

FCC SAR Test Report

APPLICANT : vivo Mobile Communication Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : vivo
MODEL NAME : V2202
FCC ID : 2AUCY-V2202
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: Si Zhang

Sporton International Inc. (Shenzhen)

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People's Republic of China



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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA260813	01	Initial issue of report	Aug. 05, 2022



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **vivo Mobile Communication Co., Ltd., Mobile Phone, V2202**, are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Body-worn (Separation 15mm)	Hotspot (Separation 10mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
			1g SAR (W/kg)			
Licensed	GSM	GSM850	0.66	0.37	0.53	1.34
		GSM1900	0.79	0.30	0.79	
	WCDMA	WCDMA II	0.78	0.58	0.76	
		WCDMA IV	0.67	0.32	0.55	
		WCDMA V	0.59	0.23	0.53	
	LTE	LTE Band 2	0.76	0.51	0.57	
		LTE Band 4	0.79	0.37	0.68	
		LTE Band 5	0.65	0.24	0.40	
		LTE Band 7	0.80	0.85	0.52	
		LTE Band 12 / 17	0.60	0.25	0.54	
		LTE Band 13	0.70	0.18	0.42	
		LTE Band 26	0.87	0.21	0.45	
		LTE Band 38 / 41	0.79	0.50	0.51	
	FR1	LTE Band 66	0.79	0.38	0.76	
		FR1 n2	0.68	0.61	0.71	
		FR1 n7	0.83	0.96	0.64	
		FR1 n66	0.74	0.48	0.55	
		FR1 n77	0.69	0.81	0.62	
	FR1 n78	0.65	0.76	0.63		
DTS	WLAN	2.4GHz WLAN	0.39	0.16	0.28	1.26
NII		5GHz WLAN	0.40	0.16	0.50	1.34
DSS	Bluetooth	2.4GHz Bluetooth	0.36	0.04	0.10	1.34

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific (Separation 0mm) 10g SAR (W/kg)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	WCDMA	WCDMA II	2.34	2.72
		LTE	LTE Band 2	
	LTE Band 7		2.05	
	LTE Band 38 / 41		1.33	
	FR1	FR1 n2	2.46	
		FR1 n7	2.72	
		FR1 n66	2.17	
		FR1 n77	2.12	
		FR1 n78	1.90	
NII	WLAN	5GHz WLAN	0.48	2.08
Date of Testing:			2022/7/7 ~ 2022/7/22	

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.
	SAR02-SZ	CN1256	421272

Applicant	
Company Name	vivo Mobile Communication Co., Ltd.
Address	No.1, vivo Road, Chang'an, Dongguan, Guangdong, China

Manufacturer	
Company Name	vivo Mobile Communication Co., Ltd.
Address	No.1, vivo Road, Chang'an, Dongguan, Guangdong, China

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 616217 D04 SAR for laptop and tablets v01r02
- 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	Mobile Phone
Brand Name	vivo
Model Name	V2202
FCC ID	2AUCY-V2202
IMEI Code	866295060094058 866295060094041 866295060093894 866295060093886
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz 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 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC : 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink) LTE: QPSK / 16QAM / 64QAM / 256QAM (Downlink Only) 5G NR: DFT-s-OFDM (PI/2 BPSK/ QPSK / 16QAM / 64QAM / 256QAM) CP-OFDM (QPSK / 16QAM / 64QAM / 256QAM) WLAN 2.4GHz 802.11b/g/n/ax HT20/HE20 WLAN 5GHz 802.11a/n/ac HT20/HT40/VHT20/VHT40/VHT80 WLAN 5GHz 802.11ax HE20/HE40/HE80 Bluetooth BR/EDR/LE NFC: ASK
HW Version	MP_0.1
SW Version	PD2215CF_EX_A_12.0.3.8.W30.V000L1
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Production Unit
Remark:	
<ol style="list-style-type: none"> 802.11n-HT40 is not supported in 2.4GHz WLAN. For dual SIM card mobile has two SIM slots and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). After pre-scan two SIM cards power, we found test result of the SIM1 	

- was the worse, so we chose SIM1 slot to perform all tests.
3. The device implements Proximity sensors/receiver/hotspot detect mechanism trigger reduced power for the power management for SAR compliance at different exposure conditions (head, hotspot, body, and extremity). The device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to appendix E. Power table (full power: Default power; DSI 2: receiver on head power; DSI 3: receiver on head power and WLAN on; DSI 4: P-sensor off power/receiver off; DSI 5: Receiver off/sensor on with WLAN off for Ant 11/13; Receiver off with WLAN off for Ant 12/21/23/22/31/41; DSI 8: Receiver off/sensor on with WLAN on for Ant 11/13; Receiver off with WLAN on for Ant 12/21/23/22/31/41; DSI 9:Receiver off/sensor off with WLAN on for Ant 11; DSI 10: Hotspot on power for all WWAN ant; Receiver off/sensor off with WLAN on for Ant 13).
 4. For WWAN transmitter, while the device WWAN is transmitting simultaneously with the WLAN/Bluetooth antenna, when earpiece receiver worked, reduced power will be active. While the device WWAN is transmitting simultaneously with the WLAN/Bluetooth antenna, when earpiece receiver is not worked, reduced power will be active.
 5. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
 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 modes, standalone SAR performed for 5G NR band with the maximum power, EN-DC SAR summed 5G NR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
 9. RF exposure report for WPC (Wireless power charging) will be separately submitted.
 10. This device supports 5G NR FR1 bands as following table, including NSA mode and SA mode.

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
SA	n2	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 25, 30, 40
	n77	TDD	30	10, 15, 20, 40, 50, 60, 80, 90, 100
	n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 80, 90, 100
NSA	n7	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 30
	n78	TDD	30	10, 15, 20, 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	2AUCY-V2202																																																														
Equipment Name	Mobile 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 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 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 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 26: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz																																																														
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM (Downlink only)																																																														
LTE Voice / Data requirements	Voice and Data																																																														
LTE Release Version	Rel 15, category 13																																																														
CA Support	Yes, Uplink and Downlink																																																														
LTE MPR permanently built-in by design	<p align="center">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</p> <table border="1"> <thead> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th> <th rowspan="2">MPR (dB)</th> </tr> <tr> <th>1.4 MHz</th> <th>3.0 MHz</th> <th>5 MHz</th> <th>10 MHz</th> <th>15 MHz</th> <th>20 MHz</th> </tr> </thead> <tbody> <tr> <td>QPSK</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 3</td> </tr> <tr> <td>256 QAM</td> <td colspan="6" style="text-align: center;">≥ 1</td> <td>≤ 5</td> </tr> </tbody> </table>	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
Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)																																																								
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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 Proximity sensors/receiver/hotspot detect mechanism trigger reduction power applied to satisfy SAR compliance the detail please referred to section 13.																																																														
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section 13.																																																														
LTE Carrier Aggregation Additional Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for 7C/38C/41C with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 3 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.																																																														



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		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	20407	824.7	20415	825.5	20425	826.5	20450	829	20450	829	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	844	20600	844	20600	844				
LTE Band 7																
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 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	2510	20850	2510	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	2560	21350	2560	21350	2560				
LTE Band 12																
	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	23017	699.7	23025	700.5	23035	701.5	23060	704	23060	704	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	711	23130	711	23130	711				
LTE Band 13																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782		23255		784.5		23280		787	
M	23230		782		23255		784.5		23280		787		23305		789.5	
H	23255		784.5		23280		787		23305		789.5		23330		792	
LTE Band 17																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23755		706.5		23780		709		23805		712		23830		715	
M	23790		710		23815		713		23840		716		23865		719	
H	23825		713.5		23850		716.5		23875		719.5		23900		722.5	
LTE Band 26																
	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	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5	26790	824				
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5				
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5	26940	839				



LTE Band 38												
	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	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	38000	2595	38000	2595				
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610				
LTE Band 41												
	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	39675	2498.5	39700	2501	39725	2503.5	39750	2506				
L	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
H	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680				
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



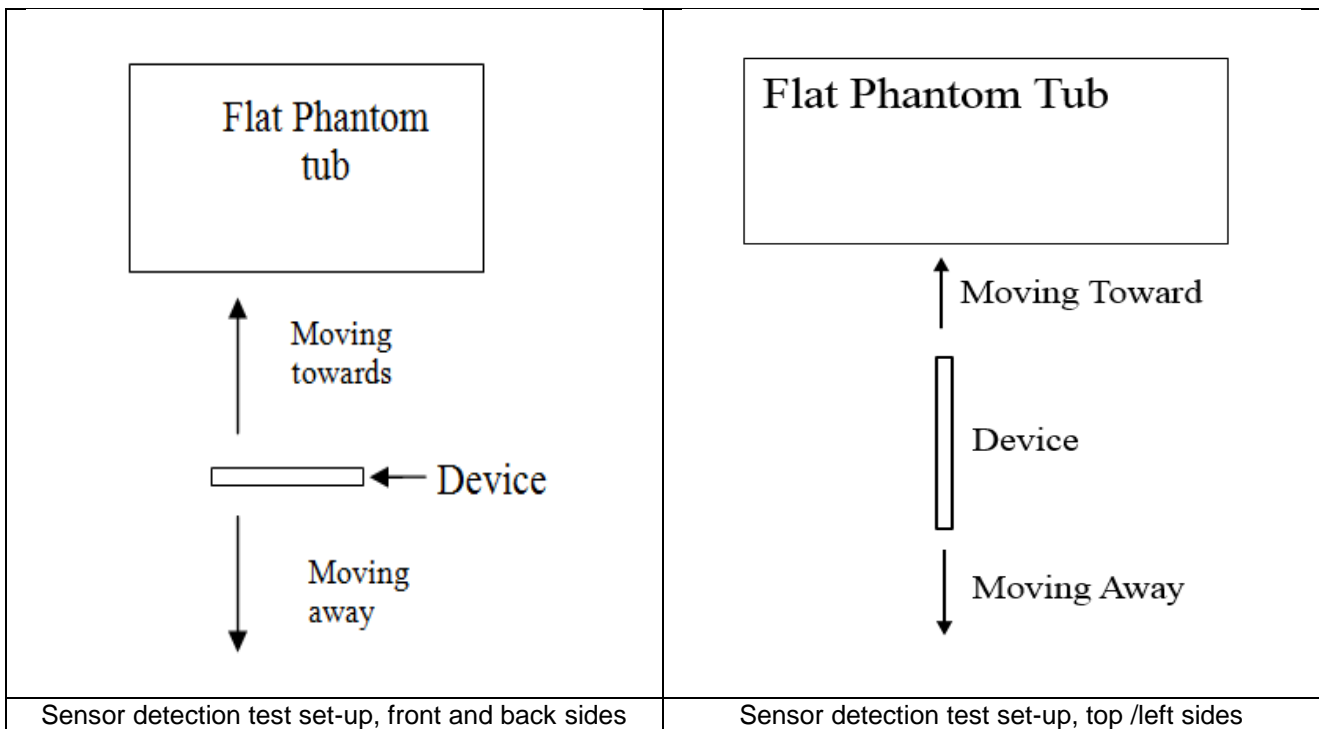
4.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information																								
FCC ID	2AUCY-V2202																							
Equipment Name	Mobile Phone																							
Operating Frequency Range of each 5G NR transmission band	5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz																							
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz 5G NR n77: 10MHz, 15MHz, 20MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz 5G NR n78: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz																							
SCS	FDD: SCS15KHz/30KHz, TDD: SCS15KHz/30KHz																							
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 n7	LTE B2/66																							
LTE Anchor Bands for n66	LTE B2/5/7																							
LTE Anchor Bands for n78	LTE B2/4/5/7/38/41/66																							
NR Band 2																								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz																	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)																
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860																
M	376000	1880	376000	1880	376000	1880	376000	1880																
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900																
NR Band 7																								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz																	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)																
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510																
M	507000	2535	507000	2535	507000	2535	507000	2535																
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560																
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																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz			
	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	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750		
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840		
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.50	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930		
NR Band 78																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	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	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	653000	3795	652832	3792.48	652666	3789.99	652500	3787.50	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98	650000	3750
NR Band 77/78(3450MHz ~ 3550MHz)																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	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	632334	3485.01	632668	3490.02	633000	3495	633334	3500.01
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	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	634332	3514.98	634000	3510	633666	3504.99	633332	3499.98

5. Proximity Sensor Triggering Test

5.1 Proximity sensor triggering distances(Per KDB616217§6.2)

1. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (3980MHz) and lowest (1750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the left and right corners of the top ends of the phone are utilized to determine when the device comes in proximity of the user's body or finger or hand at the front or back or top or left sides of the device. The output power will reduce to body worn power level when top and bottom sensor pad be detected.
3. The device employs proximity sensors that detect the presence of the user's body or handheld states at the front, back, top, left sides of the device. When front, back, top, left sides of body condition or handheld states is detected reduced power will be active. The data shown in the sections below shows the distance(s).
4. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed.



