

TEST REPORT



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1. Report No : DRRFCC2008-0071(1)

2. Customer

• Name : Point Mobile Co., LTD.

• Address : B-9F, Kabul Great Valley 32 Digital-ro 9-gil, Geumcheon-gu Seoul South Korea 153-709

3. Use of Report : FCC Original Grant

4. Product Name / Model Name : Mobile Computer / PM451

FCC ID : V2X-PM451

5. Test Method Used : IEEE 1528-2013, FCC SAR KDB Publications (Details in test report)

Test Specification : CFR 47 Part 2 subpart 2.1093

6. Date of Test : 2020.05.29 ~ 2020.06.04, 2020.08.06

7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing

8. Testing Environment : Refer to appended test report.

9. Test Result : Refer to attached test report.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.

Affirmation	Tested by		Reviewed by	
	Name : BumJun Park		Name : HakMin Kim	

2020 . 08 . 06 .

DT&C Co., Ltd.

Not abided by KS Q ISO / IEC 17025 and KOLAS accreditation.

If this report is required to confirmation of authenticity, please contact to report@dtnc.net

Test Report Version

Test Report No.	Date	Description	Tested by	Reviewed by
DRRFCC2008-0071	Aug. 3, 2020	Initial issue	BumJun Park	HakMin Kim
DRRFCC2008-0071(1)	Aug. 6, 2020	Revise of Section 1.1, SAR Summary Table, 9, 10.3 & 11.6	BumJun Park	HakMin Kim

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1. DESCRIPTION OF DEVICE

1.1 General Information

EUT type	Mobile Computer				
FCC ID	V2X-PM451				
Equipment model name	PM451				
Equipment add model name	N/A				
Equipment serial no.	Identical prototype				
FCC & ISED MRA Designation No.	KR0034				
ISED#	5470A				
Mode(s) of Operation	GPRS 850, GPRS 1900, WCDMA 850, WCDMA 1700, WCDMA 1900, LTE Band 12, 13, 26, 5, 4, 25, 2, 7, 41, 2.4 G W-LAN (802.11b/g/n-HT20/n-HT40/ac-VHT20/ac-VHT40), 5 G W-LAN (802.11a/n-HT20/n-HT40/ac-VHT20/ac-VHT40/VHT80), Bluetooth				
TX Frequency Range	Band	Mode	Operating Modes	Bandwidth	Frequency
	GPRS 850	GPRS/EDGE	Voice/Data	-	824.2 MHz ~ 848.8 MHz
	GPRS 1900	GPRS/EDGE	Voice/Data	-	1 850.2 MHz ~ 1 909.8 MHz
	WCDMA 850	WCDMA	Voice/Data	-	826.4 MHz ~ 846.6 MHz
	WCDMA 1700	WCDMA	Voice/Data	-	1 712.4 MHz ~ 1 752.6 MHz
	WCDMA 1900	WCDMA	Voice/Data	-	1 852.4 MHz ~ 1 907.6 MHz
	LTE Band 12	LTE	Voice/Data	1.4/3/5/10MHz	699.7 MHz ~ 715.3 MHz
	LTE Band 13	LTE	Voice/Data	5/10MHz	779.5 MHz ~ 784.5 MHz
	LTE Band 26	LTE	Voice/Data	1.4/3/5/10/15MHz	814.7 MHz ~ 848.3 MHz
	LTE Band 5	LTE	Voice/Data	1.4/3/5/10MHz	824.7 MHz ~ 848.3 MHz
	LTE Band 4	LTE	Voice/Data	1.4/3/5/10/15/20MHz	1 710.7 MHz ~ 1 754.3 MHz
	LTE Band 25	LTE	Voice/Data	1.4/3/5/10/15/20MHz	1 850.7 MHz ~ 1 914.3 MHz
	LTE Band 2	LTE	Voice/Data	1.4/3/5/10/15/20MHz	1 850.7 MHz ~ 1 909.3 MHz
	LTE Band 7	LTE	Voice/Data	5/10/15/20MHz	2 502.5 MHz ~ 2 567.5 MHz
	LTE Band 41	LTE	Voice/Data	5/10/15/20MHz	2 498.5 MHz ~ 2 687.5 MHz
	2.4 GHz W-LAN	802.11b/g/n/ac	Voice/Data	HT20/VHT20/HT40/VHT40	2 412 MHz ~ 2 462 MHz
	5.2 GHz W-LAN	802.11a/n/ac	Voice/Data	HT20/VHT20	5 180 MHz ~ 5 240 MHz
		802.11n/ac	Voice/Data	HT40/VHT40	5 190 MHz ~ 5 230 MHz
		802.11ac	Voice/Data	VHT80	5 210 MHz
	5.3 GHz W-LAN	802.11a/n/ac	Voice/Data	HT20/VHT20	5 260 MHz ~ 5 320 MHz
		802.11n/ac	Voice/Data	HT40/VHT40	5 270 MHz ~ 5 310 MHz
		802.11ac	Voice/Data	VHT80	5 290 MHz
	5.6 GHz W-LAN	802.11a/n/ac	Voice/Data	HT20/VHT20	5 500 MHz ~ 5 720 MHz
		802.11n/ac	Voice/Data	HT40/VHT40	5 510 MHz ~ 5 710 MHz
		802.11ac	Voice/Data	VHT80	5 530 MHz ~ 5 690 MHz
	5.8 GHz W-LAN	802.11a/n/ac	Voice/Data	HT20/VHT20	5 745 MHz ~ 5 825 MHz
		802.11n/ac	Voice/Data	HT40/VHT40	5 755 MHz ~ 5 795 MHz
		802.11ac	Voice/Data	VHT80	5 775 MHz
	Bluetooth	-	Data	-	2 402 MHz ~ 2 480 MHz
RX Frequency Range	GPRS 850	GPRS/EDGE	Voice/Data	-	869.2 MHz ~ 893.8 MHz
	GPRS 1900	GPRS/EDGE	Voice/Data	-	1 930.2 MHz ~ 1 989.8 MHz
	WCDMA 850	WCDMA	Voice/Data	-	871.4 MHz ~ 891.6 MHz
	WCDMA 1700	WCDMA	Voice/Data	-	2 112.4 MHz ~ 2 152.6 MHz
	WCDMA 1900	WCDMA	Voice/Data	-	1 932.4 MHz ~ 1 987.6 MHz
	LTE Band 12	LTE	Voice/Data	1.4/3/5/10MHz	729.7 MHz ~ 745.3 MHz
	LTE Band 13	LTE	Voice/Data	5/10MHz	748.5 MHz ~ 753.5 MHz
	LTE Band 26	LTE	Voice/Data	1.4/3/5/10/15MHz	859.7 MHz ~ 893.3 MHz
	LTE Band 5	LTE	Voice/Data	1.4/3/5/10MHz	869.7 MHz ~ 893.3 MHz
	LTE Band 4	LTE	Voice/Data	1.4/3/5/10/15/20MHz	2 110.7 MHz ~ 2 154.3 MHz
	LTE Band 25	LTE	Voice/Data	1.4/3/5/10/15/20MHz	1 930.7 MHz ~ 1 994.3 MHz
	LTE Band 2	LTE	Voice/Data	1.4/3/5/10/15/20MHz	1 930.7 MHz ~ 1 989.3 MHz
	LTE Band 7	LTE	Voice/Data	5/10/15/20MHz	2 622.5 MHz ~ 2 687.5 MHz
	LTE Band 41	LTE	Voice/Data	5/10/15/20MHz	2 498.5 MHz ~ 2 687.5 MHz
	2.4 GHz W-LAN	802.11b/g/n/ac	Voice/Data	HT20/VHT20/HT40/VHT40	2 412 MHz ~ 2 462 MHz
	5.2 GHz W-LAN	802.11a/n/ac	Voice/Data	HT20/VHT20	5 180 MHz ~ 5 240 MHz
		802.11n/ac	Voice/Data	HT40/VHT40	5 190 MHz ~ 5 230 MHz
		802.11ac	Voice/Data	VHT80	5 210 MHz
	5.3 GHz W-LAN	802.11a/n/ac	Voice/Data	HT20/VHT20	5 260 MHz ~ 5 320 MHz
		802.11n/ac	Voice/Data	HT40/VHT40	5 270 MHz ~ 5 310 MHz
		802.11ac	Voice/Data	VHT80	5 290 MHz
	5.6 GHz W-LAN	802.11a/n/ac	Voice/Data	HT20/VHT20	5 500 MHz ~ 5 720 MHz
		802.11n/ac	Voice/Data	HT40/VHT40	5 510 MHz ~ 5 710 MHz
		802.11ac	Voice/Data	VHT80	5 530 MHz ~ 5 690 MHz
	5.8 GHz W-LAN	802.11a/n/ac	Voice/Data	HT20/VHT20	5 745 MHz ~ 5 825 MHz
		802.11n/ac	Voice/Data	HT40/VHT40	5 755 MHz ~ 5 795 MHz
		802.11ac	Voice/Data	VHT80	5 775 MHz
	Bluetooth	-	Data	-	2 402 MHz ~ 2 480 MHz

SAR Summary Table

Equipment Class	Band	Reported SAR			
		1g SAR (W/kg)			10g SAR (W/kg)
		Head	Body-Worn	Hotspot	Extremity
PCE	GPRS 850	0.41	0.22	0.53	0.80
PCE	GPRS 1900	0.50	0.68	1.03	1.11
PCE	WCDMA 850	0.39	0.21	0.41	0.59
PCE	WCDMA 1700	0.56	0.45	0.68	1.13
PCE	WCDMA 1900	0.51	0.61	0.91	1.18
PCE	LTE Band 12	0.19	0.10	0.19	0.35
PCE	LTE Band 13	0.30	0.17	0.40	0.49
PCE	LTE Band 26	0.38	0.24	0.38	0.54
PCE	LTE Band 5	-	-	-	-
PCE	LTE Band 4	0.50	0.40	0.59	1.03
PCE	LTE Band 25	0.39	0.47	0.71	0.85
PCE	LTE Band 2	-	-	-	-
PCE	LTE Band 7	0.68	0.35	0.68	0.62
PCE	LTE Band 41	0.15	< 0.1	0.19	0.36
DTS(SISO)	2.4 GHz W-LAN	< 0.1	< 0.1	0.57	1.01
DTS(MIMO)	2.4 GHz W-LAN	< 0.1	< 0.1	0.60	1.12
U-NII-1(SISO)	5.2 GHz W-LAN	-	-	0.22	
U-NII-1(MIMO)	5.2 GHz W-LAN	-	-	0.38	
U-NII-2A(SISO)	5.3 GHz W-LAN	< 0.1	< 0.1	-	0.42
U-NII-2A(MIMO)	5.3 GHz W-LAN	< 0.1	< 0.1	-	0.45
U-NII-2C(SISO)	5.6 GHz W-LAN	0.13	< 0.1	-	0.60
U-NII-2C(MIMO)	5.6 GHz W-LAN	0.13	< 0.1	-	0.66
U-NII-3(SISO)	5.8 GHz W-LAN	0.11	< 0.1	0.60	0.79
U-NII-3(MIMO)	5.8 GHz W-LAN	0.11	< 0.1	0.60	0.87
DSS	Bluetooth	< 0.1	< 0.1	0.17	0.27
Simultaneous SAR per KDB 690783 D01v01r03		0.82	0.82	1.30	1.77
FCC Equipment Class	PCS Licensed Transmitter Held to Face (PCF) Part 15 Spread Spectrum Transmitter(DSS) Digital Transmission System(DTS) Unlicensed National Information Infrastructure (UNII)				
Date(s) of Tests	2020.05.29 ~ 2020.06.04, 2020.08.06				
Antenna Type	Internal Antenna				
Functions	- GPRS/EDGE (GPRS/EDGE Class: 33) supported. * DTM not supported. - No simultaneous transmission between BT & 2.4GHz WLAN - Simultaneous transmission between [GPRS, WCDMA & WLAN], [LTE & WLAN]. - VoIP is supported. - W-LAN 2.4GHz is supported Hotspot. - W-LAN 5 GHz is supported Hotspot.				

1.2 Power Reduction for SAR

There is no power reduction used for any band/mode implemented in this device for SAR purposes.

1.3 Nominal and Maximum Output Power Specifications

The Nominal and Maximum Output Power Specifications are in section 9 of this test report.

1.4 DUT Antenna Locations

The overall dimensions of this device are > 9 x 5 cm. A diagram showing the location of the device of the device antenna can be found in V2X-PM451_Antenna Location. This device supports Hotspot mode.

Mode	Device Sides for SAR Testing					
	Top	Bottom	Front	Rear	Right	Left
GPRS/EDGE 850	X	O	O	O	O	O
GPRS/EDGE 1900	X	O	O	O	O	O
WCDMA 850	X	O	O	O	O	O
WCDMA 1700	X	O	O	O	O	O
WCDMA 1900	X	O	O	O	O	O
LTE Band 12	X	O	O	O	O	O
LTE Band 13	X	O	O	O	O	O
LTE Band 26	X	O	O	O	O	O
LTE Band 5	X	O	O	O	O	O
LTE Band 4	X	O	O	O	O	O
LTE Band 25	X	O	O	O	O	O
LTE Band 2	X	O	O	O	O	O
LTE Band 7	X	O	O	O	O	O
LTE Band 41	X	O	O	O	O	O
2.4G W-LAN Ant.1	O	X	O	O	X	O
2.4G W-LAN Ant.2	X	X	O	O	O	X
2.4G W-LAN MIMO	O	X	O	O	O	O
5G W-LAN Ant.1	O	X	O	O	X	O
5G W-LAN Ant.2	X	X	O	O	O	X
5G W-LAN MIMO	O	X	O	O	O	O
Bluetooth	O	X	O	O	X	O

Note 1: Particular DUT edges were not required to be evaluated for Hotspot SAR if the edges were greater than 2.5 cm from the transmitting antenna according to FCC KDB Publication 648474 D04v01r03. The antenna document shows the distances between the transmit antennas and the edges of the device.

Note 2: O - Test / X - Not test.

Note 3: This DUT has NFC operations. The NFC antenna is integrated into the back side.

The SAR tests were performed with NFC antenna already incorporated.

A diagram showing the location of the device antenna can be found in V2X-PM451_Antenna Location

1.5 Simultaneous Transmission Capabilities

The Simultaneous Transmission Capabilities are in section 12 of this test report.

1.6 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.

Per FCC KDB 447498 D01v06, the 1g SAR exclusion threshold for distances < 50 mm is defined by the following equation:

$$\frac{\text{Max Power of Channel (mW)}}{\text{Test Separation Dist (mm)}} * \sqrt{\text{Frequency(GHz)}} \leq 3.0$$

Per FCC KDB 447498 D01v06, the 10g SAR exclusion threshold for distance < 50 mm is defined by the following equation:

$$\frac{\text{Max Power of Channel (mW)}}{\text{Test Separation Dist (mm)}} * \sqrt{\text{Frequency(GHz)}} \leq 7.5$$

(B) Tested sides for Extremity SAR configuration

(1) Per FCC KDB 447498 D01v06, the 1g SAR exclusion threshold for distances < 50 mm is defined by the following equation:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f_{\text{(GHz)}}}] \leq 3.0 \text{ for 1-g SAR}$$

Table 1.4.1 SAR Test Exclusion for Edges (Antennas < 50 mm)

FREQUENCY		Mode/ Band	Service	Tune up Max Power [mW]	# of Time Slots	Separation Distance [mm]				Calculated Threshold Power [mW]			
MHz	Ch					Top	Bottom	Right	Left	Top	Bottom	Right	Left
848.8	251	GPRS 850	-	222 ^{Note1}	4	184	0	0	0	> 50mm ^{Note2}	41.0 (O)	41.0 (O)	41.0 (O)
1909.8	810	GPRS 1900	-	140 ^{Note1}	2	184	0	0	0	> 50mm ^{Note2}	38.8 (O)	38.8 (O)	38.8 (O)
846.6	4233	WCDMA 850	RMC	229	-	184	0	0	0	> 50mm ^{Note2}	42.2 (O)	42.2 (O)	42.2 (O)
1752.6	1513	WCDMA 1700	RMC	229	-	184	0	0	0	> 50mm ^{Note2}	60.7 (O)	60.7 (O)	60.7 (O)
1907.6	9538	WCDMA 1900	RMC	229	-	184	0	0	0	> 50mm ^{Note2}	63.3 (O)	63.3 (O)	63.3 (O)
707.5	23095	LTE B12	-	224	-	184	0	0	0	> 50mm ^{Note2}	37.7 (O)	37.7 (O)	37.7 (O)
782.0	23230	LTE B13	-	224	-	184	0	0	0	> 50mm ^{Note2}	39.6 (O)	39.6 (O)	39.6 (O)
831.5	26865	LTE B26	-	224	-	184	0	0	0	> 50mm ^{Note2}	40.8 (O)	40.8 (O)	40.8 (O)
836.5	20525	LTE B5	-	224	-	184	0	0	0	> 50mm ^{Note2}	41.0 (O)	41.0 (O)	41.0 (O)
1732.5	20175	LTE B4	-	251	-	184	0	0	0	> 50mm ^{Note2}	66.1 (O)	66.1 (O)	66.1 (O)
1905.0	26590	LTE B25	-	251	-	184	0	0	0	> 50mm ^{Note2}	69.3 (O)	69.3 (O)	69.3 (O)
1900.0	19100	LTE B2	-	224	-	184	0	0	0	> 50mm ^{Note2}	61.7 (O)	61.7 (O)	61.7 (O)
2560.0	21350	LTE B7	-	224	-	184	0	0	0	> 50mm ^{Note2}	71.6 (O)	71.6 (O)	71.6 (O)
2680.0	41490	LTE B41	-	224	-	184	0	0	0	> 50mm ^{Note2}	73.3 (O)	73.3 (O)	73.3 (O)
2462.0	11	2.4 GHz W-LAN (Ant.1)	-	40	-	0	170	53	0	12.5 (O)	> 50mm ^{Note2}	> 50mm ^{Note2}	12.5 (O)
2462.0	11	2.4 GHz W-LAN (Ant.2)	-	40	-	60	129	0	43	> 50mm ^{Note2}	> 50mm ^{Note2}	12.5 (O)	1.5 (X)
2462.0	11	2.4 GHz W-LAN (MIMO)	-	79	-	0	129	0	0	24.9 (O)	> 50mm ^{Note2}	24.9 (O)	24.9 (O)
5825.0	165	5 GHz W-LAN (Ant.1)	-	25	-	0	170	53	0	12.1 (O)	> 50mm ^{Note2}	> 50mm ^{Note2}	12.1 (O)
5825.0	165	5 GHz W-LAN (Ant.2)	-	25	-	60	129	0	43	> 50mm ^{Note2}	> 50mm ^{Note2}	12.1 (O)	1.4 (X)
5825.0	165	5 GHz W-LAN (MIMO)	-	50	-	0	129	0	0	24.2 (O)	> 50mm ^{Note2}	24.2 (O)	24.2 (O)
2480.0	78	Bluetooth	-	8	-	0	170	53	0	2.5 (X)	> 50mm ^{Note2}	> 50mm ^{Note2}	2.5 (X)

Note(s):

1. GPRS 850 and GPRS 1900 Band Tune up Max Power were calculated Maximum Frame-Averaged Output Power.
2. Please refer to Table 1.4.2.

- (2) Per FCC KDB 447498 D01v06, the SAR exclusion threshold for distances > 50 mm is defined by the following equation: (the SAR test exclusion threshold is determined according to the following, and as illustrated in KDB 447498 Appendix B.)

- 1) $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot (f_{\text{MHz}}/150)]\}$ mW, for 100 MHz to 1500 MHz
- 2) $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot 10]\}$ mW, for > 1500 MHz and ≤ 6 GHz

Table 1.4.2 SAR Test Exclusion for Edges (Antennas > 50 mm)

FREQUENCY		Mode/ Band	Service	Tune up Max Power [mW]	# of Time Slots	Separation Distance (mm)				Calculated Threshold Power [mW]			
MHz	Ch					Top	Bottom	Right	Left	Top	Bottom	Right	Left
848.8	251	GPRS 850	-	222 ^{Note1}	4	184	0	0	0	922 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
1 909.8	810	GPRS 1900	-	140 ^{Note1}	2	184	0	0	0	1449 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
846.6	4233	WCDMA 850	RMC	229	-	184	0	0	0	920 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
1 752.6	1513	WCDMA 1700	RMC	229	-	184	0	0	0	1449 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
1 907.6	9538	WCDMA 1900	RMC	229	-	184	0	0	0	1449 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
707.5	23095	LTE B12	-	224	-	184	0	0	0	803 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
782.0	23230	LTE B13	-	224	-	184	0	0	0	865 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
831.5	26865	LTE B26	-	224	-	184	0	0	0	922 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
836.5	20525	LTE B5	-	224	-	184	0	0	0	922 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
1 732.5	20175	LTE B4	-	251	-	184	0	0	0	1449 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
1 905.0	26590	LTE B25	-	251	-	184	0	0	0	1449 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
1 900.0	19100	LTE B2	-	224	-	184	0	0	0	1449 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
2 560.0	21350	LTE B7	-	224	-	184	0	0	0	1436 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
2 680.0	41490	LTE B41	-	224	-	184	0	0	0	1436 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}	< 50mm ^{Note2}
2 462.0	11	2.4 GHz W-LAN (Ant.1)	-	40	-	0	170	53	0	< 50mm ^{Note2}	1296 (X)	126 (X)	< 50mm ^{Note2}
2 462.0	11	2.4 GHz W-LAN (Ant.2)	-	40	-	60	129	0	43	196 (X)	886 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}
2 462.0	11	2.4 GHz W-LAN (MIMO)	-	79	-	0	129	0	0	< 50mm ^{Note2}	886 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}
5 825.0	165	5 GHz W-LAN (Ant.1)	-	25	-	0	170	53	0	< 50mm ^{Note2}	1262 (X)	92 (X)	< 50mm ^{Note2}
5 825.0	165	5 GHz W-LAN (Ant.2)	-	25	-	60	129	0	43	162 (X)	852 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}
5 825.0	165	5 GHz W-LAN (MIMO)	-	50	-	0	129	0	0	< 50mm ^{Note2}	852 (X)	< 50mm ^{Note2}	< 50mm ^{Note2}
2 480.0	78	Bluetooth	-	8	-	0	170	53	0	< 50mm ^{Note2}	1296 (X)	126 (X)	< 50mm ^{Note2}

Note(s):

1. GPRS 850 and GPRS 1900 Band Tune up Max Power were calculated Maximum Frame-Averaged Output Power.
2. Please refer to Table 1.4.1.

Table 1.4.3 Determined EUT sides for SAR Testing

Mode	EUT Sides for SAR Testing					
	Top	Bottom	Front	Rear	Right	Left
GPRS 850	X	O	O	O	O	O
GPRS 1900	X	O	O	O	O	O
WCDMA 850	X	O	O	O	O	O
WCDMA 1700	X	O	O	O	O	O
WCDMA 1900	X	O	O	O	O	O
LTE B12	X	O	O	O	O	O
LTE B13	X	O	O	O	O	O
LTE B26	X	O	O	O	O	O
LTE B5	X	O	O	O	O	O
LTE B4	X	O	O	O	O	O
LTE B25	X	O	O	O	O	O
LTE B2	X	O	O	O	O	O
LTE B7	X	O	O	O	O	O
LTE B41	X	O	O	O	O	O
2.4 GHz W-LAN (Ant.1)	O	X	O	O	X	O
2.4 GHz W-LAN (Ant.2)	X	X	O	O	O	X
2.4 GHz W-LAN (MIMO)	O	X	O	O	O	O
5 GHz W-LAN (Ant.1)	O	X	O	O	X	O
5 GHz W-LAN (Ant.2)	X	X	O	O	O	X
5 GHz W-LAN (MIMO)	O	X	O	O	O	O
Bluetooth	X	X	O	O	X	X

Note: Particular DUT edges were not required to be evaluated for SAR based on the SAR exclusion threshold in KDB 447498 D01v06.

(C) Licensed Transmitter(s)

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 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.

1.7 Guidance Applied

- IEEE 1528-2013
- FCC KDB Publication 941225 D01v03r01 (3G SAR Procedures)
- FCC KDB Publication 941225 D05v02r05 (SAR for LTE Devices)
- FCC KDB Publication 941225 D05Av01r02 (LTE Rel.10 KDB Inquiry Sheet)
- FCC KDB Publication 941225 D06v02r01 (Hotspot Mode)
- FCC KDB Publication 248227 D01v02r02 (802.11 Wi-Fi SAR)
- FCC KDB Publication 447498 D01v06 (General RF Exposure Guidance)
- FCC KDB Publication 648474 D04v01r03 (Handset SAR)
- FCC KDB Publication 690783 D01v01r03 (SAR Listings on Grants)
- FCC KDB Publication 865664 D01v01r04 (SAR Measurement 100 MHz to 6 GHz)
- FCC KDB Publication 865664 D02v01r02 (RF Exposure Reporting)
- October 2013 TCB Workshop Notes (GPRS testing criteria)
- April 2015 TCB Workshop Notes (Simultaneous transmission summation clarified)
- October 2016 TCB Workshop Notes (Bluetooth Duty Factor)

1.8 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.

2. LTE INFORMATION

LTE Information					
FCC ID	V2X-PM451				
Form Factor	Mobile Phone				
Frequency Range of each LTE transmission Band	LTE Band 12 (699.7 ~ 715.3 MHz) LTE Band 13 (779.5 ~ 784.5 MHz) LTE Band 26 (Cell) (814.7 ~ 848.3 MHz) LTE Band 5 (Cell) (824.7 ~ 848.3 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 7 (2502.5 ~ 2567.5 MHz) LTE Band 41 (2498.5 ~ 2687.5 MHz)				
Channel Bandwidths	LTE Band 12 : 1.4 MHz, 3 MHz, 5 MHz, 10 MHz LTE Band 13 : 5 MHz, 10 MHz LTE Band 26 : 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz LTE Band 5 : 1.4 MHz, 3 MHz, 5 MHz, 10 MHz LTE Band 4 : 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz LTE Band 25 : 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz LTE Band 2 : 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz LTE Band 7 : 5 MHz, 10 MHz, 15 MHz, 20 MHz LTE Band 41 : 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Channel Number and Frequencies(MHz)	Low	Low-Mid	Mid	Mid-High	High
LTE Band 12: 1.4 MHz	699.7 (23017)	N/A	707.5 (23095)	N/A	715.3 (23173)
LTE Band 12: 3 MHz	700.5 (23025)	N/A	707.5 (23095)	N/A	714.5 (23165)
LTE Band 12: 5 MHz	701.5 (23035)	N/A	707.5 (23095)	N/A	713.5 (23155)
LTE Band 12: 10 MHz	704.0 (23060)	N/A	707.5 (23095) ^{Note1}	N/A	711.0 (23130)
LTE Band 13: 5 MHz	779.5(23205)	N/A	782.0(23230) ^{Note2}	N/A	784.5(23255)
LTE Band 13: 10 MHz	N/A	N/A	782.0(23230)	N/A	N/A
LTE Band 26 (Cell): 1.4 MHz	814.7 (26697)	N/A	831.5 (26865)	N/A	848.3 (27033)
LTE Band 26 (Cell): 3 MHz	815.5 (26705)	N/A	831.5 (26865)	N/A	847.5 (27025)
LTE Band 26 (Cell): 5 MHz	816.5 (26715)	N/A	831.5 (26865)	N/A	846.5 (27015)
LTE Band 26 (Cell): 10 MHz	819.0 (26740)	N/A	831.5 (26865)	N/A	844.0 (26990)
LTE Band 26 (Cell): 15 MHz	821.5 (26765)	N/A	831.5 (26865) ^{Note3}	N/A	841.5 (26965)
LTE Band 5 (Cell): 1.4 MHz	824.7 (20407)	N/A	836.5 (20525)	N/A	848.3 (20643)
LTE Band 5 (Cell): 3 MHz	825.5 (20415)	N/A	836.5 (20525)	N/A	847.5 (20635)
LTE Band 5 (Cell): 5 MHz	826.5 (20425)	N/A	836.5 (20525)	N/A	846.5 (20625)
LTE Band 5 (Cell): 10 MHz	829.0 (20450)	N/A	836.5 (20525) ^{Note4}	N/A	844.0 (20600)
LTE Band 4 (AWS): 1.4 MHz	1710.7 (19957)	N/A	1732.5 (20175)	N/A	1754.3 (20393)
LTE Band 4 (AWS): 3 MHz	1711.5 (19965)	N/A	1732.5 (20175)	N/A	1753.5 (20385)
LTE Band 4 (AWS): 5 MHz	1712.5 (19975)	N/A	1732.5 (20175)	N/A	1752.5 (20375)
LTE Band 4 (AWS): 10 MHz	1715.0 (20000)	N/A	1732.5 (20175)	N/A	1750.0 (20350)
LTE Band 4 (AWS): 15 MHz	1717.5 (20025)	N/A	1732.5 (20175)	N/A	1747.5 (20325)
LTE Band 4 (AWS): 20 MHz	1720.0 (20050)	N/A	1732.5 (20175) ^{Note5}	N/A	1745.0 (20300)
LTE Band 25 (PCS): 1.4 MHz	1850.7 (26047)	N/A	1882.5 (26365)	N/A	1914.3 (26683)
LTE Band 25 (PCS): 3 MHz	1851.5 (26055)	N/A	1882.5 (26365)	N/A	1913.5 (26675)
LTE Band 25 (PCS): 5 MHz	1852.5 (26065)	N/A	1882.5 (26365)	N/A	1912.5 (26665)
LTE Band 25 (PCS): 10 MHz	1855.0 (26090)	N/A	1882.5 (26365)	N/A	1910.0 (26640)
LTE Band 25 (PCS): 15 MHz	1857.5 (26115)	N/A	1882.5 (26365)	N/A	1907.5 (26615)
LTE Band 25 (PCS): 20 MHz	1860.0 (26140)	N/A	1882.5 (26365)	N/A	1905.0 (26590)
LTE Band 2 (PCS): 1.4 MHz	1850.7 (18607)	N/A	1880.0 (18900)	N/A	1909.3 (19193)
LTE Band 2 (PCS): 3 MHz	1851.5 (18615)	N/A	1880.0 (18900)	N/A	1908.5 (19185)
LTE Band 2 (PCS): 5 MHz	1852.5 (18625)	N/A	1880.0 (18900)	N/A	1907.5 (19175)
LTE Band 2 (PCS): 10 MHz	1855.0 (18650)	N/A	1880.0 (18900)	N/A	1905.0 (19150)
LTE Band 2 (PCS): 15 MHz	1857.5 (18675)	N/A	1880.0 (18900)	N/A	1902.5 (19125)
LTE Band 2 (PCS): 20 MHz	1860.0 (18700)	N/A	1880.0 (18900)	N/A	1900.0 (19100)
LTE Band 7: 5 MHz	2502.5 (20775)	N/A	2535.0 (21100)	N/A	2567.5 (21425)
LTE Band 7: 10 MHz	2505.0 (20800)	N/A	2535.0 (21100)	N/A	2565.0 (21400)
LTE Band 7: 15 MHz	2507.5 (20825)	N/A	2535.0 (21100)	N/A	2562.5 (21375)
LTE Band 7: 20 MHz	2510.0 (20850)	N/A	2535.0 (21100)	N/A	2560.0 (21350)
LTE Band 41: 5 MHz	2498.5 (39675)	2545.8 (40148)	2593.0 (40620)	2640.3 (41093)	2687.5 (41565)
LTE Band 41: 10 MHz	2501.0 (39700)	2547.0 (40160)	2593.0 (40620)	2639.0 (41080)	2685.0 (41540)
LTE Band 41: 15 MHz	2503.5 (39725)	2548.3 (40173)	2593.0 (40620)	2637.8 (41068)	2682.5 (41515)
LTE Band 41: 20 MHz	2506.0 (39750)	2549.5 (40185)	2593.0 (40620)	2636.5 (41055)	2680.0 (41490)
UE Category	LTE Rel.8 UE Cat 4				
Modulations Supported in UL	QPSK, 16QAM				
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 8. It supports only downlink carrier aggregation. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 8 Features are not supported: Relay, HetNet, Enhanced MIMO, eCIC, WIFI Offloading, MDH, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

Note(s)

- LTE B12 can not contain three non-overlapping channels of 10 MHz bandwidth.
Per KDB 941225 D05v02r05, 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.
- LTE B13 can not contain three non-overlapping channels of 5 MHz bandwidth.
Per KDB 941225 D05v02r05, 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.
- LTE B26(Cell) can not contain three non-overlapping channels of 15 MHz bandwidth.
Per KDB 941225 D05v02r05, 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.
- LTE B5(Cell) can not contain three non-overlapping channels of 10 MHz bandwidth.
Per KDB 941225 D05v02r05, 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.
- LTE B4 (AWS) can not contain three non-overlapping channels of 20 MHz bandwidth.
Per KDB 941225 D05v02r05, 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.

3. INTROCUCTION

The FCC and Industry 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.

The FCC has adopted the guidelines for evaluating the environmental effects of radio frequency radiation in ET Docket 93-62 on Aug. 6, 1996 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. 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. The measurement procedure described in IEEE/ANSI C95.3-2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave is used for guidance in measuring 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 National Council on Radiation Protection and Measurements (NCRP) in Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields," NCRP Report No. 86 NCRP, 1986, Bethesda, MD 20814. 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.

SAR Definition

Specific Absorption Rate (SAR) 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 Fig. 3.1)

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

Fig. 3.1 SAR Mathematical Equation

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/m³)
- 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 relations 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.

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:

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 IEEE1528-2013.
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.

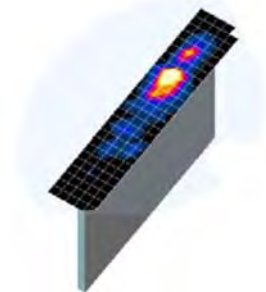


Figure 4.1
Sample SAR Area Scan

			$\leq 3 \text{ GHz}$	$> 3 \text{ GHz}$
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			$5 \text{ mm} \pm 1 \text{ mm}$	$\frac{1}{2} \cdot \delta \cdot \ln(2) \text{ mm} \pm 0.5 \text{ mm}$
Maximum probe angle from probe axis to phantom surface normal at the measurement location			$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}			$\leq 2 \text{ GHz}: \leq 15 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 12 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 12 \text{ mm}$ $4 - 6 \text{ GHz}: \leq 10 \text{ mm}$
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx_{Zoom} , Δy_{Zoom}			$\leq 2 \text{ GHz}: \leq 8 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 5 \text{ mm}^*$	$3 - 4 \text{ GHz}: \leq 5 \text{ mm}^*$ $4 - 6 \text{ GHz}: \leq 4 \text{ mm}^*$
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		$\leq 5 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 4 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 3 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
	graded grid	$\Delta z_{Zoom}(1)$: between 1 st two points closest to phantom surface	$\leq 4 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 3 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 2.5 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1) \text{ mm}$	
Minimum zoom scan volume	x, y, z		$\geq 30 \text{ mm}$	$3 - 4 \text{ GHz}: \geq 28 \text{ mm}$ $4 - 5 \text{ GHz}: \geq 25 \text{ mm}$ $5 - 6 \text{ GHz}: \geq 22 \text{ mm}$
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details.				
* When zoom scan is required and the <u>reported</u> SAR from the <u>area scan based 1-g SAR estimation</u> procedures of KDB Publication 447498 is $\leq 1.4 \text{ W/kg}$, $\leq 8 \text{ mm}$, $\leq 7 \text{ mm}$ and $\leq 5 \text{ mm}$ zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

Table 4.1 Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

5. TEST CONFIGURATION POSITIONS FOR HANDSETS

5.1 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 $> 1.2 \text{ W/kg}$, 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.

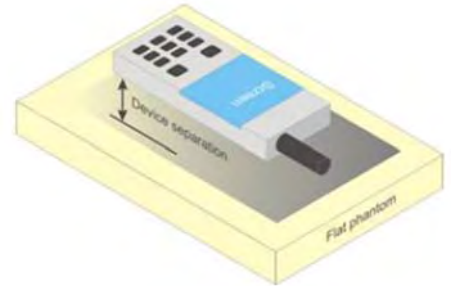


Figure 6.4 Sample Body-Worn Diagram

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 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.

5.2 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 1-g body and 10-g 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.

5.3 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 ($L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$) are based on a composite test separation distance of 10 mm from the front, rear 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. When the same wireless transmission configuration is used for testing body-worn accessory and hotspot mode SAR, respectively, in voice and data mode, SAR results for the most conservative test separation distance configuration may be used to support both SAR conditions.

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 transmitter 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 KDB Publication 447498 D01v06 procedures. The "Portable Hotspot" feature on the handset was not activated during SAR assessment, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

6. RF EXPOSURE LIMITS

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.

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 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 6.1.SAR Human Exposure Specified in ANSI/IEEE C95.1-1992

	HUMAN EXPOSURE LIMITS	
	General Public Exposure (W/kg) or (mW/g)	Occupational Exposure (W/kg) or (mW/g)
SPATIAL PEAK SAR * (Brain)	1.60	8.00
SPATIAL AVERAGE SAR ** (Whole Body)	0.08	0.40
SPATIAL PEAK SAR *** (Hands / Feet / Ankle / Wrist)	4.00	20.0

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.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

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).

7. FCC MEASUREMENT PROCEDURES

Power measurements were performed using a base station simulator under digital average power.

7.1 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.

7.2 Procedures Used to Establish RF Signal for SAR

The following procedures are according to FCC KDB Publication 941225 D01v03r01.

The device was 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 were 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 was 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 deviated by more than 5%, the SAR test and drift measurements were repeated.

7.3 SAR Measurement Conditions for WCDMA (UMTS)

7.3.1 Output Power Verification

Maximum output power is measured on the High, Middle and Low channels for each applicable transmission band according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all “1s”.

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 (release 5), 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.

7.3.2 Head SAR Measurements for Handsets

SAR for head exposure configurations is measured using the 12.2 kbps RMC with TPC bits configured to all “1s”. SAR in AMR configurations is not required when the maximum average output of each RF channel for 12.2 kbps AMR is less than 0.25 dB higher than that measured in 12.2 kbps RMC. Otherwise, SAR is measured on the maximum output channel in 12.2 AMR with a 3.4 kbps SRB (signaling radio bearer) using the exposure configuration that resulted in the highest SAR for that RF channel in the 12.2 kbps RMC mode.

7.3.3 Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits all "1s".

7.3.4 Release 5 HSDPA Data Devices

The following procedures are applicable to HSDPA data devices operating under 3GPP Release 5. SAR is required for devices in body-worn accessory and other body exposure conditions, including handsets and data modems operating in various electronic devices. HSDPA operates in conjunction with WCDMA and requires an active DPCCH. The default test configuration is to measure SAR in WCDMA with HSDPA remain inactive, to establish a radio link between the test device and a communication test set using a 12.2 kbps RMC configured in Test Loop Mode 1. SAR for HSDPA is selectively measured using the highest reported SAR configuration in WCDMA, with an FRC in H-set 1 and a 12.2 kbps RMC. SAR is selectively confirmed for other physical channel configurations (DPCCH & DPDCHn) according to exposure conditions, device operating capabilities and maximum output power specified for production units, including tune-up tolerance by applying the 3G SAR test reduction procedures. Maximum output power is verified according to the applicable versions of 3GPP TS 34.121. SAR must be measured based on these maximum output conditions and requirements in KDB Publication 447498, with respect to the UE Categories, and explained in the SAR report. When Maximum Power Reduction (MPR) applies, the implementations must be clearly identified in the SAR report to support test results according to Cubic Metric (CM) and, as appropriate, Enhanced MPR (E-MPR) requirements.

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	$\beta_{hs}^{(1)}$	CM (dB) ⁽²⁾
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15 ⁽³⁾	15/15 ⁽³⁾	64	12/15 ⁽³⁾	24/15	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5
Note 1: $\Delta_{ACK}, \Delta_{NACK}$ and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$ Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.						

Figure 9.1 Table 1

7.3.5 Release 6 HSUPA Data Devices

The following procedures are applicable to HSPA (HSUPA/HSDPA) data devices operating under 3GPP Release 6. SAR is required for devices in body-worn accessory and other body exposure conditions, including handsets and data modems operating in various electronic devices. HSUPA operates in conjunction with WCDMA and HSDPA. SAR is initially measured in WCDMA test configurations with HSPA remain inactive. The default test configuration is to establish a radio link between the test device and a communication test set to configure a 12.2 kbps RMC in Test Loop Mode 1. SAR for HSPA is selectively measured with HS-DPCCH, E-DPCCH and E-DPDCH, all enabled, along with a 12.2 kbps RMC using the highest reported SAR configuration in WCDMA with 12.2 kbps RMC only.

An FRC is configured according to HS-DPCCH Sub-test 1 using H-set 1 and QPSK. HSPA is configured according to E-DCH Sub-test 5 requirements. SAR for other HSPA sub-test configurations is confirmed selectively according to exposure conditions, E-DCH UE Category and maximum output power of production units, including tune-up tolerance by applying the 3G SAR test reduction procedure. Maximum output power is verified according to procedures in applicable versions of 3GPP TS 34.121. SAR must be measured based on these maximum output conditions and requirements in KDB Publication 447498, with respect to the UE Categories for HS-DPCCH and HSPA, and explained in the SAR report. When Maximum Power Reduction (MPR) applies, the implementations must be clearly identified in the SAR report to support test results according to Cubic Metric (CM) and, as appropriate, Enhanced MPR (E-MPR) requirements.

Sub-test	β_e	β_d	β_d (SF)	β_e/β_d	$\beta_{hs}^{(1)}$	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM ⁽²⁾ (dB)	MPR (dB)	AG ⁽⁴⁾ Index	E-TFCI
1	11/15 ⁽³⁾	15/15 ⁽³⁾	64	11/15 ⁽³⁾	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 ⁽⁴⁾	15/15 ⁽⁴⁾	64	15/15 ⁽⁴⁾	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_e = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_e$.

Note 2: CM = 1 for $\beta_e/\beta_d = 12/15$, $\beta_{hs}/\beta_e = 24/15$. For all other combinations of DPDCH, DPCCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_e/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_e = 10/15$ and $\beta_d = 15/15$.

Note 4: For subtest 5 the β_e/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_e = 14/15$ and $\beta_d = 15/15$.

Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.

Note 6: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

Figure 9.2 Table 2

7.3.6 SAR Measurement Conditions for DC-HSDPA

In the following DB 941225 D01v03r01 procedures, the mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as “otherwise” in the applicable procedures; SAR measurement is required for the secondary mode.

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.

7.4 SAR Measurement Conditions for LTE

LTE modes were tested according to FCC KDB 941225 D05v02r05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR. The call simulator was used for LTE output power measurement 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).

7.4.1 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.

7.4.2 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.

7.4.3 A-MPR

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

7.4.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r05:

- 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 channel 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. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
- 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 0.5 dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is < 1.45 W/kg.

7.4.5 LTE TDD Consideration setup for SAR measurement

According to KDB 941225 D05 SAR for LTE Devices v02r05 for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

SAR was tested with the highest transmission duty factor (63.33 %) using Uplink-downlink configuration 0 and Special subframe configuration 6.

LTE TDD Band 41 supports 3GPP TS 36.211 section 4.2 for Type 2 Frame and Table 4.2-2 for uplink-downlink configuration and Table 4.2-1 for Special subframe configurations.

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$			$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			-	-	-
8	$24144 \cdot T_s$			-	-	-

Table 4.2-2: Uplink-downlink configurations.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Calculated Duty Cycle = Extended cyclic prefix in uplink * (T_s) * # of S + # of U

$T_s = 1/(15000 * 2048)$ seconds

Example for calculated Duty Cycle for Uplink-Downlink Configuration 0:

Calculated Duty Cycle = $5120 * [1/(15000 * 2048)] * 2 + 6 \text{ ms} = 63.33 \%$

7.5 SAR Testing with 802.11 Transmitters

The normal network operating configurations are not suitable for measuring the SAR of 802.11 b/g/n transmitters. 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 248227D01v02r02 for more details.

7.5.1 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. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

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.

7.5.2 U-NII and U-NII-2A

For devices that operate in only one of the U-NII-1 and U-NII-2A bands, the normally required SAR procedures for OFDM configurations are applied. For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following, with respect to the highest reported SAR and maximum output power specified for production units. The procedures are applied independently to each exposure configuration; for example, head, body, hotspot mode etc.

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
- 2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

7.5.3 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 Rader (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. When band gap channels are disabled, each band is tested independently according to the normally required OFDM SAR measurements and probe calibration frequency points requirements.

7.5.4 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 position 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 position until the reported SAR result is ≤ 0.8 W/kg or all test position are measured.

7.5.5 2.4 GHz SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either a 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 exposure configuration 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.

7.5.6 OFDM Transmission Mode and SAR Test Channel Selection

For the 2.4 GHz and 5 GHz bands, 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 and 802.11n 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 802.11g then 802.11n is used for SAR measurement. When the maximum output power were 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.

7.5.7 Initial Test Configuration Procedure

For OFDM, in both 2.4 and 5 GHz bands, 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 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, and lowest data rate. 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.

7.5.8 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 applicable. When the highest reported SAR for the initial test configuration, adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power is ≤ 1.2 W/kg, no additional SAR testing for the subsequent test configurations is required.

7.5.9 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.

8. RF CONDUCTED POWERS

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

8.1 GPRS Nominal and Maximum Output Power Spec and Conducted Powers

Band & Mode		Burst Average GMSK [dBm]				Burst Average GMSK [dBm]			
		1 TX Slot	2 TX Slot	3 TX Slot	4 TX Slot	1 TX Slot	2 TX Slot	3 TX Slot	4 TX Slot
GPRS/EDGE 850	Maximum	32.50	30.50	29.00	28.00	26.50	25.50	24.00	22.50
	Nominal	32.00	30.00	28.50	27.50	26.00	25.00	23.50	22.00
GPRS/EDGE 1900	Maximum	27.50	27.50	27.50	27.50	27.00	26.50	25.00	24.00
	Nominal	27.00	27.00	27.00	27.00	26.50	26.00	24.50	23.50

Table 8.1.1 GSM Nominal and Maximum Output Power Spec

Band	Channel	Maximum Burst-Averaged Output Power(dBm)							
		GPRS/EDGE Data (GMSK)				EDGE Data (8-PSK)			
		GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
GPRS 850	128	32.10	30.00	28.70	27.70	26.30	25.00	23.30	22.00
	190	32.30	30.30	28.90	27.90	26.50	25.30	23.60	22.30
	251	31.90	30.20	28.80	27.60	26.40	25.20	23.50	22.30
GPRS 1900	512	26.96	26.75	26.52	26.28	26.94	26.14	24.94	23.75
	661	26.88	26.70	26.47	26.23	26.85	26.25	24.74	23.53
	810	26.78	26.65	26.40	26.10	26.77	25.94	24.77	23.67
Band	Channel	Calculated Maximum Frame-Averaged Output Power(dBm)							
		GPRS/EDGE Data (GMSK)				EDGE Data (8-PSK)			
		GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
GPRS 850	128	23.07	23.98	24.44	24.69	17.27	18.98	19.04	18.99
	190	23.27	24.28	24.64	24.89	17.47	19.28	19.34	19.29
	251	22.87	24.18	24.54	24.59	17.37	19.18	19.24	19.29
GPRS 1900	512	17.93	20.73	22.26	23.27	17.91	20.12	20.68	20.74
	661	17.85	20.68	22.21	23.22	17.82	20.23	20.48	20.52
	810	17.75	20.63	22.14	23.09	17.74	19.92	20.51	20.66
GPRS 850	Frame Avg. Targets:	22.97	23.98	24.24	24.49	16.97	18.98	19.24	18.99
GPRS 1900		17.97	20.98	22.74	23.49	17.47	19.98	20.24	20.49

Table 8.1.2 GSM Conducted Power

Note:

- 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.
- GPRS (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.
- 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 8PSK modulation do not have an impact on output power.

GPRS Multislot class: 33 (max 4 TX Uplink slots)
EDGE Multislot class: 33 (max 4 TX Uplink slots)
DTM Multislot Class: N/A



Figure 8.1 Power Measurement Setup

8.2 WCDMA Nominal and Maximum Output Power Spec and Conducted Powers

3GPP Release Version	Mode			Cellular Band (dBm)		AWS Band (dBm)		PCS Band (dBm)		3GPP MPR (dB)
99	WCDMA	Voice	Maximum		23.6		23.6		23.6	-
			Nominal		23.1		23.1		23.1	
5	HSDPA	Subtest 1	Maximum		23.6		23.6		23.6	0
			Nominal		23.1		23.1		23.1	
5		Subtest 2	Maximum		23.6		23.6		23.6	0
			Nominal		23.1		23.1		23.1	
5		Subtest 3	Maximum		23.1		23.1		23.1	0.5
			Nominal		22.6		22.6		22.6	
5		Subtest 4	Maximum		23.1		23.1		23.1	0.5
			Nominal		22.6		22.6		22.6	
6	HSUPA	Subtest 1	Maximum		23.6		23.6		23.6	0
			Nominal		23.1		23.1		23.1	
6		Subtest 2	Maximum		21.6		21.6		21.6	2
			Nominal		21.1		21.1		21.1	
6		Subtest 3	Maximum		22.6		22.6		22.6	1
			Nominal		22.1		22.1		22.1	
6		Subtest 4	Maximum		21.6		21.6		21.6	2
			Nominal		21.1		21.1		21.1	
6		Subtest 5	Maximum		23.6		23.6		23.6	0
			Nominal		23.1		23.1		23.1	
8	DC-HSDPA	Subtest 1	Maximum		23.6		23.6		23.6	0
			Nominal		23.1		23.1		23.1	
8		Subtest 2	Maximum		23.6		23.6		23.6	0
			Nominal		23.1		23.1		23.1	
8		Subtest 3	Maximum		23.1		23.1		23.1	0.5
			Nominal		22.6		22.6		22.6	
8		Subtest 4	Maximum		23.1		23.1		23.1	0.5
			Nominal		22.6		22.6		22.6	

Table 8.2.1 WCDMA Nominal and Maximum Output Power Spec

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	22.90	22.90	23.01	23.09	23.07	23.09	22.89	22.94	23.02	-
99												
5	HSDPA	Subtest 1	21.96	21.95	22.01	22.09	22.10	22.07	21.82	21.94	22.03	0
5		Subtest 2	21.97	21.98	22.02	22.06	22.05	22.02	21.87	21.99	22.02	0
5		Subtest 3	21.46	21.49	21.53	21.60	21.51	21.50	21.35	21.45	21.48	0.5
5		Subtest 4	21.46	21.48	21.52	21.59	21.50	21.49	21.34	21.44	21.48	0.5
6	HSUPA	Subtest 1	21.93	21.94	21.99	22.11	22.06	22.03	21.65	21.76	21.77	0
6		Subtest 2	20.97	20.98	21.02	21.04	20.99	20.86	20.76	20.80	20.82	2
6		Subtest 3	21.01	21.10	21.04	20.75	20.63	20.62	20.83	20.93	20.99	1
6		Subtest 4	21.55	21.56	21.60	21.18	21.34	21.31	20.63	20.89	20.87	2
6		Subtest 5	21.93	22.00	22.04	22.10	22.05	22.02	21.87	21.92	21.96	0
8	DC-HSDPA	Subtest 1	21.95	21.93	21.99	22.03	22.06	22.03	21.83	21.89	22.00	0
8		Subtest 2	21.96	21.94	22.01	22.05	22.02	22.01	21.85	21.88	21.99	0
8		Subtest 3	21.43	21.44	21.49	21.58	21.48	21.44	21.32	21.42	21.41	0.5
8		Subtest 4	21.46	21.43	21.50	21.53	21.49	21.46	21.33	21.40	21.43	0.5

Table 8.2.2 WCDMA Conducted Power

WCDMA SAR was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. HSPA SAR was not required since the average output power of the HSPA subtests was not more than 0.25 dB higher than the RMC level and SAR was less than 1.2 W/kg.

The manufacturer declares that the HSDPA, HSUPA and DC-HSDPA transmitter's power will not exceed the R99 maximum transmit power in devices based on Qualcomm's HSPA chipset solutions.

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.



Figure 8.2 Power Measurement Setup

8.3 LTE Nominal and Maximum Output Power Spec and Conducted Powers

Band & Mode		Modulated Average(dBm)
LTE Band 12	Maximum	23.5
	Nominal	23.0

Table 8.3.1.1 Nominal and Maximum Output Power Spec

1) LTE Band 12

LTE Band 12 Conducted Power-- 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			23095 (707.5 MHz)		
			Conducted Power (dBm)		
QPSK	1	0	22.89	≤ 1	0
	1	25	23.36		
	1	49	22.92		
	25	0	22.18		1
	25	12	22.26		
	25	25	22.22		
	50	0	22.19		
16QAM	1	0	21.83	≤ 1	1
	1	25	22.29		
	1	49	21.96		
	25	0	21.22		
	25	12	21.32	≤ 2	2
	25	25	21.26		
	50	0	21.23		

Table 8.3.1.2 LTE Conducted Power

Note: LTE B12 can not contain three non-overlapping channels of 10 MHz bandwidth.

Per KDB 941225 D05v02r05, 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.

LTE Band 12 Conducted Power~ 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			23035 (701.5 MHz)	23095 (707.5 MHz)	23155 (713.5 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	22.98	22.84	22.90	≤ 1	0
	1	12	23.06	23.08	22.99		
	1	24	22.97	22.81	22.80		
	12	0	21.81	22.06	22.02		1
	12	6	22.08	22.15	22.05		
	12	13	21.94	22.00	21.96		
	25	0	21.90	22.10	21.89		
16QAM	1	0	21.94	21.82	21.89	≤ 1	1
	1	12	21.97	21.99	21.96		
	1	24	21.93	21.80	21.81		
	12	0	20.82	20.96	20.93	≤ 2	2
	12	6	20.99	21.07	20.98		
	12	13	20.85	21.03	20.93		
	25	0	20.83	21.19	20.81		

Table 8.3.1.3 LTE Conducted Power

LTE Band 12 Conducted Power– 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			23025 (700.5 MHz)	23095 (707.5 MHz)	23165 (714.5 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	22.90	22.88	22.89	≤ 1	0
	1	7	23.08	23.10	23.03		
	1	14	22.91	22.80	23.01		
	8	0	21.89	22.11	22.13		1
	8	4	22.02	22.20	22.01		
	8	7	21.91	22.10	22.09		
	15	0	21.84	22.07	21.83		
16QAM	1	0	21.85	21.86	21.83	≤ 1	1
	1	7	21.95	21.99	21.92		
	1	14	21.88	21.80	21.90		
	8	0	20.85	21.13	21.06	≤ 2	2
	8	4	21.10	21.31	21.06		
	8	7	20.97	21.23	21.09		
	15	0	20.88	21.11	20.84		

Table 8.3.1.4 LTE Conducted Power

LTE Band 12 Conducted Power– 1.4 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)	
			23017 (699.7 MHz)	23095 (707.5 MHz)	23173 (715.3 MHz)			
			Conducted Power (dBm)					
QPSK	1	0	22.93	22.88	22.98	≤ 1	0	
	1	2	23.15	23.20	23.10			
	1	5	23.09	22.89	23.01			
	3	0	22.82	23.12	22.95			
	3	2	23.04	23.18	23.02		0	
	3	3	22.86	23.14	22.98			
	6	0	21.83	22.15	21.81			1
	16QAM	1	0	21.86	21.80			21.86
1		2	22.10	22.31	22.18			
1		5	21.93	21.90	21.88			
3		0	21.82	22.21	21.95			
3		2	22.09	22.26	22.16	1		
3		3	21.83	22.23	22.03			
6		0	20.85	21.13	20.83		2	

Table 8.3.1.5 LTE Conducted Power

Band & Mode		Modulated Average(dBm)
LTE Band 13	Maximum	23.5
	Nominal	23.0

Table 8.3.2.1 Nominal and Maximum Output Power Spec

2) LTE Band 13

LTE Band 13 Conducted Power– 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			23230 (782.0 MHz)		
			Conducted Power (dBm)		
QPSK	1	0	22.93	≤ 1	0
	1	25	23.37		
	1	49	23.07		
	25	0	21.93		1
	25	12	22.18		
	25	25	22.03		
16QAM	50	0	22.12	≤ 1	1
	1	0	21.80		1
	1	25	22.26		
	1	49	21.93		
	25	0	21.06	≤ 2	2
	25	12	21.25		
	25	25	21.08		
	50	0	21.25		2

Table 8.3.2.2 LTE Conducted Power

LTE Band 13 Conducted Power– 5 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			23230 (782.0 MHz)		
			Conducted Power (dBm)		
QPSK	1	0	23.06	≤ 1	0
	1	12	23.13		
	1	24	23.10		
	12	0	21.92		1
	12	6	22.06		
	12	13	22.02		
16QAM	25	0	21.91	≤ 1	1
	1	0	21.95		1
	1	12	22.23		
	1	24	22.04		
	12	0	21.05	≤ 2	2
	12	6	21.16		
	12	13	21.06		
	25	0	21.09		2

Table 8.3.2.3 LTE Conducted Power

Note: LTE B13 can not contain three non-overlapping channels of 5 MHz bandwidth.

Per KDB 941225 D05v02r05, 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.

Band & Mode		Modulated Average[dBm]
LTE Band 26	Maximum	23.5
	Nominal	23.0

Table 8.3.3.1 Nominal and Maximum Output Power Spec

3) LTE Band 26 (Cell)

LTE Band 26 (Cell) Conducted Power~ 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26865 (831.5 MHz) Conducted Power (dBm)		
QPSK	1	0	22.88	≤ 1	0
	1	36	22.93		
	1	74	23.18		
	36	0	21.89		1
	36	18	21.82		
	36	37	22.16		
16QAM	75	0	21.85	≤ 1	1
	1	0	21.87		
	1	36	21.96		
	1	74	22.12		2
	36	0	20.83		
	36	18	20.80		
	36	37	21.03	≤ 2	2
	75	0	20.86		

Table 8.3.3.2 LTE Conducted Power

Note: LTE B26 can not contain three non-overlapping channels of 10 MHz bandwidth.

