power	N/A	33.5	32.5	30.5	28.5	28.0	26.0	24.0	22.0
	Nominal	N/A	32.5	31.5	29.5	27.5	27.0	25.0	23.0	21.0
Proximity Sensor Active	Max allowed power	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	22.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	21.0
Earjack Mode Active	Max allowed power	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	22.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	21.0
GSM/GPRS/EDGE 1900										
Power Level		Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Max	Max allowed power	30.5	30.5	29.0	27.5	25.5	27.0	25.0	23.0	22.0
	Nominal	29.5	29.5	28.0	26.5	24.5	26.0	24.0	22.0	21.0
RCV Mode Active	Max allowed power	30.5	30.5	29.0	27.5	25.5	27.0	25.0	23.0	22.0
	Nominal	29.5	29.5	28.0	26.5	24.5	26.0	24.0	22.0	21.0
Hotspot Mode Active	Max allowed power	N/A	28.0	26.0	24.0	22.0	27.0	25.0	23.0	22.0
	Nominal	N/A	27.0	25.0	23.0	21.0	26.0	24.0	22.0	21.0
Proximity Sensor Active	Max allowed power	28.0	28.0	26.0	24.0	22.0	27.0	25.0	23.0	22.0
	Nominal	27.0	27.0	25.0	23.0	21.0	26.0	24.0	22.0	21.0
Earjack Mode Active	Max allowed power	28.0	28.0	26.0	24.0	22.0	27.0	25.0	23.0	22.0
	Nominal	27.0	27.0	25.0	23.0	21.0	26.0	24.0	22.0	21.0

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UMTS Band 5 (850 MHz)					
Power Level		Modulated Average Output Power (in dBm)			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Max	Max allowed power	25.8	24.8	24.8	24.8
	Nominal	24.8	23.8	23.8	23.8
RCV Mode Active	Max allowed power	25.8	24.8	24.8	24.8
	Nominal	24.8	23.8	23.8	23.8
Hotspot Mode Active	Max allowed power	25.8	24.8	24.8	24.8
	Nominal	24.8	23.8	23.8	23.8
Proximity Sensor Active	Max allowed power	25.8	24.8	24.8	24.8
	Nominal	24.8	23.8	23.8	23.8
Earjack Mode Active	Max allowed power	25.8	24.8	24.8	24.8
	Nominal	24.8	23.8	23.8	23.8
UMTS Band 4 (1750 MHz)					
Power Level		Modulated Average Output Power (in dBm)			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Max	Max allowed power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
RCV Mode Active	Max allowed power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
Hotspot Mode Active	Max allowed power	20.0	19.0	19.0	19.0
	Nominal	19.0	18.0	18.0	18.0
Proximity Sensor Active	Max allowed power	20.0	19.0	19.0	19.0
	Nominal	19.0	18.0	18.0	18.0
Earjack Mode Active	Max allowed power	20.0	19.0	19.0	19.0
	Nominal	19.0	18.0	18.0	18.0
UMTS Band 2 (1900 MHz)					
Power Level		Modulated Average Output Power (in dBm)			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Max	Max allowed power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
RCV Mode Active	Max allowed power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
Hotspot Mode Active	Max allowed power	19.5	19.0	19.0	19.0
	Nominal	18.5	18.0	18.0	18.0
Proximity Sensor Active	Max allowed power	19.5	19.0	19.0	19.0
	Nominal	18.5	18.0	18.0	18.0
Earjack Mode Active	Max allowed power	19.5	19.0	19.0	19.0
	Nominal	18.5	18.0	18.0	18.0

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CDMA BC10 (815 MHz)				
Power Level		Modulated Average Output Power		
		1x-RTT	EVDO Rev 0	EVDO Rev A
Max	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
RCV Mode Active	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
Hotspot Mode Active	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
Proximity Sensor Active	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
Earjack Mode Active	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
CDMA BC0 (835 MHz)				
Power Level		Modulated Average Output Power (in dBm)		
		1x-RTT	EVDO Rev 0	EVDO Rev A
Max	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
RCV Mode Active	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
Hotspot Mode Active	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
Proximity Sensor Active	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
Earjack Mode Active	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
CDMA BC1 (1900 MHz)				
Power Level		Modulated Average Output Power (in dBm)		
		1x-RTT	EVDO Rev 0	EVDO Rev A
Max	Max allowed power	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5
RCV Mode Active	Max allowed power	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5
Hotspot Mode Active	Max allowed power	19.5	19.5	19.5
	Nominal	18.5	18.5	18.5
Proximity Sensor Active	Max allowed power	19.5	19.5	19.5
	Nominal	18.5	18.5	18.5
Earjack Mode Active	Max allowed power	19.5	19.5	19.5
	Nominal	18.5	18.5	18.5

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Mode / Band		Modulated Average Output Power (in dBm)				
		Max	RCV Mode Active	Hotspot Mode Active	Proximity Sensor Active	Earjack Mode Active
LTE FDD Band 71	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 12	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 13	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 14	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 5	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 26	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 4	Max allowed power	25.5	25.5	20.0	20.0	20.0
	Nominal	24.5	24.5	19.0	19.0	19.0
LTE FDD Band 66	Max allowed power	25.5	25.5	20.0	20.0	20.0
	Nominal	24.5	24.5	19.0	19.0	19.0
LTE FDD Band 2	Max allowed power	25.5	25.5	18.5	18.5	18.5
	Nominal	24.5	24.5	17.5	17.5	17.5
LTE FDD Band 25	Max allowed power	25.5	25.5	18.5	18.5	18.5
	Nominal	24.5	24.5	17.5	17.5	17.5
LTE FDD Band 30	Max allowed power	24.0	24.0	21.0	21.0	21.0
	Nominal	23.0	23.0	20.0	20.0	20.0
LTE FDD Band 7	Max allowed power	24.8	24.8	19.5	19.5	19.5
	Nominal	23.8	23.8	18.5	18.5	18.5
LTE TDD Band 48	Max allowed power	24.3	17.0	24.3	24.3	24.3
	Nominal	23.3	16.0	23.3	23.3	23.3
LTE TDD Band 41 (PC3)	Max allowed power	25.8	25.8	21.0	21.0	21.0
	Nominal	24.8	24.8	20.0	20.0	20.0
LTE TDD Band 41 (PC2)	Max allowed power	27.0	27.0	23.0	23.0	23.0
	Nominal	26.0	26.0	22.0	22.0	22.0
LTE TDD Band 38	Max allowed power	25.8	25.8	21.0	21.0	21.0
	Nominal	24.8	24.8	20.0	20.0	20.0

Mode / Band		Modulated Average Output Power (in dBm)				
		Max	RCV Mode Active	Hotspot Mode Active	Proximity Sensor Active	Earjack Mode Active
NR FDD Band 71	Max allowed power	25.5	25.5	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5	24.5	24.5
NR FDD Band 5	Max allowed power	25.5	25.5	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5	24.5	24.5
NR FDD Band 2	Max allowed power	24.8	24.8	18.5	18.5	18.5
	Nominal	23.8	23.8	17.5	17.5	17.5
NR FDD Band 66	Max allowed power	24.8	24.8	20.0	20.0	20.0
	Nominal	23.8	23.8	19.0	19.0	19.0
NR FDD Band 25	Max allowed power	24.8	24.8	18.5	18.5	18.5
	Nominal	23.8	23.8	17.5	17.5	17.5
NR TDD Band 41	Max allowed power	25.3	21.0	25.3	25.3	25.3
	Nominal	24.3	20.0	24.3	24.3	24.3

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1.3.2 2.4 GHz Maximum Bluetooth and SISO/MIMO WLAN Output Power

Note: Targets for 802.11ax RU operations can be found in Appendix H

Mode	Band	IEEE 802.11 (in dBm)																							
		SISO Antenna 1								SISO Antenna 2								MIMO							
		b		g		n		ax (SU)		b		g		n		ax (SU)		b (CDD + STBC)		g (CDD + STBC)		n (CDD+STBC, SDM)		ax (SU) (CDD+STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
2.4 GHz WIFI	2.45 GHz	19.0	18.0	18.0 ch. 11: 16.5	17.0 15.5	18.0 ch. 11: 15.0	17.0 14.0	18.0 ch. 11: 15.0	17.0 14.0	18.0	17.0	18.0 ch. 11: 16.5	17.0 15.5	18.0 ch. 11: 15.0	17.0 14.0	18.0 ch. 11: 15.0	17.0 14.0	21.5	20.5	21.0 ch. 11: 19.5	20.0 18.5	21.0 ch. 11: 18.0	20.0 17.0	21.0 ch. 11: 18.0	20.0 17.0

Mode / Band		(Antenna 1/ Antenna 2) Modulated Average - Single Tx Chain (dBm)	
Channel		0 - 77	78
Bluetooth 1 Mbps (GFSK)	Maximum	**15.0**	**14.0**
	Nominal	**14.0**	**13.0**
Bluetooth 2 Mbps (DPSK)	Maximum	**15.0**	**14.0**
	Nominal	**14.0**	**13.0**
Bluetooth 3 Mbps (8DPSK)	Maximum	**15.0**	**14.0**
	Nominal	**14.0**	**13.0**
Bluetooth LE 2 Mbps	Maximum	**6.0**	
	Nominal	**5.0**	
Bluetooth LE 1 Mbps, 125/500 Kbps	Maximum	**6.0**	
	Nominal	**5.0**	

1.3.3 2.4 GHz Reduced Bluetooth and WLAN Output Power

Note: Targets for 802.11ax RU operations can be found in Appendix H

The below table is applicable in the following conditions:

- Simultaneous conditions with 5 GHz WLAN
- Simultaneous conditions with 5G NR and/or 5 GHz WLAN

Mode	Band	IEEE 802.11 (in dBm)															
		SISO Antenna 1/Antenna 2								MIMO							
		b		g		n		ax (SU)		b (CDD + STBC)		g (CDD + STBC)		n (CDD+STBC, SDM)		ax (SU) (CDD+STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
2.4 GHz WIFI	2.45 GHz	16.0	15.0	15.0	14.0	15.0	14.0	15.0	14.0	19.0	18.0	18.0	17.0	18.0	17.0	18.0	17.0

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The below table is applicable in the following conditions:

- Head Conditions
- Head Conditions during simultaneous conditions with 5 GHz WLAN
- Head Conditions during simultaneous conditions with 5G NR and/or 5 GHz WLAN

Mode	Band	IEEE 802.11 (in dBm)															
		SISO								MIMO							
		Antenna 1/Antenna 2															
		b		g		n		ax (SU)		b (CDD + STBC)		g (CDD + STBC)		n (CDD+STBC, SDM)		ax (SU) (CDD+STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
2.4 GHz WIFI	2.45 GHz	13.0	12.0	13.0	12.0	13.0	12.0	13.0	12.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0

Mode / Band		(Antenna 1/ Antenna 2) Modulated Average - Single Tx Chain (dBm)
Bluetooth 1 Mbps (GFSK)	Maximum	**13.5**
	Nominal	**12.5**
Bluetooth 2 Mbps (DPSK)	Maximum	**13.5**
	Nominal	**12.5**
Bluetooth 3 Mbps (8DPSK)	Maximum	**13.5**
	Nominal	**12.5**

1.3.4 5 GHz Maximum SISO/MIMO WLAN Output Power

Note: Targets for 802.11ax RU operations can be found in Appendix H

Mode	Band	IEEE 802.11 (in dBm)															
		SISO								MIMO							
		Antenna 1/Antenna 2															
		a		n		ac		ax (SU)		a (CDD + STBC)		n (CDD+STBC, SDM)		ac (CDD+STBC, SDM)		ax (SU) (CDD+STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
5 GHz WIFI (20MHz BW)	5200 MHz	17.0	16.0	17.0 ch. 36: 16.0	16.0 15.0	17.0 ch. 36: 16.0	16.0 15.0	17.0 ch. 36: 16.0	16.0 15.0	20.0	19.0	20.0 ch. 36: 19.0	19.0 18.0	20.0 ch. 36: 19.0	19.0 18.0	20.0 ch. 36: 19.0	19.0 18.0
	5300 MHz	17.0	16.0	17.0 ch. 64: 16.5	16.0 15.5	17.0 ch. 64: 16.5	16.0 15.5	17.0 ch. 64: 16.5	16.0 15.5	20.0	19.0	20.0 ch. 64: 19.5	19.0 18.5	20.0 ch. 64: 19.5	19.0 18.5	20.0 ch. 64: 19.5	19.0 18.5
	5500 MHz	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0	20.0	19.0	20.0	19.0	20.0	19.0	20.0	19.0
	5800 MHz	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0	20.0	19.0	20.0	19.0	20.0	19.0	20.0	19.0
5 GHz WIFI (40MHz BW)	5200 MHz			16.0 ch. 38: 15.5	15.0 14.5	16.0 ch. 38: 15.5	15.0 14.5	16.0 ch. 38: 15.5	15.0 14.5			19.0 ch. 38: 18.5	18.0 17.5	19.0 ch. 38: 18.5	18.0 17.5	19.0 ch. 38: 18.5	18.0 17.5
	5300 MHz			16.0 ch. 62: 14.5	15.0 13.5	16.0 ch. 62: 14.5	15.0 13.5	16.0 ch. 62: 14.5	15.0 13.5			19.0 ch. 62: 17.5	18.0 16.5	19.0 ch. 62: 17.5	18.0 16.5	19.0 ch. 62: 17.5	18.0 16.5
	5500 MHz			16.0 ch. 102: 15.5	15.0 14.5	16.0 ch. 102: 15.5	15.0 14.5	16.0 ch. 102: 15.5	15.0 14.5			19.0 ch. 102: 18.5	18.0 17.5	19.0 ch. 102: 18.5	18.0 17.5	19.0 ch. 102: 18.5	18.0 17.5
	5800 MHz			16.0	15.0	16.0	15.0	16.0	15.0			19.0	18.0	19.0	18.0	19.0	18.0
5 GHz WIFI (80MHz BW)	5200 MHz					15.0	14.0	15.0	14.0					18.0	17.0	18.0	17.0
	5300 MHz					14.0	13.0	14.0	13.0					17.0	16.0	17.0	16.0
	5500 MHz					15.0	14.0	15.0	14.0					18.0	17.0	18.0	17.0
	5800 MHz					15.0	14.0	15.0	14.0					18.0	17.0	18.0	17.0

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1.3.5 5 GHz Reduced SISO/MIMO WLAN Output Power

Note: Targets for 802.11ax RU operations can be found in Appendix H

The below table is applicable in the following conditions:

- Simultaneous conditions with 2.4 GHz WLAN
- Simultaneous conditions with 5G NR and/or 2.4 GHz WLAN

Mode	Band	IEEE 802.11 (in dBm)															
		SISO								MIMO							
		Antenna 1/Antenna 2															
		a		n		ac		ax (SU)		a (CDD + STBC)		n (CDD+STBC, SDM)		ac (CDD+STBC, SDM)		ax (SU) (CDD+STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
5 GHz WIFI (20MHz BW)	5200 MHz	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0
	5300 MHz	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0
	5500 MHz	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0
	5800 MHz	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0
5 GHz WIFI (40MHz BW)	5200 MHz			13.0	12.0	13.0	12.0	13.0	12.0			16.0	15.0	16.0	15.0	16.0	15.0
	5300 MHz			13.0	12.0	13.0	12.0	13.0	12.0			16.0	15.0	16.0	15.0	16.0	15.0
	5500 MHz			13.0	12.0	13.0	12.0	13.0	12.0			16.0	15.0	16.0	15.0	16.0	15.0
	5800 MHz			13.0	12.0	13.0	12.0	13.0	12.0			16.0	15.0	16.0	15.0	16.0	15.0
5 GHz WIFI (80MHz BW)	5200 MHz					12.0	11.0	12.0	11.0					15.0	14.0	15.0	14.0
	5300 MHz					12.0	11.0	12.0	11.0					15.0	14.0	15.0	14.0
	5500 MHz					12.0	11.0	12.0	11.0					15.0	14.0	15.0	14.0
	5800 MHz					12.0	11.0	12.0	11.0					15.0	14.0	15.0	14.0

The below table is applicable in the following conditions:

- Head Conditions
- Head Conditions during simultaneous conditions with 2.4 GHz WLAN
- Head Conditions during simultaneous conditions with 5G NR and/or 2.4 GHz WLAN

Mode	Band	IEEE 802.11 (in dBm)															
		SISO								MIMO							
		Antenna 1/Antenna 2															
		a		n		ac		ax (SU)		a (CDD + STBC)		n (CDD+STBC, SDM)		ac (CDD+STBC, SDM)		ax (SU) (CDD+STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
5 GHz WIFI (20MHz BW)	5200 MHz	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	12.0
	5300 MHz	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	12.0
	5500 MHz	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	12.0
	5800 MHz	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	12.0
5 GHz WIFI (40MHz BW)	5200 MHz			10.0	9.0	10.0	9.0	10.0	9.0			13.0	12.0	13.0	12.0	13.0	12.0
	5300 MHz			10.0	9.0	10.0	9.0	10.0	9.0			13.0	12.0	13.0	12.0	13.0	12.0
	5500 MHz			10.0	9.0	10.0	9.0	10.0	9.0			13.0	12.0	13.0	12.0	13.0	12.0
	5800 MHz			10.0	9.0	10.0	9.0	10.0	9.0			13.0	12.0	13.0	12.0	13.0	12.0
5 GHz WIFI (80MHz BW)	5200 MHz					10.0	9.0	10.0	9.0					13.0	12.0	13.0	12.0
	5300 MHz					10.0	9.0	10.0	9.0					13.0	12.0	13.0	12.0
	5500 MHz					10.0	9.0	10.0	9.0					13.0	12.0	13.0	12.0
	5800 MHz					10.0	9.0	10.0	9.0					13.0	12.0	13.0	12.0

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1.4 DUT Antenna Locations

The overall dimensions of this device are > 9 x 5 cm. A diagram showing the location of the device antennas for both open and closed configurations can be found in Appendix E. Since the diagonal dimension of this device when open is > 160 mm and <200 mm, it is considered a “phablet.” When the device is in the open configuration, it is considered a "Portable Handset". In the closed configuration, only a simple display/interaction of notifications occurs. Therefore, when the device is closed, the only testing considered is for body-worn and hotspot.

Table 1-1
Device Edges/Sides for SAR Testing Open

Mode	Back	Front	Top	Bottom	Right	Left
GPRS 850	Yes	Yes	No	Yes	Yes	Yes
GPRS 1900	Yes	Yes	No	Yes	Yes	Yes
UMTS 850	Yes	Yes	No	Yes	Yes	Yes
UMTS 1750	Yes	Yes	No	Yes	Yes	Yes
UMTS 1900	Yes	Yes	No	Yes	Yes	Yes
EVDO BC10 (§90S)	Yes	Yes	No	Yes	Yes	Yes
EVDO BC0 (§22H)	Yes	Yes	No	Yes	Yes	Yes
PCS EVDO	Yes	Yes	No	Yes	Yes	Yes
LTE Band 71	Yes	Yes	No	Yes	Yes	Yes
LTE Band 12	Yes	Yes	No	Yes	Yes	Yes
LTE Band 13	Yes	Yes	No	Yes	Yes	Yes
LTE Band 14	Yes	Yes	No	Yes	Yes	Yes
LTE Band 5 (Cell)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 26 (Cell)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 66 (AWS)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 25 (PCS)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 30	Yes	Yes	No	Yes	Yes	Yes
LTE Band 7	Yes	Yes	No	Yes	No	Yes
LTE Band 48	Yes	Yes	Yes	No	No	Yes
LTE Band 41	Yes	Yes	No	Yes	No	Yes
NR Band n71	Yes	Yes	No	Yes	Yes	Yes
NR Band n5 (Cell)	Yes	Yes	No	Yes	Yes	Yes
NR Band n66 (AWS)	Yes	Yes	No	Yes	Yes	Yes
NR Band n25 (PCS)	Yes	Yes	No	Yes	Yes	Yes
NR Band n41	Yes	Yes	Yes	No	No	Yes
2.4 GHz WLAN Ant 1	Yes	Yes	Yes	No	Yes	No
2.4 GHz WLAN Ant 2	Yes	Yes	No	No	No	Yes
2.4 GHz WLAN MIMO	Yes	Yes	Yes	No	Yes	Yes
5 GHz WLAN Ant 1	Yes	Yes	Yes	No	Yes	No
5 GHz WLAN Ant 2	Yes	Yes	Yes	No	Yes	No
5 GHz WLAN MIMO	Yes	Yes	Yes	No	Yes	No
Bluetooth Ant 1	Yes	Yes	Yes	No	Yes	No
Bluetooth Ant 2	Yes	Yes	No	No	No	Yes

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Table 1-2
Device Edges/Sides for SAR Testing Closed

Mode	Back	Front	Top	Bottom	Right	Left
GPRS 850	Yes	Yes	No	Yes	Yes	Yes
GPRS 1900	Yes	Yes	No	Yes	Yes	Yes
UMTS 850	Yes	Yes	No	Yes	Yes	Yes
UMTS 1750	Yes	Yes	No	Yes	Yes	Yes
UMTS 1900	Yes	Yes	No	Yes	Yes	Yes
EVDO BC10 (§90S)	Yes	Yes	No	Yes	Yes	Yes
EVDO BC0 (§22H)	Yes	Yes	No	Yes	Yes	Yes
PCS EVDO	Yes	Yes	No	Yes	Yes	Yes
LTE Band 71	Yes	Yes	No	Yes	Yes	Yes
LTE Band 12	Yes	Yes	No	Yes	Yes	Yes
LTE Band 13	Yes	Yes	No	Yes	Yes	Yes
LTE Band 14	Yes	Yes	No	Yes	Yes	Yes
LTE Band 5 (Cell)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 26 (Cell)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 66 (AWS)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 25 (PCS)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 30	Yes	Yes	No	Yes	Yes	Yes
LTE Band 7	Yes	Yes	No	Yes	No	Yes
LTE Band 48	Yes	Yes	No	Yes	No	Yes
LTE Band 41	Yes	Yes	No	Yes	No	Yes
NR Band n71	Yes	Yes	No	Yes	Yes	Yes
NR Band n5 (Cell)	Yes	Yes	No	Yes	Yes	Yes
NR Band n66 (AWS)	Yes	Yes	No	Yes	Yes	Yes
NR Band n25 (PCS)	Yes	Yes	No	Yes	Yes	Yes
NR Band n41	Yes	Yes	No	Yes	No	Yes
2.4 GHz WLAN Ant 1	Yes	Yes	No	Yes	Yes	No
2.4 GHz WLAN Ant 2	Yes	Yes	Yes	Yes	No	Yes
2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes
5 GHz WLAN Ant 1	Yes	Yes	No	Yes	Yes	No
5 GHz WLAN Ant 2	Yes	Yes	No	Yes	Yes	No
5 GHz WLAN MIMO	Yes	Yes	No	Yes	Yes	No
Bluetooth Ant 1	Yes	Yes	No	Yes	Yes	No
Bluetooth Ant 2	Yes	Yes	Yes	Yes	No	Yes

Note: Particular DUT edges were not required to be evaluated for wireless router SAR or phablet SAR if the edges were greater than 2.5 cm from the transmitting antenna according to FCC KDB Publication 941225 D06v02r01 Section III and FCC KDB Publication 648474 D04v01r03. The distances between the transmit antennas and the edges of the device are included in the filing. When wireless router mode is enabled, U-NII-1, U-NII-2A, U-NII-2C operations are disabled.

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1.5 Near Field Communications (NFC) Antenna

This DUT has NFC operations. The NFC antenna is integrated into the device for this model. Therefore, all SAR tests were performed with the device which already incorporates the NFC antenna. A diagram showing the location of the NFC antenna can be found in Appendix E.

1.6 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D01v06 4.3.2 procedures.

Table 1-3
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Phablet	Notes
1	1x CDMA voice + 5 GHz WI-FI Ant 1	Yes	Yes	N/A	Yes	
2	1x CDMA voice + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI Ant 1	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
3	1x CDMA voice + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI Ant 1	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
4	1x CDMA voice + 2.4 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
5	1x CDMA voice + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
6	1x CDMA voice + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
7	1x CDMA voice + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
8	1x CDMA voice + 5 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
9	1x CDMA voice + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI MIMO	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
10	1x CDMA voice + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI MIMO	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
11	1x CDMA voice + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
12	1x CDMA voice + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2+ 5 GHz WI-FI MIMO	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
13	GSM voice + 5 GHz WI-FI Ant 1	Yes	Yes	N/A	Yes	
14	GSM voice + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI Ant 1	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
15	GSM voice + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI Ant 1	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
16	GSM voice + 2.4 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
17	GSM voice + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
18	GSM voice + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
19	GSM voice + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
20	GSM voice + 5 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
21	GSM voice + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI MIMO	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
22	GSM voice + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI MIMO	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
23	GSM voice + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
24	GSM voice + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2 + 5 GHz WI-FI MIMO	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
25	UMTS + 5 GHz WI-FI Ant 1	Yes	Yes	Yes	Yes	
26	UMTS + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI Ant 1	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
27	UMTS + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI Ant 1	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
28	UMTS + 2.4 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
29	UMTS + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
30	UMTS + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
31	UMTS + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
32	UMTS + 5 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
33	UMTS + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
34	UMTS + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
35	UMTS + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
36	UMTS + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2 + 5 GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
37	LTE + 5G NR	Yes	Yes	N/A	Yes	
38	LTE + 5 GHz WI-FI Ant 1	Yes	Yes	Yes	Yes	
39	LTE + 5 GHz WI-FI Ant 1 + 5G NR	Yes	Yes	Yes	Yes	
40	LTE + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI Ant 1	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
41	LTE + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI Ant 1 + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
42	LTE + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI Ant 1	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
43	LTE + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI Ant 1 + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
44	LTE + 2.4 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
45	LTE + 2.4 GHz WI-FI MIMO + 5G NR	Yes	Yes	Yes	Yes	
46	LTE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
47	LTE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2 + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
48	LTE + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
49	LTE + 2.4 GHz Bluetooth Ant 1 + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
50	LTE + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
51	LTE + 2.4 GHz Bluetooth Ant 2 + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
52	LTE + 5 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
53	LTE + 5 GHz WI-FI MIMO + 5G NR	Yes	Yes	Yes	Yes	
54	LTE + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
55	LTE + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI MIMO + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
56	LTE + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
57	LTE + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI MIMO + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
58	LTE + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
59	LTE + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO + 5G NR	Yes	Yes	Yes	Yes	
60	LTE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2 + 5 GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
61	LTE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2 + 5 GHz WI-FI MIMO + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
62	CDMA/EVDO data + 5 GHz WI-FI Ant 1	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
63	CDMA/EVDO data + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI Ant 1	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
64	CDMA/EVDO data + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI Ant 1	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
65	CDMA/EVDO data + 2.4 GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
66	CDMA/EVDO data + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
67	CDMA/EVDO data + 2.4 GHz Bluetooth Ant 1	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
68	CDMA/EVDO data + 2.4 GHz Bluetooth Ant 2	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
69	CDMA/EVDO data + 5 GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
70	CDMA/EVDO data + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI MIMO	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
71	CDMA/EVDO data + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI MIMO	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
72	CDMA/EVDO data + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
73	CDMA/EVDO data + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2 + 5 GHz WI-FI MIMO	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
74	GPRS/EDGE + 5 GHz WI-FI Ant 1	N/A	N/A	Yes	Yes	
75	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI Ant 1	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered
76	GPRS/EDGE + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI Ant 1	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered
77	GPRS/EDGE + 2.4 GHz WI-FI MIMO	N/A	N/A	Yes	Yes	
78	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered
79	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered
80	GPRS/EDGE + 2.4 GHz Bluetooth Ant 2	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered
81	GPRS/EDGE + 5 GHz WI-FI MIMO	N/A	N/A	Yes	Yes	
82	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1 + 5 GHz WI-FI MIMO	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered
83	GPRS/EDGE + 2.4 GHz Bluetooth Ant 2 + 5 GHz WI-FI MIMO	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered
84	GPRS/EDGE + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	N/A	N/A	Yes	Yes	
85	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WI-FI Ant 2 + 5 GHz WI-FI MIMO	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered

1. 2.4 GHz WLAN Antenna 1 and 2.4 GHz Bluetooth Antenna 2 cannot transmit simultaneously.
2. 2.4 GHz Bluetooth Antenna 1 and 2.4 GHz Bluetooth Antenna 2 cannot transmit simultaneously.

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3. All licensed modes share the same antenna path and cannot transmit simultaneously.
4. When the user utilizes multiple services in UMTS 3G mode it uses multi-Radio Access Bearer or multi-RAB. The power control is based on a physical control channel (Dedicated Physical Control Channel [DPCCH]) and power control will be adjusted to meet the needs of both services. Therefore, the UMTS+WLAN scenario also represents the UMTS Voice/DATA + WLAN Hotspot scenario.
5. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held-to-ear or body-worn accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFI direct beyond that listed in the above table.
6. 5 GHz Wireless Router is only supported for the U-NII-3 by S/W, therefore U-NII-1, U-NII-2A, and U-NII-2C were not evaluated for wireless router conditions.
7. This device supports VOLTE.
8. This device supports VOWIFI.
9. This device supports Bluetooth Tethering.
10. LTE + 5G NR Scenarios are limited to LTE Anchor Bands, LTE Band 12, LTE Band 13, LTE Band 5, LTE Band 66, LTE Band 2, LTE Band 30, and LTE Band 48.
11. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac/ax. 802.11a/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM. Each WLAN antenna can transmit independently or together when operating with MIMO.

1.7 Miscellaneous SAR Test Considerations

(A) WIFI/BT

Since U-NII-1 and U-NII-2A bands have the same maximum output power and the highest reported SAR for U-NII-2A is less than 1.2 W/kg, SAR is not required for U-NII-1 band according to FCC KDB Publication 248227 D01v02r02.

Since Wireless Router operations are not allowed by the chipset firmware using U-NII-1, U-NII-2A & U-NII-2C WIFI, only 2.4 GHz and U-NII-3 WIFI Hotspot SAR tests and combinations are considered for SAR with respect to Wireless Router configurations according to FCC KDB 941225 D06v02r01.

This device supports IEEE 802.11ax with the following features:

a) Up to 80 MHz Bandwidth only for 5 GHz
b) Up to 20 MHz Bandwidth only for 2.4 GHz
c) No aggregate channel configurations
d) 2 Tx antenna output
e) Up to 1024 QAM is supported
f) TDWR and Band gap channels are supported
g) MU-MIMO UL Operations are not supported

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is greater than 160mm and less than 200mm. Phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. Because wireless router operations are not supported for U-NII-1, U-NII-2A & U-NII-2C WLAN, phablet SAR tests were performed. Phablet SAR was not evaluated for Bluetooth, 2.4 GHz and U-NII-3 WLAN operations since wireless router 1g SAR was < 1.2 W/kg.

Per April 2019 TCB Workshop Notes, SAR testing was not required for 802.11ax when applying the initial test configuration procedures of KDB 248227, with 802.11ax considered a higher order 802.11 mode.

(B) Licensed Transmitter(s)

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GSM/GPRS/EDGE DTM is not supported for US bands. Therefore, the GSM Voice modes in this report do not transmit simultaneously with GPRS/EDGE Data.

This device is only capable of QPSK HSUPA in the uplink. Therefore, no additional SAR tests are required beyond that described for devices with HSUPA in KDB 941225 D01v03r01.

CDMA 1X Advanced technology was not required for SAR since the maximum allowed output powers for 1x Advanced was not more than 0.25 dB higher than the maximum powers for 1x and the measured SAR in any 1x mode exposure conditions was not greater than 1.2 W/kg per FCC KDB Publication 941225 D01v03r01.

LTE SAR for the higher modulations and lower bandwidths were not tested since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth; and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg for all configurations according to FCC KDB 941225 D05v02r04.

This device supports LTE Carrier Aggregation (CA) in the downlink. All uplink communications are identical to Release 8 specifications. Per FCC KDB Publication 941225 D05A v01r02, SAR for LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive. The downlink carrier aggregation exclusion analysis can be found in Appendix F.

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is greater than 160mm and less than 200mm. Therefore, phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. Additional SAR tests for phablet SAR were evaluated per KDB 616217 Section 6 (See Section 6.9 for more information).

This device supports downlink 4x4 MIMO operations for some LTE Bands. Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum average output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

This device supports LTE capabilities with overlapping transmission frequency ranges. When the supported frequency range of an LTE Band falls completely within an LTE band with a larger transmission frequency range, both LTE bands have the same target power (or the band with the larger transmission frequency range has a higher target power), and both LTE bands share the same transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

This device supports both Power Class 2 (PC2) and Power Class 3 (PC3) for LTE Band 41. Per May 2017 TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the power class 2 condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly (See Section 14.1).

This device supports LTE Carrier Aggregation (CA) for LTE Band 5, LTE Band 66, LTE Band 48, and LTE Band 41 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per 2017 Fall TCB Workshop Notes.

This device supports 64QAM and 256 QAM on the uplink and 256 QAM on the downlink for LTE Operations. Conducted powers for 64QAM uplink configurations were measured per Section 5.1 of FCC KDB Publication

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941225D05v02r05. SAR was not required for 64QAM since the highest maximum output power for 64QAM is ≤ ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45W/kg, per Section 5.2.4 of FCC KDB Publication 941225 D05v02r05.

NR implementation of n71, n5, n66, n2, n25, and n41 is limited to EN-DC operations only, with LTE Band 12/13/5/66/2/30/48 acting as the anchor band. Per FCC Guidance, SAR tests were performed separately for NR Bands and LTE Anchor Bands. Please see Section 11 for more details.

1.8 Guidance Applied

- IEEE 1528-2013
- FCC KDB Publication 941225 D01v03r01, D05v02r04, D05Av01r02, D06v02r01 (2G/3G/4G and Hotspot)
- FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- FCC KDB Publication 447498 D01v06 (General SAR Guidance)
- FCC KDB Publication 865664 D01v01r04, D02v01r02 (SAR Measurements up to 6 GHz)
- FCC KDB Publication 648474 D04v01r03 (Phablet Procedures)
- FCC KDB Publication 616217 D04v01r02 (Proximity Sensor)
- October 2013 TCB Workshop Notes (GPRS Testing Considerations)
- May 2017 TCB Workshop Notes (LTE 4x4 Downlink MIMO, LTE Band 41 Power Class 2/3)
- April 2018 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2019 TCB Workshop Notes (IEEE 802.11ax, Dynamic Antenna Tuning)

1.9 Device Serial Numbers

Several samples with identical hardware were used to support SAR testing. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units. The serial numbers used for each test are indicated alongside the results in Section 11.

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2 LTE AND NR INFORMATION

LTE Information					
Form Factor	Portable Handset				
Frequency Range of each LTE transmission band	LTE Band 71 (665.5 - 695.5 MHz)				
	LTE Band 12 (699.7 - 715.3 MHz)				
	LTE Band 13 (779.5 - 784.5 MHz)				
	LTE Band 14 (790.5 - 795.5 MHz)				
	LTE Band 5 (Cell) (824.7 - 848.3 MHz)				
	LTE Band 26 (Cell) (814.7 - 848.3 MHz)				
	LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)				
	LTE Band 4 (AWS) (1710.7 - 1754.3 MHz)				
	LTE Band 25 (PCS) (1850.7 - 1914.3 MHz)				
	LTE Band 2 (PCS) (1850.7 - 1909.3 MHz)				
	LTE Band 30 (2307.5 - 2312.5 MHz)				
	LTE Band 7 (2502.5 - 2567.5 MHz)				
	LTE Band 48 (3552.5 - 3697.5 MHz)				
	LTE Band 41 (2498.5 - 2687.5 MHz)				
	LTE Band 38 (2572.5 - 2617.5 MHz)				
Channel Bandwidths	LTE Band 71: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 13: 5 MHz, 10 MHz				
	LTE Band 14: 5 MHz, 10 MHz				
	LTE Band 5 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 26 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz				
	LTE Band 66 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 25 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 2 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 30: 5 MHz, 10 MHz				
	LTE Band 7: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 48: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 38: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High	High
LTE Band 71: 5 MHz	665.5 (133147)		680.5 (133297)	695.5 (133447)	
LTE Band 71: 10 MHz	668 (133172)		680.5 (133297)	693 (133422)	
LTE Band 71: 15 MHz	670.5 (133197)		680.5 (133297)	690.5 (133397)	
LTE Band 71: 20 MHz	673 (133222)		680.5 (133297)	688 (133372)	
LTE Band 12: 1.4 MHz	699.7 (23017)		707.5 (23095)	715.3 (23173)	
LTE Band 12: 3 MHz	700.5 (23025)		707.5 (23095)	714.5 (23165)	
LTE Band 12: 5 MHz	701.5 (23035)		707.5 (23095)	713.5 (23155)	
LTE Band 12: 10 MHz	704 (23060)		707.5 (23095)	711 (23130)	
LTE Band 13: 5 MHz	779.5 (23205)		782 (23230)	784.5 (23255)	
LTE Band 13: 10 MHz	N/A		782 (23230)	N/A	
LTE Band 14: 5 MHz	790.5 (23305)		793 (23330)	795.5 (23355)	
LTE Band 14: 10 MHz	N/A		793 (23330)	N/A	
LTE Band 5 (Cell): 1.4 MHz	824.7 (20407)		836.5 (20525)	848.3 (20643)	
LTE Band 5 (Cell): 3 MHz	825.5 (20415)		836.5 (20525)	847.5 (20635)	
LTE Band 5 (Cell): 5 MHz	826.5 (20425)		836.5 (20525)	846.5 (20625)	
LTE Band 5 (Cell): 10 MHz	829 (20450)		836.5 (20525)	844 (20600)	
LTE Band 26 (Cell): 1.4 MHz	814.7 (26697)		831.5 (26865)	848.3 (27033)	
LTE Band 26 (Cell): 3 MHz	815.5 (26705)		831.5 (26865)	847.5 (27025)	
LTE Band 26 (Cell): 5 MHz	816.5 (26715)		831.5 (26865)	846.5 (27015)	
LTE Band 26 (Cell): 10 MHz	819 (26740)		831.5 (26865)	844 (26990)	
LTE Band 26 (Cell): 15 MHz	821.5 (26765)		831.5 (26865)	841.5 (26965)	
LTE Band 66 (AWS): 1.4 MHz	1710.7 (131979)		1745 (132322)	1779.3 (132665)	
LTE Band 66 (AWS): 3 MHz	1711.5 (131987)		1745 (132322)	1778.5 (132657)	
LTE Band 66 (AWS): 5 MHz	1712.5 (131997)		1745 (132322)	1777.5 (132647)	
LTE Band 66 (AWS): 10 MHz	1715 (132022)		1745 (132322)	1775 (132622)	
LTE Band 66 (AWS): 15 MHz	1717.5 (132047)		1745 (132322)	1772.5 (132597)	
LTE Band 66 (AWS): 20 MHz	1720 (132072)		1745 (132322)	1770 (132572)	
LTE Band 4 (AWS): 1.4 MHz	1710.7 (19957)		1732.5 (20175)	1754.3 (20393)	
LTE Band 4 (AWS): 3 MHz	1711.5 (19965)		1732.5 (20175)	1753.5 (20385)	
LTE Band 4 (AWS): 5 MHz	1712.5 (19975)		1732.5 (20175)	1752.5 (20375)	
LTE Band 4 (AWS): 10 MHz	1715 (20000)		1732.5 (20175)	1750 (20350)	
LTE Band 4 (AWS): 15 MHz	1717.5 (20025)		1732.5 (20175)	1747.5 (20325)	
LTE Band 4 (AWS): 20 MHz	1720 (20050)		1732.5 (20175)	1745 (20300)	
LTE Band 25 (PCS): 1.4 MHz	1850.7 (26047)		1882.5 (26365)	1914.3 (26683)	
LTE Band 25 (PCS): 3 MHz	1851.5 (26055)		1882.5 (26365)	1913.5 (26675)	
LTE Band 25 (PCS): 5 MHz	1852.5 (26065)		1882.5 (26365)	1912.5 (26665)	
LTE Band 25 (PCS): 10 MHz	1855 (26090)		1882.5 (26365)	1910 (26640)	
LTE Band 25 (PCS): 15 MHz	1857.5 (26115)		1882.5 (26365)	1907.5 (26615)	
LTE Band 25 (PCS): 20 MHz	1860 (26140)		1882.5 (26365)	1905 (26590)	
LTE Band 2 (PCS): 1.4 MHz	1850.7 (18607)		1880 (18900)	1909.3 (19193)	
LTE Band 2 (PCS): 3 MHz	1851.5 (18615)		1880 (18900)	1908.5 (19185)	
LTE Band 2 (PCS): 5 MHz	1852.5 (18625)		1880 (18900)	1907.5 (19175)	
LTE Band 2 (PCS): 10 MHz	1855 (18650)		1880 (18900)	1905 (19150)	
LTE Band 2 (PCS): 15 MHz	1857.5 (18675)		1880 (18900)	1902.5 (19125)	
LTE Band 2 (PCS): 20 MHz	1860 (18700)		1880 (18900)	1900 (19100)	
LTE Band 30: 5 MHz	2307.5 (27685)		2310 (27710)	2312.5 (27735)	
LTE Band 30: 10 MHz	N/A		2310 (27710)	N/A	
LTE Band 7: 5 MHz	2502.5 (20775)		2535 (21100)	2567.5 (21425)	
LTE Band 7: 10 MHz	2505 (20800)		2535 (21100)	2565 (21400)	
LTE Band 7: 15 MHz	2507.5 (20825)		2535 (21100)	2562.5 (21375)	
LTE Band 7: 20 MHz	2510 (20850)		2535 (21100)	2560 (21350)	
LTE Band 48: 5 MHz	3552.5 (55265)	3600.8 (55748)	N/A	3649.2 (56232)	3697.5 (56715)
LTE Band 48: 10 MHz	3555 (55290)	3601.7 (55757)	N/A	3648.3 (56223)	3695 (56690)
LTE Band 48: 15 MHz	3557.5 (55315)	3602.5 (55765)	N/A	3647.5 (56215)	3692.5 (56965)
LTE Band 48: 20 MHz	3560 (55340)	3603.3 (55773)	N/A	3646.7 (56207)	3690 (56640)
LTE Band 41: 5 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 38: 5 MHz	2572.5 (37775)		2595 (38000)	2617.5 (38225)	
LTE Band 38: 10 MHz	2575 (37800)		2595 (38000)	2615 (38200)	
LTE Band 38: 15 MHz	2577.5 (37825)		2595 (38000)	2612.5 (38175)	
LTE Band 38: 20 MHz	2580 (37850)		2595 (38000)	2610 (38150)	
UE Category	DL UE Cat 20, UL UE Cat 18				
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256QAM				
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3~6.2.5? (manufacturer attestation to be provided)	YES				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
LTE Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations				
LTE Additional Information	This device does not support full CA features on 3GPP Release 15. It supports carrier aggregation, downlink MIMO features as shown in Section 9 and Appendix F. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 15 Features are not supported: LAA, Relay, HetNet, Enhanced MIMO, eICIC, WIFI Offloading, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

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09/11/2019

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NR Information					
Form Factor	Portable Handset				
Frequency Range of each NR transmission band	NR Band n71 (670.5 - 690.5 MHz)				
	NR Band n5 (Cell) (826.5 - 846.5 MHz)				
	NR Band n66 (AWS) (1712.5 - 1777.5 MHz)				
	NR Band n25 (PCS) (1852.5 - 1912.5 MHz)				
	NR Band n2 (PCS) (1852.5 - 1907.5 MHz)				
	NR Band n41 (2506.02 - 2679.99 MHz)				
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n5 (Cell): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n66 (AWS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n25 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n2 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n41: 20 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz				
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High	High
NR Band n71: 5 MHz	665.5 (133100)		680.5 (136100)	695.5 (139100)	
NR Band n71: 10 MHz	668 (133600)		680.5 (136100)	693 (138600)	
NR Band n71: 15 MHz	670.5 (134100)		680.5 (136100)	690.5 (138100)	
NR Band n71: 20 MHz	673 (134600)		680.5 (136100)	688 (137600)	
NR Band n5 (Cell): 5 MHz	826.5 (165300)		836.5 (167300)	846.5 (169300)	
NR Band n5 (Cell): 10 MHz	829 (165800)		836.5 (167300)	844 (168800)	
NR Band n5 (Cell): 15 MHz	831.5 (166300)		836.5 (167300)	841.5 (168300)	
NR Band n5 (Cell): 20 MHz	834 (166800)		836.5 (167300)	839 (167800)	
NR Band n66 (AWS): 5 MHz	1712.5 (342500)		1745 (349000)	1777.5 (355500)	
NR Band n66 (AWS): 10 MHz	1715 (343000)		1745 (349000)	1775 (355000)	
NR Band n66 (AWS): 15 MHz	1717.5 (343500)		1745 (349000)	1772.5 (354500)	
NR Band n66 (AWS): 20 MHz	1720 (344000)		1745 (349000)	1770 (354000)	
NR Band n25 (PCS): 5 MHz	1852.5 (370500)		1882.5 (376500)	1912.5 (382500)	
NR Band n25 (PCS): 10 MHz	1855 (371000)		1882.5 (376500)	1910 (382000)	
NR Band n25 (PCS): 15 MHz	1857.5 (371500)		1882.5 (376500)	1907.5 (381500)	
NR Band n25 (PCS): 20 MHz	1860 (372000)		1882.5 (376500)	1905 (381000)	
NR Band n2 (PCS): 5 MHz	1852.5 (370500)		1880 (376000)	1907.5 (381500)	
NR Band n2 (PCS): 10 MHz	1855 (371000)		1880 (376000)	1905 (381000)	
NR Band n2 (PCS): 15 MHz	1857.5 (371500)		1880 (376000)	1902.5 (380500)	
NR Band n2 (PCS): 20 MHz	1860 (372000)		1880 (376000)	1900 (380000)	
NR Band n41: 20 MHz	2506.02 (501204)	2549.49 (509898)	2592.99 (518598)	2636.49 (527298)	2679.99 (535998)
NR Band n41: 40 MHz	2516.01 (503202)	2567.34 (513468)	N/A	2618.67 (523734)	2670 (534000)
NR Band n41: 50 MHz	2521.02 (504204)		2592.99 (518598)	2664.99 (532998)	
NR Band n41: 60 MHz	2526 (505200)		2592.99 (518598)	2659.98 (531996)	
NR Band n41: 80 MHz	2536.02 (507204)		N/A	2649.99 (529998)	
NR Band n41: 90 MHz	2541 (508200)		N/A	2644.98 (528996)	
NR Band n41: 100 MHz	2546.01 (509202)		2592.99 (518598)	2640 (528000)	
SCS for NR Band n71/n5/n66/n25/n2	15 kHz				
SCS for NR Band n41	30 kHz				
Modulations Supported in UL	DFT-s-OFDM: π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM				
NR MPR Permanently implemented per 3GPP TS 38.101	YES				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations				
LTE Anchor Bands for NR Band n71	LTE Band 2/66				
LTE Anchor Bands for NR Band n5 (Cell)	LTE Band 2/30/66				
LTE Anchor Bands for NR Band n66 (AWS)	LTE Band 5/12/13/48				
LTE Anchor Bands for NR Band n25 (PCS)	LTE Band 12				
LTE Anchor Bands for NR Band n2 (PCS)	LTE Band 5/12/13				
LTE Anchor Bands for NR Band n41	LTE Band 2/66				

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3 INTRODUCTION

The FCC and Innovation, Science, and Economic Development Canada have adopted the guidelines for evaluating the environmental effects of radio frequency (RF) radiation in ET Docket 93-62 on Aug. 6, 1996 and Health Canada Safety Code 6 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. [1]

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [3] and Health Canada RF Exposure Guidelines Safety Code 6 [22]. The measurement procedure described in IEEE/ANSI C95.3-2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave [4] is used for guidance in measuring the Specific Absorption Rate (SAR) due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the International Committee for Non-Ionizing Radiation Protection (ICNIRP) in Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," Report No. Vol 74. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

3.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 3-1).

Equation 3-1
SAR Mathematical Equation

$$SAR = \frac{d}{dt}\left(\frac{dU}{dm}\right) = \frac{d}{dt}\left(\frac{dU}{\rho dv}\right)$$

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \frac{\sigma \cdot E^2}{\rho}$$

where:

σ = conductivity of the tissue-simulating material (S/m)
ρ = mass density of the tissue-simulating material (kg/m^3)
E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

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4 DOSIMETRIC ASSESSMENT

4.1 Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

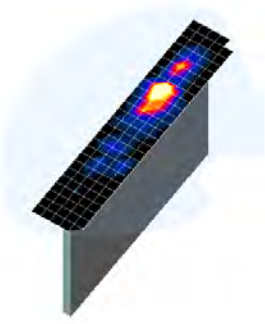

Figure 4-1
Sample SAR Area Scan

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.
3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):

   a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 4-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).

   b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot" condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.

   c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

Table 4-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

Frequency	Maximum Area Scan Resolution (mm) (Δx_{area}, Δy_{area})	Maximum Zoom Scan Resolution (mm) (Δx_{zoom}, Δy_{zoom})	Maximum Zoom Scan Spatial Resolution (mm)			Minimum Zoom Scan Volume (mm) (x,y,z)
			Uniform Grid	Graded Grid		
			$\Delta z_{zoom}(n)$	$\Delta z_{zoom}(1)$*	$\Delta z_{zoom}(n>1)$*	
≤ 2 GHz	≤ 15	≤ 8	≤ 5	≤ 4	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 30
2-3 GHz	≤ 12	≤ 5	≤ 5	≤ 4	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 30
3-4 GHz	≤ 12	≤ 5	≤ 4	≤ 3	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 28
4-5 GHz	≤ 10	≤ 4	≤ 3	≤ 2.5	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 25
5-6 GHz	≤ 10	≤ 4	≤ 2	≤ 2	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 22

*Also compliant to IEEE 1528-2013 Table 6

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5 DEFINITION OF REFERENCE POINTS

5.1 EAR REFERENCE POINT

Figure 5-2 shows the front, back and side views of the SAM Twin Phantom. The point "M" is the reference point for the center of the mouth, "LE" is the left ear reference point (ERP), and "RE" is the right ERP. The ERP is 15mm posterior to the entrance to the ear canal (EEC) along the B-M line (Back-Mouth), as shown in Figure 5-1. The plane passing through the two ear canals and M is defined as the Reference Plane. The line N-F (Neck-Front), also called the Reference Pivoting Line, is not perpendicular to the reference plane (see Figure 5-1). Line B-M is perpendicular to the N-F line. Both N-F and B-M lines are marked on the external phantom shell to facilitate handset positioning [5].

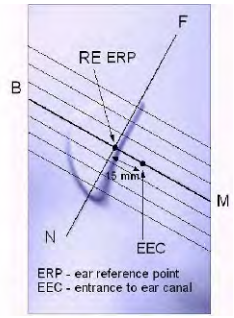

Figure 5-1
Close-Up Side view of ERP

5.2 HANDSET REFERENCE POINTS

Two imaginary lines on the handset were established: the vertical centerline and the horizontal line. The test device was placed in a normal operating position with the acoustic output located along the "vertical centerline" on the front of the device aligned to the "ear reference point" (See Figure 5-3). The acoustic output was than located at the same level as the center of the ear reference point. The test device was positioned so that the "vertical centerline" was bisecting the front surface of the handset at its top and bottom edges, positioning the "ear reference point" on the outer surface of the both the left and right head phantoms on the ear reference point.

Figure 5-2
Front, back and side view of SAM Twin Phantom

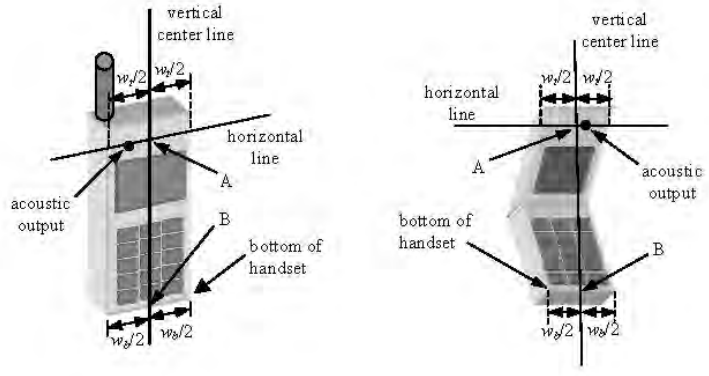

Figure 5-3
Handset Vertical Center & Horizontal Line Reference Points

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6 TEST CONFIGURATION POSITIONS

6.1 Device Holder

The device holder is made out of low-loss POM material having the following dielectric parameters: relative permittivity ε = 3 and loss tangent δ = 0.02.

6.2 Positioning for Cheek

1. The test device was positioned with the device close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 6-1), such that the plane defined by the vertical center line and the horizontal line of the phone is approximately parallel to the sagittal plane of the phantom.

Figure 6-1 Front, Side and Top View of Cheek Position

2. The handset was translated towards the phantom along the line passing through RE & LE until the handset touches the pinna.
3. While maintaining the handset in this plane, the handset was rotated around the LE-RE line until the vertical centerline was in the reference plane.
4. The phone was then rotated around the vertical centerline until the phone (horizontal line) was symmetrical was respect to the line NF.
5. While maintaining the vertical centerline in the reference plane, keeping point A on the line passing through RE and LE, and maintaining the device contact with the ear, the device was rotated about the NF line until any point on the handset made contact with a phantom point below the ear (cheek) (See Figure 6-2).

6.3 Positioning for Ear / 15º Tilt

With the test device aligned in the “Cheek Position”:

1. While maintaining the orientation of the phone, the phone was retracted parallel to the reference plane far enough to enable a rotation of the phone by 15degrees.
2. The phone was then rotated around the horizontal line by 15 degrees.
3. While maintaining the orientation of the phone, the phone was moved parallel to the reference plane until any part of the handset touched the head. (In this position, point A was located on the line RE-LE). The tilted position is obtained when the contact is on the pinna. If the contact was at any location other than the pinna, the angle of the phone would then be reduced. In this situation, the tilted position was obtained when any part of the phone was in contact of the ear as well as a second part of the phone was in contact with the head (see Figure 6-2).

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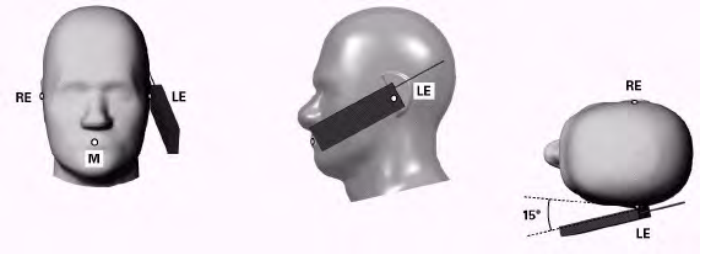

Figure 6-2 Front, Side and Top View of Ear/15º Tilt Position

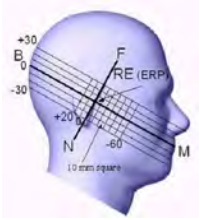

Figure 6-3
Side view w/ relevant markings

6.4 SAR Evaluations near the Mouth/Jaw Regions of the SAM Phantom

Antennas located near the bottom of a phone may require SAR measurements around the mouth and jaw regions of the SAM head phantom. This typically applies to clam-shell style phones that are generally longer in the unfolded normal use positions or to certain older style long rectangular phones. Per IEEE 1528-2013, a rotated SAM phantom is necessary to allow probe access to such regions. Both SAM heads of the TwinSAM-Chin20 are rotated 20 degrees around the NF line. Each head can be removed from the table for emptying and cleaning.

Under these circumstances, the following procedures apply, adopted from the FCC guidance on SAR handsets document FCC KDB Publication 648474 D04v01r03. The SAR required in these regions of SAM should be measured using a flat phantom. The phone should be positioned with a separation distance of 4 mm between the ear reference point (ERP) and the outer surface of the flat phantom shell. While maintaining this distance at the ERP location, the low (bottom) edge of the phone should be lowered from the phantom to establish the same separation distance between the peak SAR location identified by the truncated partial SAR distribution measured with the SAM phantom. The distance from the peak SAR location to the phone is determined by the straight line passing perpendicularly through the phantom surface. When it is not feasible to maintain 4 mm separation at the ERP while also establishing the required separation at the peak SAR location, the top edge of the phone will be allowed to touch the phantom with a separation < 4 mm at the ERP. The phone should not be tilted to the left or right while placed in this inclined position to the flat phantom.

6.5 Body-Worn Accessory Configurations

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 6-4). Per FCC KDB Publication 648474 D04v01r03, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

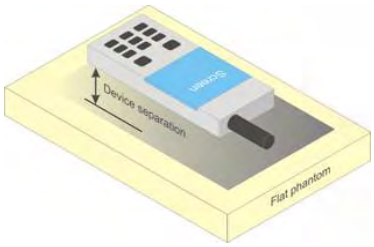

Figure 6-4
Sample Body-Worn Diagram

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not

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contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented.
Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

6.6 Extremity Exposure Configurations

Devices that are designed or intended for use on extremities or mainly operated in extremity only exposure conditions; i.e., hands, wrists, feet and ankles, may require extremity SAR evaluation. When the device also operates in close proximity to the user's body, SAR compliance for the body is also required. The 1g body and 10g extremity SAR Exclusion Thresholds found in KDB Publication 447498 D01v06 should be applied to determine SAR test requirements.

Per KDB Publication 447498 D01v06, Cell phones (handsets) are not normally designed to be used on extremities or operated in extremity only exposure conditions. The maximum output power levels of handsets generally do not require extremity SAR testing to show compliance. Therefore, extremity SAR was not evaluated for this device.

6.7 Wireless Router Configurations

Some battery-operated handsets have the capability to transmit and receive user data through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06v02r01 where SAR test considerations for handsets (L x W ≥ 9 cm x 5 cm) are based on a composite test separation distance of 10 mm from the front, back and edges of the device containing transmitting antennas within 2.5 cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v06 procedures. The "Portable Hotspot" feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

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6.8 Phablet Configurations

For smart phones with a display diagonal dimension > 150 mm or an overall diagonal dimension > 160 mm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, the phablets procedures outlined in KDB Publication 648474 D04v01r03 should be applied to evaluate SAR compliance. A device marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance. In addition to the normally required head and body-worn accessory SAR test procedures required for handsets, the UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna <=25 mm from that surface or edge, in direct contact with the phantom, for 10g SAR. The UMPC mini-tablet 1g SAR at 5 mm is not required. When hotspot mode applies, 10g SAR is required only for the surfaces and edges with hotspot mode 1g SAR > 1.2 W/kg.

6.9 Proximity Sensor Considerations

This device uses a power reduction mechanism to reduce output powers in certain use conditions when the device is used close the user's body.

When the device's antenna is within a certain distance of the user, the sensor activates and reduces the maximum allowed output power. However, the sensor is not active when the device is moved beyond the sensor triggering distance and the maximum output power is no longer limited. Therefore, additional evaluation is needed in the vicinity of the triggering distance to ensure SAR is compliant when the device is allowed to operate at a nonreduced output power level. FCC KDB Publication 616217 D04v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device at these additional test positions. Sensor triggering distance summary data is included in Appendix G.

The sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the sensor entirely covers the antennas.

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7 RF EXPOSURE LIMITS

7.1 Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

7.2 Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Table 7-1
SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6

HUMAN EXPOSURE LIMITS		
	UNCONTROLLED ENVIRONMENT *General Population* (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT *Occupational* (W/kg) or (mW/g)
Peak Spatial Average SAR Head	1.6	8.0
Whole Body SAR	0.08	0.4
Peak Spatial Average SAR Hands, Feet, Ankle, Wrists, etc.	4.0	20

1. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
2. The Spatial Average value of the SAR averaged over the whole body.
3. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

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8 FCC MEASUREMENT PROCEDURES

Power measurements for licensed transmitters are performed using a base station simulator under digital average power.

8.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D01v06, when SAR is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance. For simultaneous transmission, the measured aggregate SAR must be scaled according to the sum of the differences between the maximum tune-up tolerance and actual power used to test each transmitter. When SAR is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as *reported* SAR. The highest *reported* SAR results are identified on the grant of equipment authorization according to procedures in KDB 690783 D01v01r03.

8.2 3G SAR Test Reduction Procedure

In FCC KDB Publication 941225 D01v03r01, certain transmission modes within a frequency band and wireless mode evaluated for SAR are defined as primary modes. The equivalent modes considered for SAR test reduction are denoted as secondary modes. When the maximum output power including tune-up tolerance specified for production units in a secondary mode is ≤ 0.25 dB higher than the primary mode or when the highest reported SAR of the primary mode, scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode, is ≤ 1.2 W/kg, SAR measurements are not required for the secondary mode. These criteria are referred to as the 3G SAR test reduction procedure. When the 3G SAR test reduction procedure is not satisfied, SAR measurements are additionally required for the secondary mode.

8.3 Procedures Used to Establish RF Signal for SAR

The following procedures are according to FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.”

The device is placed into a simulated call using a base station simulator in a RF shielded chamber. Establishing connections in this manner ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. Devices under test are evaluated prior to testing, with a fully charged battery and were configured to operate at maximum output power. In order to verify that the device is tested throughout the SAR test at maximum output power, the SAR measurement system measures a “point SAR” at an arbitrary reference point at the start and end of the 1 gram SAR evaluation, to assess for any power drifts during the evaluation. If the power drift deviates by more than 5%, the SAR test and drift measurements are repeated.

8.4 SAR Measurement Conditions for CDMA2000

The following procedures were performed according to FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.”

8.4.1 Output Power Verification

See 3GPP2 C.S0011/TIA-98-E as recommended by FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.” Maximum output power is verified on the High, Middle and Low channels according to procedures in section 4.4.5.2 of 3GPP2 C.S0011/TIA-98-E. SO55 tests were measured with power control bits in the “All Up” condition.

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1. If the mobile station (MS) supports Reverse TCH RC 1 and Forward TCH RC 1, set up a call using Fundamental Channel Test Mode 1 (RC=1/1) with 9600 bps data rate only.
2. Under RC1, C.S0011 Table 4.4.5.2-1, Table 8-1 parameters were applied.
3. If the MS supports the RC 3 Reverse FCH, RC3 Reverse SCH_0 and demodulation of RC 3,4, or 5, set up a call using Supplemental Channel Test Mode 3 (RC 3/3) with 9600 bps Fundamental Channel and 9600 bps SCH0 data rate.
4. Under RC3, C.S0011 Table 4.4.5.2-2, Table 8-2 was applied.

Table 8-1
Parameters for Max. Power for RC1

Parameter	Units	Value
$\hat{I}_{or}$	dBm/1.23 MHz	-104
$\frac{\text{Pilot } E_c}{I_{or}}$	dB	-7
$\frac{\text{Traffic } E_c}{I_{or}}$	dB	-7.4

Table 8-2
Parameters for Max. Power for RC3

Parameter	Units	Value
$\hat{I}_{or}$	dBm/1.23 MHz	-86
$\frac{\text{Pilot } E_c}{I_{or}}$	dB	-7
$\frac{\text{Traffic } E_c}{I_{or}}$	dB	-7.4

5. FCHs were configured at full rate for maximum SAR with “All Up” power control bits.

8.4.2 Head SAR Measurements

SAR for next to the ear head exposure is measured in RC3 with the handset configured to transmit at fullrate in SO55. The 3G SAR test reduction procedure is applied to RC1 with RC3 as the primary mode; otherwise, SAR is required for the channel with maximum measured output in RC1 using the head exposure configuration that results in the highest reported SAR in RC3.

Head SAR is additionally evaluated using EVDO Rev. A to support compliance for VoIP operations. See Section 8.4.5 for EVDO Rev. A configuration parameters.

8.4.3 Body-worn SAR Measurements

SAR for body-worn exposure configurations is measured in RC3 with the DUT configured to transmit at full rate on FCH with all other code channels disabled using TDSO / SO32. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCHn), with FCH only as the primary mode. Otherwise, SAR is required for multiple code channel configuration (FCH + SCHn), with FCH at full rate and SCH0 enabled at 9600 bps, using the highest reported SAR configuration for FCH only. When multiple code channels are enabled, the transmitter output can shift by more than 0.5 dB and may lead to higher SAR drifts and SCH dropouts.

The 3G SAR test reduction procedure is applied to body-worn accessory SAR in RC1 with RC3 as the primary mode. Otherwise, SAR is required for RC1, with SO55 and full rate, using the highest reported SAR configuration for body-worn accessory exposure in RC3.

8.4.4 Body-worn SAR Measurements for EVDO Devices

For handsets with EVDO capabilities, the 3G SAR test reduction procedure is applied to EVDO Rev. 0 with 1x RTT RC3 as the primary mode to determine body-worn accessory test requirements. Otherwise, body-worn accessory SAR is required for Rev. 0, at 153.6 kbps, using the highest reported SAR configuration for body-worn accessory exposure in RC3.

The 3G SAR test reduction procedure is applied to Rev. A, with Rev. 0 as the primary mode to determine body-worn accessory SAR test requirements. When SAR is not required for Rev. 0, the 3G SAR test reduction is applied with 1x RTT RC3 as the primary mode.

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When SAR is required for EVDO Rev. A, SAR is measured with a Reverse Data Channel payload size of 4096 bits and a Termination Target of 16 slots defined for Subtype 2 Physical Layer configurations, using the highest reported SAR configuration for body-worn accessory exposure in Rev. 0 or 1x RTT RC3, as appropriate.

8.4.5 Body SAR Measurements for EVDO Hotspot

Hotspot Body SAR is measured using Subtype 0/1 Physical Layer configurations for Rev. 0. The 3G SAR test reduction procedure is applied to Rev. A, Subtype 2 Physical layer configuration, with Rev. 0 as the primary mode; otherwise, SAR is measured for Rev. A using the highest reported SAR configuration for body-worn accessory exposure in Rev. 0. The AT is tested with a Reverse Data Channel rate of 153.6 kbps in Subtype 0/1 Physical Layer configurations; and a Reverse Data Channel payload size of 4096 bits and Termination Target of 16 slots in Subtype 2 Physical Layer configurations.

For EVDO data devices that also support 1x RTT voice and/or data operations, the 3G SAR test reduction procedure is applied to 1x RTT RC3 and RC1 with EVDO Rev. 0 and Rev. A as the respective primary modes. Otherwise, the 'Body-Worn Accessory SAR' procedures in the '3GPP2 CDMA 2000 1x Handsets' section are applied.

8.4.6 CDMA2000 1x Advanced

This device additionally supports 1x Advanced. Conducted powers are measured using SO75 with RC8 on the uplink and RC11 on the downlink per FCC KDB Publication 941225 D01v03r01. Smart blanking is disabled for all measurements. The EUT is configured with forward power control Mode 000 and reverse power control at 400 bps. Conducted powers are measured on an Agilent 8960 Series 10 Wireless Communications Test Set, Model E5515C using the CDMA2000 1x Advanced application, Option E1962B-410.

The 3G SAR test reduction procedure is applied to the 1x-Advanced transmission mode with 1x RTT RC3 as the primary mode. When SAR measurement is required, the 1x-Advanced power measurement configurations are used. The1x Advanced SAR procedures are applied separately to head, body-worn accessory and other exposure conditions.

8.5 SAR Measurement Conditions for UMTS

8.5.1 Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC with TPC (transmit power control) set to all "1s" or applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HS-DPCCH etc) are tabulated in this test report. All configurations that are not supported by the DUT or cannot be measured due to technical or equipment limitations are identified.

8.5.2 Head SAR Measurements

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the

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primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

8.5.3 Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits all "1s". The 3G SAR test reduction procedure is applied to other spreading codes and multiple $DPDCH_n$ configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or $DPDCH_n$, for the highest reported SAR configuration in 12.2 kbps RMC.

8.5.4 SAR Measurements with Rel 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

8.5.5 SAR Measurements with Rel 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA.

When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

8.5.6 SAR Measurement Conditions for DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

8.6 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r04 publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 or Anritsu MT8820C simulators are used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

8.6.1 Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

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8.6.2 MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

8.6.3 A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

8.6.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

a. Per Section 5.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
    i. The required channel and offset combination with the highest maximum output power is required for SAR.
    ii. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
    iii. When the reported SAR for a required test channel is > 1.45 W/kg, SAR is required for all RB offset configurations for that channel.
b. Per Section 5.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Section 5.2.1.
c. Per Section 5.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocation is less than the highest maximum output power of the 1 RB and 50% RB allocations and the reported SAR for the 1 RB and 50% RB allocations is < 0.8 W/kg.
d. Per Section 5.2.4 and 5.3, SAR tests for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configurations determined by Sections 5.2.1 through 5.2.3 is less than or equal to ½ dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is <1.45 W/kg.

8.6.5 TDD

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05v02r04. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05v02r04. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4.

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8.6.6 Downlink Only Carrier Aggregation

Conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for downlink only carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive.

8.7 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01v02r02 for more details.

8.7.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters.

A periodic duty factor is required for current generation SAR systems to measure SAR. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR is scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

8.7.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is > 1.2 W/kg. When different maximum output powers are specified for the bands, SAR measurement for the U-NII band with the lower maximum output power is not required unless the highest reported SAR for the U-NII band with the higher maximum output power, adjusted by the ratio of lower to higher specified maximum output power for the two bands, is > 1.2 W/kg. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.7.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification. Unless band gap channels are permanently disabled, SAR must be considered for these channels. Each band is

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tested independently according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

8.7.4 Initial Test Position Procedure

For exposure conditions with multiple test positions, such as handset operating next to the ear, devices with hotspot mode or UMPC mini-tablet, procedures for initial test position can be applied. Using the transmission mode determined by the DSSS procedure or initial test configuration, area scans are measured for all positions in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg, no additional testing for the remaining test positions is required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.7.5 2.4 GHz SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either the fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.

2) When the reported SAR is > 0.8 W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

2.4 GHz 802.11 g/n OFDM are additionally evaluated for SAR if the highest reported SAR for 802.11b, adjusted by the ratio of the OFDM to DSSS specified maximum output power, is > 1.2 W/kg. When SAR is required for OFDM modes in 2.4 GHz band, the Initial Test Configuration Procedures should be followed. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.7.6 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

8.7.7 Initial Test Configuration Procedure

For OFDM, an initial test configuration is determined for each frequency band and aggregated band, according to the transmission mode with the highest maximum output power specified for SAR measurements. When the same maximum output power is specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration(s) with the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order IEEE 802.11 mode.

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The channel of the transmission mode with the highest average RF output conducted power will be the initial test configuration.

When the reported SAR is ≤ 0.8 W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is ≤ 1.2 W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest 802.11 mode is considered for SAR measurements (See Section 8.7.6). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.7.8 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency band and aggregated band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position procedure. When the highest reported SAR (for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is ≤ 1.2 W/kg, no additional SAR tests for the subsequent test configurations are required. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.7.9 MIMO SAR considerations

Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D01v06 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is <1.6 W/kg, no additional SAR measurements for MIMO are required. Alternatively, SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

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9 RF CONDUCTED POWERS

9.1 GSM Conducted Powers

Table 9-1
Maximum Conducted Power

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	32.58	32.65	31.01	**29.49**	27.23	26.42	24.82	22.54	21.73
	190	32.61	32.77	30.70	**29.51**	27.56	26.45	24.93	23.00	21.79
	251	32.63	32.58	30.52	**29.61**	27.33	26.55	24.94	22.89	21.94
GSM 1900	512	29.41	29.44	29.00	**27.38**	25.34	25.88	24.72	22.76	21.35
	661	29.47	29.54	28.97	**27.36**	25.50	26.17	24.98	22.84	21.80
	810	29.52	29.61	28.86	**27.34**	25.46	25.71	24.55	22.70	21.50
Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	23.38	23.45	24.82	**25.06**	24.05	17.22	18.63	18.11	18.55
	190	23.41	23.57	24.51	**25.08**	24.38	17.25	18.74	18.57	18.61
	251	23.43	23.38	24.33	**25.18**	24.15	17.35	18.75	18.46	18.76
GSM 1900	512	20.21	20.24	22.81	**22.95**	22.16	16.68	18.53	18.33	18.17
	661	20.27	20.34	22.78	**22.93**	22.32	16.97	18.79	18.41	18.62
	810	20.32	20.41	22.67	**22.91**	22.28	16.51	18.36	18.27	18.32
GSM 850	**Frame Avg.Targets:**	23.30	23.30	25.31	**25.07**	24.32	17.80	18.81	18.57	17.82
GSM 1900		20.30	20.30	21.81	**22.07**	21.32	16.80	17.81	17.57	17.82

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Table 9-2
Reduced Conducted Power – Hotspot Mode Active

Maximum Burst-Averaged Output Power									
		GPRS/EDGE Data (GMSK)				*EDGE Data (GMSK)*			
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	27.33	25.10	**23.13**	21.29	25.88	24.72	22.76	21.35
	661	27.81	25.37	**23.56**	21.57	26.17	24.98	22.84	21.80
	810	27.08	25.12	**23.02**	21.10	25.71	24.55	22.70	21.50
Calculated Maximum Frame-Averaged Output Power									
		GPRS/EDGE Data (GMSK)				*EDGE Data (GMSK)*			
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	18.13	18.91	**18.70**	18.11	16.85	18.70	18.50	18.34
	661	18.61	19.18	**19.13**	18.39	17.14	18.96	18.58	18.79
	810	17.88	18.93	**18.59**	17.92	16.68	18.53	18.44	18.49
GSM 1900	**Frame Avg.Targets:**	17.80	18.81	**18.57**	17.82	16.80	17.81	17.57	17.82

Table 9-3
Reduced Conducted Power – Grip Sensor and/or Earjack Mode Active

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (GMSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	27.55	27.33	25.10	**23.13**	21.29	25.88	24.72	22.76	21.35
	661	28.00	27.81	25.37	**23.56**	21.57	26.17	24.98	22.84	21.80
	810	27.35	27.08	25.12	**23.02**	21.10	25.71	24.55	22.70	21.50
Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (GMSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	18.35	18.13	18.91	**18.70**	18.11	16.85	18.70	18.50	18.34
	661	18.80	18.61	19.18	**19.13**	18.39	17.14	18.96	18.58	18.79
	810	18.15	17.88	18.93	**18.59**	17.92	16.68	18.53	18.44	18.49
GSM 1900	**Frame Avg.Targets:**	17.80	17.80	18.81	**18.57**	17.82	16.80	17.81	17.57	17.82

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Note:

1. Both burst-averaged and calculated frame-averaged powers are included. Frame-averaged power was calculated from the measured burst-averaged power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
2. GPRS/EDGE (GMSK) output powers were measured with coding scheme setting of 1 (CS1) on the base station simulator. CS1 was configured to measure GPRS output power measurements and SAR to ensure GMSK modulation in the signal. Our Investigation has shown that CS1 - CS4 settings do not have any impact on the output levels or modulation in the GPRS modes.
3. EDGE (8-PSK) output powers were measured with MCS7 on the base station simulator. MCS7 coding scheme was used to measure the output powers for EDGE since investigation has shown that choosing MCS7 coding scheme will ensure 8-PSK modulation. It has been shown that MCS levels that produce 8-PSK modulation do not have an impact on output power.

GSM Class: B
GPRS Multislot class: 33 (Max 4 Tx uplink slots)
EDGE Multislot class: 33 (Max 4 Tx uplink slots)
DTM Multislot Class: N/A

Figure 9-1
Power Measurement Setup

9.2 UMTS Conducted Powers

Table 9-4
Maximum Conducted Power

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	24.57	24.64	24.67	24.59	25.00	24.63	24.55	24.45	24.31	-
99		12.2 kbps AMR	24.55	24.59	24.62	24.30	24.99	24.54	24.53	24.34	24.22	-
6	HSDPA	Subtest 1	23.63	23.73	23.74	23.35	24.11	23.73	23.73	23.68	23.46	0
6		Subtest 2	23.66	23.74	23.67	23.13	23.97	23.53	23.42	23.65	23.45	0
6		Subtest 3	23.17	23.20	23.22	22.56	23.49	22.99	23.05	22.90	22.86	0.5
6		Subtest 4	23.17	23.22	23.25	22.62	23.50	23.06	23.03	22.91	22.90	0.5
6	HSUPA	Subtest 1	23.36	23.40	23.28	23.16	24.16	23.63	23.75	23.68	23.61	0
6		Subtest 2	21.35	21.43	21.45	21.65	22.36	21.92	21.83	21.73	21.88	2
6		Subtest 3	22.35	22.41	22.45	22.51	23.28	22.89	22.78	22.81	22.73	1
6		Subtest 4	21.38	21.46	21.45	21.71	22.39	22.02	21.91	21.92	21.96	2
6		Subtest 5	23.41	23.47	23.48	23.03	23.96	23.32	23.47	23.65	23.08	0
8	DC-HSDPA	Subtest 1	23.37	23.35	23.11	23.33	24.15	23.61	23.68	23.59	23.24	0
8		Subtest 2	23.45	23.53	23.49	23.19	23.98	23.19	23.38	23.28	23.11	0
8		Subtest 3	22.99	23.02	23.02	22.55	23.46	22.73	22.99	22.84	22.68	0.5
8		Subtest 4	22.94	23.01	22.99	22.67	23.64	23.11	23.28	22.98	22.81	0.5

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Table 9-5
Reduced Conducted Power – Hotspot Mode, Grip Sensor and/or Earjack Mode Active

3GPP Release Version	Mode	3GPP 34.121 Subtest	AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	19.63	19.50	19.62	19.03	19.13	19.07	-
99		12.2 kbps AMR	19.59	19.54	19.63	19.05	19.19	19.09	-
6	HSDPA	Subtest 1	18.95	18.94	19.00	18.53	18.65	18.54	0
6		Subtest 2	18.99	18.99	18.99	18.50	18.65	18.58	0
6		Subtest 3	18.51	18.52	18.55	18.07	18.04	18.06	0.5
6		Subtest 4	18.48	18.52	18.56	18.07	18.09	18.11	0.5
6	HSUPA	Subtest 1	18.93	18.94	19.00	18.52	18.63	18.56	0
6		Subtest 2	17.00	17.01	17.05	16.53	16.62	16.56	2
6		Subtest 3	18.01	18.00	18.12	17.57	17.67	17.58	1
6		Subtest 4	16.99	17.01	17.07	16.55	16.67	16.57	2
6		Subtest 5	18.99	18.99	19.00	18.61	18.72	18.61	0
8	DC-HSDPA	Subtest 1	18.97	18.95	19.00	18.53	18.62	18.57	0
8		Subtest 2	19.00	19.00	18.98	18.53	18.69	18.61	0
8		Subtest 3	18.51	18.48	18.55	18.06	18.13	18.05	0.5
8		Subtest 4	18.47	18.47	18.52	18.01	18.16	18.07	0.5

DC-HSDPA considerations

- 3GPP Specification 34.121-1 Release 8 Ver 8.10.0 was used for DC-HSDPA guidance
- H-Set 12 (QPSK) was confirmed to be used during DC-HSDPA measurements
- The DUT supports UE category 24 for HSDPA

It is expected by the manufacturer that MPR for some HSPA subtests may be up to 2 dB more than specified by 3GPP, but also as low as 0 dB according to the chipset implementation in this model.

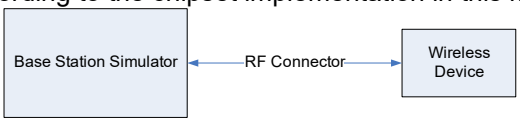

Figure 9-2
Power Measurement Setup

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9.3 CDMA Conducted Powers

Table 9-6
Maximum Conducted Power

Band	Channel	Rule Part	Frequency	SO55 [dBm]	SO55 [dBm]	SO75 [dBm]	TDSO SO32 [dBm]	TDSO SO32 [dBm]	1x EvDO Rev. 0 [dBm]	1x EvDO Rev. A [dBm]
	F-RC		MHz	RC1	RC3	RC11	FCH+SCH	FCH	(RTAP)	(RETAP)
Cellular	564	90S	820.1	25.04	25.02	24.91	24.94	24.96	24.84	24.81
Cellular	1013	22H	824.7	24.88	24.89	24.84	24.86	24.84	24.72	24.70
	384	22H	836.52	24.71	24.85	24.80	24.86	24.83	24.61	24.67
	777	22H	848.31	24.75	24.86	24.90	24.88	24.90	24.50	24.41
PCS	25	24E	1851.25	24.22	24.11	24.25	24.32	24.22	24.20	24.00
	600	24E	1880	24.16	24.29	24.47	24.52	24.35	24.37	24.12
	1175	24E	1908.75	24.21	24.26	24.16	24.56	24.37	24.24	23.96

Table 9-7
Reduced Conducted Power – Hotspot Mode, Grip Sensor and/or Earjack Mode Active

Band	Channel	Rule Part	Frequency	SO55 [dBm]	SO55 [dBm]	SO75 [dBm]	TDSO SO32 [dBm]	TDSO SO32 [dBm]	1x EvDO Rev. 0 [dBm]	1x EvDO Rev. A [dBm]
	F-RC		MHz	RC1	RC3	RC11	FCH+SCH	FCH	(RTAP)	(RETAP)
PCS	25	24E	1851.25	18.82	18.82	18.78	18.83	18.82	18.81	18.79
	600	24E	1880	19.12	19.12	19.09	19.13	19.14	19.14	19.11
	1175	24E	1908.75	18.92	18.95	19.05	18.97	18.97	19.02	19.03

Note: RC1 is only applicable for IS-95 compatibility. For FCC Rule Part 90S, Per FCC KDB Publication 447498 D01v06 4.1.g), only one channel is required since the device operates within the transmission range of 817.90 – 823.10 MHz.

Figure 9-3
Power Measurement Setup

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9.4 LTE Conducted Powers

9.4.1 LTE Band 71

Table 9-8
LTE Band 71 Maximum Conducted Powers - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.66**	0	0
	1	50	24.37		0
	1	99	24.40		0
	50	0	**23.62**	0-1	1
	50	25	23.51		1
	50	50	23.49		1
	100	0	23.47		1
16QAM	1	0	24.28	0-1	1
	1	50	23.93		1
	1	99	23.98		1
	50	0	22.65	0-2	2
	50	25	22.57		2
	50	50	22.56		2
	100	0	22.56		2
64QAM	1	0	22.99	0-2	2
	1	50	22.74		2
	1	99	22.82		2
	50	0	21.73	0-3	3
	50	25	21.63		3
	50	50	21.58		3
	100	0	21.47		3
256QAM	1	0	19.98	0-5	5
	1	50	20.10		5
	1	99	19.95		5
	50	0	19.92		5
	50	25	20.01		5
	50	50	19.98		5
	100	0	19.89		5

Note: LTE Band 71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-9
LTE Band 71 Maximum Conducted Powers - 15 MHz Bandwidth

LTE Band 71 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.88	0	0
	1	36	24.84		0
	1	74	24.71		0
	36	0	23.99	0-1	1
	36	18	23.92		1
	36	37	23.79		1
	75	0	23.88		1
16QAM	1	0	24.38	0-1	1
	1	36	23.96		1
	1	74	24.15		1
	36	0	23.03	0-2	2
	36	18	22.94		2
	36	37	22.88		2
	75	0	22.84		2
64QAM	1	0	22.90	0-2	2
	1	36	23.05		2
	1	74	23.03		2
	36	0	21.99	0-3	3
	36	18	21.94		3
	36	37	21.88		3
	75	0	21.85		3
256QAM	1	0	19.94	0-5	5
	1	36	20.01		5
	1	74	19.96		5
	36	0	19.89		5
	36	18	19.98		5
	36	37	19.91		5
	75	0	19.90		5

Note: LTE Band 71 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-10
LTE Band 71 Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 71 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 133172 (668.0 MHz)	Mid Channel 133297 (680.5 MHz)	High Channel 133422 (693.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.95	24.89	24.79	0	0
	1	25	25.07	24.74	24.83		0
	1	49	24.94	24.80	24.78		0
	25	0	24.26	23.95	23.80	0-1	1
	25	12	24.17	23.93	23.88		1
	25	25	24.05	23.82	23.95		1
	50	0	24.10	23.83	23.82		1
16QAM	1	0	24.75	24.35	24.24	0-1	1
	1	25	24.55	24.18	24.15		1
	1	49	24.45	24.21	24.18		1
	25	0	23.23	22.93	22.91	0-2	2
	25	12	23.18	22.86	22.86		2
	25	25	23.12	22.90	22.90		2
	50	0	23.11	22.85	22.85		2
64QAM	1	0	22.78	23.05	23.03	0-2	2
	1	25	23.33	22.97	23.04		2
	1	49	22.90	23.02	22.73		2
	25	0	22.24	21.94	21.95	0-3	3
	25	12	22.23	21.94	21.92		3
	25	25	22.01	21.83	21.88		3
	50	0	22.05	21.87	21.85		3
256QAM	1	0	20.06	19.88	19.79	0-5	5
	1	25	20.35	19.83	19.96		5
	1	49	19.93	19.82	19.80		5
	25	0	20.19	19.94	19.84		5
	25	12	20.23	19.91	19.84		5
	25	25	20.07	19.80	19.88		5
	50	0	20.12	19.90	19.74		5

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Table 9-11
LTE Band 71 Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 71 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 133147 (665.5 MHz)	Mid Channel 133297 (680.5 MHz)	High Channel 133447 (695.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.99	24.76	24.68	0	0
	1	12	24.90	24.80	25.00		0
	1	24	25.00	24.83	24.81		0
	12	0	24.23	23.86	23.86	0-1	1
	12	6	24.26	23.92	23.93		1
	12	13	24.22	23.84	24.00		1
	25	0	24.22	23.88	23.87		1
16QAM	1	0	24.55	24.06	24.11	0-1	1
	1	12	24.66	24.22	24.38		1
	1	24	24.54	24.21	24.14		1
	12	0	23.35	22.92	22.86	0-2	2
	12	6	23.33	23.00	22.96		2
	12	13	23.34	22.94	22.95		2
	25	0	23.25	22.91	22.92		2
64QAM	1	0	22.86	23.05	22.89	0-2	2
	1	12	23.38	23.10	23.08		2
	1	24	23.44	23.00	22.72		2
	12	0	22.05	21.91	21.90	0-3	3
	12	6	22.38	21.97	21.94		3
	12	13	22.31	21.93	21.98		3
	25	0	22.23	21.90	21.89		3
256QAM	1	0	20.31	19.89	19.91	0-5	5
	1	12	20.41	20.00	20.15		5
	1	24	20.34	19.99	19.98		5
	12	0	20.25	19.96	19.87		5
	12	6	20.33	19.98	19.89		5
	12	13	20.18	19.94	19.90		5
	25	0	20.28	19.84	19.94		5

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9.4.2 LTE Band 12

Table 9-12
LTE Band 12 Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.40**	0	0
	1	25	24.11		0
	1	49	24.10		0
	25	0	23.09	0-1	1
	25	12	23.14		1
	25	25	**23.40**		1
	50	0	23.09		1
16QAM	1	0	23.81	0-1	1
	1	25	23.61		1
	1	49	23.44		1
	25	0	22.13	0-2	2
	25	12	22.27		2
	25	25	22.09		2
	50	0	22.19		2
64QAM	1	0	22.37	0-2	2
	1	25	22.26		2
	1	49	22.26		2
	25	0	21.20	0-3	3
	25	12	21.35		3
	25	25	21.21		3
	50	0	21.16		3
256QAM	1	0	19.10	0-5	5
	1	25	19.25		5
	1	49	19.40		5
	25	0	19.30		5
	25	12	19.70		5
	25	25	19.65		5
	50	0	19.75		5

Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-13
LTE Band 12 Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 12 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 23035 (701.5 MHz)	Mid Channel 23095 (707.5 MHz)	High Channel 23155 (713.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.11	24.19	24.04	0	0
	1	12	24.15	24.20	24.03		0
	1	24	24.13	24.21	24.03		0
	12	0	23.29	23.29	23.20	0-1	1
	12	6	23.38	23.30	23.17		1
	12	13	23.32	23.25	23.17		1
	25	0	23.37	23.29	23.19		1
16QAM	1	0	23.54	23.35	23.48	0-1	1
	1	12	23.59	23.40	23.56		1
	1	24	23.63	23.35	23.39		1
	12	0	22.31	22.27	22.21	0-2	2
	12	6	22.38	22.35	22.22		2
	12	13	22.32	22.32	22.19		2
	25	0	22.40	22.35	22.21		2
64QAM	1	0	22.31	22.58	22.26	0-2	2
	1	12	22.31	22.54	22.25		2
	1	24	22.34	22.53	22.28		2
	12	0	21.38	21.40	21.25	0-3	3
	12	6	21.48	21.43	21.26		3
	12	13	21.43	21.36	21.28		3
	25	0	21.34	21.41	21.16		3
256QAM	1	0	18.96	19.23	18.87	0-5	5
	1	12	18.95	19.25	18.85		5
	1	24	18.88	19.25	18.81		5
	12	0	19.31	19.43	19.20		5
	12	6	19.39	19.48	19.19		5
	12	13	19.32	19.44	19.23		5
	25	0	19.37	19.39	19.25		5

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Table 9-14
LTE Band 12 Maximum Conducted Powers - 3 MHz Bandwidth

LTE Band 12 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 23025 (700.5 MHz)	Mid Channel 23095 (707.5 MHz)	High Channel 23165 (714.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.14	24.12	24.14	0	0
	1	7	24.22	24.14	24.03		0
	1	14	24.16	24.10	24.03		0
	8	0	23.35	23.34	23.19	0-1	1
	8	4	23.35	23.32	23.19		1
	8	7	23.31	23.27	23.21		1
	15	0	23.33	23.31	23.18		1
16QAM	1	0	23.58	23.57	23.73	0-1	1
	1	7	23.51	23.51	23.60		1
	1	14	23.58	23.58	23.58		1
	8	0	22.47	22.43	22.34	0-2	2
	8	4	22.49	22.44	22.31		2
	8	7	22.44	22.39	22.31		2
	15	0	22.47	22.44	22.28		2
64QAM	1	0	22.50	22.51	22.22	0-2	2
	1	7	22.51	22.47	22.12		2
	1	14	22.50	22.48	22.09		2
	8	0	21.36	21.30	21.28	0-3	3
	8	4	21.38	21.35	21.26		3
	8	7	21.34	21.28	21.25		3
	15	0	21.41	21.39	21.22		3
256QAM	1	0	19.25	19.31	19.83	0-5	5
	1	7	19.26	19.26	19.75		5
	1	14	19.27	19.22	19.69		5
	8	0	19.39	19.44	19.34		5
	8	4	19.41	19.44	19.32		5
	8	7	19.41	19.43	19.31		5
	15	0	19.41	19.44	19.28		5

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Table 9-15
LTE Band 12 Maximum Conducted Powers - 1.4 MHz Bandwidth

LTE Band 12 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 23017 (699.7 MHz)	Mid Channel 23095 (707.5 MHz)	High Channel 23173 (715.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.05	24.03	24.01	0	0
	1	2	24.18	24.12	24.18		0
	1	5	24.16	24.03	24.15		0
	3	0	24.13	24.12	23.99		0
	3	2	24.18	24.16	24.06		0
	3	3	24.16	24.10	24.04		0
	6	0	23.29	23.21	23.06	0-1	1
16QAM	1	0	23.51	23.49	23.31	0-1	1
	1	2	23.58	23.52	23.43		1
	1	5	23.58	23.50	23.40		1
	3	0	23.27	23.22	23.23		1
	3	2	23.35	23.25	23.33		1
	3	3	23.31	23.24	23.29		1
	6	0	22.35	22.28	22.22	0-2	2
64QAM	1	0	22.39	22.41	22.46	0-2	2
	1	2	22.49	22.43	22.57		2
	1	5	22.47	22.42	22.47		2
	3	0	22.37	22.33	22.23		2
	3	2	22.43	22.40	22.24		2
	3	3	22.38	22.34	22.28		2
	6	0	21.40	21.31	21.03	0-3	3
256QAM	1	0	19.15	19.21	19.18	0-5	5
	1	2	19.21	19.23	19.28		5
	1	5	19.09	19.17	19.14		5
	3	0	19.34	19.35	19.15		5
	3	2	19.41	19.39	19.25		5
	3	3	19.38	19.37	19.20		5
	6	0	19.36	19.36	19.18		5

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9.4.3 LTE Band 13

Table 9-16
LTE Band 13 Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**25.00**	0	0
	1	25	24.80		0
	1	49	24.81		0
	25	0	23.90	0-1	1
	25	12	23.88		1
	25	25	**24.00**		1
	50	0	23.99		1
16QAM	1	0	24.10	0-1	1
	1	25	24.15		1
	1	49	24.08		1
	25	0	22.85	0-2	2
	25	12	22.76		2
	25	25	22.78		2
	50	0	22.72		2
64QAM	1	0	22.86	0-2	2
	1	25	22.94		2
	1	49	22.85		2
	25	0	21.85	0-3	3
	25	12	21.88		3
	25	25	21.86		3
	50	0	21.76		3
256QAM	1	0	20.59	0-5	5
	1	25	20.50		5
	1	49	20.51		5
	25	0	20.41		5
	25	12	20.48		5
	25	25	20.50		5
	50	0	20.36		5

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Table 9-17
LTE Band 13 Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 13 5 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	25.16	0	0
	1	12	25.10		0
	1	24	25.15		0
	12	0	24.12	0-1	1
	12	6	24.15		1
	12	13	24.13		1
	25	0	24.10		1
16QAM	1	0	24.58	0-1	1
	1	12	24.47		1
	1	24	24.52		1
	12	0	23.31	0-2	2
	12	6	23.15		2
	12	13	23.20		2
	25	0	23.20		2
64QAM	1	0	23.26	0-2	2
	1	12	23.25		2
	1	24	23.30		2
	12	0	22.33	0-3	3
	12	6	22.36		3
	12	13	22.32		3
	25	0	22.20		3
256QAM	1	0	20.29	0-5	5
	1	12	20.51		5
	1	24	20.43		5
	12	0	20.30		5
	12	6	20.33		5
	12	13	20.43		5
	25	0	20.29		5

Note: LTE Band 13 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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9.4.4 LTE Band 14

Table 9-18
LTE Band 14 Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**25.65**	0	0
	1	25	25.54		0
	1	49	25.40		0
	25	0	24.51	0-1	1
	25	12	**24.56**		1
	25	25	24.50		1
	50	0	24.50		1
16QAM	1	0	24.80	0-1	1
	1	25	24.75		1
	1	49	24.69		1
	25	0	23.60	0-2	2
	25	12	23.67		2
	25	25	23.60		2
	50	0	23.59		2
64QAM	1	0	23.53	0-2	2
	1	25	23.52		2
	1	49	23.46		2
	25	0	22.64	0-3	3
	25	12	22.68		3
	25	25	22.65		3
	50	0	22.62		3
256QAM	1	0	20.29	0-5	5
	1	25	20.48		5
	1	49	20.14		5
	25	0	20.57		5
	25	12	20.60		5
	25	25	20.56		5
	50	0	20.60		5

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Table 9-19
LTE Band 14 Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 14 5 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	25.46	0	0
	1	12	25.55		0
	1	24	25.52		0
	12	0	24.57	0-1	1
	12	6	24.60		1
	12	13	24.56		1
	25	0	24.56		1
16QAM	1	0	24.62	0-1	1
	1	12	24.71		1
	1	24	24.63		1
	12	0	23.61	0-2	2
	12	6	23.54		2
	12	13	23.55		2
	25	0	23.64		2
64QAM	1	0	23.78	0-2	2
	1	12	23.80		2
	1	24	23.79		2
	12	0	22.68	0-3	3
	12	6	22.67		3
	12	13	22.63		3
	25	0	22.64		3
256QAM	1	0	20.43	0-5	5
	1	12	20.50		5
	1	24	20.48		5
	12	0	20.71		5
	12	6	20.70		5
	12	13	20.65		5
	25	0	20.67		5

Note: LTE Band 14 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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9.4.5 LTE Band 26

Table 9-20
LTE Band 26 (Cell) Maximum Conducted Powers - 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**25.18**	0	0
	1	36	25.09		0
	1	74	24.80		0
	36	0	**24.23**	0-1	1
	36	18	24.15		1
	36	37	24.04		1
	75	0	24.01		1
16QAM	1	0	24.29	0-1	1
	1	36	24.31		1
	1	74	24.04		1
	36	0	23.21	0-2	2
	36	18	23.22		2
	36	37	23.25		2
	75	0	23.20		2
64QAM	1	0	23.51	0-2	2
	1	36	23.01		2
	1	74	22.83		2
	36	0	22.29	0-3	3
	36	18	22.10		3
	36	37	22.00		3
	75	0	21.99		3
256QAM	1	0	20.60	0-5	5
	1	36	20.71		5
	1	74	20.40		5
	36	0	20.55		5
	36	18	20.61		5
	36	37	20.52		5
	75	0	20.52		5

Note: LTE Band 26 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-21
LTE Band 26 (Cell) Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 26 (Cell) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26740 (819.0 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 26990 (844.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	25.48	25.45	25.00	0	0
	1	25	25.44	25.47	25.08		0
	1	49	25.52	25.19	25.21		0
	25	0	24.43	24.40	24.26	0-1	1
	25	12	24.52	24.52	24.33		1
	25	25	24.41	24.50	24.21		1
	50	0	24.46	24.39	24.21		1
16QAM	1	0	24.76	24.80	24.71	0-1	1
	1	25	24.75	24.70	24.66		1
	1	49	24.73	24.72	24.53		1
	25	0	23.37	23.80	23.24	0-2	2
	25	12	23.54	23.52	23.38		2
	25	25	23.36	23.70	23.12		2
	50	0	23.49	23.60	23.24		2
64QAM	1	0	23.00	23.78	23.11	0-2	2
	1	25	23.11	23.30	23.25		2
	1	49	23.41	22.90	23.07		2
	25	0	21.80	22.72	21.93	0-3	3
	25	12	21.84	22.49	21.99		3
	25	25	22.45	22.23	21.92		3
	50	0	21.85	22.38	21.84		3
256QAM	1	0	20.28	20.41	20.40	0-5	5
	1	25	20.65	20.79	20.43		5
	1	49	20.46	20.59	20.29		5
	25	0	20.41	20.61	20.25		5
	25	12	20.55	20.66	20.38		5
	25	25	20.46	20.66	20.29		5
	50	0	20.44	20.53	20.27		5

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Table 9-22
LTE Band 26 (Cell) Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 26 (Cell) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26715 (816.5 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 27015 (846.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	25.18	25.42	25.27	0	0
	1	12	25.36	25.52	25.31		0
	1	24	25.35	25.30	25.21		0
	12	0	24.35	24.46	24.30	0-1	1
	12	6	24.40	24.56	24.37		1
	12	13	24.42	24.45	24.24		1
	25	0	24.20	24.40	24.27		1
16QAM	1	0	24.52	24.70	24.60	0-1	1
	1	12	24.51	24.80	24.52		1
	1	24	24.63	24.52	24.57		1
	12	0	23.38	23.60	23.30	0-2	2
	12	6	23.55	23.63	23.39		2
	12	13	23.52	23.65	23.32		2
	25	0	23.43	23.51	23.28		2
64QAM	1	0	22.82	23.51	23.31	0-2	2
	1	12	22.81	23.19	23.13		2
	1	24	22.66	23.06	23.04		2
	12	0	21.64	22.24	22.00	0-3	3
	12	6	21.79	22.20	22.02		3
	12	13	21.69	22.06	22.24		3
	25	0	21.63	22.10	22.02		3
256QAM	1	0	20.47	20.55	20.33	0-5	5
	1	12	20.61	20.63	20.43		5
	1	24	20.51	20.64	20.35		5
	12	0	20.40	20.54	20.38		5
	12	6	20.51	20.62	20.38		5
	12	13	20.45	20.57	20.28		5
	25	0	20.42	20.58	20.27		5