<P-Sensor>

Ant 11

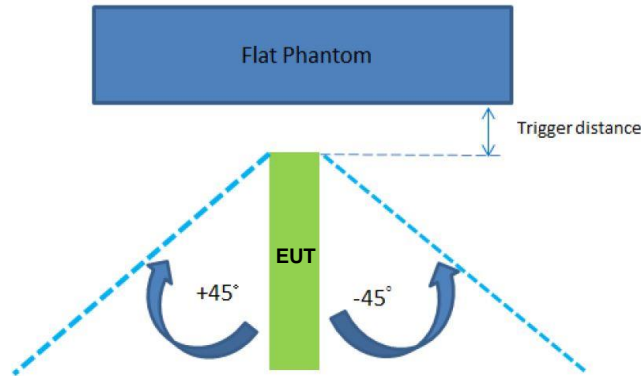
The Sensor Trigger Distance (mm)						
Position	Front		Back		Left Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	4	4	11	11	14	14

Ant 13

The Sensor Trigger Distance (mm)						
Position	Front		Back		Top Side	
	Moving towards	Moving away	Moving towards	Moving towards	Moving towards	Moving away
Minimum	9	9	13	13	15	15

<Tablet Tilt angle influences to proximity sensor triggering (KDB 616217 D04 section 6.4)>:

The influence of table tilt angles to proximity sensor triggering was determined by positioning each tablet edge that contains a transmitting antenna, perpendicular to the flat phantom, at above separation distance. Rotating the tablet around the edge next to the phantom in $\leq 10^\circ$ increments until the tablet is $\pm 45^\circ$ from the vertical position at 0° , and the maximum output power remains in the reduced mode.



Ant 13

The Sensor Trigger Distance (mm)	
Position	Top Side
Minimum	15

6. RF Exposure Limits

6.1 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.

6.2 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

1. 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.

7. Specific Absorption Rate (SAR)

7.1 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.

7.2 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:

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

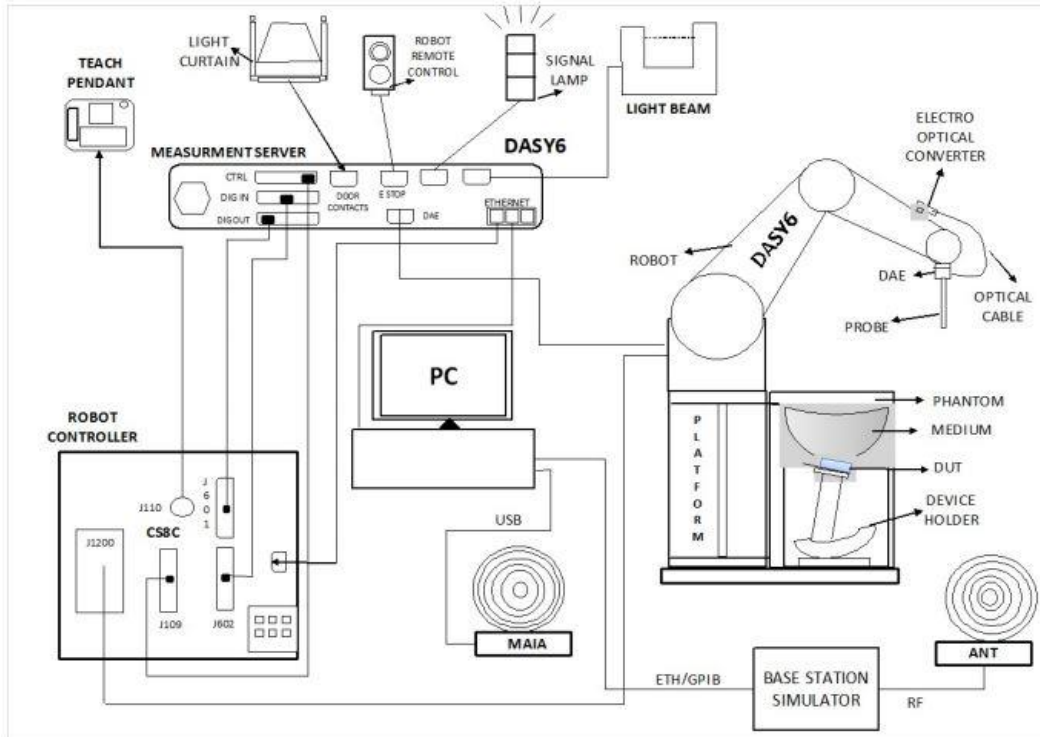
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

8. System Description and Setup

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




- The DASY system in SAR Configuration is shown above
- 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 windows software and the DASY 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.


8.1 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.

<ES3DV3 Probe>

Construction	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – 4 GHz; Linearity: ±0.2 dB (30 MHz – 4 GHz)	
Directivity	±0.2 dB in TSL (rotation around probe axis) ±0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	5 µW/g – >100 mW/g; Linearity: ±0.2 dB	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 3.9 mm (body: 12 mm) Distance from probe tip to dipole centers: 3.0 mm	

<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	10 MHz – >6 GHz Linearity: ±0.2 dB (30 MHz – 6 GHz)	
Directivity	±0.3 dB in TSL (rotation around probe axis) ±0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 µW/g – >100 mW/g Linearity: ±0.2 dB (noise: typically <1 µW/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	

8.2 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.



Fig 5.1 Photo of DAE


8.3 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 in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

8.4 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

9. Measurement Procedures

The measurement procedures are as follows:

- (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

9.1 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

9.2 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.

9.3 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° ± 1°	20° ± 1°
Maximum area scan spatial resolution: $\Delta x_{Area}, \Delta y_{Area}$	≤ 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 ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

9.4 Zoom Scan

Zoom scans are used 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 shoes 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: $\Delta x_{Zoom}, \Delta y_{Zoom}$		≤ 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: $\Delta z_{Zoom}(n)$	≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm	
	graded grid	$\Delta z_{Zoom}(1)$: 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
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
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 <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> 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.				

9.5 Volume Scan Procedures

The volume scan is used for 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.

9.6 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.



10. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1099	Dec. 15, 2021	Dec. 14, 2022
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 17, 2021	Dec. 16, 2022
SPEAG	1750MHz System Validation Kit	D1750V2	1137	Oct. 19, 2021	Oct. 18, 2022
SPEAG	1900MHz System Validation Kit	D1900V2	5d182	Dec. 20, 2021	Dec. 19, 2022
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	924	Sep. 02, 2020	Sep. 01, 2023
SPEAG	2600MHz System Validation Kit	D2600V2	1070	Dec. 20, 2021	Dec. 19, 2022
SPEAG	3500MHz System Validation Kit	D3500V2	1076	May. 09, 2022	May. 08, 2023
SPEAG	3700MHz System Validation Kit	D3700V2	1037	May. 09, 2022	May. 08, 2023
SPEAG	3900MHz System Validation Kit ⁽²⁾	D3900V2	1048	May. 14, 2020	May. 13, 2023
SPEAG	5000MHz System Validation Kit	D5GHZV2	1341	Dec. 13, 2021	Dec. 12, 2022
SPEAG	Data Acquisition Electronics	DAE4	1664	May. 30, 2022	May. 29, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7515	Dec. 28, 2021	Dec. 27, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7577	Nov. 23, 2021	Nov. 22, 2022
SPEAG	SAM Twin Phantom	QD 000 P40 CD	1671	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio communication analyzer	MT8820C	6201341952	Dec. 28, 2021	Dec. 27, 2022
Anritsu	Radio communication analyzer	MT8820C	6201563813	Dec. 28, 2021	Dec. 27, 2022
Anritsu	Radio communication analyzer	MT8821C	6272416837	Apr. 06, 2022	Apr. 05, 2023
Anritsu	Radio communication analyzer	MT8821C	6272416846	Apr. 06, 2022	Apr. 05, 2023
Anritsu	Radio communication analyzer	MT8821C	6272416863	Apr. 06, 2022	Apr. 05, 2023
Keysight	Network Analyzer	E5071C	MY46523671	Oct. 25, 2021	Oct. 24, 2022
Speag	Dielectric Assessment KIT	DAK-3.5	1071	Jan. 24, 2022	Jan. 23, 2023
Agilent	Signal Generator	N5181A	MY50145381	Dec. 28, 2021	Dec. 27, 2022
Anritsu	Power Sensor	MA2411B	1306099	Sep. 29, 2021	Sep. 28, 2022
Anritsu	Power Meter	ML2495A	1349001	Sep. 29, 2021	Sep. 28, 2022
Anritsu	Power Sensor	MA2411B	1542004	Dec. 28, 2021	Dec. 27, 2022
Anritsu	Power Meter	ML2495A	1339473	Dec. 28, 2021	Dec. 27, 2022
R&S	CBT BLUETOOTH TESTER	CBT	100963	Dec. 28, 2021	Dec. 27, 2022
EXA	Spectrum Analyzer	FSV7	101631	Oct. 14, 2021	Oct. 13, 2022
FLUKE	DIGITAC THERMOMETER	51II	97240029	Oct. 23, 2021	Oct. 22, 2022
Anymetre	Thermo-Hygrometer	JR593	2015030903	Dec. 30, 2021	Dec. 29, 2022
AR	Amplifier	5S1G4	0333096	Apr. 07, 2022	Apr. 06, 2023
mini-circuits	Amplifier	ZVE-3W-83+	599201528	Apr. 07, 2022	Apr. 06, 2023
SPEAG	Device Holder	N/A	N/A	N/A	N/A
ARRA	Power Divider	A3200-2	N/A	Note 1	
ET Industries	Dual Directional Coupler	C-058-10	N/A	Note 1	
Weinschel	Attenuator 1	3M-10	N/A	Note 1	
Weinschel	Attenuator 2	3M-20	N/A	Note 1	

General Note:

1. 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 source.
2. The dipole calibration interval can be extended to 3 years with justification according to KDB 865664 D01. The dipoles are also not physically damaged, or repaired during the interval. The justification data in appendix C can be found which the return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration for each dipole.



11. System Verification

11.1 Tissue Verification

The tissue dielectric parameters of tissue-equivalent media used for SAR measurements must be characterized within a temperature range of 18°C to 25°C, measured with calibrated instruments and apparatuses, such as network analyzers and temperature probes. The temperature of the tissue-equivalent medium during SAR measurement must also be within 18°C to 25°C and within ± 2°C of the temperature when the tissue parameters are characterized. The tissue dielectric measurement system must be calibrated before use. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements.