Per KDB 941225 D05v02r05, 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.

LTE Band 26 (Cell) Conducted Power~ 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26740 (819.0 MHz)	26865 (831.5 MHz)	26990 (844.0 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	22.83	22.84	22.81	≤ 1	0
	1	25	22.84	22.92	22.86		
	1	49	23.13	23.14	22.89		
	25	0	22.00	21.95	21.98		1
	25	12	22.07	21.83	21.85		
	25	25	22.11	22.12	22.09		
	50	0	22.06	22.08	22.03	1	
16QAM	1	0	21.88	21.83	21.83	≤ 1	1
	1	25	21.89	21.97	21.85		
	1	49	22.02	22.06	21.90		
	25	0	20.83	21.02	20.96	≤ 2	2
	25	12	21.00	20.82	20.93		
	25	25	21.02	21.03	20.99		
	50	0	21.03	21.02	20.96		

Table 8.3.3.3 LTE Conducted Power

LTE Band 26 (Cell) Conducted Power~ 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26715 (816.5 MHz)	26865 (831.5 MHz)	27015 (846.5 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	22.81	22.85	22.83	≤ 1	0
	1	12	22.83	22.88	22.85		
	1	24	22.86	22.90	22.88		
	12	0	21.95	21.96	21.93		1
	12	6	21.93	21.93	21.90		
	12	13	21.96	21.99	21.98		
	25	0	21.92	21.94	21.93		1
	16QAM	1	0	21.80	21.86		21.84
1		12	21.86	21.92	21.91		
1		24	21.88	21.96	21.95		
12		0	20.86	20.88	20.86	≤ 2	2
12		6	20.90	20.83	20.85		
12		13	20.95	20.96	20.95		
25		0	20.96	20.99	20.97		2

Table 8.3.3.4 LTE Conducted Power

LTE Band 26 (Cell) Conducted Power~ 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26705 (815.5 MHz)	26865 (831.5 MHz)	27025 (847.5 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	22.81	22.84	22.85	0	0
	1	7	22.89	22.92	22.91		
	1	14	22.91	22.96	22.95		
	8	0	22.03	22.04	22.01	0-1	1
	8	4	22.03	22.01	21.98		
	8	7	22.04	22.06	22.05		
	15	0	22.01	22.06	22.05	0-1	1
16QAM	1	0	21.83	21.86	21.87	0-1	1
	1	7	21.88	21.93	21.95		
	1	14	21.95	21.97	21.96		
	8	0	20.98	20.96	20.99	0-2	2
	8	4	21.03	20.93	20.96		
	8	7	21.09	21.11	21.10		
	15	0	21.03	21.09	21.06	0-2	2

Table 8.3.3.5 LTE Conducted Power

LTE Band 26 (Cell) Conducted Power~ 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26697 (814.7 MHz)	26865 (831.5 MHz)	27033 (848.3 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	22.85	22.83	22.86	0	0
	1	2	22.91	22.90	22.88		
	1	5	22.93	22.98	22.96		
	3	0	22.87	22.93	22.89	0	0
	3	2	22.84	22.91	22.88		
	3	3	22.90	22.97	22.93		
	6	0	21.85	21.92	21.90	0-1	1
	1	0	21.89	21.87	21.85		
	1	2	21.89	21.91	21.90		
16QAM	1	5	22.01	22.03	22.02	0-1	1
	3	0	21.85	21.90	21.86		
	3	2	21.83	21.81	21.80		
	3	3	21.88	21.91	21.90	0-1	1
	6	0	20.83	20.88	20.85		
						0-2	2

Table 8.3.3.6 LTE Conducted Power

Band & Mode		Modulated Average(dBm)
LTE Band 4	Maximum	24.0
	Nominal	23.5

Table 8.3.4.1 Nominal and Maximum Output Power Spec

4) LTE Band 4 (AWS)

LTE Band 4 (AWS) Conducted Power– 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			20175 (1 732.5 MHz)		
			Conducted Power (dBm)		
QPSK	1	0	23.58	≤ 1	0
	1	50	23.93		
	1	99	23.39		
	50	0	22.65		1
	50	25	22.83		
	50	50	22.57		
	100	0	22.73		
16QAM	1	0	22.56	≤ 1	1
	1	50	22.83		
	1	99	22.48		
	50	0	21.58		≤ 2
	50	25	21.78		
	50	50	21.54		
	100	0	21.58		

Table 8.3.4.2 LTE Conducted Power

Note: LTE B4 (AWS) can not contain three non-overlapping channels of 20 MHz bandwidth.

Per KDB 941225 D05v02r05, 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.

LTE Band 4 (AWS) Conducted Power~15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			20025 (1 717.5 MHz)	20175 (1 732.5 MHz)	20325 (1 747.5 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	23.50	23.67	23.73	≤ 1	0
	1	36	23.56	23.85	23.94		
	1	74	23.48	23.66	23.62		
	36	0	22.68	22.62	22.72		1
	36	18	22.79	22.82	22.89		
	36	37	22.69	22.62	22.69		
	75	0	22.63	22.65	22.68		
16QAM	1	0	22.51	22.58	22.62	≤ 1	1
	1	36	22.53	22.76	22.82		
	1	74	22.42	22.56	22.52		
	36	0	21.56	21.49	21.61	≤ 2	2
	36	18	21.74	21.76	21.78		
	36	37	21.66	21.46	21.53		
	75	0	21.53	21.58	21.68		

Table 8.3.4.3 LTE Conducted Power

LTE Band 4 (AWS) Conducted Power– 10 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)	
			20000 (1 715.0 MHz)	20175 (1 732.5 MHz)	20350 (1 750.0 MHz)			
			Conducted Power (dBm)					
QPSK	1	0	23.38	23.77	23.55	≤ 1	0	
	1	25	23.42	23.88	23.93			
	1	49	23.31	23.72	23.38			
	25	0	22.62	22.54	22.68			
	25	12	22.66	22.68	22.76		1	
	25	25	22.65	22.51	22.67			
	50	0	22.52	22.55	22.61			1
	1	0	22.36	22.76	22.44			
16QAM	1	25	22.57	22.89	22.96	≤ 1	1	
	1	49	22.32	22.75	22.53			
	25	0	21.56	21.60	21.68			
	25	12	21.64	21.62	21.70			
	25	25	21.63	21.59	21.59	≤ 2	2	
	50	0	21.55	21.56	21.73			

Table 8.3.4.4 LTE Conducted Power

LTE Band 4 (AWS) Conducted Power– 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			19975 (1 712.5 MHz)	20175 (1 732.5 MHz)	20375 (1 752.5 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	23.43	23.65	23.67	≤ 1	0
	1	12	23.49	23.74	23.78		
	1	24	23.33	23.64	23.71		
	12	0	22.54	22.57	22.66		
	12	6	22.61	22.62	22.73		1
	12	13	22.51	22.56	22.56		
	25	0	22.52	22.57	22.65		
16QAM	1	0	22.40	22.46	22.52	≤ 1	1
	1	12	22.42	22.62	22.66		
	1	24	22.41	22.45	22.53		
	12	0	21.52	21.49	21.63		
	12	6	21.60	21.68	21.59	≤ 2	2
	12	13	21.48	21.48	21.51		
	25	0	21.54	21.56	21.62		

Table 8.3.4.5 LTE Conducted Power

LTE Band 4 (AWS) Conducted Power~3 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)	
			19965 (1 711.5 MHz)	20175 (1 732.5 MHz)	20385 (1 753.5 MHz)			
			Conducted Power (dBm)					
QPSK	1	0	23.45	23.61	23.55	≤ 1	0	
	1	7	23.51	23.74	23.76			
	1	14	23.37	23.73	23.64			
	8	0	22.64	22.56	22.52		1	
	8	4	22.65	22.72	22.73			
	8	7	22.63	22.53	22.64			
	15	0	22.51	22.54	22.56		1	
	16QAM	1	0	22.40	22.60		22.51	≤ 1
1		7	22.42	22.64	22.69			
1		14	22.31	22.59	22.51			
8		0	21.61	21.62	21.50	≤ 2	2	
8		4	21.66	21.72	21.73			
8		7	21.60	21.61	21.69			
15		0	21.41	21.53	21.52	2		

Table 8.3.4.6 LTE Conducted Power

LTE Band 4 (AWS) Conducted Power- 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			19957 (1 710.7 MHz)	20175 (1 732.5 MHz)	20393 (1 754.3 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	23.37	23.57	23.67	≤ 1	0
	1	2	23.43	23.77	23.82		
	1	5	23.30	23.65	23.68		
	3	0	23.32	23.57	23.67		
	3	2	23.34	23.70	23.71		0
	3	3	23.31	23.56	23.67		
	6	0	22.52	22.54	22.56		
	16QAM	1	0	22.38	22.40		
1		2	22.63	22.68	22.69		
1		5	22.36	22.46	22.51		
3		0	22.48	22.52	22.49		
3		2	22.51	22.61	22.66	1	
3		3	22.47	22.51	22.61		
6		0	21.50	21.55	21.59		
				≤ 2	2		

Table 8.3.4.7 LTE Conducted Power

Band & Mode		Modulated Average[dBm]
LTE Band 25(PCS)	Maximum	24.0
	Nominal	23.5

Table 8.3.5.1 Nominal and Maximum Output Power Spec

5) LTE Band 25 (PCS)

LTE Band 25 (PCS) Conducted Power~ 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26140 (1 860.0 MHz)	26365 (1 882.5 MHz)	26590 (1 905.0 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	23.43	23.77	23.37	≤ 1	0
	1	50	23.64	23.95	23.39		
	1	99	23.42	23.61	23.32		
	50	0	22.58	22.83	22.55		
	50	25	22.46	22.81	22.41		1
	50	50	22.45	22.73	22.34		
	100	0	22.45	22.82	22.41		
	1	0	22.39	22.63	22.41		
16QAM	1	50	22.52	22.76	22.43	≤ 1	1
	1	99	22.38	22.56	22.37		
	50	0	21.56	21.78	21.54		
	50	25	21.44	21.76	21.51		
	50	50	21.43	21.72	21.32	≤ 2	2
	100	0	21.36	21.77	21.41		

Table 8.3.5.2 LTE Conducted Power

LTE Band 25 (PCS) Conducted Power-- 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26115 (1 857.5 MHz)	26365 (1 882.5 MHz)	26615 (1 907.5 MHz)		
Conducted Power (dBm)							
QPSK	1	0	23.43	23.62	23.33	≤ 1	0
	1	36	23.53	23.88	23.36		
	1	74	23.40	23.61	23.32		
	36	0	22.53	22.78	22.52		
	36	18	22.40	22.77	22.35		1
	36	37	22.39	22.73	22.34		
	75	0	22.46	22.77	22.45		
	1	0	22.36	22.46	22.36		
16QAM	1	36	22.42	22.73	22.38	≤ 1	1
	1	74	22.30	22.43	22.31		
	36	0	21.44	21.69	21.42		
	36	18	21.35	21.68	21.32		
	36	37	21.31	21.63	21.30	≤ 2	2
	75	0	21.38	21.77	21.37		

Table 8.3.5.3 LTE Conducted Power

LTE Band 2 (PCS) Conducted Power-- 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26090 (1 855.0 MHz)	26365 (1 882.5 MHz)	26640 (1 910.0 MHz)		
Conducted Power (dBm)							
QPSK	1	0	23.55	23.32	23.45	≤ 1	0
	1	25	23.56	23.94	23.48		
	1	49	23.34	23.84	23.36		
	25	0	22.42	22.81	22.33		
	25	12	22.37	22.71	22.32		1
	25	25	22.33	22.73	22.31		
	50	0	22.35	22.75	22.33		
	1	0	22.48	22.36	22.38		
16QAM	1	25	22.57	22.82	22.51	≤ 1	1
	1	49	22.40	22.68	22.33		
	25	0	21.47	21.72	21.37		
	25	12	21.32	21.66	21.33		
	25	25	21.31	21.65	21.31	≤ 2	2
	50	0	21.45	21.76	21.44		

Table 8.3.5.4 LTE Conducted Power

LTE Band 2 (PCS) Conducted Power~ 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26065 (1 852.5 MHz)	26365 (1 882.5 MHz)	26665 (1 912.5 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	23.31	23.72	23.36	≤ 1	0
	1	12	23.45	23.76	23.40		
	1	24	23.30	23.70	23.31		
	12	0	22.44	22.73	22.40		
	12	6	22.43	22.72	22.36		1
	12	13	22.36	22.71	22.33		
	25	0	22.36	22.81	22.35		
	1	0	22.34	22.59	22.39		
16QAM	1	12	22.38	22.60	22.45	≤ 1	1
	1	24	22.32	22.58	22.34		
	12	0	21.35	21.67	21.43		
	12	6	21.34	21.65	21.34		
	12	13	21.32	21.52	21.31	≤ 2	2
	25	0	21.34	21.63	21.33		

Table 8.3.5.5 LTE Conducted Power

LTE Band 2 (PCS) Conducted Power~3 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)	
			26055 (1 851.5 MHz)	26365 (1 882.5 MHz)	26675 (1 913.5 MHz)			
			Conducted Power (dBm)					
QPSK	1	0	23.30	23.71	23.42	≤ 1	0	
	1	7	23.46	23.82	23.43			
	1	14	23.38	23.70	23.35			
	8	0	22.53	22.74	22.52		1	
	8	4	22.40	22.72	22.39			
	8	7	22.33	22.71	22.32			
	15	0	22.42	22.70	22.41			
	16QAM	1	0	22.36	22.58		22.38	≤ 1
1		7	22.48	22.72	22.39			
1		14	22.34	22.60	22.31			
8		0	21.60	21.88	21.59	≤ 2	2	
8		4	21.46	21.86	21.48			
8		7	21.38	21.85	21.37			
15		0	21.40	21.58	21.46			

Table 8.3.5.6 LTE Conducted Power

LTE Band 2 (PCS) Conducted Power- 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			26047 (1 850.7 MHz)	26365 (1 882.5 MHz)	26683 (1 914.3 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	23.43	23.85	23.42	≤ 1	0
	1	2	23.58	23.89	23.56		
	1	5	23.35	23.83	23.38		
	3	0	23.55	23.80	23.53		0
	3	2	23.43	23.74	23.46		
	3	3	23.41	23.71	23.39		
	6	0	22.46	22.67	22.45		
	16QAM	1	0	22.33	22.73		22.46
1		2	22.53	22.82	22.51		
1		5	22.31	22.72	22.33		
3		0	22.52	22.76	22.50	1	
3		2	22.33	22.75	22.39		
3		3	22.30	22.71	22.31		
6		0	21.44	21.58	21.43		
						≤ 2	2

Table 8.3.5.7 LTE Conducted Power

Band & Mode		Modulated Average(dBm)
LTE Band 7	Maximum	23.5
	Nominal	23.0

Table 8.3.6.1 Nominal and Maximum Output Power Spec

6) LTE Band 7

LTE Band 7 Conducted Power- 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			20850 (2 510.0 MHz)	21100 (2 535.0 MHz)	21350 (2 560.0 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	23.21	23.33	23.36	≤ 1	0
	1	50	23.47	23.42	23.43		
	1	99	23.36	23.35	23.33		
	50	0	22.40	22.35	22.37		1
	50	25	22.36	22.33	22.34		
	50	50	22.34	22.17	22.25		
	100	0	22.33	22.23	22.26		
16QAM	1	0	22.16	22.25	22.21	≤ 1	1
	1	50	22.34	22.35	22.36		
	1	99	22.24	22.23	22.16		
	50	0	21.35	21.30	21.29	≤ 2	2
	50	25	21.34	21.28	21.30		
	50	50	21.32	21.14	21.27		
	100	0	21.32	21.16	21.07		

Table 8.3.6.2 LTE Conducted Power

LTE Band 7 Conducted Power– 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			20825 (2 507.5 MHz)	21100 (2 535.0 MHz)	21375 (2 562.5 MHz)		
Conducted Power (dBm)							
QPSK	1	0	23.31	23.34	23.28	≤ 1	0
	1	36	23.48	23.42	23.45		
	1	74	23.27	23.31	23.40		
	36	0	22.37	22.30	22.33		
	36	18	22.35	22.29	22.30		
	36	37	22.32	22.20	22.20		
	75	0	22.28	22.24	22.26	1	
	16QAM	1	0	22.26	22.23	22.14	≤ 1
1		36	22.39	22.32	22.33		
1		74	22.18	22.21	22.30		
36		0	21.29	21.24	21.26	≤ 2	2
36		18	21.27	21.14	21.15		
36		37	21.23	21.14	21.12		
75		0	21.28	21.26	21.28		

Table 8.3.6.3 LTE Conducted Power

LTE Band 7 Conducted Power– 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			20800 (2 505.0 MHz)	21100 (2 535.0 MHz)	21400 (2 565.0 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	23.25	23.25	23.19	≤ 1	0
	1	25	23.41	23.39	23.40		
	1	49	23.33	23.37	23.39		
	25	0	22.39	22.31	22.38		1
	25	12	22.35	22.28	22.33		
	25	25	22.34	22.29	22.26		
	50	0	22.32	22.30	22.31		
16QAM	1	0	22.21	22.19	22.13	≤ 1	1
	1	25	22.31	22.28	22.21		
	1	49	22.26	22.25	22.20		
	25	0	21.33	21.32	21.32	≤ 2	2
	25	12	21.30	21.30	21.24		
	25	25	21.29	21.11	21.22		
	50	0	21.31	21.22	21.24		

Table 8.3.6.4 LTE Conducted Power

LTE Band 7 Conducted Power~ 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed Per 3GPP(dB)	MPR (dB)
			20775 (2 502.5 MHz)	21100 (2 535.0 MHz)	21425 (2 567.5 MHz)		
			Conducted Power (dBm)				
QPSK	1	0	23.20	23.15	23.11	≤ 1	0
	1	12	23.45	23.25	23.44		
	1	24	23.38	23.23	23.36		
	12	0	22.36	22.24	22.34		1
	12	6	22.28	22.18	22.29		
	12	13	22.27	22.16	22.25		
	25	0	22.29	22.24	22.28		
16QAM	1	0	22.16	22.08	22.16	≤ 1	1
	1	12	22.32	22.19	22.31		
	1	24	22.26	22.12	22.26		
	12	0	21.41	21.21	21.27	≤ 2	2
	12	6	21.35	21.19	21.25		
	12	13	21.30	21.16	21.24		
	25	0	21.26	21.22	21.23		

Table 8.3.6.5 LTE Conducted Power

Band & Mode		Modulated Average[dBm]
LTE Band 41	Maximum	29.5
	Nominal	29.0

Table 8.3.7.1 Nominal and Maximum Output Power Spec

7) LTE Band 41

LTE Band 41 Conducted Power- 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 (2 506.0 MHz)	40185 (2 549.5 MHz)	40620 (2 593.0 MHz)	41055 (2 636.5 MHz)	41490 (2 680.0 MHz)		
			Conducted Power (dBm)						
QPSK	1	0	19.82	19.93	20.11	20.06	20.07	≤ 1	0
	1	50	19.91	19.96	20.20	20.13	20.08		
	1	99	19.85	19.87	20.13	20.09	19.95		
	50	0	18.86	18.88	19.11	18.92	18.95		1
	50	25	18.97	18.90	19.07	19.00	19.06		
	50	50	18.98	19.02	19.18	19.16	19.10		
	100	0	18.87	18.90	19.13	19.11	19.09		
	16QAM	1	0	18.88	18.89	19.05	18.96		18.90
1		50	18.96	18.97	19.08	18.99	18.92		
1		99	18.93	18.91	19.06	18.98	18.91		
50		0	17.81	17.82	18.09	18.03	18.08	≤ 2	2
50		25	17.82	17.89	18.14	18.02	18.10		
50		50	18.03	18.04	18.20	18.18	18.13		
100		0	17.83	17.85	18.13	18.12	18.11		2

Table 8.3.7.2 LTE Conducted Power

LTE Band 41 Conducted Power-- 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)
			39725 (2 503.5 MHz)	40173 (2 548.3 MHz)	40620 (2 593.0 MHz)	41068 (2 637.8 MHz)	41515 (2 682.5 MHz)		
			Conducted Power (dBm)						
QPSK	1	0	19.84	19.86	20.12	20.03	19.97	≤ 1	0
	1	36	20.01	20.06	20.16	20.09	20.08		
	1	74	19.86	19.90	20.13	20.08	20.06		
	36	0	18.81	18.83	19.06	19.02	18.95		1
	36	18	18.82	18.86	19.10	19.04	18.98		
	36	37	18.88	19.01	19.16	19.09	19.07		
	75	0	18.81	18.84	19.09	19.03	18.99		1
16QAM	1	0	18.81	18.84	19.03	18.84	18.83	≤ 1	1
	1	36	18.87	18.88	19.05	19.02	18.89		
	1	74	18.85	18.87	19.03	19.00	18.87		
	36	0	17.85	17.92	17.99	18.03	18.02	≤ 2	2
	36	18	17.86	17.88	18.01	18.04	18.04		
	36	37	17.87	18.03	18.07	18.08	18.06		
	75	0	17.84	17.88	18.14	18.09	18.08		2

Table 8.3.7.3 LTE Conducted Power

LTE Band 41 Conducted Power- 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)
			39700 (2 501.0 MHz)	40160 (2 547.0 MHz)	40620 (2 593.0 MHz)	41080 (2 639.0 MHz)	41640 (2 685.0 MHz)		
			Conducted Power (dBm)						
QPSK	1	0	19.83	19.82	20.16	20.15	20.02	≤ 1	0
	1	25	20.04	20.07	20.18	20.17	20.14		
	1	49	19.92	19.95	20.17	20.13	20.07		
	25	0	18.84	18.90	19.06	19.02	18.98		1
	25	12	18.89	18.93	19.12	19.09	18.95		
	25	25	18.90	18.96	19.14	19.10	19.00		
	50	0	18.81	18.85	19.11	19.08	19.02		1
16QAM	1	0	18.81	18.81	19.04	19.03	19.00	≤ 1	1
	1	25	18.93	19.02	19.09	19.08	19.09		
	1	49	18.83	18.86	19.06	19.05	19.08		
	25	0	17.94	17.92	18.23	18.11	17.93	≤ 2	2
	25	12	18.00	18.02	18.24	18.16	17.95		
	25	25	18.03	18.05	18.29	18.23	17.97		
	50	0	17.80	17.82	18.14	18.10	18.15		2

Table 8.3.7.4 LTE Conducted Power

LTE Band 41 Conducted Power- 5 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)
			39675 (2 498.5 MHz)	40148 (2 545.8 MHz)	40620 (2 593.0 MHz)	41093 (2 640.3 MHz)	41565 (2 687.5 MHz)		
			Conducted Power (dBm)						
QPSK	1	0	19.81	19.88	19.95	19.94	19.93	≤ 1	0
	1	12	19.88	19.93	20.04	20.01	19.97		
	1	24	19.82	19.90	20.00	19.96	19.96		
	12	0	18.81	18.83	19.01	19.01	18.92		1
	12	6	18.84	18.85	19.06	19.02	18.95		
	12	13	18.86	18.91	19.11	19.08	18.97		
	25	0	18.83	18.90	19.04	19.03	18.98		1
16QAM	1	0	18.81	18.82	18.85	18.84	18.83	≤ 1	1
	1	12	18.82	18.85	18.97	18.90	18.87		
	1	24	18.80	18.83	18.86	18.87	18.86		
	12	0	17.81	17.84	18.18	18.12	17.82	≤ 2	2
	12	6	17.80	17.82	17.91	18.13	17.89		
	12	13	17.82	17.85	18.19	18.16	17.90		
	25	0	18.01	18.03	18.16	18.13	18.06		2

Table 8.3.7.5 LTE Conducted Power

8.4 WLAN Nominal and Maximum Output Power Spec and Conducted Powers

Band (GHz)	Mode	Ch	Modulated Average[dBm]					
			Ant.1		Ant.2		MIMO(CDD/SDM)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
2.4	802.11b	1-11	16.0	15.0	16.0	15.0	19.0	18.0
	802.11g/n(HT-20)/ac(VHT-20)	1-11	12.0	11.0	12.0	11.0	15.0	14.0
	802.11n(HT-40)/ac(VHT-40)	1-9	12.0	11.0	12.0	11.0	15.0	14.0
		10-11	10.0	9.0	10.0	9.0	13.0	12.0

Table 8.4.1 Nominal and Maximum Output Power Spec

Mode	Freq. (MHz)	Channel	IEEE 802.11 (2.4 GHz) Conducted Power[dBm]			
			Ant.1	Ant.2	MIMO(CDD)	MIMO(SDM)
802.11b	2 412	1	15.43	15.21	18.33	-
	2 437	6	15.50	15.81	18.67	-
	2 462	11	15.51	15.71	18.62	-
802.11g	2 412	1	10.76	10.98	13.88	-
	2 437	6	10.95	11.15	14.06	-
	2 462	11	11.34	10.99	14.18	-
802.11n (HT-20)	2 412	1	10.63	10.93	13.79	13.89
	2 437	6	10.75	11.08	13.93	14.09
	2 462	11	10.36	10.18	13.28	13.27
802.11ac (VHT-20)	2 412	1	10.62	10.77	13.71	13.64
	2 437	6	10.71	10.85	13.79	13.95
	2 462	11	10.40	10.23	13.33	13.33
802.11n (HT-40)	2 422	3	10.23	10.57	13.41	13.32
	2 437	6	11.13	11.22	14.19	14.12
	2 452	9	9.71	9.69	12.71	12.72
802.11ac (VHT-40)	2 422	3	10.34	10.27	13.32	13.32
	2 437	6	11.03	11.22	14.14	14.09
	2 452	9	9.51	9.49	12.51	12.50

Table 8.4.2 IEEE 802.11 Average RF Power

Band (GHz)	Mode	Ch	Modulated Average[dBm]					
			Ant.1		Ant.2		MIMO(CDD/SDM)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
5 (UNII)	802.11a	36-165	14.0	13.0	14.0	13.0	17.0	16.0
	802.11n/ac (20MHz/40MHz)	36-165	13.0	12.0	13.0	12.0	16.0	15.0
	802.11ac (80MHz)	42-155	12.0	11.0	12.0	11.0	15.0	14.0

Table 8.4.3 Nominal and Maximum Output Power Spec

Mode	Freq. (MHz)	Channel	IEEE 802.11a (5 GHz) Conducted Power[dBm]			
			Ant.1	Ant.2	MIMO(CDD)	MIMO(SDM)
802.11a	5 180	36	13.18	13.32	16.26	-
	5 200	40	12.77	13.01	15.90	-
	5 220	44	12.92	13.39	16.17	-
	5 240	48	12.90	13.34	16.14	-
	5 260	52	13.19	13.15	16.18	-
	5 280	56	12.75	13.25	16.02	-
	5 300	60	13.05	13.00	16.04	-
	5 320	64	12.72	12.44	15.59	-
	5 500	100	13.32	13.10	16.22	-
	5 600	120	12.94	13.08	16.02	-
	5 660	132	13.18	13.12	16.16	-
	5 720	144	13.08	13.01	16.06	-
	5 745	149	13.00	13.28	16.15	-
	5 785	157	13.10	13.29	16.21	-
	5 825	165	13.17	13.20	16.20	-

Table 8.4.4 IEEE 802.11a Average RF Power

Mode	Freq. (MHz)	Channel	IEEE 802.11n HT20 (5 GHz) Conducted Power[dBm]			
			Ant.1	Ant.2	MIMO(CDD)	MIMO(SDM)
802.11n (HT-20)	5 180	36	11.63	12.14	14.90	14.76
	5 200	40	11.67	12.10	14.90	14.86
	5 220	44	11.66	12.13	14.91	14.95
	5 240	48	11.52	12.20	14.88	14.74
	5 260	52	11.76	11.76	14.77	14.70
	5 280	56	11.62	12.11	14.88	14.69
	5 300	60	11.50	11.50	14.51	14.40
	5 320	64	11.41	11.35	14.39	14.33
	5 500	100	11.75	11.48	14.63	14.40
	5 600	120	11.34	11.38	14.37	14.60
	5 660	132	12.15	11.93	15.05	14.83
	5 720	144	12.07	11.85	14.97	14.97
	5 745	149	11.95	12.10	15.04	14.98
	5 785	157	11.97	12.25	15.12	15.01
	5 825	165	12.26	12.03	15.16	15.14

Table 8.4.5 IEEE 802.11n HT20 Average RF Power

Mode	Freq. (MHz)	Channel	IEEE 802.11ac VHT20 (5 GHz) Conducted Power[dBm]			
			Ant.1	Ant.2	MIMO(CDD)	MIMO(SDM)
802.11ac (VHT-20)	5 180	36	11.74	12.08	14.92	14.83
	5 200	40	11.83	11.87	14.86	15.01
	5 220	44	11.61	12.03	14.84	14.85
	5 240	48	11.57	12.16	14.89	14.98
	5 260	52	11.81	11.92	14.88	14.81
	5 280	56	11.48	12.03	14.77	14.97
	5 300	60	11.44	11.52	14.49	14.72
	5 320	64	11.48	11.47	14.49	14.39
	5 500	100	11.84	11.55	14.71	14.80
	5 600	120	11.56	11.39	14.49	14.46
	5 660	132	12.13	11.97	15.06	15.01
	5 720	144	11.99	11.89	14.95	14.93
	5 745	149	11.98	12.07	15.04	15.11
	5 785	157	12.05	12.19	15.13	15.13
	5 825	165	12.21	12.13	15.18	14.15

Table 8.4.6 IEEE 802.11ac VHT20 Average RF Power

Mode	Freq. (MHz)	Channel	IEEE 802.11n HT40 (5 GHz) Conducted Power[dBm]			
			Ant.1	Ant.2	MIMO(CDD)	MIMO(SDM)
802.11n (HT-40)	5 190	38	12.12	11.89	15.02	14.95
	5 230	46	11.89	11.76	14.84	15.06
	5 270	54	12.12	11.95	15.05	15.04
	5 310	62	11.84	12.05	14.96	14.93
	5 510	102	12.01	12.24	15.14	14.88
	5 590	118	12.04	12.13	15.10	15.09
	5 670	134	12.34	12.24	15.30	15.21
	5 710	142	11.89	12.02	14.97	15.01
	5 755	151	12.34	12.37	15.37	15.20
	5 795	159	12.15	12.53	15.35	15.15

Table 8.4.7 IEEE 802.11n HT40 Average RF Power

Mode	Freq. (MHz)	Channel	IEEE 802.11ac VHT40 (5 GHz) Conducted Power[dBm]			
			Ant.1	Ant.2	MIMO(CDD)	MIMO(SDM)
802.11ac (VHT-40)	5 190	38	11.91	12.02	14.98	15.11
	5 230	46	11.84	11.98	14.92	14.83
	5 270	54	12.13	12.03	15.09	15.02
	5 310	62	11.66	11.79	14.74	14.82
	5 510	102	11.91	11.95	14.94	14.92
	5 590	118	12.12	12.05	15.10	15.05
	5 670	134	12.24	12.38	15.32	15.21
	5 710	142	11.74	11.98	14.87	14.95
	5 755	151	12.18	12.24	15.22	15.10
	5 795	159	12.05	12.14	15.11	15.21

Table 8.4.8 IEEE 802.11ac VHT40 Average RF Power

Mode	Freq. (MHz)	Channel	IEEE 802.11ac VHT80 (5 GHz) Conducted Power[dBm]			
			Ant.1	Ant.2	MIMO(CDD)	MIMO(SDM)
802.11ac (VHT-80)	5 210	42	11.08	11.38	14.24	14.33
	5 290	58	10.95	11.05	14.01	14.41
	5 530	106	11.19	11.24	14.23	14.04
	5 690	138	11.00	11.23	14.13	14.01
	5 775	155	11.39	11.52	14.47	14.44

Table 8.4.9 IEEE 802.11ac VHT80 Average RF Power

Justification for reduced test configurations for WIFI channels per KDB Publication 248227 D01v02r02:

- 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.
- Output Power and SAR is not required for 802.11 g/n HT20/ac VHT20 channels when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjust SAR is ≤ 1.2 W/kg.
- The underlined data rate and channel above were tested for SAR.

The average output powers of this device were tested by below configuration.

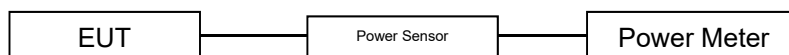


Figure 8.4 Power Measurement Setup

8.5 Bluetooth Conducted Powers

Burst Modulated Average[dBm]		
Bluetooth 1 Mbps	Maximum	8.0
	Nominal	7.0
Bluetooth 2 Mbps	Maximum	5.0
	Nominal	4.0
Bluetooth 3 Mbps	Maximum	5.0
	Nominal	4.0
Bluetooth LE	Maximum	-4.0
	Nominal	-5.0

Table 8.5.1 Nominal and Maximum Output Power Spec (Burst)

Frame Modulated Average[dBm]		
Bluetooth 1 Mbps	Maximum	6.85
	Nominal	5.85
Bluetooth 2 Mbps	Maximum	3.85
	Nominal	2.85
Bluetooth 3 Mbps	Maximum	3.85
	Nominal	2.85
Bluetooth (LE / 1Mbps)	Maximum	-4.67
	Nominal	-5.67
Bluetooth (LE / 2Mbps)	Maximum	-6.38
	Nominal	-7.38

Table 8.5.2 Nominal and Maximum Output Power Spec (Frame)

Channel	Frequency (MHz)	Burst AVG Output Power (1Mbps) (dBm)	Frame AVG Output Power (1Mbps) (dBm)	Burst AVG Output Power (2Mbps) (dBm)	Frame AVG Output Power (2Mbps) (dBm)	Burst AVG Output Power (3Mbps) (dBm)	Frame AVG Output Power (3Mbps) (dBm)
Low	2 402	6.67	5.52	3.36	2.21	3.35	2.20
Mid	2 441	7.12	5.97	4.01	2.86	4.00	2.85
High	2 480	6.57	5.42	3.55	2.40	3.53	2.38

Table 8.5.3 Bluetooth Burst and Frame Average RF Power

Channel	Frequency (MHz)	Burst AVG Output Power(LE / 1Mbps) (dBm)	Frame AVG Output Power(LE / 1Mbps) (dBm)	Burst AVG Output Power(LE / 2Mbps) (dBm)	Frame AVG Output Power(LE / 2Mbps) (dBm)
Low	2 402	-5.47	-6.14	-5.48	-7.86
Mid	2 440	-5.62	-6.29	-5.63	-8.01
High	2 480	-5.05	-5.72	-5.11	-7.49

Table 8.5.4 Bluetooth LE Burst and Frame Average RF Power

Bluetooth Conducted Powers procedures

1. Bluetooth (BDR, EDR)

- 1) Enter DUT mode in EUT and operate it.
When it operating, The EUT is transmitting at maximum power level and duty cycle fixed.
- 2) Instruments and EUT were connected like Figure 8.5.1(A).
- 3) The maximum output powers of BDR(1 Mbps), EDR(2, 3 Mbps) and each frequency were set by a Bluetooth Tester.
- 4) Power levels were measured by a Power Meter.

2. Bluetooth (LE)

- 1) Enter LE mode in EUT and operate it.
When it operating, The EUT is transmitting at maximum power level and duty cycle fixed.
- 2) Instruments and EUT were connected like Figure 8.5.1(B).
- 3) The average conducted output powers of LE and each frequency can measurement according to setting program in EUT.
- 4) Power levels were measured by a Power Meter.

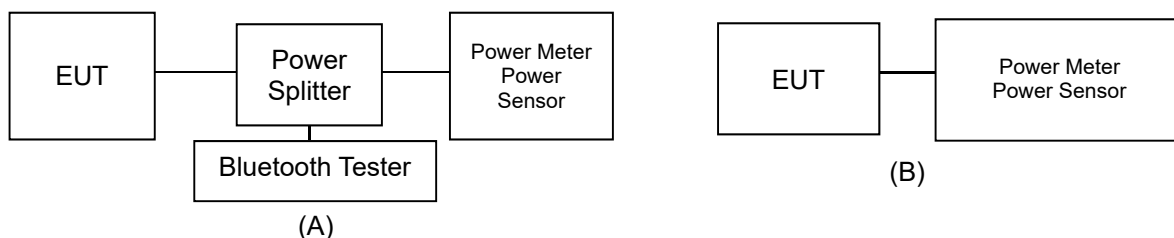


Figure 8.5.1 Average Power Measurement Setup

- Bluetooth Transmission Plot

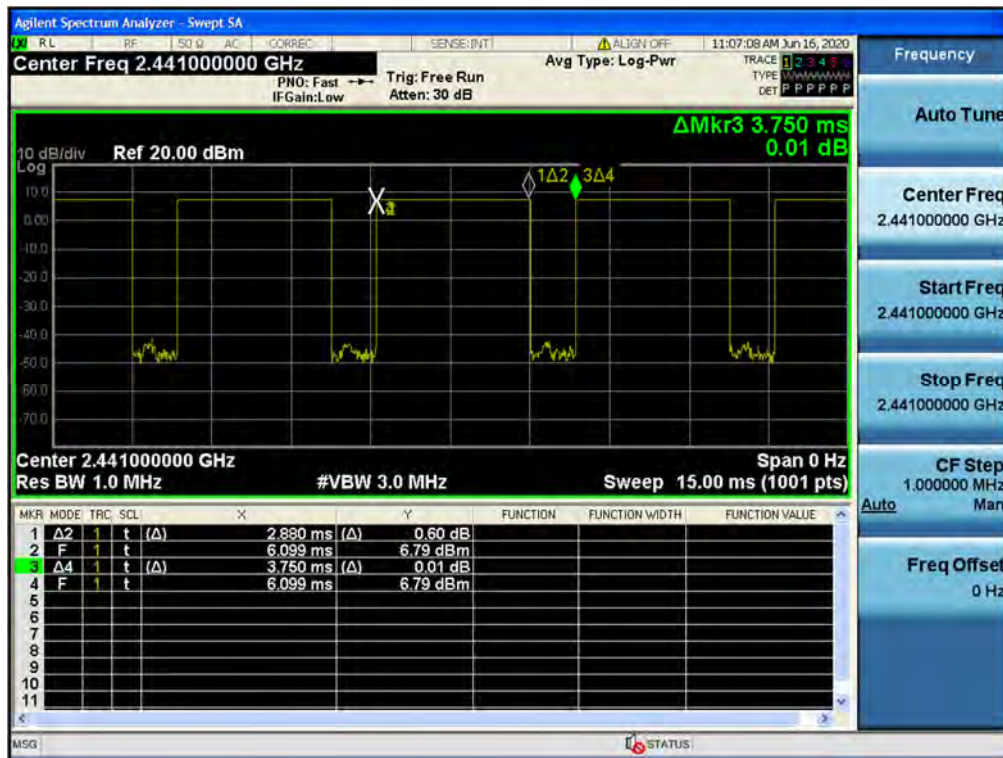


Figure 8.5.2 Bluetooth Transmission Plot

- Bluetooth Duty Cycle Calculation

$$\text{Duty Cycle} = \text{Pulse/Period} * 100\% = (2.880/3.750) * 100 = 76.8\%$$

9. SYSTEM VERIFICATION

9.1 Tissue Verification

MEASURED TISSUE PARAMETERS										
Date(s)	Tissue Type	Ambient Temp.[°C]	Liquid Temp.[°C]	Measured Frequency [MHz]	Target Dielectric Constant, ϵ_r	Target Conductivity, σ (S/m)	Measured Dielectric Constant, ϵ_r	Measured Conductivity, σ (S/m)	Er Deviation [%]	σ Deviation [%]
Jun. 1. 2020	750 Head	21.6	21.8	707.5	42.129	0.887	42.748	0.856	1.47	-3.49
				750.0	41.900	0.890	42.211	0.891	0.74	0.11
				782.0	41.749	0.894	41.713	0.923	-0.09	3.24
May. 29. 2020	835 Head	20.3	20.5	821.5	41.566	0.898	43.061	0.911	3.60	1.45
				824.2	41.552	0.899	43.033	0.913	3.56	1.56
				826.4	41.542	0.899	43.011	0.915	3.54	1.78
				829.0	41.528	0.899	42.981	0.917	3.50	2.00
				831.5	41.519	0.900	42.957	0.919	3.46	2.11
				835.0	41.500	0.900	42.918	0.922	3.42	2.44
				836.5	41.500	0.901	42.899	0.923	3.37	2.44
				836.6	41.500	0.901	42.898	0.923	3.37	2.44
				841.5	41.500	0.906	42.841	0.927	3.23	2.32
				844.0	41.500	0.910	42.816	0.929	3.17	2.09
				846.6	41.500	0.912	42.780	0.931	3.08	2.08
				848.8	41.500	0.914	42.754	0.933	3.02	2.08
Jun. 1. 2020	1800 Head	21.3	21.5	1712.4	40.126	1.350	39.279	1.371	-2.11	1.56
				1720.0	40.114	1.354	39.262	1.375	-2.12	1.55
				1732.4	40.097	1.361	39.227	1.383	-2.17	1.62
				1732.5	40.097	1.361	39.227	1.383	-2.17	1.62
				1745.0	40.079	1.369	39.205	1.390	-2.18	1.53
				1752.6	40.069	1.373	39.191	1.395	-2.19	1.60
				1770.0	40.043	1.383	39.148	1.407	-2.24	1.74
				1800.0	40.000	1.400	39.097	1.428	-2.26	2.00
May. 29. 2020	1900 Head	21.7	21.8	1850.2	40.000	1.400	40.961	1.373	2.40	-1.93
				1852.4	40.000	1.400	40.960	1.377	2.40	-1.64
				1860.0	40.000	1.400	40.913	1.381	2.28	-1.36
				1880.0	40.000	1.400	40.844	1.398	2.11	-0.14
				1882.5	40.000	1.400	40.838	1.400	2.10	0.00
				1900.0	40.000	1.400	40.725	1.412	1.81	0.86
				1905.0	40.000	1.400	40.723	1.417	1.81	1.21
				1907.6	40.000	1.400	40.721	1.421	1.80	1.50
Jun. 3. 2020	2450 Head	21.4	21.2	1909.8	40.000	1.400	40.718	1.423	1.80	1.64
				2402.0	39.282	1.757	37.952	1.743	-3.39	-0.80
				2412.0	39.265	1.766	37.925	1.753	-3.41	-0.74
				2437.0	39.222	1.788	37.857	1.782	-3.48	-0.34
				2441.0	39.215	1.792	37.843	1.786	-3.50	-0.33
				2450.0	39.200	1.800	37.814	1.797	-3.54	-0.17
				2462.0	39.184	1.813	37.786	1.810	-3.57	-0.17
				2467.0	39.177	1.818	37.771	1.815	-3.59	-0.17
Jun. 2. 2020	2600 Head	21.7	21.8	2472.0	39.171	1.823	37.756	1.820	-3.61	-0.16
				2480.0	39.160	1.832	37.729	1.829	-3.65	-0.16
				2506.0	39.125	1.860	40.017	1.844	2.28	-0.86
				2510.0	39.120	1.864	40.003	1.848	2.26	-0.86
				2535.0	39.087	1.891	39.931	1.877	2.16	-0.74
				2549.5	39.068	1.906	39.885	1.892	2.09	-0.73
				2560.0	39.053	1.917	39.846	1.903	2.03	-0.73
				2593.0	39.009	1.953	39.729	1.940	1.85	-0.67
Aug. 6. 2020	5200 Head	21.7	21.5	2600.0	39.000	1.960	39.704	1.948	1.81	-0.61
				2636.5	38.955	2.000	39.587	1.995	1.62	-0.25
				2680.0	38.900	2.048	39.446	2.042	1.40	-0.29
				5180.0	36.020	4.639	35.128	4.582	-2.48	-1.23
				5190.0	36.010	4.650	35.106	4.592	-2.51	-1.25
				5200.0	36.000	4.660	35.083	4.605	-2.55	-1.18
				5210.0	35.990	4.670	35.070	4.617	-2.56	-1.13
				5220.0	35.980	4.680	35.057	4.627	-2.57	-1.13
Jun. 2. 2020	5300 Head	21.3	21.5	5230.0	35.970	4.690	35.038	4.636	-2.59	-1.15
				5240.0	35.960	4.700	35.017	4.647	-2.62	-1.13
				5260.0	35.940	4.720	35.718	4.837	-0.62	2.48
				5270.0	35.930	4.730	35.697	4.851	-0.65	2.56
				5280.0	35.920	4.740	35.686	4.864	-0.65	2.62
				5290.0	35.910	4.750	35.682	4.873	-0.63	2.59
				5300.0	35.900	4.760	35.661	4.881	-0.67	2.54
				5310.0	35.890	4.770	35.631	4.893	-0.72	2.58
Jun. 3. 2020	5600 Head	21.4	21.7	5320.0	35.880	4.780	35.609	4.907	-0.76	2.66
				5500.0	35.650	4.965	36.036	4.922	1.08	-0.87
				5510.0	35.635	4.976	36.030	4.930	1.11	-0.92
				5530.0	35.605	4.997	35.985	4.950	1.07	-0.94
				5550.0	35.575	5.018	35.962	4.974	1.09	-0.88
				5580.0	35.530	5.049	35.916	5.004	1.09	-0.89
				5600.0	35.500	5.070	35.883	5.029	1.08	-0.81
				5660.0	35.440	5.130	35.807	5.094	1.04	-0.70
Jun. 4. 2020	5800 Head	21.1	21.1	5670.0	35.430	5.140	35.795	5.103	1.03	-0.72
				5690.0	35.410	5.160	35.757	5.124	0.98	-0.70
				5710.0	35.390	5.180	35.722	5.150	0.94	-0.58
				5720.0	35.380	5.190	35.720	5.161	0.96	-0.56
				5745.0	35.355	5.215	34.920	5.315	-1.23	1.92
				5755.0	35.345	5.225	34.899	5.329	-1.26	1.99
				5775.0	35.325	5.245	34.872	5.351	-1.28	2.02
				5785.0	35.315	5.255	34.851	5.361	-1.31	2.02
				5795.0	35.305	5.265	34.829	5.374	-1.35	2.07
				5800.0	35.300	5.270	34.819	5.380	-1.36	2.09
				5825.0	35.275	5.296	34.782	5.415	-1.40	2.25

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 865664 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.

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the sample which was placed in a hermetic container. Trapped air bubbles beneath the flange were removed by placing the probe at a slight angle.
- 3) The complex admittance with respect to the probe aperture was measured.
- 4) The complex relative permittivity ϵ_r for example from the below equation (Pournazeri and Mousa):
$$\gamma = \frac{j2\omega\epsilon_0\epsilon_r}{\ln(b/a)} \int_0^1 \int_0^{2\pi} \cos\theta \frac{\exp\left[-j\omega\epsilon_0\epsilon_r\sqrt{1-\frac{a^2}{r^2}}\right]}{r} d\theta dr$$
where γ is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively, $r = \sqrt{r'^2 + z'^2}$, ω is the angular frequency, and $j = \sqrt{-1}$.

9.2 Test System Verification

Prior to assessment, the system is verified to the $\pm 10\%$ of the specifications at using the SAR Dipole kit(s). (Graphic Plots Attached)

Table 9.2.1 System Verification Results (1g)

SYSTEM DIPOLE VERIFICATION TARGET & MEASURED												
SAR System #	Freq. [MHz]	SAR Dipole kits	Date(s)	Tissue Type	Ambient Temp. [°C]	Liquid Temp. [°C]	Probe S/N	Input Power (mW)	1 W Target SAR _{1g} (W/kg)	Measured SAR _{1g} (W/kg)	1 W Normalized SAR _{1g} (W/kg)	Deviation [%]
D	750	D750V3, SN:1049	Jun. 1. 2020	Head	21.6	21.8	3933	250	8.47	2.06	8.24	-2.72
D	835	D835V2, SN:464	May. 29. 2020	Head	20.3	20.5	3933	250	9.59	2.43	9.72	1.36
C	1 800	D1800V2, SN:2d202	Jun. 1. 2020	Head	21.3	21.5	3328	100	39.6	3.83	38.30	-3.28
C	1 900	D1900V2, SN:5d176	May. 29. 2020	Head	21.7	21.8	3328	100	39.3	4.01	40.10	2.04
C	2 450	D2450V2, SN: 726	Jun. 3. 2020	Head	21.4	21.2	3328	100	51.2	5.13	51.30	0.20
C	2 600	D2600V2, SN: 1103	Jun. 2. 2020	Head	21.7	21.8	3328	100	57.8	5.72	57.20	-1.04
D	5 200	D5GHZV2, SN:1212	Aug. 6. 2020	Head	21.7	21.5	3933	100	80.2	7.72	77.20	-3.74
D	5 300	D5GHZV2, SN:1212	Jun. 2. 2020	Head	21.3	21.5	3933	100	81.3	8.29	82.90	1.97
D	5 500	D5GHZV2, SN:1212	Jun. 3. 2020	Head	21.4	21.7	3933	100	86.3	8.42	84.20	-2.43
D	5 600	D5GHZV2, SN:1212	Jun. 3. 2020	Head	21.4	21.7	3933	100	83.3	8.56	85.60	2.76
D	5 800	D5GHZV2, SN:1212	Jun. 4. 2020	Head	21.1	21.1	3933	100	81.5	8.24	82.40	1.10

Table 9.2.2 System Verification Results (10g)

SYSTEM DIPOLE VERIFICATION TARGET & MEASURED												
SAR System #	Freq. [MHz]	SAR Dipole kits	Date(s)	Tissue Type	Ambient Temp. [°C]	Liquid Temp. [°C]	Probe S/N	Input Power (mW)	1 W Target SAR _{10g} (W/kg)	Measured SAR _{10g} (W/kg)	1 W Normalized SAR _{10g} (W/kg)	Deviation [%]
D	750	D750V3, SN:1049	Jun. 1. 2020	Head	21.6	21.8	3933	250	5.58	1.35	5.40	-3.23
D	835	D835V2, SN:464	May. 29. 2020	Head	20.3	20.5	3933	250	6.21	1.57	6.28	1.13
C	1 800	D1800V2, SN:2d202	Jun. 1. 2020	Head	21.3	21.5	3328	100	20.7	2.03	20.30	-1.93
C	1 900	D1900V2, SN:5d176	May. 29. 2020	Head	21.7	21.8	3328	100	20.4	2.13	21.30	4.41
C	2 450	D2450V2, SN: 726	Jun. 3. 2020	Head	21.4	21.2	3328	100	24.0	2.39	23.90	-0.42
C	2 600	D2600V2, SN: 1103	Jun. 2. 2020	Head	21.7	21.8	3328	100	25.7	2.61	26.10	1.56
D	5 300	D5GHZV2, SN:1212	Jun. 2. 2020	Head	21.3	21.5	3933	100	23.0	2.32	23.20	0.87
D	5 500	D5GHZV2, SN:1212	Jun. 3. 2020	Head	21.4	21.7	3933	100	24.2	2.37	23.70	-2.07
D	5 600	D5GHZV2, SN:1212	Jun. 3. 2020	Head	21.4	21.7	3933	100	23.6	2.40	24.00	1.69
D	5 800	D5GHZV2, SN:1212	Jun. 4. 2020	Head	21.1	21.1	3933	100	22.7	2.29	22.90	0.88

Note1 : System Verification was measured with input 250 mW, 100 mW and normalized to 1W.

Note2 : Full system validation status and results can be found in Appendix D.

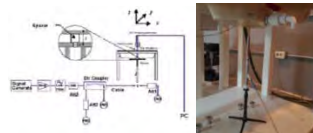


Figure 9.1 Dipole Verification Test Setup Diagram & Photo

10. SAR TEST RESULTS

10.1 Head SAR Results

Table 10.1.1 GPRS/WCDMA Head SAR

MEASUREMENT RESULTS														
FREQUENCY		Mode/ Band	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	# of Time Slots	Duty Cycle	1g SAR (W/kg)	Scaling Factor	1g Scaled SAR (W/kg)	Plots #
MHz	Ch													
836.6	190	GSM850	GPRS	28.00	27.90	0.050	10 mm [Front]	FCC #1	4	1:2.075	0.398	1.023	0.407	A1
836.6	190	GSM850	GPRS	28.00	27.90	0.070	10 mm [Front]	FCC #1	4	1:2.075	0.372	1.023	0.381	
1880.0	661	PCS1900	GPRS	27.50	26.23	-0.030	10 mm [Front]	FCC #1	4	1:2.075	0.375	1.340	0.503	A2
1880.0	661	PCS1900	GPRS	27.50	26.23	0.140	10 mm [Front]	FCC #1	4	1:2.075	0.365	1.340	0.489	
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.040	10 mm [Front]	FCC #1	N/A	1:1	0.330	1.175	0.388	A3
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.030	10 mm [Front]	FCC #1	N/A	1:1	0.328	1.175	0.385	
1732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.000	10 mm [Front]	FCC #1	N/A	1:1	0.494	1.130	0.558	A4
1732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.060	10 mm [Front]	FCC #1	N/A	1:1	0.465	1.130	0.525	
1880.0	9400	WCDMA 1900	RMC	23.60	22.94	-0.030	10 mm [Front]	FCC #1	N/A	1:1	0.437	1.164	0.509	A5
1880.0	9400	WCDMA 1900	RMC	23.60	22.94	-0.170	10 mm [Front]	FCC #1	N/A	1:1	0.435	1.164	0.506	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Head 1.6 W/kg (mW/g) averaged over 1 gram						

Note: The front with 10 mm spacing configuration was tested since only the front is 10 mm spacing to human head in normal operation of this device.

Table 10.1.2 LTE Head SAR

MEASUREMENT RESULTS																	
FREQUENCY		Mode/ Band	BW [MHz]	Max Allowed Power [dBm]	Cond. PWR [dBm]	Drift Power [dB]	MPR	Position	Device Serial Number	Mod.	RB Size	RB Offs.	Duty Cycle	1g SAR (W/kg)	Scaling Factor	1g Scaled SAR (W/kg)	Plots #
MHz	Ch																
707.5	23095	LTE B12	10	23.50	23.36	-0.020	0	10 mm [Front]	FCC #1	QPSK	1	25	1:1	0.179	1.033	0.185	A6
707.5	23095	LTE B12	10	22.50	22.26	0.060	1	10 mm [Front]	FCC #1	QPSK	25	12	1:1	0.102	1.057	0.108	
707.5	23095	LTE B12	10	23.50	23.36	0.020	0	10 mm [Front]	FCC #1	QPSK	1	25	1:1	0.173	1.033	0.179	
782.0	23230	LTE B13	10	23.50	23.37	0.090	0	10 mm [Front]	FCC #1	QPSK	1	25	1:1	0.294	1.030	0.303	A7
782.0	23230	LTE B13	10	22.50	22.18	0.160	1	10 mm [Front]	FCC #1	QPSK	25	12	1:1	0.195	1.076	0.210	
782.0	23230	LTE B13	10	23.50	23.37	0.070	0	10 mm [Front]	FCC #1	QPSK	1	25	1:1	0.240	1.030	0.247	
831.5	26865	LTE B26	15	23.50	23.18	-0.090	0	10 mm [Front]	FCC #1	QPSK	1	74	1:1	0.354	1.076	0.381	A8
831.5	26865	LTE B26	15	22.50	22.16	0.020	1	10 mm [Front]	FCC #1	QPSK	36	37	1:1	0.242	1.081	0.262	
831.5	26865	LTE B26	15	23.50	23.18	0.030	0	10 mm [Front]	FCC #1	QPSK	1	74	1:1	0.347	1.076	0.373	
1732.5	20175	LTE B4	20	24.00	23.93	0.190	0	10 mm [Front]	FCC #1	QPSK	1	50	1:1	0.490	1.016	0.498	A9
1732.5	20175	LTE B4	20	23.00	22.83	-0.030	1	10 mm [Front]	FCC #1	QPSK	50	25	1:1	0.369	1.040	0.384	
1732.5	20175	LTE B4	20	24.00	23.93	0.090	0	10 mm [Front]	FCC #1	QPSK	1	50	1:1	0.474	1.016	0.482	
1882.5	26365	LTE B25	20	24.00	23.95	0.010	0	10 mm [Front]	FCC #1	QPSK	1	50	1:1	0.383	1.012	0.388	A10
1882.5	26365	LTE B25	20	23.00	22.83	0.020	1	10 mm [Front]	FCC #1	QPSK	50	0	1:1	0.219	1.040	0.228	
1882.5	26365	LTE B25	20	24.00	23.95	0.190	0	10 mm [Front]	FCC #1	QPSK	1	50	1:1	0.371	1.012	0.375	
2510.0	20850	LTE B7	20	23.50	23.47	0.000	0	10 mm [Front]	FCC #1	QPSK	1	50	1:1	0.670	1.007	0.675	A11
2510.0	20850	LTE B7	20	22.50	22.40	-0.040	1	10 mm [Front]	FCC #1	QPSK	50	0	1:1	0.463	1.023	0.474	
2510.0	20850	LTE B7	20	23.50	23.47	-0.070	0	10 mm [Front]	FCC #1	QPSK	1	50	1:1	0.649	1.007	0.654	
2593.0	40620	LTE B41	20	20.50	20.20	0.020	0	10 mm [Front]	FCC #1	QPSK	1	50	1:1.58	0.140	1.072	0.150	A12
2593.0	40620	LTE B41	20	19.50	19.18	0.020	1	10 mm [Front]	FCC #1	QPSK	50	50	1:1.58	0.116	1.076	0.125	
2593.0	40620	LTE B41	20	20.50	20.20	-0.110	0	10 mm [Front]	FCC #1	QPSK	1	50	1:1	0.136	1.072	0.146	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure									Head 1.6 W/kg (mW/g) averaged over 1 gram								

Note: The front with 10 mm spacing configuration was tested since only the front is 10 mm spacing to human head in normal operation of this device.