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Table 9-23
LTE Band 26 (Cell) Maximum Conducted Powers - 3 MHz Bandwidth

LTE Band 26 (Cell) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26705 (815.5 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 27025 (847.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	25.31	25.48	25.23	0	0
	1	7	25.40	25.54	25.17		0
	1	14	25.22	25.25	25.03		0
	8	0	24.40	24.54	24.25	0-1	1
	8	4	24.43	24.54	24.27		1
	8	7	24.41	24.51	24.20		1
	15	0	24.40	24.53	24.27		1
16QAM	1	0	24.64	24.80	24.60	0-1	1
	1	7	24.65	24.73	24.61		1
	1	14	24.55	24.54	24.47		1
	8	0	23.50	23.66	23.34	0-2	2
	8	4	23.58	23.69	23.35		2
	8	7	23.55	23.66	23.37		2
	15	0	23.49	23.55	23.30		2
64QAM	1	0	22.75	23.29	23.28	0-2	2
	1	7	22.81	23.24	23.21		2
	1	14	22.67	23.27	23.20		2
	8	0	21.73	22.23	22.32	0-3	3
	8	4	21.85	22.22	22.18		3
	8	7	21.79	22.18	22.36		3
	15	0	21.71	22.16	22.22		3
256QAM	1	0	20.50	20.56	20.37	0-5	5
	1	7	20.57	20.65	20.40		5
	1	14	20.54	20.66	20.25		5
	8	0	20.47	20.59	20.25		5
	8	4	20.55	20.61	20.36		5
	8	7	20.48	20.62	20.33		5
	15	0	20.53	20.58	20.28		5

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Table 9-24
LTE Band 26 (Cell) Maximum Conducted Powers - 1.4 MHz Bandwidth

LTE Band 26 (Cell) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26697 (814.7 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 27033 (848.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	25.22	25.45	25.02	0	0
	1	2	25.36	25.48	25.14		0
	1	5	25.20	25.40	24.92		0
	3	0	25.23	25.36	25.05		0
	3	2	25.34	25.49	25.11		0
	3	3	25.31	25.40	25.08		0
	6	0	24.35	24.44	24.16	0-1	1
16QAM	1	0	24.59	24.72	24.53	0-1	1
	1	2	24.63	24.77	24.47		1
	1	5	24.67	24.79	24.41		1
	3	0	24.59	24.60	24.31		1
	3	2	24.51	24.68	24.30		1
	3	3	24.50	24.66	24.28		1
	6	0	23.45	23.49	23.24	0-2	2
64QAM	1	0	22.91	23.29	23.35	0-2	2
	1	2	22.96	23.37	23.43		2
	1	5	22.87	23.20	23.31		2
	3	0	22.82	23.24	23.22		2
	3	2	22.89	23.20	23.29		2
	3	3	22.87	23.16	23.27		2
	6	0	21.81	22.15	22.18	0-3	3
256QAM	1	0	20.48	20.51	20.31	0-5	5
	1	2	20.55	20.65	20.33		5
	1	5	20.54	20.57	20.34		5
	3	0	20.49	20.57	20.32		5
	3	2	20.55	20.66	20.33		5
	3	3	20.48	20.62	20.29		5
	6	0	20.41	20.45	20.17		5

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9.4.6 LTE Band 5

Table 9-25
LTE Band 5 (Cell) Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.13	0	0
	1	25	24.12		0
	1	49	**24.30**		0
	25	0	**23.15**	0-1	1
	25	12	23.12		1
	25	25	23.14		1
	50	0	23.08		1
16QAM	1	0	23.10	0-1	1
	1	25	23.12		1
	1	49	23.17		1
	25	0	22.21	0-2	2
	25	12	22.20		2
	25	25	22.25		2
	50	0	22.11		2
64QAM	1	0	22.47	0-2	2
	1	25	22.56		2
	1	49	22.61		2
	25	0	21.30	0-3	3
	25	12	21.29		3
	25	25	21.31		3
	50	0	21.12		3
256QAM	1	0	18.96	0-5	5
	1	25	19.13		5
	1	49	19.00		5
	25	0	19.20		5
	25	12	19.30		5
	25	25	19.21		5
	50	0	19.15		5

Note: LTE Band 5 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-26
LTE Band 5 (Cell) Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 5 (Cell) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20425 (826.5 MHz)	Mid Channel 20525 (836.5 MHz)	High Channel 20625 (846.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.12	24.19	24.35	0	0
	1	12	24.29	24.42	24.37		0
	1	24	24.21	24.29	24.29		0
	12	0	23.27	23.31	23.44	0-1	1
	12	6	23.36	23.38	23.52		1
	12	13	23.38	23.42	23.55		1
	25	0	23.34	23.34	23.41		1
16QAM	1	0	23.48	23.51	23.69	0-1	1
	1	12	23.66	23.60	23.71		1
	1	24	23.58	23.61	23.72		1
	12	0	22.37	22.41	22.50	0-2	2
	12	6	22.48	22.46	22.53		2
	12	13	22.39	22.47	22.54		2
	25	0	22.35	22.39	22.46		2
64QAM	1	0	22.42	22.49	22.59	0-2	2
	1	12	22.54	22.61	22.73		2
	1	24	22.52	22.56	22.63		2
	12	0	21.36	21.45	21.49	0-3	3
	12	6	21.45	21.50	21.56		3
	12	13	21.40	21.46	21.57		3
	25	0	21.37	21.39	21.45		3
256QAM	1	0	19.36	19.40	19.53	0-5	5
	1	12	19.47	19.49	19.69		5
	1	24	19.42	19.43	19.50		5
	12	0	19.32	19.40	19.50		5
	12	6	19.41	19.51	19.53		5
	12	13	19.39	19.42	19.57		5
	25	0	19.33	19.37	19.52		5

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Table 9-27
LTE Band 5 (Cell) Maximum Conducted Powers - 3 MHz Bandwidth

LTE Band 5 (Cell) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20415 (825.5 MHz)	Mid Channel 20525 (836.5 MHz)	High Channel 20635 (847.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.15	24.25	24.34	0	0
	1	7	24.19	24.43	24.41		0
	1	14	24.27	24.40	24.42		0
	8	0	23.32	23.39	23.50	0-1	1
	8	4	23.40	23.41	23.49		1
	8	7	23.34	23.44	23.52		1
	15	0	23.38	23.33	23.49		1
16QAM	1	0	23.51	23.57	23.78	0-1	1
	1	7	23.51	23.59	23.81		1
	1	14	23.63	23.60	23.77		1
	8	0	22.38	22.49	22.56	0-2	2
	8	4	22.53	22.60	22.60		2
	8	7	22.50	22.58	22.65		2
	15	0	22.41	22.41	22.54		2
64QAM	1	0	22.43	22.51	22.61	0-2	2
	1	7	22.61	22.58	22.71		2
	1	14	22.56	22.62	22.71		2
	8	0	21.41	21.41	21.57	0-3	3
	8	4	21.42	21.58	21.56		3
	8	7	21.41	21.49	21.56		3
	15	0	21.41	21.47	21.54		3
256QAM	1	0	19.42	19.40	19.61	0-5	5
	1	7	19.49	19.59	19.70		5
	1	14	19.48	19.47	19.68		5
	8	0	19.34	19.44	19.57		5
	8	4	19.47	19.55	19.62		5
	8	7	19.43	19.55	19.62		5
	15	0	19.41	19.51	19.59		5

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Table 9-28
LTE Band 5 (Cell) Maximum Conducted Powers - 1.4 MHz Bandwidth

LTE Band 5 (Cell) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20407 (824.7 MHz)	Mid Channel 20525 (836.5 MHz)	High Channel 20643 (848.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.11	24.19	24.32	0	0
	1	2	24.19	24.20	24.44		0
	1	5	24.17	24.28	24.40		0
	3	0	24.14	24.20	24.37		0
	3	2	24.20	24.27	24.39		0
	3	3	24.22	24.29	24.38		0
	6	0	23.32	23.31	23.45	0-1	1
16QAM	1	0	23.49	23.60	23.72	0-1	1
	1	2	23.52	23.74	23.76		1
	1	5	23.52	23.70	23.70		1
	3	0	23.40	23.43	23.57		1
	3	2	23.43	23.45	23.64		1
	3	3	23.41	23.48	23.55		1
	6	0	22.37	22.36	22.52	0-2	2
64QAM	1	0	22.41	22.48	22.65	0-2	2
	1	2	22.51	22.55	22.78		2
	1	5	22.44	22.59	22.72		2
	3	0	22.36	22.39	22.59		2
	3	2	22.32	22.46	22.59		2
	3	3	22.38	22.49	22.60		2
	6	0	21.33	21.35	21.51	0-3	3
256QAM	1	0	19.36	19.50	19.60	0-5	5
	1	2	19.41	19.57	19.67		5
	1	5	19.36	19.54	19.60		5
	3	0	19.35	19.48	19.63		5
	3	2	19.47	19.53	19.70		5
	3	3	19.44	19.39	19.62		5
	6	0	19.34	19.40	19.55		5

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9.4.7 LTE Band 66

Table 9-29
LTE Band 66 (AWS) Maximum Conducted Powers - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.67	24.75	24.65	0	0
	1	50	24.70	**25.00**	24.60		0
	1	99	24.72	24.65	24.63		0
	50	0	24.13	24.12	23.88	0-1	1
	50	25	24.19	**24.21**	23.90		1
	50	50	24.10	24.14	23.83		1
	100	0	24.16	24.12	23.77		1
16QAM	1	0	24.23	24.32	23.90	0-1	1
	1	50	24.33	24.41	24.10		1
	1	99	24.22	24.40	24.05		1
	50	0	23.20	23.16	22.87	0-2	2
	50	25	23.25	23.23	22.95		2
	50	50	23.19	23.17	22.93		2
	100	0	23.12	23.10	22.86		2
64QAM	1	0	22.58	22.76	22.59	0-2	2
	1	50	22.59	22.74	22.82		2
	1	99	22.47	22.78	22.80		2
	50	0	21.58	21.60	21.20	0-3	3
	50	25	21.50	21.70	21.20		3
	50	50	21.45	21.52	21.19		3
	100	0	21.44	21.50	21.30		3
256QAM	1	0	20.06	20.02	20.00	0-5	5
	1	50	20.20	20.30	20.11		5
	1	99	20.14	20.10	20.17		5
	50	0	20.21	20.15	20.11		5
	50	25	20.27	20.25	20.06		5
	50	50	20.19	20.19	20.07		5
	100	0	20.14	20.16	20.10		5

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Table 9-30
LTE Band 66 (AWS) Maximum Conducted Powers - 15 MHz Bandwidth

LTE Band 66 (AWS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132047 (1717.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132597 (1772.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.92	25.20	24.95	0	0
	1	36	24.67	25.33	25.16		0
	1	74	24.84	25.00	24.92		0
	36	0	23.72	24.38	24.19	0-1	1
	36	18	23.93	24.40	24.24		1
	36	37	23.93	24.41	24.18		1
	75	0	23.93	24.32	24.17		1
16QAM	1	0	24.16	24.50	24.21	0-1	1
	1	36	24.06	24.49	24.41		1
	1	74	24.15	24.50	24.20		1
	36	0	23.07	23.40	23.21	0-2	2
	36	18	22.96	23.39	23.30		2
	36	37	22.94	23.42	23.26		2
	75	0	22.97	23.36	23.22		2
64QAM	1	0	22.28	22.83	22.58	0-2	2
	1	36	22.68	22.86	22.75		2
	1	74	22.22	22.50	22.75		2
	36	0	21.46	21.77	21.57	0-3	3
	36	18	21.65	21.77	21.61		3
	36	37	21.60	21.64	21.62		3
	75	0	21.50	21.68	21.52		3
256QAM	1	0	20.06	20.36	20.42	0-5	5
	1	36	20.20	20.50	20.49		5
	1	74	20.18	20.42	20.33		5
	36	0	20.10	20.37	20.37		5
	36	18	20.21	20.41	20.39		5
	36	37	20.18	20.43	20.40		5
	75	0	20.21	20.28	20.31		5

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Table 9-31
LTE Band 66 (AWS) Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.81	24.70	24.99	0	0
	1	25	24.73	24.86	24.95		0
	1	49	24.64	24.69	24.95		0
	25	0	24.07	24.36	24.25	0-1	1
	25	12	24.01	24.40	24.26		1
	25	25	23.93	24.38	24.17		1
	50	0	23.96	24.32	24.18		1
16QAM	1	0	24.24	24.21	24.35	0-1	1
	1	25	24.11	24.35	24.33		1
	1	49	23.96	24.16	24.07		1
	25	0	23.20	23.47	23.35	0-2	2
	25	12	23.16	23.50	23.37		2
	25	25	23.05	23.49	23.26		2
	50	0	23.02	23.35	23.22		2
64QAM	1	0	22.53	22.76	22.49	0-2	2
	1	25	22.45	22.81	22.51		2
	1	49	22.41	22.50	22.50		2
	25	0	21.52	21.77	21.64	0-3	3
	25	12	21.48	21.78	21.73		3
	25	25	21.45	21.67	21.61		3
	50	0	21.40	21.67	21.60		3
256QAM	1	0	19.93	20.06	20.19	0-5	5
	1	25	20.18	20.42	20.49		5
	1	49	20.05	20.23	20.18		5
	25	0	20.23	20.44	20.40		5
	25	12	20.39	20.50	20.39		5
	25	25	20.30	20.48	20.49		5
	50	0	20.23	20.33	20.46		5

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Table 9-32
LTE Band 66 (AWS) Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 66 (AWS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131997 (1712.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132647 (1777.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.91	25.10	24.99	0	0
	1	12	24.86	25.46	25.07		0
	1	24	24.83	25.06	24.98		0
	12	0	24.09	24.42	24.26	0-1	1
	12	6	24.06	24.41	24.23		1
	12	13	23.97	24.42	24.15		1
	25	0	23.98	24.40	24.15		1
16QAM	1	0	24.34	24.47	24.25	0-1	1
	1	12	24.28	24.38	24.42		1
	1	24	24.17	23.50	24.31		1
	12	0	23.34	23.43	23.36	0-2	2
	12	6	23.34	23.40	23.44		2
	12	13	23.25	23.20	23.38		2
	25	0	23.05	23.40	23.22		2
64QAM	1	0	22.59	22.67	22.59	0-2	2
	1	12	22.52	22.64	22.50		2
	1	24	22.41	22.59	22.50		2
	12	0	21.55	21.63	21.56	0-3	3
	12	6	21.57	21.65	21.53		3
	12	13	21.48	21.62	21.51		3
	25	0	21.54	21.67	21.51		3
256QAM	1	0	20.34	20.50	20.49	0-5	5
	1	12	20.40	20.49	20.48		5
	1	24	20.34	20.43	20.49		5
	12	0	20.30	20.42	20.42		5
	12	6	20.34	20.44	20.45		5
	12	13	20.28	20.46	20.50		5
	25	0	20.26	20.42	20.48		5

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Table 9-33
LTE Band 66 (AWS) Maximum Conducted Powers - 3 MHz Bandwidth

LTE Band 66 (AWS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131987 (1711.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132657 (1778.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.92	25.31	24.99	0	0
	1	7	24.86	25.24	25.06		0
	1	14	24.98	25.01	25.02		0
	8	0	24.19	24.38	24.17	0-1	1
	8	4	24.17	24.43	24.17		1
	8	7	24.11	24.40	24.14		1
	15	0	24.22	24.35	24.16		1
16QAM	1	0	24.30	24.49	24.34	0-1	1
	1	7	24.22	24.50	24.23		1
	1	14	24.19	24.48	24.19		1
	8	0	23.27	23.43	23.26	0-2	2
	8	4	23.28	23.45	23.27		2
	8	7	23.21	23.41	23.22		2
	15	0	23.18	23.36	23.16		2
64QAM	1	0	22.51	22.55	22.50	0-2	2
	1	7	22.44	22.54	22.53		2
	1	14	22.43	22.56	22.52		2
	8	0	21.45	21.73	21.56	0-3	3
	8	4	21.44	21.71	21.58		3
	8	7	21.39	21.68	21.52		3
	15	0	21.47	21.76	21.50		3
256QAM	1	0	20.08	20.40	20.46	0-5	5
	1	7	20.07	20.35	20.42		5
	1	14	20.06	20.33	20.40		5
	8	0	20.20	20.42	20.50		5
	8	4	20.22	20.49	20.47		5
	8	7	20.11	20.36	20.48		5
	15	0	20.29	20.49	20.45		5

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Table 9-34
LTE Band 66 (AWS) Maximum Conducted Powers - 1.4 MHz Bandwidth

LTE Band 66 (AWS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131979 (1710.7 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132665 (1779.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	25.13	25.30	24.89	0	0
	1	2	25.14	25.45	24.92		0
	1	5	25.08	25.38	24.82		0
	3	0	25.00	25.25	24.94		0
	3	2	25.00	25.31	24.91		0
	3	3	24.96	25.25	24.82		0
	6	0	24.10	24.32	24.00	0-1	1
16QAM	1	0	24.30	24.49	24.18	0-1	1
	1	2	24.36	24.50	24.26		1
	1	5	24.32	24.48	24.19		1
	3	0	24.24	24.46	24.00		1
	3	2	24.28	24.48	24.02		1
	3	3	24.23	24.44	23.96		1
	6	0	23.26	23.50	23.10	0-2	2
64QAM	1	0	22.63	22.86	22.59	0-2	2
	1	2	22.71	22.93	22.65		2
	1	5	22.60	22.86	22.59		2
	3	0	22.55	22.68	22.52		2
	3	2	22.56	22.71	22.55		2
	3	3	22.51	22.66	22.52		2
	6	0	21.48	21.50	21.55	0-3	3
256QAM	1	0	20.12	20.38	20.44	0-5	5
	1	2	20.27	20.50	20.46		5
	1	5	20.14	20.33	20.34		5
	3	0	20.26	20.42	20.50		5
	3	2	20.27	20.48	20.48		5
	3	3	20.21	20.39	20.47		5
	6	0	20.15	20.36	20.46		5

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Table 9-35
LTE Band 66 (AWS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.90	19.26	19.15	0	0
	1	50	19.20	**19.61**	19.21		0
	1	99	19.01	19.44	19.14		0
	50	0	19.15	19.63	19.38	0-1	0
	50	25	19.33	**19.68**	19.40		0
	50	50	19.23	19.63	19.38		0
	100	0	19.20	19.59	19.15		0
16QAM	1	0	19.47	19.92	19.82	0-1	0
	1	50	19.85	20.00	19.82		0
	1	99	19.61	19.97	19.79		0
	50	0	19.20	19.60	19.36	0-2	0
	50	25	19.31	19.65	19.46		0
	50	50	19.22	19.61	19.37		0
	100	0	19.24	19.60	19.34		0
64QAM	1	0	19.05	19.38	19.57	0-2	0
	1	50	19.40	19.64	19.69		0
	1	99	19.21	19.64	19.63		0
	50	0	19.22	19.70	19.47	0-3	0
	50	25	19.41	19.76	19.57		0
	50	50	19.27	19.70	19.47		0
	100	0	19.25	19.66	19.40		0
256QAM	1	0	19.01	19.29	19.22	0-5	0
	1	50	19.44	19.66	19.65		0
	1	99	19.20	19.52	19.42		0
	50	0	19.19	19.72	19.45		0
	50	25	19.36	19.73	19.50		0
	50	50	19.21	19.68	19.46		0
	100	0	19.21	19.67	19.37		0

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Table 9-36
LTE Band 66 (AWS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 15 MHz Bandwidth

LTE Band 66 (AWS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132047 (1717.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132597 (1772.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.18	19.28	19.62	0	0
	1	36	19.30	19.45	19.69		0
	1	74	19.19	19.34	19.52		0
	36	0	19.47	19.54	19.74	0-1	0
	36	18	19.57	19.53	19.77		0
	36	37	19.50	19.54	19.76		0
	75	0	19.50	19.48	19.50		0
16QAM	1	0	19.54	19.84	19.75	0-1	0
	1	36	19.68	20.00	19.76		0
	1	74	19.54	19.87	19.75		0
	36	0	19.44	19.56	19.75	0-2	0
	36	18	19.53	19.54	19.75		0
	36	37	19.47	19.56	19.72		0
	75	0	19.47	19.50	19.75		0
64QAM	1	0	19.50	19.40	19.77	0-2	0
	1	36	19.67	19.54	19.76		0
	1	74	19.55	19.34	19.75		0
	36	0	19.52	19.57	19.76	0-3	0
	36	18	19.58	19.60	19.74		0
	36	37	19.54	19.60	19.73		0
	75	0	19.56	19.56	19.74		0
256QAM	1	0	19.29	19.70	19.65	0-5	0
	1	36	19.34	19.89	19.87		0
	1	74	19.31	19.75	19.72		0
	36	0	19.51	19.63	19.78		0
	36	18	19.60	19.61	19.79		0
	36	37	19.54	19.62	19.78		0
	75	0	19.58	19.58	19.72		0

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Table 9-37
LTE Band 66 (AWS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.85	19.14	19.05	0	0
	1	25	19.01	19.09	19.24		0
	1	49	18.85	19.06	19.10		0
	25	0	19.09	19.29	19.41	0-1	0
	25	12	19.23	19.39	19.43		0
	25	25	19.11	19.32	19.40		0
	50	0	19.14	19.28	19.40		0
16QAM	1	0	19.05	19.95	19.78	0-1	0
	1	25	19.28	19.80	19.78		0
	1	49	19.25	19.82	19.75		0
	25	0	19.41	19.65	19.74	0-2	0
	25	12	19.60	19.74	19.74		0
	25	25	19.47	19.69	19.74		0
	50	0	19.48	19.58	19.76		0
64QAM	1	0	19.42	19.37	19.75	0-2	0
	1	25	19.65	19.71	19.74		0
	1	49	19.45	19.50	19.74		0
	25	0	19.44	19.70	19.74	0-3	0
	25	12	19.62	19.74	19.76		0
	25	25	19.56	19.71	19.73		0
	50	0	19.52	19.64	19.75		0
256QAM	1	0	19.11	19.70	19.42	0-5	0
	1	25	19.25	20.00	19.67		0
	1	49	19.28	19.80	19.49		0
	25	0	19.49	19.68	19.78		0
	25	12	19.65	19.72	19.85		0
	25	25	19.55	19.69	19.82		0
	50	0	19.50	19.64	19.71		0

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Table 9-38
LTE Band 66 (AWS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 5 MHz Bandwidth

LTE Band 66 (AWS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131997 (1712.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132647 (1777.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.23	18.64	19.48	0	0
	1	12	19.36	18.76	19.59		0
	1	24	19.39	18.66	19.50		0
	12	0	19.44	18.83	19.68	0-1	0
	12	6	19.52	18.82	19.70		0
	12	13	19.41	18.78	19.63		0
	25	0	19.43	18.74	19.50		0
16QAM	1	0	19.60	19.02	19.74	0-1	0
	1	12	19.63	19.06	19.94		0
	1	24	19.61	19.04	19.89		0
	12	0	19.42	18.88	19.73	0-2	0
	12	6	19.54	18.89	19.82		0
	12	13	19.50	18.82	19.72		0
	25	0	19.40	18.79	19.71		0
64QAM	1	0	19.53	18.97	19.78	0-2	0
	1	12	19.63	19.05	19.86		0
	1	24	19.49	18.96	19.76		0
	12	0	19.49	18.84	19.77	0-3	0
	12	6	19.50	18.86	19.81		0
	12	13	19.41	18.86	19.74		0
	25	0	19.48	18.75	19.71		0
256QAM	1	0	19.49	18.87	19.73	0-5	0
	1	12	19.60	18.97	19.83		0
	1	24	19.45	18.84	19.71		0
	12	0	19.45	18.83	19.72		0
	12	6	19.49	18.79	19.76		0
	12	13	19.44	18.82	19.68		0
	25	0	19.48	18.83	19.73		0

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Table 9-39
LTE Band 66 (AWS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 3 MHz Bandwidth

LTE Band 66 (AWS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131987 (1711.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132657 (1778.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.39	19.54	19.60	0	0
	1	7	19.38	19.52	19.68		0
	1	14	19.36	19.46	19.63		0
	8	0	19.53	19.61	19.72	0-1	0
	8	4	19.54	19.66	19.78		0
	8	7	19.46	19.56	19.79		0
	15	0	19.47	19.56	19.64		0
16QAM	1	0	19.75	19.89	20.00	0-1	0
	1	7	19.65	19.87	19.97		0
	1	14	19.72	19.80	19.99		0
	8	0	19.59	19.72	19.81	0-2	0
	8	4	19.59	19.74	19.87		0
	8	7	19.53	19.72	19.84		0
	15	0	19.55	19.61	19.83		0
64QAM	1	0	19.54	19.83	19.92	0-2	0
	1	7	19.63	19.85	19.96		0
	1	14	19.60	19.77	19.94		0
	8	0	19.61	19.64	19.78	0-3	0
	8	4	19.63	19.75	19.91		0
	8	7	19.51	19.65	19.81		0
	15	0	19.53	19.62	19.87		0
256QAM	1	0	19.50	19.70	19.70	0-5	0
	1	7	19.64	19.72	19.91		0
	1	14	19.54	19.73	19.88		0
	8	0	19.58	19.70	19.78		0
	8	4	19.59	19.71	19.87		0
	8	7	19.61	19.67	19.84		0
	15	0	19.57	19.59	19.84		0

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Table 9-40
LTE Band 66 (AWS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 1.4 MHz Bandwidth

LTE Band 66 (AWS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131979 (1710.7 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132665 (1779.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.32	19.52	19.60	0	0
	1	2	19.54	19.57	19.67		0
	1	5	19.35	19.51	19.60		0
	3	0	19.38	19.48	19.62		0
	3	2	19.36	19.60	19.67		0
	3	3	19.35	19.48	19.62		0
	6	0	19.45	19.65	19.64	0-1	0
16QAM	1	0	19.63	19.85	19.98	0-1	0
	1	2	19.71	20.00	20.00		0
	1	5	19.62	19.85	19.98		0
	3	0	19.56	19.72	19.83		0
	3	2	19.56	19.77	19.86		0
	3	3	19.60	19.73	19.82		0
	6	0	19.48	19.71	19.78	0-2	0
64QAM	1	0	19.54	19.81	19.88	0-2	0
	1	2	19.71	19.89	19.98		0
	1	5	19.62	19.78	19.83		0
	3	0	19.50	19.72	19.84		0
	3	2	19.56	19.83	19.87		0
	3	3	19.52	19.75	19.88		0
	6	0	19.48	19.69	19.78	0-3	0
256QAM	1	0	19.45	19.68	19.70	0-5	0
	1	2	19.58	19.82	19.92		0
	1	5	19.52	19.74	19.82		0
	3	0	19.59	19.79	19.86		0
	3	2	19.64	19.84	19.90		0
	3	3	19.56	19.81	19.84		0
	6	0	19.50	19.72	19.74		0

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9.4.8 LTE Band 25

Table 9-41
LTE Band 25 (PCS) Maximum Conducted Powers - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**24.30**	24.22	24.13	0	0
	1	50	24.29	24.21	24.11		0
	1	99	24.12	24.25	24.17		0
	50	0	**23.35**	23.28	23.20	0-1	1
	50	25	23.27	23.32	23.30		1
	50	50	23.25	23.31	23.23		1
	100	0	23.30	23.24	23.22		1
16QAM	1	0	23.44	23.41	23.28	0-1	1
	1	50	23.31	23.49	23.69		1
	1	99	23.42	23.61	23.23		1
	50	0	22.35	22.34	22.12	0-2	2
	50	25	22.35	22.23	22.31		2
	50	50	22.36	22.26	22.20		2
	100	0	22.33	22.26	22.22		2
64QAM	1	0	22.34	22.35	22.26	0-2	2
	1	50	22.51	22.43	22.55		2
	1	99	22.42	22.35	22.38		2
	50	0	21.17	21.32	21.17	0-3	3
	50	25	21.41	21.01	21.28		3
	50	50	21.34	21.08	20.92		3
	100	0	21.23	21.19	21.28		3
256QAM	1	0	19.16	19.13	19.34	0-5	5
	1	50	19.50	19.63	19.30		5
	1	99	19.38	19.32	19.43		5
	50	0	19.25	19.20	19.12		5
	50	25	19.25	19.24	19.20		5
	50	50	19.38	19.26	19.21		5
	100	0	19.30	19.18	19.26		5

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Table 9-42
LTE Band 25 (PCS) Maximum Conducted Powers - 15 MHz Bandwidth

LTE Band 25 (PCS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26115 (1857.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26615 (1907.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.88	24.07	24.11	0	0
	1	36	24.08	24.04	24.12		0
	1	74	23.95	24.03	24.09		0
	36	0	23.24	23.05	23.06	0-1	1
	36	18	23.27	23.13	23.24		1
	36	37	23.18	23.19	23.28		1
	75	0	23.23	23.03	23.11		1
16QAM	1	0	23.27	23.52	23.36	0-1	1
	1	36	23.38	23.45	23.52		1
	1	74	23.23	23.38	23.62		1
	36	0	22.27	22.05	22.05	0-2	2
	36	18	22.21	22.14	22.18		2
	36	37	22.23	22.22	22.28		2
	75	0	22.11	21.96	22.07		2
64QAM	1	0	22.02	22.34	22.31	0-2	2
	1	36	22.31	21.77	21.98		2
	1	74	22.22	22.15	21.91		2
	36	0	20.98	20.92	21.09	0-3	3
	36	18	21.19	20.80	21.05		3
	36	37	21.26	20.84	20.91		3
	75	0	21.27	20.86	21.13		3
256QAM	1	0	19.11	18.97	19.01	0-5	5
	1	36	19.39	19.22	19.21		5
	1	74	19.25	19.16	19.29		5
	36	0	19.22	19.05	19.10		5
	36	18	19.32	19.21	19.25		5
	36	37	19.31	19.30	19.31		5
	75	0	19.24	19.10	19.18		5

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Table 9-43
LTE Band 25 (PCS) Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 25 (PCS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26090 (1855.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26640 (1910.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.05	23.80	24.01	0	0
	1	25	24.01	24.00	24.02		0
	1	49	23.80	23.91	23.78		0
	25	0	23.16	23.03	23.03	0-1	1
	25	12	23.12	23.16	23.23		1
	25	25	23.15	23.07	23.17		1
	50	0	23.16	22.97	23.13		1
16QAM	1	0	23.30	23.15	23.62	0-1	1
	1	25	23.57	23.52	23.54		1
	1	49	23.20	23.22	23.43		1
	25	0	22.20	21.96	22.01	0-2	2
	25	12	22.25	22.11	22.22		2
	25	25	22.23	22.10	22.18		2
	50	0	22.15	22.03	22.20		2
64QAM	1	0	21.82	21.98	22.19	0-2	2
	1	25	22.08	21.74	21.88		2
	1	49	22.11	21.73	21.80		2
	25	0	20.79	20.72	20.85	0-3	3
	25	12	20.93	20.72	20.81		3
	25	25	21.17	20.71	20.80		3
	50	0	20.92	20.71	20.85		3
256QAM	1	0	19.19	19.05	19.05	0-5	5
	1	25	19.27	19.22	19.38		5
	1	49	19.13	19.11	19.25		5
	25	0	19.18	19.11	19.11		5
	25	12	19.24	19.16	19.35		5
	25	25	19.11	19.15	19.32		5
	50	0	19.21	19.09	19.22		5

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Table 9-44
LTE Band 25 (PCS) Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 25 (PCS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26065 (1852.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26665 (1912.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.22	24.02	24.23	0	0
	1	12	24.22	24.12	24.32		0
	1	24	24.21	24.18	24.25		0
	12	0	23.33	23.19	23.36	0-1	1
	12	6	23.37	23.28	23.33		1
	12	13	23.39	23.29	23.35		1
	25	0	23.36	23.18	23.35		1
16QAM	1	0	23.51	23.42	23.56	0-1	1
	1	12	23.55	23.37	23.53		1
	1	24	23.57	23.60	23.63		1
	12	0	22.35	22.22	22.43	0-2	2
	12	6	22.48	22.33	22.44		2
	12	13	22.42	22.40	22.42		2
	25	0	22.38	22.24	22.38		2
64QAM	1	0	21.93	21.88	21.96	0-2	2
	1	12	21.95	21.78	21.95		2
	1	24	22.06	21.87	22.05		2
	12	0	20.83	20.80	20.82	0-3	3
	12	6	20.93	20.86	20.93		3
	12	13	20.97	20.83	20.96		3
	25	0	20.87	20.79	20.86		3
256QAM	1	0	19.47	19.24	19.45	0-5	5
	1	12	19.51	19.40	19.52		5
	1	24	19.47	19.44	19.48		5
	12	0	19.33	19.30	19.33		5
	12	6	19.39	19.32	19.39		5
	12	13	19.40	19.36	19.41		5
	25	0	19.36	19.27	19.36		5

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Table 9-45
LTE Band 25 (PCS) Maximum Conducted Powers - 3 MHz Bandwidth

LTE Band 25 (PCS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26055 (1851.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26675 (1913.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.22	24.13	24.14	0	0
	1	7	24.33	24.14	24.21		0
	1	14	24.22	24.17	23.85		0
	8	0	23.32	23.18	23.22	0-1	1
	8	4	23.34	23.26	23.29		1
	8	7	23.32	23.32	23.31		1
	15	0	23.36	23.21	23.29		1
16QAM	1	0	23.45	23.36	23.46	0-1	1
	1	7	23.60	23.50	23.49		1
	1	14	23.62	23.52	23.24		1
	8	0	22.46	22.31	22.31	0-2	2
	8	4	22.48	22.31	22.39		2
	8	7	22.47	22.34	22.39		2
	15	0	22.38	22.24	22.33		2
64QAM	1	0	22.03	21.91	22.05	0-2	2
	1	7	21.95	21.82	22.09		2
	1	14	22.00	21.91	21.81		2
	8	0	20.91	20.74	20.99	0-3	3
	8	4	20.95	20.87	21.08		3
	8	7	20.93	20.79	20.99		3
	15	0	20.92	20.82	21.02		3
256QAM	1	0	19.45	19.30	19.32	0-5	5
	1	7	19.45	19.43	19.38		5
	1	14	19.37	19.42	19.40		5
	8	0	19.39	19.29	19.26		5
	8	4	19.37	19.34	19.41		5
	8	7	19.42	19.40	19.38		5
	15	0	19.41	19.31	19.36		5

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Table 9-46
LTE Band 25 (PCS) Maximum Conducted Powers - 1.4 MHz Bandwidth

LTE Band 25 (PCS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26047 (1850.7 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26683 (1914.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.15	24.01	24.05	0	0
	1	2	24.20	24.14	24.19		0
	1	5	24.13	24.10	23.85		0
	3	0	24.12	24.02	24.02		0
	3	2	24.23	24.07	23.97		0
	3	3	24.16	24.11	23.79		0
	6	0	23.25	23.12	23.18	0-1	1
16QAM	1	0	23.47	23.31	23.42	0-1	1
	1	2	23.56	23.45	23.61		1
	1	5	23.53	23.47	23.16		1
	3	0	23.42	23.28	23.31		1
	3	2	23.36	23.32	23.31		1
	3	3	23.46	23.35	23.14		1
	6	0	22.36	22.19	22.26	0-2	2
64QAM	1	0	21.95	21.80	22.04	0-2	2
	1	2	22.00	21.86	21.99		2
	1	5	21.92	21.85	21.71		2
	3	0	21.88	21.72	21.86		2
	3	2	21.92	21.82	21.82		2
	3	3	21.86	21.77	21.75		2
	6	0	20.82	20.74	20.81	0-3	3
256QAM	1	0	19.33	19.29	19.23	0-5	5
	1	2	19.42	19.36	19.43		5
	1	5	19.39	19.37	19.36		5
	3	0	19.36	19.29	19.26		5
	3	2	19.45	19.35	19.42		5
	3	3	19.39	19.41	19.42		5
	6	0	19.29	19.24	19.25		5

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Table 9-47
LTE Band 25 (PCS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.60	17.55	17.52	0	0
	1	50	17.61	17.52	**17.68**		0
	1	99	17.55	17.56	17.65		0
	50	0	17.73	17.64	17.64	0-1	0
	50	25	17.71	17.70	17.70		0
	50	50	17.68	17.71	**17.75**		0
	100	0	17.66	17.53	17.67		0
16QAM	1	0	18.10	17.97	18.01	0-1	0
	1	50	17.91	17.91	17.99		0
	1	99	17.74	18.04	18.07		0
	50	0	17.70	17.64	17.68	0-2	0
	50	25	17.69	17.60	17.73		0
	50	50	17.68	17.71	17.72		0
	100	0	17.62	17.49	17.63		0
64QAM	1	0	17.93	17.88	17.83	0-2	0
	1	50	17.83	17.79	17.92		0
	1	99	17.88	17.87	17.96		0
	50	0	17.74	17.67	17.65	0-3	0
	50	25	17.73	17.62	17.76		0
	50	50	17.73	17.70	17.81		0
	100	0	17.64	17.60	17.62		0
256QAM	1	0	17.47	17.41	17.36	0-5	0
	1	50	17.75	17.83	17.81		0
	1	99	17.58	17.57	17.67		0
	50	0	17.60	17.48	17.48		0
	50	25	17.71	17.62	17.76		0
	50	50	17.67	17.61	17.71		0
	100	0	17.69	17.55	17.67		0

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Table 9-48
LTE Band 25 (PCS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 15 MHz Bandwidth

LTE Band 25 (PCS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26115 (1857.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26615 (1907.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.40	17.55	17.62	0	0
	1	36	17.59	17.53	17.60		0
	1	74	17.50	17.50	17.71		0
	36	0	17.72	17.54	17.56	0-1	0
	36	18	17.74	17.61	17.66		0
	36	37	17.71	17.67	17.76		0
	75	0	17.68	17.57	17.62		0
16QAM	1	0	17.86	17.97	18.05	0-1	0
	1	36	18.01	17.89	18.05		0
	1	74	17.72	17.95	18.09		0
	36	0	17.69	17.52	17.56	0-2	0
	36	18	17.77	17.63	17.66		0
	36	37	17.71	17.71	17.74		0
	75	0	17.70	17.57	17.63		0
64QAM	1	0	17.70	17.80	17.80	0-2	0
	1	36	17.89	17.71	17.78		0
	1	74	17.71	17.83	17.94		0
	36	0	17.73	17.54	17.60	0-3	0
	36	18	17.78	17.70	17.71		0
	36	37	17.73	17.68	17.77		0
	75	0	17.70	17.58	17.64		0
256QAM	1	0	17.64	17.51	17.54	0-5	0
	1	36	17.83	17.67	17.71		0
	1	74	17.60	17.69	17.74		0
	36	0	17.74	17.53	17.54		0
	36	18	17.78	17.70	17.66		0
	36	37	17.73	17.72	17.81		0
	75	0	17.71	17.55	17.59		0

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Table 9-49
LTE Band 25 (PCS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 10 MHz Bandwidth

LTE Band 25 (PCS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26090 (1855.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26640 (1910.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.40	17.25	17.41	0	0
	1	25	17.46	17.45	17.52		0
	1	49	17.32	17.31	17.56		0
	25	0	17.63	17.48	17.56	0-1	0
	25	12	17.71	17.56	17.73		0
	25	25	17.64	17.60	17.68		0
	50	0	17.63	17.50	17.70		0
16QAM	1	0	17.79	17.67	18.04	0-1	0
	1	25	18.02	17.98	18.11		0
	1	49	17.59	17.64	18.11		0
	25	0	17.69	17.50	17.46	0-2	0
	25	12	17.70	17.58	17.72		0
	25	25	17.65	17.63	17.66		0
	50	0	17.62	17.52	17.66		0
64QAM	1	0	17.62	17.45	17.78	0-2	0
	1	25	17.83	17.70	17.79		0
	1	49	17.59	17.64	17.86		0
	25	0	17.66	17.55	17.60	0-3	0
	25	12	17.76	17.62	17.80		0
	25	25	17.69	17.64	17.74		0
	50	0	17.67	17.53	17.70		0
256QAM	1	0	17.64	17.37	17.41	0-5	0
	1	25	17.57	17.74	17.82		0
	1	49	17.62	17.53	17.61		0
	25	0	17.67	17.60	17.60		0
	25	12	17.76	17.62	17.80		0
	25	25	17.66	17.66	17.72		0
	50	0	17.65	17.53	17.69		0

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Table 9-50
LTE Band 25 (PCS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 5 MHz Bandwidth

LTE Band 25 (PCS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26065 (1852.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26665 (1912.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.58	17.42	17.53	0	0
	1	12	17.56	17.53	17.59		0
	1	24	17.56	17.52	17.70		0
	12	0	17.70	17.52	17.66	0-1	0
	12	6	17.76	17.57	17.65		0
	12	13	17.70	17.63	17.73		0
	25	0	17.71	17.54	17.65		0
16QAM	1	0	17.96	17.80	17.83	0-1	0
	1	12	17.93	17.83	17.86		0
	1	24	17.97	17.90	18.00		0
	12	0	17.74	17.63	17.70	0-2	0
	12	6	17.82	17.65	17.72		0
	12	13	17.80	17.74	17.80		0
	25	0	17.69	17.60	17.63		0
64QAM	1	0	17.85	17.75	17.85	0-2	0
	1	12	17.88	17.83	17.85		0
	1	24	17.93	17.84	17.90		0
	12	0	17.81	17.61	17.68	0-3	0
	12	6	17.78	17.66	17.73		0
	12	13	17.79	17.73	17.82		0
	25	0	17.73	17.58	17.70		0
256QAM	1	0	17.81	17.63	17.75	0-5	0
	1	12	17.88	17.80	17.80		0
	1	24	17.86	17.74	17.83		0
	12	0	17.70	17.59	17.65		0
	12	6	17.80	17.64	17.73		0
	12	13	17.77	17.71	17.76		0
	25	0	17.74	17.58	17.68		0

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Table 9-51
LTE Band 25 (PCS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 3 MHz Bandwidth

LTE Band 25 (PCS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26055 (1851.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26675 (1913.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.61	17.43	17.51	0	0
	1	7	17.60	17.47	17.61		0
	1	14	17.65	17.51	17.62		0
	8	0	17.71	17.50	17.63	0-1	0
	8	4	17.75	17.57	17.73		0
	8	7	17.73	17.56	17.70		0
	15	0	17.75	17.55	17.72		0
16QAM	1	0	17.92	17.79	17.92	0-1	0
	1	7	17.89	17.77	17.91		0
	1	14	18.00	17.94	18.03		0
	8	0	17.85	17.66	17.72	0-2	0
	8	4	17.88	17.68	17.85		0
	8	7	17.82	17.74	17.83		0
	15	0	17.78	17.60	17.75		0
64QAM	1	0	17.86	17.85	17.84	0-2	0
	1	7	17.92	17.80	17.89		0
	1	14	17.97	17.90	17.92		0
	8	0	17.75	17.59	17.68	0-3	0
	8	4	17.82	17.62	17.81		0
	8	7	17.79	17.69	17.76		0
	15	0	17.75	17.60	17.77		0
256QAM	1	0	17.83	17.63	17.76	0-5	0
	1	7	17.88	17.81	17.78		0
	1	14	17.90	17.76	17.92		0
	8	0	17.77	17.61	17.65		0
	8	4	17.79	17.67	17.82		0
	8	7	17.76	17.72	17.75		0
	15	0	17.75	17.63	17.73		0

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Table 9-52
LTE Band 25 (PCS) Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 1.4 MHz Bandwidth

LTE Band 25 (PCS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26047 (1850.7 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26683 (1914.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.49	17.32	17.43	0	0
	1	2	17.56	17.39	17.53		0
	1	5	17.50	17.46	17.53		0
	3	0	17.60	17.34	17.41		0
	3	2	17.61	17.41	17.58		0
	3	3	17.57	17.47	17.51		0
	6	0	17.61	17.43	17.55	0-1	0
16QAM	1	0	17.85	17.67	17.78	0-1	0
	1	2	18.00	17.77	17.93		0
	1	5	17.86	17.86	17.82		0
	3	0	17.81	17.67	17.68		0
	3	2	17.76	17.63	17.74		0
	3	3	17.77	17.69	17.71		0
	6	0	17.64	17.57	17.63	0-2	0
64QAM	1	0	17.78	17.64	17.80	0-2	0
	1	2	17.78	17.75	17.86		0
	1	5	17.81	17.76	17.83		0
	3	0	17.76	17.57	17.67		0
	3	2	17.81	17.63	17.82		0
	3	3	17.75	17.62	17.77		0
	6	0	17.65	17.50	17.65	0-3	0
256QAM	1	0	17.72	17.56	17.68	0-5	0
	1	2	17.84	17.66	17.80		0
	1	5	17.75	17.61	17.80		0
	3	0	17.74	17.60	17.74		0
	3	2	17.82	17.67	17.74		0
	3	3	17.69	17.69	17.80		0
	6	0	17.63	17.50	17.63		0

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9.4.9 LTE Band 30

Table 9-53
LTE Band 30 Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.35	0	0
	1	25	23.33		0
	1	49	**23.41**		0
	25	0	22.25	0-1	1
	25	12	**22.43**		1
	25	25	22.38		1
	50	0	22.41		1
16QAM	1	0	22.75	0-1	1
	1	25	22.94		1
	1	49	22.60		1
	25	0	21.35	0-2	2
	25	12	21.45		2
	25	25	21.36		2
	50	0	21.39		2
64QAM	1	0	21.58	0-2	2
	1	25	21.37		2
	1	49	21.57		2
	25	0	20.31	0-3	3
	25	12	20.48		3
	25	25	20.34		3
	50	0	20.51		3
256QAM	1	0	18.30	0-5	5
	1	25	18.24		5
	1	49	18.28		5
	25	0	18.30		5
	25	12	18.23		5
	25	25	18.21		5
	50	0	18.47		5

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Table 9-54
LTE Band 30 Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 30 5 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	22.85	0	0
	1	12	22.93		0
	1	24	22.94		0
	12	0	22.00	0-1	1
	12	6	22.13		1
	12	13	22.04		1
	25	0	22.05		1
16QAM	1	0	22.26	0-1	1
	1	12	22.35		1
	1	24	22.34		1
	12	0	21.07	0-2	2
	12	6	21.16		2
	12	13	21.11		2
	25	0	21.00		2
64QAM	1	0	21.17	0-2	2
	1	12	21.23		2
	1	24	21.19		2
	12	0	20.08	0-3	3
	12	6	20.17		3
	12	13	20.12		3
	25	0	19.99		3
256QAM	1	0	18.10	0-5	5
	1	12	18.18		5
	1	24	18.11		5
	12	0	18.04		5
	12	6	18.14		5
	12	13	18.13		5
	25	0	18.01		5

Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-55
LTE Band 30 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**19.98**	0	0
	1	25	19.81		0
	1	49	19.91		0
	25	0	19.84	0-1	0
	25	12	**19.90**		0
	25	25	19.86		0
	50	0	19.79		0
16QAM	1	0	19.88	0-1	0
	1	25	19.87		0
	1	49	19.83		0
	25	0	19.85	0-2	0
	25	12	19.82		0
	25	25	19.88		0
	50	0	19.79		0
64QAM	1	0	20.22	0-2	0
	1	25	20.27		0
	1	49	20.26		0
	25	0	19.91	0-3	0
	25	12	19.96		0
	25	25	19.94		0
	50	0	19.87		0
256QAM	1	0	18.27	0-5	2
	1	25	18.55		2
	1	49	18.24		2
	25	0	17.88		2
	25	12	17.91		2
	25	25	18.02		2
	50	0	17.95		2

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Table 9-56
LTE Band 30 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 5 MHz Bandwidth

LTE Band 30 5 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	19.92	0	0
	1	12	20.06		0
	1	24	20.02		0
	12	0	20.05	0-1	0
	12	6	20.12		0
	12	13	20.11		0
	25	0	20.07		0
16QAM	1	0	20.36	0-1	0
	1	12	20.27		0
	1	24	20.28		0
	12	0	20.14	0-2	0
	12	6	20.30		0
	12	13	20.18		0
	25	0	20.08		0
64QAM	1	0	20.27	0-2	0
	1	12	20.41		0
	1	24	20.26		0
	12	0	20.13	0-3	0
	12	6	20.22		0
	12	13	20.18		0
	25	0	20.09		0
256QAM	1	0	18.10	0-5	2
	1	12	18.26		2
	1	24	18.25		2
	12	0	18.11		2
	12	6	18.22		2
	12	13	18.18		2
	25	0	18.12		2

Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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9.4.10 LTE Band 7

Table 9-57
LTE Band 7 Maximum Conducted Powers - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.36	**24.67**	24.41	0	0
	1	50	24.08	24.57	24.32		0
	1	99	24.30	24.51	24.09		0
	50	0	23.44	**23.74**	23.48	0-1	1
	50	25	23.35	23.72	23.47		1
	50	50	23.37	23.63	23.34		1
	100	0	23.32	23.67	23.38		1
16QAM	1	0	23.61	23.80	23.65	0-1	1
	1	50	23.58	23.62	23.61		1
	1	99	23.80	23.71	23.34		1
	50	0	22.61	22.62	22.49	0-2	2
	50	25	22.54	22.77	22.44		2
	50	50	22.52	22.63	22.48		2
	100	0	22.45	22.66	22.39		2
64QAM	1	0	22.01	22.64	22.75	0-2	2
	1	50	22.00	22.48	22.60		2
	1	99	21.99	22.77	21.83		2
	50	0	20.97	21.42	21.43	0-3	3
	50	25	20.93	21.32	21.33		3
	50	50	20.92	21.27	20.96		3
	100	0	20.97	21.27	21.26		3
256QAM	1	0	19.59	19.72	19.61	0-5	5
	1	50	19.80	19.80	19.72		5
	1	99	19.72	19.65	19.33		5
	50	0	19.63	19.70	19.48		5
	50	25	19.68	19.69	19.47		5
	50	50	19.61	19.51	19.30		5
	100	0	19.76	19.63	19.42		5

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Table 9-58
LTE Band 7 Maximum Conducted Powers - 15 MHz Bandwidth

LTE Band 7 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20825 (2507.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21375 (2562.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.14	24.02	23.66	0	0
	1	36	23.93	23.96	23.63		0
	1	74	24.18	23.92	23.22		0
	36	0	23.04	23.12	22.82	0-1	1
	36	18	22.94	23.09	22.82		1
	36	37	23.08	23.07	22.69		1
	75	0	23.17	23.07	22.76		1
16QAM	1	0	23.29	23.39	23.13	0-1	1
	1	36	23.11	23.30	22.94		1
	1	74	23.37	23.32	22.95		1
	36	0	22.17	22.11	21.81	0-2	2
	36	18	22.18	22.13	21.83		2
	36	37	22.26	22.09	21.66		2
	75	0	22.18	22.09	21.76		2
64QAM	1	0	21.49	22.28	22.00	0-2	2
	1	36	21.45	21.66	21.62		2
	1	74	21.57	21.76	21.26		2
	36	0	20.37	20.91	20.86	0-3	3
	36	18	20.37	20.57	20.80		3
	36	37	20.43	20.48	20.38		3
	75	0	20.46	20.78	20.80		3
256QAM	1	0	19.33	19.09	18.84	0-5	5
	1	36	19.36	19.23	18.88		5
	1	74	19.30	18.98	18.71		5
	36	0	19.29	19.17	18.80		5
	36	18	19.36	19.14	18.89		5
	36	37	19.30	19.01	18.72		5
	75	0	19.36	19.08	18.75		5

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Table 9-59
LTE Band 7 Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 7 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20800 (2505.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21400 (2565.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.13	24.15	23.71	0	0
	1	25	24.10	23.93	23.63		0
	1	49	23.98	23.60	23.66		0
	25	0	23.20	23.18	22.75	0-1	1
	25	12	23.18	23.17	22.80		1
	25	25	23.13	23.09	22.76		1
	50	0	22.92	23.13	22.73		1
16QAM	1	0	23.23	23.49	23.22	0-1	1
	1	25	23.23	23.40	23.11		1
	1	49	23.12	23.43	23.06		1
	25	0	22.21	22.14	21.77	0-2	2
	25	12	22.26	22.13	21.77		2
	25	25	22.15	22.02	21.76		2
	50	0	22.20	22.07	21.64		2
64QAM	1	0	21.65	22.24	22.04	0-2	2
	1	25	21.70	21.81	21.53		2
	1	49	21.42	21.51	21.40		2
	25	0	20.53	20.81	20.75	0-3	3
	25	12	20.55	20.53	20.47		3
	25	25	20.39	20.53	20.27		3
	50	0	20.39	20.66	20.43		3
256QAM	1	0	19.33	18.96	18.73	0-5	5
	1	25	19.37	19.26	18.83		5
	1	49	19.29	18.99	18.55		5
	25	0	19.32	19.12	18.70		5
	25	12	19.38	19.20	18.85		5
	25	25	19.13	18.95	18.73		5
	50	0	19.27	19.00	18.70		5

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Table 9-60
LTE Band 7 Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 7 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20775 (2502.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21425 (2567.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.99	24.05	23.57	0	0
	1	12	23.95	24.03	23.32		0
	1	24	24.00	23.55	23.31		0
	12	0	23.13	23.10	22.76	0-1	1
	12	6	23.26	23.15	22.75		1
	12	13	23.20	23.09	22.73		1
	25	0	23.10	23.15	22.76		1
16QAM	1	0	23.53	23.43	23.00	0-1	1
	1	12	23.45	23.38	22.99		1
	1	24	23.52	23.33	22.97		1
	12	0	22.28	22.14	21.80	0-2	2
	12	6	22.53	22.23	21.84		2
	12	13	22.35	22.11	21.82		2
	25	0	22.32	22.14	21.80		2
64QAM	1	0	21.65	22.01	21.52	0-2	2
	1	12	21.67	21.78	21.42		2
	1	24	21.71	21.43	21.47		2
	12	0	20.53	20.74	20.34	0-3	3
	12	6	20.70	20.70	20.51		3
	12	13	20.66	20.55	20.51		3
	25	0	20.57	20.68	20.38		3
256QAM	1	0	19.46	19.17	18.85	0-5	5
	1	12	19.52	19.31	18.87		5
	1	24	19.34	19.13	18.77		5
	12	0	19.39	19.14	18.72		5
	12	6	19.44	19.15	18.83		5
	12	13	19.38	19.11	18.76		5
	25	0	19.44	19.12	18.70		5

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Table 9-61
LTE Band 7 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**18.15**	17.92	17.60	0	0
	1	50	18.09	17.84	17.56		0
	1	99	18.11	17.63	17.52		0
	50	0	**18.30**	17.92	17.60	0-1	0
	50	25	18.27	17.86	17.55		0
	50	50	18.17	17.79	17.55		0
	100	0	18.12	17.86	17.69		0
16QAM	1	0	18.64	18.23	18.01	0-1	0
	1	50	18.36	18.12	17.80		0
	1	99	18.40	18.15	17.68		0
	50	0	18.30	17.88	17.58	0-2	0
	50	25	18.21	17.90	17.57		0
	50	50	18.08	17.80	17.51		0
	100	0	18.20	17.85	17.60		0
64QAM	1	0	18.55	18.07	17.90	0-2	0
	1	50	18.28	17.85	17.65		0
	1	99	18.44	17.88	17.62		0
	50	0	18.25	17.92	17.55	0-3	0
	50	25	18.37	17.84	17.60		0
	50	50	18.15	17.69	17.52		0
	100	0	18.22	17.80	17.55		0
256QAM	1	0	18.09	17.85	17.70	0-5	0
	1	50	18.41	17.99	17.73		0
	1	99	17.88	17.66	17.50		0
	50	0	18.20	17.88	17.56		0
	50	25	18.35	17.92	17.57		0
	50	50	18.15	17.70	17.50		0
	100	0	18.22	17.89	17.54		0

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Table 9-62
LTE Band 7 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 15 MHz Bandwidth

LTE Band 7 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20825 (2507.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21375 (2562.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.95	17.64	17.35	0	0
	1	36	17.93	17.62	17.27		0
	1	74	17.92	17.52	17.26		0
	36	0	17.99	17.75	17.40	0-1	0
	36	18	17.99	17.77	17.39		0
	36	37	17.90	17.60	17.28		0
	75	0	17.95	17.67	17.35		0
16QAM	1	0	18.47	18.42	18.00	0-1	0
	1	36	18.48	18.35	17.95		0
	1	74	18.42	18.27	17.72		0
	36	0	18.10	17.81	17.45	0-2	0
	36	18	18.07	17.80	17.44		0
	36	37	18.00	17.68	17.36		0
	75	0	18.00	17.71	17.37		0
64QAM	1	0	18.09	18.23	17.51	0-2	0
	1	36	18.00	18.08	17.36		0
	1	74	17.93	17.97	17.27		0
	36	0	18.12	17.83	17.49	0-3	0
	36	18	18.18	17.82	17.52		0
	36	37	18.06	17.70	17.37		0
	75	0	18.03	17.70	17.40		0
256QAM	1	0	18.13	18.24	17.63	0-5	0
	1	36	18.26	18.30	17.70		0
	1	74	18.08	18.09	17.51		0
	36	0	17.95	17.77	17.40		0
	36	18	18.01	17.86	17.42		0
	36	37	17.94	17.71	17.26		0
	75	0	17.99	17.76	17.32		0

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Table 9-63
LTE Band 7 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 10 MHz Bandwidth

LTE Band 7 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20800 (2505.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21400 (2565.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.79	17.77	17.37	0	0
	1	25	17.74	17.70	17.32		0
	1	49	17.78	17.73	17.31		0
	25	0	17.77	17.77	17.38	0-1	0
	25	12	17.80	17.79	17.36		0
	25	25	17.80	17.66	17.35		0
	50	0	17.78	17.71	17.30		0
16QAM	1	0	18.14	18.32	17.95	0-1	0
	1	25	18.33	18.23	17.82		0
	1	49	18.26	18.14	17.84		0
	25	0	17.73	17.75	17.35	0-2	0
	25	12	17.75	17.78	17.38		0
	25	25	17.65	17.66	17.32		0
	50	0	17.68	17.71	17.30		0
64QAM	1	0	17.86	17.86	17.50	0-2	0
	1	25	17.80	17.83	17.37		0
	1	49	17.68	17.71	17.42		0
	25	0	17.88	17.91	17.53	0-3	0
	25	12	17.88	17.90	17.50		0
	25	25	17.78	17.78	17.45		0
	50	0	17.78	17.79	17.45		0
256QAM	1	0	17.80	17.82	17.35	0-5	0
	1	25	18.02	18.08	17.59		0
	1	49	17.61	17.68	17.32		0
	25	0	17.77	17.76	17.37		0
	25	12	17.87	17.84	17.46		0
	25	25	17.69	17.72	17.37		0
	50	0	17.68	17.72	17.35		0

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Table 9-64
LTE Band 7 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 5 MHz Bandwidth

LTE Band 7 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20775 (2502.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21425 (2567.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.06	17.77	17.32	0	0
	1	12	18.04	17.78	17.30		0
	1	24	17.99	17.72	17.29		0
	12	0	18.00	17.72	17.36	0-1	0
	12	6	18.10	17.83	17.38		0
	12	13	18.00	17.70	17.35		0
	25	0	18.02	17.73	17.35		0
16QAM	1	0	18.52	18.19	17.81	0-1	0
	1	12	18.46	18.13	17.76		0
	1	24	18.40	18.14	17.78		0
	12	0	18.11	17.83	17.45	0-2	0
	12	6	18.15	17.90	17.43		0
	12	13	18.08	17.78	17.41		0
	25	0	18.08	17.76	17.38		0
64QAM	1	0	18.40	18.15	17.73	0-2	0
	1	12	18.33	18.22	17.64		0
	1	24	18.32	18.08	17.72		0
	12	0	18.12	17.81	17.44	0-3	0
	12	6	18.14	17.90	17.47		0
	12	13	18.04	17.79	17.41		0
	25	0	18.09	17.80	17.40		0
256QAM	1	0	18.60	18.32	17.92	0-5	0
	1	12	18.58	18.31	17.94		0
	1	24	18.35	18.10	17.86		0
	12	0	18.16	17.85	17.50		0
	12	6	18.19	17.92	17.48		0
	12	13	18.07	17.80	17.49		0
	25	0	18.04	17.72	17.34		0

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9.4.11 LTE Band 48

Table 9-65
LTE Band 48 Maximum Conducted Powers - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55340 (3560.0 MHz)	55773 (3603.3 MHz)	56207 (3646.7 MHz)	56640 (3690.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	23.32	23.24	22.90	22.94	0	0
	1	50	23.31	23.25	**23.35**	23.16		0
	1	99	23.07	22.95	22.87	22.87		0
	50	0	22.28	22.38	22.30	22.28	0-1	1
	50	25	22.32	22.39	**22.41**	22.32		1
	50	50	22.23	22.27	22.27	22.10		1
	100	0	22.23	22.33	22.28	22.24		1
16QAM	1	0	22.61	22.47	22.35	22.22	0-1	1
	1	50	22.80	22.64	22.77	22.56		1
	1	99	22.63	22.29	22.53	22.51		1
	50	0	21.68	21.40	21.51	21.63	0-2	2
	50	25	21.55	21.51	21.71	21.65		2
	50	50	21.62	21.33	21.54	21.39		2
	100	0	21.73	21.46	21.61	21.49		2
64QAM	1	0	21.37	21.23	21.19	20.99	0-2	2
	1	50	21.66	21.39	21.58	21.29		2
	1	99	21.36	21.00	21.24	21.20		2
	50	0	20.74	20.53	20.62	20.55	0-3	3
	50	25	20.80	20.59	20.64	20.35		3
	50	50	20.62	20.42	20.48	20.42		3
	100	0	20.72	20.51	20.49	20.33		3
256QAM	1	0	18.77	18.80	18.77	18.78	0-5	5
	1	50	18.73	18.48	18.47	18.40		5
	1	99	18.38	18.03	18.12	17.93		5
	50	0	18.51	18.56	18.51	18.50		5
	50	25	18.56	18.63	18.55	18.53		5
	50	50	18.38	18.46	18.43	18.37		5
	100	0	18.49	18.46	18.49	18.47		5

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Table 9-66
LTE Band 48 Maximum Conducted Powers - 15 MHz Bandwidth

LTE Band 48 15 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55315 (3557.5 MHz)	55765 (3602.5 MHz)	56215 (3647.5 MHz)	56665 (3692.5 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	23.31	23.39	23.32	22.97	0	0
	1	36	23.58	23.41	23.54	23.10		0
	1	74	23.39	23.22	23.34	23.00		0
	36	0	22.61	22.60	22.57	22.19	0-1	1
	36	18	22.60	22.57	22.65	22.27		1
	36	37	22.52	22.41	22.57	22.17		1
	75	0	22.54	22.48	22.59	22.22		1
16QAM	1	0	22.63	22.50	22.58	22.33	0-1	1
	1	36	22.80	22.49	22.80	22.46		1
	1	74	22.69	22.32	22.68	22.39		1
	36	0	21.60	21.50	21.52	21.14	0-2	2
	36	18	21.57	21.52	21.63	21.21		2
	36	37	21.48	21.35	21.52	21.12		2
	75	0	21.54	21.45	21.60	21.25		2
64QAM	1	0	21.38	21.15	21.32	21.04	0-2	2
	1	36	21.63	21.16	21.55	21.21		2
	1	74	21.42	21.09	21.37	21.07		2
	36	0	20.70	20.60	20.61	20.24	0-3	3
	36	18	20.65	20.60	20.68	20.32		3
	36	37	20.60	20.55	20.59	20.22		3
	75	0	20.59	20.59	20.64	20.28		3
256QAM	1	0	18.48	18.44	18.65	18.08	0-5	5
	1	36	18.70	18.45	18.41	18.30		5
	1	74	18.47	18.20	18.61	18.08		5
	36	0	18.68	18.55	18.71	18.26		5
	36	18	18.66	18.59	18.72	18.36		5
	36	37	18.59	18.55	18.61	18.24		5
	75	0	18.59	18.49	18.66	18.30		5

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Table 9-67
LTE Band 48 Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 48 10 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55290 (3555.0 MHz)	55757 (3601.7 MHz)	56223 (3648.3 MHz)	56690 (3695.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	23.37	23.12	23.23	22.87	0	0
	1	25	23.57	23.41	23.57	23.28		0
	1	49	23.49	23.26	23.30	23.06		0
	25	0	22.64	22.41	22.54	22.26	0-1	1
	25	12	22.76	22.45	22.70	22.38		1
	25	25	22.66	22.45	22.61	22.40		1
	50	0	22.61	22.40	22.61	22.31		1
16QAM	1	0	22.69	22.46	22.56	22.30	0-1	1
	1	25	22.80	22.79	22.80	22.70		1
	1	49	22.79	22.63	22.79	22.63		1
	25	0	21.63	21.46	21.55	21.23	0-2	2
	25	12	21.78	21.51	21.70	21.47		2
	25	25	21.73	21.47	21.57	21.43		2
	50	0	21.63	21.43	21.62	21.40		2
64QAM	1	0	21.38	21.22	21.23	20.95	0-2	2
	1	25	21.70	21.48	21.62	21.26		2
	1	49	21.48	21.33	21.39	21.16		2
	25	0	20.64	20.41	20.53	20.29	0-3	3
	25	12	20.77	20.49	20.71	20.42		3
	25	25	20.65	20.46	20.61	20.42		3
	50	0	20.67	20.47	20.66	20.39		3
256QAM	1	0	18.47	18.29	18.24	18.02	0-5	5
	1	25	18.80	18.65	18.71	18.46		5
	1	49	18.56	18.35	18.41	18.21		5
	25	0	18.80	18.58	18.62	18.30		5
	25	12	18.79	18.60	18.75	18.50		5
	25	25	18.77	18.59	18.66	18.44		5
	50	0	18.75	18.53	18.68	18.41		5

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Table 9-68
LTE Band 48 Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 48 5 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55265 (3552.5 MHz)	55748 (3600.8 MHz)	56232 (3649.2 MHz)	56715 (3697.5 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	23.26	23.33	23.20	23.18	0	0
	1	12	23.42	23.48	23.55	23.22		0
	1	24	23.37	23.34	23.34	23.30		0
	12	0	22.50	22.51	22.59	22.33	0-1	1
	12	6	22.60	22.59	22.71	22.41		1
	12	13	22.52	22.50	22.67	22.40		1
	25	0	22.48	22.51	22.65	22.39		1
16QAM	1	0	22.68	22.65	22.77	22.48	0-1	1
	1	12	22.80	22.80	22.79	22.70		1
	1	24	22.70	22.72	22.78	22.65		1
	12	0	21.47	21.45	21.62	21.32	0-2	2
	12	6	21.55	21.53	21.65	21.38		2
	12	13	21.50	21.48	21.64	21.43		2
	25	0	21.56	21.49	21.74	21.43		2
64QAM	1	0	21.36	21.37	21.47	21.26	0-2	2
	1	12	21.56	21.52	21.63	21.35		2
	1	24	21.48	21.46	21.54	21.36		2
	12	0	20.46	20.52	20.63	20.40	0-3	3
	12	6	20.59	20.60	20.74	20.47		3
	12	13	20.50	20.51	20.67	20.44		3
	25	0	20.53	20.50	20.67	20.42		3
256QAM	1	0	18.40	18.42	18.50	18.51	0-5	5
	1	12	18.57	18.55	18.68	18.44		5
	1	24	18.48	18.50	18.60	18.40		5
	12	0	18.62	18.64	18.76	18.65		5
	12	6	18.70	18.71	18.80	18.75		5
	12	13	18.67	18.67	18.79	18.73		5
	25	0	18.52	18.51	18.70	18.55		5

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Table 9-69
LTE Band 48 Reduced Conducted Powers – Receiver Mode Active - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55340 (3560.0 MHz)	55773 (3603.3 MHz)	56207 (3646.7 MHz)	56640 (3690.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	16.17	16.00	15.98	15.93	0	0
	1	50	16.18	**16.50**	16.33	16.11		0
	1	99	16.19	15.99	16.01	15.87		0
	50	0	16.18	16.52	16.28	16.23	0-1	0
	50	25	16.17	**16.58**	16.42	16.31		0
	50	50	16.19	16.40	16.27	16.15		0
	100	0	16.16	16.48	16.35	16.23		0
16QAM	1	0	16.18	16.47	15.76	15.77	0-1	0
	1	50	16.19	16.61	15.99	15.98		0
	1	99	16.17	16.24	15.76	15.65		0
	50	0	16.16	16.55	16.31	16.24	0-2	0
	50	25	16.19	16.60	16.44	16.33		0
	50	50	16.18	16.43	16.29	16.15		0
	100	0	16.19	16.50	16.36	16.24		0
64QAM	1	0	16.16	15.83	16.24	16.21	0-2	0
	1	50	16.14	16.02	16.61	16.47		0
	1	99	16.17	15.72	16.27	16.11		0
	50	0	16.20	16.52	16.35	16.25	0-3	0
	50	25	16.16	16.58	16.46	16.31		0
	50	50	16.17	16.41	16.31	16.14		0
	100	0	16.16	16.52	16.34	16.22		0
256QAM	1	0	16.39	16.33	16.13	16.10	0-5	0
	1	50	16.72	16.52	16.44	16.28		0
	1	99	16.44	16.15	16.06	16.02		0
	50	0	16.51	16.54	16.31	16.26		0
	50	25	16.63	16.61	16.47	16.33		0
	50	50	16.50	16.42	16.29	16.13		0
	100	0	16.57	16.52	16.36	16.23		0

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Table 9-70
LTE Band 48 Reduced Conducted Powers - Receiver Mode Active - 15 MHz Bandwidth

LTE Band 48 15 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55315 (3557.5 MHz)	55765 (3602.5 MHz)	56215 (3647.5 MHz)	56665 (3692.5 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	16.40	16.27	16.07	16.10	0	0
	1	36	16.62	16.20	16.30	16.24		0
	1	74	16.47	16.43	16.18	16.11		0
	36	0	16.56	16.40	16.25	16.34	0-1	0
	36	18	16.59	16.35	16.37	16.40		0
	36	37	16.53	16.29	16.28	16.25		0
	75	0	16.49	16.30	16.29	16.32		0
16QAM	1	0	16.05	16.12	15.84	16.19	0-1	0
	1	36	16.31	16.15	16.04	16.32		0
	1	74	16.16	15.92	15.90	16.13		0
	36	0	16.55	16.31	16.27	16.38	0-2	0
	36	18	16.53	16.26	16.35	16.44		0
	36	37	16.47	16.22	16.29	16.30		0
	75	0	16.47	16.26	16.30	16.32		0
64QAM	1	0	15.90	16.24	15.66	16.06	0-2	0
	1	36	16.15	16.27	15.88	16.17		0
	1	74	15.97	16.05	15.70	15.96		0
	36	0	16.60	16.39	16.33	16.38	0-3	0
	36	18	16.58	16.35	16.42	16.43		0
	36	37	16.53	16.28	16.35	16.30		0
	75	0	16.50	16.28	16.34	16.35		0
256QAM	1	0	15.88	16.40	15.61	16.56	0-5	0
	1	36	16.08	16.45	15.85	16.68		0
	1	74	15.92	16.30	15.66	16.44		0
	36	0	16.58	16.32	16.32	16.32		0
	36	18	16.59	16.28	16.43	16.40		0
	36	37	16.50	16.24	16.33	16.24		0
	75	0	16.51	16.26	16.36	16.36		0

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Table 9-71
LTE Band 48 Reduced Conducted Powers - Receiver Mode Active - 10 MHz Bandwidth

LTE Band 48 10 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55290 (3555.0 MHz)	55757 (3601.7 MHz)	56223 (3648.3 MHz)	56690 (3695.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	16.27	16.14	16.00	16.10	0	0
	1	25	16.62	16.46	16.41	16.45		0
	1	49	16.40	16.26	16.44	16.23		0
	25	0	16.55	16.35	16.29	16.32	0-1	0
	25	12	16.60	16.40	16.40	16.46		0
	25	25	16.56	16.38	16.28	16.44		0
	50	0	16.54	16.31	16.34	16.37		0
16QAM	1	0	16.08	15.71	16.10	15.71	0-1	0
	1	25	16.41	16.08	16.48	16.13		0
	1	49	16.26	15.94	16.24	15.90		0
	25	0	16.49	16.30	16.29	16.26	0-2	0
	25	12	16.61	16.35	16.45	16.38		0
	25	25	16.50	16.33	16.32	16.35		0
	50	0	16.51	16.31	16.35	16.37		0
64QAM	1	0	16.30	15.70	15.85	15.67	0-2	0
	1	25	16.62	16.11	16.28	16.07		0
	1	49	16.40	15.80	16.04	15.78		0
	25	0	16.52	16.38	16.31	16.34	0-3	0
	25	12	16.63	16.44	16.44	16.48		0
	25	25	16.53	16.42	16.30	16.45		0
	50	0	16.50	16.34	16.34	16.35		0
256QAM	1	0	16.53	15.66	15.87	15.63	0-5	0
	1	25	16.86	15.94	16.29	15.93		0
	1	49	16.63	15.77	16.07	15.68		0
	25	0	16.54	16.37	16.24	16.30		0
	25	12	16.68	16.45	16.39	16.46		0
	25	25	16.54	16.39	16.28	16.42		0
	50	0	16.55	16.38	16.36	16.38		0

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Table 9-72
LTE Band 48 Reduced Conducted Powers - Receiver Mode Active - 5 MHz Bandwidth

LTE Band 48 5 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			109 (3552.5 MHz)	55748 (3600.8 MHz)	56232 (3649.2 MHz)	56715 (3697.5 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	16.43	16.22	16.23	16.25	0	0
	1	12	16.60	16.37	16.29	16.35		0
	1	24	16.50	16.27	16.22	16.33		0
	12	0	16.58	16.41	16.31	16.43	0-1	0
	12	6	16.64	16.51	16.38	16.49		0
	12	13	16.67	16.42	16.40	16.50		0
	25	0	16.64	16.40	16.37	16.47		0
16QAM	1	0	16.31	16.13	16.26	16.20	0-1	0
	1	12	16.45	16.26	16.48	16.32		0
	1	24	16.42	16.19	16.26	16.09		0
	12	0	16.51	16.36	16.35	16.39	0-2	0
	12	6	16.58	16.45	16.41	16.44		0
	12	13	16.56	16.39	16.42	16.44		0
	25	0	16.64	16.38	16.34	16.40		0
64QAM	1	0	16.63	16.12	16.60	16.14	0-2	0
	1	12	16.60	16.25	16.71	16.25		0
	1	24	16.63	16.19	16.64	16.24		0
	12	0	16.50	16.52	16.37	16.50	0-3	0
	12	6	16.60	16.58	16.48	16.54		0
	12	13	16.61	16.55	16.44	16.55		0
	25	0	16.60	16.39	16.27	16.46		0
256QAM	1	0	16.63	16.14	16.55	16.15	0-5	0
	1	12	16.72	16.28	16.65	16.28		0
	1	24	16.72	16.18	16.56	16.24		0
	12	0	16.58	16.42	16.25	16.44		0
	12	6	16.68	16.48	16.37	16.51		0
	12	13	16.67	16.43	16.34	16.50		0
	25	0	16.62	16.33	16.28	16.41		0

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9.4.12 LTE Band 41

Table 9-73
LTE Band 41 PC3 Maximum Conducted Powers - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	24.18	24.00	23.99	23.95	24.01	0	0
	1	50	24.20	23.90	23.96	24.12	**24.48**		0
	1	99	24.34	23.80	23.80	23.85	24.40		0
	50	0	23.28	22.89	22.85	23.15	23.50	0-1	1
	50	25	23.33	23.00	22.83	23.20	**23.60**		1
	50	50	23.30	22.99	22.81	23.10	23.56		1
	100	0	23.28	22.98	22.85	23.07	23.55		1
16QAM	1	0	23.31	22.88	22.68	22.95	23.15	0-1	1
	1	50	23.22	22.85	22.72	23.18	23.60		1
	1	99	23.25	22.70	22.76	22.63	23.50		1
	50	0	22.33	21.80	21.66	22.60	22.47	0-2	2
	50	25	22.34	21.85	21.90	22.17	22.66		2
	50	50	22.32	21.76	21.86	22.11	22.66		2
	100	0	22.31	21.80	21.88	22.11	22.61		2
64QAM	1	0	22.07	21.60	21.99	21.70	21.98	0-2	2
	1	50	21.93	21.54	21.60	21.90	22.28		2
	1	99	21.95	21.60	21.50	21.60	22.18		2
	50	0	21.32	20.99	20.70	21.25	21.40	0-3	3
	50	25	21.40	20.87	20.87	21.30	21.61		3
	50	50	21.40	20.84	20.81	21.21	21.61		3
	100	0	21.30	20.80	20.83	21.18	21.50		3
256QAM	1	0	18.80	18.40	18.30	18.88	18.92	0-5	5
	1	50	19.14	18.60	18.70	19.11	19.41		5
	1	99	18.91	18.77	18.60	18.60	19.30		5
	50	0	19.26	18.79	18.65	19.25	19.39		5
	50	25	19.30	18.85	18.85	19.25	19.66		5
	50	50	19.35	18.73	18.82	19.20	19.65		5
	100	0	19.30	18.77	18.75	19.15	19.60		5

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Table 9-74
LTE Band 41 PC3 Maximum Conducted Powers - 15 MHz Bandwidth

LTE Band 41 15 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	23.74	23.83	23.86	24.18	24.40	0	0
	1	36	23.93	23.99	23.94	24.26	24.67		0
	1	74	23.72	23.85	23.73	24.13	24.71		0
	36	0	22.92	22.95	22.97	23.25	23.58	0-1	1
	36	18	23.08	23.11	23.07	23.28	23.77		1
	36	37	23.04	23.03	23.04	23.31	23.79		1
	75	0	22.99	23.00	23.05	23.24	23.72		1
16QAM	1	0	22.77	22.84	22.85	23.20	23.37	0-1	1
	1	36	23.02	22.99	22.99	23.33	23.67		1
	1	74	22.84	22.84	22.83	23.10	23.76		1
	36	0	21.86	21.87	21.90	22.20	22.51	0-2	2
	36	18	22.04	22.04	22.04	22.26	22.70		2
	36	37	21.99	21.95	21.98	22.25	22.74		2
	75	0	22.01	21.99	22.05	22.23	22.72		2
64QAM	1	0	21.44	21.41	21.49	21.82	22.05	0-2	2
	1	36	21.69	21.70	21.79	22.04	22.36		2
	1	74	21.52	21.51	21.51	21.84	22.41		2
	36	0	20.98	20.95	21.00	21.28	21.60	0-3	3
	36	18	21.11	21.10	21.08	21.30	21.77		3
	36	37	20.99	21.03	21.03	21.31	21.81		3
	75	0	21.04	21.05	21.06	21.25	21.75		3
256QAM	1	0	18.64	18.63	18.74	18.99	19.23	0-5	5
	1	36	18.90	18.88	18.88	19.21	19.61		5
	1	74	18.71	18.71	18.69	19.00	19.61		5
	36	0	18.93	18.94	18.95	19.26	19.58		5
	36	18	19.11	19.10	19.07	19.33	19.82		5
	36	37	19.04	19.01	19.04	19.36	19.80		5
	75	0	19.01	19.02	19.07	19.22	19.76		5

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Table 9-75
LTE Band 41 PC3 Maximum Conducted Powers - 10 MHz Bandwidth

LTE Band 41 10 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	24.62	23.78	23.78	23.99	24.45	0	0
	1	25	24.61	24.06	24.00	24.29	24.68		0
	1	49	24.58	23.78	23.64	23.99	24.45		0
	25	0	23.71	22.98	22.93	23.19	23.58	0-1	1
	25	12	23.72	23.14	23.07	23.27	23.74		1
	25	25	23.69	23.03	22.96	23.26	23.66		1
	50	0	23.65	23.05	23.03	23.21	23.65		1
16QAM	1	0	23.75	22.94	22.92	23.17	23.54	0-1	1
	1	25	23.70	23.15	23.07	23.36	23.73		1
	1	49	23.74	22.94	22.83	23.10	23.55		1
	25	0	22.75	21.97	21.93	22.17	22.56	0-2	2
	25	12	22.74	22.15	22.08	22.25	22.75		2
	25	25	22.70	22.05	21.95	22.29	22.63		2
	50	0	22.70	22.09	22.03	22.26	22.71		2
64QAM	1	0	22.53	21.50	21.41	21.74	22.03	0-2	2
	1	25	22.38	21.79	21.59	22.02	22.37		2
	1	49	22.35	21.60	21.35	21.81	22.16		2
	25	0	21.70	20.97	20.92	21.17	21.56	0-3	3
	25	12	21.72	21.15	21.07	21.30	21.76		3
	25	25	21.65	21.01	20.94	21.21	21.65		3
	50	0	21.72	21.13	21.06	21.27	21.73		3
256QAM	1	0	19.28	18.72	18.58	18.89	19.34	0-5	5
	1	25	19.46	19.04	18.83	19.22	19.72		5
	1	49	19.18	18.86	18.59	19.04	19.33		5
	25	0	19.70	19.07	19.04	19.27	19.67		5
	25	12	19.65	19.24	19.16	19.39	19.82		5
	25	25	19.70	19.15	19.06	19.37	19.73		5
	50	0	19.74	19.19	19.10	19.30	19.76		5

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Table 9-76
LTE Band 41 PC3 Maximum Conducted Powers - 5 MHz Bandwidth

LTE Band 41 5 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	24.63	24.01	23.95	24.22	24.50	0	0
	1	12	24.56	24.08	23.95	24.32	24.71		0
	1	24	24.56	24.04	23.92	24.31	24.68		0
	12	0	23.68	23.11	22.99	23.29	23.65	0-1	1
	12	6	23.66	23.14	23.10	23.33	23.77		1
	12	13	23.60	23.10	23.02	23.36	23.70		1
	25	0	23.65	23.13	23.08	23.30	23.75		1
16QAM	1	0	23.72	23.07	23.08	23.28	23.62	0-1	1
	1	12	23.60	23.17	23.12	23.40	23.76		1
	1	24	23.70	23.12	23.05	23.40	23.74		1
	12	0	22.60	22.03	21.94	22.21	22.56	0-2	2
	12	6	22.63	22.08	21.98	22.22	22.66		2
	12	13	22.57	22.07	21.92	22.28	22.65		2
	25	0	22.65	22.14	22.10	22.30	22.76		2
64QAM	1	0	22.36	21.74	21.67	21.92	22.31	0-2	2
	1	12	22.31	21.80	21.70	22.01	22.42		2
	1	24	22.30	21.78	21.68	21.97	22.36		2
	12	0	21.61	21.10	20.97	21.27	21.60	0-3	3
	12	6	21.66	21.13	21.04	21.25	21.70		3
	12	13	21.55	21.07	20.98	21.33	21.70		3
	25	0	21.65	21.14	21.04	21.32	21.71		3
256QAM	1	0	19.29	18.85	18.75	19.12	19.40	0-5	5
	1	12	19.50	18.97	18.91	19.18	19.60		5
	1	24	19.40	18.97	18.85	19.05	19.57		5
	12	0	19.70	19.27	19.10	19.37	19.82		5
	12	6	19.72	19.27	19.13	19.46	19.85		5
	12	13	19.70	19.22	19.11	19.44	19.86		5
	25	0	19.65	19.20	19.05	19.33	19.75		5

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Table 9-77
LTE Band 41 PC3 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	20.14	19.81	19.79	20.15	20.30	0	0
	1	50	20.09	19.79	19.97	20.39	20.55		0
	1	99	20.03	19.77	19.75	20.06	**20.56**		0
	50	0	20.16	19.86	19.74	20.29	20.45	0-1	0
	50	25	20.19	19.89	20.06	20.33	20.68		0
	50	50	20.16	19.95	20.04	20.34	**20.73**		0
	100	0	20.12	19.90	20.01	20.28	20.51		0
16QAM	1	0	20.27	20.21	19.96	20.39	20.57	0-1	0
	1	50	20.21	19.91	20.32	20.44	20.67		0
	1	99	20.25	20.26	20.20	20.54	20.61		0
	50	0	20.16	19.90	19.99	20.30	20.50	0-2	0
	50	25	20.22	19.87	19.99	20.29	20.61		0
	50	50	20.19	19.96	20.03	20.33	20.58		0
	100	0	20.20	19.91	19.99	20.50	20.57		0
64QAM	1	0	20.24	19.89	19.96	20.40	20.61	0-2	0
	1	50	20.28	19.88	19.99	20.69	20.85		0
	1	99	20.24	19.84	20.00	20.49	20.81		0
	50	0	20.26	19.90	19.95	20.39	20.68	0-3	0
	50	25	20.19	19.92	20.17	20.34	20.63		0
	50	50	20.24	19.95	20.11	20.38	20.78		0
	100	0	20.27	19.94	20.09	20.35	20.72		0
256QAM	1	0	19.71	19.12	19.37	19.54	19.70	0-5	0.2
	1	50	19.80	19.21	19.46	19.52	19.82		0.2
	1	99	19.75	19.33	19.56	19.63	19.80		0.2
	50	0	19.60	19.24	19.24	19.58	19.70		0.2
	50	25	19.62	19.27	19.40	19.50	19.71		0.2
	50	50	19.61	19.31	19.30	19.60	19.79		0.2
	100	0	19.65	19.30	19.31	19.54	19.76		0.2

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Table 9-78
LTE Band 41 PC3 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 15 MHz Bandwidth

LTE Band 41 15 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	20.11	19.85	19.86	20.20	20.09	0	0
	1	36	20.10	20.08	20.18	20.35	20.35		0
	1	74	20.00	19.78	19.99	20.16	20.28		0
	36	0	20.16	19.94	20.07	20.32	20.26	0-1	0
	36	18	20.18	20.07	20.27	20.33	20.47		0
	36	37	20.14	20.01	20.26	20.32	20.43		0
	75	0	20.09	19.97	20.20	20.22	20.37		0
16QAM	1	0	20.25	19.72	20.05	20.42	20.19	0-1	0
	1	36	20.25	19.95	20.29	20.53	20.49		0
	1	74	20.16	19.70	20.11	20.31	20.38		0
	36	0	20.27	20.00	20.16	20.29	20.35	0-2	0
	36	18	20.30	20.17	20.34	20.31	20.55		0
	36	37	20.27	20.08	20.30	20.27	20.53		0
	75	0	20.15	20.02	20.21	20.25	20.40		0
64QAM	1	0	20.34	19.58	20.10	20.02	20.25	0-2	0
	1	36	20.37	19.88	20.44	20.17	20.59		0
	1	74	20.29	19.60	20.27	19.97	20.53		0
	36	0	20.27	19.94	20.18	20.24	20.36	0-3	0
	36	18	20.28	20.10	20.34	20.32	20.54		0
	36	37	20.25	20.04	20.32	20.31	20.52		0
	75	0	20.16	20.04	20.24	20.28	20.43		0
256QAM	1	0	20.20	19.26	19.80	19.70	20.12	0-5	0.2
	1	36	20.29	19.21	19.94	19.83	20.31		0.2
	1	74	20.23	19.18	20.00	19.63	20.20		0.2
	36	0	20.00	19.53	19.63	19.77	19.82		0.2
	36	18	20.05	19.66	19.83	19.86	20.03		0.2
	36	37	20.06	19.56	19.78	19.87	19.97		0.2
	75	0	20.11	19.59	19.73	19.76	19.90		0.2

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Table 9-79
LTE Band 41 PC3 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 10 MHz Bandwidth

LTE Band 41 10 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	20.28	19.90	20.24	20.10	20.28	0	0
	1	25	20.21	20.07	20.29	20.34	20.48		0
	1	49	20.25	19.82	20.00	20.11	20.14		0
	25	0	20.20	20.01	20.15	20.31	20.33	0-1	0
	25	12	20.16	20.16	20.30	20.39	20.46		0
	25	25	20.15	20.07	20.18	20.35	20.34		0
	50	0	20.14	20.06	20.19	20.28	20.37		0
16QAM	1	0	20.32	19.77	20.25	20.36	20.42	0-1	0
	1	25	20.21	19.97	20.29	20.54	20.57		0
	1	49	20.37	19.74	20.16	20.30	20.38		0
	25	0	20.24	20.01	20.18	20.30	20.35	0-2	0
	25	12	20.24	20.13	20.37	20.43	20.52		0
	25	25	20.16	20.08	20.29	20.44	20.34		0
	50	0	20.12	20.09	20.23	20.32	20.41		0
64QAM	1	0	20.36	19.78	20.28	20.01	20.34	0-2	0
	1	25	20.53	19.99	20.45	20.32	20.61		0
	1	49	20.57	19.73	20.44	20.05	20.47		0
	25	0	20.13	20.07	20.12	20.33	20.22	0-3	0
	25	12	20.11	20.25	20.27	20.37	20.45		0
	25	25	20.02	20.15	20.16	20.36	20.29		0
	50	0	20.15	20.15	20.23	20.26	20.39		0
256QAM	1	0	19.79	19.25	19.59	19.74	19.65	0-5	0.2
	1	25	19.92	19.48	19.67	19.97	19.75		0.2
	1	49	19.66	19.38	19.67	19.74	19.79		0.2
	25	0	20.00	19.56	19.71	19.77	19.82		0.2
	25	12	20.03	19.75	19.82	19.86	19.98		0.2
	25	25	19.99	19.63	19.72	19.83	19.77		0.2
	50	0	19.99	19.67	19.73	19.82	19.85		0.2

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Table 9-80
LTE Band 41 PC3 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 5 MHz Bandwidth

LTE Band 41 5 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	20.24	20.08	20.22	20.28	20.44	0	0
	1	12	20.15	20.11	20.24	20.35	20.36		0
	1	24	20.20	20.10	20.16	20.28	20.44		0
	12	0	20.24	20.14	20.19	20.38	20.39	0-1	0
	12	6	20.21	20.21	20.32	20.37	20.45		0
	12	13	20.21	20.17	20.28	20.40	20.38		0
	25	0	20.22	20.11	20.27	20.38	20.39		0
16QAM	1	0	20.63	20.21	20.43	20.32	20.73	0-1	0
	1	12	20.56	20.26	20.62	20.31	20.79		0
	1	24	20.59	20.26	20.64	20.44	20.80		0
	12	0	20.18	20.14	20.17	20.48	20.38	0-2	0
	12	6	20.21	20.17	20.32	20.49	20.41		0
	12	13	20.21	20.15	20.27	20.57	20.39		0
	25	0	20.13	20.13	20.25	20.38	20.44		0
64QAM	1	0	20.13	19.96	20.05	20.49	20.22	0-2	0
	1	12	20.04	20.02	20.15	20.56	20.27		0
	1	24	20.03	19.97	20.16	20.51	20.25		0
	12	0	20.27	20.17	20.27	20.39	20.40	0-3	0
	12	6	20.29	20.21	20.40	20.40	20.51		0
	12	13	20.30	20.18	20.38	20.43	20.44		0
	25	0	20.20	20.15	20.32	20.39	20.43		0
256QAM	1	0	20.20	19.22	19.82	19.98	20.10	0-5	0.2
	1	12	20.23	19.28	19.94	19.99	20.24		0.2
	1	24	20.24	19.28	20.00	19.97	20.26		0.2
	12	0	20.04	19.66	19.66	19.79	19.78		0.2
	12	6	20.03	19.70	19.73	19.82	19.79		0.2
	12	13	20.01	19.68	19.68	19.86	19.82		0.2
	25	0	20.06	19.67	19.73	19.94	19.88		0.2

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Table 9-81
LTE Band 41 PC2 Maximum Conducted Powers - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	25.66	25.32	25.04	25.41	25.44	0	0
	1	50	25.70	25.26	25.37	25.68	**25.90**		0
	1	99	25.78	25.33	25.15	25.33	25.86		0
	50	0	24.90	24.42	24.29	24.66	24.91	0-1	1
	50	25	25.02	24.50	24.50	24.74	25.13		1
	50	50	24.97	24.45	24.39	24.77	**25.14**		1
	100	0	24.93	24.40	24.36	24.64	25.08		1

Table 9-82
LTE Band 41 PC2 Reduced Conducted Powers - Hotspot, Grip Sensor and/or Earjack Mode Active - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	21.53	21.30	21.06	21.47	21.62	0	0
	1	50	21.42	21.28	21.44	21.80	21.63		0
	1	99	21.39	21.29	21.21	21.78	**22.04**		0
	50	0	21.60	21.41	21.40	21.88	22.00	0-1	0
	50	25	21.64	21.44	21.64	21.91	22.24		0
	50	50	21.60	21.48	21.60	21.86	**22.27**		0
	100	0	21.56	21.41	21.56	21.84	22.01		0

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9.4.13 LTE Uplink Carrier Aggregation Conducted Powers

Table 9-83
LTE Maximum Uplink Carrier Aggregation for LTE Band 5/66/48/41 Conducted Powers

	PCC									SCC								Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	1	49	LTE B5	5	20597	843.7	2597	888.7	QPSK	1	0	24.37	24.30

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132322	1745.0	66786	2145.0	QPSK	1	0	LTE B66	20	132124	1725.2	66588	2125.2	QPSK	1	99	25.50	24.75
CA_66B	LTE B66	10	132322	1745.0	66786	2145.0	QPSK	1	0	LTE B66	10	132223	1735.1	66687	2135.1	QPSK	1	49	25.35	24.70

	PCC							SCC								Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	56207	3646.7	QPSK	1	0	LTE B48	20	56009	3626.9	QPSK	1	99	23.14	22.90

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	41490	2680.0	QPSK	1	0	LTE B41	20	41292	2660.2	QPSK	1	99	24.90	24.01

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	41490	2680.0	QPSK	1	0	LTE B41 PC2	20	41292	2660.2	QPSK	1	99	25.85	25.44

Table 9-84
LTE Band 48 Uplink Carrier Aggregation Conducted Powers – Receiver Active Mode

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	55773	3603.3	QPSK	1	0	LTE B48	20	55575	3583.5	QPSK	1	99	16.55	16.00

Table 9-85
LTE Hotspot, Proximity Sensor and/or Earjack Active Uplink Carrier Aggregation for LTE Band 66/41 Conducted Powers

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132572	1770.0	67036	2170.0	QPSK	50	0	LTE B66	20	132374	1750.2	66838	2150.2	QPSK	50	50	20.00	19.38
CA_66B	LTE B66	10	132622	1775.0	67086	2175.0	QPSK	25	0	LTE B66	10	132523	1765.1	66987	2165.1	QPSK	25	25	19.80	19.41

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	41490	2680.0	QPSK	50	0	LTE B41	20	41292	2660.2	QPSK	50	50	21.00	20.45

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	41490	2680.0	QPSK	50	0	LTE B41 PC2	20	41292	2660.2	QPSK	50	50	22.75	22.00

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9.5 NR Conducted Powers

9.5.1 NR Band n71

Table 9-86
NR Band n71 Maximum Conducted Powers - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.53	0	0.0
	1	53	24.58		0.0
	1	104	24.44		0.0
	50	0	24.09	0-0.5	0.5
	50	28	24.59	0	0.0
	50	56	24.01	0-0.5	0.5
	100	0	24.14		0.5
DFT-s-OFDM QPSK	1	1	24.57	0	0.0
	1	53	**24.58**		0.0
	1	104	24.45		0.0
	50	0	23.70	0-1	1.0
	50	28	**24.51**	0	0.0
	50	56	23.53	0-1	1.0
	100	0	23.73		1.0
DFT-s-OFDM 16QAM	1	1	23.83	0-1	1.0
CP-OFDM QPSK	1	1	22.98	0-1.5	1.5

Note: NR Band n71 at 20 MHz bandwidth does not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-87
NR Band n71 Maximum Conducted Powers - 15 MHz Bandwidth

NR Band n71 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.75	0	0.0
	1	40	24.61		0.0
	1	77	24.62		0.0
	36	0	24.27	0-0.5	0.5
	36	22	24.75	0	0.0
	36	43	24.13	0-0.5	0.5
	75	0	24.28		0.5
DFT-s-OFDM QPSK	1	1	24.81	0	0.0
	1	40	24.77		0.0
	1	77	24.71		0.0
	36	0	23.89	0-1	1.0
	36	22	24.70	0	0.0
	36	43	23.73	0-1	1.0
	75	0	23.84		1.0
DFT-s-OFDM 16QAM	1	1	23.80	0-1	1.0
CP-OFDM QPSK	1	1	22.82	0-1.5	1.5

Note: NR Band n71 at 15 MHz bandwidth does not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-88
NR Band n71 Maximum Conducted Powers - 10 MHz Bandwidth

NR Band n71 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	133600 (668 MHz)	136100 (680.5 MHz)	138600 (693 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.59	24.66	24.61	0	0.0
	1	26	24.70	24.70	24.62		0.0
	1	50	24.69	24.73	24.55		0.0
	25	0	24.15	24.15	24.07	0-0.5	0.5
	25	14	24.65	24.69	24.60	0	0.0
	25	27	24.08	24.14	24.07	0-0.5	0.5
	50	0	24.09	24.22	24.15		0.5
DFT-s-OFDM QPSK	1	1	24.67	24.83	24.67	0	0.0
	1	26	24.66	24.76	24.46		0.0
	1	50	24.71	24.77	24.41		0.0
	25	0	23.77	23.76	23.67	0-1	1.0
	25	14	24.65	24.72	24.62	0	0.0
	25	27	23.72	23.78	23.67	0-1	1.0
	50	0	23.70	23.78	23.70		1.0
DFT-s-OFDM 16QAM	1	1	23.44	23.72	23.54	0-1	1.0
CP-OFDM QPSK	1	1	22.95	23.10	23.01	0-1.5	1.5

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Table 9-89
NR Band n71 Maximum Conducted Powers - 5 MHz Bandwidth

NR Band n71 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	133100 (665.5 MHz)	136100 (680.5 MHz)	139100 (695.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.66	24.72	24.70	0	0.0
	1	13	24.66	24.71	24.68		0.0
	1	23	24.70	24.69	24.57		0.0
	12	0	24.20	24.22	24.08	0-0.5	0.5
	12	7	24.66	24.70	24.56	0	0.0
	12	13	24.05	24.11	23.96	0-0.5	0.5
	25	0	24.13	24.13	24.04		0.5
DFT-s-OFDM QPSK	1	1	24.60	24.73	24.71	0	0.0
	1	13	24.68	24.65	24.63		0.0
	1	23	24.65	24.62	24.57		0.0
	12	0	23.82	23.85	23.72	0-1	1.0
	12	7	24.61	24.59	24.48	0	0.0
	12	13	23.67	23.70	23.62	0-1	1.0
	25	0	23.76	23.81	23.66		1.0
DFT-s-OFDM 16QAM	1	1	23.53	23.67	23.63	0-1	1.0
CP-OFDM QPSK	1	1	22.92	23.08	23.11	0-1.5	1.5

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9.5.2 NR Band n5

Table 9-90
NR Band n5 Maximum Conducted Powers - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	24.65	0	0.0
	1	53	24.62		0.0
	1	104	24.62		0.0
	50	0	24.15	0-0.5	0.5
	50	28	24.59	0	0.0
	50	56	24.15	0-0.5	0.5
	100	0	24.09		0.5
DFT-s-OFDM QPSK	1	1	**24.75**	0	0.0
	1	53	24.62		0.0
	1	104	24.42		0.0
	50	0	23.81	0-1	1.0
	50	28	**24.57**	0	0.0
	50	56	23.62	0-1	1.0
	100	0	23.71		1.0
DFT-s-OFDM 16QAM	1	1	23.86	0-1	1.0
CP-OFDM QPSK	1	1	22.85	0-1.5	1.5

Note: NR Band n5 at 20 MHz bandwidth does not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-91
NR Band n5 Maximum Conducted Powers - 15 MHz Bandwidth