The liquid tissue depth was at least 15cm in the phantom for all SAR testing

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
750	22.4	0.893	41.008	0.89	41.90	0.34	-2.13	±5	2022/7/7
750	22.6	0.883	40.811	0.89	41.90	-0.79	-2.60	±5	2022/7/14
835	22.5	0.928	42.730	0.90	41.50	3.11	2.96	±5	2022/7/8
835	22.5	0.929	41.793	0.90	41.50	3.22	0.71	±5	2022/7/15
1750	22.6	1.375	41.375	1.37	40.10	0.36	3.18	±5	2022/7/9
1750	22.4	1.373	41.392	1.37	40.10	0.22	3.22	±5	2022/7/16
1900	22.5	1.455	40.068	1.40	40.00	3.93	0.17	±5	2022/7/10
1900	22.4	1.441	40.002	1.40	40.00	2.93	0.01	±5	2022/7/17
2450	22.3	1.856	37.685	1.80	39.20	3.11	-3.86	±5	2022/7/12
2450	22.7	1.861	39.345	1.80	39.20	3.39	0.37	±5	2022/7/18
2600	22.7	1.974	38.204	1.96	39.00	0.71	-2.04	±5	2022/7/11
2600	22.5	1.926	40.256	1.96	39.00	-1.73	3.22	±5	2022/7/19
3500	22.5	2.934	39.288	2.91	37.90	0.82	3.66	±5	2022/7/13
3500	22.3	2.901	39.215	2.91	37.90	-0.31	3.47	±5	2022/7/20
3700	22.4	3.203	37.933	3.12	37.70	2.66	0.62	±5	2022/7/13
3700	22.1	3.017	39.145	3.12	37.70	-3.30	3.83	±5	2022/7/21
3900	22.1	3.196	36.353	3.33	37.51	-4.02	-3.08	±5	2022/7/22
5250	22.2	4.622	36.842	4.71	35.95	-1.87	2.48	±5	2022/7/14
5250	22.5	4.766	36.972	4.71	35.95	1.19	2.84	±5	2022/7/15
5600	22.2	4.960	36.853	5.07	35.50	-2.17	3.81	±5	2022/7/11
5600	22.4	5.210	36.221	5.07	35.50	2.76	2.03	±5	2022/7/13
5750	22.3	5.244	35.730	5.22	35.35	0.46	1.07	±5	2022/7/12
5750	22.6	5.298	35.400	5.22	35.35	1.49	0.14	±5	2022/7/16

11.2 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)	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 (%)
2022/7/7	750	250	D750V3-1099	EX3DV4 - SN7515	DAE4 Sn1664	2.12	8.54	8.48	-0.70
2022/7/14	750	250	D750V3-1099	EX3DV4 - SN7577	DAE4 Sn1664	1.95	8.54	7.8	-8.67
2022/7/8	835	250	D835V2-4d162	EX3DV4 - SN7515	DAE4 Sn1664	2.45	9.64	9.8	1.66
2022/7/15	835	250	D835V2-4d162	EX3DV4 - SN7577	DAE4 Sn1664	2.50	9.64	10	3.73
2022/7/9	1750	250	D1750V2-1137	EX3DV4 - SN7515	DAE4 Sn1664	9.34	36.50	37.36	2.36
2022/7/16	1750	250	D1750V2-1137	EX3DV4 - SN7577	DAE4 Sn1664	8.92	36.50	35.68	-2.25
2022/7/10	1900	250	D1900V2-5d182	EX3DV4 - SN7515	DAE4 Sn1664	9.60	39.60	38.4	-3.03
2022/7/17	1900	250	D1900V2-5d182	EX3DV4 - SN7577	DAE4 Sn1664	9.65	39.60	38.6	-2.53
2022/7/12	2450	250	D2450V2-924	EX3DV4 - SN7515	DAE4 Sn1664	12.30	51.40	49.2	-4.28
2022/7/18	2450	250	D2450V2-924	EX3DV4 - SN7577	DAE4 Sn1664	11.90	51.40	47.6	-7.39
2022/7/11	2600	250	D2600V2-1070	EX3DV4 - SN7515	DAE4 Sn1664	13.50	56.20	54	-3.91
2022/7/19	2600	250	D2600V2-1070	EX3DV4 - SN7577	DAE4 Sn1664	12.70	56.20	50.8	-9.61
2022/7/13	3500	100	D3500V2-1076	EX3DV4 - SN7515	DAE4 Sn1664	6.03	66.20	60.3	-8.91
2022/7/20	3500	100	D3500V2-1076	EX3DV4 - SN7577	DAE4 Sn1664	6.72	66.20	67.2	1.51
2022/7/13	3700	100	D3700V2-1037	EX3DV4 - SN7515	DAE4 Sn1664	6.40	66.70	64	-4.05
2022/7/21	3700	100	D3700V2-1037	EX3DV4 - SN7577	DAE4 Sn1664	7.18	66.70	71.8	7.65
2022/7/22	3900	100	D3900V2-1048-3900	EX3DV4 - SN7577	DAE4 Sn1664	7.66	70.20	76.6	9.12
2022/7/14	5250	100	D5GHzV2-1341-5250	EX3DV4 - SN7515	DAE4 Sn1664	8.37	80.70	83.7	3.72
2022/7/15	5250	100	D5GHzV2-1341-5250	EX3DV4 - SN7577	DAE4 Sn1664	8.53	80.70	85.3	5.70
2022/7/11	5600	100	D5GHzV2-1341-5600	EX3DV4 - SN7515	DAE4 Sn1664	7.85	84.50	78.5	-7.10
2022/7/13	5600	100	D5GHzV2-1341-5600	EX3DV4 - SN7577	DAE4 Sn1664	7.99	84.50	79.9	-5.44
2022/7/12	5750	100	D5GHzV2-1341-5750	EX3DV4 - SN7515	DAE4 Sn1664	7.62	80.60	76.2	-5.46
2022/7/16	5750	100	D5GHzV2-1341-5750	EX3DV4 - SN7577	DAE4 Sn1664	7.48	80.60	74.8	-7.20

Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2022/7/7	750	250	D750V3-1099	EX3DV4 - SN7515	DAE4 Sn1664	1.41	5.65	5.64	-0.18
2022/7/14	750	250	D750V3-1099	EX3DV4 - SN7577	DAE4 Sn1664	1.37	5.65	5.48	-3.01
2022/7/8	835	250	D835V2-4d162	EX3DV4 - SN7515	DAE4 Sn1664	1.61	6.26	6.44	2.88
2022/7/15	835	250	D835V2-4d162	EX3DV4 - SN7577	DAE4 Sn1664	1.44	6.26	5.76	-7.99
2022/7/9	1750	250	D1750V2-1137	EX3DV4 - SN7515	DAE4 Sn1664	4.99	19.20	19.96	3.96
2022/7/16	1750	250	D1750V2-1137	EX3DV4 - SN7577	DAE4 Sn1664	4.83	19.20	19.32	0.63
2022/7/10	1900	250	D1900V2-5d182	EX3DV4 - SN7515	DAE4 Sn1664	4.85	20.20	19.4	-3.96
2022/7/17	1900	250	D1900V2-5d182	EX3DV4 - SN7577	DAE4 Sn1664	5.37	20.20	21.48	6.34
2022/7/12	2450	250	D2450V2-924	EX3DV4 - SN7515	DAE4 Sn1664	5.66	24.00	22.64	-5.67
2022/7/18	2450	250	D2450V2-924	EX3DV4 - SN7577	DAE4 Sn1664	6.53	24.00	26.12	8.83
2022/7/11	2600	250	D2600V2-1070	EX3DV4 - SN7515	DAE4 Sn1664	5.57	24.60	22.28	-9.43
2022/7/19	2600	250	D2600V2-1070	EX3DV4 - SN7577	DAE4 Sn1664	6.21	24.60	24.84	0.98
2022/7/13	3500	100	D3500V2-1076	EX3DV4 - SN7515	DAE4 Sn1664	2.63	25.50	26.3	3.14
2022/7/20	3500	100	D3500V2-1076	EX3DV4 - SN7577	DAE4 Sn1664	2.45	25.50	24.5	-3.92
2022/7/13	3700	100	D3700V2-1037	EX3DV4 - SN7515	DAE4 Sn1664	2.36	24.60	23.6	-4.07
2022/7/21	3700	100	D3700V2-1037	EX3DV4 - SN7577	DAE4 Sn1664	2.55	24.60	25.5	3.66
2022/7/22	3900	100	D3900V2-1048-3900	EX3DV4 - SN7577	DAE4 Sn1664	2.65	24.40	26.5	8.61
2022/7/14	5250	100	D5GHzV2-1341-5250	EX3DV4 - SN7515	DAE4 Sn1664	2.37	23.10	23.7	2.60
2022/7/15	5250	100	D5GHzV2-1341-5250	EX3DV4 - SN7577	DAE4 Sn1664	2.51	23.10	25.1	8.66
2022/7/11	5600	100	D5GHzV2-1341-5600	EX3DV4 - SN7515	DAE4 Sn1664	2.17	24.00	21.7	-9.58
2022/7/13	5600	100	D5GHzV2-1341-5600	EX3DV4 - SN7577	DAE4 Sn1664	2.23	24.00	22.3	-7.08
2022/7/12	5750	100	D5GHzV2-1341-5750	EX3DV4 - SN7515	DAE4 Sn1664	2.37	22.70	23.7	4.41
2022/7/16	5750	100	D5GHzV2-1341-5750	EX3DV4 - SN7577	DAE4 Sn1664	2.19	22.70	21.9	-3.52

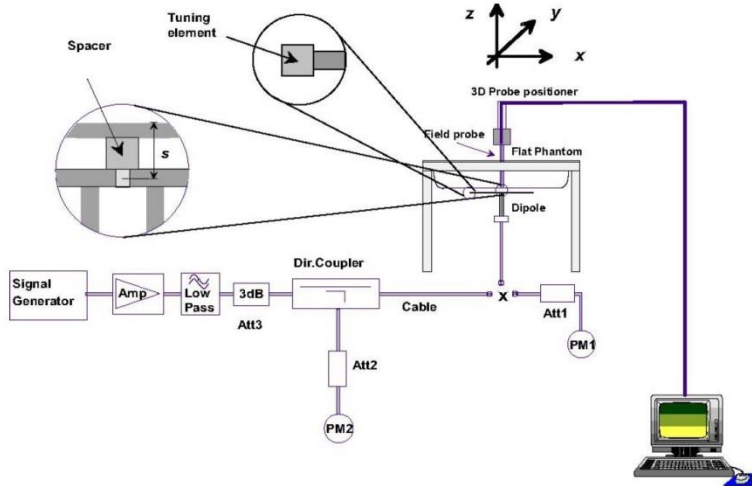


Fig 8.3.1 System Performance Check Setup



Fig 8.3.2 Setup Photo

12. RF Exposure Positions

12.1 Ear and handset reference point

Figure 9.1.1 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 9.1.2 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 9.1.3). 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 9.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

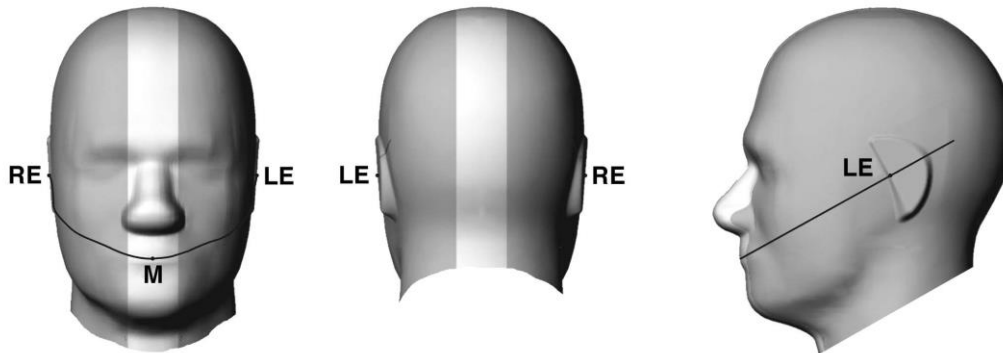


Fig 9.1.1 Front, back, and side views of SAM twin phantom

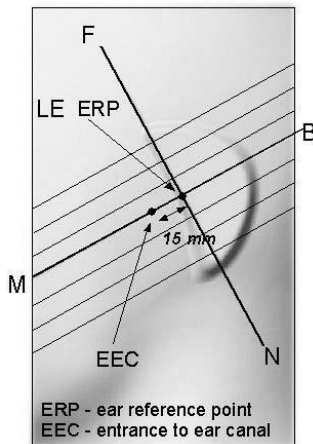


Fig 9.1.2 Close-up side view of phantom showing the ear region.