Table 10.1.3 DTS Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode (Antenna)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)	Plot s #
MHz	Ch														
2 462.0	11	802.11b (Ant.1)	16.00	15.51	-0.080	10 mm [Front]	FCC #2	0.043	1	99.2	0.042	1.119	1.008	0.047	A13
2 462.0	11	802.11b (Ant.1)	16.00	15.51	-0.110	10 mm [Front]	FCC #2	0.042	1	99.2	0.041	1.119	1.008	0.046	
2 437.0	6	802.11b (Ant.2)	16.00	15.81	0.000	10 mm [Front]	FCC #2	0.029	1	99.2	0.028	1.045	1.008	0.029	A14
2 437.0	6	802.11b (Ant.2)	16.00	15.81	0.190	10 mm [Front]	FCC #2	0.028	1	99.2	0.027	1.045	1.008	0.028	
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.030	10 mm [Front]	FCC #2	0.062	1	99.2	0.062	1.119	1.008	0.070	A15
2 437.0	6	802.11g (MIMO)	19.00	18.67	0.180	10 mm [Front]	FCC #2	0.054	1	99.2	0.057	1.119	1.008	0.064	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure									Head 1.6 W/kg (mW/g) averaged over 1 gram						

Note: The front with 10 mm spacing configuration was tested since only the front is 10 mm spacing to human head in normal operation of this device.

Adjusted SAR results for OFDM SAR												
FREQUENCY		Mode/ Antenna	Service	Maximum Allowed Power [dBm]	1g Scaled SAR (W/kg)	FREQUENCY [MHz]	Mode	Service	Maximum Allowed Power [dBm]	Ratio of OFDM to DSSS	1g Adjusted SAR (W/kg)	Determine OFDM SAR
MHz	Ch											
2 462.0	11	802.11b (Ant.1)	DSSS	16.0	0.047	2437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	12.0	0.398	0.019	X
2 462.0	11	802.11b (Ant.1)	DSSS	16.0	0.047	2437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	12.0	0.398	0.019	X
2 437.0	6	802.11b (Ant.2)	DSSS	16.0	0.029	2437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	12.0	0.398	0.012	X
2 437.0	6	802.11b (Ant.2)	DSSS	16.0	0.029	2437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	12.0	0.398	0.012	X
2 437.0	6	802.11b (MIMO)	DSSS	19.0	0.067	2437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	15.0	0.398	0.027	X
2 437.0	6	802.11b (MIMO)	DSSS	19.0	0.067	2437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	15.0	0.398	0.027	X
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure						Head 1.6 W/kg (mW/g) averaged over 1 gram						

Note: SAR is not required for the following 2.4 GHz OFDM conditions. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

Table 10.1.4 UNII Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode (Antenna)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)	Plots #
MHz	Ch														
5 260.0	52	802.11a (Ant.1)	14.00	13.19	-0.190	10 mm [Front]	FCC #2	0.049	6	95.6	0.047	1.205	1.046	0.059	A16
5 260.0	52	802.11a (Ant.1)	14.00	13.19	0.120	10 mm [Front]	FCC #2	0.048	6	95.6	0.046	1.205	1.046	0.058	
5 280.0	56	802.11a (Ant.2)	14.00	13.25	-0.080	10 mm [Front]	FCC #2	0.009	6	95.4	0.011	1.189	1.048	0.014	A17
5 280.0	56	802.11a (Ant.2)	14.00	13.25	0.000	10 mm [Front]	FCC #2	0.008	6	95.4	0.010	1.189	1.048	0.012	
5 260.0	52	802.11a (MIMO)	17.00	16.18	0.140	10 mm [Front]	FCC #2	0.055	6	95.3	0.059	1.208	1.049	0.075	A18
5 260.0	52	802.11a (MIMO)	17.00	16.18	-0.060	10 mm [Front]	FCC #2	0.047	6	95.3	0.023	1.208	1.049	0.029	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Head 1.6 W/kg (mW/g) averaged over 1 gram							

Note: The front with 10 mm spacing configuration was tested since only the front is 10 mm spacing to human head in normal operation of this device.

Adjusted SAR results for UNII-1 and UNII-2A SAR												
FREQUENCY		Mode/ Antenna	Service	Maximum Allowed Power [dBm]	1g Scaled SAR (W/kg)	FREQUENCY [MHz]	Mode	Service	Maximum Allowed Power [dBm]	Adjusted Factor	1g Adjusted SAR (W/kg)	SAR for the band with lower maximum output power
MHz	Ch											
5 260.0	52	802.11a (Ant.1)	OFDM	14.00	0.059	5 180.0	802.11a	OFDM	14.00	1.000	0.059	X
5 280.0	56	802.11a (Ant.2)	OFDM	14.00	0.014	5 220.0	802.11a	OFDM	14.00	1.000	0.014	X
5 260.0	52	802.11a (MIMO)	OFDM	17.00	0.075	5 180.0	802.11a	OFDM	17.00	1.000	0.075	X
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure						Head 1.6 W/kg (mW/g) averaged over 1 gram						

Note: U-NII-1 and U-NII-2A Bands: When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration.

Table 10.1.5 UNII Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode (Antenna)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)	Plots #
MHz	Ch														
5 500.0	100	802.11a (Ant.1)	14.00	13.32	0.010	10 mm [Front]	FCC #2	0.100	6	95.6	0.104	1.169	1.046	0.127	A19
5 500.0	100	802.11a (Ant.1)	14.00	13.32	0.150	10 mm [Front]	FCC #2	0.101	6	95.6	0.102	1.169	1.046	0.125	
5 660.0	132	802.11a (Ant.2)	14.00	13.12	-0.110	10 mm [Front]	FCC #2	0.019	6	95.4	0.013	1.225	1.048	0.017	A20
5 660.0	132	802.11a (Ant.2)	14.00	13.12	0.090	10 mm [Front]	FCC #2	0.018	6	95.4	0.012	1.225	1.048	0.015	
5 500.0	100	802.11a (MIMO)	17.00	16.22	-0.070	10 mm [Front]	FCC #2	0.107	6	95.3	0.103	1.225	1.049	0.132	A21
5 500.0	100	802.11a (MIMO)	17.00	16.22	0.160	10 mm [Front]	FCC #2	0.099	6	95.3	0.097	1.225	1.049	0.125	
5 825.0	165	802.11a (Ant.1)	14.00	13.17	-0.060	10 mm [Front]	FCC #2	0.087	6	95.6	0.089	1.211	1.046	0.113	A22
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.080	10 mm [Front]	FCC #2	0.087	6	95.6	0.088	1.211	1.046	0.111	
5 785.0	157	802.11a (Ant.2)	14.00	13.29	0.130	10 mm [Front]	FCC #2	0.023	6	95.4	0.017	1.178	1.048	0.021	A23
5 785.0	157	802.11a (Ant.2)	14.00	13.29	0.190	10 mm [Front]	FCC #2	0.025	6	95.4	0.015	1.178	1.048	0.019	
5 785.0	157	802.11a (MIMO)	17.00	16.21	-0.100	10 mm [Front]	FCC #2	0.093	6	95.3	0.089	1.211	1.049	0.113	A24
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.050	10 mm [Front]	FCC #2	0.091	6	95.3	0.088	1.211	1.049	0.112	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Head 1.6 W/kg (mW/g) averaged over 1 gram							

Note: The front with 10 mm spacing configuration was tested since only the front is 10 mm spacing to human head in normal operation of this device.

Table 10.1.6 Bluetooth Head SAR

MEASUREMENT RESULTS													
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Rate [Mbps]	Duty Cycle (%)	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)
MHz	Ch												
2 441.0	39	Bluetooth	6.85	5.97	0.060	10 mm [Front]	FCC #2	1	76.8	0.008	1.225	1.302	0.013
2 441.0	39	Bluetooth	6.85	5.97	0.000	10 mm [Front]	FCC #2	1	76.8	0.008	1.225	1.302	0.012
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Head 1.6 W/kg (mW/g) averaged over 1 gram					

Note: The front with 10 mm spacing configuration was tested since only the front is 10 mm spacing to human head in normal operation of this device.

10.2 Standalone Body-Worn SAR Worn SAR Results

Table 10.2.1 GPRS/WCDMA Body-Worn SAR

MEASUREMENT RESULTS														
FREQUENCY		Mode/ Band	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Spacing [Side]	Device Serial Number	# of Time Slots	Duty Cycle	1g SAR (W/kg)	Scaling Factor	1g Scaled SAR (W/kg)	Plots #
MHz	Ch													
836.6	190	GSM850	GPRS	28.00	27.90	0.050	0 mm [Rear]	FCC #1	4	1:2.075	0.213	1.023	0.218	A26
1880.0	661	PCS1900	GPRS	27.50	26.23	-0.160	0 mm [Rear]	FCC #1	4	1:2.075	0.510	1.340	0.683	A27
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.040	0 mm [Rear]	FCC #1	N/A	1:1	0.179	1.175	0.210	A28
1732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.050	0 mm [Rear]	FCC #1	N/A	1:1	0.401	1.130	0.453	A29
1880.0	9400	WCDMA 1900	RMC	23.60	22.94	0.070	0 mm [Rear]	FCC #1	N/A	1:1	0.521	1.164	0.606	A30
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak								Body 1.6 W/kg (mW/g) averaged over 1 gram						
Uncontrolled Exposure/General Population Exposure														
Note: The rear with 0 mm spacing configuration was tested since only the rear is 0 mm spacing to human body-worn with handstrap of this device.														

Table 10.2.2 LTE Body-Worn SAR

MEASUREMENT RESULTS																	
FREQUENCY		Mode/ Band	BW [MHz]	Max Allowed Power [dBm]	Cond. PWR [dBm]	Drift Power [dB]	MPR	Position	Device Serial Number	Mod.	RB Size	RB Offs.	Duty Cycle	1g SAR (W/kg)	Scaling Factor	1g Scaled SAR (W/kg)	Plots #
MHz	Ch																
707.5	23095	LTE B12	10	23.50	23.36	0.040	0	0 mm [Rear]	FCC #1	QPSK	1	25	1:1	0.098	1.033	0.101	A31
707.5	23095	LTE B12	10	22.50	22.26	0.130	1	0 mm [Rear]	FCC #1	QPSK	25	12	1:1	0.077	1.057	0.081	
782.0	23230	LTE B13	10	23.50	23.37	-0.080	0	0 mm [Rear]	FCC #1	QPSK	1	25	1:1	0.160	1.030	0.165	A32
782.0	23230	LTE B13	10	22.50	22.18	0.070	1	0 mm [Rear]	FCC #1	QPSK	25	12	1:1	0.143	1.076	0.154	
831.5	26865	LTE B26	15	23.50	23.18	0.190	0	0 mm [Rear]	FCC #1	QPSK	1	74	1:1	0.226	1.076	0.243	A33
831.5	26865	LTE B26	15	22.50	22.16	0.070	1	0 mm [Rear]	FCC #1	QPSK	25	37	1:1	0.192	1.081	0.208	
1732.5	20175	LTE B4	20	24.00	23.93	0.110	0	0 mm [Rear]	FCC #1	QPSK	1	50	1:1	0.390	1.016	0.396	A34
1732.5	20175	LTE B4	20	23.00	22.83	-0.170	1	0 mm [Rear]	FCC #1	QPSK	50	25	1:1	0.334	1.040	0.347	
1882.5	26365	LTE B25	20	24.00	23.95	-0.050	0	0 mm [Rear]	FCC #1	QPSK	1	50	1:1	0.468	1.012	0.474	A35
1882.5	26365	LTE B25	20	23.00	22.83	-0.090	1	0 mm [Rear]	FCC #1	QPSK	50	0	1:1	0.399	1.040	0.415	
2510.0	20850	LTE B7	20	23.50	23.47	-0.100	0	0 mm [Rear]	FCC #1	QPSK	1	50	1:1	0.343	1.007	0.345	A36
2510.0	20850	LTE B7	20	22.50	22.40	0.120	1	0 mm [Rear]	FCC #1	QPSK	50	0	1:1	0.241	1.023	0.247	
2593.0	40620	LTE B41	20	20.50	20.20	0.100	0	0 mm [Rear]	FCC #1	QPSK	1	50	1:1.58	0.092	1.072	0.099	A37
2593.0	40620	LTE B41	20	19.50	19.18	0.030	1	0 mm [Rear]	FCC #1	QPSK	50	50	1:1.58	0.065	1.076	0.070	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak										Body 1.6 W/kg (mW/g) averaged over 1 gram							
Uncontrolled Exposure/General Population Exposure																	
Note: The rear with 0 mm spacing configuration was tested since only the rear is 0 mm spacing to human body-worn with handstrap of this device.																	

Table 10.2.3 DTS Body-Worn SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	SAR (W/kg)	Plots #
MHz	Ch														
2 462.0	11	802.11b (Ant.1)	16.00	15.51	0.060	0 mm [Rear]	FCC #2	0.072	1	99.2	0.050	1.119	1.008	0.056	A38
2 437.0	6	802.11b (Ant.2)	16.00	15.81	0.000	0 mm [Rear]	FCC #2	0.054	1	99.2	0.065	1.045	1.008	0.068	A39
2 437.0	6	802.11b (MIMO)	19.00	18.67	-0.030	0 mm [Rear]	FCC #2	0.070	1	99.2	0.068	1.079	1.008	0.074	A40
ANSI / IEEE C95.1-1992- SAFETY LIMIT									Body						
Spatial Peak									1.6 W/kg (mW/g)						
Uncontrolled Exposure/General Population Exposure									averaged over 1 gram						

Note: The rear with 0 mm spacing configuration was tested since only the rear is 0 mm spacing to human body-worn with handstrap of this device.

Adjusted SAR results for OFDM SAR													
FREQUENCY		Mode/ Antenna	Service	Maximum Allowed Power [dBm]	1g Scaled SAR (W/kg)	FREQUENCY [MHz]	Mode	Service	Maximum Allowed Power [dBm]	Ratio of OFDM to DSSS	1g Adjusted SAR (W/kg)	Determine OFDM SAR	
MHz	Ch												
2462.0	11	802.11b (Ant.1)	DSSS	16.0	0.056	2437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	12.0	0.398	0.022		X
2462.0	11	802.11b (Ant.1)	DSSS	16.0	0.056	2437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	12.0	0.398	0.022		X
2437.0	6	802.11b (Ant.2)	DSSS	16.0	0.068	2437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	12.0	0.398	0.027		X
2437.0	6	802.11b (Ant.2)	DSSS	16.0	0.068	2437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	12.0	0.398	0.027		X
2437.0	6	802.11b (MIMO)	DSSS	19.0	0.074	2437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	15.0	0.398	0.029		X
2437.0	6	802.11b (MIMO)	DSSS	19.0	0.074	2437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	15.0	0.398	0.029		X
ANSI / IEEE C95.1-1992- SAFETY LIMIT								Head					
Spatial Peak								1.6 W/kg (mW/g)					
Uncontrolled Exposure/General Population Exposure								averaged over 1 gram					

Note: SAR is not required for the following 2.4 GHz OFDM conditions. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

Table 10.2.4 UNII Body-Worn SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)	Plots #
MHz	Ch														
5 260.0	52	802.11a (Ant.1)	14.00	13.19	-0.080	0 mm [Rear]	FCC #2	0.032	6	95.6	0.015	1.205	1.046	0.019	A41
5 280.0	56	802.11a (Ant.2)	14.00	13.25	-0.150	0 mm [Rear]	FCC #2	0.017	6	95.4	0.015	1.189	1.048	0.019	A42
5 260.0	52	802.11a (MIMO)	17.00	16.18	0.180	0 mm [Rear]	FCC #2	0.029	6	95.3	0.021	1.208	1.049	0.027	A43
ANSI / IEEE C95.1-2005- SAFETY LIMIT								Body 1.6 W/kg (mW/g) averaged over 1 gram							
Spatial Peak															
Uncontrolled Exposure/General Population Exposure															
Note: The rear with 0 mm spacing configuration was tested since only the rear is 0 mm spacing to human body-worn with handstrap of this device.															

Adjusted SAR results for UNII-1 and UNII-2A SAR													
FREQUENCY		Mode/ Antenna	Service	Maximum Allowed Power [dBm]	1g Scaled SAR (W/kg)	FREQUENCY [MHz]	Mode	Service	Maximum Allowed Power [dBm]	Adjusted Factor	1g Adjusted SAR (W/kg)	SAR for the band with lower maximum output power	
MHz	Ch												
5260.0	52	802.11a (Ant.1)	OFDM	14.00	0.019	5180.0	802.11a	OFDM	14.00	1.000	0.019		X
5280.0	56	802.11a (Ant.2)	OFDM	14.00	0.019	5220.0	802.11a	OFDM	14.00	1.000	0.019		X
5260.0	52	802.11a (MIMO)	OFDM	17.00	0.027	5180.0	802.11a	OFDM	17.00	1.000	0.027		X
ANSI / IEEE C95.1-1992- SAFETY LIMIT								Head					
Spatial Peak								1.6 W/kg (mW/g)					
Uncontrolled Exposure/General Population Exposure								averaged over 1 gram					

Note: U-NII-1 and U-NII-2A Bands: When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration.

Table 10.2.5 UNII Body-Worn SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)	Plots #
MHz	Ch														
5 500.0	100	802.11a (Ant.1)	14.00	13.32	-0.140	0 mm [Rear]	FCC #2	0.044	6	95.6	0.025	1.169	1.046	0.031	A44
5 660.0	132	802.11a (Ant.2)	14.00	13.12	-0.060	0 mm [Rear]	FCC #2	0.057	6	95.4	0.059	1.225	1.048	0.076	A45
5 500.0	100	802.11a (MIMO)	17.00	16.22	-0.060	0 mm [Rear]	FCC #2	0.044	6	95.3	0.025	1.225	1.049	0.032	A46
5 825.0	165	802.11a (Ant.1)	14.00	13.17	-0.020	0 mm [Rear]	FCC #2	0.048	6	95.6	0.024	1.211	1.046	0.030	A47
5 785.0	157	802.11a (Ant.2)	14.00	13.29	0.000	0 mm [Rear]	FCC #2	0.058	6	95.4	0.057	1.178	1.048	0.070	A48
5 785.0	157	802.11a (MIMO)	17.00	16.21	-0.030	0 mm [Rear]	FCC #2	0.053	6	95.3	0.049	1.211	1.049	0.062	A49
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Body 1.6 W/kg (mW/g) averaged over 1 gram							

Note: The rear with 0 mm spacing configuration was tested since only the rear is 0 mm spacing to human body-worn with handstrap of this device.

Table 10.2.6 Bluetooth Body-Worn SAR

MEASUREMENT RESULTS														
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Rate [Mbps]	Duty Cycle (%)	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)	Plots #
MHz	Ch													
2 441.0	39	Bluetooth	6.85	5.97	0.000	0 mm [Rear]	FCC #2	1	76.8	0.009	1.225	1.302	0.015	A50
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Body 1.6 W/kg (mW/g) averaged over 1 gram						

Note: The rear with 0 mm spacing configuration was tested since only the rear is 0 mm spacing to human body-worn with handstrap of this device.

10.3 Standalone Hotspot SAR Results

Table 10.3.1 GPRS/WCDMA Hotspot SAR

MEASUREMENT RESULTS														
FREQUENCY		Mode/ Band	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Spacing [Side]	Device Serial Number	# of Time Slots	Duty Cycle	1g SAR (W/kg)	Scaling Factor	1g Scaled SAR (W/kg)	Plots #
MHz	Ch													
836.6	190	GSM850	GPRS	28.00	27.90	-0.020	10 mm [Bottom]	FCC #1	4	1:2.075	0.065	1.023	0.066	A51
836.6	190	GSM850	GPRS	28.00	27.90	0.050	10 mm [Front]	FCC #1	4	1:2.075	0.398	1.023	0.407	
836.6	190	GSM850	GPRS	28.00	27.90	-0.010	10 mm [Rear]	FCC #1	4	1:2.075	0.265	1.023	0.271	
836.6	190	GSM850	GPRS	28.00	27.90	0.040	10 mm [Right]	FCC #1	4	1:2.075	0.259	1.023	0.265	
836.6	190	GSM850	GPRS	28.00	27.90	0.150	10 mm [Left]	FCC #1	4	1:2.075	0.515	1.023	0.527	
836.6	190	GSM850	GPRS	28.00	27.90	0.050	10 mm [Left]	FCC #1	4	1:2.075	0.413	1.023	0.422	
1880.0	661	PCS1900	GPRS	27.50	26.23	-0.010	10 mm [Bottom]	FCC #1	4	1:2.075	0.288	1.340	0.386	A52
1880.0	661	PCS1900	GPRS	27.50	26.23	-0.030	10 mm [Front]	FCC #1	4	1:2.075	0.375	1.340	0.503	
1880.0	661	PCS1900	GPRS	27.50	26.23	-0.020	10 mm [Rear]	FCC #1	4	1:2.075	0.767	1.340	1.028	
1880.0	661	PCS1900	GPRS	27.50	26.23	-0.000	10 mm [Right]	FCC #1	4	1:2.075	0.256	1.340	0.343	
1880.0	661	PCS1900	GPRS	27.50	26.23	0.190	10 mm [Left]	FCC #1	4	1:2.075	0.089	1.340	0.119	
1880.0	661	PCS1900	GPRS	27.50	26.23	-0.160	10 mm [Rear]	FCC #1	4	1:2.075	0.510	1.340	0.683	
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.080	10 mm [Bottom]	FCC #1	N/A	1:1	0.132	1.175	0.155	A53
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.040	10 mm [Front]	FCC #1	N/A	1:1	0.330	1.175	0.388	
836.6	4183	WCDMA 850	RMC	23.60	22.90	-0.050	10 mm [Rear]	FCC #1	N/A	1:1	0.310	1.175	0.364	
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.150	10 mm [Right]	FCC #1	N/A	1:1	0.272	1.175	0.320	
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.110	10 mm [Left]	FCC #1	N/A	1:1	0.349	1.175	0.410	
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.070	10 mm [Left]	FCC #1	N/A	1:1	0.338	1.175	0.397	
1732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.100	10 mm [Bottom]	FCC #1	N/A	1:1	0.418	1.130	0.472	A54
1732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.000	10 mm [Front]	FCC #1	N/A	1:1	0.494	1.130	0.558	
1732.4	1412	WCDMA 1700	RMC	23.60	23.07	0.010	10 mm [Rear]	FCC #1	N/A	1:1	0.598	1.130	0.676	
1732.4	1412	WCDMA 1700	RMC	23.60	23.07	0.110	10 mm [Right]	FCC #1	N/A	1:1	0.283	1.130	0.320	
1732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.090	10 mm [Left]	FCC #1	N/A	1:1	0.104	1.130	0.118	
1732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.050	10 mm [Rear]	FCC #1	N/A	1:1	0.401	1.130	0.453	
1880.0	9400	WCDMA 1900	RMC	23.60	22.94	-0.020	10 mm [Bottom]	FCC #1	N/A	1:1	0.399	1.164	0.464	A55
1880.0	9400	WCDMA 1900	RMC	23.60	22.94	-0.030	10 mm [Front]	FCC #1	N/A	1:1	0.437	1.164	0.509	
1880.0	9400	WCDMA 1900	RMC	23.60	22.94	-0.190	10 mm [Rear]	FCC #1	N/A	1:1	0.781	1.164	0.909	
1880.0	9400	WCDMA 1900	RMC	23.60	22.94	0.010	10 mm [Right]	FCC #1	N/A	1:1	0.293	1.164	0.341	
1880.0	9400	WCDMA 1900	RMC	23.60	22.94	-0.170	10 mm [Left]	FCC #1	N/A	1:1	0.098	1.164	0.114	
1880.0	9400	WCDMA 1900	RMC	23.60	22.94	0.070	10 mm [Rear]	FCC #1	N/A	1:1	0.521	1.164	0.606	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Body 1.6 W/kg (mW/g) averaged over 1 gram						

Note: Blue entries represent additional Hotspot SAR Test (with handstrap) with the worst case position.

Table 10.3.2 LTE B12, B13, B26 Hotspot SAR

MEASUREMENT RESULTS																	
FREQUENCY		Mode/ Band	BW [MHz]	Max Allowed Power [dBm]	Cond. PWR [dBm]	Drift Power [dB]	MPR	Position	Device Serial Number	Mod.	RB Size	RB Offs.	Duty Cycle	1g SAR (W/kg)	Scaling Factor	1g Scaled SAR (W/kg)	Plots #
MHz	Ch																
707.5	23095	LTE B12	10	23.50	23.36	0.180	0	10 mm (Bottom)	FCC #1	QPSK	1	25	1:1	0.061	1.033	0.063	A6
707.5	23095	LTE B12	10	22.50	22.26	0.110	1	10 mm (Bottom)	FCC #1	QPSK	25	12	1:1	0.053	1.057	0.056	
707.5	23095	LTE B12	10	23.50	23.36	-0.020	0	10 mm (Front)	FCC #1	QPSK	1	25	1:1	0.179	1.033	0.185	
707.5	23095	LTE B12	10	22.50	22.26	0.060	1	10 mm (Front)	FCC #1	QPSK	25	12	1:1	0.102	1.057	0.108	
707.5	23095	LTE B12	10	23.50	23.36	0.080	0	10 mm (Rear)	FCC #1	QPSK	1	25	1:1	0.147	1.033	0.152	
707.5	23095	LTE B12	10	22.50	22.26	0.130	1	10 mm (Rear)	FCC #1	QPSK	25	12	1:1	0.132	1.057	0.140	
707.5	23095	LTE B12	10	23.50	23.36	-0.110	0	10 mm (Right)	FCC #1	QPSK	1	25	1:1	0.096	1.033	0.099	
707.5	23095	LTE B12	10	22.50	22.26	0.070	1	10 mm (Right)	FCC #1	QPSK	25	12	1:1	0.061	1.057	0.064	
707.5	23095	LTE B12	10	23.50	23.36	-0.030	0	10 mm (Left)	FCC #1	QPSK	1	25	1:1	0.136	1.033	0.140	
707.5	23095	LTE B12	10	22.50	22.26	0.070	1	10 mm (Left)	FCC #1	QPSK	25	12	1:1	0.123	1.057	0.130	
707.5	23095	LTE B12	10	22.50	22.26	0.020	1	10 mm (Front)	FCC #1	QPSK	1	25	1:1	0.173	1.057	0.183	
782.0	23230	LTE B13	10	23.50	23.37	-0.060	0	10 mm (Bottom)	FCC #1	QPSK	1	25	1:1	0.141	1.030	0.145	A56
782.0	23230	LTE B13	10	22.50	22.18	-0.030	1	10 mm (Bottom)	FCC #1	QPSK	25	12	1:1	0.109	1.076	0.117	
782.0	23230	LTE B13	10	23.50	23.37	0.090	0	10 mm (Front)	FCC #1	QPSK	1	25	1:1	0.294	1.030	0.303	
782.0	23230	LTE B13	10	22.50	22.18	0.160	1	10 mm (Front)	FCC #1	QPSK	25	12	1:1	0.195	1.076	0.210	
782.0	23230	LTE B13	10	23.50	23.37	0.080	0	10 mm (Rear)	FCC #1	QPSK	1	25	1:1	0.273	1.030	0.281	
782.0	23230	LTE B13	10	22.50	22.18	0.110	1	10 mm (Rear)	FCC #1	QPSK	25	12	1:1	0.191	1.076	0.206	
782.0	23230	LTE B13	10	23.50	23.37	-0.030	0	10 mm (Right)	FCC #1	QPSK	1	25	1:1	0.248	1.030	0.255	
782.0	23230	LTE B13	10	22.50	22.18	0.090	1	10 mm (Right)	FCC #1	QPSK	25	12	1:1	0.187	1.076	0.201	
782.0	23230	LTE B13	10	23.50	23.37	0.070	0	10 mm (Left)	FCC #1	QPSK	1	25	1:1	0.392	1.030	0.404	
782.0	23230	LTE B13	10	22.50	22.18	0.090	1	10 mm (Left)	FCC #1	QPSK	25	12	1:1	0.286	1.076	0.308	
782.0	23230	LTE B13	10	23.50	23.37	0.090	1	10 mm (Left)	FCC #1	QPSK	1	25	1:1	0.389	1.030	0.401	
831.5	26865	LTE B26	15	23.50	23.18	0.170	0	10 mm (Bottom)	FCC #1	QPSK	1	74	1:1	0.153	1.076	0.165	A8
831.5	26865	LTE B26	15	22.50	22.16	-0.160	1	10 mm (Bottom)	FCC #1	QPSK	36	37	1:1	0.104	1.081	0.112	
831.5	26865	LTE B26	15	23.50	23.18	-0.090	0	10 mm (Front)	FCC #1	QPSK	1	74	1:1	0.354	1.076	0.381	
831.5	26865	LTE B26	15	22.50	22.16	0.020	1	10 mm (Front)	FCC #1	QPSK	36	37	1:1	0.242	1.081	0.262	
831.5	26865	LTE B26	15	23.50	23.18	0.130	0	10 mm (Rear)	FCC #1	QPSK	1	74	1:1	0.293	1.076	0.315	
831.5	26865	LTE B26	15	22.50	22.16	0.080	1	10 mm (Rear)	FCC #1	QPSK	36	37	1:1	0.253	1.081	0.273	
831.5	26865	LTE B26	15	23.50	23.18	0.110	0	10 mm (Right)	FCC #1	QPSK	1	74	1:1	0.209	1.076	0.225	
831.5	26865	LTE B26	15	22.50	22.16	0.190	1	10 mm (Right)	FCC #1	QPSK	36	37	1:1	0.179	1.081	0.193	
831.5	26865	LTE B26	15	23.50	23.18	0.090	0	10 mm (Left)	FCC #1	QPSK	1	74	1:1	0.339	1.076	0.365	
831.5	26865	LTE B26	15	22.50	22.16	0.090	1	10 mm (Left)	FCC #1	QPSK	36	37	1:1	0.263	1.081	0.284	
831.5	26865	LTE B26	15	23.50	23.18	0.030	0	10 mm (Front)	FCC #1	QPSK	1	74	1:1	0.347	1.076	0.373	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure										Body 1.6 W/kg (mW/g) averaged over 1 gram							

Note: Blue entries represent additional Hotspot SAR Test (with handstrap) with the worst case position.

Table 10.3.3 LTE B4, B25, B7, B41 Hotspot SAR

MEASUREMENT RESULTS																	
FREQUENCY		Mode/ Band	BW [MHz]	Max Allowed Power [dBm]	Cond. PWR [dBm]	Drift Power [dB]	MPR	Position	Device Serial Number	Mod.	RB Size	RB Offs.	Duty Cycle	1g SAR (W/kg)	Scaling Factor	1g Scaled SAR (W/kg)	Plots #
MHz	Ch																
1732.5	20175	LTE B4	20	24.00	23.93	-0.030	0	10 mm (Bottom)	FCC #1	QPSK	1	50	1:1	0.395	1.016	0.401	
1732.5	20175	LTE B4	20	23.00	22.83	-0.050	1	10 mm (Bottom)	FCC #1	QPSK	50	25	1:1	0.343	1.040	0.357	
1732.5	20175	LTE B4	20	24.00	23.93	0.190	0	10 mm (Front)	FCC #1	QPSK	1	50	1:1	0.490	1.016	0.498	
1732.5	20175	LTE B4	20	23.00	22.83	-0.030	1	10 mm (Front)	FCC #1	QPSK	50	25	1:1	0.369	1.040	0.384	
1732.5	20175	LTE B4	20	24.00	23.93	0.120	0	10 mm (Rear)	FCC #1	QPSK	1	50	1:1	0.585	1.016	0.594	A57
1732.5	20175	LTE B4	20	23.00	22.83	-0.080	1	10 mm (Rear)	FCC #1	QPSK	50	25	1:1	0.510	1.040	0.530	
1732.5	20175	LTE B4	20	24.00	23.93	0.080	0	10 mm (Right)	FCC #1	QPSK	1	50	1:1	0.249	1.016	0.253	
1732.5	20175	LTE B4	20	23.00	22.83	0.040	1	10 mm (Right)	FCC #1	QPSK	50	25	1:1	0.218	1.040	0.227	
1732.5	20175	LTE B4	20	24.00	23.93	0.020	0	10 mm (Left)	FCC #1	QPSK	1	50	1:1	0.112	1.016	0.114	
1732.5	20175	LTE B4	20	23.00	22.83	0.010	1	10 mm (Left)	FCC #1	QPSK	50	25	1:1	0.094	1.040	0.098	
1732.5	20175	LTE B4	20	24.00	23.93	0.110	0	10 mm (Rear)	FCC #1	QPSK	1	50	1:1	0.390	1.016	0.396	
1882.5	26365	LTE B25	20	24.00	23.95	0.020	0	10 mm (Bottom)	FCC #1	QPSK	1	50	1:1	0.326	1.012	0.330	
1882.5	26365	LTE B25	20	23.00	22.83	-0.010	1	10 mm (Bottom)	FCC #1	QPSK	50	0	1:1	0.271	1.040	0.282	
1882.5	26365	LTE B25	20	24.00	23.95	0.010	0	10 mm (Front)	FCC #1	QPSK	1	50	1:1	0.383	1.012	0.388	
1882.5	26365	LTE B25	20	23.00	22.83	0.020	1	10 mm (Front)	FCC #1	QPSK	50	0	1:1	0.219	1.040	0.228	
1882.5	26365	LTE B25	20	24.00	23.95	-0.020	0	10 mm (Rear)	FCC #1	QPSK	1	50	1:1	0.699	1.012	0.707	A58
1882.5	26365	LTE B25	20	23.00	22.83	-0.070	1	10 mm (Rear)	FCC #1	QPSK	50	0	1:1	0.613	1.040	0.638	
1882.5	26365	LTE B25	20	24.00	23.95	-0.060	0	10 mm (Right)	FCC #1	QPSK	1	50	1:1	0.234	1.012	0.237	
1882.5	26365	LTE B25	20	23.00	22.83	0.170	1	10 mm (Right)	FCC #1	QPSK	50	0	1:1	0.187	1.040	0.194	
1882.5	26365	LTE B25	20	24.00	23.95	0.050	0	10 mm (Left)	FCC #1	QPSK	1	50	1:1	0.095	1.012	0.096	
1882.5	26365	LTE B25	20	23.00	22.83	0.130	1	10 mm (Left)	FCC #1	QPSK	50	0	1:1	0.091	1.040	0.095	
1882.5	26365	LTE B25	20	24.00	23.95	-0.050	0	10 mm (Rear)	FCC #1	QPSK	1	50	1:1	0.468	1.012	0.474	
2510.0	20850	LTE B7	20	23.50	23.47	0.090	0	10 mm (Bottom)	FCC #1	QPSK	1	50	1:1	0.091	1.007	0.092	
2510.0	20850	LTE B7	20	22.50	22.40	0.080	1	10 mm (Bottom)	FCC #1	QPSK	50	0	1:1	0.080	1.023	0.082	
2510.0	20850	LTE B7	20	23.50	23.47	0.000	0	10 mm (Front)	FCC #1	QPSK	1	50	1:1	0.670	1.007	0.675	A11
2510.0	20850	LTE B7	20	22.50	22.40	-0.040	1	10 mm (Front)	FCC #1	QPSK	50	0	1:1	0.463	1.023	0.474	
2510.0	20850	LTE B7	20	23.50	23.47	0.010	0	10 mm (Rear)	FCC #1	QPSK	1	50	1:1	0.512	1.007	0.516	
2510.0	20850	LTE B7	20	22.50	22.40	-0.020	1	10 mm (Rear)	FCC #1	QPSK	50	0	1:1	0.406	1.023	0.417	
2510.0	20850	LTE B7	20	23.50	23.47	-0.010	0	10 mm (Right)	FCC #1	QPSK	1	50	1:1	0.191	1.007	0.192	
2510.0	20850	LTE B7	20	22.50	22.40	0.000	1	10 mm (Right)	FCC #1	QPSK	50	0	1:1	0.103	1.023	0.105	
2510.0	20850	LTE B7	20	23.50	23.47	-0.070	0	10 mm (Left)	FCC #1	QPSK	1	50	1:1	0.114	1.007	0.115	
2510.0	20850	LTE B7	20	22.50	22.40	0.040	1	10 mm (Left)	FCC #1	QPSK	50	0	1:1	0.074	1.023	0.076	
2510.0	20850	LTE B7	20	23.50	23.47	-0.070	0	10 mm (Front)	FCC #1	QPSK	1	50	1:1	0.649	1.007	0.654	
2593.0	40620	LTE B41	20	20.50	20.20	0.170	0	10 mm (Bottom)	FCC #1	QPSK	1	50	1:1.58	0.177	1.072	0.190	A59
2593.0	40620	LTE B41	20	19.50	19.18	0.070	1	10 mm (Bottom)	FCC #1	QPSK	50	50	1:1.58	0.119	1.076	0.128	
2593.0	40620	LTE B41	20	20.50	20.20	0.020	0	10 mm (Front)	FCC #1	QPSK	1	50	1:1.58	0.140	1.072	0.150	
2593.0	40620	LTE B41	20	19.50	19.18	0.020	1	10 mm (Front)	FCC #1	QPSK	50	50	1:1.58	0.116	1.076	0.125	
2593.0	40620	LTE B41	20	20.50	20.20	0.020	0	10 mm (Rear)	FCC #1	QPSK	1	50	1:1.58	0.138	1.072	0.148	
2593.0	40620	LTE B41	20	19.50	19.18	0.070	1	10 mm (Rear)	FCC #1	QPSK	50	50	1:1.58	0.110	1.076	0.118	
2593.0	40620	LTE B41	20	20.50	20.20	0.040	0	10 mm (Right)	FCC #1	QPSK	1	50	1:1.58	0.162	1.072	0.174	
2593.0	40620	LTE B41	20	19.50	19.18	0.060	1	10 mm (Right)	FCC #1	QPSK	50	50	1:1.58	0.133	1.076	0.143	
2593.0	40620	LTE B41	20	20.50	20.20	0.150	0	10 mm (Left)	FCC #1	QPSK	1	50	1:1.58	0.084	1.072	0.090	
2593.0	40620	LTE B41	20	19.50	19.18	0.080	1	10 mm (Left)	FCC #1	QPSK	50	50	1:1.58	0.074	1.076	0.080	
2593.0	40620	LTE B41	20	20.50	20.20	0.000	0	10 mm (Bottom)	FCC #1	QPSK	1	50	1:1.58	0.170	1.072	0.182	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak										Body 1.6 W/kg (mW/g) averaged over 1 gram							
Uncontrolled Exposure/General Population Exposure																	

Note: Blue entries represent additional Hotspot SAR Test (with handstrap) with the worst case position.

Table 10.3.4 DTS Hotspot SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	SAR (W/kg)	Plots #
MHz	Ch														
2 462.0	11	802.11b (Ant.1)	16.00	15.51	0.040	10 mm [Top]	FCC #2	0.055	1	99.2	0.056	1.119	1.008	0.063	A60
2 462.0	11	802.11b (Ant.1)	16.00	15.51	-0.080	10 mm [Front]	FCC #2	0.043	1	99.2	0.042	1.119	1.008	0.047	
2 462.0	11	802.11b (Ant.1)	16.00	15.51	0.010	10 mm [Rear]	FCC #2	0.086	1	99.2	0.082	1.119	1.008	0.092	
2 462.0	11	802.11b (Ant.1)	16.00	15.51	0.100	10 mm [Left]	FCC #2	0.526	1	99.2	0.508	1.119	1.008	0.573	
2 462.0	11	802.11b (Ant.1)	16.00	15.51	-0.130	10 mm [Left]	FCC #2	0.510	1	99.2	0.491	1.119	1.008	0.554	
2 437.0	6	802.11b (Ant.2)	16.00	15.81	0.000	10 mm [Front]	FCC #2	0.029	1	99.2	0.028	1.045	1.008	0.029	A61
2 437.0	6	802.11b (Ant.2)	16.00	15.81	-0.040	10 mm [Rear]	FCC #2	0.072	1	99.2	0.069	1.045	1.008	0.073	
2 437.0	6	802.11b (Ant.2)	16.00	15.81	0.010	10 mm [Right]	FCC #2	0.151	1	99.2	0.144	1.045	1.008	0.152	
2 437.0	6	802.11b (Ant.2)	16.00	15.81	0.070	10 mm [Right]	FCC #2	0.148	1	99.2	0.143	1.045	1.008	0.151	
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.030	10 mm [Top]	FCC #2	0.060	1	99.2	0.057	1.119	1.008	0.064	
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.030	10 mm [Front]	FCC #2	0.062	1	99.2	0.062	1.119	1.008	0.070	A62
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.040	10 mm [Rear]	FCC #2	0.106	1	99.2	0.102	1.119	1.008	0.115	
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.100	10 mm [Right]	FCC #2	0.140	1	99.2	0.133	1.119	1.008	0.150	
2 437.0	6	802.11b (MIMO)	19.00	18.67	-0.050	10 mm [Left]	FCC #2	0.548	1	99.2	0.534	1.119	1.008	0.602	
2 437.0	6	802.11g (MIMO)	19.00	18.67	-0.090	10 mm [Left]	FCC #2	0.544	1	99.2	0.531	1.119	1.008	0.599	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Body 1.6 W/kg (mW/g) averaged over 1 gram							

Note: Blue entries represent additional Hotspot SAR Test (with handstrap) with the worst case position.

Adjusted SAR results for OFDM SAR

FREQUENCY		Mode/ Antenna	Service	Maximum Allowed Power [dBm]	1g Scaled SAR (W/kg)	FREQUENCY [MHz]	Mode	Service	Maximum Allowed Power [dBm]	Ratio of OFDM to DSSS	1g Adjusted SAR (W/kg)	Determine OFDM SAR
MHz	Ch											
2 462.0	11	802.11b (Ant.1)	DSSS	16.0	0.573	2 437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	12.0	0.398	0.228	X
2 462.0	11	802.11b (Ant.1)	DSSS	16.0	0.573	2 437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	12.0	0.398	0.228	X
2 437.0	6	802.11b (Ant.2)	DSSS	16.0	0.152	2 437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	12.0	0.398	0.060	X
2 437.0	6	802.11b (Ant.2)	DSSS	16.0	0.152	2 437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	12.0	0.398	0.060	X
2 437.0	6	802.11b (MIMO)	DSSS	19.0	0.602	2 437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	15.0	0.398	0.240	X
2 437.0	6	802.11b (MIMO)	DSSS	19.0	0.602	2 437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	15.0	0.398	0.240	X
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure						Body 1.6 W/kg (mW/g) averaged over 1 gram						

Note: SAR is not required for the following 2.4 GHz OFDM conditions. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

Table 10.3.5 UNII Hotspot SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)	Plots #
MHz	Ch														
5180.0	36	802.11a (Ant.1)	14.00	13.18	-0.050	10 mm [Top]	FCC #2	0.110	6	95.6	0.114	1.208	1.046	0.144	A98
5180.0	36	802.11a (Ant.1)	14.00	13.18	0.070	10 mm [Front]	FCC #2	0.045	6	95.6	0.043	1.208	1.046	0.054	
5180.0	36	802.11a (Ant.1)	14.00	13.18	-0.040	10 mm [Rear]	FCC #2	0.035	6	95.6	0.022	1.208	1.046	0.028	
5180.0	36	802.11a (Ant.1)	14.00	13.18	-0.040	10 mm [Left]	FCC #2	0.164	6	95.6	0.175	1.208	1.046	0.221	
5180.0	36	802.11a (Ant.1)	14.00	13.18	0.070	10 mm [Left]	FCC #2	0.160	6	95.6	0.171	1.208	1.046	0.216	
5220.0	44	802.11a (Ant.2)	14.00	13.39	0.000	10 mm [Front]	FCC #2	0.011	6	95.4	0.011	1.151	1.048	0.013	A99
5220.0	44	802.11a (Ant.2)	14.00	13.39	0.030	10 mm [Rear]	FCC #2	0.022	6	95.4	0.015	1.151	1.048	0.018	
5220.0	44	802.11a (Ant.2)	14.00	13.39	-0.110	10 mm [Right]	FCC #2	0.059	6	95.4	0.063	1.151	1.048	0.076	
5220.0	44	802.11a (Ant.2)	14.00	13.39	-0.160	10 mm [Right]	FCC #2	0.058	6	95.4	0.062	1.151	1.048	0.075	
5180.0	36	802.11a (MIMO)	17.00	16.26	0.050	10 mm [Top]	FCC #2	0.113	6	95.3	0.116	1.208	1.049	0.147	
5180.0	36	802.11a (MIMO)	17.00	16.26	0.030	10 mm [Front]	FCC #2	0.047	6	95.3	0.035	1.208	1.049	0.044	A100
5180.0	36	802.11a (MIMO)	17.00	16.26	0.040	10 mm [Rear]	FCC #2	0.040	6	95.3	0.030	1.208	1.049	0.038	
5180.0	36	802.11a (MIMO)	17.00	16.26	0.040	10 mm [Right]	FCC #2	0.064	6	95.3	0.064	1.208	1.049	0.081	
5180.0	36	802.11a (MIMO)	17.00	16.26	0.010	10 mm [Left]	FCC #2	0.279	6	95.3	0.300	1.208	1.049	0.380	
5180.0	36	802.11a (MIMO)	17.00	16.26	0.060	10 mm [Left]	FCC #2	0.282	6	95.3	0.294	1.208	1.049	0.373	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Body 1.6 W/kg (mW/g) averaged over 1 gram							

Note: Blue entries represent additional Hotspot SAR Test (with handstrap) with the worst case position.

Table 10.3.6 UNII Hotspot SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)	Plots #
MHz	Ch														
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.010	10 mm [Top]	FCC #2	0.134	6	95.6	0.142	1.211	1.046	0.180	A69
5 825.0	165	802.11a (Ant.1)	14.00	13.17	-0.060	10 mm [Front]	FCC #2	0.087	6	95.6	0.089	1.211	1.046	0.113	
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.080	10 mm [Rear]	FCC #2	0.053	6	95.6	0.026	1.211	1.046	0.033	
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.070	10 mm [Left]	FCC #2	0.437	6	95.6	0.471	1.211	1.046	0.597	
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.010	10 mm [Left]	FCC #2	0.426	6	95.6	0.469	1.211	1.046	0.594	
5 785.0	157	802.11a (Ant.2)	14.00	13.29	0.130	10 mm [Front]	FCC #2	0.023	6	95.4	0.017	1.178	1.048	0.021	A70
5 785.0	157	802.11a (Ant.2)	14.00	13.29	0.070	10 mm [Rear]	FCC #2	0.062	6	95.4	0.063	1.178	1.048	0.078	
5 785.0	157	802.11a (Ant.2)	14.00	13.29	-0.090	10 mm [Right]	FCC #2	0.156	6	95.4	0.147	1.178	1.048	0.182	
5 785.0	157	802.11a (Ant.2)	14.00	13.29	0.030	10 mm [Right]	FCC #2	0.152	6	95.4	0.144	1.178	1.048	0.178	
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.020	10 mm [Top]	FCC #2	0.136	6	95.3	0.151	1.211	1.049	0.192	
5 785.0	157	802.11a (MIMO)	17.00	16.21	-0.100	10 mm [Front]	FCC #2	0.093	6	95.3	0.089	1.211	1.049	0.113	A71
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.070	10 mm [Rear]	FCC #2	0.065	6	95.3	0.064	1.211	1.049	0.081	
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.110	10 mm [Right]	FCC #2	0.142	6	95.3	0.146	1.211	1.049	0.186	
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.020	10 mm [Left]	FCC #2	0.457	6	95.3	0.474	1.211	1.049	0.602	
5 785.0	157	802.11a (MIMO)	17.00	16.21	-0.050	10 mm [Left]	FCC #2	0.453	6	95.3	0.471	1.211	1.049	0.599	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure												Body 1.6 W/kg (mW/g) averaged over 1 gram			

Note: Blue entries represent additional Hotspot SAR Test (with handstrap) with the worst case position.

Table 10.3.7 Bluetooth Hotspot SAR

MEASUREMENT RESULTS														
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Rate [Mbps]	Duty Cycle (%)	1g SAR (W/kg)	Scaling Factor	Scaling Factor (Duty Cycle)	1g Scaled SAR (W/kg)	Plots #
MHz	Ch													
2 441.0	39	Bluetooth	6.85	5.97	0.190	10 mm [Top]	FCC #2	1	76.8	0.010	1.225	1.302	0.015	A72
2 441.0	39	Bluetooth	6.85	5.97	0.060	10 mm [Front]	FCC #2	1	76.8	0.008	1.225	1.302	0.013	
2 441.0	39	Bluetooth	6.85	5.97	0.110	10 mm [Rear]	FCC #2	1	76.8	0.015	1.225	1.302	0.023	
2 441.0	39	Bluetooth	6.85	5.97	-0.010	10 mm [Left]	FCC #2	1	76.8	0.105	1.225	1.302	0.167	
2 441.0	39	Bluetooth	6.85	5.97	-0.010	10 mm [Left]	FCC #2	1	76.8	0.101	1.225	1.302	0.161	
ANSI / IEEE C95.1-1992- SAFETY LIMIT								Body 1.6 W/kg (mW/g) averaged over 1 gram						
Spatial Peak Uncontrolled Exposure/General Population Exposure														

10.4 Standalone Phablet SAR Results

Table 10.4.1 GPRS/WCDMA Phablet SAR

MEASUREMENT RESULTS														
FREQUENCY		Mode/ Band	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Spacing [Side]	Device Serial Number	# of Time Slots	Duty Cycle	1g SAR (W/kg)	Scaling Factor	1g Scaled SAR (W/kg)	Plots #
MHz	Ch													
836.6	190	GSM850	GPRS	28.00	27.90	-0.010	0 mm [Bottom]	FCC #1	4	1:2.075	0.253	1.023	0.259	
836.6	190	GSM850	GPRS	28.00	27.90	-0.040	0 mm [Front]	FCC #1	4	1:2.075	0.482	1.023	0.493	
836.6	190	GSM850	GPRS	28.00	27.90	-0.020	0 mm [Rear]	FCC #1	4	1:2.075	0.781	1.023	0.799	A73
836.6	190	GSM850	GPRS	28.00	27.90	0.000	0 mm [Right]	FCC #1	4	1:2.075	0.392	1.023	0.401	
836.6	190	GSM850	GPRS	28.00	27.90	0.050	0 mm [Left]	FCC #1	4	1:2.075	0.620	1.023	0.634	
836.6	190	GSM850	GPRS	28.00	27.90	0.050	0 mm [Rear]	FCC #1	4	1:2.075	0.154	1.023	0.158	
1 880.0	661	PCS1900	GPRS	27.50	26.23	0.010	0 mm [Bottom]	FCC #1	4	1:2.075	0.649	1.340	0.870	
1 880.0	661	PCS1900	GPRS	27.50	26.23	-0.040	0 mm [Front]	FCC #1	4	1:2.075	0.722	1.340	0.967	
1 880.0	661	PCS1900	GPRS	27.50	26.23	0.070	0 mm [Rear]	FCC #1	4	1:2.075	0.830	1.340	1.112	A74
1 880.0	661	PCS1900	GPRS	27.50	26.23	-0.070	0 mm [Right]	FCC #1	4	1:2.075	0.356	1.340	0.477	
1 880.0	661	PCS1900	GPRS	27.50	26.23	-0.020	0 mm [Left]	FCC #1	4	1:2.075	0.118	1.340	0.158	
1 880.0	661	PCS1900	GPRS	27.50	26.23	-0.160	0 mm [Rear]	FCC #1	4	1:2.075	0.338	1.340	0.453	
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.110	0 mm [Bottom]	FCC #1	N/A	1:1	0.180	1.175	0.212	
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.080	0 mm [Front]	FCC #1	N/A	1:1	0.412	1.175	0.484	
836.6	4183	WCDMA 850	RMC	23.60	22.90	-0.020	0 mm [Rear]	FCC #1	N/A	1:1	0.482	1.175	0.566	
836.6	4183	WCDMA 850	RMC	23.60	22.90	-0.050	0 mm [Right]	FCC #1	N/A	1:1	0.308	1.175	0.362	
836.6	4183	WCDMA 850	RMC	23.60	22.90	-0.120	0 mm [Left]	FCC #1	N/A	1:1	0.499	1.175	0.586	A75
836.6	4183	WCDMA 850	RMC	23.60	22.90	0.080	0 mm [Left]	FCC #1	N/A	1:1	0.495	1.175	0.582	
1 732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.080	0 mm [Bottom]	FCC #1	N/A	1:1	0.886	1.130	1.001	
1 732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.010	0 mm [Front]	FCC #1	N/A	1:1	1.000	1.130	1.130	A76
1 732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.000	0 mm [Rear]	FCC #1	N/A	1:1	0.896	1.130	1.012	
1 732.4	1412	WCDMA 1700	RMC	23.60	23.07	-0.060	0 mm [Right]	FCC #1	N/A	1:1	0.403	1.130	0.455	
1 732.4	1412	WCDMA 1700	RMC	23.60	23.07	0.000	0 mm [Left]	FCC #1	N/A	1:1	0.128	1.130	0.145	
1 732.4	1412	WCDMA 1700	RMC	23.60	23.07	0.100	0 mm [Front]	FCC #1	N/A	1:1	0.990	1.130	1.119	
1 880.0	9400	WCDMA 1900	RMC	23.60	22.94	0.020	0 mm [Bottom]	FCC #1	N/A	1:1	0.897	1.164	1.044	
1 880.0	9400	WCDMA 1900	RMC	23.60	22.94	0.010	0 mm [Front]	FCC #1	N/A	1:1	0.900	1.164	1.048	
1 880.0	9400	WCDMA 1900	RMC	23.60	22.94	0.090	0 mm [Rear]	FCC #1	N/A	1:1	1.010	1.164	1.176	A77
1 880.0	9400	WCDMA 1900	RMC	23.60	22.94	0.010	0 mm [Right]	FCC #1	N/A	1:1	0.409	1.164	0.476	
1 880.0	9400	WCDMA 1900	RMC	23.60	22.94	-0.020	0 mm [Left]	FCC #1	N/A	1:1	0.132	1.164	0.154	
1 880.0	9400	WCDMA 1900	RMC	23.60	22.94	0.070	0 mm [Rear]	FCC #1	N/A	1:1	0.310	1.164	0.361	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Phablet 4.0 W/kg (mW/g) averaged over 10 gram						

Note: Blue entries represent additional Phablet SAR Test (with handstrap) with the worst case position.

