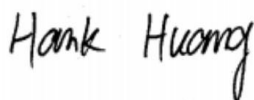


FCC SAR Test Report

APPLICANT : COOSEA GROUP (HK) COMPANY LIMITED
EQUIPMENT : Feature Phone
BRAND NAME : Consumer Cellular
MODEL NAME : SN331CC
FCC ID : 2A28USN331CC
STANDARD : FCC 47 CFR Part 2 (2.1093)

We, Sporton International Inc. (Shenzhen), would like to declare that the tested sample has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Shenzhen), the test report shall not be reproduced except in full.



Approved by: Hank Huang

Sporton International Inc. (Shenzhen)

**1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055
People's Republic of China**



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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA5N2009	Rev. 02	Initial issue of report.	Mar. 11, 2026

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **COOSEA GROUP (HK) COMPANY LIMITED, Feature Phone, SN331CC**, are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 10mm)	Body-worn (Separation 15mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
			1g SAR (W/kg)			
Licensed	WCDMA	WCDMA II	0.18	0.92	0.44	1.55
		WCDMA IV	0.19	0.99	0.42	
		WCDMA V	0.72	0.93	0.57	
	LTE	LTE Band 2	0.22	0.92	0.36	
		LTE Band 5	0.85	0.95	0.73	
		LTE Band 7	<0.10	0.51	0.14	
		LTE Band 12/17	0.20	0.87	0.56	
		LTE Band 14	0.43	0.98	0.70	
		LTE Band 30	0.51	0.93	0.47	
		LTE Band 66/4	0.20	0.91	0.34	
	5G NR	FR1 n2	0.31	0.96	0.34	
		FR1 n5	0.78	0.98	0.71	
		FR1 n30	0.49	0.99	0.54	
		FR1 n66	0.20	0.95	0.36	
		FR1 n77	0.97	0.95	0.37	
DTS	WLAN	2.4GHz WLAN	0.44	0.35	0.24	1.51
NII		5GHz WLAN	0.45	0.48	0.36	1.55
DSS	Bluetooth	2.4GHz Bluetooth	<0.10	<0.10	<0.10	1.42

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
NII	WLAN	5GHz WLAN	1.32	-
Date of Testing:			2025/12/19 ~ 2026/3/10	

Remark:

- This device supports LTE B4 / B17 and B66 / B12. Since the supported frequency span for LTE B4 / B17 falls completely within the supports frequency span for LTE B66 / B12, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66 / B12.

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

2. Administration Data

Sporton International Inc. (Shenzhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Testing Laboratory			
Test Firm	Sporton International Inc. (Shenzhen)		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR05-SZ	CN1256	421272

Applicant	
Company Name	COOSEA GROUP (HK) COMPANY LIMITED
Address	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL

Manufacturer	
Company Name	COOSEA GROUP (HK) COMPANY LIMITED
Address	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL

3. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards:

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Feature Phone
Brand Name	Consumer Cellular
Model Name	SN331CC
FCC ID	2A28USN331CC
IMEI Code	351341590004217/351341590004225, 351341590004878/351341590004886
Wireless Technology and Frequency Range	WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n77: 3450 MHz ~ 3980 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5700 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Mode	RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink is support) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ac VHT20/VHT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
EUT Stage	Production Unit
Remark: 1. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications. 2. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only). 3. For dual SIM card mobile supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). 4. The device implements receiver detection for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E. 5. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission. 6. This device only supports HPUE mode for 5G NR n77 with higher power, so power class 2 was chosen to perform full SAR testing and power class 2 SAR can represent power class 3 SAR. 7. This device supports 5G NR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.	

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20, 25, 30, 40
	n5	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 25, 30, 40
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30, 40
	n5	FDD	15	5, 10, 15, 20
	n30	FDD	15	5, 10
	n66	FDD	15	5, 10, 15, 20, 25, 30, 40
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05									
FCC ID		2A28USN331CC							
Equipment Name		Feature Phone							
Operating Frequency Range of each LTE transmission band		LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 66: 1710 MHz ~ 1780 MHz							
Channel Bandwidth		LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 30: 5MHz, 10MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz							
uplink modulations used		QPSK / 16QAM / 64QAM / 256QAM							
LTE Voice / Data requirements		Voice and Data							
LTE Release Version		R15							
CA Support		Yes, Uplink and Downlink							
LTE MPR permanently built-in by design		Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3							
		Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)
			1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
		QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
		16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
		16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
		64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
		64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
		256 QAM	≥ 1						≤ 5
LTE A-MPR		In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)							
Spectrum plots for RB configuration		A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.							
Power reduction applied to satisfy SAR compliance		Yes, when operating in receiver/hotspot detect mechanism, head/body -worn /hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 12.							
LTE Carrier Aggregation Combinations		Inter-Band possible combinations and the detail power verification please referred to section 12.							
LTE Carrier Information	Carrier Aggregation	Additional	1. This device supports LTE Carrier Aggregation (CA) in the uplink for Inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were						

evaluated per FCC Guidance.
2. This device supports maximum of 2 carriers in the uplink.

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	826.5	20450	826.5	20450	829
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	846.5	20600	846.5	20600	844
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2507.5	20850	2507.5	20850	2510
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2562.5	21350	2562.5	21350	2560
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	701.5	23060	701.5	23060	704
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	713.5	23130	713.5	23130	711
LTE Band 14												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)					
L	23305		790.5		23330		793					
M	23330		793									
H	23355		795.5									
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)					
L	23755		706.5		23780		709					
M	23790		710		23790		710					
H	23825		713.5		23800		711					
LTE Band 30												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)					
L	27685		2307.5		27710		2310					
M	27710		2310									
H	27735		2312.5									
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770

<For LTE Overlap Bands Description>
1) LTE Bands BW

Band	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 12	Yes	Yes	Yes	Yes		
LTE Band 17			Yes	Yes		

2) LTE Bands tune up:

Band	Ant	Head SA	Hotspot Extremity Body worn SA
		Receiver on_Full	Receiver off
		Tune-up Limit	Tune-up Limit
LTE Band 4	Ant 0	25	19
LTE Band 66		25	19
LTE Band 12	Ant 0	25	25
LTE Band 17		25	25

Band	Ant	Head NSA<E Inter CA	Hotspot Extremity Body worn NSA<E Inter CA
		Receiver on_Full	Receiver off
		Tune-up Limit	Tune-up Limit
LTE Band 4	Ant 5	25	22.5
LTE Band 66		25	22.5

4.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n77 : 3450 MHz ~ 3980 MHz
Channel Bandwidth	The detail please refers to section 4.1 5G NR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B5/30/12/2/14/66
LTE Anchor Bands for n5	LTE B2/66/30
LTE Anchor Bands for n66	LTE B2/30/12/14/66
LTE Anchor Bands for n77	LTE B2/5/30/12/14/66

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band														
NR Band 2														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	374000	1870
M	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378000	1890

	NR Band 5							
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839

NR Band 30 SCS15KHz					
	Bandwidth 5MHz			Bandwidth 10MHz	
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)
L	461500	2307.5		462000	2310
M	462000	2310			
H	462500	2312.5			

NR Band 66														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	346000	1730
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352000	1760



NR Band 77																					
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649334	3740.01	649668	3745.02	650000	3750
M 656000	3840	656000	3840	656000	3840	656000	3840.00	656000	3840.00	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H 665000	3975	664832	3972.48	664666	3969.99	664500	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	662666	3939.99	662332	3934.98	662000	3930

For Part96

NR Band 77																					
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 637000	3555	637168	3557.52	637334	3560.01	637500	3562.5	637668	3565.02	638000	3570	638334	3575.01	638668	3580.02	639334	3590.01	639668	3595.02	640000	3600
M 641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H 646332	3694.98	646166	3692.49	646000	3690	645832	3687.48	645666	3684.99	645332	3624.99	645000	3675	644666	3669.99	644000	3660	643666	3654.99	643332	3649.98

For <3450 MHz ~ 3550 MHz >

NR Band 77																					
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632668	3490.02	633000	3495		
M 633332	3499.98	633332	3499.98	633334	3500.01	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H 636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634000	3510	633666	3504.99		

5. RF Exposure Limits

5.1 Uncontrolled Environment

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

5.2 Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The 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.

Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

6. Specific Absorption Rate (SAR)

6.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

6.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

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

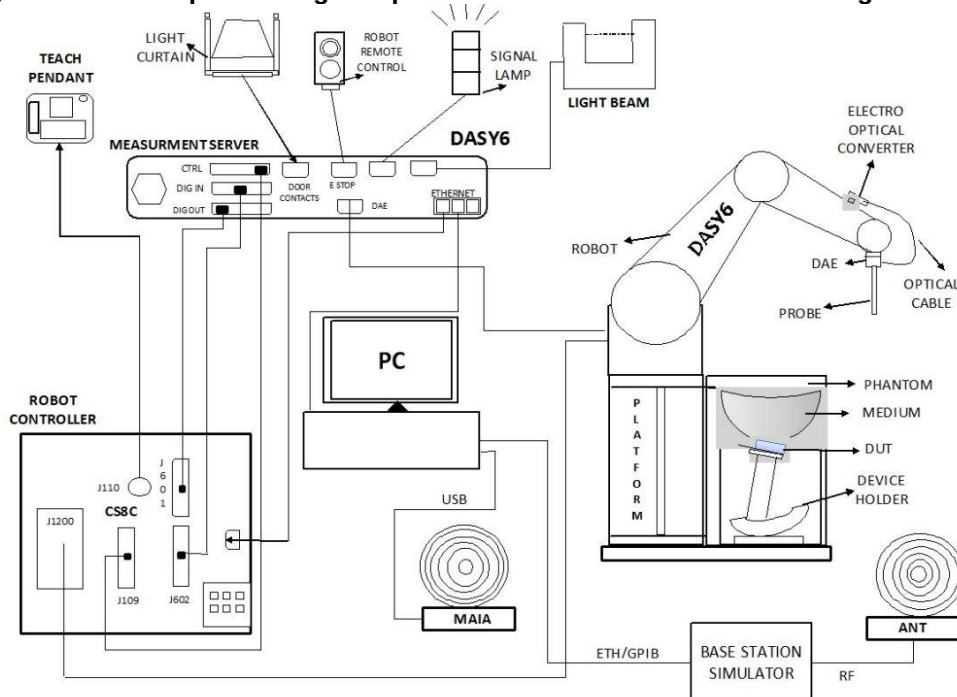
SAR is expressed in units of Watts per kilogram (W/kg)

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

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

7. System Description and Setup

The DASY system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win7 or Win10 and the DASY5 or DASY6 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

7.1 E-Field Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG). The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 MHz – 10 GHz Linearity: ± 0.2 dB (30 MHz – 10 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g – >100 mW/g Linearity: ± 0.2 dB (noise: typically <1 μ W/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

7.2 Data Acquisition Electronics (DAE)

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.



Photo of DAE

7.3 Phantom

<SAM Twin Phantom>

Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm	
Filling Volume	Approx. 25 liters	
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet	
Measurement Areas	Left Hand, Right Hand, Flat Phantom	

The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

<ELI Phantom>

Shell Thickness	2 ± 0.2 mm (sagging: <1%)	
Filling Volume	Approx. 30 liters	
Dimensions	Major ellipse axis: 600 mm Minor axis: 400 mm	

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices or for evaluating transmitters operating at low frequencies. ELI is fully compatible with standard and all known tissue simulating liquids.

7.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

In combination with the Twin SAM V5.0/V5.0c or ELI phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat). And upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140 mm.



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

<Mounting Device for Laptops and other Body-Worn Transmitters>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the mounting device in place of the phone positioned. The extension is fully compatible with the SAM Twin and ELI phantoms.



Mounting Device for Laptops

8. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

- (a) For WWAN power measurement, use base station simulator to configure EUT WWAN transmission in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
- (b) Read the WWAN RF power level from the base station simulator.
- (c) For WLAN/BT power measurement, use engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power in each supported wireless interface and frequency band
- (d) Connect EUT RF port through RF cable to the power meter, and measure WLAN/BT output power

<SAR measurement>

- (a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power, in the highest power channel.
- (b) Place the EUT in the positions as Appendix D demonstrates.
- (c) Set scan area, grid size and other setting on the DASY software.
- (d) Measure SAR results for the highest power channel on each testing position.
- (e) Find out the largest SAR result on these testing positions of each band
- (f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- (a) Power reference measurement
- (b) Area scan
- (c) Zoom scan
- (d) Power drift measurement

8.1 *Spatial Peak SAR Evaluation*

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- (a) Extraction of the measured data (grid and values) from the Zoom Scan
- (b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- (c) Generation of a high-resolution mesh within the measured volume
- (d) Interpolation of all measured values from the measurement grid to the high-resolution grid
- (e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- (f) Calculation of the averaged SAR within masses of 1g and 10g

8.2 Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

8.3 Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

Area scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ 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: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$	≤ 2 GHz: ≤ 15 mm $2 - 3$ GHz: ≤ 12 mm	$3 - 4$ GHz: ≤ 12 mm $4 - 6$ GHz: ≤ 10 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.	

8.4 Zoom Scan

Zoom scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm *	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 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 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 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.				

8.5 Volume Scan Procedures

The volume scan is used to assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

8.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5%, the SAR will be retested.

9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1087	Mar. 12, 2025	Mar. 11, 2026
SPEAG	835MHz System Validation Kit	D835V2	4d298	Jan. 26, 2024	Jan. 24, 2026
SPEAG	1750MHz System Validation Kit	D1750V2	1090	Mar. 12, 2025	Mar. 11, 2026
SPEAG	1900MHz System Validation Kit	D1900V2	5d093	Mar. 20, 2025	Mar. 19, 2026
SPEAG	2300MHz System Validation Kit	D2300V2	1055	Aug. 21, 2023	Aug. 19, 2026
SPEAG	2450MHz System Validation Kit	D2450V2	1095	Feb. 08, 2024	Feb. 06, 2026
SPEAG	2600MHz System Validation Kit	D2600V2	1112	Dec. 18, 2023	Dec. 15, 2026
SPEAG	3500MHz System Validation Kit	D3500V2	1076	Apr. 16, 2025	Apr. 15, 2026
SPEAG	3700MHz System Validation Kit	D3700V2	1037	Apr. 16, 2025	Apr. 15, 2026
SPEAG	3900MHz System Validation Kit	D3900V2	1022	Aug. 13, 2025	Aug. 12, 2026
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	Sep. 17, 2025	Sep. 16, 2026
SPEAG	Data Acquisition Electronics	DAE4	1326	Jul. 11, 2025	Jul. 10, 2026
SPEAG	Data Acquisition Electronics	DAE4	1210	Nov. 28, 2025	Nov. 27, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7641	Jun. 26, 2025	Jun. 25, 2026
SPEAG	SAM Twin Phantom	QD 000 P41 AA	2033	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio communication analyzer	MT8820C	6201341952	Dec. 25, 2025	Dec. 24, 2026
Anritsu	Radio communication analyzer	MT8820C	6201563813	Dec. 25, 2025	Dec. 24, 2026
Anritsu	Radio communication analyzer	MT8821C	6262314715	Jul. 03, 2025	Jul. 02, 2026
Anritsu	Radio communication analyzer	MT8821C	6272278319	Jul. 03, 2025	Jul. 02, 2026
Agilent	Wireless Communication Test Set	E5515C	MY50267224	Jul. 04, 2025	Jul. 03, 2026
Keysight	Network Analyzer	E5071C	MY46523671	Oct. 14, 2025	Oct. 13, 2026
Speag	Dielectric Assessment KIT	DAK-3.5	1171	Feb. 24, 2025	Feb. 23, 2026
Agilent	Signal Generator	N5181A	MY50145381	Dec. 25, 2025	Dec. 24, 2026
R&S	Power Sensor	NRP50S	101254	Apr. 01, 2025	Mar. 31, 2026
R&S	Power Sensor	NRP251	103113	Apr. 01, 2025	Mar. 31, 2026
R&S	Power Sensor	NRP8S	109228	Apr. 01, 2025	Mar. 31, 2026
R&S	Wideband Radio Communication Tester	CMW500	157651	Dec. 25, 2025	Dec. 24, 2026
R&S	Spectrum Analyzer	FSP7	100818	Jul. 03, 2025	Jul. 02, 2026
TES	Hygrometer	1310	200505600	Jul. 05, 2025	Jul. 04, 2026
Anymetre	Thermo-Hygrometer	JR593	2020062101	Jul. 05, 2025	Jul. 04, 2026
SPEAG	Device Holder	N/A	N/A	N/A	N/A
AR	Amplifier	5S1G4	0333096	Note 1	
Mini-Circuits	Amplifier	ZVE-3W-83+	599201528	Note 1	
Mini-Circuits	Amplifier	ZVA-183W-S+	726202215	Note 1	
ARRA	Power Divider	A3200-2	N/A	Note 1	
ET Industries	Dual Directional Coupler	C-058-10	N/A	Note 1	
Jinkexinhua	Attenuator	10db-8G	N/A	Note 1	

Note:

- Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check.
- Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged, or repaired during the interval.
- The justification data of dipole can be found in appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.

10. System Verification

10.1 Tissue Simulating Liquids

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 11.1. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 11.2.

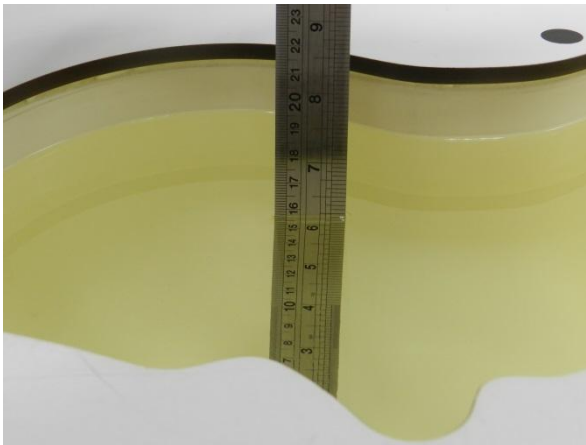


Fig 11.1 Photo of Liquid Height for Head SAR

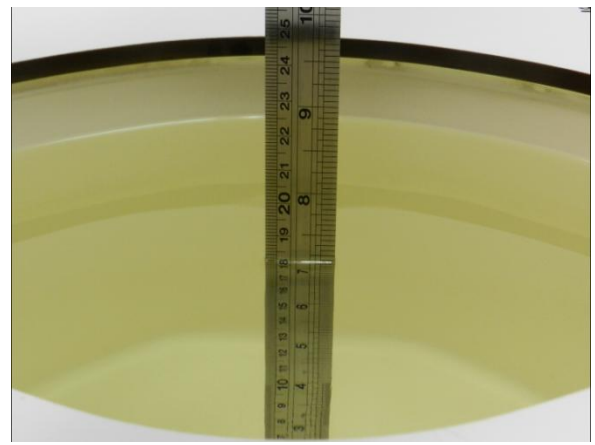


Fig 11.2 Photo of Liquid Height for Body SAR

10.2 Tissue Verification

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity (σ)	Permittivity (ϵ_r)
For Head								
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.40	40.0
2450	55.0	0	0	0	0	45.0	1.80	39.2
2600	54.8	0	0	0.1	0	45.1	1.96	39.0

Simulating Liquid for 5GHz, Manufactured by SPEAG

Ingredients	(% by weight)
Water	64~78%
Mineral oil	11~18%
Emulsifiers	9~15%
Additives and Salt	2~3%

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
750	Head	22.6	0.905	41.800	0.89	41.90	1.69	-0.24	±5	2025/12/19
750	Head	22.4	0.908	42.900	0.89	41.90	2.02	2.39	±5	2026/1/2
835	Head	22.5	0.921	42.500	0.90	41.50	2.33	2.41	±5	2025/12/20
835	Head	22.3	0.932	43.300	0.90	41.50	3.56	4.34	±5	2026/1/3
1750	Head	22.4	1.410	39.500	1.37	40.10	2.92	-1.50	±5	2025/12/22
1750	Head	22.6	1.390	39.900	1.37	40.10	1.46	-0.50	±5	2026/1/5
1900	Head	22.8	1.440	41.600	1.40	40.00	2.86	4.00	±5	2026/1/2
1900	Head	22.3	1.450	38.400	1.40	40.00	3.57	-4.00	±5	2026/1/7
2300	Head	22.8	1.690	39.800	1.67	39.50	1.20	0.76	±5	2025/12/24
2300	Head	22.5	1.630	38.500	1.67	39.50	-2.40	-2.53	±5	2026/1/6
2450	Head	22.4	1.850	40.300	1.80	39.20	2.78	2.81	±5	2025/12/25
2450	Head	22.6	1.780	38.900	1.80	39.20	-1.11	-0.77	±5	2026/1/3
2600	Head	22.8	1.960	38.700	1.96	39.00	0.00	-0.77	±5	2025/12/26
2600	Head	22.3	2.010	40.100	1.96	39.00	2.55	2.82	±5	2026/1/5
3500	Head	22.3	2.810	36.900	2.91	37.90	-3.44	-2.64	±5	2026/1/11
3500	Head	22.5	2.830	37.200	2.91	37.90	-2.75	-1.85	±5	2026/1/7
3700	Head	22.4	3.090	38.600	3.12	37.70	-0.96	2.39	±5	2026/1/13
3700	Head	22.8	3.140	37.500	3.12	37.70	0.64	-0.53	±5	2026/1/4
3900	Head	22.4	3.260	36.700	3.33	37.51	-2.10	-2.16	±5	2026/1/14
5250	Head	22.7	4.670	36.100	4.71	35.95	-0.85	0.42	±5	2025/12/20
5250	Head	22.4	4.530	37.100	4.71	35.95	-3.82	3.20	±5	2026/1/7
5600	Head	22.5	5.150	35.300	5.07	35.50	1.58	-0.56	±5	2025/12/22
5600	Head	22.3	4.880	36.500	5.07	35.50	-3.75	2.82	±5	2026/1/9
5800	Head	22.6	5.070	34.800	5.27	35.30	-3.80	-1.42	±5	2025/12/23
5800	Head	22.4	5.230	34.300	5.27	35.30	-0.76	-2.83	±5	2026/1/8
3700	Head	22.7	3.180	37.400	3.12	37.70	1.92	-0.80	±5	2026/3/10

10.3 System Performance Check Results

Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix A of this report.

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2025/12/19	750	Head	250	1087	7641	1326	2.080	8.680	8.32	-4.15	1.350	5.610	5.4	-3.74
2026/1/2	750	Head	250	1087	7641	1326	2.010	8.680	8.04	-7.37	1.310	5.610	5.24	-6.60
2025/12/20	835	Head	250	4d298	7641	1326	2.320	9.890	9.28	-6.17	1.550	6.450	6.2	-3.88
2026/1/3	835	Head	250	4d298	7641	1326	2.350	9.890	9.4	-4.95	1.590	6.450	6.36	-1.40
2025/12/22	1750	Head	250	1090	7641	1326	9.280	36.600	37.12	1.42	4.860	19.500	19.44	-0.31
2026/1/5	1750	Head	250	1090	7641	1326	9.160	36.600	36.64	0.11	4.780	19.500	19.12	-1.95
2026/1/2	1900	Head	250	5d093	7641	1326	9.470	39.300	37.88	-3.61	4.960	20.800	19.84	-4.62
2026/1/7	1900	Head	250	5d093	7641	1326	9.890	39.300	39.56	0.66	5.010	20.800	20.04	-3.65
2025/12/24	2300	Head	250	1055	7641	1326	11.900	48.400	47.6	-1.65	6.110	23.700	24.44	3.12
2026/1/6	2300	Head	250	1055	7641	1326	12.600	48.400	50.4	4.13	5.970	23.700	23.88	0.76
2025/12/25	2450	Head	250	1095	7641	1326	13.900	52.600	55.6	5.70	6.220	24.700	24.88	0.73
2026/1/3	2450	Head	250	1095	7641	1326	12.200	52.600	48.8	-7.22	6.010	24.700	24.04	-2.67
2025/12/26	2600	Head	250	1112	7641	1326	14.100	55.100	56.4	2.36	6.190	24.800	24.76	-0.16
2026/1/5	2600	Head	250	1112	7641	1326	13.500	55.100	54	-2.00	6.310	24.800	25.24	1.77
2026/1/11	3500	Head	100	1076	7641	1326	6.780	65.800	67.8	3.04	2.480	25.000	24.8	-0.80
2026/1/7	3500	Head	100	1076	7641	1326	6.950	65.800	69.5	5.62	2.520	25.000	25.2	0.80
2026/1/13	3700	Head	100	1037	7641	1326	6.450	67.000	64.5	-3.73	2.350	24.400	23.5	-3.69
2026/1/4	3700	Head	100	1037	7641	1326	6.910	67.000	69.1	3.13	2.490	24.400	24.9	2.05
2026/1/14	3900	Head	100	1022	7641	1326	7.050	70.100	70.5	0.57	2.390	24.600	23.9	-2.85
2025/12/20	5250	Head	100	1113	7641	1326	7.990	78.100	79.9	2.30	2.350	22.400	23.5	4.91
2026/1/7	5250	Head	100	1113	7641	1326	7.490	78.100	74.9	-4.10	2.080	22.400	20.8	-7.14
2025/12/22	5600	Head	100	1113	7641	1326	8.110	80.000	81.1	1.37	2.210	23.000	22.1	-3.91
2026/1/9	5600	Head	100	1113	7641	1326	8.530	80.000	85.3	6.63	2.270	23.000	22.7	-1.30
2025/12/23	5800	Head	100	1113	7641	1326	8.220	77.900	82.2	5.52	2.350	22.300	23.5	5.38
2026/1/8	5800	Head	100	1113	7641	1326	8.330	77.900	83.3	6.93	2.270	22.300	22.7	1.79
2026/3/10	3700	Head	100	1037	7641	1210	6.370	67.000	63.7	-4.93	2.250	24.400	22.5	-7.79

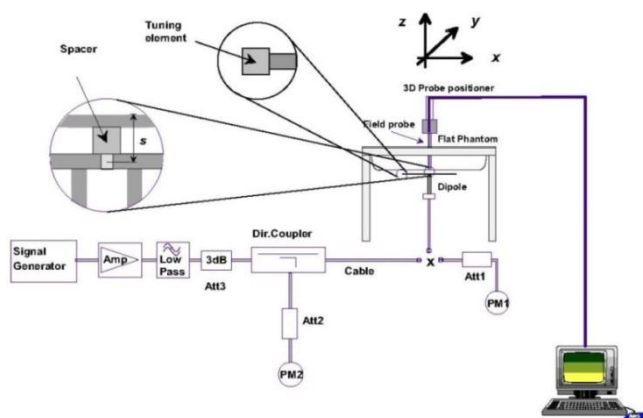


Fig 11.3.1 System Performance Check Setup



Fig 11.3.2 Setup Photo

11. RF Exposure Positions

11.1 Ear and handset reference point

Figure 12.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled "M," the left ear reference point (ERP) is marked "LE," and the right ERP is marked "RE." Each ERP is 15 mm along the B-M (back-mouth) line behind the entrance-to-ear-canal (EEC) point, as shown in Figure 12.1.2 The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (neck-front), also called the reference pivoting line, is normal to the Reference Plane and perpendicular to both a line passing through RE and LE and the B-M line (see Figure 12.1.3). Both N-F and B-M lines should be marked on the exterior of the phantom shell to facilitate handset positioning. Posterior to the N-F line the ear shape is a flat surface with 6 mm thickness at each ERP, and forward of the N-F line the ear is truncated, as illustrated in Figure 12.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

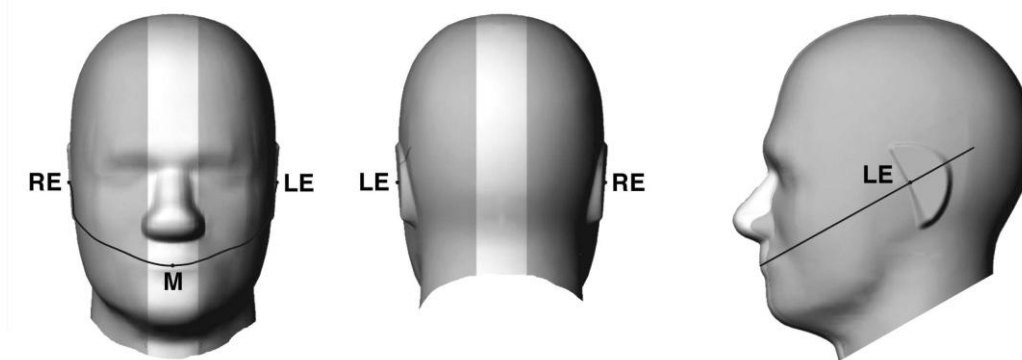


Fig 12.1.1 Front, back, and side views of SAM twin phantom

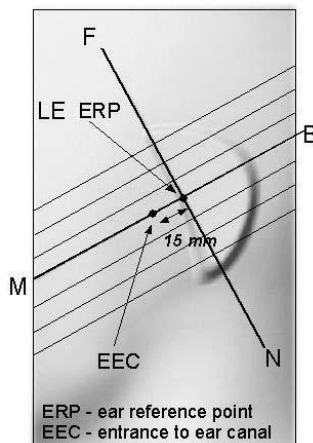


Fig 12.1.2 Close-up side view of phantom showing the ear region.