NR Band n5 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.65	0	0.0
	1	40	24.64		0.0
	1	77	24.71		0.0
	36	0	24.16	0-0.5	0.5
	36	22	24.70	0	0.0
	36	43	24.18	0-0.5	0.5
	75	0	24.20		0.5
DFT-s-OFDM QPSK	1	1	24.76	0	0.0
	1	40	24.75		0.0
	1	77	24.62		0.0
	36	0	23.89	0-1	1.0
	36	22	24.62	0	0.0
	36	43	23.73	0-1	1.0
	75	0	23.77		1.0
DFT-s-OFDM 16QAM	1	1	23.60	0-1	1.0
CP-OFDM QPSK	1	1	23.12	0-1.5	1.5

Note: NR Band n5 at 15 MHz bandwidth does not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-92
NR Band n5 Maximum Conducted Powers - 10 MHz Bandwidth

NR Band n5 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.64	0	0.0
	1	26	24.70		0.0
	1	50	24.68		0.0
	25	0	24.11	0-0.5	0.5
	25	14	24.65	0	0.0
	25	27	24.14	0-0.5	0.5
	50	0	24.21		0.5
DFT-s-OFDM QPSK	1	1	24.73	0	0.0
	1	26	24.67		0.0
	1	50	24.78		0.0
	25	0	23.73	0-1	1.0
	25	14	24.65	0	0.0
	25	27	23.69	0-1	1.0
	50	0	23.71		1.0
DFT-s-OFDM 16QAM	1	1	23.62	0-1	1.0
CP-OFDM QPSK	1	1	23.11	0-1.5	1.5

Note: NR Band n5 at 10 MHz bandwidth does not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-93
NR Band n5 Maximum Conducted Powers - 5 MHz Bandwidth

NR Band n5 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	165300 (826.5 MHz)	167300 (836.5 MHz)	169300 (846.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.83	24.71	24.85	0	0.0
	1	13	24.66	24.65	24.72		0.0
	1	23	24.65	24.66	24.06		0.0
	12	0	24.20	24.18	24.20	0-0.5	0.5
	12	7	24.66	24.67	24.73	0	0.0
	12	13	24.05	24.07	24.11	0-0.5	0.5
	25	0	24.13	24.08	24.17		0.5
DFT-s-OFDM QPSK	1	1	24.84	24.71	24.84	0	0.0
	1	13	24.66	24.62	24.68		0.0
	1	23	24.69	24.68	24.02		0.0
	12	0	23.80	23.69	23.69	0-1	1.0
	12	7	24.57	24.53	24.60	0	0.0
	12	13	23.68	23.70	23.73	0-1	1.0
	25	0	23.77	23.52	23.84		1.0
DFT-s-OFDM 16QAM	1	1	23.68	23.29	23.73	0-1	1.0
CP-OFDM QPSK	1	1	23.06	22.81	23.20	0-1.5	1.5

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9.5.3 NR Band n66

Table 9-94
NR Band n66 Maximum Conducted Powers - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.82	23.90	23.41	0	0.0
	1	53	23.97	24.10	24.00		0.0
	1	104	23.77	23.80	23.77		0.0
	50	0	23.19	22.98	23.34	0-0.5	0.5
	50	28	23.78	23.53	23.63	0	0.0
	50	56	23.13	22.88	23.33	0-0.5	0.5
	100	0	23.18	22.94	23.33		0.5
DFT-s-OFDM QPSK	1	1	23.72	**23.73**	23.44	0	0.0
	1	53	23.41	23.65	23.54		0.0
	1	104	23.56	23.51	23.67		0.0
	50	0	22.71	22.71	22.74	0-1	1.0
	50	28	23.51	**23.68**	23.58	0	0.0
	50	56	22.60	22.60	22.57	0-1	1.0
	100	0	22.68	22.70	22.57		1.0
DFT-s-OFDM 16QAM	1	1	23.36	23.00	22.90	0-1	1.0
CP-OFDM QPSK	1	1	22.11	22.14	22.03	0-1.5	1.5

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Table 9-95
NR Band n66 Maximum Conducted Powers - 15 MHz Bandwidth

NR Band n66 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	343500 (1717.5 MHz)	349000 (1745 MHz)	354500 (1772.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.05	23.73	23.78	0	0.0
	1	40	23.99	23.65	23.71		0.0
	1	77	24.06	23.71	23.73		0.0
	36	0	23.50	23.23	23.19	0-0.5	0.5
	36	22	24.04	23.72	23.69	0	0.0
	36	43	23.44	23.09	23.12	0-0.5	0.5
	75	0	23.46	23.17	23.18		0.5
DFT-s-OFDM QPSK	1	1	23.89	23.85	23.37	0	0.0
	1	40	23.51	23.73	23.63		0.0
	1	77	23.58	23.75	23.66		0.0
	36	0	22.77	22.81	22.58	0-1	1.0
	36	22	23.53	23.79	23.67	0	0.0
	36	43	22.57	22.76	22.75	0-1	1.0
	75	0	22.65	22.77	22.66		1.0
DFT-s-OFDM 16QAM	1	1	23.11	22.76	22.64	0-1	1.0
CP-OFDM QPSK	1	1	22.64	22.59	22.22	0-1.5	1.5

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Table 9-96
NR Band n66 Maximum Conducted Powers - 10 MHz Bandwidth

NR Band n66 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	343000 (1715 MHz)	349000 (1745 MHz)	355000 (1775 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.06	23.78	23.80	0	0.0
	1	26	24.18	23.91	23.88		0.0
	1	50	24.05	23.75	23.79		0.0
	25	0	23.42	23.18	23.15	0-0.5	0.5
	25	14	24.04	23.80	23.75	0	0.0
	25	27	23.47	23.15	23.12	0-0.5	0.5
	50	0	23.50	23.23	23.17		0.5
DFT-s-OFDM QPSK	1	1	23.71	23.89	23.47	0	0.0
	1	26	23.60	23.95	23.66		0.0
	1	50	23.40	23.78	23.58		0.0
	25	0	22.77	22.82	22.66	0-1	1.0
	25	14	23.55	23.85	23.66	0	0.0
	25	27	22.53	22.79	22.74	0-1	1.0
	50	0	22.64	22.78	22.67		1.0
DFT-s-OFDM 16QAM	1	1	22.97	22.95	22.70	0-1	1.0
CP-OFDM QPSK	1	1	22.59	22.61	22.24	0-1.5	1.5

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Table 9-97
NR Band n66 Maximum Conducted Powers - 5 MHz Bandwidth

NR Band n66 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	342500 (1712.5 MHz)	349000 (1745 MHz)	355500 (1777.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.00	23.78	23.81	0	0.0
	1	13	24.12	23.83	23.86		0.0
	1	23	23.99	23.72	23.85		0.0
	12	0	23.44	23.18	23.23	0-0.5	0.5
	12	7	24.08	23.80	23.80	0	0.0
	12	13	23.42	23.17	23.20	0-0.5	0.5
	25	0	23.45	23.15	23.16		0.5
DFT-s-OFDM QPSK	1	1	23.77	23.85	23.65	0	0.0
	1	13	23.66	23.78	23.59		0.0
	1	23	23.55	23.82	23.58		0.0
	12	0	22.86	22.74	22.76	0-1	1.0
	12	7	23.61	23.77	23.66	0	0.0
	12	13	22.68	22.77	22.73	0-1	1.0
	25	0	22.65	22.78	22.61		1.0
DFT-s-OFDM 16QAM	1	1	22.90	22.89	22.82	0-1	1.0
CP-OFDM QPSK	1	1	22.27	22.61	22.24	0-1.5	1.5

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Table 9-98
NR Band n66 Reduced Conducted Power – Hotspot, Grip Sensor and/or Earjack Mode Active - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	19.63	19.49	19.38	0	0.0
	1	53	19.58	19.40	19.31		0.0
	1	104	19.55	19.33	19.31		0.0
	50	0	19.53	19.37	19.33	0-0.5	0.0
	50	28	19.51	19.31	19.28	0	0.0
	50	56	19.50	19.24	19.27	0-0.5	0.0
	100	0	19.53	19.31	19.30		0.0
DFT-s-OFDM QPSK	1	1	19.60	19.50	19.60	0	0.0
	1	53	**19.70**	19.32	19.36		0.0
	1	104	19.52	19.25	19.26		0.0
	50	0	19.55	19.50	19.50	0-1	0.0
	50	28	**19.60**	19.33	19.30	0	0.0
	50	56	19.53	19.29	19.28	0-1	0.0
	100	0	19.65	19.34	19.33		0.0
DFT-s-OFDM 16QAM	1	1	19.59	19.25	19.39	0-1	0.0
CP-OFDM QPSK	1	1	19.85	19.68	19.59	0-1.5	0.0

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Table 9-99
NR Band n66 Reduced Conducted Power – Hotspot, Grip Sensor and/or Earjack Mode Active - 15 MHz Bandwidth

NR Band n66 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	343500 (1717.5 MHz)	349000 (1745 MHz)	354500 (1772.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	19.57	19.35	19.28	0	0.0
	1	40	19.44	19.31	19.18		0.0
	1	77	19.55	19.30	19.23		0.0
	36	0	19.49	19.31	19.28	0-0.5	0.0
	36	22	19.43	19.25	19.20	0	0.0
	36	43	19.46	19.26	19.23	0-0.5	0.0
	75	0	19.53	19.27	19.27		0.0
DFT-s-OFDM QPSK	1	1	19.59	19.34	19.29	0	0.0
	1	40	19.37	19.23	19.22		0.0
	1	77	19.48	19.27	19.23		0.0
	36	0	19.55	19.28	19.26	0-1	0.0
	36	22	19.50	19.27	19.21	0	0.0
	36	43	19.45	19.28	19.23	0-1	0.0
	75	0	19.40	19.33	19.24		0.0
DFT-s-OFDM 16QAM	1	1	19.59	19.43	19.42	0-1	0.0
CP-OFDM QPSK	1	1	19.78	19.54	19.58	0-1.5	0.0

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Table 9-100
NR Band n66 Reduced Conducted Power – Hotspot, Grip Sensor and/or Earjack Mode Active - 10 MHz Bandwidth

NR Band n66 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	343000 (1715 MHz)	349000 (1745 MHz)	355000 (1775 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	19.52	19.41	19.33	0	0.0
	1	26	19.65	19.37	19.55		0.0
	1	50	19.49	19.26	19.24		0.0
	25	0	19.50	19.24	19.31	0-0.5	0.0
	25	14	19.47	19.27	19.25	0	0.0
	25	27	19.46	19.22	19.28	0-0.5	0.0
	50	0	19.52	19.25	19.34		0.0
DFT-s-OFDM QPSK	1	1	19.57	19.33	19.33	0	0.0
	1	26	19.66	19.39	19.44		0.0
	1	50	19.44	19.22	19.30		0.0
	25	0	19.53	19.30	19.31	0-1	0.0
	25	14	19.52	19.29	19.36	0	0.0
	25	27	19.54	19.27	19.34	0-1	0.0
	50	0	19.53	19.27	19.36		0.0
DFT-s-OFDM 16QAM	1	1	19.65	19.40	19.43	0-1	0.0
CP-OFDM QPSK	1	1	19.88	19.58	19.57	0-1.5	0.0

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Table 9-101
NR Band n66 Reduced Conducted Power – Hotspot, Grip Sensor and/or Earjack Mode Active - 5 MHz Bandwidth

NR Band n66 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	342500 (1712.5 MHz)	349000 (1745 MHz)	355500 (1777.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	19.44	19.27	19.32	0	0.0
	1	13	19.60	19.29	19.33		0.0
	1	23	19.54	19.26	19.21		0.0
	12	0	19.48	19.33	19.28	0-0.5	0.0
	12	7	19.65	19.39	19.30	0	0.0
	12	13	19.55	19.31	19.26	0-0.5	0.0
	25	0	19.57	19.28	19.28		0.0
DFT-s-OFDM QPSK	1	1	19.61	19.33	19.35	0	0.0
	1	13	19.58	19.34	19.37		0.0
	1	23	19.57	19.36	19.30		0.0
	12	0	19.56	19.29	19.29	0-1	0.0
	12	7	19.59	19.34	19.30	0	0.0
	12	13	19.60	19.28	19.26	0-1	0.0
	25	0	19.60	19.33	19.30		0.0
DFT-s-OFDM 16QAM	1	1	19.65	19.30	19.44	0-1	0.0
CP-OFDM QPSK	1	1	19.85	19.61	19.60	0-1.5	0.0

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9.5.4 NR Band n25

Table 9-102
NR Band n25 Maximum Conducted Powers - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.92	23.84	23.97	0	0.0
	1	53	23.71	23.91	23.99		0.0
	1	104	23.73	23.89	23.46		0.0
	50	0	22.90	23.33	23.36	0-0.5	0.5
	50	28	23.44	23.72	23.79	0	0.0
	50	56	22.89	23.27	23.22	0-0.5	0.5
	100	0	22.86	23.34	23.35		0.5
DFT-s-OFDM QPSK	1	1	23.72	23.61	23.87	0	0.0
	1	53	23.64	23.91	23.77		0.0
	1	104	23.79	**23.98**	23.00		0.0
	50	0	22.78	22.93	22.82	0-1	1.0
	50	28	**23.72**	23.71	23.70	0	0.0
	50	56	22.66	22.95	22.30	0-1	1.0
	100	0	22.63	22.94	22.80		1.0
DFT-s-OFDM 16QAM	1	1	22.73	22.77	22.92	0-1	1.0
CP-OFDM QPSK	1	1	22.02	22.42	22.14	0-1.5	1.5

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Table 9-103
NR Band n25 Maximum Conducted Powers - 15 MHz Bandwidth

NR Band n25 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371500 (1857.5 MHz)	376500 (1882.5 MHz)	381500 (1907.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.83	24.00	24.02	0	0.0
	1	40	23.84	24.09	24.10		0.0
	1	77	23.79	24.11	23.50		0.0
	36	0	23.25	23.47	23.53	0-0.5	0.5
	36	22	23.78	23.99	24.09	0	0.0
	36	43	23.21	23.37	23.51	0-0.5	0.5
	75	0	23.23	23.44	23.59		0.5
DFT-s-OFDM QPSK	1	1	23.65	23.85	24.17	0	0.0
	1	40	23.84	23.77	23.50		0.0
	1	77	23.90	24.02	23.70		0.0
	36	0	22.86	22.82	22.95	0-1	1.0
	36	22	23.84	23.73	23.50	0	0.0
	36	43	22.74	22.98	22.41	0-1	1.0
	75	0	22.81	22.81	22.73		1.0
DFT-s-OFDM 16QAM	1	1	22.78	23.01	23.22	0-1	1.0
CP-OFDM QPSK	1	1	22.30	22.64	22.49	0-1.5	1.5

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Table 9-104
NR Band n25 Maximum Conducted Powers - 10 MHz Bandwidth

NR Band n25 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371000 (1855 MHz)	376500 (1882.5 MHz)	382000 (1910 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.82	23.94	23.88	0	0.0
	1	26	23.96	24.24	23.90		0.0
	1	50	23.79	23.99	23.83		0.0
	25	0	23.16	23.36	23.50	0-0.5	0.5
	25	14	23.79	23.97	23.88	0	0.0
	25	27	23.16	23.39	23.39	0-0.5	0.5
	50	0	23.25	23.46	23.27		0.5
DFT-s-OFDM QPSK	1	1	23.61	23.67	23.55	0	0.0
	1	26	23.99	23.65	23.76		0.0
	1	50	23.80	23.89	23.40		0.0
	25	0	22.72	22.82	22.48	0-1	1.0
	25	14	23.83	23.81	23.30	0	0.0
	25	27	22.81	22.85	22.13	0-1	1.0
	50	0	22.86	22.84	22.30		1.0
DFT-s-OFDM 16QAM	1	1	22.75	22.96	22.56	0-1	1.0
CP-OFDM QPSK	1	1	22.20	22.26	22.15	0-1.5	1.5

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Table 9-105
NR Band n25 Maximum Conducted Powers - 5 MHz Bandwidth

NR Band n25 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	370500 (1852.5 MHz)	376500 (1882.5 MHz)	382500 (1912.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.72	23.80	23.87	0	0.0
	1	13	23.74	23.93	23.99		0.0
	1	23	23.80	23.92	23.67		0.0
	12	0	23.17	23.31	23.21	0-0.5	0.5
	12	7	23.88	23.99	23.84	0	0.0
	12	13	23.24	23.40	23.26	0-0.5	0.5
	25	0	23.18	23.30	23.28		0.5
DFT-s-OFDM QPSK	1	1	23.77	23.75	23.50	0	0.0
	1	13	23.80	23.71	23.56		0.0
	1	23	23.91	23.83	23.02		0.0
	12	0	22.69	22.74	22.61	0-1	1.0
	12	7	23.64	23.68	23.40	0	0.0
	12	13	22.75	22.72	22.43	0-1	1.0
	25	0	22.60	22.67	22.41		1.0
DFT-s-OFDM 16QAM	1	1	22.66	22.76	22.47	0-1	1.0
CP-OFDM QPSK	1	1	21.78	21.95	21.87	0-1.5	1.5

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Table 9-106
NR Band n25 Reduced Conducted Power – Hotspot, Grip Sensor and/or Earjack Mode Active - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	17.82	17.91	18.04	0	0.0
	1	53	17.88	18.07	18.23		0.0
	1	104	17.73	17.78	17.95		0.0
	50	0	17.69	17.80	17.96	0-0.5	0.0
	50	28	17.62	17.78	17.92	0	0.0
	50	56	17.68	17.77	17.91	0-0.5	0.0
	100	0	17.66	17.82	17.92		0.0
DFT-s-OFDM QPSK	1	1	17.80	17.94	18.09	0	0.0
	1	53	17.79	18.06	**18.17**		0.0
	1	104	17.81	17.77	17.91		0.0
	50	0	17.65	17.91	**17.98**	0-1	0.0
	50	28	17.64	17.85	17.94	0	0.0
	50	56	17.64	17.76	17.93	0-1	0.0
	100	0	17.63	17.85	17.97		0.0
DFT-s-OFDM 16QAM	1	1	17.91	17.91	18.04	0-1	0.0
CP-OFDM QPSK	1	1	18.00	18.07	18.21	0-1.5	0.0

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Table 9-107
NR Band n25 Reduced Conducted Power – Hotspot, Grip Sensor and/or Earjack Mode Active - 15 MHz Bandwidth

NR Band n25 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371500 (1857.5 MHz)	376500 (1882.5 MHz)	381500 (1907.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	17.78	17.87	17.94	0	0.0
	1	40	17.82	17.93	18.01		0.0
	1	77	17.80	17.90	17.99		0.0
	36	0	17.72	17.91	17.93	0-0.5	0.0
	36	22	17.68	17.79	17.88	0	0.0
	36	43	17.60	17.83	17.90	0-0.5	0.0
	75	0	17.65	17.84	17.89		0.0
DFT-s-OFDM QPSK	1	1	17.87	17.87	18.02	0	0.0
	1	40	17.80	17.95	18.00		0.0
	1	77	17.78	17.90	18.06		0.0
	36	0	17.73	17.93	17.92	0-1	0.0
	36	22	17.61	17.85	17.91	0	0.0
	36	43	17.60	17.83	17.90	0-1	0.0
	75	0	17.67	17.85	17.92		0.0
DFT-s-OFDM 16QAM	1	1	17.99	17.94	18.10	0-1	0.0
CP-OFDM QPSK	1	1	17.97	18.08	18.21	0-1.5	0.0

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Table 9-108
NR Band n25 Reduced Conducted Power – Hotspot, Grip Sensor and/or Earjack Mode Active - 10 MHz Bandwidth

NR Band n25 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371000 (1855 MHz)	376500 (1882.5 MHz)	382000 (1910 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	17.66	17.95	17.97	0	0.0
	1	26	17.87	18.07	17.99		0.0
	1	50	17.72	17.93	17.93		0.0
	25	0	17.61	17.89	17.85	0-0.5	0.0
	25	14	17.63	17.90	17.90	0	0.0
	25	27	17.62	17.88	17.91	0-0.5	0.0
	50	0	17.64	17.92	17.87		0.0
DFT-s-OFDM QPSK	1	1	17.79	17.93	17.94	0	0.0
	1	26	17.88	18.06	17.95		0.0
	1	50	17.67	17.94	17.87		0.0
	25	0	17.68	17.88	17.88	0-1	0.0
	25	14	17.66	17.93	17.87	0	0.0
	25	27	17.62	17.88	17.92	0-1	0.0
	50	0	17.68	17.88	17.88		0.0
DFT-s-OFDM 16QAM	1	1	17.72	18.05	17.83	0-1	0.0
CP-OFDM QPSK	1	1	17.71	18.02	18.10	0-1.5	0.0

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Table 9-109
NR Band n25 Reduced Conducted Power – Hotspot, Grip Sensor and/or Earjack Mode Active - 5 MHz Bandwidth

NR Band n25 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	370500 (1852.5 MHz)	376500 (1882.5 MHz)	382500 (1912.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	17.67	17.86	17.77	0	0.0
	1	13	17.68	17.84	17.89		0.0
	1	23	17.71	17.93	17.86		0.0
	12	0	17.58	17.84	17.82	0-0.5	0.0
	12	7	17.69	17.89	17.88	0	0.0
	12	13	17.65	17.88	17.87	0-0.5	0.0
	25	0	17.62	17.82	17.86		0.0
DFT-s-OFDM QPSK	1	1	17.63	17.84	17.88	0	0.0
	1	13	17.65	17.99	17.91		0.0
	1	23	17.76	17.85	17.93		0.0
	12	0	17.61	17.79	17.79	0-1	0.0
	12	7	17.64	17.84	17.87	0	0.0
	12	13	17.63	17.89	17.88	0-1	0.0
	25	0	17.62	17.88	17.90		0.0
DFT-s-OFDM 16QAM	1	1	17.52	17.77	17.79	0-1	0.0
CP-OFDM QPSK	1	1	17.94	18.15	18.18	0-1.5	0.0

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9.5.5 NR Band n41

Table 9-110
NR Band n41 Maximum Conducted Powers - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.31	0	0.0
	1	137	24.68		0.0
	1	271	24.63		0.0
	135	0	24.14	0-0.5	0.5
	135	69	24.75	0	0.0
	135	138	24.33	0-0.5	0.5
	270	0	24.49		0.5
DFT-s-OFDM QPSK	1	1	24.27	0	0.0
	1	137	**24.81**		0.0
	1	271	24.72		0.0
	135	0	23.79	0-1	1.0
	135	69	**24.45**	0	0.0
	135	138	23.78	0-1	1.0
	270	0	23.69		1.0
DFT-s-OFDM 16QAM	1	1	23.71	0-1	1.0
CP-OFDM QPSK	1	1	22.88	0-1.5	1.5

Note: NR Band n41 at 100 MHz bandwidth does not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-111
NR Band n41 Maximum Conducted Powers - 90 MHz Bandwidth

NR Band n41 90 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	508200 (2541 MHz)	528996 (2644.98 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	24.71	24.68	0	0.0
	1	123	24.50	24.73		0.0
	1	243	24.58	24.51		0.0
	120	0	24.44	24.32	0-0.5	0.5
	120	63	24.63	24.68	0	0.0
	120	125	24.22	24.39	0-0.5	0.5
	243	0	24.43	24.36		0.5
DFT-s-OFDM QPSK	1	1	24.78	24.63	0	0.0
	1	123	24.49	24.69		0.0
	1	243	24.58	24.42		0.0
	120	0	23.77	23.84	0-1	1.0
	120	63	24.56	24.71	0	0.0
	120	125	23.61	23.95	0-1	1.0
	243	0	23.82	23.86		1.0
DFT-s-OFDM 16QAM	1	1	23.72	23.78	0-1	1.0
CP-OFDM QPSK	1	1	23.09	23.34	0-1.5	1.5

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Table 9-112
NR Band n41 Maximum Conducted Powers - 80 MHz Bandwidth

NR Band n41 80 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	507204 (2536.02 MHz)	529998 (2649.99 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	24.83	24.69	0	0.0
	1	109	24.58	24.85		0.0
	1	215	24.53	24.51		0.0
	108	0	24.38	24.37	0-0.5	0.5
	108	55	24.61	24.80	0	0.0
	108	109	24.16	23.78	0-0.5	0.5
	216	0	24.43	24.46		0.5
DFT-s-OFDM QPSK	1	1	24.78	24.72	0	0.0
	1	109	24.74	24.84		0.0
	1	215	24.66	24.66		0.0
	108	0	23.91	23.81	0-1	1.0
	108	55	24.67	24.77	0	0.0
	108	109	23.70	23.97	0-1	1.0
	216	0	23.84	23.99		1.0
DFT-s-OFDM 16QAM	1	1	23.71	23.72	0-1	1.0
CP-OFDM QPSK	1	1	23.39	23.42	0-1.5	1.5

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Table 9-113
NR Band n41 Maximum Conducted Powers - 60 MHz Bandwidth

NR Band n41 60 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	505200 (2526 MHz)	518598 (2592.99 MHz)	531996 (2659.98 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.58	24.58	24.52	0	0.0
	1	81	24.48	24.66	24.63		0.0
	1	160	24.25	24.69	24.71		0.0
	81	0	24.11	24.21	24.24	0-0.5	0.5
	81	41	24.75	24.62	24.62	0	0.0
	81	81	24.10	24.13	24.26	0-0.5	0.5
	162	0	24.32	24.08	24.25		0.5
DFT-s-OFDM QPSK	1	1	24.69	24.63	24.66	0	0.0
	1	81	24.72	24.57	24.74		0.0
	1	160	24.16	24.69	24.27		0.0
	81	0	23.87	23.71	23.77	0-1	1.0
	81	41	24.76	24.62	24.69	0	0.0
	81	81	23.69	23.81	23.85	0-1	1.0
	162	0	23.87	23.78	23.81		1.0
DFT-s-OFDM 16QAM	1	1	23.89	23.47	23.51	0-1	1.0
CP-OFDM QPSK	1	1	23.28	23.03	23.28	0-1.5	1.5

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Table 9-114
NR Band n41 Maximum Conducted Powers - 50 MHz Bandwidth

NR Band n41 50 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	504204 (2521.02 MHz)	518598 (2592.99 MHz)	532998 (2664.99 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.68	24.65	24.71	0	0.0
	1	67	24.65	24.59	24.68		0.0
	1	131	24.71	24.66	24.57		0.0
	64	0	24.36	24.14	24.29	0-0.5	0.5
	64	35	24.77	24.47	24.80	0	0.0
	64	69	24.33	24.19	24.45	0-0.5	0.5
	128	0	24.05	24.13	24.28		0.5
DFT-s-OFDM QPSK	1	1	24.65	24.61	24.54	0	0.0
	1	67	24.59	24.65	24.69		0.0
	1	131	24.63	24.76	24.58		0.0
	64	0	23.72	23.63	23.81	0-1	1.0
	64	35	24.71	24.50	24.72	0	0.0
	64	69	23.83	23.81	23.78	0-1	1.0
	128	0	23.81	23.72	23.77		1.0
DFT-s-OFDM 16QAM	1	1	23.62	23.84	24.08	0-1	1.0
CP-OFDM QPSK	1	1	23.09	23.39	23.46	0-1.5	1.5

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Table 9-115
NR Band n41 Maximum Conducted Powers - 40 MHz Bandwidth

NR Band n41 40 MHz Bandwidth								
			Channel				MPR Allowed per 3GPP [dB]	MPR Allowed per 3GPP [dB]
Modulation	RB Size	RB Offset	503202 (2516.01 MHz)	513468 (2567.34 MHz)	523734 (2618.67 MHz)	534000 (2670 MHz)		
			Conducted Power [dBm]					
DFT-s-OFDM π/2 BPSK	1	1	24.87	24.43	25.05	24.90	0	0.0
	1	53	24.95	24.69	24.99	25.12		0.0
	1	104	25.03	24.77	25.08	24.48		0.0
	50	0	24.58	24.11	24.47	24.61	0-0.5	0.5
	50	28	25.14	24.76	24.84	24.84	0	0.0
	50	56	24.66	24.60	24.55	24.59	0-0.5	0.5
	100	0	24.69	24.06	23.93	24.61		0.5
DFT-s-OFDM QPSK	1	1	24.97	24.46	24.81	25.12	0	0.0
	1	53	24.90	24.82	24.88	24.83		0.0
	1	104	25.05	24.75	24.98	24.37		0.0
	50	0	24.10	23.62	24.01	24.09	0-1	1.0
	50	28	25.06	24.51	24.94	24.96	0	0.0
	50	56	24.12	24.04	24.09	24.15	0-1	1.0
	100	0	24.20	23.82	24.05	24.19		1.0
DFT-s-OFDM 16QAM	1	1	24.16	23.51	24.11	24.12	0-1	1.0
CP-OFDM QPSK	1	1	23.68	22.87	23.32	23.65	0-1.5	1.5

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Table 9-116
NR Band n41 Maximum Conducted Powers - 20 MHz Bandwidth

NR Band n41 20 MHz Bandwidth									
			Channel					MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	501204 (2506.02 MHz)	509898 (2549.49 MHz)	518598 (2592.99 MHz)	527298 (2636.49 MHz)	535998 (2679.99 MHz)		
			Conducted Power [dBm]						
DFT-s-OFDM π/2 BPSK	1	1	24.81	24.65	24.53	24.65	24.75	0	0.0
	1	26	24.69	24.59	24.45	24.46	24.78		0.0
	1	49	24.72	24.60	24.56	24.78	24.67		0.0
	25	0	24.35	24.38	24.17	24.34	24.38	0-0.5	0.5
	25	13	24.40	24.69	24.63	24.76	24.73	0	0.0
	25	26	24.54	24.40	24.31	24.24	24.41	0-0.5	0.5
	50	0	24.32	24.23	24.02	24.28	24.53		0.5
DFT-s-OFDM QPSK	1	1	24.63	24.58	24.58	24.60	24.66	0	0.0
	1	26	24.55	24.64	24.52	24.54	24.64		0.0
	1	49	24.67	24.70	24.67	24.68	24.59		0.0
	25	0	23.73	23.69	23.65	23.82	23.95	0-1	1.0
	25	13	24.76	24.63	24.57	24.66	24.78	0	0.0
	25	26	23.82	23.66	23.61	23.72	24.01	0-1	1.0
	50	0	23.81	23.64	23.68	23.77	23.80		1.0
DFT-s-OFDM 16QAM	1	1	23.88	23.65	23.56	23.82	23.97	0-1	1.0
CP-OFDM QPSK	1	1	23.27	23.02	23.13	23.41	23.54	0-1.5	1.5

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Table 9-117
NR Band n41 Conducted Powers – Receiver Mode Active - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	20.85	0	0.0
	1	137	20.98		0.0
	1	271	20.88		0.0
	135	0	20.94	0-0.5	0.0
	135	69	20.98	0	0.0
	135	138	20.78	0-0.5	0.0
	270	0	20.96		0.0
DFT-s-OFDM QPSK	1	1	20.87	0	0.0
	1	137	**20.99**		0.0
	1	271	20.89		0.0
	135	0	20.77	0-1	0.0
	135	69	**20.99**	0	0.0
	135	138	20.94	0-1	0.0
	270	0	20.89		0.0
DFT-s-OFDM 16QAM	1	1	20.95	0-1	0.0
CP-OFDM QPSK	1	1	20.86	0-1.5	0.0

Note: NR Band n41 at 100 MHz bandwidth does not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

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Table 9-118
NR Band n41 Conducted Powers - Receiver Mode Active - 90 MHz Bandwidth

NR Band n41 90 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	508200 (2541 MHz)	528996 (2644.98 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	20.69	20.88	0	0.0
	1	123	20.39	20.72		0.0
	1	243	20.34	20.95		0.0
	120	0	20.71	20.82	0-0.5	0.0
	120	63	20.75	20.87	0	0.0
	120	125	20.58	20.99	0-0.5	0.0
	243	0	20.78	20.80		0.0
DFT-s-OFDM QPSK	1	1	20.74	20.82	0	0.0
	1	123	20.63	20.85		0.0
	1	243	20.48	20.87		0.0
	120	0	20.83	20.89	0-1	0.0
	120	63	20.77	20.86	0	0.0
	120	125	20.54	20.90	0-1	0.0
	243	0	20.89	20.92		0.0
DFT-s-OFDM 16QAM	1	1	20.77	20.86	0-1	0.0
CP-OFDM QPSK	1	1	20.91	20.68	0-1.5	0.0

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Table 9-119
NR Band n41 Conducted Powers - Receiver Mode Active - 80 MHz Bandwidth

NR Band n41 80 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	507204 (2536.02 MHz)	529998 (2649.99 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	20.82	20.85	0	0.0
	1	109	20.78	20.90		0.0
	1	215	20.67	20.82		0.0
	108	0	20.76	20.79	0-0.5	0.0
	108	55	20.82	20.88	0	0.0
	108	109	20.63	20.99	0-0.5	0.0
	216	0	20.86	20.93		0.0
DFT-s-OFDM QPSK	1	1	20.84	20.82	0	0.0
	1	109	20.76	20.93		0.0
	1	215	20.53	20.87		0.0
	108	0	20.77	20.84	0-1	0.0
	108	55	20.82	20.89	0	0.0
	108	109	20.68	20.99	0-1	0.0
	216	0	20.88	20.91		0.0
DFT-s-OFDM 16QAM	1	1	20.94	20.80	0-1	0.0
CP-OFDM QPSK	1	1	20.65	20.68	0-1.5	0.0

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Table 9-120
NR Band n41 Conducted Powers - Receiver Mode Active - 60 MHz Bandwidth

NR Band n41 60 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	505200 (2526 MHz)	518598 (2592.99 MHz)	531996 (2659.98 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	20.63	20.71	20.76	0	0.0
	1	81	20.71	20.78	20.79		0.0
	1	160	20.65	20.73	20.89		0.0
	81	0	20.72	20.67	20.80	0-0.5	0.0
	81	41	20.68	20.73	20.91	0	0.0
	81	81	20.61	20.66	20.92	0-0.5	0.0
	162	0	20.80	20.77	20.89		0.0
DFT-s-OFDM QPSK	1	1	20.74	20.60	20.70	0	0.0
	1	81	20.64	20.64	20.78		0.0
	1	160	20.68	20.72	20.97		0.0
	81	0	20.71	20.67	20.81	0-1	0.0
	81	41	20.69	20.69	20.76	0	0.0
	81	81	20.62	20.72	20.88	0-1	0.0
	162	0	20.90	20.81	20.96		0.0
DFT-s-OFDM 16QAM	1	1	20.60	20.56	20.66	0-1	0.0
CP-OFDM QPSK	1	1	20.37	20.48	20.51	0-1.5	0.0

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Table 9-121
NR Band n41 Conducted Powers - Receiver Mode Active - 50 MHz Bandwidth

NR Band n41 50 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	504204 (2521.02 MHz)	518598 (2592.99 MHz)	532998 (2664.99 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	20.64	20.59	20.78	0	0.0
	1	67	20.72	20.67	20.82		0.0
	1	131	20.75	20.73	20.85		0.0
	64	0	20.68	20.66	20.72	0-0.5	0.0
	64	35	20.77	20.63	20.81	0	0.0
	64	69	20.66	20.69	20.88	0-0.5	0.0
	128	0	20.77	20.80	20.89		0.0
DFT-s-OFDM QPSK	1	1	20.80	20.84	20.79	0	0.0
	1	67	20.78	20.72	20.74		0.0
	1	131	20.98	20.81	20.99		0.0
	64	0	20.72	20.69	20.69	0-1	0.0
	64	35	20.86	20.80	20.85	0	0.0
	64	69	20.70	20.79	20.88	0-1	0.0
	128	0	20.78	20.76	20.83		0.0
DFT-s-OFDM 16QAM	1	1	20.91	20.87	20.98	0-1	0.0
CP-OFDM QPSK	1	1	20.73	20.52	20.70	0-1.5	0.0

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Table 9-122
NR Band n41 Conducted Powers - Receiver Mode Active - 40 MHz Bandwidth

NR Band n41 40 MHz Bandwidth								
			Channel				MPR Allowed per 3GPP [dB]	MPR Allowed per 3GPP [dB]
Modulation	RB Size	RB Offset	503202 (2516.01 MHz)	513468 (2567.34 MHz)	523734 (2618.67 MHz)	534000 (2670 MHz)		
			Conducted Power [dBm]					
DFT-s-OFDM π/2 BPSK	1	1	20.99	20.80	21.00	21.00	0	0.0
	1	53	20.90	20.88	20.92	20.93		0.0
	1	104	20.79	20.95	20.81	20.89		0.0
	50	0	20.85	20.85	20.87	20.95	0-0.5	0.0
	50	28	20.88	20.83	20.81	20.98	0	0.0
	50	56	20.91	20.88	20.90	20.99	0-0.5	0.0
	100	0	21.00	20.94	20.93	20.97		0.0
DFT-s-OFDM QPSK	1	1	20.97	21.00	20.97	20.98	0	0.0
	1	53	20.91	20.89	20.84	20.95		0.0
	1	104	20.82	20.97	20.96	21.00		0.0
	50	0	20.95	20.94	20.91	20.96	0-1	0.0
	50	28	20.96	20.88	20.92	20.98	0	0.0
	50	56	20.89	20.84	20.95	21.00	0-1	0.0
	100	0	20.93	20.96	20.91	20.99		0.0
DFT-s-OFDM 16QAM	1	1	20.78	20.71	20.82	20.86	0-1	0.0
CP-OFDM QPSK	1	1	20.90	20.63	20.69	20.75	0-1.5	0.0

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Table 9-123
NR Band n41 Conducted Powers - Receiver Mode Active - 20 MHz Bandwidth

NR Band n41 20 MHz Bandwidth									
			Channel					MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	501204 (2506.02 MHz)	509898 (2549.49 MHz)	518598 (2592.99 MHz)	527298 (2636.49 MHz)	535998 (2679.99 MHz)		
			Conducted Power [dBm]						
DFT-s-OFDM π/2 BPSK	1	1	20.78	20.89	20.73	20.81	20.77		0.0
	1	26	20.60	20.70	20.64	20.76	20.84	0	0.0
	1	49	20.70	20.68	20.77	20.80	20.86		0.0
	25	0	20.63	20.64	20.74	20.87	20.79	0-0.5	0.0
	25	13	20.77	20.62	20.69	20.81	20.85	0	0.0
	25	26	20.75	20.53	20.75	20.88	20.90	0-0.5	0.0
	50	0	20.74	20.66	20.71	20.66	20.93		0.0
DFT-s-OFDM QPSK	1	1	20.82	20.76	20.82	20.84	20.84		0.0
	1	26	20.73	20.62	20.85	20.88	20.96	0	0.0
	1	49	20.81	20.68	20.63	20.70	20.94		0.0
	25	0	20.76	20.75	20.77	20.64	20.83	0-1	0.0
	25	13	20.63	20.63	20.69	20.59	20.86	0	0.0
	25	26	20.68	20.52	20.64	20.68	20.88	0-1	0.0
	50	0	20.65	20.72	20.76	20.86	20.97		0.0
DFT-s-OFDM 16QAM	1	1	20.67	20.58	20.67	20.83	20.72	0-1	0.0
CP-OFDM QPSK	1	1	20.54	20.73	20.59	20.68	20.90	0-1.5	0.0

9.6 WLAN Conducted Powers

Table 9-124
2.4 GHz WLAN Maximum Average RF Power – Ant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax
		Average	Average	Average	Average
2412	1	18.68	17.84	17.67	17.75
2437	6	18.59	17.80	17.62	17.57
2457	10	N/A	17.81	17.67	17.69
2462	11	18.65	16.23	14.72	14.85

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Table 9-125
2.4 GHz WLAN Maximum Average RF Power – Ant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax
		Average	Average	Average	Average
2412	1	17.99	17.71	17.60	17.98
2437	6	17.82	17.96	17.84	17.85
2457	10	N/A	17.99	17.87	17.90
2462	11	17.47	16.06	14.77	14.83

Table 9-126
2.4 GHz WLAN Maximum Average RF Power – MIMO

2.4GHz 802.11n Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
2412	1	17.67	17.60	20.65
2437	6	17.62	17.84	20.74
2457	10	17.67	17.87	20.78
2462	11	14.72	14.77	17.76

Table 9-127
5 GHz WLAN Maximum Average RF Power – Ant 1

5GHz (20MHz) Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11a	802.11n	802.11ac	802.11ax
		Average	Average	Average	Average
5180	36	16.75	15.92	15.93	15.98
5200	40	16.89	16.98	16.63	16.69
5220	44	16.57	16.77	16.70	16.97
5240	48	16.69	16.88	16.95	16.71
5260	52	16.72	16.95	16.98	16.80
5280	56	16.66	16.88	16.90	16.85
5300	60	16.62	16.88	16.81	16.67
5320	64	16.94	16.23	16.33	16.45
5500	100	16.75	16.94	16.90	16.82
5600	120	16.73	16.97	16.93	16.72
5620	124	16.98	16.81	16.79	16.57
5720	144	16.89	16.69	16.60	16.57
5745	149	16.67	16.92	16.91	16.89
5785	157	16.75	16.95	16.92	16.92
5825	165	16.71	16.88	16.88	16.79

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Table 9-128
5 GHz WLAN Maximum Average RF Power – Ant 2

5GHz (20MHz) Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11a	802.11n	802.11ac	802.11ax
		Average	Average	Average	Average
5180	36	16.96	15.98	14.98	15.68
5200	40	16.57	16.92	16.94	16.78
5220	44	16.70	16.51	16.51	16.73
5240	48	16.96	16.71	16.77	16.93
5260	52	16.95	16.85	16.91	16.57
5280	56	16.87	16.71	16.72	16.71
5300	60	16.79	16.58	16.59	16.62
5320	64	16.77	16.33	16.35	16.47
5500	100	16.87	16.60	16.58	16.19
5600	120	16.77	16.56	16.54	16.57
5620	124	16.56	16.78	16.79	16.89
5720	144	16.77	16.58	16.54	16.54
5745	149	16.80	16.98	16.97	16.69
5785	157	16.58	16.81	16.84	16.97
5825	165	16.85	16.61	16.64	16.74

Table 9-129
5 GHz WLAN Maximum Average RF Power – MIMO

5GHz (20MHz) 802.11n Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
5180	36	15.92	15.98	18.96
5200	40	16.98	16.92	19.96
5220	44	16.77	16.51	19.65
5240	48	16.88	16.71	19.81
5260	52	16.95	16.85	19.91
5280	56	16.88	16.71	19.81
5300	60	16.88	16.58	19.74
5320	64	16.23	16.33	19.29
5500	100	16.94	16.60	19.78
5600	120	16.97	16.56	19.78
5620	124	16.81	16.78	19.81
5720	144	16.69	16.58	19.65
5745	149	16.92	16.98	19.96
5785	157	16.95	16.81	19.89
5825	165	16.88	16.61	19.76

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Table 9-130
Maximum Output Powers During Conditions with 2.4 GHz and 5GHz WLAN

2.4GHz Antenna 2 Conducted Power [dBm]		
Freq [MHz]	Channel	IEEE Transmission Mode
		802.11b
		Average
2412	1	15.74
2437	6	15.54
2462	11	15.65

2.4GHz 802.11n Conducted Power [dBm]			
Freq [MHz]	Channel	ANT1	ANT2
2412	1	14.84	14.51
2437	6	14.87	14.75
2462	11	14.99	14.84

5GHz (20MHz) 802.11n Conducted Power [dBm]			
Freq [MHz]	Channel	ANT1	ANT2
5180	36	13.66	13.93
5200	40	13.99	13.91
5220	44	13.79	13.95
5240	48	13.98	13.73
5260	52	13.97	13.83
5280	56	13.57	13.59
5300	60	13.84	13.97
5320	64	13.72	13.97
5500	100	13.81	13.78
5600	120	13.99	13.81
5620	124	13.75	13.65
5720	144	13.71	13.64
5745	149	13.51	13.78
5785	157	13.99	13.79
5825	165	13.90	13.51

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Table 9-131
2.4 GHz WLAN Reduced Average RF Power – Ant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax
		Average	Average	Average	Average
2412	1	12.71	12.74	12.48	12.81
2437	6	12.61	12.53	12.74	12.74
2462	11	12.92	12.95	12.81	12.50

Table 9-132
2.4 GHz WLAN Reduced Average RF Power – Ant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax
		Average	Average	Average	Average
2412	1	12.99	12.96	12.81	12.65
2437	6	12.65	12.65	12.99	12.80
2462	11	12.84	12.83	12.61	12.60

Table 9-133
2.4 GHz WLAN Reduced Average RF Power – MIMO

2.4GHz 802.11n Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
2412	1	12.48	12.81	15.66
2437	6	12.74	12.99	15.88
2462	11	12.81	12.61	15.72

Table 9-134
5 GHz WLAN Reduced Average RF Power – Ant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5210	42	9.98	9.97
5290	58	9.95	9.95
5530	106	9.94	9.91
5610	122	9.97	9.86
5690	138	9.91	9.89
5775	155	9.83	9.84

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Table 9-135
5 GHz WLAN Reduced Average RF Power – Ant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5210	42	9.77	9.72
5290	58	9.83	9.88
5530	106	9.90	9.75
5610	122	9.78	9.86
5690	138	9.76	9.77
5775	155	9.94	9.92

Table 9-136
5 GHz WLAN Reduced Average RF Power – MIMO

5GHz (80MHz) 802.11ac Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
5210	42	9.98	9.77	12.89
5290	58	9.95	9.83	12.90
5530	106	9.94	9.90	12.93
5610	122	9.97	9.78	12.89
5690	138	9.91	9.76	12.85
5775	155	9.83	9.94	12.90

Table 9-137
Reduced Output Powers During Conditions with 2.4 GHz and 5GHz WLAN

2.4GHz 802.11n Conducted Power [dBm]			
Freq [MHz]	Channel	ANT1	ANT2
2412	1	12.48	12.81
2437	6	12.74	12.99
2462	11	12.81	12.61

5GHz (80MHz) 802.11ac Conducted Power [dBm]			
Freq [MHz]	Channel	ANT1	ANT2
5210	42	9.98	9.77
5290	58	9.95	9.83
5530	106	9.94	9.90
5610	122	9.97	9.78
5690	138	9.91	9.76
5775	155	9.83	9.94

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

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- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission modes with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.

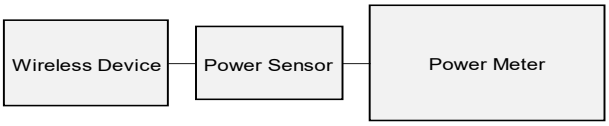

Figure 9-4
Power Measurement Setup

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9.7 Bluetooth Conducted Powers

Table 9-138
Bluetooth Antenna 1 Maximum Average RF Power

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
			[dBm]	[mW]
2402	1.0	0	12.58	18.093
2441	1.0	39	14.94	31.210
2479	1.0	77	12.39	17.346
2480	1.0	78	12.16	16.459
2402	2.0	0	12.55	17.985
2441	2.0	39	14.89	30.818
2479	2.0	77	12.31	17.037
2480	2.0	78	12.09	16.162
2402	3.0	0	12.58	18.130
2441	3.0	39	14.94	31.182
2479	3.0	77	12.42	17.454
2480	3.0	78	12.14	16.353

Table 9-139
Bluetooth Antenna 2 Maximum Average RF Power

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
			[dBm]	[mW]
2402	1.0	0	13.18	20.816
2441	1.0	39	14.78	30.046
2479	1.0	77	13.68	23.324
2480	1.0	78	13.62	23.039
2402	2.0	0	13.10	20.394
2441	2.0	39	14.70	29.512
2479	2.0	77	13.65	23.158
2480	2.0	78	13.50	22.361
2402	3.0	0	13.20	20.903
2441	3.0	39	14.77	29.971
2479	3.0	77	13.74	23.659
2480	3.0	78	13.56	22.699

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Table 9-140
Bluetooth Antenna 1 Receiver Active Average RF Power

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
			[dBm]	[mW]
2402	1.0	0	11.60	14.448
2441	1.0	39	13.19	20.864
2479	1.0	77	11.83	15.234
2480	1.0	78	11.41	13.826
2402	2.0	0	11.36	13.687
2441	2.0	39	12.98	19.856
2479	2.0	77	11.55	14.289
2480	2.0	78	11.26	13.360
2402	3.0	0	11.49	14.096
2441	3.0	39	13.06	20.249
2479	3.0	77	11.70	14.774
2480	3.0	78	11.33	13.577

Table 9-141
Bluetooth Antenna 2 Receiver Active Average RF Power

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
			[dBm]	[mW]
2402	1.0	0	11.38	13.750
2441	1.0	39	12.11	16.252
2479	1.0	77	11.61	14.488
2480	1.0	78	11.67	14.699
2402	2.0	0	11.11	12.921
2441	2.0	39	11.86	15.350
2479	2.0	77	11.36	13.680
2480	2.0	78	11.43	13.909
2402	3.0	0	11.22	13.234
2441	3.0	39	11.95	15.664
2479	3.0	77	11.44	13.919
2480	3.0	78	11.56	14.305

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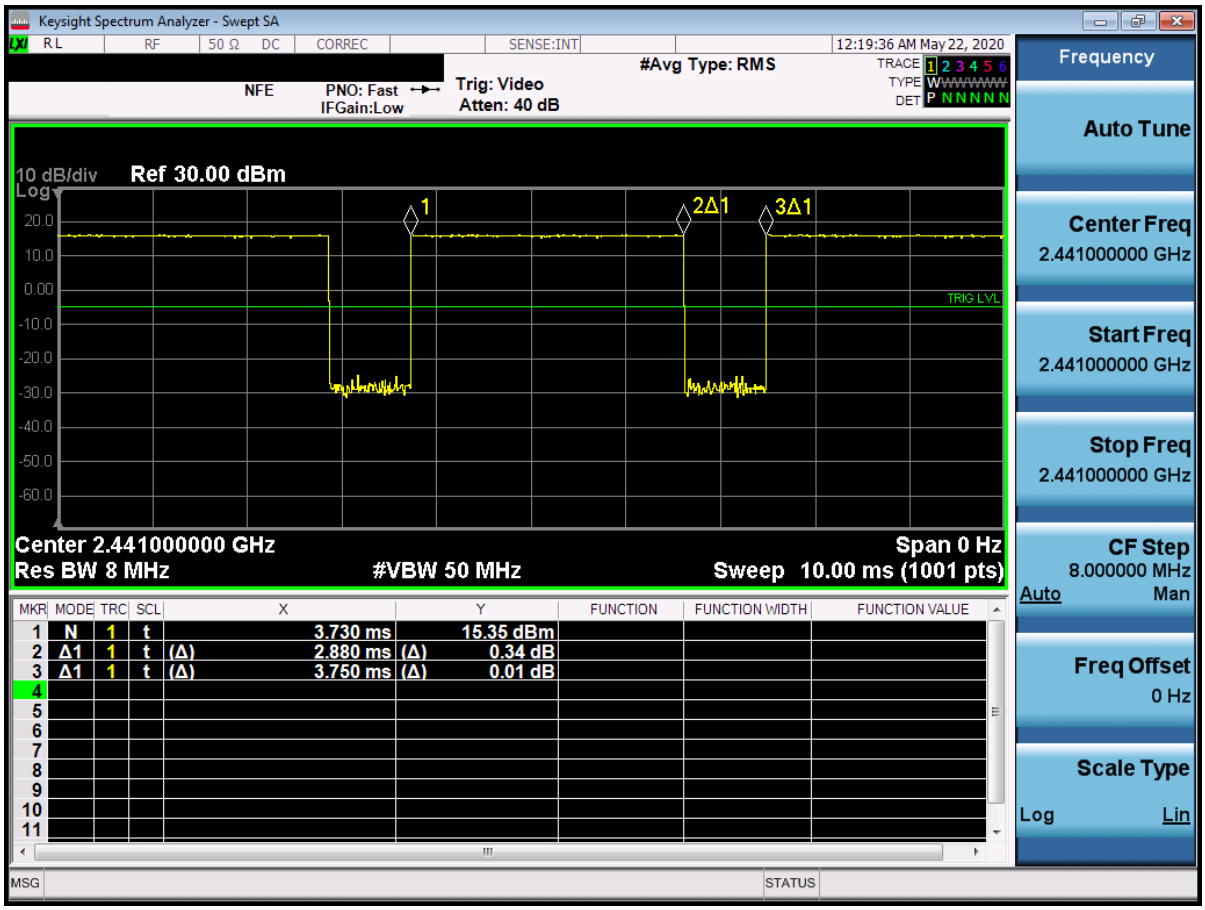

Figure 9-5
Bluetooth Antenna 1 Transmission Plot

Equation 9-1
Bluetooth Antenna 1 Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.88ms}{3.75ms} * 100\% = 76.8\%$$

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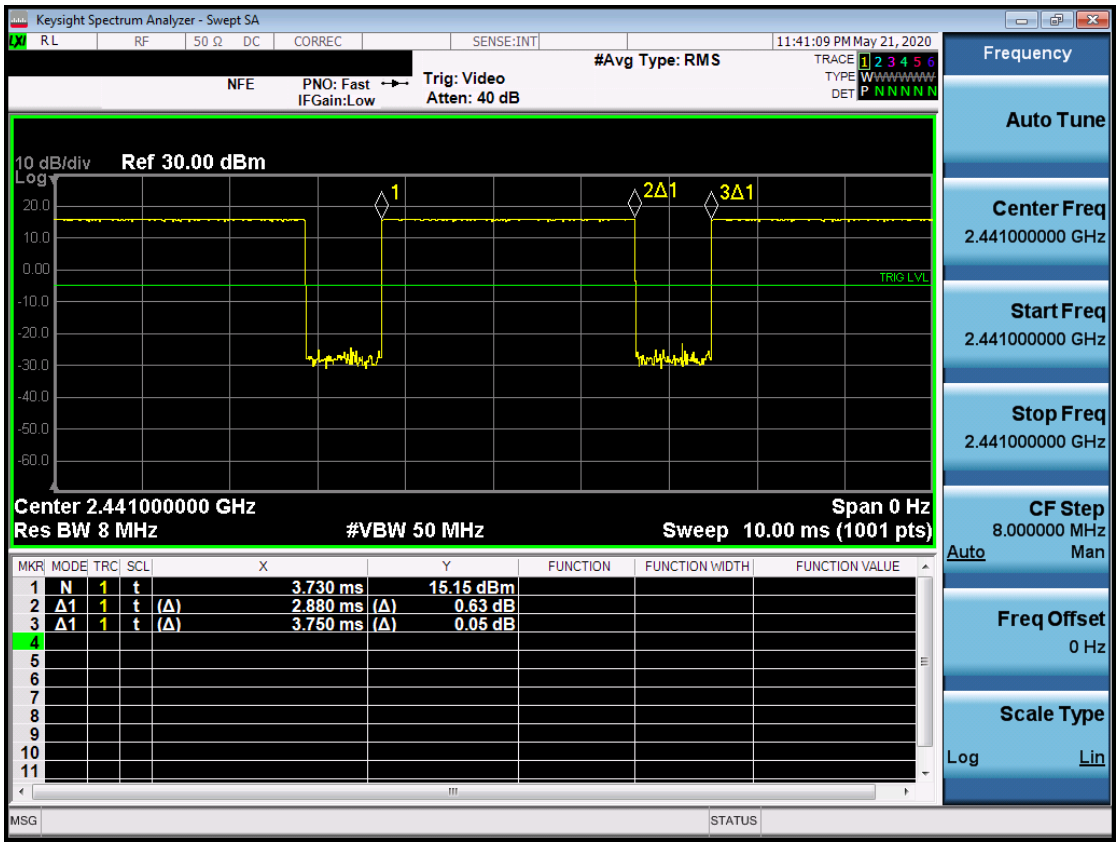

Figure 9-6
Bluetooth Antenna 2 Transmission Plot

Equation 9-2
Bluetooth Antenna 2 Duty Cycle Calculation

$$\boldsymbol{Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.88ms}{3.75ms} * 100\% = 76.8\%}$$

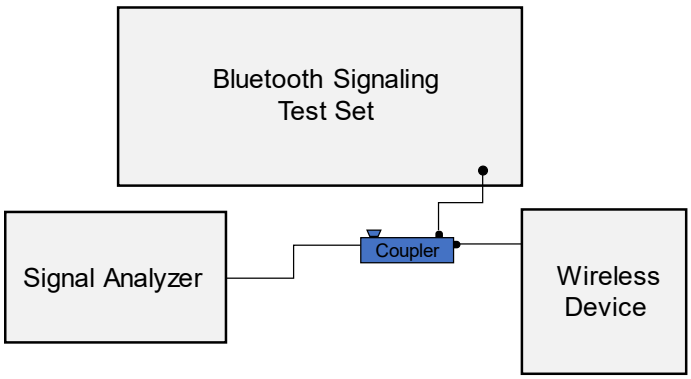

Figure 9-7
Power Measurement Setup

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10 SYSTEM VERIFICATION

10.1 Tissue Verification

Table 10-1
Measured Tissue Properties - Head

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (˚C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
06/08/2020	750 Head	21.5	680	0.849	41.469	0.888	42.305	-4.39%	-1.98%
			695	0.854	41.413	0.889	42.227	-3.94%	-1.93%
			700	0.855	41.394	0.889	42.201	-3.82%	-1.91%
			710	0.859	41.355	0.890	42.149	-3.48%	-1.88%
			725	0.864	41.295	0.891	42.071	-3.03%	-1.84%
			750	0.873	41.208	0.894	41.942	-2.35%	-1.75%
			770	0.880	41.159	0.895	41.838	-1.68%	-1.62%
			785	0.885	41.119	0.896	41.760	-1.23%	-1.53%
			800	0.889	41.075	0.897	41.682	-0.89%	-1.46%
05/18/2020	835 Head	21.6	820	0.914	42.111	0.899	41.578	1.67%	1.28%
			835	0.919	42.068	0.900	41.500	2.11%	1.37%
			850	0.925	42.028	0.916	41.500	0.98%	1.27%
05/26/2020	835 Head	21.8	820	0.931	42.218	0.899	41.578	3.56%	1.54%
			835	0.936	42.172	0.900	41.500	4.00%	1.62%
			850	0.942	42.129	0.916	41.500	2.84%	1.52%
06/01/2020	835 Head	21.1	820	0.899	41.168	0.899	41.578	0.00%	-0.99%
			835	0.904	41.119	0.900	41.500	0.44%	-0.92%
			850	0.909	41.078	0.916	41.500	-0.76%	-1.02%
06/08/2020	1750 Head	20.9	1710	1.341	39.536	1.348	40.142	-0.52%	-1.51%
			1720	1.347	39.524	1.354	40.126	-0.52%	-1.50%
			1745	1.362	39.495	1.368	40.087	-0.44%	-1.48%
			1750	1.365	39.488	1.371	40.079	-0.44%	-1.47%
			1770	1.378	39.454	1.383	40.047	-0.36%	-1.48%
			1790	1.391	39.417	1.394	40.016	-0.22%	-1.50%
05/18/2020	1900 Head	21.9	1850	1.409	40.313	1.400	40.000	0.64%	0.78%
			1860	1.415	40.297	1.400	40.000	1.07%	0.74%
			1880	1.426	40.270	1.400	40.000	1.86%	0.68%
			1900	1.437	40.242	1.400	40.000	2.64%	0.60%
			1905	1.440	40.235	1.400	40.000	2.86%	0.59%
			1910	1.443	40.226	1.400	40.000	3.07%	0.56%
06/01/2020	1900 Head	21.1	1850	1.404	39.139	1.400	40.000	0.29%	-2.15%
			1860	1.411	39.123	1.400	40.000	0.79%	-2.19%
			1880	1.423	39.093	1.400	40.000	1.64%	-2.27%
			1900	1.436	39.063	1.400	40.000	2.57%	-2.34%
			1905	1.439	39.055	1.400	40.000	2.79%	-2.36%
			1910	1.442	39.045	1.400	40.000	3.00%	-2.39%
06/03/2020	1900 Head	21.5	1850	1.415	39.801	1.400	40.000	1.07%	-0.50%
			1860	1.421	39.786	1.400	40.000	1.50%	-0.53%
			1880	1.433	39.763	1.400	40.000	2.36%	-0.59%
			1900	1.444	39.743	1.400	40.000	3.14%	-0.64%
			1905	1.447	39.736	1.400	40.000	3.36%	-0.66%
			1910	1.450	39.730	1.400	40.000	3.57%	-0.68%
06/05/2020	2450 Head	22.9	2300	1.671	40.381	1.670	39.500	0.06%	2.23%
			2310	1.678	40.369	1.679	39.480	-0.06%	2.25%
			2320	1.685	40.358	1.687	39.460	-0.12%	2.28%
06/19/2020	2450 Head	22.4	2400	1.754	40.161	1.756	39.289	-0.11%	2.22%
			2450	1.791	40.085	1.800	39.200	-0.50%	2.26%
			2480	1.815	40.027	1.833	39.162	-0.98%	2.21%
			2500	1.831	39.999	1.855	39.136	-1.29%	2.21%
06/28/2020	2450 Head	22.3	2400	1.781	41.165	1.756	39.289	1.42%	4.77%
			2450	1.821	41.109	1.800	39.200	1.17%	4.87%
			2480	1.843	41.060	1.833	39.162	0.55%	4.85%
			2500	1.857	41.050	1.855	39.136	0.11%	4.89%
05/31/2020	2450 Head	22.5	2560	1.870	40.527	1.920	39.060	-2.60%	3.76%
			2600	1.899	40.473	1.964	39.009	-3.31%	3.75%
			2650	1.939	40.377	2.018	38.945	-3.91%	3.68%
			2680	1.963	40.332	2.051	38.907	-4.29%	3.66%
			2700	1.978	40.310	2.073	38.882	-4.58%	3.67%

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Table 10-2
Measured Tissue Head Continued

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	%dev σ	%dev ε
06/03/2020	2450 Head	23.0	2500	1.832	39.969	1.855	39.136	-1.24%	2.13%
			2510	1.840	39.944	1.866	39.123	-1.39%	2.10%
			2535	1.863	39.916	1.893	39.092	-1.58%	2.11%
			2550	1.874	39.910	1.909	39.073	-1.83%	2.14%
			2560	1.883	39.890	1.920	39.060	-1.93%	2.12%
			2600	1.908	39.842	1.964	39.009	-2.85%	2.14%
			2650	1.950	39.736	2.018	38.945	-3.37%	2.03%
06/10/2020	2450 Head	21.5	2560	1.863	40.024	1.920	39.060	-2.97%	2.47%
			2600	1.892	39.969	1.964	39.009	-3.67%	2.46%
			2650	1.932	39.874	2.018	38.945	-4.26%	2.39%
			2680	1.959	39.828	2.051	38.907	-4.49%	2.37%
			2700	1.975	39.800	2.073	38.882	-4.73%	2.36%
06/30/2020	3600 Head	22.8	3500	2.848	38.837	2.913	37.929	-2.23%	2.39%
			3550	2.888	38.778	2.964	37.871	-2.56%	2.39%
			3560	2.897	38.759	2.974	37.860	-2.59%	2.37%
			3600	2.928	38.706	3.015	37.814	-2.89%	2.36%
			3650	2.967	38.660	3.066	37.757	-3.23%	2.39%
			3690	3.001	38.586	3.107	37.711	-3.41%	2.32%
			3700	3.010	38.571	3.117	37.700	-3.43%	2.31%
06/29/2020	5200-5800 Head	22.0	5180	4.423	36.378	4.635	36.009	-4.57%	1.02%
			5190	4.431	36.368	4.645	35.998	-4.61%	1.03%
			5200	4.443	36.353	4.655	35.986	-4.55%	1.02%
			5210	4.455	36.337	4.666	35.975	-4.52%	1.01%
			5220	4.467	36.321	4.676	35.963	-4.47%	1.00%
			5240	4.486	36.299	4.696	35.940	-4.47%	1.00%
			5250	4.495	36.293	4.706	35.929	-4.48%	1.01%
			5260	4.502	36.282	4.717	35.917	-4.56%	1.02%
			5270	4.511	36.256	4.727	35.906	-4.57%	0.97%
			5280	4.520	36.227	4.737	35.894	-4.58%	0.93%
			5290	4.530	36.209	4.748	35.883	-4.59%	0.91%
			5300	4.541	36.196	4.758	35.871	-4.56%	0.91%
			5310	4.550	36.174	4.768	35.860	-4.57%	0.88%
			5320	4.561	36.156	4.778	35.849	-4.54%	0.86%
			5500	4.767	35.818	4.963	35.643	-3.95%	0.49%
			5510	4.782	35.807	4.973	35.632	-3.84%	0.49%
			5520	4.793	35.805	4.983	35.620	-3.81%	0.52%
			5530	4.803	35.801	4.994	35.609	-3.82%	0.54%
			5540	4.811	35.791	5.004	35.597	-3.86%	0.54%
			5550	4.819	35.779	5.014	35.586	-3.89%	0.54%
			5560	4.828	35.758	5.024	35.574	-3.90%	0.52%
			5580	4.853	35.730	5.045	35.551	-3.81%	0.50%
			5600	4.882	35.690	5.065	35.529	-3.61%	0.45%
			5610	4.896	35.666	5.076	35.518	-3.55%	0.42%
			5620	4.908	35.652	5.086	35.506	-3.50%	0.41%
			5640	4.932	35.621	5.106	35.483	-3.41%	0.39%
			5660	4.949	35.569	5.127	35.460	-3.47%	0.31%
			5670	4.958	35.545	5.137	35.449	-3.48%	0.27%
			5680	4.968	35.516	5.147	35.437	-3.48%	0.22%
			5690	4.977	35.490	5.158	35.426	-3.51%	0.18%
			5700	4.988	35.473	5.168	35.414	-3.48%	0.17%
			5710	5.002	35.468	5.178	35.403	-3.40%	0.18%
			5720	5.020	35.457	5.188	35.391	-3.24%	0.19%
			5745	5.050	35.434	5.214	35.363	-3.15%	0.20%
			5750	5.052	35.428	5.219	35.357	-3.20%	0.20%
			5755	5.056	35.420	5.224	35.351	-3.22%	0.20%
			5765	5.062	35.405	5.234	35.340	-3.29%	0.18%
			5775	5.070	35.387	5.245	35.329	-3.34%	0.16%
			5785	5.082	35.367	5.255	35.317	-3.29%	0.14%
			5795	5.098	35.334	5.265	35.305	-3.17%	0.08%
			5800	5.106	35.323	5.270	35.300	-3.11%	0.07%
			5805	5.114	35.313	5.275	35.294	-3.05%	0.05%
			5825	5.141	35.301	5.296	35.271	-2.93%	0.09%

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Table 10-3
Measured Tissue Properties – Body

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	%dev σ	%dev ε
05/20/2020	750 Body	22.1	680	0.955	53.808	0.958	55.804	-0.31%	-3.58%
			695	0.960	53.773	0.959	55.745	0.10%	-3.54%
			700	0.962	53.764	0.959	55.726	0.31%	-3.52%
			710	0.965	53.744	0.960	55.687	0.52%	-3.49%
			725	0.971	53.711	0.961	55.629	1.04%	-3.45%
			750	0.980	53.650	0.964	55.531	1.66%	-3.39%
05/27/2020	750 Body	21.8	680	0.931	54.413	0.958	55.804	-2.82%	-2.49%
			695	0.936	54.384	0.959	55.745	-2.40%	-2.44%
			700	0.938	54.377	0.959	55.726	-2.19%	-2.42%
			710	0.941	54.358	0.960	55.687	-1.98%	-2.39%
			725	0.947	54.329	0.961	55.629	-1.46%	-2.34%
			750	0.957	54.277	0.964	55.531	-0.73%	-2.26%
			770	0.965	54.241	0.965	55.453	0.00%	-2.19%
			785	0.971	54.208	0.966	55.395	0.52%	-2.14%
			800	0.977	54.171	0.967	55.336	1.03%	-2.11%
06/14/2020	835 Body	21.0	820	0.958	53.739	0.969	55.258	-1.14%	-2.75%
			835	0.974	53.583	0.970	55.200	0.41%	-2.93%
			850	0.989	53.422	0.988	55.154	0.10%	-3.14%
06/17/2020	835 Body	21.6	820	0.934	53.236	0.969	55.258	-3.61%	-3.66%
			835	0.950	53.076	0.970	55.200	-2.06%	-3.85%
			850	0.966	52.921	0.988	55.154	-2.23%	-4.05%
06/24/2020	835 Body	22.3	820	0.950	54.264	0.969	55.258	-1.96%	-1.80%
			835	0.965	54.112	0.970	55.200	-0.52%	-1.97%
			850	0.981	53.963	0.988	55.154	-0.71%	-2.16%
06/29/2020	835 Body	21.3	820	0.944	53.819	0.969	55.258	-2.58%	-2.60%
			835	0.960	53.653	0.970	55.200	-1.03%	-2.80%
			850	0.976	53.501	0.988	55.154	-1.21%	-3.00%
06/08/2020	1750 Body	21.4	1710	1.484	52.260	1.463	53.537	1.44%	-2.39%
			1720	1.496	52.222	1.469	53.511	1.84%	-2.41%
			1745	1.524	52.128	1.485	53.445	2.63%	-2.46%
			1750	1.530	52.110	1.488	53.432	2.82%	-2.47%
			1770	1.554	52.031	1.501	53.379	3.53%	-2.53%
			1790	1.576	51.948	1.514	53.326	4.10%	-2.58%
06/19/2020	1750 Body	21.0	1710	1.482	51.681	1.463	53.537	1.30%	-3.47%
			1720	1.494	51.641	1.469	53.511	1.70%	-3.49%
			1745	1.524	51.528	1.485	53.445	2.63%	-3.59%
			1750	1.530	51.507	1.488	53.432	2.82%	-3.60%
			1770	1.554	51.427	1.501	53.379	3.53%	-3.66%
			1790	1.579	51.358	1.514	53.326	4.29%	-3.69%
06/22/2020	1750 Body	22.4	1710	1.436	52.522	1.463	53.537	-1.85%	-1.90%
			1720	1.447	52.490	1.469	53.511	-1.50%	-1.91%
			1745	1.474	52.410	1.485	53.445	-0.74%	-1.94%
			1750	1.480	52.393	1.488	53.432	-0.54%	-1.94%
			1770	1.502	52.322	1.501	53.379	0.07%	-1.98%
			1790	1.525	52.251	1.514	53.326	0.73%	-2.02%
06/24/2020	1750 Body	21.8	1710	1.470	52.117	1.463	53.537	0.48%	-2.65%
			1720	1.481	52.073	1.469	53.511	0.82%	-2.69%
			1745	1.508	51.959	1.485	53.445	1.55%	-2.78%
			1750	1.514	51.937	1.488	53.432	1.75%	-2.80%
			1770	1.535	51.851	1.501	53.379	2.27%	-2.86%
			1790	1.557	51.768	1.514	53.326	2.84%	-2.92%
05/26/2020	1900 Body	24.7	1850	1.502	53.157	1.520	53.300	-1.18%	-0.27%
			1860	1.513	53.133	1.520	53.300	-0.46%	-0.31%
			1880	1.536	53.097	1.520	53.300	1.05%	-0.38%
			1900	1.558	53.035	1.520	53.300	2.50%	-0.50%
			1905	1.565	52.998	1.520	53.300	2.96%	-0.57%
			1910	1.571	52.998	1.520	53.300	3.36%	-0.57%
05/31/2020	1900 Body	24.0	1850	1.503	51.909	1.520	53.300	-1.12%	-2.61%
			1860	1.513	51.883	1.520	53.300	-0.46%	-2.66%
			1880	1.533	51.816	1.520	53.300	0.86%	-2.78%
			1900	1.554	51.737	1.520	53.300	2.24%	-2.93%
			1905	1.560	51.715	1.520	53.300	2.63%	-2.97%
			1910	1.566	51.693	1.520	53.300	3.03%	-3.02%

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Table 10-4
Measured Tissue Properties – Body Continued

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	%dev σ	%dev ε
06/03/2020	1900 Body	24.6	1850	1.501	52.314	1.520	53.300	-1.25%	-1.85%
			1860	1.512	52.275	1.520	53.300	-0.53%	-1.92%
			1880	1.536	52.224	1.520	53.300	1.05%	-2.02%
			1900	1.558	52.135	1.520	53.300	2.50%	-2.19%
			1905	1.565	52.114	1.520	53.300	2.96%	-2.23%
			1910	1.570	52.086	1.520	53.300	3.29%	-2.28%
06/07/2020	1900 Body	23.2	1850	1.522	51.819	1.520	53.300	0.13%	-2.78%
			1860	1.534	51.786	1.520	53.300	0.92%	-2.84%
			1880	1.558	51.720	1.520	53.300	2.50%	-2.96%
			1900	1.579	51.656	1.520	53.300	3.88%	-3.08%
			1905	1.585	51.639	1.520	53.300	4.28%	-3.12%
			1910	1.590	51.620	1.520	53.300	4.61%	-3.15%
06/10/2020	1900 Body	23.8	1850	1.515	52.982	1.520	53.300	-0.33%	-0.60%
			1860	1.526	52.937	1.520	53.300	0.39%	-0.68%
			1880	1.549	52.891	1.520	53.300	1.91%	-0.77%
			1900	1.573	52.802	1.520	53.300	3.49%	-0.93%
			1905	1.579	52.801	1.520	53.300	3.88%	-0.94%
			1910	1.584	52.762	1.520	53.300	4.21%	-1.01%
06/15/2020	1900 Body	23.2	1850	1.528	51.829	1.520	53.300	0.53%	-2.76%
			1860	1.539	51.803	1.520	53.300	1.25%	-2.81%
			1880	1.561	51.753	1.520	53.300	2.70%	-2.90%
			1900	1.584	51.694	1.520	53.300	4.21%	-3.01%
			1905	1.589	51.678	1.520	53.300	4.54%	-3.04%
			1910	1.595	51.661	1.520	53.300	4.93%	-3.08%
06/21/2020	1900 Body	24.5	1850	1.509	52.444	1.520	53.300	-0.72%	-1.61%
			1860	1.520	52.408	1.520	53.300	0.00%	-1.67%
			1880	1.543	52.344	1.520	53.300	1.51%	-1.79%
			1900	1.566	52.281	1.520	53.300	3.03%	-1.91%
			1905	1.571	52.266	1.520	53.300	3.36%	-1.94%
			1910	1.577	52.247	1.520	53.300	3.75%	-1.98%
06/17/2020	2450 Body	22.9	2300	1.842	52.113	1.809	52.900	1.82%	-1.49%
			2310	1.853	52.091	1.816	52.887	2.04%	-1.51%
			2320	1.865	52.056	1.826	52.873	2.14%	-1.55%
06/17/2020	2450 Body	21.9	2500	2.102	51.386	2.021	52.636	4.01%	-2.37%
			2510	2.118	51.339	2.035	52.623	4.08%	-2.44%
			2535	2.160	51.244	2.071	52.592	4.30%	-2.56%
			2550	2.181	51.204	2.092	52.573	4.25%	-2.60%
			2560	2.193	51.178	2.106	52.560	4.13%	-2.63%
			2600	2.244	50.987	2.163	52.509	3.74%	-2.90%
			2650	2.324	50.770	2.234	52.445	4.03%	-3.19%
			2680	2.360	50.664	2.277	52.407	3.65%	-3.33%
			2700	2.389	50.541	2.305	52.382	3.64%	-3.51%
06/24/2020	2450 Body	22.8	2300	1.781	51.542	1.809	52.900	-1.55%	-2.57%
			2310	1.794	51.507	1.816	52.887	-1.21%	-2.61%
			2320	1.807	51.473	1.826	52.873	-1.04%	-2.65%
06/27/2020	2450 Body	23.0	2400	1.946	52.313	1.902	52.767	2.31%	-0.86%
			2450	2.013	52.120	1.950	52.700	3.23%	-1.10%
			2480	2.055	51.995	1.993	52.662	3.11%	-1.27%
			2500	2.082	51.922	2.021	52.636	3.02%	-1.36%
			2510	2.095	51.885	2.035	52.623	2.95%	-1.40%
			2535	2.128	51.794	2.071	52.592	2.75%	-1.52%
			2550	2.148	51.730	2.092	52.573	2.68%	-1.60%
			2560	2.163	51.686	2.106	52.560	2.71%	-1.66%
			2600	2.219	51.533	2.163	52.509	2.59%	-1.86%
			2650	2.287	51.336	2.234	52.445	2.37%	-2.11%
			2680	2.330	51.215	2.277	52.407	2.33%	-2.27%
			2700	2.359	51.149	2.305	52.382	2.34%	-2.35%

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Table 10-5
Measured Tissue Properties – Body Continued

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
06/28/2020	2450 Body	23.4	2400	1.979	51.095	1.902	52.767	4.05%	-3.17%
			2450	2.042	50.965	1.950	52.700	4.72%	-3.29%
			2480	2.076	50.872	1.993	52.662	4.16%	-3.40%
			2500	2.096	50.799	2.021	52.636	3.71%	-3.49%
			2510	2.109	50.783	2.035	52.623	3.64%	-3.50%
			2535	2.139	50.692	2.071	52.592	3.28%	-3.61%
			2550	2.160	50.646	2.092	52.573	3.25%	-3.67%
			2560	2.173	50.643	2.106	52.560	3.18%	-3.65%
			2600	2.220	50.520	2.163	52.509	2.64%	-3.79%
			2650	2.279	50.363	2.234	52.445	2.01%	-3.97%
			2680	2.317	50.258	2.277	52.407	1.76%	-4.10%
			2700	2.343	50.199	2.305	52.382	1.65%	-4.17%
06/30/2020	2450 Body	22.1	2400	1.923	51.792	1.902	52.767	1.10%	-1.85%
			2450	1.989	51.602	1.950	52.700	2.00%	-2.08%
			2480	2.029	51.481	1.993	52.662	1.81%	-2.24%
			2500	2.056	51.407	2.021	52.636	1.73%	-2.33%
			2510	2.069	51.373	2.035	52.623	1.67%	-2.38%
			2535	2.102	51.287	2.071	52.592	1.50%	-2.48%
			2550	2.122	51.229	2.092	52.573	1.43%	-2.56%
			2560	2.136	51.192	2.106	52.560	1.42%	-2.60%
			2600	2.191	51.037	2.163	52.509	1.29%	-2.80%
			2650	2.259	50.843	2.234	52.445	1.12%	-3.05%
			2680	2.302	50.727	2.277	52.407	1.10%	-3.21%
			2700	2.330	50.654	2.305	52.382	1.08%	-3.30%
07/02/2020	2450 Body	21.6	2400	1.982	50.768	1.902	52.767	4.21%	-3.79%
			2450	2.041	50.633	1.950	52.700	4.67%	-3.92%
			2480	2.074	50.542	1.993	52.662	4.06%	-4.03%
			2500	2.098	50.476	2.021	52.636	3.81%	-4.10%
07/11/2020	2450 Body	23.0	2400	1.933	51.553	1.902	52.767	1.63%	-2.30%
			2450	1.990	51.463	1.950	52.700	2.05%	-2.35%
			2480	2.020	51.346	1.993	52.662	1.35%	-2.50%
			2500	2.045	51.306	2.021	52.636	1.19%	-2.53%
06/24/2020	3600 Body	22.3	3500	3.380	49.224	3.314	51.321	1.99%	-4.09%
			3550	3.432	49.172	3.372	51.254	1.78%	-4.06%
			3560	3.444	49.153	3.384	51.240	1.77%	-4.07%
			3600	3.485	49.079	3.431	51.186	1.57%	-4.12%
			3650	3.536	48.979	3.489	51.118	1.35%	-4.18%
			3690	3.584	48.942	3.536	51.063	1.36%	-4.15%
			3700	3.592	48.919	3.548	51.050	1.24%	-4.17%
06/01/2020	5200-5800 Body	21.4	5180	5.334	48.644	5.276	49.041	1.10%	-0.81%
			5190	5.344	48.647	5.288	49.028	1.06%	-0.78%
			5200	5.357	48.634	5.299	49.014	1.09%	-0.78%
			5210	5.369	48.618	5.311	49.001	1.09%	-0.78%
			5220	5.381	48.594	5.323	48.987	1.09%	-0.80%
			5240	5.406	48.553	5.346	48.960	1.12%	-0.83%
			5250	5.419	48.521	5.358	48.947	1.14%	-0.87%
			5260	5.431	48.491	5.369	48.933	1.15%	-0.90%
			5270	5.443	48.456	5.381	48.919	1.15%	-0.95%
			5280	5.456	48.409	5.393	48.906	1.17%	-1.02%
			5290	5.467	48.346	5.404	48.892	1.17%	-1.12%
			5300	5.475	48.294	5.416	48.879	1.09%	-1.20%
			5310	5.481	48.243	5.428	48.865	0.98%	-1.27%
			5320	5.491	48.185	5.439	48.851	0.96%	-1.36%
			5500	5.733	47.778	5.650	48.607	1.47%	-1.71%
			5510	5.745	47.752	5.661	48.594	1.48%	-1.73%
			5520	5.754	47.726	5.673	48.580	1.43%	-1.76%
			5530	5.767	47.686	5.685	48.566	1.44%	-1.81%
			5540	5.781	47.650	5.696	48.553	1.49%	-1.86%
			5550	5.794	47.614	5.708	48.539	1.51%	-1.91%
			5560	5.811	47.590	5.720	48.526	1.59%	-1.93%
			5580	5.843	47.522	5.743	48.499	1.74%	-2.01%
			5600	5.872	47.456	5.766	48.471	1.84%	-2.09%
			5610	5.888	47.434	5.778	48.458	1.90%	-2.11%
			5620	5.901	47.421	5.790	48.444	1.92%	-2.11%
			5640	5.924	47.391	5.813	48.417	1.91%	-2.12%
			5660	5.947	47.326	5.837	48.390	1.88%	-2.20%
			5670	5.961	47.281	5.848	48.376	1.93%	-2.26%
			5680	5.973	47.230	5.860	48.363	1.93%	-2.34%
			5690	5.983	47.176	5.872	48.349	1.89%	-2.43%
			5700	5.992	47.114	5.883	48.336	1.85%	-2.53%
			5710	6.003	47.050	5.895	48.322	1.83%	-2.63%
			5720	6.015	46.993	5.907	48.309	1.83%	-2.72%
			5745	6.045	46.903	5.936	48.275	1.84%	-2.84%
			5750	6.050	46.893	5.942	48.268	1.82%	-2.85%
			5755	6.057	46.893	5.947	48.261	1.85%	-2.83%
			5765	6.072	46.885	5.959	48.248	1.90%	-2.82%
			5775	6.084	46.868	5.971	48.234	1.89%	-2.83%
			5785	6.099	46.833	5.982	48.220	1.96%	-2.88%
			5795	6.114	46.789	5.994	48.207	2.00%	-2.94%
			5800	6.123	46.766	6.000	48.200	2.05%	-2.98%
			5805	6.131	46.750	6.006	48.193	2.08%	-2.99%
			5825	6.167	46.703	6.029	48.166	2.29%	-3.04%

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Table 10-6
Measured Tissue Properties – Body Continued

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
06/14/2020	5200B-5800B	21.0	5180	5.351	47.651	5.276	49.041	*1.42%*	*-2.83%*
			5200	5.373	47.636	5.299	49.014	*1.40%*	*-2.81%*
			5220	5.398	47.594	5.323	48.987	*1.41%*	*-2.84%*
			5240	5.422	47.559	5.346	48.960	*1.42%*	*-2.86%*
			5260	5.453	47.517	5.369	48.933	*1.56%*	*-2.89%*
			5280	5.477	47.481	5.393	48.906	*1.56%*	*-2.91%*
			5300	5.509	47.471	5.416	48.879	*1.72%*	*-2.88%*
			5320	5.533	47.440	5.439	48.851	*1.73%*	*-2.89%*
			5500	5.768	47.138	5.650	48.607	*2.09%*	*-3.02%*
			5520	5.796	47.111	5.673	48.580	*2.17%*	*-3.02%*
			5540	5.823	47.094	5.696	48.553	*2.23%*	*-3.00%*
			5560	5.846	47.035	5.720	48.526	*2.20%*	*-3.07%*
			5580	5.871	47.008	5.743	48.499	*2.23%*	*-3.07%*
			5600	5.907	46.984	5.766	48.471	*2.45%*	*-3.07%*
			5620	5.934	46.948	5.790	48.444	*2.49%*	*-3.09%*
			5640	5.965	46.930	5.813	48.417	*2.61%*	*-3.07%*
			5660	5.989	46.885	5.837	48.390	*2.60%*	*-3.11%*
			5680	6.010	46.853	5.860	48.363	*2.56%*	*-3.12%*
			5700	6.040	46.824	5.883	48.336	*2.67%*	*-3.13%*
			5745	6.109	46.749	5.936	48.275	*2.91%*	*-3.16%*
			5765	6.130	46.711	5.959	48.248	*2.87%*	*-3.19%*
			5785	6.159	46.687	5.982	48.220	*2.96%*	*-3.18%*
			5800	6.180	46.669	6.000	48.200	*3.00%*	*-3.18%*
			5805	6.184	46.665	6.006	48.193	*2.96%*	*-3.17%*
			5825	6.216	46.645	6.029	48.166	*3.10%*	*-3.16%*

The above measured tissue parameters were used in the DASY software. The DASY software was used to perform interpolation to determine the dielectric parameters at the SAR test device frequencies (per KDB Publication 865664 D01v01r04 and IEEE 1528-2013 6.6.1.2). The tissue parameters listed in the SAR test plots may slightly differ from the table above due to significant digit rounding in the software.

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10.2 Test System Verification

Prior to SAR assessment, the system is verified to ±10% of the SAR measurement on the reference dipole at the time of calibration by the calibration facility. Full system validation status and result summary can be found in Appendix D.