Table 10.4.2 LTE Phablet SAR

MEASUREMENT RESULTS																	
FREQUENCY		Mode/ Band	BW [MHz]	Max Allowed Power [dBm]	Cond. PWR [dBm]	Drift Power [dB]	MPR	Position	Device Serial Number	Mod.	RB Size	RB Offs.	Duty Cycle	10g SAR (W/kg)	Scaling Factor	10g Scaled SAR (W/kg)	Plots #
MHz	Ch																
707.5	23095	LTE B12	10	23.50	23.36	-0.100	0	0 mm [Bottom]	FCC #1	QPSK	1	25	1:1	0.070	1.033	0.072	A78
707.5	23095	LTE B12	10	22.50	22.26	-0.010	1	0 mm [Bottom]	FCC #1	QPSK	25	12	1:1	0.062	1.057	0.066	
707.5	23095	LTE B12	10	23.50	23.36	-0.000	0	0 mm [Front]	FCC #1	QPSK	1	25	1:1	0.343	1.033	0.354	
707.5	23095	LTE B12	10	22.50	22.26	0.160	1	0 mm [Front]	FCC #1	QPSK	25	12	1:1	0.228	1.057	0.241	
707.5	23095	LTE B12	10	23.50	23.36	0.010	0	0 mm [Rear]	FCC #1	QPSK	1	25	1:1	0.277	1.033	0.286	
707.5	23095	LTE B12	10	22.50	22.26	-0.060	1	0 mm [Rear]	FCC #1	QPSK	25	12	1:1	0.229	1.057	0.242	
707.5	23095	LTE B12	10	23.50	23.36	0.180	0	0 mm [Right]	FCC #1	QPSK	1	25	1:1	0.133	1.033	0.137	
707.5	23095	LTE B12	10	22.50	22.26	-0.140	1	0 mm [Right]	FCC #1	QPSK	25	12	1:1	0.078	1.057	0.082	
707.5	23095	LTE B12	10	23.50	23.36	0.140	0	0 mm [Left]	FCC #1	QPSK	1	25	1:1	0.250	1.033	0.258	
707.5	23095	LTE B12	10	22.50	22.26	-0.150	1	0 mm [Left]	FCC #1	QPSK	25	12	1:1	0.203	1.057	0.215	
707.5	23095	LTE B12	10	23.50	23.36	-0.020	0	0 mm [Front]	FCC #1	QPSK	1	25	1:1	0.341	1.033	0.352	
782.0	23230	LTE B13	10	23.50	23.37	-0.080	0	0 mm [Bottom]	FCC #1	QPSK	1	25	1:1	0.143	1.030	0.147	A79
782.0	23230	LTE B13	10	22.50	22.18	-0.030	1	0 mm [Bottom]	FCC #1	QPSK	25	12	1:1	0.103	1.076	0.111	
782.0	23230	LTE B13	10	23.50	23.37	-0.020	0	0 mm [Front]	FCC #1	QPSK	1	25	1:1	0.420	1.030	0.433	
782.0	23230	LTE B13	10	22.50	22.18	0.040	1	0 mm [Front]	FCC #1	QPSK	25	12	1:1	0.258	1.076	0.278	
782.0	23230	LTE B13	10	23.50	23.37	0.060	0	0 mm [Rear]	FCC #1	QPSK	1	25	1:1	0.325	1.030	0.335	
782.0	23230	LTE B13	10	22.50	22.18	0.030	1	0 mm [Rear]	FCC #1	QPSK	25	12	1:1	0.250	1.076	0.269	
782.0	23230	LTE B13	10	23.50	23.37	-0.010	0	0 mm [Right]	FCC #1	QPSK	1	25	1:1	0.307	1.030	0.316	
782.0	23230	LTE B13	10	22.50	22.18	-0.020	1	0 mm [Right]	FCC #1	QPSK	25	12	1:1	0.220	1.076	0.237	
782.0	23230	LTE B13	10	23.50	23.37	0.100	0	0 mm [Left]	FCC #1	QPSK	1	25	1:1	0.479	1.030	0.493	
782.0	23230	LTE B13	10	22.50	22.18	-0.090	1	0 mm [Left]	FCC #1	QPSK	25	12	1:1	0.356	1.076	0.383	
782.0	23230	LTE B13	10	23.50	23.37	0.110	0	0 mm [Left]	FCC #1	QPSK	1	25	1:1	0.475	1.030	0.489	
831.5	26865	LTE B26	15	23.50	23.18	-0.090	0	0 mm [Bottom]	FCC #1	QPSK	1	74	1:1	0.153	1.076	0.165	A80
831.5	26865	LTE B26	15	22.50	22.16	-0.020	1	0 mm [Bottom]	FCC #1	QPSK	36	37	1:1	0.127	1.081	0.137	
831.5	26865	LTE B26	15	23.50	23.18	0.050	0	0 mm [Front]	FCC #1	QPSK	1	74	1:1	0.383	1.076	0.412	
831.5	26865	LTE B26	15	22.50	22.16	0.020	1	0 mm [Front]	FCC #1	QPSK	36	37	1:1	0.310	1.081	0.335	
831.5	26865	LTE B26	15	23.50	23.18	-0.060	0	0 mm [Rear]	FCC #1	QPSK	1	74	1:1	0.439	1.076	0.472	
831.5	26865	LTE B26	15	22.50	22.16	0.050	1	0 mm [Rear]	FCC #1	QPSK	36	37	1:1	0.402	1.081	0.435	
831.5	26865	LTE B26	15	23.50	23.18	0.070	0	0 mm [Right]	FCC #1	QPSK	1	74	1:1	0.301	1.076	0.324	
831.5	26865	LTE B26	15	22.50	22.16	0.060	1	0 mm [Right]	FCC #1	QPSK	36	37	1:1	0.254	1.081	0.275	
831.5	26865	LTE B26	15	23.50	23.18	0.100	0	0 mm [Left]	FCC #1	QPSK	1	74	1:1	0.501	1.076	0.539	
831.5	26865	LTE B26	15	22.50	22.16	-0.090	1	0 mm [Left]	FCC #1	QPSK	36	37	1:1	0.397	1.081	0.429	
831.5	26865	LTE B26	15	23.50	23.18	-0.130	0	0 mm [Left]	FCC #1	QPSK	1	74	1:1	0.451	1.076	0.485	
1732.5	20175	LTE B4	20	24.00	23.93	-0.170	0	0 mm [Bottom]	FCC #1	QPSK	1	50	1:1	0.824	1.016	0.837	A81
1732.5	20175	LTE B4	20	23.00	22.83	0.030	1	0 mm [Bottom]	FCC #1	QPSK	50	25	1:1	0.666	1.040	0.693	
1732.5	20175	LTE B4	20	24.00	23.93	0.010	0	0 mm [Front]	FCC #1	QPSK	1	50	1:1	1.010	1.016	1.026	
1732.5	20175	LTE B4	20	23.00	22.83	-0.030	1	0 mm [Front]	FCC #1	QPSK	50	25	1:1	0.832	1.040	0.865	
1732.5	20175	LTE B4	20	24.00	23.93	0.120	0	0 mm [Rear]	FCC #1	QPSK	1	50	1:1	0.871	1.016	0.885	
1732.5	20175	LTE B4	20	23.00	22.83	0.010	1	0 mm [Rear]	FCC #1	QPSK	50	25	1:1	0.731	1.040	0.760	
1732.5	20175	LTE B4	20	24.00	23.93	0.010	0	0 mm [Right]	FCC #1	QPSK	1	50	1:1	0.356	1.016	0.362	
1732.5	20175	LTE B4	20	23.00	22.83	-0.020	1	0 mm [Right]	FCC #1	QPSK	50	25	1:1	0.310	1.040	0.322	
1732.5	20175	LTE B4	20	24.00	23.93	0.180	0	0 mm [Left]	FCC #1	QPSK	1	50	1:1	0.137	1.016	0.139	
1732.5	20175	LTE B4	20	23.00	22.83	0.020	1	0 mm [Left]	FCC #1	QPSK	50	25	1:1	0.119	1.040	0.124	
1732.5	20175	LTE B4	20	24.00	23.93	0.090	0	0 mm [Front]	FCC #1	QPSK	1	50	1:1	0.998	1.016	1.014	
1882.5	26365	LTE B25	20	24.00	23.95	0.070	0	0 mm [Bottom]	FCC #1	QPSK	1	50	1:1	0.732	1.012	0.741	A82
1882.5	26365	LTE B25	20	23.00	22.83	0.020	1	0 mm [Bottom]	FCC #1	QPSK	50	0	1:1	0.597	1.040	0.621	
1882.5	26365	LTE B25	20	24.00	23.95	0.040	0	0 mm [Front]	FCC #1	QPSK	1	50	1:1	0.836	1.012	0.846	
1882.5	26365	LTE B25	20	23.00	22.83	-0.050	1	0 mm [Front]	FCC #1	QPSK	50	0	1:1	0.702	1.040	0.730	
1882.5	26365	LTE B25	20	24.00	23.95	-0.080	0	0 mm [Rear]	FCC #1	QPSK	1	50	1:1	0.757	1.012	0.766	
1882.5	26365	LTE B25	20	23.00	22.83	-0.110	1	0 mm [Rear]	FCC #1	QPSK	50	0	1:1	0.674	1.040	0.701	
1882.5	26365	LTE B25	20	24.00	23.95	-0.010	0	0 mm [Right]	FCC #1	QPSK	1	50	1:1	0.323	1.012	0.327	
1882.5	26365	LTE B25	20	23.00	22.83	-0.020	1	0 mm [Right]	FCC #1	QPSK	50	0	1:1	0.301	1.040	0.313	
1882.5	26365	LTE B25	20	24.00	23.95	-0.030	0	0 mm [Left]	FCC #1	QPSK	1	50	1:1	0.126	1.012	0.128	
1882.5	26365	LTE B25	20	23.00	22.83	0.060	1	0 mm [Left]	FCC #1	QPSK	50	0	1:1	0.115	1.040	0.120	
1882.5	26365	LTE B25	20	24.00	23.95	0.090	0	0 mm [Front]	FCC #1	QPSK	1	50	1:1	0.831	1.012	0.841	
2510.0	20850	LTE B7	20	23.50	23.47	-0.170	0	0 mm [Bottom]	FCC #1	QPSK	1	50	1:1	0.184	1.007	0.185	A83
2510.0	20850	LTE B7	20	22.50	22.40	-0.160	1	0 mm [Bottom]	FCC #1	QPSK	50	0	1:1	0.147	1.023	0.150	
2510.0	20850	LTE B7	20	23.50	23.47	0.110	0	0 mm [Front]	FCC #1	QPSK	1	50	1:1	0.496	1.007	0.499	
2510.0	20850	LTE B7	20	22.50	22.40	0.020	1	0 mm [Front]	FCC #1	QPSK	50	0	1:1	0.356	1.023	0.364	
2510.0	20850	LTE B7	20	23.50	23.47	0.190	0	0 mm [Rear]	FCC #1	QPSK	1	50	1:1	0.613	1.007	0.617	
2510.0	20850	LTE B7	20	22.50	22.40	0.040	1	0 mm [Rear]	FCC #1	QPSK	50	0	1:1	0.514	1.023	0.526	
2510.0	20850	LTE B7	20	23.50	23.47	0.030	0	0 mm [Right]	FCC #1	QPSK	1	50	1:1	0.235	1.007	0.237	
2510.0	20850	LTE B7	20	22.50	22.40	-0.030	1	0 mm [Right]	FCC #1	QPSK	50	0	1:1	0.212	1.023	0.217	
2510.0	20850	LTE B7	20	23.50	23.47	0.010	0	0 mm [Left]	FCC #1	QPSK	1	50	1:1	0.249	1.007	0.251	
2510.0	20850	LTE B7	20	22.50	22.40	0.100	1	0 mm [Left]	FCC #1	QPSK	50	0	1:1	0.168	1.023	0.172	
2510.0	20850	LTE B7	20	23.50	23.47	-0.100	0	0 mm [Rear]	FCC #1	QPSK	1	50	1:1	0.192	1.007	0.193	
2593.0	40620	LTE B41	20	20.50	20.20	0.000	0	0 mm [Bottom]	FCC #1	QPSK	1	50	1:1	0.190	1.072	0.204	A84
2593.0	40620	LTE B41	20	19.50	19.18	0.080	1	0 mm [Bottom]	FCC #1	QPSK	50	50	1:1	0.153	1.076	0.165	
2593.0	40620	LTE B41	20	20.50	20.20	-0.010	0	0 mm [Front]	FCC #1	QPSK	1	50	1:1	0.190	1.072	0.204	
2593.0	40620	LTE B41	20	19.50	19.18	0.040	1	0 mm [Front]	FCC #1	QPSK	50	50	1:1	0.153			

Table 10.4.3 DTS Phablet SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	10g SAR [W/kg]	Scaling Factor	Scaling Factor (Duty Cycle)	10g Scaled SAR [W/kg]	Pilot #
MHz	Ch														
2 462.0	11	802.11b (Ant.1)	16.00	15.51	0.010	0 mm [Top]	FCC #2	0.080	1	99.2	0.070	1.119	1.008	0.079	
2 462.0	11	802.11b (Ant.1)	16.00	15.51	0.180	0 mm [Front]	FCC #2	0.065	1	99.2	0.064	1.119	1.008	0.072	
2 462.0	11	802.11b (Ant.1)	16.00	15.51	0.040	0 mm [Rear]	FCC #2	0.101	1	99.2	0.098	1.119	1.008	0.111	
2 462.0	11	802.11b (Ant.1)	16.00	15.51	-0.150	0 mm [Left]	FCC #2	0.951	1	99.2	0.891	1.119	1.008	1.005	A85
2 462.0	11	802.11b (Ant.1)	16.00	15.51	0.090	0 mm [Left]	FCC #2	0.941	1	99.2	0.886	1.119	1.008	0.999	
2 437.0	6	802.11b (Ant.2)	16.00	15.81	0.170	0 mm [Front]	FCC #2	0.046	1	99.2	0.046	1.045	1.008	0.048	
2 437.0	6	802.11b (Ant.2)	16.00	15.81	0.050	0 mm [Rear]	FCC #2	0.066	1	99.2	0.065	1.045	1.008	0.068	
2 437.0	6	802.11b (Ant.2)	16.00	15.81	0.070	0 mm [Right]	FCC #2	0.294	1	99.2	0.291	1.045	1.008	0.307	A86
2 437.0	6	802.11b (Ant.2)	16.00	15.81	-0.190	0 mm [Right]	FCC #2	0.286	1	99.2	0.283	1.045	1.008	0.298	
2 437.0	6	802.11b (MIMO)	19.00	18.67	-0.070	0 mm [Top]	FCC #2	0.096	1	99.2	0.086	1.119	1.008	0.097	
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.010	0 mm [Front]	FCC #2	0.078	1	99.2	0.076	1.119	1.008	0.086	
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.010	0 mm [Rear]	FCC #2	0.140	1	99.2	0.128	1.119	1.008	0.144	
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.100	0 mm [Right]	FCC #2	0.257	1	99.2	0.243	1.119	1.008	0.274	
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.000	0 mm [Left]	FCC #2	0.974	1	99.2	0.994	1.119	1.008	1.121	A87
2 437.0	6	802.11b (MIMO)	19.00	18.67	0.100	0 mm [Left]	FCC #2	0.971	1	99.2	0.980	1.119	1.008	1.105	
ANSI / IEEE C63.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Phablet 4.0 W/kg (mW/g) averaged over 10 gram							

Note: Blue entries represent additional Phablet SAR Test (with handstrap) with the worst case position.

Adjusted SAR results for OFDM SAR												
FREQUENCY		Mode/ Antenna	Service	Maximum Allowed Power [dBm]	10g Scaled SAR (W/kg)	FREQUENCY [MHz]	Mode	Service	Maximum Allowed Power [dBm]	Ratio of OFDM to DSSS	10g Adjusted SAR (W/kg)	Determine OFDM SAR
MHz	Ch											
2 462.0	11	802.11b (Ant.1)	DSSS	16.0	1.005	2 437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	12.0	0.398	0.400	X
2 462.0	11	802.11b (Ant.1)	DSSS	16.0	1.005	2 437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	12.0	0.398	0.400	X
2 437.0	6	802.11b (Ant.2)	DSSS	16.0	0.307	2 437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	12.0	0.398	0.122	X
2 437.0	6	802.11b (Ant.2)	DSSS	16.0	0.307	2 437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	12.0	0.398	0.122	X
2 437.0	6	802.11b (MIMO)	DSSS	19.0	1.121	2 437.0	802.11g/n(HT-20)/ac(VHT-20)	OFDM	15.0	0.398	0.446	X
2 437.0	6	802.11b (MIMO)	DSSS	19.0	1.121	2 437.0	802.11n(HT-40)/ac(VHT-40)	OFDM	15.0	0.398	0.446	X
ANSI / IEEE C63.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Phablet 4.0 W/kg (mW/g) averaged over 10 gram				

Note: SAR is not required for the following 2.4 GHz OFDM conditions. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 3.0 W/kg.

Table 10.4.4 UNII Phablet SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	10g SAR [W/kg]	Scaling Factor	Scaling Factor (Duty Cycle)	10g Scaled SAR [W/kg]	Pilot #
MHz	Ch														
5 260.0	52	802.11a (Ant.1)	14.00	13.19	-0.180	0 mm [Top]	FCC #2	0.109	6	95.6	0.111	1.205	1.046	0.140	
5 260.0	52	802.11a (Ant.1)	14.00	13.19	0.050	0 mm [Front]	FCC #2	0.056	6	95.6	0.055	1.205	1.046	0.069	
5 260.0	52	802.11a (Ant.1)	14.00	13.19	0.020	0 mm [Rear]	FCC #2	0.026	6	95.6	0.023	1.205	1.046	0.029	
5 260.0	52	802.11a (Ant.1)	14.00	13.19	0.070	0 mm [Left]	FCC #2	0.284	6	95.6	0.332	1.205	1.046	0.418	A88
5 260.0	52	802.11a (Ant.1)	14.00	13.19	0.020	0 mm [Left]	FCC #2	0.281	6	95.6	0.330	1.205	1.046	0.416	
5 280.0	56	802.11a (Ant.2)	14.00	13.25	0.000	0 mm [Front]	FCC #2	0.015	6	95.4	0.012	1.189	1.048	0.015	
5 280.0	56	802.11a (Ant.2)	14.00	13.25	-0.130	0 mm [Rear]	FCC #2	0.028	6	95.4	0.027	1.189	1.048	0.034	
5 280.0	56	802.11a (Ant.2)	14.00	13.25	-0.030	0 mm [Right]	FCC #2	0.105	6	95.4	0.116	1.189	1.048	0.145	A89
5 280.0	56	802.11a (Ant.2)	14.00	13.25	0.070	0 mm [Right]	FCC #2	0.102	6	95.4	0.113	1.189	1.048	0.141	
5 260.0	52	802.11a (MIMO)	17.00	16.18	-0.030	0 mm [Top]	FCC #2	0.123	6	95.3	0.127	1.208	1.049	0.161	
5 260.0	52	802.11a (MIMO)	17.00	16.18	-0.130	0 mm [Front]	FCC #2	0.076	6	95.3	0.078	1.208	1.049	0.099	
5 260.0	52	802.11a (MIMO)	17.00	16.18	-0.130	0 mm [Rear]	FCC #2	0.029	6	95.3	0.023	1.208	1.049	0.029	
5 260.0	52	802.11a (MIMO)	17.00	16.18	-0.090	0 mm [Right]	FCC #2	0.118	6	95.3	0.123	1.208	1.049	0.156	
5 260.0	52	802.11a (MIMO)	17.00	16.18	-0.030	0 mm [Left]	FCC #2	0.300	6	95.3	0.354	1.208	1.049	0.449	A90
5 260.0	52	802.11a (MIMO)	17.00	16.18	0.080	0 mm [Left]	FCC #2	0.302	6	95.3	0.349	1.208	1.049	0.442	
ANSI / IEEE C63.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Phablet 4.0 W/kg (mW/g) averaged over 10 gram							

Note: Blue entries represent additional Phablet SAR Test (with handstrap) with the worst case position.

Adjusted SAR results for UNII-1 and UNII-2A SAR												
FREQUENCY		Mode/ Antenna	Service	Maximum Allowed Power [dBm]	10g Scaled SAR (W/kg)	FREQUENCY [MHz]	Mode	Service	Maximum Allowed Power [dBm]	Adjusted Factor	10g Adjusted SAR (W/kg)	SAR for the band with lower maximum output power
MHz	Ch											
5 260.0	52	802.11a (Ant.1)	OFDM	14.00	0.418	5 180.0	802.11a	OFDM	14.00	1.000	0.418	X
5 280.0	56	802.11a (Ant.2)	OFDM	14.00	0.145	5 220.0	802.11a	OFDM	14.00	1.000	0.145	X
5 260.0	52	802.11a (MIMO)	OFDM	17.00	0.449	5 180.0	802.11a	OFDM	17.00	1.000	0.449	X
ANSI / IEEE C63.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure						Phablet 4.0 W/kg (mW/g) averaged over 10 gram						

Note: U-NII-1 and U-NII-2A Bands: When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 3.0 W/kg, SAR is not required for the band with lower maximum output power in that test configuration.

Table 10.4.5 UNII Phablet SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Peak SAR of Area Scan	Data Rate [Mbps]	Duty Cycle	10g SAR [W/kg]	Scaling Factor	Scaling Factor (Duty Cycle)	10g Scaled SAR [W/kg]	Plots #
MHz	Ch														
5 500.0	100	802.11a (Ant.1)	14.00	13.32	0.070	0 mm [Top]	FCC #2	0.111	6	95.6	0.117	1.169	1.019	0.139	
5 500.0	100	802.11a (Ant.1)	14.00	13.32	0.090	0 mm [Front]	FCC #2	0.107	6	95.6	0.109	1.169	1.019	0.130	
5 500.0	100	802.11a (Ant.1)	14.00	13.32	-0.030	0 mm [Rear]	FCC #2	0.034	6	95.6	0.031	1.169	1.019	0.037	
5 500.0	100	802.11a (Ant.1)	14.00	13.32	0.070	0 mm [Left]	FCC #2	0.427	6	95.6	0.501	1.169	1.019	0.597	A91
5 500.0	100	802.11a (Ant.1)	14.00	13.32	0.020	0 mm [Left]	FCC #2	0.385	6	95.6	0.487	1.169	1.019	0.580	
5 660.0	132	802.11a (Ant.2)	14.00	13.12	0.050	0 mm [Front]	FCC #2	0.038	6	95.4	0.045	1.225	1.019	0.056	
5 660.0	132	802.11a (Ant.2)	14.00	13.12	0.030	0 mm [Rear]	FCC #2	0.058	6	95.4	0.065	1.225	1.019	0.081	
5 660.0	132	802.11a (Ant.2)	14.00	13.12	-0.030	0 mm [Right]	FCC #2	0.226	6	95.4	0.241	1.225	1.019	0.301	A92
5 660.0	132	802.11a (Ant.2)	14.00	13.12	0.070	0 mm [Right]	FCC #2	0.221	6	95.4	0.237	1.225	1.019	0.296	
5 500.0	100	802.11a (MIMO)	17.00	16.22	0.040	0 mm [Top]	FCC #2	0.115	6	95.3	0.121	1.225	1.019	0.151	
5 500.0	100	802.11a (MIMO)	17.00	16.22	0.070	0 mm [Front]	FCC #2	0.103	6	95.3	0.111	1.225	1.019	0.139	
5 500.0	100	802.11a (MIMO)	17.00	16.22	-0.020	0 mm [Rear]	FCC #2	0.048	6	95.3	0.042	1.225	1.019	0.052	
5 500.0	100	802.11a (MIMO)	17.00	16.22	0.070	0 mm [Right]	FCC #2	0.243	6	95.3	0.257	1.225	1.019	0.321	
5 500.0	100	802.11a (MIMO)	17.00	16.22	0.190	0 mm [Left]	FCC #2	0.419	6	95.3	0.526	1.225	1.019	0.657	A93
5 500.0	100	802.11a (MIMO)	17.00	16.22	0.120	0 mm [Left]	FCC #2	0.452	6	95.3	0.503	1.225	1.019	0.628	
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.020	0 mm [Top]	FCC #2	0.125	6	95.6	0.134	1.211	1.046	0.170	
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.050	0 mm [Front]	FCC #2	0.102	6	95.6	0.101	1.211	1.046	0.128	
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.160	0 mm [Rear]	FCC #2	0.038	6	95.6	0.035	1.211	1.046	0.044	
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.100	0 mm [Left]	FCC #2	0.508	6	95.6	0.625	1.211	1.046	0.792	A94
5 825.0	165	802.11a (Ant.1)	14.00	13.17	0.070	0 mm [Left]	FCC #2	0.496	6	95.6	0.604	1.211	1.046	0.765	
5 785.0	157	802.11a (Ant.2)	14.00	13.29	0.090	0 mm [Front]	FCC #2	0.028	6	95.4	0.027	1.178	1.048	0.033	
5 785.0	157	802.11a (Ant.2)	14.00	13.29	-0.010	0 mm [Rear]	FCC #2	0.073	6	95.4	0.082	1.178	1.048	0.101	
5 785.0	157	802.11a (Ant.2)	14.00	13.29	-0.050	0 mm [Right]	FCC #2	0.241	6	95.4	0.272	1.178	1.048	0.336	A95
5 785.0	157	802.11a (Ant.2)	14.00	13.29	0.070	0 mm [Right]	FCC #2	0.224	6	95.4	0.255	1.178	1.048	0.315	
5 785.0	157	802.11a (MIMO)	17.00	16.21	-0.030	0 mm [Top]	FCC #2	0.128	6	95.3	0.136	1.211	1.049	0.173	
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.070	0 mm [Front]	FCC #2	0.109	6	95.3	0.113	1.211	1.049	0.144	
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.010	0 mm [Rear]	FCC #2	0.106	6	95.3	0.105	1.211	1.049	0.133	
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.080	0 mm [Right]	FCC #2	0.412	6	95.3	0.469	1.211	1.049	0.596	
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.150	0 mm [Left]	FCC #2	0.541	6	95.3	0.682	1.211	1.049	0.867	A96
5 785.0	157	802.11a (MIMO)	17.00	16.21	0.070	0 mm [Left]	FCC #2	0.539	6	95.3	0.672	1.211	1.049	0.854	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Phablet 4.0 W/kg (mW/g) averaged over 10 gram							

Note: Blue entries represent additional Phablet SAR Test (with handstrap) with the worst case position.

Table 10.4.6 Bluetooth Phablet SAR

MEASUREMENT RESULTS														
FREQUENCY		Mode	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Drift Power [dB]	Phantom Position	Device Serial Number	Rate [Mbps]	Duty Cycle (%)	10g SAR [W/kg]	Scaling Factor	Scaling Factor (Duty Cycle)	10g Scaled SAR [W/kg]	Plots #
MHz	Ch													
2 441.0	39	Bluetooth	6.85	5.97	0.010	0 mm [Top]	FCC #2	1	76.8	0.012	1.225	1.302	0.019	
2 441.0	39	Bluetooth	6.85	5.97	0.080	0 mm [Front]	FCC #2	1	76.8	0.011	1.225	1.302	0.018	
2 441.0	39	Bluetooth	6.85	5.97	0.140	0 mm [Rear]	FCC #2	1	76.8	0.017	1.225	1.302	0.027	
2 441.0	39	Bluetooth	6.85	5.97	0.060	0 mm [Left]	FCC #2	1	76.8	0.166	1.225	1.302	0.265	A97
2 441.0	39	Bluetooth	6.85	5.97	0.170	0 mm [Left]	FCC #2	1	76.8	0.148	1.225	1.302	0.236	
ANSI / IEEE C95.1-1992- SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population Exposure								Phablet 4.0 W/kg (mW/g) averaged over 10 gram						

Note: Blue entries represent additional Phablet SAR Test (with handstrap) with the worst case position.

10.5 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. A standard battery was used for all 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 boy-worn SAR was not > 1.2 W/kg, no additional body-worn SAR evaluations using a headset cable were performed.
8. 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.
9. SAR measurements were performed using the DASY5 automated system. The procedure for spatial peak SAR evaluation has been implemented according to the IEEE 1528 standard. During a maximum search, global and local maxima searches are automatically performed in 2-D after each area scan measurement. The algorithm will find the global maximum and all local maxima within 2 dB of the global maxima for all SAR distributions. All local maxima within 2 dB of the global maximum were searched and passed for the Zoom Scan measurement.

GPRS Notes:

1. This device supports GPRS VOIP in the head and body-worn configurations; therefore GPRS was additionally evaluated for head and body-worn compliance.
2. Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October2013 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.
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 then testing at the other channels is not required for such test configuration(s). Since the maximum output power variation across the required test channels is not > $\frac{1}{2}$ dB, the middle channel was used for testing.

WCDMA (UMTS) Notes:

1. WCDMA (UMTS) mode in was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required since the average output power of the HSPA subtests was not more than 0.25 dB higher than the RMC level and SAR was less than 1.2 W/kg.
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 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 $> \frac{1}{2}$ dB, instead of the middle channel, the highest output power channel was used.

LTE Notes:

1. LTE Considerations: LTE test configurations are determined according to SAR Evaluation Considerations for LTE Devices in FCC KDB Publication 941225 D05v02r05. The general test procedures used for testing can be found in Section 8.4.4.
2. According to FCC KDB 941225 D05v02r05, when the reported SAR is ≤ 0.8 W/kg, testing of the 100% RB allocation and required test channels is not required.
Otherwise, SAR is required for the remaining required test channels using the 1 RB, 50% RB and 100% RB allocation with highest output power for that channel.
Only one channel, and as reported SAR values for 1 RB allocation and 50% RB allocation were less than 1.45 W/kg only the highest power RB offset for each allocation was required.
3. 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.
4. A-MPR was disabled for all SAR tests by setting NS=1 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).
5. Per KDB Publication 941225 D05Av01r02, 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.
6. Per FCC KDB Publication 447498 D01v06, when the reported (scaled) for LTE Band 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.
7. TDD LTE was tested per the guidance provided in FCC KDB Publication 941225 D05v02r05. Testing was performed using UL-DL configuration 0 with 6 UL sub frames and 2S sub frames using extended cyclic prefix only and special sub frame configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Sec. 4, the duty factor using extended cyclic prefix is 0.633 (cf=1.58).
8. SAR test reduction is applied using the following criteria:
Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is > 0.8 W/kg, testing for other channels is performed at the highest output power level for 1 RB, and 50% RB configuration for that channel. Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High channel when the highest reported SAR for 1 RB and 50% RB are > 0.8 W/kg, Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation < 1.45 W/kg. Testing for 16QAM modulation is not required because the reported SAR for QPSK is < 1.45 W/kg and its output power is not more than 0.5 dB higher than that a QPSK. Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is < 1.45 W/kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.

WLAN Notes:

1. 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, 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 single transmission chain 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 when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output and the adjust SAR is ≤ 1.2 W/kg.
3. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI single transmission chain 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.
4. When the maximum reported 1g averaged SAR ≤ 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 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 to determine compliance.
6. Per KDB Publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB Publication 447498 D01v06 by making a SAR measurement with both antennas transmitting simultaneously.

Bluetooth Notes:

1. Bluetooth SAR was measured with the device connected to a call with hopping disabled with DH5 operation and Tx test mode type. Per October 2016 TCB Workshop Notes, the reported SAR was scaled to the 100% transmission duty factor to determine compliance. Refer to section 9.5 for the time-domain plot and calculation for the duty factor of the device.
2. Head and hotspot Bluetooth SAR were evaluated for BT tethering applications.

11. FCC MULTI-TX AND ANTENNA SAR CONSIDERATIONS

11.1 Introduction

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

11.2 Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore simultaneous transmission analysis is required. Per FCC KDB 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 sum 1-g SAR for all the simultaneous transmitting antennas in a specific physical test configuration is ≤ 1.6 W/kg. The different test position in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1-g or 10-g SAR.

11.3 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be transmitting 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.

Table 11.3.1 Simultaneous SAR Cases

No.	Capable Transmit Configuration	Head SAR	Body-Worn SAR	Hotspot SAR	Extremity SAR	Note
1	WCDMA + Wi-Fi 2.4 GHz	Yes	Yes	Yes	Yes	
2	WCDMA + Wi-Fi 5 GHz	Yes	Yes	Yes	Yes	
3	WCDMA + Bluetooth 2.4 GHz	Yes^	Yes	Yes	Yes	^Bluetooth Tethering is considered.
4	WCDMA + Wi-Fi 2.4 GHz MIMO	Yes	Yes	Yes	Yes	
5	WCDMA + Wi-Fi 5 GHz MIMO	Yes	Yes	Yes	Yes	
6	WCDMA + Wi-Fi 2.4 GHz Ant.1 + Wi-Fi 5 GHz Ant.2	Yes	Yes	Yes	Yes	
7	WCDMA + Bluetooth 2.4 GHz + Wi-Fi 5 GHz	Yes^	Yes	Yes	Yes	^Bluetooth Tethering is considered.
8	WCDMA + Bluetooth 2.4 GHz + Wi-Fi 5 GHz MIMO	Yes^	Yes	Yes	Yes	^Bluetooth Tethering is considered.
9	LTE + Wi-Fi 2.4 GHz	Yes	Yes	Yes	Yes	
10	LTE + Wi-Fi 5 GHz	Yes	Yes	Yes	Yes	
11	LTE + Bluetooth 2.4 GHz	Yes^	Yes	Yes	Yes	^Bluetooth Tethering is considered.
12	LTE + Wi-Fi 2.4 GHz MIMO	Yes	Yes	Yes	Yes	
13	LTE + Wi-Fi 5 GHz MIMO	Yes	Yes	Yes	Yes	
14	LTE + Wi-Fi 2.4 GHz Ant.1 + Wi-Fi 5 GHz Ant.2	Yes	Yes	Yes	Yes	
15	LTE + Bluetooth 2.4 GHz + Wi-Fi 5GHz	Yes^	Yes	Yes	Yes	^Bluetooth Tethering is considered.
16	LTE + Bluetooth 2.4 GHz + Wi-Fi 5GHz MIMO	Yes^	Yes	Yes	Yes	^Bluetooth Tethering is considered.
17	GPRS/EDGE + Wi-Fi 2.4 GHz	Yes*	Yes*	Yes	Yes	*Pre-installed VOIP applications are considered.
18	GPRS/EDGE + Wi-Fi 5 GHz	Yes*	Yes*	Yes	Yes	*Pre-installed VOIP applications are considered.
19	GPRS/EDGE + Bluetooth 2.4 GHz	Yes^*	Yes*	Yes	Yes	*Pre-installed VOIP applications are considered. ^Bluetooth Tethering is considered.
20	GPRS/EDGE + Wi-Fi 2.4 GHz MIMO	Yes*	Yes*	Yes	Yes	*Pre-installed VOIP applications are considered.
21	GPRS/EDGE + Wi-Fi 5 GHz MIMO	Yes*	Yes*	Yes	Yes	*Pre-installed VOIP applications are considered.
22	GPRS/EDGE + Wi-Fi 2.4 GHz Ant.1 + Wi-Fi 5 GHz Ant.2	Yes*	Yes*	Yes	Yes	*Pre-installed VOIP applications are considered.
23	GPRS/EDGE + Bluetooth 2.4 GHz + Wi-Fi 5 GHz	Yes^*	Yes*	Yes	Yes	*Pre-installed VOIP applications are considered. ^Bluetooth Tethering is considered.
24	GPRS/EDGE + Bluetooth 2.4 GHz + Wi-Fi 5 GHz MIMO	Yes^*	Yes*	Yes	Yes	*Pre-installed VOIP applications are considered. ^Bluetooth Tethering is considered.
25	Wi-Fi 2.4 GHz Ant.1 + Wi-Fi 5 GHz Ant.2	Yes	Yes	N/A	Yes	
26	Bluetooth 2.4 GHz + Wi-Fi 5 GHz	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered.
27	Bluetooth 2.4 GHz + Wi-Fi 5 GHz MIMO	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered.

Notes:

1. Wi-Fi 2.4GHz is supported Hotspot and Wi-Fi-Direct(GO/GC).
2. Wi-Fi 5GHz is supported Hotspot and Wi-Fi-Direct(GO/GC).
3. LTE, WCDMA, GPRS/EDGE is supported Hotspot.
4. VoIP is supported in LTE, WCDMA and GPRS.
5. Bluetooth and Wi-Fi can not transmit simultaneously at 2.4G band.
6. GSM, WCDMA and LTE can not transmit simultaneously since they share the same chip.

11.4 Head SAR Simultaneous Transmission Analysis

Table 11.4.1 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.3 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.3G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.047	0.014	0.454	0.421	0.468
	GPRS 1900	Front	0.503	0.047	0.014	0.550	0.517	0.564
	WCDMA 850	Front	0.388	0.047	0.014	0.435	0.402	0.449
	WCDMA 1700	Front	0.558	0.047	0.014	0.605	0.572	0.619
	WCDMA 1900	Front	0.509	0.047	0.014	0.556	0.523	0.570
	LTE Band 12	Front	0.185	0.047	0.014	0.232	0.199	0.246
	LTE Band 13	Front	0.303	0.047	0.014	0.350	0.317	0.364
	LTE Band 26	Front	0.381	0.047	0.014	0.428	0.395	0.442
	LTE Band 4	Front	0.498	0.047	0.014	0.545	0.512	0.559
	LTE Band 25	Front	0.388	0.047	0.014	0.435	0.402	0.449
	LTE Band 7	Front	0.675	0.047	0.014	0.722	0.689	0.736
	LTE Band 41	Front	0.150	0.047	0.014	0.197	0.164	0.211

Table 11.4.2 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.6 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.6G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.047	0.017	0.454	0.424	0.471
	GPRS 1900	Front	0.503	0.047	0.017	0.550	0.520	0.567
	WCDMA 850	Front	0.388	0.047	0.017	0.435	0.405	0.452
	WCDMA 1700	Front	0.558	0.047	0.017	0.605	0.575	0.622
	WCDMA 1900	Front	0.509	0.047	0.017	0.556	0.526	0.573
	LTE Band 12	Front	0.185	0.047	0.017	0.232	0.202	0.249
	LTE Band 13	Front	0.303	0.047	0.017	0.350	0.320	0.367
	LTE Band 26	Front	0.381	0.047	0.017	0.428	0.398	0.445
	LTE Band 4	Front	0.498	0.047	0.017	0.545	0.515	0.562
	LTE Band 25	Front	0.388	0.047	0.017	0.435	0.405	0.452
	LTE Band 7	Front	0.675	0.047	0.017	0.722	0.692	0.739
	LTE Band 41	Front	0.150	0.047	0.017	0.197	0.167	0.214

Table 11.4.3 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.8 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.047	0.021	0.454	0.428	0.471
	GPRS 1900	Front	0.503	0.047	0.021	0.550	0.524	0.571
	WCDMA 850	Front	0.388	0.047	0.021	0.435	0.409	0.456
	WCDMA 1700	Front	0.558	0.047	0.021	0.605	0.579	0.626
	WCDMA 1900	Front	0.509	0.047	0.021	0.556	0.530	0.577
	LTE Band 12	Front	0.185	0.047	0.021	0.232	0.206	0.253
	LTE Band 13	Front	0.303	0.047	0.021	0.350	0.324	0.371
	LTE Band 26	Front	0.381	0.047	0.021	0.428	0.402	0.449
	LTE Band 4	Front	0.498	0.047	0.021	0.545	0.519	0.566
	LTE Band 25	Front	0.388	0.047	0.021	0.435	0.409	0.456
	LTE Band 7	Front	0.675	0.047	0.021	0.722	0.696	0.743
	LTE Band 41	Front	0.150	0.047	0.021	0.197	0.171	0.218

Table 11.4.4 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.3 GHz W-LAN Ant.1 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.3G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.013	0.059	0.420	0.466	0.479
	GPRS 1900	Front	0.503	0.013	0.059	0.516	0.562	0.575
	WCDMA 850	Front	0.388	0.013	0.059	0.401	0.447	0.460
	WCDMA 1700	Front	0.558	0.013	0.059	0.571	0.617	0.630
	WCDMA 1900	Front	0.509	0.013	0.059	0.522	0.568	0.581
	LTE Band 12	Front	0.185	0.013	0.059	0.198	0.244	0.257
	LTE Band 13	Front	0.303	0.013	0.059	0.316	0.362	0.375
	LTE Band 26	Front	0.381	0.013	0.059	0.394	0.440	0.453
	LTE Band 4	Front	0.498	0.013	0.059	0.511	0.557	0.570
	LTE Band 25	Front	0.388	0.013	0.059	0.401	0.447	0.460
	LTE Band 7	Front	0.675	0.013	0.059	0.688	0.734	0.747
	LTE Band 41	Front	0.150	0.013	0.059	0.163	0.209	0.222

Table 11.4.5 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.3 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.3G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.013	0.014	0.420	0.421	0.434
	GPRS 1900	Front	0.503	0.013	0.014	0.516	0.517	0.530
	WCDMA 850	Front	0.388	0.013	0.014	0.401	0.402	0.415
	WCDMA 1700	Front	0.558	0.013	0.014	0.571	0.572	0.585
	WCDMA 1900	Front	0.509	0.013	0.014	0.522	0.523	0.536
	LTE Band 12	Front	0.185	0.013	0.014	0.198	0.199	0.212
	LTE Band 13	Front	0.303	0.013	0.014	0.316	0.317	0.330
	LTE Band 26	Front	0.381	0.013	0.014	0.394	0.395	0.408
	LTE Band 4	Front	0.498	0.013	0.014	0.511	0.512	0.525
	LTE Band 25	Front	0.388	0.013	0.014	0.401	0.402	0.415
	LTE Band 7	Front	0.675	0.013	0.014	0.688	0.689	0.702
	LTE Band 41	Front	0.150	0.013	0.014	0.163	0.164	0.177

Table 11.4.6 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.3 GHz W-LAN MIMO (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.3G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.013	0.075	0.420	0.482	0.495
	GPRS 1900	Front	0.503	0.013	0.075	0.516	0.578	0.591
	WCDMA 850	Front	0.388	0.013	0.075	0.401	0.463	0.476
	WCDMA 1700	Front	0.558	0.013	0.075	0.571	0.633	0.646
	WCDMA 1900	Front	0.509	0.013	0.075	0.522	0.584	0.597
	LTE Band 12	Front	0.185	0.013	0.075	0.198	0.260	0.273
	LTE Band 13	Front	0.303	0.013	0.075	0.316	0.378	0.391
	LTE Band 26	Front	0.381	0.013	0.075	0.394	0.456	0.469
	LTE Band 4	Front	0.498	0.013	0.075	0.511	0.573	0.586
	LTE Band 25	Front	0.388	0.013	0.075	0.401	0.463	0.476
	LTE Band 7	Front	0.675	0.013	0.075	0.688	0.750	0.763
	LTE Band 41	Front	0.150	0.013	0.075	0.163	0.225	0.238

Table 11.4.7 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.6 GHz W-LAN Ant.1 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.6G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.013	0.127	0.420	0.534	0.547
	GPRS 1900	Front	0.503	0.013	0.127	0.516	0.630	0.643
	WCDMA 850	Front	0.388	0.013	0.127	0.401	0.515	0.528
	WCDMA 1700	Front	0.558	0.013	0.127	0.571	0.685	0.698
	WCDMA 1900	Front	0.509	0.013	0.127	0.522	0.636	0.649
	LTE Band 12	Front	0.185	0.013	0.127	0.198	0.312	0.325
	LTE Band 13	Front	0.303	0.013	0.127	0.316	0.430	0.443
	LTE Band 26	Front	0.381	0.013	0.127	0.394	0.508	0.521
	LTE Band 4	Front	0.498	0.013	0.127	0.511	0.625	0.638
	LTE Band 25	Front	0.388	0.013	0.127	0.401	0.515	0.528
	LTE Band 7	Front	0.675	0.013	0.127	0.688	0.802	0.815
	LTE Band 41	Front	0.150	0.013	0.127	0.163	0.277	0.290

Table 11.4.8 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.6 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.6G W-LAN Ant.2 SAR (W/kg)	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.013	0.017	0.420	0.424	0.437
	GPRS 1900	Front	0.503	0.013	0.017	0.516	0.520	0.533
	WCDMA 850	Front	0.388	0.013	0.017	0.401	0.405	0.418
	WCDMA 1700	Front	0.558	0.013	0.017	0.571	0.575	0.588
	WCDMA 1900	Front	0.509	0.013	0.017	0.522	0.526	0.539
	LTE Band 12	Front	0.185	0.013	0.017	0.198	0.202	0.215
	LTE Band 13	Front	0.303	0.013	0.017	0.316	0.320	0.333
	LTE Band 26	Front	0.381	0.013	0.017	0.394	0.398	0.411
	LTE Band 4	Front	0.498	0.013	0.017	0.511	0.515	0.528
	LTE Band 25	Front	0.388	0.013	0.017	0.401	0.405	0.418
	LTE Band 7	Front	0.675	0.013	0.017	0.688	0.692	0.705
	LTE Band 41	Front	0.150	0.013	0.017	0.163	0.167	0.180

Table 11.4.9 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.6 GHz W-LAN MIMO (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.6G W-LAN MIMO SAR (W/kg)	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.013	0.132	0.420	0.539	0.552
	GPRS 1900	Front	0.503	0.013	0.132	0.516	0.635	0.648
	WCDMA 850	Front	0.388	0.013	0.132	0.401	0.520	0.533
	WCDMA 1700	Front	0.558	0.013	0.132	0.571	0.690	0.703
	WCDMA 1900	Front	0.509	0.013	0.132	0.522	0.641	0.654
	LTE Band 12	Front	0.185	0.013	0.132	0.198	0.317	0.330
	LTE Band 13	Front	0.303	0.013	0.132	0.316	0.435	0.448
	LTE Band 26	Front	0.381	0.013	0.132	0.394	0.513	0.526
	LTE Band 4	Front	0.498	0.013	0.132	0.511	0.630	0.643
	LTE Band 25	Front	0.388	0.013	0.132	0.401	0.520	0.533
	LTE Band 7	Front	0.675	0.013	0.132	0.688	0.807	0.820
	LTE Band 41	Front	0.150	0.013	0.132	0.163	0.282	0.295

Table 11.4.10 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN Ant.1 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN Ant.1 SAR (W/kg)	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.013	0.113	0.420	0.520	0.533
	GPRS 1900	Front	0.503	0.013	0.113	0.516	0.616	0.629
	WCDMA 850	Front	0.388	0.013	0.113	0.401	0.501	0.514
	WCDMA 1700	Front	0.558	0.013	0.113	0.571	0.671	0.684
	WCDMA 1900	Front	0.509	0.013	0.113	0.522	0.622	0.635
	LTE Band 12	Front	0.185	0.013	0.113	0.198	0.298	0.311
	LTE Band 13	Front	0.303	0.013	0.113	0.316	0.416	0.429
	LTE Band 26	Front	0.381	0.013	0.113	0.394	0.494	0.507
	LTE Band 4	Front	0.498	0.013	0.113	0.511	0.611	0.624
	LTE Band 25	Front	0.388	0.013	0.113	0.401	0.501	0.514
	LTE Band 7	Front	0.675	0.013	0.113	0.688	0.788	0.801
	LTE Band 41	Front	0.150	0.013	0.113	0.163	0.263	0.276

Table 11.4.11 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.013	0.021	0.420	0.428	0.441
	GPRS 1900	Front	0.503	0.013	0.021	0.516	0.524	0.537
	WCDMA 850	Front	0.388	0.013	0.021	0.401	0.409	0.422
	WCDMA 1700	Front	0.558	0.013	0.021	0.571	0.579	0.592
	WCDMA 1900	Front	0.509	0.013	0.021	0.522	0.530	0.543
	LTE Band 12	Front	0.185	0.013	0.021	0.198	0.206	0.219
	LTE Band 13	Front	0.303	0.013	0.021	0.316	0.324	0.337
	LTE Band 26	Front	0.381	0.013	0.021	0.394	0.402	0.415
	LTE Band 4	Front	0.498	0.013	0.021	0.511	0.519	0.532
	LTE Band 25	Front	0.388	0.013	0.021	0.401	0.409	0.422
	LTE Band 7	Front	0.675	0.013	0.021	0.688	0.696	0.709
	LTE Band 41	Front	0.150	0.013	0.021	0.163	0.171	0.184

Table 11.4.12 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN MIMO (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN MIMO SAR (W/kg)	1+2	1+3	1+2+3
Head SAR	GPRS 850	Front	0.407	0.013	0.113	0.420	0.520	0.533
	GPRS 1900	Front	0.503	0.013	0.113	0.516	0.616	0.629
	WCDMA 850	Front	0.388	0.013	0.113	0.401	0.501	0.514
	WCDMA 1700	Front	0.558	0.013	0.113	0.571	0.671	0.684
	WCDMA 1900	Front	0.509	0.013	0.113	0.522	0.622	0.635
	LTE Band 12	Front	0.185	0.013	0.113	0.198	0.298	0.311
	LTE Band 13	Front	0.303	0.013	0.113	0.316	0.416	0.429
	LTE Band 26	Front	0.381	0.013	0.113	0.394	0.494	0.507
	LTE Band 4	Front	0.498	0.013	0.113	0.511	0.611	0.624
	LTE Band 25	Front	0.388	0.013	0.113	0.401	0.501	0.514
	LTE Band 7	Front	0.675	0.013	0.113	0.688	0.788	0.801
	LTE Band 41	Front	0.150	0.013	0.113	0.163	0.263	0.276

Table 11.4.13 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
Head SAR	GPRS 850	Front	0.407	0.047	0.454
	GPRS 1900	Front	0.503	0.047	0.550
	WCDMA 850	Front	0.388	0.047	0.435
	WCDMA 1700	Front	0.558	0.047	0.605
	WCDMA 1900	Front	0.509	0.047	0.556
	LTE Band 12	Front	0.185	0.047	0.232
	LTE Band 13	Front	0.303	0.047	0.350
	LTE Band 26	Front	0.381	0.047	0.428
	LTE Band 66	Front	0.498	0.047	0.545
	LTE Band 25	Front	0.388	0.047	0.435
	LTE Band 7	Front	0.675	0.047	0.722
	LTE Band 41	Front	0.150	0.047	0.197

Table 11.4.14 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Head SAR	GPRS 850	Front	0.407	0.029	0.436
	GPRS 1900	Front	0.503	0.029	0.532
	WCDMA 850	Front	0.388	0.029	0.417
	WCDMA 1700	Front	0.558	0.029	0.587
	WCDMA 1900	Front	0.509	0.029	0.538
	LTE Band 12	Front	0.185	0.029	0.214
	LTE Band 13	Front	0.303	0.029	0.332
	LTE Band 26	Front	0.381	0.029	0.410
	LTE Band 66	Front	0.498	0.029	0.527
	LTE Band 25	Front	0.388	0.029	0.417
	LTE Band 7	Front	0.675	0.029	0.704
	LTE Band 41	Front	0.150	0.029	0.179

Table 11.4.15 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN MIMO (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Head SAR	GPRS 850	Front	0.407	0.070	0.477
	GPRS 1900	Front	0.503	0.070	0.573
	WCDMA 850	Front	0.388	0.070	0.458
	WCDMA 1700	Front	0.558	0.070	0.628
	WCDMA 1900	Front	0.509	0.070	0.579
	LTE Band 12	Front	0.185	0.070	0.255
	LTE Band 13	Front	0.303	0.070	0.373
	LTE Band 26	Front	0.381	0.070	0.451
	LTE Band 66	Front	0.498	0.070	0.568
	LTE Band 25	Front	0.388	0.070	0.458
	LTE Band 7	Front	0.675	0.070	0.745
	LTE Band 41	Front	0.150	0.070	0.220

Table 11.4.16 Simultaneous Transmission Scenario : 2G/3G/4G + 5.3 GHz W-LAN Ant.1 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.3G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Head SAR	GPRS 850	Front	0.407	0.059	0.466
	GPRS 1900	Front	0.503	0.059	0.562
	WCDMA 850	Front	0.388	0.059	0.447
	WCDMA 1700	Front	0.558	0.059	0.617
	WCDMA 1900	Front	0.509	0.059	0.568
	LTE Band 12	Front	0.185	0.059	0.244
	LTE Band 13	Front	0.303	0.059	0.362
	LTE Band 26	Front	0.381	0.059	0.440
	LTE Band 66	Front	0.498	0.059	0.557
	LTE Band 25	Front	0.388	0.059	0.447
	LTE Band 7	Front	0.675	0.059	0.734
	LTE Band 41	Front	0.150	0.059	0.209

Table 11.4.17 Simultaneous Transmission Scenario : 2G/3G/4G + 5.3 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.3G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Head SAR	GPRS 850	Front	0.407	0.014	0.421
	GPRS 1900	Front	0.503	0.014	0.517
	WCDMA 850	Front	0.388	0.014	0.402
	WCDMA 1700	Front	0.558	0.014	0.572
	WCDMA 1900	Front	0.509	0.014	0.523
	LTE Band 12	Front	0.185	0.014	0.199
	LTE Band 13	Front	0.303	0.014	0.317
	LTE Band 26	Front	0.381	0.014	0.395
	LTE Band 66	Front	0.498	0.014	0.512
	LTE Band 25	Front	0.388	0.014	0.402
	LTE Band 7	Front	0.675	0.014	0.689
	LTE Band 41	Front	0.150	0.014	0.164

Table 11.4.18 Simultaneous Transmission Scenario : 2G/3G/4G + 5.3 GHz W-LAN MIMO (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.3G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Head SAR	GPRS 850	Front	0.407	0.075	0.482
	GPRS 1900	Front	0.503	0.075	0.578
	WCDMA 850	Front	0.388	0.075	0.463
	WCDMA 1700	Front	0.558	0.075	0.633
	WCDMA 1900	Front	0.509	0.075	0.584
	LTE Band 12	Front	0.185	0.075	0.260
	LTE Band 13	Front	0.303	0.075	0.378
	LTE Band 26	Front	0.381	0.075	0.456
	LTE Band 66	Front	0.498	0.075	0.573
	LTE Band 25	Front	0.388	0.075	0.463
	LTE Band 7	Front	0.675	0.075	0.750
	LTE Band 41	Front	0.150	0.075	0.225

Table 11.4.19 Simultaneous Transmission Scenario : 2G/3G/4G + 5.6 GHz W-LAN Ant.1 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.6G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Head SAR	GPRS 850	Front	0.407	0.127	0.534
	GPRS 1900	Front	0.503	0.127	0.630
	WCDMA 850	Front	0.388	0.127	0.515
	WCDMA 1700	Front	0.558	0.127	0.685
	WCDMA 1900	Front	0.509	0.127	0.636
	LTE Band 12	Front	0.185	0.127	0.312
	LTE Band 13	Front	0.303	0.127	0.430
	LTE Band 26	Front	0.381	0.127	0.508
	LTE Band 66	Front	0.498	0.127	0.625
	LTE Band 25	Front	0.388	0.127	0.515
	LTE Band 7	Front	0.675	0.127	0.802
	LTE Band 41	Front	0.150	0.127	0.277

Table 11.4.20 Simultaneous Transmission Scenario : 2G/3G/4G + 5.6 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.6G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Head SAR	GPRS 850	Front	0.407	0.017	0.424
	GPRS 1900	Front	0.503	0.017	0.520
	WCDMA 850	Front	0.388	0.017	0.405
	WCDMA 1700	Front	0.558	0.017	0.575
	WCDMA 1900	Front	0.509	0.017	0.526
	LTE Band 12	Front	0.185	0.017	0.202
	LTE Band 13	Front	0.303	0.017	0.320
	LTE Band 26	Front	0.381	0.017	0.398
	LTE Band 66	Front	0.498	0.017	0.515
	LTE Band 25	Front	0.388	0.017	0.405
	LTE Band 7	Front	0.675	0.017	0.692
	LTE Band 41	Front	0.150	0.017	0.167

Table 11.4.21 Simultaneous Transmission Scenario : 2G/3G/4G + 5.6 GHz W-LAN MIMO (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.6G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Head SAR	GPRS 850	Front	0.407	0.132	0.539
	GPRS 1900	Front	0.503	0.132	0.635
	WCDMA 850	Front	0.388	0.132	0.520
	WCDMA 1700	Front	0.558	0.132	0.690
	WCDMA 1900	Front	0.509	0.132	0.641
	LTE Band 12	Front	0.185	0.132	0.317
	LTE Band 13	Front	0.303	0.132	0.435
	LTE Band 26	Front	0.381	0.132	0.513
	LTE Band 66	Front	0.498	0.132	0.630
	LTE Band 25	Front	0.388	0.132	0.520
	LTE Band 7	Front	0.675	0.132	0.807
	LTE Band 41	Front	0.150	0.132	0.282

Table 11.4.22 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN Ant.1 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
Head SAR	GPRS 850	Front	0.407	0.113	0.520
	GPRS 1900	Front	0.503	0.113	0.616
	WCDMA 850	Front	0.388	0.113	0.501
	WCDMA 1700	Front	0.558	0.113	0.671
	WCDMA 1900	Front	0.509	0.113	0.622
	LTE Band 12	Front	0.185	0.113	0.298
	LTE Band 13	Front	0.303	0.113	0.416
	LTE Band 26	Front	0.381	0.113	0.494
	LTE Band 66	Front	0.498	0.113	0.611
	LTE Band 25	Front	0.388	0.113	0.501
	LTE Band 7	Front	0.675	0.113	0.788
	LTE Band 41	Front	0.150	0.113	0.263

Table 11.4.23 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Head SAR	GPRS 850	Front	0.407	0.021	0.428
	GPRS 1900	Front	0.503	0.021	0.524
	WCDMA 850	Front	0.388	0.021	0.409
	WCDMA 1700	Front	0.558	0.021	0.579
	WCDMA 1900	Front	0.509	0.021	0.530
	LTE Band 12	Front	0.185	0.021	0.206
	LTE Band 13	Front	0.303	0.021	0.324
	LTE Band 26	Front	0.381	0.021	0.402
	LTE Band 66	Front	0.498	0.021	0.519
	LTE Band 25	Front	0.388	0.021	0.409
	LTE Band 7	Front	0.675	0.021	0.696
	LTE Band 41	Front	0.150	0.021	0.171

Table 11.4.24 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN MIMO (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
Head SAR	GPRS 850	Front	0.407	0.113	0.520
	GPRS 1900	Front	0.503	0.113	0.616
	WCDMA 850	Front	0.388	0.113	0.501
	WCDMA 1700	Front	0.558	0.113	0.671
	WCDMA 1900	Front	0.509	0.113	0.622
	LTE Band 12	Front	0.185	0.113	0.298
	LTE Band 13	Front	0.303	0.113	0.416
	LTE Band 26	Front	0.381	0.113	0.494
	LTE Band 66	Front	0.498	0.113	0.611
	LTE Band 25	Front	0.388	0.113	0.501
	LTE Band 7	Front	0.675	0.113	0.788
	LTE Band 41	Front	0.150	0.113	0.263

Table 11.4.25 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth (Held to Ear)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	ΣSAR (W/kg)
Head SAR	GPRS 850	Front	0.407	0.013	0.420
	GPRS 1900	Front	0.503	0.013	0.516
	WCDMA 850	Front	0.388	0.013	0.401
	WCDMA 1700	Front	0.558	0.013	0.571
	WCDMA 1900	Front	0.509	0.013	0.522
	LTE Band 12	Front	0.185	0.013	0.198
	LTE Band 13	Front	0.303	0.013	0.316
	LTE Band 26	Front	0.381	0.013	0.394
	LTE Band 66	Front	0.498	0.013	0.511
	LTE Band 25	Front	0.388	0.013	0.401
	LTE Band 7	Front	0.675	0.013	0.688
	LTE Band 41	Front	0.150	0.013	0.163

Table 11.4.26 Simultaneous Transmission Scenario : 2.4 GHz W-LAN Ant.1 + 5 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	2.4G W-LAN Ant.1 SAR (W/kg)	5G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Head SAR	5.3G W-LAN Ant.2	Front	0.047	0.014	0.061
	5.6G W-LAN Ant.2	Front	0.047	0.017	0.064
	5.8G W-LAN Ant.2	Front	0.047	0.021	0.068

Table 11.4.27 Simultaneous Transmission Scenario : Bluetooth Ant.1 + 5 GHz W-LAN Ant.1 (Held to Ear)

Exposure Condition	Mode	Configuration	Bluetooth Ant.1 SAR (W/kg)	5G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
Head SAR	5.3G W-LAN Ant.1	Front	0.013	0.059	0.072
	5.6G W-LAN Ant.1	Front	0.013	0.127	0.140
	5.8G W-LAN Ant.1	Front	0.013	0.113	0.126

Table 11.4.28 Simultaneous Transmission Scenario : Bluetooth Ant.1 + 5 GHz W-LAN Ant.2 (Held to Ear)

Exposure Condition	Mode	Configuration	Bluetooth Ant.1 SAR (W/kg)	5G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Head SAR	5.3G W-LAN Ant.2	Front	0.013	0.014	0.027
	5.6G W-LAN Ant.2	Front	0.013	0.017	0.030
	5.8G W-LAN Ant.2	Front	0.013	0.021	0.034

Table 11.4.29 Simultaneous Transmission Scenario : Bluetooth Ant.1 + 5 GHz W-LAN MIMO (Held to Ear)

Exposure Condition	Mode	Configuration	Bluetooth Ant.1 SAR (W/kg)	5G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
Head SAR	5.3G W-LAN MIMO	Front	0.013	0.075	0.088
	5.6G W-LAN MIMO	Front	0.013	0.132	0.145
	5.8G W-LAN MIMO	Front	0.013	0.113	0.126