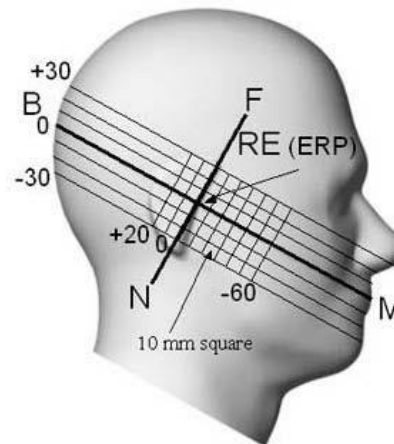


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

12.2 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 9.2.1 and Figure 9.2.2), 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 9.2.1). 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 9.2.2), 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 9.2.3), 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 9.2.3. The actual rotation angles should be documented in the test report.

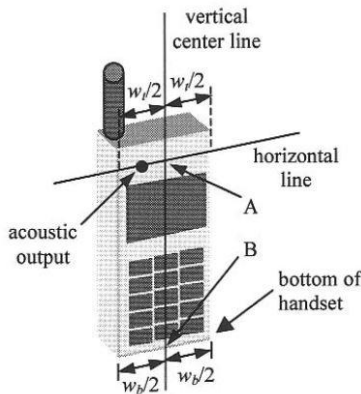


Fig 9.2.1 Handset vertical and horizontal reference lines—“fixed case”

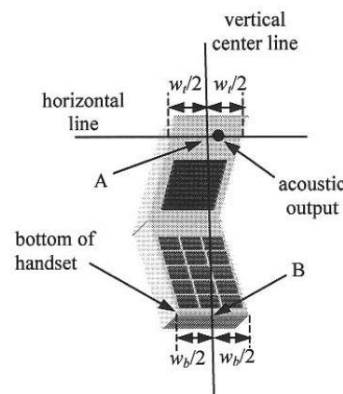


Fig 9.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

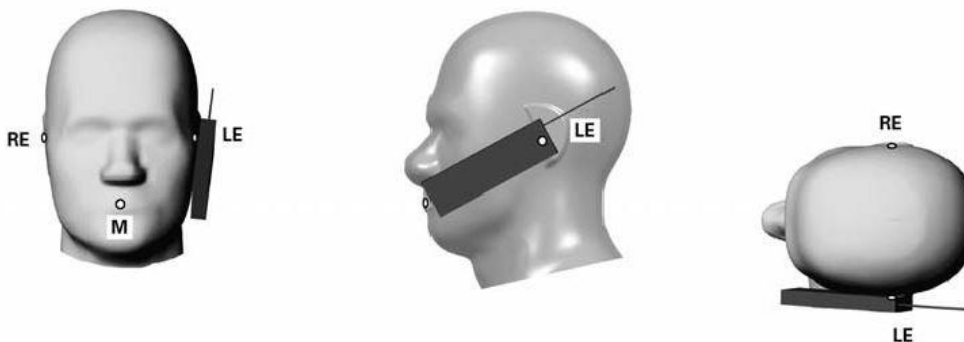


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

12.3 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 9.3.1. 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

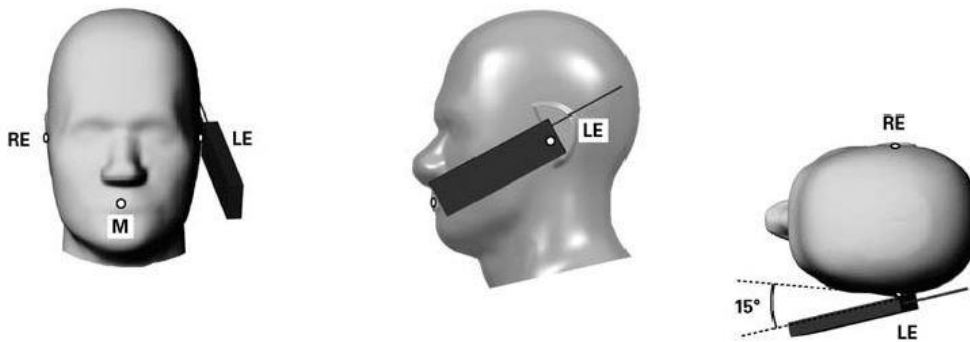


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

12.4 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 9.4). 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 headset 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-chip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

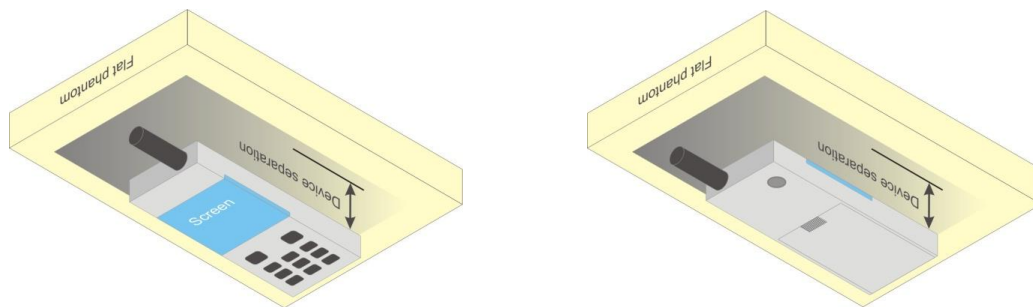


Fig 9.4 Body Worn Position



12.5 Product Specific Exposure

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, 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.

12.6 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.

13. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode

<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: $\Delta_{ACK}, \Delta_{NACK}$ 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, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

Setup Configuration

HSUPA 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. Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
 - 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, C11.1.3, quoted from the TS 34.121
 - iii. Set Cell Power = -86 dBm
 - iv. Set Channel Type = 12.2k + HSPA
 - v. Set UE Target Power
 - vi. Power Ctrl Mode= Alternating bits
 - vii. Set and observe the E-TFCl
 - viii. Confirm that E-TFCl is equal to the target E-TFCl of 75 for sub-test 1, and other subtest's E-TFCl
- d. 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} (Note1)	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-TFCl
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	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4 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.		

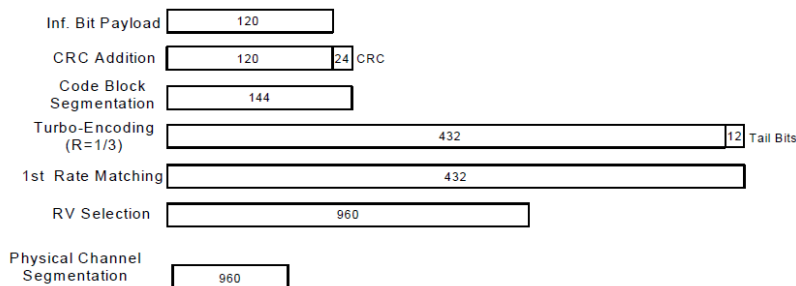


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

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

- 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. 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 Parm
 - 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
- d. 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: $\Delta_{ACK}, \Delta_{NACK}$ and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$.

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 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 to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.



<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 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 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/B26/B38 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 band 17/38 SAR test was covered by Band 12/41; 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

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

SAR was tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

- a. 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations
- b. “special subframe S” contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS
- c. Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

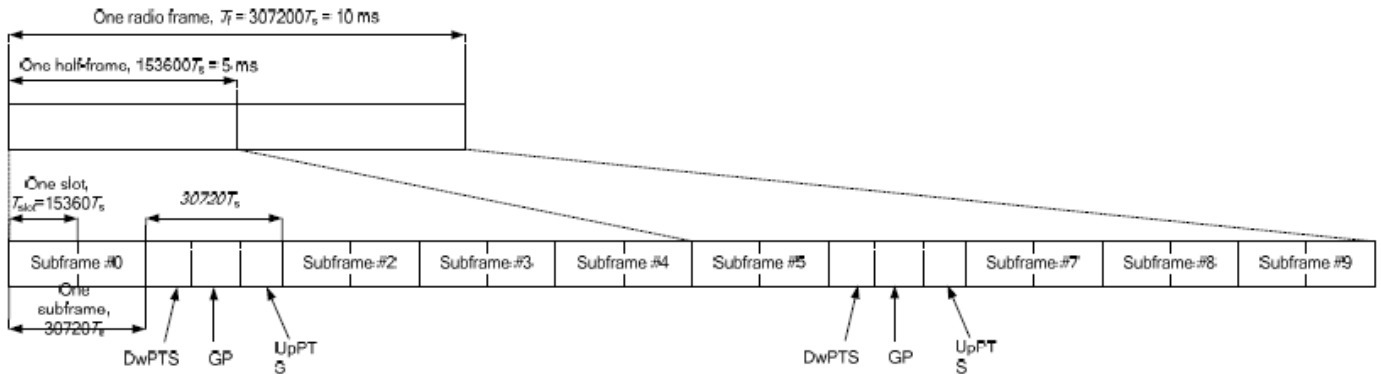


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink				
	DwPTS	UpPTS		DwPTS	UpPTS			
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		
0	6592 · Ts	2192 · Ts	2560 · Ts	7680 · Ts	2192 · Ts	2560 · Ts		
1	19760 · Ts			20480 · Ts				
2	21952 · Ts			23040 · Ts				
3	24144 · Ts			25600 · Ts				
4	26336 · Ts			7680 · Ts				
5	6592 · Ts	4384 · Ts	5120 · Ts	20480 · Ts	4384 · Ts	5120 · Ts		
6	19760 · Ts			23040 · Ts				
7	21952 · Ts			12800 · Ts				
8	24144 · Ts			-			-	-
9	13168 · Ts			-			-	-

Special subframe (30720·T_s): Normal cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
Uplink duty factor in one special subframe	0~4	7.13%	8.33%
	5~9	14.3%	16.7%

Special subframe(30720·T_s): Extended cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
Uplink duty factor in one special subframe	0~3	7.13%	8.33%
	4~7	14.3%	16.7%

The highest duty factor is resulted from:

- i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subframes, uplink operation is in 3 uplink subframes and 1 special subframe.
- ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
- iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(3+0.167)/5 = 63.3\%$
- iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: $(3+0.143)/5 = 62.9\%$
- v. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.



<LTE Carrier Aggregation combinations>

General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need combination, and for this device that all the configurations were choose to power measurement.

2CC Downlink Carrier Aggregation					3CC Downlink Carrier Aggregation				
Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset
1	CA_4A-7A				1	CA_2A-7A-7A			
2	CA_7C		3CC-3		2	CA_2A-7C			
3	CA_38C				3	CA_4A-7C			
4	CA_41C				4	CA_5A-7C			
5	CA_4A-4A				5	CA_41D			
6	CA_7A-7A		3CC-1						
7	CA_41A-41A								
8	CA_2A-5A								
9	CA_2A-7A		3CC-1						
10	CA_4A-5A								
11	CA_5A-7A								

<Power verification when LTE DL Carrier Aggregation Active>

General Note:

- i. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.
- ii. 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.
- iii. The device supports downlink two carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
- iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.
- v. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.
- vi. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

$$\text{Nominal channel spacing} = \left\lceil \frac{BW_{\text{Channel}(1)} + BW_{\text{Channel}(2)} - 0.1|BW_{\text{Channel}(1)} - BW_{\text{Channel}(2)}|}{0.6} \right\rceil 0.3 \text{ [MHz]}$$

LTE Intra-Band uplink Carrier Aggregation

General Note:

- i. The device supports uplink carrier aggregation with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre the 3GPP requirement.
- ii. According TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- iii. According TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- iv. Additional SAR measurement for LTE UL CA whit other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.