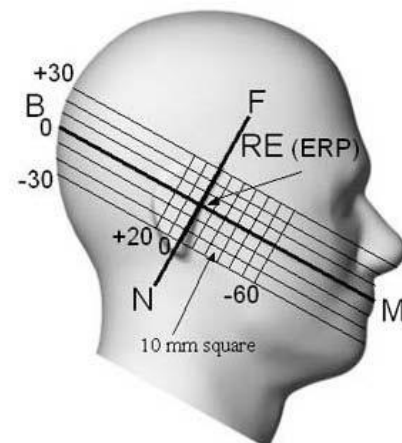


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width w_t of the handset at the level of the acoustic output (point A in Figure 12.2.1 and Figure 12.2.2), and the midpoint of the width w_b of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 12.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 12.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
3. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 12.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
4. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP.
5. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
6. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.
7. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 12.2.3. The actual rotation angles should be documented in the test report.

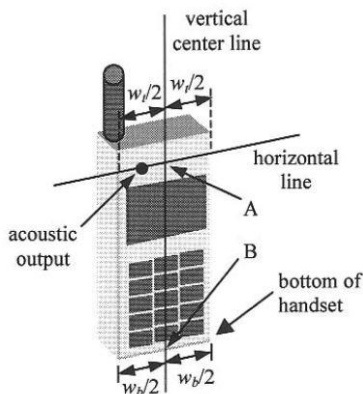


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

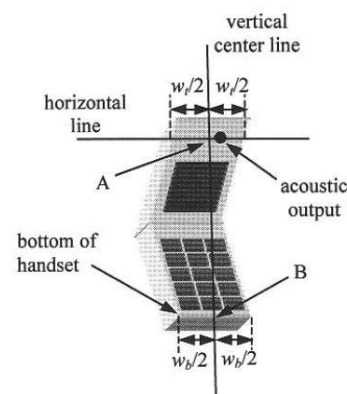


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

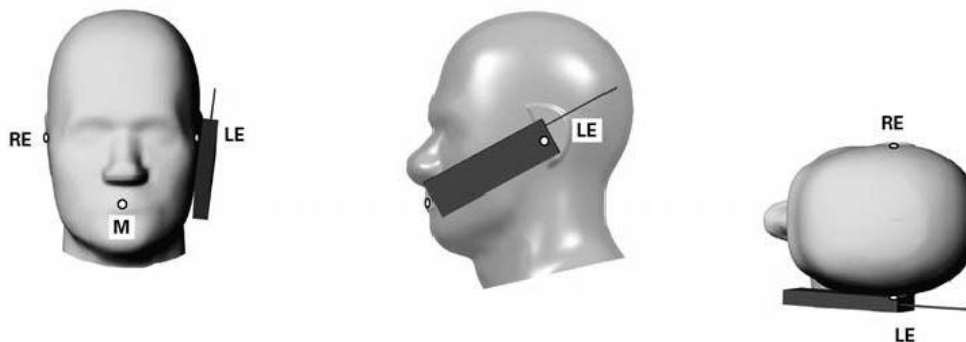


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15°.
3. Rotate the handset around the horizontal line by 15°.
4. While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. See Figure 12.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

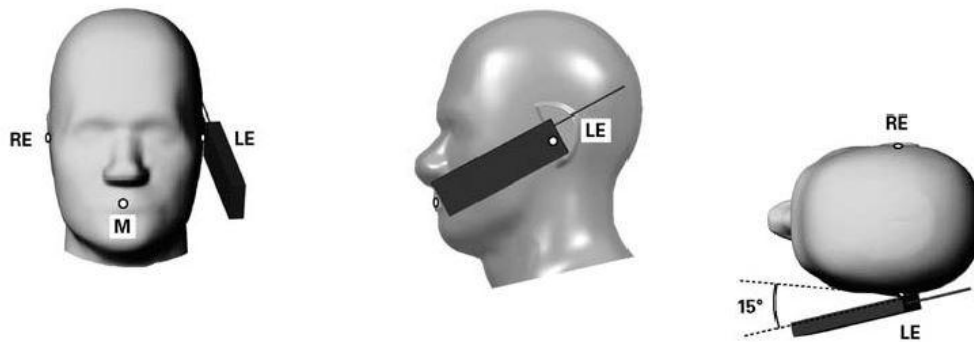


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

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 11.4). Per KDB648474 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 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 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 handset attached to the handset.

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 test 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.

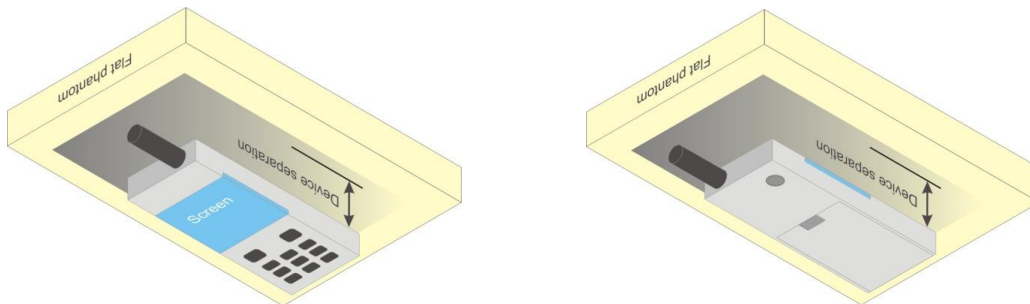


Fig 12.4 Body Worn Position

11.5 Product Specific 10g SAR Exposure

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, that can provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets and support voice calls next to the ear, According to KDB648474 D04v01r03, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
2. The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions.⁶ The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

11.6 Wireless Router

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 v02r01 where SAR test considerations for handsets ($L \times W \geq 9$ cm x 5 cm) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

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

12. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<WCDMA Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
3. For HSPA+ devices supporting 16 QAM in the uplink, power measurements procedure is according to the configurations in Table C.11.1.4 of 3GPP TS 34.121-1.
4. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the power measurement.

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set Gain Factors (β_c and β_d) and parameters were set according to each
 - ii. Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - iii. Set RMC 12.2Kbps + HSDPA mode.
 - iv. Set Cell Power = -86 dBm
 - v. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
 - vi. Select HSDPA Uplink Parameters
 - vii. Set Delta ACK, Delta NACK and Delta CQI = 8
 - viii. Set Ack-Nack Repetition Factor to 3
 - ix. Set CQI Feedback Cycle (k) to 4 ms
 - x. Set CQI Repetition Factor to 2
 - xi. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{hs} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: 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 signalled gain factors for the reference TFC (TF1, TF0) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

Setup Configuration

HSUPA Setup Configuration:

- The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- The RF path losses were compensated into the measurements.
- A call was established between EUT and Base Station with following setting * :
 - Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
 - Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
 - Set Cell Power = -86 dBm
 - Set Channel Type = 12.2k + HSPA
 - Set UE Target Power
 - Power Ctrl Mode= Alternating bits
 - Set and observe the E-TFCI
 - Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
- The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	1309/225	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	β_{ed1} : 47/15 β_{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	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

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

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

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration below
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set RMC 12.2Kbps + HSDPA mode.
 - ii. Set Cell Power = -25 dBm
 - iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
 - iv. Select HSDPA Uplink Parameters
 - v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - a). Subtest 1: $\beta_c/\beta_d=2/15$
 - b). Subtest 2: $\beta_c/\beta_d=12/15$
 - c). Subtest 3: $\beta_c/\beta_d=15/8$
 - d). Subtest 4: $\beta_c/\beta_d=15/4$
 - vi. Set Delta ACK, Delta NACK and Delta CQI = 8
 - vii. Set Ack-Nack Repetition Factor to 3
 - viii. Set CQI Feedback Cycle (k) to 4 ms
 - ix. Set CQI Repetition Factor to 2
 - x. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification. A summary of these settings are illustrated below:

C.8.1.12 Fixed Reference Channel Definition H-Set 12

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

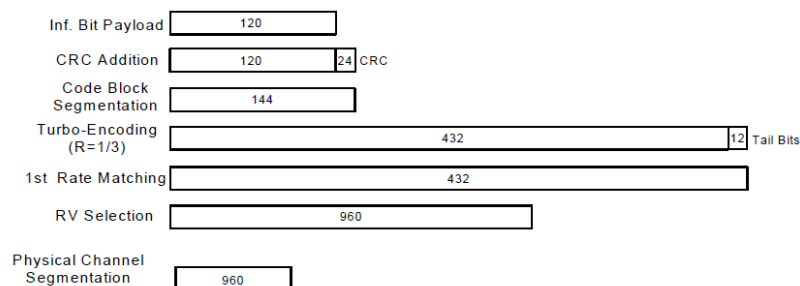


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

HSPA+ 3GPP release 7 (uplink category 7) 16QAM, Setup Configuration:

1. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
2. The RF path losses were compensated into the measurements.
3. A call was established between EUT and Base Station with following setting * :
 - i. Call Configs = 5.2E:HSPA+:UL with 16QAM
 - ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.4, quoted from the TS 34.121-1 s5.2E
 - iii. Set Channel Params
 - iv. Set Cell Power = -86 dBm
 - v. Set Channel Type = HSPA
 - vi. Set UE Target Power =21 dBm
 - vii. Power Ctrl Mode= All Up Bits
 - viii. Set Manual Uplink DPCH Bc/Bd = Manual
 - ix. Set Manual Uplink DPCH Bc and Bd=15,15(for 34.121-1 v8.10.0 table C11.1.4 sub-test 1)
 - x. Set HSPA Conn DL Channel Levels
 - xi. Set HS-SCCH Configs
 - xii. Set RB Test Mode Setup
 - xiii. Set Common HSUPA Parameters
 - xiv. Set Serving Grant
 - xv. Confirm that E-TFCI is equal to the target E-TFCI of 105 for sub-test 1, and other subtest's E-TFCI
4. The transmitted maximum output power was recorded.

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note 3)	β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{fs} = 30/15 * \beta_c$.
 Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
 Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default.
 Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
 Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signaled to use the extrapolation algorithm.

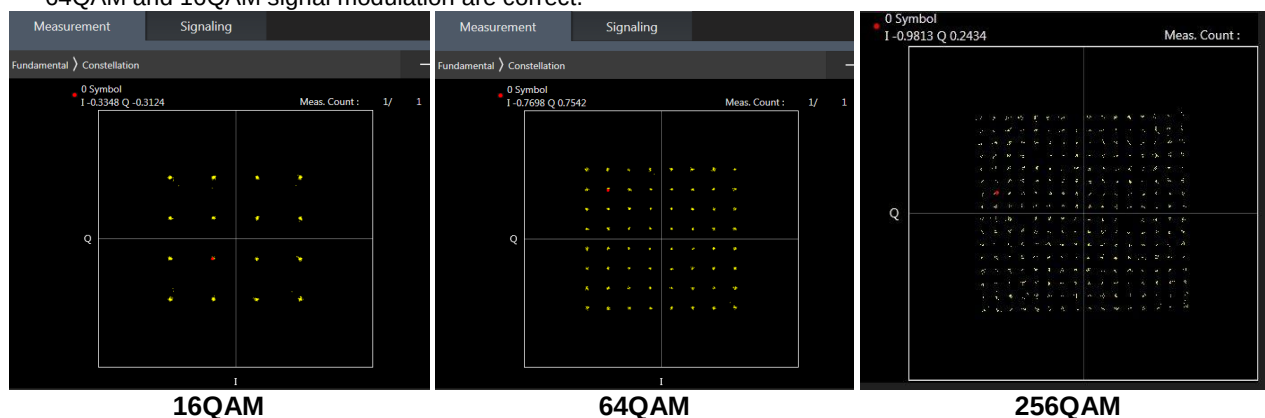
Setup Configuration
<WCDMA Conducted Power>
General Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA/ HSPA+ is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA/ HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA/ HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA/ HSPA+) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA/ HSPA+.

<LTE Conducted Power>

General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 the maximum bandwidth does not support three non-overlapping channels, 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.
9. LTE B4 / B17 SAR test was covered by B66 / B12; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



<LTE Carrier Aggregation>
General Note:

1. Per Oct. 2024 TCB workshop, the downlink (DL) pertains to receiver functionality, thus it is not related to RF exposure compliance limits related to cumulative effects of different transmitters.
2. Per Oct. 2024 TCB workshop, equipment authorization applications shall refer to the worst-case UL powers resulting from all the possible modes of operations. Accordingly, CA-DL cases do not need to be analyzed separately, unless pertinent to establishing UL power setting.
3. Per Oct. 2024 TCB workshop, Manufacturer declares that TX power measurement for multiple DL CA configurations is deemed not required as the DL CA has no impact on the TX power according to preliminary scan. TX power measured in LTE standalone operation represents the worst case.
4. This device supports LTE carrier aggregation in the downlink. All uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.

LTE Carrier Aggregation Conducted Power (Uplink)
<Inter-band uplink carrier aggregation consideration>

LTE Inter CA	LTE TX0	TX0 Ant	LTE TX1	TX1 Ant
CA_2A-14A	B2	Ant 5	B14	Ant 0
CA_5A-30A	B5	Ant 0	B30	Ant 5
CA_12A-30A	B12	Ant 0	B30	Ant 5
CA_14A-30A	B14	Ant 0	B30	Ant 5
CA_14A-66A	B14	Ant 0	B66	Ant 5
CA_4A-5A	B5	Ant 0	B4	Ant 5
CA_2A-5A	B5	Ant 0	B2	Ant 5
CA_2A-12A	B2	Ant 5	B12	Ant 0
CA_5A-66A	B5	Ant 0	B66	Ant 5
CA_12A-66A	B12	Ant 0	B66	Ant 5
CA_4A-12A	B4	Ant 5	B12	Ant 0

General Note:

1. For Inter-band CA co-located SAR analysis is performed using standalone SAR summed together and they are more conservatively for inter band CA.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n30/ n66 /n77 is SA mode.
2. 5G NR n2/n5 /n66 /n77 is NSA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
 - b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
 - c. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
 - d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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
 - f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
5. 5G NR NSA mode, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time.
6. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
7. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
8. For 5G NR EN-DC mode, standalone SAR performed for 5G NR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5G NR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.

<3GPP 38.101 MPR for EN-DC>

Table 6.2.2-1 Maximum power reduction (MPR) for power class 3

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	$\leq 3.5^1$	$\leq 1.2^1$	$\leq 0.2^1$
		$\leq 0.5^2$	$\leq 0.5^2$	0 ²
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
CP-OFDM	256 QAM	≤ 4.5		
	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0 dB MPR is 26 dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

Table 6.2.2-2 Maximum power reduction (MPR) for power class 2

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5	≤ 2.5	
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

<EN-DC combination>

ENDC	LTE TX	LTE Ant	NR TX	NR Ant
DC_5A_n2A	B5	Ant 0	n2	Ant 5
DC_12A_n2A	B12	Ant 0	n2	Ant 5
DC_14A_n2A	B14	Ant 0	n2	Ant 5
DC_30A_n2A	B30	Ant 0	n2	Ant 5
DC_66A_n2A	B66	Ant 5	n2	Ant 0
DC_2A_n5A	B2	Ant 5	n5	Ant 0
DC_30A_n5A	B30	Ant 5	n5	Ant 0
DC_66A_n5A	B66	Ant 5	n5	Ant 0
DC_2A_n66A	B2	Ant 5	n66	Ant 0
DC_12A_n66A	B12	Ant 0	n66	Ant 5
DC_14A_n66A	B14	Ant 0	n66	Ant 5
DC_30A_n66A	B30	Ant 0	n66	Ant 5
DC_2A_n77A	B2	Ant 0	n77	Ant 1
DC_5A_n77A	B5	Ant 0	n77	Ant 1
DC_30A_n77A	B30	Ant 0	n77	Ant 1
DC_66A_n77A	B66	Ant 0	n77	Ant 1
DC_12A_n77A	B12	Ant 0	n77	Ant 1
DC_14A_n77A	B14	Ant 0	n77	Ant 1
DC_66A_n66A	B66	Ant 0	n66	Ant 5
DC_2A_n2A	B2	Ant 0	n2	Ant 5

<WLAN Conducted Power>

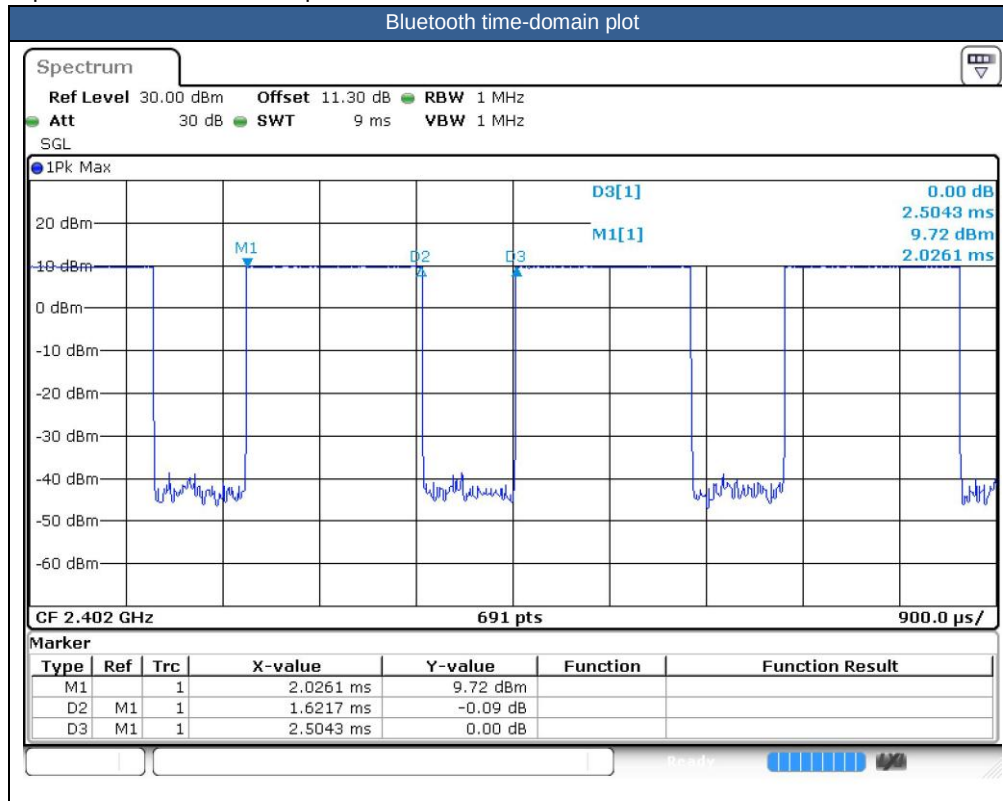
General Note:

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration. Additional output power measurements were not necessary.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.¹⁸ The initial test position procedure is described in the following:
 - a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
 - b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
 - c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 64.76% as following figure, according to Oct. 2016 TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation





13. Antenna Location

The detailed antenna location information can refer to SAR Test Setup Photos.

14. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN/Bluetooth signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
 - b. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
6. The EUT has two work states, flip open and flip close, SAR testing have been evaluated two states. For head mode, only flip open mode is performed SAR testing. When it is in flip close configuration since the diagonal dimension is < 160 mm, 10-g extremity SAR tests are not required. When it is in flip open configuration since the diagonal dimension is > 160 mm and < 200 mm. Therefore, 10-g extremity SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg.
7. According to Nov. 2017 TCB workshop, when the reported 1gSAR for UL CA configuration is < 1.2 W/kg, UL CA 1gSAR is not required for all required test channels (PCC based).
8. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot SAR.
9. For Phablet devices, when hotspot mode is not supported, Product specific 10-g SAR is required for all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.
10. The following table "n/a" in the result means the SAR cube is too small to be detected.

WCDMA Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA/ HSPA+ is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA/ HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA/ HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA/ HSPA+) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA/ HSPA+.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 the maximum bandwidth does not support three non-overlapping channels, 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.
7. LTE B4 / B17 SAR test was covered by B66 / B12; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
 - b. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - c. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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. $\pi/2$ BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, $\pi/2$ BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - e. Smaller bandwidth output power for each RB allocation configuration for this device will not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - f. For 5G FR1 n5 /n66 /n77 the maximum bandwidth does not support three non-overlapping channels, 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.

WLAN/Bluetooth Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required 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.
2. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.



14.1 Head SAR

<Flip Open>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	EUT Flip State	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Note
750MHz																				
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	23095	707.5	Open	24.40	25.00	1.148	0.08	0.161	0.185	
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	23095	707.5	Open	24.40	25.00	1.148	-0.03	0.107	0.123	
01	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	23095	707.5	Open	24.40	25.00	1.148	0.12	0.174	0.200	
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	23095	707.5	Open	24.40	25.00	1.148	-0.1	0.084	0.096	
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	Receiver on	23095	707.5	Open	23.38	24.00	1.153	-0.08	0.144	0.166	
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	Receiver on	23095	707.5	Open	23.38	24.00	1.153	0.09	0.097	0.112	
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	Receiver on	23095	707.5	Open	23.38	24.00	1.153	-0.12	0.151	0.174	
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	Receiver on	23095	707.5	Open	23.38	24.00	1.153	0.01	0.074	0.085	
	LTE Band 14	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	23330	793	Open	24.41	25.00	1.146	-0.15	0.348	0.399	
	LTE Band 14	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	23330	793	Open	24.41	25.00	1.146	0.1	0.289	0.331	
02	LTE Band 14	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	23330	793	Open	24.41	25.00	1.146	-0.02	0.378	0.433	
	LTE Band 14	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	23330	793	Open	24.41	25.00	1.146	-0.09	0.230	0.263	
	LTE Band 14	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	Receiver on	23330	793	Open	23.36	24.00	1.159	0.02	0.292	0.338	
	LTE Band 14	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	Receiver on	23330	793	Open	23.36	24.00	1.159	0.03	0.248	0.287	
	LTE Band 14	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	Receiver on	23330	793	Open	23.36	24.00	1.159	-0.16	0.326	0.378	
	LTE Band 14	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	Receiver on	23330	793	Open	23.36	24.00	1.159	0.02	0.197	0.228	
835MHz																				
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	Receiver on	4182	836.4	Open	23.46	24.00	1.132	0.05	0.480	0.544	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	Receiver on	4182	836.4	Open	23.46	24.00	1.132	-0.03	0.355	0.402	
03	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	Receiver on	4182	836.4	Open	23.46	24.00	1.132	0.13	0.635	0.719	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	Receiver on	4182	836.4	Open	23.46	24.00	1.132	-0.04	0.317	0.359	
	LTE Band 5	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	20525	836.5	Open	23.82	25.00	1.312	0.12	0.503	0.660	
	LTE Band 5	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	20525	836.5	Open	23.82	25.00	1.312	0.13	0.373	0.489	
04	LTE Band 5	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	20525	836.5	Open	23.82	25.00	1.312	-0.13	0.648	0.850	
	LTE Band 5	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	20525	836.5	Open	23.82	25.00	1.312	0.09	0.271	0.356	
	LTE Band 5	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	20525	836.5	Open	22.31	23.50	1.315	0.07	0.465	0.612	ENDC/LTE Inter CA
	LTE Band 5	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	Receiver on	20525	836.5	Open	22.79	24.00	1.321	0.17	0.396	0.523	
	LTE Band 5	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	Receiver on	20525	836.5	Open	22.79	24.00	1.321	-0.02	0.294	0.388	
	LTE Band 5	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	Receiver on	20525	836.5	Open	22.79	24.00	1.321	-0.12	0.508	0.671	
	LTE Band 5	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	Receiver on	20525	836.5	Open	22.79	24.00	1.321	0.01	0.217	0.287	
	LTE Band 5	10M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	Receiver on	20525	836.5	Open	22.73	24.00	1.340	-0.02	0.486	0.651	
	FR1 n5	20M	QPSK	1	53	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	167300	836.5	Open	24.06	25.00	1.242	-0.11	0.458	0.569	
	FR1 n5	20M	QPSK	1	53	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	167300	836.5	Open	24.06	25.00	1.242	-0.14	0.330	0.410	
05	FR1 n5	20M	QPSK	1	53	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	167300	836.5	Open	24.06	25.00	1.242	0.13	0.627	0.779	
	FR1 n5	20M	QPSK	1	53	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	167300	836.5	Open	24.06	25.00	1.242	0.11	0.282	0.350	
	FR1 n5	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	167300	836.5	Open	23.94	25.00	1.276	-0.13	0.444	0.567	
	FR1 n5	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	167300	836.5	Open	23.94	25.00	1.276	-0.05	0.317	0.405	
	FR1 n5	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	167300	836.5	Open	23.94	25.00	1.276	-0.02	0.602	0.768	
	FR1 n5	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	167300	836.5	Open	23.94	25.00	1.276	0.14	0.268	0.342	
1800MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	Receiver on	1413	1732.6	Open	23.71	24.50	1.199	-0.15	0.142	0.170	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	Receiver on	1413	1732.6	Open	23.71	24.50	1.199	-0.06	0.132	0.158	
06	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	Receiver on	1413	1732.6	Open	23.71	24.50	1.199	0.12	0.159	0.191	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	Receiver on	1413	1732.6	Open	23.71	24.50	1.199	-0.12	0.147	0.176	
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	132322	1745	Open	24.35	25.00	1.161	-0.17	0.134	0.156	
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	132322	1745	Open	24.35	25.00	1.161	-0.03	0.128	0.149	
07	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	132322	1745	Open	24.35	25.00	1.161	-0.06	0.170	0.197	
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	132322	1745	Open	24.35	25.00	1.161	-0.17	0.149	0.173	
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	Receiver on	132322	1745	Open	23.32	24.00	1.169	-0.08	0.112	0.131	
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	Receiver on	132322	1745	Open	23.32	24.00	1.169	0.14	0.108	0.126	