11.5 Body-Worn Simultaneous Transmission Analysis

Table 11.5.1 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.3 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.3G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.056	0.019	0.274	0.237	0.293
	GPRS 1900	Rear	0.683	0.056	0.019	0.739	0.702	0.758
	WCDMA 850	Rear	0.210	0.056	0.019	0.286	0.229	0.285
	WCDMA 1700	Rear	0.453	0.056	0.019	0.509	0.472	0.528
	WCDMA 1900	Rear	0.606	0.056	0.019	0.662	0.625	0.681
	LTE Band 12	Rear	0.101	0.056	0.019	0.157	0.120	0.176
	LTE Band 13	Rear	0.165	0.056	0.019	0.221	0.184	0.240
	LTE Band 26	Rear	0.243	0.056	0.019	0.299	0.262	0.318
	LTE Band 4	Rear	0.396	0.056	0.019	0.452	0.415	0.471
	LTE Band 25	Rear	0.474	0.056	0.019	0.530	0.493	0.549
	LTE Band 7	Rear	0.345	0.056	0.019	0.401	0.364	0.420
	LTE Band 41	Rear	0.099	0.056	0.019	0.155	0.118	0.174

Table 11.5.2 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.6 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.6G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.056	0.076	0.274	0.294	0.350
	GPRS 1900	Rear	0.683	0.056	0.076	0.739	0.789	0.915
	WCDMA 850	Rear	0.210	0.056	0.076	0.286	0.286	0.342
	WCDMA 1700	Rear	0.453	0.056	0.076	0.509	0.529	0.585
	WCDMA 1900	Rear	0.606	0.056	0.076	0.662	0.662	0.738
	LTE Band 12	Rear	0.101	0.056	0.076	0.157	0.177	0.233
	LTE Band 13	Rear	0.165	0.056	0.076	0.221	0.241	0.297
	LTE Band 26	Rear	0.243	0.056	0.076	0.299	0.319	0.375
	LTE Band 4	Rear	0.396	0.056	0.076	0.452	0.472	0.528
	LTE Band 25	Rear	0.474	0.056	0.076	0.530	0.550	0.606
	LTE Band 7	Rear	0.345	0.056	0.076	0.401	0.421	0.477
	LTE Band 41	Rear	0.099	0.056	0.076	0.155	0.175	0.231

Table 11.5.3 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.8 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.056	0.070	0.274	0.288	0.344
	GPRS 1900	Rear	0.683	0.056	0.070	0.739	0.753	0.809
	WCDMA 850	Rear	0.210	0.056	0.070	0.286	0.280	0.336
	WCDMA 1700	Rear	0.453	0.056	0.070	0.509	0.523	0.579
	WCDMA 1900	Rear	0.606	0.056	0.070	0.662	0.676	0.732
	LTE Band 12	Rear	0.101	0.056	0.070	0.157	0.171	0.227
	LTE Band 13	Rear	0.165	0.056	0.070	0.221	0.235	0.291
	LTE Band 26	Rear	0.243	0.056	0.070	0.299	0.313	0.369
	LTE Band 4	Rear	0.396	0.056	0.070	0.452	0.466	0.522
	LTE Band 25	Rear	0.474	0.056	0.070	0.530	0.544	0.600
	LTE Band 7	Rear	0.345	0.056	0.070	0.401	0.415	0.471
	LTE Band 41	Rear	0.099	0.056	0.070	0.155	0.169	0.225

Table 11.5.4 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.3 GHz W-LAN Ant.1 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.3G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.019	0.233	0.237	0.252
	GPRS 1900	Rear	0.683	0.015	0.019	0.698	0.702	0.717
	WCDMA 850	Rear	0.210	0.015	0.019	0.225	0.229	0.244
	WCDMA 1700	Rear	0.453	0.015	0.019	0.468	0.472	0.487
	WCDMA 1900	Rear	0.606	0.015	0.019	0.621	0.625	0.640
	LTE Band 12	Rear	0.101	0.015	0.019	0.116	0.120	0.135
	LTE Band 13	Rear	0.165	0.015	0.019	0.180	0.184	0.199
	LTE Band 26	Rear	0.243	0.015	0.019	0.258	0.262	0.277
	LTE Band 4	Rear	0.396	0.015	0.019	0.411	0.415	0.430
	LTE Band 25	Rear	0.474	0.015	0.019	0.489	0.493	0.508
	LTE Band 7	Rear	0.345	0.015	0.019	0.360	0.364	0.379
	LTE Band 41	Rear	0.099	0.015	0.019	0.114	0.118	0.133

Table 11.5.5 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.3 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.3G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.019	0.233	0.237	0.252
	GPRS 1900	Rear	0.683	0.015	0.019	0.698	0.702	0.717
	WCDMA 850	Rear	0.210	0.015	0.019	0.225	0.229	0.244
	WCDMA 1700	Rear	0.453	0.015	0.019	0.468	0.472	0.487
	WCDMA 1900	Rear	0.606	0.015	0.019	0.621	0.625	0.640
	LTE Band 12	Rear	0.101	0.015	0.019	0.116	0.120	0.135
	LTE Band 13	Rear	0.165	0.015	0.019	0.180	0.184	0.199
	LTE Band 26	Rear	0.243	0.015	0.019	0.258	0.262	0.277
	LTE Band 4	Rear	0.396	0.015	0.019	0.411	0.415	0.430
	LTE Band 25	Rear	0.474	0.015	0.019	0.489	0.493	0.508
	LTE Band 7	Rear	0.345	0.015	0.019	0.360	0.364	0.379
	LTE Band 41	Rear	0.099	0.015	0.019	0.114	0.118	0.133

Table 11.5.6 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.3 GHz W-LAN MIMO (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.3G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.027	0.233	0.245	0.260
	GPRS 1900	Rear	0.683	0.015	0.027	0.698	0.710	0.725
	WCDMA 850	Rear	0.210	0.015	0.027	0.225	0.237	0.252
	WCDMA 1700	Rear	0.453	0.015	0.027	0.468	0.480	0.495
	WCDMA 1900	Rear	0.606	0.015	0.027	0.621	0.633	0.648
	LTE Band 12	Rear	0.101	0.015	0.027	0.116	0.128	0.143
	LTE Band 13	Rear	0.165	0.015	0.027	0.180	0.192	0.207
	LTE Band 26	Rear	0.243	0.015	0.027	0.258	0.270	0.285
	LTE Band 4	Rear	0.396	0.015	0.027	0.411	0.423	0.438
	LTE Band 25	Rear	0.474	0.015	0.027	0.489	0.501	0.516
	LTE Band 7	Rear	0.345	0.015	0.027	0.360	0.372	0.387
	LTE Band 41	Rear	0.099	0.015	0.027	0.114	0.126	0.141

Table 11.5.7 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.6 GHz W-LAN Ant.1 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.6G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.031	0.233	0.249	0.264
	GPRS 1900	Rear	0.683	0.015	0.031	0.698	0.714	0.729
	WCDMA 850	Rear	0.210	0.015	0.031	0.225	0.241	0.256
	WCDMA 1700	Rear	0.453	0.015	0.031	0.468	0.484	0.499
	WCDMA 1900	Rear	0.606	0.015	0.031	0.621	0.637	0.652
	LTE Band 12	Rear	0.101	0.015	0.031	0.116	0.132	0.147
	LTE Band 13	Rear	0.165	0.015	0.031	0.180	0.196	0.211
	LTE Band 26	Rear	0.243	0.015	0.031	0.258	0.274	0.289
	LTE Band 4	Rear	0.396	0.015	0.031	0.411	0.427	0.442
	LTE Band 25	Rear	0.474	0.015	0.031	0.489	0.505	0.520
	LTE Band 7	Rear	0.345	0.015	0.031	0.360	0.376	0.391
	LTE Band 41	Rear	0.099	0.015	0.031	0.114	0.130	0.145

Table 11.5.8 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.6 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.6G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.076	0.233	0.294	0.309
	GPRS 1900	Rear	0.683	0.015	0.076	0.698	0.759	0.774
	WCDMA 850	Rear	0.210	0.015	0.076	0.225	0.286	0.301
	WCDMA 1700	Rear	0.453	0.015	0.076	0.468	0.529	0.544
	WCDMA 1900	Rear	0.606	0.015	0.076	0.621	0.682	0.697
	LTE Band 12	Rear	0.101	0.015	0.076	0.116	0.177	0.192
	LTE Band 13	Rear	0.165	0.015	0.076	0.180	0.241	0.256
	LTE Band 26	Rear	0.243	0.015	0.076	0.258	0.319	0.334
	LTE Band 4	Rear	0.396	0.015	0.076	0.411	0.472	0.487
	LTE Band 25	Rear	0.474	0.015	0.076	0.489	0.550	0.565
	LTE Band 7	Rear	0.345	0.015	0.076	0.360	0.421	0.436
	LTE Band 41	Rear	0.099	0.015	0.076	0.114	0.175	0.190

Table 11.5.9 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.6 GHz W-LAN MIMO (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.6G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.032	0.233	0.250	0.265
	GPRS 1900	Rear	0.683	0.015	0.032	0.698	0.715	0.730
	WCDMA 850	Rear	0.210	0.015	0.032	0.225	0.242	0.257
	WCDMA 1700	Rear	0.453	0.015	0.032	0.468	0.485	0.500
	WCDMA 1900	Rear	0.606	0.015	0.032	0.621	0.638	0.653
	LTE Band 12	Rear	0.101	0.015	0.032	0.116	0.133	0.148
	LTE Band 13	Rear	0.165	0.015	0.032	0.180	0.197	0.212
	LTE Band 26	Rear	0.243	0.015	0.032	0.258	0.275	0.290
	LTE Band 4	Rear	0.396	0.015	0.032	0.411	0.428	0.443
	LTE Band 25	Rear	0.474	0.015	0.032	0.489	0.506	0.521
	LTE Band 7	Rear	0.345	0.015	0.032	0.360	0.377	0.392
	LTE Band 41	Rear	0.099	0.015	0.032	0.114	0.131	0.146

Table 11.5.10 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN Ant.1 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.030	0.233	0.248	0.263
	GPRS 1900	Rear	0.683	0.015	0.030	0.698	0.713	0.728
	WCDMA 850	Rear	0.210	0.015	0.030	0.225	0.240	0.255
	WCDMA 1700	Rear	0.453	0.015	0.030	0.468	0.483	0.498
	WCDMA 1900	Rear	0.606	0.015	0.030	0.621	0.636	0.651
	LTE Band 12	Rear	0.101	0.015	0.030	0.116	0.131	0.146
	LTE Band 13	Rear	0.165	0.015	0.030	0.180	0.195	0.210
	LTE Band 26	Rear	0.243	0.015	0.030	0.258	0.273	0.288
	LTE Band 4	Rear	0.396	0.015	0.030	0.411	0.426	0.441
	LTE Band 25	Rear	0.474	0.015	0.030	0.489	0.504	0.519
	LTE Band 7	Rear	0.345	0.015	0.030	0.360	0.375	0.390
	LTE Band 41	Rear	0.099	0.015	0.030	0.114	0.129	0.144

Table 11.5.11 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.070	0.233	0.288	0.303
	GPRS 1900	Rear	0.683	0.015	0.070	0.698	0.753	0.768
	WCDMA 850	Rear	0.210	0.015	0.070	0.225	0.280	0.295
	WCDMA 1700	Rear	0.453	0.015	0.070	0.468	0.523	0.538
	WCDMA 1900	Rear	0.606	0.015	0.070	0.621	0.676	0.691
	LTE Band 12	Rear	0.101	0.015	0.070	0.116	0.171	0.186
	LTE Band 13	Rear	0.165	0.015	0.070	0.180	0.235	0.250
	LTE Band 26	Rear	0.243	0.015	0.070	0.258	0.313	0.328
	LTE Band 4	Rear	0.396	0.015	0.070	0.411	0.466	0.481
	LTE Band 25	Rear	0.474	0.015	0.070	0.489	0.544	0.559
	LTE Band 7	Rear	0.345	0.015	0.070	0.360	0.415	0.430
	LTE Band 41	Rear	0.099	0.015	0.070	0.114	0.169	0.184

Table 11.5.12 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN MIMO (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.062	0.233	0.280	0.295
	GPRS 1900	Rear	0.683	0.015	0.062	0.698	0.745	0.760
	WCDMA 850	Rear	0.210	0.015	0.062	0.225	0.272	0.287
	WCDMA 1700	Rear	0.453	0.015	0.062	0.468	0.515	0.530
	WCDMA 1900	Rear	0.606	0.015	0.062	0.621	0.668	0.683
	LTE Band 12	Rear	0.101	0.015	0.062	0.116	0.163	0.178
	LTE Band 13	Rear	0.165	0.015	0.062	0.180	0.227	0.242
	LTE Band 26	Rear	0.243	0.015	0.062	0.258	0.305	0.320
	LTE Band 4	Rear	0.396	0.015	0.062	0.411	0.458	0.473
	LTE Band 25	Rear	0.474	0.015	0.062	0.489	0.536	0.551
	LTE Band 7	Rear	0.345	0.015	0.062	0.360	0.407	0.422
	LTE Band 41	Rear	0.099	0.015	0.062	0.114	0.161	0.176

Table 11.5.13 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.056	0.274
	GPRS 1900	Rear	0.683	0.056	0.739
	WCDMA 850	Rear	0.210	0.056	0.266
	WCDMA 1700	Rear	0.453	0.056	0.509
	WCDMA 1900	Rear	0.606	0.056	0.662
	LTE Band 12	Rear	0.101	0.056	0.157
	LTE Band 13	Rear	0.165	0.056	0.221
	LTE Band 26	Rear	0.243	0.056	0.299
	LTE Band 66	Rear	0.396	0.056	0.452
	LTE Band 25	Rear	0.474	0.056	0.530
	LTE Band 7	Rear	0.345	0.056	0.401
	LTE Band 41	Rear	0.099	0.056	0.155

Table 11.5.14 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.068	0.286
	GPRS 1900	Rear	0.683	0.068	0.751
	WCDMA 850	Rear	0.210	0.068	0.278
	WCDMA 1700	Rear	0.453	0.068	0.521
	WCDMA 1900	Rear	0.606	0.068	0.674
	LTE Band 12	Rear	0.101	0.068	0.169
	LTE Band 13	Rear	0.165	0.068	0.233
	LTE Band 26	Rear	0.243	0.068	0.311
	LTE Band 66	Rear	0.396	0.068	0.464
	LTE Band 25	Rear	0.474	0.068	0.542
	LTE Band 7	Rear	0.345	0.068	0.413
	LTE Band 41	Rear	0.099	0.068	0.167

Table 11.5.15 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN MIMO (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.077	0.295
	GPRS 1900	Rear	0.683	0.077	0.760
	WCDMA 850	Rear	0.210	0.077	0.287
	WCDMA 1700	Rear	0.453	0.077	0.530
	WCDMA 1900	Rear	0.606	0.077	0.683
	LTE Band 12	Rear	0.101	0.077	0.178
	LTE Band 13	Rear	0.165	0.077	0.242
	LTE Band 26	Rear	0.243	0.077	0.320
	LTE Band 66	Rear	0.396	0.077	0.473
	LTE Band 25	Rear	0.474	0.077	0.551
	LTE Band 7	Rear	0.345	0.077	0.422
	LTE Band 41	Rear	0.099	0.077	0.176

Table 11.5.16 Simultaneous Transmission Scenario : 2G/3G/4G + 5.3 GHz W-LAN Ant.1 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.3G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.019	0.237
	GPRS 1900	Rear	0.683	0.019	0.702
	WCDMA 850	Rear	0.210	0.019	0.229
	WCDMA 1700	Rear	0.453	0.019	0.472
	WCDMA 1900	Rear	0.606	0.019	0.625
	LTE Band 12	Rear	0.101	0.019	0.120
	LTE Band 13	Rear	0.165	0.019	0.184
	LTE Band 26	Rear	0.243	0.019	0.262
	LTE Band 66	Rear	0.396	0.019	0.415
	LTE Band 25	Rear	0.474	0.019	0.493
	LTE Band 7	Rear	0.345	0.019	0.364
	LTE Band 41	Rear	0.099	0.019	0.118

Table 11.5.17 Simultaneous Transmission Scenario : 2G/3G/4G + 5.3 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.3G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.019	0.237
	GPRS 1900	Rear	0.683	0.019	0.702
	WCDMA 850	Rear	0.210	0.019	0.229
	WCDMA 1700	Rear	0.453	0.019	0.472
	WCDMA 1900	Rear	0.606	0.019	0.625
	LTE Band 12	Rear	0.101	0.019	0.120
	LTE Band 13	Rear	0.165	0.019	0.184
	LTE Band 26	Rear	0.243	0.019	0.262
	LTE Band 66	Rear	0.396	0.019	0.415
	LTE Band 25	Rear	0.474	0.019	0.493
	LTE Band 7	Rear	0.345	0.019	0.364
	LTE Band 41	Rear	0.099	0.019	0.118

Table 11.5.18 Simultaneous Transmission Scenario : 2G/3G/4G + 5.3 GHz W-LAN MIMO (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.3G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.027	0.245
	GPRS 1900	Rear	0.683	0.027	0.710
	WCDMA 850	Rear	0.210	0.027	0.237
	WCDMA 1700	Rear	0.453	0.027	0.480
	WCDMA 1900	Rear	0.606	0.027	0.633
	LTE Band 12	Rear	0.101	0.027	0.128
	LTE Band 13	Rear	0.165	0.027	0.192
	LTE Band 26	Rear	0.243	0.027	0.270
	LTE Band 66	Rear	0.396	0.027	0.423
	LTE Band 25	Rear	0.474	0.027	0.501
	LTE Band 7	Rear	0.345	0.027	0.372
	LTE Band 41	Rear	0.099	0.027	0.126

Table 11.5.19 Simultaneous Transmission Scenario : 2G/3G/4G + 5.6 GHz W-LAN Ant.1 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.6G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.031	0.249
	GPRS 1900	Rear	0.683	0.031	0.714
	WCDMA 850	Rear	0.210	0.031	0.241
	WCDMA 1700	Rear	0.453	0.031	0.484
	WCDMA 1900	Rear	0.606	0.031	0.637
	LTE Band 12	Rear	0.101	0.031	0.132
	LTE Band 13	Rear	0.165	0.031	0.196
	LTE Band 26	Rear	0.243	0.031	0.274
	LTE Band 66	Rear	0.396	0.031	0.427
	LTE Band 25	Rear	0.474	0.031	0.505
	LTE Band 7	Rear	0.345	0.031	0.376
	LTE Band 41	Rear	0.099	0.031	0.130

Table 11.5.20 Simultaneous Transmission Scenario : 2G/3G/4G + 5.6 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.6G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.076	0.294
	GPRS 1900	Rear	0.683	0.076	0.759
	WCDMA 850	Rear	0.210	0.076	0.286
	WCDMA 1700	Rear	0.453	0.076	0.529
	WCDMA 1900	Rear	0.606	0.076	0.682
	LTE Band 12	Rear	0.101	0.076	0.177
	LTE Band 13	Rear	0.165	0.076	0.241
	LTE Band 26	Rear	0.243	0.076	0.319
	LTE Band 66	Rear	0.396	0.076	0.472
	LTE Band 25	Rear	0.474	0.076	0.550
	LTE Band 7	Rear	0.345	0.076	0.421
	LTE Band 41	Rear	0.099	0.076	0.175

Table 11.5.21 Simultaneous Transmission Scenario : 2G/3G/4G + 5.6 GHz W-LAN MIMO (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.6G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.032	0.250
	GPRS 1900	Rear	0.683	0.032	0.715
	WCDMA 850	Rear	0.210	0.032	0.242
	WCDMA 1700	Rear	0.453	0.032	0.485
	WCDMA 1900	Rear	0.606	0.032	0.638
	LTE Band 12	Rear	0.101	0.032	0.133
	LTE Band 13	Rear	0.165	0.032	0.197
	LTE Band 26	Rear	0.243	0.032	0.275
	LTE Band 66	Rear	0.396	0.032	0.428
	LTE Band 25	Rear	0.474	0.032	0.506
	LTE Band 7	Rear	0.345	0.032	0.377
	LTE Band 41	Rear	0.099	0.032	0.131

Table 11.5.22 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN Ant.1 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.030	0.248
	GPRS 1900	Rear	0.683	0.030	0.713
	WCDMA 850	Rear	0.210	0.030	0.240
	WCDMA 1700	Rear	0.453	0.030	0.483
	WCDMA 1900	Rear	0.606	0.030	0.636
	LTE Band 12	Rear	0.101	0.030	0.131
	LTE Band 13	Rear	0.165	0.030	0.195
	LTE Band 26	Rear	0.243	0.030	0.273
	LTE Band 66	Rear	0.396	0.030	0.426
	LTE Band 25	Rear	0.474	0.030	0.504
	LTE Band 7	Rear	0.345	0.030	0.375
	LTE Band 41	Rear	0.099	0.030	0.129

Table 11.5.23 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.070	0.288
	GPRS 1900	Rear	0.683	0.070	0.753
	WCDMA 850	Rear	0.210	0.070	0.280
	WCDMA 1700	Rear	0.453	0.070	0.523
	WCDMA 1900	Rear	0.606	0.070	0.676
	LTE Band 12	Rear	0.101	0.070	0.171
	LTE Band 13	Rear	0.165	0.070	0.235
	LTE Band 26	Rear	0.243	0.070	0.313
	LTE Band 66	Rear	0.396	0.070	0.466
	LTE Band 25	Rear	0.474	0.070	0.544
	LTE Band 7	Rear	0.345	0.070	0.415
	LTE Band 41	Rear	0.099	0.070	0.169

Table 11.5.24 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN MIMO (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.062	0.280
	GPRS 1900	Rear	0.683	0.062	0.745
	WCDMA 850	Rear	0.210	0.062	0.272
	WCDMA 1700	Rear	0.453	0.062	0.515
	WCDMA 1900	Rear	0.606	0.062	0.668
	LTE Band 12	Rear	0.101	0.062	0.163
	LTE Band 13	Rear	0.165	0.062	0.227
	LTE Band 26	Rear	0.243	0.062	0.305
	LTE Band 66	Rear	0.396	0.062	0.458
	LTE Band 25	Rear	0.474	0.062	0.536
	LTE Band 7	Rear	0.345	0.062	0.407
	LTE Band 41	Rear	0.099	0.062	0.161

Table 11.5.25 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	GPRS 850	Rear	0.218	0.015	0.233
	GPRS 1900	Rear	0.683	0.015	0.698
	WCDMA 850	Rear	0.210	0.015	0.225
	WCDMA 1700	Rear	0.453	0.015	0.468
	WCDMA 1900	Rear	0.606	0.015	0.621
	LTE Band 12	Rear	0.101	0.015	0.116
	LTE Band 13	Rear	0.165	0.015	0.180
	LTE Band 26	Rear	0.243	0.015	0.258
	LTE Band 66	Rear	0.396	0.015	0.411
	LTE Band 25	Rear	0.474	0.015	0.489
	LTE Band 7	Rear	0.345	0.015	0.360
	LTE Band 41	Rear	0.099	0.015	0.114

Table 11.5.26 Simultaneous Transmission Scenario : 2.4 GHz W-LAN Ant.1 + 5 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	2.4G W-LAN Ant.1 SAR (W/kg)	5G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	5.3G W-LAN Ant.2	Rear	0.056	0.019	0.075
	5.6G W-LAN Ant.2	Rear	0.056	0.076	0.132
	5.8G W-LAN Ant.2	Rear	0.056	0.070	0.126

Table 11.5.27 Simultaneous Transmission Scenario : Bluetooth Ant.1 + 5 GHz W-LAN Ant.1 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	Bluetooth Ant.1 SAR (W/kg)	5G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	5.3G W-LAN Ant.1	Rear	0.015	0.019	0.034
	5.6G W-LAN Ant.1	Rear	0.015	0.031	0.046
	5.8G W-LAN Ant.1	Rear	0.015	0.030	0.045

Table 11.5.28 Simultaneous Transmission Scenario : Bluetooth Ant.1 + 5 GHz W-LAN Ant.2 (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	Bluetooth Ant.1 SAR (W/kg)	5G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	5.3G W-LAN Ant.2	Rear	0.015	0.019	0.034
	5.6G W-LAN Ant.2	Rear	0.015	0.076	0.091
	5.8G W-LAN Ant.2	Rear	0.015	0.070	0.085

Table 11.5.29 Simultaneous Transmission Scenario : Bluetooth Ant.1 + 5 GHz W-LAN MIMO (Body-Worn at 10 mm)

Exposure Condition	Mode	Configuration	Bluetooth Ant.1 SAR (W/kg)	5G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
			1	2	1+2
Body-Worn SAR	5.3G W-LAN MIMO	Rear	0.015	0.027	0.042
	5.6G W-LAN MIMO	Rear	0.015	0.032	0.047
	5.8G W-LAN MIMO	Rear	0.015	0.062	0.077

11.6 Hotspot SAR Simultaneous Transmission Analysis

Per FCC KDB Publication 941225 D06v02r01, the device edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR ("~").

Table 11.6.1 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.2 GHz W-LAN Ant.2 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.2G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)		
Hotspot SAR	GPRS 850	Top	0.066	0.063	-	0.063	0.000	0.063
		Bottom	-	-	-	0.066	0.000	0.066
		Front	0.497	0.047	0.013	0.454	0.420	0.467
		Rear	0.271	0.092	0.016	0.363	0.289	0.381
		Right	0.255	-	0.076	0.255	0.341	0.341
		Left	0.527	0.573	-	1.100	0.527	1.100
	GPRS 1900	Top	0.388	0.063	-	0.063	0.000	0.063
		Bottom	-	-	-	0.388	0.388	0.388
		Front	0.503	0.047	0.013	0.550	0.516	0.563
		Rear	1.028	0.092	0.016	1.120	1.046	1.138
		Right	0.343	-	0.016	0.343	0.419	0.419
		Left	0.119	0.573	-	0.692	0.119	0.692
	WCDMA 850	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.155	-	-	0.155	0.155	0.155
		Front	0.388	0.047	0.013	0.435	0.401	0.448
		Rear	0.364	0.092	0.016	0.456	0.382	0.474
		Right	0.594	-	0.076	0.320	0.396	0.396
		Left	0.419	0.573	-	0.993	0.419	0.993
	WCDMA 1700	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.472	-	-	0.472	0.472	0.472
		Front	0.568	0.047	0.013	0.605	0.571	0.618
		Rear	0.676	0.092	0.016	0.768	0.694	0.786
		Right	0.320	-	0.076	0.320	0.396	0.396
		Left	0.118	0.573	-	0.691	0.118	0.691
	WCDMA 1900	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.484	-	-	0.484	0.484	0.484
		Front	0.506	0.047	0.013	0.556	0.522	0.566
		Rear	0.509	0.092	0.016	1.001	0.927	1.019
		Right	0.341	-	0.076	0.341	0.417	0.417
		Left	0.114	0.573	-	0.687	0.114	0.687
	LTE Band 12	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.063	-	-	0.063	0.063	0.063
		Front	0.185	0.047	0.013	0.232	0.198	0.245
		Rear	0.152	0.092	0.016	0.244	0.170	0.252
		Right	0.099	-	0.076	0.099	0.175	0.175
		Left	0.149	0.573	-	0.723	0.149	0.723
	LTE Band 13	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.145	-	-	0.145	0.145	0.145
		Front	0.303	0.047	0.013	0.350	0.316	0.363
		Rear	0.281	0.092	0.016	0.373	0.309	0.381
		Right	0.255	-	0.076	0.255	0.331	0.331
		Left	0.404	0.573	-	0.977	0.404	0.977
	LTE Band 26	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.165	-	-	0.165	0.165	0.165
		Front	0.381	0.047	0.013	0.428	0.394	0.441
		Rear	0.315	0.092	0.016	0.407	0.333	0.435
		Right	0.225	-	0.076	0.225	0.301	0.301
		Left	0.365	0.573	-	0.938	0.365	0.938
	LTE Band 66	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.401	-	-	0.401	0.401	0.401
		Front	0.498	0.047	0.013	0.545	0.511	0.558
		Rear	0.494	0.092	0.016	0.686	0.612	0.704
		Right	0.253	-	0.076	0.253	0.329	0.329
		Left	0.114	0.573	-	0.687	0.114	0.687
	LTE Band 25	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.330	-	-	0.330	0.330	0.330
		Front	0.388	0.047	0.013	0.435	0.401	0.448
		Rear	0.707	0.092	0.016	0.789	0.725	0.817
		Right	0.217	-	0.076	0.217	0.213	0.213
		Left	0.096	0.573	-	0.669	0.096	0.669
	LTE Band 7	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.092	-	-	0.092	0.092	0.092
		Front	0.675	0.047	0.013	0.722	0.688	0.738
		Rear	0.518	0.092	0.016	0.608	0.534	0.626
		Right	0.192	-	0.076	0.192	0.268	0.268
		Left	0.115	0.573	-	0.688	0.115	0.688
	LTE Band 41	Top	-	0.063	-	0.063	0.000	0.063
		Bottom	0.190	-	-	0.190	0.190	0.190
		Front	0.150	0.047	0.013	0.197	0.163	0.210
		Rear	0.148	0.092	0.016	0.240	0.166	0.258
		Right	0.174	-	0.076	0.174	0.250	0.250
		Left	0.090	0.573	-	0.663	0.090	0.663

Table 11.6.2 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.8 GHz W-LAN Ant.2 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)		2.4G WLAN Ant.1 SAR (W/kg)		5.8G WLAN Ant.2 SAR (W/kg)		ΣSAR (W/kg)		
			1	2	3	4	5	1+2	1+3	1+2+3	
Hotspot SAR	GPRS 850	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.066	-	-	-	-	0.066	0.066	-	0.066
		Front	0.497	0.047	0.021	0.454	0.021	0.475	0.475	0.475	-
		Rear	0.271	0.092	-	0.363	0.349	0.441	-	-	0.441
		Right	0.265	-	-	0.265	0.182	0.447	-	-	0.447
	Left	0.527	0.573	-	1.100	-	1.100	0.527	0.527	1.100	
	GPRS 1900	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.388	-	-	-	-	0.388	0.388	-	0.388
		Front	0.503	0.047	0.021	0.550	0.021	0.571	0.571	0.571	-
		Rear	1.028	0.092	-	1.078	0.078	1.198	-	-	1.198
		Right	0.343	-	-	0.343	0.182	0.529	-	-	0.529
	Left	0.119	0.573	-	0.692	0.119	0.692	-	-	0.692	
	WCDMA 850	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.155	-	-	-	-	0.155	0.155	-	0.155
		Front	0.388	0.047	0.021	0.435	0.021	0.456	0.456	0.456	-
		Rear	0.364	0.092	-	0.456	0.078	0.534	-	-	0.534
		Right	0.594	-	-	0.594	0.182	0.776	-	-	0.776
	Left	0.410	0.573	-	0.983	0.410	0.983	-	-	0.983	
	WCDMA 1700	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.472	-	-	-	-	0.472	0.472	-	0.472
		Front	0.568	0.047	0.021	0.605	0.021	0.626	0.626	0.626	-
		Rear	0.676	0.092	-	0.768	0.078	0.846	-	-	0.846
		Right	0.320	-	-	0.320	0.182	0.502	-	-	0.502
	Left	0.118	0.573	-	0.691	0.118	0.691	-	-	0.691	
	WCDMA 1900	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.484	-	-	-	-	0.484	0.484	-	0.484
		Front	0.509	0.047	0.021	0.556	0.021	0.577	0.577	0.577	-
		Rear	0.909	0.092	-	0.987	0.078	1.078	-	-	1.078
		Right	0.341	-	-	0.341	0.182	0.523	-	-	0.523
	Left	0.114	0.573	-	0.687	0.114	0.687	-	-	0.687	
	LTE Band 12	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.063	-	-	-	-	0.063	0.063	-	0.063
		Front	0.185	0.047	0.021	0.232	0.021	0.253	0.253	0.253	-
		Rear	0.152	0.092	-	0.244	0.078	0.322	-	-	0.322
		Right	0.099	-	-	0.099	0.182	0.281	-	-	0.281
	Left	0.149	0.573	-	0.723	0.149	0.723	-	-	0.723	
	LTE Band 13	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.145	-	-	-	-	0.145	0.145	-	0.145
		Front	0.303	0.047	0.021	0.350	0.021	0.371	0.371	0.371	-
		Rear	0.281	0.092	-	0.373	0.078	0.451	-	-	0.451
		Right	0.255	-	-	0.255	0.182	0.437	-	-	0.437
	Left	0.404	0.573	-	0.977	0.404	0.977	-	-	0.977	
	LTE Band 26	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.165	-	-	-	-	0.165	0.165	-	0.165
		Front	0.381	0.047	0.021	0.428	0.021	0.449	0.449	0.449	-
		Rear	0.315	0.092	-	0.407	0.078	0.485	-	-	0.485
		Right	0.225	-	-	0.225	0.182	0.407	-	-	0.407
	Left	0.365	0.573	-	0.938	0.365	0.938	-	-	0.938	
	LTE Band 66	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.401	-	-	-	-	0.401	0.401	-	0.401
		Front	0.498	0.047	0.021	0.545	0.021	0.566	0.566	0.566	-
		Rear	0.594	0.092	-	0.686	0.078	0.764	-	-	0.764
		Right	0.253	-	-	0.253	0.182	0.435	-	-	0.435
	Left	0.114	0.573	-	0.687	0.114	0.687	-	-	0.687	
	LTE Band 25	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.330	-	-	-	-	0.330	0.330	-	0.330
		Front	0.388	0.047	0.021	0.435	0.021	0.456	0.456	0.456	-
		Rear	0.707	0.092	-	0.789	0.078	0.877	-	-	0.877
		Right	0.217	-	-	0.217	0.182	0.419	-	-	0.419
	Left	0.096	0.573	-	0.669	0.096	0.669	-	-	0.669	
	LTE Band 7	Top	-	-	0.063	-	-	0.063	-	-	0.063
		Bottom	0.092	-	-	-	-	0.092	0.092	-	0.092
		Front	0.675	0.047	0.021	0.722	0.021	0.743	0.743	0.743	-
		Rear	0.516	0.092	-	0.608	0.078	0.686	-	-	0.686
		Right	0.192	-	-	0.192	0.182	0.374	-	-	0.374
Left	0.115	0.573	-	0.688	0.115	0.688	-	-	0.688		
LTE Band 41	Top	-	-	0.063	-	-	0.063	-	-	0.063	
	Bottom	0.190	-	-	-	-	0.190	0.190	-	0.190	
	Front	0.190	0.047	0.021	0.197	0.021	0.218	0.218	0.218	-	
	Rear	0.148	0.092	-	0.240	0.078	0.318	-	-	0.318	
	Right	0.174	-	-	0.174	0.182	0.356	-	-	0.356	
Left	0.090	0.573	-	0.663	0.090	0.663	-	-	0.663		

Table 11.6.3 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.2 GHz W-LAN Ant.1 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.2G W-LAN Ant.1 SAR (W/kg)	1+2	3+4	1+2+3
Hotspot SAR	GPRS 850	Top	-	0.015	0.144	0.015	0.144	0.159
		Bottom	0.066	-	0.066	0.066	0.066	0.066
		Front	0.497	0.013	0.054	0.420	0.461	0.474
		Right	0.271	0.023	0.028	0.298	0.298	0.302
		Left	0.255	-	0.255	0.255	0.255	0.255
	GPRS 1900	Top	0.527	0.167	0.221	0.694	0.749	0.815
		Bottom	-	0.015	0.144	0.015	0.144	0.159
		Front	0.366	-	0.366	0.366	0.366	0.366
		Rear	0.593	0.013	0.054	0.516	0.557	0.570
		Right	1.028	0.023	0.028	1.021	1.028	1.079
	WCDMA 850	Top	0.257	0.167	0.221	0.286	0.340	0.367
		Bottom	-	0.015	0.144	0.015	0.144	0.159
		Front	0.388	0.013	0.054	0.401	0.442	0.455
		Rear	0.364	0.023	0.028	0.387	0.392	0.415
		Right	0.330	-	0.330	0.330	0.330	0.330
	WCDMA 1700	Top	0.410	0.167	0.221	0.577	0.631	0.708
		Bottom	-	0.015	0.144	0.015	0.144	0.159
		Front	0.472	-	0.472	0.472	0.472	0.472
		Rear	0.558	0.013	0.054	0.571	0.612	0.625
		Right	0.676	0.023	0.028	0.699	0.704	0.727
	WCDMA 1900	Top	0.320	0.167	0.221	0.320	0.320	0.320
		Bottom	-	0.015	0.144	0.015	0.144	0.159
		Front	0.464	0.013	0.054	0.464	0.464	0.464
		Rear	0.509	0.023	0.028	0.522	0.527	0.576
		Right	0.909	0.023	0.028	0.932	0.937	0.960
	LTE Band 12	Top	0.341	0.167	0.221	0.341	0.341	0.341
		Bottom	0.114	-	0.114	0.114	0.114	0.114
		Front	0.063	0.013	0.054	0.063	0.063	0.063
		Rear	0.185	0.023	0.028	0.185	0.185	0.185
		Right	0.152	-	0.152	0.152	0.152	0.152
	LTE Band 13	Top	0.099	0.167	0.221	0.099	0.099	0.099
		Bottom	0.140	-	0.140	0.140	0.140	0.140
		Front	0.145	0.013	0.054	0.145	0.145	0.145
		Rear	0.303	0.023	0.028	0.303	0.303	0.303
		Right	0.281	-	0.281	0.281	0.281	0.281
	LTE Band 26	Top	0.225	0.167	0.221	0.225	0.225	0.225
		Bottom	0.365	-	0.365	0.365	0.365	0.365
		Front	0.401	0.013	0.054	0.401	0.401	0.401
		Rear	0.488	0.023	0.028	0.511	0.552	0.565
		Right	0.584	0.023	0.028	0.617	0.622	0.645
	LTE Band 66	Top	0.253	0.167	0.221	0.253	0.253	0.253
		Bottom	0.114	-	0.114	0.114	0.114	0.114
		Front	0.330	0.013	0.054	0.330	0.330	0.330
		Rear	0.388	0.023	0.028	0.401	0.442	0.455
		Right	0.707	-	0.707	0.707	0.707	0.707
	LTE Band 25	Top	0.237	0.167	0.221	0.237	0.237	0.237
		Bottom	0.096	-	0.096	0.096	0.096	0.096
		Front	0.092	0.013	0.054	0.092	0.092	0.092
		Rear	0.675	0.023	0.028	0.698	0.729	0.742
		Right	0.516	-	0.516	0.516	0.516	0.516
	LTE Band 7	Top	0.192	0.167	0.221	0.192	0.192	0.192
		Bottom	0.115	-	0.115	0.115	0.115	0.115
		Front	0.150	0.013	0.054	0.150	0.150	0.150
		Rear	0.148	0.023	0.028	0.171	0.176	0.199
		Right	0.174	-	0.174	0.174	0.174	0.174
	LTE Band 41	Top	0.090	0.167	0.221	0.090	0.090	0.090
		Bottom	-	-	-	-	-	-
		Front	-	-	-	-	-	-
		Rear	-	-	-	-	-	-
		Left	-	-	-	-	-	-

Table 11.6.4 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.2 GHz W-LAN Ant.2 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.2G W-LAN Ant.2 SAR (W/kg)	1+2	3+4	1+2+3
Hotspot SAR	GPRS 850	Top	-	0.015	-	0.015	-	0.015
		Bottom	0.066	-	-	0.066	-	0.066
		Front	0.497	0.013	0.054	0.420	0.461	0.474
		Right	0.271	0.023	0.028	0.298	0.298	0.302
		Left	0.255	-	0.255	0.255	0.255	0.255
	GPRS 1900	Top	0.527	0.167	-	0.694	0.749	0.815
		Bottom	-	0.015	-	0.015	-	0.015
		Front	0.366	-	-	0.366	-	0.366
		Rear	0.593	0.013	0.054	0.516	0.557	0.570
		Right	1.028	0.023	0.028	1.021	1.028	1.079
	WCDMA 850	Top	0.257	0.167	-	0.286	0.340	0.367
		Bottom	-	0.015	-	0.015	-	0.015
		Front	0.388	0.013	0.054	0.401	0.442	0.455
		Rear	0.364	0.023	0.028	0.387	0.392	0.415
		Right	0.330	-	0.330	0.330	0.330	0.330
	WCDMA 1700	Top	0.410	0.167	-	0.577	0.631	0.708
		Bottom	-	0.015	-	0.015	-	0.015
		Front	0.472	-	-	0.472	-	0.472
		Rear	0.558	0.013	0.054	0.571	0.612	0.625
		Right	0.676	0.023	0.028	0.699	0.704	0.727
	WCDMA 1900	Top	0.320	0.167	-	0.320	0.320	0.320
		Bottom	-	0.015	-	0.015	-	0.015
		Front	0.464	0.013	0.054	0.464	0.464	0.464
		Rear	0.509	0.023	0.028	0.522	0.527	0.576
		Right	0.909	0.023	0.028	0.932	0.937	0.960
	LTE Band 12	Top	0.341	0.167	-	0.341	0.341	0.341
		Bottom	0.114	-	0.114	0.114	0.114	0.114
		Front	0.063	0.013	0.054	0.063	0.063	0.063
		Rear	0.185	0.023	0.028	0.185	0.185	0.185
		Right	0.152	-	0.152	0.152	0.152	0.152
	LTE Band 13	Top	0.099	0.167	-	0.099	0.099	0.099
		Bottom	0.140	-	0.140	0.140	0.140	0.140
		Front	0.145	0.013	0.054	0.145	0.145	0.145
		Rear	0.303	0.023	0.028	0.303	0.303	0.303
		Right	0.281	-	0.281	0.281	0.281	0.281
	LTE Band 26	Top	0.225	0.167	-	0.225	0.225	0.225
		Bottom	0.365	-	0.365	0.365	0.365	0.365
		Front	0.401	0.013	0.054	0.401	0.401	0.401
		Rear	0.488	0.023	0.028	0.511	0.552	0.565
		Right	0.584	0.023	0.028	0.617	0.622	0.645
	LTE Band 66	Top	0.253	0.167	-	0.253	0.253	0.253
		Bottom	0.114	-	0.114	0.114	0.114	0.114
		Front	0.330	0.013	0.054	0.330	0.330	0.330
		Rear	0.388	0.023	0.028	0.401	0.442	0.455
		Right	0.707	-	0.707	0.707	0.707	0.707
	LTE Band 25	Top	0.237	0.167	-	0.237	0.237	0.237
		Bottom	0.096	-	0.096	0.096	0.096	0.096
		Front	0.092	0.013	0.054	0.092	0.092	0.092
		Rear	0.675	0.023	0.028	0.698	0.729	0.742
		Right	0.516	-	0.516	0.516	0.516	0.516
	LTE Band 7	Top	0.192	0.167	-	0.192	0.192	0.192
		Bottom	0.115	-	0.115	0.115	0.115	0.115
		Front	0.150	0.013	0.054	0.150	0.150	0.150
		Rear	0.148	0.023	0.028	0.171	0.176	0.199
		Right	0.174	-	0.174	0.174	0.174	0.174
	LTE Band 41	Top	0.090	0.167	-	0.090	0.090	0.090
		Bottom	-	-	-	-	-	-
		Front	-	-	-	-	-	-
		Rear	-	-	-	-	-	-
		Left	-	-	-	-	-	-

Table 11.6.5 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.2 GHz W-LAN MIMO (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.2G W-LAN MIMO SAR (W/kg)	1+2	2+3	1+2+3
Hotspot SAR	GPRS 850	Top	-	0.015	0.147	0.015	0.147	0.162
		Bottom	0.065	-	0.096	0.065	0.096	0.066
		Front	0.407	0.013	0.420	0.420	0.421	0.464
		Rear	0.271	0.023	0.036	0.294	0.309	0.332
		Right	0.265	-	0.081	0.265	0.265	0.302
	GPRS 1900	Left	0.527	0.167	0.064	0.597	0.397	1.074
		Top	-	0.015	0.147	0.015	0.147	0.162
		Bottom	0.386	-	0.044	0.386	0.386	0.386
		Front	0.523	0.013	0.044	0.537	0.547	0.590
		Rear	1.028	0.023	0.036	1.051	1.066	1.089
	WCDMA 850	Right	0.343	-	0.081	0.343	0.424	0.424
		Left	0.119	0.167	0.380	0.119	0.730	0.969
		Top	-	0.015	0.147	0.015	0.147	0.162
		Bottom	0.155	-	0.044	0.155	0.155	0.155
		Front	0.386	0.013	0.044	0.401	0.438	0.445
	WCDMA 1700	Rear	0.364	0.023	0.036	0.387	0.402	0.425
		Right	0.320	-	0.081	0.320	0.401	0.401
		Left	0.118	0.167	0.380	0.118	0.577	0.887
		Top	-	0.015	0.147	0.015	0.147	0.162
		Bottom	0.472	-	0.044	0.472	0.472	0.472
	WCDMA 1900	Front	0.558	0.013	0.044	0.569	0.602	0.616
		Rear	0.976	0.023	0.036	0.999	1.014	1.037
		Right	0.320	-	0.081	0.320	0.401	0.401
		Left	0.118	0.167	0.380	0.118	0.499	0.905
		Top	-	0.015	0.147	0.015	0.147	0.162
	LTE Band 12	Bottom	0.464	-	0.044	0.464	0.464	0.464
		Front	0.509	0.013	0.044	0.522	0.553	0.566
		Rear	0.909	0.023	0.036	0.932	0.937	0.979
		Right	0.341	-	0.081	0.341	0.422	0.422
		Left	0.114	0.167	0.380	0.114	0.484	0.861
	LTE Band 13	Top	-	0.015	0.147	0.015	0.147	0.162
		Bottom	0.063	-	0.044	0.063	0.063	0.063
		Front	0.185	0.013	0.044	0.188	0.229	0.242
		Rear	0.152	0.023	0.036	0.155	0.190	0.213
		Right	0.099	-	0.081	0.099	0.180	0.180
	LTE Band 26	Left	0.140	0.167	0.380	0.140	0.520	0.667
		Top	-	0.015	0.147	0.015	0.147	0.162
		Bottom	0.155	-	0.044	0.155	0.155	0.155
		Front	0.386	0.013	0.044	0.386	0.425	0.438
		Rear	0.925	0.023	0.036	0.948	0.953	0.976
	LTE Band 68	Right	0.365	-	0.081	0.365	0.425	0.425
		Left	0.114	0.167	0.380	0.114	0.484	0.861
		Top	-	0.015	0.147	0.015	0.147	0.162
		Bottom	0.401	-	0.044	0.401	0.401	0.401
		Front	0.498	0.013	0.044	0.511	0.542	0.555
	LTE Band 25	Rear	0.584	0.023	0.036	0.617	0.632	0.655
		Right	0.253	-	0.081	0.253	0.334	0.334
		Left	0.114	0.167	0.380	0.114	0.494	0.861
		Top	-	0.015	0.147	0.015	0.147	0.162
		Bottom	0.330	-	0.044	0.330	0.330	0.330
	LTE Band 7	Front	0.386	0.013	0.044	0.401	0.432	0.445
		Rear	0.707	0.023	0.036	0.730	0.745	0.768
		Right	0.237	-	0.081	0.237	0.318	0.318
		Left	0.099	0.167	0.380	0.099	0.476	0.643
		Top	-	0.015	0.147	0.015	0.147	0.162
	LTE Band 41	Bottom	0.092	-	0.044	0.092	0.092	0.092
		Front	0.675	0.013	0.044	0.688	0.719	0.732
		Rear	0.518	0.023	0.036	0.539	0.554	0.577
		Right	0.192	-	0.081	0.192	0.273	0.273
		Left	0.115	0.167	0.380	0.115	0.485	0.862
		Top	-	0.015	0.147	0.015	0.147	0.162
		Bottom	0.190	-	0.044	0.190	0.190	0.190
		Front	0.150	0.013	0.044	0.153	0.180	0.207
		Rear	0.148	0.023	0.036	0.171	0.186	0.209
		Right	0.174	-	0.081	0.174	0.255	0.255
		Left	0.090	0.167	0.380	0.090	0.470	0.637

Table 11.6.6 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN Ant.1 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN Ant.1 SAR (W/kg)	1+2	2+3	1+2+3
Hotspot SAR	GPRS 850	Top	-	0.015	0.180	0.015	0.180	0.195
		Bottom	0.066	-	0.096	0.066	0.096	0.066
		Front	0.497	0.013	0.113	0.420	0.520	0.537
		Rear	0.271	0.023	0.033	0.294	0.309	0.327
		Right	0.265	-	0.081	0.265	0.265	0.265
	GPRS 1900	Left	0.527	0.167	0.064	0.597	0.424	1.081
		Top	-	0.015	0.180	0.015	0.180	0.195
		Bottom	0.386	-	0.044	0.386	0.386	0.386
		Front	0.523	0.013	0.113	0.537	0.618	0.629
		Rear	1.028	0.023	0.033	1.051	1.066	1.084
	WCDMA 850	Right	0.343	-	0.081	0.343	0.343	0.343
		Left	0.119	0.167	0.597	0.119	0.718	0.863
		Top	-	0.015	0.180	0.015	0.180	0.195
		Bottom	0.155	-	0.044	0.155	0.155	0.155
		Front	0.386	0.013	0.113	0.401	0.501	0.514
	WCDMA 1700	Rear	0.944	0.023	0.033	0.967	0.982	1.000
		Right	0.320	-	0.081	0.320	0.320	0.320
		Left	0.118	0.167	0.597	0.118	0.715	0.882
		Top	-	0.015	0.180	0.015	0.180	0.195
		Bottom	0.464	-	0.044	0.464	0.464	0.464
	WCDMA 1900	Front	0.509	0.013	0.113	0.522	0.622	0.635
		Rear	0.909	0.023	0.033	0.932	0.942	0.965
		Right	0.341	-	0.081	0.341	0.421	0.421
		Left	0.114	0.167	0.597	0.114	0.711	0.878
		Top	-	0.015	0.180	0.015	0.180	0.195
	LTE Band 12	Bottom	0.063	-	0.044	0.063	0.063	0.063
		Front	0.185	0.013	0.113	0.188	0.288	0.311
		Rear	0.152	0.023	0.033	0.155	0.185	0.208
		Right	0.099	-	0.081	0.099	0.099	0.099
		Left	0.140	0.167	0.597	0.140	0.737	0.904
	LTE Band 13	Top	-	0.015	0.180	0.015	0.180	0.195
		Bottom	0.145	-	0.044	0.145	0.145	0.145
		Front	0.393	0.013	0.113	0.416	0.516	0.529
		Rear	0.281	0.023	0.033	0.304	0.314	0.337
		Right	0.255	-	0.081	0.255	0.255	0.255
	LTE Band 26	Left	0.094	0.167	0.597	0.094	0.691	1.000
		Top	-	0.015	0.180	0.015	0.180	0.195
		Bottom	0.165	-	0.044	0.165	0.165	0.165
		Front	0.381	0.013	0.113	0.396	0.491	0.507
		Rear	0.315	0.023	0.033	0.338	0.348	0.371
	LTE Band 68	Right	0.225	-	0.081	0.225	0.225	0.225
		Left	0.365	0.167	0.597	0.365	0.485	1.129
		Top	-	0.015	0.180	0.015	0.180	0.195
		Bottom	0.092	-	0.044	0.092	0.092	0.092
		Front	0.675	0.013	0.113	0.688	0.788	0.801
	LTE Band 25	Rear	0.518	0.023	0.033	0.539	0.549	0.572
		Right	0.192	-	0.081	0.192	0.192	0.192
		Left	0.115	0.167	0.597	0.115	0.712	0.878
		Top	-	0.015	0.180	0.015	0.180	0.195
		Bottom	0.190	-	0.044	0.190	0.190	0.190
	LTE Band 41	Front	0.150	0.013	0.113	0.153	0.263	0.276
		Rear	0.148	0.023	0.033	0.171	0.181	0.204
		Right	0.174	-	0.081	0.174	0.174	0.174
		Left	0.090	0.167	0.597	0.090	0.687	0.884

Table 11.6.7 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN Ant.2 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	1+2	2SAR (W/kg)	1+2+3
			1	2	3	1+3	1+3	1+2+3
Hotspot SAR	GPRS 850	Top	-	0.015	-	0.015	-	0.015
		Bottom	0.065	-	-	0.065	0.065	0.065
		Front	0.407	0.013	0.021	0.420	0.428	0.441
		Rear	0.271	0.023	0.078	0.294	0.349	0.372
		Right	0.265	-	0.162	0.265	0.447	0.447
	GPRS 1900	Left	0.527	0.167	0.084	0.684	0.527	0.684
		Top	-	0.015	-	0.015	-	0.015
		Bottom	0.385	-	-	0.385	0.385	0.385
		Front	0.523	0.013	0.021	0.535	0.524	0.537
		Rear	1.028	0.023	0.078	1.051	1.106	1.129
	WCDMA 850	Right	0.343	-	0.162	0.343	0.525	0.525
		Left	0.119	0.167	0.162	0.298	0.119	0.286
		Top	-	0.015	-	0.015	-	0.015
		Bottom	0.155	-	-	0.155	0.155	0.155
		Front	0.388	0.013	0.021	0.401	0.408	0.422
	WCDMA 1700	Rear	0.584	0.023	0.078	0.397	0.442	0.455
		Right	0.320	-	0.162	0.320	0.502	0.502
		Left	0.118	0.167	0.162	0.298	0.118	0.286
		Top	-	0.015	-	0.015	-	0.015
		Bottom	0.472	-	-	0.472	0.472	0.472
	WCDMA 1900	Front	0.558	0.013	0.021	0.571	0.579	0.592
		Rear	0.976	0.023	0.078	1.009	1.054	1.077
		Right	0.320	-	0.162	0.320	0.502	0.502
		Left	0.118	0.167	0.162	0.298	0.118	0.286
		Top	-	0.015	-	0.015	-	0.015
	LTE Band 12	Bottom	0.484	-	-	0.484	0.484	0.484
		Front	0.509	0.013	0.021	0.522	0.530	0.543
		Rear	0.909	0.023	0.078	0.932	0.977	1.018
		Right	0.341	-	0.162	0.341	0.523	0.523
		Left	0.114	0.167	0.162	0.281	0.114	0.281
	LTE Band 13	Top	-	0.015	-	0.015	-	0.015
		Bottom	0.063	-	-	0.063	0.063	0.063
		Front	0.185	0.013	0.021	0.198	0.206	0.219
		Rear	0.152	0.023	0.078	0.175	0.220	0.233
		Right	0.099	-	0.162	0.099	0.281	0.281
	LTE Band 25	Left	0.140	0.167	-	0.307	0.140	0.307
		Top	-	0.015	-	0.015	-	0.015
		Bottom	0.145	-	-	0.145	0.145	0.145
		Front	0.303	0.013	0.021	0.316	0.324	0.337
		Rear	0.281	0.023	0.078	0.294	0.302	0.315
	LTE Band 26	Right	0.255	-	0.162	0.255	0.437	0.437
		Left	0.404	0.167	-	0.571	0.404	0.671
		Top	-	0.015	-	0.015	-	0.015
		Bottom	0.165	-	-	0.165	0.165	0.165
		Front	0.381	0.013	0.021	0.394	0.402	0.415
	LTE Band 66	Rear	0.315	0.023	0.078	0.338	0.393	0.416
		Right	0.225	-	0.162	0.225	0.407	0.407
		Left	0.365	0.167	-	0.532	0.365	0.632
		Top	-	0.015	-	0.015	-	0.015
		Bottom	0.401	-	-	0.401	0.401	0.401
	LTE Band 25	Front	0.498	0.013	0.021	0.511	0.519	0.532
		Rear	0.584	0.023	0.078	0.617	0.672	0.695
		Right	0.253	-	0.162	0.253	0.435	0.435
		Left	0.114	0.167	0.162	0.281	0.114	0.281
		Top	-	0.015	-	0.015	-	0.015
	LTE Band 7	Bottom	0.330	-	-	0.330	0.330	0.330
		Front	0.388	0.013	0.021	0.401	0.409	0.422
		Rear	0.707	0.023	0.078	0.730	0.785	0.808
		Right	0.237	-	0.162	0.237	0.419	0.419
		Left	0.099	0.167	-	0.263	0.099	0.263
	LTE Band 41	Top	-	0.015	-	0.015	-	0.015
		Bottom	0.092	-	-	0.092	0.092	0.092
		Front	0.175	0.013	0.021	0.188	0.196	0.209
		Rear	0.152	0.023	0.078	0.175	0.220	0.233
		Right	0.099	-	0.162	0.099	0.281	0.281
	LTE Band 41	Left	0.115	0.167	0.162	0.282	0.115	0.282
		Top	-	0.015	-	0.015	-	0.015
		Bottom	0.160	-	-	0.160	0.160	0.160
		Front	0.150	0.013	0.021	0.163	0.171	0.184
		Rear	0.148	0.023	0.078	0.171	0.226	0.249
		Right	0.174	-	0.162	0.174	0.356	0.356
		Left	0.090	0.167	-	0.257	0.090	0.257