2CC Uplink Carrier Aggregation			
Number	Combination	Antenna	
1	7C	Ant 13	Ant 31
2	38C	Ant 13	Ant 31
3	41C	Ant 13	Ant 31

LTE Inter-Band uplink Carrier Aggregation

Combination	Ant combination
4A-7A	B4 Ant 31 + B7 Ant 11
	B4 Ant 31 + B7 Ant 13

General Note:

1. According to October 2018 TCB workshop, uplink CA SAR test guidance as follows:
 - a. Provide the single uplink SAR values you have obtained for the relevant SAR configuration and frequency bands that employ inter-band uplink carrier aggregation.
 - b. If the single uplink 1g SAR values for each band are both less than 0.8W/kg and the algebraic summation of the 1g SAR values are less than 1.45W/kg no additional measurements need to be performed.
 - c. If one on the single uplink 1g SAR values is greater than 0.8W/kg, instead of algebraically summing the 1g SAR values, sum up the SAR distributions, similar to the enlarged zoom scan (volume scan) procedures found in FCC KDB publication 865664 D01 SAR measurement 100MHz to 6GHz V01r04
 - d. If the algebraic sum of the 1g SAR values is > 1.45W/kg additional measurements may have to be made. Submit a KDB inquiry for additional guidance.
 - e. The output power was measured include in appendix E, SAR testing include in section 15, Sim-Tx analysis include in 16

5G NR Output Power (Unit: dBm)

General Note:

1. 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 PI/2 BPSK and the reported SAR for the DFT-s PI/2 BPSK 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 PI/2 BPSK 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 PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure
 - e. PI/2 BPSK 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. QPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/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
2. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
3. 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.
4. For 5G NR EN-DC modes, standalone SAR performed for 5G NR band with the maximum power, EN-DC SAR summed 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	$\leq 3.5^1$ $\leq 0.5^2$	$\leq 1.2^1$ $\leq 0.5^2$	$\leq 0.2^1$ 0^2
	QPSK		≤ 1	0
	16 QAM		≤ 2	≤ 1
	64 QAM		≤ 2.5	
	256 QAM		≤ 4.5	
CP-OFDM	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>

EN-DC configuration	LTE		NR	
	Band	ANT port	Band	ANT port
2A-N7A	B2	Ant31	N7	Ant11
				Ant13
66A-N7A	B66	Ant31	N7	Ant11
				Ant13
2A-N66A	B2	Ant31	N66	Ant11
				Ant13
5A-N66A	B5	Ant41	N66	Ant11
				Ant13
7A-N66A	B7	Ant31	N66	Ant11
				Ant13
2A-N78A	B2	Ant31	N78	Ant11
		Ant13		Ant23
				Ant21
				Ant12
4A-N78A	B4	Ant31	N78	Ant11
		Ant13		Ant23
				Ant21
				Ant12
5A-N78A	B5	Ant41	N78	Ant11
		Ant13		Ant23
				Ant21
				Ant12
7A-N78A	B7	Ant31	N78	Ant11
		Ant13		Ant23
				Ant21
				Ant12
38A-N78A	B38	Ant31	N78	Ant11
		Ant13		Ant23
				Ant21
				Ant12
41A-N78A	B41	Ant31	N78	Ant11
		Ant13		Ant23
				Ant21
				Ant12
66A-N78A	B66	Ant31	N78	Ant11
		Ant13		Ant23
				Ant21
				Ant12



WiFi/Bluetooth Output Power (Unit: dBm)

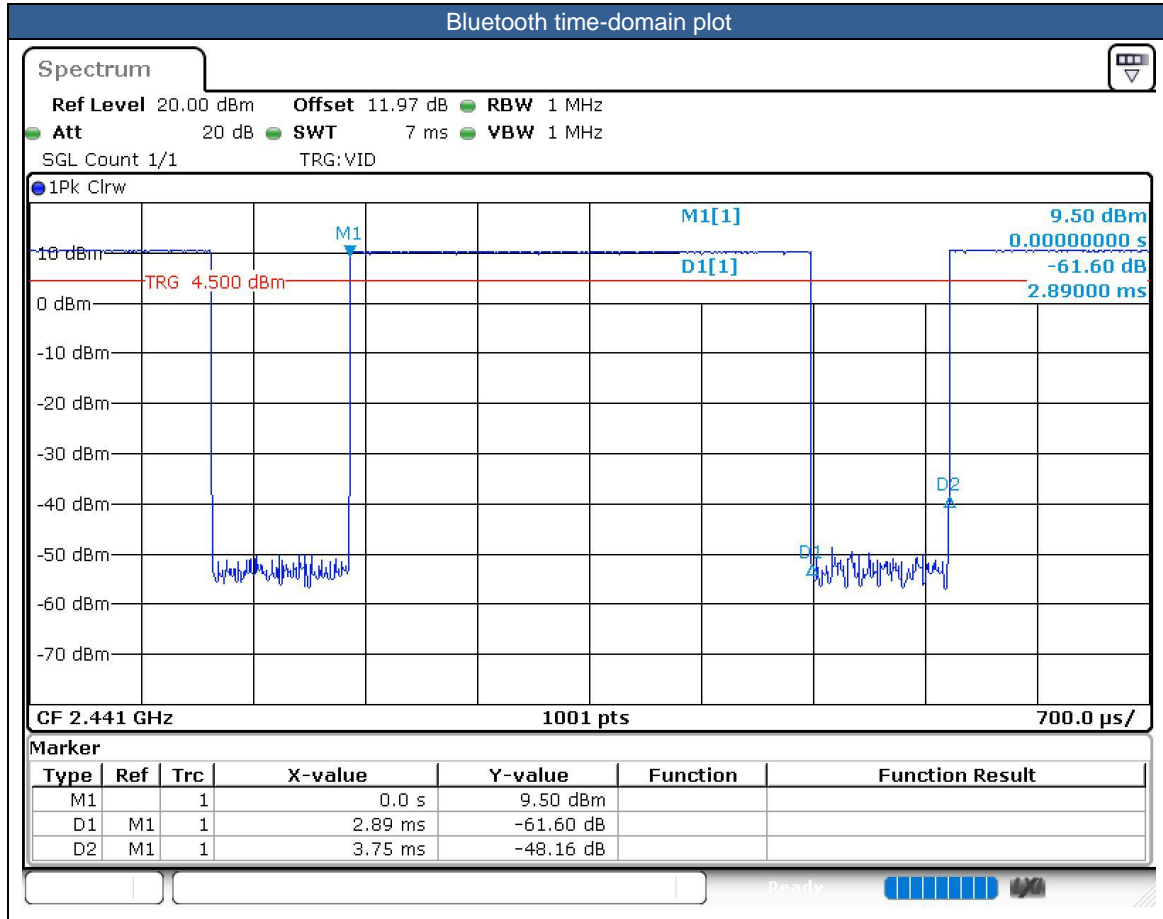
General Note:

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.
6. For modes with the same maximum output power, the guidance from section 5.3.2 a) of FCC KDB Publication 248227 D01 should be applied, with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency bands
7. When SAR testing for 802.11ax is required
 - a. If the maximum output power is highest for OFDMA scenarios, choose the tone size with the maximum number of tones and the highest maximum output power
 - b. Otherwise, consider the fully allocated channel for SAR testing
 - c. When SAR testing is required on RU sizes less than the fully allocated channel, use the RU number closest to the middle of the channel, choosing the higher RU number when two RUs are equidistant to the middle of the channel

<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 is 77.07% see as following figure, according to 2016 Oct. 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.





14. Antenna Location

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



15. 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 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 WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
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 only when the measured SAR is ≥ 0.8 W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
5. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15 cm or an overall diagonal dimension > 16 cm, when hotspot mode applies, 10-g product specific SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, in this report all the hotspot mode results are < 1.2 W/kg.
6. 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 (for handheld on state, the maximum full power means reduced power), including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. For this device SAR for WWAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of WCDMA Band II, LTE Band 2/7/41, and 5GNR n2//7/66/77/78, therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
 - c. 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.
7. For distance SAR and non-distance SAR, always chose higher SAR to do co-located analysis.



GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

UMTS 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 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 to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

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 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 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/B26/B38 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 band 17/38 SAR test was covered by Band 12/41; according to 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:

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 PI/2 BPSK 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 PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure.
- c. PI/2 BPSK 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. QPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/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

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.

SRS (Sounding Reference Signal) description :

If one or more receive antennas are used as SRS as dedicated antennas, i.e., the antenna(s) is used for receive and Sound Reference Signal transmission (SRS) only (not traffic transmission), then the SAR measurement at P_{limit} for SAR as dedicated antenna(s) can be performed using FTM mode with CW modulation (as SRS could operate at very low duty cycle in online mode). Reported SAR for SRS dedicated antenna can be calculated by scaling the measured SAR at P_{limit} to a Tx power corresponding to worst-case SRS duty cycle * P_{max}, then reported SAR for SRS = measured SAR @ P_{limit} * $10^{\lceil \min\{(\text{reported } P_{\text{max_dBm}} + 10 \cdot \log_{10}(\text{duty_cycle}); \text{reported } P_{\text{limit_dBm}}) - \text{measured } P_{\text{limit_dBm}}\} / 10 \rceil}$. The worst-case SRS duty cycle is 8.5% (Declared by Manufacturer).