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	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	Receiver on	132322	1745	Open	23.32	24.00	1.169	0.07	0.139	0.163	
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	Receiver on	132322	1745	Open	23.32	24.00	1.169	-0.07	0.120	0.140	
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	Receiver on	132322	1745	Open	23.56	25.00	1.393	-0.1	0.087	0.121	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	Receiver on	132322	1745	Open	23.56	25.00	1.393	-0.16	0.055	0.077	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	Receiver on	132322	1745	Open	23.56	25.00	1.393	0.03	0.069	0.096	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	Receiver on	132322	1745	Open	23.56	25.00	1.393	0.17	0.045	0.063	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	Receiver on	132322	1745	Open	22.54	24.00	1.400	-0.09	0.071	0.099	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	Receiver on	132322	1745	Open	22.54	24.00	1.400	-0.13	0.046	0.064	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	Receiver on	132322	1745	Open	22.54	24.00	1.400	0.07	0.057	0.080	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	Receiver on	132322	1745	Open	22.54	24.00	1.400	0.07	0.039	0.055	ENDC/LTE Inter CA
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	349000	1745	Open	24.05	25.00	1.245	0.17	0.144	0.179	
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	349000	1745	Open	24.05	25.00	1.245	-0.06	0.099	0.123	
08	FR1 n66	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	349000	1745	Open	24.05	25.00	1.245	-0.01	0.163	0.203	
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	349000	1745	Open	24.05	25.00	1.245	-0.11	0.124	0.154	
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	349000	1745	Open	23.94	25.00	1.276	0.05	0.138	0.176	
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	349000	1745	Open	23.94	25.00	1.276	-0.04	0.092	0.117	
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	349000	1745	Open	23.94	25.00	1.276	-0.17	0.153	0.195	
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	349000	1745	Open	23.94	25.00	1.276	-0.01	0.121	0.154	
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 5	Receiver on	349000	1745	Open	23.56	25.00	1.393	0.07	0.098	0.137	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 5	Receiver on	349000	1745	Open	23.56	25.00	1.393	-0.09	0.051	0.071	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 5	Receiver on	349000	1745	Open	23.56	25.00	1.393	0.17	0.075	0.104	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 5	Receiver on	349000	1745	Open	23.56	25.00	1.393	-0.16	0.039	0.054	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 5	Receiver on	349000	1745	Open	23.54	25.00	1.400	0.03	0.112	0.157	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 5	Receiver on	349000	1745	Open	23.54	25.00	1.400	-0.15	0.061	0.085	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 5	Receiver on	349000	1745	Open	23.54	25.00	1.400	-0.03	0.088	0.123	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 5	Receiver on	349000	1745	Open	23.54	25.00	1.400	0.09	0.047	0.066	ENDC
1900MHz																				
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	Receiver on	9400	1880	Open	23.95	24.00	1.012	0.07	0.153	0.155	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	Receiver on	9400	1880	Open	23.95	24.00	1.012	0.13	0.089	0.090	
09	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	Receiver on	9400	1880	Open	23.95	24.00	1.012	0.12	0.176	0.178	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	Receiver on	9400	1880	Open	23.95	24.00	1.012	-0.12	0.123	0.124	
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	18900	1880	Open	24.34	25.00	1.164	-0.03	0.154	0.179	
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	18900	1880	Open	24.34	25.00	1.164	-0.12	0.093	0.108	
10	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	18900	1880	Open	24.34	25.00	1.164	-0.15	0.192	0.224	
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	18900	1880	Open	24.34	25.00	1.164	0.09	0.107	0.125	
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	Receiver on	18900	1880	Open	23.35	24.00	1.161	-0.1	0.124	0.144	
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	Receiver on	18900	1880	Open	23.35	24.00	1.161	-0.07	0.076	0.088	
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	Receiver on	18900	1880	Open	23.35	24.00	1.161	0.1	0.151	0.175	
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	Receiver on	18900	1880	Open	23.35	24.00	1.161	0.08	0.086	0.100	
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	Receiver on	18900	1880	Open	23.69	25.00	1.352	-0.12	0.158	0.214	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	Receiver on	18900	1880	Open	23.69	25.00	1.352	0.09	0.087	0.118	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	Receiver on	18900	1880	Open	23.69	25.00	1.352	-0.16	0.152	0.206	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	Receiver on	18900	1880	Open	23.69	25.00	1.352	0.11	0.091	0.123	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	Receiver on	18900	1880	Open	22.67	24.00	1.358	-0.14	0.131	0.178	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	Receiver on	18900	1880	Open	22.67	24.00	1.358	0.14	0.072	0.098	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	Receiver on	18900	1880	Open	22.67	24.00	1.358	-0.06	0.124	0.168	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	Receiver on	18900	1880	Open	22.67	24.00	1.358	0.05	0.076	0.103	ENDC/LTE Inter CA
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	376000	1880	Open	23.82	25.00	1.312	-0.02	0.195	0.256	
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	376000	1880	Open	23.82	25.00	1.312	-0.16	0.106	0.139	
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	376000	1880	Open	23.82	25.00	1.312	-0.08	0.203	0.266	
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	376000	1880	Open	23.82	25.00	1.312	0.06	0.124	0.163	
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	376000	1880	Open	23.77	25.00	1.327	-0.03	0.189	0.251	
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	376000	1880	Open	23.77	25.00	1.327	0.15	0.104	0.138	
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	376000	1880	Open	23.77	25.00	1.327	0.04	0.197	0.261	
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	376000	1880	Open	23.77	25.00	1.327	0.09	0.118	0.157	
11	FR1 n2	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 5	Receiver on	376000	1880	Open	23.51	25.00	1.409	-0.08	0.223	0.314	ENDC



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	FR1 n2	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 5	Receiver on	376000	1880	Open	23.51	25.00	1.409	0.01	0.128	0.180	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 5	Receiver on	376000	1880	Open	23.51	25.00	1.409	-0.17	0.220	0.310	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 5	Receiver on	376000	1880	Open	23.51	25.00	1.409	-0.11	0.131	0.185	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 5	Receiver on	376000	1880	Open	23.48	25.00	1.419	0.03	0.216	0.307	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 5	Receiver on	376000	1880	Open	23.48	25.00	1.419	-0.16	0.119	0.169	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 5	Receiver on	376000	1880	Open	23.48	25.00	1.419	-0.13	0.208	0.295	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 5	Receiver on	376000	1880	Open	23.48	25.00	1.419	-0.02	0.127	0.180	ENDC
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	27710	2310	Open	23.99	24.50	1.125	-0.06	0.297	0.334	
	LTE Band 30	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	27710	2310	Open	23.99	24.50	1.125	-0.15	0.237	0.267	
12	LTE Band 30	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	27710	2310	Open	23.99	24.50	1.125	-0.05	0.453	0.509	
	LTE Band 30	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	27710	2310	Open	23.99	24.50	1.125	-0.08	0.214	0.241	
	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	Receiver on	27710	2310	Open	22.94	23.50	1.138	0.16	0.241	0.274	
	LTE Band 30	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	Receiver on	27710	2310	Open	22.94	23.50	1.138	-0.1	0.192	0.218	
	LTE Band 30	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	Receiver on	27710	2310	Open	22.94	23.50	1.138	-0.04	0.369	0.420	
	LTE Band 30	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	Receiver on	27710	2310	Open	22.94	23.50	1.138	0.03	0.171	0.195	
	LTE Band 30	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	Receiver on	27710	2310	Open	23.49	24.50	1.262	-0.07	0.076	0.096	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	Receiver on	27710	2310	Open	23.49	24.50	1.262	0.02	0.033	0.042	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	Receiver on	27710	2310	Open	23.49	24.50	1.262	0.04	0.064	0.081	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	Receiver on	27710	2310	Open	23.49	24.50	1.262	0.15	0.027	0.034	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 5	Receiver on	27710	2310	Open	22.48	23.50	1.265	0.15	0.062	0.078	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 5	Receiver on	27710	2310	Open	22.48	23.50	1.265	-0.06	0.029	0.037	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 5	Receiver on	27710	2310	Open	22.48	23.50	1.265	0.09	0.054	0.068	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 5	Receiver on	27710	2310	Open	22.48	23.50	1.265	0.06	0.023	0.029	ENDC/LTE Inter CA
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	462000	2310	Open	23.48	24.50	1.265	-0.14	0.235	0.297	
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	462000	2310	Open	23.48	24.50	1.265	-0.05	0.125	0.158	
13	FR1 n30	10M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	462000	2310	Open	23.48	24.50	1.265	-0.01	0.384	0.486	
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	462000	2310	Open	23.48	24.50	1.265	0.09	0.121	0.153	
	FR1 n30	10M	QPSK	25	14	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	462000	2310	Open	23.41	24.50	1.285	-0.03	0.231	0.297	
	FR1 n30	10M	QPSK	25	14	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	462000	2310	Open	23.41	24.50	1.285	-0.02	0.122	0.157	
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	462000	2310	Open	23.41	24.50	1.285	-0.02	0.376	0.483	
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	462000	2310	Open	23.41	24.50	1.285	0.11	0.117	0.150	
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	21100	2535	Open	23.31	24.00	1.172	0.17	0.065	0.076	
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	21100	2535	Open	23.31	24.00	1.172	0.04	0.040	0.047	
14	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	21100	2535	Open	23.31	24.00	1.172	-0.03	0.079	0.093	
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	21100	2535	Open	23.31	24.00	1.172	-0.08	0.056	0.066	
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	Receiver on	21100	2535	Open	22.30	23.00	1.175	-0.06	0.051	0.060	
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	Receiver on	21100	2535	Open	22.30	23.00	1.175	0.12	0.033	0.039	
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	Receiver on	21100	2535	Open	22.30	23.00	1.175	-0.15	0.068	0.080	
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	Receiver on	21100	2535	Open	22.30	23.00	1.175	0.08	0.042	0.049	
3000MHz																				
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 1	Receiver on	533332	3499.98	Open	19.11	20.50	1.377	0.02	0.120	0.165	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 1	Receiver on	533332	3499.98	Open	19.11	20.50	1.377	0.01	0.080	0.110	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	533332	3499.98	Open	19.11	20.50	1.377	0.11	0.416	0.573	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 1	Receiver on	533332	3499.98	Open	19.11	20.50	1.377	0.04	0.127	0.175	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 1	Receiver on	533332	3499.98	Open	19.05	20.50	1.396	-0.03	0.123	0.172	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 1	Receiver on	533332	3499.98	Open	19.05	20.50	1.396	0.06	0.082	0.115	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	533332	3499.98	Open	19.05	20.50	1.396	0.12	0.459	0.641	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 1	Receiver on	533332	3499.98	Open	19.05	20.50	1.396	-0.07	0.129	0.180	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	533332	3499.98	Open	16.95	18.50	1.429	-0.16	0.313	0.447	ENDC
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 1	Receiver on	556000	3840	Open	19.34	20.50	1.306	-0.01	0.174	0.227	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 1	Receiver on	556000	3840	Open	19.34	20.50	1.306	-0.13	0.160	0.209	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	556000	3840	Open	19.34	20.50	1.306	0.14	0.684	0.893	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 1	Receiver on	556000	3840	Open	19.34	20.50	1.306	-0.16	0.195	0.255	
15	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	550000	3750	Open	19.31	20.50	1.315	-0.09	0.736	0.968	



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FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	562000	3930	Open	19.29	20.50	1.321	0.1	0.711	0.939	
FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	550000	3750	Open	17.26	18.50	1.330	0.17	0.472	0.628	ENDC
FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 1	Receiver on	556000	3840	Open	19.33	20.50	1.309	-0.16	0.169	0.221	
FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 1	Receiver on	556000	3840	Open	19.33	20.50	1.309	-0.02	0.153	0.200	
FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	556000	3840	Open	19.33	20.50	1.309	-0.07	0.661	0.865	
FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 1	Receiver on	556000	3840	Open	19.33	20.50	1.309	0.07	0.185	0.242	
FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	550000	3750	Open	19.21	20.50	1.346	-0.09	0.711	0.957	
FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	562000	3930	Open	19.16	20.50	1.361	-0.1	0.664	0.904	
FR1 n77 Part270	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	556000	3840	Open	19.23	20.50	1.340	-0.02	0.65	0.868	
FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 1	Receiver on	541666	3624.99	Open	16.23	17.50	1.340	0.05	0.064	0.086	
FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 1	Receiver on	541666	3624.99	Open	16.23	17.50	1.340	0.11	0.046	0.062	
FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	541666	3624.99	Open	16.23	17.50	1.340	-0.13	0.306	0.410	
FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 1	Receiver on	541666	3624.99	Open	16.23	17.50	1.340	0.09	0.071	0.095	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 1	Receiver on	541666	3624.99	Open	16.10	17.50	1.380	0.05	0.069	0.095	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 1	Receiver on	541666	3624.99	Open	16.10	17.50	1.380	0.02	0.053	0.073	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 1	Receiver on	541666	3624.99	Open	16.10	17.50	1.380	-0.09	0.318	0.439	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 1	Receiver on	541666	3624.99	Open	16.10	17.50	1.380	0.02	0.073	0.101	

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch	Freq. (MHz)	EUT Flip State	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN/BT																	
16	Bluetooth	DH5 1Mbps	Right Cheek	0mm	Ant 4	Receiver on	39	2441	Open	9.60	11.00	1.380	64.76	1.544	-0.16	0.036	0.077
	Bluetooth	DH5 1Mbps	Right Tilted	0mm	Ant 4	Receiver on	39	2441	Open	9.60	11.00	1.380	64.76	1.544	0.01	0.008	0.017
	Bluetooth	DH5 1Mbps	Left Cheek	0mm	Ant 4	Receiver on	39	2441	Open	9.60	11.00	1.380	64.76	1.544	-0.11	0.025	0.053
	Bluetooth	DH5 1Mbps	Left Tilted	0mm	Ant 4	Receiver on	39	2441	Open	9.60	11.00	1.380	64.76	1.544	-0.05	0.013	0.028
17	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	Receiver on	6	2437	Open	18.00	19.50	1.413	100	1.000	-0.1	0.312	0.441
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	Receiver on	6	2437	Open	18.00	19.50	1.413	100	1.000	0.03	0.053	0.075
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	Receiver on	6	2437	Open	18.00	19.50	1.413	100	1.000	0.08	0.192	0.271
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	Receiver on	6	2437	Open	18.00	19.50	1.413	100	1.000	0.17	0.062	0.088
18	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4	Receiver on	52	5260	Open	17.52	18.50	1.253	97.48	1.026	0.05	0.345	0.444
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4	Receiver on	52	5260	Open	17.52	18.50	1.253	97.48	1.026	0.03	0.127	0.163
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4	Receiver on	52	5260	Open	17.52	18.50	1.253	97.48	1.026	-0.17	0.193	0.248
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4	Receiver on	52	5260	Open	17.52	18.50	1.253	97.48	1.026	-0.07	0.148	0.190
19	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4	Receiver on	110	5550	Open	14.58	16.00	1.387	94.92	1.054	-0.12	0.305	0.446
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4	Receiver on	110	5550	Open	14.58	16.00	1.387	94.92	1.054	0.11	0.079	0.115
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	Receiver on	110	5550	Open	14.58	16.00	1.387	94.92	1.054	-0.09	0.147	0.215
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4	Receiver on	110	5550	Open	14.58	16.00	1.387	94.92	1.054	0.16	0.080	0.117
20	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	Receiver on	155	5775	Open	14.60	16.00	1.380	90.32	1.107	-0.15	0.285	0.436
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	Receiver on	155	5775	Open	14.60	16.00	1.380	90.32	1.107	0.07	0.086	0.131
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	Receiver on	155	5775	Open	14.60	16.00	1.380	90.32	1.107	-0.07	0.156	0.238
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	Receiver on	155	5775	Open	14.60	16.00	1.380	90.32	1.107	-0.15	0.090	0.138



14.2 Hotspot SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	EUT Flip State	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Note
750MHz																				
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	23095	707.5	Open	24.40	25.00	1.148	-0.04	0.553	0.635	
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23095	707.5	Open	24.40	25.00	1.148	-0.08	0.756	0.868	
	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	23095	707.5	Open	24.40	25.00	1.148	0.11	0.162	0.186	
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	23095	707.5	Open	24.40	25.00	1.148	-0.04	0.407	0.467	
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	23095	707.5	Open	24.40	25.00	1.148	-0.03	0.163	0.187	
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23095	707.5	Open	21.85	22.50	1.161	-0.05	0.419	0.487	ENDC/LTE Inter CA
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 0	Receiver off	23095	707.5	Open	23.38	24.00	1.153	0.11	0.408	0.471	
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 0	Receiver off	23095	707.5	Open	23.38	24.00	1.153	0.03	0.599	0.691	
	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Receiver off	23095	707.5	Open	23.38	24.00	1.153	0.04	0.132	0.152	
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Receiver off	23095	707.5	Open	23.38	24.00	1.153	-0.07	0.357	0.412	
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Receiver off	23095	707.5	Open	23.38	24.00	1.153	-0.02	0.131	0.151	
	LTE Band 12	10M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	23095	707.5	Open	23.35	24.00	1.161	0.01	0.611	0.710	
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	23095	707.5	Close	24.40	25.00	1.148	-0.1	0.205	0.235	
21	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23095	707.5	Close	24.40	25.00	1.148	-0.05	0.760	0.873	
	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	23095	707.5	Close	24.40	25.00	1.148	0.08	0.267	0.307	
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	23095	707.5	Close	24.40	25.00	1.148	0.17	0.351	0.403	
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	23095	707.5	Close	24.40	25.00	1.148	-0.03	0.209	0.240	
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23095	707.5	Close	21.85	22.50	1.161	0.04	0.426	0.495	ENDC/LTE Inter CA
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 0	Receiver off	23095	707.5	Close	23.38	24.00	1.153	0.11	0.163	0.188	
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 0	Receiver off	23095	707.5	Close	23.38	24.00	1.153	0.05	0.626	0.722	
	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Receiver off	23095	707.5	Close	23.38	24.00	1.153	-0.05	0.225	0.260	
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Receiver off	23095	707.5	Close	23.38	24.00	1.153	0.06	0.306	0.353	
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Receiver off	23095	707.5	Close	23.38	24.00	1.153	-0.12	0.171	0.197	
	LTE Band 12	10M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	23095	707.5	Close	23.35	24.00	1.161	-0.06	0.624	0.725	
	LTE Band 14	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	23330	793	Open	24.02	24.50	1.117	0.09	0.495	0.553	
	LTE Band 14	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23330	793	Open	24.02	24.50	1.117	-0.07	0.596	0.666	
	LTE Band 14	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	23330	793	Open	24.02	24.50	1.117	0.17	0.177	0.198	
	LTE Band 14	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	23330	793	Open	24.02	24.50	1.117	0.05	0.389	0.434	
	LTE Band 14	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	23330	793	Open	24.02	24.50	1.117	-0.07	0.234	0.261	
	LTE Band 14	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23330	793	Open	21.11	21.50	1.094	0.11	0.306	0.335	ENDC/LTE Inter CA
	LTE Band 14	10M	QPSK	25	0	-	Front	10mm	Ant 0	Receiver off	23330	793	Open	23.40	24.00	1.148	-0.02	0.460	0.528	
	LTE Band 14	10M	QPSK	25	0	-	Back	10mm	Ant 0	Receiver off	23330	793	Open	23.40	24.00	1.148	-0.13	0.520	0.597	
	LTE Band 14	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Receiver off	23330	793	Open	23.40	24.00	1.148	-0.01	0.166	0.191	
	LTE Band 14	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Receiver off	23330	793	Open	23.40	24.00	1.148	-0.04	0.352	0.404	
	LTE Band 14	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Receiver off	23330	793	Open	23.40	24.00	1.148	0.04	0.211	0.242	
	LTE Band 14	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	23330	793	Close	24.02	24.50	1.117	0.06	0.295	0.329	
22	LTE Band 14	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23330	793	Close	24.02	24.50	1.117	0.05	0.875	0.977	
	LTE Band 14	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	23330	793	Close	24.02	24.50	1.117	-0.1	0.404	0.451	
	LTE Band 14	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	23330	793	Close	24.02	24.50	1.117	0.1	0.501	0.560	
	LTE Band 14	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	23330	793	Close	24.02	24.50	1.117	0.1	0.219	0.245	
	LTE Band 14	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23330	793	Close	21.11	21.50	1.094	-0.06	0.446	0.488	ENDC/LTE Inter CA
	LTE Band 14	10M	QPSK	25	0	-	Front	10mm	Ant 0	Receiver off	23330	793	Close	23.40	24.00	1.148	0.03	0.254	0.292	
	LTE Band 14	10M	QPSK	25	0	-	Back	10mm	Ant 0	Receiver off	23330	793	Close	23.40	24.00	1.148	-0.05	0.763	0.876	
	LTE Band 14	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Receiver off	23330	793	Close	23.40	24.00	1.148	0.17	0.339	0.389	
	LTE Band 14	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Receiver off	23330	793	Close	23.40	24.00	1.148	-0.05	0.422	0.485	
	LTE Band 14	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Receiver off	23330	793	Close	23.40	24.00	1.148	0.15	0.206	0.237	
	LTE Band 14	10M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	23330	793	Close	23.35	24.00	1.161	0.14	0.726	0.843	
835MHz																				
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	Receiver off	4182	836.4	Open	21.93	22.50	1.140	0.09	0.363	0.414	



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	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	4182	836.4	Open	21.93	22.50	1.140	-0.13	0.543	0.619	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	Receiver off	4182	836.4	Open	21.93	22.50	1.140	0.12	0.194	0.221	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	Receiver off	4182	836.4	Open	21.93	22.50	1.140	0.06	0.411	0.469	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	4182	836.4	Open	21.93	22.50	1.140	0.05	0.282	0.322	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	Receiver off	4182	836.4	Close	21.93	22.50	1.140	0.16	0.197	0.225	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	4182	836.4	Close	21.93	22.50	1.140	0.03	0.758	0.864	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	Receiver off	4182	836.4	Close	21.93	22.50	1.140	0.13	0.337	0.384	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	Receiver off	4182	836.4	Close	21.93	22.50	1.140	-0.04	0.412	0.470	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	4182	836.4	Close	21.93	22.50	1.140	-0.03	0.170	0.194	
23	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	4132	826.4	Close	21.88	22.50	1.153	0.09	0.802	0.925	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	4233	846.6	Close	21.83	22.50	1.167	-0.16	0.686	0.800	
	LTE Band 5	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	20525	836.5	Open	22.24	23.50	1.337	-0.07	0.362	0.484	
	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	20525	836.5	Open	22.24	23.50	1.337	0.07	0.436	0.583	
	LTE Band 5	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	20525	836.5	Open	22.24	23.50	1.337	0.14	0.187	0.250	
	LTE Band 5	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	20525	836.5	Open	22.24	23.50	1.337	-0.08	0.422	0.564	
	LTE Band 5	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	20525	836.5	Open	22.24	23.50	1.337	-0.1	0.269	0.360	
	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	20525	836.5	Open	19.48	20.50	1.265	-0.09	0.234	0.296	ENDC/LTE Inter CA
	LTE Band 5	10M	QPSK	25	0	-	Front	10mm	Ant 0	Receiver off	20525	836.5	Open	22.23	23.50	1.340	-0.17	0.330	0.442	
	LTE Band 5	10M	QPSK	25	0	-	Back	10mm	Ant 0	Receiver off	20525	836.5	Open	22.23	23.50	1.340	0.06	0.398	0.533	
	LTE Band 5	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Receiver off	20525	836.5	Open	22.23	23.50	1.340	0.04	0.171	0.229	
	LTE Band 5	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Receiver off	20525	836.5	Open	22.23	23.50	1.340	0.15	0.385	0.516	
	LTE Band 5	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Receiver off	20525	836.5	Open	22.23	23.50	1.340	0.03	0.245	0.328	
	LTE Band 5	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	20525	836.5	Close	22.24	23.50	1.337	-0.12	0.212	0.283	
24	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	20525	836.5	Close	22.24	23.50	1.337	0.04	0.710	0.949	
	LTE Band 5	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	20525	836.5	Close	22.24	23.50	1.337	-0.14	0.356	0.476	
	LTE Band 5	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	20525	836.5	Close	22.24	23.50	1.337	-0.02	0.412	0.551	
	LTE Band 5	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	20525	836.5	Close	22.24	23.50	1.337	-0.14	0.182	0.243	
	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	20525	836.5	Close	19.48	20.50	1.265	0.15	0.364	0.460	ENDC/LTE Inter CA
	LTE Band 5	10M	QPSK	25	0	-	Front	10mm	Ant 0	Receiver off	20525	836.5	Close	22.23	23.50	1.340	0.14	0.196	0.263	
	LTE Band 5	10M	QPSK	25	0	-	Back	10mm	Ant 0	Receiver off	20525	836.5	Close	22.23	23.50	1.340	0.03	0.676	0.906	
	LTE Band 5	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Receiver off	20525	836.5	Close	22.23	23.50	1.340	0.02	0.328	0.439	
	LTE Band 5	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Receiver off	20525	836.5	Close	22.23	23.50	1.340	0.13	0.392	0.525	
	LTE Band 5	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Receiver off	20525	836.5	Close	22.23	23.50	1.340	-0.02	0.173	0.232	
	LTE Band 5	10M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	20525	836.5	Close	22.17	23.50	1.358	0.14	0.651	0.884	
	FR1 n5	20M	QPSK	1	53	DFT-15	Front	10mm	Ant 0	Receiver off	167300	836.5	Open	22.51	23.50	1.256	0.02	0.294	0.369	
	FR1 n5	20M	QPSK	1	53	DFT-15	Back	10mm	Ant 0	Receiver off	167300	836.5	Open	22.51	23.50	1.256	-0.13	0.396	0.497	
	FR1 n5	20M	QPSK	1	53	DFT-15	Left Side	10mm	Ant 0	Receiver off	167300	836.5	Open	22.51	23.50	1.256	-0.03	0.136	0.171	
	FR1 n5	20M	QPSK	1	53	DFT-15	Right Side	10mm	Ant 0	Receiver off	167300	836.5	Open	22.51	23.50	1.256	0.01	0.315	0.396	
	FR1 n5	20M	QPSK	1	53	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	167300	836.5	Open	22.51	23.50	1.256	-0.03	0.193	0.242	
	FR1 n5	20M	QPSK	1	53	DFT-15	Back	10mm	Ant 0	Receiver off	167300	836.5	Open	19.05	20.50	1.396	0.12	0.202	0.282	ENDC
	FR1 n5	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 0	Receiver off	167300	836.5	Open	22.46	23.50	1.271	-0.09	0.288	0.366	
	FR1 n5	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 0	Receiver off	167300	836.5	Open	22.46	23.50	1.271	0.04	0.382	0.485	
	FR1 n5	20M	QPSK	50	28	DFT-15	Left Side	10mm	Ant 0	Receiver off	167300	836.5	Open	22.46	23.50	1.271	0.09	0.127	0.161	
	FR1 n5	20M	QPSK	50	28	DFT-15	Right Side	10mm	Ant 0	Receiver off	167300	836.5	Open	22.46	23.50	1.271	-0.1	0.300	0.381	
	FR1 n5	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	167300	836.5	Open	22.46	23.50	1.271	0.05	0.187	0.238	
	FR1 n5	20M	QPSK	1	53	DFT-15	Front	10mm	Ant 0	Receiver off	167300	836.5	Close	22.51	23.50	1.256	-0.07	0.207	0.260	
25	FR1 n5	20M	QPSK	1	53	DFT-15	Back	10mm	Ant 0	Receiver off	167300	836.5	Close	22.51	23.50	1.256	-0.02	0.782	0.982	
	FR1 n5	20M	QPSK	1	53	DFT-15	Left Side	10mm	Ant 0	Receiver off	167300	836.5	Close	22.51	23.50	1.256	0.11	0.339	0.426	
	FR1 n5	20M	QPSK	1	53	DFT-15	Right Side	10mm	Ant 0	Receiver off	167300	836.5	Close	22.51	23.50	1.256	0.17	0.456	0.573	
	FR1 n5	20M	QPSK	1	53	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	167300	836.5	Close	22.51	23.50	1.256	-0.09	0.156	0.196	
	FR1 n5	20M	QPSK	1	53	DFT-15	Back	10mm	Ant 0	Receiver off	167300	836.5	Close	19.05	20.50	1.396	0.05	0.401	0.560	ENDC
	FR1 n5	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 0	Receiver off	167300	836.5	Close	22.46	23.50	1.271	-0.09	0.193	0.245	
	FR1 n5	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 0	Receiver off	167300	836.5	Close	22.46	23.50	1.271	0.06	0.745	0.947	
	FR1 n5	20M	QPSK	50	28	DFT-15	Left Side	10mm	Ant 0	Receiver off	167300	836.5	Close	22.46	23.50	1.271	-0.1	0.311	0.395	
	FR1 n5	20M	QPSK	50	28	DFT-15	Right Side	10mm	Ant 0	Receiver off	167300	836.5	Close	22.46	23.50	1.271	-0.06	0.433	0.550	
	FR1 n5	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	167300	836.5	Close	22.46	23.50	1.271	-0.08	0.149	0.189	