Table 11.6.8 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN MIMO (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN MIMO SAR (W/kg)	2SAR (W/kg)		
			1	2	3	1+2	1+3	1+2+3
Hotspot SAR	GPRS 850	Top	-	0.015	0.192	0.015	0.192	0.207
		Bottom	0.066	-	-	0.066	0.066	0.066
		Front	0.407	0.013	0.113	0.420	0.520	0.533
		Rear	0.271	0.023	0.081	0.294	0.352	0.375
		Right	0.265	-	0.196	0.265	0.451	0.451
	Left	0.427	0.167	0.602	0.427	0.427	0.427	
	GPRS 1900	Top	-	0.015	0.192	0.015	0.192	0.207
		Bottom	0.385	-	-	0.385	0.385	0.385
		Front	0.523	0.013	0.113	0.535	0.618	0.629
		Rear	1.028	0.023	0.081	1.051	1.108	1.132
		Right	0.343	-	0.196	0.343	0.529	0.529
	WCDMA 850	Left	0.119	0.167	0.602	0.288	0.721	0.685
		Top	-	0.015	0.192	0.015	0.192	0.207
		Bottom	0.155	-	-	0.155	0.155	0.155
		Front	0.388	0.013	0.113	0.401	0.501	0.514
		Rear	0.948	0.023	0.081	0.961	0.445	0.948
	WCDMA 1700	Right	0.320	-	0.196	0.320	0.506	0.506
		Left	0.110	0.167	0.602	0.277	0.702	1.179
		Top	-	0.015	0.192	0.015	0.192	0.207
		Bottom	0.472	-	-	0.472	0.472	0.472
		Front	0.558	0.013	0.113	0.571	0.671	0.684
	WCDMA 1900	Rear	0.976	0.023	0.081	0.999	0.757	0.760
		Right	0.320	-	0.196	0.320	0.506	0.506
		Left	0.118	0.167	0.602	0.285	0.720	0.887
		Top	-	0.015	0.192	0.015	0.192	0.207
		Bottom	0.484	-	-	0.484	0.484	0.484
	LTE Band 12	Front	0.509	0.013	0.113	0.522	0.622	0.635
		Rear	0.909	0.023	0.081	0.932	0.890	1.013
		Right	0.341	-	0.196	0.341	0.527	0.527
		Left	0.114	0.167	0.602	0.281	0.716	0.863
		Top	-	0.015	0.192	0.015	0.192	0.207
	LTE Band 13	Bottom	0.063	-	-	0.063	0.063	0.063
		Front	0.185	0.013	0.113	0.198	0.298	0.311
		Rear	0.152	0.023	0.081	0.175	0.223	0.236
		Right	0.099	-	0.196	0.099	0.285	0.285
		Left	0.140	0.167	0.602	0.307	0.742	0.909
	LTE Band 13	Top	-	0.015	0.192	0.015	0.192	0.207
		Bottom	0.145	-	-	0.145	0.145	0.145
		Front	0.303	0.013	0.113	0.316	0.416	0.429
		Rear	0.281	0.023	0.081	0.304	0.362	0.385
		Right	0.255	-	0.196	0.255	0.441	0.441
	LTE Band 26	Left	0.404	0.167	1.005	0.571	1.005	1.173
		Top	-	0.015	0.192	0.015	0.192	0.207
		Bottom	0.165	-	-	0.165	0.165	0.165
		Front	0.381	0.013	0.113	0.394	0.494	0.507
		Rear	0.315	0.023	0.081	0.338	0.396	0.419
	LTE Band 26	Right	0.225	-	0.196	0.225	0.411	0.411
		Left	0.365	0.167	0.602	0.532	0.967	1.134
		Top	-	0.015	0.192	0.015	0.192	0.207
		Bottom	0.401	-	-	0.401	0.401	0.401
		Front	0.498	0.013	0.113	0.511	0.611	0.624
	LTE Band 66	Rear	0.584	0.023	0.081	0.617	0.675	0.698
		Right	0.253	-	0.196	0.253	0.439	0.439
		Left	0.114	0.167	0.602	0.281	0.716	0.863
		Top	-	0.015	0.192	0.015	0.192	0.207
		Bottom	0.330	-	-	0.330	0.330	0.330
	LTE Band 25	Front	0.388	0.013	0.113	0.401	0.501	0.514
		Rear	0.707	0.023	0.081	0.730	0.788	0.811
		Right	0.237	-	0.196	0.237	0.423	0.423
		Left	0.099	0.167	0.602	0.263	0.698	0.961
		Top	-	0.015	0.192	0.015	0.192	0.207
	LTE Band 7	Bottom	0.092	-	-	0.092	0.092	0.092
		Front	0.175	0.013	0.113	0.188	0.288	0.301
Rear		0.516	0.023	0.081	0.539	0.597	0.620	
Right		0.162	-	0.196	0.162	0.378	0.378	
Left		0.115	0.167	0.602	0.277	0.717	0.884	
LTE Band 41	Top	-	0.015	0.192	0.015	0.192	0.207	
	Bottom	0.190	-	-	0.190	0.190	0.190	
	Front	0.150	0.013	0.113	0.163	0.263	0.276	
	Rear	0.148	0.023	0.081	0.171	0.229	0.252	
	Right	0.174	-	0.196	0.174	0.365	0.365	
LTE Band 41	Left	0.090	0.167	0.602	0.257	0.692	0.999	

Table 11.6.9 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	-	0.063	0.063
		Bottom	0.066	-	0.066
		Front	0.407	0.047	0.454
		Rear	0.271	0.029	0.3
		Right	0.265	-	0.265
	GPRS 1900	Left	0.527	0.573	1.1
		Top	-	0.063	0.063
		Bottom	0.398	-	0.398
		Front	0.593	0.047	0.64
		Rear	1.028	0.029	1.058
	WCDMA 850	Right	0.343	-	0.343
		Left	0.119	0.573	0.692
		Top	-	0.063	0.063
		Bottom	0.155	-	0.155
		Front	0.388	0.047	0.435
	WCDMA 1700	Rear	0.326	0.092	0.418
		Right	0.326	-	0.326
		Left	0.410	0.573	0.983
		Top	-	0.063	0.063
		Bottom	0.472	-	0.472
	WCDMA 1900	Front	0.558	0.047	0.605
		Rear	0.676	0.092	0.768
		Right	0.320	-	0.320
		Left	0.118	0.573	0.691
		Top	-	0.063	0.063
	LTE Band 12	Bottom	0.484	-	0.484
		Front	0.599	0.047	0.646
		Rear	0.909	0.092	1.001
		Right	0.341	-	0.341
		Left	0.114	0.573	0.687
	LTE Band 13	Top	-	0.063	0.063
		Bottom	0.063	-	0.063
		Front	0.185	0.047	0.232
		Rear	0.152	0.092	0.244
		Right	0.099	-	0.099
	LTE Band 26	Left	0.140	0.573	0.713
		Top	-	0.063	0.063
		Bottom	0.145	-	0.145
		Front	0.303	0.047	0.35
		Rear	0.281	0.092	0.373
	LTE Band 66	Right	0.253	-	0.253
		Left	0.404	0.573	0.977
		Top	-	0.063	0.063
		Bottom	0.401	-	0.401
		Front	0.498	0.047	0.545
	LTE Band 25	Rear	0.584	0.092	0.676
		Right	0.253	-	0.253
		Left	0.114	0.573	0.687
		Top	-	0.063	0.063
		Bottom	0.330	-	0.330
	LTE Band 7	Front	0.388	0.047	0.435
		Rear	0.707	0.092	0.799
		Right	0.237	-	0.237
		Left	0.096	0.573	0.669
		Top	-	0.063	0.063
	LTE Band 41	Bottom	0.092	-	0.092
		Front	0.675	0.047	0.722
		Rear	0.516	0.092	0.608
		Right	0.192	-	0.192
		Left	0.115	0.573	0.688
		Top	-	0.063	0.063
		Bottom	0.190	-	0.190
		Front	0.150	0.047	0.197
		Rear	0.148	0.092	0.240
		Right	0.174	-	0.174
		Left	0.090	0.573	0.663

Table 11.6.10 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.2 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	-	-	-
		Bottom	0.066	-	0.066
		Front	0.407	0.029	0.436
		Rear	0.271	0.073	0.344
		Right	0.265	0.152	0.417
	GPRS 1900	Left	0.527	-	0.527
		Top	-	-	-
		Bottom	0.398	-	0.398
		Front	0.593	0.029	0.622
		Rear	1.028	0.073	1.101
	WCDMA 850	Right	0.343	-	0.343
		Left	0.119	0.152	0.271
		Top	-	-	-
		Bottom	0.155	-	0.155
		Front	0.388	0.029	0.417
	WCDMA 1700	Rear	0.364	0.073	0.437
		Right	0.320	-	0.320
		Left	0.410	0.152	0.562
		Top	-	-	-
		Bottom	0.472	-	0.472
	WCDMA 1900	Front	0.558	0.029	0.587
		Rear	0.676	0.073	0.749
		Right	0.320	0.152	0.472
		Left	0.118	0.152	0.27
		Top	-	-	-
	LTE Band 12	Bottom	0.063	-	0.063
		Front	0.185	0.029	0.214
		Rear	0.152	0.073	0.225
		Right	0.099	0.152	0.251
		Left	0.140	-	0.140
	LTE Band 13	Top	-	-	-
		Bottom	0.145	-	0.145
		Front	0.303	0.029	0.332
		Rear	0.281	0.073	0.354
		Right	0.253	0.152	0.405
	LTE Band 26	Left	0.404	-	0.404
		Top	-	-	-
		Bottom	0.185	-	0.185
		Front	0.381	0.029	0.41
		Rear	0.315	0.073	0.388
	LTE Band 66	Right	0.225	0.152	0.377
		Left	0.365	-	0.365
		Top	-	-	-
		Bottom	0.401	-	0.401
		Front	0.498	0.029	0.527
	LTE Band 25	Rear	0.584	0.073	0.657
		Right	0.253	0.152	0.405
		Left	0.114	-	0.114
		Top	-	-	-
		Bottom	0.330	-	0.330
	LTE Band 7	Front	0.388	0.029	0.417
		Rear	0.707	0.073	0.78
		Right	0.237	0.152	0.389
		Left	0.096	-	0.096
		Top	-	-	-
	LTE Band 41	Bottom	0.092	-	0.092
		Front	0.675	0.029	0.704
		Rear	0.518	0.073	0.591
		Right	0.192	0.152	0.344
		Left	0.115	-	0.115
		Top	-	-	-
		Bottom	0.190	-	0.190
		Front	0.150	0.029	0.179
		Rear	0.148	0.073	0.221
		Right	0.174	0.152	0.326
		Left	0.090	-	0.090

Table 11.6.11 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN MIMO (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	1	0.064	0.064
		Bottom	0.066	0.064	0.066
		Front	0.407	0.070	0.477
		Rear	0.271	0.115	0.386
		Right	0.265	0.150	0.415
		Left	0.527	0.602	1.129
	GPRS 1900	Top	0.398	0.064	0.398
		Bottom	0.593	0.070	0.573
		Front	1.028	0.115	1.143
		Rear	0.343	0.150	0.493
		Left	0.119	0.602	0.721
	WCDMA 850	Top	0.155	0.064	0.155
		Bottom	0.388	0.070	0.458
		Front	0.394	0.115	0.478
		Rear	0.320	0.150	0.470
		Left	0.410	0.602	1.012
	WCDMA 1700	Top	0.472	0.064	0.536
		Bottom	0.558	0.070	0.628
		Front	0.676	0.115	0.791
		Rear	0.320	0.150	0.470
		Left	0.118	0.602	0.720
	WCDMA 1900	Top	0.464	0.064	0.464
		Bottom	0.559	0.070	0.570
		Front	0.909	0.115	1.024
		Rear	0.341	0.150	0.491
		Left	0.114	0.602	0.716
	LTE Band 12	Top	0.063	0.064	0.064
		Bottom	0.185	0.064	0.185
		Front	0.185	0.070	0.255
		Rear	0.152	0.115	0.267
		Right	0.099	0.150	0.249
	LTE Band 13	Top	0.140	0.064	0.140
		Bottom	0.145	0.064	0.145
		Front	0.353	0.070	0.373
		Rear	0.281	0.115	0.396
		Right	0.255	0.150	0.405
	LTE Band 26	Top	0.401	0.064	0.401
		Bottom	0.401	0.064	0.401
		Front	0.401	0.070	0.451
		Rear	0.315	0.115	0.430
		Right	0.225	0.150	0.375
	LTE Band 66	Top	0.385	0.064	0.385
		Bottom	0.401	0.064	0.401
		Front	0.401	0.070	0.451
		Rear	0.315	0.115	0.430
		Right	0.253	0.150	0.403
	LTE Band 25	Top	0.114	0.064	0.114
		Bottom	0.330	0.064	0.330
		Front	0.388	0.070	0.458
		Rear	0.707	0.115	0.822
		Right	0.237	0.150	0.387
	LTE Band 7	Top	0.099	0.064	0.099
		Bottom	0.092	0.064	0.092
		Front	0.675	0.070	0.745
		Rear	0.516	0.115	0.631
		Right	0.192	0.150	0.342
	LTE Band 41	Top	0.115	0.064	0.115
		Bottom	0.190	0.064	0.190
		Front	0.150	0.070	0.220
		Rear	0.148	0.115	0.263
		Right	0.174	0.150	0.324

Table 11.6.12 Simultaneous Transmission Scenario : 2G/3G/4G + 5.2 GHz W-LAN Ant.1 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.2G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	1	0.144	0.144
		Bottom	0.066	0.144	0.066
		Front	0.407	0.054	0.461
		Rear	0.271	0.028	0.299
		Right	0.265	0.028	0.293
		Left	0.527	0.221	0.748
	GPRS 1900	Top	0.398	0.144	0.398
		Bottom	0.593	0.054	0.597
		Front	1.028	0.028	1.056
		Rear	0.343	0.028	0.343
		Left	0.119	0.221	0.340
	WCDMA 850	Top	0.155	0.144	0.155
		Bottom	0.388	0.054	0.442
		Front	0.394	0.028	0.394
		Rear	0.320	0.028	0.320
		Left	0.410	0.221	0.631
	WCDMA 1700	Top	0.472	0.144	0.472
		Bottom	0.558	0.054	0.612
		Front	0.676	0.028	0.704
		Rear	0.320	0.028	0.320
		Left	0.118	0.221	0.339
	WCDMA 1900	Top	0.464	0.144	0.464
		Bottom	0.559	0.054	0.563
		Front	0.909	0.028	0.937
		Rear	0.341	0.028	0.341
		Left	0.114	0.221	0.335
	LTE Band 12	Top	0.063	0.144	0.063
		Bottom	0.185	0.054	0.185
		Front	0.185	0.028	0.213
		Rear	0.152	0.028	0.180
		Right	0.099	0.028	0.099
	LTE Band 13	Top	0.140	0.144	0.140
		Bottom	0.145	0.054	0.145
		Front	0.353	0.028	0.357
		Rear	0.281	0.028	0.309
		Right	0.255	0.028	0.255
	LTE Band 26	Top	0.401	0.144	0.401
		Bottom	0.401	0.054	0.401
		Front	0.401	0.028	0.429
		Rear	0.315	0.028	0.343
		Right	0.253	0.028	0.253
	LTE Band 66	Top	0.114	0.144	0.114
		Bottom	0.330	0.054	0.330
		Front	0.388	0.028	0.416
		Rear	0.707	0.028	0.735
		Right	0.237	0.028	0.237
	LTE Band 25	Top	0.099	0.144	0.099
		Bottom	0.092	0.054	0.092
		Front	0.675	0.028	0.703
		Rear	0.516	0.028	0.544
		Right	0.192	0.028	0.192
	LTE Band 7	Top	0.115	0.221	0.336
		Bottom	0.190	0.144	0.190
		Front	0.150	0.054	0.204
		Rear	0.148	0.028	0.176
		Right	0.174	0.028	0.174
	LTE Band 41	Top	0.090	0.221	0.311
		Bottom	0.150	0.144	0.150
		Front	0.150	0.054	0.204
		Rear	0.148	0.028	0.176
		Right	0.174	0.028	0.174

Table 11.6.13 Simultaneous Transmission Scenario : 2G/3G/4G + 5.2 GHz W-LAN Ant.2 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.2G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	-	-	-
		Bottom	0.086	-	0.086
		Front	0.407	0.013	0.420
		Rear	0.271	0.018	0.289
		Right	0.265	0.076	0.341
		Left	0.527	-	0.527
	GPRS 1900	Top	-	-	-
		Bottom	0.388	-	0.388
		Front	0.593	0.013	0.606
		Rear	1.028	0.018	1.046
		Right	0.343	0.076	0.419
		Left	0.119	-	0.119
	WCDMA 850	Top	-	-	-
		Bottom	0.155	-	0.155
		Front	0.388	0.013	0.401
		Rear	0.356	0.018	0.374
		Right	0.320	0.076	0.396
		Left	0.410	-	0.410
	WCDMA 1700	Top	-	-	-
		Bottom	0.472	-	0.472
		Front	0.558	0.013	0.571
		Rear	0.676	0.018	0.694
		Right	0.320	0.076	0.396
		Left	0.118	-	0.118
	WCDMA 1900	Top	-	-	-
		Bottom	0.484	-	0.484
		Front	0.599	0.013	0.612
		Rear	0.909	0.018	0.927
		Right	0.341	0.076	0.417
		Left	0.114	-	0.114
	LTE Band 12	Top	-	-	-
		Bottom	0.063	-	0.063
		Front	0.185	0.013	0.198
		Rear	0.152	0.018	0.170
		Right	0.099	0.076	0.175
		Left	0.140	-	0.140
	LTE Band 13	Top	-	-	-
		Bottom	0.145	-	0.145
		Front	0.353	0.013	0.366
		Rear	0.281	0.018	0.299
		Right	0.255	0.076	0.331
		Left	0.404	-	0.404
	LTE Band 26	Top	-	-	-
		Bottom	0.185	-	0.185
		Front	0.381	0.013	0.394
		Rear	0.315	0.018	0.333
		Right	0.225	0.076	0.301
		Left	0.365	-	0.365
	LTE Band 66	Top	-	-	-
		Bottom	0.401	-	0.401
		Front	0.488	0.013	0.501
		Rear	0.584	0.018	0.602
		Right	0.253	0.076	0.329
		Left	0.114	-	0.114
	LTE Band 25	Top	-	-	-
		Bottom	0.330	-	0.330
		Front	0.388	0.013	0.401
		Rear	0.707	0.018	0.725
		Right	0.237	0.076	0.313
		Left	0.098	-	0.098
	LTE Band 7	Top	-	-	-
		Bottom	0.092	-	0.092
		Front	0.675	0.013	0.688
		Rear	0.516	0.018	0.534
		Right	0.192	0.076	0.268
		Left	0.115	-	0.115
	LTE Band 41	Top	-	-	-
		Bottom	0.190	-	0.190
		Front	0.150	0.013	0.163
		Rear	0.148	0.018	0.166
		Right	0.174	0.076	0.250
		Left	0.090	-	0.090

Table 11.6.14 Simultaneous Transmission Scenario : 2G/3G/4G + 5.2 GHz W-LAN MIMO (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.2G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	-	0.147	0.147
		Bottom	0.086	-	0.086
		Front	0.407	0.044	0.451
		Rear	0.271	0.020	0.290
		Right	0.265	0.081	0.346
		Left	0.527	0.380	0.907
	GPRS 1900	Top	-	0.147	0.147
		Bottom	0.388	0.386	0.774
		Front	0.593	0.044	0.637
		Rear	1.028	0.038	1.066
		Right	0.343	0.081	0.424
		Left	0.119	0.380	0.499
	WCDMA 850	Top	-	0.147	0.147
		Bottom	0.155	0.155	0.310
		Front	0.388	0.044	0.432
		Rear	0.364	0.038	0.402
		Right	0.320	0.081	0.401
		Left	0.410	0.380	0.790
	WCDMA 1700	Top	-	0.147	0.147
		Bottom	0.472	0.147	0.619
		Front	0.558	0.044	0.602
		Rear	0.676	0.038	0.714
		Right	0.320	0.081	0.401
		Left	0.118	0.380	0.498
	WCDMA 1900	Top	-	0.147	0.147
		Bottom	0.484	0.484	0.968
		Front	0.599	0.044	0.643
		Rear	0.909	0.038	0.947
		Right	0.341	0.081	0.422
		Left	0.114	0.380	0.494
	LTE Band 12	Top	-	0.147	0.147
		Bottom	0.063	-	0.063
		Front	0.185	0.044	0.229
		Rear	0.152	0.038	0.190
		Right	0.099	0.081	0.180
		Left	0.140	0.380	0.520
	LTE Band 13	Top	-	0.147	0.147
		Bottom	0.145	-	0.145
		Front	0.353	0.044	0.397
		Rear	0.281	0.038	0.319
		Right	0.255	0.081	0.336
		Left	0.404	0.380	0.784
	LTE Band 26	Top	-	0.147	0.147
		Bottom	0.185	-	0.185
		Front	0.381	0.044	0.425
		Rear	0.315	0.038	0.353
		Right	0.225	0.081	0.306
		Left	0.365	0.380	0.745
	LTE Band 66	Top	-	0.147	0.147
		Bottom	0.401	-	0.401
		Front	0.488	0.044	0.532
		Rear	0.584	0.038	0.622
		Right	0.253	0.081	0.334
		Left	0.114	0.380	0.494
	LTE Band 25	Top	-	0.147	0.147
		Bottom	0.330	-	0.330
		Front	0.388	0.044	0.432
		Rear	0.707	0.038	0.745
		Right	0.237	0.081	0.318
		Left	0.098	0.380	0.478
	LTE Band 7	Top	-	0.147	0.147
		Bottom	0.092	0.092	0.184
		Front	0.675	0.044	0.719
		Rear	0.516	0.038	0.554
		Right	0.192	0.081	0.273
		Left	0.115	0.380	0.495
	LTE Band 41	Top	-	0.147	0.147
		Bottom	0.190	-	0.190
		Front	0.150	0.044	0.194
		Rear	0.148	0.038	0.186
		Right	0.174	0.081	0.255
		Left	0.090	0.380	0.470

Table 11.6.15 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN Ant.1 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	-	0.180	0.180
		Bottom	0.066	-	0.066
		Front	0.407	0.113	0.520
		Rear	0.271	0.033	0.304
		Right	0.265	-	0.265
		Left	0.527	0.597	1.124
	GPRS 1900	Top	-	0.180	0.180
		Bottom	0.388	-	0.388
		Front	0.593	0.113	0.706
		Rear	1.028	0.033	1.061
		Right	0.343	-	0.343
		Left	0.119	0.597	0.716
	WCDMA 850	Top	-	0.180	0.180
		Bottom	0.155	-	0.155
		Front	0.388	0.113	0.501
		Rear	0.320	0.033	0.353
		Right	0.320	-	0.320
		Left	0.410	0.597	1.007
	WCDMA 1700	Top	-	0.180	0.180
		Bottom	0.472	-	0.472
		Front	0.558	0.113	0.671
		Rear	0.676	0.033	0.709
		Right	0.320	-	0.320
		Left	0.118	0.597	0.715
	WCDMA 1900	Top	-	0.180	0.180
		Bottom	0.484	-	0.484
		Front	0.599	0.113	0.712
		Rear	0.909	0.033	0.942
		Right	0.341	-	0.341
		Left	0.114	0.597	0.711
	LTE Band 12	Top	-	0.180	0.180
		Bottom	0.063	-	0.063
		Front	0.180	0.113	0.293
		Rear	0.152	0.033	0.185
		Right	0.099	-	0.099
		Left	0.140	0.597	0.737
	LTE Band 13	Top	-	0.180	0.180
		Bottom	0.145	-	0.145
		Front	0.303	0.113	0.416
		Rear	0.281	0.033	0.314
		Right	0.255	-	0.255
		Left	0.404	0.597	1.001
	LTE Band 26	Top	-	0.180	0.180
		Bottom	0.185	-	0.185
		Front	0.381	0.113	0.494
		Rear	0.315	0.033	0.348
		Right	0.225	-	0.225
		Left	0.385	0.597	0.982
	LTE Band 66	Top	-	0.180	0.180
		Bottom	0.401	-	0.401
		Front	0.498	0.113	0.611
		Rear	0.584	0.033	0.617
		Right	0.253	-	0.253
		Left	0.114	0.597	0.711
	LTE Band 25	Top	-	0.180	0.180
		Bottom	0.330	-	0.330
		Front	0.388	0.113	0.501
		Rear	0.707	0.033	0.740
		Right	0.237	-	0.237
		Left	0.098	0.597	0.695
	LTE Band 7	Top	-	0.180	0.180
		Bottom	0.092	-	0.092
		Front	0.675	0.113	0.788
		Rear	0.516	0.033	0.549
		Right	0.192	-	0.192
		Left	0.115	0.597	0.712
	LTE Band 41	Top	-	0.180	0.180
		Bottom	0.190	-	0.190
		Front	0.150	0.113	0.263
		Rear	0.148	0.033	0.181
		Right	0.174	-	0.174
		Left	0.090	0.597	0.687

Table 11.6.16 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN Ant.2 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	-	-	-
		Bottom	0.066	-	0.066
		Front	0.407	0.021	0.428
		Rear	0.271	0.018	0.289
		Right	0.265	0.182	0.447
		Left	0.527	-	0.527
	GPRS 1900	Top	-	-	-
		Bottom	0.388	-	0.388
		Front	0.593	0.021	0.614
		Rear	1.028	0.078	1.106
		Right	0.343	0.182	0.525
		Left	0.119	-	0.119
	WCDMA 850	Top	-	-	-
		Bottom	0.155	-	0.155
		Front	0.388	0.021	0.409
		Rear	0.384	0.078	0.462
		Right	0.320	0.182	0.502
		Left	0.410	-	0.410
	WCDMA 1700	Top	-	-	-
		Bottom	0.472	-	0.472
		Front	0.558	0.021	0.579
		Rear	0.676	0.078	0.754
		Right	0.320	0.182	0.502
		Left	0.118	-	0.118
	WCDMA 1900	Top	-	-	-
		Bottom	0.484	-	0.484
		Front	0.599	0.021	0.620
		Rear	0.909	0.078	0.987
		Right	0.341	0.182	0.523
		Left	0.114	-	0.114
	LTE Band 12	Top	-	-	-
		Bottom	0.063	-	0.063
		Front	0.180	0.021	0.201
		Rear	0.152	0.078	0.230
		Right	0.140	0.182	0.321
		Left	0.140	-	0.140
	LTE Band 13	Top	-	-	-
		Bottom	0.145	-	0.145
		Front	0.303	0.021	0.324
		Rear	0.281	0.078	0.359
		Right	0.255	0.182	0.437
		Left	0.404	-	0.404
	LTE Band 26	Top	-	-	-
		Bottom	0.185	-	0.185
		Front	0.381	0.021	0.402
		Rear	0.315	0.078	0.393
		Right	0.225	0.182	0.407
		Left	0.385	-	0.385
	LTE Band 66	Top	-	-	-
		Bottom	0.401	-	0.401
		Front	0.498	0.021	0.519
		Rear	0.584	0.078	0.662
		Right	0.253	0.182	0.435
		Left	0.114	-	0.114
	LTE Band 25	Top	-	-	-
		Bottom	0.330	-	0.330
		Front	0.388	0.021	0.409
		Rear	0.707	0.078	0.785
		Right	0.237	0.182	0.419
		Left	0.098	-	0.098
	LTE Band 7	Top	-	-	-
		Bottom	0.092	-	0.092
		Front	0.675	0.021	0.696
		Rear	0.516	0.078	0.594
		Right	0.192	0.182	0.374
		Left	0.115	-	0.115
	LTE Band 41	Top	-	-	-
		Bottom	0.190	-	0.190
		Front	0.150	0.021	0.171
		Rear	0.148	0.078	0.226
		Right	0.174	0.182	0.356
		Left	0.090	-	0.090

Table 11.6.17 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN MIMO (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	1	0.192	0.192
		Bottom	0.066	-	0.066
		Front	0.407	0.113	0.520
		Rear	0.271	0.081	0.352
		Right	0.265	0.186	0.451
		Left	0.527	0.602	1.129
	GPRS 1900	Top	-	0.192	0.192
		Bottom	0.398	-	0.398
		Front	0.593	0.113	0.706
		Rear	1.028	0.081	1.109
		Right	0.343	0.186	0.529
	WCDMA 850	Top	0.119	0.602	0.721
		Bottom	-	0.192	0.192
		Front	0.155	0.182	0.337
		Rear	0.388	0.113	0.501
		Right	0.320	0.186	0.506
	WCDMA 1700	Left	0.410	0.602	1.012
		Top	-	0.192	0.192
		Bottom	0.472	0.182	0.654
		Front	0.558	0.113	0.671
		Rear	0.676	0.081	0.757
	WCDMA 1900	Right	0.320	0.186	0.506
		Left	0.118	0.602	0.720
		Top	-	0.192	0.192
		Bottom	0.464	0.182	0.646
		Front	0.559	0.113	0.672
	LTE Band 12	Rear	0.909	0.081	0.990
		Right	0.341	0.186	0.527
		Left	0.114	0.602	0.716
		Top	-	0.192	0.192
		Bottom	0.063	-	0.063
	LTE Band 13	Front	0.185	0.113	0.298
		Rear	0.192	0.113	0.305
		Right	0.353	0.081	0.434
		Left	0.140	0.602	0.742
		Top	-	0.192	0.192
	LTE Band 26	Bottom	0.145	-	0.145
		Front	0.333	0.113	0.446
		Rear	0.281	0.081	0.362
		Right	0.255	0.186	0.441
		Left	0.404	0.602	1.006
	LTE Band 66	Top	-	0.192	0.192
		Bottom	0.385	-	0.385
		Front	0.401	0.113	0.514
		Rear	0.498	0.081	0.579
		Right	0.253	0.186	0.439
	LTE Band 25	Left	0.114	0.602	0.716
		Top	-	0.192	0.192
		Bottom	0.330	-	0.330
		Front	0.388	0.113	0.501
		Rear	0.707	0.081	0.788
	LTE Band 7	Right	0.237	0.186	0.423
		Left	0.096	0.602	0.698
		Top	-	0.192	0.192
		Bottom	0.092	-	0.092
		Front	0.675	0.113	0.788
	LTE Band 41	Rear	0.516	0.081	0.597
		Right	0.192	0.186	0.378
		Left	0.115	0.602	0.717
		Top	-	0.192	0.192
		Bottom	0.190	-	0.190
		Front	0.120	0.113	0.233
		Rear	0.148	0.081	0.229
		Right	0.174	0.186	0.360
		Left	0.090	0.602	0.692

Table 11.6.18 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	GPRS 850	Top	1	0.015	0.015
		Bottom	0.066	-	0.066
		Front	0.407	0.013	0.420
		Rear	0.271	0.023	0.294
		Right	0.265	0.025	0.290
	GPRS 1900	Left	0.527	0.167	0.694
		Top	-	0.015	0.015
		Bottom	0.398	0.015	0.413
		Front	0.593	0.013	0.606
		Rear	1.028	0.023	1.051
	WCDMA 850	Right	0.343	0.023	0.366
		Left	0.119	0.167	0.286
		Top	-	0.015	0.015
		Bottom	0.155	0.015	0.170
		Front	0.388	0.013	0.401
	WCDMA 1700	Rear	0.384	0.023	0.407
		Right	0.320	0.023	0.343
		Left	0.410	0.167	0.577
		Top	-	0.015	0.015
		Bottom	0.472	0.015	0.487
	WCDMA 1900	Front	0.558	0.013	0.571
		Rear	0.676	0.023	0.699
		Right	0.320	0.023	0.343
		Left	0.118	0.167	0.285
		Top	-	0.015	0.015
	LTE Band 12	Bottom	0.464	-	0.464
		Front	0.509	0.013	0.522
		Rear	0.909	0.023	0.932
		Right	0.341	0.023	0.364
		Left	0.114	0.167	0.281
	LTE Band 13	Top	-	0.015	0.015
		Bottom	0.063	-	0.063
		Front	0.185	0.013	0.198
		Rear	0.152	0.023	0.175
		Right	0.099	0.023	0.122
	LTE Band 26	Left	0.140	0.167	0.307
		Top	-	0.015	0.015
		Bottom	0.145	-	0.145
		Front	0.333	0.013	0.346
		Rear	0.281	0.023	0.304
	LTE Band 66	Right	0.255	0.023	0.278
		Left	0.404	0.167	0.571
		Top	-	0.015	0.015
		Bottom	0.385	-	0.385
		Front	0.401	0.013	0.414
	LTE Band 25	Rear	0.498	0.013	0.511
		Right	0.253	0.023	0.276
		Left	0.114	0.167	0.281
		Top	-	0.015	0.015
		Bottom	0.330	-	0.330
	LTE Band 7	Front	0.388	0.013	0.401
		Rear	0.707	0.023	0.730
		Right	0.237	0.023	0.260
		Left	0.096	0.167	0.263
		Top	-	0.015	0.015
	LTE Band 41	Bottom	0.092	0.015	0.107
		Front	0.675	0.013	0.688
		Rear	0.516	0.023	0.539
		Right	0.192	0.023	0.215
		Left	0.115	0.167	0.282
		Top	-	0.015	0.015
		Bottom	0.190	-	0.190
		Front	0.120	0.013	0.133
		Rear	0.148	0.023	0.171
		Right	0.174	0.023	0.197
		Left	0.090	0.167	0.257

Table 11.6.19 Simultaneous Transmission Scenario : 2.4 GHz W-LAN Ant.1 + 5 GHz W-LAN Ant.2 (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	2.4G W-LAN Ant.1 SAR (W/kg)	5G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	5.2G W-LAN Ant.2	Top	1	2	1+2
		Bottom	0.063	-	0.063
		Front	0.047	0.013	0.060
		Rear	0.092	0.018	0.110
		Right	-	0.076	0.076
		Left	0.573	-	0.573
	5.8G W-LAN Ant.2	Top	0.063	-	0.063
		Bottom	-	-	-
		Front	0.047	0.021	0.068
		Rear	0.092	0.078	0.170
		Right	-	0.182	0.182
		Left	0.573	-	0.573

Table 11.6.20 Simultaneous Transmission Scenario : Bluetooth Ant.1 + 5 GHz W-LAN Ant.1/Ant.2/MIMO (Hotspot at 10 mm)

Exposure Condition	Mode	Configuration	Bluetooth Ant.1 SAR (W/kg)	5G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
Hotspot SAR	5.2G W-LAN Ant.1	Top	0.015	0.144	0.159
		Bottom	-	-	-
		Front	0.013	0.054	0.067
		Rear	0.023	0.028	0.051
		Right	-	-	-
		Left	0.167	0.223	0.388
	5.8G W-LAN Ant.1	Top	0.015	0.189	0.199
		Bottom	-	-	-
		Front	0.013	0.113	0.126
		Rear	0.023	0.033	0.056
		Right	-	-	-
		Left	0.167	0.597	0.764
Hotspot SAR	5.2G W-LAN Ant.2	Top	0.015	-	0.015
		Bottom	-	-	-
		Front	0.013	0.013	0.026
		Rear	0.023	0.018	0.041
		Right	-	0.076	0.076
		Left	0.167	-	0.167
	5.8G W-LAN Ant.2	Top	0.015	-	0.015
		Bottom	-	-	-
		Front	0.013	0.021	0.034
		Rear	0.023	0.078	0.101
		Right	-	0.182	0.182
		Left	0.167	-	0.167
Hotspot SAR	5.2G W-LAN MIMO	Top	0.015	0.147	0.162
		Bottom	-	-	-
		Front	0.013	0.044	0.057
		Rear	0.023	0.038	0.061
		Right	-	0.081	0.081
		Left	0.167	0.389	0.547
	5.8G W-LAN MIMO	Top	0.015	0.192	0.207
		Bottom	-	-	-
		Front	0.013	0.113	0.126
		Rear	0.023	0.081	0.104
		Right	-	0.186	0.186
		Left	0.167	0.602	0.769

11.7 Phablet SAR Simultaneous Transmission Analysis with proximity sensor enabled

Per FCC KDB Publication 648474 D04 Handset SAR, Phablet SAR tests were not required when Hotspot 1g SAR (scaled to maximum output power including tolerance) < 1.2 W/kg.

Table 11.7.1 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.3 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.3G W-LAN Ant.2 SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.258	-	-	0.258	-	0.258
		Front	0.493	0.072	0.015	0.565	0.508	0.580
		Rear	0.789	0.111	0.034	0.910	0.833	0.844
		Right	0.491	0.111	0.145	0.741	0.546	0.546
		Left	0.634	1.005	-	1.639	0.634	1.639
	GPRS 1900	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.870	-	-	0.870	-	0.870
		Front	0.957	0.072	0.015	1.039	0.982	1.054
		Rear	1.112	0.111	0.034	1.223	1.146	1.287
		Right	0.477	-	0.145	0.622	0.622	0.622
	WCDMA 850	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.212	-	0.015	0.212	0.212	0.212
		Front	0.484	0.072	0.015	0.556	0.499	0.571
		Rear	0.586	0.111	0.034	0.677	0.600	0.711
		Right	0.362	-	0.145	0.362	0.507	0.507
	WCDMA 1700	Top	-	0.079	-	0.079	-	0.079
		Bottom	1.001	-	-	1.001	1.001	1.001
		Front	1.130	0.072	0.015	1.220	1.145	1.217
		Rear	1.012	0.111	0.034	1.123	1.048	1.157
		Right	0.455	-	0.145	0.455	0.600	0.600
	WCDMA 1900	Top	-	0.079	-	0.079	-	0.079
		Bottom	1.044	-	-	1.044	1.044	1.044
		Front	1.048	0.072	0.015	1.129	1.064	1.139
		Rear	1.176	0.111	0.034	1.281	1.204	1.321
		Right	0.476	-	0.145	0.476	0.621	0.621
	LTE Band 12	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.092	-	-	0.092	-	0.092
		Front	0.354	0.072	0.015	0.426	0.369	0.441
		Rear	0.258	0.111	0.034	0.397	0.338	0.431
		Right	0.137	-	0.145	0.137	0.282	0.282
	LTE Band 13	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.147	-	-	0.147	-	0.147
		Front	0.433	0.072	0.015	0.505	0.448	0.520
		Rear	0.335	0.111	0.034	0.448	0.483	0.483
		Right	0.316	-	0.145	0.316	0.461	0.461
	LTE Band 26	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.463	1.005	-	1.468	0.463	1.468
		Front	0.165	-	-	0.165	-	0.165
		Rear	0.412	0.072	0.015	0.484	0.427	0.499
		Right	0.472	0.111	0.034	0.583	0.506	0.617
	LTE Band 66	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.539	1.005	-	1.544	0.539	1.544
		Front	0.837	0.072	0.015	0.837	0.837	0.837
		Rear	1.026	0.072	0.015	1.098	1.041	1.113
		Right	0.885	0.111	0.034	0.996	0.919	1.030
	LTE Band 25	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.741	0.079	-	0.741	-	0.741
		Front	0.848	0.072	0.015	0.918	0.861	0.933
		Rear	0.769	0.111	0.034	0.877	0.800	0.911
		Right	0.327	-	0.145	0.327	0.472	0.472
	LTE Band 7	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.128	1.005	-	1.133	0.128	1.133
		Front	0.185	-	-	0.185	-	0.185
		Rear	0.499	0.072	0.015	0.571	0.514	0.586
		Right	0.617	0.111	0.034	0.728	0.651	0.762
	LTE Band 41	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.251	1.005	-	1.256	0.251	1.256
		Front	0.204	0.072	0.015	0.204	0.204	0.204
		Rear	0.204	0.072	0.015	0.204	0.204	0.204
		Right	0.170	-	0.145	0.170	0.315	0.315

Table 11.7.2 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.6 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.6G W-LAN Ant.2 SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.259	-	-	0.259	-	0.259
		Front	0.493	0.072	0.056	0.565	0.549	0.621
		Rear	0.789	0.111	0.081	0.910	0.891	0.911
		Right	0.491	0.111	0.301	0.601	0.702	0.702
	GPRS 1900	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.870	-	-	0.870	-	0.870
		Front	0.967	0.072	0.056	1.039	1.023	1.095
		Rear	1.112	0.111	0.081	1.223	1.204	1.284
		Right	0.477	-	0.301	0.777	0.777	0.777
	WCDMA 850	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.158	1.005	-	1.163	0.158	1.163
		Front	0.212	-	0.015	0.212	-	0.212
		Rear	0.484	0.072	0.056	0.556	0.540	0.612
		Right	0.362	0.111	0.081	0.467	0.604	0.604
	WCDMA 1700	Top	-	0.079	-	0.079	-	0.079
		Bottom	1.001	-	-	1.001	1.001	1.001
		Front	1.130	0.072	0.056	1.202	1.186	1.288
		Rear	1.012	0.111	0.081	1.123	1.093	1.204
		Right	0.455	-	0.301	0.455	0.756	0.756
	WCDMA 1900	Top	-	0.079	-	0.079	-	0.079
		Bottom	1.044	-	-	1.044	1.044	1.044
		Front	1.048	0.072	0.056	1.129	1.104	1.176
		Rear	1.176	0.111	0.081	1.281	1.257	1.388
		Right	0.476	-	0.301	0.476	0.777	0.777
	LTE Band 12	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.092	-	-	0.092	-	0.092
		Front	0.354	0.072	0.056	0.426	0.410	0.482
		Rear	0.258	0.111	0.081	0.397	0.367	0.478
		Right	0.137	-	0.301	0.137	0.438	0.438
	LTE Band 13	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.147	-	-	0.147	-	0.147
		Front	0.433	0.072	0.056	0.505	0.489	0.561
		Rear	0.335	0.111	0.081	0.448	0.416	0.527
		Right	0.316	-	0.301	0.316	0.617	0.617
	LTE Band 26	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.463	1.005	-	1.468	0.463	1.468
		Front	0.165	-	-	0.165	-	0.165
		Rear	0.412	0.072	0.056	0.484	0.468	0.540
		Right	0.472	0.111	0.081	0.583	0.553	0.664
	LTE Band 66	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.539	1.005	-	1.544	0.539	1.544
		Front	0.837	0.072	0.056	0.837	0.837	0.837
		Rear	1.026	0.072	0.056	1.098	1.082	1.177
		Right	0.885	0.111	0.081	0.996	0.966	1.097
	LTE Band 25	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.741	0.079	-	0.741	-	0.741
		Front	0.848	0.072	0.056	0.918	0.902	0.974
		Rear	0.769	0.111	0.081	0.877	0.847	0.958
		Right	0.327	-	0.301	0.327	0.628	0.628
	LTE Band 7	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.128	1.005	-	1.133	0.128	1.133
		Front	0.185	-	-	0.185	-	0.185
		Rear	0.499	0.072	0.056	0.571	0.555	0.627
		Right	0.617	0.111	0.081	0.728	0.687	0.808
	LTE Band 41	Top	-	0.079	-	0.079	-	0.079
		Bottom	0.251	1.005	-	1.256	0.251	1.256
		Front	0.204	0.072	0.056	0.204	0.204	0.204
		Rear	0.204	0.072	0.056	0.204	0.204	0.204
		Right	0.170	-	0.301	0.170	0.471	0.471

Table 11.7.3 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 + 5.8 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.258	-	0.033	0.258	0.258	0.258
		Front	0.493	0.072	0.033	0.598	0.598	0.598
		Rear	0.799	0.111	0.101	0.910	0.900	1.011
		Left	0.481	-	0.336	0.481	0.737	0.737
		Right	0.534	1.005	-	1.639	1.634	1.639
	GPRS 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.870	-	0.033	0.870	0.870	0.870
		Front	0.987	0.072	0.033	1.092	1.090	1.097
		Rear	1.112	0.111	0.101	1.223	1.213	1.324
		Left	0.477	-	0.336	0.477	0.813	0.813
		Right	0.158	1.005	-	1.163	1.158	1.163
	WCDMA 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.212	-	0.033	0.212	0.212	0.212
		Front	0.484	0.072	0.033	0.558	0.517	0.599
		Rear	0.558	0.111	0.101	0.670	0.667	0.778
		Left	0.362	-	0.336	0.362	0.698	0.698
		Right	0.588	1.005	-	1.591	0.588	1.591
	WCDMA 1700	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.001	-	0.033	1.001	1.001	1.001
		Front	1.130	0.072	0.033	1.235	1.163	1.235
		Rear	1.012	0.111	0.101	1.123	1.113	1.224
		Left	0.455	-	0.336	0.455	0.791	0.791
		Right	0.145	1.005	-	1.150	0.145	1.150
	WCDMA 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.044	-	0.033	1.044	1.044	1.044
		Front	1.048	0.072	0.033	1.120	1.081	1.153
		Rear	1.176	0.111	0.101	1.287	1.277	1.388
		Left	0.476	-	0.336	0.476	0.812	0.812
		Right	0.154	1.005	-	1.159	0.154	1.159
	LTE Band 12	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.072	-	0.033	0.072	0.072	0.072
		Front	0.384	0.072	0.033	0.426	0.387	0.458
		Rear	0.288	0.111	0.101	0.397	0.387	0.498
		Left	0.137	-	0.336	0.137	0.473	0.473
	LTE Band 13	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.147	-	0.033	0.147	0.147	0.147
		Front	0.433	0.072	0.033	0.466	0.456	0.538
		Rear	0.335	0.111	0.101	0.446	0.436	0.547
		Left	0.316	-	0.336	0.316	0.652	0.652
	LTE Band 26	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.165	-	0.033	0.165	0.165	0.165
		Front	0.412	0.072	0.033	0.445	0.435	0.517
		Rear	0.472	0.111	0.101	0.583	0.573	0.684
		Left	0.539	-	0.336	0.539	0.880	0.880
	LTE Band 66	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.837	-	0.033	0.837	0.837	0.837
		Front	1.028	0.072	0.033	1.098	1.055	1.131
		Rear	0.885	0.111	0.101	0.996	0.986	1.067
		Left	0.352	-	0.336	0.352	0.698	0.698
	LTE Band 25	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.741	-	0.033	0.741	0.741	0.741
		Front	0.846	0.072	0.033	0.918	0.861	0.961
		Rear	0.708	0.111	0.101	0.807	0.797	0.878
		Left	0.327	-	0.336	0.327	0.663	0.663
	LTE Band 7	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.185	-	0.033	0.185	0.185	0.185
		Front	0.499	0.072	0.033	0.571	0.539	0.604
		Rear	0.617	0.111	0.101	0.718	0.708	0.769
		Left	0.237	-	0.336	0.237	0.573	0.573
	LTE Band 41	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.204	-	0.033	0.204	0.204	0.204
		Front	0.204	0.072	0.033	0.276	0.237	0.309
		Rear	0.358	0.111	0.101	0.459	0.450	0.570
		Left	0.170	-	0.336	0.170	0.506	0.506
		Right	0.137	1.005	-	1.142	0.137	1.142

Table 11.7.4 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.3 GHz W-LAN Ant.1 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.3G W-LAN Ant.1 SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.019	0.140	0.019	0.140	0.159
		Bottom	0.258	-	0.068	0.258	0.258	0.258
		Front	0.493	0.018	0.051	0.562	0.580	0.580
		Rear	0.799	0.027	0.029	0.826	0.826	0.855
		Left	0.481	-	0.401	0.481	0.401	0.401
		Right	0.534	0.285	0.051	0.879	1.052	1.011
	GPRS 1900	Top	-	0.019	0.140	0.019	0.140	0.159
		Bottom	0.870	-	0.068	0.870	0.870	0.870
		Front	0.987	0.018	0.051	1.065	1.065	1.054
		Rear	1.112	0.027	0.029	1.139	1.141	1.148
		Left	0.477	-	0.423	0.477	0.477	0.477
		Right	0.158	0.285	0.051	0.476	0.676	0.641
	WCDMA 850	Top	-	0.019	0.140	0.019	0.140	0.159
		Bottom	0.212	-	0.068	0.212	0.212	0.212
		Front	0.484	0.018	0.051	0.558	0.558	0.571
		Rear	0.558	0.027	0.029	0.593	0.593	0.622
		Left	0.362	-	0.418	0.362	0.362	0.362
		Right	0.588	0.285	0.051	0.881	1.004	1.088
	WCDMA 1700	Top	-	0.019	0.140	0.019	0.140	0.159
		Bottom	1.001	-	0.068	1.001	1.001	1.001
		Front	1.130	0.018	0.051	1.188	1.188	1.217
		Rear	1.012	0.027	0.029	1.041	1.041	1.058
		Left	0.455	-	0.418	0.455	0.455	0.455
		Right	0.145	0.285	0.051	0.454	0.653	0.588
	WCDMA 1900	Top	-	0.019	0.140	0.019	0.140	0.158
		Bottom	1.044	-	0.068	1.044	1.044	1.044
		Front	1.048	0.018	0.051	1.098	1.117	1.135
		Rear	1.176	0.027	0.029	1.203	1.205	1.222
		Left	0.476	-	0.418	0.476	0.476	0.476
		Right	0.154	0.285	0.051	0.476	0.672	0.637
	LTE Band 12	Top	-	0.019	0.140	0.019	0.140	0.158
		Bottom	0.072	-	0.068	0.072	0.072	0.072
		Front	0.354	0.018	0.051	0.372	0.423	0.441
		Rear	0.288	0.027	0.029	0.313	0.315	0.342
		Left	0.137	-	0.418	0.137	0.137	0.137
	LTE Band 13	Top	-	0.019	0.140	0.019	0.140	0.158
		Bottom	0.147	-	0.068	0.147	0.147	0.147
		Front	0.433	0.018	0.051	0.451	0.502	0.520
		Rear	0.335	0.027	0.029	0.362	0.362	0.362
		Left	0.316	-	0.418	0.316	0.316	0.316
	LTE Band 26	Top	-	0.019	0.140	0.019	0.140	0.158
		Bottom	0.165	-	0.068	0.165	0.165	0.165
		Front	0.412	0.018	0.051	0.430	0.481	0.499
		Rear	0.472	0.027	0.029	0.499	0.501	0.528
		Left	0.534	-	0.418	0.534	0.534	0.534
	LTE Band 66	Top	-	0.019	0.140	0.019	0.140	0.159
		Bottom	0.837	-	0.068	0.837	0.837	0.837
		Front	1.028	0.018	0.051	1.044	1.095	1.113
		Rear	0.885	0.027	0.029	0.912	0.914	0.941
		Left	0.352	-	0.418	0.352	0.352	0.352
	LTE Band 25	Top	-	0.019	0.140	0.019	0.140	0.159
		Bottom	0.741	-	0.068	0.741	0.741	0.741
		Front	0.846	0.018	0.051	0.864	0.915	0.933
		Rear	0.708	0.027	0.029	0.733	0.735	0.762
		Left	0.327	-	0.418	0.327	0.327	0.327
	LTE Band 7	Top	-	0.019	0.140	0.019	0.140	0.159
		Bottom	0.185	-	0.068	0.185	0.185	0.185
		Front	0.499	0.018	0.051	0.517	0.568	0.586
		Rear	0.617	0.027	0.029	0.644	0.646	0.673
		Left	0.237	-	0.418	0.237	0.237	0.237
	LTE Band 41	Top	-	0.019	0.140	0.019	0.140	0.159
		Bottom	0.204	-	0.068	0.204	0.204	0.204
		Front	0.204	0.018	0.051	0.222	0.273	0.291
		Rear	0.358	0.027	0.029	0.385	0.387	0.414
		Left	0.170	-	0.418	0.170	0.170	0.170
		Right	0.137	0.285	0.051	0.402	0.555	0.628

Table 11.7.5 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.3 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.3G W-LAN Ant.2 SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.258	-	0.258	0.258	-	0.258
		Front	0.483	0.018	0.015	0.502	0.503	0.526
		Rear	0.799	0.027	0.034	0.826	0.833	0.860
		Right	0.481	-	0.481	0.481	0.546	0.546
		Left	0.534	0.285	0.688	0.823	0.834	0.869
	GPRS 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.870	-	0.870	0.870	-	0.870
		Front	0.987	0.018	0.015	1.002	0.982	1.000
		Rear	1.112	0.027	0.034	1.139	1.148	1.173
		Right	0.477	-	0.477	0.477	0.622	0.622
		Left	0.158	0.285	0.688	0.423	0.158	0.618
	WCDMA 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.212	-	0.212	0.212	-	0.212
		Front	0.484	0.018	0.015	0.502	0.499	0.517
		Rear	0.558	0.027	0.034	0.593	0.600	0.627
		Right	0.362	-	0.362	0.362	0.507	0.507
		Left	0.588	0.285	-	0.873	0.588	0.873
	WCDMA 1700	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.001	-	1.001	1.001	-	1.001
		Front	1.130	0.018	0.015	1.148	1.145	1.163
		Rear	1.012	0.027	0.034	1.039	1.048	1.073
		Right	0.455	-	0.455	0.455	0.600	0.600
		Left	0.145	0.285	-	0.410	0.145	0.410
	WCDMA 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.044	-	1.044	1.044	-	1.044
		Front	1.048	0.018	0.015	1.066	1.063	1.081
		Rear	1.176	0.027	0.034	1.203	1.210	1.237
		Right	0.476	-	0.476	0.476	0.621	0.621
		Left	0.154	0.285	-	0.419	0.154	0.419
	LTE Band 12	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.072	-	0.072	0.072	-	0.072
		Front	0.354	0.018	0.015	0.372	0.369	0.387
		Rear	0.288	0.027	0.034	0.313	0.320	0.347
		Right	0.137	-	0.137	0.137	0.232	0.232
		Left	0.258	0.285	-	0.523	0.258	0.523
	LTE Band 13	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.147	-	0.147	0.147	-	0.147
		Front	0.433	0.018	0.015	0.451	0.448	0.458
		Rear	0.335	0.027	0.034	0.362	0.369	0.386
		Right	0.316	-	0.316	0.316	0.461	0.461
		Left	0.493	0.285	-	0.758	0.493	0.758
	LTE Band 26	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.185	-	0.185	0.185	-	0.185
		Front	0.412	0.018	0.015	0.429	0.427	0.445
		Rear	0.472	0.027	0.034	0.499	0.506	0.533
		Right	0.324	-	0.324	0.324	0.469	0.469
		Left	0.539	0.285	0.645	0.804	0.539	0.804
	LTE Band 66	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.837	-	0.837	0.837	-	0.837
		Front	1.028	0.018	0.015	1.044	1.041	1.058
		Rear	0.885	0.027	0.034	0.912	0.919	0.946
		Right	0.352	-	0.352	0.352	0.507	0.507
		Left	0.139	0.285	0.494	0.404	0.139	0.404
	LTE Band 25	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.741	-	0.741	0.741	-	0.741
		Front	0.846	0.018	0.015	0.864	0.864	0.878
		Rear	0.708	0.027	0.034	0.733	0.740	0.757
		Right	0.357	-	0.357	0.357	0.472	0.472
		Left	0.128	0.285	0.388	0.388	0.128	0.388
	LTE Band 7	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.185	-	0.185	0.185	-	0.185
		Front	0.409	0.018	0.015	0.417	0.414	0.432
		Rear	0.617	0.027	0.034	0.644	0.651	0.676
		Right	0.237	-	0.237	0.237	0.382	0.382
		Left	0.281	0.285	0.418	0.518	0.281	0.518
	LTE Band 41	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.204	-	0.204	0.204	-	0.204
		Front	0.204	0.018	0.015	0.222	0.219	0.237
		Rear	0.358	0.027	0.034	0.385	0.392	0.418
		Right	0.170	-	0.170	0.170	0.315	0.315
		Left	0.137	0.285	-	0.402	0.137	0.402

Table 11.7.6 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.3 GHz W-LAN MIMO (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.3G W-LAN MIMO SAR (W/kg)	25G SAR (W/kg)			
			1	2		1+2	1+3	1+2+3	
Phablet SAR	GPRS 850	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	0.258	-	0.258	0.258	-	0.258	
		Front	0.493	0.018	0.511	0.999	0.503	0.992	0.610
		Rear	0.709	0.027	0.826	0.826	0.828	0.828	0.855
		Right	0.401	-	0.401	0.401	0.557	0.557	0.557
	Left	0.634	0.285	0.899	1.083	1.083	1.348	1.348	
	GPRS 1900	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	0.870	-	0.870	0.870	-	0.870	0.870
		Front	0.987	0.018	0.999	1.999	0.999	1.999	1.984
		Rear	1.112	0.027	0.826	1.139	1.141	1.141	1.148
		Right	0.477	-	0.477	0.477	0.633	0.633	0.633
	Left	0.158	0.285	0.449	0.607	0.607	0.607	0.672	
	WCDMA 850	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	0.212	-	0.212	0.212	-	0.212	0.212
		Front	0.484	0.018	0.499	0.999	0.503	0.999	0.601
		Rear	0.598	0.027	0.826	0.826	0.828	0.828	0.822
		Right	0.362	-	0.362	0.362	0.518	0.518	0.518
	Left	0.588	0.285	0.851	1.035	1.035	1.300	1.300	
	WCDMA 1700	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	1.001	-	1.001	1.001	-	1.001	1.001
		Front	1.130	0.018	1.148	1.229	1.229	1.247	1.247
		Rear	1.012	0.027	0.826	1.039	1.041	1.041	1.068
		Right	0.455	-	0.455	0.455	0.611	0.611	0.611
	Left	0.145	0.285	0.449	0.594	0.594	0.594	0.659	
	WCDMA 1900	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	1.044	-	1.044	1.044	-	1.044	1.044
		Front	1.048	0.018	0.999	1.099	1.147	1.147	1.165
		Rear	1.178	0.027	0.826	1.203	1.205	1.205	1.232
		Right	0.476	-	0.476	0.476	0.632	0.632	0.632
	Left	0.154	0.285	0.449	0.603	0.603	0.603	0.668	
	LTE Band 12	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	0.072	-	0.072	0.072	-	0.072	0.072
		Front	0.354	0.018	0.399	0.372	0.453	0.453	0.471
		Rear	0.288	0.027	0.313	0.313	0.315	0.315	0.342
		Right	0.137	-	0.137	0.137	0.253	0.253	0.253
	Left	0.258	0.285	0.449	0.523	0.523	0.707	0.972	
	LTE Band 13	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	0.147	-	0.147	0.147	-	0.147	0.147
		Front	0.433	0.018	0.451	0.451	0.532	0.532	0.550
		Rear	0.335	0.027	0.362	0.362	0.364	0.364	0.391
		Right	0.316	-	0.316	0.316	0.472	0.472	0.472
	Left	0.493	0.285	0.449	0.758	0.758	0.942	1.207	
	LTE Band 26	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	0.185	-	0.185	0.185	-	0.185	0.185
		Front	0.412	0.018	0.429	0.429	0.511	0.511	0.529
		Rear	0.472	0.027	0.499	0.499	0.501	0.501	0.528
		Right	0.324	-	0.324	0.324	0.469	0.469	0.469
	Left	0.539	0.285	0.449	0.804	0.804	0.988	1.283	
	LTE Band 66	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	0.837	-	0.837	0.837	-	0.837	0.837
		Front	1.028	0.018	0.999	1.044	1.125	1.125	1.143
		Rear	0.885	0.027	0.826	0.912	0.914	0.914	0.941
		Right	0.352	-	0.352	0.352	0.518	0.518	0.518
	Left	0.139	0.285	0.449	0.404	0.404	0.588	0.653	
	LTE Band 25	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	0.741	-	0.741	0.741	-	0.741	0.741
		Front	0.846	0.018	0.864	0.864	0.864	0.864	0.863
		Rear	0.788	0.027	0.793	0.793	0.795	0.795	0.822
		Right	0.357	-	0.357	0.357	0.472	0.472	0.472
	Left	0.128	0.285	0.449	0.388	0.388	0.572	0.642	
	LTE Band 7	Top	-	0.019	0.161	0.019	0.161	0.180	
		Bottom	0.185	-	0.185	0.185	-	0.185	0.185
		Front	0.409	0.018	0.417	0.417	0.499	0.499	0.516
		Rear	0.617	0.027	0.622	0.644	0.646	0.646	0.673
		Right	0.237	-	0.237	0.237	0.393	0.393	0.393
	Left	0.251	0.285	0.449	0.740	0.740	0.924	0.965	
LTE Band 41	Top	-	0.019	0.161	0.019	0.161	0.180		
	Bottom	0.204	-	0.204	0.204	-	0.204	0.204	
	Front	0.304	0.018	0.322	0.322	0.393	0.393	0.391	
	Rear	0.358	0.027	0.373	0.385	0.387	0.387	0.414	
	Right	0.130	-	0.130	0.130	0.236	0.236	0.236	
Left	0.137	0.285	0.449	0.402	0.402	0.588	0.681		