Table 10-7
System Verification Results – 1g Head

System Verification TARGET & MEASURED												
SAR System #	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp (°C)	Liquid Temp (°C)	Input Power (W)	Source SN	Probe SN	Measured SAR_{1g} (W/kg)	1 W Target SAR_{1g} (W/kg)	1 W Normalized SAR_{1g} (W/kg)	$Deviation_{1g}$ (%)
L	750	HEAD	06/08/2020	22.3	22.0	0.200	1054	7410	1.650	8.630	8.250	-4.40%
P	835	HEAD	05/18/2020	22.7	21.6	0.200	4d132	7551	1.940	9.650	9.700	0.52%
P	835	HEAD	05/26/2020	22.7	21.8	0.200	4d132	7551	1.980	9.650	9.900	2.59%
P	835	HEAD	06/01/2020	22.2	21.1	0.200	4d132	7551	1.840	9.650	9.200	-4.66%
P	1750	HEAD	06/08/2020	21.6	20.9	0.100	1150	7551	3.890	36.500	38.900	6.58%
L	1900	HEAD	05/18/2020	22.7	21.9	0.100	5d148	7410	4.260	39.100	42.600	8.95%
P	1900	HEAD	06/01/2020	22.2	21.1	0.100	5d148	7551	4.070	39.100	40.700	4.09%
P	1900	HEAD	06/03/2020	23.1	21.7	0.100	5d148	7551	4.140	39.100	41.400	5.88%
E	2300	HEAD	06/05/2020	23.5	22.9	0.100	1073	3589	4.800	49.200	48.000	-2.44%
L	2450	HEAD	06/19/2020	24.9	22.5	0.100	981	7410	5.330	52.300	53.300	1.91%
E	2450	HEAD	06/28/2020	22.9	22.3	0.100	719	3589	5.340	53.100	53.400	0.56%
E	2600	HEAD	05/31/2020	22.2	21.9	0.100	1064	3589	5.810	58.100	58.100	0.00%
E	2600	HEAD	06/03/2020	23.6	21.8	0.100	1064	3589	5.540	58.100	55.400	-4.65%
E	2600	HEAD	06/10/2020	21.1	21.5	0.100	1064	3589	5.680	58.100	56.800	-2.24%
D	3500	HEAD	06/30/2020	23.1	22.8	0.100	1059	7488	6.200	64.600	62.000	-4.02%
D	3700	HEAD	06/30/2020	23.1	22.8	0.100	1018	7488	6.160	65.800	61.600	-6.38%
H	5250	HEAD	06/29/2020	24.0	22.0	0.050	1057	7357	3.710	79.200	74.200	-6.31%
H	5600	HEAD	06/29/2020	24.0	22.0	0.050	1057	7357	3.980	84.100	79.600	-5.35%
H	5750	HEAD	06/29/2020	24.0	22.0	0.050	1057	7357	3.830	80.500	76.600	-4.84%

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Table 10-8
System Verification Results – 1g Body

System Verification TARGET & MEASURED												
SAR System #	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp (°C)	Liquid Temp (°C)	Input Power (W)	Source SN	Probe SN	Measured SAR_{1g} (W/kg)	1 W Target SAR_{1g} (W/kg)	1 W Normalized SAR_{1g} (W/kg)	$Deviation_{1g}$ (%)
L	750	BODY	05/20/2020	24.0	22.1	0.200	1054	7410	1.590	8.530	7.950	-6.80%
L	750	BODY	05/27/2020	22.4	21.8	0.200	1054	7410	1.710	8.530	8.550	0.23%
D	835	BODY	06/14/2020	22.3	21.0	0.200	4d047	7488	2.010	9.470	10.050	6.12%
P	835	BODY	06/17/2020	22.0	21.6	0.200	4d047	7551	2.020	9.470	10.100	6.65%
P	835	BODY	06/24/2020	22.9	22.3	0.200	4d133	7551	1.940	9.750	9.700	-0.51%
P	835	BODY	06/29/2020	22.4	21.3	0.200	4d132	7551	2.010	9.960	10.050	0.90%
I	1750	BODY	06/08/2020	21.6	21.4	0.100	1008	7527	3.850	37.400	38.500	2.94%
I	1750	BODY	06/19/2020	20.9	21.0	0.100	1150	7570	3.780	36.600	37.800	3.28%
L	1750	BODY	06/22/2020	22.3	22.1	0.100	1150	7410	3.580	36.600	35.800	-2.19%
L	1750	BODY	06/24/2020	24.3	21.8	0.100	1148	7410	3.910	37.700	39.100	3.71%
J	1900	BODY	05/26/2020	24.1	22.7	0.100	5d080	7571	4.050	39.200	40.500	3.32%
J	1900	BODY	05/31/2020	23.3	24.0	0.100	5d080	7571	4.140	39.200	41.400	5.61%
J	1900	BODY	06/03/2020	22.3	22.6	0.100	5d080	7571	4.220	39.200	42.200	7.65%
J	1900	BODY	06/07/2020	21.3	21.2	0.100	5d080	7571	3.950	39.200	39.500	0.77%
J	1900	BODY	06/10/2020	22.0	22.9	0.100	5d080	7571	4.170	39.200	41.700	6.38%
J	1900	BODY	06/15/2020	22.1	23.2	0.100	5d080	7571	4.260	39.200	42.600	8.67%
J	1900	BODY	06/21/2020	21.3	24.5	0.100	5d149	7571	4.060	39.400	40.600	3.05%
K	2300	BODY	06/17/2020	23.5	22.2	0.100	1073	7547	5.120	47.700	51.200	7.34%
O	2450	BODY	06/27/2020	23.7	22.5	0.100	719	7552	4.960	50.800	49.600	-2.36%
K	2450	BODY	06/28/2020	22.6	21.8	0.100	719	7547	5.270	50.800	52.700	3.74%
K	2450	BODY	07/02/2020	23.5	21.5	0.100	719	7547	5.180	50.800	51.800	1.97%
K	2450	BODY	07/11/2020	23.5	22.4	0.100	719	7409	5.190	50.800	51.900	2.17%
O	2600	BODY	06/17/2020	22.6	21.9	0.100	1004	7552	5.750	54.800	57.500	4.93%
O	2600	BODY	06/27/2020	23.7	22.5	0.100	1064	7552	5.920	55.600	59.200	6.47%
K	2600	BODY	06/28/2020	22.6	21.8	0.100	1064	7547	5.670	55.600	56.700	1.98%
D	3500	BODY	06/24/2020	22.5	22.3	0.100	1059	7488	6.610	65.100	66.100	1.54%
D	3700	BODY	06/24/2020	22.5	22.3	0.100	1018	7488	6.560	64.300	65.600	2.02%
G	5250	BODY	06/14/2020	22.6	22.4	0.050	1191	7538	3.590	77.000	71.800	-6.75%
G	5600	BODY	06/14/2020	22.6	22.4	0.050	1191	7538	3.760	78.600	75.200	-4.33%
G	5750	BODY	06/14/2020	22.6	22.4	0.050	1191	7538	3.680	76.900	73.600	-4.29%

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Table 10-9
System Verification Results – 10g

System Verification TARGET & MEASURED												
SAR System #	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp (°C)	Liquid Temp (°C)	Input Power (W)	Source SN	Probe SN	Measured SAR_{10g} (W/kg)	1 W Target SAR_{10g} (W/kg)	1 W Normalized SAR_{10g} (W/kg)	$Deviation_{10g}$ (%)
I	1750	BODY	06/08/2020	21.6	21.4	0.100	1008	7527	2.020	19.900	20.200	1.51%
L	1750	BODY	06/22/2020	22.3	22.1	0.100	1150	7410	1.930	19.400	19.300	-0.52%
J	1900	BODY	05/26/2020	24.1	22.7	0.100	5d080	7571	2.050	20.600	20.500	-0.49%
J	1900	BODY	05/31/2020	23.3	24.0	0.100	5d080	7571	2.120	20.600	21.200	2.91%
J	1900	BODY	06/03/2020	22.3	22.6	0.100	5d080	7571	2.170	20.600	21.700	5.34%
J	1900	BODY	06/21/2020	21.3	24.5	0.100	5d149	7571	2.080	20.700	20.800	0.48%
O	2300	BODY	06/24/2020	23.1	22.8	0.100	1073	7552	2.310	23.200	23.100	-0.43%
O	2450	BODY	06/30/2020	22.4	22.1	0.100	981	7552	2.320	24.200	23.200	-4.13%
O	2600	BODY	06/30/2020	22.4	22.1	0.100	1004	7552	2.450	24.700	24.500	-0.81%
G	5250	BODY	06/01/2020	21.9	21.4	0.050	1057	7409	1.030	21.100	20.600	-2.37%
G	5600	BODY	06/01/2020	21.9	21.4	0.050	1057	7409	1.100	22.300	22.000	-1.35%
G	5750	BODY	06/01/2020	21.9	21.4	0.050	1057	7409	1.040	21.200	20.800	-1.89%

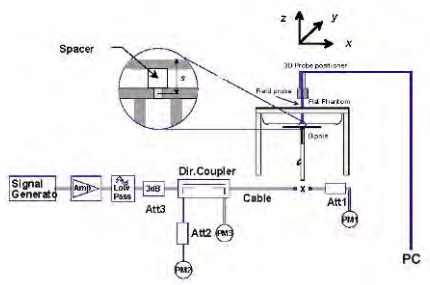

Figure 10-1
System Verification Setup Diagram

Figure 10-2
System Verification Setup Photo

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11 SAR DATA SUMMARY

11.1 Standalone Head SAR Data

Table 11-1
GSM 850 Head SAR - Open

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Device Serial Number	# of Time Slots	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
836.60	190	GSM 850	GSM	33.5	32.61	-0.19	Right	Cheek	12532	1	1:8.3	0.164	1.227	0.201	A1
836.60	190	GSM 850	GSM	33.5	32.61	-0.16	Right	Tilt	12532	1	1:8.3	0.078	1.227	0.096	
836.60	190	GSM 850	GSM	33.5	32.61	0.13	Left	Cheek	12532	1	1:8.3	0.156	1.227	0.191	
836.60	190	GSM 850	GSM	33.5	32.61	0.11	Left	Tilt	12532	1	1:8.3	0.089	1.227	0.109	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-2
GSM 1900 Head SAR - Open

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Device Serial Number	# of Time Slots	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1880.00	661	GSM 1900	GSM	30.5	29.47	0.11	Right	Cheek	12557	1	1:8.3	0.031	1.268	0.039	A2
1880.00	661	GSM 1900	GSM	30.5	29.47	0.05	Right	Tilt	12557	1	1:8.3	0.014	1.268	0.018	
1880.00	661	GSM 1900	GSM	30.5	29.47	0.11	Left	Cheek	12557	1	1:8.3	0.016	1.268	0.020	
1880.00	661	GSM 1900	GSM	30.5	29.47	0.16	Left	Tilt	12557	1	1:8.3	0.017	1.268	0.022	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-3
UMTS 850 Head SAR - Open

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
836.60	4183	UMTS 850	RMC	25.8	24.64	-0.14	Right	Cheek	57	12532	1:1	0.350	1.306	0.457	A3
836.60	4183	UMTS 850	RMC	25.8	24.64	0.18	Right	Tilt	57	12532	1:1	0.142	1.306	0.185	
836.60	4183	UMTS 850	RMC	25.8	24.64	0.02	Left	Cheek	57	12532	1:1	0.248	1.306	0.324	
836.60	4183	UMTS 850	RMC	25.8	24.64	-0.02	Left	Tilt	57	12532	1:1	0.139	1.306	0.182	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-4
UMTS 1750 Head SAR - Open

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1732.40	1412	UMTS 1750	RMC	25.5	25.00	0.14	Right	Cheek	26	17333	1:1	0.138	1.122	0.155	A4
1732.40	1412	UMTS 1750	RMC	25.5	25.00	0.14	Right	Tilt	26	17333	1:1	0.113	1.122	0.127	
1732.40	1412	UMTS 1750	RMC	25.5	25.00	0.18	Left	Cheek	26	17333	1:1	0.062	1.122	0.070	
1732.40	1412	UMTS 1750	RMC	25.5	25.00	0.09	Left	Tilt	26	17333	1:1	0.057	1.122	0.064	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-5
UMTS 1900 Head SAR - Open

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1880.00	9400	UMTS 1900	RMC	25.5	24.45	-0.21	Right	Cheek	57	17333	1:1	0.070	1.274	0.089	A5
1880.00	9400	UMTS 1900	RMC	25.5	24.45	0.16	Right	Tilt	57	17333	1:1	0.039	1.274	0.050	
1880.00	9400	UMTS 1900	RMC	25.5	24.45	0.21	Left	Cheek	57	17333	1:1	0.051	1.274	0.065	
1880.00	9400	UMTS 1900	RMC	25.5	24.45	0.13	Left	Tilt	57	17333	1:1	0.051	1.274	0.065	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-6
CDMA BC10 (§90S) Head SAR - Open

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	25.8	25.02	-0.04	Right	Cheek	15	12532	1:1	0.347	1.197	0.415	A6
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	25.8	25.02	-0.05	Right	Tilt	15	12532	1:1	0.150	1.197	0.180	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	25.8	25.02	0.03	Left	Cheek	15	12532	1:1	0.239	1.197	0.286	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	25.8	25.02	-0.11	Left	Tilt	15	12532	1:1	0.146	1.197	0.175	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	25.8	24.81	0.21	Right	Cheek	15	12532	1:1	0.275	1.256	0.345	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	25.8	24.81	0.09	Right	Tilt	15	12532	1:1	0.136	1.256	0.171	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	25.8	24.81	0.00	Left	Cheek	15	12532	1:1	0.228	1.256	0.286	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	25.8	24.81	0.06	Left	Tilt	15	12532	1:1	0.147	1.256	0.185	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-7
CDMA BC0 (§22H) Head SAR - Open

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.85	0.19	Right	Cheek	0	12532	1:1	0.318	1.245	0.396	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.85	0.16	Right	Tilt	0	12532	1:1	0.114	1.245	0.142	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.85	0.01	Left	Cheek	0	12532	1:1	0.230	1.245	0.286	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.85	0.15	Left	Tilt	0	12532	1:1	0.132	1.245	0.164	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.67	-0.12	Right	Cheek	0	12532	1:1	0.350	1.297	0.454	A7
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.67	-0.02	Right	Tilt	0	12532	1:1	0.167	1.297	0.217	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.67	0.01	Left	Cheek	0	12532	1:1	0.235	1.297	0.305	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.67	0.16	Left	Tilt	0	12532	1:1	0.150	1.297	0.195	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-8
PCS CDMA Head SAR - Open

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1880.00	600	PCS CDMA	RC3 / SO55	25.5	24.29	0.19	Right	Cheek	0	17333	1:1	0.044	1.321	0.058	
1880.00	600	PCS CDMA	RC3 / SO55	25.5	24.29	0.19	Right	Tilt	0	17333	1:1	0.039	1.321	0.052	
1880.00	600	PCS CDMA	RC3 / SO55	25.5	24.29	-0.01	Left	Cheek	0	17333	1:1	0.065	1.321	0.086	A8
1880.00	600	PCS CDMA	RC3 / SO55	25.5	24.29	0.13	Left	Tilt	0	17333	1:1	0.036	1.321	0.048	
1880.00	600	PCS CDMA	EVDO Rev. A	25.5	24.12	0.13	Right	Cheek	0	17333	1:1	0.042	1.374	0.058	
1880.00	600	PCS CDMA	EVDO Rev. A	25.5	24.12	0.15	Right	Tilt	0	17333	1:1	0.030	1.374	0.041	
1880.00	600	PCS CDMA	EVDO Rev. A	25.5	24.12	0.15	Left	Cheek	0	17333	1:1	0.057	1.374	0.078	
1880.00	600	PCS CDMA	EVDO Rev. A	25.5	24.12	0.07	Left	Tilt	0	17333	1:1	0.029	1.374	0.040	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-9
LTE Band 71 Head SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	-0.08	0	Right	Cheek	14	QPSK	1	0	17754	1:1	0.182	1.300	0.237	A9
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.03	1	Right	Cheek	14	QPSK	50	0	17754	1:1	0.139	1.312	0.182	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	-0.02	0	Right	Tilt	14	QPSK	1	0	17754	1:1	0.084	1.300	0.109	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	0.13	1	Right	Tilt	14	QPSK	50	0	17754	1:1	0.049	1.312	0.064	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	-0.02	0	Left	Cheek	14	QPSK	1	0	17754	1:1	0.170	1.300	0.221	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	0.02	1	Left	Cheek	14	QPSK	50	0	17754	1:1	0.129	1.312	0.169	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.04	0	Left	Tilt	14	QPSK	1	0	17754	1:1	0.087	1.300	0.113	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	0.14	1	Left	Tilt	14	QPSK	50	0	17754	1:1	0.069	1.312	0.091	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram			

Table 11-10
LTE Band 12 Head SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	0.00	0	Right	Cheek	13	QPSK	1	0	17754	1:1	0.192	1.380	0.265	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.08	1	Right	Cheek	13	QPSK	25	25	17754	1:1	0.161	1.380	0.222	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	0.09	0	Right	Tilt	13	QPSK	1	0	17754	1:1	0.086	1.380	0.119	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	-0.01	1	Right	Tilt	13	QPSK	25	25	17754	1:1	0.078	1.380	0.108	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	0.15	0	Left	Cheek	13	QPSK	1	0	17754	1:1	0.208	1.380	0.287	A10
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.12	1	Left	Cheek	13	QPSK	25	25	17754	1:1	0.153	1.380	0.211	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	0.10	0	Left	Tilt	13	QPSK	1	0	17754	1:1	0.125	1.380	0.173	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.07	1	Left	Tilt	13	QPSK	25	25	17754	1:1	0.092	1.380	0.127	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram			

Table 11-11
LTE Band 13 Head SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	0.11	0	Right	Cheek	0	QPSK	1	0	17754	1:1	0.233	1.202	0.280	A11
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.01	1	Right	Cheek	0	QPSK	25	25	17754	1:1	0.170	1.202	0.204	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	0.01	0	Right	Tilt	0	QPSK	1	0	17754	1:1	0.116	1.202	0.139	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.02	1	Right	Tilt	0	QPSK	25	25	17754	1:1	0.076	1.202	0.091	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	0.12	0	Left	Cheek	0	QPSK	1	0	17754	1:1	0.189	1.202	0.227	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.05	1	Left	Cheek	0	QPSK	25	25	17754	1:1	0.146	1.202	0.175	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	-0.18	0	Left	Tilt	0	QPSK	1	0	17754	1:1	0.105	1.202	0.126	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.05	1	Left	Tilt	0	QPSK	25	25	17754	1:1	0.083	1.202	0.100	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram			

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Table 11-12
LTE Band 14 Head SAR – Open

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	-0.14	0	Right	Cheek	0	QPSK	1	0	17754	1:1	0.248	1.035	0.257	A12
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.05	1	Right	Cheek	0	QPSK	25	12	17754	1:1	0.217	1.057	0.229	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	0.08	0	Right	Tilt	0	QPSK	1	0	17754	1:1	0.106	1.035	0.110	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.03	1	Right	Tilt	0	QPSK	25	12	17754	1:1	0.098	1.057	0.104	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	0.05	0	Left	Cheek	0	QPSK	1	0	17754	1:1	0.185	1.035	0.191	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	0.04	1	Left	Cheek	0	QPSK	25	12	17754	1:1	0.133	1.057	0.141	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	0.13	0	Left	Tilt	0	QPSK	1	0	17754	1:1	0.104	1.035	0.108	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	0.07	1	Left	Tilt	0	QPSK	25	12	17754	1:1	0.076	1.057	0.080	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram			

Table 11-13
LTE Band 5 (Cell) Head SAR – Open

MEASUREMENT RESULTS																							
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.13	0	Right	Cheek	0	QPSK	1	49	12748	1:1	0.217	1.413	0.307	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.11	1	Right	Cheek	0	QPSK	25	0	12748	1:1	0.187	1.462	0.273	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.37	0.07	0	Right	Cheek	0	QPSK	1	49	12748	1:1	0.221	1.390	0.307	A13
	SCC	843.70	20597	Mid	LTE Band 5 (Cell)	5									1	0						
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	0.06	0	Right	Tilt	0	QPSK	1	49	12748	1:1	0.101	1.413	0.143	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.03	1	Right	Tilt	0	QPSK	25	0	12748	1:1	0.081	1.462	0.118	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.05	0	Left	Cheek	0	QPSK	1	49	12748	1:1	0.179	1.413	0.253	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.08	1	Left	Cheek	0	QPSK	25	0	12748	1:1	0.147	1.462	0.215	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.11	0	Left	Tilt	0	QPSK	1	49	12748	1:1	0.096	1.413	0.136	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.12	1	Left	Tilt	0	QPSK	25	0	12748	1:1	0.081	1.462	0.118	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram			

Table 11-14
LTE Band 26 (Cell) Head SAR – Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	0.13	0	Right	Cheek	15	QPSK	1	0	12573	1:1	0.287	1.153	0.331	A14
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	-0.02	1	Right	Cheek	15	QPSK	36	0	12573	1:1	0.228	1.140	0.260	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	0.06	0	Right	Tilt	15	QPSK	1	0	12573	1:1	0.130	1.153	0.150	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.05	1	Right	Tilt	15	QPSK	36	0	12573	1:1	0.103	1.140	0.117	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	-0.12	0	Left	Cheek	15	QPSK	1	0	12573	1:1	0.205	1.153	0.236	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.03	1	Left	Cheek	15	QPSK	36	0	12573	1:1	0.175	1.140	0.200	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	0.15	0	Left	Tilt	15	QPSK	1	0	12573	1:1	0.114	1.153	0.131	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.08	1	Left	Tilt	15	QPSK	36	0	12573	1:1	0.100	1.140	0.114	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram			

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Table 11-15
LTE Band 66 (AWS) Head SAR - Open

MEASUREMENT RESULTS																								
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	24.75	-0.03	0	Right	Cheek	26	QPSK	1	0	17796	1:1	0.135	1.189	0.161	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	0.04	0	Right	Cheek	26	QPSK	1	50	17796	1:1	0.141	1.122	0.158	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	10	25.5	24.70	0.11	0	Right	Cheek	26	QPSK	1	0	17796	1:1	0.126	1.202	0.151	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	0.16	1	Right	Cheek	26	QPSK	50	25	17796	1:1	0.110	1.069	0.118	
2 CC Uplink CA_66C	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.50	0.17	0	Right	Cheek	26	QPSK	1	0	17796	1:1	0.155	1.000	0.155	A15
	SCC	1725.20	132124	Mid	LTE Band 66 (AWS)											99						
2 CC Uplink CA_66B	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	10	25.5	25.35	0.05	0	Right	Cheek	26	QPSK	1	0	17796	1:1	0.151	1.035	0.156	
	SCC	1735.10	132223	Mid	LTE Band 66 (AWS)											49						
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	-0.01	0	Right	Tilt	26	QPSK	1	50	17796	1:1	0.081	1.122	0.091	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	0.13	1	Right	Tilt	26	QPSK	50	25	17796	1:1	0.063	1.069	0.067	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	0.12	0	Left	Cheek	26	QPSK	1	50	17796	1:1	0.051	1.122	0.057	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	0.21	1	Left	Cheek	26	QPSK	50	25	17796	1:1	0.041	1.069	0.044	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	0.14	0	Left	Tilt	26	QPSK	1	50	17796	1:1	0.077	1.122	0.086	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	0.17	1	Left	Tilt	26	QPSK	50	25	17796	1:1	0.055	1.069	0.059	
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Table 11-16
LTE Band 25 (PCS) Head SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	0.13	0	Right	Cheek	30	QPSK	1	0	17333	1:1	0.084	1.318	0.111	A16
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	0.06	1	Right	Cheek	30	QPSK	50	0	17333	1:1	0.060	1.303	0.078	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	0.13	0	Right	Tilt	30	QPSK	1	0	17333	1:1	0.047	1.318	0.062	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	0.13	1	Right	Tilt	30	QPSK	50	0	17333	1:1	0.043	1.303	0.056	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	-0.18	0	Left	Cheek	30	QPSK	1	0	17333	1:1	0.065	1.318	0.086	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	0.13	1	Left	Cheek	30	QPSK	50	0	17333	1:1	0.045	1.303	0.059	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	0.12	0	Left	Tilt	30	QPSK	1	0	17333	1:1	0.051	1.318	0.067	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	0.13	1	Left	Tilt	30	QPSK	50	0	17333	1:1	0.036	1.303	0.047	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-17
LTE Band 30 Head SAR – Open

MEASUREMENT RESULTS																			
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	0.12	0	Right	Cheek	QPSK	1	49	12581	1:1	0.030	1.146	0.034	A17
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	0.13	1	Right	Cheek	QPSK	25	12	12581	1:1	0.022	1.140	0.025	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	0.15	0	Right	Tilt	QPSK	1	49	12581	1:1	0.017	1.146	0.019	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	0.19	1	Right	Tilt	QPSK	25	12	12581	1:1	0.012	1.140	0.014	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	0.17	0	Left	Cheek	QPSK	1	49	12581	1:1	0.008	1.146	0.009	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	0.18	1	Left	Cheek	QPSK	25	12	12581	1:1	0.004	1.140	0.005	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	0.12	0	Left	Tilt	QPSK	1	49	12581	1:1	0.012	1.146	0.014	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	0.12	1	Left	Tilt	QPSK	25	12	12581	1:1	0.007	1.140	0.008	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram				

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Table 11-18
LTE Band 7 Head SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	0.13	0	Right	Cheek	QPSK	1	0	18646	1:1	0.080	1.030	0.082	A18
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	-0.07	1	Right	Cheek	QPSK	50	0	18646	1:1	0.061	1.014	0.062	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	0.15	0	Right	Tilt	QPSK	1	0	18646	1:1	0.026	1.030	0.027	
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	0.16	1	Right	Tilt	QPSK	50	0	18646	1:1	0.021	1.014	0.021	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	0.17	0	Left	Cheek	QPSK	1	0	18646	1:1	0.026	1.030	0.027	
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	0.11	1	Left	Cheek	QPSK	50	0	18646	1:1	0.015	1.014	0.015	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	0.15	0	Left	Tilt	QPSK	1	0	18646	1:1	0.022	1.030	0.023	
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	0.11	1	Left	Tilt	QPSK	50	0	18646	1:1	0.014	1.014	0.014	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-19
LTE Band 48 Head SAR - Open

MEASUREMENT RESULTS																					
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.															(W/kg)		(W/kg)	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.00	0.00	0	Right	Cheek	QPSK	1	0	17762	1:1.58	0.427	1.259	0.538	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.50	-0.06	0	Right	Cheek	QPSK	1	50	17762	1:1.58	0.465	1.122	0.522	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.58	-0.05	0	Right	Cheek	QPSK	50	25	17762	1:1.58	0.472	1.102	0.520	
2 CC Uplink	PCC	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.55	0.04	0	Right	Cheek	QPSK	1	0	17762	1:1.58	0.503	1.109	**0.558**	A19
	SCC	3583.50	55575	Low-Mid	LTE Band 48										99						
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.50	0.03	0	Right	Tilt	QPSK	1	50	17762	1:1.58	0.260	1.122	0.292	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.58	0.00	0	Right	Tilt	QPSK	50	25	17762	1:1.58	0.267	1.102	0.294	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.50	0.12	0	Left	Cheek	QPSK	1	50	17762	1:1.58	0.121	1.122	0.136	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.58	0.05	0	Left	Cheek	QPSK	50	25	17762	1:1.58	0.125	1.102	0.138	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.50	0.14	0	Left	Tilt	QPSK	1	50	17762	1:1.58	0.119	1.122	0.134	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	17.0	16.58	0.02	0	Left	Tilt	QPSK	50	25	17762	1:1.58	0.125	1.102	0.138	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-20
LTE Band 41 Head SAR - Open

MEASUREMENT RESULTS																				
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.															(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.01	0.13	0	Right	Cheek	QPSK	1	0	12664	1:1.58	0.079	1.510	0.119	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.48	0.02	0	Right	Cheek	QPSK	1	50	12664	1:1.58	0.076	1.355	0.103	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.8	23.60	0.16	1	Right	Cheek	QPSK	50	25	12664	1:1.58	0.065	1.318	0.086	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	27.0	25.44	-0.20	0	Right	Cheek	QPSK	1	0	12664	1:2.31	0.073	1.432	0.105	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	27.0	25.90	-0.14	0	Right	Cheek	QPSK	1	50	12664	1:2.31	0.067	1.288	0.086	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	25.8	24.90	0.09	0	Right	Cheek	QPSK	1	0	12664	1:1.58	0.097	1.230	0.119	A20
	SCC	2660.20	41292	High	LTE Band 41										99						
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	27.0	25.85	-0.01	0	Right	Cheek	QPSK	1	0	12664	1:2.31	0.084	1.303	0.109	
	SCC	2660.20	41292	High	LTE Band 41										99						
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.48	0.04	0	Right	Tilt	QPSK	1	50	12664	1:1.58	0.030	1.355	0.041	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.8	23.60	0.13	1	Right	Tilt	QPSK	50	25	12664	1:1.58	0.024	1.318	0.032	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.48	0.12	0	Left	Cheek	QPSK	1	50	12664	1:1.58	0.031	1.355	0.042	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.8	23.60	0.15	1	Left	Cheek	QPSK	50	25	12664	1:1.58	0.022	1.318	0.029	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.48	0.11	0	Left	Tilt	QPSK	1	50	12664	1:1.58	0.014	1.355	0.019	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.8	23.60	0.12	1	Left	Tilt	QPSK	50	25	12664	1:1.58	0.007	1.318	0.009	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-21
NR Band n71 Head SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	0.16	0	Right	Cheek	DFT-S-OFDM QPSK	1	53	12698	1:1	0.144	1.236	0.178	A21
680.50	136100	Mid	NR Band n71	20	25.5	24.51	0.00	0	Right	Cheek	DFT-S-OFDM QPSK	50	28	12698	1:1	0.140	1.256	0.176	
680.50	136100	Mid	NR Band n71	20	24.0	22.98	0.10	1.5	Right	Cheek	CP-OFDM QPSK	1	1	12698	1:1	0.080	1.265	0.101	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	0.07	0	Right	Tilt	DFT-S-OFDM QPSK	1	53	12698	1:1	0.063	1.236	0.078	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	-0.01	0	Right	Tilt	DFT-S-OFDM QPSK	50	28	12698	1:1	0.063	1.256	0.079	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	0.06	0	Left	Cheek	DFT-S-OFDM QPSK	1	53	12698	1:1	0.121	1.236	0.150	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	0.14	0	Left	Cheek	DFT-S-OFDM QPSK	50	28	12698	1:1	0.123	1.256	0.154	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.15	0	Left	Tilt	DFT-S-OFDM QPSK	1	53	12698	1:1	0.067	1.236	0.083	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	0.13	0	Left	Tilt	DFT-S-OFDM QPSK	50	28	12698	1:1	0.063	1.256	0.079	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Head
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 11-22
NR Band n5 Head SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	0.06	0	Right	Cheek	DFT-S-OFDM QPSK	1	1	12698	1:1	0.208	1.189	0.247	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	-0.16	0	Right	Cheek	DFT-S-OFDM QPSK	50	28	12698	1:1	0.215	1.239	0.266	A22
836.50	167300	Mid	NR Band n5 (Cell)	20	24.0	22.85	0.13	1.5	Right	Cheek	CP-OFDM QPSK	1	1	12698	1:1	0.161	1.303	0.210	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.02	0	Right	Tilt	DFT-S-OFDM QPSK	1	1	12698	1:1	0.095	1.189	0.113	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	0.06	0	Right	Tilt	DFT-S-OFDM QPSK	50	28	12698	1:1	0.089	1.239	0.110	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.15	0	Left	Cheek	DFT-S-OFDM QPSK	1	1	12698	1:1	0.162	1.189	0.193	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	0.05	0	Left	Cheek	DFT-S-OFDM QPSK	50	28	12698	1:1	0.169	1.239	0.209	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.03	0	Left	Tilt	DFT-S-OFDM QPSK	1	1	12698	1:1	0.084	1.189	0.100	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	0.11	0	Left	Tilt	DFT-S-OFDM QPSK	50	28	12698	1:1	0.084	1.239	0.104	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Head
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 11-23
NR Band n66 Head SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	0.04	0	Right	Cheek	DFT-S-OFDM QPSK	1	1	17291	1:1	0.121	1.279	0.155	A23
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	0.14	0	Right	Cheek	DFT-S-OFDM QPSK	50	28	17291	1:1	0.101	1.294	0.131	
1745.00	349000	Mid	NR Band n66 (AWS)	20	23.3	22.14	0.12	1.5	Right	Cheek	CP-OFDM QPSK	1	1	17291	1:1	0.084	1.306	0.110	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	0.18	0	Right	Tilt	DFT-S-OFDM QPSK	1	1	17291	1:1	0.093	1.279	0.119	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	0.16	0	Right	Tilt	DFT-S-OFDM QPSK	50	28	17291	1:1	0.056	1.294	0.072	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	0.13	0	Left	Cheek	DFT-S-OFDM QPSK	1	1	17291	1:1	0.052	1.279	0.067	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	0.13	0	Left	Cheek	DFT-S-OFDM QPSK	50	28	17291	1:1	0.045	1.294	0.058	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	0.13	0	Left	Tilt	DFT-S-OFDM QPSK	1	1	17291	1:1	0.048	1.279	0.061	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	0.13	0	Left	Tilt	DFT-S-OFDM QPSK	50	28	17291	1:1	0.046	1.294	0.060	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Head
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

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Table 11-24
NR Band n25 Head SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	0.00	0	Right	Cheek	DFT-S-OFDM QPSK	1	104	12706	1:1	0.068	1.208	0.082	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	0.12	0	Right	Cheek	DFT-S-OFDM QPSK	50	28	12706	1:1	0.074	1.282	0.095	A24
1882.50	376500	Mid	NR Band n25 (PCS)	20	23.3	22.42	-0.14	1.5	Right	Cheek	CP-OFDM QPSK	1	1	12706	1:1	0.059	1.225	0.072	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	0.13	0	Right	Tilt	DFT-S-OFDM QPSK	1	104	12706	1:1	0.039	1.208	0.047	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	0.13	0	Right	Tilt	DFT-S-OFDM QPSK	50	28	12706	1:1	0.040	1.282	0.051	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	-0.14	0	Left	Cheek	DFT-S-OFDM QPSK	1	104	12706	1:1	0.061	1.208	0.074	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	-0.08	0	Left	Cheek	DFT-S-OFDM QPSK	50	28	12706	1:1	0.060	1.282	0.077	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	0.15	0	Left	Tilt	DFT-S-OFDM QPSK	1	104	12706	1:1	0.031	1.208	0.037	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	0.18	0	Left	Tilt	DFT-S-OFDM QPSK	50	28	12706	1:1	0.036	1.282	0.046	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-25
NR Band n41 Head SAR - Open

MEASUREMENT RESULTS																			
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2592.99	518598	Mid	NR Band n41	100	21.0	20.99	0.09	0	Right	Cheek	DFT-S-OFDM QPSK	1	137	17705	1:4	0.383	1.002	0.384	
2592.99	518598	Mid	NR Band n41	100	21.0	20.99	0.07	0	Right	Cheek	DFT-S-OFDM QPSK	135	69	17705	1:4	0.373	1.002	0.374	
2592.99	518598	Mid	NR Band n41	100	21.0	20.86	0.16	0	Right	Cheek	CP-OFDM QPSK	1	1	17705	1:4	0.397	1.033	**0.410**	A25
2592.99	518598	Mid	NR Band n41	100	21.0	20.99	0.08	0	Right	Tilt	DFT-S-OFDM QPSK	1	137	17705	1:4	0.238	1.002	0.238	
2592.99	518598	Mid	NR Band n41	100	21.0	20.99	0.01	0	Right	Tilt	DFT-S-OFDM QPSK	135	69	17705	1:4	0.238	1.002	0.238	
2592.99	518598	Mid	NR Band n41	100	21.0	20.99	0.01	0	Left	Cheek	DFT-S-OFDM QPSK	1	137	17705	1:4	0.094	1.002	0.094	
2592.99	518598	Mid	NR Band n41	100	21.0	20.99	0.03	0	Left	Cheek	DFT-S-OFDM QPSK	135	69	17705	1:4	0.092	1.002	0.092	
2592.99	518598	Mid	NR Band n41	100	21.0	20.99	0.12	0	Left	Tilt	DFT-S-OFDM QPSK	1	137	17705	1:4	0.138	1.002	0.138	
2592.99	518598	Mid	NR Band n41	100	21.0	20.99	-0.11	0	Left	Tilt	DFT-S-OFDM QPSK	135	69	17705	1:4	0.119	1.002	0.119	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-26
DTS Head SAR – Open

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
2462	11	802.11b	DSSS	22	13.0	12.92	0.14	Right	Cheek	1	0025H	1	99.9	0.289	-	1.019	1.001	-	
2462	11	802.11b	DSSS	22	13.0	12.92	0.14	Right	Tilt	1	0025H	1	99.9	0.276	-	1.019	1.001	-	
2412	1	802.11b	DSSS	22	13.0	12.71	0.20	Left	Cheek	1	41929	1	99.9	0.775	0.456	1.069	1.001	0.488	
2437	6	802.11b	DSSS	22	13.0	12.61	0.09	Left	Cheek	1	41929	1	99.9	1.185	0.627	1.094	1.001	0.687	
2462	11	802.11b	DSSS	22	13.0	12.92	0.15	Left	Cheek	1	41929	1	99.9	1.283	0.688	1.019	1.001	**0.702**	A26
2462	11	802.11b	DSSS	22	13.0	12.92	0.16	Left	Tilt	1	41929	1	99.9	0.742	0.464	1.019	1.001	0.473	
2412	1	802.11b	DSSS	22	13.0	12.99	0.20	Right	Cheek	2	0025H	1	99.9	0.161	0.078	1.002	1.001	0.078	
2412	1	802.11b	DSSS	22	13.0	12.99	0.20	Right	Tilt	2	0025H	1	99.9	0.012	-	1.002	1.001	-	
2412	1	802.11b	DSSS	22	13.0	12.99	-0.16	Left	Cheek	2	0025H	1	99.9	0.154	-	1.002	1.001	-	
2412	1	802.11b	DSSS	22	13.0	12.99	0.20	Left	Tilt	2	0025H	1	99.9	0.006	-	1.002	1.001	-	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-27
DTS MIMO Head SAR – Open

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Side	Test Position	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
2437	6	802.11n	OFDM	20	13.0	12.74	13.0	12.99	0.17	Right	Cheek	MIMO	41929	13	99.7	0.191	0.126	1.062	1.003	0.134	
2437	6	802.11n	OFDM	20	13.0	12.74	13.0	12.99	0.18	Right	Tilt	MIMO	41929	13	99.7	0.157	0.092	1.062	1.003	0.098	
2437	6	802.11n	OFDM	20	13.0	12.74	13.0	12.99	0.15	Left	Cheek	MIMO	41929	13	99.7	0.966	0.623	1.062	1.003	0.664	
2437	6	802.11n	OFDM	20	13.0	12.74	13.0	12.99	0.15	Left	Tilt	MIMO	41929	13	99.7	0.640	0.421	1.062	1.003	0.448	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 16.0 dBm maximum allowed MIMO power shown in the documentation for channel 6 each antenna transmits at a maximum allowed power of 13.0 dBm.

Table 11-28
NII SISO Head SAR - Open

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
5290	58	802.11ac	OFDM	80	10.0	9.95	0.12	Right	Cheek	1	44923	29.3	95.4	0.090	-	1.012	1.048	-	
5290	58	802.11ac	OFDM	80	10.0	9.95	0.16	Right	Tilt	1	44923	29.3	95.4	0.155	-	1.012	1.048	-	
5290	58	802.11ac	OFDM	80	10.0	9.95	0.21	Left	Cheek	1	44923	29.3	95.4	0.596	0.258	1.012	1.048	0.274	
5290	58	802.11ac	OFDM	80	10.0	9.95	0.12	Left	Tilt	1	44923	29.3	95.4	0.228	-	1.012	1.048	-	
5290	58	802.11ac	OFDM	80	10.0	9.83	0.15	Right	Cheek	2	44923	29.3	95.5	0.017	-	1.040	1.047	-	
5290	58	802.11ac	OFDM	80	10.0	9.83	0.19	Right	Tilt	2	44923	29.3	95.5	0.019	-	1.040	1.047	-	
5290	58	802.11ac	OFDM	80	10.0	9.83	-0.19	Left	Cheek	2	44923	29.3	95.5	0.030	0.012	1.040	1.047	0.013	
5290	58	802.11ac	OFDM	80	10.0	9.83	0.19	Left	Tilt	2	44923	29.3	95.5	0.026	-	1.040	1.047	-	
5610	122	802.11ac	OFDM	80	10.0	9.97	0.11	Right	Cheek	1	44923	29.3	95.4	0.162	-	1.007	1.048	-	
5610	122	802.11ac	OFDM	80	10.0	9.97	0.12	Right	Tilt	1	44923	29.3	95.4	0.151	-	1.007	1.048	-	
5610	122	802.11ac	OFDM	80	10.0	9.97	0.19	Left	Cheek	1	44923	29.3	95.4	0.727	0.351	1.007	1.048	**0.370**	
5610	122	802.11ac	OFDM	80	10.0	9.97	0.12	Left	Tilt	1	44923	29.3	95.4	0.358	-	1.007	1.048	-	
5530	106	802.11ac	OFDM	80	10.0	9.90	0.19	Right	Cheek	2	44923	29.3	95.5	0.014	-	1.023	1.047	-	
5530	106	802.11ac	OFDM	80	10.0	9.90	0.19	Right	Tilt	2	44923	29.3	95.5	0.009	-	1.023	1.047	-	
5530	106	802.11ac	OFDM	80	10.0	9.90	0.15	Left	Cheek	2	44923	29.3	95.5	0.025	-	1.023	1.047	-	
5530	106	802.11ac	OFDM	80	10.0	9.90	0.20	Left	Tilt	2	44923	29.3	95.5	0.031	0.004	1.023	1.047	0.004	
5775	155	802.11ac	OFDM	80	10.0	9.83	0.05	Right	Cheek	1	44923	29.3	95.4	0.141	-	1.040	1.048	-	
5775	155	802.11ac	OFDM	80	10.0	9.83	0.18	Right	Tilt	1	44923	29.3	95.4	0.133	-	1.040	1.048	-	
5775	155	802.11ac	OFDM	80	10.0	9.83	0.12	Left	Cheek	1	44923	29.3	95.4	0.772	0.309	1.040	1.048	0.337	
5775	155	802.11ac	OFDM	80	10.0	9.83	0.12	Left	Tilt	1	44923	29.3	95.4	0.309	-	1.040	1.048	-	
5775	155	802.11ac	OFDM	80	10.0	9.94	0.00	Right	Cheek	2	44923	29.3	95.5	0.021	-	1.014	1.047	-	
5775	155	802.11ac	OFDM	80	10.0	9.94	0.00	Right	Tilt	2	44923	29.3	95.5	0.019	-	1.014	1.047	-	
5775	155	802.11ac	OFDM	80	10.0	9.94	0.00	Left	Cheek	2	44923	29.3	95.5	0.066	-	1.014	1.047	-	
5775	155	802.11ac	OFDM	80	10.0	9.94	0.00	Left	Tilt	2	44923	29.3	95.5	0.072	0.020	1.014	1.047	0.021	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-29
NII MIMO Head SAR - Open

MEASUREMENT RESULTS																							
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Side	Test Position	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
5290	58	802.11ac	OFDM	80	10.0	9.95	10.0	9.83	0.11	Right	Cheek	MIMO	41929	58.5	99.7	0.166	-	1.040	1.003	-	
5290	58	802.11ac	OFDM	80	10.0	9.95	10.0	9.83	0.12	Right	Tilt	MIMO	41929	58.5	99.7	0.143	-	1.040	1.003	-	
5290	58	802.11ac	OFDM	80	10.0	9.95	10.0	9.83	0.11	Left	Cheek	MIMO	41929	58.5	99.7	1.079	0.398	1.040	1.003	0.415	A27
5290	58	802.11ac	OFDM	80	10.0	9.95	10.0	9.83	0.11	Left	Tilt	MIMO	41929	58.5	99.7	0.352	0.188	1.040	1.003	0.196	
5530	106	802.11ac	OFDM	80	10.0	9.94	10.0	9.90	0.12	Right	Cheek	MIMO	41929	58.5	99.7	0.251	-	1.023	1.003	-	
5530	106	802.11ac	OFDM	80	10.0	9.94	10.0	9.90	0.13	Right	Tilt	MIMO	41929	58.5	99.7	0.240	-	1.023	1.003	-	
5530	106	802.11ac	OFDM	80	10.0	9.94	10.0	9.90	0.12	Left	Cheek	MIMO	41929	58.5	99.7	0.944	0.345	1.023	1.003	0.354	
5530	106	802.11ac	OFDM	80	10.0	9.94	10.0	9.90	0.11	Left	Tilt	MIMO	41929	58.5	99.7	0.442	-	1.023	1.003	-	
5775	155	802.11ac	OFDM	80	10.0	9.83	10.0	9.94	0.17	Right	Cheek	MIMO	41929	58.5	99.7	0.119	-	1.040	1.003	-	
5775	155	802.11ac	OFDM	80	10.0	9.83	10.0	9.94	0.12	Right	Tilt	MIMO	41929	58.5	99.7	0.122	-	1.040	1.003	-	
5775	155	802.11ac	OFDM	80	10.0	9.83	10.0	9.94	0.20	Left	Cheek	MIMO	41929	58.5	99.7	0.689	0.288	1.040	1.003	0.300	
5775	155	802.11ac	OFDM	80	10.0	9.83	10.0	9.94	0.13	Left	Tilt	MIMO	41929	58.5	99.7	0.324	-	1.040	1.003	-	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 13.0 dBm maximum allowed MIMO power shown in the documentation for channels 58, 106, 155 each antenna transmits at a maximum allowed power of 10.0 dBm.

Table 11-30
DSS Head SAR - Open

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2441.00	39	Bluetooth	FHSS	13.5	13.19	-0.11	Right	Cheek	1	41929	1	76.8	0.123	1.074	1.302	0.172	
2441.00	39	Bluetooth	FHSS	13.5	13.19	0.12	Right	Tilt	1	41929	1	76.8	0.108	1.074	1.302	0.151	
2441.00	39	Bluetooth	FHSS	13.5	13.19	-0.03	Left	Cheek	1	41929	1	76.8	0.306	1.074	1.302	**0.428**	A28
2441.00	39	Bluetooth	FHSS	13.5	13.19	0.08	Left	Tilt	1	41929	1	76.8	0.204	1.074	1.302	0.285	
2441.00	39	Bluetooth	FHSS	13.5	12.11	-0.14	Right	Cheek	2	41929	1	76.8	0.051	1.377	1.302	0.091	
2441.00	39	Bluetooth	FHSS	13.5	12.11	0.11	Right	Tilt	2	41929	1	76.8	0.004	1.377	1.302	0.007	
2441.00	39	Bluetooth	FHSS	13.5	12.11	0.12	Left	Cheek	2	41929	1	76.8	0.042	1.377	1.302	0.075	
2441.00	39	Bluetooth	FHSS	13.5	12.11	0.12	Left	Tilt	2	41929	1	76.8	0.005	1.377	1.302	0.009	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram										

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11.2 Standalone Open Body-Worn SAR Data

Table 11-31
GSM/UMTS/CDMA Body-Worn SAR Data - Open

MEASUREMENT RESULTS																	
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna State	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	190	GSM 850	GSM	33.5	32.61	-0.01	15 mm	N/A	12532	1	1:8.3	back	0.182	1.227	0.223	
1880.00	661	GSM 1900	GSM	30.5	29.47	0.09	15 mm	N/A	12540	1	1:8.3	back	0.213	1.268	0.270	A31
836.60	4183	UMTS 850	RMC	25.8	24.64	0.05	15 mm	0	12532	N/A	1:1	back	0.256	1.306	0.334	
1712.40	1312	UMTS 1750	RMC	25.5	24.59	0.00	15 mm	26	17283	N/A	1:1	back	0.557	1.233	0.687	
1732.40	1412	UMTS 1750	RMC	25.5	25.00	-0.02	15 mm	26	17283	N/A	1:1	back	0.607	1.122	0.681	A35
1752.60	1513	UMTS 1750	RMC	25.5	24.63	0.02	15 mm	26	17283	N/A	1:1	back	0.604	1.222	0.738	
1852.40	9262	UMTS 1900	RMC	25.5	24.55	-0.06	15 mm	26	12540	N/A	1:1	back	0.694	1.245	0.864	A37
1880.00	9400	UMTS 1900	RMC	25.5	24.45	-0.04	15 mm	26	12540	N/A	1:1	back	0.604	1.274	0.769	
1907.60	9538	UMTS 1900	RMC	25.5	24.31	-0.07	15 mm	26	12540	N/A	1:1	back	0.526	1.315	0.692	
820.10	564	CDMA BC10 (§90S)	TDSO / SO32	25.8	24.96	-0.07	15 mm	15	12532	N/A	1:1	back	0.294	1.213	0.357	
836.52	384	CDMA BC0 (§22H)	TDSO / SO32	25.8	24.83	-0.03	15 mm	0	12532	N/A	1:1	back	0.289	1.250	0.361	
1880.00	600	PCS CDMA	TDSO / SO32	25.5	24.35	-0.01	15 mm	1	12540	N/A	1:1	back	0.424	1.303	0.552	A43
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram			

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Table 11-32
LTE Body-Worn SAR - Open

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	-0.01	0	0	12573	QPSK	1	0	15 mm	back	1:1	0.236	1.300	0.307	A45
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.01	1	0	12573	QPSK	50	0	15 mm	back	1:1	0.192	1.312	0.252	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	-0.04	0	1	12573	QPSK	1	0	15 mm	back	1:1	0.243	1.380	0.335	A47
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.07	1	1	12573	QPSK	25	25	15 mm	back	1:1	0.198	1.380	0.273	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	-0.12	0	0	12573	QPSK	1	0	15 mm	back	1:1	0.240	1.202	0.288	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.03	1	0	12573	QPSK	25	25	15 mm	back	1:1	0.195	1.202	0.234	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	0.01	0	0	12573	QPSK	1	0	15 mm	back	1:1	0.232	1.035	0.240	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	0.01	1	0	12573	QPSK	25	12	15 mm	back	1:1	0.170	1.057	0.180	
836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.06	0	0	12748	QPSK	1	49	15 mm	back	1:1	0.198	1.413	0.280	
836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.05	1	0	12748	QPSK	25	0	15 mm	back	1:1	0.158	1.462	0.231	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	-0.02	0	57	12565	QPSK	1	0	15 mm	back	1:1	0.270	1.153	0.311	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.00	1	57	12565	QPSK	36	0	15 mm	back	1:1	0.210	1.140	0.239	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	-0.09	0	1	12599	QPSK	1	0	15 mm	back	1:1	0.684	1.318	**0.902**	A59
1882.50	26365	Mid	LTE Band 25 (PCS)	20	25.5	24.25	-0.02	0	1	12599	QPSK	1	99	15 mm	back	1:1	0.541	1.334	0.722	
1905.00	26590	High	LTE Band 25 (PCS)	20	25.5	24.17	-0.13	0	1	12599	QPSK	1	99	15 mm	back	1:1	0.382	1.358	0.519	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	-0.05	1	1	12599	QPSK	50	0	15 mm	back	1:1	0.558	1.303	0.727	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.30	0.03	1	1	12599	QPSK	100	0	15 mm	back	1:1	0.558	1.318	0.735	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	-0.12	0	N/A	17796	QPSK	1	49	15 mm	back	1:1	0.367	1.146	0.421	A61
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	-0.02	1	N/A	17796	QPSK	25	12	15 mm	back	1:1	0.300	1.140	0.342	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	-0.02	0	N/A	18646	QPSK	1	0	15 mm	back	1:1	0.377	1.030	0.388	A63
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	0.00	1	N/A	18646	QPSK	50	0	15 mm	back	1:1	0.274	1.014	0.278	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 11-33
LTE Band 66 Body-Worn SAR - Open

MEASUREMENT RESULTS																							
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	25.5	24.72	0.00	0	26	17488	QPSK	1	99	15 mm	back	1:1	0.593	1.197	0.710	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	10	25.5	24.70	0.00	0	26	17488	QPSK	1	0	15 mm	back	1:1	0.630	1.202	0.757	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	24.75	-0.09	0	26	17488	QPSK	1	0	15 mm	back	1:1	0.629	1.189	0.748	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	0.02	0	26	17488	QPSK	1	50	15 mm	back	1:1	0.636	1.122	0.714	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	25.5	24.65	-0.08	0	26	17488	QPSK	1	0	15 mm	back	1:1	0.520	1.216	0.632	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	0.00	1	26	17488	QPSK	50	25	15 mm	back	1:1	0.539	1.069	0.576	
2 CC Uplink CA_66B	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	10	25.5	25.35	0.02	0	26	17488	QPSK	1	0	15 mm	back	1:1	0.715	1.035	0.740	
	SCC	1735.10	132223	Mid	LTE Band 66 (AWS)										49	15 mm						
2 CC Uplink CA_66C	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.50	0.02	0	26	17488	QPSK	1	0	15 mm	back	1:1	0.776	1.000	0.776	A57
	SCC	1725.20	132124	Mid	LTE Band 66 (AWS)										99	15 mm						

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

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Table 11-34
LTE Band 48 Body-Worn SAR - Open

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY MHz	FREQUENCY Ch.		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	24.3	22.90	0.14	0	17762	QPSK	1	0	15 mm	back	1:1.58	0.142	1.380	0.196	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.02	0	17762	QPSK	1	50	15 mm	back	1:1.58	0.150	1.245	0.187	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	0.02	1	17762	QPSK	50	25	15 mm	back	1:1.58	0.120	1.227	0.147	
2 CC Uplink	PCC	3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.14	0.07	0	17762	QPSK	1	0	15 mm	back	1:1.58	0.153	1.306	**0.200**	A65
	SCC	3626.90	56009	Mid-High	LTE Band 48								1	99							
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-35
LTE Band 41 Body-Worn SAR - Open

MEASUREMENT RESULTS																					
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY MHz	FREQUENCY Ch.		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.01	0.00	0	12664	QPSK	1	0	15 mm	back	1:1.58	0.241	1.510	0.364	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.48	-0.02	0	12664	QPSK	1	50	15 mm	back	1:1.58	0.261	1.355	0.354	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.8	23.60	0.02	1	12664	QPSK	50	25	15 mm	back	1:1.58	0.211	1.318	0.278	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	27.0	25.44	0.00	0	12664	QPSK	1	0	15 mm	back	1:2.31	0.218	1.432	0.312	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	27.0	25.90	0.00	0	12664	QPSK	1	50	15 mm	back	1:2.31	0.233	1.288	0.300	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	25.8	24.90	-0.15	0	12664	QPSK	1	0	15 mm	back	1:1.58	0.280	1.230	0.344	A67
2 CC Uplink - Power Class 3	SCC	2660.20	41292	High	LTE Band 41	20							1	99							
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	27.0	25.85	-0.14	0	12664	QPSK	1	0	15 mm	back	1:2.31	0.235	1.303	0.306	
2 CC Uplink - Power Class 2	SCC	2660.20	41292	High	LTE Band 41	20							1	99							
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-36
NR Body-Worn SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY MHz	FREQUENCY Ch.		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.14	0	12698	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.168	1.236	0.208	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	-0.05	0	12698	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.196	1.256	0.246	A69
680.50	136100	Mid	NR Band n71	20	24.0	22.98	0.16	1.5	12698	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.126	1.265	0.159	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.14	0	12698	DFT-S-OFDM QPSK	1	1	15 mm	back	1:1	0.175	1.189	0.208	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	-0.01	0	12698	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.172	1.239	0.213	
836.50	167300	Mid	NR Band n5 (Cell)	20	24.0	22.85	0.05	1.5	12698	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.136	1.303	0.177	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	0.15	0	17291	DFT-S-OFDM QPSK	1	1	15 mm	back	1:1	0.568	1.279	0.726	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.8	23.51	-0.03	0	17291	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.486	1.346	0.654	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	-0.10	0	17291	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.576	1.294	0.745	A73
1745.00	349000	Mid	NR Band n66 (AWS)	20	23.3	22.14	-0.01	1.5	17291	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.363	1.306	0.474	
1770.00	354000	High	NR Band n66 (AWS)	20	24.8	23.58	0.02	0	17291	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.469	1.324	0.621	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	-0.03	0	12706	DFT-S-OFDM QPSK	1	104	15 mm	back	1:1	0.351	1.208	0.424	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	-0.01	0	12706	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.411	1.282	0.527	A75
1882.50	376500	Mid	NR Band n25 (PCS)	20	23.3	22.42	-0.04	1.5	12706	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.295	1.225	0.361	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	0.03	0	17705	DFT-S-OFDM QPSK	1	137	15 mm	back	1:4	0.073	1.119	0.082	
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	0.10	0	17705	DFT-S-OFDM QPSK	135	69	15 mm	back	1:4	0.071	1.216	0.086	
2592.99	518598	Mid	NR Band n41	100	23.8	22.88	0.06	1.5	17705	CP-OFDM QPSK	1	1	15 mm	back	1:4	0.099	1.236	0.122	A77
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram					

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Table 11-37
DTS Body-Worn SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
2412	1	802.11b	DSSS	22	19.0	18.68	0.03	15 mm	1	41929	1	back	99.9	0.185	0.129	1.076	1.001	0.139	
2412	1	802.11b	DSSS	22	18.0	17.99	0.11	15 mm	2	44923	1	back	99.9	0.249	0.147	1.002	1.001	**0.147**	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-38
WLAN Antenna 2 SISO Body-Worn SAR for Conditions with 2.4 GHz and 5 GHz WLAN SAR - Open

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
2412	1	802.11b	DSSS	22	16.0	15.74	-0.13	15 mm	2	44923	1	back	99.9	0.138	0.090	1.062	1.001	0.096	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-39
DTS MIMO Body-Worn SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																				
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	-0.03	15 mm	MIMO	44923	13	back	99.7	0.310	0.201	1.079	1.003	0.218	A79
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 21 dBm maximum allowed MIMO power shown in the documentation for channel 10 each antenna transmits at a maximum allowed power of 18.0 dBm.

Table 11-40
NII SISO Body-Worn SAR - Open

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
5320	64	802.11a	OFDM	20	17.0	16.94	0.14	15 mm	1	0009H	6	back	98.9	0.203	0.086	1.014	1.011	0.088	
5260	52	802.11a	OFDM	20	17.0	16.95	0.11	15 mm	2	0009H	6	back	98.9	0.131	0.059	1.012	1.011	0.060	
5620	124	802.11a	OFDM	20	17.0	16.98	0.12	15 mm	1	0009H	6	back	98.9	0.412	0.183	1.005	1.011	**0.186**	
5500	100	802.11a	OFDM	20	17.0	16.87	0.12	15 mm	2	0009H	6	back	98.9	0.086	0.040	1.030	1.011	0.042	
5785	157	802.11a	OFDM	20	17.0	16.75	0.03	15 mm	1	0009H	6	back	98.9	0.422	0.180	1.059	1.011	**0.193**	
5825	165	802.11a	OFDM	20	17.0	16.85	-0.14	15 mm	2	0009H	6	back	98.9	0.392	0.173	1.035	1.011	0.181	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-41
NII MIMO Body-Worn SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																				
5260	52	802.11n	OFDM	20	17.0	16.95	17.0	16.85	-0.07	15 mm	MIMO	0009H	13	back	99.7	0.238	0.099	1.035	1.003	0.103	
5620	124	802.11n	OFDM	20	17.0	16.81	17.0	16.78	-0.05	15 mm	MIMO	0009H	13	back	99.7	0.476	0.208	1.052	1.003	0.219	A81
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	0.08	15 mm	MIMO	0009H	13	back	99.7	0.459	0.202	1.019	1.003	0.206	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 20.0 dBm maximum allowed MIMO power shown in the documentation for channels 52, 124, 149 each antenna transmits at a maximum allowed power of 17.0 dBm.

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Table 11-42
DSS Body-Worn SAR - Open

MEASUREMENT RESULTS																	
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g) (W/kg)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																
2441	39	Bluetooth	FHSS	15.0	14.94	0.15	15 mm	Ant 1	44923	1	back	76.8	0.047	1.014	1.302	**0.062**	A83
2441	39	Bluetooth	FHSS	15.0	14.78	0.13	15 mm	Ant 2	44923	1	back	76.8	0.043	1.052	1.302	**0.059**	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**							**Body** **1.6 W/kg (mW/g)** averaged over 1 gram										

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11.3 Standalone Open Hotspot SAR Data

Table 11-43
GPRS/UMTS/CDMA Hotspot SAR Data – Open

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna State	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	190	GSM 850	GPRS	30.5	29.51	-0.12	10 mm	N/A	12532	3	1:2.76	back	0.410	1.256	0.515	
836.60	190	GSM 850	GPRS	30.5	29.51	-0.06	10 mm	N/A	12532	3	1:2.76	front	0.328	1.256	0.412	
836.60	190	GSM 850	GPRS	30.5	29.51	-0.10	10 mm	N/A	12532	3	1:2.76	bottom	0.315	1.256	0.396	
836.60	190	GSM 850	GPRS	30.5	29.51	-0.07	10 mm	N/A	12532	3	1:2.76	right	0.371	1.256	0.466	
836.60	190	GSM 850	GPRS	30.5	29.51	-0.02	10 mm	N/A	12532	3	1:2.76	left	0.096	1.256	0.121	
1880.00	661	GSM 1900	GPRS	24.0	23.56	-0.12	10 mm	N/A	12540	3	1:2.76	back	0.338	1.107	0.374	
1880.00	661	GSM 1900	GPRS	24.0	23.56	-0.09	10 mm	N/A	12540	3	1:2.76	front	0.257	1.107	0.284	
1850.20	512	GSM 1900	GPRS	24.0	23.13	-0.19	10 mm	N/A	12540	3	1:2.76	bottom	0.651	1.222	0.796	
1880.00	661	GSM 1900	GPRS	24.0	23.56	-0.20	10 mm	N/A	12540	3	1:2.76	bottom	0.882	1.107	0.976	A32
1909.80	810	GSM 1900	GPRS	24.0	23.02	-0.19	10 mm	N/A	12540	3	1:2.76	bottom	0.860	1.253	1.078	
1880.00	661	GSM 1900	GPRS	24.0	23.56	0.13	10 mm	N/A	12540	3	1:2.76	right	0.033	1.107	0.037	
1880.00	661	GSM 1900	GPRS	24.0	23.56	-0.14	10 mm	N/A	12540	3	1:2.76	left	0.103	1.107	0.114	
826.40	4132	UMTS 850	RMC	25.8	24.57	-0.01	10 mm	0	12532	N/A	1:1	back	0.481	1.327	0.638	
836.60	4183	UMTS 850	RMC	25.8	24.64	-0.01	10 mm	0	12532	N/A	1:1	back	0.482	1.306	0.629	
846.60	4233	UMTS 850	RMC	25.8	24.67	0.01	10 mm	0	12532	N/A	1:1	back	0.544	1.297	0.706	
836.60	4183	UMTS 850	RMC	25.8	24.64	0.01	10 mm	0	12532	N/A	1:1	front	0.366	1.306	0.478	
836.60	4183	UMTS 850	RMC	25.8	24.64	0.01	10 mm	0	12532	N/A	1:1	bottom	0.285	1.306	0.372	
836.60	4183	UMTS 850	RMC	25.8	24.64	-0.01	10 mm	0	12532	N/A	1:1	right	0.396	1.306	0.517	
836.60	4183	UMTS 850	RMC	25.8	24.64	0.07	10 mm	0	12532	N/A	1:1	left	0.114	1.306	0.149	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	0.00	10 mm	26	17283	N/A	1:1	back	0.401	1.122	0.450	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	0.00	10 mm	26	17283	N/A	1:1	front	0.296	1.122	0.332	
1712.40	1312	UMTS 1750	RMC	20.0	19.63	-0.02	10 mm	26	17283	N/A	1:1	bottom	0.633	1.089	0.689	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	-0.02	10 mm	26	17283	N/A	1:1	bottom	0.701	1.122	0.787	
1752.60	1513	UMTS 1750	RMC	20.0	19.62	-0.02	10 mm	26	17283	N/A	1:1	bottom	0.728	1.091	0.794	A36
1732.40	1412	UMTS 1750	RMC	20.0	19.50	-0.04	10 mm	26	17283	N/A	1:1	right	0.053	1.122	0.059	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	-0.02	10 mm	26	17283	N/A	1:1	left	0.065	1.122	0.073	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.03	10 mm	26	12540	N/A	1:1	back	0.342	1.089	0.372	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.05	10 mm	26	12540	N/A	1:1	front	0.292	1.089	0.318	
1852.40	9262	UMTS 1900	RMC	19.5	19.03	-0.07	10 mm	26	12540	N/A	1:1	bottom	0.841	1.114	0.937	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.05	10 mm	26	12540	N/A	1:1	bottom	0.980	1.089	1.067	
1907.60	9538	UMTS 1900	RMC	19.5	19.07	-0.05	10 mm	26	12540	N/A	1:1	bottom	0.991	1.104	1.094	A38
1880.00	9400	UMTS 1900	RMC	19.5	19.13	0.12	10 mm	26	12540	N/A	1:1	right	0.043	1.089	0.047	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.03	10 mm	26	12540	N/A	1:1	left	0.109	1.089	0.119	
1907.60	9538	UMTS 1900	RMC	19.5	19.07	0.00	10 mm	26	12540	N/A	1:1	bottom	0.974	1.104	1.075	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	-0.08	10 mm	15	12532	N/A	1:1	back	0.469	1.247	0.585	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	-0.02	10 mm	15	12532	N/A	1:1	front	0.344	1.247	0.429	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	0.01	10 mm	15	12532	N/A	1:1	bottom	0.290	1.247	0.362	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	-0.08	10 mm	15	12532	N/A	1:1	right	0.424	1.247	0.529	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	0.14	10 mm	15	12532	N/A	1:1	left	0.140	1.247	0.175	
824.70	1013	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.72	0.03	10 mm	0	12532	N/A	1:1	back	0.414	1.282	0.531	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	-0.14	10 mm	0	12532	N/A	1:1	back	0.519	1.315	0.682	
848.31	777	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.50	-0.08	10 mm	0	12532	N/A	1:1	back	0.535	1.349	0.722	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	-0.04	10 mm	0	12532	N/A	1:1	front	0.376	1.315	0.494	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	-0.03	10 mm	0	12532	N/A	1:1	bottom	0.363	1.315	0.477	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	-0.06	10 mm	0	12532	N/A	1:1	right	0.432	1.315	0.568	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	-0.11	10 mm	0	12532	N/A	1:1	left	0.143	1.315	0.188	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	-0.08	10 mm	1	12540	N/A	1:1	back	0.315	1.086	0.342	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	-0.03	10 mm	1	12540	N/A	1:1	front	0.241	1.086	0.262	
1851.25	25	PCS CDMA	EVDO Rev. 0	19.5	18.81	0.00	10 mm	1	12540	N/A	1:1	bottom	0.619	1.172	0.725	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	-0.06	10 mm	1	12540	N/A	1:1	bottom	0.657	1.086	0.714	
1908.75	1175	PCS CDMA	EVDO Rev. 0	19.5	19.02	-0.06	10 mm	1	12540	N/A	1:1	bottom	0.676	1.117	0.755	A44
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	0.13	10 mm	1	12540	N/A	1:1	right	0.027	1.086	0.029	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	-0.12	10 mm	1	12540	N/A	1:1	left	0.064	1.086	0.070	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram									

Note: Blue Entry represents variability measurement

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Table 11-44
LTE Band 71 Hotspot SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	-0.07	0	0	12573	QPSK	1	0	10 mm	back	1:1	0.329	1.300	0.428	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.04	1	0	12573	QPSK	50	0	10 mm	back	1:1	0.278	1.312	0.365	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.00	0	0	12573	QPSK	1	0	10 mm	front	1:1	0.283	1.300	0.368	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.03	1	0	12573	QPSK	50	0	10 mm	front	1:1	0.233	1.312	0.306	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	-0.11	0	0	12573	QPSK	1	0	10 mm	bottom	1:1	0.168	1.300	0.218	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.04	1	0	12573	QPSK	50	0	10 mm	bottom	1:1	0.144	1.312	0.189	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.12	0	0	12573	QPSK	1	0	10 mm	right	1:1	0.305	1.300	0.397	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.02	1	0	12573	QPSK	50	0	10 mm	right	1:1	0.280	1.312	0.367	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.13	0	0	12573	QPSK	1	0	10 mm	left	1:1	0.137	1.300	0.178	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	0.09	1	0	12573	QPSK	50	0	10 mm	left	1:1	0.110	1.312	0.144	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 11-45
LTE Band 12 Hotspot SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	-0.21	0	1	12573	QPSK	1	0	10 mm	back	1:1	0.379	1.380	0.523	A48
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.01	1	1	12573	QPSK	25	25	10 mm	back	1:1	0.287	1.380	0.396	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	-0.04	0	1	12573	QPSK	1	0	10 mm	front	1:1	0.309	1.380	0.426	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	-0.02	1	1	12573	QPSK	25	25	10 mm	front	1:1	0.244	1.380	0.337	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	-0.08	0	1	12573	QPSK	1	0	10 mm	bottom	1:1	0.228	1.380	0.315	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	-0.04	1	1	12573	QPSK	25	25	10 mm	bottom	1:1	0.179	1.380	0.247	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	0.12	0	1	12573	QPSK	1	0	10 mm	right	1:1	0.361	1.380	0.498	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.02	1	1	12573	QPSK	25	25	10 mm	right	1:1	0.322	1.380	0.444	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	-0.11	0	1	12573	QPSK	1	0	10 mm	left	1:1	0.105	1.380	0.145	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.11	1	1	12573	QPSK	25	25	10 mm	left	1:1	0.104	1.380	0.144	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram												

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Table 11-46
LTE Band 13 Hotspot SAR – Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	-0.16	0	0	12573	QPSK	1	0	10 mm	back	1:1	0.400	1.202	0.481	A50
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.01	1	0	12573	QPSK	25	25	10 mm	back	1:1	0.328	1.202	0.394	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	-0.12	0	0	12573	QPSK	1	0	10 mm	front	1:1	0.285	1.202	0.343	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.01	1	0	12573	QPSK	25	25	10 mm	front	1:1	0.264	1.202	0.317	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	-0.15	0	0	12573	QPSK	1	0	10 mm	bottom	1:1	0.248	1.202	0.298	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	-0.14	1	0	12573	QPSK	25	25	10 mm	bottom	1:1	0.227	1.202	0.273	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	0.00	0	0	12573	QPSK	1	0	10 mm	right	1:1	0.365	1.202	0.439	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	-0.02	1	0	12573	QPSK	25	25	10 mm	right	1:1	0.286	1.202	0.344	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	0.01	0	0	12573	QPSK	1	0	10 mm	left	1:1	0.119	1.202	0.143	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.01	1	0	12573	QPSK	25	25	10 mm	left	1:1	0.088	1.202	0.106	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-47
LTE Band 14 Hotspot SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	-0.05	0	0	12573	QPSK	1	0	10 mm	back	1:1	0.402	1.035	0.416	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.02	1	0	12573	QPSK	25	12	10 mm	back	1:1	0.306	1.057	0.323	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	0.06	0	0	12573	QPSK	1	0	10 mm	front	1:1	0.306	1.035	0.317	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	0.00	1	0	12573	QPSK	25	12	10 mm	front	1:1	0.234	1.057	0.247	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	-0.09	0	0	12573	QPSK	1	0	10 mm	bottom	1:1	0.265	1.035	0.274	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.01	1	0	12573	QPSK	25	12	10 mm	bottom	1:1	0.212	1.057	0.224	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	-0.04	0	0	12573	QPSK	1	0	10 mm	right	1:1	0.356	1.035	0.368	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.01	1	0	12573	QPSK	25	12	10 mm	right	1:1	0.266	1.057	0.281	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	0.13	0	0	12573	QPSK	1	0	10 mm	left	1:1	0.105	1.035	0.109	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.08	1	0	12573	QPSK	25	12	10 mm	left	1:1	0.073	1.057	0.077	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

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Table 11-48
LTE Band 5 (Cell) Hotspot SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.07	0	0	12748	QPSK	1	49	10 mm	back	1:1	0.354	1.413	0.500	
836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	-0.11	1	0	12748	QPSK	25	0	10 mm	back	1:1	0.287	1.462	0.420	
836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	0.01	0	0	12748	QPSK	1	49	10 mm	front	1:1	0.286	1.413	0.404	
836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	-0.02	1	0	12748	QPSK	25	0	10 mm	front	1:1	0.218	1.462	0.319	
836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.08	0	0	12748	QPSK	1	49	10 mm	bottom	1:1	0.239	1.413	0.338	
836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	-0.03	1	0	12748	QPSK	25	0	10 mm	bottom	1:1	0.179	1.462	0.262	
836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	0.05	0	0	12748	QPSK	1	49	10 mm	right	1:1	0.292	1.413	0.413	
836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.02	1	0	12748	QPSK	25	0	10 mm	right	1:1	0.230	1.462	0.336	
836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.07	0	0	12748	QPSK	1	49	10 mm	left	1:1	0.082	1.413	0.116	
836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.03	1	0	12748	QPSK	25	0	10 mm	left	1:1	0.071	1.462	0.104	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-49
LTE Band 26 (Cell) Hotspot SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	-0.04	0	57	12565	QPSK	1	0	10 mm	back	1:1	0.486	1.153	0.560	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.00	1	57	12565	QPSK	36	0	10 mm	back	1:1	0.399	1.140	0.455	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	-0.03	0	57	12565	QPSK	1	0	10 mm	front	1:1	0.302	1.153	0.348	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	-0.06	1	57	12565	QPSK	36	0	10 mm	front	1:1	0.256	1.140	0.292	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	0.01	0	57	12565	QPSK	1	0	10 mm	bottom	1:1	0.292	1.153	0.337	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.02	1	57	12565	QPSK	36	0	10 mm	bottom	1:1	0.234	1.140	0.267	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	0.04	0	57	12565	QPSK	1	0	10 mm	right	1:1	0.398	1.153	0.459	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.03	1	57	12565	QPSK	36	0	10 mm	right	1:1	0.320	1.140	0.365	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	-0.13	0	57	12565	QPSK	1	0	10 mm	left	1:1	0.138	1.153	0.159	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	-0.05	1	57	12565	QPSK	36	0	10 mm	left	1:1	0.105	1.140	0.120	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

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Table 11-50
LTE Band 66 (AWS) Hotspot SAR - Open

MEASUREMENT RESULTS																							
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.00	0	26	17488	QPSK	1	50	10 mm	back	1:1	0.429	1.094	0.469	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	0.01	0	26	17488	QPSK	50	25	10 mm	back	1:1	0.444	1.076	0.478	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	-0.04	0	26	17488	QPSK	1	50	10 mm	front	1:1	0.291	1.094	0.318	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	-0.06	0	26	17488	QPSK	50	25	10 mm	front	1:1	0.300	1.076	0.323	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.03	0	26	17488	QPSK	1	50	10 mm	bottom	1:1	0.700	1.094	0.766	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.0	19.33	-0.01	0	26	17488	QPSK	50	25	10 mm	bottom	1:1	0.684	1.167	0.798	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	0.00	0	26	17488	QPSK	50	25	10 mm	bottom	1:1	0.726	1.076	0.781	
1 CC Uplink	N/A	1775.00	132622	High	LTE Band 66 (AWS)	10	20.0	19.41	0.18	0	26	17488	QPSK	25	0	10 mm	bottom	1:1	0.686	1.146	0.786	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	19.38	0.17	0	26	17488	QPSK	50	0	10 mm	bottom	1:1	0.699	1.153	0.806	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	19.40	0.02	0	26	17488	QPSK	50	25	10 mm	bottom	1:1	0.722	1.148	0.829	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.59	0.13	0	26	17488	QPSK	100	0	10 mm	bottom	1:1	0.696	1.099	0.765	
2 CC Uplink CA_66B	PCC	1775.00	132622	High	LTE Band 66 (AWS)	10	20.0	19.80	0.18	0	26	17488	QPSK	25	0	10 mm	bottom	1:1	0.744	1.047	0.779	
	SCC	1765.10	132523	High	LTE Band 66 (AWS)	10								25	25							
2 CC Uplink CA_66C	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	20.00	0.17	0	26	17488	QPSK	50	0	10 mm	bottom	1:1	0.812	1.000	0.812	A58
	SCC	1750.20	132374	High	LTE Band 66 (AWS)	20								50	50							
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.04	0	26	17488	QPSK	1	50	10 mm	right	1:1	0.054	1.094	0.059	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	0.06	0	26	17488	QPSK	50	25	10 mm	right	1:1	0.054	1.076	0.058	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.00	0	26	17488	QPSK	1	50	10 mm	left	1:1	0.042	1.094	0.046	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	-0.02	0	26	17488	QPSK	50	25	10 mm	left	1:1	0.042	1.076	0.045	
2 CC Uplink CA_66C	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	20.00	0.00	0	26	17488	QPSK	50	0	10 mm	bottom	1:1	0.812	1.000	0.812	
	SCC	1750.20	132374	High	LTE Band 66 (AWS)	20								50	50							
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram												

Note: Blue Entry represents variability measurement

Table 11-51
LTE Band 25 (PCS) Hotspot SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.10	0	1	12599	QPSK	1	50	10 mm	back	1:1	0.290	1.208	0.350	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.03	0	1	12599	QPSK	50	50	10 mm	back	1:1	0.293	1.189	0.348	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.08	0	1	12599	QPSK	1	50	10 mm	front	1:1	0.249	1.208	0.301	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.06	0	1	12599	QPSK	50	50	10 mm	front	1:1	0.246	1.189	0.292	
1860.00	26140	Low	LTE Band 25 (PCS)	20	18.5	17.61	-0.03	0	1	12599	QPSK	1	50	10 mm	bottom	1:1	0.696	1.227	0.854	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	18.5	17.56	0.01	0	1	12599	QPSK	1	99	10 mm	bottom	1:1	0.783	1.242	0.972	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.06	0	1	12599	QPSK	1	50	10 mm	bottom	1:1	0.856	1.208	1.034	
1860.00	26140	Low	LTE Band 25 (PCS)	20	18.5	17.73	-0.01	0	1	12599	QPSK	50	0	10 mm	bottom	1:1	0.723	1.194	0.863	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	18.5	17.71	-0.08	0	1	12599	QPSK	50	50	10 mm	bottom	1:1	0.818	1.199	0.981	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.02	0	1	12599	QPSK	50	50	10 mm	bottom	1:1	0.866	1.189	1.030	A60
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.67	-0.05	0	1	12599	QPSK	100	0	10 mm	bottom	1:1	0.836	1.211	1.012	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	0.13	0	1	12599	QPSK	1	50	10 mm	right	1:1	0.028	1.208	0.034	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	0.12	0	1	12599	QPSK	50	50	10 mm	right	1:1	0.027	1.189	0.032	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.11	0	1	12599	QPSK	1	50	10 mm	left	1:1	0.055	1.208	0.066	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.01	0	1	12599	QPSK	50	50	10 mm	left	1:1	0.063	1.189	0.075	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram										

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Table 11-52
LTE Band 30 Hotspot SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	-0.08	0	17796	QPSK	1	0	10 mm	back	1:1	0.420	1.265	0.531	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	0.00	0	17796	QPSK	25	12	10 mm	back	1:1	0.417	1.288	0.537	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	-0.01	0	17796	QPSK	1	0	10 mm	front	1:1	0.324	1.265	0.410	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	0.00	0	17796	QPSK	25	12	10 mm	front	1:1	0.323	1.288	0.416	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	-0.03	0	17796	QPSK	1	0	10 mm	bottom	1:1	1.030	1.265	1.303	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	-0.04	0	17796	QPSK	25	12	10 mm	bottom	1:1	1.040	1.288	1.340	A62
2310.00	27710	Mid	LTE Band 30	10	21.0	19.79	-0.07	0	17796	QPSK	50	0	10 mm	bottom	1:1	1.020	1.321	**1.347**	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	0.03	0	17796	QPSK	1	0	10 mm	right	1:1	0.064	1.265	0.081	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	-0.20	0	17796	QPSK	25	12	10 mm	right	1:1	0.065	1.288	0.084	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	0.18	0	17796	QPSK	1	0	10 mm	left	1:1	0.037	1.265	0.047	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	0.03	0	17796	QPSK	25	12	10 mm	left	1:1	0.036	1.288	0.046	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	-0.04	0	17796	QPSK	25	12	10 mm	bottom	1:1	1.030	1.288	1.327	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

Note: Blue Entry represents variability measurement

Table 11-53
LTE Band 7 Hotspot SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	-0.03	0	18646	QPSK	1	0	10 mm	back	1:1	0.200	1.365	0.273	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	0.01	0	18646	QPSK	50	0	10 mm	back	1:1	0.208	1.318	0.274	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	-0.02	0	18646	QPSK	1	0	10 mm	front	1:1	0.209	1.365	0.285	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	0.02	0	18646	QPSK	50	0	10 mm	front	1:1	0.211	1.318	0.278	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	-0.10	0	18646	QPSK	1	0	10 mm	bottom	1:1	0.474	1.365	0.647	
2535.00	21100	Mid	LTE Band 7	20	19.5	17.92	0.12	0	18646	QPSK	1	0	10 mm	bottom	1:1	0.460	1.439	0.662	
2560.00	21350	High	LTE Band 7	20	19.5	17.60	0.17	0	18646	QPSK	1	0	10 mm	bottom	1:1	0.429	1.549	0.665	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	0.02	0	18646	QPSK	50	0	10 mm	bottom	1:1	0.476	1.318	0.627	A64
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	0.02	0	18646	QPSK	1	0	10 mm	left	1:1	0.059	1.365	0.081	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	0.15	0	18646	QPSK	50	0	10 mm	left	1:1	0.065	1.318	0.086	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

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Table 11-54
LTE Band 48 Hotspot SAR - Open

MEASUREMENT RESULTS																								
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																		
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.21	0	17747	QPSK	1	50	10 mm	back	1:1.58	0.246	1.245	0.306	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	0.02	1	17747	QPSK	50	25	10 mm	back	1:1.58	0.203	1.227	0.249	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.08	0	17747	QPSK	1	50	10 mm	front	1:1.58	0.314	1.245	0.391	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	0.02	1	17747	QPSK	50	25	10 mm	front	1:1.58	0.256	1.227	0.314	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.02	0	17747	QPSK	1	50	10 mm	top	1:1.58	0.118	1.245	0.147	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	0.20	1	17747	QPSK	50	25	10 mm	top	1:1.58	0.093	1.227	0.114	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	24.3	22.90	0.04	0	17762	QPSK	1	0	10 mm	left	1:1.58	0.328	1.380	0.453	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.01	0	17762	QPSK	1	50	10 mm	left	1:1.58	0.355	1.245	0.442	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	0.08	1	17762	QPSK	50	25	10 mm	left	1:1.58	0.294	1.227	0.361	
2CC Uplink	PCC	3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.14	0.13	0	17762	QPSK	1	0	10 mm	left	1:1.58	0.355	1.306	**0.464**	A66
	SCC	3626.90	56009	High	LTE Band 48	20							1	99							
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-55
LTE Band 41 Hotspot SAR - Open

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																		
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.56	-0.01	0	12664	QPSK	1	99	10 mm	back	1:1.58	0.195	1.107	0.216	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.73	0.00	0	12664	QPSK	50	50	10 mm	back	1:1.58	0.201	1.064	0.214	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.56	0.03	0	12664	QPSK	1	99	10 mm	front	1:1.58	0.194	1.107	0.215	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.73	0.04	0	12664	QPSK	50	50	10 mm	front	1:1.58	0.200	1.064	0.213	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.56	-0.03	0	12664	QPSK	1	99	10 mm	bottom	1:1.58	0.512	1.107	0.567	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.45	-0.01	0	12664	QPSK	50	0	10 mm	bottom	1:1.58	0.527	1.135	0.598	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.73	0.02	0	12664	QPSK	50	50	10 mm	bottom	1:1.58	0.540	1.064	0.575	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	23.0	22.00	0.13	0	12664	QPSK	50	0	10 mm	bottom	1:2.31	0.473	1.259	0.596	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	23.0	22.27	0.12	0	12664	QPSK	50	50	10 mm	bottom	1:2.31	0.485	1.183	0.574	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	21.0	21.00	-0.14	0	12664	QPSK	50	0	10 mm	bottom	1:1.58	0.626	1.000	0.626	A68
	SCC	2660.20	41292	High	LTE Band 41									50							
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	23.0	22.75	0.10	0	12664	QPSK	50	0	10 mm	bottom	1:2.31	0.582	1.059	0.616	
	SCC	2660.20	41292	High	LTE Band 41									50							
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.56	0.14	0	12664	QPSK	1	99	10 mm	left	1:1.58	0.069	1.107	0.076	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.73	0.20	0	12664	QPSK	50	50	10 mm	left	1:1.58	0.070	1.064	0.074	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-56
NR Band n71 Hotspot SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.11	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.220	1.236	0.272	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	-0.04	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.220	1.256	0.276	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.07	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.221	1.236	0.273	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	-0.01	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.227	1.256	0.285	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.04	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.156	1.236	0.193	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	0.03	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.153	1.256	0.192	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.03	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.304	1.236	0.376	A70
680.50	136100	Mid	NR Band n71	20	25.5	24.51	0.00	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.292	1.256	0.367	
680.50	136100	Mid	NR Band n71	20	24.0	22.98	0.06	1.5	12698	CP-OFDM QPSK	1	1	10 mm	right	1:1	0.173	1.265	0.219	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	0.00	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.117	1.236	0.145	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	-0.11	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.108	1.256	0.136	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram				

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Table 11-57
NR Band n5 Hotspot SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.03	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	back	1:1	0.268	1.189	0.319	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	0.03	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.278	1.239	0.344	
836.50	167300	Mid	NR Band n5 (Cell)	20	24.0	22.85	0.05	1.5	12698	CP-OFDM QPSK	1	1	10 mm	back	1:1	0.200	1.303	0.261	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.06	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	front	1:1	0.242	1.189	0.288	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	0.03	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.243	1.239	0.301	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.01	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.191	1.189	0.227	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	-0.07	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.195	1.239	0.242	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.06	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	right	1:1	0.285	1.189	0.339	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	0.02	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.273	1.239	0.338	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.09	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	left	1:1	0.100	1.189	0.119	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	-0.19	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.094	1.239	0.116	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-58
NR Band n66 Hotspot SAR - Open

MEASUREMENT RESULTS																			
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.00	0	17291	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.408	1.072	0.437	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	0.16	0	17291	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.397	1.096	0.435	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.17	0	17291	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.341	1.072	0.366	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	0.05	0	17291	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.331	1.096	0.363	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.17	0	17291	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.669	1.072	0.717	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.0	19.50	0.13	0	17291	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.744	1.122	0.835	
1770.00	354000	High	NR Band n66 (AWS)	20	20.0	19.60	0.13	0	17291	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.788	1.096	0.864	A74
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	0.13	0	17291	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.663	1.096	0.727	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.85	-0.07	0	17291	CP-OFDM QPSK	1	1	10 mm	bottom	1:1	0.640	1.035	0.662	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.0	19.50	-0.06	0	17291	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.712	1.122	0.799	
1770.00	354000	High	NR Band n66 (AWS)	20	20.0	19.50	-0.05	0	17291	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.753	1.122	0.845	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.65	0.02	0	17291	DFT-S-OFDM QPSK	100	0	10 mm	bottom	1:1	0.648	1.084	0.702	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	-0.14	0	17291	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.061	1.072	0.065	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	-0.04	0	17291	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.060	1.096	0.066	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	-0.05	0	17291	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.062	1.072	0.066	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	-0.03	0	17291	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.063	1.096	0.069	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-59
NR Band n25 Hotspot SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	0.02	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.271	1.079	0.292	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	-0.02	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	back	1:1	0.230	1.127	0.259	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	-0.10	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.230	1.079	0.248	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	-0.03	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	front	1:1	0.222	1.127	0.250	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	-0.07	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.607	1.079	0.655	A76
1860.00	372000	Low	NR Band n25 (PCS)	20	18.5	17.65	-0.06	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.505	1.216	0.614	
1882.50	376500	Mid	NR Band n25 (PCS)	20	18.5	17.91	0.00	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.548	1.146	0.628	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	-0.08	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.590	1.127	0.665	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.21	-0.04	0	12706	CP-OFDM QPSK	1	1	10 mm	bottom	1:1	0.597	1.069	0.638	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	0.14	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.025	1.079	0.027	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	0.09	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	right	1:1	0.023	1.127	0.026	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	0.01	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.089	1.079	0.096	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	-0.06	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	left	1:1	0.089	1.127	0.100	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-60
NR Band n41 Hotspot SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	0.03	0	17705	DFT-S-OFDM QPSK	1	137	10 mm	back	1:4	0.124	1.119	0.139	
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	0.18	0	17705	DFT-S-OFDM QPSK	135	69	10 mm	back	1:4	0.124	1.216	0.151	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	0.16	0	17705	DFT-S-OFDM QPSK	1	137	10 mm	front	1:4	0.140	1.119	0.157	
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	0.07	0	17705	DFT-S-OFDM QPSK	135	69	10 mm	front	1:4	0.138	1.216	0.168	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	0.03	0	17705	DFT-S-OFDM QPSK	1	137	10 mm	top	1:4	0.141	1.119	0.158	
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	-0.13	0	17705	DFT-S-OFDM QPSK	135	69	10 mm	top	1:4	0.147	1.216	0.179	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	-0.01	0	17705	DFT-S-OFDM QPSK	1	137	10 mm	left	1:4	0.310	1.119	0.347	A78
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	0.06	0	17705	DFT-S-OFDM QPSK	135	69	10 mm	left	1:4	0.305	1.216	0.371	
2592.99	518598	Mid	NR Band n41	100	23.8	22.88	0.01	1.5	17705	CP-OFDM QPSK	1	1	10 mm	left	1:4	0.237	1.236	0.293	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-61
WLAN SISO Hotspot SAR - Open

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
2412	1	802.11b	DSSS	22	19.0	18.68	-0.17	10 mm	1	41929	1	back	99.9	0.385	0.285	1.076	1.001	0.307	
2412	1	802.11b	DSSS	22	19.0	18.68	0.00	10 mm	1	41929	1	front	99.9	0.608	0.356	1.076	1.001	0.383	
2412	1	802.11b	DSSS	22	19.0	18.68	0.04	10 mm	1	41929	1	top	99.9	0.265	-	1.076	1.001	-	
2412	1	802.11b	DSSS	22	19.0	18.68	0.16	10 mm	1	41929	1	right	99.9	0.800	0.528	1.076	1.001	0.569	
2412	1	802.11b	DSSS	22	18.0	17.99	0.01	10 mm	2	44923	1	back	99.9	0.769	0.506	1.002	1.001	0.508	
2412	1	802.11b	DSSS	22	18.0	17.99	0.17	10 mm	2	44923	1	front	99.9	0.042	0.031	1.002	1.001	0.031	
2412	1	802.11b	DSSS	22	18.0	17.99	0.11	10 mm	2	44923	1	left	99.9	0.127	0.077	1.002	1.001	0.077	
5785	157	802.11a	OFDM	20	17.0	16.75	-0.11	10 mm	1	0009H	6	back	98.9	0.596	0.255	1.059	1.011	0.273	
5785	157	802.11a	OFDM	20	17.0	16.75	0.15	10 mm	1	0009H	6	front	98.9	0.482	-	1.059	1.011	-	
5785	157	802.11a	OFDM	20	17.0	16.75	0.18	10 mm	1	0009H	6	top	98.9	0.240	-	1.059	1.011	-	
5785	157	802.11a	OFDM	20	17.0	16.75	0.16	10 mm	1	0009H	6	right	98.9	0.880	0.374	1.059	1.011	0.400	
5825	165	802.11a	OFDM	20	17.0	16.85	0.11	10 mm	2	0009H	6	back	98.9	0.539	0.233	1.035	1.011	0.244	
5825	165	802.11a	OFDM	20	17.0	16.85	-0.15	10 mm	2	0009H	6	front	98.9	0.012	-	1.035	1.011	-	
5825	165	802.11a	OFDM	20	17.0	16.85	0.16	10 mm	2	0009H	6	top	98.9	0.052	-	1.035	1.011	-	
5825	165	802.11a	OFDM	20	17.0	16.85	0.10	10 mm	2	0009H	6	right	98.9	0.093	-	1.035	1.011	-	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-62
WLAN Antenna 2 Hotspot SAR for Conditions with 2.4 GHz and 5 GHz WLAN SAR - Open

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
2412	1	802.11b	DSSS	22	16.0	15.74	0.11	10 mm	2	44923	1	back	99.9	0.427	0.249	1.062	1.001	0.265	
2412	1	802.11b	DSSS	22	16.0	15.74	0.14	10 mm	2	44923	1	front	99.9	0.032	-	1.062	1.001	-	
2412	1	802.11b	DSSS	22	16.0	15.74	0.11	10 mm	2	44923	1	left	99.9	0.078	-	1.062	1.001	-	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-63
WLAN MIMO Hotspot SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.12	10 mm	MIMO	44923	13	back	99.7	0.763	0.434	1.079	1.003	0.470	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.09	10 mm	MIMO	44923	13	front	99.7	0.506	0.328	1.079	1.003	0.355	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.16	10 mm	MIMO	44923	13	top	99.7	0.297	-	1.079	1.003	-	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.12	10 mm	MIMO	44923	13	right	99.7	0.751	0.480	1.079	1.003	0.519	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.15	10 mm	MIMO	44923	13	left	99.7	0.133	-	1.079	1.003	-	
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	-0.13	10 mm	MIMO	0009H	13	back	99.7	0.742	0.307	1.019	1.003	0.314	
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	0.13	10 mm	MIMO	0009H	13	front	99.7	0.438	-	1.019	1.003	-	
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	0.04	10 mm	MIMO	0009H	13	top	99.7	0.254	-	1.019	1.003	-	
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	0.17	10 mm	MIMO	0009H	13	right	99.7	0.942	0.381	1.019	1.003	0.389	A82
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram					

Note: To achieve the 21.0 dBm maximum allowed MIMO power shown in the documentation, for channel 10, each antenna transmits at a maximum allowed power of 18.0 dBm. To achieve the 20.0 dBm maximum allowed MIMO power shown in the documentation, for channel 149, each antenna transmits at a maximum allowed power of 17.0 dBm.

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Table 11-64
WLAN MIMO Hotspot SAR for Conditions with 2.4 GHz and 5 GHz WLAN SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																				
2462	11	802.11n	OFDM	20	15.0	14.99	15.0	14.84	0.14	10 mm	MIMO	44923	13	back	99.7	0.483	0.271	1.038	1.003	0.282	
2462	11	802.11n	OFDM	20	15.0	14.99	15.0	14.84	0.08	10 mm	MIMO	44923	13	front	99.7	0.406	0.246	1.038	1.003	0.256	
2462	11	802.11n	OFDM	20	15.0	14.99	15.0	14.84	0.11	10 mm	MIMO	44923	13	top	99.7	0.266	-	1.038	1.003	-	
2462	11	802.11n	OFDM	20	15.0	14.99	15.0	14.84	0.20	10 mm	MIMO	44923	13	right	99.7	0.713	0.429	1.038	1.003	0.447	
2462	11	802.11n	OFDM	20	15.0	14.99	15.0	14.84	0.13	10 mm	MIMO	44923	13	left	99.7	0.100	-	1.038	1.003	-	
5785	157	802.11n	OFDM	20	14.0	13.99	14.0	13.79	0.15	10 mm	MIMO	0009H	13	back	99.7	0.313	-	1.050	1.003	-	
5785	157	802.11n	OFDM	20	14.0	13.99	14.0	13.79	0.20	10 mm	MIMO	0009H	13	front	99.7	0.235	-	1.050	1.003	-	
5785	157	802.11n	OFDM	20	14.0	13.99	14.0	13.79	-0.16	10 mm	MIMO	0009H	13	top	99.7	0.125	-	1.050	1.003	-	
5785	157	802.11n	OFDM	20	14.0	13.99	14.0	13.79	0.12	10 mm	MIMO	0009H	13	right	99.7	0.438	0.155	1.050	1.003	0.163	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

DTS and NII MIMO were additionally evaluated at the maximum allowed output power during operations with Simultaneous 2.4 GHz and 5 GHz WLAN. 2.4 GHz WIFI was not transmitting during NII MIMO evaluations and 5 GHz WIFI was not transmitting during DTS MIMO evaluations.

Table 11-65
DSS Hotspot SAR - Open

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g) (W/kg)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																
2441	39	Bluetooth	FHSS	15.0	14.94	0.10	10 mm	Ant 1	44923	1	back	76.8	0.087	1.014	1.302	0.115	
2441	39	Bluetooth	FHSS	15.0	14.94	-0.03	10 mm	Ant 1	44923	1	front	76.8	0.103	1.014	1.302	0.136	
2441	39	Bluetooth	FHSS	15.0	14.94	0.15	10 mm	Ant 1	44923	1	top	76.8	0.051	1.014	1.302	0.067	
2441	39	Bluetooth	FHSS	15.0	14.94	-0.04	10 mm	Ant 1	44923	1	right	76.8	0.167	1.014	1.302	**0.220**	A84
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram					

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g) (W/kg)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																
2441	39	Bluetooth	FHSS	15.0	14.78	0.06	10 mm	Ant 2	44923	1	back	76.8	0.119	1.052	1.302	0.163	
2441	39	Bluetooth	FHSS	15.0	14.78	-0.14	10 mm	Ant 2	44923	1	front	76.8	0.008	1.052	1.302	0.011	
2441	39	Bluetooth	FHSS	15.0	14.78	0.18	10 mm	Ant 2	44923	1	left	76.8	0.002	1.052	1.302	0.003	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram					

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11.4 Standalone Open Phablet SAR Data

Table 11-66
GPRS/UMTS/CDMA Phablet SAR Data - Open

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna State	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1880.00	661	GSM 1900	GPRS	27.5	27.36	-0.08	8 mm	N/A	12540	3	1:2.76	back	0.401	1.033	0.414	
1880.00	661	GSM 1900	GPRS	27.5	27.36	-0.17	7 mm	N/A	12540	3	1:2.76	front	0.426	1.033	0.440	
1880.00	661	GSM 1900	GPRS	27.5	27.36	-0.04	13 mm	N/A	12540	3	1:2.76	bottom	0.463	1.033	0.478	
1880.00	661	GSM 1900	GPRS	27.5	27.36	-0.06	0 mm	N/A	12540	3	1:2.76	right	0.165	1.033	0.170	
1880.00	661	GSM 1900	GPRS	27.5	27.36	0.14	0 mm	N/A	12540	3	1:2.76	left	0.432	1.033	0.446	
1880.00	661	GSM 1900	GPRS	24.0	23.56	-0.08	0 mm	N/A	12540	3	1:2.76	back	1.060	1.107	1.173	
1880.00	661	GSM 1900	GPRS	24.0	23.56	-0.12	0 mm	N/A	12540	3	1:2.76	front	0.847	1.107	0.938	
1850.20	512	GSM 1900	GPRS	24.0	23.13	-0.03	0 mm	N/A	12540	3	1:2.76	bottom	1.730	1.222	2.114	
1880.00	661	GSM 1900	GPRS	24.0	23.56	0.05	0 mm	N/A	12540	3	1:2.76	bottom	1.770	1.107	1.959	A85
1909.80	810	GSM 1900	GPRS	24.0	23.02	0.05	0 mm	N/A	12540	3	1:2.76	bottom	1.480	1.253	1.854	
1732.40	1412	UMTS 1750	RMC	25.5	25.00	-0.04	8 mm	26	17283	N/A	1:1	back	0.977	1.122	1.096	
1732.40	1412	UMTS 1750	RMC	25.5	25.00	-0.01	7 mm	26	17283	N/A	1:1	front	0.795	1.122	0.892	
1732.40	1412	UMTS 1750	RMC	25.5	25.00	0.00	13 mm	26	17283	N/A	1:1	bottom	0.699	1.122	0.784	
1732.40	1412	UMTS 1750	RMC	25.5	25.00	0.03	0 mm	26	17283	N/A	1:1	right	0.378	1.122	0.424	
1732.40	1412	UMTS 1750	RMC	25.5	25.00	-0.01	0 mm	26	17283	N/A	1:1	left	0.369	1.122	0.414	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	-0.08	0 mm	26	17283	N/A	1:1	back	1.460	1.122	1.638	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	-0.05	0 mm	26	17283	N/A	1:1	front	1.090	1.122	1.223	
1712.40	1312	UMTS 1750	RMC	20.0	19.63	0.00	0 mm	26	17283	N/A	1:1	bottom	1.680	1.089	1.830	A86
1732.40	1412	UMTS 1750	RMC	20.0	19.50	0.02	0 mm	26	17283	N/A	1:1	bottom	1.560	1.122	1.750	
1752.60	1513	UMTS 1750	RMC	20.0	19.62	0.12	0 mm	26	17283	N/A	1:1	bottom	1.460	1.091	1.593	
1880.00	9400	UMTS 1900	RMC	25.5	24.45	-0.06	8 mm	26	12540	N/A	1:1	back	0.749	1.274	0.954	
1880.00	9400	UMTS 1900	RMC	25.5	24.45	-0.06	7 mm	26	12540	N/A	1:1	front	0.754	1.274	0.961	
1880.00	9400	UMTS 1900	RMC	25.5	24.45	-0.09	13 mm	26	12540	N/A	1:1	bottom	0.951	1.274	1.212	
1880.00	9400	UMTS 1900	RMC	25.5	24.45	-0.16	0 mm	26	12540	N/A	1:1	right	0.292	1.274	0.372	
1880.00	9400	UMTS 1900	RMC	25.5	24.45	-0.15	0 mm	26	12540	N/A	1:1	left	0.930	1.274	1.185	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	0.00	0 mm	26	12540	N/A	1:1	back	1.090	1.089	1.187	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.06	0 mm	26	12540	N/A	1:1	front	0.863	1.089	0.940	
1852.40	9262	UMTS 1900	RMC	19.5	19.03	-0.08	0 mm	26	12540	N/A	1:1	bottom	2.340	1.114	**2.607**	A87
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.05	0 mm	26	12540	N/A	1:1	bottom	2.280	1.089	2.483	
1907.60	9538	UMTS 1900	RMC	19.5	19.07	-0.06	0 mm	26	12540	N/A	1:1	bottom	2.090	1.104	2.307	
1852.40	9262	UMTS 1900	RMC	19.5	19.03	-0.08	0 mm	26	12540	N/A	1:1	bottom	2.340	1.114	**2.607**	
1880.00	600	PCS CDMA	EVDO Rev. 0	25.5	24.37	0.02	8 mm	1	12540	N/A	1:1	back	0.238	1.297	0.309	
1880.00	600	PCS CDMA	EVDO Rev. 0	25.5	24.37	-0.09	7 mm	1	12540	N/A	1:1	front	0.220	1.297	0.285	
1880.00	600	PCS CDMA	EVDO Rev. 0	25.5	24.37	-0.04	13 mm	1	12540	N/A	1:1	bottom	0.259	1.297	0.336	
1880.00	600	PCS CDMA	EVDO Rev. 0	25.5	24.37	0.04	0 mm	1	12540	N/A	1:1	right	0.093	1.297	0.121	
1880.00	600	PCS CDMA	EVDO Rev. 0	25.5	24.37	0.00	0 mm	1	12540	N/A	1:1	left	0.243	1.297	0.315	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	-0.01	0 mm	1	12540	N/A	1:1	back	0.837	1.086	0.909	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	-0.10	0 mm	1	12540	N/A	1:1	front	0.624	1.086	0.678	
1851.25	25	PCS CDMA	EVDO Rev. 0	19.5	18.81	0.13	0 mm	1	12540	N/A	1:1	bottom	1.580	1.172	1.852	A88
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	0.13	0 mm	1	12540	N/A	1:1	bottom	1.540	1.086	1.672	
1908.75	1175	PCS CDMA	EVDO Rev. 0	19.5	19.02	0.05	0 mm	1	12540	N/A	1:1	bottom	1.380	1.117	1.541	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Phablet 4.0 W/kg (mW/g) averaged over 10 grams			

Note: Blue Entry represents variability measurement.

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Table 11-67
LTE Band 66 Phablet SAR - Open

MEASUREMENT RESULTS																						
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
		MHz	Ch.															(W/kg)		(W/kg)	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	-0.05	0	17488	QPSK	1	50	8 mm	back	1:1	0.893	1.122	1.002	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	-0.02	1	17488	QPSK	50	25	8 mm	back	1:1	0.733	1.069	0.784	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	-0.02	0	17488	QPSK	1	50	7 mm	front	1:1	0.824	1.122	0.925	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	-0.03	1	17488	QPSK	50	25	7 mm	front	1:1	0.670	1.069	0.716	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	-0.08	0	17488	QPSK	1	50	13 mm	bottom	1:1	0.773	1.122	0.867	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	-0.06	1	17488	QPSK	50	25	13 mm	bottom	1:1	0.646	1.069	0.691	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	0.02	0	17488	QPSK	1	50	0 mm	right	1:1	0.407	1.122	0.457	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	0.01	1	17488	QPSK	50	25	0 mm	right	1:1	0.340	1.069	0.363	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	-0.13	0	17488	QPSK	1	50	0 mm	left	1:1	0.402	1.122	0.451	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	-0.15	1	17488	QPSK	50	25	0 mm	left	1:1	0.334	1.069	0.357	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	-0.02	0	17488	QPSK	1	50	0 mm	back	1:1	1.160	1.094	1.269	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	-0.03	0	17488	QPSK	50	25	0 mm	back	1:1	1.200	1.076	1.291	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	-0.01	0	17488	QPSK	1	50	0 mm	front	1:1	0.954	1.094	1.044	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	-0.03	0	17488	QPSK	50	25	0 mm	front	1:1	0.987	1.076	1.062	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.04	0	17488	QPSK	1	50	0 mm	bottom	1:1	1.510	1.094	1.652	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.0	19.33	0.11	0	17488	QPSK	50	25	0 mm	bottom	1:1	1.670	1.167	1.949	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	0.06	0	17488	QPSK	50	25	0 mm	bottom	1:1	1.590	1.076	1.711	
1 CC Uplink	N/A	1775.00	132622	High	LTE Band 66 (AWS)	10	20.0	19.41	0.11	0	17488	QPSK	25	0	0 mm	bottom	1:1	1.740	1.146	1.994	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	19.38	0.10	0	17488	QPSK	50	0	0 mm	bottom	1:1	1.760	1.153	2.029	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	19.40	0.14	0	17488	QPSK	50	25	0 mm	bottom	1:1	1.800	1.148	2.066	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.59	0.08	0	17488	QPSK	100	0	0 mm	bottom	1:1	1.520	1.099	1.670	
2 CC Uplink CA_66B	PCC	1775.00	132622	High	LTE Band 66 (AWS)	10	20.0	19.80	0.15	0	17488	QPSK	25	0	0 mm	bottom	1:1	1.890	1.047	1.979	
	SCC	1765.10	132523	High	LTE Band 66 (AWS)	10							25	25							
2 CC Uplink CA_66C	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	20.00	0.07	0	17488	QPSK	50	0	0 mm	bottom	1:1	2.080	1.000	2.080	A89
	SCC	1750.20	132374	High	LTE Band 66 (AWS)	20							50	50							
2 CC Uplink CA_66C	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	20.00	0.07	0	17488	QPSK	50	0	0 mm	bottom	1:1	2.070	1.000	2.070	
	SCC	1750.20	132374	High	LTE Band 66 (AWS)	20							50	50							
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Phablet 4.0 W/kg (mW/g) averaged over 10 grams										

Note: Blue Entry represents variability measurement.