15.1 Head SAR

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)	Reported 1g SAR (W/kg)
750MHz																				
01	LTE Band 12	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 13	DSI 2	23095	707.5	23.15	24.00	1.216	-	-	-0.01	0.497	0.604
	LTE Band 12	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 13	DSI 2	23095	707.5	23.15	24.00	1.216	-	-	-0.06	0.469	0.570
	LTE Band 12	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 13	DSI 2	23095	707.5	23.15	24.00	1.216	-	-	0.02	0.360	0.438
	LTE Band 12	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 13	DSI 2	23095	707.5	23.15	24.00	1.216	-	-	0.11	0.356	0.433
	LTE Band 12	10M	QPSK	25	12	-	Right Cheek	0mm	Ant 13	DSI 2	23095	707.5	22.50	23.50	1.259	-	-	-0.07	0.435	0.548
	LTE Band 12	10M	QPSK	25	12	-	Right Tilted	0mm	Ant 13	DSI 2	23095	707.5	22.50	23.50	1.259	-	-	-0.02	0.415	0.522
	LTE Band 12	10M	QPSK	25	12	-	Left Cheek	0mm	Ant 13	DSI 2	23095	707.5	22.50	23.50	1.259	-	-	-0.11	0.310	0.390
	LTE Band 12	10M	QPSK	25	12	-	Left Tilted	0mm	Ant 13	DSI 2	23095	707.5	22.50	23.50	1.259	-	-	0.04	0.307	0.386
	LTE Band 12	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 13	DSI 3	23095	707.5	21.67	22.50	1.211	-	-	0.07	0.346	0.419
	LTE Band 12	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 13	DSI 3	23095	707.5	21.67	22.50	1.211	-	-	-0.11	0.343	0.415
	LTE Band 12	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 13	DSI 3	23095	707.5	21.67	22.50	1.211	-	-	-0.03	0.244	0.295
	LTE Band 12	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 13	DSI 3	23095	707.5	21.67	22.50	1.211	-	-	-0.08	0.242	0.293
	LTE Band 12	10M	QPSK	25	12	-	Right Cheek	0mm	Ant 13	DSI 3	23095	707.5	21.64	22.50	1.219	-	-	-0.03	0.340	0.414
	LTE Band 12	10M	QPSK	25	12	-	Right Tilted	0mm	Ant 13	DSI 3	23095	707.5	21.64	22.50	1.219	-	-	-0.02	0.339	0.413
	LTE Band 12	10M	QPSK	25	12	-	Left Cheek	0mm	Ant 13	DSI 3	23095	707.5	21.64	22.50	1.219	-	-	-0.03	0.248	0.302
	LTE Band 12	10M	QPSK	25	12	-	Left Tilted	0mm	Ant 13	DSI 3	23095	707.5	21.64	22.50	1.219	-	-	-0.07	0.242	0.295
	LTE Band 12	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 41	DSI 2/3	23095	707.5	23.55	24.50	1.245	-	-	-0.07	0.111	0.138
	LTE Band 12	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 41	DSI 2/3	23095	707.5	23.55	24.50	1.245	-	-	0.08	0.053	0.066
	LTE Band 12	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 41	DSI 2/3	23095	707.5	23.55	24.50	1.245	-	-	0.12	0.152	0.189
	LTE Band 12	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 41	DSI 2/3	23095	707.5	23.55	24.50	1.245	-	-	0.04	0.076	0.095
	LTE Band 12	10M	QPSK	25	12	-	Right Cheek	0mm	Ant 41	DSI 2/3	23095	707.5	22.47	23.50	1.268	-	-	0.09	0.082	0.104
	LTE Band 12	10M	QPSK	25	12	-	Right Tilted	0mm	Ant 41	DSI 2/3	23095	707.5	22.47	23.50	1.268	-	-	-0.11	0.042	0.053
	LTE Band 12	10M	QPSK	25	12	-	Left Cheek	0mm	Ant 41	DSI 2/3	23095	707.5	22.47	23.50	1.268	-	-	0.04	0.114	0.145
	LTE Band 12	10M	QPSK	25	12	-	Left Tilted	0mm	Ant 41	DSI 2/3	23095	707.5	22.47	23.50	1.268	-	-	-0.09	0.060	0.076
835MHz																				
02	LTE Band 13	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 13	DSI 2	23230	782	22.79	23.50	1.178	-	-	-0.1	0.597	0.703
	LTE Band 13	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 13	DSI 2	23230	782	22.79	23.50	1.178	-	-	0.01	0.535	0.630
	LTE Band 13	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 13	DSI 2	23230	782	22.79	23.50	1.178	-	-	0.04	0.415	0.489
	LTE Band 13	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 13	DSI 2	23230	782	22.79	23.50	1.178	-	-	-0.1	0.407	0.479
	LTE Band 13	10M	QPSK	25	12	-	Right Cheek	0mm	Ant 13	DSI 2	23230	782	22.67	23.50	1.211	-	-	-0.1	0.550	0.666
	LTE Band 13	10M	QPSK	25	12	-	Right Tilted	0mm	Ant 13	DSI 2	23230	782	22.67	23.50	1.211	-	-	0.03	0.522	0.632
	LTE Band 13	10M	QPSK	25	12	-	Left Cheek	0mm	Ant 13	DSI 2	23230	782	22.67	23.50	1.211	-	-	0.09	0.399	0.483
	LTE Band 13	10M	QPSK	25	12	-	Left Tilted	0mm	Ant 13	DSI 2	23230	782	22.67	23.50	1.211	-	-	0.06	0.390	0.472
	LTE Band 13	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 13	DSI 3	23230	782	20.81	21.50	1.172	-	-	0.1	0.342	0.401
	LTE Band 13	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 13	DSI 3	23230	782	20.81	21.50	1.172	-	-	0.11	0.332	0.389
	LTE Band 13	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 13	DSI 3	23230	782	20.81	21.50	1.172	-	-	-0.03	0.264	0.309
	LTE Band 13	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 13	DSI 3	23230	782	20.81	21.50	1.172	-	-	0.06	0.260	0.305
	LTE Band 13	10M	QPSK	25	12	-	Right Cheek	0mm	Ant 13	DSI 3	23230	782	20.75	21.50	1.189	-	-	0.07	0.342	0.406
	LTE Band 13	10M	QPSK	25	12	-	Right Tilted	0mm	Ant 13	DSI 3	23230	782	20.75	21.50	1.189	-	-	-0.12	0.331	0.393
	LTE Band 13	10M	QPSK	25	12	-	Left Cheek	0mm	Ant 13	DSI 3	23230	782	20.75	21.50	1.189	-	-	0.06	0.268	0.319
	LTE Band 13	10M	QPSK	25	12	-	Left Tilted	0mm	Ant 13	DSI 3	23230	782	20.75	21.50	1.189	-	-	-0.02	0.259	0.308
	LTE Band 13	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 41	DSI 2/3	23230	782	23.58	24.50	1.236	-	-	0.01	0.084	0.104
	LTE Band 13	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 41	DSI 2/3	23230	782	23.58	24.50	1.236	-	-	-0.11	0.052	0.064
	LTE Band 13	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 41	DSI 2/3	23230	782	23.58	24.50	1.236	-	-	0.04	0.117	0.145
	LTE Band 13	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 41	DSI 2/3	23230	782	23.58	24.50	1.236	-	-	-0.01	0.062	0.077
	LTE Band 13	10M	QPSK	25	12	-	Right Cheek	0mm	Ant 41	DSI 2/3	23230	782	22.48	23.50	1.265	-	-	-0.03	0.068	0.086
	LTE Band 13	10M	QPSK	25	12	-	Right Tilted	0mm	Ant 41	DSI 2/3	23230	782	22.48	23.50	1.265	-	-	0.08	0.047	0.059
	LTE Band 13	10M	QPSK	25	12	-	Left Cheek	0mm	Ant 41	DSI 2/3	23230	782	22.48	23.50	1.265	-	-	-0.01	0.096	0.121
	LTE Band 13	10M	QPSK	25	12	-	Left Tilted	0mm	Ant 41	DSI 2/3	23230	782	22.48	23.50	1.265	-	-	-0.12	0.050	0.063
835MHz																				
03	GSM850	-	-	-	-	GPRS(1 Tx slots)	Right Cheek	0mm	Ant 13	DSI 2	189	836.4	29.42	30.50	1.282	-	-	0.07	0.512	0.657
	GSM850	-	-	-	-	GPRS(1 Tx slots)	Right Tilted	0mm	Ant 13	DSI 2	189	836.4	29.42	30.50	1.282	-	-	-0.06	0.471	0.604



Table with columns for test parameters (e.g., GSM850, WCDMA V, LTE Band 5) and SAR values. Includes rows for various antenna orientations and modulation schemes, with some cells highlighted in green.



	LTE Band 26	15M	QPSK	75	0	-	Right Cheek	0mm	Ant 13	DSI 2	26865	831.5	21.36	22.50	1.300	-	-	0.08	0.574	0.746
	LTE Band 26	15M	QPSK	1	37	-	Right Cheek	0mm	Ant 13	DSI 3	26865	831.5	19.77	20.50	1.183	-	-	-0.09	0.397	0.470
	LTE Band 26	15M	QPSK	1	37	-	Right Tilted	0mm	Ant 13	DSI 3	26865	831.5	19.77	20.50	1.183	-	-	-0.1	0.345	0.408
	LTE Band 26	15M	QPSK	1	37	-	Left Cheek	0mm	Ant 13	DSI 3	26865	831.5	19.77	20.50	1.183	-	-	0.07	0.321	0.380
	LTE Band 26	15M	QPSK	1	37	-	Left Tilted	0mm	Ant 13	DSI 3	26865	831.5	19.77	20.50	1.183	-	-	-0.04	0.287	0.340
	LTE Band 26	15M	QPSK	36	20	-	Right Cheek	0mm	Ant 13	DSI 3	26865	831.5	19.73	20.50	1.194	-	-	0.09	0.398	0.475
	LTE Band 26	15M	QPSK	36	20	-	Right Tilted	0mm	Ant 13	DSI 3	26865	831.5	19.73	20.50	1.194	-	-	0.07	0.346	0.413
	LTE Band 26	15M	QPSK	36	20	-	Left Cheek	0mm	Ant 13	DSI 3	26865	831.5	19.73	20.50	1.194	-	-	-0.01	0.325	0.388
	LTE Band 26	15M	QPSK	36	20	-	Left Tilted	0mm	Ant 13	DSI 3	26865	831.5	19.73	20.50	1.194	-	-	0.02	0.284	0.339
	LTE Band 26	15M	QPSK	1	37	-	Right Cheek	0mm	Ant 41	DSI 2/3	26865	831.5	22.86	24.00	1.300	-	-	0.08	0.130	0.169
	LTE Band 26	15M	QPSK	1	37	-	Right Tilted	0mm	Ant 41	DSI 2/3	26865	831.5	22.86	24.00	1.300	-	-	0.04	0.060	0.078
	LTE Band 26	15M	QPSK	1	37	-	Left Cheek	0mm	Ant 41	DSI 2/3	26865	831.5	22.86	24.00	1.300	-	-	0.05	0.162	0.211
	LTE Band 26	15M	QPSK	1	37	-	Left Tilted	0mm	Ant 41	DSI 2/3	26865	831.5	22.86	24.00	1.300	-	-	0.1	0.075	0.098
	LTE Band 26	15M	QPSK	36	20	-	Right Cheek	0mm	Ant 41	DSI 2/3	26865	831.5	21.78	23.00	1.324	-	-	0.11	0.103	0.136
	LTE Band 26	15M	QPSK	36	20	-	Right Tilted	0mm	Ant 41	DSI 2/3	26865	831.5	21.78	23.00	1.324	-	-	-0.09	0.045	0.060
	LTE Band 26	15M	QPSK	36	20	-	Left Cheek	0mm	Ant 41	DSI 2/3	26865	831.5	21.78	23.00	1.324	-	-	0.01	0.132	0.175
	LTE Band 26	15M	QPSK	36	20	-	Left Tilted	0mm	Ant 41	DSI 2/3	26865	831.5	21.78	23.00	1.324	-	-	0.12	0.057	0.075
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 13	DSI 2	1413	1732.6	17.04	17.80	1.191	-	-	-0.1	0.481	0.573
07	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 13	DSI 2	1413	1732.6	17.04	17.80	1.191	-	-	0.1	0.565	0.673
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 13	DSI 2	1413	1732.6	17.04	17.80	1.191	-	-	-0.05	0.286	0.341
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 13	DSI 2	1413	1732.6	17.04	17.80	1.191	-	-	0.09	0.310	0.369
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 13	DSI 3	1413	1732.6	14.63	15.80	1.309	-	-	-0.04	0.294	0.385
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 13	DSI 3	1413	1732.6	14.63	15.80	1.309	-	-	-0.12	0.312	0.408
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 13	DSI 3	1413	1732.6	14.63	15.80	1.309	-	-	0.02	0.179	0.234
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 13	DSI 3	1413	1732.6	14.63	15.80	1.309	-	-	0.06	0.192	0.251
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 31	DSI 2/3	1413	1732.6	23.12	24.20	1.282	-	-	-0.05	0.055	0.071
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 31	DSI 2/3	1413	1732.6	23.12	24.20	1.282	-	-	0.07	0.027	0.035
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 31	DSI 2/3	1413	1732.6	23.12	24.20	1.282	-	-	0.04	0.108	0.138
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 31	DSI 2/3	1413	1732.6	23.12	24.20	1.282	-	-	0.09	0.036	0.046
	LTE Band 4	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	20175	1732.5	16.89	18.00	1.291	-	-	-0.07	0.472	0.609
08	LTE Band 4	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	20175	1732.5	16.89	18.00	1.291	-	-	0.14	0.615	0.794
	LTE Band 4	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 2	20175	1732.5	16.89	18.00	1.291	-	-	0.02	0.280	0.362
	LTE Band 4	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 2	20175	1732.5	16.89	18.00	1.291	-	-	-0.1	0.337	0.435
	LTE Band 4	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 2	20175	1732.5	16.78	18.00	1.324	-	-	-0.03	0.472	0.625
	LTE Band 4	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 2	20175	1732.5	16.78	18.00	1.324	-	-	0.05	0.505	0.669
	LTE Band 4	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 2	20175	1732.5	16.78	18.00	1.324	-	-	0.08	0.269	0.356
	LTE Band 4	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 2	20175	1732.5	16.78	18.00	1.324	-	-	0.02	0.318	0.421
	LTE Band 4	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 3	20175	1732.5	15.14	16.00	1.219	-	-	0.05	0.274	0.334
	LTE Band 4	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 3	20175	1732.5	15.14	16.00	1.219	-	-	-0.02	0.296	0.361
	LTE Band 4	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 3	20175	1732.5	15.14	16.00	1.219	-	-	0.1	0.186	0.227
	LTE Band 4	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 3	20175	1732.5	15.14	16.00	1.219	-	-	0.03	0.209	0.255
	LTE Band 4	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 3	20175	1732.5	15.11	16.00	1.227	-	-	0.1	0.276	0.339
	LTE Band 4	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 3	20175	1732.5	15.11	16.00	1.227	-	-	0.01	0.296	0.363
	LTE Band 4	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 3	20175	1732.5	15.11	16.00	1.227	-	-	0.02	0.179	0.220
	LTE Band 4	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 3	20175	1732.5	15.11	16.00	1.227	-	-	-0.1	0.212	0.260
	LTE Band 4	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	22.59	24.00	1.384	-	-	0.04	0.048	0.066
	LTE Band 4	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	22.59	24.00	1.384	-	-	0.04	0.041	0.057
	LTE Band 4	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	22.59	24.00	1.384	-	-	-0.07	0.087	0.120
	LTE Band 4	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	22.59	24.00	1.384	-	-	-0.02	0.075	0.104
	LTE Band 4	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	21.56	23.00	1.393	-	-	0.01	0.042	0.059
	LTE Band 4	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	21.56	23.00	1.393	-	-	-0.09	0.034	0.047
	LTE Band 4	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	21.56	23.00	1.393	-	-	-0.04	0.069	0.096
	LTE Band 4	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	21.56	23.00	1.393	-	-	0.14	0.060	0.084
	LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	132322	1745	16.88	17.70	1.208	-	-	-0.11	0.502	0.606
09	LTE Band 66	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	132322	1745	16.88	17.70	1.208	-	-	0.07	0.656	0.792