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	FR1 n5	20M	QPSK	100	0	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	167300	836.5	Close	22.36	23.50	1.300	0.08	0.733	0.953	
1800MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	Receiver off	1413	1732.6	Open	19.34	20.00	1.164	-0.12	0.470	0.547	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	1413	1732.6	Open	19.34	20.00	1.164	0.03	0.646	0.752	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	Receiver off	1413	1732.6	Open	19.34	20.00	1.164	0.07	0.197	0.229	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	Receiver off	1413	1732.6	Open	19.34	20.00	1.164	-0.17	0.082	0.095	
26	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	1413	1732.6	Open	19.34	20.00	1.164	0.06	0.846	0.985	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	1312	1712.4	Open	19.33	20.00	1.167	0.09	0.807	0.942	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	1513	1752.6	Open	19.25	20.00	1.189	0.02	0.776	0.922	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	Receiver off	1413	1732.6	Close	19.34	20.00	1.164	-0.04	0.116	0.135	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	1413	1732.6	Close	19.34	20.00	1.164	0.05	0.640	0.745	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	Receiver off	1413	1732.6	Close	19.34	20.00	1.164	0.12	0.213	0.248	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	Receiver off	1413	1732.6	Close	19.34	20.00	1.164	-0.06	0.138	0.161	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	1413	1732.6	Close	19.34	20.00	1.164	-0.09	0.711	0.828	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	1312	1712.4	Close	19.33	20.00	1.167	-0.01	0.724	0.845	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	1513	1752.6	Close	19.25	20.00	1.189	-0.06	0.685	0.814	
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	132322	1745	Open	18.21	19.00	1.199	-0.07	0.468	0.561	
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	132322	1745	Open	18.21	19.00	1.199	0.1	0.574	0.689	
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	132322	1745	Open	18.21	19.00	1.199	0.01	0.175	0.210	
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	132322	1745	Open	18.21	19.00	1.199	0.01	0.061	0.073	
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	132322	1745	Open	18.21	19.00	1.199	-0.06	0.740	0.888	
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	132072	1720	Open	18.06	19.00	1.242	0.13	0.689	0.855	
27	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	132572	1770	Open	18.18	19.00	1.208	-0.08	0.757	0.914	
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	132322	1745	Open	16.18	17.00	1.208	-0.15	0.376	0.454	ENDC
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 0	Receiver off	132322	1745	Open	18.19	19.00	1.205	0.04	0.452	0.545	
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	132322	1745	Open	18.19	19.00	1.205	-0.06	0.562	0.677	
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	Receiver off	132322	1745	Open	18.19	19.00	1.205	0.17	0.168	0.202	
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 0	Receiver off	132322	1745	Open	18.19	19.00	1.205	-0.09	0.050	0.060	
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	132322	1745	Open	18.19	19.00	1.205	0.02	0.719	0.866	
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	132072	1720	Open	17.95	19.00	1.274	-0.05	0.668	0.851	
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	132572	1770	Open	18.04	19.00	1.247	-0.1	0.711	0.887	
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 0	Receiver off	132322	1745	Open	18.15	19.00	1.216	0.08	0.711	0.865	
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	132322	1745	Close	18.21	19.00	1.199	0.03	0.103	0.124	
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	132322	1745	Close	18.21	19.00	1.199	-0.12	0.521	0.625	
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	132322	1745	Close	18.21	19.00	1.199	-0.13	0.176	0.211	
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	132322	1745	Close	18.21	19.00	1.199	0.06	0.102	0.122	
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	132322	1745	Close	18.21	19.00	1.199	0.08	0.584	0.701	
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	132322	1745	Close	16.18	17.00	1.208	0.05	0.342	0.413	ENDC
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 0	Receiver off	132322	1745	Close	18.19	19.00	1.205	0.05	0.105	0.127	
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	132322	1745	Close	18.19	19.00	1.205	-0.09	0.512	0.617	
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	Receiver off	132322	1745	Close	18.19	19.00	1.205	-0.15	0.168	0.202	
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 0	Receiver off	132322	1745	Close	18.19	19.00	1.205	-0.11	0.100	0.121	
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	132322	1745	Close	18.19	19.00	1.205	-0.01	0.573	0.690	
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 5	Receiver off	132322	1745	Open	21.13	22.50	1.371	-0.17	0.213	0.292	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 5	Receiver off	132322	1745	Open	21.13	22.50	1.371	0.16	0.368	0.504	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	Receiver off	132322	1745	Open	21.13	22.50	1.371	0.15	0.029	0.040	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	Receiver off	132322	1745	Open	21.13	22.50	1.371	0.11	0.220	0.302	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	Receiver off	132322	1745	Open	21.13	22.50	1.371	-0.02	0.107	0.147	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 5	Receiver off	132322	1745	Open	21.10	22.50	1.380	0.06	0.170	0.235	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 5	Receiver off	132322	1745	Open	21.10	22.50	1.380	0.01	0.303	0.418	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	Receiver off	132322	1745	Open	21.10	22.50	1.380	0.13	0.025	0.035	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 5	Receiver off	132322	1745	Open	21.10	22.50	1.380	0.06	0.174	0.240	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	Receiver off	132322	1745	Open	21.10	22.50	1.380	-0.12	0.084	0.116	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 5	Receiver off	132322	1745	Close	21.13	22.50	1.371	0.1	0.108	0.148	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 5	Receiver off	132322	1745	Close	21.13	22.50	1.371	-0.04	0.314	0.430	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	Receiver off	132322	1745	Close	21.13	22.50	1.371	0.13	0.030	0.041	ENDC/LTE Inter CA



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	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	Receiver off	132322	1745	Close	21.13	22.50	1.371	-0.13	0.269	0.369	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	Receiver off	132322	1745	Close	21.13	22.50	1.371	-0.14	0.076	0.104	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 5	Receiver off	132322	1745	Close	21.10	22.50	1.380	0.17	0.091	0.126	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 5	Receiver off	132322	1745	Close	21.10	22.50	1.380	0.04	0.258	0.356	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	Receiver off	132322	1745	Close	21.10	22.50	1.380	0.01	0.025	0.035	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 5	Receiver off	132322	1745	Close	21.10	22.50	1.380	0.01	0.220	0.304	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	Receiver off	132322	1745	Close	21.10	22.50	1.380	-0.02	0.063	0.087	ENDC/LTE Inter CA
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Receiver off	349000	1745	Open	18.96	20.00	1.271	0.12	0.421	0.535	
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Receiver off	349000	1745	Open	18.96	20.00	1.271	0.13	0.511	0.649	
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Receiver off	349000	1745	Open	18.96	20.00	1.271	-0.11	0.168	0.213	
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Receiver off	349000	1745	Open	18.96	20.00	1.271	-0.03	0.063	0.080	
	FR1 n66	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	349000	1745	Open	18.96	20.00	1.271	-0.06	0.721	0.916	
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	Receiver off	349000	1745	Open	18.87	20.00	1.297	-0.12	0.435	0.564	
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	Receiver off	349000	1745	Open	18.87	20.00	1.297	0.13	0.519	0.673	
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 0	Receiver off	349000	1745	Open	18.87	20.00	1.297	-0.15	0.176	0.228	
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 0	Receiver off	349000	1745	Open	18.87	20.00	1.297	-0.1	0.065	0.084	
28	FR1 n66	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	349000	1745	Open	18.87	20.00	1.297	0.15	0.734	0.952	
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	Receiver off	349000	1745	Open	16.94	18.00	1.276	0.05	0.331	0.423	ENDC
	FR1 n66	40M	QPSK	216	0	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	349000	1745	Open	18.77	20.00	1.327	0.1	0.705	0.936	
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Receiver off	349000	1745	Close	18.96	20.00	1.271	0.17	0.093	0.118	
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Receiver off	349000	1745	Close	18.96	20.00	1.271	0.03	0.504	0.640	
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Receiver off	349000	1745	Close	18.96	20.00	1.271	-0.05	0.169	0.215	
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Receiver off	349000	1745	Close	18.96	20.00	1.271	0.07	0.112	0.142	
	FR1 n66	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	349000	1745	Close	18.96	20.00	1.271	-0.12	0.608	0.773	
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	Receiver off	349000	1745	Close	18.87	20.00	1.297	0.02	0.107	0.139	
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	Receiver off	349000	1745	Close	18.87	20.00	1.297	-0.09	0.526	0.682	
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 0	Receiver off	349000	1745	Close	18.87	20.00	1.297	0.04	0.180	0.233	
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 0	Receiver off	349000	1745	Close	18.87	20.00	1.297	0.1	0.115	0.149	
	FR1 n66	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	349000	1745	Close	18.87	20.00	1.297	-0.04	0.610	0.791	
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	Receiver off	349000	1745	Close	16.94	18.00	1.276	0.03	0.346	0.442	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	Receiver off	349000	1745	Open	20.58	21.50	1.236	-0.13	0.211	0.261	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	Receiver off	349000	1745	Open	20.58	21.50	1.236	-0.08	0.395	0.488	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 5	Receiver off	349000	1745	Open	20.58	21.50	1.236	-0.15	0.026	0.032	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 5	Receiver off	349000	1745	Open	20.58	21.50	1.236	-0.14	0.229	0.283	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 5	Receiver off	349000	1745	Open	20.58	21.50	1.236	0.14	0.074	0.091	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	Receiver off	349000	1745	Open	20.45	21.50	1.274	-0.08	0.200	0.255	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	Receiver off	349000	1745	Open	20.45	21.50	1.274	-0.03	0.385	0.490	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 5	Receiver off	349000	1745	Open	20.45	21.50	1.274	0.17	0.021	0.027	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 5	Receiver off	349000	1745	Open	20.45	21.50	1.274	0.14	0.214	0.273	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 5	Receiver off	349000	1745	Open	20.45	21.50	1.274	-0.07	0.070	0.089	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	Receiver off	349000	1745	Close	20.58	21.50	1.236	0.08	0.093	0.115	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	Receiver off	349000	1745	Close	20.58	21.50	1.236	0.13	0.296	0.366	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 5	Receiver off	349000	1745	Close	20.58	21.50	1.236	-0.13	0.028	0.035	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 5	Receiver off	349000	1745	Close	20.58	21.50	1.236	-0.16	0.233	0.288	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 5	Receiver off	349000	1745	Close	20.58	21.50	1.236	-0.03	0.069	0.085	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	Receiver off	349000	1745	Close	20.45	21.50	1.274	0.14	0.088	0.112	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	Receiver off	349000	1745	Close	20.45	21.50	1.274	-0.08	0.284	0.362	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 5	Receiver off	349000	1745	Close	20.45	21.50	1.274	-0.09	0.026	0.033	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 5	Receiver off	349000	1745	Close	20.45	21.50	1.274	0.04	0.231	0.294	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 5	Receiver off	349000	1745	Close	20.45	21.50	1.274	-0.07	0.062	0.079	ENDC
1900MHz																				
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	Receiver off	9400	1880	Open	21.25	21.50	1.059	-0.17	0.542	0.574	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	9400	1880	Open	21.25	21.50	1.059	0.12	0.558	0.591	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	Receiver off	9400	1880	Open	21.25	21.50	1.059	0.12	0.240	0.254	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	Receiver off	9400	1880	Open	21.25	21.50	1.059	-0.13	0.119	0.126	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	9400	1880	Open	21.25	21.50	1.059	0.01	0.805	0.853	



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	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	9262	1852.4	Open	21.18	21.50	1.076	-0.13	0.742	0.799	
29	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	9538	1907.6	Open	21.20	21.50	1.072	0.12	0.856	0.917	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	Receiver off	9400	1880	Close	21.25	21.50	1.059	-0.09	0.181	0.192	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	9400	1880	Close	21.25	21.50	1.059	-0.15	0.563	0.596	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	Receiver off	9400	1880	Close	21.25	21.50	1.059	0.16	0.276	0.292	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	Receiver off	9400	1880	Close	21.25	21.50	1.059	0.17	0.125	0.132	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	9400	1880	Close	21.25	21.50	1.059	0.09	0.693	0.734	
	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	18900	1880	Open	18.97	20.00	1.268	0.09	0.545	0.691	
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	18900	1880	Open	18.97	20.00	1.268	0.13	0.518	0.657	
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	18900	1880	Open	18.97	20.00	1.268	0.16	0.204	0.259	
	LTE Band 2	20M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	18900	1880	Open	18.97	20.00	1.268	0.03	0.088	0.112	
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	18900	1880	Open	18.97	20.00	1.268	0.14	0.686	0.870	
30	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	18700	1860	Open	18.88	20.00	1.294	0.03	0.713	0.923	
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	19100	1900	Open	18.96	20.00	1.271	0.11	0.586	0.745	
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	18900	1880	Open	16.97	18.00	1.268	-0.09	0.341	0.432	ENDC
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 0	Receiver off	18900	1880	Open	18.95	20.00	1.274	0.17	0.537	0.684	
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	18900	1880	Open	18.95	20.00	1.274	0.07	0.511	0.651	
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	Receiver off	18900	1880	Open	18.95	20.00	1.274	-0.01	0.194	0.247	
	LTE Band 2	20M	QPSK	50	0	-	Right Side	10mm	Ant 0	Receiver off	18900	1880	Open	18.95	20.00	1.274	-0.02	0.084	0.107	
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	18900	1880	Open	18.95	20.00	1.274	-0.05	0.672	0.856	
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	18700	1860	Open	18.86	20.00	1.300	-0.05	0.694	0.902	
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	19100	1900	Open	18.85	20.00	1.303	0.11	0.574	0.748	
	LTE Band 2	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 0	Receiver off	18900	1880	Open	18.91	20.00	1.285	-0.04	0.630	0.810	
	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	18900	1880	Close	18.97	20.00	1.268	-0.16	0.140	0.177	
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	18900	1880	Close	18.97	20.00	1.268	-0.11	0.474	0.601	
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	18900	1880	Close	18.97	20.00	1.268	0.11	0.241	0.306	
	LTE Band 2	20M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	18900	1880	Close	18.97	20.00	1.268	0.17	0.091	0.115	
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	18900	1880	Close	18.97	20.00	1.268	0.11	0.520	0.659	
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	18900	1880	Close	16.97	18.00	1.268	0.06	0.316	0.401	ENDC
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 0	Receiver off	18900	1880	Close	18.95	20.00	1.274	0.08	0.135	0.172	
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	18900	1880	Close	18.95	20.00	1.274	0.03	0.454	0.578	
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	Receiver off	18900	1880	Close	18.95	20.00	1.274	0.08	0.231	0.294	
	LTE Band 2	20M	QPSK	50	0	-	Right Side	10mm	Ant 0	Receiver off	18900	1880	Close	18.95	20.00	1.274	-0.07	0.087	0.111	
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	18900	1880	Close	18.95	20.00	1.274	-0.1	0.473	0.602	
	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 5	Receiver off	18900	1880	Open	19.58	21.00	1.387	0.06	0.234	0.325	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 5	Receiver off	18900	1880	Open	19.58	21.00	1.387	0.11	0.355	0.492	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	Receiver off	18900	1880	Open	19.58	21.00	1.387	-0.13	0.027	0.037	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	Receiver off	18900	1880	Open	19.58	21.00	1.387	-0.1	0.238	0.330	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	Receiver off	18900	1880	Open	19.58	21.00	1.387	0.1	0.075	0.104	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 5	Receiver off	18900	1880	Open	19.55	21.00	1.396	-0.14	0.226	0.316	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 5	Receiver off	18900	1880	Open	19.55	21.00	1.396	-0.01	0.342	0.478	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	Receiver off	18900	1880	Open	19.55	21.00	1.396	0.02	0.025	0.035	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Right Side	10mm	Ant 5	Receiver off	18900	1880	Open	19.55	21.00	1.396	0.02	0.232	0.324	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	Receiver off	18900	1880	Open	19.55	21.00	1.396	-0.06	0.068	0.095	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 5	Receiver off	18900	1880	Close	19.58	21.00	1.387	0.04	0.096	0.133	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 5	Receiver off	18900	1880	Close	19.58	21.00	1.387	-0.13	0.367	0.509	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	Receiver off	18900	1880	Close	19.58	21.00	1.387	0.07	0.038	0.053	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	Receiver off	18900	1880	Close	19.58	21.00	1.387	0.15	0.322	0.447	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	Receiver off	18900	1880	Close	19.58	21.00	1.387	0.1	0.064	0.089	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 5	Receiver off	18900	1880	Close	19.55	21.00	1.396	-0.13	0.093	0.130	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 5	Receiver off	18900	1880	Close	19.55	21.00	1.396	0.05	0.357	0.499	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	Receiver off	18900	1880	Close	19.55	21.00	1.396	0.16	0.037	0.052	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Right Side	10mm	Ant 5	Receiver off	18900	1880	Close	19.55	21.00	1.396	-0.01	0.313	0.437	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	Receiver off	18900	1880	Close	19.55	21.00	1.396	0.04	0.059	0.082	ENDC/LTE Inter CA
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Receiver off	376000	1880	Open	19.79	21.00	1.321	0.02	0.445	0.588	
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Receiver off	376000	1880	Open	19.79	21.00	1.321	-0.03	0.462	0.610	



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	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Receiver off	376000	1880	Open	19.79	21.00	1.321	0.06	0.175	0.231	
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Receiver off	376000	1880	Open	19.79	21.00	1.321	-0.12	0.102	0.135	
31	FR1 n2	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	376000	1880	Open	19.79	21.00	1.321	-0.14	0.723	0.955	
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Receiver off	376000	1880	Open	18.82	20.00	1.312	0.17	0.372	0.488	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	Receiver off	376000	1880	Open	19.70	21.00	1.349	0.1	0.432	0.583	
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	Receiver off	376000	1880	Open	19.70	21.00	1.349	0.14	0.451	0.608	
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 0	Receiver off	376000	1880	Open	19.70	21.00	1.349	0.07	0.169	0.228	
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 0	Receiver off	376000	1880	Open	19.70	21.00	1.349	-0.03	0.092	0.124	
	FR1 n2	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	376000	1880	Open	19.70	21.00	1.349	-0.16	0.689	0.929	
	FR1 n2	40M	QPSK	216	0	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	376000	1880	Open	19.64	21.00	1.368	-0.02	0.684	0.936	
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Receiver off	376000	1880	Close	19.79	21.00	1.321	-0.15	0.120	0.159	
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Receiver off	376000	1880	Close	19.79	21.00	1.321	0.17	0.406	0.536	
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Receiver off	376000	1880	Close	19.79	21.00	1.321	0.14	0.178	0.235	
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Receiver off	376000	1880	Close	19.79	21.00	1.321	0.07	0.094	0.124	
	FR1 n2	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	376000	1880	Close	19.79	21.00	1.321	0.06	0.503	0.665	
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Receiver off	376000	1880	Close	18.82	20.00	1.312	-0.13	0.332	0.436	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 0	Receiver off	376000	1880	Close	19.70	21.00	1.349	-0.11	0.119	0.161	
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 0	Receiver off	376000	1880	Close	19.70	21.00	1.349	0.12	0.384	0.518	
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 0	Receiver off	376000	1880	Close	19.70	21.00	1.349	0.16	0.165	0.223	
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 0	Receiver off	376000	1880	Close	19.70	21.00	1.349	0.11	0.084	0.113	
	FR1 n2	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	376000	1880	Close	19.70	21.00	1.349	0.13	0.476	0.642	
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	Receiver off	376000	1880	Open	19.62	21.00	1.374	0.16	0.219	0.301	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	Receiver off	376000	1880	Open	19.62	21.00	1.374	-0.14	0.362	0.497	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 5	Receiver off	376000	1880	Open	19.62	21.00	1.374	-0.13	0.028	0.038	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 5	Receiver off	376000	1880	Open	19.62	21.00	1.374	0.14	0.223	0.306	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 5	Receiver off	376000	1880	Open	19.62	21.00	1.374	0.05	0.084	0.115	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	Receiver off	376000	1880	Open	19.40	21.00	1.445	0.15	0.218	0.315	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	Receiver off	376000	1880	Open	19.40	21.00	1.445	-0.09	0.349	0.504	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 5	Receiver off	376000	1880	Open	19.40	21.00	1.445	-0.14	0.025	0.036	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 5	Receiver off	376000	1880	Open	19.40	21.00	1.445	0.16	0.211	0.305	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 5	Receiver off	376000	1880	Open	19.40	21.00	1.445	-0.04	0.070	0.101	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 5	Receiver off	376000	1880	Close	19.62	21.00	1.374	-0.04	0.119	0.164	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 5	Receiver off	376000	1880	Close	19.62	21.00	1.374	0.14	0.389	0.535	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 5	Receiver off	376000	1880	Close	19.62	21.00	1.374	-0.13	0.058	0.080	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 5	Receiver off	376000	1880	Close	19.62	21.00	1.374	-0.1	0.331	0.455	ENDC
	FR1 n2	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 5	Receiver off	376000	1880	Close	19.62	21.00	1.374	0.08	0.078	0.107	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 5	Receiver off	376000	1880	Close	19.40	21.00	1.445	0.17	0.110	0.159	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 5	Receiver off	376000	1880	Close	19.40	21.00	1.445	-0.02	0.383	0.554	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 5	Receiver off	376000	1880	Close	19.40	21.00	1.445	-0.1	0.055	0.079	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 5	Receiver off	376000	1880	Close	19.40	21.00	1.445	-0.06	0.322	0.465	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 5	Receiver off	376000	1880	Close	19.40	21.00	1.445	0.1	0.067	0.097	ENDC
2300MHz																				
32	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	27710	2310	Open	21.94	22.50	1.138	0.13	0.817	0.929	
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	27710	2310	Open	21.94	22.50	1.138	-0.16	0.767	0.873	
	LTE Band 30	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	27710	2310	Open	21.94	22.50	1.138	-0.03	0.414	0.471	
	LTE Band 30	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	27710	2310	Open	21.94	22.50	1.138	0.12	0.182	0.207	
	LTE Band 30	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	27710	2310	Open	21.94	22.50	1.138	-0.17	0.662	0.753	
	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	27710	2310	Open	19.52	20.00	1.117	-0.04	0.462	0.516	ENDC
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	27710	2310	Open	19.52	20.00	1.117	-0.14	0.441	0.493	ENDC
	LTE Band 30	10M	QPSK	25	0	-	Front	10mm	Ant 0	Receiver off	27710	2310	Open	21.84	22.50	1.164	0.01	0.788	0.917	
	LTE Band 30	10M	QPSK	25	0	-	Back	10mm	Ant 0	Receiver off	27710	2310	Open	21.84	22.50	1.164	-0.13	0.740	0.861	
	LTE Band 30	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Receiver off	27710	2310	Open	21.84	22.50	1.164	0.16	0.399	0.464	
	LTE Band 30	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Receiver off	27710	2310	Open	21.84	22.50	1.164	0.17	0.176	0.205	
	LTE Band 30	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Receiver off	27710	2310	Open	21.84	22.50	1.164	0.08	0.638	0.743	
	LTE Band 30	10M	QPSK	50	0	-	Front	10mm	Ant 0	Receiver off	27710	2310	Open	21.71	22.50	1.199	-0.05	0.752	0.902	
	LTE Band 30	10M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	27710	2310	Open	21.71	22.50	1.199	-0.02	0.714	0.856	



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	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	27710	2310	Close	21.94	22.50	1.138	0.08	0.141	0.160	
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	27710	2310	Close	21.94	22.50	1.138	-0.09	0.666	0.758	
	LTE Band 30	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	27710	2310	Close	21.94	22.50	1.138	0.05	0.365	0.415	
	LTE Band 30	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	27710	2310	Close	21.94	22.50	1.138	-0.02	0.232	0.264	
	LTE Band 30	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	27710	2310	Close	21.94	22.50	1.138	0.09	0.616	0.701	
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	27710	2310	Close	19.52	20.00	1.117	-0.15	0.386	0.431	ENDC
	LTE Band 30	10M	QPSK	25	0	-	Front	10mm	Ant 0	Receiver off	27710	2310	Close	21.84	22.50	1.164	0.13	0.136	0.158	
	LTE Band 30	10M	QPSK	25	0	-	Back	10mm	Ant 0	Receiver off	27710	2310	Close	21.84	22.50	1.164	-0.04	0.641	0.746	
	LTE Band 30	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Receiver off	27710	2310	Close	21.84	22.50	1.164	0.12	0.351	0.409	
	LTE Band 30	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Receiver off	27710	2310	Close	21.84	22.50	1.164	-0.09	0.223	0.260	
	LTE Band 30	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Receiver off	27710	2310	Close	21.84	22.50	1.164	-0.13	0.592	0.689	
	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 5	Receiver off	27710	2310	Open	21.05	22.00	1.245	0.09	0.161	0.200	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 5	Receiver off	27710	2310	Open	21.05	22.00	1.245	-0.08	0.375	0.467	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Left Side	10mm	Ant 5	Receiver off	27710	2310	Open	21.05	22.00	1.245	-0.1	0.033	0.041	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Right Side	10mm	Ant 5	Receiver off	27710	2310	Open	21.05	22.00	1.245	0.17	0.193	0.240	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	Receiver off	27710	2310	Open	21.05	22.00	1.245	-0.16	0.097	0.121	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Front	10mm	Ant 5	Receiver off	27710	2310	Open	20.94	22.00	1.276	-0.11	0.123	0.157	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Back	10mm	Ant 5	Receiver off	27710	2310	Open	20.94	22.00	1.276	-0.02	0.290	0.370	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Left Side	10mm	Ant 5	Receiver off	27710	2310	Open	20.94	22.00	1.276	0.16	0.028	0.036	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Right Side	10mm	Ant 5	Receiver off	27710	2310	Open	20.94	22.00	1.276	0.07	0.150	0.191	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 5	Receiver off	27710	2310	Open	20.94	22.00	1.276	-0.1	0.081	0.103	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 5	Receiver off	27710	2310	Close	21.05	22.00	1.245	0.1	0.037	0.046	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 5	Receiver off	27710	2310	Close	21.05	22.00	1.245	0.04	0.409	0.509	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Left Side	10mm	Ant 5	Receiver off	27710	2310	Close	21.05	22.00	1.245	0.15	0.048	0.060	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Right Side	10mm	Ant 5	Receiver off	27710	2310	Close	21.05	22.00	1.245	-0.16	0.153	0.190	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	Receiver off	27710	2310	Close	21.05	22.00	1.245	-0.04	0.103	0.128	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Front	10mm	Ant 5	Receiver off	27710	2310	Close	20.94	22.00	1.276	-0.16	0.033	0.042	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Back	10mm	Ant 5	Receiver off	27710	2310	Close	20.94	22.00	1.276	-0.03	0.312	0.398	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Left Side	10mm	Ant 5	Receiver off	27710	2310	Close	20.94	22.00	1.276	0.16	0.035	0.045	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Right Side	10mm	Ant 5	Receiver off	27710	2310	Close	20.94	22.00	1.276	0.11	0.134	0.171	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 5	Receiver off	27710	2310	Close	20.94	22.00	1.276	0.17	0.089	0.114	ENDC/LTE Inter CA
	FR1 n30	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Receiver off	462000	2310	Open	21.45	22.50	1.274	0.03	0.731	0.931	
	FR1 n30	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Receiver off	462000	2310	Open	21.45	22.50	1.274	0.14	0.718	0.914	
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Receiver off	462000	2310	Open	21.45	22.50	1.274	-0.09	0.288	0.367	
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Receiver off	462000	2310	Open	21.45	22.50	1.274	0.04	0.117	0.149	
	FR1 n30	10M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	462000	2310	Open	21.45	22.50	1.274	-0.16	0.670	0.853	
33	FR1 n30	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 0	Receiver off	462000	2310	Open	21.38	22.50	1.294	-0.12	0.763	0.987	
	FR1 n30	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 0	Receiver off	462000	2310	Open	21.38	22.50	1.294	-0.16	0.741	0.959	
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Side	10mm	Ant 0	Receiver off	462000	2310	Open	21.38	22.50	1.294	0.1	0.290	0.375	
	FR1 n30	10M	QPSK	25	14	DFT-15	Right Side	10mm	Ant 0	Receiver off	462000	2310	Open	21.38	22.50	1.294	-0.11	0.126	0.163	
	FR1 n30	10M	QPSK	25	14	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	462000	2310	Open	21.38	22.50	1.294	-0.07	0.695	0.899	
	FR1 n30	10M	QPSK	50	0	DFT-15	Front	10mm	Ant 0	Receiver off	462000	2310	Open	21.36	22.50	1.300	0.02	0.711	0.924	
	FR1 n30	10M	QPSK	50	0	DFT-15	Back	10mm	Ant 0	Receiver off	462000	2310	Open	21.36	22.50	1.300	-0.05	0.689	0.896	
	FR1 n30	10M	QPSK	50	0	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	462000	2310	Open	21.36	22.50	1.300	-0.11	0.659	0.857	
	FR1 n30	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Receiver off	462000	2310	Close	21.45	22.50	1.274	0.01	0.136	0.173	
	FR1 n30	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Receiver off	462000	2310	Close	21.45	22.50	1.274	0.17	0.707	0.900	
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Receiver off	462000	2310	Close	21.45	22.50	1.274	-0.17	0.327	0.416	
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Receiver off	462000	2310	Close	21.45	22.50	1.274	-0.08	0.194	0.247	
	FR1 n30	10M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	462000	2310	Close	21.45	22.50	1.274	0.13	0.575	0.732	
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 0	Receiver off	462000	2310	Close	21.38	22.50	1.294	-0.09	0.154	0.199	
	FR1 n30	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 0	Receiver off	462000	2310	Close	21.38	22.50	1.294	0.09	0.757	0.980	
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Side	10mm	Ant 0	Receiver off	462000	2310	Close	21.38	22.50	1.294	0.05	0.332	0.430	
	FR1 n30	10M	QPSK	25	14	DFT-15	Right Side	10mm	Ant 0	Receiver off	462000	2310	Close	21.38	22.50	1.294	-0.03	0.216	0.280	
	FR1 n30	10M	QPSK	25	14	DFT-15	Bottom Side	10mm	Ant 0	Receiver off	462000	2310	Close	21.38	22.50	1.294	-0.1	0.592	0.766	
	FR1 n30	10M	QPSK	50	0	DFT-15	Back	10mm	Ant 0	Receiver off	462000	2310	Close	21.36	22.50	1.300	0.09	0.694	0.902	
2600MHz																				