Table 11-68
LTE Band 25 Phablet SAR - Open

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	-0.07	0	1	12599	QPSK	1	0	8 mm	back	1:1	0.867	1.318	1.143	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	-0.02	1	1	12599	QPSK	50	0	8 mm	back	1:1	0.717	1.303	0.934	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	-0.05	0	1	12599	QPSK	1	0	7 mm	front	1:1	0.930	1.318	1.226	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	0.02	1	1	12599	QPSK	50	0	7 mm	front	1:1	0.768	1.303	1.001	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	-0.10	0	1	12599	QPSK	1	0	13 mm	bottom	1:1	0.785	1.318	1.035	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	-0.07	1	1	12599	QPSK	50	0	13 mm	bottom	1:1	0.691	1.303	0.900	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	0.03	0	1	12599	QPSK	1	0	0 mm	right	1:1	0.286	1.318	0.377	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	0.01	1	1	12599	QPSK	50	0	0 mm	right	1:1	0.225	1.303	0.293	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	-0.13	0	1	12599	QPSK	1	0	0 mm	left	1:1	0.719	1.318	0.948	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	-0.21	1	1	12599	QPSK	50	0	0 mm	left	1:1	0.583	1.303	0.760	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.09	0	1	12599	QPSK	1	50	0 mm	back	1:1	0.758	1.208	0.916	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.02	0	1	12599	QPSK	50	50	0 mm	back	1:1	0.769	1.189	0.914	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.03	0	1	12599	QPSK	1	50	0 mm	front	1:1	0.900	1.208	1.087	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.01	0	1	12599	QPSK	50	50	0 mm	front	1:1	0.915	1.189	1.088	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.08	0	1	12599	QPSK	1	50	0 mm	bottom	1:1	1.520	1.208	1.836	
1860.00	26140	Low	LTE Band 25 (PCS)	20	18.5	17.73	-0.07	0	1	12599	QPSK	50	0	0 mm	bottom	1:1	1.720	1.194	2.054	A90
1882.50	26365	Mid	LTE Band 25 (PCS)	20	18.5	17.71	-0.06	0	1	12599	QPSK	50	50	0 mm	bottom	1:1	1.640	1.199	1.966	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.08	0	1	12599	QPSK	50	50	0 mm	bottom	1:1	1.550	1.189	1.843	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.67	-0.09	0	1	12599	QPSK	100	0	0 mm	bottom	1:1	1.520	1.211	1.841	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Phablet 4.0 W/kg (mW/g) averaged over 10 grams										

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Table 11-69
LTE Band 30 Phablet SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	0.04	0	17796	QPSK	1	49	8 mm	back	1:1	0.458	1.146	0.525	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	0.00	1	17796	QPSK	25	12	8 mm	back	1:1	0.387	1.140	0.441	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	-0.12	0	17796	QPSK	1	49	7 mm	front	1:1	0.380	1.146	0.435	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	-0.01	1	17796	QPSK	25	12	7 mm	front	1:1	0.321	1.140	0.366	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	-0.01	0	17796	QPSK	1	49	13 mm	bottom	1:1	0.430	1.146	0.493	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	-0.04	1	17796	QPSK	25	12	13 mm	bottom	1:1	0.362	1.140	0.413	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	-0.11	0	17796	QPSK	1	49	0 mm	right	1:1	0.370	1.146	0.424	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	-0.07	1	17796	QPSK	25	12	0 mm	right	1:1	0.304	1.140	0.347	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	0.05	0	17796	QPSK	1	49	0 mm	left	1:1	0.146	1.146	0.167	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	0.07	1	17796	QPSK	25	12	0 mm	left	1:1	0.125	1.140	0.143	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	-0.01	0	17796	QPSK	1	0	0 mm	back	1:1	1.050	1.265	1.328	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	0.00	0	17796	QPSK	25	12	0 mm	back	1:1	1.080	1.288	1.391	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	-0.01	0	17796	QPSK	1	0	0 mm	front	1:1	0.890	1.265	1.126	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	-0.06	0	17796	QPSK	25	12	0 mm	front	1:1	0.895	1.288	1.153	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	0.01	0	17796	QPSK	1	0	0 mm	bottom	1:1	1.600	1.265	2.024	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	-0.06	0	17796	QPSK	25	12	0 mm	bottom	1:1	1.640	1.288	2.112	A91
2310.00	27710	Mid	LTE Band 30	10	21.0	19.79	0.00	0	17796	QPSK	50	0	0 mm	bottom	1:1	1.610	1.321	2.127	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Phablet 4.0 W/kg (mW/g) averaged over 10 grams			

Table 11-70
LTE Band 7 Phablet SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	-0.04	0	18646	QPSK	1	0	8 mm	back	1:1	0.379	1.030	0.390	
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	-0.03	1	18646	QPSK	50	0	8 mm	back	1:1	0.305	1.014	0.309	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	-0.05	0	18646	QPSK	1	0	7 mm	front	1:1	0.450	1.030	0.464	
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	-0.03	1	18646	QPSK	50	0	7 mm	front	1:1	0.366	1.014	0.371	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	-0.04	0	18646	QPSK	1	0	13 mm	bottom	1:1	0.489	1.030	0.504	
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	-0.02	1	18646	QPSK	50	0	13 mm	bottom	1:1	0.404	1.014	0.410	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	-0.05	0	18646	QPSK	1	0	0 mm	left	1:1	0.600	1.030	0.618	
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	-0.06	1	18646	QPSK	50	0	0 mm	left	1:1	0.500	1.014	0.507	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	-0.02	0	18646	QPSK	1	0	0 mm	back	1:1	0.871	1.365	1.189	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	-0.03	0	18646	QPSK	50	0	0 mm	back	1:1	0.909	1.318	1.198	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	0.04	0	18646	QPSK	1	0	0 mm	front	1:1	0.420	1.365	0.573	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	0.05	0	18646	QPSK	50	0	0 mm	front	1:1	0.437	1.318	0.576	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	-0.06	0	18646	QPSK	1	0	0 mm	bottom	1:1	0.935	1.365	1.276	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	-0.17	0	18646	QPSK	50	0	0 mm	bottom	1:1	0.995	1.318	1.311	A92
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Phablet 4.0 W/kg (mW/g) averaged over 10 grams			

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Table 11-71
LTE Band 41 Phablet SAR - Open

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
		MHz	Ch.															(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.48	-0.09	0	12664	QPSK	1	50	8 mm	back	1:1.58	0.311	1.355	0.421	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.8	23.60	-0.04	1	12664	QPSK	50	25	8 mm	back	1:1.58	0.251	1.318	0.331	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.48	0.01	0	12664	QPSK	1	50	7 mm	front	1:1.58	0.337	1.355	0.457	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.8	23.60	-0.02	1	12664	QPSK	50	25	7 mm	front	1:1.58	0.276	1.318	0.364	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.48	0.00	0	12664	QPSK	1	50	13 mm	bottom	1:1.58	0.409	1.355	0.554	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.8	23.60	-0.02	1	12664	QPSK	50	25	13 mm	bottom	1:1.58	0.329	1.318	0.434	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	25.8	24.48	0.20	0	12664	QPSK	1	50	0 mm	left	1:1.58	0.434	1.355	0.588	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.8	23.60	0.09	1	12664	QPSK	50	25	0 mm	left	1:1.58	0.359	1.318	0.473	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.56	0.00	0	12664	QPSK	1	99	0 mm	back	1:1.58	0.775	1.107	0.858	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.45	-0.10	0	12664	QPSK	50	0	0 mm	back	1:1.58	0.644	1.135	0.731	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.73	-0.09	0	12664	QPSK	50	50	0 mm	back	1:1.58	0.815	1.064	0.867	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	23.0	22.00	-0.08	0	12664	QPSK	50	0	0 mm	back	1:2.31	0.691	1.259	0.870	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	23.0	22.27	-0.07	0	12664	QPSK	50	50	0 mm	back	1:2.31	0.745	1.183	0.881	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	21.0	21.00	-0.08	0	12664	QPSK	50	0	0 mm	back	1:1.58	0.774	1.000	0.774	
	SCC	2660.20	41292	High	LTE Band 41								50	50							
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	23.0	22.75	0.18	0	12664	QPSK	50	0	0 mm	back	1:2.31	0.818	1.059	0.866	A93
	SCC	2660.20	41292	High	LTE Band 41								50	50							
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.56	-0.17	0	12664	QPSK	1	99	0 mm	front	1:1.58	0.560	1.107	0.620	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.73	-0.09	0	12664	QPSK	50	50	0 mm	front	1:1.58	0.593	1.064	0.631	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.56	0.03	0	12664	QPSK	1	99	0 mm	bottom	1:1.58	0.629	1.107	0.696	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	21.0	20.73	0.00	0	12664	QPSK	50	50	0 mm	bottom	1:1.58	0.676	1.064	0.719	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Phablet
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 grams

Table 11-72
NR Band n66 Phablet SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	-0.01	0	17291	DFT-S-OFDM QPSK	1	1	8 mm	back	1:1	0.651	1.279	0.833	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	-0.04	0	17291	DFT-S-OFDM QPSK	50	28	8 mm	back	1:1	0.608	1.294	0.787	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	0.00	0	17291	DFT-S-OFDM QPSK	1	1	7 mm	front	1:1	0.546	1.279	0.698	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	-0.01	0	17291	DFT-S-OFDM QPSK	50	28	7 mm	front	1:1	0.513	1.294	0.664	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	-0.05	0	17291	DFT-S-OFDM QPSK	1	1	13 mm	bottom	1:1	0.652	1.279	0.834	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	-0.04	0	17291	DFT-S-OFDM QPSK	50	28	13 mm	bottom	1:1	0.640	1.294	0.828	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	-0.10	0	17291	DFT-S-OFDM QPSK	1	1	0 mm	right	1:1	0.364	1.279	0.466	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	-0.11	0	17291	DFT-S-OFDM QPSK	50	28	0 mm	right	1:1	0.356	1.294	0.461	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	0.04	0	17291	DFT-S-OFDM QPSK	1	1	0 mm	left	1:1	0.368	1.279	0.471	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	0.07	0	17291	DFT-S-OFDM QPSK	50	28	0 mm	left	1:1	0.336	1.294	0.435	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	-0.04	0	17291	DFT-S-OFDM QPSK	1	53	0 mm	back	1:1	1.100	1.072	1.179	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	-0.07	0	17291	DFT-S-OFDM QPSK	50	28	0 mm	back	1:1	1.110	1.096	1.217	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	-0.03	0	17291	DFT-S-OFDM QPSK	1	53	0 mm	front	1:1	0.940	1.072	1.008	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	0.01	0	17291	DFT-S-OFDM QPSK	50	28	0 mm	front	1:1	0.955	1.096	1.047	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	-0.01	0	17291	DFT-S-OFDM QPSK	1	53	0 mm	bottom	1:1	1.630	1.072	1.747	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	-0.10	0	17291	DFT-S-OFDM QPSK	50	28	0 mm	bottom	1:1	1.630	1.096	1.786	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.85	-0.03	0	17291	CP-OFDM QPSK	1	1	0 mm	bottom	1:1	1.790	1.035	1.853	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.0	19.50	-0.13	0	17291	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	1.560	1.122	1.750	
1770.00	354000	High	NR Band n66 (AWS)	20	20.0	19.50	-0.04	0	17291	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	1.930	1.122	2.165	A94
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.65	-0.13	0	17291	DFT-S-OFDM QPSK	100	0	0 mm	bottom	1:1	1.620	1.084	1.756	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Phablet
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 grams

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Table 11-73
NR Band n25 Phablet SAR - Open

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	-0.11	0	12706	DFT-S-OFDM QPSK	1	104	8 mm	back	1:1	0.488	1.208	0.590	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	-0.09	0	12706	DFT-S-OFDM QPSK	50	28	8 mm	back	1:1	0.590	1.282	0.756	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	0.00	0	12706	DFT-S-OFDM QPSK	1	104	7 mm	front	1:1	0.589	1.208	0.712	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	-0.06	0	12706	DFT-S-OFDM QPSK	50	28	7 mm	front	1:1	0.555	1.282	0.712	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	-0.10	0	12706	DFT-S-OFDM QPSK	1	104	13 mm	bottom	1:1	0.653	1.208	0.789	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	-0.08	0	12706	DFT-S-OFDM QPSK	50	28	13 mm	bottom	1:1	0.648	1.282	0.831	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	-0.08	0	12706	DFT-S-OFDM QPSK	1	104	0 mm	right	1:1	0.106	1.208	0.128	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	0.02	0	12706	DFT-S-OFDM QPSK	50	28	0 mm	right	1:1	0.091	1.282	0.117	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	-0.14	0	12706	DFT-S-OFDM QPSK	1	104	0 mm	left	1:1	0.523	1.208	0.632	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	-0.14	0	12706	DFT-S-OFDM QPSK	50	28	0 mm	left	1:1	0.578	1.282	0.741	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	-0.03	0	12706	DFT-S-OFDM QPSK	1	53	0 mm	back	1:1	0.731	1.079	0.789	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	-0.09	0	12706	DFT-S-OFDM QPSK	50	0	0 mm	back	1:1	0.696	1.127	0.784	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	0.03	0	12706	DFT-S-OFDM QPSK	1	53	0 mm	front	1:1	0.568	1.079	0.613	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	-0.10	0	12706	DFT-S-OFDM QPSK	50	0	0 mm	front	1:1	0.550	1.127	0.620	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	-0.05	0	12706	DFT-S-OFDM QPSK	1	53	0 mm	bottom	1:1	1.020	1.079	1.101	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	0.04	0	12706	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	1.020	1.127	1.150	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.21	0.01	0	12706	CP-OFDM QPSK	1	1	0 mm	bottom	1:1	1.030	1.069	1.101	A95
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Phablet 4.0 W/kg (mW/g) averaged over 10 grams			

Table 11-74
WLAN SISO Phablet SAR - Open

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
5320	64	802.11a	OFDM	20	17.0	16.94	0.21	0 mm	1	0009H	6	back	98.9	2.379	-	1.014	1.011	-	
5320	64	802.11a	OFDM	20	17.0	16.94	-0.19	0 mm	1	0009H	6	front	98.9	8.863	1.170	1.014	1.011	1.199	
5320	64	802.11a	OFDM	20	17.0	16.94	0.12	0 mm	1	0009H	6	top	98.9	7.298	-	1.014	1.011	-	
5320	64	802.11a	OFDM	20	17.0	16.94	-0.09	0 mm	1	0009H	6	right	98.9	21.159	1.130	1.014	1.011	1.158	
5260	52	802.11a	OFDM	20	17.0	16.95	0.15	0 mm	2	0009H	6	back	98.9	2.617	0.282	1.012	1.011	0.289	
5260	52	802.11a	OFDM	20	17.0	16.95	-0.12	0 mm	2	0009H	6	front	98.9	0.055	-	1.012	1.011	-	
5260	52	802.11a	OFDM	20	17.0	16.95	0.12	0 mm	2	0009H	6	top	98.9	0.236	-	1.012	1.011	-	
5260	52	802.11a	OFDM	20	17.0	16.95	0.14	0 mm	2	0009H	6	right	98.9	0.227	-	1.012	1.011	-	
5620	124	802.11a	OFDM	20	17.0	16.98	0.13	0 mm	1	0009H	6	back	98.9	3.823	-	1.005	1.011	-	
5620	124	802.11a	OFDM	20	17.0	16.98	-0.16	0 mm	1	0009H	6	front	98.9	10.252	1.210	1.005	1.011	1.229	
5620	124	802.11a	OFDM	20	17.0	16.98	0.12	0 mm	1	0009H	6	top	98.9	6.915	-	1.005	1.011	-	
5620	124	802.11a	OFDM	20	17.0	16.98	-0.12	0 mm	1	0009H	6	right	98.9	23.136	1.430	1.005	1.011	1.453	A77
5500	100	802.11a	OFDM	20	17.0	16.87	0.18	0 mm	2	0009H	6	back	98.9	5.417	0.409	1.030	1.011	0.426	
5500	100	802.11a	OFDM	20	17.0	16.87	0.11	0 mm	2	0009H	6	front	98.9	0.125	-	1.030	1.011	-	
5500	100	802.11a	OFDM	20	17.0	16.87	0.19	0 mm	2	0009H	6	top	98.9	0.109	-	1.030	1.011	-	
5500	100	802.11a	OFDM	20	17.0	16.87	0.11	0 mm	2	0009H	6	right	98.9	0.312	0.019	1.030	1.011	0.020	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Phablet 4.0 W/kg (mW/g) averaged over 10 grams					

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11.5 Standalone Closed Body-Worn SAR Data

Table 11-75
GSM/UMTS/CDMA Body-Worn SAR Data – Closed

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna State	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	190	GSM 850	GSM	33.5	32.61	0.20	15 mm	N/A	12532	1	1:8.3	back	0.247	1.227	0.303	A29
1880.00	661	GSM 1900	GSM	30.5	29.47	-0.10	15 mm	N/A	12540	1	1:8.3	back	0.143	1.268	0.181	
836.60	4183	UMTS 850	RMC	25.8	24.64	-0.06	15 mm	0	12532	N/A	1:1	back	0.385	1.306	0.503	A33
1732.40	1412	UMTS 1750	RMC	25.5	25.00	0.03	15 mm	26	17283	N/A	1:1	back	0.212	1.122	0.238	
1880.00	9400	UMTS 1900	RMC	25.5	24.45	-0.08	15 mm	26	12540	N/A	1:1	back	0.449	1.274	0.572	
820.10	564	CDMA BC10 (§90S)	TDSO / SO32	25.8	24.96	-0.15	15 mm	15	12532	N/A	1:1	back	0.428	1.213	0.519	A39
836.52	384	CDMA BC0 (§22H)	TDSO / SO32	25.8	24.83	-0.12	15 mm	0	12532	N/A	1:1	back	0.417	1.250	0.521	A41
1880.00	600	PCS CDMA	TDSO / SO32	25.5	24.35	-0.10	15 mm	1	12540	N/A	1:1	back	0.348	1.303	0.453	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram				

Table 11-76
LTE Body-Worn SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.04	0	0	12573	QPSK	1	0	15 mm	back	1:1	0.204	1.300	0.265	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.01	1	0	12573	QPSK	50	0	15 mm	back	1:1	0.160	1.312	0.210	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	0.06	0	1	12573	QPSK	1	0	15 mm	back	1:1	0.193	1.380	0.266	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.03	1	1	12573	QPSK	25	25	15 mm	back	1:1	0.140	1.380	0.193	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	-0.13	0	0	12573	QPSK	1	0	15 mm	back	1:1	0.261	1.202	0.314	A49
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	-0.04	1	0	12573	QPSK	25	25	15 mm	back	1:1	0.191	1.202	0.230	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	0.01	0	0	12573	QPSK	1	0	15 mm	back	1:1	0.235	1.035	0.243	A51
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.01	1	0	12573	QPSK	25	12	15 mm	back	1:1	0.181	1.057	0.191	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	0.00	0	57	12565	QPSK	1	0	15 mm	back	1:1	0.340	1.153	0.392	A55
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.03	1	57	12565	QPSK	36	0	15 mm	back	1:1	0.274	1.140	0.312	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.5	25.00	-0.02	0	26	17488	QPSK	1	50	15 mm	back	1:1	0.204	1.122	0.229	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.21	0.05	1	26	17488	QPSK	50	25	15 mm	back	1:1	0.167	1.069	0.179	
1860.00	26140	Low	LTE Band 25 (PCS)	20	25.5	24.30	-0.18	0	1	12599	QPSK	1	0	15 mm	back	1:1	0.363	1.318	0.478	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.35	-0.03	1	1	12599	QPSK	50	0	15 mm	back	1:1	0.323	1.303	0.421	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.41	-0.01	0	N/A	17796	QPSK	1	49	15 mm	back	1:1	0.313	1.146	0.359	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.43	0.01	1	N/A	17796	QPSK	25	12	15 mm	back	1:1	0.259	1.140	0.295	
2535.00	21100	Mid	LTE Band 7	20	24.8	24.67	-0.03	0	N/A	18646	QPSK	1	0	15 mm	back	1:1	0.348	1.030	0.358	
2535.00	21100	Mid	LTE Band 7	20	23.8	23.74	0.04	1	N/A	18646	QPSK	50	0	15 mm	back	1:1	0.284	1.014	0.288	
3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.02	0	N/A	17762	QPSK	1	50	15 mm	back	1:1.58	0.034	1.245	0.042	
3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	0.15	1	N/A	17762	QPSK	50	25	15 mm	back	1:1.58	0.026	1.227	0.032	
2680.00	41490	High	LTE Band 41	20	25.8	24.48	0.00	0	N/A	12664	QPSK	1	50	15 mm	back	1:1.58	0.216	1.355	0.293	
2680.00	41490	High	LTE Band 41	20	24.8	23.60	0.02	1	N/A	12664	QPSK	50	25	15 mm	back	1:1.58	0.162	1.318	0.214	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-77
LTE Band 5 Body-Worn SAR - Closed

MEASUREMENT RESULTS																						
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.04	0	0	12748	QPSK	1	49	15 mm	back	1:1	0.295	1.413	0.417	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	-0.01	1	0	12748	QPSK	25	0	15 mm	back	1:1	0.214	1.462	0.313	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.37	0.01	0	0	12748	QPSK	1	49	15 mm	back	1:1	0.314	1.390	0.436	A53
	SCC	843.70	20597	Mid	LTE Band 5 (Cell)	5									0	15 mm						
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram						

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Table 11-78
NR Body-Worn SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.13	0	12698	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.179	1.236	0.221	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	-0.08	0	12698	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.177	1.256	0.222	
680.50	136100	Mid	NR Band n71	20	24.0	22.98	-0.12	1.5	12698	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.118	1.265	0.149	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.12	0	12698	DFT-S-OFDM QPSK	1	1	15 mm	back	1:1	0.253	1.189	0.301	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	-0.17	0	12698	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.270	1.239	0.335	A71
836.50	167300	Mid	NR Band n5 (Cell)	20	24.0	22.85	0.06	1.5	12698	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.197	1.303	0.257	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.73	-0.07	0	17488	DFT-S-OFDM QPSK	1	1	15 mm	back	1:1	0.164	1.279	0.210	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.8	23.68	0.00	0	17488	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.152	1.294	0.197	
1745.00	349000	Mid	NR Band n66 (AWS)	20	23.3	22.14	0.02	1.5	17488	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.111	1.306	0.145	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.8	23.98	-0.20	0	12706	DFT-S-OFDM QPSK	1	104	15 mm	back	1:1	0.274	1.208	0.331	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.8	23.72	-0.08	0	12706	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.259	1.282	0.332	
1882.50	376500	Mid	NR Band n25 (PCS)	20	23.3	22.42	-0.01	1.5	12706	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.159	1.225	0.195	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	0.17	0	17705	DFT-S-OFDM QPSK	1	137	15 mm	back	1:4	0.015	1.119	0.017	
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	0.14	0	17705	DFT-S-OFDM QPSK	135	69	15 mm	back	1:4	0.014	1.216	0.017	
2592.99	518598	Mid	NR Band n41	100	23.8	22.88	0.16	1.5	17705	CP-OFDM QPSK	1	1	15 mm	back	1:4	0.010	1.236	0.012	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-79
DTS Body-Worn SAR - Closed

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
2412	1	802.11b	DSSS	22	19.0	18.68	-0.09	15 mm	1	44923	1	back	99.9	0.163	0.108	1.076	1.001	0.116	
2412	1	802.11b	DSSS	22	18.0	17.99	0.17	15 mm	2	44923	1	back	99.9	0.005	0.002	1.002	1.001	0.002	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-80
DTS MIMO Body-Worn SAR - Closed

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.10	15 mm	MIMO	41929	13	back	99.7	0.127	0.085	1.079	1.003	0.092	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram					

Note: To achieve the 21.0 dBm maximum allowed MIMO power shown in the documentation, for channel 10 each antenna transmits at a maximum allowed power of 18.0 dBm.

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Table 11-81
NII SISO Body-Worn SAR - Closed

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
5320	64	802.11a	OFDM	20	17.0	16.94	-0.14	15 mm	1	0009H	6	back	98.9	0.078	0.029	1.014	1.011	0.030	
5260	52	802.11a	OFDM	20	17.0	16.95	0.11	15 mm	2	0009H	6	back	98.9	0.037	0.015	1.012	1.011	0.015	
5620	124	802.11a	OFDM	20	17.0	16.98	-0.13	15 mm	1	0009H	6	back	98.9	0.089	0.033	1.005	1.011	0.034	
5500	100	802.11a	OFDM	20	17.0	16.87	0.15	15 mm	2	0009H	6	back	98.9	0.029	0.010	1.030	1.011	0.010	
5785	157	802.11a	OFDM	20	17.0	16.75	0.13	15 mm	1	0009H	6	back	98.9	0.140	0.055	1.059	1.011	0.059	
5825	165	802.11a	OFDM	20	17.0	16.85	0.19	15 mm	2	0009H	6	back	98.9	0.129	0.042	1.035	1.011	0.044	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-82
NII MIMO Body-Worn SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
5260	52	802.11n	OFDM	20	17.0	16.95	17.0	16.85	-0.07	15 mm	MIMO	0009H	13	back	99.7	0.103	0.040	1.035	1.003	0.042	
5620	124	802.11n	OFDM	20	17.0	16.81	17.0	16.78	-0.18	15 mm	MIMO	0009H	13	back	99.7	0.106	0.037	1.052	1.003	0.039	
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	-0.13	15 mm	MIMO	0009H	13	back	99.7	0.141	0.053	1.019	1.003	0.054	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram										

Note: To achieve the 20.0 dBm maximum allowed MIMO power shown in the documentation, for channels 52, 124, 149 each antenna transmits at a maximum allowed power of 17.0 dBm.

Table 11-83
DSS Body-Worn SAR – Closed

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2441	39	Bluetooth	FHSS	15.0	14.94	-0.04	15 mm	Ant 1	44923	1	back	76.8	0.029	1.014	1.302	0.038	
2441	39	Bluetooth	FHSS	15.0	14.78	-0.12	15 mm	Ant 2	44923	1	back	76.8	0.000	1.052	1.302	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram										

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11.6 Standalone Closed Hotspot SAR Data

Table 11-84
GPRS/UMTS/CDMA Hotspot SAR Data - Closed

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna State	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
824.20	128	GSM 850	GPRS	30.5	29.49	-0.17	10 mm	N/A	12532	3	1:2.76	back	0.434	1.262	0.548	
836.60	190	GSM 850	GPRS	30.5	29.51	-0.16	10 mm	N/A	12532	3	1:2.76	back	0.499	1.256	0.627	
848.80	251	GSM 850	GPRS	30.5	29.61	-0.05	10 mm	N/A	12532	3	1:2.76	back	0.583	1.227	0.715	A30
836.60	190	GSM 850	GPRS	30.5	29.51	-0.13	10 mm	N/A	12532	3	1:2.76	front	0.202	1.256	0.254	
836.60	190	GSM 850	GPRS	30.5	29.51	-0.05	10 mm	N/A	12532	3	1:2.76	bottom	0.191	1.256	0.240	
836.60	190	GSM 850	GPRS	30.5	29.51	-0.16	10 mm	N/A	12532	3	1:2.76	right	0.071	1.256	0.089	
836.60	190	GSM 850	GPRS	30.5	29.51	0.02	10 mm	N/A	12532	3	1:2.76	left	0.091	1.256	0.114	
1880.00	661	GSM 1900	GPRS	24.0	23.56	-0.08	10 mm	N/A	12540	3	1:2.76	back	0.267	1.107	0.296	
1880.00	661	GSM 1900	GPRS	24.0	23.56	0.04	10 mm	N/A	12540	3	1:2.76	front	0.053	1.107	0.059	
1880.00	661	GSM 1900	GPRS	24.0	23.56	-0.07	10 mm	N/A	12540	3	1:2.76	bottom	0.529	1.107	0.586	
1880.00	661	GSM 1900	GPRS	24.0	23.56	-0.12	10 mm	N/A	12540	3	1:2.76	right	0.024	1.107	0.027	
1880.00	661	GSM 1900	GPRS	24.0	23.56	0.13	10 mm	N/A	12540	3	1:2.76	left	0.064	1.107	0.071	
826.40	4132	UMTS 850	RMC	25.8	24.57	0.02	10 mm	0	12532	N/A	1:1	back	0.603	1.327	0.800	
836.60	4183	UMTS 850	RMC	25.8	24.64	0.00	10 mm	0	12532	N/A	1:1	back	0.633	1.306	0.827	
846.60	4233	UMTS 850	RMC	25.8	24.67	0.02	10 mm	0	12532	N/A	1:1	back	0.634	1.297	0.822	A34
836.60	4183	UMTS 850	RMC	25.8	24.64	0.08	10 mm	0	12532	N/A	1:1	front	0.174	1.306	0.227	
836.60	4183	UMTS 850	RMC	25.8	24.64	0.02	10 mm	0	12532	N/A	1:1	bottom	0.224	1.306	0.293	
836.60	4183	UMTS 850	RMC	25.8	24.64	-0.07	10 mm	0	12532	N/A	1:1	right	0.090	1.306	0.118	
836.60	4183	UMTS 850	RMC	25.8	24.64	0.03	10 mm	0	12532	N/A	1:1	left	0.114	1.306	0.149	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	0.03	10 mm	26	17283	N/A	1:1	back	0.172	1.122	0.193	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	0.07	10 mm	26	17283	N/A	1:1	front	0.051	1.122	0.057	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	0.01	10 mm	26	17283	N/A	1:1	bottom	0.392	1.122	0.440	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	-0.02	10 mm	26	17283	N/A	1:1	right	0.036	1.122	0.040	
1732.40	1412	UMTS 1750	RMC	20.0	19.50	-0.01	10 mm	26	17283	N/A	1:1	left	0.111	1.122	0.125	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.06	10 mm	26	12540	N/A	1:1	back	0.310	1.089	0.338	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.02	10 mm	26	12540	N/A	1:1	front	0.090	1.089	0.098	
1852.40	9262	UMTS 1900	RMC	19.5	19.03	0.03	10 mm	26	12540	N/A	1:1	bottom	0.551	1.114	0.614	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.01	10 mm	26	12540	N/A	1:1	bottom	0.689	1.089	0.750	
1907.60	9538	UMTS 1900	RMC	19.5	19.07	-0.08	10 mm	26	12540	N/A	1:1	bottom	0.741	1.104	0.818	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	0.06	10 mm	26	12540	N/A	1:1	right	0.035	1.089	0.038	
1880.00	9400	UMTS 1900	RMC	19.5	19.13	-0.01	10 mm	26	12540	N/A	1:1	left	0.072	1.089	0.078	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	-0.06	10 mm	15	12532	N/A	1:1	back	0.615	1.247	0.767	A40
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	0.05	10 mm	15	12532	N/A	1:1	front	0.132	1.247	0.165	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	-0.04	10 mm	15	12532	N/A	1:1	bottom	0.199	1.247	0.248	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	0.03	10 mm	15	12532	N/A	1:1	right	0.069	1.247	0.086	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.84	0.05	10 mm	15	12532	N/A	1:1	left	0.122	1.247	0.152	
824.70	1013	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.72	-0.05	10 mm	0	12532	N/A	1:1	back	0.587	1.282	0.753	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	-0.17	10 mm	0	12532	N/A	1:1	back	0.708	1.315	0.931	A42
848.31	777	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.50	-0.13	10 mm	0	12532	N/A	1:1	back	0.607	1.349	0.819	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	-0.06	10 mm	0	12532	N/A	1:1	front	0.164	1.315	0.216	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	0.06	10 mm	0	12532	N/A	1:1	bottom	0.248	1.315	0.326	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	-0.02	10 mm	0	12532	N/A	1:1	right	0.094	1.315	0.124	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	-0.04	10 mm	0	12532	N/A	1:1	left	0.137	1.315	0.180	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	0.03	10 mm	1	12540	N/A	1:1	back	0.227	1.086	0.247	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	0.02	10 mm	1	12540	N/A	1:1	front	0.047	1.086	0.051	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	-0.01	10 mm	1	12540	N/A	1:1	bottom	0.486	1.086	0.528	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	0.14	10 mm	1	12540	N/A	1:1	right	0.028	1.086	0.030	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	19.14	0.00	10 mm	1	12540	N/A	1:1	left	0.084	1.086	0.091	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram				

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Table 11-85
LTE Band 71 Hotspot SAR - Closed

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.20	0	0	12573	QPSK	1	0	10 mm	back	1:1	0.359	1.300	0.467	A46
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.04	1	0	12573	QPSK	50	0	10 mm	back	1:1	0.280	1.312	0.367	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.08	0	0	12573	QPSK	1	0	10 mm	front	1:1	0.082	1.300	0.107	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.04	1	0	12573	QPSK	50	0	10 mm	front	1:1	0.063	1.312	0.083	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.05	0	0	12573	QPSK	1	0	10 mm	bottom	1:1	0.163	1.300	0.212	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	-0.07	1	0	12573	QPSK	50	0	10 mm	bottom	1:1	0.124	1.312	0.163	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.05	0	0	12573	QPSK	1	0	10 mm	right	1:1	0.056	1.300	0.073	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	0.04	1	0	12573	QPSK	50	0	10 mm	right	1:1	0.048	1.312	0.063	
680.50	133297	Mid	LTE Band 71	20	25.8	24.66	0.06	0	0	12573	QPSK	1	0	10 mm	left	1:1	0.104	1.300	0.135	
680.50	133297	Mid	LTE Band 71	20	24.8	23.62	0.06	1	0	12573	QPSK	50	0	10 mm	left	1:1	0.082	1.312	0.108	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-86
LTE Band 12 Hotspot SAR - Closed

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	-0.08	0	1	12573	QPSK	1	0	10 mm	back	1:1	0.338	1.380	0.466	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	-0.05	1	1	12573	QPSK	25	25	10 mm	back	1:1	0.235	1.380	0.324	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	0.02	0	1	12573	QPSK	1	0	10 mm	front	1:1	0.062	1.380	0.086	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.12	1	1	12573	QPSK	25	25	10 mm	front	1:1	0.033	1.380	0.046	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	-0.12	0	1	12573	QPSK	1	0	10 mm	bottom	1:1	0.080	1.380	0.110	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.02	1	1	12573	QPSK	25	25	10 mm	bottom	1:1	0.058	1.380	0.080	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	0.10	0	1	12573	QPSK	1	0	10 mm	right	1:1	0.064	1.380	0.088	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.01	1	1	12573	QPSK	25	25	10 mm	right	1:1	0.055	1.380	0.076	
707.50	23095	Mid	LTE Band 12	10	25.8	24.40	0.10	0	1	12573	QPSK	1	0	10 mm	left	1:1	0.082	1.380	0.113	
707.50	23095	Mid	LTE Band 12	10	24.8	23.40	0.10	1	1	12573	QPSK	25	25	10 mm	left	1:1	0.068	1.380	0.094	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

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Table 11-87
LTE Band 13 Hotspot SAR – Closed

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	-0.11	0	0	17754	QPSK	1	0	10 mm	back	1:1	0.380	1.202	0.457	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	-0.14	1	0	17754	QPSK	25	25	10 mm	back	1:1	0.346	1.202	0.416	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	-0.12	0	0	12573	QPSK	1	0	10 mm	front	1:1	0.137	1.202	0.165	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.06	1	0	12573	QPSK	25	25	10 mm	front	1:1	0.075	1.202	0.090	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	0.06	0	0	17754	QPSK	1	0	10 mm	bottom	1:1	0.173	1.202	0.208	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.12	1	0	17754	QPSK	25	25	10 mm	bottom	1:1	0.144	1.202	0.173	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	-0.12	0	0	12573	QPSK	1	0	10 mm	right	1:1	0.090	1.202	0.108	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	-0.05	1	0	12573	QPSK	25	25	10 mm	right	1:1	0.075	1.202	0.090	
782.00	23230	Mid	LTE Band 13	10	25.8	25.00	0.01	0	0	12573	QPSK	1	0	10 mm	left	1:1	0.075	1.202	0.090	
782.00	23230	Mid	LTE Band 13	10	24.8	24.00	0.12	1	0	12573	QPSK	25	25	10 mm	left	1:1	0.054	1.202	0.065	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-88
LTE Band 14 Hotspot SAR - Closed

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	-0.08	0	0	12573	QPSK	1	0	10 mm	back	1:1	0.406	1.035	0.420	A52
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.19	1	0	12573	QPSK	25	12	10 mm	back	1:1	0.326	1.057	0.345	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	-0.11	0	0	12573	QPSK	1	0	10 mm	front	1:1	0.116	1.035	0.120	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.14	1	0	12573	QPSK	25	12	10 mm	front	1:1	0.067	1.057	0.071	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	-0.11	0	0	12573	QPSK	1	0	10 mm	bottom	1:1	0.202	1.035	0.209	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.14	1	0	12573	QPSK	25	12	10 mm	bottom	1:1	0.177	1.057	0.187	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	-0.12	0	0	12573	QPSK	1	0	10 mm	right	1:1	0.082	1.035	0.085	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	-0.04	1	0	12573	QPSK	25	12	10 mm	right	1:1	0.066	1.057	0.070	
793.00	23330	Mid	LTE Band 14	10	25.8	25.65	0.08	0	0	12573	QPSK	1	0	10 mm	left	1:1	0.072	1.035	0.075	
793.00	23330	Mid	LTE Band 14	10	24.8	24.56	0.01	1	0	12573	QPSK	25	12	10 mm	left	1:1	0.057	1.057	0.060	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

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Table 11-89
LTE Band 5 (Cell) Hotspot SAR - Closed

MEASUREMENT RESULTS																							
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.15	0	0	12748	QPSK	1	49	10 mm	back	1:1	0.507	1.413	0.716	A54
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	-0.06	1	0	12748	QPSK	25	0	10 mm	back	1:1	0.393	1.462	0.575	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.37	-0.03	0	0	12748	QPSK	1	49	10 mm	back	1:1	0.502	1.390	0.698	
	SCC	843.70	20597	Mid	LTE Band 5 (Cell)	5								1	0							
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.01	0	0	12748	QPSK	1	49	10 mm	front	1:1	0.117	1.413	0.165	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.03	1	0	12748	QPSK	25	0	10 mm	front	1:1	0.089	1.462	0.130	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	-0.01	0	0	12748	QPSK	1	49	10 mm	bottom	1:1	0.201	1.413	0.284	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.08	1	0	12748	QPSK	25	0	10 mm	bottom	1:1	0.154	1.462	0.225	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	0.18	0	0	12748	QPSK	1	49	10 mm	right	1:1	0.065	1.413	0.092	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.07	1	0	12748	QPSK	25	0	10 mm	right	1:1	0.050	1.462	0.073	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.30	0.08	0	0	12748	QPSK	1	49	10 mm	left	1:1	0.095	1.413	0.134	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.15	0.00	1	0	12748	QPSK	25	0	10 mm	left	1:1	0.074	1.462	0.108	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram														

Table 11-90
LTE Band 26 (Cell) Hotspot SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	0.04	0	57	12565	QPSK	1	0	10 mm	back	1:1	0.533	1.153	0.615	A56
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.02	1	57	12565	QPSK	36	0	10 mm	back	1:1	0.427	1.140	0.487	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	-0.01	0	57	12565	QPSK	1	0	10 mm	front	1:1	0.117	1.153	0.135	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.06	1	57	12565	QPSK	36	0	10 mm	front	1:1	0.098	1.140	0.112	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	-0.06	0	57	12565	QPSK	1	0	10 mm	bottom	1:1	0.202	1.153	0.233	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.02	1	57	12565	QPSK	36	0	10 mm	bottom	1:1	0.172	1.140	0.196	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	0.15	0	57	12565	QPSK	1	0	10 mm	right	1:1	0.066	1.153	0.076	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.01	1	57	12565	QPSK	36	0	10 mm	right	1:1	0.058	1.140	0.066	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.18	0.07	0	57	12565	QPSK	1	0	10 mm	left	1:1	0.107	1.153	0.123	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.23	0.04	1	57	12565	QPSK	36	0	10 mm	left	1:1	0.091	1.140	0.104	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram												

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Table 11-91
LTE Band 66 (AWS) Hotspot SAR - Closed

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.06	0	26	17488	QPSK	1	50	10 mm	back	1:1	0.136	1.094	0.149	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	0.06	0	26	17488	QPSK	50	25	10 mm	back	1:1	0.141	1.076	0.152	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.14	0	26	17488	QPSK	1	50	10 mm	front	1:1	0.040	1.094	0.044	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	0.01	0	26	17488	QPSK	50	25	10 mm	front	1:1	0.042	1.076	0.045	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	-0.04	0	26	17488	QPSK	1	50	10 mm	bottom	1:1	0.343	1.094	0.375	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	-0.06	0	26	17488	QPSK	50	25	10 mm	bottom	1:1	0.351	1.076	0.378	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.12	0	26	17488	QPSK	1	50	10 mm	right	1:1	0.021	1.094	0.023	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	0.10	0	26	17488	QPSK	50	25	10 mm	right	1:1	0.022	1.076	0.024	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.08	0	26	17488	QPSK	1	50	10 mm	left	1:1	0.041	1.094	0.045	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.68	0.04	0	26	17488	QPSK	50	25	10 mm	left	1:1	0.043	1.076	0.046	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-92
LTE Band 25 (PCS) Hotspot SAR - Closed

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	0.03	0	1	12599	QPSK	1	50	10 mm	back	1:1	0.215	1.208	0.260	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.01	0	1	12599	QPSK	50	50	10 mm	back	1:1	0.219	1.189	0.260	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.05	0	1	12599	QPSK	1	50	10 mm	front	1:1	0.055	1.208	0.066	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	0.05	0	1	12599	QPSK	50	50	10 mm	front	1:1	0.056	1.189	0.067	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.01	0	1	12599	QPSK	1	50	10 mm	bottom	1:1	0.550	1.208	0.664	
1860.00	26140	Low	LTE Band 25 (PCS)	20	18.5	17.73	0.07	0	1	12599	QPSK	50	0	10 mm	bottom	1:1	0.408	1.194	0.487	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	18.5	17.71	-0.07	0	1	12599	QPSK	50	50	10 mm	bottom	1:1	0.543	1.199	0.651	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.02	0	1	12599	QPSK	50	50	10 mm	bottom	1:1	0.560	1.189	0.666	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	0.12	0	1	12599	QPSK	1	50	10 mm	right	1:1	0.018	1.208	0.022	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	0.14	0	1	12599	QPSK	50	50	10 mm	right	1:1	0.016	1.189	0.019	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.68	-0.12	0	1	12599	QPSK	1	50	10 mm	left	1:1	0.025	1.208	0.030	
1905.00	26590	High	LTE Band 25 (PCS)	20	18.5	17.75	-0.02	0	1	12599	QPSK	50	50	10 mm	left	1:1	0.028	1.189	0.033	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

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Table 11-93
LTE Band 30 Hotspot SAR – Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	0.05	0	17796	QPSK	1	0	10 mm	back	1:1	0.371	1.265	0.469	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	0.02	0	17796	QPSK	25	12	10 mm	back	1:1	0.380	1.288	0.489	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	0.11	0	17796	QPSK	1	0	10 mm	front	1:1	0.022	1.265	0.028	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	0.19	0	17796	QPSK	25	12	10 mm	front	1:1	0.022	1.288	0.028	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	0.01	0	17796	QPSK	1	0	10 mm	bottom	1:1	0.648	1.265	0.820	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	-0.04	0	17796	QPSK	25	12	10 mm	bottom	1:1	0.679	1.288	0.875	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.79	-0.04	0	17796	QPSK	50	0	10 mm	bottom	1:1	0.667	1.321	0.881	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	0.12	0	17796	QPSK	1	0	10 mm	right	1:1	0.028	1.265	0.035	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	0.00	0	17796	QPSK	25	12	10 mm	right	1:1	0.031	1.288	0.040	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.98	0.14	0	17796	QPSK	1	0	10 mm	left	1:1	0.026	1.265	0.033	
2310.00	27710	Mid	LTE Band 30	10	21.0	19.90	0.13	0	17796	QPSK	25	12	10 mm	left	1:1	0.029	1.288	0.037	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-94
LTE Band 7 Hotspot SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	0.00	0	18646	QPSK	1	0	10 mm	back	1:1	0.188	1.365	0.257	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	0.03	0	18646	QPSK	50	0	10 mm	back	1:1	0.196	1.318	0.258	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	0.15	0	18646	QPSK	1	0	10 mm	front	1:1	0.017	1.365	0.023	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	0.12	0	18646	QPSK	50	0	10 mm	front	1:1	0.016	1.318	0.021	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	-0.01	0	18646	QPSK	1	0	10 mm	bottom	1:1	0.310	1.365	0.423	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	-0.02	0	18646	QPSK	50	0	10 mm	bottom	1:1	0.323	1.318	0.426	
2510.00	20850	Low	LTE Band 7	20	19.5	18.15	-0.05	0	18646	QPSK	1	0	10 mm	left	1:1	0.048	1.365	0.066	
2510.00	20850	Low	LTE Band 7	20	19.5	18.30	0.13	0	18646	QPSK	50	0	10 mm	left	1:1	0.050	1.318	0.066	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-95
LTE Band 48 Hotspot SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.14	0	17762	QPSK	1	50	10 mm	back	1:1.58	0.053	1.245	0.066	
3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	0.13	1	17762	QPSK	50	25	10 mm	back	1:1.58	0.041	1.227	0.050	
3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.06	0	17762	QPSK	1	50	10 mm	front	1:1.58	0.291	1.245	0.362	
3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	0.07	1	17762	QPSK	50	25	10 mm	front	1:1.58	0.246	1.227	0.302	
3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.04	0	17762	QPSK	1	50	10 mm	bottom	1:1.58	0.141	1.245	0.176	
3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	0.06	1	17762	QPSK	50	25	10 mm	bottom	1:1.58	0.118	1.227	0.145	
3646.70	56207	Mid-High	LTE Band 48	20	24.3	23.35	0.10	0	17762	QPSK	1	50	10 mm	left	1:1.58	0.240	1.245	0.299	
3646.70	56207	Mid-High	LTE Band 48	20	23.3	22.41	-0.07	1	17762	QPSK	50	25	10 mm	left	1:1.58	0.195	1.227	0.239	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram										

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Table 11-96
LTE Band 41 Hotspot SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2680.00	41490	High	LTE Band 41	20	21.0	20.56	-0.13	0	12664	QPSK	1	99	10 mm	back	1:1.58	0.148	1.107	0.164	
2680.00	41490	High	LTE Band 41	20	21.0	20.73	-0.04	0	12664	QPSK	50	50	10 mm	back	1:1.58	0.155	1.064	0.165	
2680.00	41490	High	LTE Band 41	20	21.0	20.56	0.12	0	12664	QPSK	1	99	10 mm	front	1:1.58	0.012	1.107	0.013	
2680.00	41490	High	LTE Band 41	20	21.0	20.73	-0.12	0	12664	QPSK	50	50	10 mm	front	1:1.58	0.012	1.064	0.013	
2680.00	41490	High	LTE Band 41	20	21.0	20.56	0.02	0	12664	QPSK	1	99	10 mm	bottom	1:1.58	0.264	1.107	0.292	
2680.00	41490	High	LTE Band 41	20	21.0	20.73	0.01	0	12664	QPSK	50	50	10 mm	bottom	1:1.58	0.276	1.064	0.294	
2680.00	41490	High	LTE Band 41	20	21.0	20.56	0.13	0	12664	QPSK	1	99	10 mm	left	1:1.58	0.039	1.107	0.043	
2680.00	41490	High	LTE Band 41	20	21.0	20.73	0.12	0	12664	QPSK	50	50	10 mm	left	1:1.58	0.039	1.064	0.041	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-97
NR Band n71 Hotspot SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.09	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.299	1.236	0.370	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	-0.17	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.297	1.256	0.373	
680.50	136100	Mid	NR Band n71	20	24.0	22.98	-0.03	1.5	12698	CP-OFDM QPSK	1	1	10 mm	back	1:1	0.189	1.265	0.239	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	0.04	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.070	1.236	0.087	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	0.02	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.069	1.256	0.087	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.14	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.143	1.236	0.177	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	-0.16	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.135	1.256	0.170	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	0.00	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.054	1.236	0.067	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	0.10	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.056	1.256	0.070	
680.50	136100	Mid	NR Band n71	20	25.5	24.58	-0.07	0	12698	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.086	1.236	0.106	
680.50	136100	Mid	NR Band n71	20	25.5	24.51	0.01	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.085	1.256	0.107	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-98
NR Band n5 Hotspot SAR - Closed

MEASUREMENT RESULTS																			
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.12	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	back	1:1	0.380	1.189	0.452	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	0.00	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.380	1.239	0.471	A72
836.50	167300	Mid	NR Band n5 (Cell)	20	24.0	22.85	0.03	1.5	12698	CP-OFDM QPSK	1	1	10 mm	back	1:1	0.268	1.303	0.349	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	0.00	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	front	1:1	0.086	1.189	0.102	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	-0.03	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.088	1.239	0.109	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.11	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.143	1.189	0.170	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	0.00	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.153	1.239	0.190	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.16	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	right	1:1	0.052	1.189	0.062	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	0.06	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.051	1.239	0.063	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.75	-0.19	0	12698	DFT-S-OFDM QPSK	1	1	10 mm	left	1:1	0.041	1.189	0.049	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.57	-0.08	0	12698	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.047	1.239	0.058	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram					

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Table 11-99
NR Band n66 Hotspot SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	-0.03	0	17488	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.156	1.072	0.167	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	0.02	0	17488	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.157	1.096	0.172	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	-0.12	0	17488	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.042	1.072	0.045	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	0.20	0	17488	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.041	1.096	0.045	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.05	0	17488	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.356	1.072	0.382	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	0.00	0	17488	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.352	1.096	0.386	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.85	0.19	0	17488	CP-OFDM QPSK	1	1	10 mm	bottom	1:1	0.343	1.035	0.355	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.21	0	17488	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.023	1.072	0.025	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	0.11	0	17488	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.020	1.096	0.022	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.12	0	17488	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.056	1.072	0.060	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.60	0.15	0	17488	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.055	1.096	0.060	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-100
NR Band n25 Hotspot SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	0.00	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.172	1.079	0.186	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	0.00	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	back	1:1	0.168	1.127	0.189	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	0.15	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.037	1.079	0.040	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	0.06	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	front	1:1	0.038	1.127	0.043	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	-0.12	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.425	1.079	0.459	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	-0.02	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.434	1.127	0.489	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.21	0.01	0	12706	CP-OFDM QPSK	1	1	10 mm	bottom	1:1	0.433	1.069	0.463	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	0.20	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.021	1.079	0.023	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	0.19	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	right	1:1	0.022	1.127	0.025	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	18.17	0.09	0	12706	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.082	1.079	0.088	
1905.00	381000	High	NR Band n25 (PCS)	20	18.5	17.98	0.09	0	12706	DFT-S-OFDM QPSK	50	0	10 mm	left	1:1	0.078	1.127	0.088	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram							

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Table 11-101
NR Band n41 Hotspot SAR - Closed

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	0.10	0	17705	DFT-S-OFDM QPSK	1	137	10 mm	back	1:4	0.028	1.119	0.031	
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	0.12	0	17705	DFT-S-OFDM QPSK	135	69	10 mm	back	1:4	0.028	1.216	0.034	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	0.14	0	17705	DFT-S-OFDM QPSK	1	137	10 mm	front	1:4	0.094	1.119	0.105	
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	0.17	0	17705	DFT-S-OFDM QPSK	135	69	10 mm	front	1:4	0.095	1.216	0.116	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	0.13	0	17705	DFT-S-OFDM QPSK	1	137	10 mm	bottom	1:4	0.101	1.119	0.113	
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	0.14	0	17705	DFT-S-OFDM QPSK	135	69	10 mm	bottom	1:4	0.097	1.216	0.118	
2592.99	518598	Mid	NR Band n41	100	25.3	24.81	0.01	0	17705	DFT-S-OFDM QPSK	1	137	10 mm	left	1:4	0.198	1.119	0.222	
2592.99	518598	Mid	NR Band n41	100	25.3	24.45	0.04	0	17705	DFT-S-OFDM QPSK	135	69	10 mm	left	1:4	0.196	1.216	0.238	
2592.99	518598	Mid	NR Band n41	100	23.8	22.88	-0.04	1.5	17705	CP-OFDM QPSK	1	1	10 mm	left	1:4	0.140	1.236	0.173	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 11-102
WLAN Hotspot SAR - Closed

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
2412	1	802.11b	DSSS	22	19.0	18.68	-0.14	10 mm	1	44923	1	back	99.9	0.288	0.219	1.076	1.001	0.236	
2412	1	802.11b	DSSS	22	19.0	18.68	-0.14	10 mm	1	44923	1	front	99.9	0.398	0.261	1.076	1.001	0.281	
2412	1	802.11b	DSSS	22	19.0	18.68	-0.07	10 mm	1	44923	1	bottom	99.9	0.311	0.203	1.076	1.001	0.219	
2412	1	802.11b	DSSS	22	19.0	18.68	0.18	10 mm	1	44923	1	right	99.9	0.889	0.554	1.076	1.001	0.597	
2412	1	802.11b	DSSS	22	18.0	17.99	0.20	10 mm	2	44923	1	back	99.9	0.008	0.003	1.002	1.001	0.003	
2412	1	802.11b	DSSS	22	18.0	17.99	0.13	10 mm	2	44923	1	front	99.9	0.637	0.620	1.002	1.001	**0.622**	A80
2437	6	802.11b	DSSS	22	18.0	17.82	0.15	10 mm	2	44923	1	front	99.9	0.725	0.447	1.042	1.001	0.466	
2462	11	802.11b	DSSS	22	18.0	17.47	0.17	10 mm	2	44923	1	front	99.9	0.592	0.361	1.130	1.001	0.408	
2412	1	802.11b	DSSS	22	18.0	17.99	0.20	10 mm	2	44923	1	top	99.9	0.009	-	1.002	1.001	-	
2412	1	802.11b	DSSS	22	18.0	17.99	0.17	10 mm	2	44923	1	bottom	99.9	0.005	0.002	1.002	1.001	0.002	
2412	1	802.11b	DSSS	22	18.0	17.99	0.18	10 mm	2	44923	1	left	99.9	0.142	0.106	1.002	1.001	0.106	
5785	157	802.11a	OFDM	20	17.0	16.75	-0.20	10 mm	1	0009H	6	back	98.9	0.229	0.091	1.059	1.011	0.097	
5785	157	802.11a	OFDM	20	17.0	16.75	0.20	10 mm	1	0009H	6	front	98.9	0.611	0.251	1.059	1.011	0.269	
5785	157	802.11a	OFDM	20	17.0	16.75	-0.13	10 mm	1	0009H	6	bottom	98.9	0.408	0.171	1.059	1.011	0.183	
5785	157	802.11a	OFDM	20	17.0	16.75	0.11	10 mm	1	0009H	6	right	98.9	0.752	0.283	1.059	1.011	0.303	
5825	165	802.11a	OFDM	20	17.0	16.85	0.00	10 mm	2	0009H	6	back	98.9	0.227	0.072	1.035	1.011	0.075	
5825	165	802.11a	OFDM	20	17.0	16.85	0.17	10 mm	2	0009H	6	front	98.9	0.361	0.167	1.035	1.011	0.175	
5825	165	802.11a	OFDM	20	17.0	16.85	0.00	10 mm	2	0009H	6	bottom	98.9	0.039	0.010	1.035	1.011	0.010	
5825	165	802.11a	OFDM	20	17.0	16.85	-0.11	10 mm	2	0009H	6	right	98.9	0.088	0.028	1.035	1.011	0.029	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

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Table 11-103
WLAN MIMO Hotspot SAR - Closed

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																				
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	-0.14	10 mm	MIMO	41929	13	back	99.7	0.207	0.126	1.079	1.003	0.136	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	-0.16	10 mm	MIMO	41929	13	front	99.7	0.444	0.405	1.079	1.003	0.438	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.18	10 mm	MIMO	41929	13	top	99.7	0.033	-	1.079	1.003	-	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.16	10 mm	MIMO	41929	13	bottom	99.7	0.256	0.170	1.079	1.003	0.184	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.15	10 mm	MIMO	41929	13	right	99.7	0.576	0.415	1.079	1.003	0.449	
2457	10	802.11n	OFDM	20	18.0	17.67	18.0	17.87	0.14	10 mm	MIMO	41929	13	left	99.7	0.098	-	1.079	1.003	-	
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	-0.20	10 mm	MIMO	0009H	13	back	99.7	0.200	0.077	1.019	1.003	0.079	
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	0.13	10 mm	MIMO	0009H	13	front	99.7	0.742	0.318	1.019	1.003	0.325	
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	0.15	10 mm	MIMO	0009H	13	bottom	99.7	0.419	0.175	1.019	1.003	0.179	
5745	149	802.11n	OFDM	20	17.0	16.92	17.0	16.98	0.11	10 mm	MIMO	0009H	13	right	99.7	0.768	0.296	1.019	1.003	0.303	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Note: To achieve the 21.0 dBm maximum allowed MIMO power shown in the documentation, for channel 10 each antenna transmits at a maximum allowed power of 18.0 dBm. To achieve the 20.0 dBm maximum allowed MIMO power shown in the documentation, for channel 149 each antenna transmits at a maximum allowed power of 17.0 dBm.

Table 11-104
DSS Hotspot SAR – Closed

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g) (W/kg)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																
2441	39	Bluetooth	FHSS	15.0	14.94	-0.09	10 mm	Ant 1	44923	1	back	76.8	0.062	1.014	1.302	0.082	
2441	39	Bluetooth	FHSS	15.0	14.94	0.17	10 mm	Ant 1	44923	1	front	76.8	0.071	1.014	1.302	0.094	
2441	39	Bluetooth	FHSS	15.0	14.94	0.08	10 mm	Ant 1	44923	1	bottom	76.8	0.061	1.014	1.302	0.081	
2441	39	Bluetooth	FHSS	15.0	14.94	0.07	10 mm	Ant 1	44923	1	right	76.8	0.139	1.014	1.302	0.184	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram						

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g) (W/kg)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																
2441	39	Bluetooth	FHSS	15.0	14.78	0.08	10 mm	Ant 2	44923	1	back	76.8	0.070	1.052	1.302	0.096	
2441	39	Bluetooth	FHSS	15.0	14.78	-0.05	10 mm	Ant 2	44923	1	front	76.8	0.151	1.052	1.302	0.207	
2441	39	Bluetooth	FHSS	15.0	14.78	0.16	10 mm	Ant 2	44923	1	top	76.8	0.001	1.052	1.302	0.001	
2441	39	Bluetooth	FHSS	15.0	14.78	0.00	10 mm	Ant 2	44923	1	bottom	76.8	0.000	1.052	1.302	0.000	
2441	39	Bluetooth	FHSS	15.0	14.78	0.02	10 mm	Ant 2	44923	1	left	76.8	0.020	1.052	1.302	0.027	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram						

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11.7 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, and FCC KDB Publication 447498 D01v06.
2. Batteries are fully charged at the beginning of the SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v06.
6. Device was tested using a fixed spacing for body-worn accessory testing. A separation distance of 15 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.
7. Per FCC KDB Publication 648474 D04v01r03, body-worn SAR was evaluated without a headset connected to the device. Since the standalone reported body-worn SAR was ≤ 1.2 W/kg, no additional body-worn SAR evaluations using a headset cable were required.
8. Per FCC KDB 865664 D01v01r04, variability SAR tests were performed when the measured SAR results for a frequency band were greater than or equal to 0.8 W/kg. Repeated SAR measurements are highlighted in the tables above for clarity. Please see Section 13 for variability analysis.
9. During SAR Testing for the Wireless Router conditions per FCC KDB Publication 941225 D06v02r01, the actual Portable Hotspot operation (with actual simultaneous transmission of a transmitter with WIFI) was not activated (See Section 6.7 for more details).
10. Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is > 160 mm and < 200 mm. Therefore, phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg.
11. This device utilizes power reduction for some wireless modes and technologies, as outlined in Section 1.3. The maximum output power allowed for each transmitter and exposure condition was evaluated for SAR compliance based on expected use conditions and simultaneous transmission scenarios.
12. Unless otherwise noted, when 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds below.
13. This device supports dynamic antenna tuning for some bands. Per FCC Guidance, SAR was measured according to the normally required SAR measurement configurations with tuner active. The auto-tune state determined by the device was verified before and after each SAR measurement and is listed in tables above. Please see Section 14 for supplemental data.
14. Additional SAR tests for phablet SAR were evaluated per KDB 616217 Section 6 (See Section 6.9 for more information).
15. This device has an open and closed configuration. When closed, 1g SAR test are required for back side at a test separation distance of 15mm for body-worn, and on all surfaces and edges with an antenna <=25 mm from that surface or edge at a test separation distance 10mm for hotspot.

GSM Test Notes:

1. Body-Worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR.
2. Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October 2013 TCB Workshop Notes: The source-based frame-averaged output power was evaluated for all GPRS/EDGE slot configurations. The configuration with the highest target frame averaged output power was evaluated for hotspot SAR. When the maximum frame-averaged powers are equivalent across two or more slots (within 0.25 dB), the configuration with the most number of time slots was tested.
3. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel was used.

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CDMA Notes:

1. Head SAR for CDMA2000 mode was tested under RC3/SO55 per FCC KDB Publication 941225 D01v03r01.
2. Body-Worn SAR was tested with 1x RTT with TDSO / SO32 FCH Only. EVDO Rev0 and RevA and TDSO / SO32 FCH+SCH SAR tests were not required per the 3G SAR Test Reduction Procedure in FCC KDB Publication 941225 D01v03r01.
3. CDMA Wireless Router SAR is measured using Subtype 0/1 Physical Layer configurations for Rev. 0 according to KDB 941225 D01v03r01 procedures for data devices. Wireless Router SAR tests for Subtype 2 of Rev.A and 1x RTT configurations were not required per the 3G SAR Test Reduction Policy in KDB Publication 941225 D01v03r01.
4. Head SAR was additionally evaluated using EVDO Rev. A to determine compliance for VoIP operations.
5. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel was used.
6. CDMA 1X Advanced technology was not required for SAR since the maximum allowed output powers for 1X Advanced was not more than 0.25 dB higher than the maximum powers for 1X.

UMTS Notes:

1. UMTS mode was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel was used.

LTE Notes:

1. LTE test configurations are determined according to SAR Evaluation Considerations for LTE Devices in FCC KDB Publication 941225 D05v02r04. The general test procedures used for testing can be found in Section 8.6.4.
2. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.
3. A-MPR was disabled for all SAR tests by setting NS=01 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).
4. Per FCC KDB Publication 447498 D01v06, when the reported LTE Band 48 and 41 SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for 1g evaluations, testing at the other channels was required for such test configurations.
5. TDD LTE was tested per the guidance provided in FCC KDB Publication 941225 D05v02r04. Testing was performed using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633.
6. Per KDB Publication 941225 D05Av01r02, SAR for downlink only LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive.
7. This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per FCC

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Guidance, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions. Please see Section 14 for linearity results.

8. For LTE Band 5, LTE Band 66, LTE Band 48, and LTE Band 41, per FCC guidance, SAR was first measured with only a single carrier active in the uplink (carrier aggregation not active). For each exposure condition, the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when carrier aggregation was not active. The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power.
9. This device supports LTE Band 41 ULCA active with Power Class 2. Highest SAR test configuration for each exposure condition in Power Class 3 with ULCA active was repeated with Power Class 2 with ULCA active.

NR Notes:

1. NR implementation of n71, n5, n66, n2, n25, and n41 is limited to EN-DC operations only, with LTE Band 2, LTE Band 5, LTE Band 12, LTE Band 13, LTE Band 30, LTE Band 66, and LTE Band 48. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.
2. Due to test setup limitations, SAR testing for NR was performed using test mode software to establish the connection.
3. Simultaneous transmission analysis for EN-DC operations is included in Section 12. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only. Per FCC guidance, all unique uplink combinations were assessed.
4. Per FCC Guidance, NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power were evaluated for SAR tests.
5. For final implementation, NR slot configuration is synchronized using maximum duty cycle of 25%. SAR testing was performed using FTM mode with a 25% duty cycle applied to match final duty cycle.

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WLAN Notes:

1. For held-to-ear, hotspot, and phablet operations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg for 1g evaluations, no additional testing for the remaining test positions was required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured.
2. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 2.4 GHz WIFI operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11g/n) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 8.7.5 for more information.
3. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2 W/kg for 1g evaluations. See Section 8.7.6 for more information.
4. When the maximum reported 1g averaged SAR is ≤0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg for 1g evaluations or all test channels were measured.
5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated EMC test reports.
6. Per KDB Publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB Publication 447498 D01v06 by either evaluating the sum of the 1g SAR values of each antenna transmitting independently or making a SAR measurement with both antennas transmitting simultaneously.
7. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

Bluetooth Notes

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests test mode type. Per October 2016 TCB Workshop Notes, the reported SAR was scaled to the 100% transmission duty factor to determine compliance. See Section 9.6 for the time domain plot and calculation for the duty factor of the device.
2. Head and Hotspot Bluetooth SAR were evaluated for BT BR tethering applications.

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12 FCC MULTI-TX AND ANTENNA SAR CONSIDERATIONS

12.1 Introduction

The following procedures adopted from FCC KDB Publication 447498 D01v06 are applicable to devices with built-in unlicensed transmitters such as 802.11 and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

LTE B25 SAR additionally represents LTE B2 since their transmission frequency ranges are overlapped and they share the same transmission path and signal characteristics.

NR band n25 additionally represents NR band n2 since their transmission frequency ranges are overlapped and they share the same transmission path and signal characteristics.

12.2 Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per FCC KDB Publication 447498 D01v06 4.3.2 and IEEE 1528-2013 Section 6.3.4.1.2, simultaneous transmission SAR test exclusion may be applied when the sum of the 1g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤1.6 W/kg. The different test positions in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1g or 10g SAR.

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12.3 Head SAR Simultaneous Transmission Analysis

(*) For test positions that were not required to be evaluated for WLAN SAR per FCC KDB publication 248227, the worst case WLAN SAR result for the applicable exposure conditions was used for simultaneous transmission analysis.

Table 12-1
Simultaneous Transmission Scenario with 5 GHz WLAN Antenna 1 (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	GSM 850	0.201	0.370	0.571
	GSM 1900	0.039	0.370	0.409
	UMTS 850	0.457	0.370	0.827
	UMTS 1750	0.155	0.370	0.525
	UMTS 1900	0.089	0.370	0.459
	CDMA/EVDO BC10 (§90S)	0.415	0.370	0.785
	CDMA/EVDO BC0 (§22H)	0.454	0.370	0.824
	PCS CDMA/EVDO	0.086	0.370	0.456
	LTE Band 71	0.237	0.370	0.607
	LTE Band 12	0.287	0.370	0.657
	LTE Band 13	0.280	0.370	0.650
	LTE Band 14	0.257	0.370	0.627
	LTE Band 5 (Cell)	0.307	0.370	0.677
	LTE Band 26 (Cell)	0.331	0.370	0.701
	LTE Band 66 (AWS)	0.161	0.370	0.531
	LTE Band 25 (PCS)	0.111	0.370	0.481
	LTE Band 30	0.034	0.370	0.404
	LTE Band 7	0.082	0.370	0.452
	LTE Band 48	0.558	0.370	**0.928**
	LTE Band 41	0.119	0.370	0.489

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.095	0.370*	**0.772**
	Right Tilt	0.143	0.051	0.370*	0.564
	Left Cheek	0.253	0.077	0.370	0.700
	Left Tilt	0.136	0.046	0.370*	0.552

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.034	0.266	0.370*	**0.670**
	Right Tilt	0.019	0.113	0.370*	0.502
	Left Cheek	0.009	0.209	0.370	0.588
	Left Tilt	0.014	0.104	0.370*	0.488

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.370*	0.730
	Right Tilt	0.119	0.051	0.370*	0.540
	Left Cheek	0.287	0.077	0.370	**0.734**
	Left Tilt	0.173	0.046	0.370*	0.589

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.266	0.370*	**0.747**
	Right Tilt	0.062	0.113	0.370*	0.545
	Left Cheek	0.086	0.209	0.370	0.665
	Left Tilt	0.067	0.104	0.370*	0.541

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.095	0.370*	**0.745**
	Right Tilt	0.139	0.051	0.370*	0.560
	Left Cheek	0.227	0.077	0.370	0.674
	Left Tilt	0.126	0.046	0.370*	0.542

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.266	0.370*	**0.797**
	Right Tilt	0.091	0.113	0.370*	0.574
	Left Cheek	0.057	0.209	0.370	0.636
	Left Tilt	0.086	0.104	0.370*	0.560

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.155	0.370*	**0.790**
	Right Tilt	0.119	0.119	0.370*	0.608
	Left Cheek	0.287	0.067	0.370	0.724
	Left Tilt	0.173	0.061	0.370*	0.604

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.558	0.155	0.370*	**1.083**
	Right Tilt	0.294	0.119	0.370*	0.783
	Left Cheek	0.138	0.067	0.370	0.575
	Left Tilt	0.138	0.061	0.370*	0.569

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.155	0.370*	**0.805**
	Right Tilt	0.139	0.119	0.370*	0.628
	Left Cheek	0.227	0.067	0.370	0.664
	Left Tilt	0.126	0.061	0.370*	0.557

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.178	0.370*	**0.709**
	Right Tilt	0.091	0.079	0.370*	0.540
	Left Cheek	0.057	0.154	0.370	0.581
	Left Tilt	0.086	0.083	0.370*	0.539

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.155	0.370*	**0.832**
	Right Tilt	0.143	0.119	0.370*	0.632
	Left Cheek	0.253	0.067	0.370	0.690
	Left Tilt	0.136	0.061	0.370*	0.567

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.178	0.370*	**0.659**
	Right Tilt	0.062	0.079	0.370*	0.511
	Left Cheek	0.086	0.154	0.370	0.610
	Left Tilt	0.067	0.083	0.370*	0.520

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.410	0.370*	**0.941**
	Right Tilt	0.091	0.238	0.370*	0.699
	Left Cheek	0.057	0.094	0.370	0.521
	Left Tilt	0.086	0.138	0.370*	0.594

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.410	0.370*	**0.891**
	Right Tilt	0.062	0.238	0.370*	0.670
	Left Cheek	0.086	0.094	0.370	0.550
	Left Tilt	0.067	0.138	0.370*	0.575

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.370*	0.730
	Right Tilt	0.119	0.051	0.370*	0.540
	Left Cheek	0.287	0.077	0.370	**0.734**
	Left Tilt	0.173	0.046	0.370*	0.589

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Table 12-2
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz Antenna 1 WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	GSM 850	0.201	0.428	0.370	0.999
	GSM 1900	0.039	0.428	0.370	0.837
	UMTS 850	0.457	0.428	0.370	1.255
	UMTS 1750	0.155	0.428	0.370	0.953
	UMTS 1900	0.089	0.428	0.370	0.887
	CDMA/EVDO BC10 (§90S)	0.415	0.428	0.370	1.213
	CDMA/EVDO BC0 (§22H)	0.454	0.428	0.370	1.252
	PCS CDMA/EVDO	0.086	0.428	0.370	0.884
	LTE Band 71	0.237	0.428	0.370	1.035
	LTE Band 12	0.287	0.428	0.370	1.085
	LTE Band 13	0.280	0.428	0.370	1.078
	LTE Band 14	0.257	0.428	0.370	1.055
	LTE Band 5 (Cell)	0.307	0.428	0.370	1.105
	LTE Band 26 (Cell)	0.331	0.428	0.370	1.129
	LTE Band 66 (AWS)	0.161	0.428	0.370	0.959
	LTE Band 25 (PCS)	0.111	0.428	0.370	0.909
	LTE Band 30	0.034	0.428	0.370	0.832
	LTE Band 7	0.082	0.428	0.370	0.880
	LTE Band 48	0.558	0.428	0.370	**1.356**
	LTE Band 41	0.119	0.428	0.370	0.917

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.307	0.095	0.172	0.370*	0.944
	Right Tilt	0.143	0.051	0.151	0.370*	0.715
	Left Cheek	0.253	0.077	0.428	0.370	**1.128**
	Left Tilt	0.136	0.046	0.285	0.370*	0.837

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.034	0.266	0.172	0.370*	0.842
	Right Tilt	0.019	0.113	0.151	0.370*	0.653
	Left Cheek	0.009	0.209	0.428	0.370	**1.016**
	Left Tilt	0.014	0.104	0.285	0.370*	0.773

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.172	0.370*	0.902
	Right Tilt	0.119	0.051	0.151	0.370*	0.691
	Left Cheek	0.287	0.077	0.428	0.370	**1.162**
	Left Tilt	0.173	0.046	0.285	0.370*	0.874

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.111	0.266	0.172	0.370*	0.919
	Right Tilt	0.062	0.113	0.151	0.370*	0.696
	Left Cheek	0.086	0.209	0.428	0.370	**1.093**
	Left Tilt	0.067	0.104	0.285	0.370*	0.826

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.280	0.095	0.172	0.370*	0.917
	Right Tilt	0.139	0.051	0.151	0.370*	0.711
	Left Cheek	0.227	0.077	0.428	0.370	**1.102**
	Left Tilt	0.126	0.046	0.285	0.370*	0.827

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.161	0.266	0.172	0.370*	0.969
	Right Tilt	0.091	0.113	0.151	0.370*	0.725
	Left Cheek	0.057	0.209	0.428	0.370	**1.064**
	Left Tilt	0.086	0.104	0.285	0.370*	0.845

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.265	0.155	0.172	0.370*	0.962
	Right Tilt	0.119	0.119	0.151	0.370*	0.759
	Left Cheek	0.287	0.067	0.428	0.370	**1.152**
	Left Tilt	0.173	0.061	0.285	0.370*	0.889

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.558	0.155	0.172	0.370*	**1.255**
	Right Tilt	0.294	0.119	0.151	0.370*	0.934
	Left Cheek	0.138	0.067	0.428	0.370	**1.003**
	Left Tilt	0.138	0.061	0.285	0.370*	0.854

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.280	0.155	0.172	0.370*	0.977
	Right Tilt	0.139	0.119	0.151	0.370*	0.779
	Left Cheek	0.227	0.067	0.428	0.370	**1.092**
	Left Tilt	0.126	0.061	0.285	0.370*	0.842

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.161	0.178	0.172	0.370*	0.881
	Right Tilt	0.091	0.079	0.151	0.370*	0.691
	Left Cheek	0.057	0.154	0.428	0.370	**1.009**
	Left Tilt	0.086	0.083	0.285	0.370*	0.824

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.307	0.155	0.172	0.370*	1.004
	Right Tilt	0.143	0.119	0.151	0.370*	0.783
	Left Cheek	0.253	0.067	0.428	0.370	**1.118**
	Left Tilt	0.136	0.061	0.285	0.370*	0.852

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.111	0.178	0.172	0.370*	0.831
	Right Tilt	0.062	0.079	0.151	0.370*	0.662
	Left Cheek	0.086	0.154	0.428	0.370	**1.038**
	Left Tilt	0.067	0.083	0.285	0.370*	0.805

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.161	0.410	0.172	0.370*	**1.113**
	Right Tilt	0.091	0.238	0.151	0.370*	0.850
	Left Cheek	0.057	0.094	0.428	0.370	0.949
	Left Tilt	0.086	0.138	0.285	0.370*	0.879

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.111	0.410	0.172	0.370*	**1.063**
	Right Tilt	0.062	0.238	0.151	0.370*	0.821
	Left Cheek	0.086	0.094	0.428	0.370	0.978
	Left Tilt	0.067	0.138	0.285	0.370*	0.860

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.172	0.370*	0.902
	Right Tilt	0.119	0.051	0.151	0.370*	0.691
	Left Cheek	0.287	0.077	0.428	0.370	**1.162**
	Left Tilt	0.173	0.046	0.285	0.370*	0.874

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Table 12-3
Simultaneous Transmission Scenario with Bluetooth Antenna 2 and 5 GHz Antenna 1 WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	GSM 850	0.201	0.091	0.370	0.662
	GSM 1900	0.039	0.091	0.370	0.500
	UMTS 850	0.457	0.091	0.370	0.918
	UMTS 1750	0.155	0.091	0.370	0.616
	UMTS 1900	0.089	0.091	0.370	0.550
	CDMA/EVDO BC10 (§90S)	0.415	0.091	0.370	0.876
	CDMA/EVDO BC0 (§22H)	0.454	0.091	0.370	0.915
	PCS CDMA/EVDO	0.086	0.091	0.370	0.547
	LTE Band 71	0.237	0.091	0.370	0.698
	LTE Band 12	0.287	0.091	0.370	0.748
	LTE Band 13	0.280	0.091	0.370	0.741
	LTE Band 14	0.257	0.091	0.370	0.718
	LTE Band 5 (Cell)	0.307	0.091	0.370	0.768
	LTE Band 26 (Cell)	0.331	0.091	0.370	0.792
	LTE Band 66 (AWS)	0.161	0.091	0.370	0.622
	LTE Band 25 (PCS)	0.111	0.091	0.370	0.572
	LTE Band 30	0.034	0.091	0.370	0.495
	LTE Band 7	0.082	0.091	0.370	0.543
	LTE Band 48	0.558	0.091	0.370	**1.019**
	LTE Band 41	0.119	0.091	0.370	0.580

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.307	0.095	0.091	0.370*	**0.863**
	Right Tilt	0.143	0.051	0.007	0.370*	0.571
	Left Cheek	0.253	0.077	0.075	0.370	0.775
	Left Tilt	0.136	0.046	0.009	0.370*	0.561

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.034	0.266	0.091	0.370*	**0.761**
	Right Tilt	0.019	0.113	0.007	0.370*	0.509
	Left Cheek	0.009	0.209	0.075	0.370	0.663
	Left Tilt	0.014	0.104	0.009	0.370*	0.497

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.091	0.370*	**0.821**
	Right Tilt	0.119	0.051	0.007	0.370*	0.547
	Left Cheek	0.287	0.077	0.075	0.370	0.809
	Left Tilt	0.173	0.046	0.009	0.370*	0.598

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.111	0.266	0.091	0.370*	**0.838**
	Right Tilt	0.062	0.113	0.007	0.370*	0.552
	Left Cheek	0.086	0.209	0.075	0.370	0.740
	Left Tilt	0.067	0.104	0.009	0.370*	0.550

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.280	0.095	0.091	0.370*	**0.836**
	Right Tilt	0.139	0.051	0.007	0.370*	0.567
	Left Cheek	0.227	0.077	0.075	0.370	0.749
	Left Tilt	0.126	0.046	0.009	0.370*	0.551

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.161	0.266	0.091	0.370*	**0.888**
	Right Tilt	0.091	0.113	0.007	0.370*	0.581
	Left Cheek	0.057	0.209	0.075	0.370	0.711
	Left Tilt	0.086	0.104	0.009	0.370*	0.569

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.265	0.155	0.091	0.370*	**0.881**
	Right Tilt	0.119	0.119	0.007	0.370*	0.615
	Left Cheek	0.287	0.067	0.075	0.370	0.799
	Left Tilt	0.173	0.061	0.009	0.370*	0.613

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.558	0.155	0.091	0.370*	**1.174**
	Right Tilt	0.294	0.119	0.007	0.370*	0.790
	Left Cheek	0.138	0.067	0.075	0.370	0.650
	Left Tilt	0.138	0.061	0.009	0.370*	0.578

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.280	0.155	0.091	0.370*	**0.896**
	Right Tilt	0.139	0.119	0.007	0.370*	0.635
	Left Cheek	0.227	0.067	0.075	0.370	0.739
	Left Tilt	0.126	0.061	0.009	0.370*	0.566

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.161	0.178	0.091	0.370*	**0.800**
	Right Tilt	0.091	0.079	0.007	0.370*	0.547
	Left Cheek	0.057	0.154	0.075	0.370	0.656
	Left Tilt	0.086	0.083	0.009	0.370*	0.548

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.307	0.155	0.091	0.370*	**0.923**
	Right Tilt	0.143	0.119	0.007	0.370*	0.639
	Left Cheek	0.253	0.067	0.075	0.370	0.765
	Left Tilt	0.136	0.061	0.009	0.370*	0.576

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.111	0.178	0.091	0.370*	**0.750**
	Right Tilt	0.062	0.079	0.007	0.370*	0.518
	Left Cheek	0.086	0.154	0.075	0.370	0.685
	Left Tilt	0.067	0.083	0.009	0.370*	0.529

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.161	0.410	0.091	0.370*	**1.032**
	Right Tilt	0.091	0.238	0.007	0.370*	0.706
	Left Cheek	0.057	0.094	0.075	0.370	0.596
	Left Tilt	0.086	0.138	0.009	0.370*	0.603

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.111	0.410	0.091	0.370*	**0.982**
	Right Tilt	0.062	0.238	0.007	0.370*	0.677
	Left Cheek	0.086	0.094	0.075	0.370	0.625
	Left Tilt	0.067	0.138	0.009	0.370*	0.584

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.091	0.370*	**0.821**
	Right Tilt	0.119	0.051	0.007	0.370*	0.547
	Left Cheek	0.287	0.077	0.075	0.370	0.809
	Left Tilt	0.173	0.046	0.009	0.370*	0.598

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Table 12-4
Simultaneous Transmission Scenario with 2.4 GHz MIMO WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	GSM 850	0.201	0.664	0.865
	GSM 1900	0.039	0.664	0.703
	UMTS 850	0.457	0.664	1.121
	UMTS 1750	0.155	0.664	0.819
	UMTS 1900	0.089	0.664	0.753
	CDMA/EVDO BC10 (§90S)	0.415	0.664	1.079
	CDMA/EVDO BC0 (§22H)	0.454	0.664	1.118
	PCS CDMA/EVDO	0.086	0.664	0.750
	LTE Band 71	0.237	0.664	0.901
	LTE Band 12	0.287	0.664	0.951
	LTE Band 13	0.280	0.664	0.944
	LTE Band 14	0.257	0.664	0.921
	LTE Band 5 (Cell)	0.307	0.664	0.971
	LTE Band 26 (Cell)	0.331	0.664	0.995
	LTE Band 66 (AWS)	0.161	0.664	0.825
	LTE Band 25 (PCS)	0.111	0.664	0.775
	LTE Band 30	0.034	0.664	0.698
	LTE Band 7	0.082	0.664	0.746
	LTE Band 48	0.558	0.664	**1.222**
	LTE Band 41	0.119	0.664	0.783

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.095	0.134	0.536
	Right Tilt	0.143	0.051	0.098	0.292
	Left Cheek	0.253	0.077	0.664	**0.994**
	Left Tilt	0.136	0.046	0.448	0.630

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.134	0.494
	Right Tilt	0.119	0.051	0.098	0.268
	Left Cheek	0.287	0.077	0.664	**1.028**
	Left Tilt	0.173	0.046	0.448	0.667

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.095	0.134	0.509
	Right Tilt	0.139	0.051	0.098	0.288
	Left Cheek	0.227	0.077	0.664	**0.968**
	Left Tilt	0.126	0.046	0.448	0.620

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.155	0.134	0.554
	Right Tilt	0.119	0.119	0.098	0.336
	Left Cheek	0.287	0.067	0.664	**1.018**
	Left Tilt	0.173	0.061	0.448	0.682

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.155	0.134	0.569
	Right Tilt	0.139	0.119	0.098	0.356
	Left Cheek	0.227	0.067	0.664	**0.958**
	Left Tilt	0.126	0.061	0.448	0.635

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.155	0.134	0.596
	Right Tilt	0.143	0.119	0.098	0.360
	Left Cheek	0.253	0.067	0.664	**0.984**
	Left Tilt	0.136	0.061	0.448	0.645

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.034	0.266	0.134	0.434
	Right Tilt	0.019	0.113	0.098	0.230
	Left Cheek	0.009	0.209	0.664	**0.882**
	Left Tilt	0.014	0.104	0.448	0.566

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.266	0.134	0.511
	Right Tilt	0.062	0.113	0.098	0.273
	Left Cheek	0.086	0.209	0.664	**0.959**
	Left Tilt	0.067	0.104	0.448	0.619

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.266	0.134	0.561
	Right Tilt	0.091	0.113	0.098	0.302
	Left Cheek	0.057	0.209	0.664	**0.930**
	Left Tilt	0.086	0.104	0.448	0.638

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.558	0.155	0.134	0.847
	Right Tilt	0.294	0.119	0.098	0.511
	Left Cheek	0.138	0.067	0.664	**0.869**
	Left Tilt	0.138	0.061	0.448	0.647

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.178	0.134	0.473
	Right Tilt	0.091	0.079	0.098	0.268
	Left Cheek	0.057	0.154	0.664	**0.875**
	Left Tilt	0.086	0.083	0.448	0.617

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.178	0.134	0.423
	Right Tilt	0.062	0.079	0.098	0.239
	Left Cheek	0.086	0.154	0.664	**0.904**
	Left Tilt	0.067	0.083	0.448	0.598

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.410	0.134	0.705
	Right Tilt	0.091	0.238	0.098	0.427
	Left Cheek	0.057	0.094	0.664	**0.815**
	Left Tilt	0.086	0.138	0.448	0.672

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.410	0.134	0.655
	Right Tilt	0.062	0.238	0.098	0.398
	Left Cheek	0.086	0.094	0.664	**0.844**
	Left Tilt	0.067	0.138	0.448	0.653

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.134	0.494
	Right Tilt	0.119	0.051	0.098	0.268
	Left Cheek	0.287	0.077	0.664	**1.028**
	Left Tilt	0.173	0.046	0.448	0.667

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Table 12-5
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 2.4 GHz WLAN Antenna 2 (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	GSM 850	0.201	0.428	0.078	0.707
	GSM 1900	0.039	0.428	0.078	0.545
	UMTS 850	0.457	0.428	0.078	0.963
	UMTS 1750	0.155	0.428	0.078	0.661
	UMTS 1900	0.089	0.428	0.078	0.595
	CDMA/EVDO BC10 (§90S)	0.415	0.428	0.078	0.921
	CDMA/EVDO BC0 (§22H)	0.454	0.428	0.078	0.960
	PCS CDMA/EVDO	0.086	0.428	0.078	0.592
	LTE Band 71	0.237	0.428	0.078	0.743
	LTE Band 12	0.287	0.428	0.078	0.793
	LTE Band 13	0.280	0.428	0.078	0.786
	LTE Band 14	0.257	0.428	0.078	0.763
	LTE Band 5 (Cell)	0.307	0.428	0.078	0.813
	LTE Band 26 (Cell)	0.331	0.428	0.078	0.837
	LTE Band 66 (AWS)	0.161	0.428	0.078	0.667
	LTE Band 25 (PCS)	0.111	0.428	0.078	0.617
	LTE Band 30	0.034	0.428	0.078	0.540
	LTE Band 7	0.082	0.428	0.078	0.588
	LTE Band 48	0.558	0.428	0.078	**1.064**
	LTE Band 41	0.119	0.428	0.078	0.625

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.307	0.095	0.172	0.078	0.652
	Right Tilt	0.143	0.051	0.151	0.078*	0.423
	Left Cheek	0.253	0.077	0.428	0.078*	**0.836**
	Left Tilt	0.136	0.046	0.285	0.078*	0.545

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.034	0.266	0.172	0.078	0.550
	Right Tilt	0.019	0.113	0.151	0.078*	0.361
	Left Cheek	0.009	0.209	0.428	0.078*	**0.724**
	Left Tilt	0.014	0.104	0.285	0.078*	0.481

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.172	0.078	0.610
	Right Tilt	0.119	0.051	0.151	0.078*	0.399
	Left Cheek	0.287	0.077	0.428	0.078*	**0.870**
	Left Tilt	0.173	0.046	0.285	0.078*	0.582

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.111	0.266	0.172	0.078	0.627
	Right Tilt	0.062	0.113	0.151	0.078*	0.404
	Left Cheek	0.086	0.209	0.428	0.078*	**0.801**
	Left Tilt	0.067	0.104	0.285	0.078*	0.534

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.280	0.095	0.172	0.078	0.625
	Right Tilt	0.139	0.051	0.151	0.078*	0.419
	Left Cheek	0.227	0.077	0.428	0.078*	**0.810**
	Left Tilt	0.126	0.046	0.285	0.078*	0.535

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.161	0.266	0.172	0.078	0.677
	Right Tilt	0.091	0.113	0.151	0.078*	0.433
	Left Cheek	0.057	0.209	0.428	0.078*	**0.772**
	Left Tilt	0.086	0.104	0.285	0.078*	0.553

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.155	0.172	0.078	0.670
	Right Tilt	0.119	0.119	0.151	0.078*	0.467
	Left Cheek	0.287	0.067	0.428	0.078*	**0.860**
	Left Tilt	0.173	0.061	0.285	0.078*	0.597

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.558	0.155	0.172	0.078	**0.963**
	Right Tilt	0.294	0.119	0.151	0.078*	0.642
	Left Cheek	0.138	0.067	0.428	0.078*	0.711
	Left Tilt	0.138	0.061	0.285	0.078*	0.562

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.280	0.155	0.172	0.078	0.685
	Right Tilt	0.139	0.119	0.151	0.078*	0.487
	Left Cheek	0.227	0.067	0.428	0.078*	**0.800**
	Left Tilt	0.126	0.061	0.285	0.078*	0.550

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.161	0.178	0.172	0.078	0.589
	Right Tilt	0.091	0.079	0.151	0.078*	0.399
	Left Cheek	0.057	0.154	0.428	0.078*	**0.717**
	Left Tilt	0.086	0.083	0.285	0.078*	0.532

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.307	0.155	0.172	0.078	0.712
	Right Tilt	0.143	0.119	0.151	0.078*	0.491
	Left Cheek	0.253	0.067	0.428	0.078*	**0.826**
	Left Tilt	0.136	0.061	0.285	0.078*	0.560

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.111	0.178	0.172	0.078	0.539
	Right Tilt	0.062	0.079	0.151	0.078*	0.370
	Left Cheek	0.086	0.154	0.428	0.078*	**0.746**
	Left Tilt	0.067	0.083	0.285	0.078*	0.513

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.161	0.410	0.172	0.078	**0.821**
	Right Tilt	0.091	0.238	0.151	0.078*	0.558
	Left Cheek	0.057	0.094	0.428	0.078*	0.657
	Left Tilt	0.086	0.138	0.285	0.078*	0.587

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.111	0.410	0.172	0.078	**0.771**
	Right Tilt	0.062	0.238	0.151	0.078*	0.529
	Left Cheek	0.086	0.094	0.428	0.078*	0.686
	Left Tilt	0.067	0.138	0.285	0.078*	0.568

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.172	0.078	0.610
	Right Tilt	0.119	0.051	0.151	0.078*	0.399
	Left Cheek	0.287	0.077	0.428	0.078*	**0.870**
	Left Tilt	0.173	0.046	0.285	0.078*	0.582

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Table 12-6
Simultaneous Transmission Scenario with Bluetooth Antenna 1
(Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	GSM 850	0.201	0.428	0.629
	GSM 1900	0.039	0.428	0.467
	UMTS 850	0.457	0.428	0.885
	UMTS 1750	0.155	0.428	0.583
	UMTS 1900	0.089	0.428	0.517
	CDMA/EVDO BC10 (§90S)	0.415	0.428	0.843
	CDMA/EVDO BC0 (§22H)	0.454	0.428	0.882
	PCS CDMA/EVDO	0.086	0.428	0.514
	LTE Band 71	0.237	0.428	0.665
	LTE Band 12	0.287	0.428	0.715
	LTE Band 13	0.280	0.428	0.708
	LTE Band 14	0.257	0.428	0.685
	LTE Band 5 (Cell)	0.307	0.428	0.735
	LTE Band 26 (Cell)	0.331	0.428	0.759
	LTE Band 66 (AWS)	0.161	0.428	0.589
	LTE Band 25 (PCS)	0.111	0.428	0.539
	LTE Band 30	0.034	0.428	0.462
	LTE Band 7	0.082	0.428	0.510
	LTE Band 48	0.558	0.428	**0.986**
	LTE Band 41	0.119	0.428	0.547

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.095	0.172	0.574
	Right Tilt	0.143	0.051	0.151	0.345
	Left Cheek	0.253	0.077	0.428	**0.758**
	Left Tilt	0.136	0.046	0.285	0.467

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.034	0.266	0.172	0.472
	Right Tilt	0.019	0.113	0.151	0.283
	Left Cheek	0.009	0.209	0.428	**0.646**
	Left Tilt	0.014	0.104	0.285	0.403

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.172	0.532
	Right Tilt	0.119	0.051	0.151	0.321
	Left Cheek	0.287	0.077	0.428	**0.792**
	Left Tilt	0.173	0.046	0.285	0.504

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.266	0.172	0.549
	Right Tilt	0.062	0.113	0.151	0.326
	Left Cheek	0.086	0.209	0.428	**0.723**
	Left Tilt	0.067	0.104	0.285	0.456

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.095	0.172	0.547
	Right Tilt	0.139	0.051	0.151	0.341
	Left Cheek	0.227	0.077	0.428	**0.732**
	Left Tilt	0.126	0.046	0.285	0.457

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.266	0.172	0.599
	Right Tilt	0.091	0.113	0.151	0.355
	Left Cheek	0.057	0.209	0.428	**0.694**
	Left Tilt	0.086	0.104	0.285	0.475

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.155	0.172	0.592
	Right Tilt	0.119	0.119	0.151	0.389
	Left Cheek	0.287	0.067	0.428	**0.782**
	Left Tilt	0.173	0.061	0.285	0.519

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.558	0.155	0.172	**0.885**
	Right Tilt	0.294	0.119	0.151	0.564
	Left Cheek	0.138	0.067	0.428	0.633
	Left Tilt	0.138	0.061	0.285	0.484

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.155	0.172	0.607
	Right Tilt	0.139	0.119	0.151	0.409
	Left Cheek	0.227	0.067	0.428	**0.722**
	Left Tilt	0.126	0.061	0.285	0.472

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.178	0.172	0.511
	Right Tilt	0.091	0.079	0.151	0.321
	Left Cheek	0.057	0.154	0.428	**0.639**
	Left Tilt	0.086	0.083	0.285	0.454

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.155	0.172	0.634
	Right Tilt	0.143	0.119	0.151	0.413
	Left Cheek	0.253	0.067	0.428	**0.748**
	Left Tilt	0.136	0.061	0.285	0.482

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.178	0.172	0.461
	Right Tilt	0.062	0.079	0.151	0.292
	Left Cheek	0.086	0.154	0.428	**0.668**
	Left Tilt	0.067	0.083	0.285	0.435

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.410	0.172	**0.743**
	Right Tilt	0.091	0.238	0.151	0.480
	Left Cheek	0.057	0.094	0.428	0.579
	Left Tilt	0.086	0.138	0.285	0.509

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.410	0.172	**0.693**
	Right Tilt	0.062	0.238	0.151	0.451
	Left Cheek	0.086	0.094	0.428	0.608
	Left Tilt	0.067	0.138	0.285	0.490

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.172	0.532
	Right Tilt	0.119	0.051	0.151	0.321
	Left Cheek	0.287	0.077	0.428	**0.792**
	Left Tilt	0.173	0.046	0.285	0.504

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Table 12-7
Simultaneous Transmission Scenario with Bluetooth Antenna 2
(Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	GSM 850	0.201	0.091	0.292
	GSM 1900	0.039	0.091	0.130
	UMTS 850	0.457	0.091	0.548
	UMTS 1750	0.155	0.091	0.246
	UMTS 1900	0.089	0.091	0.180
	CDMA/EVDO BC10 (§90S)	0.415	0.091	0.506
	CDMA/EVDO BC0 (§22H)	0.454	0.091	0.545
	PCS CDMA/EVDO	0.086	0.091	0.177
	LTE Band 71	0.237	0.091	0.328
	LTE Band 12	0.287	0.091	0.378
	LTE Band 13	0.280	0.091	0.371
	LTE Band 14	0.257	0.091	0.348
	LTE Band 5 (Cell)	0.307	0.091	0.398
	LTE Band 26 (Cell)	0.331	0.091	0.422
	LTE Band 66 (AWS)	0.161	0.091	0.252
	LTE Band 25 (PCS)	0.111	0.091	0.202
	LTE Band 30	0.034	0.091	0.125
	LTE Band 7	0.082	0.091	0.173
	LTE Band 48	0.558	0.091	**0.649**
	LTE Band 41	0.119	0.091	0.210

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.095	0.091	**0.493**
	Right Tilt	0.143	0.051	0.007	0.201
	Left Cheek	0.253	0.077	0.075	0.405
	Left Tilt	0.136	0.046	0.009	0.191

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.034	0.266	0.091	**0.391**
	Right Tilt	0.019	0.113	0.007	0.139
	Left Cheek	0.009	0.209	0.075	0.293
	Left Tilt	0.014	0.104	0.009	0.127

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.091	**0.451**
	Right Tilt	0.119	0.051	0.007	0.177
	Left Cheek	0.287	0.077	0.075	0.439
	Left Tilt	0.173	0.046	0.009	0.228

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.266	0.091	**0.468**
	Right Tilt	0.062	0.113	0.007	0.182
	Left Cheek	0.086	0.209	0.075	0.370
	Left Tilt	0.067	0.104	0.009	0.180

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.095	0.091	**0.466**
	Right Tilt	0.139	0.051	0.007	0.197
	Left Cheek	0.227	0.077	0.075	0.379
	Left Tilt	0.126	0.046	0.009	0.181

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.266	0.091	**0.518**
	Right Tilt	0.091	0.113	0.007	0.211
	Left Cheek	0.057	0.209	0.075	0.341
	Left Tilt	0.086	0.104	0.009	0.199

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.155	0.091	**0.511**
	Right Tilt	0.119	0.119	0.007	0.245
	Left Cheek	0.287	0.067	0.075	0.429
	Left Tilt	0.173	0.061	0.009	0.243

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.558	0.155	0.091	**0.804**
	Right Tilt	0.294	0.119	0.007	0.420
	Left Cheek	0.138	0.067	0.075	0.280
	Left Tilt	0.138	0.061	0.009	0.208

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.155	0.091	**0.526**
	Right Tilt	0.139	0.119	0.007	0.265
	Left Cheek	0.227	0.067	0.075	0.369
	Left Tilt	0.126	0.061	0.009	0.196

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.178	0.091	**0.430**
	Right Tilt	0.091	0.079	0.007	0.177
	Left Cheek	0.057	0.154	0.075	0.286
	Left Tilt	0.086	0.083	0.009	0.178

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.155	0.091	**0.553**
	Right Tilt	0.143	0.119	0.007	0.269
	Left Cheek	0.253	0.067	0.075	0.395
	Left Tilt	0.136	0.061	0.009	0.206

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.178	0.091	**0.380**
	Right Tilt	0.062	0.079	0.007	0.148
	Left Cheek	0.086	0.154	0.075	0.315
	Left Tilt	0.067	0.083	0.009	0.159

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.410	0.091	**0.662**
	Right Tilt	0.091	0.238	0.007	0.336
	Left Cheek	0.057	0.094	0.075	0.226
	Left Tilt	0.086	0.138	0.009	0.233
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.410	0.091	**0.612**
	Right Tilt	0.062	0.238	0.007	0.307
	Left Cheek	0.086	0.094	0.075	0.255
	Left Tilt	0.067	0.138	0.009	0.214
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.091	**0.451**
	Right Tilt	0.119	0.051	0.007	0.177
	Left Cheek	0.287	0.077	0.075	0.439
	Left Tilt	0.173	0.046	0.009	0.228

Table 12-8
Simultaneous Transmission Scenario with 5GHz MIMO WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	GSM 850	0.201	0.415	0.616
	GSM 1900	0.039	0.415	0.454
	UMTS 850	0.457	0.415	0.872
	UMTS 1750	0.155	0.415	0.570
	UMTS 1900	0.089	0.415	0.504
	CDMA/EVDO BC10 (§90S)	0.415	0.415	0.830
	CDMA/EVDO BC0 (§22H)	0.454	0.415	0.869
	PCS CDMA/EVDO	0.086	0.415	0.501
	LTE Band 71	0.237	0.415	0.652
	LTE Band 12	0.287	0.415	0.702
	LTE Band 13	0.280	0.415	0.695
	LTE Band 14	0.257	0.415	0.672
	LTE Band 5 (Cell)	0.307	0.415	0.722
	LTE Band 26 (Cell)	0.331	0.415	0.746
	LTE Band 66 (AWS)	0.161	0.415	0.576
	LTE Band 25 (PCS)	0.111	0.415	0.526
	LTE Band 30	0.034	0.415	0.449
	LTE Band 7	0.082	0.415	0.497
	LTE Band 48	0.558	0.415	**0.973**
	LTE Band 41	0.119	0.415	0.534

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.095	0.415*	**0.817**
	Right Tilt	0.143	0.051	0.415*	0.609
	Left Cheek	0.253	0.077	0.415	0.745
	Left Tilt	0.136	0.046	0.196	0.378

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.034	0.266	0.415*	**0.715**
	Right Tilt	0.019	0.113	0.415*	0.547
	Left Cheek	0.009	0.209	0.415	0.633
	Left Tilt	0.014	0.104	0.196	0.314

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.415*	0.775
	Right Tilt	0.119	0.051	0.415*	0.585
	Left Cheek	0.287	0.077	0.415	**0.779**
	Left Tilt	0.173	0.046	0.196	0.415

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.266	0.415*	**0.792**
	Right Tilt	0.062	0.113	0.415*	0.590
	Left Cheek	0.086	0.209	0.415	0.710
	Left Tilt	0.067	0.104	0.196	0.367

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.095	0.415*	**0.790**
	Right Tilt	0.139	0.051	0.415*	0.605
	Left Cheek	0.227	0.077	0.415	0.719
	Left Tilt	0.126	0.046	0.196	0.368

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.266	0.415*	**0.842**
	Right Tilt	0.091	0.113	0.415*	0.619
	Left Cheek	0.057	0.209	0.415	0.681
	Left Tilt	0.086	0.104	0.196	0.386

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.155	0.415*	**0.835**
	Right Tilt	0.119	0.119	0.415*	0.653
	Left Cheek	0.287	0.067	0.415	0.769
	Left Tilt	0.173	0.061	0.196	0.430

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.558	0.155	0.415*	**1.128**
	Right Tilt	0.294	0.119	0.415*	0.828
	Left Cheek	0.138	0.067	0.415	0.620
	Left Tilt	0.138	0.061	0.196	0.395

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.280	0.155	0.415*	**0.850**
	Right Tilt	0.139	0.119	0.415*	0.673
	Left Cheek	0.227	0.067	0.415	0.709
	Left Tilt	0.126	0.061	0.196	0.383

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.178	0.415*	**0.754**
	Right Tilt	0.091	0.079	0.415*	0.585
	Left Cheek	0.057	0.154	0.415	0.626
	Left Tilt	0.086	0.083	0.196	0.365

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.307	0.155	0.415*	**0.877**
	Right Tilt	0.143	0.119	0.415*	0.677
	Left Cheek	0.253	0.067	0.415	0.735
	Left Tilt	0.136	0.061	0.196	0.393

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.178	0.415*	**0.704**
	Right Tilt	0.062	0.079	0.415*	0.556
	Left Cheek	0.086	0.154	0.415	0.655
	Left Tilt	0.067	0.083	0.196	0.346

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.161	0.410	0.415*	**0.986**
	Right Tilt	0.091	0.238	0.415*	0.744
	Left Cheek	0.057	0.094	0.415	0.566
	Left Tilt	0.086	0.138	0.196	0.420
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.111	0.410	0.415*	**0.936**
	Right Tilt	0.062	0.238	0.415*	0.715
	Left Cheek	0.086	0.094	0.415	0.595
	Left Tilt	0.067	0.138	0.196	0.401
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.265	0.095	0.415*	0.775
	Right Tilt	0.119	0.051	0.415*	0.585
	Left Cheek	0.287	0.077	0.415	**0.779**
	Left Tilt	0.173	0.046	0.196	0.415

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Table 12-9
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz MIMO WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	GSM 850	0.201	0.428	0.415	1.044
	GSM 1900	0.039	0.428	0.415	0.882
	UMTS 850	0.457	0.428	0.415	1.300
	UMTS 1750	0.155	0.428	0.415	0.998
	UMTS 1900	0.089	0.428	0.415	0.932
	CDMA/EVDO BC10 (§90S)	0.415	0.428	0.415	1.258
	CDMA/EVDO BC0 (§22H)	0.454	0.428	0.415	1.297
	PCS CDMA/EVDO	0.086	0.428	0.415	0.929
	LTE Band 71	0.237	0.428	0.415	1.080
	LTE Band 12	0.287	0.428	0.415	1.130
	LTE Band 13	0.280	0.428	0.415	1.123
	LTE Band 14	0.257	0.428	0.415	1.100
	LTE Band 5 (Cell)	0.307	0.428	0.415	1.150
	LTE Band 26 (Cell)	0.331	0.428	0.415	1.174
	LTE Band 66 (AWS)	0.161	0.428	0.415	1.004
	LTE Band 25 (PCS)	0.111	0.428	0.415	0.954
	LTE Band 30	0.034	0.428	0.415	0.877
	LTE Band 7	0.082	0.428	0.415	0.925
	LTE Band 48	0.558	0.428	0.415	**1.401**
	LTE Band 41	0.119	0.428	0.415	0.962

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.307	0.095	0.172	0.415*	0.989
	Right Tilt	0.143	0.051	0.151	0.415*	0.760
	Left Cheek	0.253	0.077	0.428	0.415	**1.173**
	Left Tilt	0.136	0.046	0.285	0.196	0.663