Table with columns for band (LTE, FR1, GSM), power, modulation, frequency, antenna position, antenna type, DSI, and SAR values. Includes a 1900MHz section for GSM1900.



Table with columns for test parameters (e.g., GSM1900, WCDMA II, LTE Band 2, FR1 n2), modulation, power, and SAR results (Right Cheek, Left Cheek, Right Tilted, Left Tilted).



	FR1 n2	20M	BPSK	1	53	DFT-15	Right Tilted	0mm	Ant 11	DSI 3	376000	1880	15.08	16.00	1.236	-	-	0.12	0.055	0.068
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Cheek	0mm	Ant 11	DSI 3	376000	1880	15.08	16.00	1.236	-	-	-0.1	0.194	0.240
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Tilted	0mm	Ant 11	DSI 3	376000	1880	15.08	16.00	1.236	-	-	-0.12	0.029	0.036
	FR1 n2	20M	BPSK	50	28	DFT-15	Right Cheek	0mm	Ant 11	DSI 3	376000	1880	15.06	16.00	1.242	-	-	0.09	0.227	0.282
	FR1 n2	20M	BPSK	50	28	DFT-15	Right Tilted	0mm	Ant 11	DSI 3	376000	1880	15.06	16.00	1.242	-	-	0.04	0.053	0.066
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Cheek	0mm	Ant 11	DSI 3	376000	1880	15.06	16.00	1.242	-	-	0.09	0.190	0.236
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Tilted	0mm	Ant 11	DSI 3	376000	1880	15.06	16.00	1.242	-	-	-0.03	0.027	0.034
	FR1 n2	20M	BPSK	1	53	DFT-15	Right Cheek	0mm	Ant 13	DSI 2	376000	1880	13.99	15.60	1.449	-	-	0.04	0.349	0.506
14	FR1 n2	20M	BPSK	1	53	DFT-15	Right Tilted	0mm	Ant 13	DSI 2	376000	1880	13.99	15.60	1.449	-	-	0.02	0.467	0.677
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Cheek	0mm	Ant 13	DSI 2	376000	1880	13.99	15.60	1.449	-	-	0.05	0.207	0.300
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Tilted	0mm	Ant 13	DSI 2	376000	1880	13.99	15.60	1.449	-	-	-0.07	0.242	0.351
	FR1 n2	20M	BPSK	50	28	DFT-15	Right Cheek	0mm	Ant 13	DSI 2	376000	1880	13.95	15.60	1.462	-	-	-0.1	0.351	0.513
	FR1 n2	20M	BPSK	50	28	DFT-15	Right Tilted	0mm	Ant 13	DSI 2	376000	1880	13.95	15.60	1.462	-	-	0.06	0.355	0.519
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Cheek	0mm	Ant 13	DSI 2	376000	1880	13.95	15.60	1.462	-	-	0.06	0.208	0.304
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Tilted	0mm	Ant 13	DSI 2	376000	1880	13.95	15.60	1.462	-	-	0.08	0.241	0.352
	FR1 n2	20M	BPSK	1	53	DFT-15	Right Cheek	0mm	Ant 13	DSI 3	376000	1880	12.45	14.10	1.462	-	-	0.11	0.244	0.357
	FR1 n2	20M	BPSK	1	53	DFT-15	Right Tilted	0mm	Ant 13	DSI 3	376000	1880	12.45	14.10	1.462	-	-	-0.01	0.248	0.363
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Cheek	0mm	Ant 13	DSI 3	376000	1880	12.45	14.10	1.462	-	-	-0.1	0.145	0.212
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Tilted	0mm	Ant 13	DSI 3	376000	1880	12.45	14.10	1.462	-	-	-0.06	0.161	0.235
	FR1 n2	20M	BPSK	50	28	DFT-15	Right Cheek	0mm	Ant 13	DSI 3	376000	1880	12.43	14.10	1.469	-	-	-0.06	0.244	0.358
	FR1 n2	20M	BPSK	50	28	DFT-15	Right Tilted	0mm	Ant 13	DSI 3	376000	1880	12.43	14.10	1.469	-	-	-0.12	0.247	0.363
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Cheek	0mm	Ant 13	DSI 3	376000	1880	12.43	14.10	1.469	-	-	-0.02	0.148	0.217
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Tilted	0mm	Ant 13	DSI 3	376000	1880	12.43	14.10	1.469	-	-	-0.07	0.162	0.238
2600MHz																				
	LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	21100	2535	13.14	14.00	1.219	-	-	0.11	0.308	0.375
15	LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	21100	2535	13.14	14.00	1.219	-	-	0.09	0.652	0.795
	LTE Band 7C	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	21100 +21298	2535 +2554.8	12.89	14.00	1.291	-	-	0.02	0.499	0.644
	LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 2	21100	2535	13.14	14.00	1.219	-	-	-0.01	0.133	0.162
	LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 2	21100	2535	13.14	14.00	1.219	-	-	-0.04	0.168	0.205
	LTE Band 7	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 2	21100	2535	13.11	14.00	1.227	-	-	0.12	0.312	0.383
	LTE Band 7	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 2	21100	2535	13.11	14.00	1.227	-	-	0.01	0.618	0.759
	LTE Band 7	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 2	21100	2535	13.11	14.00	1.227	-	-	0.09	0.135	0.166
	LTE Band 7	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 2	21100	2535	13.11	14.00	1.227	-	-	-0.08	0.172	0.211
	LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 3	21100	2535	10.95	12.00	1.274	-	-	-0.09	0.202	0.257
	LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 3	21100	2535	10.95	12.00	1.274	-	-	0.09	0.243	0.309
	LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 3	21100	2535	10.95	12.00	1.274	-	-	0.05	0.077	0.098
	LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 3	21100	2535	10.95	12.00	1.274	-	-	-0.07	0.100	0.127
	LTE Band 7	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 3	21100	2535	10.90	12.00	1.288	-	-	-0.02	0.204	0.263
	LTE Band 7	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 3	21100	2535	10.90	12.00	1.288	-	-	0.02	0.246	0.317
	LTE Band 7C	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 3	21100 +21298	2535 +2554.8	10.89	12.00	1.291	-	-	0.06	0.225	0.291
	LTE Band 7	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 3	21100	2535	10.90	12.00	1.288	-	-	0.01	0.080	0.103
	LTE Band 7	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 3	21100	2535	10.90	12.00	1.288	-	-	-0.12	0.105	0.135
	LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 31	DSI 2/3	21100	2535	22.29	23.50	1.321	-	-	0.06	0.227	0.300
	LTE Band 7C	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 31	DSI 2/3	21100 +21298	2535 +2554.8	22.16	23.50	1.361	-	-	0.02	0.197	0.268
	LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 31	DSI 2/3	21100	2535	22.29	23.50	1.321	-	-	-0.08	0.135	0.178
	LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 31	DSI 2/3	21100	2535	22.29	23.50	1.321	-	-	-0.02	0.127	0.168
	LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 31	DSI 2/3	21100	2535	22.29	23.50	1.321	-	-	0.12	0.108	0.143
	LTE Band 7	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 31	DSI 2/3	21100	2535	21.25	22.50	1.334	-	-	-0.07	0.177	0.236
	LTE Band 7	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 31	DSI 2/3	21100	2535	21.25	22.50	1.334	-	-	0	0.101	0.135
	LTE Band 7	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 31	DSI 2/3	21100	2535	21.25	22.50	1.334	-	-	-0.01	0.103	0.137
	LTE Band 7	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 31	DSI 2/3	21100	2535	21.25	22.50	1.334	-	-	-0.11	0.084	0.112
	LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	40620	2593	15.26	16.40	1.300	62.9	1.006	0.11	0.358	0.468
	LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	40620	2593	15.26	16.40	1.300	62.9	1.006	0.06	0.545	0.713
	LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 2	40620	2593	15.26	16.40	1.300	62.9	1.006	-0.05	0.145	0.190
	LTE Band 41	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 2	40620	2593	15.26	16.40	1.300	62.9	1.006	-0.06	0.181	0.237
	LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	39750	2506	15.22	16.40	1.312	62.9	1.006	0.03	0.531	0.701



Table with columns for Band, Modulation, Power, Frequency, Position, etc. Includes rows for LTE Band 41, LTE Band 41C, and FR1 n7.