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	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	21100	2535	Open	23.31	24.00	1.172	-0.07	0.214	0.251	
34	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	21100	2535	Open	23.31	24.00	1.172	-0.1	0.431	0.505	
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	21100	2535	Open	23.31	24.00	1.172	0.1	0.185	0.217	
	LTE Band 7	20M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	21100	2535	Open	23.31	24.00	1.172	0.13	0.148	0.173	
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	21100	2535	Open	23.31	24.00	1.172	-0.08	0.248	0.291	
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 0	Receiver off	21100	2535	Open	22.30	23.00	1.175	0.14	0.164	0.193	
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	21100	2535	Open	22.30	23.00	1.175	0.16	0.332	0.390	
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	Receiver off	21100	2535	Open	22.30	23.00	1.175	-0.15	0.143	0.168	
	LTE Band 7	20M	QPSK	50	0	-	Right Side	10mm	Ant 0	Receiver off	21100	2535	Open	22.30	23.00	1.175	-0.11	0.117	0.137	
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	21100	2535	Open	22.30	23.00	1.175	-0.07	0.193	0.227	
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	21100	2535	Close	23.31	24.00	1.172	-0.16	0.052	0.061	
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	21100	2535	Close	23.31	24.00	1.172	0.17	0.408	0.478	
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	Receiver off	21100	2535	Close	23.31	24.00	1.172	-0.12	0.204	0.239	
	LTE Band 7	20M	QPSK	1	0	-	Right Side	10mm	Ant 0	Receiver off	21100	2535	Close	23.31	24.00	1.172	0.08	0.137	0.161	
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Receiver off	21100	2535	Close	23.31	24.00	1.172	0.02	0.236	0.277	
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 0	Receiver off	21100	2535	Close	22.30	23.00	1.175	0.07	0.043	0.051	
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 0	Receiver off	21100	2535	Close	22.30	23.00	1.175	-0.05	0.311	0.365	
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	Receiver off	21100	2535	Close	22.30	23.00	1.175	0.14	0.159	0.187	
	LTE Band 7	20M	QPSK	50	0	-	Right Side	10mm	Ant 0	Receiver off	21100	2535	Close	22.30	23.00	1.175	-0.17	0.105	0.123	
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Receiver off	21100	2535	Close	22.30	23.00	1.175	-0.14	0.186	0.219	
3000MHz																				
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.60	20.00	1.380	-0.17	0.410	0.566	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.60	20.00	1.380	-0.1	0.443	0.612	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.60	20.00	1.380	0.12	0.556	0.767	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.60	20.00	1.380	0.14	0.076	0.105	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.60	20.00	1.380	0.03	0.060	0.083	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.47	20.00	1.422	0.09	0.425	0.604	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.47	20.00	1.422	-0.09	0.458	0.651	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.47	20.00	1.422	-0.16	0.566	0.805	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.47	20.00	1.422	-0.09	0.080	0.114	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.47	20.00	1.422	-0.13	0.062	0.088	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 1	Receiver off	533332	3499.98	Open	15.95	17.50	1.429	0.06	0.246	0.352	ENDC
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	533332	3499.98	Open	15.95	17.50	1.429	0.12	0.271	0.387	ENDC
	FR1 n77 Part27Q	100M	QPSK	270	0	DFT-30	Left Side	10mm	Ant 1	Receiver off	533332	3499.98	Open	18.34	20.00	1.466	0.17	0.533	0.781	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.60	20.00	1.380	-0.14	0.194	0.268	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.60	20.00	1.380	0.06	0.334	0.461	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.60	20.00	1.380	0.05	0.436	0.602	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.60	20.00	1.380	-0.07	0.118	0.163	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.60	20.00	1.380	-0.09	0.145	0.200	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.60	20.00	1.380	0.09	0.071	0.098	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.47	20.00	1.422	0.15	0.206	0.293	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.47	20.00	1.422	-0.09	0.342	0.486	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.47	20.00	1.422	-0.09	0.445	0.633	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.47	20.00	1.422	-0.09	0.121	0.172	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.47	20.00	1.422	-0.03	0.152	0.216	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	533332	3499.98	Close	18.47	20.00	1.422	0.05	0.076	0.108	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	533332	3499.98	Close	15.95	17.50	1.429	0.16	0.211	0.301	ENDC
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 1	Receiver off	556000	3840	Open	18.89	20.00	1.291	0.15	0.530	0.684	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	556000	3840	Open	18.89	20.00	1.291	-0.07	0.622	0.803	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	556000	3840	Open	18.89	20.00	1.291	-0.03	0.721	0.931	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 1	Receiver off	556000	3840	Open	18.89	20.00	1.291	0.13	0.076	0.098	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	556000	3840	Open	18.89	20.00	1.291	-0.17	0.069	0.089	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 1	Receiver off	550000	3750	Open	18.88	20.00	1.294	-0.07	0.545	0.705	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 1	Receiver off	562000	3930	Open	18.67	20.00	1.358	0.09	0.498	0.676	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	550000	3750	Open	18.88	20.00	1.294	0.11	0.649	0.840	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	562000	3930	Open	18.67	20.00	1.358	-0.02	0.568	0.772	



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35	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	550000	3750	Open	18.88	20.00	1.294	-0.12	0.731	0.946	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	562000	3930	Open	18.67	20.00	1.358	-0.17	0.626	0.850	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 1	Receiver off	550000	3750	Open	16.42	17.50	1.282	-0.01	0.311	0.399	ENDC
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	550000	3750	Open	16.42	17.50	1.282	-0.15	0.376	0.482	ENDC
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 1	Receiver off	556000	3840	Open	18.88	20.00	1.294	-0.16	0.491	0.635	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	556000	3840	Open	18.88	20.00	1.294	-0.14	0.600	0.777	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	556000	3840	Open	18.88	20.00	1.294	-0.17	0.705	0.912	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 1	Receiver off	556000	3840	Open	18.88	20.00	1.294	0.11	0.071	0.092	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	556000	3840	Open	18.88	20.00	1.294	0.1	0.063	0.082	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 1	Receiver off	550000	3750	Open	18.76	20.00	1.330	-0.14	0.526	0.700	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 1	Receiver off	562000	3930	Open	18.66	20.00	1.361	-0.16	0.462	0.629	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	550000	3750	Open	18.76	20.00	1.330	0.13	0.622	0.828	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	562000	3930	Open	18.66	20.00	1.361	0.02	0.546	0.743	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	550000	3750	Open	18.76	20.00	1.330	-0.1	0.701	0.933	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	562000	3930	Open	18.66	20.00	1.361	-0.16	0.611	0.832	
	FR1 n77 Part270	100M	QPSK	270	0	DFT-30	Front	10mm	Ant 1	Receiver off	556000	3840	Open	18.82	20.00	1.312	0.02	0.471	0.618	
	FR1 n77 Part270	100M	QPSK	270	0	DFT-30	Back	10mm	Ant 1	Receiver off	556000	3840	Open	18.82	20.00	1.312	-0.09	0.587	0.770	
	FR1 n77 Part270	100M	QPSK	270	0	DFT-30	Left Side	10mm	Ant 1	Receiver off	556000	3840	Open	18.82	20.00	1.312	-0.01	0.694	0.911	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 1	Receiver off	556000	3840	Close	18.89	20.00	1.291	0.11	0.201	0.260	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	556000	3840	Close	18.89	20.00	1.291	-0.03	0.589	0.761	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	556000	3840	Close	18.89	20.00	1.291	0.16	0.411	0.531	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 1	Receiver off	556000	3840	Close	18.89	20.00	1.291	-0.06	0.114	0.147	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 1	Receiver off	556000	3840	Close	18.89	20.00	1.291	-0.08	0.191	0.247	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	556000	3840	Close	18.89	20.00	1.291	0.1	0.154	0.199	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	550000	3750	Close	18.88	20.00	1.294	-0.15	0.439	0.568	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	562000	3930	Close	18.67	20.00	1.358	-0.17	0.516	0.701	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	550000	3750	Close	18.88	20.00	1.294	0.08	0.326	0.422	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	562000	3930	Close	18.67	20.00	1.358	-0.11	0.371	0.504	
	FR1 n77 Part270	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	556000	3840	Close	16.52	17.50	1.253	-0.03	0.342	0.429	ENDC
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 1	Receiver off	556000	3840	Close	18.88	20.00	1.294	-0.06	0.184	0.238	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	556000	3840	Close	18.88	20.00	1.294	-0.11	0.564	0.730	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	556000	3840	Close	18.88	20.00	1.294	0.08	0.388	0.502	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 1	Receiver off	556000	3840	Close	18.88	20.00	1.294	-0.14	0.102	0.132	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 1	Receiver off	556000	3840	Close	18.88	20.00	1.294	0.02	0.182	0.236	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	556000	3840	Close	18.88	20.00	1.294	0.06	0.144	0.186	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	550000	3750	Close	18.76	20.00	1.330	-0.12	0.425	0.565	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	562000	3930	Close	18.66	20.00	1.361	-0.11	0.504	0.686	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	550000	3750	Close	18.76	20.00	1.330	-0.13	0.311	0.414	
	FR1 n77 Part270	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	562000	3930	Close	18.66	20.00	1.361	-0.13	0.358	0.487	
	FR1 n77 Part270	100M	QPSK	270	0	DFT-30	Back	10mm	Ant 1	Receiver off	562000	3930	Close	18.82	20.00	1.312	-0.04	0.533	0.699	
	FR1 n77 Part270	100M	QPSK	270	0	DFT-30	Left Side	10mm	Ant 1	Receiver off	562000	3930	Close	18.82	20.00	1.312	0.06	0.376	0.493	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.23	17.50	1.340	-0.02	0.260	0.348	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.23	17.50	1.340	0.06	0.239	0.320	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.23	17.50	1.340	0.02	0.340	0.455	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.23	17.50	1.340	-0.13	0.023	0.031	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.23	17.50	1.340	0.05	0.021	0.028	
	FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.10	17.50	1.380	0.07	0.277	0.382	
	FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.10	17.50	1.380	-0.16	0.259	0.358	
	FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.10	17.50	1.380	0.03	0.347	0.479	
	FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.10	17.50	1.380	0.07	0.029	0.040	
	FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	541666	3624.99	Open	16.10	17.50	1.380	0.15	0.025	0.035	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 1	Receiver off	541666	3624.99	Close	16.23	17.50	1.340	0.03	0.121	0.162	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 1	Receiver off	541666	3624.99	Close	16.23	17.50	1.340	0.15	0.245	0.328	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 1	Receiver off	541666	3624.99	Close	16.23	17.50	1.340	0.06	0.273	0.366	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 1	Receiver off	541666	3624.99	Close	16.23	17.50	1.340	-0.03	0.048	0.064	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 1	Receiver off	541666	3624.99	Close	16.23	17.50	1.340	0.11	0.094	0.126	



FCC SAR Test Report

Report No. : FA5N2009

FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	5416663	3624.99	Close	16.23	17.50	1.340	0.02	0.042	0.056	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 1	Receiver off	5416663	3624.99	Close	16.10	17.50	1.380	-0.05	0.128	0.177	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 1	Receiver off	5416663	3624.99	Close	16.10	17.50	1.380	0.03	0.259	0.358	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 1	Receiver off	5416663	3624.99	Close	16.10	17.50	1.380	0.09	0.286	0.395	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 1	Receiver off	5416663	3624.99	Close	16.10	17.50	1.380	-0.05	0.051	0.070	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 1	Receiver off	5416663	3624.99	Close	16.10	17.50	1.380	0.07	0.099	0.137	
FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 1	Receiver off	5416663	3624.99	Close	16.10	17.50	1.380	-0.13	0.043	0.059	

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	EUT Flip State	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN/BT																	
36	Bluetooth	DH5 1Mbps	Front	10mm	Ant 4	Receiver off	39	2441	Open	9.60	11.00	1.380	64.76	1.544	-0.11	0.019	0.040
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 4	Receiver off	39	2441	Open	9.60	11.00	1.380	64.76	1.544	0.13	0.018	0.038
	Bluetooth	DH5 1Mbps	Left Side	10mm	Ant 4	Receiver off	39	2441	Open	9.60	11.00	1.380	64.76	1.544	-	n/a	n/a
	Bluetooth	DH5 1Mbps	Right Side	10mm	Ant 4	Receiver off	39	2441	Open	9.60	11.00	1.380	64.76	1.544	-0.13	0.016	0.034
	Bluetooth	DH5 1Mbps	Front	10mm	Ant 4	Receiver off	39	2441	Close	9.60	11.00	1.380	64.76	1.544	0.02	0.011	0.023
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 4	Receiver off	39	2441	Close	9.60	11.00	1.380	64.76	1.544	0.05	0.029	0.062
	Bluetooth	DH5 1Mbps	Left Side	10mm	Ant 4	Receiver off	39	2441	Close	9.60	11.00	1.380	64.76	1.544	0.13	0.005	0.011
	Bluetooth	DH5 1Mbps	Right Side	10mm	Ant 4	Receiver off	39	2441	Close	9.60	11.00	1.380	64.76	1.544	0.13	0.008	0.017
	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 4	Receiver off	39	2441	Close	9.60	11.00	1.380	64.76	1.544	0.13	0.016	0.034
37	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	Receiver off	6	2437	Open	18.00	19.50	1.413	100	1.000	0.07	0.209	0.295
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	Receiver off	6	2437	Open	18.00	19.50	1.413	100	1.000	-0.17	0.178	0.251
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4	Receiver off	6	2437	Open	18.00	19.50	1.413	100	1.000	-	n/a	n/a
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4	Receiver off	6	2437	Open	18.00	19.50	1.413	100	1.000	-0.06	0.147	0.208
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	Receiver off	6	2437	Close	18.00	19.50	1.413	100	1.000	0.01	0.102	0.144
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	Receiver off	6	2437	Close	18.00	19.50	1.413	100	1.000	-0.07	0.247	0.349
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4	Receiver off	6	2437	Close	18.00	19.50	1.413	100	1.000	-0.14	0.047	0.066
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4	Receiver off	6	2437	Close	18.00	19.50	1.413	100	1.000	-0.14	0.094	0.133
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	Receiver off	6	2437	Close	18.00	19.50	1.413	100	1.000	0.17	0.162	0.229
38	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	Receiver off	42	5210	Open	13.61	15.00	1.377	90.32	1.107	-0.15	0.064	0.098
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	Receiver off	42	5210	Open	13.61	15.00	1.377	90.32	1.107	-0.06	0.282	0.430
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4	Receiver off	42	5210	Open	13.61	15.00	1.377	90.32	1.107	0.06	0.029	0.044
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4	Receiver off	42	5210	Open	13.61	15.00	1.377	90.32	1.107	0.15	0.174	0.265
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	Receiver off	42	5210	Close	13.61	15.00	1.377	90.32	1.107	0.02	0.031	0.047
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	Receiver off	42	5210	Close	13.61	15.00	1.377	90.32	1.107	0.05	0.317	0.483
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4	Receiver off	42	5210	Close	13.61	15.00	1.377	90.32	1.107	-0.02	0.033	0.050
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4	Receiver off	42	5210	Close	13.61	15.00	1.377	90.32	1.107	-0.15	0.191	0.291
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4	Receiver off	42	5210	Close	13.61	15.00	1.377	90.32	1.107	0.02	0.066	0.101
39	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	Receiver off	155	5775	Open	14.60	16.00	1.380	90.32	1.107	0.12	0.094	0.144
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	Receiver off	155	5775	Open	14.60	16.00	1.380	90.32	1.107	0.01	0.251	0.384
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4	Receiver off	155	5775	Open	14.60	16.00	1.380	90.32	1.107	-0.11	0.070	0.107
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4	Receiver off	155	5775	Open	14.60	16.00	1.380	90.32	1.107	-0.02	0.173	0.264
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4	Receiver off	155	5775	Close	14.60	16.00	1.380	90.32	1.107	0.04	0.050	0.076
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4	Receiver off	155	5775	Close	14.60	16.00	1.380	90.32	1.107	0.15	0.299	0.457
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4	Receiver off	155	5775	Close	14.60	16.00	1.380	90.32	1.107	-0.16	0.039	0.060
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4	Receiver off	155	5775	Close	14.60	16.00	1.380	90.32	1.107	-0.16	0.188	0.287
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4	Receiver off	155	5775	Close	14.60	16.00	1.380	90.32	1.107	-0.01	0.159	0.243



14.3 Body-Worn SAR

<Flip Close >

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	EUT Flip State	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Note
750MHz																				
40	LTE Band 12	10M	QPSK	1	0	-	Front	15mm	Ant 0	Receiver off	23095	707.5	Close	24.40	25.00	1.148	0.09	0.169	0.194	
	LTE Band 12	10M	QPSK	1	0	-	Back	15mm	Ant 0	Receiver off	23095	707.5	Close	24.40	25.00	1.148	0.12	0.490	0.563	
	LTE Band 12	10M	QPSK	25	0	-	Front	15mm	Ant 0	Receiver off	23095	707.5	Close	23.38	24.00	1.153	-0.12	0.143	0.165	
	LTE Band 12	10M	QPSK	25	0	-	Back	15mm	Ant 0	Receiver off	23095	707.5	Close	23.38	24.00	1.153	0.01	0.387	0.446	
41	LTE Band 14	10M	QPSK	1	0	-	Front	15mm	Ant 0	Receiver off	23330	793	Close	24.02	24.50	1.117	0.06	0.226	0.252	
	LTE Band 14	10M	QPSK	1	0	-	Back	15mm	Ant 0	Receiver off	23330	793	Close	24.02	24.50	1.117	-0.07	0.628	0.701	
	LTE Band 14	10M	QPSK	25	0	-	Front	15mm	Ant 0	Receiver off	23330	793	Close	23.40	24.00	1.148	-0.03	0.191	0.219	
	LTE Band 14	10M	QPSK	25	0	-	Back	15mm	Ant 0	Receiver off	23330	793	Close	23.40	24.00	1.148	-0.02	0.534	0.613	
835MHz																				
42	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 0	Receiver off	4182	836.4	Close	21.93	22.50	1.140	0.01	0.140	0.160	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 0	Receiver off	4182	836.4	Close	21.93	22.50	1.140	-0.05	0.500	0.570	
	LTE Band 5	10M	QPSK	1	0	-	Front	15mm	Ant 0	Receiver off	20525	836.5	Close	22.24	23.50	1.337	-0.12	0.165	0.221	
	LTE Band 5	10M	QPSK	1	0	-	Back	15mm	Ant 0	Receiver off	20525	836.5	Close	22.24	23.50	1.337	0.17	0.545	0.728	
43	LTE Band 5	10M	QPSK	25	0	-	Front	15mm	Ant 0	Receiver off	20525	836.5	Close	22.23	23.50	1.340	0.07	0.159	0.213	
	LTE Band 5	10M	QPSK	25	0	-	Back	15mm	Ant 0	Receiver off	20525	836.5	Close	22.23	23.50	1.340	0.07	0.527	0.706	
	FR1 n5	20M	QPSK	1	53	DFT-15	Front	15mm	Ant 0	Receiver off	167300	836.5	Close	22.51	23.50	1.256	0.08	0.134	0.168	
	FR1 n5	20M	QPSK	1	53	DFT-15	Back	15mm	Ant 0	Receiver off	167300	836.5	Close	22.51	23.50	1.256	-0.15	0.561	0.705	
44	FR1 n5	20M	QPSK	50	28	DFT-15	Front	15mm	Ant 0	Receiver off	167300	836.5	Close	22.46	23.50	1.271	0.02	0.127	0.161	
	FR1 n5	20M	QPSK	50	28	DFT-15	Back	15mm	Ant 0	Receiver off	167300	836.5	Close	22.46	23.50	1.271	0.01	0.527	0.670	
1800MHz																				
45	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 0	Receiver off	1413	1732.6	Close	19.34	20.00	1.164	-0.13	0.081	0.094	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 0	Receiver off	1413	1732.6	Close	19.34	20.00	1.164	0.05	0.360	0.419	
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 0	Receiver off	132322	1745	Close	18.21	19.00	1.199	-0.02	0.061	0.073	
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 0	Receiver off	132322	1745	Close	18.21	19.00	1.199	0.13	0.279	0.335	
46	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 0	Receiver off	132322	1745	Close	18.19	19.00	1.205	0.16	0.058	0.070	
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 0	Receiver off	132322	1745	Close	18.19	19.00	1.205	-0.08	0.267	0.322	
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 5	Receiver off	132322	1745	Close	21.13	22.50	1.371	-0.13	0.077	0.106	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 5	Receiver off	132322	1745	Close	21.13	22.50	1.371	0.09	0.190	0.260	ENDC/LTE Inter CA
47	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 5	Receiver off	132322	1745	Close	21.10	22.50	1.380	0.1	0.057	0.079	ENDC/LTE Inter CA
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 5	Receiver off	132322	1745	Close	21.10	22.50	1.380	-0.07	0.149	0.206	ENDC/LTE Inter CA
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	15mm	Ant 0	Receiver off	349000	1745	Close	18.96	20.00	1.271	-0.12	0.077	0.098	
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	15mm	Ant 0	Receiver off	349000	1745	Close	18.96	20.00	1.271	-0.05	0.283	0.360	
48	FR1 n66	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 0	Receiver off	349000	1745	Close	18.87	20.00	1.297	0.06	0.072	0.093	
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 0	Receiver off	349000	1745	Close	18.87	20.00	1.297	-0.09	0.276	0.358	
	FR1 n66	40M	QPSK	1	1	DFT-15	Front	15mm	Ant 5	Receiver off	349000	1745	Close	20.58	21.50	1.236	0.01	0.080	0.099	ENDC
	FR1 n66	40M	QPSK	1	1	DFT-15	Back	15mm	Ant 5	Receiver off	349000	1745	Close	20.58	21.50	1.236	0.09	0.194	0.240	ENDC
49	FR1 n66	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 5	Receiver off	349000	1745	Close	20.45	21.50	1.274	-0.02	0.078	0.099	ENDC
	FR1 n66	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 5	Receiver off	349000	1745	Close	20.45	21.50	1.274	0.11	0.185	0.236	ENDC
1900MHz																				
48	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 0	Receiver off	9400	1880	Close	21.25	21.50	1.059	-0.09	0.134	0.142	
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 0	Receiver off	9400	1880	Close	21.25	21.50	1.059	-0.08	0.412	0.436	
	LTE Band 2	20M	QPSK	1	0	-	Front	15mm	Ant 0	Receiver off	18900	1880	Close	18.97	20.00	1.268	-0.16	0.085	0.108	
	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 0	Receiver off	18900	1880	Close	18.97	20.00	1.268	-0.07	0.279	0.354	
49	LTE Band 2	20M	QPSK	50	0	-	Front	15mm	Ant 0	Receiver off	18900	1880	Close	18.95	20.00	1.274	-0.17	0.082	0.104	
	LTE Band 2	20M	QPSK	50	0	-	Back	15mm	Ant 0	Receiver off	18900	1880	Close	18.95	20.00	1.274	0.12	0.269	0.343	
	LTE Band 2	20M	QPSK	1	0	-	Front	15mm	Ant 5	Receiver off	18900	1880	Close	19.58	21.00	1.387	-0.08	0.082	0.114	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 5	Receiver off	18900	1880	Close	19.58	21.00	1.387	0.1	0.259	0.359	ENDC/LTE Inter CA
50	LTE Band 2	20M	QPSK	50	0	-	Front	15mm	Ant 5	Receiver off	18900	1880	Close	19.55	21.00	1.396	0.03	0.080	0.112	ENDC/LTE Inter CA
	LTE Band 2	20M	QPSK	50	0	-	Back	15mm	Ant 5	Receiver off	18900	1880	Close	19.55	21.00	1.396	-0.11	0.252	0.352	ENDC/LTE Inter CA
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	15mm	Ant 0	Receiver off	376000	1880	Close	19.79	21.00	1.321	-0.02	0.085	0.112	



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	FR1 n2	40M	QPSK	1	1	DFT-15	Back	15mm	Ant 0	Receiver off	376000	1880	Close	19.79	21.00	1.321	-0.02	0.249	0.329	
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 0	Receiver off	376000	1880	Close	19.70	21.00	1.349	0.06	0.078	0.105	
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 0	Receiver off	376000	1880	Close	19.70	21.00	1.349	-0.15	0.237	0.320	
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	15mm	Ant 5	Receiver off	376000	1880	Close	19.62	21.00	1.374	-0.1	0.084	0.115	ENDC
50	FR1 n2	40M	QPSK	1	1	DFT-15	Back	15mm	Ant 5	Receiver off	376000	1880	Close	19.62	21.00	1.374	0.06	0.249	0.342	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 5	Receiver off	376000	1880	Close	19.40	21.00	1.445	0.09	0.079	0.114	ENDC
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 5	Receiver off	376000	1880	Close	19.40	21.00	1.445	0.13	0.235	0.340	ENDC
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Front	15mm	Ant 0	Receiver off	27710	2310	Close	21.94	22.50	1.138	0.12	0.127	0.144	
51	LTE Band 30	10M	QPSK	1	0	-	Back	15mm	Ant 0	Receiver off	27710	2310	Close	21.94	22.50	1.138	-0.15	0.410	0.466	
	LTE Band 30	10M	QPSK	25	0	-	Front	15mm	Ant 0	Receiver off	27710	2310	Close	21.84	22.50	1.164	-0.03	0.124	0.144	
	LTE Band 30	10M	QPSK	25	0	-	Back	15mm	Ant 0	Receiver off	27710	2310	Close	21.84	22.50	1.164	-0.14	0.389	0.453	
	LTE Band 30	10M	QPSK	1	0	-	Front	15mm	Ant 5	Receiver off	27710	2310	Close	21.05	22.00	1.245	-0.03	0.077	0.096	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	1	0	-	Back	15mm	Ant 5	Receiver off	27710	2310	Close	21.05	22.00	1.245	-0.12	0.241	0.300	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Front	15mm	Ant 5	Receiver off	27710	2310	Close	20.94	22.00	1.276	0.03	0.075	0.096	ENDC/LTE Inter CA
	LTE Band 30	10M	QPSK	25	0	-	Back	15mm	Ant 5	Receiver off	27710	2310	Close	20.94	22.00	1.276	0.15	0.223	0.285	ENDC/LTE Inter CA
	FR1 n30	10M	QPSK	1	1	-	Front	15mm	Ant 0	Receiver off	462000	2310	Close	21.45	22.50	1.274	0.04	0.093	0.118	
52	FR1 n30	10M	QPSK	1	1	-	Back	15mm	Ant 0	Receiver off	462000	2310	Close	21.45	22.50	1.274	0.02	0.427	0.544	
	FR1 n30	10M	QPSK	25	14	-	Front	15mm	Ant 0	Receiver off	462000	2310	Close	21.38	22.50	1.294	0.08	0.091	0.118	
	FR1 n30	10M	QPSK	25	14	-	Back	15mm	Ant 0	Receiver off	462000	2310	Close	21.38	22.50	1.294	0.14	0.411	0.532	
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	15mm	Ant 0	Receiver off	21100	2535	Close	23.31	24.00	1.172	-0.01	0.046	0.054	
53	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 0	Receiver off	21100	2535	Close	23.31	24.00	1.172	-0.17	0.122	0.143	
	LTE Band 7	20M	QPSK	50	0	-	Front	15mm	Ant 0	Receiver off	21100	2535	Close	22.30	23.00	1.175	-0.09	0.041	0.048	
	LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 0	Receiver off	21100	2535	Close	22.30	23.00	1.175	-0.02	0.108	0.127	
3000MHz																				
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 1	Receiver off	633332	3499.98	Close	18.60	20.00	1.380	-0.16	0.095	0.131	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 1	Receiver off	633332	3499.98	Close	18.60	20.00	1.380	-0.07	0.125	0.173	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 1	Receiver off	633332	3499.98	Close	18.47	20.00	1.422	-0.03	0.091	0.129	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 1	Receiver off	633332	3499.98	Close	18.47	20.00	1.422	0.16	0.121	0.172	
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 1	Receiver off	656000	3840	Close	18.89	20.00	1.291	-0.02	0.106	0.137	
54	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 1	Receiver off	656000	3840	Close	18.89	20.00	1.291	-0.06	0.289	0.373	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 1	Receiver off	656000	3840	Close	18.88	20.00	1.294	0.13	0.101	0.131	
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 1	Receiver off	656000	3840	Close	18.88	20.00	1.294	0.16	0.271	0.351	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 1	Receiver off	641666	3624.99	Close	16.23	17.50	1.340	0.03	0.074	0.099	
	FR1 n77 Part96	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 1	Receiver off	641666	3624.99	Close	16.23	17.50	1.340	0.09	0.114	0.153	
	FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 1	Receiver off	641666	3624.99	Close	16.10	17.50	1.380	-0.15	0.069	0.095	
	FR1 n77 Part96	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 1	Receiver off	641666	3624.99	Close	16.10	17.50	1.380	0.07	0.110	0.152	