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.034	0.266	0.172	0.415*	0.887
	Right Tilt	0.019	0.113	0.151	0.415*	0.698
	Left Cheek	0.009	0.209	0.428	0.415	**1.061**
	Left Tilt	0.014	0.104	0.285	0.196	0.599

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.172	0.415*	0.947
	Right Tilt	0.119	0.051	0.151	0.415*	0.736
	Left Cheek	0.287	0.077	0.428	0.415	**1.207**
	Left Tilt	0.173	0.046	0.285	0.196	0.700

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.111	0.266	0.172	0.415*	0.964
	Right Tilt	0.062	0.113	0.151	0.415*	0.741
	Left Cheek	0.086	0.209	0.428	0.415	**1.138**
	Left Tilt	0.067	0.104	0.285	0.196	0.652

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.280	0.095	0.172	0.415*	0.962
	Right Tilt	0.139	0.051	0.151	0.415*	0.756
	Left Cheek	0.227	0.077	0.428	0.415	**1.147**
	Left Tilt	0.126	0.046	0.285	0.196	0.653

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.161	0.266	0.172	0.415*	1.014
	Right Tilt	0.091	0.113	0.151	0.415*	0.770
	Left Cheek	0.057	0.209	0.428	0.415	**1.109**
	Left Tilt	0.086	0.104	0.285	0.196	0.671

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.155	0.172	0.415*	1.007
	Right Tilt	0.119	0.119	0.151	0.415*	0.804
	Left Cheek	0.287	0.067	0.428	0.415	**1.197**
	Left Tilt	0.173	0.061	0.285	0.196	0.715

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.558	0.155	0.172	0.415*	**1.300**
	Right Tilt	0.294	0.119	0.151	0.415*	0.979
	Left Cheek	0.138	0.067	0.428	0.415	1.048
	Left Tilt	0.138	0.061	0.285	0.196	0.680

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.280	0.155	0.172	0.415*	1.022
	Right Tilt	0.139	0.119	0.151	0.415*	0.824
	Left Cheek	0.227	0.067	0.428	0.415	**1.137**
	Left Tilt	0.126	0.061	0.285	0.196	0.668

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.161	0.178	0.172	0.415*	0.926
	Right Tilt	0.091	0.079	0.151	0.415*	0.736
	Left Cheek	0.057	0.154	0.428	0.415	**1.054**
	Left Tilt	0.086	0.083	0.285	0.196	0.650

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.307	0.155	0.172	0.415*	1.049
	Right Tilt	0.143	0.119	0.151	0.415*	0.828
	Left Cheek	0.253	0.067	0.428	0.415	**1.163**
	Left Tilt	0.136	0.061	0.285	0.196	0.678

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.111	0.178	0.172	0.415*	0.876
	Right Tilt	0.062	0.079	0.151	0.415*	0.707
	Left Cheek	0.086	0.154	0.428	0.415	**1.083**
	Left Tilt	0.067	0.083	0.285	0.196	0.631

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.161	0.410	0.172	0.415*	**1.158**
	Right Tilt	0.091	0.238	0.151	0.415*	0.895
	Left Cheek	0.057	0.094	0.428	0.415	0.994
	Left Tilt	0.086	0.138	0.285	0.196	0.705

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.111	0.410	0.172	0.415*	**1.108**
	Right Tilt	0.062	0.238	0.151	0.415*	0.866
	Left Cheek	0.086	0.094	0.428	0.415	1.023
	Left Tilt	0.067	0.138	0.285	0.196	0.686

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.172	0.415*	0.947
	Right Tilt	0.119	0.051	0.151	0.415*	0.736
	Left Cheek	0.287	0.077	0.428	0.415	**1.207**
	Left Tilt	0.173	0.046	0.285	0.196	0.700

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Table 12-10
Simultaneous Transmission Scenario with Bluetooth Antenna 2 and 5 GHz MIMO WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	GSM 850	0.201	0.091	0.415	0.707
	GSM 1900	0.039	0.091	0.415	0.545
	UMTS 850	0.457	0.091	0.415	0.963
	UMTS 1750	0.155	0.091	0.415	0.661
	UMTS 1900	0.089	0.091	0.415	0.595
	CDMA/EVDO BC10 (§90S)	0.415	0.091	0.415	0.921
	CDMA/EVDO BC0 (§22H)	0.454	0.091	0.415	0.960
	PCS CDMA/EVDO	0.086	0.091	0.415	0.592
	LTE Band 71	0.237	0.091	0.415	0.743
	LTE Band 12	0.287	0.091	0.415	0.793
	LTE Band 13	0.280	0.091	0.415	0.786
	LTE Band 14	0.257	0.091	0.415	0.763
	LTE Band 5 (Cell)	0.307	0.091	0.415	0.813
	LTE Band 26 (Cell)	0.331	0.091	0.415	0.837
	LTE Band 66 (AWS)	0.161	0.091	0.415	0.667
	LTE Band 25 (PCS)	0.111	0.091	0.415	0.617
	LTE Band 30	0.034	0.091	0.415	0.540
	LTE Band 7	0.082	0.091	0.415	0.588
	LTE Band 48	0.558	0.091	0.415	**1.064**
	LTE Band 41	0.119	0.091	0.415	0.625

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.307	0.095	0.091	0.415*	**0.908**
	Right Tilt	0.143	0.051	0.007	0.415*	0.616
	Left Cheek	0.253	0.077	0.075	0.415	0.820
	Left Tilt	0.136	0.046	0.009	0.196	0.387

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.091	0.415*	**0.866**
	Right Tilt	0.119	0.051	0.007	0.415*	0.592
	Left Cheek	0.287	0.077	0.075	0.415	0.854
	Left Tilt	0.173	0.046	0.009	0.196	0.424

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.280	0.095	0.091	0.415*	**0.881**
	Right Tilt	0.139	0.051	0.007	0.415*	0.612
	Left Cheek	0.227	0.077	0.075	0.415	0.794
	Left Tilt	0.126	0.046	0.009	0.196	0.377

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.034	0.266	0.172	0.370*	0.842
	Right Tilt	0.019	0.113	0.151	0.370*	0.653
	Left Cheek	0.009	0.209	0.428	0.370	**1.016**
	Left Tilt	0.014	0.104	0.285	0.370*	0.773

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.111	0.266	0.172	0.370*	0.919
	Right Tilt	0.062	0.113	0.151	0.370*	0.696
	Left Cheek	0.086	0.209	0.428	0.370	**1.093**
	Left Tilt	0.067	0.104	0.285	0.370*	0.826

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.161	0.266	0.172	0.370*	0.969
	Right Tilt	0.091	0.113	0.151	0.370*	0.725
	Left Cheek	0.057	0.209	0.428	0.370	**1.064**
	Left Tilt	0.086	0.104	0.285	0.370*	0.845

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.155	0.091	0.415*	**0.926**
	Right Tilt	0.119	0.119	0.007	0.415*	0.660
	Left Cheek	0.287	0.067	0.075	0.415	0.844
	Left Tilt	0.173	0.061	0.009	0.196	0.439

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.280	0.155	0.091	0.415*	**0.941**
	Right Tilt	0.139	0.119	0.007	0.415*	0.680
	Left Cheek	0.227	0.067	0.075	0.415	0.784
	Left Tilt	0.126	0.061	0.009	0.196	0.392

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.307	0.155	0.091	0.415*	**0.968**
	Right Tilt	0.143	0.119	0.007	0.415*	0.684
	Left Cheek	0.253	0.067	0.075	0.415	0.810
	Left Tilt	0.136	0.061	0.009	0.196	0.402

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.558	0.155	0.172	0.370*	**1.255**
	Right Tilt	0.294	0.119	0.151	0.370*	0.934
	Left Cheek	0.138	0.067	0.428	0.370	**1.003**
	Left Tilt	0.138	0.061	0.285	0.370*	0.854

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.161	0.178	0.172	0.370*	0.881
	Right Tilt	0.091	0.079	0.151	0.370*	0.691
	Left Cheek	0.057	0.154	0.428	0.370	**1.009**
	Left Tilt	0.086	0.083	0.285	0.370*	0.824

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.111	0.178	0.172	0.370*	0.831
	Right Tilt	0.062	0.079	0.151	0.370*	0.662
	Left Cheek	0.086	0.154	0.428	0.370	**1.038**
	Left Tilt	0.067	0.083	0.285	0.370*	0.805

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.161	0.410	0.172	0.370*	**1.113**
	Right Tilt	0.091	0.238	0.151	0.370*	0.850
	Left Cheek	0.057	0.094	0.428	0.370	0.949
	Left Tilt	0.086	0.138	0.285	0.370*	0.879

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.111	0.410	0.172	0.370*	**1.063**
	Right Tilt	0.062	0.238	0.151	0.370*	0.821
	Left Cheek	0.086	0.094	0.428	0.370	0.978
	Left Tilt	0.067	0.138	0.285	0.370*	0.860

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.172	0.370*	0.902
	Right Tilt	0.119	0.051	0.151	0.370*	0.691
	Left Cheek	0.287	0.077	0.428	0.370	**1.162**
	Left Tilt	0.173	0.046	0.285	0.370*	0.874

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Table 12-11
Simultaneous Transmission Scenario with 2.4 GHz MIMO WLAN and 5 GHz MIMO WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	GSM 850	0.201	0.664	0.415	1.280
	GSM 1900	0.039	0.664	0.415	1.118
	UMTS 850	0.457	0.664	0.415	**1.536**
	UMTS 1750	0.155	0.664	0.415	1.234
	UMTS 1900	0.089	0.664	0.415	1.168
	CDMA/EVDO BC10 (§90S)	0.415	0.664	0.415	1.494
	CDMA/EVDO BC0 (§22H)	0.454	0.664	0.415	1.533
	PCS CDMA/EVDO	0.086	0.664	0.415	1.165
	LTE Band 71	0.237	0.664	0.415	1.316
	LTE Band 12	0.287	0.664	0.415	1.366
	LTE Band 13	0.280	0.664	0.415	1.359
	LTE Band 14	0.257	0.664	0.415	1.336
	LTE Band 5 (Cell)	0.307	0.664	0.415	1.386
	LTE Band 26 (Cell)	0.331	0.664	0.415	1.410
	LTE Band 66 (AWS)	0.161	0.664	0.415	1.240
	LTE Band 25 (PCS)	0.111	0.664	0.415	1.190
	LTE Band 30	0.034	0.664	0.415	1.113
	LTE Band 7	0.082	0.664	0.415	1.161
	LTE Band 48	0.558	0.664	0.415	See Table Below
	LTE Band 41	0.119	0.664	0.415	1.198

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	Right Cheek	0.558	0.134	0.415*	1.107
	Right Tilt	0.294	0.098	0.415*	0.807
	Left Cheek	0.138	0.664	0.415	**1.217**
	Left Tilt	0.138	0.448	0.196	0.782

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.307	0.095	0.134	0.415*	0.951
	Right Tilt	0.143	0.051	0.098	0.415*	0.707
	Left Cheek	0.253	0.077	0.664	0.415	**1.409**
	Left Tilt	0.136	0.046	0.448	0.196	0.826

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.034	0.266	0.134	0.415*	0.849
	Right Tilt	0.019	0.113	0.098	0.415*	0.645
	Left Cheek	0.009	0.209	0.664	0.415	**1.297**
	Left Tilt	0.014	0.104	0.448	0.196	0.762

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.134	0.415*	0.909
	Right Tilt	0.119	0.051	0.098	0.415*	0.683
	Left Cheek	0.287	0.077	0.664	0.415	**1.443**
	Left Tilt	0.173	0.046	0.448	0.196	0.863

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.111	0.266	0.134	0.415*	0.926
	Right Tilt	0.062	0.113	0.098	0.415*	0.688
	Left Cheek	0.086	0.209	0.664	0.415	**1.374**
	Left Tilt	0.067	0.104	0.448	0.196	0.815

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.280	0.095	0.134	0.415*	0.924
	Right Tilt	0.139	0.051	0.098	0.415*	0.703
	Left Cheek	0.227	0.077	0.664	0.415	**1.383**
	Left Tilt	0.126	0.046	0.448	0.196	0.816

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.161	0.266	0.134	0.415*	0.976
	Right Tilt	0.091	0.113	0.098	0.415*	0.717
	Left Cheek	0.057	0.209	0.664	0.415	**1.345**
	Left Tilt	0.086	0.104	0.448	0.196	0.834

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.155	0.134	0.415*	0.969
	Right Tilt	0.119	0.119	0.098	0.415*	0.751
	Left Cheek	0.287	0.067	0.664	0.415	**1.433**
	Left Tilt	0.173	0.061	0.448	0.196	0.878

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.558	0.155	0.134	0.415*	1.262
	Right Tilt	0.294	0.119	0.098	0.415*	0.926
	Left Cheek	0.138	0.067	0.664	0.415	**1.284**
	Left Tilt	0.138	0.061	0.448	0.196	0.843

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.280	0.155	0.134	0.415*	0.984
	Right Tilt	0.139	0.119	0.098	0.415*	0.771
	Left Cheek	0.227	0.067	0.664	0.415	**1.373**
	Left Tilt	0.126	0.061	0.448	0.196	0.831

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.161	0.178	0.134	0.415*	0.888
	Right Tilt	0.091	0.079	0.098	0.415*	0.683
	Left Cheek	0.057	0.154	0.664	0.415	**1.290**
	Left Tilt	0.086	0.083	0.448	0.196	0.813

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.307	0.155	0.134	0.415*	1.011
	Right Tilt	0.143	0.119	0.098	0.415*	0.775
	Left Cheek	0.253	0.067	0.664	0.415	**1.399**
	Left Tilt	0.136	0.061	0.448	0.196	0.841

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.111	0.178	0.134	0.415*	0.838
	Right Tilt	0.062	0.079	0.098	0.415*	0.654
	Left Cheek	0.086	0.154	0.664	0.415	**1.319**
	Left Tilt	0.067	0.083	0.448	0.196	0.794

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.161	0.410	0.134	0.415*	1.120
	Right Tilt	0.091	0.238	0.098	0.415*	0.842
	Left Cheek	0.057	0.094	0.664	0.415	**1.230**
	Left Tilt	0.086	0.138	0.448	0.196	0.868

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.111	0.410	0.134	0.415*	1.070
	Right Tilt	0.062	0.238	0.098	0.415*	0.813
	Left Cheek	0.086	0.094	0.664	0.415	**1.259**
	Left Tilt	0.067	0.138	0.448	0.196	0.849

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	Right Cheek	0.265	0.095	0.134	0.415*	0.909
	Right Tilt	0.119	0.051	0.098	0.415*	0.683
	Left Cheek	0.287	0.077	0.664	0.415	**1.443**
	Left Tilt	0.173	0.046	0.448	0.196	0.863

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Table 12-12
Simultaneous Transmission Scenario with Bluetooth Antenna 1, 2.4 GHz Antenna 2 WLAN, and 5 GHz MIMO WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Head SAR	GSM 850	0.201	0.428	0.078	0.415	1.122
	GSM 1900	0.039	0.428	0.078	0.415	0.960
	UMTS 850	0.457	0.428	0.078	0.415	1.378
	UMTS 1750	0.155	0.428	0.078	0.415	1.076
	UMTS 1900	0.089	0.428	0.078	0.415	1.010
	CDMA/EVDO BC10 (§90S)	0.415	0.428	0.078	0.415	1.336
	CDMA/EVDO BC0 (§22H)	0.454	0.428	0.078	0.415	1.375
	PCS CDMA/EVDO	0.086	0.428	0.078	0.415	1.007
	LTE Band 71	0.237	0.428	0.078	0.415	1.158
	LTE Band 12	0.287	0.428	0.078	0.415	1.208
	LTE Band 13	0.280	0.428	0.078	0.415	1.201
	LTE Band 14	0.257	0.428	0.078	0.415	1.178
	LTE Band 5 (Cell)	0.307	0.428	0.078	0.415	1.228
	LTE Band 26 (Cell)	0.331	0.428	0.078	0.415	1.252
	LTE Band 66 (AWS)	0.161	0.428	0.078	0.415	1.082
	LTE Band 25 (PCS)	0.111	0.428	0.078	0.415	1.032
	LTE Band 30	0.034	0.428	0.078	0.415	0.955
	LTE Band 7	0.082	0.428	0.078	0.415	1.003
	LTE Band 48	0.558	0.428	0.078	0.415	**1.479**
	LTE Band 41	0.119	0.428	0.078	0.415	1.040

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.307	0.095	0.172	0.078	0.415*	1.067
	Right Tilt	0.143	0.051	0.151	0.078*	0.415*	0.838
	Left Cheek	0.253	0.077	0.428	0.078*	0.415	**1.251**
	Left Tilt	0.136	0.046	0.285	0.078*	0.196	0.741

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.265	0.095	0.172	0.078	0.415*	1.025
	Right Tilt	0.119	0.051	0.151	0.078*	0.415*	0.814
	Left Cheek	0.287	0.077	0.428	0.078*	0.415	**1.285**
	Left Tilt	0.173	0.046	0.285	0.078*	0.196	0.778

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.280	0.095	0.172	0.078	0.415*	1.040
	Right Tilt	0.139	0.051	0.151	0.078*	0.415*	0.834
	Left Cheek	0.227	0.077	0.428	0.078*	0.415	**1.225**
	Left Tilt	0.126	0.046	0.285	0.078*	0.196	0.731

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.034	0.266	0.172	0.078	0.415*	0.965
	Right Tilt	0.019	0.113	0.151	0.078*	0.415*	0.776
	Left Cheek	0.009	0.209	0.428	0.078*	0.415	**1.139**
	Left Tilt	0.014	0.104	0.285	0.078*	0.196	0.677

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.111	0.266	0.172	0.078	0.415*	1.042
	Right Tilt	0.062	0.113	0.151	0.078*	0.415*	0.819
	Left Cheek	0.086	0.209	0.428	0.078*	0.415	**1.216**
	Left Tilt	0.067	0.104	0.285	0.078*	0.196	0.730

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.161	0.266	0.172	0.078	0.415*	1.092
	Right Tilt	0.091	0.113	0.151	0.078*	0.415*	0.848
	Left Cheek	0.057	0.209	0.428	0.078*	0.415	**1.187**
	Left Tilt	0.086	0.104	0.285	0.078*	0.196	0.749

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.265	0.155	0.172	0.078	0.415*	1.085
	Right Tilt	0.119	0.119	0.151	0.078*	0.415*	0.882
	Left Cheek	0.287	0.067	0.428	0.078*	0.415	**1.275**
	Left Tilt	0.173	0.061	0.285	0.078*	0.196	0.793

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.558	0.155	0.172	0.078	0.415*	**1.378**
	Right Tilt	0.294	0.119	0.151	0.078*	0.415*	1.057
	Left Cheek	0.138	0.067	0.428	0.078*	0.415	1.126
	Left Tilt	0.138	0.061	0.285	0.078*	0.196	0.758

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.280	0.155	0.172	0.078	0.415*	1.100
	Right Tilt	0.139	0.119	0.151	0.078*	0.415*	0.902
	Left Cheek	0.227	0.067	0.428	0.078*	0.415	**1.215**
	Left Tilt	0.126	0.061	0.285	0.078*	0.196	0.746

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.161	0.178	0.172	0.078	0.415*	1.004
	Right Tilt	0.091	0.079	0.151	0.078*	0.415*	0.814
	Left Cheek	0.057	0.154	0.428	0.078*	0.415	**1.132**
	Left Tilt	0.086	0.083	0.285	0.078*	0.196	0.728

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.307	0.155	0.172	0.078	0.415*	1.127
	Right Tilt	0.143	0.119	0.151	0.078*	0.415*	0.906
	Left Cheek	0.253	0.067	0.428	0.078*	0.415	**1.241**
	Left Tilt	0.136	0.061	0.285	0.078*	0.196	0.756

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.111	0.178	0.172	0.078	0.415*	0.954
	Right Tilt	0.062	0.079	0.151	0.078*	0.415*	0.785
	Left Cheek	0.086	0.154	0.428	0.078*	0.415	**1.161**
	Left Tilt	0.067	0.083	0.285	0.078*	0.196	0.709

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.161	0.410	0.172	0.078	0.415*	**1.236**
	Right Tilt	0.091	0.238	0.151	0.078*	0.415*	0.973
	Left Cheek	0.057	0.094	0.428	0.078*	0.415	1.072
	Left Tilt	0.086	0.138	0.285	0.078*	0.196	0.783

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.111	0.410	0.172	0.078	0.415*	**1.186**
	Right Tilt	0.062	0.238	0.151	0.078*	0.415*	0.944
	Left Cheek	0.086	0.094	0.428	0.078*	0.415	1.101
	Left Tilt	0.067	0.138	0.285	0.078*	0.196	0.764

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	3	5	1+2+3+4+5
Head SAR	Right Cheek	0.265	0.095	0.172	0.078	0.415*	1.025
	Right Tilt	0.119	0.051	0.151	0.078*	0.415*	0.814
	Left Cheek	0.287	0.077	0.428	0.078*	0.415	**1.285**
	Left Tilt	0.173	0.046	0.285	0.078*	0.196	0.778

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12.4 Open Body-Worn Simultaneous Transmission Analysis

Table 12-13
Simultaneous Transmission Scenario with 5 GHz WLAN Antenna 1 (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.223	0.193	0.416
	GSM 1900	0.270	0.193	0.463
	UMTS 850	0.334	0.193	0.527
	UMTS 1750	0.738	0.193	0.931
	UMTS 1900	0.864	0.193	1.057
	CDMA BC10 (§90S)	0.357	0.193	0.550
	CDMA BC0 (§22H)	0.361	0.193	0.554
	PCS CDMA	0.552	0.193	0.745
	LTE Band 71	0.307	0.193	0.500
	LTE Band 12	0.335	0.193	0.528
	LTE Band 13	0.288	0.193	0.481
	LTE Band 14	0.240	0.193	0.433
	LTE Band 5 (Cell)	0.280	0.193	0.473
	LTE Band 26 (Cell)	0.311	0.193	0.504
	LTE Band 66 (AWS)	0.776	0.193	0.969
	LTE Band 25 (PCS)	0.902	0.193	**1.095**
	LTE Band 30	0.421	0.193	0.614
	LTE Band 7	0.388	0.193	0.581
	LTE Band 48	0.200	0.193	0.393
	LTE Band 41	0.364	0.193	0.557

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.527	0.193	**1.000**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.213	0.193	**1.182**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.193	**1.055**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.745	0.193	**1.273**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.527	0.193	**1.008**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.745	0.193	**1.226**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.421	0.213	0.193	**0.827**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.745	0.193	**1.218**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.213	0.193	**1.308**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.200	0.745	0.193	**1.138**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.246	0.193	**1.215**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.246	0.193	**1.341**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.122	0.193	**1.091**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.122	0.193	**1.217**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.193	**1.055**

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Table 12-14
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz WLAN Antenna 1 (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.223	0.062	0.193	0.478
	GSM 1900	0.270	0.062	0.193	0.525
	UMTS 850	0.334	0.062	0.193	0.589
	UMTS 1750	0.738	0.062	0.193	0.993
	UMTS 1900	0.864	0.062	0.193	1.119
	CDMA BC10 (§90S)	0.357	0.062	0.193	0.612
	CDMA BC0 (§22H)	0.361	0.062	0.193	0.616
	PCS CDMA	0.552	0.062	0.193	0.807
	LTE Band 71	0.307	0.062	0.193	0.562
	LTE Band 12	0.335	0.062	0.193	0.590
	LTE Band 13	0.288	0.062	0.193	0.543
	LTE Band 14	0.240	0.062	0.193	0.495
	LTE Band 5 (Cell)	0.280	0.062	0.193	0.535
	LTE Band 26 (Cell)	0.311	0.062	0.193	0.566
	LTE Band 66 (AWS)	0.776	0.062	0.193	1.031
	LTE Band 25 (PCS)	0.902	0.062	0.193	**1.157**
	LTE Band 30	0.421	0.062	0.193	0.676
	LTE Band 7	0.388	0.062	0.193	0.643
	LTE Band 48	0.200	0.062	0.193	0.455
	LTE Band 41	0.364	0.062	0.193	0.619

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.527	0.062	0.193	**1.062**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.213	0.062	0.193	**1.244**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.062	0.193	**1.117**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.745	0.062	0.193	**1.335**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.527	0.062	0.193	**1.070**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.745	0.062	0.193	**1.288**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.421	0.213	0.062	0.193	**0.889**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.745	0.062	0.193	**1.280**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.213	0.062	0.193	**1.370**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.200	0.745	0.062	0.193	**1.200**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.246	0.062	0.193	**1.277**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.246	0.062	0.193	**1.403**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.122	0.062	0.193	**1.153**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.122	0.062	0.193	**1.279**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.062	0.193	**1.117**

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Table 12-15
Simultaneous Transmission Scenario with Bluetooth Antenna 2 and 5 GHz WLAN Antenna 1
(Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.223	0.059	0.193	0.475
	GSM 1900	0.270	0.059	0.193	0.522
	UMTS 850	0.334	0.059	0.193	0.586
	UMTS 1750	0.738	0.059	0.193	0.990
	UMTS 1900	0.864	0.059	0.193	1.116
	CDMA BC10 (§90S)	0.357	0.059	0.193	0.609
	CDMA BC0 (§22H)	0.361	0.059	0.193	0.613
	PCS CDMA	0.552	0.059	0.193	0.804
	LTE Band 71	0.307	0.059	0.193	0.559
	LTE Band 12	0.335	0.059	0.193	0.587
	LTE Band 13	0.288	0.059	0.193	0.540
	LTE Band 14	0.240	0.059	0.193	0.492
	LTE Band 5 (Cell)	0.280	0.059	0.193	0.532
	LTE Band 26 (Cell)	0.311	0.059	0.193	0.563
	LTE Band 66 (AWS)	0.776	0.059	0.193	1.028
	LTE Band 25 (PCS)	0.902	0.059	0.193	**1.154**
	LTE Band 30	0.421	0.059	0.193	0.673
	LTE Band 7	0.388	0.059	0.193	0.640
	LTE Band 48	0.200	0.059	0.193	0.452
	LTE Band 41	0.364	0.059	0.193	0.616

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.527	0.059	0.193	**1.059**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.213	0.059	0.193	**1.241**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.059	0.193	**1.114**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.745	0.059	0.193	**1.332**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.527	0.059	0.193	**1.067**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.745	0.059	0.193	**1.285**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.421	0.213	0.059	0.193	**0.886**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.745	0.059	0.193	**1.277**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.213	0.059	0.193	**1.367**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.200	0.745	0.059	0.193	**1.197**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.246	0.059	0.193	**1.274**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.246	0.059	0.193	**1.400**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.122	0.059	0.193	**1.150**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.122	0.059	0.193	**1.276**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.059	0.193	**1.114**

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Table 12-16
Simultaneous Transmission Scenario with 2.4 GHz MIMO WLAN (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.223	0.218	0.441
	GSM 1900	0.270	0.218	0.488
	UMTS 850	0.334	0.218	0.552
	UMTS 1750	0.738	0.218	0.956
	UMTS 1900	0.864	0.218	1.082
	CDMA BC10 (§90S)	0.357	0.218	0.575
	CDMA BC0 (§22H)	0.361	0.218	0.579
	PCS CDMA	0.552	0.218	0.770
	LTE Band 71	0.307	0.218	0.525
	LTE Band 12	0.335	0.218	0.553
	LTE Band 13	0.288	0.218	0.506
	LTE Band 14	0.240	0.218	0.458
	LTE Band 5 (Cell)	0.280	0.218	0.498
	LTE Band 26 (Cell)	0.311	0.218	0.529
	LTE Band 66 (AWS)	0.776	0.218	0.994
	LTE Band 25 (PCS)	0.902	0.218	**1.120**
	LTE Band 30	0.421	0.218	0.639
	LTE Band 7	0.388	0.218	0.606
	LTE Band 48	0.200	0.218	0.418
	LTE Band 41	0.364	0.218	0.582

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.527	0.218	**1.025**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.213	0.218	**1.207**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.218	**1.080**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.745	0.218	**1.298**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.527	0.218	**1.033**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.745	0.218	**1.251**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.421	0.213	0.218	**0.852**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.745	0.218	**1.243**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.213	0.218	**1.333**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.200	0.745	0.218	**1.163**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.246	0.218	**1.240**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.246	0.218	**1.366**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.122	0.218	**1.116**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.122	0.218	**1.242**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.218	**1.080**

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Table 12-17
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 2.4 GHz WLAN Antenna 2 (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body-Worn	GSM 850	0.223	0.062	0.147	0.285	0.370	0.432
	GSM 1900	0.270	0.062	0.147	0.332	0.417	0.479
	UMTS 850	0.334	0.062	0.147	0.396	0.481	0.543
	UMTS 1750	0.738	0.062	0.147	0.800	0.885	0.947
	UMTS 1900	0.864	0.062	0.147	0.926	1.011	1.073
	CDMA BC10 (§90S)	0.357	0.062	0.147	0.419	0.504	0.566
	CDMA BC0 (§22H)	0.361	0.062	0.147	0.423	0.508	0.570
	PCS CDMA	0.552	0.062	0.147	0.614	0.699	0.761
	LTE Band 71	0.307	0.062	0.147	0.369	0.454	0.516
	LTE Band 12	0.335	0.062	0.147	0.397	0.482	0.544
	LTE Band 13	0.288	0.062	0.147	0.350	0.435	0.497
	LTE Band 14	0.240	0.062	0.147	0.302	0.387	0.449
	LTE Band 5 (Cell)	0.280	0.062	0.147	0.342	0.427	0.489
	LTE Band 26 (Cell)	0.311	0.062	0.147	0.373	0.458	0.520
	LTE Band 66 (AWS)	0.776	0.062	0.147	0.838	0.923	0.985
	LTE Band 25 (PCS)	0.902	0.062	0.147	0.964	1.049	**1.111**
	LTE Band 30	0.421	0.062	0.147	0.483	0.568	0.630
	LTE Band 7	0.388	0.062	0.147	0.450	0.535	0.597
	LTE Band 48	0.200	0.062	0.147	0.262	0.347	0.409
	LTE Band 41	0.364	0.062	0.147	0.426	0.511	0.573

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.527	0.062	0.147	**1.016**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.213	0.062	0.147	**1.198**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.062	0.147	**1.071**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.745	0.062	0.147	**1.289**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.527	0.062	0.147	**1.024**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.745	0.062	0.147	**1.242**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.421	0.213	0.062	0.147	**0.843**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.745	0.062	0.147	**1.234**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.213	0.062	0.147	**1.324**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.200	0.745	0.062	0.147	**1.154**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.246	0.062	0.147	**1.231**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.246	0.062	0.147	**1.357**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.122	0.062	0.147	**1.107**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.122	0.062	0.147	**1.233**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.062	0.147	**1.071**

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Table 12-18
Simultaneous Transmission Scenario with Bluetooth Antenna 1 (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.223	0.062	0.285
	GSM 1900	0.270	0.062	0.332
	UMTS 850	0.334	0.062	0.396
	UMTS 1750	0.738	0.062	0.800
	UMTS 1900	0.864	0.062	0.926
	CDMA BC10 (§90S)	0.357	0.062	0.419
	CDMA BC0 (§22H)	0.361	0.062	0.423
	PCS CDMA	0.552	0.062	0.614
	LTE Band 71	0.307	0.062	0.369
	LTE Band 12	0.335	0.062	0.397
	LTE Band 13	0.288	0.062	0.350
	LTE Band 14	0.240	0.062	0.302
	LTE Band 5 (Cell)	0.280	0.062	0.342
	LTE Band 26 (Cell)	0.311	0.062	0.373
	LTE Band 66 (AWS)	0.776	0.062	0.838
	LTE Band 25 (PCS)	0.902	0.062	**0.964**
	LTE Band 30	0.421	0.062	0.483
	LTE Band 7	0.388	0.062	0.450
	LTE Band 48	0.200	0.062	0.262
	LTE Band 41	0.364	0.062	0.426

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.527	0.062	**0.869**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.213	0.062	**1.051**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.062	**0.924**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.745	0.062	**1.142**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.527	0.062	**0.877**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.745	0.062	**1.095**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.421	0.213	0.062	**0.696**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.745	0.062	**1.087**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.213	0.062	**1.177**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.200	0.745	0.062	**1.007**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.246	0.062	**1.084**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.246	0.062	**1.210**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.122	0.062	**0.960**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.122	0.062	**1.086**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.062	**0.924**

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Table 12-19
Simultaneous Transmission Scenario with Bluetooth Antenna 2 (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.223	0.059	0.282
	GSM 1900	0.270	0.059	0.329
	UMTS 850	0.334	0.059	0.393
	UMTS 1750	0.738	0.059	0.797
	UMTS 1900	0.864	0.059	0.923
	CDMA BC10 (§90S)	0.357	0.059	0.416
	CDMA BC0 (§22H)	0.361	0.059	0.420
	PCS CDMA	0.552	0.059	0.611
	LTE Band 71	0.307	0.059	0.366
	LTE Band 12	0.335	0.059	0.394
	LTE Band 13	0.288	0.059	0.347
	LTE Band 14	0.240	0.059	0.299
	LTE Band 5 (Cell)	0.280	0.059	0.339
	LTE Band 26 (Cell)	0.311	0.059	0.370
	LTE Band 66 (AWS)	0.776	0.059	0.835
	LTE Band 25 (PCS)	0.902	0.059	**0.961**
	LTE Band 30	0.421	0.059	0.480
	LTE Band 7	0.388	0.059	0.447
	LTE Band 48	0.200	0.059	0.259
	LTE Band 41	0.364	0.059	0.423

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.527	0.059	**0.866**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.213	0.059	**1.048**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.059	**0.921**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.745	0.059	**1.139**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.527	0.059	**0.874**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.745	0.059	**1.092**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.421	0.213	0.059	**0.693**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.745	0.059	**1.084**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.213	0.059	**1.174**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.200	0.745	0.059	**1.004**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.246	0.059	**1.081**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.246	0.059	**1.207**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.122	0.059	**0.957**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.122	0.059	**1.083**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.059	**0.921**

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Table 12-20
Simultaneous Transmission Scenario with 5 GHz MIMO WLAN (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.223	0.219	0.442
	GSM 1900	0.270	0.219	0.489
	UMTS 850	0.334	0.219	0.553
	UMTS 1750	0.738	0.219	0.957
	UMTS 1900	0.864	0.219	1.083
	CDMA BC10 (§90S)	0.357	0.219	0.576
	CDMA BC0 (§22H)	0.361	0.219	0.580
	PCS CDMA	0.552	0.219	0.771
	LTE Band 71	0.307	0.219	0.526
	LTE Band 12	0.335	0.219	0.554
	LTE Band 13	0.288	0.219	0.507
	LTE Band 14	0.240	0.219	0.459
	LTE Band 5 (Cell)	0.280	0.219	0.499
	LTE Band 26 (Cell)	0.311	0.219	0.530
	LTE Band 66 (AWS)	0.776	0.219	0.995
	LTE Band 25 (PCS)	0.902	0.219	**1.121**
	LTE Band 30	0.421	0.219	0.640
	LTE Band 7	0.388	0.219	0.607
	LTE Band 48	0.200	0.219	0.419
	LTE Band 41	0.364	0.219	0.583

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.527	0.219	**1.026**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.213	0.219	**1.208**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.219	**1.081**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.745	0.219	**1.299**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.527	0.219	**1.034**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.288	0.745	0.219	**1.252**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.421	0.213	0.219	**0.853**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.280	0.745	0.219	**1.244**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.213	0.219	**1.334**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.200	0.745	0.219	**1.164**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.246	0.219	**1.241**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.246	0.219	**1.367**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.776	0.122	0.219	**1.117**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.902	0.122	0.219	**1.243**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.335	0.527	0.219	**1.081**

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Table 12-21
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz MIMO WLAN
(Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.223	0.062	0.219	0.504
	GSM 1900	0.270	0.062	0.219	0.551
	UMTS 850	0.334	0.062	0.219	0.615
	UMTS 1750	0.738	0.062	0.219	1.019
	UMTS 1900	0.864	0.062	0.219	1.145
	CDMA BC10 (§90S)	0.357	0.062	0.219	0.638
	CDMA BC0 (§22H)	0.361	0.062	0.219	0.642
	PCS CDMA	0.552	0.062	0.219	0.833
	LTE Band 71	0.307	0.062	0.219	0.588
	LTE Band 12	0.335	0.062	0.219	0.616
	LTE Band 13	0.288	0.062	0.219	0.569
	LTE Band 14	0.240	0.062	0.219	0.521
	LTE Band 5 (Cell)	0.280	0.062	0.219	0.561
	LTE Band 26 (Cell)	0.311	0.062	0.219	0.592
	LTE Band 66 (AWS)	0.776	0.062	0.219	1.057
	LTE Band 25 (PCS)	0.902	0.062	0.219	**1.183**
	LTE Band 30	0.421	0.062	0.219	0.702
	LTE Band 7	0.388	0.062	0.219	0.669
	LTE Band 48	0.200	0.062	0.219	0.481
	LTE Band 41	0.364	0.062	0.219	0.645

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.527	0.062	0.147	**1.016**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.213	0.062	0.219	**1.270**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.062	0.219	**1.143**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.745	0.062	0.219	**1.361**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.527	0.062	0.219	**1.096**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.745	0.062	0.219	**1.314**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.421	0.213	0.062	0.219	**0.915**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.745	0.062	0.219	**1.306**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.213	0.062	0.219	**1.396**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.200	0.745	0.062	0.219	**1.226**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.246	0.062	0.219	**1.303**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.246	0.062	0.219	**1.429**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.122	0.062	0.219	**1.179**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.122	0.062	0.219	**1.305**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.062	0.219	**1.143**

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Table 12-22
Simultaneous Transmission Scenario with Bluetooth Antenna 2 and 5 GHz MIMO WLAN
(Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.223	0.059	0.219	0.501
	GSM 1900	0.270	0.059	0.219	0.548
	UMTS 850	0.334	0.059	0.219	0.612
	UMTS 1750	0.738	0.059	0.219	1.016
	UMTS 1900	0.864	0.059	0.219	1.142
	CDMA BC10 (§90S)	0.357	0.059	0.219	0.635
	CDMA BC0 (§22H)	0.361	0.059	0.219	0.639
	PCS CDMA	0.552	0.059	0.219	0.830
	LTE Band 71	0.307	0.059	0.219	0.585
	LTE Band 12	0.335	0.059	0.219	0.613
	LTE Band 13	0.288	0.059	0.219	0.566
	LTE Band 14	0.240	0.059	0.219	0.518
	LTE Band 5 (Cell)	0.280	0.059	0.219	0.558
	LTE Band 26 (Cell)	0.311	0.059	0.219	0.589
	LTE Band 66 (AWS)	0.776	0.059	0.219	1.054
	LTE Band 25 (PCS)	0.902	0.059	0.219	**1.180**
	LTE Band 30	0.421	0.059	0.219	0.699
	LTE Band 7	0.388	0.059	0.219	0.666
	LTE Band 48	0.200	0.059	0.219	0.478
	LTE Band 41	0.364	0.059	0.219	0.642

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.527	0.059	0.219	**1.085**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.213	0.059	0.219	**1.267**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.059	0.219	**1.140**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.745	0.059	0.219	**1.358**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.527	0.059	0.219	**1.093**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.745	0.059	0.219	**1.311**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.421	0.213	0.059	0.219	**0.912**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.745	0.059	0.219	**1.303**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.213	0.059	0.219	**1.393**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.200	0.745	0.059	0.219	**1.223**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.246	0.059	0.219	**1.300**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.246	0.059	0.219	**1.426**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.122	0.059	0.219	**1.176**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.122	0.059	0.219	**1.302**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.059	0.219	**1.140**

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Table 12-23
Simultaneous Transmission Scenario with 2.4 GHz MIMO WLAN and 5 GHz MIMO WLAN
(Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.223	0.218	0.219	0.660
	GSM 1900	0.270	0.218	0.219	0.707
	UMTS 850	0.334	0.218	0.219	0.771
	UMTS 1750	0.738	0.218	0.219	1.175
	UMTS 1900	0.864	0.218	0.219	1.301
	CDMA BC10 (§90S)	0.357	0.218	0.219	0.794
	CDMA BC0 (§22H)	0.361	0.218	0.219	0.798
	PCS CDMA	0.552	0.218	0.219	0.989
	LTE Band 71	0.307	0.218	0.219	0.744
	LTE Band 12	0.335	0.218	0.219	0.772
	LTE Band 13	0.288	0.218	0.219	0.725
	LTE Band 14	0.240	0.218	0.219	0.677
	LTE Band 5 (Cell)	0.280	0.218	0.219	0.717
	LTE Band 26 (Cell)	0.311	0.218	0.219	0.748
	LTE Band 66 (AWS)	0.776	0.218	0.219	1.213
	LTE Band 25 (PCS)	0.902	0.218	0.219	**1.339**
	LTE Band 30	0.421	0.218	0.219	0.858
	LTE Band 7	0.388	0.218	0.219	0.825
	LTE Band 48	0.200	0.218	0.219	0.637
	LTE Band 41	0.364	0.218	0.219	0.801

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.527	0.218	0.219	**1.244**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.213	0.218	0.219	**1.426**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.218	0.219	**1.299**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.745	0.218	0.219	**1.517**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.527	0.218	0.219	**1.252**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.288	0.745	0.218	0.219	**1.470**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.421	0.213	0.218	0.219	**1.071**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.280	0.745	0.218	0.219	**1.462**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.213	0.218	0.219	**1.552**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.200	0.745	0.218	0.219	**1.382**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.246	0.218	0.219	**1.459**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.860	0.246	0.218	0.219	**1.543**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.776	0.122	0.218	0.219	**1.335**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.902	0.122	0.218	0.219	**1.461**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.335	0.527	0.218	0.219	**1.299**

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Table 12-24
Simultaneous Transmission Scenario with Bluetooth Antenna 1, 2.4 GHz Antenna 2 WLAN, and 5 GHz MIMO WLAN (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+3	1+2+3	1+2+3+4
Body-Worn	GSM 850	0.223	0.062	0.096	0.219	0.319	0.381	0.600
	GSM 1900	0.270	0.062	0.096	0.219	0.366	0.428	0.647
	UMTS 850	0.334	0.062	0.096	0.219	0.430	0.492	0.711
	UMTS 1750	0.738	0.062	0.096	0.219	0.834	0.896	1.115
	UMTS 1900	0.864	0.062	0.096	0.219	0.960	1.022	1.241
	CDMA BC10 (§90S)	0.357	0.062	0.096	0.219	0.453	0.515	0.734
	CDMA BC0 (§22H)	0.361	0.062	0.096	0.219	0.457	0.519	0.738
	PCS CDMA	0.552	0.062	0.096	0.219	0.648	0.710	0.929
	LTE Band 71	0.307	0.062	0.096	0.219	0.403	0.465	0.684
	LTE Band 12	0.335	0.062	0.096	0.219	0.431	0.493	0.712
	LTE Band 13	0.288	0.062	0.096	0.219	0.384	0.446	0.665
	LTE Band 14	0.240	0.062	0.096	0.219	0.336	0.398	0.617
	LTE Band 5 (Cell)	0.280	0.062	0.096	0.219	0.376	0.438	0.657
	LTE Band 26 (Cell)	0.311	0.062	0.096	0.219	0.407	0.469	0.688
	LTE Band 66 (AWS)	0.776	0.062	0.096	0.219	0.872	0.934	1.153
	LTE Band 25 (PCS)	0.902	0.062	0.096	0.219	0.998	1.060	**1.279**
	LTE Band 30	0.421	0.062	0.096	0.219	0.517	0.579	0.798
	LTE Band 7	0.388	0.062	0.096	0.219	0.484	0.546	0.765
	LTE Band 48	0.200	0.062	0.096	0.219	0.296	0.358	0.577
	LTE Band 41	0.364	0.062	0.096	0.219	0.460	0.522	0.741

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.280	0.527	0.062	0.096	0.219	**1.184**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.776	0.213	0.062	0.096	0.219	**1.366**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.335	0.527	0.062	0.096	0.219	**1.239**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.335	0.745	0.062	0.096	0.219	**1.457**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.288	0.527	0.062	0.096	0.219	**1.192**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.288	0.745	0.062	0.096	0.219	**1.410**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.421	0.213	0.062	0.096	0.219	**1.011**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.280	0.745	0.062	0.096	0.219	**1.402**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.902	0.213	0.062	0.096	0.219	**1.492**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.200	0.745	0.062	0.096	0.219	**1.322**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.776	0.246	0.062	0.096	0.219	**1.399**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.902	0.246	0.062	0.096	0.219	**1.525**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.776	0.122	0.062	0.096	0.219	**1.275**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.902	0.122	0.062	0.096	0.219	**1.401**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.335	0.527	0.062	0.096	0.219	**1.239**

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12.5 Open Hotspot SAR Simultaneous Transmission Analysis

Per FCC KDB Publication 941225 D06v02r01, the devices edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR ("-").

(*) For test positions that were not required to be evaluated for WLAN SAR per FCC KDB publication 248227, the worst case WLAN SAR result for the applicable exposure conditions was used for simultaneous transmission analysis.

Table 12-25
Simultaneous Transmission Scenario with 5 GHz WLAN Antenna 1 (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	GPRS 850	0.515	0.400	0.915
	GPRS 1900	1.078	0.400	1.478
	UMTS 850	0.706	0.400	1.106
	UMTS 1750	0.794	0.400	1.194
	UMTS 1900	1.094	0.400	**1.494**
	EVDO BC10 (§90S)	0.585	0.400	0.985
	EVDO BC0 (§22H)	0.722	0.400	1.122
	PCS EVDO	0.755	0.400	1.155
	LTE Band 71	0.428	0.400	0.828
	LTE Band 12	0.523	0.400	0.923
	LTE Band 13	0.481	0.400	0.881
	LTE Band 14	0.416	0.400	0.816
	LTE Band 5 (Cell)	0.500	0.400	0.900
	LTE Band 26 (Cell)	0.560	0.400	0.960
	LTE Band 66 (AWS)	0.829	0.400	1.229
	LTE Band 25 (PCS)	1.034	0.400	1.434
	LTE Band 30	1.347	0.400	See Table Below
	LTE Band 7	0.665	0.400	1.065
	LTE Band 48	0.464	0.400	0.864
	LTE Band 41	0.626	0.400	1.026

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Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.537	0.273	0.810
	Front	0.416	0.400*	0.816
	Top	-	0.400*	0.400
	Bottom	1.347	-	**1.347**
	Right	0.084	0.400	0.484
	Left	0.047	-	0.047

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.292	0.273	**1.065**
	Front	0.404	0.250	0.400*	1.054
	Top	-	-	0.400*	0.400
	Bottom	0.338	0.665	-	1.003
	Right	0.413	0.027	0.400	0.840
	Left	0.116	0.100	-	0.216

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.537	0.344	0.273	1.154
	Front	0.416	0.301	0.400*	1.117
	Top	-	-	0.400*	0.400
	Bottom	1.347	0.242	-	**1.589**
	Right	0.084	0.339	0.400	0.823
	Left	0.047	0.119	-	0.166

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.292	0.273	**1.088**
	Front	0.426	0.250	0.400*	1.076
	Top	-	-	0.400*	0.400
	Bottom	0.315	0.665	-	0.980
	Right	0.498	0.027	0.400	0.925
	Left	0.145	0.100	-	0.245

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.344	0.273	0.967
	Front	0.301	0.301	0.400*	1.002
	Top	-	-	0.400*	0.400
	Bottom	1.034	0.242	-	**1.276**
	Right	0.034	0.339	0.400	0.773
	Left	0.075	0.119	-	0.194

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.292	0.273	**1.046**
	Front	0.343	0.250	0.400*	0.993
	Top	-	-	0.400*	0.400
	Bottom	0.298	0.665	-	0.963
	Right	0.439	0.027	0.400	0.866
	Left	0.143	0.100	-	0.243

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.344	0.273	**1.095**
	Front	0.323	0.301	0.400*	1.024
	Top	-	-	0.400*	0.400
	Bottom	0.829	0.242	-	1.071
	Right	0.059	0.339	0.400	0.798
	Left	0.046	0.119	-	0.165

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.437	0.273	**1.233**
	Front	0.426	0.366	0.400*	1.192
	Top	-	-	0.400*	0.400
	Bottom	0.315	0.864	-	1.179
	Right	0.498	0.066	0.400	0.964
	Left	0.145	0.069	-	0.214

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.306	0.437	0.273	1.016
	Front	0.391	0.366	0.400*	**1.157**
	Top	0.147	-	0.400*	0.547
	Bottom	-	0.864	-	0.864
	Right	-	0.066	0.400	0.466
	Left	0.464	0.069	-	0.533

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.437	0.273	**1.191**
	Front	0.343	0.366	0.400*	1.109
	Top	-	-	0.400*	0.400
	Bottom	0.298	0.864	-	1.162
	Right	0.439	0.066	0.400	0.905
	Left	0.143	0.069	-	0.212

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.276	0.273	**1.027**
	Front	0.323	0.285	0.400*	1.008
	Top	-	-	0.400*	0.400
	Bottom	0.829	0.193	-	1.022
	Right	0.059	0.376	0.400	0.835
	Left	0.046	0.145	-	0.191

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.437	0.273	**1.210**
	Front	0.404	0.366	0.400*	1.170
	Top	-	-	0.400*	0.400
	Bottom	0.338	0.864	-	1.202
	Right	0.413	0.066	0.400	0.879
	Left	0.116	0.069	-	0.185

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.276	0.273	0.899
	Front	0.301	0.285	0.400*	0.986
	Top	-	-	0.400*	0.400
	Bottom	1.034	0.193	-	**1.227**
	Right	0.034	0.376	0.400	0.810
	Left	0.075	0.145	-	0.220

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.151	0.273	**0.902**
	Front	0.323	0.168	0.400*	0.891
	Top	-	0.179	0.400*	0.579
	Bottom	0.829	-	-	0.829
	Right	0.059	-	0.400	0.459
	Left	0.046	0.371	-	0.417

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.151	0.273	0.774
	Front	0.301	0.168	0.400*	0.869
	Top	-	0.179	0.400*	0.579
	Bottom	1.034	-	-	**1.034**
	Right	0.034	-	0.400	0.434
	Left	0.075	0.371	-	0.446

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.292	0.273	**1.088**
	Front	0.426	0.250	0.400*	1.076
	Top	-	-	0.400*	0.400
	Bottom	0.315	0.665	-	0.980
	Right	0.498	0.027	0.400	0.925
	Left	0.145	0.100	-	0.245

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Table 12-26
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz WLAN Antenna 1 (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.515	0.220	0.400	1.135
	GPRS 1900	1.078	0.220	0.400	See Table Below
	UMTS 850	0.706	0.220	0.400	1.326
	UMTS 1750	0.794	0.220	0.400	1.414
	UMTS 1900	1.094	0.220	0.400	See Table Below
	EVDO BC10 (§90S)	0.585	0.220	0.400	1.205
	EVDO BC0 (§22H)	0.722	0.220	0.400	1.342
	PCS EVDO	0.755	0.220	0.400	1.375
	LTE Band 71	0.428	0.220	0.400	1.048
	LTE Band 12	0.523	0.220	0.400	1.143
	LTE Band 13	0.481	0.220	0.400	1.101
	LTE Band 14	0.416	0.220	0.400	1.036
	LTE Band 5 (Cell)	0.500	0.220	0.400	1.120
	LTE Band 26 (Cell)	0.560	0.220	0.400	1.180
	LTE Band 66 (AWS)	0.829	0.220	0.400	**1.449**
	LTE Band 25 (PCS)	1.034	0.220	0.400	See Table Below
	LTE Band 30	1.347	0.220	0.400	See Table Below
	LTE Band 7	0.665	0.220	0.400	1.285
	LTE Band 48	0.464	0.220	0.400	1.084
	LTE Band 41	0.626	0.220	0.400	1.246

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Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.374	0.115	0.273	0.762	Hotspot SAR	Back	0.372	0.115	0.273	0.760
	Front	0.284	0.136	0.400*	0.820		Front	0.318	0.136	0.400*	0.854
	Top	-	0.067	0.400*	0.467		Top	-	0.067	0.400*	0.467
	Bottom	1.078	-	-	**1.078**		Bottom	1.094	-	-	**1.094**
	Right	0.037	0.220	0.400	0.657		Right	0.047	0.220	0.400	0.667
	Left	0.114	-	-	0.114		Left	0.119	-	-	0.119

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.115	0.273	0.738	Hotspot SAR	Back	0.537	0.115	0.273	0.925
	Front	0.301	0.136	0.400*	0.837		Front	0.416	0.136	0.400*	0.952
	Top	-	0.067	0.400*	0.467		Top	-	0.067	0.400*	0.467
	Bottom	1.034	-	-	**1.034**		Bottom	1.347	-	-	**1.347**
	Right	0.034	0.220	0.400	0.654		Right	0.084	0.220	0.400	0.704
	Left	0.075	-	-	0.075		Left	0.047	-	-	0.047

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.292	0.115	0.273	1.180
	Front	0.404	0.250	0.136	0.400*	**1.190**
	Top	-	-	0.067	0.400*	0.467
	Bottom	0.338	0.665	-	-	1.003
	Right	0.413	0.027	0.220	0.400	1.060
	Left	0.116	0.100	-	-	0.216

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.537	0.344	0.115	0.273	1.269
	Front	0.416	0.301	0.136	0.400*	1.253
	Top	-	-	0.067	0.400*	0.467
	Bottom	1.347	0.242	-	-	**1.589**
	Right	0.084	0.339	0.220	0.400	1.043
	Left	0.047	0.119	-	-	0.166

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.115	0.273	1.203
	Front	0.426	0.250	0.136	0.400*	**1.212**
	Top	-	-	0.067	0.400*	0.467
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	0.220	0.400	1.145
	Left	0.145	0.100	-	-	0.245

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.344	0.115	0.273	1.082
	Front	0.301	0.301	0.136	0.400*	1.138
	Top	-	-	0.067	0.400*	0.467
	Bottom	1.034	0.242	-	-	**1.276**
	Right	0.034	0.339	0.220	0.400	0.993
	Left	0.075	0.119	-	-	0.194

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.292	0.115	0.273	**1.161**
	Front	0.343	0.250	0.136	0.400*	1.129
	Top	-	-	0.067	0.400*	0.467
	Bottom	0.298	0.665	-	-	0.963
	Right	0.439	0.027	0.220	0.400	1.086
	Left	0.143	0.100	-	-	0.243

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.344	0.115	0.273	**1.210**
	Front	0.323	0.301	0.136	0.400*	1.160
	Top	-	-	0.067	0.400*	0.467
	Bottom	0.829	0.242	-	-	1.071
	Right	0.059	0.339	0.220	0.400	1.018
	Left	0.046	0.119	-	-	0.165

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.437	0.115	0.273	**1.348**
	Front	0.426	0.366	0.136	0.400*	1.328
	Top	-	-	0.067	0.400*	0.467
	Bottom	0.315	0.864	-	-	1.179
	Right	0.498	0.066	0.220	0.400	1.184
	Left	0.145	0.069	-	-	0.214

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.306	0.437	0.115	0.273	1.131
	Front	0.391	0.366	0.136	0.400*	**1.293**
	Top	0.147	-	0.067	0.400*	0.614
	Bottom	-	0.864	-	-	0.864
	Right	-	0.066	0.220	0.400	0.686
	Left	0.464	0.069	-	-	0.533

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.437	0.115	0.273	**1.306**
	Front	0.343	0.366	0.136	0.400*	1.245
	Top	-	-	0.067	0.400*	0.467
	Bottom	0.298	0.864	-	-	1.162
	Right	0.439	0.066	0.220	0.400	1.125
	Left	0.143	0.069	-	-	0.212

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.276	0.115	0.273	1.142
	Front	0.323	0.285	0.136	0.400*	**1.144**
	Top	-	-	0.067	0.400*	0.467
	Bottom	0.829	0.193	-	-	1.022
	Right	0.059	0.376	0.220	0.400	1.055
	Left	0.046	0.145	-	-	0.191

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.437	0.115	0.273	**1.325**
	Front	0.404	0.366	0.136	0.400*	1.306
	Top	-	-	0.067	0.400*	0.467
	Bottom	0.338	0.864	-	-	1.202
	Right	0.413	0.066	0.220	0.400	1.099
	Left	0.116	0.069	-	-	0.185

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.276	0.115	0.273	1.014
	Front	0.301	0.285	0.136	0.400*	1.122
	Top	-	-	0.067	0.400*	0.467
	Bottom	1.034	0.193	-	-	**1.227**
	Right	0.034	0.376	0.220	0.400	1.030
	Left	0.075	0.145	-	-	0.220

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.151	0.115	0.273	1.017
	Front	0.323	0.168	0.136	0.400*	**1.027**
	Top	-	0.179	0.067	0.400*	0.646
	Bottom	0.829	-	-	-	0.829
	Right	0.059	-	0.220	0.400	0.679
	Left	0.046	0.371	-	-	0.417

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.151	0.115	0.273	0.889
	Front	0.301	0.168	0.136	0.400*	1.005
	Top	-	0.179	0.067	0.400*	0.646
	Bottom	1.034	-	-	-	**1.034**
	Right	0.034	-	0.220	0.400	0.654
	Left	0.075	0.371	-	-	0.446

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.115	0.273	1.203
	Front	0.426	0.250	0.136	0.400*	**1.212**
	Top	-	-	0.067	0.400*	0.467
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	0.220	0.400	1.145
	Left	0.145	0.100	-	-	0.245

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Table 12-27
Simultaneous Transmission Scenario with Bluetooth Antenna 2 and 5 GHz WLAN Antenna 1
(Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.515	0.163	0.400	1.078
	GPRS 1900	1.078	0.163	0.400	See Table Below
	UMTS 850	0.706	0.163	0.400	1.269
	UMTS 1750	0.794	0.163	0.400	1.357
	UMTS 1900	1.094	0.163	0.400	See Table Below
	EVDO BC10 (§90S)	0.585	0.163	0.400	1.148
	EVDO BC0 (§22H)	0.722	0.163	0.400	1.285
	PCS EVDO	0.755	0.163	0.400	1.318
	LTE Band 71	0.428	0.163	0.400	0.991
	LTE Band 12	0.523	0.163	0.400	1.086
	LTE Band 13	0.481	0.163	0.400	1.044
	LTE Band 14	0.416	0.163	0.400	0.979
	LTE Band 5 (Cell)	0.500	0.163	0.400	1.063
	LTE Band 26 (Cell)	0.560	0.163	0.400	1.123
	LTE Band 66 (AWS)	0.829	0.163	0.400	**1.392**
	LTE Band 25 (PCS)	1.034	0.163	0.400	See Table Below
	LTE Band 30	1.347	0.163	0.400	See Table Below
	LTE Band 7	0.665	0.163	0.400	1.228
	LTE Band 48	0.464	0.163	0.400	1.027
	LTE Band 41	0.626	0.163	0.400	1.189

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Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.374	0.163	0.273	0.810
	Front	0.284	0.011	0.400*	0.695
	Top	-	-	0.400*	0.400
	Bottom	1.078	-	-	**1.078**
	Right	0.037	-	0.400	0.437
	Left	0.114	0.003	-	0.117

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.372	0.163	0.273	0.808
	Front	0.318	0.011	0.400*	0.729
	Top	-	-	0.400*	0.400
	Bottom	1.094	-	-	**1.094**
	Right	0.047	-	0.400	0.447
	Left	0.119	0.003	-	0.122

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.163	0.273	0.786
	Front	0.301	0.011	0.400*	0.712
	Top	-	-	0.400*	0.400
	Bottom	1.034	-	-	**1.034**
	Right	0.034	-	0.400	0.434
	Left	0.075	0.003	-	0.078

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.537	0.163	0.273	0.973
	Front	0.416	0.011	0.400*	0.827
	Top	-	-	0.400*	0.400
	Bottom	1.347	-	-	**1.347**
	Right	0.084	-	0.400	0.484
	Left	0.047	0.003	-	0.050

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.292	0.163	0.273	**1.228**
	Front	0.404	0.250	0.011	0.400*	1.065
	Top	-	-	-	0.400*	0.400
	Bottom	0.338	0.665	-	-	1.003
	Right	0.413	0.027	-	0.400	0.840
	Left	0.116	0.100	0.003	-	0.219

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.163	0.273	**1.251**
	Front	0.426	0.250	0.011	0.400*	1.087
	Top	-	-	-	0.400*	0.400
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	-	0.400	0.925
	Left	0.145	0.100	0.003	-	0.248

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.292	0.163	0.273	**1.209**
	Front	0.343	0.250	0.011	0.400*	1.004
	Top	-	-	-	0.400*	0.400
	Bottom	0.298	0.665	-	-	0.963
	Right	0.439	0.027	-	0.400	0.866
	Left	0.143	0.100	0.003	-	0.246

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.537	0.344	0.163	0.273	1.317
	Front	0.416	0.301	0.011	0.400*	1.128
	Top	-	-	-	0.400*	0.400
	Bottom	1.347	0.242	-	-	**1.589**
	Right	0.084	0.339	-	0.400	0.823
	Left	0.047	0.119	0.003	-	0.169

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.344	0.163	0.273	1.130
	Front	0.301	0.301	0.011	0.400*	1.013
	Top	-	-	-	0.400*	0.400
	Bottom	1.034	0.242	-	-	**1.276**
	Right	0.034	0.339	-	0.400	0.773
	Left	0.075	0.119	0.003	-	0.197

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.344	0.163	0.273	**1.258**
	Front	0.323	0.301	0.011	0.400*	1.035
	Top	-	-	-	0.400*	0.400
	Bottom	0.829	0.242	-	-	1.071
	Right	0.059	0.339	-	0.400	0.798
	Left	0.046	0.119	0.003	-	0.168

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.437	0.163	0.273	**1.396**
	Front	0.426	0.366	0.011	0.400*	1.203
	Top	-	-	-	0.400*	0.400
	Bottom	0.315	0.864	-	-	1.179
	Right	0.498	0.066	-	0.400	0.964
	Left	0.145	0.069	0.003	-	0.217

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.306	0.437	0.163	0.273	**1.179**
	Front	0.391	0.366	0.011	0.400*	1.168
	Top	0.147	-	-	0.400*	0.547
	Bottom	-	0.864	-	-	0.864
	Right	-	0.066	-	0.400	0.466
	Left	0.464	0.069	0.003	-	0.536

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.437	0.163	0.273	**1.354**
	Front	0.343	0.366	0.011	0.400*	1.120
	Top	-	-	-	0.400*	0.400
	Bottom	0.298	0.864	-	-	1.162
	Right	0.439	0.066	-	0.400	0.905
	Left	0.143	0.069	0.003	-	0.215

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.276	0.163	0.273	**1.190**
	Front	0.323	0.285	0.011	0.400*	1.019
	Top	-	-	-	0.400*	0.400
	Bottom	0.829	0.193	-	-	1.022
	Right	0.059	0.376	-	0.400	0.835
	Left	0.046	0.145	0.003	-	0.194

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.437	0.163	0.273	**1.373**
	Front	0.404	0.366	0.011	0.400*	1.181
	Top	-	-	-	0.400*	0.400
	Bottom	0.338	0.864	-	-	1.202
	Right	0.413	0.066	-	0.400	0.879
	Left	0.116	0.069	0.003	-	0.188

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.276	0.163	0.273	1.062
	Front	0.301	0.285	0.011	0.400*	0.997
	Top	-	-	-	0.400*	0.400
	Bottom	1.034	0.193	-	-	**1.227**
	Right	0.034	0.376	-	0.400	0.810
	Left	0.075	0.145	0.003	-	0.223

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.151	0.163	0.273	**1.065**
	Front	0.323	0.168	0.011	0.400*	0.902
	Top	-	0.179	-	0.400*	0.579
	Bottom	0.829	-	-	-	0.829
	Right	0.059	-	-	0.400	0.459
	Left	0.046	0.371	0.003	-	0.420

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.151	0.163	0.273	0.937
	Front	0.301	0.168	0.011	0.400*	0.880
	Top	-	0.179	-	0.400*	0.579
	Bottom	1.034	-	-	-	**1.034**
	Right	0.034	-	-	0.400	0.434
	Left	0.075	0.371	0.003	-	0.449

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.163	0.273	**1.251**
	Front	0.426	0.250	0.011	0.400*	1.087
	Top	-	-	-	0.400*	0.400
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	-	0.400	0.925
	Left	0.145	0.100	0.003	-	0.248

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Table 12-28
Simultaneous Transmission Scenario with 2.4 GHz MIMO WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	GPRS 850	0.515	0.519	1.034
	GPRS 1900	1.078	0.519	See Table Below
	UMTS 850	0.706	0.519	1.225
	UMTS 1750	0.794	0.519	1.313
	UMTS 1900	1.094	0.519	See Table Below
	EVDO BC10 (§90S)	0.585	0.519	1.104
	EVDO BC0 (§22H)	0.722	0.519	1.241
	PCS EVDO	0.755	0.519	1.274
	LTE Band 71	0.428	0.519	0.947
	LTE Band 12	0.523	0.519	1.042
	LTE Band 13	0.481	0.519	1.000
	LTE Band 14	0.416	0.519	0.935
	LTE Band 5 (Cell)	0.500	0.519	1.019
	LTE Band 26 (Cell)	0.560	0.519	1.079
	LTE Band 66 (AWS)	0.829	0.519	1.348
	LTE Band 25 (PCS)	1.034	0.519	**1.553**
	LTE Band 30	1.347	0.519	See Table Below
	LTE Band 7	0.665	0.519	1.184
	LTE Band 48	0.464	0.519	0.983
	LTE Band 41	0.626	0.519	1.145

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Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.374	0.470	0.844
	Front	0.284	0.355	0.639
	Top	-	0.519*	0.519
	Bottom	1.078	-	**1.078**
	Right	0.037	0.519	0.556
	Left	0.114	0.519*	0.633

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.372	0.470	0.842
	Front	0.318	0.355	0.673
	Top	-	0.519*	0.519
	Bottom	1.094	-	**1.094**
	Right	0.047	0.519	0.566
	Left	0.119	0.519*	0.638

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.537	0.470	1.007
	Front	0.416	0.355	0.771
	Top	-	0.519*	0.519
	Bottom	1.347	-	**1.347**
	Right	0.084	0.519	0.603
	Left	0.047	0.519*	0.566

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.292	0.470	**1.262**
	Front	0.404	0.250	0.355	1.009
	Top	-	-	0.519*	0.519
	Bottom	0.338	0.665	-	1.003
	Right	0.413	0.027	0.519	0.959
	Left	0.116	0.100	0.519*	0.735

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.537	0.344	0.470	1.351
	Front	0.416	0.301	0.355	1.072
	Top	-	-	0.519*	0.519
	Bottom	1.347	0.242	-	**1.589**
	Right	0.084	0.339	0.519	0.942
	Left	0.047	0.119	0.519*	0.685

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.292	0.470	**1.285**
	Front	0.426	0.250	0.355	1.031
	Top	-	-	0.519*	0.519
	Bottom	0.315	0.665	-	0.980
	Right	0.498	0.027	0.519	1.044
	Left	0.145	0.100	0.519*	0.764

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.344	0.470	1.164
	Front	0.301	0.301	0.355	0.957
	Top	-	-	0.519*	0.519
	Bottom	1.034	0.242	-	**1.276**
	Right	0.034	0.339	0.519	0.892
	Left	0.075	0.119	0.519*	0.713

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.292	0.470	**1.243**
	Front	0.343	0.250	0.355	0.948
	Top	-	-	0.519*	0.519
	Bottom	0.298	0.665	-	0.963
	Right	0.439	0.027	0.519	0.985
	Left	0.143	0.100	0.519*	0.762

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.344	0.470	**1.292**
	Front	0.323	0.301	0.355	0.979
	Top	-	-	0.519*	0.519
	Bottom	0.829	0.242	-	1.071
	Right	0.059	0.339	0.519	0.917
	Left	0.046	0.119	0.519*	0.684

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.437	0.470	**1.430**	Hotspot SAR	Back	0.306	0.437	0.470	**1.213**
	Front	0.426	0.366	0.355	1.147		Front	0.391	0.366	0.355	1.112
	Top	-	-	0.519*	0.519		Top	0.147	-	0.519*	0.666
	Bottom	0.315	0.864	-	1.179		Bottom	-	0.864	-	0.864
	Right	0.498	0.066	0.519	1.083		Right	-	0.066	0.519	0.585
	Left	0.145	0.069	0.519*	0.733		Left	0.464	0.069	0.519*	1.052

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.437	0.470	**1.388**	Hotspot SAR	Back	0.478	0.276	0.470	**1.224**
	Front	0.343	0.366	0.355	1.064		Front	0.323	0.285	0.355	0.963
	Top	-	-	0.519*	0.519		Top	-	-	0.519*	0.519
	Bottom	0.298	0.864	-	1.162		Bottom	0.829	0.193	-	1.022
	Right	0.439	0.066	0.519	1.024		Right	0.059	0.376	0.519	0.954
	Left	0.143	0.069	0.519*	0.731		Left	0.046	0.145	0.519*	0.710

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.437	0.470	**1.407**	Hotspot SAR	Back	0.350	0.276	0.470	1.096
	Front	0.404	0.366	0.355	1.125		Front	0.301	0.285	0.355	0.941
	Top	-	-	0.519*	0.519		Top	-	-	0.519*	0.519
	Bottom	0.338	0.864	-	1.202		Bottom	1.034	0.193	-	**1.227**
	Right	0.413	0.066	0.519	0.998		Right	0.034	0.376	0.519	0.929
	Left	0.116	0.069	0.519*	0.704		Left	0.075	0.145	0.519*	0.739

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.151	0.470	**1.099**
	Front	0.323	0.168	0.355	0.846
	Top	-	0.179	0.519*	0.698
	Bottom	0.829	-	-	0.829
	Right	0.059	-	0.519	0.578
	Left	0.046	0.371	0.519*	0.936
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.151	0.470	0.971
	Front	0.301	0.168	0.355	0.824
	Top	-	0.179	0.519*	0.698
	Bottom	1.034	-	-	**1.034**
	Right	0.034	-	0.519	0.553
	Left	0.075	0.371	0.519*	0.965
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.292	0.470	**1.285**
	Front	0.426	0.250	0.355	1.031
	Top	-	-	0.519*	0.519
	Bottom	0.315	0.665	-	0.980
	Right	0.498	0.027	0.519	1.044
	Left	0.145	0.100	0.519*	0.764

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Table 12-29
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 2.4 GHz WLAN Antenna 2 (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.515	0.220	0.508	1.243
	GPRS 1900	1.078	0.220	0.508	See Table Below
	UMTS 850	0.706	0.220	0.508	1.434
	UMTS 1750	0.794	0.220	0.508	1.522
	UMTS 1900	1.094	0.220	0.508	See Table Below
	EVDO BC10 (§90S)	0.585	0.220	0.508	1.313
	EVDO BC0 (§22H)	0.722	0.220	0.508	1.450
	PCS EVDO	0.755	0.220	0.508	1.483
	LTE Band 71	0.428	0.220	0.508	1.156
	LTE Band 12	0.523	0.220	0.508	1.251
	LTE Band 13	0.481	0.220	0.508	1.209
	LTE Band 14	0.416	0.220	0.508	1.144
	LTE Band 5 (Cell)	0.500	0.220	0.508	1.228
	LTE Band 26 (Cell)	0.560	0.220	0.508	1.288
	LTE Band 66 (AWS)	0.829	0.220	0.508	**1.557**
	LTE Band 25 (PCS)	1.034	0.220	0.508	See Table Below
	LTE Band 30	1.347	0.220	0.508	See Table Below
	LTE Band 7	0.665	0.220	0.508	1.393
	LTE Band 48	0.464	0.220	0.508	1.192
	LTE Band 41	0.626	0.220	0.508	1.354

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Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.374	0.115	0.508	0.997
	Front	0.284	0.136	0.031	0.451
	Top	-	0.067	-	0.067
	Bottom	1.078	-	-	**1.078**
	Right	0.037	0.220	-	0.257
	Left	0.114	-	0.077	0.191

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.372	0.115	0.508	0.995
	Front	0.318	0.136	0.031	0.485
	Top	-	0.067	-	0.067
	Bottom	1.094	-	-	**1.094**
	Right	0.047	0.220	-	0.267
	Left	0.119	-	0.077	0.196

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.115	0.508	0.973
	Front	0.301	0.136	0.031	0.468
	Top	-	0.067	-	0.067
	Bottom	1.034	-	-	**1.034**
	Right	0.034	0.220	-	0.254
	Left	0.075	-	0.077	0.152

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.537	0.115	0.508	1.160
	Front	0.416	0.136	0.031	0.583
	Top	-	0.067	-	0.067
	Bottom	1.347	-	-	**1.347**
	Right	0.084	0.220	-	0.304
	Left	0.047	-	0.077	0.124

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.292	0.115	0.508	**1.415**
	Front	0.404	0.250	0.136	0.031	0.821
	Top	-	-	0.067	-	0.067
	Bottom	0.338	0.665	-	-	1.003
	Right	0.413	0.027	0.220	-	0.660
	Left	0.116	0.100	-	0.077	0.293

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.537	0.344	0.115	0.508	1.504
	Front	0.416	0.301	0.136	0.031	0.884
	Top	-	-	0.067	-	0.067
	Bottom	1.347	0.242	-	-	**1.589**
	Right	0.084	0.339	0.220	-	0.643
	Left	0.047	0.119	-	0.077	0.243

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.115	0.508	**1.438**
	Front	0.426	0.250	0.136	0.031	0.843
	Top	-	-	0.067	-	0.067
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	0.220	-	0.745
	Left	0.145	0.100	-	0.077	0.322

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.344	0.115	0.508	**1.317**
	Front	0.301	0.301	0.136	0.031	0.769
	Top	-	-	0.067	-	0.067
	Bottom	1.034	0.242	-	-	1.276
	Right	0.034	0.339	0.220	-	0.593
	Left	0.075	0.119	-	0.077	0.271

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.292	0.115	0.508	**1.396**
	Front	0.343	0.250	0.136	0.031	0.760
	Top	-	-	0.067	-	0.067
	Bottom	0.298	0.665	-	-	0.963
	Right	0.439	0.027	0.220	-	0.686
	Left	0.143	0.100	-	0.077	0.320

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.344	0.115	0.508	**1.445**
	Front	0.323	0.301	0.136	0.031	0.791
	Top	-	-	0.067	-	0.067
	Bottom	0.829	0.242	-	-	1.071
	Right	0.059	0.339	0.220	-	0.618
	Left	0.046	0.119	-	0.077	0.242

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.437	0.115	0.508	**1.583**
	Front	0.426	0.366	0.136	0.031	0.959
	Top	-	-	0.067	-	0.067
	Bottom	0.315	0.864	-	-	1.179
	Right	0.498	0.066	0.220	-	0.784
	Left	0.145	0.069	-	0.077	0.291

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.306	0.437	0.115	0.508	**1.366**
	Front	0.391	0.366	0.136	0.031	0.924
	Top	0.147	-	0.067	-	0.214
	Bottom	-	0.864	-	-	0.864
	Right	-	0.066	0.220	-	0.286
	Left	0.464	0.069	-	0.077	0.610

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.437	0.115	0.508	**1.541**
	Front	0.343	0.366	0.136	0.031	0.876
	Top	-	-	0.067	-	0.067
	Bottom	0.298	0.864	-	-	1.162
	Right	0.439	0.066	0.220	-	0.725
	Left	0.143	0.069	-	0.077	0.289

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.276	0.115	0.508	**1.377**
	Front	0.323	0.285	0.136	0.031	0.775
	Top	-	-	0.067	-	0.067
	Bottom	0.829	0.193	-	-	1.022
	Right	0.059	0.376	0.220	-	0.655
	Left	0.046	0.145	-	0.077	0.268

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.437	0.115	0.508	**1.560**
	Front	0.404	0.366	0.136	0.031	0.937
	Top	-	-	0.067	-	0.067
	Bottom	0.338	0.864	-	-	1.202
	Right	0.413	0.066	0.220	-	0.699
	Left	0.116	0.069	-	0.077	0.262

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.276	0.115	0.508	**1.249**
	Front	0.301	0.285	0.136	0.031	0.753
	Top	-	-	0.067	-	0.067
	Bottom	1.034	0.193	-	-	1.227
	Right	0.034	0.376	0.220	-	0.630
	Left	0.075	0.145	-	0.077	0.297

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.151	0.115	0.508	**1.252**
	Front	0.323	0.168	0.136	0.031	0.658
	Top	-	0.179	0.067	-	0.246
	Bottom	0.829	-	-	-	0.829
	Right	0.059	-	0.220	-	0.279
	Left	0.046	0.371	-	0.077	0.494

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.151	0.115	0.508	**1.124**
	Front	0.301	0.168	0.136	0.031	0.636
	Top	-	0.179	0.067	-	0.246
	Bottom	1.034	-	-	-	1.034
	Right	0.034	-	0.220	-	0.254
	Left	0.075	0.371	-	0.077	0.523

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.115	0.508	**1.438**
	Front	0.426	0.250	0.136	0.031	0.843
	Top	-	-	0.067	-	0.067
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	0.220	-	0.745
	Left	0.145	0.100	-	0.077	0.322

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Table 12-30
Simultaneous Transmission Scenario with Bluetooth Antenna 1
(Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	GPRS 850	0.515	0.220	0.735
	GPRS 1900	1.078	0.220	1.298
	UMTS 850	0.706	0.220	0.926
	UMTS 1750	0.794	0.220	1.014
	UMTS 1900	1.094	0.220	1.314
	EVDO BC10 (§90S)	0.585	0.220	0.805
	EVDO BC0 (§22H)	0.722	0.220	0.942
	PCS EVDO	0.755	0.220	0.975
	LTE Band 71	0.428	0.220	0.648
	LTE Band 12	0.523	0.220	0.743
	LTE Band 13	0.481	0.220	0.701
	LTE Band 14	0.416	0.220	0.636
	LTE Band 5 (Cell)	0.500	0.220	0.720
	LTE Band 26 (Cell)	0.560	0.220	0.780
	LTE Band 66 (AWS)	0.829	0.220	1.049
	LTE Band 25 (PCS)	1.034	0.220	1.254
	LTE Band 30	1.347	0.220	**1.567**
	LTE Band 7	0.665	0.220	0.885
	LTE Band 48	0.464	0.220	0.684
	LTE Band 41	0.626	0.220	0.846

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.292	0.115	0.907
	Front	0.404	0.250	0.136	0.790
	Top	-	-	0.067	0.067
	Bottom	0.338	0.665	-	**1.003**
	Right	0.413	0.027	0.220	0.660
	Left	0.116	0.100	-	0.216

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.537	0.344	0.115	0.996
	Front	0.416	0.301	0.136	0.853
	Top	-	-	0.067	0.067
	Bottom	1.347	0.242	-	**1.589**
	Right	0.084	0.339	0.220	0.643
	Left	0.047	0.119	-	0.166

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.292	0.115	0.930
	Front	0.426	0.250	0.136	0.812
	Top	-	-	0.067	0.067
	Bottom	0.315	0.665	-	**0.980**
	Right	0.498	0.027	0.220	0.745
	Left	0.145	0.100	-	0.245

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.344	0.115	0.809
	Front	0.301	0.301	0.136	0.738
	Top	-	-	0.067	0.067
	Bottom	1.034	0.242	-	**1.276**
	Right	0.034	0.339	0.220	0.593
	Left	0.075	0.119	-	0.194

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.292	0.115	0.888
	Front	0.343	0.250	0.136	0.729
	Top	-	-	0.067	0.067
	Bottom	0.298	0.665	-	**0.963**
	Right	0.439	0.027	0.220	0.686
	Left	0.143	0.100	-	0.243

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.344	0.115	0.937
	Front	0.323	0.301	0.136	0.760
	Top	-	-	0.067	0.067
	Bottom	0.829	0.242	-	**1.071**
	Right	0.059	0.339	0.220	0.618
	Left	0.046	0.119	-	0.165

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.437	0.115	1.075
	Front	0.426	0.366	0.136	0.928
	Top	-	-	0.067	0.067
	Bottom	0.315	0.864	-	**1.179**
	Right	0.498	0.066	0.220	0.784
	Left	0.145	0.069	-	0.214

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.306	0.437	0.115	0.858
	Front	0.391	0.366	0.136	**0.893**
	Top	0.147	-	0.067	0.214
	Bottom	-	0.864	-	0.864
	Right	-	0.066	0.220	0.286
	Left	0.464	0.069	-	0.533

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.437	0.115	1.033
	Front	0.343	0.366	0.136	0.845
	Top	-	-	0.067	0.067
	Bottom	0.298	0.864	-	**1.162**
	Right	0.439	0.066	0.220	0.725
	Left	0.143	0.069	-	0.212

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.276	0.115	0.869
	Front	0.323	0.285	0.136	0.744
	Top	-	-	0.067	0.067
	Bottom	0.829	0.193	-	**1.022**
	Right	0.059	0.376	0.220	0.655
	Left	0.046	0.145	-	0.191

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.437	0.115	1.052
	Front	0.404	0.366	0.136	0.906
	Top	-	-	0.067	0.067
	Bottom	0.338	0.864	-	**1.202**
	Right	0.413	0.066	0.220	0.699
	Left	0.116	0.069	-	0.185

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.276	0.115	0.741
	Front	0.301	0.285	0.136	0.722
	Top	-	-	0.067	0.067
	Bottom	1.034	0.193	-	**1.227**
	Right	0.034	0.376	0.220	0.630
	Left	0.075	0.145	-	0.220

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.151	0.115	0.744
	Front	0.323	0.168	0.136	0.627
	Top	-	0.179	0.067	0.246
	Bottom	0.829	-	-	**0.829**
	Right	0.059	-	0.220	0.279
	Left	0.046	0.371	-	0.417

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.151	0.115	0.616
	Front	0.301	0.168	0.136	0.605
	Top	-	0.179	0.067	0.246
	Bottom	1.034	-	-	**1.034**
	Right	0.034	-	0.220	0.254
	Left	0.075	0.371	-	0.446

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.292	0.115	0.930
	Front	0.426	0.250	0.136	0.812
	Top	-	-	0.067	0.067
	Bottom	0.315	0.665	-	**0.980**
	Right	0.498	0.027	0.220	0.745
	Left	0.145	0.100	-	0.245

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Table 12-31
Simultaneous Transmission Scenario with Bluetooth Antenna 2
(Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	GPRS 850	0.515	0.163	0.678
	GPRS 1900	1.078	0.163	1.241
	UMTS 850	0.706	0.163	0.869
	UMTS 1750	0.794	0.163	0.957
	UMTS 1900	1.094	0.163	1.257
	EVDO BC10 (§90S)	0.585	0.163	0.748
	EVDO BC0 (§22H)	0.722	0.163	0.885
	PCS EVDO	0.755	0.163	0.918
	LTE Band 71	0.428	0.163	0.591
	LTE Band 12	0.523	0.163	0.686
	LTE Band 13	0.481	0.163	0.644
	LTE Band 14	0.416	0.163	0.579
	LTE Band 5 (Cell)	0.500	0.163	0.663
	LTE Band 26 (Cell)	0.560	0.163	0.723
	LTE Band 66 (AWS)	0.829	0.163	0.992
	LTE Band 25 (PCS)	1.034	0.163	1.197
	LTE Band 30	1.347	0.163	**1.510**
	LTE Band 7	0.665	0.163	0.828
	LTE Band 48	0.464	0.163	0.627
	LTE Band 41	0.626	0.163	0.789

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.292	0.163	0.955
	Front	0.404	0.250	0.011	0.665
	Bottom	0.338	0.665	-	**1.003**
	Right	0.413	0.027	-	0.440
	Left	0.116	0.100	0.003	0.219

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.292	0.163	0.978
	Front	0.426	0.250	0.011	0.687
	Bottom	0.315	0.665	-	**0.980**
	Right	0.498	0.027	-	0.525
	Left	0.145	0.100	0.003	0.248

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.292	0.163	0.936
	Front	0.343	0.250	0.011	0.604
	Bottom	0.298	0.665	-	**0.963**
	Right	0.439	0.027	-	0.466
	Left	0.143	0.100	0.003	0.246

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.537	0.344	0.163	1.044
	Front	0.416	0.301	0.011	0.728
	Bottom	1.347	0.242	-	**1.589**
	Right	0.084	0.339	-	0.423
	Left	0.047	0.119	0.003	0.169

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.344	0.163	0.857
	Front	0.301	0.301	0.011	0.613
	Bottom	1.034	0.242	-	**1.276**
	Right	0.034	0.339	-	0.373
	Left	0.075	0.119	0.003	0.197

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.344	0.163	0.985
	Front	0.323	0.301	0.011	0.635
	Bottom	0.829	0.242	-	**1.071**
	Right	0.059	0.339	-	0.398
	Left	0.046	0.119	0.003	0.168

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.437	0.163	1.123
	Front	0.426	0.366	0.011	0.803
	Bottom	0.315	0.864	-	**1.179**
	Right	0.498	0.066	-	0.564
	Left	0.145	0.069	0.003	0.217

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.437	0.163	1.081
	Front	0.343	0.366	0.011	0.720
	Bottom	0.298	0.864	-	**1.162**
	Right	0.439	0.066	-	0.505
	Left	0.143	0.069	0.003	0.215

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.437	0.163	1.100
	Front	0.404	0.366	0.011	0.781
	Bottom	0.338	0.864	-	**1.202**
	Right	0.413	0.066	-	0.479
	Left	0.116	0.069	0.003	0.188

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.306	0.437	0.163	**0.906**
	Front	0.391	0.366	0.011	0.768
	Top	0.147	-	-	0.147
	Bottom	-	0.864	-	0.864
	Right	-	0.066	-	0.066
	Left	0.464	0.069	0.003	0.536

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.276	0.163	0.917
	Front	0.323	0.285	0.011	0.619
	Bottom	0.829	0.193	-	**1.022**
	Right	0.059	0.376	-	0.435
	Left	0.046	0.145	0.003	0.194

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.276	0.163	0.789
	Front	0.301	0.285	0.011	0.597
	Bottom	1.034	0.193	-	**1.227**
	Right	0.034	0.376	-	0.410
	Left	0.075	0.145	0.003	0.223

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Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.537	0.314	0.851
	Front	0.416	0.389*	0.805
	Top	-	0.389*	0.389
	Bottom	1.347	-	**1.347**
	Right	0.084	0.389	0.473
	Left	0.047	-	0.047

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.292	0.314	**1.106**
	Front	0.404	0.250	0.389*	1.043
	Top	-	-	0.389*	0.389
	Bottom	0.338	0.665	-	1.003
	Right	0.413	0.027	0.389	0.829
	Left	0.116	0.100	-	0.216

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.537	0.344	0.314	1.195
	Front	0.416	0.301	0.389*	1.106
	Top	-	-	0.389*	0.389
	Bottom	1.347	0.242	-	**1.589**
	Right	0.084	0.339	0.389	0.812
	Left	0.047	0.119	-	0.166

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.292	0.314	**1.129**
	Front	0.426	0.250	0.389*	1.065
	Top	-	-	0.389*	0.389
	Bottom	0.315	0.665	-	0.980
	Right	0.498	0.027	0.389	0.914
	Left	0.145	0.100	-	0.245

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.344	0.314	1.008
	Front	0.301	0.301	0.389*	0.991
	Top	-	-	0.389*	0.389
	Bottom	1.034	0.242	-	**1.276**
	Right	0.034	0.339	0.389	0.762
	Left	0.075	0.119	-	0.194

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.292	0.314	**1.087**
	Front	0.343	0.250	0.389*	0.982
	Top	-	-	0.389*	0.389
	Bottom	0.298	0.665	-	0.963
	Right	0.439	0.027	0.389	0.855
	Left	0.143	0.100	-	0.243

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.344	0.314	**1.136**
	Front	0.323	0.301	0.389*	1.013
	Top	-	-	0.389*	0.389
	Bottom	0.829	0.242	-	1.071
	Right	0.059	0.339	0.389	0.787
	Left	0.046	0.119	-	0.165

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.437	0.314	**1.274**
	Front	0.426	0.366	0.389*	1.181
	Top	-	-	0.389*	0.389
	Bottom	0.315	0.864	-	1.179
	Right	0.498	0.066	0.389	0.953
	Left	0.145	0.069	-	0.214

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.306	0.437	0.314	1.057
	Front	0.391	0.366	0.389*	**1.146**
	Top	0.147	-	0.389*	0.536
	Bottom	-	0.864	-	0.864
	Right	-	0.066	0.389	0.455
	Left	0.464	0.069	-	0.533

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.481	0.437	0.314	**1.232**
	Front	0.343	0.366	0.389*	1.098
	Top	-	-	0.389*	0.389
	Bottom	0.298	0.864	-	1.162
	Right	0.439	0.066	0.389	0.894
	Left	0.143	0.069	-	0.212

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.276	0.314	**1.068**
	Front	0.323	0.285	0.389*	0.997
	Top	-	-	0.389*	0.389
	Bottom	0.829	0.193	-	1.022
	Right	0.059	0.376	0.389	0.824
	Left	0.046	0.145	-	0.191

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.500	0.437	0.314	**1.251**
	Front	0.404	0.366	0.389*	1.159
	Top	-	-	0.389*	0.389
	Bottom	0.338	0.864	-	1.202
	Right	0.413	0.066	0.389	0.868
	Left	0.116	0.069	-	0.185

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.276	0.314	0.940
	Front	0.301	0.285	0.389*	0.975
	Top	-	-	0.389*	0.389
	Bottom	1.034	0.193	-	**1.227**
	Right	0.034	0.376	0.389	0.799
	Left	0.075	0.145	-	0.220

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.478	0.151	0.314	**0.943**
	Front	0.323	0.168	0.389*	0.880
	Top	-	0.179	0.389*	0.568
	Bottom	0.829	-	-	0.829
	Right	0.059	-	0.389	0.448
	Left	0.046	0.371	-	0.417

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.151	0.314	0.815
	Front	0.301	0.168	0.389*	0.858
	Top	-	0.179	0.389*	0.568
	Bottom	1.034	-	-	**1.034**
	Right	0.034	-	0.389	0.423
	Left	0.075	0.371	-	0.446

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.523	0.292	0.314	**1.129**
	Front	0.426	0.250	0.389*	1.065
	Top	-	-	0.389*	0.389
	Bottom	0.315	0.665	-	0.980
	Right	0.498	0.027	0.389	0.914
	Left	0.145	0.100	-	0.245

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Table 12-33
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz MIMO WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.515	0.220	0.389	1.124
	GPRS 1900	1.078	0.220	0.389	See Table Below
	UMTS 850	0.706	0.220	0.389	1.315
	UMTS 1750	0.794	0.220	0.389	1.403
	UMTS 1900	1.094	0.220	0.389	See Table Below
	EVDO BC10 (§90S)	0.585	0.220	0.389	1.194
	EVDO BC0 (§22H)	0.722	0.220	0.389	1.331
	PCS EVDO	0.755	0.220	0.389	1.364
	LTE Band 71	0.428	0.220	0.389	1.037
	LTE Band 12	0.523	0.220	0.389	1.132
	LTE Band 13	0.481	0.220	0.389	1.090
	LTE Band 14	0.416	0.220	0.389	1.025
	LTE Band 5 (Cell)	0.500	0.220	0.389	1.109
	LTE Band 26 (Cell)	0.560	0.220	0.389	1.169
	LTE Band 66 (AWS)	0.829	0.220	0.389	**1.438**
	LTE Band 25 (PCS)	1.034	0.220	0.389	See Table Below
	LTE Band 30	1.347	0.220	0.389	See Table Below
	LTE Band 7	0.665	0.220	0.389	1.274
	LTE Band 48	0.464	0.220	0.389	1.073
	LTE Band 41	0.626	0.220	0.389	1.235

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Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.374	0.115	0.314	0.803
	Front	0.284	0.136	0.389*	0.809
	Top	-	0.067	0.389*	0.456
	Bottom	1.078	-	-	**1.078**
	Right	0.037	0.220	0.389	0.646
	Left	0.114	-	-	0.114

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.372	0.115	0.314	0.801
	Front	0.318	0.136	0.389*	0.843
	Top	-	0.067	0.389*	0.456
	Bottom	1.094	-	-	**1.094**
	Right	0.047	0.220	0.389	0.656
	Left	0.119	-	-	0.119

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.115	0.314	0.779
	Front	0.301	0.136	0.389*	0.826
	Top	-	0.067	0.389*	0.456
	Bottom	1.034	-	-	**1.034**
	Right	0.034	0.220	0.389	0.643
	Left	0.075	-	-	0.075

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.537	0.115	0.314	0.966
	Front	0.416	0.136	0.389*	0.941
	Top	-	0.067	0.389*	0.456
	Bottom	1.347	-	-	**1.347**
	Right	0.084	0.220	0.389	0.693
	Left	0.047	-	-	0.047

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.292	0.115	0.314	**1.221**
	Front	0.404	0.250	0.136	0.389*	1.179
	Top	-	-	0.067	0.389*	0.456
	Bottom	0.338	0.665	-	-	1.003
	Right	0.413	0.027	0.220	0.389	1.049
	Left	0.116	0.100	-	-	0.216

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.115	0.314	**1.244**
	Front	0.426	0.250	0.136	0.389*	1.201
	Top	-	-	0.067	0.389*	0.456
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	0.220	0.389	1.134
	Left	0.145	0.100	-	-	0.245

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.292	0.115	0.314	**1.202**
	Front	0.343	0.250	0.136	0.389*	1.118
	Top	-	-	0.067	0.389*	0.456
	Bottom	0.298	0.665	-	-	0.963
	Right	0.439	0.027	0.220	0.389	1.075
	Left	0.143	0.100	-	-	0.243

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.537	0.344	0.115	0.314	1.310
	Front	0.416	0.301	0.136	0.389*	1.242
	Top	-	-	0.067	0.389*	0.456
	Bottom	1.347	0.242	-	-	**1.589**
	Right	0.084	0.339	0.220	0.389	1.032
	Left	0.047	0.119	-	-	0.166

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.344	0.115	0.314	1.123
	Front	0.301	0.301	0.136	0.389*	1.127
	Top	-	-	0.067	0.389*	0.456
	Bottom	1.034	0.242	-	-	**1.276**
	Right	0.034	0.339	0.220	0.389	0.982
	Left	0.075	0.119	-	-	0.194

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.344	0.115	0.314	**1.251**
	Front	0.323	0.301	0.136	0.389*	1.149
	Top	-	-	0.067	0.389*	0.456
	Bottom	0.829	0.242	-	-	1.071
	Right	0.059	0.339	0.220	0.389	1.007
	Left	0.046	0.119	-	-	0.165

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.437	0.115	0.314	**1.389**
	Front	0.426	0.366	0.136	0.389*	1.317
	Top	-	-	0.067	0.389*	0.456
	Bottom	0.315	0.864	-	-	1.179
	Right	0.498	0.066	0.220	0.389	1.173
	Left	0.145	0.069	-	-	0.214

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.437	0.115	0.314	**1.347**
	Front	0.343	0.366	0.136	0.389*	1.234
	Top	-	-	0.067	0.389*	0.456
	Bottom	0.298	0.864	-	-	1.162
	Right	0.439	0.066	0.220	0.389	1.114
	Left	0.143	0.069	-	-	0.212

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.437	0.115	0.314	**1.366**
	Front	0.404	0.366	0.136	0.389*	1.295
	Top	-	-	0.067	0.389*	0.456
	Bottom	0.338	0.864	-	-	1.202
	Right	0.413	0.066	0.220	0.389	1.088
	Left	0.116	0.069	-	-	0.185

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.306	0.437	0.115	0.314	1.172
	Front	0.391	0.366	0.136	0.389*	**1.282**
	Top	0.147	-	0.067	0.389*	0.603
	Bottom	-	0.864	-	-	0.864
	Right	-	0.066	0.220	0.389	0.675
	Left	0.464	0.069	-	-	0.533

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.276	0.115	0.314	**1.183**
	Front	0.323	0.285	0.136	0.389*	1.133
	Top	-	-	0.067	0.389*	0.456
	Bottom	0.829	0.193	-	-	1.022
	Right	0.059	0.376	0.220	0.389	1.044
	Left	0.046	0.145	-	-	0.191

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.276	0.115	0.314	1.055
	Front	0.301	0.285	0.136	0.389*	1.111
	Top	-	-	0.067	0.389*	0.456
	Bottom	1.034	0.193	-	-	**1.227**
	Right	0.034	0.376	0.220	0.389	1.019
	Left	0.075	0.145	-	-	0.220

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.151	0.115	0.314	**1.058**
	Front	0.323	0.168	0.136	0.389*	1.016
	Top	-	0.179	0.067	0.389*	0.635
	Bottom	0.829	-	-	-	0.829
	Right	0.059	-	0.220	0.389	0.668
	Left	0.046	0.371	-	-	0.417
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.151	0.115	0.314	0.930
	Front	0.301	0.168	0.136	0.389*	0.994
	Top	-	0.179	0.067	0.389*	0.635
	Bottom	1.034	-	-	-	**1.034**
	Right	0.034	-	0.220	0.389	0.643
	Left	0.075	0.371	-	-	0.446
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.115	0.314	**1.244**
	Front	0.426	0.250	0.136	0.389*	1.201
	Top	-	-	0.067	0.389*	0.456
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	0.220	0.389	1.134
	Left	0.145	0.100	-	-	0.245

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Table 12-34
Simultaneous Transmission Scenario with Bluetooth Antenna 2 and 5 GHz MIMO WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.515	0.163	0.389	1.067
	GPRS 1900	1.078	0.163	0.389	See Table Below
	UMTS 850	0.706	0.163	0.389	1.258
	UMTS 1750	0.794	0.163	0.389	1.346
	UMTS 1900	1.094	0.163	0.389	See Table Below
	EVDO BC10 (§90S)	0.585	0.163	0.389	1.137
	EVDO BC0 (§22H)	0.722	0.163	0.389	1.274
	PCS EVDO	0.755	0.163	0.389	1.307
	LTE Band 71	0.428	0.163	0.389	0.980
	LTE Band 12	0.523	0.163	0.389	1.075
	LTE Band 13	0.481	0.163	0.389	1.033
	LTE Band 14	0.416	0.163	0.389	0.968
	LTE Band 5 (Cell)	0.500	0.163	0.389	1.052
	LTE Band 26 (Cell)	0.560	0.163	0.389	1.112
	LTE Band 66 (AWS)	0.829	0.163	0.389	1.381
	LTE Band 25 (PCS)	1.034	0.163	0.389	**1.586**
	LTE Band 30	1.347	0.163	0.389	See Table Below
	LTE Band 7	0.665	0.163	0.389	1.217
	LTE Band 48	0.464	0.163	0.389	1.016
	LTE Band 41	0.626	0.163	0.389	1.178

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Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.374	0.163	0.273	0.810
	Front	0.284	0.011	0.400*	0.695
	Top	-	-	0.400*	0.400
	Bottom	1.078	-	-	**1.078**
	Right	0.037	-	0.400	0.437
	Left	0.114	0.003	-	0.117

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.372	0.163	0.273	0.808
	Front	0.318	0.011	0.400*	0.729
	Top	-	-	0.400*	0.400
	Bottom	1.094	-	-	**1.094**
	Right	0.047	-	0.400	0.447
	Left	0.119	0.003	-	0.122

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.537	0.163	0.273	0.973
	Front	0.416	0.011	0.400*	0.827
	Top	-	-	0.400*	0.400
	Bottom	1.347	-	-	**1.347**
	Right	0.084	-	0.400	0.484
	Left	0.047	0.003	-	0.050

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.292	0.163	0.314	**1.269**
	Front	0.404	0.250	0.011	0.389*	1.054
	Top	-	-	-	0.389*	0.389
	Bottom	0.338	0.665	-	-	1.003
	Right	0.413	0.027	-	0.389	0.829
	Left	0.116	0.100	0.003	-	0.219