Table 11.7.7 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.6 GHz W-LAN Ant.1 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.6G W-LAN Ant.1 SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.258	-	0.258	0.258	0.258	0.258
		Front	0.483	0.018	0.130	0.511	0.543	0.641
		Rear	0.799	0.027	0.037	0.826	0.836	0.863
		Right	0.481	-	0.587	0.481	0.481	0.481
		Left	0.634	0.265	0.688	0.901	1.201	1.486
	GPRS 1900	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.870	-	0.870	0.870	0.870	0.870
		Front	0.987	0.018	0.130	1.005	1.005	1.015
		Rear	1.112	0.027	0.037	1.139	1.149	1.176
		Right	0.477	-	0.587	0.477	0.477	0.477
		Left	0.158	0.265	0.597	0.423	0.756	1.084
	WCDMA 850	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.212	-	0.212	0.212	0.212	0.212
		Front	0.484	0.018	0.130	0.502	0.614	0.832
		Rear	0.568	0.027	0.037	0.595	0.603	0.630
		Right	0.362	-	0.587	0.362	0.362	0.362
		Left	0.588	0.265	0.597	0.851	1.183	1.448
	WCDMA 1700	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	1.001	-	1.001	1.001	1.001	1.001
		Front	1.130	0.018	0.130	1.148	1.260	1.278
		Rear	1.012	0.027	0.037	1.029	1.049	1.076
		Right	0.455	-	0.587	0.455	0.455	0.455
		Left	0.145	0.265	0.597	0.410	0.742	1.007
	WCDMA 1900	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	1.044	-	1.044	1.044	1.044	1.044
		Front	1.048	0.018	0.130	1.066	1.178	1.196
		Rear	1.176	0.027	0.037	1.203	1.213	1.240
		Right	0.476	-	0.476	0.476	0.476	0.476
		Left	0.154	0.265	0.597	0.419	0.751	1.016
	LTE Band 12	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.072	-	0.072	0.072	0.072	0.072
		Front	0.384	0.018	0.130	0.372	0.484	0.502
		Rear	0.288	0.027	0.037	0.313	0.323	0.350
		Right	0.137	-	0.137	0.137	0.137	0.137
	LTE Band 13	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.147	-	0.147	0.147	0.147	0.147
		Front	0.433	0.018	0.130	0.451	0.563	0.581
		Rear	0.335	0.027	0.037	0.362	0.372	0.399
		Right	0.316	-	0.316	0.316	0.316	0.316
	LTE Band 26	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.483	-	0.483	0.483	0.483	0.483
		Front	0.165	0.018	0.130	0.165	0.165	0.165
		Rear	0.412	0.027	0.037	0.439	0.449	0.459
		Right	0.472	-	0.472	0.472	0.472	0.472
	LTE Band 66	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.539	-	0.539	0.539	0.539	0.539
		Front	0.885	0.018	0.130	0.885	0.885	0.885
		Rear	0.885	0.027	0.037	0.912	0.922	0.949
		Right	0.352	-	0.352	0.352	0.352	0.352
	LTE Band 25	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.837	-	0.837	0.837	0.837	0.837
		Front	1.028	0.018	0.130	1.044	1.156	1.174
		Rear	0.885	0.027	0.037	0.912	0.922	0.949
		Right	0.352	-	0.352	0.352	0.352	0.352
	LTE Band 7	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.185	-	0.185	0.185	0.185	0.185
		Front	0.489	0.018	0.130	0.517	0.629	0.647
		Rear	0.617	0.027	0.037	0.644	0.654	0.681
		Right	0.237	-	0.237	0.237	0.237	0.237
	LTE Band 41	Top	-	0.019	0.139	0.019	0.139	0.158
		Bottom	0.204	-	0.204	0.204	0.204	0.204
		Front	0.204	0.018	0.130	0.222	0.334	0.352
		Rear	0.358	0.027	0.037	0.385	0.395	0.422
		Right	0.170	-	0.170	0.170	0.170	0.170
		Left	0.137	0.265	0.597	0.402	0.734	0.999

Table 11.7.8 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.6 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.6G W-LAN Ant.2 SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.258	-	-	0.258	-	0.258
		Front	0.483	0.018	0.056	0.511	0.543	0.567
		Rear	0.799	0.027	0.081	0.826	0.880	0.907
		Right	0.481	-	0.481	0.481	-	0.481
		Left	0.634	0.265	0.899	0.901	0.634	0.899
	GPRS 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.870	-	-	0.870	-	0.870
		Front	0.987	0.018	0.056	1.005	0.870	1.041
		Rear	1.112	0.027	0.081	1.139	1.193	1.220
		Right	0.477	-	0.477	0.477	-	0.477
		Left	0.158	0.265	0.423	0.423	0.158	0.423
	WCDMA 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.212	-	-	0.212	-	0.212
		Front	0.484	0.018	0.056	0.502	0.544	0.568
		Rear	0.568	0.027	0.081	0.595	0.647	0.674
		Right	0.362	-	0.362	0.362	-	0.362
		Left	0.588	0.265	0.851	0.851	0.588	0.851
	WCDMA 1700	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.001	-	-	1.001	-	1.001
		Front	1.130	0.018	0.056	1.148	1.186	1.244
		Rear	1.012	0.027	0.081	1.029	1.053	1.120
		Right	0.455	-	0.455	0.455	-	0.455
		Left	0.145	0.265	0.419	0.419	0.145	0.419
	WCDMA 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.044	-	-	1.044	-	1.044
		Front	1.048	0.018	0.056	1.066	1.104	1.122
		Rear	1.176	0.027	0.081	1.203	1.213	1.240
		Right	0.476	-	0.476	0.476	-	0.476
		Left	0.154	0.265	0.419	0.419	0.154	0.419
	LTE Band 12	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.072	-	-	0.072	-	0.072
		Front	0.384	0.018	0.056	0.372	0.410	0.428
		Rear	0.288	0.027	0.081	0.313	0.323	0.340
		Right	0.137	-	0.137	0.137	-	0.137
	LTE Band 13	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.147	-	-	0.147	-	0.147
		Front	0.433	0.018	0.056	0.451	0.489	0.507
		Rear	0.335	0.027	0.081	0.362	0.372	0.389
		Right	0.316	-	0.316	0.316	-	0.316
	LTE Band 26	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.483	-	-	0.483	-	0.483
		Front	0.165	0.018	0.056	0.165	0.165	0.165
		Rear	0.412	0.027	0.081	0.439	0.449	0.459
		Right	0.472	-	0.472	0.472	-	0.472
	LTE Band 66	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.539	-	-	0.539	-	0.539
		Front	0.885	0.018	0.056	0.885	0.885	0.885
		Rear	0.885	0.027	0.081	0.912	0.922	0.949
		Right	0.352	-	0.352	0.352	-	0.352
	LTE Band 25	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.837	-	-	0.837	-	0.837
		Front	1.028	0.018	0.056	1.044	1.082	1.100
		Rear	0.885	0.027	0.081	0.912	0.922	0.949
		Right	0.352	-	0.352	0.352	-	0.352
	LTE Band 7	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.185	-	-	0.185	-	0.185
		Front	0.489	0.018	0.056	0.517	0.555	0.573
		Rear	0.617	0.027	0.081	0.644	0.654	0.681
		Right	0.237	-	0.237	0.237	-	0.237
	LTE Band 41	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.204	-	-	0.204	-	0.204
		Front	0.204	0.018	0.056	0.222	0.260	0.278
		Rear	0.358	0.027	0.081	0.385	0.395	0.422
		Right	0.170	-	0.170	0.170	-	0.170
		Left	0.137	0.265	0.402	0.402	0.137	0.402

Table 11.7.9 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.6 GHz W-LAN MIMO (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.6G W-LAN MIMO SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.019	0.151	0.019	0.151	0.170
		Bottom	0.258	-	0.258	0.258	0.258	0.258
		Front	0.483	0.138	0.251	0.621	0.639	0.860
		Rear	0.799	0.027	0.052	0.826	0.851	0.876
		Right	0.481	-	0.321	0.481	0.722	0.722
		Left	0.634	0.265	0.657	0.889	1.261	1.586
	GPRS 1900	Top	-	0.019	0.151	0.019	0.151	0.170
		Bottom	0.870	-	0.870	0.870	0.870	0.870
		Front	0.967	0.018	0.138	1.085	1.106	1.124
		Rear	1.112	0.027	0.052	1.139	1.164	1.191
		Right	0.477	-	0.321	0.477	0.798	0.798
		Left	0.158	0.265	0.657	0.428	0.985	1.060
	WCDMA 850	Top	-	0.019	0.151	0.019	0.151	0.170
		Bottom	0.212	-	-	0.212	0.212	0.212
		Front	0.484	0.018	0.138	0.502	0.623	0.641
		Rear	0.558	0.027	0.052	0.593	0.618	0.645
		Right	0.362	-	0.321	0.362	0.683	0.683
		Left	0.588	0.265	0.657	0.851	1.243	1.588
	WCDMA 1700	Top	-	0.019	0.151	0.019	0.151	0.170
		Bottom	1.001	-	1.001	1.001	1.001	1.001
		Front	1.130	0.018	0.138	1.148	1.269	1.287
		Rear	1.012	0.027	0.052	1.039	1.064	1.091
		Right	0.455	-	0.321	0.455	0.776	0.776
		Left	0.145	0.265	0.657	0.410	0.802	1.067
	WCDMA 1900	Top	-	0.019	0.151	0.019	0.151	0.170
		Bottom	1.044	-	1.044	1.044	1.044	1.044
		Front	1.048	0.018	0.138	1.066	1.187	1.205
		Rear	1.176	0.027	0.052	1.203	1.228	1.255
		Right	0.476	-	0.321	0.476	0.797	0.797
		Left	0.154	0.265	0.657	0.419	0.811	1.076
	LTE Band 12	Top	0.072	0.019	0.151	0.019	0.151	0.170
		Bottom	-	-	0.072	0.072	0.072	0.072
		Front	0.384	0.018	0.138	0.372	0.483	0.511
		Rear	0.288	0.027	0.052	0.313	0.338	0.365
		Right	0.137	-	0.137	0.137	0.458	0.458
	LTE Band 13	Top	0.258	0.265	0.657	0.523	0.915	1.188
		Bottom	0.147	0.019	0.151	0.019	0.151	0.170
		Front	0.433	-	0.138	0.451	0.572	0.590
		Rear	0.335	0.027	0.052	0.362	0.387	0.414
		Right	0.316	-	0.321	0.316	0.637	0.637
	LTE Band 26	Top	0.483	0.265	0.657	0.758	1.150	1.415
		Bottom	0.165	0.019	0.151	0.019	0.151	0.170
		Front	0.412	-	0.138	0.465	0.585	0.595
		Rear	0.472	0.027	0.052	0.499	0.524	0.551
		Right	0.362	-	0.321	0.362	0.683	0.683
	LTE Band 66	Top	0.539	0.265	0.657	0.804	1.196	1.461
		Bottom	0.157	0.019	0.151	0.019	0.151	0.170
		Front	0.837	0.018	0.138	0.837	0.837	0.837
		Rear	1.028	0.027	0.052	1.044	1.065	1.183
		Right	0.885	-	0.052	0.912	0.937	0.964
	LTE Band 25	Top	0.352	0.265	0.657	0.362	0.683	0.683
		Bottom	0.139	-	0.139	0.139	0.458	0.458
		Front	0.741	0.018	0.138	0.741	0.741	0.741
		Rear	0.846	0.027	0.052	0.864	0.884	1.003
		Right	0.708	-	0.052	0.708	0.818	0.845
	LTE Band 7	Top	0.327	0.265	0.657	0.327	0.648	0.648
		Bottom	0.128	-	0.128	0.128	0.389	0.389
		Front	0.185	0.019	0.151	0.019	0.151	0.170
		Rear	0.489	0.027	0.052	0.489	0.509	0.558
		Right	0.917	-	0.052	0.917	0.937	0.964
	LTE Band 41	Top	0.237	0.265	0.657	0.237	0.558	0.558
		Bottom	0.281	-	0.281	0.281	0.608	0.608
		Front	0.204	-	0.151	0.019	0.151	0.170
		Rear	0.204	0.018	0.138	0.222	0.343	0.361
		Right	0.358	0.027	0.052	0.385	0.410	0.437
		Top	0.170	-	0.321	0.170	0.491	0.491
		Bottom	0.137	0.265	0.657	0.402	0.794	1.099

Table 11.7.10 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN Ant.1 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN Ant.1 SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.019	0.170	0.019	0.170	0.189
		Bottom	0.258	-	0.258	0.258	0.258	0.258
		Front	0.483	0.018	0.251	0.628	0.639	0.860
		Rear	0.799	0.027	0.044	0.826	0.843	0.870
		Right	0.481	-	0.401	0.481	0.722	0.722
		Left	0.634	0.265	0.792	0.889	1.256	1.581
	GPRS 1900	Top	-	0.019	0.170	0.019	0.170	0.189
		Bottom	0.870	-	0.870	0.870	0.870	0.870
		Front	0.967	0.018	0.138	1.085	1.103	1.113
		Rear	1.112	0.027	0.044	1.139	1.166	1.183
		Right	0.477	-	0.444	0.477	0.777	0.777
		Left	0.158	0.265	0.792	0.423	0.950	1.077
	WCDMA 850	Top	-	0.019	0.170	0.019	0.170	0.189
		Bottom	0.212	-	-	0.212	0.212	0.212
		Front	0.484	0.018	0.138	0.502	0.620	0.630
		Rear	0.558	0.027	0.044	0.593	0.610	0.637
		Right	0.362	-	0.362	0.362	0.682	0.682
		Left	0.586	0.265	0.792	0.851	1.218	1.643
	WCDMA 1700	Top	-	0.019	0.170	0.019	0.170	0.189
		Bottom	1.001	-	1.001	1.001	1.001	1.001
		Front	1.130	0.018	0.138	1.148	1.258	1.278
		Rear	1.012	0.027	0.044	1.039	1.064	1.093
		Right	0.455	-	0.455	0.455	0.769	0.769
		Left	0.145	0.265	0.792	0.410	0.807	1.067
	WCDMA 1900	Top	-	0.019	0.170	0.019	0.170	0.189
		Bottom	1.044	-	1.044	1.044	1.044	1.044
		Front	1.048	0.018	0.138	1.066	1.178	1.194
		Rear	1.176	0.027	0.044	1.203	1.229	1.247
		Right	0.476	-	0.476	0.476	0.776	0.776
		Left	0.154	0.265	0.792	0.419	0.808	1.071
	LTE Band 12	Top	0.072	0.019	0.170	0.019	0.170	0.189
		Bottom	-	-	0.072	0.072	0.072	0.072
		Front	0.354	0.018	0.138	0.372	0.482	0.500
		Rear	0.268	0.027	0.044	0.313	0.338	0.365
		Right	0.137	-	0.137	0.137	0.457	0.457
	LTE Band 13	Top	0.258	0.265	0.792	0.523	0.950	1.315
		Bottom	0.147	0.019	0.170	0.019	0.170	0.189
		Front	0.433	-	0.138	0.451	0.561	0.579
		Rear	0.335	0.027	0.044	0.362	0.387	0.414
		Right	0.316	-	0.316	0.316	0.616	0.616
	LTE Band 26	Top	0.483	0.265	0.792	0.758	1.285	1.589
		Bottom	0.165	0.019	0.170	0.019	0.170	0.189
		Front	0.412	-	0.138	0.465	0.585	0.595
		Rear	0.472	0.027	0.044	0.499	0.518	0.558
		Right	0.362	-	0.324	0.362	0.684	0.684
	LTE Band 66	Top	0.539	0.265	0.792	0.804	1.331	1.584
		Bottom	0.157	0.019	0.170	0.019	0.170	0.189
		Front	0.837	0.018	0.138	0.837	0.837	0.837
		Rear	1.028	0.027	0.044	1.044	1.064	1.172
		Right	0.885	-	0.044	0.912	0.929	0.958
	LTE Band 25	Top	0.352	0.265	0.792	0.362	0.682	0.682
		Bottom	0.139	-	0.139	0.139	0.457	0.457
		Front	0.741	0.018	0.138	0.741	0.741	0.741
		Rear	0.846	0.027	0.044	0.864	0.884	1.002
		Right	0.708	-	0.044	0.708	0.817	0.837
	LTE Band 7	Top	0.327	0.265	0.792	0.327	0.620	0.620
		Bottom	0.128	-	0.128	0.128	0.389	0.389
		Front	0.185	0.019	0.170	0.019	0.170	0.189
		Rear	0.489	0.027	0.044	0.489	0.507	0.557
		Right	0.917	-	0.044	0.917	0.937	0.964
	LTE Band 41	Top	0.237	0.265	0.792	0.237	0.547	0.547
		Bottom	0.281	-	0.281	0.281	0.607	0.607
		Front	0.204	0.018	0.138	0.222	0.342	0.360
		Rear	0.204	0.027	0.044	0.385	0.402	0.429
		Right	0.358	-	0.358	0.358	0.678	0.678
		Top	0.170	-	0.792	0.170	0.770	1.134
		Bottom	0.137	0.265	0.792	0.402	0.926	1.134

Table 11.7.11 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.258	-	0.258	0.258	-	0.258
		Front	0.483	0.018	0.033	0.531	0.033	0.544
		Rear	0.799	0.027	0.101	0.826	0.090	0.927
		Right	0.481	-	0.336	0.481	0.336	0.737
		Left	0.634	0.285	0.688	1.604	0.634	0.960
	GPRS 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.870	-	0.870	0.870	-	0.870
		Front	0.987	0.018	0.033	1.038	0.060	1.044
		Rear	1.112	0.027	0.101	1.239	0.1213	1.248
		Right	0.477	-	0.336	0.477	0.336	0.813
		Left	0.158	0.285	-	0.443	0.158	0.597
	WCDMA 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.212	-	0.212	0.212	-	0.212
		Front	0.484	0.018	0.033	0.502	0.033	0.535
		Rear	0.558	0.027	0.101	0.687	0.090	0.694
		Right	0.362	-	0.336	0.362	0.336	0.698
		Left	0.588	0.285	-	0.871	0.588	0.881
	WCDMA 1700	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.001	-	1.001	1.001	-	1.001
		Front	1.130	0.018	0.033	1.148	0.060	1.181
		Rear	1.012	0.027	0.101	1.039	0.1213	1.140
		Right	0.455	-	0.336	0.455	0.336	0.791
		Left	0.145	0.285	-	0.410	0.145	0.410
	WCDMA 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.044	-	1.044	1.044	-	1.044
		Front	1.048	0.018	0.033	1.066	0.060	1.099
		Rear	1.178	0.027	0.101	1.283	0.1213	1.344
		Right	0.476	-	0.336	0.476	0.336	0.812
		Left	0.154	0.285	-	0.419	0.154	0.419
	LTE Band 12	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.072	-	0.072	0.072	-	0.072
		Front	0.384	0.018	0.033	0.372	0.033	0.405
		Rear	0.288	0.027	0.101	0.313	0.090	0.414
		Right	0.137	-	0.137	0.137	0.137	0.273
	LTE Band 13	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.258	-	0.258	0.258	-	0.258
		Front	0.147	0.018	0.033	0.147	0.033	0.147
		Rear	0.233	-	0.101	0.233	0.101	0.484
		Right	0.335	0.027	0.101	0.362	0.090	0.463
	LTE Band 26	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.483	-	0.483	0.483	-	0.483
		Front	0.165	0.018	0.033	0.165	0.033	0.165
		Rear	0.412	0.027	0.101	0.443	0.090	0.533
		Right	0.472	-	0.101	0.499	0.101	0.600
	LTE Band 66	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.539	-	0.539	0.539	-	0.539
		Front	0.837	0.018	0.033	0.837	0.033	0.837
		Rear	1.028	0.027	0.101	1.044	0.090	1.077
		Right	0.885	-	0.336	0.912	0.336	1.013
	LTE Band 25	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.352	-	0.352	0.352	-	0.352
		Front	0.139	0.018	0.033	0.139	0.033	0.139
		Rear	0.741	0.027	0.101	0.741	0.090	0.831
		Right	0.846	-	0.336	0.846	0.336	0.887
	LTE Band 7	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.708	-	0.708	0.708	-	0.708
		Front	0.357	0.018	0.033	0.357	0.033	0.357
		Rear	0.128	0.027	0.101	0.128	0.090	0.218
		Right	0.327	-	0.336	0.327	0.336	0.663
	LTE Band 41	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.138	-	0.138	0.138	-	0.138
		Front	0.185	0.018	0.033	0.185	0.033	0.185
		Rear	0.489	0.027	0.101	0.517	0.090	0.597
		Right	0.917	-	0.336	0.917	0.336	0.748

Table 11.7.12 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth Ant.1 + 5.8 GHz W-LAN MIMO (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth Ant.1 SAR (W/kg)	5.8G W-LAN MIMO SAR (W/kg)	1+2	1+3	1+2+3
Phablet SAR	GPRS 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.258	-	0.258	0.258	-	0.258
		Front	0.483	0.018	0.033	0.531	0.033	0.544
		Rear	0.799	0.027	0.101	0.826	0.090	0.927
		Right	0.481	-	0.336	0.481	0.336	0.737
	GPRS 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.870	-	0.870	0.870	-	0.870
		Front	0.987	0.018	0.033	1.038	0.060	1.044
		Rear	1.112	0.027	0.101	1.239	0.1213	1.248
		Right	0.477	-	0.336	0.477	0.336	0.813
	WCDMA 850	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.212	-	0.212	0.212	-	0.212
		Front	0.484	0.018	0.033	0.502	0.033	0.535
		Rear	0.558	0.027	0.101	0.687	0.090	0.694
		Right	0.362	-	0.336	0.362	0.336	0.698
	WCDMA 1700	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.001	-	1.001	1.001	-	1.001
		Front	1.130	0.018	0.033	1.148	0.060	1.181
		Rear	1.012	0.027	0.101	1.039	0.1213	1.140
		Right	0.455	-	0.336	0.455	0.336	0.791
	WCDMA 1900	Top	-	0.019	-	0.019	-	0.019
		Bottom	1.044	-	1.044	1.044	-	1.044
		Front	1.048	0.018	0.033	1.066	0.060	1.099
		Rear	1.178	0.027	0.101	1.283	0.1213	1.344
		Right	0.476	-	0.336	0.476	0.336	0.812
	LTE Band 12	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.072	-	0.072	0.072	-	0.072
		Front	0.384	0.018	0.033	0.372	0.033	0.405
		Rear	0.288	0.027	0.101	0.313	0.090	0.414
		Right	0.137	-	0.137	0.137	0.137	0.273
	LTE Band 13	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.258	-	0.258	0.258	-	0.258
		Front	0.147	0.018	0.033	0.147	0.033	0.147
		Rear	0.233	-	0.101	0.233	0.101	0.484
		Right	0.335	0.027	0.101	0.362	0.090	0.463
	LTE Band 26	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.483	-	0.483	0.483	-	0.483
		Front	0.165	0.018	0.033	0.165	0.033	0.165
		Rear	0.412	0.027	0.101	0.443	0.090	0.533
		Right	0.472	-	0.101	0.499	0.101	0.600
	LTE Band 66	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.539	-	0.539	0.539	-	0.539
		Front	0.837	0.018	0.033	0.837	0.033	0.837
		Rear	1.028	0.027	0.101	1.044	0.090	1.077
		Right	0.885	-	0.336	0.912	0.336	1.013
	LTE Band 25	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.352	-	0.352	0.352	-	0.352
		Front	0.139	0.018	0.033	0.139	0.033	0.139
		Rear	0.741	0.027	0.101	0.741	0.090	0.831
		Right	0.846	-	0.336	0.846	0.336	0.887
	LTE Band 7	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.708	-	0.708	0.708	-	0.708
		Front	0.357	0.018	0.033	0.357	0.033	0.357
		Rear	0.128	0.027	0.101	0.128	0.090	0.218
		Right	0.327	-	0.336	0.327	0.336	0.663
	LTE Band 41	Top	-	0.019	-	0.019	-	0.019
		Bottom	0.138	-	0.138	0.138	-	0.138
		Front	0.185	0.018	0.033	0.185	0.033	0.185
		Rear	0.489	0.027	0.101	0.517	0.090	0.597
		Right	0.917	-	0.336	0.917	0.336	0.748

Table 11.7.13 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.1 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.1 SAR (W/kg)	1+2
Phablet SAR	GPRS 850	Top	-	0.879	0.879
		Bottom	0.258	-	0.258
		Front	0.483	0.072	0.555
		Rear	0.799	0.111	0.910
		Right	0.481	-	0.481
	GPRS 1900	Left	0.834	1.005	1.839
		Top	-	0.879	0.879
		Bottom	0.879	-	0.879
		Front	0.987	0.072	1.059
		Rear	1.112	0.111	1.223
	WCDMA 850	Right	0.477	-	0.477
		Left	0.158	1.005	1.163
		Top	-	0.879	0.879
		Bottom	0.212	-	0.212
		Front	0.484	0.072	0.556
	WCDMA 1700	Rear	0.559	0.111	0.670
		Right	0.362	-	0.362
		Left	0.588	1.005	1.593
		Top	-	0.879	0.879
		Bottom	1.001	-	1.001
	WCDMA 1900	Front	1.130	0.072	1.202
		Rear	1.012	0.111	1.123
		Right	0.455	-	0.455
		Left	0.145	1.005	1.150
		Top	-	0.879	0.879
	LTE Band 12	Bottom	1.044	-	1.044
		Front	1.048	0.072	1.120
		Rear	1.176	0.111	1.287
		Right	0.476	-	0.476
		Left	0.154	1.005	1.159
	LTE Band 13	Top	-	0.879	0.879
		Bottom	0.072	-	0.072
		Front	0.354	0.072	0.426
		Rear	0.288	0.111	0.399
		Right	0.137	0.137	0.274
	LTE Band 26	Left	0.258	1.005	1.263
		Top	-	0.879	0.879
		Bottom	0.147	-	0.147
		Front	0.433	0.072	0.505
		Rear	0.335	0.111	0.446
	LTE Band 66	Right	0.316	-	0.316
		Left	0.493	1.005	1.498
		Top	-	0.879	0.879
		Bottom	0.185	-	0.185
		Front	0.412	0.072	0.484
	LTE Band 25	Rear	0.472	0.111	0.583
		Right	0.324	-	0.324
		Left	0.539	1.005	1.544
		Top	-	0.879	0.879
		Bottom	0.837	-	0.837
	LTE Band 7	Front	1.026	0.072	1.098
		Rear	0.885	0.111	0.996
		Right	0.352	-	0.352
		Left	0.139	1.005	1.144
		Top	-	0.879	0.879
	LTE Band 41	Bottom	0.741	-	0.741
		Front	0.846	0.072	0.918
		Rear	0.799	0.111	0.910
		Right	0.327	-	0.327
		Left	0.128	1.005	1.133
	LTE Band 12	Top	-	0.879	0.879
		Bottom	0.185	-	0.185
		Front	0.499	0.072	0.571
		Rear	0.617	0.111	0.728
		Right	0.237	-	0.237
	LTE Band 13	Left	0.281	1.005	1.286
		Top	-	0.879	0.879
		Bottom	0.204	-	0.204
		Front	0.204	0.072	0.276
		Rear	0.358	0.111	0.469
	LTE Band 26	Right	0.170	-	0.170
		Left	0.137	1.005	1.142

Table 11.7.14 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN Ant.2 SAR (W/kg)	3SAR (W/kg)
Phablet SAR	GPRS 850	Top	-	-	-
		Bottom	0.258	-	0.258
		Front	0.483	0.048	0.531
		Rear	0.799	0.068	0.867
		Right	0.481	-	0.481
	GPRS 1900	Left	0.834	0.307	1.141
		Top	-	-	-
		Bottom	0.879	-	0.879
		Front	0.987	0.048	1.035
		Rear	1.112	0.068	1.180
	WCDMA 850	Right	0.477	0.307	0.784
		Left	0.158	0.158	0.316
		Top	-	-	-
		Bottom	0.212	-	0.212
		Front	0.484	0.048	0.532
	WCDMA 1700	Rear	0.559	0.068	0.627
		Right	0.362	0.307	0.669
		Left	0.588	-	0.588
		Top	-	-	-
		Bottom	1.001	-	1.001
	WCDMA 1900	Front	1.130	0.048	1.178
		Rear	1.012	0.068	1.080
		Right	0.455	0.307	0.762
		Left	0.145	-	0.145
		Top	-	-	-
	LTE Band 12	Bottom	1.044	-	1.044
		Front	1.048	0.048	1.096
		Rear	1.176	0.068	1.244
		Right	0.476	0.307	0.783
		Left	0.154	-	0.154
	LTE Band 13	Top	-	-	-
		Bottom	0.072	-	0.072
		Front	0.354	0.048	0.402
		Rear	0.288	0.068	0.356
		Right	0.137	0.307	0.444
	LTE Band 26	Left	0.258	-	0.258
		Top	-	-	-
		Bottom	0.147	-	0.147
		Front	0.433	0.048	0.481
		Rear	0.335	0.068	0.403
	LTE Band 66	Right	0.316	0.307	0.623
		Left	0.493	-	0.493
		Top	-	-	-
		Bottom	0.185	-	0.185
		Front	0.412	0.048	0.460
	LTE Band 25	Rear	0.472	0.068	0.540
		Right	0.324	0.307	0.631
		Left	0.539	-	0.539
		Top	-	-	-
		Bottom	0.837	-	0.837
	LTE Band 7	Front	1.026	0.048	1.074
		Rear	0.885	0.068	0.953
		Right	0.352	0.307	0.659
		Left	0.139	-	0.139
		Top	-	-	-
	LTE Band 41	Bottom	0.741	-	0.741
		Front	0.846	0.048	0.894
		Rear	0.799	0.068	0.867
		Right	0.327	0.307	0.634
		Left	0.128	-	0.128
	LTE Band 12	Top	-	-	-
		Bottom	0.185	-	0.185
		Front	0.499	0.048	0.547
		Rear	0.617	0.068	0.685
		Right	0.237	0.307	0.544
	LTE Band 13	Left	0.281	0.307	0.588
		Top	-	-	-
		Bottom	0.204	-	0.204
		Front	0.204	0.048	0.252
		Rear	0.358	0.068	0.426
	LTE Band 26	Right	0.170	0.307	0.477
		Left	0.137	-	0.137

Table 11.7.15 Simultaneous Transmission Scenario : 2G/3G/4G + 2.4 GHz W-LAN MIMO (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	2.4G W-LAN MIMO SAR (W/kg)	Δ SAR (W/kg)
Phablet SAR	GPRS 850	Top	-	0.097	0.097
		Bottom	0.259	-	0.259
		Front	0.493	0.098	0.591
		Rear	0.799	0.144	0.943
		Right	0.481	0.274	0.675
	GPRS 1900	Left	0.634	1.121	1.755
		Top	-	0.097	0.097
		Bottom	0.870	-	0.870
		Front	0.987	0.088	1.075
		Rear	1.112	0.144	1.256
	WCDMA 850	Right	0.477	0.274	0.751
		Left	0.158	1.121	1.269
		Top	-	0.097	0.097
		Bottom	0.212	-	0.212
		Front	0.484	0.088	0.570
	WCDMA 1700	Rear	0.559	0.144	0.703
		Right	0.362	0.274	0.636
		Left	0.588	1.121	1.707
		Top	-	0.097	0.097
		Bottom	1.001	-	1.001
	WCDMA 1900	Front	1.130	0.088	1.218
		Rear	1.012	0.144	1.156
		Right	0.455	0.274	0.729
		Left	0.145	1.121	1.266
		Top	-	0.097	0.097
	LTE Band 12	Bottom	1.044	-	1.044
		Front	1.048	0.088	1.134
		Rear	1.178	0.144	1.322
		Right	0.476	0.274	0.750
		Left	0.154	1.121	1.275
	LTE Band 13	Top	-	0.097	0.097
		Bottom	0.072	-	0.072
		Front	0.354	0.088	0.440
		Rear	0.289	0.144	0.430
		Right	0.137	0.274	0.411
	LTE Band 26	Left	0.258	1.121	1.379
		Top	-	0.097	0.097
		Bottom	0.147	-	0.147
		Front	0.433	0.088	0.519
		Rear	0.335	0.144	0.479
	LTE Band 66	Right	0.316	0.274	0.590
		Left	0.493	1.121	1.614
		Top	-	0.097	0.097
		Bottom	0.165	-	0.165
		Front	0.412	0.088	0.498
	LTE Band 25	Rear	0.472	0.144	0.616
		Right	0.354	0.274	0.628
		Left	0.539	1.121	1.660
		Top	-	0.097	0.097
		Bottom	0.837	-	0.837
	LTE Band 7	Front	1.028	0.088	1.112
		Rear	0.885	0.144	1.029
		Right	0.352	0.274	0.626
		Left	0.139	1.121	1.260
		Top	-	0.097	0.097
	LTE Band 41	Bottom	0.741	-	0.741
		Front	0.846	0.088	0.932
		Rear	0.799	0.144	0.910
		Right	0.357	0.274	0.631
		Left	0.128	1.121	1.249
	LTE Band 12	Top	-	0.097	0.097
		Bottom	0.185	-	0.185
		Front	0.499	0.088	0.587
		Rear	0.617	0.144	0.761
		Right	0.237	0.274	0.511
	LTE Band 13	Left	0.281	1.121	1.402
		Top	-	0.097	0.097
		Bottom	0.204	-	0.204
		Front	0.204	0.088	0.290
		Rear	0.358	0.144	0.502
	LTE Band 26	Right	0.170	0.274	0.444
		Left	0.137	1.121	1.258

Table 11.7.16 Simultaneous Transmission Scenario : 2G/3G/4G + 5.3 GHz W-LAN Ant.1 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.3G W-LAN Ant.1 SAR (W/kg)	Δ SAR (W/kg)
Phablet SAR	GPRS 850	Top	-	0.149	0.149
		Bottom	0.259	-	0.259
		Front	0.493	0.089	0.582
		Rear	0.799	0.029	0.828
		Right	0.481	0.418	0.611
	GPRS 1900	Left	0.634	0.418	1.052
		Top	-	0.149	0.149
		Bottom	0.870	-	0.870
		Front	0.987	0.089	1.076
		Rear	1.112	0.029	1.141
	WCDMA 850	Right	0.477	0.418	0.477
		Left	0.158	0.418	0.576
		Top	-	0.149	0.149
		Bottom	0.212	-	0.212
		Front	0.484	0.089	0.573
	WCDMA 1700	Rear	0.559	0.029	0.588
		Right	0.362	0.418	0.362
		Left	0.588	0.418	1.004
		Top	-	0.149	0.149
		Bottom	1.001	-	1.001
	WCDMA 1900	Front	1.130	0.089	1.219
		Rear	1.012	0.029	1.041
		Right	0.455	0.418	0.455
		Left	0.145	0.418	0.563
		Top	-	0.149	0.149
	LTE Band 12	Bottom	1.044	-	1.044
		Front	1.048	0.089	1.137
		Rear	1.178	0.029	1.207
		Right	0.476	-	0.476
		Left	0.154	0.418	0.572
	LTE Band 13	Top	-	0.149	0.149
		Bottom	0.072	-	0.072
		Front	0.354	0.089	0.423
		Rear	0.288	0.029	0.315
		Right	0.137	0.418	0.137
	LTE Band 26	Left	0.258	0.418	0.676
		Top	-	0.149	0.149
		Bottom	0.147	-	0.147
		Front	0.433	0.089	0.522
		Rear	0.335	0.029	0.364
	LTE Band 66	Right	0.316	0.418	0.316
		Left	0.493	0.418	0.911
		Top	-	0.149	0.149
		Bottom	0.165	-	0.165
		Front	0.412	0.089	0.491
	LTE Band 25	Rear	0.472	0.029	0.501
		Right	0.354	0.418	0.354
		Left	0.539	0.418	0.997
		Top	-	0.149	0.149
		Bottom	0.837	-	0.837
	LTE Band 7	Front	1.028	0.089	1.089
		Rear	0.885	0.029	0.914
		Right	0.352	0.418	0.352
		Left	0.139	0.418	0.557
		Top	-	0.149	0.149
	LTE Band 41	Bottom	0.741	-	0.741
		Front	0.846	0.089	0.935
		Rear	0.799	0.029	0.795
		Right	0.357	0.418	0.357
		Left	0.128	0.418	0.546
	LTE Band 12	Top	-	0.149	0.149
		Bottom	0.185	-	0.185
		Front	0.499	0.089	0.588
		Rear	0.617	0.029	0.646
		Right	0.237	0.418	0.237
	LTE Band 13	Left	0.281	0.418	0.699
		Top	-	0.149	0.149
		Bottom	0.204	-	0.204
		Front	0.204	0.089	0.293
		Rear	0.358	0.029	0.387
	LTE Band 26	Right	0.170	0.418	0.170
		Left	0.137	0.418	0.556

Table 11.7.17 Simultaneous Transmission Scenario : 2G/3G/4G + 5.3 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.3G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Phablet SAR	GPRS 850	Top	-	-	-
		Bottom	0.259	-	0.259
		Front	0.493	0.015	0.508
		Rear	0.799	0.034	0.833
		Right	0.481	0.145	0.626
		Left	0.534	-	0.534
	GPRS 1900	Top	-	-	-
		Bottom	0.870	-	0.870
		Front	0.987	0.015	1.002
		Rear	1.112	0.034	1.146
		Right	0.477	0.145	0.622
		Left	0.158	-	0.158
	WCDMA 850	Top	-	-	-
		Bottom	-	-	-
		Front	0.212	-	0.212
		Rear	0.484	0.015	0.499
		Right	0.362	0.145	0.507
		Left	0.588	-	0.588
	WCDMA 1700	Top	-	-	-
		Bottom	1.001	-	1.001
		Front	1.130	0.015	1.145
		Rear	1.012	0.034	1.046
		Right	0.455	0.145	0.600
		Left	0.145	-	0.145
	WCDMA 1900	Top	-	-	-
		Bottom	1.044	-	1.044
		Front	1.048	0.015	1.063
		Rear	1.178	0.034	1.212
		Right	0.476	0.145	0.621
		Left	0.154	-	0.154
	LTE Band 12	Top	-	-	-
		Bottom	0.072	-	0.072
		Front	0.354	0.015	0.369
		Rear	0.288	0.034	0.322
		Right	0.137	0.145	0.282
		Left	0.258	-	0.258
	LTE Band 13	Top	-	-	-
		Bottom	0.147	-	0.147
		Front	0.433	0.015	0.448
		Rear	0.335	0.034	0.369
		Right	0.316	0.145	0.461
		Left	0.493	-	0.493
	LTE Band 26	Top	-	-	-
		Bottom	0.165	-	0.165
		Front	0.412	0.015	0.427
		Rear	0.472	0.034	0.506
		Right	0.324	0.145	0.469
		Left	0.539	-	0.539
	LTE Band 66	Top	-	-	-
		Bottom	0.837	-	0.837
		Front	1.026	0.015	1.041
		Rear	0.885	0.034	0.919
		Right	0.382	0.145	0.527
		Left	0.139	-	0.139
	LTE Band 25	Top	-	-	-
		Bottom	0.741	-	0.741
		Front	0.846	0.015	0.861
		Rear	0.799	0.034	0.833
		Right	0.327	0.145	0.472
		Left	0.128	-	0.128
	LTE Band 7	Top	-	-	-
		Bottom	0.185	-	0.185
		Front	0.499	0.015	0.514
		Rear	0.617	0.034	0.651
		Right	0.237	0.145	0.382
		Left	0.281	-	0.281
	LTE Band 41	Top	-	-	-
		Bottom	0.204	-	0.204
		Front	0.204	0.015	0.219
		Rear	0.358	0.034	0.392
		Right	0.170	0.145	0.315
		Left	0.137	-	0.137

Table 11.7.18 Simultaneous Transmission Scenario : 2G/3G/4G + 5.3 GHz W-LAN MIMO (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.3G W-LAN MIMO SAR (W/kg)	ΣSAR (W/kg)
Phablet SAR	GPRS 850	Top	-	0.161	0.161
		Bottom	0.259	-	0.259
		Front	0.493	0.099	0.592
		Rear	0.799	0.029	0.828
		Right	0.481	0.158	0.639
		Left	0.534	0.429	1.063
	GPRS 1900	Top	-	0.161	0.161
		Bottom	0.870	-	0.870
		Front	0.987	0.099	1.086
		Rear	1.112	0.029	1.141
		Right	0.477	0.158	0.633
		Left	0.158	0.449	0.607
	WCDMA 850	Top	-	0.161	0.161
		Bottom	-	-	-
		Front	0.212	-	0.212
		Rear	0.484	0.029	0.513
		Right	0.589	0.029	0.618
		Left	0.362	0.158	0.520
	WCDMA 1700	Top	-	0.161	0.161
		Bottom	1.001	-	1.001
		Front	1.130	0.099	1.229
		Rear	1.012	0.029	1.041
		Right	0.455	0.158	0.611
		Left	0.145	0.449	0.594
	WCDMA 1900	Top	-	0.161	0.161
		Bottom	1.044	-	1.044
		Front	1.048	0.099	1.147
		Rear	1.178	0.029	1.207
		Right	0.476	0.158	0.632
		Left	0.154	0.449	0.603
	LTE Band 12	Top	-	0.161	0.161
		Bottom	-	-	-
		Front	0.072	-	0.072
		Rear	0.354	0.099	0.453
		Right	0.288	0.029	0.315
		Left	0.137	0.158	0.293
	LTE Band 13	Top	-	0.161	0.161
		Bottom	0.147	-	0.147
		Front	0.433	0.099	0.532
		Rear	0.335	0.029	0.364
		Right	0.316	0.158	0.472
		Left	0.493	0.449	0.942
	LTE Band 26	Top	-	0.161	0.161
		Bottom	0.165	-	0.165
		Front	0.412	0.099	0.511
		Rear	0.472	0.029	0.501
		Right	0.324	0.158	0.482
		Left	0.539	0.449	0.988
	LTE Band 66	Top	-	0.161	0.161
		Bottom	0.837	-	0.837
		Front	1.026	0.099	1.125
		Rear	0.885	0.029	0.914
		Right	0.382	0.158	0.540
		Left	0.139	0.449	0.588
	LTE Band 25	Top	-	0.161	0.161
		Bottom	0.741	-	0.741
		Front	0.846	0.099	0.945
		Rear	0.799	0.029	0.828
		Right	0.327	0.158	0.485
		Left	0.128	0.429	0.557
	LTE Band 7	Top	-	0.161	0.161
		Bottom	-	-	-
		Front	0.185	0.099	0.284
		Rear	0.499	0.029	0.528
		Right	0.617	0.029	0.646
		Left	0.237	0.158	0.393
	LTE Band 41	Top	-	0.161	0.161
		Bottom	0.204	-	0.204
		Front	0.204	0.099	0.303
		Rear	0.358	0.029	0.387
		Right	0.170	0.158	0.328
		Left	0.137	0.449	0.586

Table 11.7.19 Simultaneous Transmission Scenario : 2G/3G/4G + 5.6 GHz W-LAN Ant.1 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.6G W-LAN Ant.1 SAR (W/kg)	1+2
Phablet SAR	GPRS 850	Top	-	0.139	0.139
		Bottom	0.258	-	0.258
		Front	0.483	0.130	0.613
		Rear	0.799	0.037	0.836
		Right	0.481	-	0.481
	GPRS 1900	Left	0.534	0.597	1.131
		Top	-	0.139	0.139
		Bottom	0.870	-	0.870
		Front	0.987	0.130	1.117
		Rear	1.112	0.037	1.149
	WCDMA 850	Right	0.477	-	0.477
		Left	0.158	0.597	0.755
		Top	-	0.139	0.139
		Bottom	0.212	-	0.212
		Front	0.484	0.130	0.614
	WCDMA 1700	Rear	0.559	0.037	0.596
		Right	0.362	-	0.362
		Left	0.588	0.597	1.183
		Top	-	0.139	0.139
		Bottom	1.001	-	1.001
	WCDMA 1900	Front	1.130	0.130	1.260
		Rear	1.012	0.037	1.049
		Right	0.455	-	0.455
		Left	0.145	0.597	0.742
		Top	-	0.139	0.139
	LTE Band 12	Bottom	1.044	-	1.044
		Front	1.048	0.130	1.178
		Rear	1.178	0.037	1.213
		Right	0.476	-	0.476
		Left	0.154	0.597	0.751
	LTE Band 13	Top	-	0.139	0.139
		Bottom	0.072	-	0.072
		Front	0.354	0.130	0.484
		Rear	0.288	0.037	0.323
		Right	0.137	0.137	0.272
	LTE Band 26	Left	0.258	0.597	0.855
		Top	-	0.139	0.139
		Bottom	0.147	-	0.147
		Front	0.433	0.130	0.563
		Rear	0.335	0.037	0.372
	LTE Band 66	Right	0.316	-	0.316
		Left	0.493	0.597	1.090
		Top	-	0.139	0.139
		Bottom	0.165	-	0.165
		Front	0.412	0.130	0.542
	LTE Band 25	Rear	0.472	0.037	0.509
		Right	0.354	-	0.354
		Left	0.539	0.597	1.136
		Top	-	0.139	0.139
		Bottom	0.837	-	0.837
	LTE Band 7	Front	1.026	0.130	1.156
		Rear	0.885	0.037	0.922
		Right	0.352	-	0.352
		Left	0.139	0.597	0.736
		Top	-	0.139	0.139
	LTE Band 41	Bottom	0.741	-	0.741
		Front	0.846	0.130	0.976
		Rear	0.799	0.037	0.833
		Right	0.327	-	0.327
		Left	0.128	0.597	0.725
	LTE Band 12	Top	-	0.139	0.139
		Bottom	0.185	-	0.185
		Front	0.499	0.130	0.629
		Rear	0.617	0.037	0.654
		Right	0.237	-	0.237
	LTE Band 13	Left	0.281	0.597	0.878
		Top	-	0.139	0.139
		Bottom	0.204	-	0.204
		Front	0.204	0.130	0.334
		Rear	0.358	0.037	0.395
	LTE Band 26	Right	0.170	-	0.170
		Left	0.137	0.597	0.734

Table 11.7.20 Simultaneous Transmission Scenario : 2G/3G/4G + 5.6 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.6G W-LAN Ant.2 SAR (W/kg)	1+2
Phablet SAR	GPRS 850	Top	-	-	-
		Bottom	0.258	-	0.258
		Front	0.483	0.056	0.539
		Rear	0.799	0.081	0.880
		Right	0.481	-	0.481
	GPRS 1900	Left	0.534	0.301	0.834
		Top	-	-	-
		Bottom	0.870	-	0.870
		Front	0.987	0.056	1.043
		Rear	1.112	0.081	1.193
	WCDMA 850	Right	0.477	0.301	0.778
		Left	0.158	-	0.158
		Top	-	-	-
		Bottom	0.212	-	0.212
		Front	0.484	0.056	0.540
	WCDMA 1700	Rear	0.559	0.081	0.640
		Right	0.362	0.301	0.663
		Left	0.588	-	0.588
		Top	-	-	-
		Bottom	1.001	-	1.001
	WCDMA 1900	Front	1.130	0.056	1.186
		Rear	1.012	0.081	1.093
		Right	0.455	0.301	0.756
		Left	0.145	-	0.145
		Top	-	-	-
	LTE Band 12	Bottom	1.044	-	1.044
		Front	1.048	0.056	1.104
		Rear	1.178	0.081	1.257
		Right	0.476	0.301	0.777
		Left	0.154	-	0.154
	LTE Band 13	Top	-	-	-
		Bottom	0.072	-	0.072
		Front	0.354	0.056	0.410
		Rear	0.288	0.081	0.367
		Right	0.137	0.301	0.438
	LTE Band 26	Left	0.258	-	0.258
		Top	-	-	-
		Bottom	0.147	-	0.147
		Front	0.433	0.056	0.489
		Rear	0.335	0.081	0.416
	LTE Band 66	Right	0.316	0.301	0.617
		Left	0.493	-	0.493
		Top	-	-	-
		Bottom	0.165	-	0.165
		Front	0.412	0.056	0.468
	LTE Band 25	Rear	0.472	0.081	0.553
		Right	0.354	0.301	0.655
		Left	0.539	-	0.539
		Top	-	-	-
		Bottom	0.837	-	0.837
	LTE Band 7	Front	1.026	0.056	1.082
		Rear	0.885	0.081	0.966
		Right	0.352	0.301	0.653
		Left	0.139	-	0.139
		Top	-	-	-
	LTE Band 41	Bottom	0.741	-	0.741
		Front	0.846	0.056	0.902
		Rear	0.799	0.081	0.880
		Right	0.327	0.301	0.628
		Left	0.128	-	0.128
	LTE Band 12	Top	-	-	-
		Bottom	0.185	-	0.185
		Front	0.499	0.056	0.555
		Rear	0.617	0.081	0.698
		Right	0.237	0.301	0.538
	LTE Band 13	Left	0.281	-	0.281
		Top	-	-	-
		Bottom	0.204	-	0.204
		Front	0.204	0.056	0.260
		Rear	0.358	0.081	0.439
	LTE Band 26	Right	0.170	0.301	0.471
		Left	0.137	-	0.137

Table 11.7.21 Simultaneous Transmission Scenario : 2G/3G/4G + 5.6 GHz W-LAN MIMO (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.6G W-LAN MIMO SAR (W/kg)	1+2
Phablet SAR	GPRS 850	Top	-	0.151	0.151
		Bottom	0.259	-	0.259
		Front	0.493	0.139	0.632
		Rear	0.799	0.052	0.851
		Right	0.481	0.321	0.722
	GPRS 1900	Left	0.634	0.697	1.291
		Top	-	0.151	0.151
		Bottom	0.870	-	0.870
		Front	0.987	0.139	1.126
		Rear	1.112	0.052	1.164
	WCDMA 850	Right	0.477	0.321	0.798
		Left	0.158	0.697	0.815
		Top	-	0.151	0.151
		Bottom	0.212	-	0.212
		Front	0.484	0.139	0.623
	WCDMA 1700	Rear	0.559	0.052	0.618
		Right	0.362	0.321	0.683
		Left	0.588	0.697	1.243
		Top	-	0.151	0.151
		Bottom	1.001	-	1.001
	WCDMA 1900	Front	1.130	0.139	1.269
		Rear	1.012	0.052	1.064
		Right	0.455	0.321	0.776
		Left	0.145	0.697	0.862
		Top	-	0.151	0.151
	LTE Band 12	Bottom	1.044	-	1.044
		Front	1.048	0.139	1.187
		Rear	1.178	0.052	1.228
		Right	0.476	0.321	0.797
		Left	0.154	0.697	0.811
	LTE Band 13	Top	-	0.151	0.151
		Bottom	0.072	-	0.072
		Front	0.354	0.139	0.493
		Rear	0.289	0.052	0.348
		Right	0.137	0.321	0.458
	LTE Band 26	Left	0.258	0.697	0.915
		Top	-	0.151	0.151
		Bottom	0.147	-	0.147
		Front	0.433	0.139	0.572
		Rear	0.335	0.052	0.387
	LTE Band 66	Right	0.316	0.321	0.637
		Left	0.493	0.697	1.180
		Top	-	0.151	0.151
		Bottom	0.165	-	0.165
		Front	0.412	0.139	0.551
	LTE Band 25	Rear	0.472	0.052	0.524
		Right	0.354	0.321	0.674
		Left	0.539	0.697	1.196
		Top	-	0.151	0.151
		Bottom	0.837	-	0.837
	LTE Band 7	Front	1.026	0.139	1.158
		Rear	0.885	0.052	0.937
		Right	0.352	0.321	0.683
		Left	0.139	0.697	0.799
		Top	-	0.151	0.151
	LTE Band 41	Bottom	0.741	-	0.741
		Front	0.846	0.139	0.985
		Rear	0.799	0.052	0.810
		Right	0.327	0.321	0.648
		Left	0.128	0.697	0.785
	LTE Band 12	Top	-	0.151	0.151
		Bottom	0.185	-	0.185
		Front	0.499	0.139	0.638
		Rear	0.617	0.052	0.669
		Right	0.237	0.321	0.558
	LTE Band 13	Left	0.281	0.697	0.958
		Top	-	0.151	0.151
		Bottom	0.204	-	0.204
		Front	0.204	0.139	0.343
		Rear	0.358	0.052	0.410
	LTE Band 26	Right	0.170	0.321	0.491
		Left	0.137	0.697	0.794

Table 11.7.22 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN Ant.1 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN Ant.1 SAR (W/kg)	1+2
Phablet SAR	GPRS 850	Top	-	0.170	0.170
		Bottom	0.259	-	0.259
		Front	0.493	0.128	0.621
		Rear	0.799	0.044	0.843
		Right	0.481	0.401	0.881
	GPRS 1900	Left	0.634	0.792	1.226
		Top	-	0.170	0.170
		Bottom	0.870	-	0.870
		Front	0.987	0.128	1.095
		Rear	1.112	0.044	1.156
	WCDMA 850	Right	0.477	0.321	0.798
		Left	0.158	0.792	0.950
		Top	-	0.170	0.170
		Bottom	0.212	-	0.212
		Front	0.444	0.128	0.572
	WCDMA 1700	Rear	0.559	0.044	0.610
		Right	0.362	0.321	0.683
		Left	0.588	0.792	1.378
		Top	-	0.170	0.170
		Bottom	1.001	-	1.001
	WCDMA 1900	Front	1.130	0.128	1.258
		Rear	1.012	0.044	1.056
		Right	0.455	0.321	0.776
		Left	0.145	0.792	0.937
		Top	-	0.170	0.170
	LTE Band 12	Bottom	1.044	-	1.044
		Front	1.048	0.128	1.176
		Rear	1.178	0.044	1.229
		Right	0.476	-	0.476
		Left	0.154	0.792	0.946
	LTE Band 13	Top	-	0.170	0.170
		Bottom	0.072	-	0.072
		Front	0.354	0.128	0.482
		Rear	0.288	0.044	0.330
		Right	0.137	0.321	0.458
	LTE Band 26	Left	0.258	0.792	1.050
		Top	-	0.170	0.170
		Bottom	0.170	-	0.170
		Front	0.433	0.128	0.561
		Rear	0.335	0.044	0.379
	LTE Band 66	Right	0.316	0.321	0.637
		Left	0.493	0.792	1.289
		Top	-	0.170	0.170
		Bottom	0.165	-	0.165
		Front	0.412	0.128	0.540
	LTE Band 25	Rear	0.472	0.044	0.516
		Right	0.354	0.321	0.674
		Left	0.539	0.792	1.331
		Top	-	0.170	0.170
		Bottom	0.837	-	0.837
	LTE Band 7	Front	1.026	0.128	1.154
		Rear	0.885	0.044	0.929
		Right	0.352	0.321	0.683
		Left	0.139	0.792	0.931
		Top	-	0.170	0.170
	LTE Band 41	Bottom	0.741	-	0.741
		Front	0.846	0.128	0.974
		Rear	0.799	0.044	0.810
		Right	0.327	0.321	0.648
		Left	0.128	0.792	0.920
	LTE Band 12	Top	-	0.170	0.170
		Bottom	0.185	-	0.185
		Front	0.499	0.128	0.627
		Rear	0.617	0.044	0.661
		Right	0.237	0.321	0.558
	LTE Band 13	Left	0.281	0.792	1.043
		Top	-	0.170	0.170
		Bottom	0.204	-	0.204
		Front	0.204	0.128	0.332
		Rear	0.358	0.044	0.402
	LTE Band 26	Right	0.170	0.321	0.491
		Left	0.137	0.792	0.928