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	EUT Flip State	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN/BT																	
	Bluetooth	DH5 1Mbps	Front	15mm	Ant 4	Receiver off	39	2441	Close	9.60	11.00	1.380	64.76	1.544	0.09	0.006	0.013
55	Bluetooth	DH5 1Mbps	Back	15mm	Ant 4	Receiver off	39	2441	Close	9.60	11.00	1.380	64.76	1.544	-0.13	0.011	0.023
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 4	Receiver off	6	2437	Close	18.00	19.50	1.413	100	1.000	0.06	0.068	0.096
56	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 4	Receiver off	6	2437	Close	18.00	19.50	1.413	100	1.000	-0.03	0.169	0.239
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	15mm	Ant 4	Receiver off	58	5290	Close	13.02	15.00	1.577	90.32	1.107	-0.17	0.027	0.047
57	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 4	Receiver off	58	5290	Close	13.02	15.00	1.577	90.32	1.107	0.01	0.201	0.351
	WLAN5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 4	Receiver off	110	5550	Close	14.58	16.00	1.387	94.92	1.054	-0.03	0.038	0.056
58	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 4	Receiver off	110	5550	Close	14.58	16.00	1.387	94.92	1.054	-0.08	0.240	0.351
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	15mm	Ant 4	Receiver off	155	5775	Close	14.60	16.00	1.380	90.32	1.107	-0.04	0.041	0.063
59	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 4	Receiver off	155	5775	Close	14.60	16.00	1.380	90.32	1.107	-0.17	0.232	0.355



14.4 Product specific 10g SAR

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	EUT Flip State	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
WLAN																	
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4	Receiver off	58	5290	Open	13.02	15.00	1.577	90.32	1.107	0.09	0.072	0.126
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4	Receiver off	58	5290	Open	13.02	15.00	1.577	90.32	1.107	0.17	0.679	1.185
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4	Receiver off	58	5290	Open	13.02	15.00	1.577	90.32	1.107	0.15	0.027	0.047
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4	Receiver off	58	5290	Open	13.02	15.00	1.577	90.32	1.107	-0.17	0.420	0.733
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4	Receiver off	58	5290	Close	13.02	15.00	1.577	90.32	1.107	0.14	0.035	0.061
60	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4	Receiver off	58	5290	Close	13.02	15.00	1.577	90.32	1.107	0.09	0.755	1.318
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4	Receiver off	58	5290	Close	13.02	15.00	1.577	90.32	1.107	0.11	0.055	0.096
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4	Receiver off	58	5290	Close	13.02	15.00	1.577	90.32	1.107	-0.07	0.399	0.696
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4	Receiver off	58	5290	Close	13.02	15.00	1.577	90.32	1.107	-0.17	0.098	0.171
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4	Receiver off	110	5550	Open	14.58	16.00	1.387	94.92	1.054	-0.09	0.118	0.172
61	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4	Receiver off	110	5550	Open	14.58	16.00	1.387	94.92	1.054	-0.16	0.793	1.159
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4	Receiver off	110	5550	Open	14.58	16.00	1.387	94.92	1.054	0.06	0.076	0.111
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 4	Receiver off	110	5550	Open	14.58	16.00	1.387	94.92	1.054	0.09	0.548	0.801
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4	Receiver off	110	5550	Close	14.58	16.00	1.387	94.92	1.054	0.07	0.050	0.073
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4	Receiver off	110	5550	Close	14.58	16.00	1.387	94.92	1.054	0.15	0.689	1.007
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4	Receiver off	110	5550	Close	14.58	16.00	1.387	94.92	1.054	-0.12	0.063	0.092
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 4	Receiver off	110	5550	Close	14.58	16.00	1.387	94.92	1.054	0.09	0.531	0.776
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 4	Receiver off	110	5550	Close	14.58	16.00	1.387	94.92	1.054	0.16	0.235	0.343



14.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 14	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23330	793	24.02	24.50	1.117	-	-	0.05	0.875	1	0.977
2nd	LTE Band 14	10M	QPSK	1	0	-	Back	10mm	Ant 0	Receiver off	23330	793	24.02	24.50	1.117	-	-	-0.06	0.871	1.005	0.973
1st	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	4132	826.4	21.88	22.50	1.153	-	-	0.09	0.802	1	0.925
2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Receiver off	4132	826.4	21.88	22.50	1.153	-	-	0.04	0.798	1.005	0.920
1st	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	1413	1732.6	19.34	20.00	1.164	-	-	0.06	0.846	1	0.985
2nd	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	1413	1732.6	19.34	20.00	1.164	-	-	0.07	0.839	1.008	0.977
1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	9538	1907.6	21.20	21.50	1.072	-	-	0.12	0.856	1	0.917
2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Receiver off	9538	1907.6	21.20	21.50	1.072	-	-	-0.08	0.851	1.006	0.912
1st	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	27710	2310	21.94	22.50	1.138	-	-	0.13	0.817	1	0.929
2nd	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 0	Receiver off	27710	2310	21.94	22.50	1.138	-	-	0.07	0.811	1.007	0.923

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR < 1.45 W/kg, only one repeated measurement is required.
3. The ratio is the difference in percentage between original and repeated *measured SAR*.
4. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

15. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	5G Feature Phone			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes

General Note:

- WWAN above includes 5G NR bands and EN-DC combination.
- EUT will choose each WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- For 5GNR EN-DC mode, standalone SAR performed for 5GNR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- According to the EUT characteristic, WLAN 5GHz and Bluetooth can't transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz can't transmit simultaneously.
- According to the EUT characteristic, WLAN 2.4GHz and Bluetooth can't transmit simultaneously.
- For standalone WWAN, always choose the highest SAR among the selected WWAN band within the selected antenna to perform simultaneous transmission analysis with WLAN/BT. This is the worst co-located analysis and can represent each band.
- For EN-DC SAR co-located with WLAN/Bluetooth, chose the worst SAR among the selected LTE bands within the selected antenna per each test position and also the worst SAR of the selected 5GNR Bands within the selected antenna to do co-located with WLAN/Bluetooth. This is the worst co-located analysis and can represent each LTE bands and each 5GNR band.
- The maximum SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.



15.1 Head Exposure Conditions

<Flip Open>

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4	1+5
		WWAN	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WCDMA II Ant 0	Right Cheek	0.155	0.441	0.446	0.077	0.60	0.60	0.23
	Right Tilted	0.090	0.075	0.163	0.017	0.17	0.25	0.11
	Left Cheek	0.178	0.271	0.248	0.053	0.45	0.43	0.23
	Left Tilted	0.124	0.088	0.190	0.028	0.21	0.31	0.15
WCDMA IV Ant 0	Right Cheek	0.170	0.441	0.446	0.077	0.61	0.62	0.25
	Right Tilted	0.158	0.075	0.163	0.017	0.23	0.32	0.18
	Left Cheek	0.191	0.271	0.248	0.053	0.46	0.44	0.24
	Left Tilted	0.176	0.088	0.190	0.028	0.26	0.37	0.20
WCDMA V Ant 0	Right Cheek	0.544	0.441	0.446	0.077	0.99	0.99	0.62
	Right Tilted	0.402	0.075	0.163	0.017	0.48	0.57	0.42
	Left Cheek	0.719	0.271	0.248	0.053	0.99	0.97	0.77
	Left Tilted	0.359	0.088	0.190	0.028	0.45	0.55	0.39
LTE Band 2 Ant 0	Right Cheek	0.179	0.441	0.446	0.077	0.62	0.63	0.26
	Right Tilted	0.108	0.075	0.163	0.017	0.18	0.27	0.13
	Left Cheek	0.224	0.271	0.248	0.053	0.50	0.47	0.28
	Left Tilted	0.125	0.088	0.190	0.028	0.21	0.32	0.15
LTE Band 5 Ant 0	Right Cheek	0.660	0.441	0.446	0.077	1.10	1.11	0.74
	Right Tilted	0.489	0.075	0.163	0.017	0.56	0.65	0.51
	Left Cheek	0.850	0.271	0.248	0.053	1.12	1.10	0.90
	Left Tilted	0.356	0.088	0.190	0.028	0.44	0.55	0.38
LTE Band 7 Ant 0	Right Cheek	0.076	0.441	0.446	0.077	0.52	0.52	0.15
	Right Tilted	0.047	0.075	0.163	0.017	0.12	0.21	0.06
	Left Cheek	0.093	0.271	0.248	0.053	0.36	0.34	0.15
	Left Tilted	0.066	0.088	0.190	0.028	0.15	0.26	0.09
LTE Band 12 Ant 0	Right Cheek	0.185	0.441	0.446	0.077	0.63	0.63	0.26
	Right Tilted	0.123	0.075	0.163	0.017	0.20	0.29	0.14
	Left Cheek	0.200	0.271	0.248	0.053	0.47	0.45	0.25
	Left Tilted	0.096	0.088	0.190	0.028	0.18	0.29	0.12
LTE Band 14 Ant 0	Right Cheek	0.399	0.441	0.446	0.077	0.84	0.85	0.48
	Right Tilted	0.331	0.075	0.163	0.017	0.41	0.49	0.35
	Left Cheek	0.433	0.271	0.248	0.053	0.70	0.68	0.49
	Left Tilted	0.263	0.088	0.190	0.028	0.35	0.45	0.29
LTE Band 30 Ant 0	Right Cheek	0.334	0.441	0.446	0.077	0.78	0.78	0.41
	Right Tilted	0.267	0.075	0.163	0.017	0.34	0.43	0.28
	Left Cheek	0.509	0.271	0.248	0.053	0.78	0.76	0.56
	Left Tilted	0.241	0.088	0.190	0.028	0.33	0.43	0.27
LTE Band 66 Ant 0	Right Cheek	0.156	0.441	0.446	0.077	0.60	0.60	0.23
	Right Tilted	0.149	0.075	0.163	0.017	0.22	0.31	0.17
	Left Cheek	0.197	0.271	0.248	0.053	0.47	0.45	0.25
	Left Tilted	0.173	0.088	0.190	0.028	0.26	0.36	0.20
FR1 n2 Ant 0	Right Cheek	0.256	0.441	0.446	0.077	0.70	0.70	0.33
	Right Tilted	0.139	0.075	0.163	0.017	0.21	0.30	0.16
	Left Cheek	0.266	0.271	0.248	0.053	0.54	0.51	0.32
	Left Tilted	0.163	0.088	0.190	0.028	0.25	0.35	0.19
FR1 n5 Ant 0	Right Cheek	0.569	0.441	0.446	0.077	1.01	1.02	0.65
	Right Tilted	0.410	0.075	0.163	0.017	0.49	0.57	0.43
	Left Cheek	0.779	0.271	0.248	0.053	1.05	1.03	0.83
	Left Tilted	0.350	0.088	0.190	0.028	0.44	0.54	0.38
FR1 n30 Ant 0	Right Cheek	0.297	0.441	0.446	0.077	0.74	0.74	0.37
	Right Tilted	0.158	0.075	0.163	0.017	0.23	0.32	0.18



FCC SAR Test Report

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FR1 n66 Ant 0	Left Cheek	0.486	0.271	0.248	0.053	0.76	0.73	0.54
	Left Tilted	0.153	0.088	0.190	0.028	0.24	0.34	0.18
	Right Cheek	0.179	0.441	0.446	0.077	0.62	0.63	0.26
	Right Tilted	0.123	0.075	0.163	0.017	0.20	0.29	0.14
	Left Cheek	0.203	0.271	0.248	0.053	0.47	0.45	0.26
	Left Tilted	0.154	0.088	0.190	0.028	0.24	0.34	0.18
FR1 n77 Ant 1	Right Cheek	0.227	0.441	0.446	0.077	0.67	0.67	0.30
	Right Tilted	0.209	0.075	0.163	0.017	0.28	0.37	0.23
	Left Cheek	0.968	0.271	0.248	0.053	1.24	1.22	1.02
	Left Tilted	0.255	0.088	0.190	0.028	0.34	0.45	0.28

For ENDC

ENDC	LTE Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
				LTE	FR1	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
				1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
DC_2A_n2A	LTE Band 2 Ant 0	FR1 n2 Ant 5	Right Cheek	0.179	0.314	0.441	0.446	0.077	0.93	0.94	0.57
			Right Tilted	0.108	0.180	0.075	0.163	0.017	0.36	0.45	0.31
			Left Cheek	0.224	0.310	0.271	0.248	0.053	0.81	0.78	0.59
			Left Tilted	0.125	0.185	0.088	0.190	0.028	0.40	0.50	0.34
DC_5A_n2A	LTE Band 5 Ant 0	FR1 n2 Ant 5	Right Cheek	0.660	0.314	0.441	0.446	0.077	1.42	1.42	1.05
			Right Tilted	0.489	0.180	0.075	0.163	0.017	0.74	0.83	0.69
			Left Cheek	0.612	0.310	0.271	0.248	0.053	1.19	1.17	0.98
			Left Tilted	0.356	0.185	0.088	0.190	0.028	0.63	0.73	0.57
DC_12A_n2A	LTE Band 12 Ant 0	FR1 n2 Ant 5	Right Cheek	0.185	0.314	0.441	0.446	0.077	0.94	0.95	0.58
			Right Tilted	0.123	0.180	0.075	0.163	0.017	0.38	0.47	0.32
			Left Cheek	0.200	0.310	0.271	0.248	0.053	0.78	0.76	0.56
			Left Tilted	0.096	0.185	0.088	0.190	0.028	0.37	0.47	0.31
DC_14A_n2A	LTE Band 14 Ant 0	FR1 n2 Ant 5	Right Cheek	0.399	0.314	0.441	0.446	0.077	1.15	1.16	0.79
			Right Tilted	0.331	0.180	0.075	0.163	0.017	0.59	0.67	0.53
			Left Cheek	0.433	0.310	0.271	0.248	0.053	1.01	0.99	0.80
			Left Tilted	0.263	0.185	0.088	0.190	0.028	0.54	0.64	0.48
DC_30A_n2A	LTE Band 30 Ant 0	FR1 n2 Ant 5	Right Cheek	0.334	0.314	0.441	0.446	0.077	1.09	1.09	0.73
			Right Tilted	0.267	0.180	0.075	0.163	0.017	0.52	0.61	0.46
			Left Cheek	0.509	0.310	0.271	0.248	0.053	1.09	1.07	0.87
			Left Tilted	0.241	0.185	0.088	0.190	0.028	0.51	0.62	0.45
DC_66A_n2A	LTE Band 66 Ant 5	FR1 n2 Ant 0	Right Cheek	0.121	0.256	0.441	0.446	0.077	0.82	0.82	0.45
			Right Tilted	0.077	0.139	0.075	0.163	0.017	0.29	0.38	0.23
			Left Cheek	0.096	0.266	0.271	0.248	0.053	0.63	0.61	0.42
			Left Tilted	0.063	0.163	0.088	0.190	0.028	0.31	0.42	0.25
DC_2A_n5A	LTE Band 2 Ant 5	FR1 n5 Ant 0	Right Cheek	0.214	0.569	0.441	0.446	0.077	1.22	1.23	0.86
			Right Tilted	0.118	0.410	0.075	0.163	0.017	0.60	0.69	0.55
			Left Cheek	0.206	0.779	0.271	0.248	0.053	1.26	1.23	1.04
			Left Tilted	0.123	0.350	0.088	0.190	0.028	0.56	0.66	0.50
DC_30A_n5A	LTE Band 30 Ant 5	FR1 n5 Ant 0	Right Cheek	0.096	0.569	0.441	0.446	0.077	1.11	1.11	0.74
			Right Tilted	0.042	0.410	0.075	0.163	0.017	0.53	0.62	0.47
			Left Cheek	0.081	0.779	0.271	0.248	0.053	1.13	1.11	0.91
			Left Tilted	0.034	0.350	0.088	0.190	0.028	0.47	0.57	0.41
DC_66A_n5A	LTE Band 66 Ant 5	FR1 n5 Ant 0	Right Cheek	0.121	0.569	0.441	0.446	0.077	1.13	1.14	0.77
			Right Tilted	0.077	0.410	0.075	0.163	0.017	0.56	0.65	0.50
			Left Cheek	0.096	0.779	0.271	0.248	0.053	1.15	1.12	0.93
			Left Tilted	0.063	0.350	0.088	0.190	0.028	0.50	0.60	0.44
DC_2A_n66A	LTE Band 2 Ant 5	FR1 n66 Ant 0	Right Cheek	0.214	0.179	0.441	0.446	0.077	0.83	0.84	0.47
			Right Tilted	0.118	0.123	0.075	0.163	0.017	0.32	0.40	0.26
			Left Cheek	0.206	0.203	0.271	0.248	0.053	0.68	0.66	0.46
			Left Tilted	0.123	0.154	0.088	0.190	0.028	0.37	0.47	0.31



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DC_12A_n66A	LTE Band 12 Ant 0	FR1 n66 Ant 5	Right Cheek	0.185	0.157	0.441	0.446	0.077	0.78	0.79	0.42
			Right Tilted	0.123	0.085	0.075	0.163	0.017	0.28	0.37	0.23
			Left Cheek	0.200	0.123	0.271	0.248	0.053	0.59	0.57	0.38
			Left Tilted	0.096	0.066	0.088	0.190	0.028	0.25	0.35	0.19
DC_14A_n66A	LTE Band 14 Ant 0	FR1 n66 Ant 5	Right Cheek	0.399	0.157	0.441	0.446	0.077	1.00	1.00	0.63
			Right Tilted	0.331	0.085	0.075	0.163	0.017	0.49	0.58	0.43
			Left Cheek	0.433	0.123	0.271	0.248	0.053	0.83	0.80	0.61
			Left Tilted	0.263	0.066	0.088	0.190	0.028	0.42	0.52	0.36
DC_30A_n66A	LTE Band 30 Ant 0	FR1 n66 Ant 5	Right Cheek	0.334	0.157	0.441	0.446	0.077	0.93	0.94	0.57
			Right Tilted	0.267	0.085	0.075	0.163	0.017	0.43	0.52	0.37
			Left Cheek	0.509	0.123	0.271	0.248	0.053	0.90	0.88	0.69
			Left Tilted	0.241	0.066	0.088	0.190	0.028	0.40	0.50	0.34
DC_66A_n66A	LTE Band 66 Ant 0	FR1 n66 Ant 5	Right Cheek	0.156	0.157	0.441	0.446	0.077	0.75	0.76	0.39
			Right Tilted	0.149	0.085	0.075	0.163	0.017	0.31	0.40	0.25
			Left Cheek	0.197	0.123	0.271	0.248	0.053	0.59	0.57	0.37
			Left Tilted	0.173	0.066	0.088	0.190	0.028	0.33	0.43	0.27
DC_2A_n77A	LTE Band 2 Ant 0	FR1 n77 Ant 1	Right Cheek	0.179	0.227	0.441	0.446	0.077	0.85	0.85	0.48
			Right Tilted	0.108	0.209	0.075	0.163	0.017	0.39	0.48	0.33
			Left Cheek	0.224	0.628	0.271	0.248	0.053	1.12	1.10	0.91
			Left Tilted	0.125	0.255	0.088	0.190	0.028	0.47	0.57	0.41
DC_5A_n77A	LTE Band 5 Ant 0	FR1 n77 Ant 1	Right Cheek	0.660	0.227	0.441	0.446	0.077	1.33	1.33	0.96
			Right Tilted	0.489	0.209	0.075	0.163	0.017	0.77	0.86	0.72
			Left Cheek	0.612	0.628	0.271	0.248	0.053	1.51	1.49	1.29
			Left Tilted	0.356	0.255	0.088	0.190	0.028	0.70	0.80	0.64
DC_12A_n77A	LTE Band 12 Ant 0	FR1 n77 Ant 1	Right Cheek	0.185	0.227	0.441	0.446	0.077	0.85	0.86	0.49
			Right Tilted	0.123	0.209	0.075	0.163	0.017	0.41	0.50	0.35
			Left Cheek	0.200	0.628	0.271	0.248	0.053	1.10	1.08	0.88
			Left Tilted	0.096	0.255	0.088	0.190	0.028	0.44	0.54	0.38
DC_14A_n77A	LTE Band 14 Ant 0	FR1 n77 Ant 1	Right Cheek	0.399	0.227	0.441	0.446	0.077	1.07	1.07	0.70
			Right Tilted	0.331	0.209	0.075	0.163	0.017	0.62	0.70	0.56
			Left Cheek	0.433	0.628	0.271	0.248	0.053	1.33	1.31	1.11
			Left Tilted	0.263	0.255	0.088	0.190	0.028	0.61	0.71	0.55
DC_30A_n77A	LTE Band 30 Ant 0	FR1 n77 Ant 1	Right Cheek	0.334	0.227	0.441	0.446	0.077	1.00	1.01	0.64
			Right Tilted	0.267	0.209	0.075	0.163	0.017	0.55	0.64	0.49
			Left Cheek	0.509	0.628	0.271	0.248	0.053	1.41	1.39	1.19
			Left Tilted	0.241	0.255	0.088	0.190	0.028	0.58	0.69	0.52
DC_66A_n77A	LTE Band 66 Ant 0	FR1 n77 Ant 1	Right Cheek	0.156	0.227	0.441	0.446	0.077	0.82	0.83	0.46
			Right Tilted	0.149	0.209	0.075	0.163	0.017	0.43	0.52	0.38
			Left Cheek	0.197	0.628	0.271	0.248	0.053	1.10	1.07	0.88
			Left Tilted	0.173	0.255	0.088	0.190	0.028	0.52	0.62	0.46



For UL CA

LTE Inter CA	LTE Band	LTE Band	Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
				LTE	LTE	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4			
				1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
CA_2A-5A	LTE Band 2 Ant 5	LTE Band 5 Ant 0	Right Cheek	0.214	0.660	0.441	0.446	0.077	1.32	1.32	0.95
			Right Tilted	0.118	0.489	0.075	0.163	0.017	0.68	0.77	0.62
			Left Cheek	0.206	0.612	0.271	0.248	0.053	1.09	1.07	0.87
			Left Tilted	0.123	0.356	0.088	0.190	0.028	0.57	0.67	0.51
CA_4A-5A	LTE Band 66 Ant 5	LTE Band 5 Ant 0	Right Cheek	0.121	0.660	0.441	0.446	0.077	1.22	1.23	0.86
			Right Tilted	0.077	0.489	0.075	0.163	0.017	0.64	0.73	0.58
			Left Cheek	0.096	0.612	0.271	0.248	0.053	0.98	0.96	0.76
			Left Tilted	0.063	0.356	0.088	0.190	0.028	0.51	0.61	0.45
CA_2A-12A	LTE Band 2 Ant 5	LTE Band 12 Ant 0	Right Cheek	0.214	0.185	0.441	0.446	0.077	0.84	0.85	0.48
			Right Tilted	0.118	0.123	0.075	0.163	0.017	0.32	0.40	0.26
			Left Cheek	0.206	0.200	0.271	0.248	0.053	0.68	0.65	0.46
			Left Tilted	0.123	0.096	0.088	0.190	0.028	0.31	0.41	0.25
CA_4A-12A	LTE Band 66 Ant 5	LTE Band 12 Ant 0	Right Cheek	0.121	0.185	0.441	0.446	0.077	0.75	0.75	0.38
			Right Tilted	0.077	0.123	0.075	0.163	0.017	0.28	0.36	0.22
			Left Cheek	0.096	0.200	0.271	0.248	0.053	0.57	0.54	0.35
			Left Tilted	0.063	0.096	0.088	0.190	0.028	0.25	0.35	0.19
CA_2A-14A	LTE Band 2 Ant 5	LTE Band 14 Ant 0	Right Cheek	0.214	0.399	0.441	0.446	0.077	1.05	1.06	0.69
			Right Tilted	0.118	0.331	0.075	0.163	0.017	0.52	0.61	0.47
			Left Cheek	0.206	0.433	0.271	0.248	0.053	0.91	0.89	0.69
			Left Tilted	0.123	0.263	0.088	0.190	0.028	0.47	0.58	0.41
CA_5A-30A	LTE Band 5 Ant 0	LTE Band 30 Ant 5	Right Cheek	0.660	0.096	0.441	0.446	0.077	1.20	1.20	0.83
			Right Tilted	0.489	0.042	0.075	0.163	0.017	0.61	0.69	0.55
			Left Cheek	0.612	0.081	0.271	0.248	0.053	0.96	0.94	0.75
			Left Tilted	0.356	0.034	0.088	0.190	0.028	0.48	0.58	0.42
CA_12A-30A	LTE Band 12 Ant 0	LTE Band 30 Ant 5	Right Cheek	0.185	0.096	0.441	0.446	0.077	0.72	0.73	0.36
			Right Tilted	0.123	0.042	0.075	0.163	0.017	0.24	0.33	0.18
			Left Cheek	0.200	0.081	0.271	0.248	0.053	0.55	0.53	0.33
			Left Tilted	0.096	0.034	0.088	0.190	0.028	0.22	0.32	0.16
CA_14A-30A	LTE Band 14 Ant 0	LTE Band 30 Ant 5	Right Cheek	0.399	0.096	0.441	0.446	0.077	0.94	0.94	0.57
			Right Tilted	0.331	0.042	0.075	0.163	0.017	0.45	0.54	0.39
			Left Cheek	0.433	0.081	0.271	0.248	0.053	0.79	0.76	0.57
			Left Tilted	0.263	0.034	0.088	0.190	0.028	0.39	0.49	0.33
CA_5A-66A	LTE Band 5 Ant 0	LTE Band 66 Ant 5	Right Cheek	0.660	0.121	0.441	0.446	0.077	1.22	1.23	0.86
			Right Tilted	0.489	0.077	0.075	0.163	0.017	0.64	0.73	0.58
			Left Cheek	0.612	0.096	0.271	0.248	0.053	0.98	0.96	0.76
			Left Tilted	0.356	0.063	0.088	0.190	0.028	0.51	0.61	0.45
CA_12A-66A	LTE Band 12 Ant 0	LTE Band 66 Ant 5	Right Cheek	0.185	0.121	0.441	0.446	0.077	0.75	0.75	0.38
			Right Tilted	0.123	0.077	0.075	0.163	0.017	0.28	0.36	0.22
			Left Cheek	0.200	0.096	0.271	0.248	0.053	0.57	0.54	0.35
			Left Tilted	0.096	0.063	0.088	0.190	0.028	0.25	0.35	0.19
CA_14A-66A	LTE Band 14 Ant 0	LTE Band 66 Ant 5	Right Cheek	0.399	0.121	0.441	0.446	0.077	0.96	0.97	0.60
			Right Tilted	0.331	0.077	0.075	0.163	0.017	0.48	0.57	0.43
			Left Cheek	0.433	0.096	0.271	0.248	0.053	0.80	0.78	0.58
			Left Tilted	0.263	0.063	0.088	0.190	0.028	0.41	0.52	0.35