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.537	0.344	0.163	0.314	1.358
	Front	0.416	0.301	0.011	0.389*	1.117
	Top	-	-	-	0.389*	0.389
	Bottom	1.347	0.242	-	-	**1.589**
	Right	0.084	0.339	-	0.389	0.812
	Left	0.047	0.119	0.003	-	0.169

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.163	0.314	**1.292**
	Front	0.426	0.250	0.011	0.389*	1.076
	Top	-	-	-	0.389*	0.389
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	-	0.389	0.914
	Left	0.145	0.100	0.003	-	0.248

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.344	0.163	0.314	1.171
	Front	0.301	0.301	0.011	0.389*	1.002
	Top	-	-	-	0.389*	0.389
	Bottom	1.034	0.242	-	-	**1.276**
	Right	0.034	0.339	-	0.389	0.762
	Left	0.075	0.119	0.003	-	0.197

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.292	0.163	0.314	**1.250**
	Front	0.343	0.250	0.011	0.389*	0.993
	Top	-	-	-	0.389*	0.389
	Bottom	0.298	0.665	-	-	0.963
	Right	0.439	0.027	-	0.389	0.855
	Left	0.143	0.100	0.003	-	0.246

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.344	0.163	0.314	**1.299**
	Front	0.323	0.301	0.011	0.389*	1.024
	Top	-	-	-	0.389*	0.389
	Bottom	0.829	0.242	-	-	1.071
	Right	0.059	0.339	-	0.389	0.787
	Left	0.046	0.119	0.003	-	0.168

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.437	0.163	0.314	**1.437**
	Front	0.426	0.366	0.011	0.389*	1.192
	Top	-	-	-	0.389*	0.389
	Bottom	0.315	0.864	-	-	1.179
	Right	0.498	0.066	-	0.389	0.953
	Left	0.145	0.069	0.003	-	0.217

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.306	0.437	0.163	0.314	**1.220**
	Front	0.391	0.366	0.011	0.389*	1.157
	Top	0.147	-	-	0.389*	0.536
	Bottom	-	0.864	-	-	0.864
	Right	-	0.066	-	0.389	0.455
	Left	0.464	0.069	0.003	-	0.536

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.437	0.163	0.314	**1.395**
	Front	0.343	0.366	0.011	0.389*	1.109
	Top	-	-	-	0.389*	0.389
	Bottom	0.298	0.864	-	-	1.162
	Right	0.439	0.066	-	0.389	0.894
	Left	0.143	0.069	0.003	-	0.215

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.276	0.163	0.314	**1.231**
	Front	0.323	0.285	0.011	0.389*	1.008
	Top	-	-	-	0.389*	0.389
	Bottom	0.829	0.193	-	-	1.022
	Right	0.059	0.376	-	0.389	0.824
	Left	0.046	0.145	0.003	-	0.194

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.437	0.163	0.314	**1.414**
	Front	0.404	0.366	0.011	0.389*	1.170
	Top	-	-	-	0.389*	0.389
	Bottom	0.338	0.864	-	-	1.202
	Right	0.413	0.066	-	0.389	0.868
	Left	0.116	0.069	0.003	-	0.188

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.276	0.163	0.314	1.103
	Front	0.301	0.285	0.011	0.389*	0.986
	Top	-	-	-	0.389*	0.389
	Bottom	1.034	0.193	-	-	**1.227**
	Right	0.034	0.376	-	0.389	0.799
	Left	0.075	0.145	0.003	-	0.223

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.151	0.163	0.314	**1.106**
	Front	0.323	0.168	0.011	0.389*	0.891
	Top	-	0.179	-	0.389*	0.568
	Bottom	0.829	-	-	-	0.829
	Right	0.059	-	-	0.389	0.448
	Left	0.046	0.371	0.003	-	0.420
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.151	0.163	0.314	0.978
	Front	0.301	0.168	0.011	0.389*	0.869
	Top	-	0.179	-	0.389*	0.568
	Bottom	1.034	-	-	-	**1.034**
	Right	0.034	-	-	0.389	0.423
	Left	0.075	0.371	0.003	-	0.449
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.163	0.314	**1.292**
	Front	0.426	0.250	0.011	0.389*	1.076
	Top	-	-	-	0.389*	0.389
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	-	0.389	0.914
	Left	0.145	0.100	0.003	-	0.248

Table 12-35
Simultaneous Transmission Scenario with 2.4 GHz MIMO WLAN and 5 GHz MIMO WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Hotspot SAR	GPRS 850	0.515	0.447	0.163	0.962	0.678	1.125
	GPRS 1900	1.078	0.447	0.163	1.525	1.241	See Table Below
	UMTS 850	0.706	0.447	0.163	1.153	0.869	1.316
	UMTS 1750	0.794	0.447	0.163	1.241	0.957	1.404
	UMTS 1900	1.094	0.447	0.163	**1.541**	1.257	See Table Below
	EVDO BC10 (§90S)	0.585	0.447	0.163	1.032	0.748	1.195
	EVDO BC0 (§22H)	0.722	0.447	0.163	1.169	0.885	1.332
	PCS EVDO	0.755	0.447	0.163	1.202	0.918	1.365
	LTE Band 71	0.428	0.447	0.163	0.875	0.591	1.038
	LTE Band 12	0.523	0.447	0.163	0.970	0.686	1.133
	LTE Band 13	0.481	0.447	0.163	0.928	0.644	1.091
	LTE Band 14	0.416	0.447	0.163	0.863	0.579	1.026
	LTE Band 5 (Cell)	0.500	0.447	0.163	0.947	0.663	1.110
	LTE Band 26 (Cell)	0.560	0.447	0.163	1.007	0.723	1.170
	LTE Band 66 (AWS)	0.829	0.447	0.163	1.276	0.992	1.439
	LTE Band 25 (PCS)	1.034	0.447	0.163	1.481	1.197	See Table Below
	LTE Band 30	1.347	0.447	0.163	See Table Below	1.510	See Table Below
	LTE Band 7	0.665	0.447	0.163	1.112	0.828	1.275
	LTE Band 48	0.464	0.447	0.163	0.911	0.627	1.074
	LTE Band 41	0.626	0.447	0.163	1.073	0.789	1.236

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Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.374	0.282	0.163*	0.819
	Front	0.284	0.256	0.163*	0.703
	Top	-	0.447*	0.163*	0.610
	Bottom	1.078	-	-	**1.078**
	Right	0.037	0.447	0.163	0.647
	Left	0.114	0.447*	-	0.561

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.372	0.282	0.163*	0.817
	Front	0.318	0.256	0.163*	0.737
	Top	-	0.447*	0.163*	0.610
	Bottom	1.094	-	-	**1.094**
	Right	0.047	0.447	0.163	0.657
	Left	0.119	0.447*	-	0.566

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.350	0.282	0.163*	0.795
	Front	0.301	0.256	0.163*	0.720
	Top	-	0.447*	0.163*	0.610
	Bottom	1.034	-	-	**1.034**
	Right	0.034	0.447	0.163	0.644
	Left	0.075	0.447*	-	0.522

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+2+3
Hotspot SAR	Back	0.537	0.282	0.163*	0.819	0.982
	Front	0.416	0.256	0.163*	0.672	0.835
	Top	-	0.447*	0.163*	0.447	0.610
	Bottom	1.347	-	-	**1.347**	**1.347**
	Right	0.084	0.447	0.163	0.531	0.694
	Left	0.047	0.447*	-	0.494	0.494

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.292	0.282	0.163*	**1.237**
	Front	0.404	0.250	0.256	0.163*	1.073
	Top	-	-	0.447*	0.163*	0.610
	Bottom	0.338	0.665	-	-	1.003
	Right	0.413	0.027	0.447	0.163	1.050
	Left	0.116	0.100	0.447*	-	0.663

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.537	0.344	0.282	0.163*	1.326
	Front	0.416	0.301	0.256	0.163*	1.136
	Top	-	-	0.447*	0.163*	0.610
	Bottom	1.347	0.242	-	-	**1.589**
	Right	0.084	0.339	0.447	0.163	1.033
	Left	0.047	0.119	0.447*	-	0.613

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.282	0.163*	**1.260**
	Front	0.426	0.250	0.256	0.163*	1.095
	Top	-	-	0.447*	0.163*	0.610
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	0.447	0.163	1.135
	Left	0.145	0.100	0.447*	-	0.692

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.344	0.282	0.163*	1.139
	Front	0.301	0.301	0.256	0.163*	1.021
	Top	-	-	0.447*	0.163*	0.610
	Bottom	1.034	0.242	-	-	**1.276**
	Right	0.034	0.339	0.447	0.163	0.983
	Left	0.075	0.119	0.447*	-	0.641

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.292	0.282	0.163*	**1.218**
	Front	0.343	0.250	0.256	0.163*	1.012
	Top	-	-	0.447*	0.163*	0.610
	Bottom	0.298	0.665	-	-	0.963
	Right	0.439	0.027	0.447	0.163	1.076
	Left	0.143	0.100	0.447*	-	0.690

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.344	0.282	0.163*	**1.267**
	Front	0.323	0.301	0.256	0.163*	1.043
	Top	-	-	0.447*	0.163*	0.610
	Bottom	0.829	0.242	-	-	1.071
	Right	0.059	0.339	0.447	0.163	1.008
	Left	0.046	0.119	0.447*	-	0.612

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.437	0.282	0.163*	**1.405**
	Front	0.426	0.366	0.256	0.163*	1.211
	Top	-	-	0.447*	0.163*	0.610
	Bottom	0.315	0.864	-	-	1.179
	Right	0.498	0.066	0.447	0.163	1.174
	Left	0.145	0.069	0.447*	-	0.661

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.306	0.437	0.282	0.163*	**1.188**
	Front	0.391	0.366	0.256	0.163*	1.176
	Top	0.147	-	0.447*	0.163*	0.757
	Bottom	-	0.864	-	-	0.864
	Right	-	0.066	0.447	0.163	0.676
	Left	0.464	0.069	0.447*	-	0.980

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.481	0.437	0.282	0.163*	**1.363**
	Front	0.343	0.366	0.256	0.163*	1.128
	Top	-	-	0.447*	0.163*	0.610
	Bottom	0.298	0.864	-	-	1.162
	Right	0.439	0.066	0.447	0.163	1.115
	Left	0.143	0.069	0.447*	-	0.659

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.276	0.282	0.163*	**1.199**
	Front	0.323	0.285	0.256	0.163*	1.027
	Top	-	-	0.447*	0.163*	0.610
	Bottom	0.829	0.193	-	-	1.022
	Right	0.059	0.376	0.447	0.163	1.045
	Left	0.046	0.145	0.447*	-	0.638

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.500	0.437	0.282	0.163*	**1.382**
	Front	0.404	0.366	0.256	0.163*	1.189
	Top	-	-	0.447*	0.163*	0.610
	Bottom	0.338	0.864	-	-	1.202
	Right	0.413	0.066	0.447	0.163	1.089
	Left	0.116	0.069	0.447*	-	0.632

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.276	0.282	0.163*	1.071
	Front	0.301	0.285	0.256	0.163*	1.005
	Top	-	-	0.447*	0.163*	0.610
	Bottom	1.034	0.193	-	-	**1.227**
	Right	0.034	0.376	0.447	0.163	1.020
	Left	0.075	0.145	0.447*	-	0.667

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.478	0.151	0.282	0.163*	**1.074**
	Front	0.323	0.168	0.256	0.163*	0.910
	Top	-	0.179	0.447*	0.163*	0.789
	Bottom	0.829	-	-	-	0.829
	Right	0.059	-	0.447	0.163	0.669
	Left	0.046	0.371	0.447*	-	0.864
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.151	0.282	0.163*	0.946
	Front	0.301	0.168	0.256	0.163*	0.888
	Top	-	0.179	0.447*	0.163*	0.789
	Bottom	1.034	-	-	-	**1.034**
	Right	0.034	-	0.447	0.163	0.644
	Left	0.075	0.371	0.447*	-	0.893
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO at 17 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.523	0.292	0.282	0.163*	**1.260**
	Front	0.426	0.250	0.256	0.163*	1.095
	Top	-	-	0.447*	0.163*	0.610
	Bottom	0.315	0.665	-	-	0.980
	Right	0.498	0.027	0.447	0.163	1.135
	Left	0.145	0.100	0.447*	-	0.692

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Table 12-36
Simultaneous Transmission Scenario with Bluetooth Antenna 1, 2.4 GHz Antenna 2 WLAN, and 5 GHz MIMO WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)			
		1	2	3	4	1+2	1+3	1+2+3	1+2+3+4
Hotspot SAR	GPRS 850	0.515	0.220	0.265	0.163	0.735	0.780	1.000	1.163
	GPRS 1900	1.078	0.220	0.265	0.163	1.298	1.343	1.563	See Table Below
	UMTS 850	0.706	0.220	0.265	0.163	0.926	0.971	1.191	1.354
	UMTS 1750	0.794	0.220	0.265	0.163	1.014	1.059	1.279	1.442
	UMTS 1900	1.094	0.220	0.265	0.163	1.314	1.359	**1.579**	See Table Below
	EVDO BC10 (§90S)	0.585	0.220	0.265	0.163	0.805	0.850	1.070	1.233
	EVDO BC0 (§22H)	0.722	0.220	0.265	0.163	0.942	0.987	1.207	1.370
	PCS EVDO	0.755	0.220	0.265	0.163	0.975	1.020	1.240	1.403
	LTE Band 71	0.428	0.220	0.265	0.163	0.648	0.693	0.913	1.076
	LTE Band 12	0.523	0.220	0.265	0.163	0.743	0.788	1.008	1.171
	LTE Band 13	0.481	0.220	0.265	0.163	0.701	0.746	0.966	1.129
	LTE Band 14	0.416	0.220	0.265	0.163	0.636	0.681	0.901	1.064
	LTE Band 5 (Cell)	0.500	0.220	0.265	0.163	0.720	0.765	0.985	1.148
	LTE Band 26 (Cell)	0.560	0.220	0.265	0.163	0.780	0.825	1.045	1.208
	LTE Band 66 (AWS)	0.829	0.220	0.265	0.163	1.049	1.094	1.314	1.477
	LTE Band 25 (PCS)	1.034	0.220	0.265	0.163	1.254	1.299	1.519	See Table Below
	LTE Band 30	1.347	0.220	0.265	0.163	1.567	See Table Below	See Table Below	See Table Below
	LTE Band 7	0.665	0.220	0.265	0.163	0.885	0.930	1.150	1.313
	LTE Band 48	0.464	0.220	0.265	0.163	0.684	0.729	0.949	1.112
	LTE Band 41	0.626	0.220	0.265	0.163	0.846	0.891	1.111	1.274

Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.374	0.115	0.265	0.163*	0.917
	Front	0.284	0.136	0.265*	0.163*	0.848
	Top	-	0.067	-	0.163*	0.230
	Bottom	1.078	-	-	-	**1.078**
	Right	0.037	0.220	-	0.163	0.420
	Left	0.114	-	0.265*	-	0.379

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.372	0.115	0.265	0.163*	0.915
	Front	0.318	0.136	0.265*	0.163*	0.882
	Top	-	0.067	-	0.163*	0.230
	Bottom	1.094	-	-	-	**1.094**
	Right	0.047	0.220	-	0.163	0.430
	Left	0.119	-	0.265*	-	0.384

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.350	0.115	0.265	0.163*	0.893
	Front	0.301	0.136	0.265*	0.163*	0.865
	Top	-	0.067	-	0.163*	0.230
	Bottom	1.034	-	-	-	**1.034**
	Right	0.034	0.220	-	0.163	0.417
	Left	0.075	-	0.265*	-	0.340

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+3	1+2+3	1+2+3+4
Hotspot SAR	Back	0.537	0.115	0.265	0.163*	0.802	0.917	1.080
	Front	0.416	0.136	0.265*	0.163*	0.681	0.817	0.980
	Top	-	0.067	-	0.163*	0.000	0.067	0.230
	Bottom	1.347	-	-	-	**1.347**	**1.347**	**1.347**
	Right	0.084	0.220	-	0.163	0.084	0.304	0.467
	Left	0.047	-	0.265*	-	0.312	0.312	0.312

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.500	0.292	0.115	0.265	0.165	**1.337**
	Front	0.404	0.250	0.136	0.265*	0.165*	0.955
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	0.338	0.665	-	-	-	1.003
	Right	0.413	0.027	0.220	-	-	0.660
	Left	0.116	0.100	-	0.265*	0.165*	0.381

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.537	0.344	0.115	0.265	0.165	1.426
	Front	0.416	0.301	0.136	0.265*	0.165*	1.018
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	1.347	0.242	-	-	-	**1.589**
	Right	0.084	0.339	0.220	-	-	0.643
	Left	0.047	0.119	-	0.265*	0.165*	0.331

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.523	0.292	0.115	0.265	0.165	**1.360**
	Front	0.426	0.250	0.136	0.265*	0.165*	0.977
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	0.315	0.665	-	-	-	0.980
	Right	0.498	0.027	0.220	-	-	0.745
	Left	0.145	0.100	-	0.265*	0.165*	0.410

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.350	0.344	0.115	0.265	0.165	1.239
	Front	0.301	0.301	0.136	0.265*	0.165*	0.903
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	1.034	0.242	-	-	-	**1.276**
	Right	0.034	0.339	0.220	-	-	0.593
	Left	0.075	0.119	-	0.265*	0.165*	0.359

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.481	0.292	0.115	0.265	0.165	**1.318**
	Front	0.343	0.250	0.136	0.265*	0.165*	0.894
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	0.298	0.665	-	-	-	0.963
	Right	0.439	0.027	0.220	-	-	0.686
	Left	0.143	0.100	-	0.265*	0.165*	0.408

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.478	0.344	0.115	0.265	0.165	**1.367**
	Front	0.323	0.301	0.136	0.265*	0.165*	0.925
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	0.829	0.242	-	-	-	1.071
	Right	0.059	0.339	0.220	-	-	0.618
	Left	0.046	0.119	-	0.265*	0.165*	0.330

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.523	0.437	0.115	0.265	0.165	**1.505**
	Front	0.426	0.366	0.136	0.265*	0.165*	1.093
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	0.315	0.864	-	-	-	1.179
	Right	0.498	0.066	0.220	-	-	0.784
	Left	0.145	0.069	-	0.265*	0.165*	0.379

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.306	0.437	0.115	0.265	0.165	**1.288**
	Front	0.391	0.366	0.136	0.265*	0.165*	1.058
	Top	0.147	-	0.067	-	0.165*	0.379
	Bottom	-	0.864	-	-	-	0.864
	Right	-	0.066	0.220	-	-	0.286
	Left	0.464	0.069	-	0.265*	0.165*	0.698

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.481	0.437	0.115	0.265	0.165	**1.463**
	Front	0.343	0.366	0.136	0.265*	0.165*	1.010
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	0.298	0.864	-	-	-	1.162
	Right	0.439	0.066	0.220	-	-	0.725
	Left	0.143	0.069	-	0.265*	0.165*	0.377

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.478	0.276	0.115	0.265	0.165	**1.299**
	Front	0.323	0.285	0.136	0.265*	0.165*	0.909
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	0.829	0.193	-	-	-	1.022
	Right	0.059	0.376	0.220	-	-	0.655
	Left	0.046	0.145	-	0.265*	0.165*	0.356

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.500	0.437	0.115	0.265	0.165	**1.482**
	Front	0.404	0.366	0.136	0.265*	0.165*	1.071
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	0.338	0.864	-	-	-	1.202
	Right	0.413	0.066	0.220	-	-	0.699
	Left	0.116	0.069	-	0.265*	0.165*	0.350

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.350	0.276	0.115	0.265	0.165	1.171
	Front	0.301	0.285	0.136	0.265*	0.165*	0.887
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	1.034	0.193	-	-	-	**1.227**
	Right	0.034	0.376	0.220	-	-	0.630
	Left	0.075	0.145	-	0.265*	0.165*	0.385

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.478	0.151	0.115	0.265	0.165	**1.174**
	Front	0.323	0.168	0.136	0.265*	0.165*	0.792
	Top	-	0.179	0.067	-	0.165*	0.411
	Bottom	0.829	-	-	-	-	0.829
	Right	0.059	-	0.220	-	-	0.279
	Left	0.046	0.371	-	0.265*	0.165*	0.582

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.350	0.151	0.115	0.265	0.165	**1.046**
	Front	0.301	0.168	0.136	0.265*	0.165*	0.770
	Top	-	0.179	0.067	-	0.165*	0.411
	Bottom	1.034	-	-	-	-	1.034
	Right	0.034	-	0.220	-	-	0.254
	Left	0.075	0.371	-	0.265*	0.165*	0.611

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 at 15 dBm SAR	5 GHz WLAN MIMO at 16 dBm	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.523	0.292	0.115	0.265	0.165	**1.360**
	Front	0.426	0.250	0.136	0.265*	0.165*	0.977
	Top	-	-	0.067	-	0.165*	0.232
	Bottom	0.315	0.665	-	-	-	0.980
	Right	0.498	0.027	0.220	-	-	0.745
	Left	0.145	0.100	-	0.265*	0.165*	0.410

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12.6 Phablet Simultaneous Transmission Analysis

Per FCC KDB Publication 941225 D06v02r01, the devices edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR ("-").

(*) For test positions that were not required to be evaluated for WLAN SAR per FCC KDB publication 248227, the worst case WLAN SAR result for the applicable exposure conditions was used for simultaneous transmission analysis.

For SAR summation, the highest reported SAR across all test distances was used as the most conservative evaluation for simultaneous transmission analysis for each device edge.

Per FCC KDB Publication 648474 D04 Handset SAR, Phablet SAR tests were not required if wireless router 1g SAR (scaled to the maximum output power, including tolerance) < 1.2 W/kg. Therefore, no further analysis beyond the tables included in this section was required to determine that possible simultaneous transmission scenarios would not exceed the SAR limit.

Table 12-37
Simultaneous Transmission Scenario with 5 GHz WLAN Antenna 1 and Antenna 2 (Phablet)

Exposure Condition	Mode	2G/3G/4G/5G SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+2+3
Phablet SAR	GPRS 1900	2.114	1.453	0.426	3.567	**3.993**
	UMTS 1750	1.830	1.453	0.426	3.283	3.709
	UMTS 1900	2.607	1.453	0.426	See Table Below	See Table Below
	PCS EVDO	1.852	1.453	0.426	3.305	3.731
	LTE Band 66 (AWS)	2.080	1.453	0.426	3.533	3.959
	LTE Band 25 (PCS)	2.054	1.453	0.426	3.507	3.933
	LTE Band 30	2.127	1.453	0.426	3.580	See Table Below
	LTE Band 7	1.311	1.453	0.426	2.764	3.190
	LTE Band 41	0.881	1.453	0.426	2.334	2.760
	NR Band n66	2.165	1.453	0.426	3.618	See Table Below
	NR Band n25	1.150	1.453	0.426	2.603	3.029

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Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+2+3
Phablet SAR	Back	1.187	1.453*	0.426	2.640	**3.066**
	Front	0.961	1.229	0.426*	2.190	2.616
	Top	-	1.453*	0.426*	1.453	1.879
	Bottom	2.607	-	-	2.607	2.607
	Right	0.372	1.453	0.020	1.825	1.845
	Left	1.185	-	-	1.185	1.185

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Phablet SAR	Back	1.391	1.453*	0.426	**3.270**
	Front	1.153	1.229	0.426*	2.808
	Top	-	1.453*	0.426*	1.879
	Bottom	2.127	-	-	2.127
	Right	0.424	1.453	0.020	1.897
	Left	0.167	-	-	0.167

Simult Tx	Configuration	NR Band n66 (AWS)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Phablet SAR	Back	1.217	1.453*	0.426	**3.096**
	Front	1.047	1.229	0.426*	2.702
	Top	-	1.453*	0.426*	1.879
	Bottom	2.165	-	-	2.165
	Right	0.466	1.453	0.020	1.939
	Left	0.471	-	-	0.471

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12.7 Closed Body-Worn Simultaneous Transmission Analysis

Table 12-38
Simultaneous Transmission Scenario with 5 GHz WLAN Antenna 1 (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.303	0.059	0.362
	GSM 1900	0.181	0.059	0.240
	UMTS 850	0.503	0.059	0.562
	UMTS 1750	0.238	0.059	0.297
	UMTS 1900	0.572	0.059	**0.631**
	CDMA BC10 (§90S)	0.519	0.059	0.578
	CDMA BC0 (§22H)	0.521	0.059	0.580
	PCS CDMA	0.453	0.059	0.512
	LTE Band 71	0.265	0.059	0.324
	LTE Band 12	0.266	0.059	0.325
	LTE Band 13	0.314	0.059	0.373
	LTE Band 14	0.243	0.059	0.302
	LTE Band 5 (Cell)	0.436	0.059	0.495
	LTE Band 26 (Cell)	0.392	0.059	0.451
	LTE Band 66 (AWS)	0.229	0.059	0.288
	LTE Band 25 (PCS)	0.478	0.059	0.537
	LTE Band 30	0.359	0.059	0.418
	LTE Band 7	0.358	0.059	0.417
	LTE Band 48	0.042	0.059	0.101
	LTE Band 41	0.293	0.059	0.352

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.332	0.059	**0.827**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.335	0.059	**0.623**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.059	**0.657**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.210	0.059	**0.535**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.332	0.059	**0.705**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.210	0.059	**0.583**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.359	0.335	0.059	**0.753**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.210	0.059	**0.705**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.335	0.059	**0.872**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.042	0.210	0.059	**0.311**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.222	0.059	**0.510**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.222	0.059	**0.759**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.017	0.059	**0.305**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.017	0.059	**0.554**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.059	**0.657**

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Table 12-39
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz WLAN Antenna 1 (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.303	0.038	0.059	0.400
	GSM 1900	0.181	0.038	0.059	0.278
	UMTS 850	0.503	0.038	0.059	0.600
	UMTS 1750	0.238	0.038	0.059	0.335
	UMTS 1900	0.572	0.038	0.059	**0.669**
	CDMA BC10 (§90S)	0.519	0.038	0.059	0.616
	CDMA BC0 (§22H)	0.521	0.038	0.059	0.618
	PCS CDMA	0.453	0.038	0.059	0.550
	LTE Band 71	0.265	0.038	0.059	0.362
	LTE Band 12	0.266	0.038	0.059	0.363
	LTE Band 13	0.314	0.038	0.059	0.411
	LTE Band 14	0.243	0.038	0.059	0.340
	LTE Band 5 (Cell)	0.436	0.038	0.059	0.533
	LTE Band 26 (Cell)	0.392	0.038	0.059	0.489
	LTE Band 66 (AWS)	0.229	0.038	0.059	0.326
	LTE Band 25 (PCS)	0.478	0.038	0.059	0.575
	LTE Band 30	0.359	0.038	0.059	0.456
	LTE Band 7	0.358	0.038	0.059	0.455
	LTE Band 48	0.042	0.038	0.059	0.139
	LTE Band 41	0.293	0.038	0.059	0.390

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.332	0.038	0.059	**0.865**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.335	0.038	0.059	**0.661**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.038	0.059	**0.695**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.210	0.038	0.059	**0.573**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.332	0.038	0.059	**0.743**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.210	0.038	0.059	**0.621**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.359	0.335	0.038	0.059	**0.791**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.210	0.038	0.059	**0.743**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.335	0.038	0.059	**0.910**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.042	0.210	0.038	0.059	**0.349**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.222	0.038	0.059	**0.548**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.222	0.038	0.059	**0.797**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.017	0.038	0.059	**0.343**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.017	0.038	0.059	**0.592**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.038	0.059	**0.695**

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Table 12-40
Simultaneous Transmission Scenario with Bluetooth Antenna 2 and 5 GHz WLAN Antenna 1 (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.303	0.000	0.059	0.362
	GSM 1900	0.181	0.000	0.059	0.240
	UMTS 850	0.503	0.000	0.059	0.562
	UMTS 1750	0.238	0.000	0.059	0.297
	UMTS 1900	0.572	0.000	0.059	**0.631**
	CDMA BC10 (§90S)	0.519	0.000	0.059	0.578
	CDMA BC0 (§22H)	0.521	0.000	0.059	0.580
	PCS CDMA	0.453	0.000	0.059	0.512
	LTE Band 71	0.265	0.000	0.059	0.324
	LTE Band 12	0.266	0.000	0.059	0.325
	LTE Band 13	0.314	0.000	0.059	0.373
	LTE Band 14	0.243	0.000	0.059	0.302
	LTE Band 5 (Cell)	0.436	0.000	0.059	0.495
	LTE Band 26 (Cell)	0.392	0.000	0.059	0.451
	LTE Band 66 (AWS)	0.229	0.000	0.059	0.288
	LTE Band 25 (PCS)	0.478	0.000	0.059	0.537
	LTE Band 30	0.359	0.000	0.059	0.418
	LTE Band 7	0.358	0.000	0.059	0.417
	LTE Band 48	0.042	0.000	0.059	0.101
	LTE Band 41	0.293	0.000	0.059	0.352

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.332	0.000	0.059	**0.827**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.000	0.059	**0.657**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.332	0.000	0.059	**0.705**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.359	0.335	0.000	0.059	**0.753**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.335	0.000	0.059	**0.872**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.335	0.000	0.059	**0.623**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.210	0.000	0.059	**0.535**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.210	0.000	0.059	**0.583**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.210	0.000	0.059	**0.705**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.042	0.210	0.000	0.059	**0.311**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.222	0.000	0.059	**0.510**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.222	0.000	0.059	**0.759**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.017	0.000	0.059	**0.305**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.017	0.000	0.059	**0.554**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.000	0.059	**0.657**

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Table 12-41
Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.303	0.092	0.395
	GSM 1900	0.181	0.092	0.273
	UMTS 850	0.503	0.092	0.595
	UMTS 1750	0.238	0.092	0.330
	UMTS 1900	0.572	0.092	**0.664**
	CDMA BC10 (§90S)	0.519	0.092	0.611
	CDMA BC0 (§22H)	0.521	0.092	0.613
	PCS CDMA	0.453	0.092	0.545
	LTE Band 71	0.265	0.092	0.357
	LTE Band 12	0.266	0.092	0.358
	LTE Band 13	0.314	0.092	0.406
	LTE Band 14	0.243	0.092	0.335
	LTE Band 5 (Cell)	0.436	0.092	0.528
	LTE Band 26 (Cell)	0.392	0.092	0.484
	LTE Band 66 (AWS)	0.229	0.092	0.321
	LTE Band 25 (PCS)	0.478	0.092	0.570
	LTE Band 30	0.359	0.092	0.451
	LTE Band 7	0.358	0.092	0.450
	LTE Band 48	0.042	0.092	0.134
	LTE Band 41	0.293	0.092	0.385

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.332	0.092	**0.860**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.092	**0.690**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.332	0.092	**0.738**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.359	0.335	0.092	**0.786**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.335	0.092	**0.905**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.335	0.092	**0.656**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.210	0.092	**0.568**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.210	0.092	**0.616**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.210	0.092	**0.738**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.042	0.210	0.092	**0.344**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.222	0.092	**0.543**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.222	0.092	**0.792**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.017	0.092	**0.338**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.017	0.092	**0.587**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.092	**0.690**

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Table 12-42
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 2.4 GHz WLAN Antenna 2
(Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.303	0.038	0.002	0.343
	GSM 1900	0.181	0.038	0.002	0.221
	UMTS 850	0.503	0.038	0.002	0.543
	UMTS 1750	0.238	0.038	0.002	0.278
	UMTS 1900	0.572	0.038	0.002	**0.612**
	CDMA BC10 (§90S)	0.519	0.038	0.002	0.559
	CDMA BC0 (§22H)	0.521	0.038	0.002	0.561
	PCS CDMA	0.453	0.038	0.002	0.493
	LTE Band 71	0.265	0.038	0.002	0.305
	LTE Band 12	0.266	0.038	0.002	0.306
	LTE Band 13	0.314	0.038	0.002	0.354
	LTE Band 14	0.243	0.038	0.002	0.283
	LTE Band 5 (Cell)	0.436	0.038	0.002	0.476
	LTE Band 26 (Cell)	0.392	0.038	0.002	0.432
	LTE Band 66 (AWS)	0.229	0.038	0.002	0.269
	LTE Band 25 (PCS)	0.478	0.038	0.002	0.518
	LTE Band 30	0.359	0.038	0.002	0.399
	LTE Band 7	0.358	0.038	0.002	0.398
	LTE Band 48	0.042	0.038	0.002	0.082
	LTE Band 41	0.293	0.038	0.002	0.333

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.332	0.038	0.002	**0.808**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.335	0.038	0.002	**0.604**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.038	0.002	**0.638**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.210	0.038	0.002	**0.516**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.332	0.038	0.002	**0.686**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.210	0.038	0.002	**0.564**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.359	0.335	0.038	0.002	**0.734**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.210	0.038	0.002	**0.686**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.335	0.038	0.002	**0.853**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.042	0.210	0.038	0.002	**0.292**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.222	0.038	0.002	**0.491**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.222	0.038	0.002	**0.740**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.017	0.038	0.002	**0.286**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.017	0.038	0.002	**0.535**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.038	0.002	**0.638**

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Table 12-43
Simultaneous Transmission Scenario with Bluetooth Antenna 1
(Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.303	0.038	0.341
	GSM 1900	0.181	0.038	0.219
	UMTS 850	0.503	0.038	0.541
	UMTS 1750	0.238	0.038	0.276
	UMTS 1900	0.572	0.038	**0.610**
	CDMA BC10 (§90S)	0.519	0.038	0.557
	CDMA BC0 (§22H)	0.521	0.038	0.559
	PCS CDMA	0.453	0.038	0.491
	LTE Band 71	0.265	0.038	0.303
	LTE Band 12	0.266	0.038	0.304
	LTE Band 13	0.314	0.038	0.352
	LTE Band 14	0.243	0.038	0.281
	LTE Band 5 (Cell)	0.436	0.038	0.474
	LTE Band 26 (Cell)	0.392	0.038	0.430
	LTE Band 66 (AWS)	0.229	0.038	0.267
	LTE Band 25 (PCS)	0.478	0.038	0.516
	LTE Band 30	0.359	0.038	0.397
	LTE Band 7	0.358	0.038	0.396
	LTE Band 48	0.042	0.038	0.080
	LTE Band 41	0.293	0.038	0.331

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.332	0.038	**0.806**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.335	0.038	**0.602**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.038	**0.636**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.210	0.038	**0.514**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.332	0.038	**0.684**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.210	0.038	**0.562**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.359	0.335	0.038	**0.732**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.210	0.038	**0.684**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.335	0.038	**0.851**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.042	0.210	0.038	**0.290**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.222	0.038	**0.489**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.222	0.038	**0.738**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.017	0.038	**0.284**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.017	0.038	**0.533**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.038	**0.636**

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Table 12-44
Simultaneous Transmission Scenario with Bluetooth Antenna 2
(Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.303	0.000	0.303
	GSM 1900	0.181	0.000	0.181
	UMTS 850	0.503	0.000	0.503
	UMTS 1750	0.238	0.000	0.238
	UMTS 1900	0.572	0.000	**0.572**
	CDMA BC10 (§90S)	0.519	0.000	0.519
	CDMA BC0 (§22H)	0.521	0.000	0.521
	PCS CDMA	0.453	0.000	0.453
	LTE Band 71	0.265	0.000	0.265
	LTE Band 12	0.266	0.000	0.266
	LTE Band 13	0.314	0.000	0.314
	LTE Band 14	0.243	0.000	0.243
	LTE Band 5 (Cell)	0.436	0.000	0.436
	LTE Band 26 (Cell)	0.392	0.000	0.392
	LTE Band 66 (AWS)	0.229	0.000	0.229
	LTE Band 25 (PCS)	0.478	0.000	0.478
	LTE Band 30	0.359	0.000	0.359
	LTE Band 7	0.358	0.000	0.358
	LTE Band 48	0.042	0.000	0.042
	LTE Band 41	0.293	0.000	0.293

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.332	0.000	**0.768**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.335	0.000	**0.564**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.000	**0.598**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.210	0.000	**0.476**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.332	0.000	**0.646**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.210	0.000	**0.524**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.359	0.335	0.000	**0.694**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.210	0.000	**0.646**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.335	0.000	**0.813**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.042	0.210	0.000	**0.252**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.222	0.000	**0.451**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.222	0.000	**0.700**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.017	0.000	**0.246**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.017	0.000	**0.495**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.000	**0.598**

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Table 12-45
Simultaneous Transmission Scenario with 5 GHz MIMO WLAN (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	GSM 850	0.303	0.054	0.357
	GSM 1900	0.181	0.054	0.235
	UMTS 850	0.503	0.054	0.557
	UMTS 1750	0.238	0.054	0.292
	UMTS 1900	0.572	0.054	**0.626**
	CDMA BC10 (§90S)	0.519	0.054	0.573
	CDMA BC0 (§22H)	0.521	0.054	0.575
	PCS CDMA	0.453	0.054	0.507
	LTE Band 71	0.265	0.054	0.319
	LTE Band 12	0.266	0.054	0.320
	LTE Band 13	0.314	0.054	0.368
	LTE Band 14	0.243	0.054	0.297
	LTE Band 5 (Cell)	0.436	0.054	0.490
	LTE Band 26 (Cell)	0.392	0.054	0.446
	LTE Band 66 (AWS)	0.229	0.054	0.283
	LTE Band 25 (PCS)	0.478	0.054	0.532
	LTE Band 30	0.359	0.054	0.413
	LTE Band 7	0.358	0.054	0.412
	LTE Band 48	0.042	0.054	0.096
	LTE Band 41	0.293	0.054	0.347

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.332	0.054	**0.822**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.335	0.054	**0.618**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.054	**0.652**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.210	0.054	**0.530**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.332	0.054	**0.700**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.314	0.210	0.054	**0.578**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.359	0.335	0.054	**0.748**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.436	0.210	0.054	**0.700**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.335	0.054	**0.867**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.042	0.210	0.054	**0.306**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.222	0.054	**0.505**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.222	0.054	**0.754**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.229	0.017	0.054	**0.300**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.478	0.017	0.054	**0.549**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.266	0.332	0.054	**0.652**

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Table 12-46
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz MIMO WLAN
(Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.303	0.038	0.054	0.395
	GSM 1900	0.181	0.038	0.054	0.273
	UMTS 850	0.503	0.038	0.054	0.595
	UMTS 1750	0.238	0.038	0.054	0.330
	UMTS 1900	0.572	0.038	0.054	**0.664**
	CDMA BC10 (§90S)	0.519	0.038	0.054	0.611
	CDMA BC0 (§22H)	0.521	0.038	0.054	0.613
	PCS CDMA	0.453	0.038	0.054	0.545
	LTE Band 71	0.265	0.038	0.054	0.357
	LTE Band 12	0.266	0.038	0.054	0.358
	LTE Band 13	0.314	0.038	0.054	0.406
	LTE Band 14	0.243	0.038	0.054	0.335
	LTE Band 5 (Cell)	0.436	0.038	0.054	0.528
	LTE Band 26 (Cell)	0.392	0.038	0.054	0.484
	LTE Band 66 (AWS)	0.229	0.038	0.054	0.321
	LTE Band 25 (PCS)	0.478	0.038	0.054	0.570
	LTE Band 30	0.359	0.038	0.054	0.451
	LTE Band 7	0.358	0.038	0.054	0.450
	LTE Band 48	0.042	0.038	0.054	0.134
	LTE Band 41	0.293	0.038	0.054	0.385

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.332	0.038	0.054	**0.860**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.335	0.038	0.054	**0.656**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.038	0.054	**0.690**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.210	0.038	0.054	**0.568**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.332	0.038	0.054	**0.738**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.210	0.038	0.054	**0.616**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.359	0.335	0.038	0.054	**0.786**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.210	0.038	0.054	**0.738**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.335	0.038	0.054	**0.905**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.042	0.210	0.038	0.054	**0.344**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.222	0.038	0.054	**0.543**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.222	0.038	0.054	**0.792**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.017	0.038	0.054	**0.338**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.017	0.038	0.054	**0.587**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.038	0.054	**0.690**

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Table 12-47
Simultaneous Transmission Scenario with Bluetooth Antenna 2 and 5 GHz MIMO WLAN (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.303	0.000	0.054	0.357
	GSM 1900	0.181	0.000	0.054	0.235
	UMTS 850	0.503	0.000	0.054	0.557
	UMTS 1750	0.238	0.000	0.054	0.292
	UMTS 1900	0.572	0.000	0.054	**0.626**
	CDMA BC10 (§90S)	0.519	0.000	0.054	0.573
	CDMA BC0 (§22H)	0.521	0.000	0.054	0.575
	PCS CDMA	0.453	0.000	0.054	0.507
	LTE Band 71	0.265	0.000	0.054	0.319
	LTE Band 12	0.266	0.000	0.054	0.320
	LTE Band 13	0.314	0.000	0.054	0.368
	LTE Band 14	0.243	0.000	0.054	0.297
	LTE Band 5 (Cell)	0.436	0.000	0.054	0.490
	LTE Band 26 (Cell)	0.392	0.000	0.054	0.446
	LTE Band 66 (AWS)	0.229	0.000	0.054	0.283
	LTE Band 25 (PCS)	0.478	0.000	0.054	0.532
	LTE Band 30	0.359	0.000	0.054	0.413
	LTE Band 7	0.358	0.000	0.054	0.412
	LTE Band 48	0.042	0.000	0.054	0.096
	LTE Band 41	0.293	0.000	0.054	0.347

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.332	0.000	0.054	**0.822**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.335	0.000	0.054	**0.618**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.000	0.054	**0.652**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.210	0.000	0.054	**0.530**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.332	0.000	0.054	**0.700**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.210	0.000	0.054	**0.578**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.359	0.335	0.000	0.054	**0.748**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.210	0.000	0.054	**0.700**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.335	0.000	0.054	**0.867**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.042	0.210	0.000	0.054	**0.306**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.222	0.000	0.054	**0.505**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.222	0.000	0.054	**0.754**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.017	0.000	0.054	**0.300**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.017	0.000	0.054	**0.549**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.000	0.054	**0.652**

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Table 12-48
Simultaneous Transmission Scenario with 2.4 GHz MIMO WLAN and 5 GHz MIMO WLAN
(Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body-Worn	GSM 850	0.303	0.092	0.054	0.449
	GSM 1900	0.181	0.092	0.054	0.327
	UMTS 850	0.503	0.092	0.054	0.649
	UMTS 1750	0.238	0.092	0.054	0.384
	UMTS 1900	0.572	0.092	0.054	**0.718**
	CDMA BC10 (§90S)	0.519	0.092	0.054	0.665
	CDMA BC0 (§22H)	0.521	0.092	0.054	0.667
	PCS CDMA	0.453	0.092	0.054	0.599
	LTE Band 71	0.265	0.092	0.054	0.411
	LTE Band 12	0.266	0.092	0.054	0.412
	LTE Band 13	0.314	0.092	0.054	0.460
	LTE Band 14	0.243	0.092	0.054	0.389
	LTE Band 5 (Cell)	0.436	0.092	0.054	0.582
	LTE Band 26 (Cell)	0.392	0.092	0.054	0.538
	LTE Band 66 (AWS)	0.229	0.092	0.054	0.375
	LTE Band 25 (PCS)	0.478	0.092	0.054	0.624
	LTE Band 30	0.359	0.092	0.054	0.505
	LTE Band 7	0.358	0.092	0.054	0.504
	LTE Band 48	0.042	0.092	0.054	0.188
	LTE Band 41	0.293	0.092	0.054	0.439

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.332	0.092	0.054	**0.914**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.335	0.092	0.054	**0.710**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.092	0.054	**0.744**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.210	0.092	0.054	**0.622**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.332	0.092	0.054	**0.792**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.314	0.210	0.092	0.054	**0.670**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.359	0.335	0.092	0.054	**0.840**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.436	0.210	0.092	0.054	**0.792**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.335	0.092	0.054	**0.959**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.042	0.210	0.092	0.054	**0.398**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.222	0.092	0.054	**0.597**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.222	0.092	0.054	**0.846**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.229	0.017	0.092	0.054	**0.392**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.478	0.017	0.092	0.054	**0.641**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.266	0.332	0.092	0.054	**0.744**

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Table 12-49
Simultaneous Transmission Scenario with Bluetooth Antenna 1, 2.4 GHz Antenna 2 WLAN, and 5 GHz MIMO WLAN (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body-Worn	GSM 850	0.303	0.038	0.002	0.054	0.397
	GSM 1900	0.181	0.038	0.002	0.054	0.275
	UMTS 850	0.503	0.038	0.002	0.054	0.597
	UMTS 1750	0.238	0.038	0.002	0.054	0.332
	UMTS 1900	0.572	0.038	0.002	0.054	**0.666**
	CDMA BC10 (§90S)	0.519	0.038	0.002	0.054	0.613
	CDMA BC0 (§22H)	0.521	0.038	0.002	0.054	0.615
	PCS CDMA	0.453	0.038	0.002	0.054	0.547
	LTE Band 71	0.265	0.038	0.002	0.054	0.359
	LTE Band 12	0.266	0.038	0.002	0.054	0.360
	LTE Band 13	0.314	0.038	0.002	0.054	0.408
	LTE Band 14	0.243	0.038	0.002	0.054	0.337
	LTE Band 5 (Cell)	0.436	0.038	0.002	0.054	0.530
	LTE Band 26 (Cell)	0.392	0.038	0.002	0.054	0.486
	LTE Band 66 (AWS)	0.229	0.038	0.002	0.054	0.323
	LTE Band 25 (PCS)	0.478	0.038	0.002	0.054	0.572
	LTE Band 30	0.359	0.038	0.002	0.054	0.453
	LTE Band 7	0.358	0.038	0.002	0.054	0.452
	LTE Band 48	0.042	0.038	0.002	0.054	0.136
	LTE Band 41	0.293	0.038	0.002	0.054	0.387

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.436	0.332	0.038	0.002	0.054	**0.862**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.229	0.335	0.038	0.002	0.054	**0.658**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.266	0.332	0.038	0.002	0.054	**0.692**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.266	0.210	0.038	0.002	0.054	**0.570**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.314	0.332	0.038	0.002	0.054	**0.740**

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.314	0.210	0.038	0.002	0.054	**0.618**

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.359	0.335	0.038	0.002	0.054	**0.788**

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.436	0.210	0.038	0.002	0.054	**0.740**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.478	0.335	0.038	0.002	0.054	**0.907**

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.042	0.210	0.038	0.002	0.054	**0.346**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.229	0.222	0.038	0.002	0.054	**0.545**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.478	0.222	0.038	0.002	0.054	**0.794**

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.229	0.017	0.038	0.002	0.054	**0.340**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.478	0.017	0.038	0.002	0.054	**0.589**

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.266	0.332	0.038	0.002	0.054	**0.692**

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12.8 Closed Hotspot SAR Simultaneous Transmission Analysis

Per FCC KDB Publication 941225 D06v02r01, the devices edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR ("-").

(*) For test positions that were not required to be evaluated for WLAN SAR per FCC KDB publication 248227, the worst case WLAN SAR result for the applicable exposure conditions was used for simultaneous transmission analysis.

Table 12-50
Simultaneous Transmission Scenario with 5 GHz WLAN Antenna 1 (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	GPRS 850	0.715	0.303	1.018
	GPRS 1900	0.586	0.303	0.889
	UMTS 850	0.827	0.303	1.130
	UMTS 1750	0.440	0.303	0.743
	UMTS 1900	0.818	0.303	1.121
	EVDO BC10 (§90S)	0.767	0.303	1.070
	EVDO BC0 (§22H)	0.931	0.303	**1.234**
	PCS EVDO	0.528	0.303	0.831
	LTE Band 71	0.467	0.303	0.770
	LTE Band 12	0.466	0.303	0.769
	LTE Band 13	0.457	0.303	0.760
	LTE Band 14	0.420	0.303	0.723
	LTE Band 5 (Cell)	0.716	0.303	1.019
	LTE Band 26 (Cell)	0.615	0.303	0.918
	LTE Band 66 (AWS)	0.378	0.303	0.681
	LTE Band 25 (PCS)	0.666	0.303	0.969
	LTE Band 30	0.881	0.303	1.184
	LTE Band 7	0.426	0.303	0.729
	LTE Band 48	0.362	0.303	0.665
	LTE Band 41	0.294	0.303	0.597

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.189	0.097	**1.002**
	Front	0.165	0.043	0.269	0.477
	Bottom	0.284	0.489	0.183	0.956
	Right	0.092	0.025	0.303	0.420
	Left	0.134	0.088	-	0.222

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.489	0.471	0.097	1.057
	Front	0.028	0.109	0.269	0.406
	Bottom	0.881	0.190	0.183	**1.254**
	Right	0.040	0.063	0.303	0.406
	Left	0.037	0.058	-	0.095

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.097	0.752
	Front	0.086	0.043	0.269	0.398
	Bottom	0.110	0.489	0.183	**0.782**
	Right	0.088	0.025	0.303	0.416
	Left	0.113	0.088	-	0.201

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.471	0.097	0.828
	Front	0.067	0.109	0.269	0.445
	Bottom	0.666	0.190	0.183	**1.039**
	Right	0.022	0.063	0.303	0.388
	Left	0.033	0.058	-	0.091

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.189	0.097	0.743
	Front	0.165	0.043	0.269	0.477
	Bottom	0.208	0.489	0.183	**0.880**
	Right	0.108	0.025	0.303	0.436
	Left	0.090	0.088	-	0.178

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.471	0.097	0.720
	Front	0.045	0.109	0.269	0.423
	Bottom	0.378	0.190	0.183	**0.751**
	Right	0.024	0.063	0.303	0.390
	Left	0.046	0.058	-	0.104

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.172	0.097	**0.735**
	Front	0.086	0.045	0.269	0.400
	Bottom	0.110	0.386	0.183	0.679
	Right	0.088	0.025	0.303	0.416
	Left	0.113	0.060	-	0.173

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.066	0.172	0.097	0.335
	Front	0.362	0.045	0.269	0.676
	Bottom	0.176	0.386	0.183	**0.745**
	Right	-	0.025	0.303	0.328
	Left	0.299	0.060	-	0.359

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.172	0.097	0.726
	Front	0.165	0.045	0.269	0.479
	Bottom	0.208	0.386	0.183	**0.777**
	Right	0.108	0.025	0.303	0.436
	Left	0.090	0.060	-	0.150

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.373	0.097	0.622
	Front	0.045	0.087	0.269	0.401
	Bottom	0.378	0.177	0.183	**0.738**
	Right	0.024	0.070	0.303	0.397
	Left	0.046	0.107	-	0.153

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.172	0.097	**0.985**
	Front	0.165	0.045	0.269	0.479
	Bottom	0.284	0.386	0.183	0.853
	Right	0.092	0.025	0.303	0.420
	Left	0.134	0.060	-	0.194

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.373	0.097	0.730
	Front	0.067	0.087	0.269	0.423
	Bottom	0.666	0.177	0.183	**1.026**
	Right	0.022	0.070	0.303	0.395
	Left	0.033	0.107	-	0.140

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.034	0.097	0.283
	Front	0.045	0.116	0.269	0.430
	Bottom	0.378	0.118	0.183	**0.679**
	Right	0.024	-	0.303	0.327
	Left	0.046	0.238	-	0.284
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.034	0.097	0.391
	Front	0.067	0.116	0.269	0.452
	Bottom	0.666	0.118	0.183	**0.967**
	Right	0.022	-	0.303	0.325
	Left	0.033	0.238	-	0.271
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.097	0.752
	Front	0.086	0.043	0.269	0.398
	Bottom	0.110	0.489	0.183	**0.782**
	Right	0.088	0.025	0.303	0.416
	Left	0.113	0.088	-	0.201

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Table 12-51
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz WLAN Antenna 1 (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.715	0.184	0.303	1.202
	GPRS 1900	0.586	0.184	0.303	1.073
	UMTS 850	0.827	0.184	0.303	1.314
	UMTS 1750	0.440	0.184	0.303	0.927
	UMTS 1900	0.818	0.184	0.303	1.305
	EVDO BC10 (§90S)	0.767	0.184	0.303	1.254
	EVDO BC0 (§22H)	0.931	0.184	0.303	**1.418**
	PCS EVDO	0.528	0.184	0.303	1.015
	LTE Band 71	0.467	0.184	0.303	0.954
	LTE Band 12	0.466	0.184	0.303	0.953
	LTE Band 13	0.457	0.184	0.303	0.944
	LTE Band 14	0.420	0.184	0.303	0.907
	LTE Band 5 (Cell)	0.716	0.184	0.303	1.203
	LTE Band 26 (Cell)	0.615	0.184	0.303	1.102
	LTE Band 66 (AWS)	0.378	0.184	0.303	0.865
	LTE Band 25 (PCS)	0.666	0.184	0.303	1.153
	LTE Band 30	0.881	0.184	0.303	1.368
	LTE Band 7	0.426	0.184	0.303	0.913
	LTE Band 48	0.362	0.184	0.303	0.849
	LTE Band 41	0.294	0.184	0.303	0.781

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.189	0.082	0.097	**1.084**
	Front	0.165	0.043	0.094	0.269	0.571
	Bottom	0.284	0.489	0.081	0.183	1.037
	Right	0.092	0.025	0.184	0.303	0.604
	Left	0.134	0.088	-	-	0.222

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.489	0.471	0.082	0.097	1.139
	Front	0.028	0.109	0.094	0.269	0.500
	Bottom	0.881	0.190	0.081	0.183	**1.335**
	Right	0.040	0.063	0.184	0.303	0.590
	Left	0.037	0.058	-	-	0.095

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.082	0.097	0.834
	Front	0.086	0.043	0.094	0.269	0.492
	Bottom	0.110	0.489	0.081	0.183	**0.863**
	Right	0.088	0.025	0.184	0.303	0.600
	Left	0.113	0.088	-	-	0.201

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.471	0.082	0.097	0.910
	Front	0.067	0.109	0.094	0.269	0.539
	Bottom	0.666	0.190	0.081	0.183	**1.120**
	Right	0.022	0.063	0.184	0.303	0.572
	Left	0.033	0.058	-	-	0.091

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.189	0.082	0.097	0.825
	Front	0.165	0.043	0.094	0.269	0.571
	Bottom	0.208	0.489	0.081	0.183	**0.961**
	Right	0.108	0.025	0.184	0.303	0.620
	Left	0.090	0.088	-	-	0.178

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.471	0.082	0.097	0.802
	Front	0.045	0.109	0.094	0.269	0.517
	Bottom	0.378	0.190	0.081	0.183	**0.832**
	Right	0.024	0.063	0.184	0.303	0.574
	Left	0.046	0.058	-	-	0.104

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.172	0.082	0.097	**0.817**
	Front	0.086	0.045	0.094	0.269	0.494
	Bottom	0.110	0.386	0.081	0.183	0.760
	Right	0.088	0.025	0.184	0.303	0.600
	Left	0.113	0.060	-	-	0.173

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.066	0.172	0.082	0.097	0.417
	Front	0.362	0.045	0.094	0.269	0.770
	Bottom	0.176	0.386	0.081	0.183	**0.826**
	Right	-	0.025	0.184	0.303	0.512
	Left	0.299	0.060	-	-	0.359

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.172	0.082	0.097	0.808
	Front	0.165	0.045	0.094	0.269	0.573
	Bottom	0.208	0.386	0.081	0.183	**0.858**
	Right	0.108	0.025	0.184	0.303	0.620
	Left	0.090	0.060	-	-	0.150

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.373	0.082	0.097	0.704
	Front	0.045	0.087	0.094	0.269	0.495
	Bottom	0.378	0.177	0.081	0.183	**0.819**
	Right	0.024	0.070	0.184	0.303	0.581
	Left	0.046	0.107	-	-	0.153

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.172	0.082	0.097	**1.067**
	Front	0.165	0.045	0.094	0.269	0.573
	Bottom	0.284	0.386	0.081	0.183	0.934
	Right	0.092	0.025	0.184	0.303	0.604
	Left	0.134	0.060	-	-	0.194

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.373	0.082	0.097	0.812
	Front	0.067	0.087	0.094	0.269	0.517
	Bottom	0.666	0.177	0.081	0.183	**1.107**
	Right	0.022	0.070	0.184	0.303	0.579
	Left	0.033	0.107	-	-	0.140

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.034	0.082	0.097	0.365
	Front	0.045	0.116	0.094	0.269	0.524
	Bottom	0.378	0.118	0.081	0.183	**0.760**
	Right	0.024	-	0.184	0.303	0.511
	Left	0.046	0.238	-	-	0.284

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.034	0.082	0.097	0.473
	Front	0.067	0.116	0.094	0.269	0.546
	Bottom	0.666	0.118	0.081	0.183	**1.048**
	Right	0.022	-	0.184	0.303	0.509
	Left	0.033	0.238	-	-	0.271

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.082	0.097	0.834
	Front	0.086	0.043	0.094	0.269	0.492
	Bottom	0.110	0.489	0.081	0.183	**0.863**
	Right	0.088	0.025	0.184	0.303	0.600
	Left	0.113	0.088	-	-	0.201

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Table 12-52
Simultaneous Transmission Scenario with Bluetooth Antenna 2 and 5 GHz WLAN Antenna 1 (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.715	0.207	0.303	1.225
	GPRS 1900	0.586	0.207	0.303	1.096
	UMTS 850	0.827	0.207	0.303	1.337
	UMTS 1750	0.440	0.207	0.303	0.950
	UMTS 1900	0.818	0.207	0.303	1.328
	EVDO BC10 (§90S)	0.767	0.207	0.303	1.277
	EVDO BC0 (§22H)	0.931	0.207	0.303	**1.441**
	PCS EVDO	0.528	0.207	0.303	1.038
	LTE Band 71	0.467	0.207	0.303	0.977
	LTE Band 12	0.466	0.207	0.303	0.976
	LTE Band 13	0.457	0.207	0.303	0.967
	LTE Band 14	0.420	0.207	0.303	0.930
	LTE Band 5 (Cell)	0.716	0.207	0.303	1.226
	LTE Band 26 (Cell)	0.615	0.207	0.303	1.125
	LTE Band 66 (AWS)	0.378	0.207	0.303	0.888
	LTE Band 25 (PCS)	0.666	0.207	0.303	1.176
	LTE Band 30	0.881	0.207	0.303	1.391
	LTE Band 7	0.426	0.207	0.303	0.936
	LTE Band 48	0.362	0.207	0.303	0.872
	LTE Band 41	0.294	0.207	0.303	0.804

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.189	0.096	0.097	**1.098**
	Front	0.165	0.043	0.207	0.269	0.684
	Top	-	-	0.001	-	0.001
	Bottom	0.284	0.489	0.000	0.183	0.956
	Right	0.092	0.025	-	0.303	0.420
	Left	0.134	0.088	0.027	-	0.249

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.489	0.471	0.096	0.097	1.153
	Front	0.028	0.109	0.207	0.269	0.613
	Top	-	-	0.001	-	0.001
	Bottom	0.881	0.190	0.000	0.183	**1.254**
	Right	0.040	0.063	-	0.303	0.406
	Left	0.037	0.058	0.027	-	0.122

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.096	0.097	**0.848**
	Front	0.086	0.043	0.207	0.269	0.605
	Top	-	-	0.001	-	0.001
	Bottom	0.110	0.489	0.000	0.183	0.782
	Right	0.088	0.025	-	0.303	0.416
	Left	0.113	0.088	0.027	-	0.228

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.471	0.096	0.097	0.924
	Front	0.067	0.109	0.207	0.269	0.652
	Top	-	-	0.001	-	0.001
	Bottom	0.666	0.190	0.000	0.183	**1.039**
	Right	0.022	0.063	-	0.303	0.388
	Left	0.033	0.058	0.027	-	0.118

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.189	0.096	0.097	0.839
	Front	0.165	0.043	0.207	0.269	0.684
	Top	-	-	0.001	-	0.001
	Bottom	0.208	0.489	0.000	0.183	**0.880**
	Right	0.108	0.025	-	0.303	0.436
	Left	0.090	0.088	0.027	-	0.205

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.471	0.096	0.097	**0.816**
	Front	0.045	0.109	0.207	0.269	0.630
	Top	-	-	0.001	-	0.001
	Bottom	0.378	0.190	0.000	0.183	0.751
	Right	0.024	0.063	-	0.303	0.390
	Left	0.046	0.058	0.027	-	0.131

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.172	0.096	0.097	**0.831**
	Front	0.086	0.045	0.207	0.269	0.607
	Top	-	-	0.001	-	0.001
	Bottom	0.110	0.386	0.000	0.183	0.679
	Right	0.088	0.025	-	0.303	0.416
	Left	0.113	0.060	0.027	-	0.200

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.066	0.172	0.096	0.097	0.431
	Front	0.362	0.045	0.207	0.269	**0.883**
	Top	-	-	0.001	-	0.001
	Bottom	0.176	0.386	0.000	0.183	0.745
	Right	-	0.025	-	0.303	0.328
	Left	0.299	0.060	0.027	-	0.386

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.172	0.096	0.097	**0.822**
	Front	0.165	0.045	0.207	0.269	0.686
	Top	-	-	0.001	-	0.001
	Bottom	0.208	0.386	0.000	0.183	0.777
	Right	0.108	0.025	-	0.303	0.436
	Left	0.090	0.060	0.027	-	0.177

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.373	0.096	0.097	0.718
	Front	0.045	0.087	0.207	0.269	0.608
	Top	-	-	0.001	-	0.001
	Bottom	0.378	0.177	0.000	0.183	**0.738**
	Right	0.024	0.070	-	0.303	0.397
	Left	0.046	0.107	0.027	-	0.180

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.172	0.096	0.097	**1.081**
	Front	0.165	0.045	0.207	0.269	0.686
	Top	-	-	0.001	-	0.001
	Bottom	0.284	0.386	0.000	0.183	0.853
	Right	0.092	0.025	-	0.303	0.420
	Left	0.134	0.060	0.027	-	0.221

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.373	0.096	0.097	0.826
	Front	0.067	0.087	0.207	0.269	0.630
	Top	-	-	0.001	-	0.001
	Bottom	0.666	0.177	0.000	0.183	**1.026**
	Right	0.022	0.070	-	0.303	0.395
	Left	0.033	0.107	0.027	-	0.167

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.034	0.096	0.097	0.379
	Front	0.045	0.116	0.207	0.269	0.637
	Top	-	-	0.001	-	0.001
	Bottom	0.378	0.118	0.000	0.183	**0.679**
	Right	0.024	-	-	0.303	0.327
	Left	0.046	0.238	0.027	-	0.311

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.034	0.096	0.097	0.487
	Front	0.067	0.116	0.207	0.269	0.659
	Top	-	-	0.001	-	0.001
	Bottom	0.666	0.118	0.000	0.183	**0.967**
	Right	0.022	-	-	0.303	0.325
	Left	0.033	0.238	0.027	-	0.298

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.096	0.097	**0.848**
	Front	0.086	0.043	0.207	0.269	0.605
	Top	-	-	0.001	-	0.001
	Bottom	0.110	0.489	0.000	0.183	0.782
	Right	0.088	0.025	-	0.303	0.416
	Left	0.113	0.088	0.027	-	0.228

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Table 12-53
Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	GPRS 850	0.715	0.449	1.164
	GPRS 1900	0.586	0.449	1.035
	UMTS 850	0.827	0.449	1.276
	UMTS 1750	0.440	0.449	0.889
	UMTS 1900	0.818	0.449	1.267
	EVDO BC10 (§90S)	0.767	0.449	1.216
	EVDO BC0 (§22H)	0.931	0.449	**1.380**
	PCS EVDO	0.528	0.449	0.977
	LTE Band 71	0.467	0.449	0.916
	LTE Band 12	0.466	0.449	0.915
	LTE Band 13	0.457	0.449	0.906
	LTE Band 14	0.420	0.449	0.869
	LTE Band 5 (Cell)	0.716	0.449	1.165
	LTE Band 26 (Cell)	0.615	0.449	1.064
	LTE Band 66 (AWS)	0.378	0.449	0.827
	LTE Band 25 (PCS)	0.666	0.449	1.115
	LTE Band 30	0.881	0.449	1.330
	LTE Band 7	0.426	0.449	0.875
	LTE Band 48	0.362	0.449	0.811
	LTE Band 41	0.294	0.449	0.743

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.189	0.136	**1.041**	Hotspot SAR	Back	0.489	0.471	0.136	1.096
	Front	0.165	0.043	0.438	0.646		Front	0.028	0.109	0.438	0.575
	Top	-	-	0.449*	0.449		Top	-	-	0.449*	0.449
	Bottom	0.284	0.489	0.184	0.957		Bottom	0.881	0.190	0.184	**1.255**
	Right	0.092	0.025	0.449	0.566		Right	0.040	0.063	0.449	0.552
	Left	0.134	0.088	0.449*	0.671		Left	0.037	0.058	0.449*	0.544

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.136	**0.791**	Hotspot SAR	Back	0.260	0.471	0.136	0.867
	Front	0.086	0.043	0.438	0.567		Front	0.067	0.109	0.438	0.614
	Top	-	-	0.449*	0.449		Top	-	-	0.449*	0.449
	Bottom	0.110	0.489	0.184	0.783		Bottom	0.666	0.190	0.184	**1.040**
	Right	0.088	0.025	0.449	0.562		Right	0.022	0.063	0.449	0.534
	Left	0.113	0.088	0.449*	0.650		Left	0.033	0.058	0.449*	0.540

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.189	0.136	0.782	Hotspot SAR	Back	0.152	0.471	0.136	**0.759**
	Front	0.165	0.043	0.438	0.646		Front	0.045	0.109	0.438	0.592
	Top	-	-	0.449*	0.449		Top	-	-	0.449*	0.449
	Bottom	0.208	0.489	0.184	**0.881**		Bottom	0.378	0.190	0.184	0.752
	Right	0.108	0.025	0.449	0.582		Right	0.024	0.063	0.449	0.536
	Left	0.090	0.088	0.449*	0.627		Left	0.046	0.058	0.449*	0.553

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.172	0.136	**0.774**
	Front	0.086	0.045	0.438	0.569
	Top	-	-	0.449*	0.449
	Bottom	0.110	0.386	0.184	0.680
	Right	0.088	0.025	0.449	0.562
	Left	0.113	0.060	0.449*	0.622

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.066	0.172	0.136	0.374
	Front	0.362	0.045	0.438	0.845
	Top	-	-	0.449*	0.449
	Bottom	0.176	0.386	0.184	**0.746**
	Right	-	0.025	0.449	0.474
	Left	0.299	0.060	0.449*	0.808

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.172	0.136	**0.765**
	Front	0.165	0.045	0.438	0.648
	Top	-	-	0.449*	0.449
	Bottom	0.208	0.386	0.184	0.778
	Right	0.108	0.025	0.449	0.582
	Left	0.090	0.060	0.449*	0.599

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.373	0.136	0.661
	Front	0.045	0.087	0.438	0.570
	Top	-	-	0.449*	0.449
	Bottom	0.378	0.177	0.184	**0.739**
	Right	0.024	0.070	0.449	0.543
	Left	0.046	0.107	0.449*	0.602

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.172	0.136	**1.024**
	Front	0.165	0.045	0.438	0.648
	Top	-	-	0.449*	0.449
	Bottom	0.284	0.386	0.184	0.854
	Right	0.092	0.025	0.449	0.566
	Left	0.134	0.060	0.449*	0.643

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.373	0.136	0.769
	Front	0.067	0.087	0.438	0.592
	Top	-	-	0.449*	0.449
	Bottom	0.666	0.177	0.184	**1.027**
	Right	0.022	0.070	0.449	0.541
	Left	0.033	0.107	0.449*	0.589

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.034	0.136	0.322
	Front	0.045	0.116	0.438	0.599
	Top	-	-	0.449*	0.449
	Bottom	0.378	0.118	0.184	0.680
	Right	0.024	-	0.449	0.473
	Left	0.046	0.238	0.449*	**0.733**

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.034	0.136	0.430
	Front	0.067	0.116	0.438	0.621
	Top	-	-	0.449*	0.449
	Bottom	0.666	0.118	0.184	**0.968**
	Right	0.022	-	0.449	0.471
	Left	0.033	0.238	0.449*	0.720

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.136	**0.791**
	Front	0.086	0.043	0.438	0.567
	Top	-	-	0.449*	0.449
	Bottom	0.110	0.489	0.184	0.783
	Right	0.088	0.025	0.449	0.562
	Left	0.113	0.088	0.449*	0.650

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Table 12-54
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 2.4 GHz WLAN Antenna 2 (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.715	0.184	0.622	1.521
	GPRS 1900	0.586	0.184	0.622	1.392
	UMTS 850	0.827	0.184	0.622	See Table Below
	UMTS 1750	0.440	0.184	0.622	1.246
	UMTS 1900	0.818	0.184	0.622	See Table Below
	EVDO BC10 (§90S)	0.767	0.184	0.622	**1.573**
	EVDO BC0 (§22H)	0.931	0.184	0.622	See Table Below
	PCS EVDO	0.528	0.184	0.622	1.334
	LTE Band 71	0.467	0.184	0.622	1.273
	LTE Band 12	0.466	0.184	0.622	1.272
	LTE Band 13	0.457	0.184	0.622	1.263
	LTE Band 14	0.420	0.184	0.622	1.226
	LTE Band 5 (Cell)	0.716	0.184	0.622	1.522
	LTE Band 26 (Cell)	0.615	0.184	0.622	1.421
	LTE Band 66 (AWS)	0.378	0.184	0.622	1.184
	LTE Band 25 (PCS)	0.666	0.184	0.622	1.472
	LTE Band 30	0.881	0.184	0.622	See Table Below
	LTE Band 7	0.426	0.184	0.622	1.232
	LTE Band 48	0.362	0.184	0.622	1.168
	LTE Band 41	0.294	0.184	0.622	1.100

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Simult Tx	Configuration	UMTS 850 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.827	0.082	0.003	0.912
	Front	0.227	0.094	0.622	**0.943**
	Top	-	-	0.622*	0.622
	Bottom	0.293	0.081	0.002	0.376
	Right	0.118	0.184	-	0.302
	Left	0.149	-	0.106	0.255

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.338	0.082	0.003	0.423
	Front	0.098	0.094	0.622	0.814
	Top	-	-	0.622*	0.622
	Bottom	0.818	0.081	0.002	**0.901**
	Right	0.038	0.184	-	0.222
	Left	0.078	-	0.106	0.184

Simult Tx	Configuration	EVDO BC0 (§22H) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.931	0.082	0.003	**1.016**
	Front	0.216	0.094	0.622	0.932
	Top	-	-	0.622*	0.622
	Bottom	0.326	0.081	0.002	0.409
	Right	0.124	0.184	-	0.308
	Left	0.180	-	0.106	0.286

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.489	0.082	0.003	0.574
	Front	0.028	0.094	0.622	0.744
	Top	-	-	0.622*	0.622
	Bottom	0.881	0.081	0.002	**0.964**
	Right	0.040	0.184	-	0.224
	Left	0.037	-	0.106	0.143

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.189	0.082	0.003	**0.990**
	Front	0.165	0.043	0.094	0.622	0.924
	Top	-	-	-	0.622*	0.622
	Bottom	0.284	0.489	0.081	0.002	0.856
	Right	0.092	0.025	0.184	-	0.301
	Left	0.134	0.088	-	0.106	0.328

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.489	0.471	0.082	0.003	1.045
	Front	0.028	0.109	0.094	0.622	0.853
	Top	-	-	-	0.622*	0.622
	Bottom	0.881	0.190	0.081	0.002	**1.154**
	Right	0.040	0.063	0.184	-	0.287
	Left	0.037	0.058	-	0.106	0.201

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.082	0.003	0.740
	Front	0.086	0.043	0.094	0.622	**0.845**
	Top	-	-	-	0.622*	0.622
	Bottom	0.110	0.489	0.081	0.002	0.682
	Right	0.088	0.025	0.184	-	0.297
	Left	0.113	0.088	-	0.106	0.307

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.471	0.082	0.003	0.816
	Front	0.067	0.109	0.094	0.622	0.892
	Top	-	-	-	0.622*	0.622
	Bottom	0.666	0.190	0.081	0.002	**0.939**
	Right	0.022	0.063	0.184	-	0.269
	Left	0.033	0.058	-	0.106	0.197

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.189	0.082	0.003	0.731
	Front	0.165	0.043	0.094	0.622	**0.924**
	Top	-	-	-	0.622*	0.622
	Bottom	0.208	0.489	0.081	0.002	0.780
	Right	0.108	0.025	0.184	-	0.317
	Left	0.090	0.088	-	0.106	0.284

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.471	0.082	0.003	0.708
	Front	0.045	0.109	0.094	0.622	**0.870**
	Top	-	-	-	0.622*	0.622
	Bottom	0.378	0.190	0.081	0.002	0.651
	Right	0.024	0.063	0.184	-	0.271
	Left	0.046	0.058	-	0.106	0.210

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.172	0.082	0.003	0.723
	Front	0.086	0.045	0.094	0.622	**0.847**
	Top	-	-	-	0.622*	0.622
	Bottom	0.110	0.386	0.081	0.002	0.579
	Right	0.088	0.025	0.184	-	0.297
	Left	0.113	0.060	-	0.106	0.279

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.066	0.172	0.082	0.003	0.323
	Front	0.362	0.045	0.094	0.622	**1.123**
	Top	-	-	-	0.622*	0.622
	Bottom	0.176	0.386	0.081	0.002	0.645
	Right	-	0.025	0.184	-	0.209
	Left	0.299	0.060	-	0.106	0.465

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.172	0.082	0.003	0.714
	Front	0.165	0.045	0.094	0.622	**0.926**
	Top	-	-	-	0.622*	0.622
	Bottom	0.208	0.386	0.081	0.002	0.677
	Right	0.108	0.025	0.184	-	0.317
	Left	0.090	0.060	-	0.106	0.256

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.373	0.082	0.003	0.610
	Front	0.045	0.087	0.094	0.622	**0.848**
	Top	-	-	-	0.622*	0.622
	Bottom	0.378	0.177	0.081	0.002	0.638
	Right	0.024	0.070	0.184	-	0.278
	Left	0.046	0.107	-	0.106	0.259

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.172	0.082	0.003	**0.973**
	Front	0.165	0.045	0.094	0.622	0.926
	Top	-	-	-	0.622*	0.622
	Bottom	0.284	0.386	0.081	0.002	0.753
	Right	0.092	0.025	0.184	-	0.301
	Left	0.134	0.060	-	0.106	0.300

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.373	0.082	0.003	0.718
	Front	0.067	0.087	0.094	0.622	0.870
	Top	-	-	-	0.622*	0.622
	Bottom	0.666	0.177	0.081	0.002	**0.926**
	Right	0.022	0.070	0.184	-	0.276
	Left	0.033	0.107	-	0.106	0.246

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.034	0.082	0.003	0.271
	Front	0.045	0.116	0.094	0.622	**0.877**
	Top	-	-	-	0.622*	0.622
	Bottom	0.378	0.118	0.081	0.002	0.579
	Right	0.024	-	0.184	-	0.208
	Left	0.046	0.238	-	0.106	0.390

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.034	0.082	0.003	0.379
	Front	0.067	0.116	0.094	0.622	**0.899**
	Top	-	-	-	0.622*	0.622
	Bottom	0.666	0.118	0.081	0.002	0.867
	Right	0.022	-	0.184	-	0.206
	Left	0.033	0.238	-	0.106	0.377

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.082	0.003	0.740
	Front	0.086	0.043	0.094	0.622	**0.845**
	Top	-	-	-	0.622*	0.622
	Bottom	0.110	0.489	0.081	0.002	0.682
	Right	0.088	0.025	0.184	-	0.297
	Left	0.113	0.088	-	0.106	0.307

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Table 12-55
Simultaneous Transmission Scenario with Bluetooth Antenna 1
(Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	GPRS 850	0.715	0.184	0.899
	GPRS 1900	0.586	0.184	0.770
	UMTS 850	0.827	0.184	1.011
	UMTS 1750	0.440	0.184	0.624
	UMTS 1900	0.818	0.184	1.002
	EVDO BC10 (§90S)	0.767	0.184	0.951
	EVDO BC0 (§22H)	0.931	0.184	**1.115**
	PCS EVDO	0.528	0.184	0.712
	LTE Band 71	0.467	0.184	0.651
	LTE Band 12	0.466	0.184	0.650
	LTE Band 13	0.457	0.184	0.641
	LTE Band 14	0.420	0.184	0.604
	LTE Band 5 (Cell)	0.716	0.184	0.900
	LTE Band 26 (Cell)	0.615	0.184	0.799
	LTE Band 66 (AWS)	0.378	0.184	0.562
	LTE Band 25 (PCS)	0.666	0.184	0.850
	LTE Band 30	0.881	0.184	1.065
	LTE Band 7	0.426	0.184	0.610
	LTE Band 48	0.362	0.184	0.546
	LTE Band 41	0.294	0.184	0.478

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.189	0.082	**0.987**	Hotspot SAR	Back	0.489	0.471	0.082	1.042
	Front	0.165	0.043	0.094	0.302		Front	0.028	0.109	0.094	0.231
	Bottom	0.284	0.489	0.081	0.854		Bottom	0.881	0.190	0.081	**1.152**
	Right	0.092	0.025	0.184	0.301		Right	0.040	0.063	0.184	0.287
	Left	0.134	0.088	-	0.222		Left	0.037	0.058	-	0.095
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.082	**0.737**	Hotspot SAR	Back	0.260	0.471	0.082	0.813
	Front	0.086	0.043	0.094	0.223		Front	0.067	0.109	0.094	0.270
	Bottom	0.110	0.489	0.081	0.680		Bottom	0.666	0.190	0.081	**0.937**
	Right	0.088	0.025	0.184	0.297		Right	0.022	0.063	0.184	0.269
	Left	0.113	0.088	-	0.201		Left	0.033	0.058	-	0.091
Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.189	0.082	0.728	Hotspot SAR	Back	0.152	0.471	0.082	**0.705**
	Front	0.165	0.043	0.094	0.302		Front	0.045	0.109	0.094	0.248
	Bottom	0.208	0.489	0.081	**0.778**		Bottom	0.378	0.190	0.081	0.649
	Right	0.108	0.025	0.184	0.317		Right	0.024	0.063	0.184	0.271
	Left	0.090	0.088	-	0.178		Left	0.046	0.058	-	0.104
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.172	0.082	**0.720**	Hotspot SAR	Back	0.066	0.172	0.082	0.320
	Front	0.086	0.045	0.094	0.225		Front	0.362	0.045	0.094	0.501
	Bottom	0.110	0.386	0.081	0.577		Bottom	0.176	0.386	0.081	**0.643**
	Right	0.088	0.025	0.184	0.297		Right	-	0.025	0.184	0.209
	Left	0.113	0.060	-	0.173		Left	0.299	0.060	-	0.359
Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.172	0.082	**0.711**	Hotspot SAR	Back	0.152	0.373	0.082	0.607
	Front	0.165	0.045	0.094	0.304		Front	0.045	0.087	0.094	0.226
	Bottom	0.208	0.386	0.081	0.675		Bottom	0.378	0.177	0.081	**0.636**
	Right	0.108	0.025	0.184	0.317		Right	0.024	0.070	0.184	0.278
	Left	0.090	0.060	-	0.150		Left	0.046	0.107	-	0.153
Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.172	0.082	**0.970**	Hotspot SAR	Back	0.260	0.373	0.082	0.715
	Front	0.165	0.045	0.094	0.304		Front	0.067	0.087	0.094	0.248
	Bottom	0.284	0.386	0.081	0.751		Bottom	0.666	0.177	0.081	**0.924**
	Right	0.092	0.025	0.184	0.301		Right	0.022	0.070	0.184	0.276
	Left	0.134	0.060	-	0.194		Left	0.033	0.107	-	0.140

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.034	0.082	0.268
	Front	0.045	0.116	0.094	0.255
	Bottom	0.378	0.118	0.081	**0.577**
	Right	0.024	-	0.184	0.208
	Left	0.046	0.238	-	0.284
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.034	0.082	0.376
	Front	0.067	0.116	0.094	0.277
	Bottom	0.666	0.118	0.081	**0.865**
	Right	0.022	-	0.184	0.206
	Left	0.033	0.238	-	0.271
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.082	**0.737**
	Front	0.086	0.043	0.094	0.223
	Bottom	0.110	0.489	0.081	0.680
	Right	0.088	0.025	0.184	0.297
	Left	0.113	0.088	-	0.201

Table 12-56
Simultaneous Transmission Scenario with Bluetooth Antenna 2
(Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	GPRS 850	0.715	0.207	0.922
	GPRS 1900	0.586	0.207	0.793
	UMTS 850	0.827	0.207	1.034
	UMTS 1750	0.440	0.207	0.647
	UMTS 1900	0.818	0.207	1.025
	EVDO BC10 (§90S)	0.767	0.207	0.974
	EVDO BC0 (§22H)	0.931	0.207	**1.138**
	PCS EVDO	0.528	0.207	0.735
	LTE Band 71	0.467	0.207	0.674
	LTE Band 12	0.466	0.207	0.673
	LTE Band 13	0.457	0.207	0.664
	LTE Band 14	0.420	0.207	0.627
	LTE Band 5 (Cell)	0.716	0.207	0.923
	LTE Band 26 (Cell)	0.615	0.207	0.822
	LTE Band 66 (AWS)	0.378	0.207	0.585
	LTE Band 25 (PCS)	0.666	0.207	0.873
	LTE Band 30	0.881	0.207	1.088
	LTE Band 7	0.426	0.207	0.633
	LTE Band 48	0.362	0.207	0.569
	LTE Band 41	0.294	0.207	0.501

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.189	0.096	**1.001**
	Front	0.165	0.043	0.207	0.415
	Top	-	-	0.001	0.001
	Bottom	0.284	0.489	0.000	0.773
	Right	0.092	0.025	-	0.117
	Left	0.134	0.088	0.027	0.249

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.096	**0.751**
	Front	0.086	0.043	0.207	0.336
	Top	-	-	0.001	0.001
	Bottom	0.110	0.489	0.000	0.599
	Right	0.088	0.025	-	0.113
	Left	0.113	0.088	0.027	0.228

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.189	0.096	**0.742**
	Front	0.165	0.043	0.207	0.415
	Top	-	-	0.001	0.001
	Bottom	0.208	0.489	0.000	0.697
	Right	0.108	0.025	-	0.133
	Left	0.090	0.088	0.027	0.205

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.172	0.096	**0.734**
	Front	0.086	0.045	0.207	0.338
	Top	-	-	0.001	0.001
	Bottom	0.110	0.386	0.000	0.496
	Right	0.088	0.025	-	0.113
	Left	0.113	0.060	0.027	0.200

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.172	0.096	**0.725**
	Front	0.165	0.045	0.207	0.417
	Top	-	-	0.001	0.001
	Bottom	0.208	0.386	0.000	0.594
	Right	0.108	0.025	-	0.133
	Left	0.090	0.060	0.027	0.177

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.172	0.096	**0.984**
	Front	0.165	0.045	0.207	0.417
	Top	-	-	0.001	0.001
	Bottom	0.284	0.386	0.000	0.670
	Right	0.092	0.025	-	0.117
	Left	0.134	0.060	0.027	0.221

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.489	0.471	0.096	1.056
	Front	0.028	0.109	0.207	0.344
	Top	-	-	0.001	0.001
	Bottom	0.881	0.190	0.000	**1.071**
	Right	0.040	0.063	-	0.103
	Left	0.037	0.058	0.027	0.122

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.471	0.096	0.827
	Front	0.067	0.109	0.207	0.383
	Top	-	-	0.001	0.001
	Bottom	0.666	0.190	0.000	**0.856**
	Right	0.022	0.063	-	0.085
	Left	0.033	0.058	0.027	0.118

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.471	0.096	**0.719**
	Front	0.045	0.109	0.207	0.361
	Top	-	-	0.001	0.001
	Bottom	0.378	0.190	0.000	0.568
	Right	0.024	0.063	-	0.087
	Left	0.046	0.058	0.027	0.131

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.066	0.172	0.096	0.334
	Front	0.362	0.045	0.207	**0.614**
	Top	-	-	0.001	0.001
	Bottom	0.176	0.386	0.000	0.562
	Right	-	0.025	-	0.025
	Left	0.299	0.060	0.027	0.386

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.373	0.096	**0.621**
	Front	0.045	0.087	0.207	0.339
	Top	-	-	0.001	0.001
	Bottom	0.378	0.177	0.000	0.555
	Right	0.024	0.070	-	0.094
	Left	0.046	0.107	0.027	0.180

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.373	0.096	0.729
	Front	0.067	0.087	0.207	0.361
	Top	-	-	0.001	0.001
	Bottom	0.666	0.177	0.000	**0.843**
	Right	0.022	0.070	-	0.092
	Left	0.033	0.107	0.027	0.167

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.034	0.096	0.282
	Front	0.045	0.116	0.207	0.368
	Top	-	-	0.001	0.001
	Bottom	0.378	0.118	0.000	**0.496**
	Right	0.024	-	-	0.024
	Left	0.046	0.238	0.027	0.311
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.034	0.096	0.390
	Front	0.067	0.116	0.207	0.390
	Top	-	-	0.001	0.001
	Bottom	0.666	0.118	0.000	**0.784**
	Right	0.022	-	-	0.022
	Left	0.033	0.238	0.027	0.298
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.096	**0.751**
	Front	0.086	0.043	0.207	0.336
	Top	-	-	0.001	0.001
	Bottom	0.110	0.489	0.000	0.599
	Right	0.088	0.025	-	0.113
	Left	0.113	0.088	0.027	0.228

Table 12-57
Simultaneous Transmission Scenario with 5 GHz MIMO WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	GPRS 850	0.715	0.325	1.040
	GPRS 1900	0.586	0.325	0.911
	UMTS 850	0.827	0.325	1.152
	UMTS 1750	0.440	0.325	0.765
	UMTS 1900	0.818	0.325	1.143
	EVDO BC10 (§90S)	0.767	0.325	1.092
	EVDO BC0 (§22H)	0.931	0.325	**1.256**
	PCS EVDO	0.528	0.325	0.853
	LTE Band 71	0.467	0.325	0.792
	LTE Band 12	0.466	0.325	0.791
	LTE Band 13	0.457	0.325	0.782
	LTE Band 14	0.420	0.325	0.745
	LTE Band 5 (Cell)	0.716	0.325	1.041
	LTE Band 26 (Cell)	0.615	0.325	0.940
	LTE Band 66 (AWS)	0.378	0.325	0.703
	LTE Band 25 (PCS)	0.666	0.325	0.991
	LTE Band 30	0.881	0.325	1.206
	LTE Band 7	0.426	0.325	0.751
	LTE Band 48	0.362	0.325	0.687
	LTE Band 41	0.294	0.325	0.619

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.189	0.079	**0.984**
	Front	0.165	0.043	0.325	0.533
	Bottom	0.284	0.489	0.179	0.952
	Right	0.092	0.025	0.303	0.420
	Left	0.134	0.088	-	0.222

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.489	0.471	0.079	1.039
	Front	0.028	0.109	0.325	0.462
	Bottom	0.881	0.190	0.179	**1.250**
	Right	0.040	0.063	0.303	0.406
	Left	0.037	0.058	-	0.095

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.079	0.734
	Front	0.086	0.043	0.325	0.454
	Bottom	0.110	0.489	0.179	**0.778**
	Right	0.088	0.025	0.303	0.416
	Left	0.113	0.088	-	0.201

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.471	0.079	0.810
	Front	0.067	0.109	0.325	0.501
	Bottom	0.666	0.190	0.179	**1.035**
	Right	0.022	0.063	0.303	0.388
	Left	0.033	0.058	-	0.091

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.189	0.079	0.725
	Front	0.165	0.043	0.325	0.533
	Bottom	0.208	0.489	0.179	**0.876**
	Right	0.108	0.025	0.303	0.436
	Left	0.090	0.088	-	0.178

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.471	0.079	0.702
	Front	0.045	0.109	0.325	0.479
	Bottom	0.378	0.190	0.179	**0.747**
	Right	0.024	0.063	0.303	0.390
	Left	0.046	0.058	-	0.104

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.172	0.079	**0.717**
	Front	0.086	0.045	0.325	0.456
	Bottom	0.110	0.386	0.179	0.675
	Right	0.088	0.025	0.303	0.416
	Left	0.113	0.060	-	0.173

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.066	0.172	0.079	0.317
	Front	0.362	0.045	0.325	0.732
	Bottom	0.176	0.386	0.179	**0.741**
	Right	-	0.025	0.303	0.328
	Left	0.299	0.060	-	0.359

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.457	0.172	0.079	0.708
	Front	0.165	0.045	0.325	0.535
	Bottom	0.208	0.386	0.179	**0.773**
	Right	0.108	0.025	0.303	0.436
	Left	0.090	0.060	-	0.150

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.373	0.079	0.604
	Front	0.045	0.087	0.325	0.457
	Bottom	0.378	0.177	0.179	**0.734**
	Right	0.024	0.070	0.303	0.397
	Left	0.046	0.107	-	0.153

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.716	0.172	0.079	**0.967**
	Front	0.165	0.045	0.325	0.535
	Bottom	0.284	0.386	0.179	0.849
	Right	0.092	0.025	0.303	0.420
	Left	0.134	0.060	-	0.194

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.373	0.079	0.712
	Front	0.067	0.087	0.325	0.479
	Bottom	0.666	0.177	0.179	**1.022**
	Right	0.022	0.070	0.303	0.395
	Left	0.033	0.107	-	0.140

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.152	0.034	0.079	0.265
	Front	0.045	0.116	0.325	0.486
	Bottom	0.378	0.118	0.179	**0.675**
	Right	0.024	-	0.303	0.327
	Left	0.046	0.238	-	0.284

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.260	0.034	0.079	0.373
	Front	0.067	0.116	0.325	0.508
	Bottom	0.666	0.118	0.179	**0.963**
	Right	0.022	-	0.303	0.325
	Left	0.033	0.238	-	0.271

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.189	0.079	0.734
	Front	0.086	0.043	0.325	0.454
	Bottom	0.110	0.489	0.179	**0.778**
	Right	0.088	0.025	0.303	0.416
	Left	0.113	0.088	-	0.201

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Table 12-58
Simultaneous Transmission Scenario with Bluetooth Antenna 1 and 5 GHz MIMO WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.715	0.184	0.325	1.224
	GPRS 1900	0.586	0.184	0.325	1.095
	UMTS 850	0.827	0.184	0.325	1.336
	UMTS 1750	0.440	0.184	0.325	0.949
	UMTS 1900	0.818	0.184	0.325	1.327
	EVDO BC10 (§90S)	0.767	0.184	0.325	1.276
	EVDO BC0 (§22H)	0.931	0.184	0.325	**1.440**
	PCS EVDO	0.528	0.184	0.325	1.037
	LTE Band 71	0.467	0.184	0.325	0.976
	LTE Band 12	0.466	0.184	0.325	0.975
	LTE Band 13	0.457	0.184	0.325	0.966
	LTE Band 14	0.420	0.184	0.325	0.929
	LTE Band 5 (Cell)	0.716	0.184	0.325	1.225
	LTE Band 26 (Cell)	0.615	0.184	0.325	1.124
	LTE Band 66 (AWS)	0.378	0.184	0.325	0.887
	LTE Band 25 (PCS)	0.666	0.184	0.325	1.175
	LTE Band 30	0.881	0.184	0.325	1.390
	LTE Band 7	0.426	0.184	0.325	0.935
	LTE Band 48	0.362	0.184	0.325	0.871
	LTE Band 41	0.294	0.184	0.325	0.803

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.189	0.082	0.079	**1.066**
	Front	0.165	0.043	0.094	0.325	0.627
	Bottom	0.284	0.489	0.081	0.179	1.033
	Right	0.092	0.025	0.184	0.303	0.604
	Left	0.134	0.088	-	-	0.222

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.082	0.079	0.816
	Front	0.086	0.043	0.094	0.325	0.548
	Bottom	0.110	0.489	0.081	0.179	**0.859**
	Right	0.088	0.025	0.184	0.303	0.600
	Left	0.113	0.088	-	-	0.201

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.189	0.082	0.079	0.807
	Front	0.165	0.043	0.094	0.325	0.627
	Bottom	0.208	0.489	0.081	0.179	**0.957**
	Right	0.108	0.025	0.184	0.303	0.620
	Left	0.090	0.088	-	-	0.178

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.489	0.471	0.082	0.079	1.121
	Front	0.028	0.109	0.094	0.325	0.556
	Bottom	0.881	0.190	0.081	0.179	**1.331**
	Right	0.040	0.063	0.184	0.303	0.590
	Left	0.037	0.058	-	-	0.095

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.471	0.082	0.079	0.892
	Front	0.067	0.109	0.094	0.325	0.595
	Bottom	0.666	0.190	0.081	0.179	**1.116**
	Right	0.022	0.063	0.184	0.303	0.572
	Left	0.033	0.058	-	-	0.091

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.471	0.082	0.079	0.784
	Front	0.045	0.109	0.094	0.325	0.573
	Bottom	0.378	0.190	0.081	0.179	**0.828**
	Right	0.024	0.063	0.184	0.303	0.574
	Left	0.046	0.058	-	-	0.104

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.172	0.082	0.079	**0.799**
	Front	0.086	0.045	0.094	0.325	0.550
	Bottom	0.110	0.386	0.081	0.179	0.756
	Right	0.088	0.025	0.184	0.303	0.600
	Left	0.113	0.060	-	-	0.173

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.172	0.082	0.079	0.790
	Front	0.165	0.045	0.094	0.325	0.629
	Bottom	0.208	0.386	0.081	0.179	**0.854**
	Right	0.108	0.025	0.184	0.303	0.620
	Left	0.090	0.060	-	-	0.150

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.172	0.082	0.079	**1.049**
	Front	0.165	0.045	0.094	0.325	0.629
	Bottom	0.284	0.386	0.081	0.179	0.930
	Right	0.092	0.025	0.184	0.303	0.604
	Left	0.134	0.060	-	-	0.194

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.066	0.172	0.082	0.079	0.399
	Front	0.362	0.045	0.094	0.325	**0.826**
	Bottom	0.176	0.386	0.081	0.179	0.822
	Right	-	0.025	0.184	0.303	0.512
	Left	0.299	0.060	-	-	0.359

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.373	0.082	0.079	0.686
	Front	0.045	0.087	0.094	0.325	0.551
	Bottom	0.378	0.177	0.081	0.179	**0.815**
	Right	0.024	0.070	0.184	0.303	0.581
	Left	0.046	0.107	-	-	0.153

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.373	0.082	0.079	0.794
	Front	0.067	0.087	0.094	0.325	0.573
	Bottom	0.666	0.177	0.081	0.179	**1.103**
	Right	0.022	0.070	0.184	0.303	0.579
	Left	0.033	0.107	-	-	0.140

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.034	0.082	0.079	0.347
	Front	0.045	0.116	0.094	0.325	0.580
	Bottom	0.378	0.118	0.081	0.179	**0.756**
	Right	0.024	-	0.184	0.303	0.511
	Left	0.046	0.238	-	-	0.284

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.034	0.082	0.079	0.455
	Front	0.067	0.116	0.094	0.325	0.602
	Bottom	0.666	0.118	0.081	0.179	**1.044**
	Right	0.022	-	0.184	0.303	0.509
	Left	0.033	0.238	-	-	0.271

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.082	0.079	0.816
	Front	0.086	0.043	0.094	0.325	0.548
	Bottom	0.110	0.489	0.081	0.179	**0.859**
	Right	0.088	0.025	0.184	0.303	0.600
	Left	0.113	0.088	-	-	0.201

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Table 12-59
Simultaneous Transmission Scenario with Bluetooth Ant 2 and 5 GHz WLAN MIMO (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.715	0.207	0.325	1.247
	GPRS 1900	0.586	0.207	0.325	1.118
	UMTS 850	0.827	0.207	0.325	1.359
	UMTS 1750	0.440	0.207	0.325	0.972
	UMTS 1900	0.818	0.207	0.325	1.350
	EVDO BC10 (§90S)	0.767	0.207	0.325	1.299
	EVDO BC0 (§22H)	0.931	0.207	0.325	**1.463**
	PCS EVDO	0.528	0.207	0.325	1.060
	LTE Band 71	0.467	0.207	0.325	0.999
	LTE Band 12	0.466	0.207	0.325	0.998
	LTE Band 13	0.457	0.207	0.325	0.989
	LTE Band 14	0.420	0.207	0.325	0.952
	LTE Band 5 (Cell)	0.716	0.207	0.325	1.248
	LTE Band 26 (Cell)	0.615	0.207	0.325	1.147
	LTE Band 66 (AWS)	0.378	0.207	0.325	0.910
	LTE Band 25 (PCS)	0.666	0.207	0.325	1.198
	LTE Band 30	0.881	0.207	0.325	1.413
	LTE Band 7	0.426	0.207	0.325	0.958
	LTE Band 48	0.362	0.207	0.325	0.894
	LTE Band 41	0.294	0.207	0.325	0.826

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.189	0.096	0.079	**1.080**
	Front	0.165	0.043	0.207	0.325	0.740
	Top	-	-	0.001	-	0.001
	Bottom	0.284	0.489	0.000	0.179	0.952
	Right	0.092	0.025	-	0.303	0.420
	Left	0.134	0.088	0.027	-	0.249

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.489	0.471	0.096	0.079	1.135
	Front	0.028	0.109	0.207	0.325	0.669
	Top	-	-	0.001	-	0.001
	Bottom	0.881	0.190	0.000	0.179	**1.250**
	Right	0.040	0.063	-	0.303	0.406
	Left	0.037	0.058	0.027	-	0.122

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.096	0.079	**0.830**
	Front	0.086	0.043	0.207	0.325	0.661
	Top	-	-	0.001	-	0.001
	Bottom	0.110	0.489	0.000	0.179	0.778
	Right	0.088	0.025	-	0.303	0.416
	Left	0.113	0.088	0.027	-	0.228

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.471	0.096	0.079	0.906
	Front	0.067	0.109	0.207	0.325	0.708
	Top	-	-	0.001	-	0.001
	Bottom	0.666	0.190	0.000	0.179	**1.035**
	Right	0.022	0.063	-	0.303	0.388
	Left	0.033	0.058	0.027	-	0.118

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.189	0.096	0.079	0.821
	Front	0.165	0.043	0.207	0.325	0.740
	Top	-	-	0.001	-	0.001
	Bottom	0.208	0.489	0.000	0.179	**0.876**
	Right	0.108	0.025	-	0.303	0.436
	Left	0.090	0.088	0.027	-	0.205

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.471	0.096	0.079	**0.798**
	Front	0.045	0.109	0.207	0.325	0.686
	Top	-	-	0.001	-	0.001
	Bottom	0.378	0.190	0.000	0.179	0.747
	Right	0.024	0.063	-	0.303	0.390
	Left	0.046	0.058	0.027	-	0.131

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.172	0.096	0.079	**0.813**
	Front	0.086	0.045	0.207	0.325	0.663
	Top	-	-	0.001	-	0.001
	Bottom	0.110	0.386	0.000	0.179	0.675
	Right	0.088	0.025	-	0.303	0.416
	Left	0.113	0.060	0.027	-	0.200

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.066	0.172	0.096	0.079	0.413
	Front	0.362	0.045	0.207	0.325	**0.939**
	Top	-	-	0.001	-	0.001
	Bottom	0.176	0.386	0.000	0.179	0.741
	Right	-	0.025	-	0.303	0.328
	Left	0.299	0.060	0.027	-	0.386

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.172	0.096	0.079	**0.804**
	Front	0.165	0.045	0.207	0.325	0.742
	Top	-	-	0.001	-	0.001
	Bottom	0.208	0.386	0.000	0.179	0.773
	Right	0.108	0.025	-	0.303	0.436
	Left	0.090	0.060	0.027	-	0.177