Table 11.7.23 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN Ant.2 SAR (W/kg)	1+2
Phablet SAR	GPRS 850	Top	-	-	-
		Bottom	0.259	-	0.259
		Front	0.493	0.033	0.526
		Rear	0.799	0.101	0.900
		Right	0.481	0.336	0.737
		Left	0.634	-	0.634
	GPRS 1900	Top	-	-	-
		Bottom	0.870	-	0.870
		Front	0.987	0.033	1.020
		Rear	1.112	0.101	1.213
		Right	0.477	0.336	0.813
		Left	0.158	-	0.158
	WCDMA 850	Top	-	-	-
		Bottom	0.212	-	0.212
		Front	0.484	0.033	0.517
		Rear	0.559	0.101	0.660
		Right	0.362	0.336	0.698
		Left	0.588	-	0.588
	WCDMA 1700	Top	-	-	-
		Bottom	1.001	-	1.001
		Front	1.130	0.033	1.163
		Rear	1.012	0.101	1.113
		Right	0.455	0.336	0.791
		Left	0.145	-	0.145
	WCDMA 1900	Top	-	-	-
		Bottom	1.044	-	1.044
		Front	1.048	0.033	1.081
		Rear	1.178	0.101	1.277
		Right	0.476	0.336	0.812
		Left	0.154	-	0.154
	LTE Band 12	Top	-	-	-
		Bottom	0.072	-	0.072
		Front	0.354	0.033	0.387
		Rear	0.289	0.101	0.390
		Right	0.137	0.336	0.473
		Left	0.258	-	0.258
	LTE Band 13	Top	-	-	-
		Bottom	0.147	-	0.147
		Front	0.433	0.033	0.466
		Rear	0.335	0.101	0.436
		Right	0.316	0.336	0.652
		Left	0.493	-	0.493
	LTE Band 26	Top	-	-	-
		Bottom	0.165	-	0.165
		Front	0.412	0.033	0.445
		Rear	0.472	0.101	0.573
		Right	0.324	0.336	0.660
		Left	0.539	-	0.539
	LTE Band 66	Top	-	-	-
		Bottom	0.837	-	0.837
		Front	1.026	0.033	1.059
		Rear	0.885	0.101	0.986
		Right	0.352	0.336	0.688
		Left	0.139	-	0.139
	LTE Band 25	Top	-	-	-
		Bottom	0.741	-	0.741
		Front	0.846	0.033	0.879
		Rear	0.709	0.101	0.810
		Right	0.327	0.336	0.663
		Left	0.128	-	0.128
	LTE Band 7	Top	-	-	-
		Bottom	0.185	-	0.185
		Front	0.499	0.033	0.532
		Rear	0.617	0.101	0.718
		Right	0.237	0.336	0.573
		Left	0.281	-	0.281
	LTE Band 41	Top	-	-	-
		Bottom	0.204	-	0.204
		Front	0.204	0.033	0.237
		Rear	0.358	0.101	0.459
		Right	0.170	0.336	0.506
		Left	0.137	-	0.137

Table 11.7.24 Simultaneous Transmission Scenario : 2G/3G/4G + 5.8 GHz W-LAN MIMO (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	5.8G W-LAN MIMO SAR (W/kg)	1+2
Phablet SAR	GPRS 850	Top	-	0.173	0.173
		Bottom	0.259	-	0.259
		Front	0.493	0.037	0.530
		Rear	0.799	0.133	0.932
		Right	0.481	0.596	1.077
		Left	0.634	0.897	1.531
	GPRS 1900	Top	-	0.173	0.173
		Bottom	0.870	-	0.870
		Front	0.987	0.144	1.131
		Rear	1.112	0.133	1.245
		Right	0.477	0.596	1.073
		Left	0.158	0.897	1.055
	WCDMA 850	Top	-	0.173	0.173
		Bottom	0.212	-	0.212
		Front	0.484	0.144	0.628
		Rear	0.559	0.133	0.692
		Right	0.362	0.596	0.958
		Left	0.588	0.897	1.483
	WCDMA 1700	Top	-	0.173	0.173
		Bottom	1.001	-	1.001
		Front	1.130	0.144	1.274
		Rear	1.012	0.133	1.145
		Right	0.455	0.596	1.051
		Left	0.145	0.897	1.042
	WCDMA 1900	Top	-	0.173	0.173
		Bottom	1.044	-	1.044
		Front	1.048	0.144	1.192
		Rear	1.178	0.133	1.311
		Right	0.476	0.596	1.072
		Left	0.154	0.897	1.051
	LTE Band 12	Top	-	0.173	0.173
		Bottom	0.072	-	0.072
		Front	0.354	0.144	0.498
		Rear	0.288	0.133	0.421
		Right	0.137	0.596	0.733
		Left	0.258	0.897	1.155
	LTE Band 13	Top	-	0.173	0.173
		Bottom	0.147	-	0.147
		Front	0.433	0.144	0.577
		Rear	0.335	0.133	0.468
		Right	0.316	0.596	0.912
		Left	0.493	0.897	1.389
	LTE Band 26	Top	-	0.173	0.173
		Bottom	0.165	-	0.165
		Front	0.412	0.144	0.556
		Rear	0.472	0.133	0.605
		Right	0.324	0.596	0.920
		Left	0.539	0.897	1.406
	LTE Band 66	Top	-	0.173	0.173
		Bottom	0.837	-	0.837
		Front	1.026	0.144	1.170
		Rear	0.885	0.133	1.018
		Right	0.352	0.596	0.948
		Left	0.139	0.897	1.036
	LTE Band 25	Top	-	0.173	0.173
		Bottom	0.741	-	0.741
		Front	0.846	0.144	0.990
		Rear	0.709	0.133	0.842
		Right	0.327	0.596	0.923
		Left	0.128	0.897	0.995
	LTE Band 7	Top	-	0.173	0.173
		Bottom	0.185	-	0.185
		Front	0.499	0.144	0.643
		Rear	0.617	0.133	0.750
		Right	0.237	0.596	0.833
		Left	0.281	0.897	1.178
	LTE Band 41	Top	-	0.173	0.173
		Bottom	0.204	-	0.204
		Front	0.204	0.144	0.348
		Rear	0.358	0.133	0.491
		Right	0.170	0.596	0.766
		Left	0.137	0.897	1.034

Table 11.7.25 Simultaneous Transmission Scenario : 2G/3G/4G + Bluetooth (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	ΣSAR (W/kg)
Phablet SAR	GPRS 850	Top	-	0.019	0.019
		Bottom	0.259	-	0.259
		Front	0.493	0.018	0.511
		Rear	0.739	0.027	0.766
		Right	0.401	0.021	0.421
		Left	0.634	0.265	0.899
	GPRS 1900	Top	-	0.019	0.019
		Bottom	0.970	-	0.970
		Front	0.967	0.018	0.985
		Rear	1.112	0.027	1.139
		Right	0.477	0.021	0.497
		Left	0.198	0.265	0.463
	WCDMA 850	Top	-	0.019	0.019
		Bottom	0.212	-	0.212
		Front	0.484	0.018	0.502
		Rear	0.588	0.027	0.615
		Right	0.382	0.021	0.403
		Left	0.589	0.265	0.854
	WCDMA 1700	Top	-	0.019	0.019
		Bottom	1.001	-	1.001
		Front	1.130	0.018	1.148
		Rear	1.012	0.027	1.039
		Right	0.466	0.021	0.486
		Left	0.145	0.265	0.410
	WCDMA 1900	Top	-	0.019	0.019
		Bottom	1.044	-	1.044
		Front	1.043	0.018	1.061
		Rear	1.176	0.027	1.203
		Right	0.476	0.021	0.496
		Left	0.154	0.265	0.419
	LTE Band 12	Top	-	0.019	0.019
		Bottom	0.072	-	0.072
		Front	0.354	0.018	0.372
		Rear	0.280	0.027	0.307
		Right	0.137	0.021	0.157
		Left	0.265	0.265	0.530
	LTE Band 13	Top	-	0.019	0.019
		Bottom	0.147	-	0.147
		Front	0.443	0.018	0.461
		Rear	0.335	0.027	0.362
		Right	0.318	0.021	0.338
		Left	0.489	0.265	0.754
	LTE Band 26	Top	-	0.019	0.019
		Bottom	0.185	-	0.185
		Front	0.412	0.018	0.430
		Rear	0.472	0.027	0.499
		Right	0.324	0.021	0.344
		Left	0.539	0.265	0.804
	LTE Band 66	Top	-	0.019	0.019
		Bottom	0.837	-	0.837
		Front	1.028	0.018	1.044
		Rear	0.885	0.027	0.912
		Right	0.362	0.021	0.382
		Left	0.139	0.265	0.404
	LTE Band 25	Top	-	0.019	0.019
		Bottom	0.741	-	0.741
		Front	0.846	0.018	0.864
		Rear	0.766	0.027	0.793
		Right	0.327	0.021	0.347
		Left	0.128	0.265	0.393
	LTE Band 7	Top	-	0.019	0.019
		Bottom	0.185	-	0.185
		Front	0.499	0.018	0.517
		Rear	0.617	0.027	0.644
		Right	0.237	0.021	0.257
		Left	0.251	0.265	0.516
	LTE Band 41	Top	-	0.019	0.019
		Bottom	0.204	-	0.204
		Front	0.504	0.018	0.522
		Rear	0.358	0.027	0.385
		Right	0.170	0.021	0.190
		Left	0.137	0.265	0.402

Table 11.7.26 Simultaneous Transmission Scenario : 2.4 GHz W-LAN Ant.1 + 5 GHz W-LAN Ant.2 (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	2.4G W-LAN Ant.1 SAR (W/kg)	5G W-LAN Ant.2 SAR (W/kg)	ΣSAR (W/kg)
Phablet SAR	5.3G W-LAN Ant.2	Top	0.140	-	0.140
		Bottom	-	-	-
		Front	0.069	0.015	0.084
		Rear	0.029	0.034	0.063
		Right	-	0.145	0.145
		Left	0.418	-	0.418
	5.6G W-LAN Ant.2	Top	0.139	-	0.139
		Bottom	-	-	-
		Front	0.130	0.056	0.186
		Rear	0.037	0.081	0.118
		Right	-	0.301	0.301
		Left	0.597	-	0.597
	5.8G W-LAN Ant.2	Top	0.170	-	0.170
		Bottom	-	-	-
		Front	0.128	0.033	0.161
		Rear	0.044	0.081	0.125
		Right	-	0.336	0.336
		Left	0.792	-	0.792

Table 11.7.27 Simultaneous Transmission Scenario : Bluetooth Ant.1 + 5 GHz W-LAN Ant.1/Ant.2/MIMO (Phablet at 0 mm)

Exposure Condition	Mode	Configuration	Bluetooth Ant.1 SAR (W/kg)	5G W-LAN Ant.1 SAR (W/kg)	ΣSAR (W/kg)
Phablet SAR	5.3G W-LAN Ant.1	Top	0.019	0.140	0.159
		Bottom	-	-	-
		Front	0.018	0.089	0.097
		Rear	0.027	0.029	0.056
		Right	-	-	-
		Left	0.265	0.418	0.683
	5.6G W-LAN Ant.1	Top	0.019	0.139	0.158
		Bottom	-	-	-
		Front	0.018	0.130	0.148
		Rear	0.027	0.037	0.064
		Right	-	-	-
		Left	0.265	0.597	0.862
	5.8G W-LAN Ant.1	Top	0.019	0.170	0.189
		Bottom	-	-	-
		Front	0.018	0.128	0.146
		Rear	0.027	0.044	0.071
		Right	-	-	-
		Left	0.265	0.792	1.057
Phablet SAR	5.3G W-LAN Ant.2	Top	0.019	-	0.019
		Bottom	-	-	-
		Front	0.018	0.015	0.033
		Rear	0.027	0.034	0.061
		Right	-	0.145	0.145
		Left	0.265	-	0.265
	5.6G W-LAN Ant.2	Top	0.019	-	0.019
		Bottom	-	-	-
		Front	0.018	0.056	0.074
		Rear	0.027	0.081	0.108
		Right	-	0.301	0.301
		Left	0.265	-	0.265
	5.8G W-LAN Ant.2	Top	0.019	-	0.019
		Bottom	-	-	-
		Front	0.018	0.033	0.051
		Rear	0.027	0.081	0.108
		Right	-	0.336	0.336
		Left	0.265	-	0.265
Phablet SAR	5.3G W-LAN MIMO	Top	0.019	0.161	0.180
		Bottom	-	-	-
		Front	0.018	0.099	0.117
		Rear	0.027	0.029	0.056
		Right	-	0.156	0.156
		Left	0.265	0.449	0.714
	5.6G W-LAN MIMO	Top	0.019	0.151	0.170
		Bottom	-	-	-
		Front	0.018	0.139	0.157
		Rear	0.027	0.052	0.079
		Right	-	0.321	0.321
		Left	0.265	0.667	0.932
	5.8G W-LAN MIMO	Top	0.019	0.173	0.192
		Bottom	-	-	-
		Front	0.018	0.144	0.162
		Rear	0.027	0.133	0.160
		Right	-	0.396	0.396
		Left	0.265	0.867	1.132

11.8 Simultaneous Transmission Conclusion

The above numerical summed SAR results for all the worst-case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is 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.

12. SAR MEASUREMENT VARIABILITY

12.1 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 1-g 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. The same procedures should be adapted for measurements according to extremity exposure limits by applying a factor of 2.5 for extremity exposure to the corresponding SAR thresholds.

12.2 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.

13. EQUIPMENT LIST

Table 13.1.1 Test Equipment Calibration

	Type	Manufacturer	Model	Cal.Date	Next.Cal.Date	S/N
☒	SEMITEC Engineering	SEMITEC	N/A	N/A	N/A	Shield Room
☒	SEMITEC Engineering	SEMITEC	N/A	N/A	N/A	Shield Room
☒	Robot	SPEAG	TX90XL	N/A	N/A	F13/5RR2A1/A/01
☒	Robot	SPEAG	TX90XL	N/A	N/A	F13/5P9GA1/A/01
☒	Robot Controller	SPEAG	CS8C	N/A	N/A	F13/5RR2A1/C/01
☒	Robot Controller	SPEAG	CS8C	N/A	N/A	F13/5P9GA1/C/01
☒	Joystick	SPEAG	N/A	N/A	N/A	S-13200990
☒	Joystick	SPEAG	N/A	N/A	N/A	S-12450905
☒	Intel Core i7-3 770 3.40 GHz Windows 7 Professional	N/A	N/A	N/A	N/A	N/A
☒	Intel Core i7-3 770 3.40 GHz Windows 7 Professional	N/A	N/A	N/A	N/A	N/A
☒	Probe Alignment Unit LB	N/A	N/A	N/A	N/A	SE UKS 030 AA
☒	Probe Alignment Unit LB	N/A	N/A	N/A	N/A	SE UKS 030 AA
☒	Device Holder	SPEAG	SD000H01HA	N/A	N/A	N/A
☒	Device Holder	SPEAG	SD000H01HA	N/A	N/A	N/A
☒	2mm Oval Phantom ELI5	SPEAG	QDVA001BB	N/A	N/A	1223
☒	2mm Oval Phantom ELI5	SPEAG	QDOVA002AA	N/A	N/A	1237
☒	Data Acquisition Electronics	SPEAG	DAE3V1	2019-11-19	2020-11-19	520
☒	Data Acquisition Electronics	SPEAG	DAE4V1	2019-07-18	2020-07-18	1335
☒	Dosimetric E-Field Probe	SPEAG	EX3DV4	2019-09-27	2020-09-27	3933
☒	Dosimetric E-Field Probe	SPEAG	ES3DV3	2020-03-25	2021-03-25	3328
☒	750MHz SAR Dipole	SPEAG	D750V3	2020-01-22	2022-01-22	1049
☒	835MHz SAR Dipole	SPEAG	D835V2	2019-07-18	2020-07-18	464
☒	1 800MHz SAR Dipole	SPEAG	D1800V2	2020-03-20	2022-03-20	2d202
☒	1 900MHz SAR Dipole	SPEAG	D1900V2	2020-05-19	2022-05-19	5d176
☒	2 450MHz SAR Dipole	SPEAG	D2450V2	2019-09-19	2021-09-19	726
☒	2 600MHz SAR Dipole	SPEAG	D2600V2	2020-02-20	2022-02-20	1103
☒	5GHz SAR Dipole	SPEAG	D5GHzV2	2020-02-27	2022-02-27	1212
☒	Network Analyzer	Agilent	E5071C	2019-06-24	2020-06-24	MY46106970
☒	Signal Generator	Agilent	E4438C	2020-06-24	2021-06-24	
☒	Amplifier	RFBAY.Inc	MPA-40-40	2019-06-24	2020-06-24	US41461520
☒	Amplifier	EMPOWER	BBS3Q7ELU	2019-12-16	2020-12-16	21151801
☒	High Power RF Amplifier	EMPOWER	BBS3Q8CCJ	2019-06-24	2020-06-24	1020
☒	Power Meter	HP	EPM-442A	2019-06-24	2021-06-24	1005
☒	Power Meter	HP	EPM-442A	2019-12-16	2020-12-16	GB37170267
☒	Power Sensor	HP	8481A	2019-12-16	2020-12-16	GB37170413
☒	Power Sensor	HP	8481A	2019-12-16	2020-12-16	US37294267
☒	Power Sensor	HP	8481A	2019-12-16	2020-12-16	3318A96566
☒	Power Sensor	HP	8481A	2019-12-16	2020-12-16	2702A65976
☒	Dual Directional Coupler	Agilent	778D-012	2019-12-16	2020-12-16	50228
☒	Directional Coupler	HP	772D	2019-06-24	2020-06-24	2889A01064
☒	Low Pass Filter 1GHz	Wainwright Instruments	WLK6-1000-1400-9000-60SS	2020-06-24	2021-06-24	165
☒	Low Pass Filter 1.5GHz	Micro LAB	LA-15N	2019-06-24	2020-06-24	2
☒	Low Pass Filter 3.0GHz	Micro LAB	LA-30N	2020-06-24	2021-06-24	2
☒	Low Pass Filter 6.0GHz	Micro LAB	LA-60N	2019-12-16	2020-12-16	03942
☒	Attenuators(10 dB)	WEINSCHTEL	23-10-34	2019-12-16	2020-12-16	BP4387
☒	Attenuators	Cemexwave	CFADC2603U5	2019-06-24	2020-06-24	C11711
☒	Dielectric Probe kit	SPEAG	DAK-3.5	2020-06-24	2021-06-24	
☒	8960 Series 10 Wireless Comms. Test Set	Agilent	E5515C	2019-11-19	2020-11-19	1092
☒	Wideband Radio Communication Tester	Rohde Schwarz	CMW500	2019-06-24	2020-06-24	GB41321164
☒	Wideband Radio Communication Tester	Rohde Schwarz	CMW500	2020-06-24	2021-06-24	
☒	Radio Communication Analyzer	Agilent	E5515E	2019-12-16	2020-12-16	101414
☒	Radio Communication Analyzer	Agilent	E5515E	2020-04-29	2021-04-29	147898
☒	Radio Communication Analyzer	KEYSIGHT	E7515A	2019-06-24	2020-06-24	MY52113012
☒	Radio Communication Analyzer	KEYSIGHT	E7515A	2019-07-05	2020-07-05	MY55210201
☒	Power Splitter	Anritsu	K241B	2019-12-16	2020-12-16	MY57270113
☒	Bluetooth Tester	TESCOM	TC-3000C	2019-12-16	2020-12-16	1301183
☒				2019-06-24	2020-06-24	3000C000563
☒				2020-06-24	2021-06-24	

NOTE(S):

- The E-field probe was calibrated by SPEAG, by temperature measurement procedure. Dipole Verification measurement is performed by DT&C before each test. The brain and muscle simulating material are calibrated by DT&C using the dielectric probe system and network analyzer to determine the conductivity and permittivity (dielectric constant) of the brain and muscle-equivalent material. Each equipment item was used solely within its respective calibration period.
- 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. 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.

14. MEASUREMENT UNCERTAINTIES

750 MHz Head (SN: 3933)

Error Description	Uncertainty value ±%	Probability Distribution	Divisor	(Ci) 1 g	(Ci) 10 g	Standard 1 g (± %)	Standard 10 g (± %)	vi 2 or Veff
Measurement System								
Probe calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Isotropy	1.3	Normal	1	1	1	1.3	1.3	∞
Boundary Effects	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Probe Linearity	0.3	Normal	1	1	1	0.3	0.3	∞
Probe modulation response	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Detection limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response time	0.8	Rectangular	√3	1	1	0.46	0.46	∞
Integration time	2.6	Rectangular	√3	1	1	1.5	1.5	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner	0.8	Rectangular	√3	1	1	0.46	0.46	∞
Probe Positioning	6.7	Rectangular	√3	1	1	3.9	3.9	∞
Algorithms for Max. SAR Eval.	4.0	Rectangular	√3	1	1	2.3	2.3	∞
Test Sample Related								
Device Positioning	2.9	Normal	1	1	1	2.9	2.9	145
Device Holder	3.6	Normal	1	1	1	3.6	3.6	5
Power Drift	5.0	Rectangular	√3	1	1	2.9	2.9	∞
SAR Scaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Physical Parameters								
Phantom Shell	7.6	Rectangular	√3	1	1	4.4	4.4	∞
SAR correction	0.0	Normal	1	1	0.84	0.0	0.0	∞
Liquid conductivity (Target)	5.0	Rectangular	√3	0.64	0.43	1.8	1.2	∞
Liquid conductivity (Meas.)	4.1	Normal	1	0.78	0.71	3.2	2.9	10
Liquid permittivity (Target)	5.0	Rectangular	√3	0.60	0.49	1.7	1.4	∞
Liquid permittivity (Meas.)	4.2	Normal	1	0.23	0.26	1.0	1.1	10
Temp. unc. - Conductivity	1.9	Rectangular	√3	0.78	0.71	0.9	0.8	∞
Temp. unc. - Permittivity	2.0	Rectangular	√3	0.23	0.26	0.3	0.3	∞
Combined Standard Uncertainty						12	11	330
Expanded Uncertainty (k=2)						24	22	

$$U(1\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2)$$

$$U(10\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 11\%$$

$$= 22\% \text{ (The confidence level is about 95 \% } k = 2)$$

The above measurement uncertainties are according to IEEE Std 1528

835 MHz Head (SN: 3933)

Error Description	Uncertainty value ±%	Probability Distribution	Divisor	(Ci) 1 g	(Ci) 10 g	Standard 1 g (± %)	Standard 10 g (± %)	vi 2 or Veff
Measurement System								
Probe calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Isotropy	1.3	Normal	1	1	1	1.3	1.3	∞
Boundary Effects	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Probe Linearity	0.3	Normal	1	1	1	0.3	0.3	∞
Probe modulation response	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Detection limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response time	0.8	Rectangular	√3	1	1	0.46	0.46	∞
Integration time	2.6	Rectangular	√3	1	1	1.5	1.5	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner	0.8	Rectangular	√3	1	1	0.46	0.46	∞
Probe Positioning	6.7	Rectangular	√3	1	1	3.9	3.9	∞
Algorithms for Max. SAR Eval.	4.0	Rectangular	√3	1	1	2.3	2.3	∞
Test Sample Related								
Device Positioning	2.9	Normal	1	1	1	2.9	2.9	145
Device Holder	3.6	Normal	1	1	1	3.6	3.6	5
Power Drift	5.0	Rectangular	√3	1	1	2.9	2.9	∞
SAR Scaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Physical Parameters								
Phantom Shell	7.6	Rectangular	√3	1	1	4.4	4.4	∞
SAR correction	0.0	Normal	1	1	0.84	0.0	0.0	∞
Liquid conductivity (Target)	5.0	Rectangular	√3	0.64	0.43	1.8	1.2	∞
Liquid conductivity (Meas.)	3.9	Normal	1	0.78	0.71	3.0	2.8	10
Liquid permittivity (Target)	5.0	Rectangular	√3	0.60	0.49	1.7	1.4	∞
Liquid permittivity (Meas.)	3.7	Normal	1	0.23	0.26	0.9	1.0	10
Temp. unc. - Conductivity	1.9	Rectangular	√3	0.78	0.71	0.9	0.8	∞
Temp. unc. - Permittivity	1.8	Rectangular	√3	0.23	0.26	0.2	0.3	∞
Combined Standard Uncertainty						12	11	330
Expanded Uncertainty (k=2)						24	22	

$$U(1\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

$$U(10\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 11\%$$

$$= 22\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

The above measurement uncertainties are according to IEEE Std 1528

1 800 MHz Head (SN: 3328)

Error Description	Uncertainty value $\pm\%$	Probability Distribution	Divisor	(Ci) 1 g	(Ci) 10 g	Standard 1 g ($\pm\%$)	Standard 10 g ($\pm\%$)	vi 2 or Veff
Measurement System								
Probe calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Isotropy	1.3	Normal	1	1	1	1.3	1.3	∞
Boundary Effects	2.0	Rectangular	$\sqrt{3}$	1	1	1.2	1.2	∞
Probe Linearity	0.3	Normal	1	1	1	0.3	0.3	∞
Probe modulation response	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Detection limits	0.25	Rectangular	$\sqrt{3}$	1	1	0.14	0.14	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response time	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Integration time	2.6	Rectangular	$\sqrt{3}$	1	1	1.5	1.5	∞
RF Ambient Conditions – Noise	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
Probe Positioner	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Probe Positioning	6.7	Rectangular	$\sqrt{3}$	1	1	3.9	3.9	∞
Algorithms for Max. SAR Eval.	4.0	Rectangular	$\sqrt{3}$	1	1	2.3	2.3	∞
Test Sample Related								
Device Positioning	2.9	Normal	1	1	1	2.9	2.9	145
Device Holder	3.6	Normal	1	1	1	3.6	3.6	5
Power Drift	5.0	Rectangular	$\sqrt{3}$	1	1	2.9	2.9	∞
SAR Scaling	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Physical Parameters								
Phantom Shell	7.6	Rectangular	$\sqrt{3}$	1	1	4.4	4.4	∞
SAR correction	0.0	Normal	1	1	0.84	0.0	0.0	∞
Liquid conductivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
Liquid conductivity (Meas.)	4.0	Normal	1	0.78	0.71	3.1	2.8	10
Liquid permittivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.60	0.49	1.7	1.4	∞
Liquid permittivity (Meas.)	4.1	Normal	1	0.23	0.26	0.9	1.1	10
Temp. unc. - Conductivity	1.9	Rectangular	$\sqrt{3}$	0.78	0.71	0.9	0.8	∞
Temp. unc. - Permittivity	1.8	Rectangular	$\sqrt{3}$	0.23	0.26	0.2	0.3	∞
Combined Standard Uncertainty						12	11	330
Expanded Uncertainty (k=2)						24	22	

$$U(1\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

$$U(10\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 11\%$$

$$= 22\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

The above measurement uncertainties are according to IEEE Std 1528

1 900 MHz Head (SN: 3328)

Error Description	Uncertainty value $\pm\%$	Probability Distribution	Divisor	(Ci) 1 g	(Ci) 10 g	Standard 1 g ($\pm\%$)	Standard 10 g ($\pm\%$)	vi 2 or Veff
Measurement System								
Probe calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Isotropy	1.3	Normal	1	1	1	1.3	1.3	∞
Boundary Effects	2.0	Rectangular	$\sqrt{3}$	1	1	1.2	1.2	∞
Probe Linearity	0.3	Normal	1	1	1	0.3	0.3	∞
Probe modulation response	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Detection limits	0.25	Rectangular	$\sqrt{3}$	1	1	0.14	0.14	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response time	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Integration time	2.6	Rectangular	$\sqrt{3}$	1	1	1.5	1.5	∞
RF Ambient Conditions – Noise	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
Probe Positioner	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Probe Positioning	6.7	Rectangular	$\sqrt{3}$	1	1	3.9	3.9	∞
Algorithms for Max. SAR Eval.	4.0	Rectangular	$\sqrt{3}$	1	1	2.3	2.3	∞
Test Sample Related								
Device Positioning	2.9	Normal	1	1	1	2.9	2.9	145
Device Holder	3.6	Normal	1	1	1	3.6	3.6	5
Power Drift	5.0	Rectangular	$\sqrt{3}$	1	1	2.9	2.9	∞
SAR Scaling	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Physical Parameters								
Phantom Shell	7.6	Rectangular	$\sqrt{3}$	1	1	4.4	4.4	∞
SAR correction	0.0	Normal	1	1	0.84	0.0	0.0	∞
Liquid conductivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
Liquid conductivity (Meas.)	3.9	Normal	1	0.78	0.71	3.0	2.8	10
Liquid permittivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.60	0.49	1.7	1.4	∞
Liquid permittivity (Meas.)	4.0	Normal	1	0.23	0.26	0.9	1.0	10
Temp. unc. - Conductivity	1.8	Rectangular	$\sqrt{3}$	0.78	0.71	0.8	0.7	∞
Temp. unc. - Permittivity	1.8	Rectangular	$\sqrt{3}$	0.23	0.26	0.2	0.3	∞
Combined Standard Uncertainty						12	11	330
Expanded Uncertainty (k=2)						24	22	

$$U(1\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

$$U(10\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 11\%$$

$$= 22\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

The above measurement uncertainties are according to IEEE Std 1528

2 450 MHz Head (SN: 3328)

Error Description	Uncertainty value $\pm\%$	Probability Distribution	Divisor	(Ci) 1 g	(Ci) 10 g	Standard 1 g ($\pm\%$)	Standard 10 g ($\pm\%$)	vi 2 or Veff
Measurement System								
Probe calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Isotropy	1.3	Normal	1	1	1	1.3	1.3	∞
Boundary Effects	2.0	Rectangular	$\sqrt{3}$	1	1	1.2	1.2	∞
Probe Linearity	0.3	Normal	1	1	1	0.3	0.3	∞
Probe modulation response	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Detection limits	0.25	Rectangular	$\sqrt{3}$	1	1	0.14	0.14	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response time	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Integration time	2.6	Rectangular	$\sqrt{3}$	1	1	1.5	1.5	∞
RF Ambient Conditions – Noise	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
Probe Positioner	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Probe Positioning	6.7	Rectangular	$\sqrt{3}$	1	1	3.9	3.9	∞
Algorithms for Max. SAR Eval.	4.0	Rectangular	$\sqrt{3}$	1	1	2.3	2.3	∞
Test Sample Related								
Device Positioning	2.9	Normal	1	1	1	2.9	2.9	145
Device Holder	3.6	Normal	1	1	1	3.6	3.6	5
Power Drift	5.0	Rectangular	$\sqrt{3}$	1	1	2.9	2.9	∞
SAR Scaling	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Physical Parameters								
Phantom Shell	7.6	Rectangular	$\sqrt{3}$	1	1	4.4	4.4	∞
SAR correction	0.0	Normal	1	1	0.84	0.0	0.0	∞
Liquid conductivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
Liquid conductivity (Meas.)	4.1	Normal	1	0.78	0.71	3.2	2.9	10
Liquid permittivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.60	0.49	1.7	1.4	∞
Liquid permittivity (Meas.)	4.0	Normal	1	0.23	0.26	0.9	1.0	10
Temp. unc. - Conductivity	1.7	Rectangular	$\sqrt{3}$	0.78	0.71	0.8	0.7	∞
Temp. unc. - Permittivity	1.8	Rectangular	$\sqrt{3}$	0.23	0.26	0.2	0.3	∞
Combined Standard Uncertainty						12	11	330
Expanded Uncertainty (k=2)						24	22	

$$U(1\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

$$U(10\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 11\%$$

$$= 22\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

The above measurement uncertainties are according to IEEE Std 1528

2 600 MHz Head (SN: 3328)

Error Description	Uncertainty value $\pm\%$	Probability Distribution	Divisor	(Ci) 1 g	(Ci) 10 g	Standard 1 g ($\pm\%$)	Standard 10 g ($\pm\%$)	vi 2 or Veff
Measurement System								
Probe calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Isotropy	1.3	Normal	1	1	1	1.3	1.3	∞
Boundary Effects	2.0	Rectangular	$\sqrt{3}$	1	1	1.2	1.2	∞
Probe Linearity	0.3	Normal	1	1	1	0.3	0.3	∞
Probe modulation response	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Detection limits	0.25	Rectangular	$\sqrt{3}$	1	1	0.14	0.14	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response time	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Integration time	2.6	Rectangular	$\sqrt{3}$	1	1	1.5	1.5	∞
RF Ambient Conditions – Noise	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
Probe Positioner	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Probe Positioning	6.7	Rectangular	$\sqrt{3}$	1	1	3.9	3.9	∞
Algorithms for Max. SAR Eval.	4.0	Rectangular	$\sqrt{3}$	1	1	2.3	2.3	∞
Test Sample Related								
Device Positioning	2.9	Normal	1	1	1	2.9	2.9	145
Device Holder	3.6	Normal	1	1	1	3.6	3.6	5
Power Drift	5.0	Rectangular	$\sqrt{3}$	1	1	2.9	2.9	∞
SAR Scaling	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Physical Parameters								
Phantom Shell	7.6	Rectangular	$\sqrt{3}$	1	1	4.4	4.4	∞
SAR correction	0.0	Normal	1	1	0.84	0.0	0.0	∞
Liquid conductivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
Liquid conductivity (Meas.)	4.2	Normal	1	0.78	0.71	3.3	3.0	10
Liquid permittivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.60	0.49	1.7	1.4	∞
Liquid permittivity (Meas.)	4.1	Normal	1	0.23	0.26	0.9	1.1	10
Temp. unc. - Conductivity	1.8	Rectangular	$\sqrt{3}$	0.78	0.71	0.8	0.7	∞
Temp. unc. - Permittivity	1.9	Rectangular	$\sqrt{3}$	0.23	0.26	0.3	0.3	∞
Combined Standard Uncertainty						12	12	330
Expanded Uncertainty (k=2)						24	24	

$$U(1\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

$$U(10\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

The above measurement uncertainties are according to IEEE Std 1528

5 300 MHz Head (SN: 3933)

Error Description	Uncertainty value $\pm\%$	Probability Distribution	Divisor	(Ci) 1 g	(Ci) 10 g	Standard 1 g ($\pm\%$)	Standard 10 g ($\pm\%$)	vi 2 or Veff
Measurement System								
Probe calibration	6.55	Normal	1	1	1	6.6	6.6	∞
Isotropy	1.3	Normal	1	1	1	1.3	1.3	∞
Boundary Effects	2.0	Rectangular	$\sqrt{3}$	1	1	1.2	1.2	∞
Probe Linearity	0.3	Normal	1	1	1	0.3	0.3	∞
Probe modulation response	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Detection limits	0.25	Rectangular	$\sqrt{3}$	1	1	0.14	0.14	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response time	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Integration time	2.6	Rectangular	$\sqrt{3}$	1	1	1.5	1.5	∞
RF Ambient Conditions – Noise	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
Probe Positioner	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Probe Positioning	6.7	Rectangular	$\sqrt{3}$	1	1	3.9	3.9	∞
Algorithms for Max. SAR Eval.	4.0	Rectangular	$\sqrt{3}$	1	1	2.3	2.3	∞
Test Sample Related								
Device Positioning	2.9	Normal	1	1	1	2.9	2.9	145
Device Holder	3.6	Normal	1	1	1	3.6	3.6	5
Power Drift	5.0	Rectangular	$\sqrt{3}$	1	1	2.9	2.9	∞
SAR Scaling	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Physical Parameters								
Phantom Shell	7.6	Rectangular	$\sqrt{3}$	1	1	4.4	4.4	∞
SAR correction	0.0	Normal	1	1	0.84	0.0	0.0	∞
Liquid conductivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
Liquid conductivity (Meas.)	4.0	Normal	1	0.78	0.71	3.1	2.8	10
Liquid permittivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.60	0.49	1.7	1.4	∞
Liquid permittivity (Meas.)	4.2	Normal	1	0.23	0.26	1.0	1.1	10
Temp. unc. - Conductivity	1.8	Rectangular	$\sqrt{3}$	0.78	0.71	0.8	0.7	∞
Temp. unc. - Permittivity	1.8	Rectangular	$\sqrt{3}$	0.23	0.26	0.3	0.3	∞
Combined Standard Uncertainty						12	12	330
Expanded Uncertainty (k=2)						24	24	

$$U(1\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

= 24 % (The confidence level is about 95 % $k = 2$)

$$U(10\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

= 24 % (The confidence level is about 95 % $k = 2$)

The above measurement uncertainties are according to IEEE Std 1528

5 600 MHz Head (SN: 3933)

Error Description	Uncertainty value $\pm\%$	Probability Distribution	Divisor	(Ci) 1 g	(Ci) 10 g	Standard 1 g ($\pm\%$)	Standard 10 g ($\pm\%$)	vi 2 or Veff
Measurement System								
Probe calibration	6.55	Normal	1	1	1	6.6	6.6	∞
Isotropy	1.3	Normal	1	1	1	1.3	1.3	∞
Boundary Effects	2.0	Rectangular	$\sqrt{3}$	1	1	1.2	1.2	∞
Probe Linearity	0.3	Normal	1	1	1	0.3	0.3	∞
Probe modulation response	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Detection limits	0.25	Rectangular	$\sqrt{3}$	1	1	0.14	0.14	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response time	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Integration time	2.6	Rectangular	$\sqrt{3}$	1	1	1.5	1.5	∞
RF Ambient Conditions – Noise	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
Probe Positioner	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Probe Positioning	6.7	Rectangular	$\sqrt{3}$	1	1	3.9	3.9	∞
Algorithms for Max. SAR Eval.	4.0	Rectangular	$\sqrt{3}$	1	1	2.3	2.3	∞
Test Sample Related								
Device Positioning	2.9	Normal	1	1	1	2.9	2.9	145
Device Holder	3.6	Normal	1	1	1	3.6	3.6	5
Power Drift	5.0	Rectangular	$\sqrt{3}$	1	1	2.9	2.9	∞
SAR Scaling	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Physical Parameters								
Phantom Shell	7.6	Rectangular	$\sqrt{3}$	1	1	4.4	4.4	∞
SAR correction	0.0	Normal	1	1	0.84	0.0	0.0	∞
Liquid conductivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
Liquid conductivity (Meas.)	4.0	Normal	1	0.78	0.71	3.1	2.8	10
Liquid permittivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.60	0.49	1.7	1.4	∞
Liquid permittivity (Meas.)	4.3	Normal	1	0.23	0.26	1.0	1.1	10
Temp. unc. - Conductivity	1.8	Rectangular	$\sqrt{3}$	0.78	0.71	0.8	0.7	∞
Temp. unc. - Permittivity	1.9	Rectangular	$\sqrt{3}$	0.23	0.26	0.3	0.3	∞
Combined Standard Uncertainty						12	12	330
Expanded Uncertainty (k=2)						24	24	

$$U(1\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

$$U(10\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

The above measurement uncertainties are according to IEEE Std 1528

5 800 MHz Head (SN: 3933)

Error Description	Uncertainty value $\pm\%$	Probability Distribution	Divisor	(Ci) 1 g	(Ci) 10 g	Standard 1 g ($\pm\%$)	Standard 10 g ($\pm\%$)	vi 2 or Veff
Measurement System								
Probe calibration	6.55	Normal	1	1	1	6.6	6.6	∞
Isotropy	1.3	Normal	1	1	1	1.3	1.3	∞
Boundary Effects	2.0	Rectangular	$\sqrt{3}$	1	1	1.2	1.2	∞
Probe Linearity	0.3	Normal	1	1	1	0.3	0.3	∞
Probe modulation response	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Detection limits	0.25	Rectangular	$\sqrt{3}$	1	1	0.14	0.14	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response time	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Integration time	2.6	Rectangular	$\sqrt{3}$	1	1	1.5	1.5	∞
RF Ambient Conditions – Noise	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
Probe Positioner	0.8	Rectangular	$\sqrt{3}$	1	1	0.46	0.46	∞
Probe Positioning	6.7	Rectangular	$\sqrt{3}$	1	1	3.9	3.9	∞
Algorithms for Max. SAR Eval.	4.0	Rectangular	$\sqrt{3}$	1	1	2.3	2.3	∞
Test Sample Related								
Device Positioning	2.9	Normal	1	1	1	2.9	2.9	145
Device Holder	3.6	Normal	1	1	1	3.6	3.6	5
Power Drift	5.0	Rectangular	$\sqrt{3}$	1	1	2.9	2.9	∞
SAR Scaling	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Physical Parameters								
Phantom Shell	7.6	Rectangular	$\sqrt{3}$	1	1	4.4	4.4	∞
SAR correction	0.0	Normal	1	1	0.84	0.0	0.0	∞
Liquid conductivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
Liquid conductivity (Meas.)	3.8	Normal	1	0.78	0.71	3.0	2.7	10
Liquid permittivity (Target)	5.0	Rectangular	$\sqrt{3}$	0.60	0.49	1.7	1.4	∞
Liquid permittivity (Meas.)	4.2	Normal	1	0.23	0.26	1.0	1.1	10
Temp. unc. - Conductivity	1.9	Rectangular	$\sqrt{3}$	0.78	0.71	0.9	0.8	∞
Temp. unc. - Permittivity	1.7	Rectangular	$\sqrt{3}$	0.23	0.26	0.2	0.3	∞
Combined Standard Uncertainty						12	12	330
Expanded Uncertainty (k=2)						24	24	

$$U(1\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

$$U(10\text{ g}) = k \cdot u_c$$

$$= 2 \cdot 12\%$$

$$= 24\% \text{ (The confidence level is about 95 \% } k = 2 \text{)}$$

The above measurement uncertainties are according to IEEE Std 1528

15. CONCLUSION

Measurement Conclusion

The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the FCC. These measurements are taken to simulate the RF effects exposure under the worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The tested device complies with the requirements in respect to all parameters subject to the test. The test results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are every 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 impossible biological effect 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 innumerable factors may interact to determine the specific biological outcome of an exposure to electromagnetic fields, any protection guide shall consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

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APPENDIX A. – Probe Calibration Data

**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client **DT&C (Dymstec)**

Certificate No: **EX3-3933_Sep19**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3933**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-14.v5, QA CAL-23.v5, QA CAL-25.v7**
Calibration procedure for dosimetric E-field probes

Calibration date: **September 27, 2019**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature ($22 \pm 3^\circ\text{C}$) and humidity $< 70\%$.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	03-Apr-19 (No. 217-02892/02893)	Apr-20
Power sensor NRP-Z91	SN: 103244	03-Apr-19 (No. 217-02892)	Apr-20
Power sensor NRP-Z91	SN: 103245	03-Apr-19 (No. 217-02893)	Apr-20
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-19 (No. 217-02894)	Apr-20
DAE4	SN: 660	19-Dec-18 (No. DAE4-660_Dec18)	Dec-19
Reference Probe ES3DV2	SN: 3013	31-Dec-18 (No. ES3-3013_Dec18)	Dec-19
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-18)	In house check: Oct-19

Calibrated by:	Name Claudio Leubler	Function Laboratory Technician	Signature
Approved by:	Katja Pokovic	Technical Manager	
Issued: September 30, 2019			
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.			

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland



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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization ϕ	ϕ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z} = NORM_{x,y,z} * frequency_response** (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP_{x,y,z}**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,y,z}**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM_x (no uncertainty required).

EX3DV4 – SN:3933

September 27, 2019

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3933

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.49	0.52	0.19	± 10.1 %
DCP (mV) ^B	105.1	100.3	95.6	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB/μV	C	D dB	VR mV	Max dev.	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	163.3	± 2.2 %	± 4.7 %
		Y	0.00	0.00	1.00		166.6		
		Z	0.00	0.00	1.00		158.8		
10352- AAA	Pulse Waveform (200Hz, 10%)	X	15.00	90.30	22.21	10.00	60.0	± 3.2 %	± 9.6 %
		Y	15.00	89.45	22.16		60.0		
		Z	15.00	90.07	22.52		60.0		
10353- AAA	Pulse Waveform (200Hz, 20%)	X	15.00	93.23	22.50	6.99	80.0	± 2.1 %	± 9.6 %
		Y	15.00	90.02	21.08		80.0		
		Z	15.00	92.33	21.94		80.0		
10354- AAA	Pulse Waveform (200Hz, 40%)	X	15.00	102.11	25.43	3.98	95.0	± 2.4 %	± 9.6 %
		Y	15.00	91.85	20.31		95.0		
		Z	15.00	161.21	54.32		95.0		
10355- AAA	Pulse Waveform (200Hz, 60%)	X	15.00	127.83	36.23	2.22	120.0	± 3.0 %	± 9.6 %
		Y	15.00	100.88	23.08		120.0		
		Z	0.11	60.00	30.00		120.0		
10387- AAA	QPSK Waveform, 1 MHz	X	15.00	94.61	19.88	0.00	150.0	± 4.9 %	± 9.6 %
		Y	0.98	66.33	11.74		150.0		
		Z	0.03	60.00	30.00		150.0		
10388- AAA	QPSK Waveform, 10 MHz	X	4.47	82.57	22.97	0.00	150.0	± 4.7 %	± 9.6 %
		Y	2.77	72.49	18.16		150.0		
		Z	15.00	116.88	37.35		150.0		
10396- AAA	64-QAM Waveform, 100 kHz	X	3.14	73.89	21.30	3.01	150.0	± 3.7 %	± 9.6 %
		Y	3.97	75.80	21.70		150.0		
		Z	15.00	121.14	42.19		150.0		
10399- AAA	64-QAM Waveform, 40 MHz	X	4.01	70.75	18.20	0.00	150.0	± 3.5 %	± 9.6 %
		Y	3.70	68.48	16.76		150.0		
		Z	6.59	83.14	25.05		150.0		
10414- AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.96	67.04	16.71	0.00	150.0	± 4.5 %	± 9.6 %
		Y	4.95	66.11	16.05		150.0		
		Z	5.53	71.03	19.84		150.0		

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6).

^B Numerical linearization parameter: uncertainty not required.

^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

EX3DV4– SN:3933

September 27, 2019

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3933

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 ms. V^{-2}	T2 ms. V^{-1}	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	37.1	274.02	35.44	16.09	0.81	5.10	0.05	0.40	1.01
Y	48.6	371.39	37.26	21.32	1.16	5.10	0.67	0.53	1.01
Z	27.0	217.61	42.23	8.67	1.66	5.07	0.00	0.24	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	76.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

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DASY/EASY - Parameters of Probe: EX3DV4 - SN:3933

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	10.68	10.68	10.68	0.45	0.86	± 12.0 %
835	41.5	0.90	10.32	10.32	10.32	0.41	0.90	± 12.0 %
900	41.5	0.97	10.01	10.01	10.01	0.52	0.80	± 12.0 %
1750	40.1	1.37	8.87	8.87	8.87	0.34	0.87	± 12.0 %
1900	40.0	1.40	8.57	8.57	8.57	0.30	0.87	± 12.0 %
2300	39.5	1.67	8.19	8.19	8.19	0.29	0.90	± 12.0 %
2450	39.2	1.80	7.84	7.84	7.84	0.33	0.90	± 12.0 %
2600	39.0	1.96	7.62	7.62	7.62	0.25	0.90	± 12.0 %
3500	37.9	2.91	7.27	7.27	7.27	0.30	1.35	± 13.1 %
3700	37.7	3.12	6.99	6.99	6.99	0.30	1.35	± 13.1 %
5200	36.0	4.66	5.29	5.29	5.29	0.40	1.80	± 13.1 %
5300	35.9	4.76	5.10	5.10	5.10	0.40	1.80	± 13.1 %
5500	35.6	4.96	4.95	4.95	4.95	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.80	4.80	4.80	0.40	1.80	± 13.1 %
5800	35.3	5.27	4.75	4.75	4.75	0.40	1.80	± 13.1 %

^C Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

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DASY/EASY - Parameters of Probe: EX3DV4 - SN:3933

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	10.44	10.44	10.44	0.45	0.80	± 12.0 %
835	55.2	0.97	10.24	10.24	10.24	0.40	0.80	± 12.0 %
900	55.0	1.05	10.14	10.14	10.14	0.47	0.80	± 12.0 %
1750	53.4	1.49	8.64	8.64	8.64	0.40	0.87	± 12.0 %
1900	53.3	1.52	8.15	8.15	8.15	0.40	0.87	± 12.0 %
2300	52.9	1.81	7.94	7.94	7.94	0.39	0.90	± 12.0 %
2450	52.7	1.95	7.75	7.75	7.75	0.38	0.90	± 12.0 %
2600	52.5	2.16	7.57	7.57	7.57	0.31	0.90	± 12.0 %
3500	51.3	3.31	6.88	6.88	6.88	0.40	1.35	± 13.1 %
3700	51.0	3.55	6.82	6.82	6.82	0.40	1.35	± 13.1 %
5200	49.0	5.30	4.66	4.66	4.66	0.50	1.90	± 13.1 %
5300	48.9	5.42	4.56	4.56	4.56	0.50	1.90	± 13.1 %
5500	48.6	5.65	4.20	4.20	4.20	0.50	1.90	± 13.1 %
5600	48.5	5.77	4.05	4.05	4.05	0.50	1.90	± 13.1 %
5800	48.2	6.00	4.13	4.13	4.13	0.50	1.90	± 13.1 %

^C Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

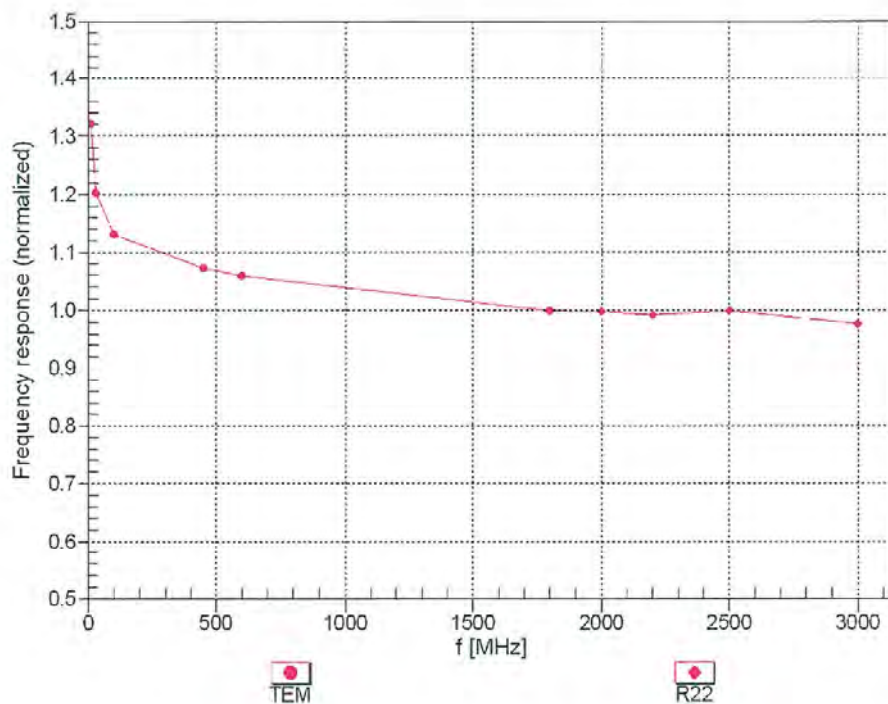
^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

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Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

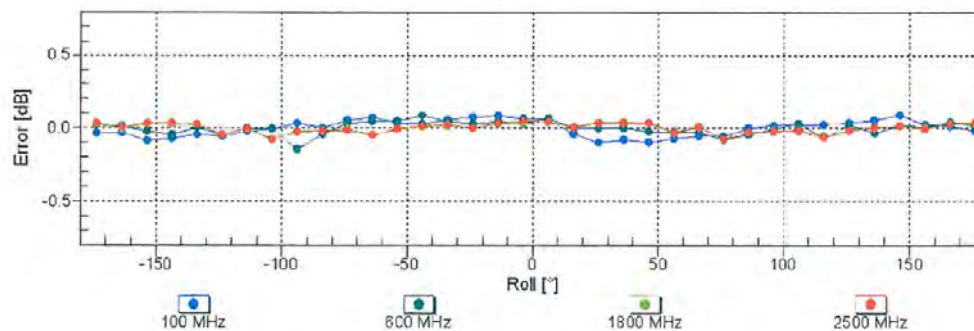
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Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz,TEM

f=1800 MHz,R22

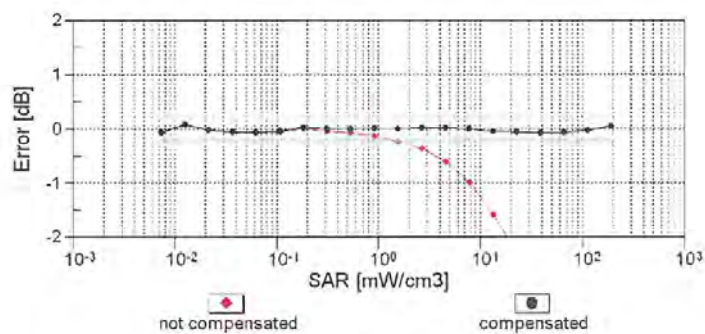
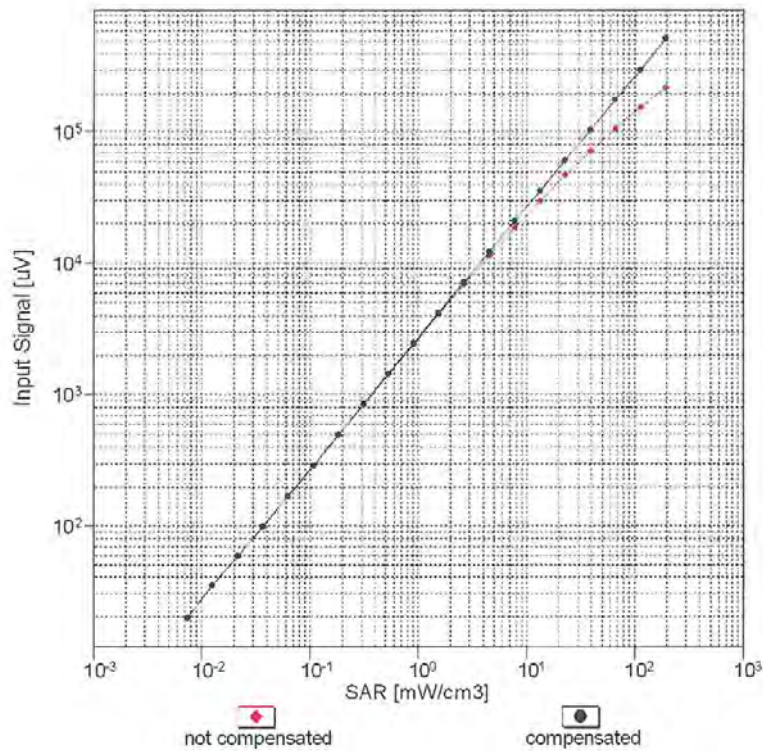


Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

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Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f_{\text{eval}} = 1900 \text{ MHz}$)

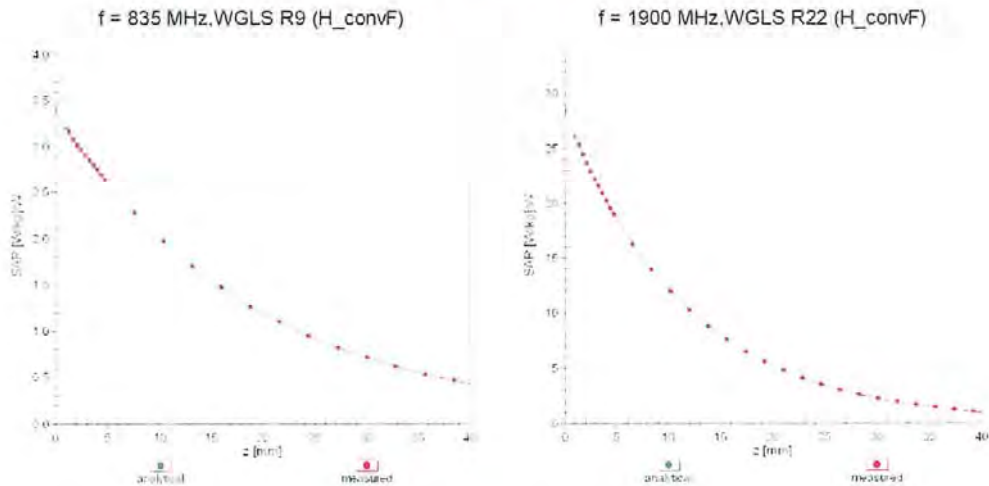


Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

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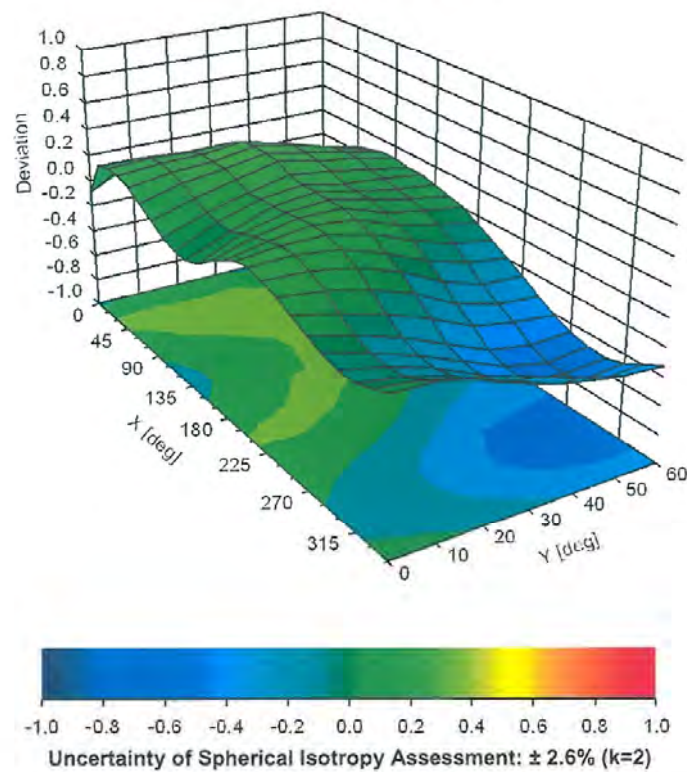
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Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), $f = 900 \text{ MHz}$



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Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %

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10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %

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10220	CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 9.6 %
10223	CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 9.6 %
10225	CAB	UMTS-FDD (HSPA+)	WCDMA	5.97	± 9.6 %
10226	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10240	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	± 9.6 %
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	± 9.6 %
10256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10269	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
10270	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	± 9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	± 9.6 %
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
10277	CAA	PHS (QPSK)	PHS	11.81	± 9.6 %
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	± 9.6 %
10279	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	± 9.6 %
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	± 9.6 %
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	± 9.6 %
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 %
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 %
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	± 9.6 %