15.2 Hotspot Exposure Conditions

<Flip Open>

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4	1+5
		WWAN	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WCDMA II Ant 0	Front	0.574	0.295	0.144	0.040	0.87	0.72	0.61
	Back	0.591	0.251	0.430	0.038	0.84	1.02	0.63
	Left side	0.254		0.107		0.25	0.36	0.25
	Right side	0.126	0.208	0.265	0.034	0.33	0.39	0.16
	Top side					0.00	0.00	0.00
	Bottom side	0.917				0.92	0.92	0.92
WCDMA IV Ant 0	Front	0.547	0.295	0.144	0.040	0.84	0.69	0.59
	Back	0.752	0.251	0.430	0.038	1.00	1.18	0.79
	Left side	0.229		0.107		0.23	0.34	0.23
	Right side	0.095	0.208	0.265	0.034	0.30	0.36	0.13
	Top side					0.00	0.00	0.00
	Bottom side	0.985				0.99	0.99	0.99
WCDMA V Ant 0	Front	0.414	0.295	0.144	0.040	0.71	0.56	0.45
	Back	0.619	0.251	0.430	0.038	0.87	1.05	0.66
	Left side	0.221		0.107		0.22	0.33	0.22
	Right side	0.469	0.208	0.265	0.034	0.68	0.73	0.50
	Top side					0.00	0.00	0.00
	Bottom side	0.322				0.32	0.32	0.32
LTE Band 2 Ant 0	Front	0.691	0.295	0.144	0.040	0.99	0.84	0.73
	Back	0.657	0.251	0.430	0.038	0.91	1.09	0.70
	Left side	0.259		0.107		0.26	0.37	0.26
	Right side	0.112	0.208	0.265	0.034	0.32	0.38	0.15
	Top side					0.00	0.00	0.00
	Bottom side	0.923				0.92	0.92	0.92
LTE Band 5 Ant 0	Front	0.484	0.295	0.144	0.040	0.78	0.63	0.52
	Back	0.583	0.251	0.430	0.038	0.83	1.01	0.62
	Left side	0.250		0.107		0.25	0.36	0.25
	Right side	0.564	0.208	0.265	0.034	0.77	0.83	0.60
	Top side					0.00	0.00	0.00
	Bottom side	0.360				0.36	0.36	0.36
LTE Band 7 Ant 0	Front	0.251	0.295	0.144	0.040	0.55	0.40	0.29
	Back	0.505	0.251	0.430	0.038	0.76	0.94	0.54
	Left side	0.217		0.107		0.22	0.32	0.22
	Right side	0.173	0.208	0.265	0.034	0.38	0.44	0.21
	Top side					0.00	0.00	0.00
	Bottom side	0.291				0.29	0.29	0.29
LTE Band 12 Ant 0	Front	0.635	0.295	0.144	0.040	0.93	0.78	0.68
	Back	0.868	0.251	0.430	0.038	1.12	1.30	0.91
	Left side	0.186		0.107		0.19	0.29	0.19
	Right side	0.467	0.208	0.265	0.034	0.68	0.73	0.50
	Top side					0.00	0.00	0.00
	Bottom side	0.187				0.19	0.19	0.19
LTE Band 14 Ant 0	Front	0.553	0.295	0.144	0.040	0.85	0.70	0.59
	Back	0.666	0.251	0.430	0.038	0.92	1.10	0.70
	Left side	0.198		0.107		0.20	0.31	0.20
	Right side	0.434	0.208	0.265	0.034	0.64	0.70	0.47
	Top side					0.00	0.00	0.00
	Bottom side	0.261				0.26	0.26	0.26
LTE Band 30	Front	0.929	0.295	0.144	0.040	1.22	1.07	0.97



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Ant 0	Back	0.873	0.251	0.430	0.038	1.12	1.30	0.91
	Left side	0.471		0.107		0.47	0.58	0.47
	Right side	0.207	0.208	0.265	0.034	0.42	0.47	0.24
	Top side					0.00	0.00	0.00
	Bottom side	0.753				0.75	0.75	0.75
LTE Band 66 Ant 0	Front	0.561	0.295	0.144	0.040	0.86	0.71	0.60
	Back	0.689	0.251	0.430	0.038	0.94	1.12	0.73
	Left side	0.210		0.107		0.21	0.32	0.21
	Right side	0.073	0.208	0.265	0.034	0.28	0.34	0.11
	Top side					0.00	0.00	0.00
FR1 n2 Ant 0	Bottom side	0.914				0.91	0.91	0.91
	Front	0.588	0.295	0.144	0.040	0.88	0.73	0.63
	Back	0.610	0.251	0.430	0.038	0.86	1.04	0.65
	Left side	0.231		0.107		0.23	0.34	0.23
	Right side	0.135	0.208	0.265	0.034	0.34	0.40	0.17
FR1 n5 Ant 0	Top side					0.00	0.00	0.00
	Bottom side	0.955				0.96	0.96	0.96
	Front	0.369	0.295	0.144	0.040	0.66	0.51	0.41
	Back	0.497	0.251	0.430	0.038	0.75	0.93	0.54
	Left side	0.171		0.107		0.17	0.28	0.17
FR1 n30 Ant 0	Right side	0.396	0.208	0.265	0.034	0.60	0.66	0.43
	Top side					0.00	0.00	0.00
	Bottom side	0.242				0.24	0.24	0.24
	Front	0.987	0.295	0.144	0.040	1.28	1.13	1.03
	Back	0.959	0.251	0.430	0.038	1.21	1.39	1.00
FR1 n66 Ant 0	Left side	0.375		0.107		0.38	0.48	0.38
	Right side	0.163	0.208	0.265	0.034	0.37	0.43	0.20
	Top side					0.00	0.00	0.00
	Bottom side	0.899				0.90	0.90	0.90
	Front	0.564	0.295	0.144	0.040	0.86	0.71	0.60
FR1 n77 Ant 1	Back	0.673	0.251	0.430	0.038	0.92	1.10	0.71
	Left side	0.228		0.107		0.23	0.34	0.23
	Right side	0.084	0.208	0.265	0.034	0.29	0.35	0.12
	Top side					0.00	0.00	0.00
	Bottom side	0.952				0.95	0.95	0.95
FR1 n77 Ant 1	Front	0.705	0.295	0.144	0.040	1.00	0.85	0.75
	Back	0.840	0.251	0.430	0.038	1.09	1.27	0.88
	Left side	0.946		0.107		0.95	1.05	0.95
	Right side	0.114	0.208	0.265	0.034	0.32	0.38	0.15
	Top side					0.00	0.00	0.00
FR1 n77 Ant 1	Bottom side	0.089				0.09	0.09	0.09

For ENDC

ENDC	LTE Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
				LTE	FR1	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
				1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
DC_2A_n2A	LTE Band 2 Ant 0	FR1 n2 Ant 5	Front	0.691	0.315	0.295	0.144	0.040	1.30	1.15	1.05
			Back	0.432	0.504	0.251	0.430	0.038	1.19	1.37	0.97
			Left side	0.259	0.038		0.107		0.30	0.40	0.30
			Right side	0.112	0.306	0.208	0.265	0.034	0.63	0.68	0.45
			Top side						0.00	0.00	0.00
DC_5A_n2A	LTE Band 5 Ant 0	FR1 n2 Ant 5	Bottom side	0.923	0.115				1.04	1.04	1.04
			Front	0.484	0.315	0.295	0.144	0.040	1.09	0.94	0.84
			Back	0.296	0.504	0.251	0.430	0.038	1.05	1.23	0.84
			Left side	0.250	0.038		0.107		0.29	0.40	0.29
			Right side								



			Right side	0.564	0.306	0.208	0.265	0.034	1.08	1.14	0.90
			Top side						0.00	0.00	0.00
			Bottom side	0.360	0.115				0.48	0.48	0.48
DC_12A_n2A	LTE Band 12 Ant 0	FR1 n2 Ant 5	Front	0.635	0.315	0.295	0.144	0.040	1.25	1.09	0.99
			Back	0.487	0.504	0.251	0.430	0.038	1.24	1.42	1.03
			Left side	0.186	0.038		0.107		0.22	0.33	0.22
			Right side	0.467	0.306	0.208	0.265	0.034	0.98	1.04	0.81
			Top side						0.00	0.00	0.00
			Bottom side	0.187	0.115				0.30	0.30	0.30
DC_14A_n2A	LTE Band 14 Ant 0	FR1 n2 Ant 5	Front	0.553	0.315	0.295	0.144	0.040	1.16	1.01	0.91
			Back	0.335	0.504	0.251	0.430	0.038	1.09	1.27	0.88
			Left side	0.198	0.038		0.107		0.24	0.34	0.24
			Right side	0.434	0.306	0.208	0.265	0.034	0.95	1.01	0.77
			Top side						0.00	0.00	0.00
			Bottom side	0.261	0.115				0.38	0.38	0.38
DC_30A_n2A	LTE Band 30 Ant 0	FR1 n2 Ant 5	Front	0.516	0.315	0.295	0.144	0.040	1.13	0.98	0.87
			Back	0.493	0.504	0.251	0.430	0.038	1.25	1.43	1.04
			Left side	0.471	0.038		0.107		0.51	0.62	0.51
			Right side	0.207	0.306	0.208	0.265	0.034	0.72	0.78	0.55
			Top side						0.00	0.00	0.00
			Bottom side	0.753	0.115				0.87	0.87	0.87
DC_66A_n2A	LTE Band 66 Ant 5	FR1 n2 Ant 0	Front	0.292	0.588	0.295	0.144	0.040	1.18	1.02	0.92
			Back	0.504	0.488	0.251	0.430	0.038	1.24	1.42	1.03
			Left side	0.040	0.231		0.107		0.27	0.38	0.27
			Right side	0.302	0.135	0.208	0.265	0.034	0.65	0.70	0.47
			Top side						0.00	0.00	0.00
			Bottom side	0.147	0.955				1.10	1.10	1.10
DC_2A_n5A	LTE Band 2 Ant 5	FR1 n5 Ant 0	Front	0.325	0.369	0.295	0.144	0.040	0.99	0.84	0.73
			Back	0.492	0.282	0.251	0.430	0.038	1.03	1.20	0.81
			Left side	0.037	0.171		0.107		0.21	0.32	0.21
			Right side	0.330	0.396	0.208	0.265	0.034	0.93	0.99	0.76
			Top side						0.00	0.00	0.00
			Bottom side	0.104	0.242				0.35	0.35	0.35
DC_30A_n5A	LTE Band 30 Ant 5	FR1 n5 Ant 0	Front	0.200	0.369	0.295	0.144	0.040	0.86	0.71	0.61
			Back	0.467	0.282	0.251	0.430	0.038	1.00	1.18	0.79
			Left side	0.041	0.171		0.107		0.21	0.32	0.21
			Right side	0.240	0.396	0.208	0.265	0.034	0.84	0.90	0.67
			Top side						0.00	0.00	0.00
			Bottom side	0.121	0.242				0.36	0.36	0.36
DC_66A_n5A	LTE Band 66 Ant 5	FR1 n5 Ant 0	Front	0.292	0.369	0.295	0.144	0.040	0.96	0.81	0.70
			Back	0.504	0.282	0.251	0.430	0.038	1.04	1.22	0.82
			Left side	0.040	0.171		0.107		0.21	0.32	0.21
			Right side	0.302	0.396	0.208	0.265	0.034	0.91	0.96	0.73
			Top side						0.00	0.00	0.00
			Bottom side	0.147	0.242				0.39	0.39	0.39
DC_2A_n66A	LTE Band 2 Ant 5	FR1 n66 Ant 0	Front	0.325	0.564	0.295	0.144	0.040	1.18	1.03	0.93
			Back	0.492	0.423	0.251	0.430	0.038	1.17	1.35	0.95
			Left side	0.037	0.228		0.107		0.27	0.37	0.27
			Right side	0.330	0.084	0.208	0.265	0.034	0.62	0.68	0.45
			Top side						0.00	0.00	0.00
			Bottom side	0.104	0.952				1.06	1.06	1.06
DC_12A_n66A	LTE Band 12 Ant 0	FR1 n66 Ant 5	Front	0.635	0.261	0.295	0.144	0.040	1.19	1.04	0.94
			Back	0.487	0.490	0.251	0.430	0.038	1.23	1.41	1.02
			Left side	0.186	0.032		0.107		0.22	0.33	0.22
			Right side	0.467	0.283	0.208	0.265	0.034	0.96	1.02	0.78
			Top side						0.00	0.00	0.00



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			Bottom side	0.187	0.091				0.28	0.28	0.28
DC_14A_n66A	LTE Band 14 Ant 0	FR1 n66 Ant 5	Front	0.553	0.261	0.295	0.144	0.040	1.11	0.96	0.85
			Back	0.335	0.490	0.251	0.430	0.038	1.08	1.26	0.86
			Left side	0.198	0.032		0.107		0.23	0.34	0.23
			Right side	0.434	0.283	0.208	0.265	0.034	0.93	0.98	0.75
			Top side						0.00	0.00	0.00
			Bottom side	0.261	0.091				0.35	0.35	0.35
DC_30A_n66A	LTE Band 30 Ant 0	FR1 n66 Ant 5	Front	0.516	0.261	0.295	0.144	0.040	1.07	0.92	0.82
			Back	0.493	0.490	0.251	0.430	0.038	1.23	1.41	1.02
			Left side	0.471	0.032		0.107		0.50	0.61	0.50
			Right side	0.207	0.283	0.208	0.265	0.034	0.70	0.76	0.52
			Top side						0.00	0.00	0.00
			Bottom side	0.753	0.091				0.84	0.84	0.84
DC_66A_n66A	LTE Band 66 Ant 0	FR1 n66 Ant 5	Front	0.561	0.261	0.295	0.144	0.040	1.12	0.97	0.86
			Back	0.454	0.490	0.251	0.430	0.038	1.20	1.37	0.98
			Left side	0.210	0.032		0.107		0.24	0.35	0.24
			Right side	0.073	0.283	0.208	0.265	0.034	0.56	0.62	0.39
			Top side						0.00	0.00	0.00
			Bottom side	0.914	0.091				1.01	1.01	1.01
DC_2A_n77A	LTE Band 2 Ant 0	FR1 n77 Ant 1	Front	0.691	0.399	0.295	0.144	0.040	1.39	1.23	1.13
			Back	0.432	0.482	0.251	0.430	0.038	1.17	1.34	0.95
			Left side	0.259	0.946		0.107		1.21	1.31	1.21
			Right side	0.112	0.114	0.208	0.265	0.034	0.43	0.49	0.26
			Top side						0.00	0.00	0.00
			Bottom side	0.923	0.089				1.01	1.01	1.01
DC_5A_n77A	LTE Band 5 Ant 0	FR1 n77 Ant 1	Front	0.484	0.399	0.295	0.144	0.040	1.18	1.03	0.92
			Back	0.296	0.482	0.251	0.430	0.038	1.03	1.21	0.82
			Left side	0.250	0.946		0.107		1.20	1.30	1.20
			Right side	0.564	0.114	0.208	0.265	0.034	0.89	0.94	0.71
			Top side						0.00	0.00	0.00
			Bottom side	0.360	0.089				0.45	0.45	0.45
DC_12A_n77A	LTE Band 12 Ant 0	FR1 n77 Ant 1	Front	0.635	0.399	0.295	0.144	0.040	1.33	1.18	1.07
			Back	0.487	0.482	0.251	0.430	0.038	1.22	1.40	1.01
			Left side	0.186	0.946		0.107		1.13	1.24	1.13
			Right side	0.467	0.114	0.208	0.265	0.034	0.79	0.85	0.62
			Top side						0.00	0.00	0.00
			Bottom side	0.187	0.089				0.28	0.28	0.28
DC_14A_n77A	LTE Band 14 Ant 0	FR1 n77 Ant 1	Front	0.553	0.399	0.295	0.144	0.040	1.25	1.10	0.99
			Back	0.335	0.482	0.251	0.430	0.038	1.07	1.25	0.86
			Left side	0.198	0.946		0.107		1.14	1.25	1.14
			Right side	0.434	0.114	0.208	0.265	0.034	0.76	0.81	0.58
			Top side						0.00	0.00	0.00
			Bottom side	0.261	0.089				0.35	0.35	0.35
DC_30A_n77A	LTE Band 30 Ant 0	FR1 n77 Ant 1	Front	0.516	0.399	0.295	0.144	0.040	1.21	1.06	0.96
			Back	0.493	0.482	0.251	0.430	0.038	1.23	1.41	1.01
			Left side	0.471	0.946		0.107		1.42	1.52	1.42
			Right side	0.207	0.114	0.208	0.265	0.034	0.53	0.59	0.36
			Top side						0.00	0.00	0.00
			Bottom side	0.753	0.089				0.84	0.84	0.84
DC_66A_n77A	LTE Band 66 Ant 0	FR1 n77 Ant 1	Front	0.561	0.399	0.295	0.144	0.040	1.26	1.10	1.00
			Back	0.454	0.482	0.251	0.430	0.038	1.19	1.37	0.97
			Left side	0.210	0.946		0.107		1.16	1.26	1.16
			Right side	0.073	0.114	0.208	0.265	0.034	0.40	0.45	0.22
			Top side						0.00	0.00	0.00
			Bottom side	0.914	0.089				1.00	1.00	1.00



For UL CA

LTE Inter CA	LTE Band	LTE Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
				LTE	LTE	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
				1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
CA_2A-5A	LTE Band 2 Ant 5	LTE Band 5 Ant 0	Front	0.325	0.484	0.295	0.144	0.040	1.10	0.95	0.85
			Back	0.492	0.296	0.251	0.430	0.038	1.04	1.22	0.83
			Left side	0.037	0.250		0.107		0.29	0.39	0.29
			Right side	0.330	0.564	0.208	0.265	0.034	1.10	1.16	0.93
			Top side						0.00	0.00	0.00
			Bottom side	0.104	0.360				0.46	0.46	0.46
CA_4A-5A	LTE Band 66 Ant 5	LTE Band 5 Ant 0	Front	0.292	0.484	0.295	0.144	0.040	1.07	0.92	0.82
			Back	0.504	0.296	0.251	0.430	0.038	1.05	1.23	0.84
			Left side	0.040	0.250		0.107		0.29	0.40	0.29
			Right side	0.302	0.564	0.208	0.265	0.034	1.07	1.13	0.90
			Top side						0.00	0.00	0.00
			Bottom side	0.147	0.360				0.51	0.51	0.51
CA_2A-12A	LTE Band 2 Ant 5	LTE Band 12 Ant 0	Front	0.325	0.635	0.295	0.144	0.040	1.26	1.10	1.00
			Back	0.492	0.487	0.251	0.430	0.038	1.23	1.41	1.02
			Left side	0.037	0.186		0.107		0.22	0.33	0.22
			Right side	0.330	0.467	0.208	0.265	0.034	1.01	1.06	0.83
			Top side						0.00	0.00	0.00
			Bottom side	0.104	0.187				0.29	0.29	0.29
CA_4A-12A	LTE Band 66 Ant 5	LTE Band 12 Ant 0	Front	0.292	0.635	0.295	0.144	0.040	1.22	1.07	0.97
			Back	0.504	0.487	0.251	0.430	0.038	1.24	1.42	1.03
			Left side	0.040	0.186		0.107		0.23	0.33	0.23
			Right side	0.302	0.467	0.208	0.265	0.034	0.98	1.03	0.80
			Top side						0.00	0.00	0.00
			Bottom side	0.147	0.187				0.33	0.33	0.33
CA_2A-14A	LTE Band 2 Ant 5	LTE Band 14 Ant 0	Front	0.325	0.553	0.295	0.144	0.040	1.17	1.02	0.92
			Back	0.492	0.335	0.251	0.430	0.038	1.08	1.26	0.87
			Left side	0.037	0.198		0.107		0.24	0.34	0.24
			Right side	0.330	0.434	0.208	0.265	0.034	0.97	1.03	0.80
			Top side						0.00	0.00	0.00
			Bottom side	0.104	0.261				0.37	0.37	0.37
CA_5A-30A	LTE Band 5 Ant 0	LTE Band 30 Ant 5	Front	0.484	0.200	0.295	0.144	0.040	0.98	0.83	0.72
			Back	0.296	0.467	0.251	0.430	0.038	1.01	1.19	0.80
			Left side	0.250	0.041		0.107		0.29	0.40	0.29
			Right side	0.564	0.240	0.208	0.265	0.034	1.01	1.07	0.84
			Top side						0.00	0.00	0.00
			Bottom side	0.360	0.121				0.48	0.48	0.48
CA_12A-30A	LTE Band 12 Ant 0	LTE Band 30 Ant 5	Front	0.635	0.200	0.295	0.144	0.040	1.13	0.98	0.88
			Back	0.487	0.467	0.251	0.430	0.038	1.21	1.38	0.99
			Left side	0.186	0.041		0.107		0.23	0.33	0.23
			Right side	0.467	0.240	0.208	0.265	0.034	0.92	0.97	0.74
			Top side						0.00	0.00	0.00
			Bottom side	0.187	0.121				0.31	0.31	0.31
CA_14A-30A	LTE Band 14 Ant 0	LTE Band 30 Ant 5	Front	0.553	0.200	0.295	0.144	0.040	1.05	0.90	0.79
			Back	0.335	0.467	0.251	0.430	0.038	1.05	1.23	0.84
			Left side	0.198	0.041		0.107		0.24	0.35	0.24
			Right side	0.434	0.240	0.208	0.265	0.034	0.88	0.94	0.71
			Top side						0.00	0.00	0.00
			Bottom side	0.261	0.121				0.38	0.38	0.38
CA_5A-66A	LTE Band 5 Ant 0	LTE Band 66 Ant 5	Front	0.484	0.292	0.295	0.144	0.040	1.07	0.92	0.82
			Back	0.296	0.504	0.251	0.430	0.038	1.05	1.23	0.84
			Left side	0.250	0.040		0.107		0.29	0.40	0.29



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			Right side	0.564	0.302	0.208	0.265	0.034	1.07	1.13	0.90
			Top side						0.00	0.00	0.00
			Bottom side	0.360	0.147				0.51	0.51	0.51
CA_12A-66A	LTE Band 12 Ant 0	LTE Band 66 Ant 5	Front	0.635	0.292	0.295	0.144	0.040	1.22	1.07	0.97
			Back	0.487	0.504	0.251	0.430	0.038	1.24	1.42	1.03
			Left side	0.186	0.040		0.107		0.23	0.33	0.23
			Right side	0.467	0.302	0.208	0.265	0.034	0.98	1.03	0.80
			Top side						0.00	0.00	0.00
			Bottom side	0.187	0.147				0.33	0.33	0.33
CA_14A-66A	LTE Band 14 Ant 0	LTE Band 66 Ant 5	Front	0.553	0.292	0.295	0.144	0.040	1.14	0.99	0.89
			Back	0.335	0.504	0.251	0.430	0.038	1.09	1.27	0.88
			Left side	0.198	0.040		0.107		0.24	0.35	0.24
			Right side	0.434	0.302	0.208	0.265	0.034	0.94	1.00	0.77
			Top side						0.00	0.00	0.00
			Bottom side	0.261	0.147				0.41	0.41	0.41

<Flip Close >

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4	1+5
		WWAN	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WCDMA II Ant 0	Front	0.192	0.144	0.076	0.023	0.34	0.27	0.22
	Back	0.596	0.349	0.483	0.062	0.95	1.08	0.66
	Left side	0.292	0.066	0.060	0.011	0.36	0.35	0.30
	Right side	0.132	0.133	0.291	0.017	0.27	0.42	0.15
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.734				0.73	0.73	0.73
WCDMA IV Ant 0	Front	0.135	0.144	0.076	0.023	0.28	0.21	0.16
	Back	0.745	0.349	0.483	0.062	1.09	1.23	0.81
	Left side	0.248	0.066	0.060	0.011	0.31	0.31	0.26
	Right side	0.161	0.133	0.291	0.017	0.29	0.45	0.18
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.845				0.85	0.85	0.85
WCDMA V Ant 0	Front	0.225	0.144	0.076	0.023	0.37	0.30	0.25
	Back	0.925	0.349	0.483	0.062	1.27	1.41	0.99
	Left side	0.384	0.066	0.060	0.011	0.45	0.44	0.40
	Right side	0.470	0.133	0.291	0.017	0.60	0.76	0.49
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.194				0.19	0.19	0.19
LTE Band 2 Ant 0	Front	0.177	0.144	0.076	0.023	0.32	0.25	0.20
	Back	0.601	0.349	0.483	0.062	0.95	1.08	0.66
	Left side	0.306	0.066	0.060	0.011	0.37	0.37	0.32
	Right side	0.115	0.133	0.291	0.017	0.25	0.41	0.13
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.659				0.66	0.66	0.66
LTE Band 5 Ant 0	Front	0.283	0.144	0.076	0.023	0.43	0.36	0.31
	Back	0.949	0.349	0.483	0.062	1.30	1.43	1.01
	Left side	0.476	0.066	0.060	0.011	0.54	0.54	0.49
	Right side	0.551	0.133	0.291	0.017	0.68	0.84	0.57
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.243				0.24	0.24	0.24
LTE Band 7 Ant 0	Front	0.061	0.144	0.076	0.023	0.21	0.14	0.08
	Back	0.478	0.349	0.483	0.062	0.83	0.96	0.54
	Left side	0.239	0.066	0.060	0.011	0.31	0.30	0.25
	Right side	0.161	0.133	0.291	0.017	0.29	0.45	0.18
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side							



	Bottom side	0.277				0.28	0.28	0.28
LTE Band 12 Ant 0	Front	0.235	0.144	0.076	0.023	0.38	0.31	0.26
	Back	0.873	0.349	0.483	0.062	1.22	1.36	0.94
	Left side	0.307	0.066	0.060	0.011	0.37	0.37	0.32
	Right side	0.403	0.133	0.291	0.017	0.54	0.69	0.42
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.240				0.24	0.24	0.24
LTE Band 14 Ant 0	Front	0.329	0.144	0.076	0.023	0.47	0.41	0.35
	Back	0.977	0.349	0.483	0.062	1.33	1.46	1.04
	Left side	0.451	0.066	0.060	0.011	0.52	0.51	0.46
	Right side	0.560	0.133	0.291	0.017	0.69	0.85	0.58
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.245				0.25	0.25	0.25
LTE Band 30 Ant 0	Front	0.160	0.144	0.076	0.023	0.30	0.24	0.18
	Back	0.758	0.349	0.483	0.062	1.11	1.24	0.82
	Left side	0.415	0.066	0.060	0.011	0.48	0.48	0.43
	Right side	0.264	0.133	0.291	0.017	0.40	0.56	0.28
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.701				0.70	0.70	0.70
LTE Band 66 Ant 0	Front	0.127	0.144	0.076	0.023	0.27	0.20	0.15
	Back	0.625	0.349	0.483	0.062	0.97	1.11	0.69
	Left side	0.211	0.066	0.060	0.011	0.28	0.27	0.22
	Right side	0.122	0.133	0.291	0.017	0.26	0.41	0.14
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.701				0.70	0.70	0.70
FR1 n2 Ant 0	Front	0.161	0.144	0.076	0.023	0.31	0.24	0.18
	Back	0.536	0.349	0.483	0.062	0.89	1.02	0.60
	Left side	0.235	0.066	0.060	0.011	0.30	0.30	0.25
	Right side	0.124	0.133	0.291	0.017	0.26	0.42	0.14
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.665				0.67	0.67	0.67
FR1 n5 Ant 0	Front	0.260	0.144	0.076	0.023	0.40	0.34	0.28
	Back	0.982	0.349	0.483	0.062	1.33	1.47	1.04
	Left side	0.426	0.066	0.060	0.011	0.49	0.49	0.44
	Right side	0.573	0.133	0.291	0.017	0.71	0.86	0.59
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.953				0.95	0.95	0.95
FR1 n30 Ant 0	Front	0.199	0.144	0.076	0.023	0.34	0.28	0.22
	Back	0.980	0.349	0.483	0.062	1.33	1.46	1.04
	Left side	0.430	0.066	0.060	0.011	0.50	0.49	0.44
	Right side	0.280	0.133	0.291	0.017	0.41	0.57	0.30
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.766				0.77	0.77	0.77
FR1 n66 Ant 0	Front	0.139	0.144	0.076	0.023	0.28	0.22	0.16
	Back	0.682	0.349	0.483	0.062	1.03	1.17	0.74
	Left side	0.233	0.066	0.060	0.011	0.30	0.29	0.24
	Right side	0.149	0.133	0.291	0.017	0.28	0.44	0.17
	Top side		0.229	0.243	0.034	0.23	0.24	0.03
	Bottom side	0.791				0.79	0.79	0.79
FR1 n77 Ant 1	Front	0.293	0.144	0.076	0.023	0.44	0.37	0.32
	Back	0.761	0.349	0.483	0.062	1.11	1.24	0.82
	Left side	0.633	0.066	0.060	0.011	0.70	0.69	0.64
	Right side	0.172	0.133	0.291	0.017	0.31	0.46	0.19
	Top side	0.247	0.229	0.243	0.034	0.48	0.49	0.28
	Bottom side	0.199				0.20	0.20	0.20