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.373	0.096	0.079	0.700
	Front	0.045	0.087	0.207	0.325	0.664
	Top	-	-	0.001	-	0.001
	Bottom	0.378	0.177	0.000	0.179	**0.734**
	Right	0.024	0.070	-	0.303	0.397
	Left	0.046	0.107	0.027	-	0.180

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.172	0.096	0.079	**1.063**
	Front	0.165	0.045	0.207	0.325	0.742
	Top	-	-	0.001	-	0.001
	Bottom	0.284	0.386	0.000	0.179	0.849
	Right	0.092	0.025	-	0.303	0.420
	Left	0.134	0.060	0.027	-	0.221

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.373	0.096	0.079	0.808
	Front	0.067	0.087	0.207	0.325	0.686
	Top	-	-	0.001	-	0.001
	Bottom	0.666	0.177	0.000	0.179	**1.022**
	Right	0.022	0.070	-	0.303	0.395
	Left	0.033	0.107	0.027	-	0.167

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.034	0.096	0.079	0.361
	Front	0.045	0.116	0.207	0.325	**0.693**
	Top	-	-	0.001	-	0.001
	Bottom	0.378	0.118	0.000	0.179	0.675
	Right	0.024	-	-	0.303	0.327
	Left	0.046	0.238	0.027	-	0.311

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.034	0.096	0.079	0.469
	Front	0.067	0.116	0.207	0.325	0.715
	Top	-	-	0.001	-	0.001
	Bottom	0.666	0.118	0.000	0.179	**0.963**
	Right	0.022	-	-	0.303	0.325
	Left	0.033	0.238	0.027	-	0.298

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.096	0.079	**0.830**
	Front	0.086	0.043	0.207	0.325	0.661
	Top	-	-	0.001	-	0.001
	Bottom	0.110	0.489	0.000	0.179	0.778
	Right	0.088	0.025	-	0.303	0.416
	Left	0.113	0.088	0.027	-	0.228

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Table 12-60
Simultaneous Transmission Scenario with 2.4 GHz MIMO WLAN and 5 GHz MIMO WLAN
(Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	GPRS 850	0.715	0.449	0.325	1.489
	GPRS 1900	0.586	0.449	0.325	1.360
	UMTS 850	0.827	0.449	0.325	See Table Below
	UMTS 1750	0.440	0.449	0.325	1.214
	UMTS 1900	0.818	0.449	0.325	**1.592**
	EVDO BC10 (§90S)	0.767	0.449	0.325	1.541
	EVDO BC0 (§22H)	0.931	0.449	0.325	See Table Below
	PCS EVDO	0.528	0.449	0.325	1.302
	LTE Band 71	0.467	0.449	0.325	1.241
	LTE Band 12	0.466	0.449	0.325	1.240
	LTE Band 13	0.457	0.449	0.325	1.231
	LTE Band 14	0.420	0.449	0.325	1.194
	LTE Band 5 (Cell)	0.716	0.449	0.325	1.490
	LTE Band 26 (Cell)	0.615	0.449	0.325	1.389
	LTE Band 66 (AWS)	0.378	0.449	0.325	1.152
	LTE Band 25 (PCS)	0.666	0.449	0.325	1.440
	LTE Band 30	0.881	0.449	0.325	See Table Below
	LTE Band 7	0.426	0.449	0.325	1.200
	LTE Band 48	0.362	0.449	0.325	1.136
	LTE Band 41	0.294	0.449	0.325	1.068

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Simult Tx	Configuration	UMTS 850 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.827	0.136	0.079	**1.042**
	Front	0.227	0.438	0.325	0.990
	Top	-	0.449*	-	0.449
	Bottom	0.293	0.184	0.179	0.656
	Right	0.118	0.449	0.303	0.870
	Left	0.149	0.449*	-	0.598

Simult Tx	Configuration	EVDO BC0 (§22H) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.931	0.136	0.079	**1.146**
	Front	0.216	0.438	0.325	0.979
	Top	-	0.449*	-	0.449
	Bottom	0.326	0.184	0.179	0.689
	Right	0.124	0.449	0.303	0.876
	Left	0.180	0.449*	-	0.629

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.489	0.136	0.079	0.704
	Front	0.028	0.438	0.325	0.791
	Top	-	0.449*	-	0.449
	Bottom	0.881	0.184	0.179	**1.244**
	Right	0.040	0.449	0.303	0.792
	Left	0.037	0.449*	-	0.486

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.189	0.136	0.079	1.120
	Front	0.165	0.043	0.438	0.325	0.971
	Top	-	-	0.449*	-	0.449
	Bottom	0.284	0.489	0.184	0.179	**1.136**
	Right	0.092	0.025	0.449	0.303	0.869
	Left	0.134	0.088	0.449*	-	0.671

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.489	0.471	0.136	0.079	1.175
	Front	0.028	0.109	0.438	0.325	0.900
	Top	-	-	0.449*	-	0.449
	Bottom	0.881	0.190	0.184	0.179	**1.434**
	Right	0.040	0.063	0.449	0.303	0.855
	Left	0.037	0.058	0.449*	-	0.544

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.136	0.079	0.870
	Front	0.086	0.043	0.438	0.325	0.892
	Top	-	-	0.449*	-	0.449
	Bottom	0.110	0.489	0.184	0.179	**0.962**
	Right	0.088	0.025	0.449	0.303	0.865
	Left	0.113	0.088	0.449*	-	0.650

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.471	0.136	0.079	0.946
	Front	0.067	0.109	0.438	0.325	0.939
	Top	-	-	0.449*	-	0.449
	Bottom	0.666	0.190	0.184	0.179	**1.219**
	Right	0.022	0.063	0.449	0.303	0.837
	Left	0.033	0.058	0.449*	-	0.540

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.189	0.136	0.079	0.861
	Front	0.165	0.043	0.438	0.325	0.971
	Top	-	-	0.449*	-	0.449
	Bottom	0.208	0.489	0.184	0.179	**1.060**
	Right	0.108	0.025	0.449	0.303	0.885
	Left	0.090	0.088	0.449*	-	0.627

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.471	0.136	0.079	0.838
	Front	0.045	0.109	0.438	0.325	0.917
	Top	-	-	0.449*	-	0.449
	Bottom	0.378	0.190	0.184	0.179	**0.931**
	Right	0.024	0.063	0.449	0.303	0.839
	Left	0.046	0.058	0.449*	-	0.553

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Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.172	0.136	0.079	0.853
	Front	0.086	0.045	0.438	0.325	**0.894**
	Top	-	-	0.449*	-	0.449
	Bottom	0.110	0.386	0.184	0.179	0.859
	Right	0.088	0.025	0.449	0.303	0.865
	Left	0.113	0.060	0.449*	-	0.622

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.066	0.172	0.136	0.079	0.453
	Front	0.362	0.045	0.438	0.325	**1.170**
	Top	-	-	0.449*	-	0.449
	Bottom	0.176	0.386	0.184	0.179	0.925
	Right	-	0.025	0.449	0.303	0.777
	Left	0.299	0.060	0.449*	-	0.808

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.457	0.172	0.136	0.079	0.844
	Front	0.165	0.045	0.438	0.325	**0.973**
	Top	-	-	0.449*	-	0.449
	Bottom	0.208	0.386	0.184	0.179	0.957
	Right	0.108	0.025	0.449	0.303	0.885
	Left	0.090	0.060	0.449*	-	0.599

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.373	0.136	0.079	0.740
	Front	0.045	0.087	0.438	0.325	0.895
	Top	-	-	0.449*	-	0.449
	Bottom	0.378	0.177	0.184	0.179	**0.918**
	Right	0.024	0.070	0.449	0.303	0.846
	Left	0.046	0.107	0.449*	-	0.602

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.172	0.136	0.079	**1.103**
	Front	0.165	0.045	0.438	0.325	0.973
	Top	-	-	0.449*	-	0.449
	Bottom	0.284	0.386	0.184	0.179	1.033
	Right	0.092	0.025	0.449	0.303	0.869
	Left	0.134	0.060	0.449*	-	0.643

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.373	0.136	0.079	0.848
	Front	0.067	0.087	0.438	0.325	0.917
	Top	-	-	0.449*	-	0.449
	Bottom	0.666	0.177	0.184	0.179	**1.206**
	Right	0.022	0.070	0.449	0.303	0.844
	Left	0.033	0.107	0.449*	-	0.589

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.152	0.034	0.136	0.079	0.401
	Front	0.045	0.116	0.438	0.325	**0.924**
	Top	-	-	0.449*	-	0.449
	Bottom	0.378	0.118	0.184	0.179	0.859
	Right	0.024	-	0.449	0.303	0.776
	Left	0.046	0.238	0.449*	-	0.733

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.034	0.136	0.079	0.509
	Front	0.067	0.116	0.438	0.325	0.946
	Top	-	-	0.449*	-	0.449
	Bottom	0.666	0.118	0.184	0.179	**1.147**
	Right	0.022	-	0.449	0.303	0.774
	Left	0.033	0.238	0.449*	-	0.720

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.189	0.136	0.079	0.870
	Front	0.086	0.043	0.438	0.325	0.892
	Top	-	-	0.449*	-	0.449
	Bottom	0.110	0.489	0.184	0.179	**0.962**
	Right	0.088	0.025	0.449	0.303	0.865
	Left	0.113	0.088	0.449*	-	0.650

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Table 12-61
Simultaneous Transmission Scenario with Bluetooth Antenna 1, 2.4 GHz Antenna 2 WLAN, and 5 GHz MIMO WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	GPRS 850	0.715	0.184	0.622	0.325	See Table Below
	GPRS 1900	0.586	0.184	0.622	0.325	See Table Below
	UMTS 850	0.827	0.184	0.622	0.325	See Table Below
	UMTS 1750	0.440	0.184	0.622	0.325	1.571
	UMTS 1900	0.818	0.184	0.622	0.325	See Table Below
	EVDO BC10 (§90S)	0.767	0.184	0.622	0.325	See Table Below
	EVDO BC0 (§22H)	0.931	0.184	0.622	0.325	See Table Below
	PCS EVDO	0.528	0.184	0.622	0.325	See Table Below
	LTE Band 71	0.467	0.184	0.622	0.325	See Table Below
	LTE Band 12	0.466	0.184	0.622	0.325	See Table Below
	LTE Band 13	0.457	0.184	0.622	0.325	**1.588**
	LTE Band 14	0.420	0.184	0.622	0.325	1.551
	LTE Band 5 (Cell)	0.716	0.184	0.622	0.325	See Table Below
	LTE Band 26 (Cell)	0.615	0.184	0.622	0.325	See Table Below
	LTE Band 66 (AWS)	0.378	0.184	0.622	0.325	1.509
	LTE Band 25 (PCS)	0.666	0.184	0.622	0.325	See Table Below
	LTE Band 30	0.881	0.184	0.622	0.325	See Table Below
	LTE Band 7	0.426	0.184	0.622	0.325	1.557
	LTE Band 48	0.362	0.184	0.622	0.325	1.493
	LTE Band 41	0.294	0.184	0.622	0.325	1.425

Simult Tx	Configuration	GPRS 850 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.715	0.082	0.003	0.079	0.879
	Front	0.254	0.094	0.622	0.325	**1.295**
	Top	-	-	0.622*	-	0.622
	Bottom	0.240	0.081	0.002	0.179	0.502
	Right	0.089	0.184	-	0.303	0.576
	Left	0.114	-	0.106	-	0.220

Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.296	0.082	0.003	0.079	0.460
	Front	0.059	0.094	0.622	0.325	**1.100**
	Top	-	-	0.622*	-	0.622
	Bottom	0.586	0.081	0.002	0.179	0.848
	Right	0.027	0.184	-	0.303	0.514
	Left	0.071	-	0.106	-	0.177

Simult Tx	Configuration	UMTS 850 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.827	0.082	0.003	0.079	0.991
	Front	0.227	0.094	0.622	0.325	**1.268**
	Top	-	-	0.622*	-	0.622
	Bottom	0.293	0.081	0.002	0.179	0.555
	Right	0.118	0.184	-	0.303	0.605
	Left	0.149	-	0.106	-	0.255

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.338	0.082	0.003	0.079	0.502
	Front	0.098	0.094	0.622	0.325	**1.139**
	Top	-	-	0.622*	-	0.622
	Bottom	0.818	0.081	0.002	0.179	1.080
	Right	0.038	0.184	-	0.303	0.525
	Left	0.078	-	0.106	-	0.184

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Simult Tx	Configuration	EVDO BC10 (§90S) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.767	0.082	0.003	0.079	0.931
	Front	0.165	0.094	0.622	0.325	**1.206**
	Top	-	-	0.622*	-	0.622
	Bottom	0.248	0.081	0.002	0.179	0.510
	Right	0.086	0.184	-	0.303	0.573
	Left	0.152	-	0.106	-	0.258

Simult Tx	Configuration	EVDO BC0 (§22H) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.931	0.082	0.003	0.079	1.095
	Front	0.216	0.094	0.622	0.325	**1.257**
	Top	-	-	0.622*	-	0.622
	Bottom	0.326	0.081	0.002	0.179	0.588
	Right	0.124	0.184	-	0.303	0.611
	Left	0.180	-	0.106	-	0.286

Simult Tx	Configuration	PCS EVDO SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.247	0.082	0.003	0.079	0.411
	Front	0.051	0.094	0.622	0.325	**1.092**
	Top	-	-	0.622*	-	0.622
	Bottom	0.528	0.081	0.002	0.179	0.790
	Right	0.030	0.184	-	0.303	0.517
	Left	0.091	-	0.106	-	0.197

Simult Tx	Configuration	LTE Band 71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.467	0.082	0.003	0.079	0.631
	Front	0.107	0.094	0.622	0.325	**1.148**
	Top	-	-	0.622*	-	0.622
	Bottom	0.212	0.081	0.002	0.179	0.474
	Right	0.073	0.184	-	0.303	0.560
	Left	0.135	-	0.106	-	0.241

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.466	0.082	0.003	0.079	0.630
	Front	0.086	0.094	0.622	0.325	**1.127**
	Top	-	-	0.622*	-	0.622
	Bottom	0.110	0.081	0.002	0.179	0.372
	Right	0.088	0.184	-	0.303	0.575
	Left	0.113	-	0.106	-	0.219

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.716	0.082	0.003	0.079	0.880
	Front	0.165	0.094	0.622	0.325	**1.206**
	Top	-	-	0.622*	-	0.622
	Bottom	0.284	0.081	0.002	0.179	0.546
	Right	0.092	0.184	-	0.303	0.579
	Left	0.134	-	0.106	-	0.240

Simult Tx	Configuration	LTE Band 26 (Cell) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.615	0.082	0.003	0.079	0.779
	Front	0.135	0.094	0.622	0.325	**1.176**
	Top	-	-	0.622*	-	0.622
	Bottom	0.233	0.081	0.002	0.179	0.495
	Right	0.076	0.184	-	0.303	0.563
	Left	0.123	-	0.106	-	0.229

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Hotspot SAR	Back	0.260	0.082	0.003	0.079	0.424
	Front	0.067	0.094	0.622	0.325	**1.108**
	Top	-	-	0.622*	-	0.622
	Bottom	0.666	0.081	0.002	0.179	0.928
	Right	0.022	0.184	-	0.303	0.509
	Left	0.033	-	0.106	-	0.139

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Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5			1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.716	0.189	0.082	0.003	0.079	1.069	Hotspot SAR	Back	0.489	0.471	0.082	0.003	0.079	1.124
	Front	0.165	0.043	0.094	0.622	0.325	**1.249**		Front	0.028	0.109	0.094	0.622	0.325	1.178
	Top	-	-	-	0.622*	-	0.622		Top	-	-	-	0.622*	-	0.622
	Bottom	0.284	0.489	0.081	0.002	0.179	1.035		Bottom	0.881	0.190	0.081	0.002	0.179	**1.333**
	Right	0.092	0.025	0.184	-	0.303	0.604		Right	0.040	0.063	0.184	-	0.303	0.590
	Left	0.134	0.088	-	0.106	-	0.328		Left	0.037	0.058	-	0.106	-	0.201

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5			1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.466	0.189	0.082	0.003	0.079	0.819	Hotspot SAR	Back	0.260	0.471	0.082	0.003	0.079	0.895
	Front	0.086	0.043	0.094	0.622	0.325	**1.170**		Front	0.067	0.109	0.094	0.622	0.325	**1.217**
	Top	-	-	-	0.622*	-	0.622		Top	-	-	-	0.622*	-	0.622
	Bottom	0.110	0.489	0.081	0.002	0.179	0.861		Bottom	0.666	0.190	0.081	0.002	0.179	1.118
	Right	0.088	0.025	0.184	-	0.303	0.600		Right	0.022	0.063	0.184	-	0.303	0.572
	Left	0.113	0.088	-	0.106	-	0.307		Left	0.033	0.058	-	0.106	-	0.197

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n2 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n5 (Cell.) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5			1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.457	0.189	0.082	0.003	0.079	0.810	Hotspot SAR	Back	0.152	0.471	0.082	0.003	0.079	0.787
	Front	0.165	0.043	0.094	0.622	0.325	**1.249**		Front	0.045	0.109	0.094	0.622	0.325	**1.195**
	Top	-	-	-	0.622*	-	0.622		Top	-	-	-	0.622*	-	0.622
	Bottom	0.208	0.489	0.081	0.002	0.179	0.959		Bottom	0.378	0.190	0.081	0.002	0.179	0.830
	Right	0.108	0.025	0.184	-	0.303	0.620		Right	0.024	0.063	0.184	-	0.303	0.574
	Left	0.090	0.088	-	0.106	-	0.284		Left	0.046	0.058	-	0.106	-	0.210

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5			1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.466	0.172	0.082	0.003	0.079	0.802	Hotspot SAR	Back	0.066	0.172	0.082	0.003	0.079	0.402
	Front	0.086	0.045	0.094	0.622	0.325	**1.172**		Front	0.362	0.045	0.094	0.622	0.325	**1.448**
	Top	-	-	-	0.622*	-	0.622		Top	-	-	-	0.622*	-	0.622
	Bottom	0.110	0.386	0.081	0.002	0.179	0.758		Bottom	0.176	0.386	0.081	0.002	0.179	0.824
	Right	0.088	0.025	0.184	-	0.303	0.600		Right	-	0.025	0.184	-	0.303	0.512
	Left	0.113	0.060	-	0.106	-	0.279		Left	0.299	0.060	-	0.106	-	0.465

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5			1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.457	0.172	0.082	0.003	0.079	0.793	Hotspot SAR	Back	0.152	0.373	0.082	0.003	0.079	0.689
	Front	0.165	0.045	0.094	0.622	0.325	**1.251**		Front	0.045	0.087	0.094	0.622	0.325	**1.173**
	Top	-	-	-	0.622*	-	0.622		Top	-	-	-	0.622*	-	0.622
	Bottom	0.208	0.386	0.081	0.002	0.179	0.856		Bottom	0.378	0.177	0.081	0.002	0.179	0.817
	Right	0.108	0.025	0.184	-	0.303	0.620		Right	0.024	0.070	0.184	-	0.303	0.581
	Left	0.090	0.060	-	0.106	-	0.256		Left	0.046	0.107	-	0.106	-	0.259

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	NR Band n66 (AWS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n71 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5			1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.716	0.172	0.082	0.003	0.079	1.052	Hotspot SAR	Back	0.260	0.373	0.082	0.003	0.079	0.797
	Front	0.165	0.045	0.094	0.622	0.325	**1.251**		Front	0.067	0.087	0.094	0.622	0.325	**1.195**
	Top	-	-	-	0.622*	-	0.622		Top	-	-	-	0.622*	-	0.622
	Bottom	0.284	0.386	0.081	0.002	0.179	0.932		Bottom	0.666	0.177	0.081	0.002	0.179	1.105
	Right	0.092	0.025	0.184	-	0.303	0.604		Right	0.022	0.070	0.184	-	0.303	0.579
	Left	0.134	0.060	-	0.106	-	0.300		Left	0.033	0.107	-	0.106	-	0.246

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.152	0.034	0.082	0.003	0.079	0.350
	Front	0.045	0.116	0.094	0.622	0.325	**1.202**
	Top	-	-	-	0.622*	-	0.622
	Bottom	0.378	0.118	0.081	0.002	0.179	0.758
	Right	0.024	-	0.184	-	0.303	0.511
	Left	0.046	0.238	-	0.106	-	0.390
Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	NR Band n41 SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.260	0.034	0.082	0.003	0.079	0.458
	Front	0.067	0.116	0.094	0.622	0.325	**1.224**
	Top	-	-	-	0.622*	-	0.622
	Bottom	0.666	0.118	0.081	0.002	0.179	1.046
	Right	0.022	-	0.184	-	0.303	0.509
	Left	0.033	0.238	-	0.106	-	0.377
Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	NR Band n25 (PCS) SAR (W/kg)	Bluetooth Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Hotspot SAR	Back	0.466	0.189	0.082	0.003	0.079	0.819
	Front	0.086	0.043	0.094	0.622	0.325	**1.170**
	Top	-	-	-	0.622*	-	0.622
	Bottom	0.110	0.489	0.081	0.002	0.179	0.861
	Right	0.088	0.025	0.184	-	0.303	0.600
	Left	0.113	0.088	-	0.106	-	0.307

12.9 Simultaneous Transmission Conclusion

The above numerical summed SAR results are sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528- 2013 Section 6.3.4.1.2.

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13 SAR MEASUREMENT VARIABILITY

13.1 Measurement Variability

Per FCC KDB Publication 865664 D01v01r04, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg
5) When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

Table 13-1
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS														
Band	FREQUENCY		Mode	Service	Side	Spacing	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.					(W/kg)	(W/kg)		(W/kg)		(W/kg)	
1750	1770.00	132572	LTE Band 66 (AWS), CA_66C ULCA 20 MHz Bandwidth	QPSK, 50 RB, 0 RB Offset	bottom	10 mm	0.812	0.812	1.00	N/A	N/A	N/A	N/A
	1750.20	132374		QPSK, 50 RB, 50 RB Offset	bottom	10 mm							
1900	1907.60	9538	UMTS 1900	RMC	bottom	10 mm	0.991	0.974	1.02	N/A	N/A	N/A	N/A
2300	2310.00	27710	LTE Band 30, 10 MHz Bandwidth	QPSK, 25 RB, 12 RB Offset	bottom	10 mm	1.040	1.030	1.01	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 13-2
Phablet SAR Measurement Variability Results

PHABLET VARIABILITY RESULTS													
Band	FREQUENCY		Mode	Service	Side	Spacing	Measured SAR (10g)	1st Repeated SAR (10g)	Ratio	2nd Repeated SAR (10g)	Ratio	3rd Repeated SAR (10g)	Ratio
	MHz	Ch.					(W/kg)	(W/kg)		(W/kg)		(W/kg)	
1750	1770.00	132572	LTE Band 66 (AWS), CA_66C ULCA 20 MHz Bandwidth	QPSK, 50 RB, 0 RB Offset	bottom	0 mm	2.080	2.070	1.00	N/A	N/A	N/A	N/A
	1750.20	132374		QPSK, 50 RB, 50 RB Offset	bottom	0 mm							
1900	1852.40	9262	UMTS 1900	RMC	bottom	0 mm	2.340	2.340	1.00	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Phablet 4.0 W/kg (mW/g) averaged over 10 grams						

13.2 Measurement Uncertainty

The measured SAR was <1.5 W/kg for 1g and <3.75 W/kg for 10g for all frequency bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE 1528-2013 was not required.

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14 ADDITIONAL TESTING PER FCC GUIDANCE

14.1 Tuner Testing

Per April 2019 TCB Workshop Notes, the following test procedures were followed to demonstrate that the SAR results in Section 11 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other than impedance matching.

To evaluate all the tuner states, the 60 tuner states were divided among the aggregate band, mode and exposure combinations. Single point time-sweep measurements were performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was > 1.2 W/kg for a particular band/mode/exposure condition, point SAR measurements were made for all 60 states.

The operational description contains more information about the design and implementation of the dynamic antenna tuning.

Table 14-1
UMTS/CDMA Supplemental Head SAR Data

Supplemental Head SAR Data												
UMTS B5		UMTS B4		UMTS B2		CDMA BC10		CDMA BC0		CDMA BC1	
RMC		RMC		RMC		CDMA		EVDO		CDMA	
Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Left Cheek
Frequency (MHz)	836.6	Frequency (MHz)	1732.4	Frequency (MHz)	1880.0	Frequency (MHz)	820.10	Frequency (MHz)	836.52	Frequency (MHz)	1880.0
Channel	4183	Channel	1412	Channel	9400	Channel	564	Channel	384	Channel	600
Measured 1g SAR (W/kg)	0.350	Measured 1g SAR (W/kg)	0.138	Measured 1g SAR (W/kg)	0.070	Measured 1g SAR (W/kg)	0.347	Measured 1g SAR (W/kg)	0.350	Measured 1g SAR (W/kg)	0.065
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 57)	0.466	Auto-tune (State 26)	0.196	Auto-tune (State 57)	0.113	Auto-tune (State 15)	0.449	Auto-tune (State 0)	0.457	Auto-tune (State 0)	0.090
Default (State 0)	0.467	Default (State 0)	0.165	Default (State 0)	0.107	Default (State 0)	0.375	Default (State 0)	0.483	Default (State 0)	0.091
State 3	0.451	State 23	0.025	State 29	0.097	State 15	0.459	State 0	0.483	State 0	0.091
State 6	0.389	State 26	0.195	State 43	0.091	State 38	0.022	State 18	0.393	State 8	0.067
State 11	0.124	State 27	0.195	State 45	0.091	State 47	0.193	State 26	0.190	State 14	0.075
State 21	0.258	State 32	0.179	State 49	0.065	State 52	0.030	State 30	0.265	State 17	0.068
State 57	0.472	State 46	0.107	State 57	0.112	State 59	0.107	State 33	0.216	State 44	0.082

Table 14-2
LTE Supplemental Head SAR Data

Supplemental Head SAR Data															
LTE B71		LTE B12		LTE B13		LTE B14		LTE B5		LTE B26		LTE B66/4		LTE B25/2	
QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 49 RB Offset		QPSK, 15 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 50 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offset	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	680.5	Frequency (MHz)	707.5	Frequency (MHz)	782.0	Frequency (MHz)	793.0	Frequency (MHz)	836.5	Frequency (MHz)	831.5	Frequency (MHz)	1745.0	Frequency (MHz)	1860.0
Channel	133297	Channel	23095	Channel	23230	Channel	23330	Channel	20525	Channel	26865	Channel	132322	Channel	26140
Measured 1g SAR (W/kg)	0.182	Measured 1g SAR (W/kg)	0.208	Measured 1g SAR (W/kg)	0.233	Measured 1g SAR (W/kg)	0.248	Measured 1g SAR (W/kg)	0.217	Measured 1g SAR (W/kg)	0.287	Measured 1g SAR (W/kg)	0.141	Measured 1g SAR (W/kg)	0.084
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 14)	0.233	Auto-tune (State 13)	0.262	Auto-tune (State 0)	0.309	Auto-tune (State 0)	0.313	Auto-tune (State 0)	0.274	Auto-tune (State 15)	0.384	Auto-tune (State 26)	0.204	Auto-tune (State 30)	0.113
Default (State 0)	0.229	Default (State 0)	0.251	Default (State 0)	0.312	Default (State 0)	0.323	Default (State 0)	0.290	Default (State 0)	0.368	Default (State 0)	0.170	Default (State 0)	0.115
State 2	0.227	State 13	0.260	State 0	0.312	State 0	0.323	State 0	0.290	State 9	0.186	State 1	0.151	State 2	0.114
State 5	0.229	State 24	0.062	State 42	0.160	State 30	0.141	State 20	0.131	State 11	0.105	State 4	0.139	State 28	0.111
State 9	0.096	State 27	0.084	State 44	0.128	State 36	0.049	State 23	0.055	State 15	0.366	State 6	0.126	State 30	0.118
State 14	0.235	State 31	0.100	State 48	0.032	State 54	0.096	State 47	0.109	State 16	0.342	State 8	0.099	State 35	0.089
State 51	0.009	State 56	0.242	State 52	0.307	State 57	0.310	State 55	0.171	State 20	0.262	State 26	0.199	State 40	0.094

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Table 14-3
UMTS/CDMA Supplemental Body SAR Data

Supplemental Body SAR Data											
UMTS B5		UMTS B4		UMTS B2		CDMA BC10		CDMA BC0		CDMA BC1	
RMC		RMC		RMC		EVDO		EVDO		EVDO	
Test Position	Back (Closed)	Test Position	Bottom (Open)	Test Position	Bottom (Open)	Test Position	Back (Closed)	Test Position	Back (Closed)	Test Position	Bottom (Open)
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	836.6	Frequency (MHz)	1752.6	Frequency (MHz)	1907.6	Frequency (MHz)	820.10	Frequency (MHz)	836.52	Frequency (MHz)	1908.75
Channel	4183	Channel	1513	Channel	9538	Channel	564	Channel	384	Channel	1175
Measured 1g SAR (W/kg)	0.633	Measured 1g SAR (W/kg)	0.728	Measured 1g SAR (W/kg)	0.991	Measured 1g SAR (W/kg)	0.615	Measured 1g SAR (W/kg)	0.708	Measured 1g SAR (W/kg)	0.676
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.970	Auto-tune (State 26)	0.830	Auto-tune (State 26)	1.116	Auto-tune (State 15)	0.899	Auto-tune (State 0)	1.074	Auto-tune (State 1)	0.773
Default (State 0)	1.081	Default (State 0)	0.796	Default (State 0)	1.140	Default (State 0)	0.827	Default (State 0)	1.036	Default (State 0)	0.722
State 0	1.081	State 15	0.398	State 26	1.123	State 2	0.889	State 0	1.036	State 1	0.778
State 5	0.927	State 18	0.361	State 41	0.966	State 6	0.816	State 7	0.604	State 44	0.584
State 50	0.074	State 22	0.177	State 45	0.875	State 14	0.905	State 21	0.411	State 49	0.331
State 53	1.043	State 26	0.853	State 51	0.284	State 15	0.906	State 29	0.616	State 52	0.693
State 58	0.526	State 42	0.595	State 56	1.114	State 31	0.475	State 37	0.091	State 54	0.706

Table 14-4
LTE Supplemental Body SAR Data

Supplemental Body SAR Data											
LTE B71		LTE B12		LTE B13		LTE B14		LTE B5		LTE B26	
QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 49 RB Offset		QPSK, 15 MHz Bandwidth, 1 RB, 0 RB Offset	
Test Position	Back (Closed)	Test Position	Back (Open)	Test Position	Back (Open)	Test Position	Back (Closed)	Test Position	Back (Closed)	Test Position	Back (Closed)
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	680.5	Frequency (MHz)	707.5	Frequency (MHz)	782.0	Frequency (MHz)	793.0	Frequency (MHz)	836.5	Frequency (MHz)	831.5
Channel	133297	Channel	23095	Channel	23230	Channel	23330	Channel	20525	Channel	26865
Measured 1g SAR (W/kg)	0.359	Measured 1g SAR (W/kg)	0.379	Measured 1g SAR (W/kg)	0.400	Measured 1g SAR (W/kg)	0.406	Measured 1g SAR (W/kg)	0.507	Measured 1g SAR (W/kg)	0.533
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.561	Auto-tune (State 1)	0.572	Auto-tune (State 0)	0.647	Auto-tune (State 0)	0.648	Auto-tune (State 0)	0.694	Auto-tune (State 57)	0.851
Default (State 0)	0.544	Default (State 0)	0.544	Default (State 0)	0.637	Default (State 0)	0.666	Default (State 0)	0.723	Default (State 0)	0.839
State 0	0.544	State 1	0.552	State 0	0.637	State 0	0.666	State 0	0.723	State 37	0.078
State 10	0.106	State 13	0.559	State 1	0.579	State 46	0.260	State 14	0.560	State 41	0.456
State 12	0.040	State 22	0.225	State 25	0.053	State 53	0.650	State 17	0.475	State 47	0.247
State 19	0.329	State 29	0.205	State 34	0.149	State 55	0.378	State 36	0.091	State 57	0.868
State 22	0.128	State 34	0.103	State 38	0.028	State 57	0.651	State 59	0.533	State 59	0.387

LTE B66/4		LTE B25/2	
QPSK, 20 MHz Bandwidth 50 RB, 25 RB Offset		QPSK, 20 MHz Bandwidth 1RB, 50 RB Offset	
Test Position	Bottom (Open)	Test Position	Bottom (Open)
Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	1770.0	Frequency (MHz)	1905.0
Channel	132572	Channel	26590
Measured 1g SAR (W/kg)	0.722	Measured 1g SAR (W/kg)	0.856
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 26)	1.086	Auto-tune (State 1)	1.319
Default (State 0)	0.974	Default (State 0)	1.274
State 4	0.836	State 0	1.274
State 8	0.650	State 1	1.234
State 26	1.168	State 2	1.228
State 50	0.208	State 3	1.217
State 57	0.483	State 4	1.193
		State 5	1.187
		State 6	1.108
		State 7	1.048
		State 8	0.954
		State 9	0.809
		State 10	0.701
		State 11	0.556
		State 12	0.383
		State 13	1.071
		State 14	0.964
		State 15	0.947
		State 16	0.917
		State 17	0.88
		State 18	0.877
		State 19	0.782
		State 20	0.717
		State 21	0.622
		State 22	0.496
		State 23	0.412
		State 24	0.315
		State 25	0.207
		State 26	1.226
		State 27	1.252
		State 28	1.261
		State 29	1.255
		State 30	1.253
		State 31	1.246
		State 32	1.229
		State 33	1.206
		State 34	1.154
		State 35	1.027
		State 36	0.908
		State 37	0.74
		State 38	0.519
		State 39	1.186
		State 40	1.147
		State 41	1.136
		State 42	1.124
		State 43	1.095
		State 44	1.102
		State 45	1.039
		State 46	0.976
		State 47	0.875
		State 48	0.727
		State 49	0.611
		State 50	0.469
		State 51	0.315
		State 52	1.294
		State 53	1.023
		State 54	1.243
		State 55	1.13
		State 56	1.287
		State 57	1.026
		State 58	1.239
		State 59	1.127

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14.2 LTE Band 41 Power Class 2 and Power Class 3 Linearity

This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per May 2017 TCB Workshop Notes based on the device behavior, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the highest power and available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR for each exposure condition. The linearity between the Power Class 2 and Power Class 3 SAR results and the respective frame averaged powers was calculated to determine that the results were linear. When ULCA is active, the linearity between the Power Class 2 with ULCA active and Power Class 3 with ULCA active SAR results and the respective frame averaged powers was calculated to determine that the results were linear. Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes was < 10% and all reported SAR values were < 1.4 W/kg for 1g and < 3.5 W/kg for 10g.

Table 14-5
LTE Band 41 Head Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25.8	27
Measured Output Power (dBm)	24.01	25.44
Measured SAR (W/kg)	0.079	0.073
Measured Power (mW)	251.77	349.95
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	159.37	151.53
% deviation from expected linearity		-2.79%

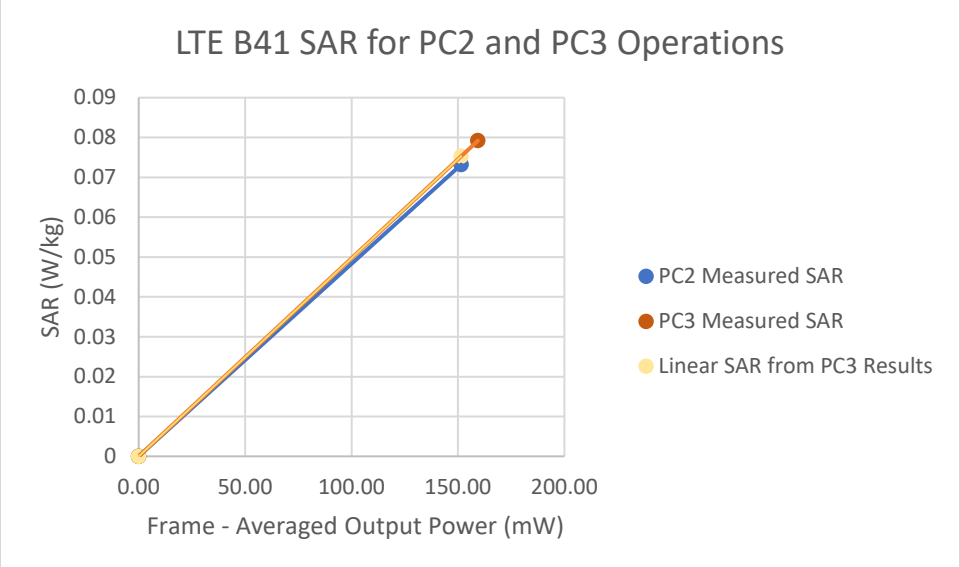

Figure 14-1
LTE Band 41 Head Linearity

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Table 14-6
LTE Band 41 ULCA Head Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25.8	27
Measured Output Power (dBm)	24.9	25.85
Measured SAR (W/kg)	0.097	0.084
Measured Power (mW)	309.03	384.59
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	195.62	166.53
% deviation from expected linearity		1.72%

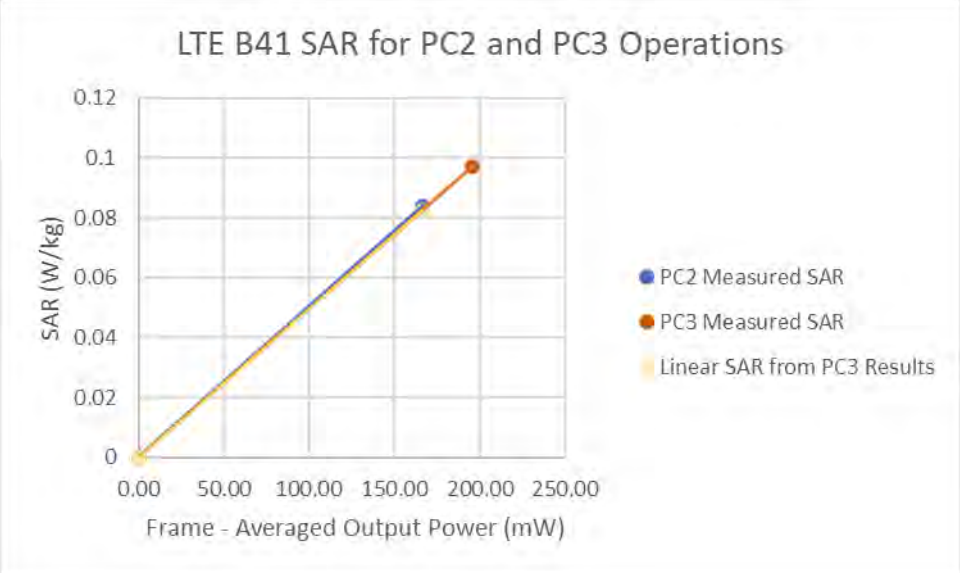

Figure 14-2
LTE Band 41 ULCA Head Linearity

Table 14-7
LTE Band 41 Body-Worn Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25.8	27
Measured Output Power (dBm)	24.01	25.44
Measured SAR (W/kg)	0.241	0.218
Measured Power (mW)	251.77	349.95
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	159.37	151.53
% deviation from expected linearity		-4.86%

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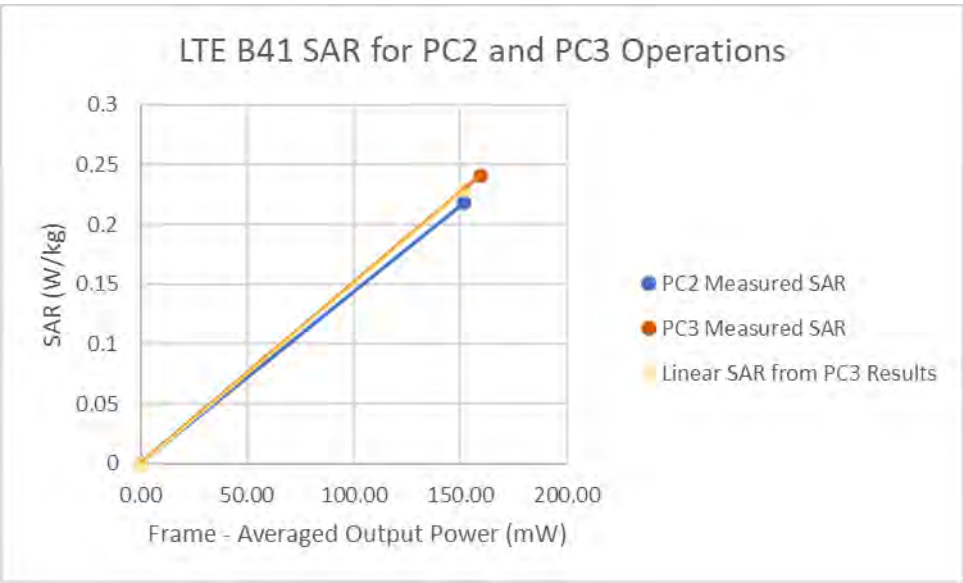

Figure 14-3
LTE Band 41 Body-Worn Linearity

Table 14-8
LTE Band 41 ULCA Body-Worn Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25.8	27
Measured Output Power (dBm)	24.9	25.85
Measured SAR (W/kg)	0.28	0.235
Measured Power (mW)	309.03	384.59
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	195.62	166.53
% deviation from expected linearity		-1.41%

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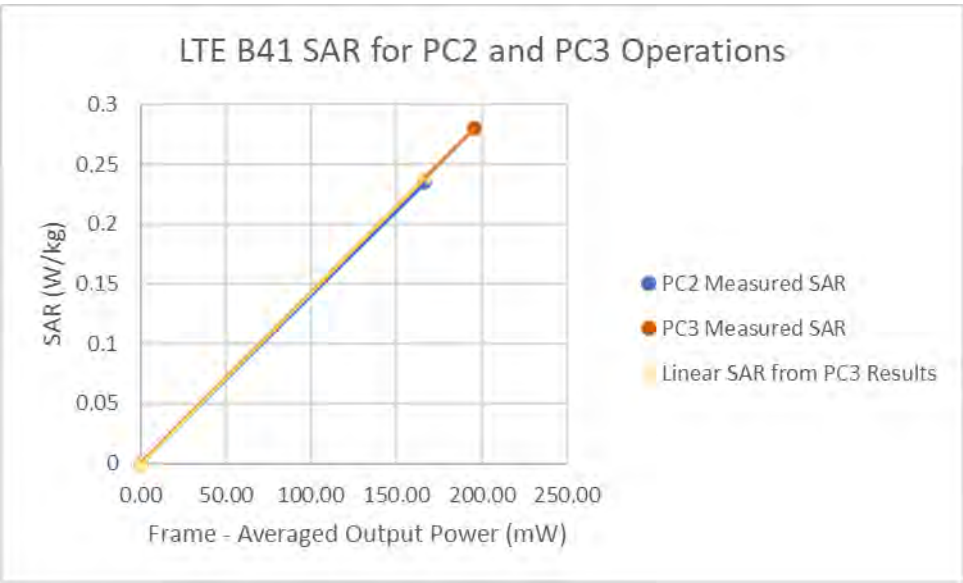

Figure 14-4
LTE Band 41 ULCA Body-Worn Linearity

Table 14-9
LTE Band 41 Hotspot Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	21	23
Measured Output Power (dBm)	20.45	22
Measured SAR (W/kg)	0.527	0.473
Measured Power (mW)	110.92	158.49
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	70.21	68.63
% deviation from expected linearity		-8.17%

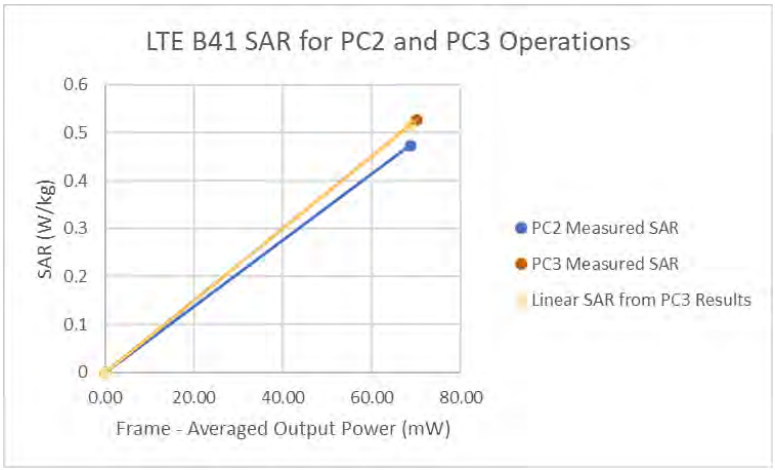

Figure 14-5
LTE Band 41 Hotspot Linearity

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Table 14-10
LTE Band 41 ULCA Hotspot Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	21	23
Measured Output Power (dBm)	21	22.75
Measured SAR (W/kg)	0.626	0.582
Measured Power (mW)	125.89	188.36
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	79.69	81.56
% deviation from expected linearity		-9.16%

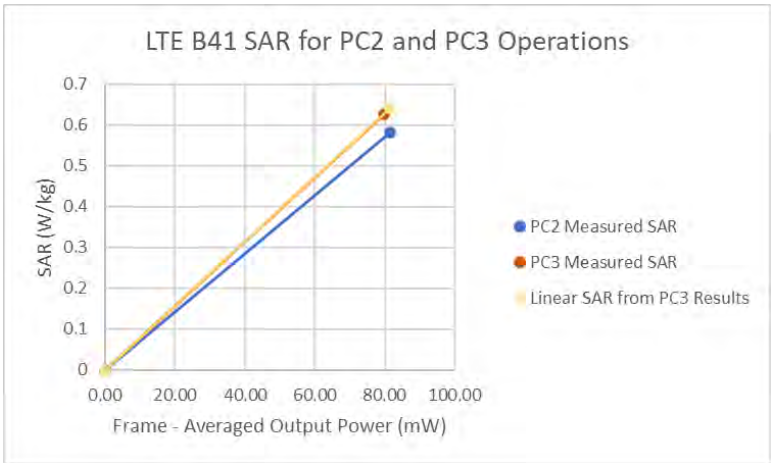

Figure 14-6
LTE Band 41 ULCA Hotspot Linearity

Table 14-11
LTE Band 41 Phablet Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	21	23
Measured Output Power (dBm)	20.73	22.27
Measured SAR (W/kg)	0.815	0.745
Measured Power (mW)	118.30	168.66
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	74.89	73.03
% deviation from expected linearity		-6.26%

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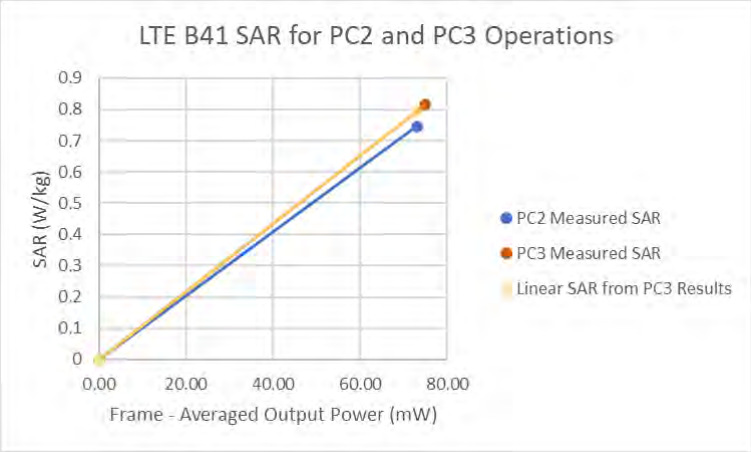

Figure 14-7
LTE Band 41 Phablet Linearity

Table 14-12
LTE Band 41 ULCA Phablet Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	21	23
Measured Output Power (dBm)	21	22.75
Measured SAR (W/kg)	0.774	0.818
Measured Power (mW)	125.89	188.36
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	79.69	81.56
% deviation from expected linearity		3.26%

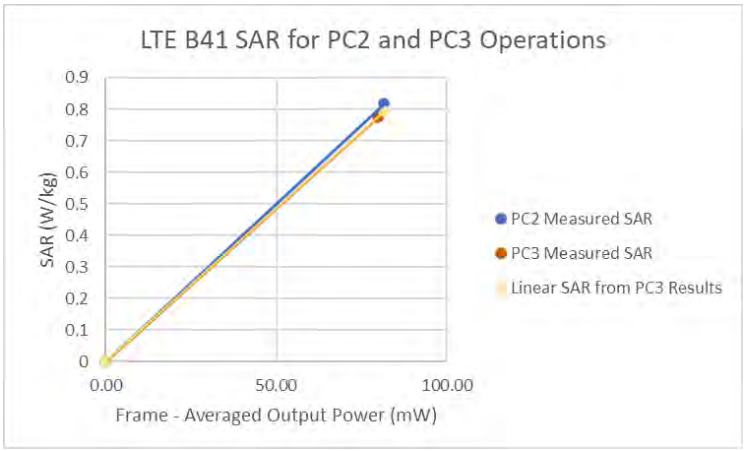

Figure 14-8
LTE Band 41 ULCA Phablet Linearity

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15 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	8594A	(9kHz-2.9GHz) Spectrum Analyzer	N/A	N/A	N/A	3051A00187
Agilent	8753ES	S-Parameter Network Analyzer	12/31/2019	Annual	12/31/2020	US39170122
Agilent	8753ES	S-Parameter Network Analyzer	8/26/2019	Annual	8/26/2020	MY40000670
Agilent	8753ES	S-Parameter Vector Network Analyzer	9/19/2019	Annual	9/19/2020	MY40003841
Agilent	E4432B	ESG-D Series Signal Generator	7/14/2019	Annual	7/14/2020	US40053896
Agilent	E4438C	ESG Vector Signal Generator	3/8/2019	Biennial	3/8/2021	MY42082385
Agilent	E4438C	ESG Vector Signal Generator	3/11/2019	Biennial	3/11/2021	MY45090700
Agilent	E4438C	ESG Vector Signal Generator	12/13/2019	Annual	12/13/2020	MY42082659
Agilent	E5515C	8960 Series 10 Wireless Communications Test Set	2/10/2020	Annual	2/10/2021	GB42230325
Agilent	E5515C	Wireless Communications Test Set	1/14/2020	Triennial	1/14/2023	GB43304447
Agilent	E5515C	Wireless Communications Test Set	6/26/2019	Annual	6/26/2020	MY50267125
Agilent	E5515C	Wireless Communications Test Set	2/26/2020	Annual	2/26/2021	GB44400860
Agilent	E5515C	Wireless Communications Test Set	9/25/2019	Annual	9/25/2020	GB43304278
Agilent	N5182A	MXG Vector Signal Generator	7/10/2019	Annual	7/10/2020	MY47420800
Agilent	N5182A	MXG Vector Signal Generator	2/19/2020	Annual	2/19/2021	MY47420651
Amplifier Research	1S51G6	Amplifier	CBT	N/A	CBT	433972
Amplifier Research	1S51G6	Amplifier	CBT	N/A	CBT	433974
Amplifier Research	1S51G6	Amplifier	CBT	N/A	CBT	433976
Anritsu	MA24106A	USB Power Sensor	2/27/2020	Annual	2/27/2021	1244524
Anritsu	MA24106A	USB Power Sensor	10/10/2019	Annual	10/10/2020	1344545
Anritsu	MA24106A	USB Power Sensor	10/10/2019	Annual	10/10/2020	1344559
Anritsu	MA2411B	Pulse Power Sensor	12/4/2019	Annual	12/4/2020	1126066
Anritsu	ML2495A	Power Meter	12/17/2019	Annual	12/17/2020	941001
Anritsu	ML2496A	Power Meter	3/23/2020	Annual	3/23/2021	1351001
Anritsu	MT8821C	Radio Communication Analyzer	3/10/2020	Annual	3/10/2021	6200901190
Anritsu	MT8821C	Radio Communication Analyzer	2/22/2020	Annual	2/22/2021	6261895213
Anritsu	MT8821C	Radio Communication Analyzer	11/22/2019	Annual	11/22/2020	6262044715
Anritsu	MT8862A	Wireless Connectivity Test Set	8/8/2019	Annual	8/8/2020	6261782395
COMTech	AR85729-5	Solid State Amplifier	CBT	N/A	CBT	M15SA00-009
COMTECH	AR85729-5/5759B	Solid State Amplifier	CBT	N/A	CBT	M3W1A00-1002
Control Company	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291455
Control Company	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291460
Control Company	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291463
Control Company	4352	Long Stem Thermometer	1/24/2020	Biennial	1/24/2022	200043588
Control Company	4352	Long Stem Thermometer	1/24/2020	Biennial	1/24/2022	200043655
Control Company	4352	Long Stem Thermometer	1/24/2020	Biennial	1/24/2022	200043647
Control Company	4352	Ultra Long Stem Thermometer	11/29/2018	Biennial	11/29/2020	181766816
Control Company	4352	Ultra Long Stem Thermometer	11/29/2018	Biennial	11/29/2020	181766817
Keysight	772D	Dual Directional Coupler	CBT	N/A	CBT	MY52180215
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
MiniCircuits	SLP-2400+	Low Pass Filter	CBT	N/A	CBT	RB7950D903
MiniCircuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
MiniCircuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Narda	8W-53W2	Attenuator (3dB)	CBT	N/A	CBT	120
NI	4474	Data Acquisition Card	CBT	N/A	CBT	N/A
Pasternack	PE2209-10	Bidirectional Coupler	CBT	N/A	CBT	N/A
Rohde & Schwarz	CMW500	Radio Communication Tester	3/27/2020	Annual	3/27/2021	128633
Rohde & Schwarz	CMW500	Radio Communication Tester	8/14/2019	Annual	8/14/2020	140144
Rohde & Schwarz	CMW500	Radio Communication Tester	10/4/2019	Annual	10/4/2020	166462
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	2/4/2020	Annual	2/4/2021	162125
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	11/14/2019	Annual	11/14/2020	164948
Rohde & Schwarz	ZNLE6	Vector Network Analyzer	10/11/2019	Annual	10/11/2020	101307
Rohde & Schwarz	CMU200	Base Station Simulator	6/3/2019	Annual	6/3/2020	109892
Rohde& Schwarz	CMW500	Wideband Radio Communication Tester	7/12/2019	Annual	7/12/2020	145645
Rohde& Schwarz	CMW500	Wideband Radio Communication Tester	7/24/2019	Annual	7/24/2020	151849
SPEAG	D1750V2	1750 MHz SAR Dipole	10/22/2018	Biennial	10/22/2020	1150
SPEAG	D1765V2	1765 MHz SAR Dipole	5/23/2018	Triennial	5/23/2021	1008
SPEAG	D1750V2	1750 MHz SAR Dipole	5/12/2020	Annual	5/12/2021	1148
SPEAG	D1900V2	1900 MHz SAR Dipole	10/23/2018	Biennial	10/23/2020	5d080
SPEAG	D1900V2	1900 MHz SAR Dipole	2/21/2019	Biennial	2/21/2021	5d148
SPEAG	D1900V2	1900 MHz SAR Dipole	10/23/2018	Biennial	10/23/2020	5d149
SPEAG	D2300V2	2300 MHz SAR Dipole	8/13/2018	Biennial	8/13/2020	1073
SPEAG	D2450V2	2450 MHz SAR Dipole	8/14/2019	Annual	8/14/2020	719
SPEAG	D2450V2	2450 MHz SAR Dipole	8/16/2018	Biennial	8/16/2020	981
SPEAG	D2600V2	2600 MHz SAR Dipole	6/14/2019	Annual	6/14/2020	1064
SPEAG	D2600V2	2600 MHz SAR Dipole	4/11/2018	Triennial	4/11/2021	1004
SPEAG	D3500V2	3500 MHz SAR Dipole	1/11/2018	Triennial	1/11/2021	1059
SPEAG	D3700V2	3700 MHz SAR Dipole	1/11/2018	Triennial	1/11/2021	1018
SPEAG	D5GHzV2	5 GHz SAR Dipole	1/16/2018	Triennial	1/16/2021	1057
SPEAG	D5GHzV2	5 GHz SAR Dipole	9/17/2019	Annual	9/17/2020	1191
SPEAG	D750V3	750 MHz Dipole	3/11/2020	Annual	3/11/2021	1054
SPEAG	D835V2	835 MHz SAR Dipole	3/13/2019	Biennial	3/13/2021	4d047
SPEAG	D835V2	835 MHz SAR Dipole	10/19/2018	Biennial	10/19/2020	4d133
SPEAG	D835V2	835 MHz SAR Dipole	1/13/2020	Annual	1/13/2021	4d132
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/20/2020	Annual	5/20/2021	728
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/11/2019	Annual	7/11/2020	1323
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/17/2019	Annual	9/17/2020	1333
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/11/2019	Annual	7/11/2020	1322
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/20/2019	Annual	6/20/2020	1334
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/12/2020	Annual	3/12/2021	1368
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/15/2020	Annual	4/15/2021	1407
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/12/2019	Annual	9/12/2020	1449
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2020	Annual	1/13/2021	1530
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2020	Annual	1/13/2021	1558
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/18/2020	Annual	6/18/2021	1334
SPEAG	DAE4	Dasy Data Acquisition Electronics	12/5/2019	Annual	12/5/2020	1533
SPEAG	DAK-3.5	Dielectric Assessment Kit	10/22/2019	Annual	10/22/2020	1091
SPEAG	EX3DV4	SAR Probe	1/21/2020	Annual	1/21/2021	3589
SPEAG	EX3DV4	SAR Probe	9/19/2019	Annual	9/19/2020	7551
SPEAG	EX3DV4	SAR Probe	4/21/2020	Annual	4/21/2021	7357
SPEAG	EX3DV4	SAR Probe	6/19/2019	Annual	6/19/2020	7409
SPEAG	EX3DV4	SAR Probe	7/16/2019	Annual	7/16/2020	7410
SPEAG	EX3DV4	SAR Probe	1/21/2020	Annual	1/21/2021	7488
SPEAG	EX3DV4	SAR Probe	3/17/2020	Annual	3/17/2021	7527
SPEAG	EX3DV4	SAR Probe	7/15/2019	Annual	7/15/2020	7547
SPEAG	EX3DV4	SAR Probe	9/19/2019	Annual	9/19/2020	7552
SPEAG	EX3DV4	SAR Probe	12/11/2019	Annual	12/11/2020	7570
SPEAG	EX3DV4	SAR Probe	12/11/2019	Annual	12/11/2020	7571
SPEAG	EX3DV4	SAR Probe	5/18/2020	Annual	5/18/2021	7538
SPEAG	EX3DV4	SAR Probe	6/23/2020	Annual	6/23/2021	7409

Note:

1. CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements.
2. Each equipment item is used solely within its respective calibration period.

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16 MEASUREMENT UNCERTAINTIES

a	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	**Tol. (± %)**	**Prob. Dist.**	**Div.**	**c_i 1gm**	**c_i 10 gms**	**1gm u_i (± %)**	**10gms u_i (± %)**	**v_i**
Measurement System								
Probe Calibration	6.55	N	1	1.0	1.0	6.6	6.6	∞
Axial Isotropy	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	2.0	R	1.73	1.0	1.0	1.2	1.2	∞
Linearity	0.3	N	1	1.0	1.0	0.3	0.3	∞
System Detection Limits	0.25	R	1.73	1.0	1.0	0.1	0.1	∞
Readout Electronics	0.3	N	1	1.0	1.0	0.3	0.3	∞
Response Time	0.8	R	1.73	1.0	1.0	0.5	0.5	∞
Integration Time	2.6	R	1.73	1.0	1.0	1.5	1.5	∞
RF Ambient Conditions - Noise	3.0	R	1.73	1.0	1.0	1.7	1.7	∞
RF Ambient Conditions - Reflections	3.0	R	1.73	1.0	1.0	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.4	R	1.73	1.0	1.0	0.2	0.2	∞
Probe Positioning w/ respect to Phantom	6.7	R	1.73	1.0	1.0	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	4.0	R	1.73	1.0	1.0	2.3	2.3	∞
Test Sample Related								
Test Sample Positioning	2.7	N	1	1.0	1.0	2.7	2.7	35
Device Holder Uncertainty	1.67	N	1	1.0	1.0	1.7	1.7	5
Output Power Variation - SAR drift measurement	5.0	R	1.73	1.0	1.0	2.9	2.9	∞
SAR Scaling	0.0	R	1.73	1.0	1.0	0.0	0.0	∞
Phantom & Tissue Parameters								
Phantom Uncertainty (Shape & Thickness tolerances)	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	4.2	N	1	0.78	0.71	3.3	3.0	10
Liquid Permittivity - measurement uncertainty	4.1	N	1	0.23	0.26	1.0	1.1	10
Liquid Conductivity - Temperature Uncertainty	3.4	R	1.73	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	0.6	R	1.73	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)		RSS				11.5	11.3	60
Expanded Uncertainty (95% CONFIDENCE LEVEL)		k=2				23.0	22.6	

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17 CONCLUSION

17.1 Measurement Conclusion

The SAR evaluation indicates that the EUT complies with the RF radiation exposure limits of the FCC and Innovation, Science, and Economic Development Canada, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables. [3]

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[2] ANSI/IEEE C95.1-2005, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, 2006.

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[4] ANSI/IEEE C95.3-2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave, New York: IEEE, December 2002.

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APPENDIX A: SAR TEST DATA

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PCTEST

DUT: A3LSMF707U; Type: Portable Handset; Serial: 12532

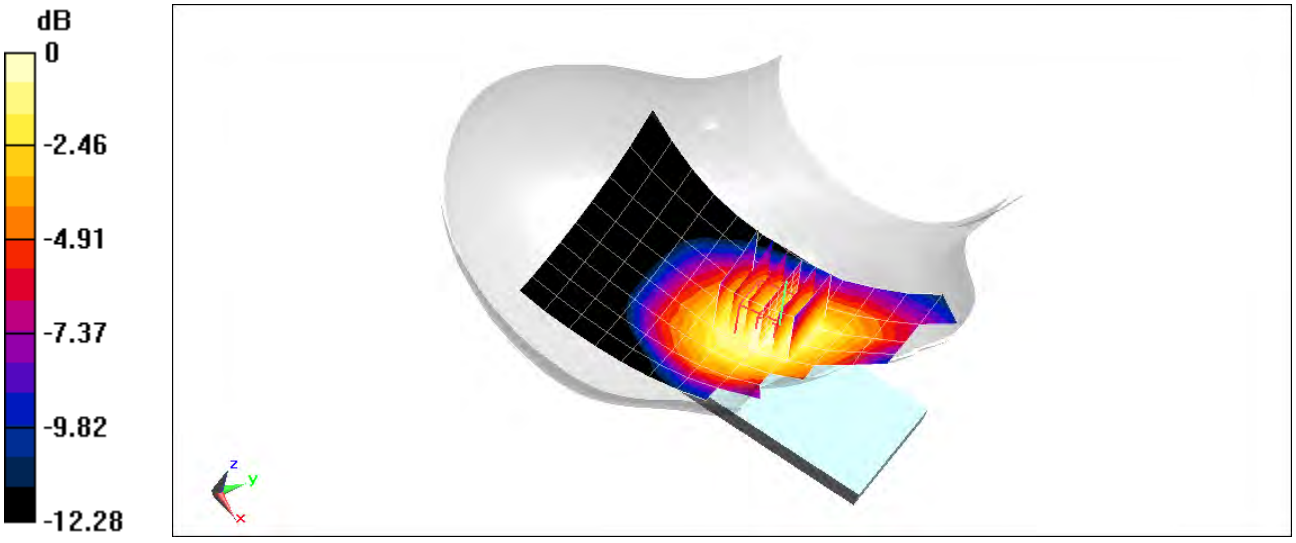
Communication System: UID 0, GSM; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium: 835 Head; Medium parameters used (interpolated):
f = 836.6 MHz; σ = 0.92 S/m; ε_r = 42.064; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 05/18/2020; Ambient Temp: 22.7°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.6 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: GSM 850, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.53 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.214 W/kg
SAR(1 g) = 0.164 W/kg



0 dB = 0.196 W/kg = -7.08 dBW/kg

PCTEST

DUT: A3LSMF707U; Type: Portable Handset; Serial: 12557

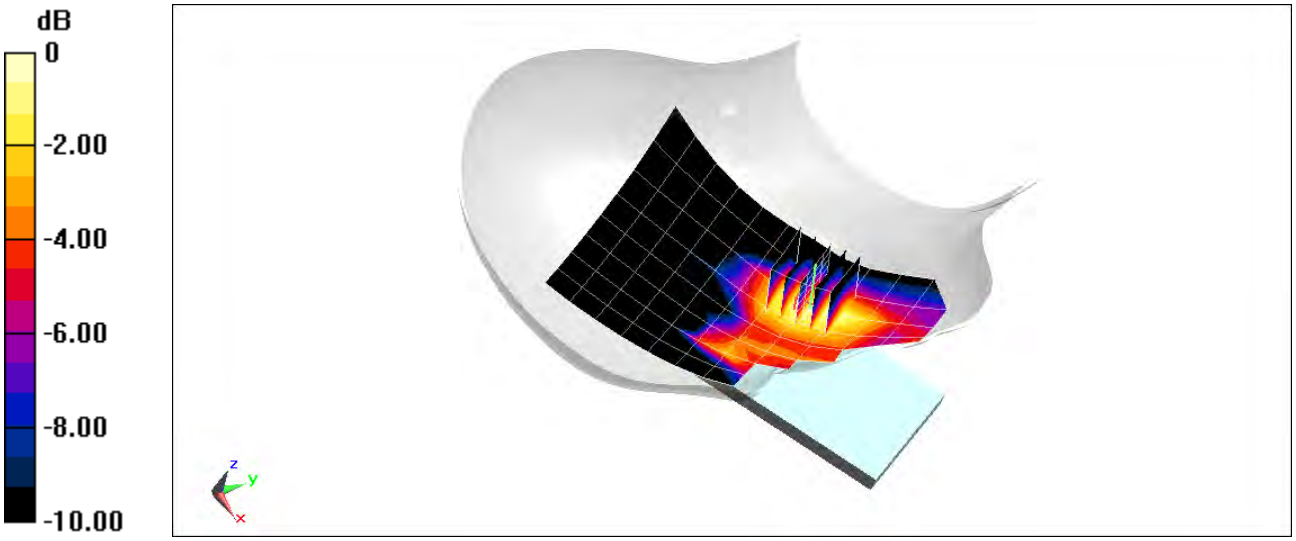
Communication System: UID 0, GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: 1900 Head; Medium parameters used:
f = 1880 MHz; σ = 1.426 S/m; ε_r = 40.27; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 05/18/2020; Ambient Temp: 22.7°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7410; ConvF(8.11, 8.11, 8.11) @ 1880 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: GSM 1900, Right Head, Cheek, Mid.ch

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.911 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.0470 W/kg
SAR(1 g) = 0.031 W/kg



0 dB = 0.0404 W/kg = -13.94 dBW/kg

PCTEST

DUT: A3LSMF707U; Type: Portable Handset; Serial: 12532

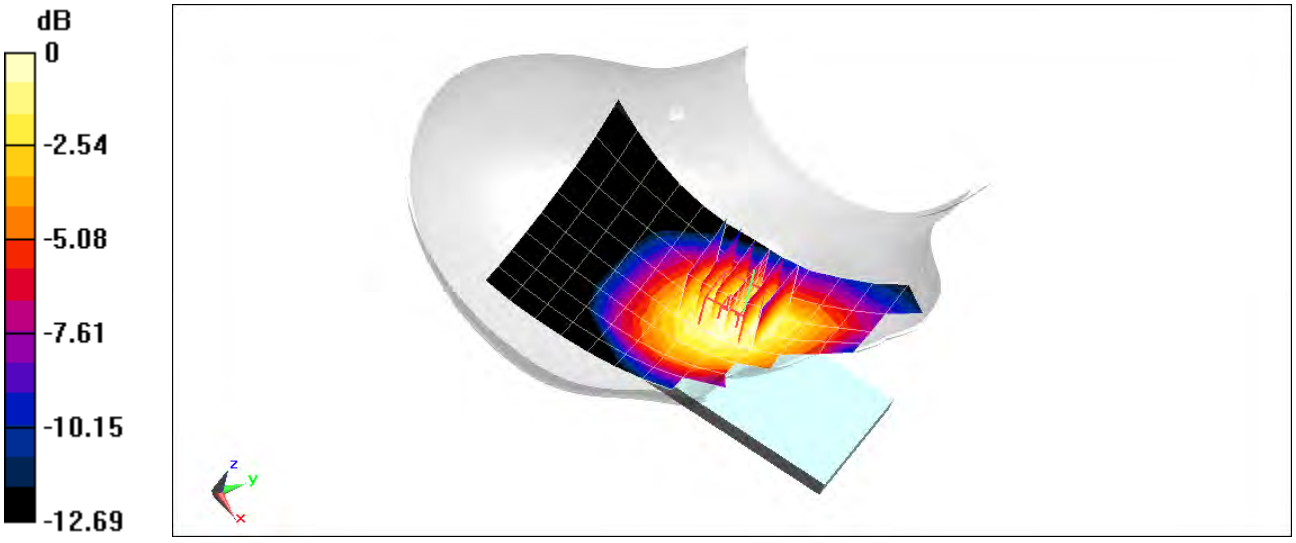
Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium: 835 Head; Medium parameters used (interpolated):
f = 836.6 MHz; σ = 0.937 S/m; ε_r = 42.167; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 05/26/2020; Ambient Temp: 22.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.6 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 850, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.90 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.470 W/kg
SAR(1 g) = 0.350 W/kg



0 dB = 0.422 W/kg = -3.75 dBW/kg

DUT: A3LSMF707U; Type: Portable Handset; Serial: 17333

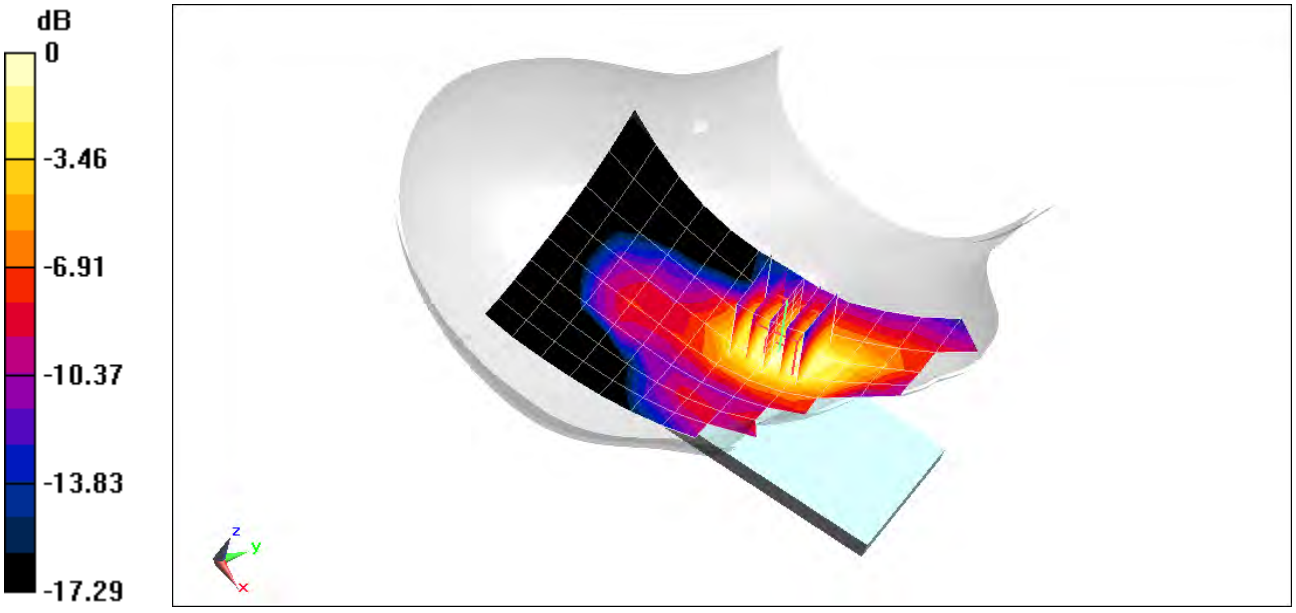
Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1
Medium: 1750 Head; Medium parameters used (interpolated):
f = 1732.4 MHz; σ = 1.354 S/m; ε_r = 39.51; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 06/08/2020; Ambient Temp: 21.6°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7551; ConvF(8.34, 8.34, 8.34) @ 1732.4 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1750, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.53 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.218 W/kg
SAR(1 g) = 0.138 W/kg



0 dB = 0.186 W/kg = -7.30 dBW/kg

DUT: A3LSMF707U; Type: Portable Handset; Serial: 17333

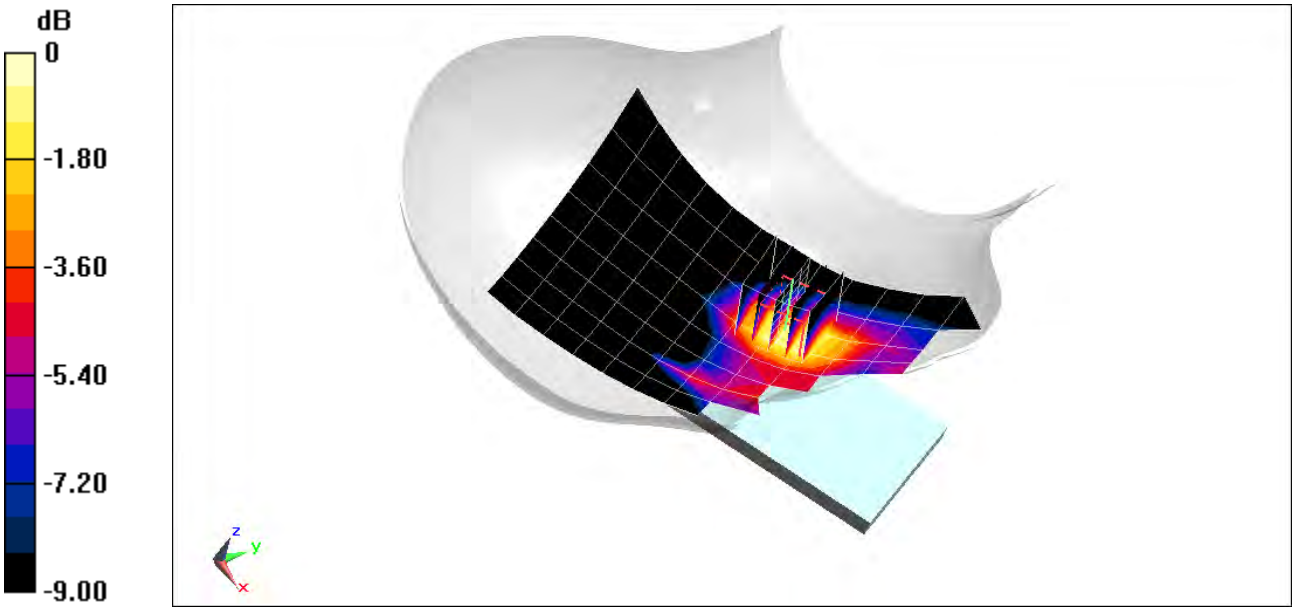
Communication System: UID 0, UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 Head; Medium parameters used:
f = 1880 MHz; σ = 1.433 S/m; ε_r = 39.763; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 06/03/2020; Ambient Temp: 23.1°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7551; ConvF(8.05, 8.05, 8.05) @ 1880 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1900, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.553 V/m; Power Drift = -0.21 dB
Peak SAR (extrapolated) = 0.112 W/kg
SAR(1 g) = 0.070 W/kg



0 dB = 0.0942 W/kg = -10.26 dBW/kg

DUT: A3LSMF707U; Type: Portable Handset; Serial: 12532

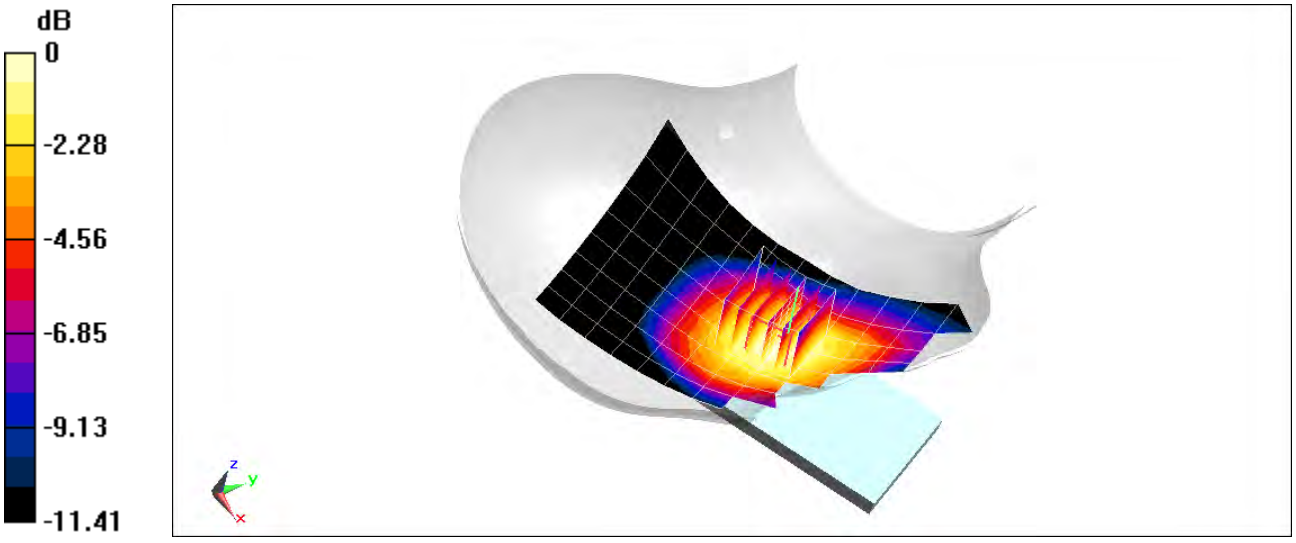
Communication System: UID 0, Cellular CDMA; Frequency: 820.1 MHz; Duty Cycle: 1:1
Medium: 835 Head; Medium parameters used (interpolated):
f = 820.1 MHz; σ = 0.931 S/m; ε_r = 42.218; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 05/26/2020; Ambient Temp: 22.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 820.1 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Cell. CDMA, Rule Part 90S, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.91 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.460 W/kg
SAR(1 g) = 0.347 W/kg



0 dB = 0.414 W/kg = -3.83 dBW/kg

PCTEST

DUT: A3LSMF707U; Type: Portable Handset; Serial: 12532

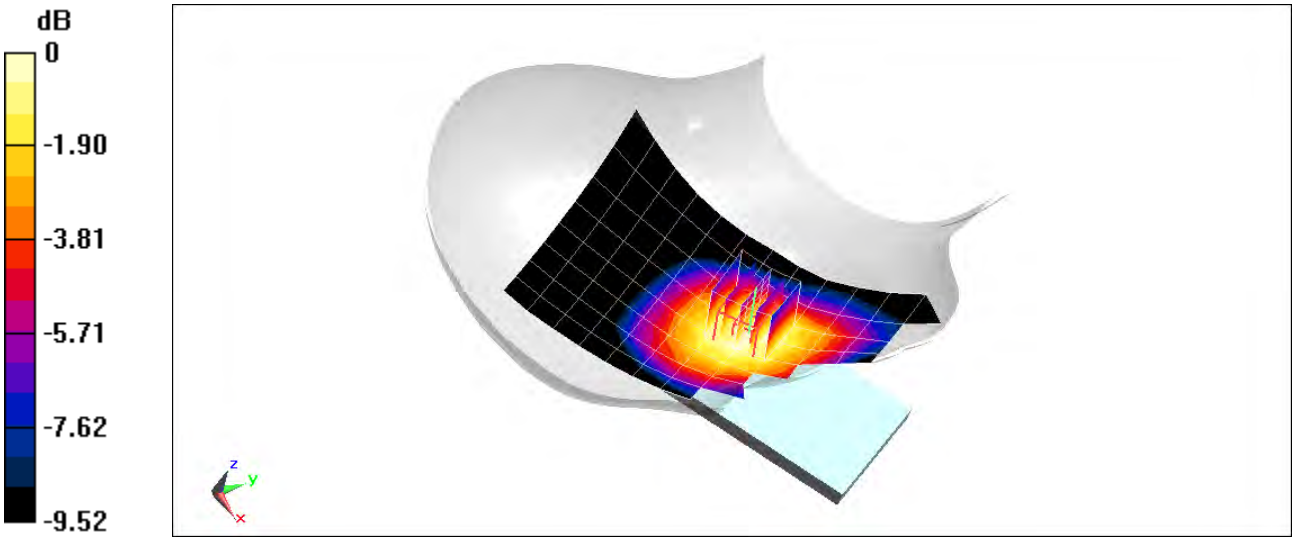
Communication System: UID 0, CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: 835 Head; Medium parameters used (interpolated):
f = 836.52 MHz; σ = 0.937 S/m; ε_r = 42.168; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 05/26/2020; Ambient Temp: 22.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.52 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Cell. EVDO Rev. A, Rule Part 22H, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.36 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.455 W/kg
SAR(1 g) = 0.350 W/kg



0 dB = 0.418 W/kg = -3.79 dBW/kg

PCTEST

DUT: A3LSMF707U; Type: Portable Handset; Serial: 17333

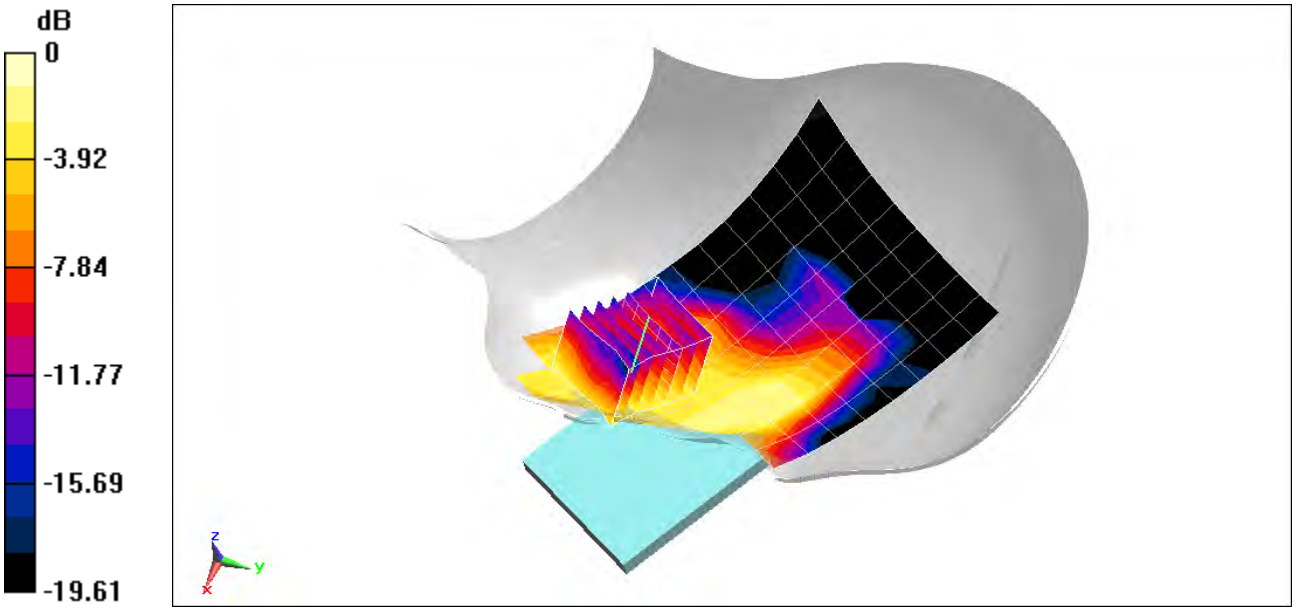
Communication System: UID 0, PCS CDMA; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 Head; Medium parameters used:
f = 1880 MHz; σ = 1.433 S/m; ε_r = 39.763; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 06/03/2020; Ambient Temp: 23.1°C; Tissue Temp: 21.7°C

Probe: EX3DV4 - SN7551; ConvF(8.05, 8.05, 8.05) @ 1880 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: PCS CDMA, Left Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.078 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.106 W/kg
SAR(1 g) = 0.065 W/kg



0 dB = 0.0923 W/kg = -10.35 dBW/kg

PCTEST

DUT: A3LSMF707U; Type: Portable Handset; Serial: 17754

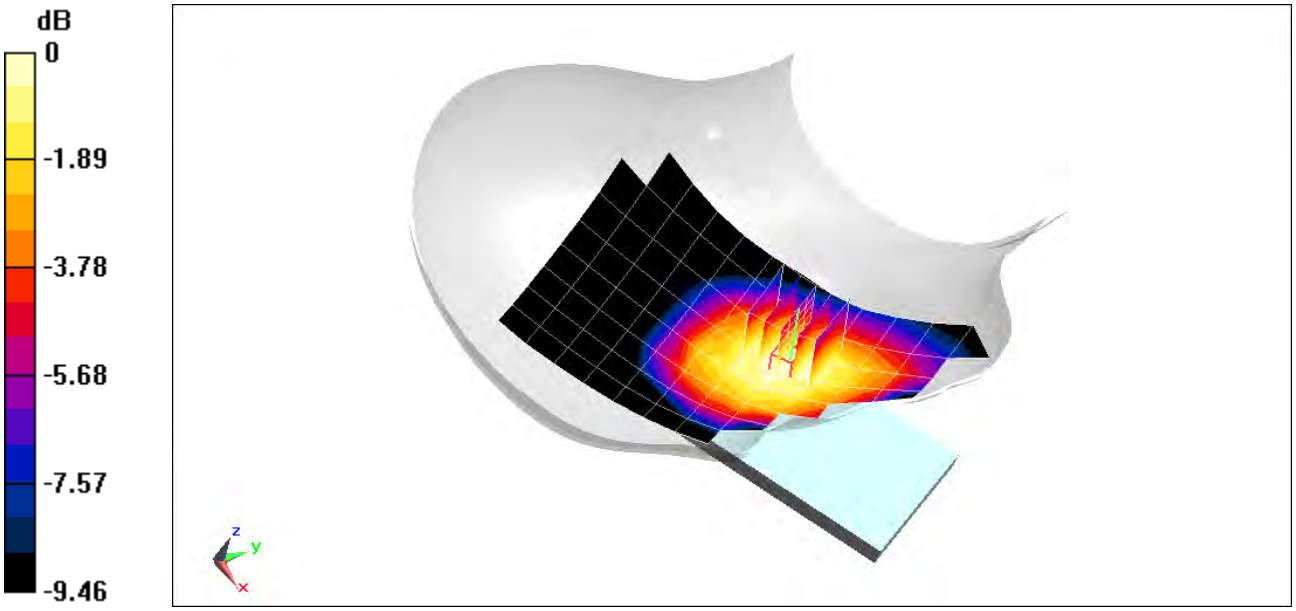
Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1
Medium: 750 Head; Medium parameters used (interpolated):
f = 680.5 MHz; σ = 0.849 S/m; ε_r = 41.467; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 06/08/2020; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7410; ConvF(9.95, 9.95, 9.95) @ 680.5 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 71, Right Head, Cheek, Mid.ch, 20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.69 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.220 W/kg
SAR(1 g) = 0.182 W/kg



0 dB = 0.208 W/kg = -6.82 dBW/kg

DUT: A3LSMF707U; Type: Portable Handset; Serial: 17754

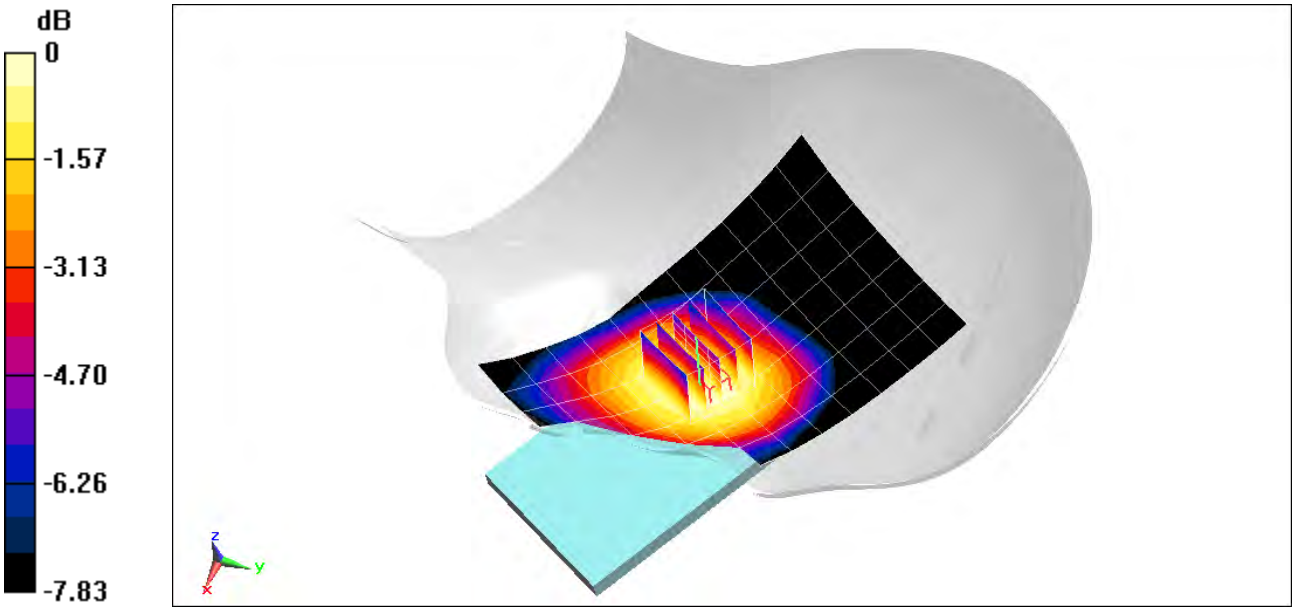
Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1
Medium: 750 Head; Medium parameters used (interpolated):
f = 707.5 MHz; σ = 0.858 S/m; ε_r = 41.365; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 06/08/2020; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7410; ConvF(9.95, 9.95, 9.95) @ 707.5 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 12, Left Head, Cheek, Mid.ch, QPSK,
10 MHz Bandwidth, 1 RB, 0 RB Offset

Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.28 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.239 W/kg
SAR(1 g) = 0.208 W/kg



0 dB = 0.230 W/kg = -6.38 dBW/kg

DUT: A3LSMF707U; Type: Portable Handset; Serial: 17754

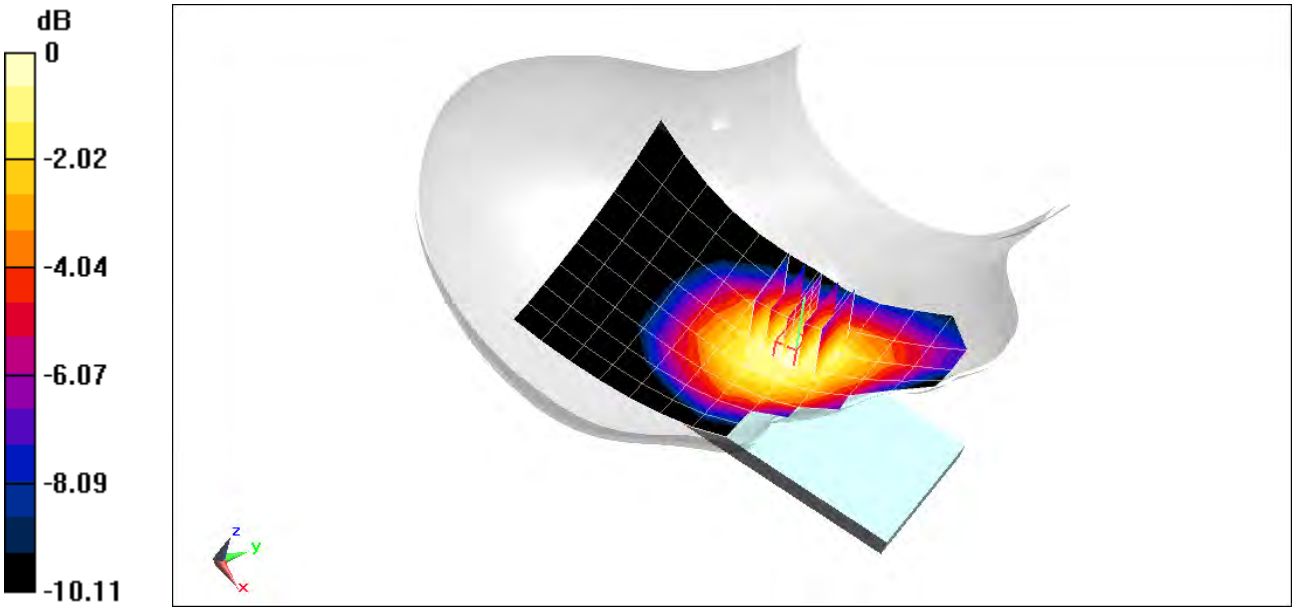
Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1
Medium: 750 Head; Medium parameters used (interpolated):
f = 782 MHz; σ = 0.884 S/m; ε_r = 41.127; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 06/08/2020; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7410; ConvF(9.95, 9.95, 9.95) @ 782 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 13, Right Head, Cheek, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.06 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.285 W/kg
SAR(1 g) = 0.233 W/kg



0 dB = 0.268 W/kg = -5.72 dBW/kg

DUT: A3LSMF707U; Type: Portable Handset; Serial: 17754

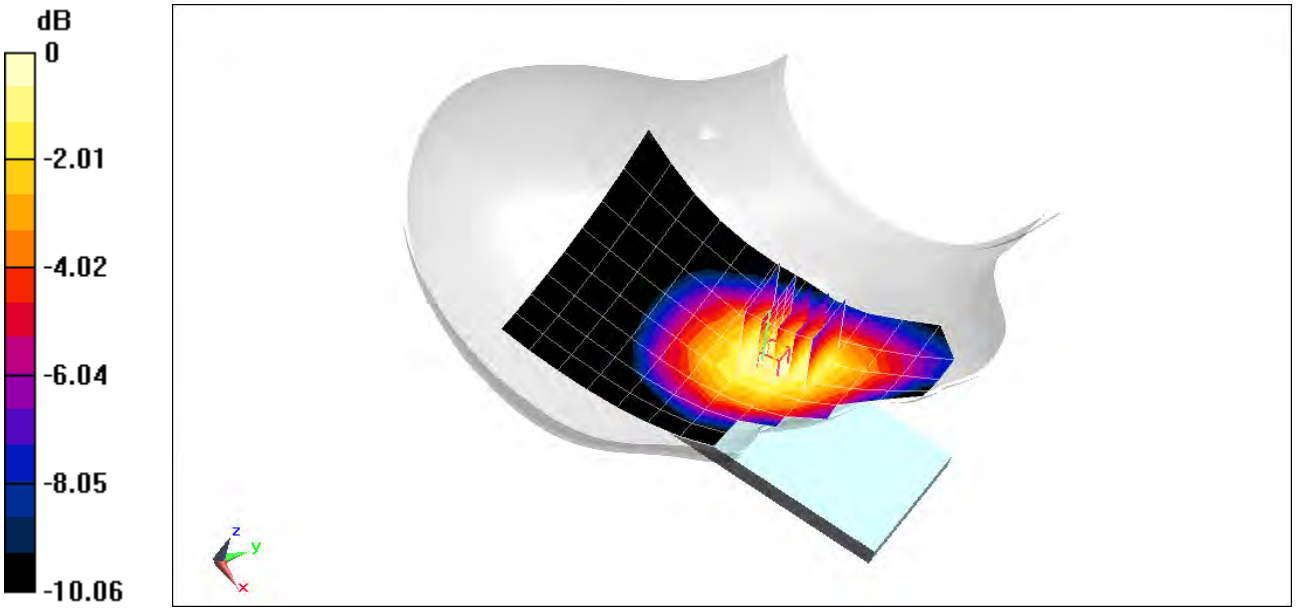
Communication System: UID 0, LTE Band 14; Frequency: 793 MHz; Duty Cycle: 1:1
Medium: 750 Head; Medium parameters used (interpolated):
f = 793 MHz; σ = 0.887 S/m; ε_r = 41.096; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 06/08/2020; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN7410; ConvF(9.95, 9.95, 9.95) @ 793 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 14, Right Head, Cheek, Mid.ch,
10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.79 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.302 W/kg
SAR(1 g) = 0.248 W/kg



0 dB = 0.283 W/kg = -5.48 dBW/kg

PCTEST

DUT: A3LSMF707U; Type: Portable Handset; Serial: 12748

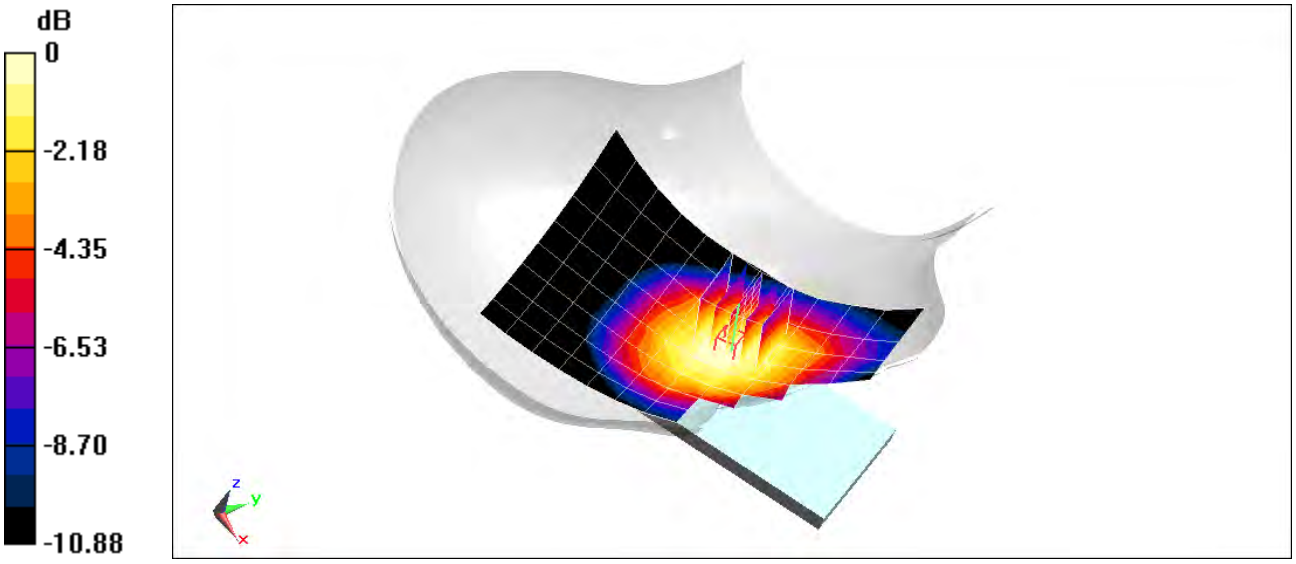
Communication System: UID 0, LTE Band 5 (Cell.); Frequency: 836.5 MHz; Duty Cycle: 1:1
Medium: 835 Head; Medium parameters used (interpolated):
f = 836.5 MHz; σ = 0.905 S/m; ε_r = 41.115; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 06/01/2020; Ambient Temp: 22.2°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.5 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 5 (Cell.) ULCA, Right Head, Cheek,
PCC: 10 MHz Bandwidth, QPSK, Ch. 20525, 1 RB, 49 RB Offset
SCC: 5 MHz Bandwidth, QPSK, Ch. 20597, 1 RB. 0 RB Offset

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.23 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.293 W/kg
SAR(1 g) = 0.221 W/kg



0 dB = 0.264 W/kg = -5.78 dBW/kg