For ENDC

ENDC	LTE Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
				LTE	FR1	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
				1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
DC_2A_n2A	LTE Band 2 Ant 0	FR1 n2 Ant 5	Front	0.177	0.164	0.144	0.076	0.023	0.49	0.42	0.36
			Back	0.401	0.554	0.349	0.483	0.062	1.30	1.44	1.02
			Left side	0.306	0.080	0.066	0.060	0.011	0.45	0.45	0.40
			Right side	0.115	0.465	0.133	0.291	0.017	0.71	0.87	0.60
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.659	0.107				0.77	0.77	0.77
DC_5A_n2A	LTE Band 5 Ant 0	FR1 n2 Ant 5	Front	0.283	0.164	0.144	0.076	0.023	0.59	0.52	0.47
			Back	0.460	0.554	0.349	0.483	0.062	1.36	1.50	1.08
			Left side	0.476	0.080	0.066	0.060	0.011	0.62	0.62	0.57
			Right side	0.551	0.465	0.133	0.291	0.017	1.15	1.31	1.03
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.243	0.107				0.35	0.35	0.35
DC_12A_n2A	LTE Band 12 Ant 0	FR1 n2 Ant 5	Front	0.235	0.164	0.144	0.076	0.023	0.54	0.48	0.42
			Back	0.495	0.554	0.349	0.483	0.062	1.40	1.53	1.11
			Left side	0.307	0.080	0.066	0.060	0.011	0.45	0.45	0.40
			Right side	0.403	0.465	0.133	0.291	0.017	1.00	1.16	0.89
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.240	0.107				0.35	0.35	0.35
DC_14A_n2A	LTE Band 14 Ant 0	FR1 n2 Ant 5	Front	0.329	0.164	0.144	0.076	0.023	0.64	0.57	0.52
			Back	0.488	0.554	0.349	0.483	0.062	1.39	1.53	1.10
			Left side	0.451	0.080	0.066	0.060	0.011	0.60	0.59	0.54
			Right side	0.560	0.465	0.133	0.291	0.017	1.16	1.32	1.04
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.245	0.107				0.35	0.35	0.35
DC_30A_n2A	LTE Band 30 Ant 0	FR1 n2 Ant 5	Front	0.160	0.164	0.144	0.076	0.023	0.47	0.40	0.35
			Back	0.431	0.554	0.349	0.483	0.062	1.33	1.47	1.05
			Left side	0.415	0.080	0.066	0.060	0.011	0.56	0.56	0.51
			Right side	0.264	0.465	0.133	0.291	0.017	0.86	1.02	0.75
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.701	0.107				0.81	0.81	0.81
DC_66A_n2A	LTE Band 66 Ant 5	FR1 n2 Ant 0	Front	0.148	0.161	0.144	0.076	0.023	0.45	0.39	0.33
			Back	0.430	0.436	0.349	0.483	0.062	1.22	1.35	0.93
			Left side	0.041	0.235	0.066	0.060	0.011	0.34	0.34	0.29
			Right side	0.369	0.124	0.133	0.291	0.017	0.63	0.78	0.51
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.104	0.665				0.77	0.77	0.77
DC_2A_n5A	LTE Band 2 Ant 5	FR1 n5 Ant 0	Front	0.133	0.260	0.144	0.076	0.023	0.54	0.47	0.42
			Back	0.509	0.560	0.349	0.483	0.062	1.42	1.55	1.13
			Left side	0.053	0.426	0.066	0.060	0.011	0.55	0.54	0.49
			Right side	0.447	0.573	0.133	0.291	0.017	1.15	1.31	1.04
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.089	0.953				1.04	1.04	1.04
DC_30A_n5A	LTE Band 30 Ant 5	FR1 n5 Ant 0	Front	0.046	0.260	0.144	0.076	0.023	0.45	0.38	0.33
			Back	0.509	0.560	0.349	0.483	0.062	1.42	1.55	1.13
			Left side	0.060	0.426	0.066	0.060	0.011	0.55	0.55	0.50
			Right side	0.190	0.573	0.133	0.291	0.017	0.90	1.05	0.78
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.128	0.953				1.08	1.08	1.08
DC_66A_n5A	LTE Band 66 Ant 5	FR1 n5 Ant 0	Front	0.148	0.260	0.144	0.076	0.023	0.55	0.48	0.43
			Back	0.430	0.560	0.349	0.483	0.062	1.34	1.47	1.05
			Left side	0.041	0.426	0.066	0.060	0.011	0.53	0.53	0.48



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			Right side	0.369	0.573	0.133	0.291	0.017	1.08	1.23	0.96
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.104	0.953				1.06	1.06	1.06
DC_2A_n66A	LTE Band 2 Ant 5	FR1 n66 Ant 0	Front	0.133	0.139	0.144	0.076	0.023	0.42	0.35	0.30
			Back	0.509	0.442	0.349	0.483	0.062	1.30	1.43	1.01
			Left side	0.053	0.233	0.066	0.060	0.011	0.35	0.35	0.30
			Right side	0.447	0.149	0.133	0.291	0.017	0.73	0.89	0.61
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.089	0.791				0.88	0.88	0.88
DC_12A_n66A	LTE Band 12 Ant 0	FR1 n66 Ant 5	Front	0.235	0.115	0.144	0.076	0.023	0.49	0.43	0.37
			Back	0.495	0.366	0.349	0.483	0.062	1.21	1.34	0.92
			Left side	0.307	0.035	0.066	0.060	0.011	0.41	0.40	0.35
			Right side	0.403	0.294	0.133	0.291	0.017	0.83	0.99	0.71
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.240	0.085				0.33	0.33	0.33
DC_14A_n66A	LTE Band 14 Ant 0	FR1 n66 Ant 5	Front	0.329	0.115	0.144	0.076	0.023	0.59	0.52	0.47
			Back	0.488	0.366	0.349	0.483	0.062	1.20	1.34	0.92
			Left side	0.451	0.035	0.066	0.060	0.011	0.55	0.55	0.50
			Right side	0.560	0.294	0.133	0.291	0.017	0.99	1.15	0.87
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.245	0.085				0.33	0.33	0.33
DC_30A_n66A	LTE Band 30 Ant 0	FR1 n66 Ant 5	Front	0.160	0.115	0.144	0.076	0.023	0.42	0.35	0.30
			Back	0.431	0.366	0.349	0.483	0.062	1.15	1.28	0.86
			Left side	0.415	0.035	0.066	0.060	0.011	0.52	0.51	0.46
			Right side	0.264	0.294	0.133	0.291	0.017	0.69	0.85	0.58
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.701	0.085				0.79	0.79	0.79
DC_66A_n66A	LTE Band 66 Ant 0	FR1 n66 Ant 5	Front	0.127	0.115	0.144	0.076	0.023	0.39	0.32	0.27
			Back	0.413	0.366	0.349	0.483	0.062	1.13	1.26	0.84
			Left side	0.211	0.035	0.066	0.060	0.011	0.31	0.31	0.26
			Right side	0.122	0.294	0.133	0.291	0.017	0.55	0.71	0.43
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.701	0.085				0.79	0.79	0.79
DC_2A_n77A	LTE Band 2 Ant 0	FR1 n77 Ant 1	Front	0.177	0.316	0.144	0.076	0.023	0.64	0.57	0.52
			Back	0.401	0.429	0.349	0.483	0.062	1.18	1.31	0.89
			Left side	0.306	0.709	0.066	0.060	0.011	1.08	1.08	1.03
			Right side	0.115	0.172	0.133	0.291	0.017	0.42	0.58	0.30
			Top side		0.247	0.229	0.243	0.034	0.48	0.49	0.28
			Bottom side	0.659	0.199				0.86	0.86	0.86
DC_5A_n77A	LTE Band 5 Ant 0	FR1 n77 Ant 1	Front	0.283	0.316	0.144	0.076	0.023	0.74	0.68	0.62
			Back	0.460	0.429	0.349	0.483	0.062	1.24	1.37	0.95
			Left side	0.476	0.709	0.066	0.060	0.011	1.25	1.25	1.20
			Right side	0.551	0.172	0.133	0.291	0.017	0.86	1.01	0.74
			Top side		0.247	0.229	0.243	0.034	0.48	0.49	0.28
			Bottom side	0.243	0.199				0.44	0.44	0.44
DC_12A_n77A	LTE Band 12 Ant 0	FR1 n77 Ant 1	Front	0.235	0.316	0.144	0.076	0.023	0.70	0.63	0.57
			Back	0.495	0.429	0.349	0.483	0.062	1.27	1.41	0.99
			Left side	0.307	0.709	0.066	0.060	0.011	1.08	1.08	1.03
			Right side	0.403	0.172	0.133	0.291	0.017	0.71	0.87	0.59
			Top side		0.247	0.229	0.243	0.034	0.48	0.49	0.28
			Bottom side	0.240	0.199				0.44	0.44	0.44
DC_14A_n77A	LTE Band 14 Ant 0	FR1 n77 Ant 1	Front	0.329	0.316	0.144	0.076	0.023	0.79	0.72	0.67
			Back	0.488	0.429	0.349	0.483	0.062	1.27	1.40	0.98
			Left side	0.451	0.709	0.066	0.060	0.011	1.23	1.22	1.17
			Right side	0.560	0.172	0.133	0.291	0.017	0.87	1.02	0.75
			Top side		0.247	0.229	0.243	0.034	0.48	0.49	0.28



			Bottom side	0.245	0.199				0.44	0.44	0.44
DC_30A_n77A	LTE Band 30 Ant 0	FR1 n77 Ant 1	Front	0.160	0.316	0.144	0.076	0.023	0.62	0.55	0.50
			Back	0.431	0.429	0.349	0.483	0.062	1.21	1.34	0.92
			Left side	0.415	0.709	0.066	0.060	0.011	1.19	1.18	1.14
			Right side	0.264	0.172	0.133	0.291	0.017	0.57	0.73	0.45
			Top side		0.247	0.229	0.243	0.034	0.48	0.49	0.28
			Bottom side	0.701	0.199				0.90	0.90	0.90
DC_66A_n77A	LTE Band 66 Ant 0	FR1 n77 Ant 1	Front	0.127	0.316	0.144	0.076	0.023	0.59	0.52	0.47
			Back	0.413	0.429	0.349	0.483	0.062	1.19	1.33	0.90
			Left side	0.211	0.709	0.066	0.060	0.011	0.99	0.98	0.93
			Right side	0.122	0.172	0.133	0.291	0.017	0.43	0.59	0.31
			Top side		0.247	0.229	0.243	0.034	0.48	0.49	0.28
			Bottom side	0.701	0.199				0.90	0.90	0.90

For UL CA

LTE Inter CA	LTE Band	LTE Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
				LTE	LTE	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
				1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
CA_2A-5A	LTE Band 2 Ant 5	LTE Band 5 Ant 0	Front	0.133	0.283	0.144	0.076	0.023	0.56	0.49	0.44
			Back	0.509	0.460	0.349	0.483	0.062	1.32	1.45	1.03
			Left side	0.053	0.476	0.066	0.060	0.011	0.60	0.59	0.54
			Right side	0.447	0.551	0.133	0.291	0.017	1.13	1.29	1.02
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.089	0.243				0.33	0.33	0.33
CA_4A-5A	LTE Band 66 Ant 5	LTE Band 5 Ant 0	Front	0.148	0.283	0.144	0.076	0.023	0.58	0.51	0.45
			Back	0.430	0.460	0.349	0.483	0.062	1.24	1.37	0.95
			Left side	0.041	0.476	0.066	0.060	0.011	0.58	0.58	0.53
			Right side	0.369	0.551	0.133	0.291	0.017	1.05	1.21	0.94
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.104	0.243				0.35	0.35	0.35
CA_2A-12A	LTE Band 2 Ant 5	LTE Band 12 Ant 0	Front	0.133	0.235	0.144	0.076	0.023	0.51	0.44	0.39
			Back	0.509	0.495	0.349	0.483	0.062	1.35	1.49	1.07
			Left side	0.053	0.307	0.066	0.060	0.011	0.43	0.42	0.37
			Right side	0.447	0.403	0.133	0.291	0.017	0.98	1.14	0.87
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.089	0.240				0.33	0.33	0.33
CA_4A-12A	LTE Band 66 Ant 5	LTE Band 12 Ant 0	Front	0.148	0.235	0.144	0.076	0.023	0.53	0.46	0.41
			Back	0.430	0.495	0.349	0.483	0.062	1.27	1.41	0.99
			Left side	0.041	0.307	0.066	0.060	0.011	0.41	0.41	0.36
			Right side	0.369	0.403	0.133	0.291	0.017	0.91	1.06	0.79
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.104	0.240				0.34	0.34	0.34
CA_2A-14A	LTE Band 2 Ant 5	LTE Band 14 Ant 0	Front	0.133	0.329	0.144	0.076	0.023	0.61	0.54	0.49
			Back	0.509	0.488	0.349	0.483	0.062	1.35	1.48	1.06
			Left side	0.053	0.451	0.066	0.060	0.011	0.57	0.56	0.52
			Right side	0.447	0.560	0.133	0.291	0.017	1.14	1.30	1.02
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.089	0.245				0.33	0.33	0.33
CA_5A-30A	LTE Band 5 Ant 0	LTE Band 30 Ant 5	Front	0.283	0.046	0.144	0.076	0.023	0.47	0.41	0.35
			Back	0.460	0.509	0.349	0.483	0.062	1.32	1.45	1.03
			Left side	0.476	0.060	0.066	0.060	0.011	0.60	0.60	0.55
			Right side	0.551	0.190	0.133	0.291	0.017	0.87	1.03	0.76
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.243	0.128				0.37	0.37	0.37
CA_12A-30A	LTE	LTE	Front	0.235	0.046	0.144	0.076	0.023	0.43	0.36	0.30



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	Band 12 Ant 0	Band 30 Ant 5	Back	0.495	0.509	0.349	0.483	0.062	1.35	1.49	1.07
			Left side	0.307	0.060	0.066	0.060	0.011	0.43	0.43	0.38
			Right side	0.403	0.190	0.133	0.291	0.017	0.73	0.88	0.61
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.240	0.128				0.37	0.37	0.37
CA_14A-30A	LTE Band 14 Ant 0	LTE Band 30 Ant 5	Front	0.329	0.046	0.144	0.076	0.023	0.52	0.45	0.40
			Back	0.488	0.509	0.349	0.483	0.062	1.35	1.48	1.06
			Left side	0.451	0.060	0.066	0.060	0.011	0.58	0.57	0.52
			Right side	0.560	0.190	0.133	0.291	0.017	0.88	1.04	0.77
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.245	0.128				0.37	0.37	0.37
			Front	0.283	0.148	0.144	0.076	0.023	0.58	0.51	0.45
			Back	0.460	0.430	0.349	0.483	0.062	1.24	1.37	0.95
			Left side	0.476	0.041	0.066	0.060	0.011	0.58	0.58	0.53
			Right side	0.551	0.369	0.133	0.291	0.017	1.05	1.21	0.94
CA_5A-66A	LTE Band 5 Ant 0	LTE Band 66 Ant 5	Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.243	0.104				0.35	0.35	0.35
			Front	0.235	0.148	0.144	0.076	0.023	0.53	0.46	0.41
			Back	0.495	0.430	0.349	0.483	0.062	1.27	1.41	0.99
			Left side	0.307	0.041	0.066	0.060	0.011	0.41	0.41	0.36
CA_12A-66A	LTE Band 12 Ant 0	LTE Band 66 Ant 5	Right side	0.403	0.369	0.133	0.291	0.017	0.91	1.06	0.79
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.240	0.104				0.34	0.34	0.34
			Front	0.329	0.148	0.144	0.076	0.023	0.62	0.55	0.50
			Back	0.488	0.430	0.349	0.483	0.062	1.27	1.40	0.98
CA_14A-66A	LTE Band 14 Ant 0	LTE Band 66 Ant 5	Left side	0.451	0.041	0.066	0.060	0.011	0.56	0.55	0.50
			Right side	0.560	0.369	0.133	0.291	0.017	1.06	1.22	0.95
			Top side			0.229	0.243	0.034	0.23	0.24	0.03
			Bottom side	0.245	0.104				0.35	0.35	0.35

15.3 Body-Worn Accessory Exposure Conditions

<Flip Close >

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4	1+5
		WWAN	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WCDMA II Ant 0	Front	0.142	0.096	0.063	0.013	0.24	0.21	0.16
	Back	0.436	0.239	0.355	0.023	0.68	0.79	0.46
WCDMA IV Ant 0	Front	0.094	0.096	0.063	0.013	0.19	0.16	0.11
	Back	0.419	0.239	0.355	0.023	0.66	0.77	0.44
WCDMA V Ant 0	Front	0.160	0.096	0.063	0.013	0.26	0.22	0.17
	Back	0.570	0.239	0.355	0.023	0.81	0.93	0.59
LTE Band 2 Ant 0	Front	0.108	0.096	0.063	0.013	0.20	0.17	0.12
	Back	0.354	0.239	0.355	0.023	0.59	0.71	0.38
LTE Band 5 Ant 0	Front	0.221	0.096	0.063	0.013	0.32	0.28	0.23
	Back	0.728	0.239	0.355	0.023	0.97	1.08	0.75
LTE Band 7 Ant 0	Front	0.054	0.096	0.063	0.013	0.15	0.12	0.07
	Back	0.143	0.239	0.355	0.023	0.38	0.50	0.17
LTE Band 12 Ant 0	Front	0.194	0.096	0.063	0.013	0.29	0.26	0.21
	Back	0.563	0.239	0.355	0.023	0.80	0.92	0.59
LTE Band 14 Ant 0	Front	0.252	0.096	0.063	0.013	0.35	0.32	0.27
	Back	0.701	0.239	0.355	0.023	0.94	1.06	0.72
LTE Band 30 Ant 0	Front	0.144	0.096	0.063	0.013	0.24	0.21	0.16
	Back	0.466	0.239	0.355	0.023	0.71	0.82	0.49
LTE Band 66 Ant 0	Front	0.073	0.096	0.063	0.013	0.17	0.14	0.09
	Back	0.335	0.239	0.355	0.023	0.57	0.69	0.36
FR1 n2 Ant 0	Front	0.112	0.096	0.063	0.013	0.21	0.18	0.13
	Back	0.329	0.239	0.355	0.023	0.57	0.68	0.35
FR1 n5 Ant 0	Front	0.168	0.096	0.063	0.013	0.26	0.23	0.18
	Back	0.705	0.239	0.355	0.023	0.94	1.06	0.73
FR1 n30 Ant 0	Front	0.118	0.096	0.063	0.013	0.21	0.18	0.13
	Back	0.544	0.239	0.355	0.023	0.78	0.90	0.57
FR1 n66 Ant 0	Front	0.098	0.096	0.063	0.013	0.19	0.16	0.11
	Back	0.360	0.239	0.355	0.023	0.60	0.72	0.38
FR1 n77 Ant 1	Front	0.137	0.096	0.063	0.013	0.23	0.20	0.15
	Back	0.373	0.239	0.355	0.023	0.61	0.73	0.40

**For ENDC Standalone**

ENDC	LTE Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5
				LTE	FR1	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4	Summed	Summed	Summed
				1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
DC_2A_n2A	LTE Band 2 Ant 0	FR1 n2 Ant 5	Front	0.108	0.115	0.096	0.063	0.013	0.32	0.29	0.24
			Back	0.354	0.342	0.239	0.355	0.023	0.94	1.05	0.72
DC_5A_n2A	LTE Band 5 Ant 0	FR1 n2 Ant 5	Front	0.221	0.115	0.096	0.063	0.013	0.43	0.40	0.35
			Back	0.728	0.342	0.239	0.355	0.023	1.31	1.43	1.09
DC_12A_n2A	LTE Band 12 Ant 0	FR1 n2 Ant 5	Front	0.194	0.115	0.096	0.063	0.013	0.41	0.37	0.32
			Back	0.563	0.342	0.239	0.355	0.023	1.14	1.26	0.93
DC_14A_n2A	LTE Band 14 Ant 0	FR1 n2 Ant 5	Front	0.252	0.115	0.096	0.063	0.013	0.46	0.43	0.38
			Back	0.701	0.342	0.239	0.355	0.023	1.28	1.40	1.07
DC_30A_n2A	LTE Band 30 Ant 0	FR1 n2 Ant 5	Front	0.144	0.115	0.096	0.063	0.013	0.36	0.32	0.27
			Back	0.466	0.342	0.239	0.355	0.023	1.05	1.16	0.83
DC_66A_n2A	LTE Band 66 Ant 5	FR1 n2 Ant 0	Front	0.106	0.112	0.096	0.063	0.013	0.31	0.28	0.23
			Back	0.260	0.329	0.239	0.355	0.023	0.83	0.94	0.61
DC_2A_n5A	LTE Band 2 Ant 5	FR1 n5 Ant 0	Front	0.114	0.168	0.096	0.063	0.013	0.38	0.35	0.30
			Back	0.359	0.705	0.239	0.355	0.023	1.30	1.42	1.09
DC_30A_n5A	LTE Band 30 Ant 5	FR1 n5 Ant 0	Front	0.096	0.168	0.096	0.063	0.013	0.36	0.33	0.28
			Back	0.300	0.705	0.239	0.355	0.023	1.24	1.36	1.03
DC_66A_n5A	LTE Band 66 Ant 5	FR1 n5 Ant 0	Front	0.106	0.168	0.096	0.063	0.013	0.37	0.34	0.29
			Back	0.260	0.705	0.239	0.355	0.023	1.20	1.32	0.99
DC_2A_n66A	LTE Band 2 Ant 5	FR1 n66 Ant 0	Front	0.114	0.098	0.096	0.063	0.013	0.31	0.28	0.23
			Back	0.359	0.360	0.239	0.355	0.023	0.96	1.07	0.74
DC_12A_n66A	LTE Band 12 Ant 0	FR1 n66 Ant 5	Front	0.194	0.099	0.096	0.063	0.013	0.39	0.36	0.31
			Back	0.563	0.240	0.239	0.355	0.023	1.04	1.16	0.83
DC_14A_n66A	LTE Band 14 Ant 0	FR1 n66 Ant 5	Front	0.252	0.099	0.096	0.063	0.013	0.45	0.41	0.36
			Back	0.701	0.240	0.239	0.355	0.023	1.18	1.30	0.96
DC_30A_n66A	LTE Band 30 Ant 0	FR1 n66 Ant 5	Front	0.144	0.099	0.096	0.063	0.013	0.34	0.31	0.26
			Back	0.466	0.240	0.239	0.355	0.023	0.95	1.06	0.73
DC_66A_n66A	LTE Band 66 Ant 0	FR1 n66 Ant 5	Front	0.073	0.099	0.096	0.063	0.013	0.27	0.24	0.19
			Back	0.335	0.240	0.239	0.355	0.023	0.81	0.93	0.60
DC_2A_n77A	LTE Band 2 Ant 0	FR1 n77 Ant 1	Front	0.108	0.137	0.096	0.063	0.013	0.34	0.31	0.26
			Back	0.354	0.373	0.239	0.355	0.023	0.97	1.08	0.75
DC_5A_n77A	LTE Band 5 Ant 0	FR1 n77 Ant 1	Front	0.221	0.137	0.096	0.063	0.013	0.45	0.42	0.37
			Back	0.728	0.373	0.239	0.355	0.023	1.34	1.46	1.12
DC_12A_n77A	LTE Band 12 Ant 0	FR1 n77 Ant 1	Front	0.194	0.137	0.096	0.063	0.013	0.43	0.39	0.34
			Back	0.563	0.373	0.239	0.355	0.023	1.18	1.29	0.96
DC_14A_n77A	LTE Band 14 Ant 0	FR1 n77 Ant 1	Front	0.252	0.137	0.096	0.063	0.013	0.49	0.45	0.40
			Back	0.701	0.373	0.239	0.355	0.023	1.31	1.43	1.10
DC_30A_n77A	LTE Band 30 Ant 0	FR1 n77 Ant 1	Front	0.144	0.137	0.096	0.063	0.013	0.38	0.34	0.29
			Back	0.466	0.373	0.239	0.355	0.023	1.08	1.19	0.86
DC_66A_n77A	LTE Band 66 Ant 0	FR1 n77 Ant 1	Front	0.073	0.137	0.096	0.063	0.013	0.31	0.27	0.22
			Back	0.335	0.373	0.239	0.355	0.023	0.95	1.06	0.73



For UL CA

LTE Inter CA	LTE Band	LTE Band	Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)
				LTE	LTE	WLAN2.4GHz Ant 4	WLAN5GHz Ant 4	Bluetooth Ant 4			
				1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
CA_2A-5A	LTE Band 2 Ant 5	LTE Band 5 Ant 0	Front	0.114	0.221	0.096	0.063	0.013	0.43	0.40	0.35
			Back	0.359	0.728	0.239	0.355	0.023	1.33	1.44	1.11
CA_4A-5A	LTE Band 66 Ant 5	LTE Band 5 Ant 0	Front	0.106	0.221	0.096	0.063	0.013	0.42	0.39	0.34
			Back	0.260	0.728	0.239	0.355	0.023	1.23	1.34	1.01
CA_2A-12A	LTE Band 2 Ant 5	LTE Band 12 Ant 0	Front	0.114	0.194	0.096	0.063	0.013	0.40	0.37	0.32
			Back	0.359	0.563	0.239	0.355	0.023	1.16	1.28	0.95
CA_4A-12A	LTE Band 66 Ant 5	LTE Band 12 Ant 0	Front	0.106	0.194	0.096	0.063	0.013	0.40	0.36	0.31
			Back	0.260	0.563	0.239	0.355	0.023	1.06	1.18	0.85
CA_2A-14A	LTE Band 2 Ant 5	LTE Band 14 Ant 0	Front	0.114	0.252	0.096	0.063	0.013	0.46	0.43	0.38
			Back	0.359	0.701	0.239	0.355	0.023	1.30	1.42	1.08
CA_5A-30A	LTE Band 5 Ant 0	LTE Band 30 Ant 5	Front	0.221	0.096	0.096	0.063	0.013	0.41	0.38	0.33
			Back	0.728	0.300	0.239	0.355	0.023	1.27	1.38	1.05
CA_12A-30A	LTE Band 12 Ant 0	LTE Band 30 Ant 5	Front	0.194	0.096	0.096	0.063	0.013	0.39	0.35	0.30
			Back	0.563	0.300	0.239	0.355	0.023	1.10	1.22	0.89
CA_14A-30A	LTE Band 14 Ant 0	LTE Band 30 Ant 5	Front	0.252	0.096	0.096	0.063	0.013	0.44	0.41	0.36
			Back	0.701	0.300	0.239	0.355	0.023	1.24	1.36	1.02
CA_5A-66A	LTE Band 5 Ant 0	LTE Band 66 Ant 5	Front	0.221	0.106	0.096	0.063	0.013	0.42	0.39	0.34
			Back	0.728	0.260	0.239	0.355	0.023	1.23	1.34	1.01
CA_12A-66A	LTE Band 12 Ant 0	LTE Band 66 Ant 5	Front	0.194	0.106	0.096	0.063	0.013	0.40	0.36	0.31
			Back	0.563	0.260	0.239	0.355	0.023	1.06	1.18	0.85
CA_14A-66A	LTE Band 14 Ant 0	LTE Band 66 Ant 5	Front	0.252	0.106	0.096	0.063	0.013	0.45	0.42	0.37
			Back	0.701	0.260	0.239	0.355	0.023	1.20	1.32	0.98

Test Engineer : Kevin Xu, David Dai, Bin He, Seth Jin

16. Uncertainty Assessment

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.

17. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [6] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [7] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [9] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [10] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [11] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [12] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [13] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015



Appendixes

Please refer to separated files for the following appendixes

Appendix A. Plots of System Performance Check

Appendix B. Plots of High SAR Measurement

Appendix C. DASY Calibration Certificate

Appendix D. Test Setup Photos

Appendix E. Conducted RF Output Power Table

Appendix F. Power measurement connection diagram

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