	FR1 n7	20M	BPSK	50	28	DFT-15	Left Tilted	0mm	Ant 13	DSI 2	507000	2535	13.01	14.80	1.510	-	-	-0.01	0.188	0.284
	FR1 n7	20M	BPSK	100	0	DFT-15	Right Tilted	0mm	Ant 13	DSI 2	507000	2535	13.02	14.80	1.507	-	-	0.04	0.543	0.818
	FR1 n7	20M	BPSK	1	53	DFT-15	Right Cheek	0mm	Ant 13	DSI 3	507000	2535	11.52	13.30	1.507	-	-	-0.05	0.253	0.381
	FR1 n7	20M	BPSK	1	53	DFT-15	Right Tilted	0mm	Ant 13	DSI 3	507000	2535	11.52	13.30	1.507	-	-	0.11	0.309	0.466
	FR1 n7	20M	BPSK	1	53	DFT-15	Left Cheek	0mm	Ant 13	DSI 3	507000	2535	11.52	13.30	1.507	-	-	-0.01	0.107	0.161
	FR1 n7	20M	BPSK	1	53	DFT-15	Left Tilted	0mm	Ant 13	DSI 3	507000	2535	11.52	13.30	1.507	-	-	0.08	0.127	0.191
	FR1 n7	20M	BPSK	50	28	DFT-15	Right Cheek	0mm	Ant 13	DSI 3	507000	2535	11.50	13.30	1.514	-	-	0.08	0.257	0.389
	FR1 n7	20M	BPSK	50	28	DFT-15	Right Tilted	0mm	Ant 13	DSI 3	507000	2535	11.50	13.30	1.514	-	-	0.07	0.311	0.471
	FR1 n7	20M	BPSK	50	28	DFT-15	Left Cheek	0mm	Ant 13	DSI 3	507000	2535	11.50	13.30	1.514	-	-	-0.11	0.106	0.160
	FR1 n7	20M	BPSK	50	28	DFT-15	Left Tilted	0mm	Ant 13	DSI 3	507000	2535	11.50	13.30	1.514	-	-	0.09	0.123	0.186
3500-3900MHz																				
18	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 11	DSI 2	633334	3500.01	15.76	17.00	1.330	-	-	-0.09	0.522	0.694
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 11	DSI 2	633334	3500.01	15.76	17.00	1.330	-	-	0.04	0.115	0.153
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 11	DSI 2	633334	3500.01	15.76	17.00	1.330	-	-	-0.06	0.216	0.287
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 11	DSI 2	633334	3500.01	15.76	17.00	1.330	-	-	0.1	0.059	0.078
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 11	DSI 2	633334	3500.01	15.52	17.00	1.406	-	-	-0.12	0.428	0.602
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 11	DSI 2	633334	3500.01	15.52	17.00	1.406	-	-	0.04	0.113	0.159
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 11	DSI 2	633334	3500.01	15.52	17.00	1.406	-	-	-0.12	0.217	0.305
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 11	DSI 2	633334	3500.01	15.52	17.00	1.406	-	-	0.01	0.058	0.082
	FR1 n77 (Part 27Q)	100M	BPSK	270	0	DFT-30	Right Cheek	0mm	Ant 11	DSI 2	633334	3500.01	15.44	17.00	1.432	-	-	0.05	0.419	0.600
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 11	DSI 3	633334	3500.01	14.45	15.50	1.274	-	-	-0.03	0.334	0.425
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 11	DSI 3	633334	3500.01	14.45	15.50	1.274	-	-	-0.11	0.079	0.101
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 11	DSI 3	633334	3500.01	14.45	15.50	1.274	-	-	0.07	0.154	0.196
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 11	DSI 3	633334	3500.01	14.45	15.50	1.274	-	-	0.06	0.035	0.045
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 11	DSI 3	633334	3500.01	14.40	15.50	1.288	-	-	0.09	0.247	0.318
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 11	DSI 3	633334	3500.01	14.40	15.50	1.288	-	-	-0.05	0.081	0.104
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 11	DSI 3	633334	3500.01	14.40	15.50	1.288	-	-	-0.04	0.148	0.191
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 11	DSI 3	633334	3500.01	14.40	15.50	1.288	-	-	0.07	0.030	0.039
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 11	DSI 2	656000	3840	15.37	17.00	1.455	-	-	0.02	0.327	0.476
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 11	DSI 2	656000	3840	15.37	17.00	1.455	-	-	0.11	0.077	0.112
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 11	DSI 2	656000	3840	15.37	17.00	1.455	-	-	-0.07	0.152	0.221
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 11	DSI 2	656000	3840	15.37	17.00	1.455	-	-	-0.01	0.044	0.064
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 11	DSI 2	656000	3840	15.35	17.00	1.462	-	-	0.02	0.329	0.481
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 11	DSI 2	656000	3840	15.35	17.00	1.462	-	-	-0.04	0.077	0.113
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 11	DSI 2	656000	3840	15.35	17.00	1.462	-	-	0.03	0.145	0.212
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 11	DSI 2	656000	3840	15.35	17.00	1.462	-	-	-0.03	0.044	0.064
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 11	DSI 3	656000	3840	14.22	15.50	1.343	-	-	-0.03	0.223	0.299
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 11	DSI 3	656000	3840	14.22	15.50	1.343	-	-	-0.07	0.050	0.067
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 11	DSI 3	656000	3840	14.22	15.50	1.343	-	-	-0.04	0.105	0.141
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 11	DSI 3	656000	3840	14.22	15.50	1.343	-	-	0.05	0.028	0.038
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 11	DSI 3	656000	3840	14.17	15.50	1.358	-	-	0.12	0.224	0.304
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 11	DSI 3	656000	3840	14.17	15.50	1.358	-	-	-0.1	0.050	0.068
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 11	DSI 3	656000	3840	14.17	15.50	1.358	-	-	0.01	0.104	0.141
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 11	DSI 3	656000	3840	14.17	15.50	1.358	-	-	0.03	0.029	0.039
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 23	DSI 2	633334	3500.01	13.29	15.00	1.483	-	-	-0.06	0.076	0.113
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	DSI 2	633334	3500.01	13.29	15.00	1.483	-	-	0.07	0.025	0.037
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	DSI 2	633334	3500.01	13.29	15.00	1.483	-	-	-0.11	0.278	0.412
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	DSI 2	633334	3500.01	13.29	15.00	1.483	-	-	0.15	0.078	0.116
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	DSI 2	633334	3500.01	13.25	15.00	1.496	-	-	0.04	0.074	0.111
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	DSI 2	633334	3500.01	13.25	15.00	1.496	-	-	0.06	0.023	0.034
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	DSI 2	633334	3500.01	13.25	15.00	1.496	-	-	-0.01	0.338	0.506
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	DSI 2	633334	3500.01	13.25	15.00	1.496	-	-	-0.09	0.082	0.123
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 23	DSI 3	633334	3500.01	10.72	12.00	1.343	-	-	-0.19	0.042	0.056
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	DSI 3	633334	3500.01	10.72	12.00	1.343	-	-	0.16	0.011	0.015
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	DSI 3	633334	3500.01	10.72	12.00	1.343	-	-	0.01	0.143	0.192
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	DSI 3	633334	3500.01	10.72	12.00	1.343	-	-	0.19	0.039	0.052



Table with columns for device model (FR1 n77/n78), power (100M), modulation (BPSK), frequency (135/69/137), polarization (DFT-30), antenna position (Right/Left Cheek/Tilted), antenna type (0mm), antenna number (Ant 23/Ant 11), DSI number (DSI 3/DSI 2), EIRP (3500.01/3840/3750), and SAR values (10.71/15.86/15.62, 12.00/16.80, 1.346/1.312, etc.).



FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	DSI 2	633334	3500.01	13.68	15.30	1.452	-	-	-0.15	0.085	0.123
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	DSI 2	633334	3500.01	13.60	15.30	1.479	-	-	-0.18	0.073	0.108
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	DSI 2	633334	3500.01	13.60	15.30	1.479	-	-	0.07	0.022	0.033
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	DSI 2	633334	3500.01	13.60	15.30	1.479	-	-	-0.18	0.283	0.419
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	DSI 2	633334	3500.01	13.60	15.30	1.479	-	-	0	0.082	0.121
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 23	DSI 3	633334	3500.01	11.23	12.30	1.279	-	-	-0.02	0.035	0.045
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	DSI 3	633334	3500.01	11.23	12.30	1.279	-	-	0.09	0.012	0.015
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	DSI 3	633334	3500.01	11.23	12.30	1.279	-	-	-0.11	0.146	0.187
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	DSI 3	633334	3500.01	11.23	12.30	1.279	-	-	0.1	0.042	0.054
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	DSI 3	633334	3500.01	11.16	12.30	1.300	-	-	0.08	0.036	0.047
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	DSI 3	633334	3500.01	11.16	12.30	1.300	-	-	0.04	0.011	0.014
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	DSI 3	633334	3500.01	11.16	12.30	1.300	-	-	-0.01	0.143	0.186
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	DSI 3	633334	3500.01	11.16	12.30	1.300	-	-	0.09	0.042	0.055
FR1 n78 (Part27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 23	DSI 2	650000	3750	13.67	15.30	1.455	-	-	-0.19	0.079	0.115
FR1 n78 (Part27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	DSI 2	650000	3750	13.67	15.30	1.455	-	-	-0.14	0.021	0.031
FR1 n78 (Part27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	DSI 2	650000	3750	13.67	15.30	1.455	-	-	0.04	0.391	0.569
FR1 n78 (Part27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	DSI 2	650000	3750	13.67	15.30	1.455	-	-	0.13	0.106	0.154
FR1 n78 (Part27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	DSI 2	650000	3750	13.57	15.30	1.489	-	-	-0.06	0.080	0.119
FR1 n78 (Part27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	DSI 2	650000	3750	13.57	15.30	1.489	-	-	0.08	0.019	0.028
FR1 n78 (Part27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	DSI 2	650000	3750	13.57	15.30	1.489	-	-	0.12	0.291	0.433
FR1 n78 (Part27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	DSI 2	650000	3750	13.57	15.30	1.489	-	-	0.15	0.101	0.150
FR1 n78 (Part27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 23	DSI 3	650000	3750	10.62	12.30	1.472	-	-	0.08	0.041	0.060
FR1 n78 (Part27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	DSI 3	650000	3750	10.62	12.30	1.472	-	-	-0.16	0.011	0.016
FR1 n78 (Part27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	DSI 3	650000	3750	10.62	12.30	1.472	-	-	-0.06	0.199	0.293
FR1 n78 (Part27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	DSI 3	650000	3750	10.62	12.30	1.472	-	-	-0.08	0.056	0.082
FR1 n78 (Part27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	DSI 3	650000	3750	10.56	12.30	1.493	-	-	-0.06	0.040	0.060
FR1 n78 (Part27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	DSI 3	650000	3750	10.56	12.30	1.493	-	-	-0.08	0.010	0.015
FR1 n78 (Part27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	DSI 3	650000	3750	10.56	12.30	1.493	-	-	0.04	0.144	0.215
FR1 n78 (Part27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	DSI 3	650000	3750	10.56	12.30	1.493	-	-	-0.03	0.055	0.082
2450MHz																			
WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Right Cheek	0mm	Ant 22	Reduce Level 2	1	2412	12.86	14.00	1.300	99.41	1.006	-0.07	0.106	0.139
WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Right Tilted	0mm	Ant 22	Reduce Level 2	1	2412	12.86	14.00	1.300	99.41	1.006	0.09	0.127	0.166
20 WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 22	Reduce Level 2	1	2412	12.86	14.00	1.300	99.41	1.006	-0.08	0.296	0.387
WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Tilted	0mm	Ant 22	Reduce Level 2	1	2412	12.86	14.00	1.300	99.41	1.006	0.09	0.234	0.306
Bluetooth	-	-	-	-	DH5 1Mbps	Right Cheek	0mm	Ant 22	Full	39	2441	11.35	12.50	1.303	77.07	1.298	-0.04	0.061	0.103
Bluetooth	-	-	-	-	DH5 1Mbps	Right Tilted	0mm	Ant 22	Full	39	2441	11.35	12.50	1.303	77.07	1.298	-0.05	0.074	0.125
21 Bluetooth	-	-	-	-	DH5 1Mbps	Left Cheek	0mm	Ant 22	Full	39	2441	11.35	12.50	1.303	77.07	1.298	-0.06	0.211	0.357
Bluetooth	-	-	-	-	DH5 1Mbps	Left Tilted	0mm	Ant 22	Full	39	2441	11.35	12.50	1.303	77.07	1.298	0.12	0.119	0.201
5000MHz-6000MHz																			
WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 22	Reduce Level 2	58	5290	10.94	12.00	1.276	88.89	1.125	0.01	0.085	0.122
WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 22	Reduce Level 2	58	5290	10.94	12.00	1.276	88.89	1.125	0.05	0.103	0.148
22 WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 22	Reduce Level 2	58	5290	10.94	12.00	1.276	88.89	1.125	-0.04	0.278	0.399
WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 22	Reduce Level 2	58	5290	10.94	12.00	1.276	88.89	1.125	0.01	0.152	0.218
WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 22	Reduce Level 2	122	5610	10.98	12.00	1.265	88.89	1.125	-0.02	0.071	0.101
WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 22	Reduce Level 2	122	5610	10.98	12.00	1.265	88.89	1.125	-0.15	0.095	0.135
23 WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 22	Reduce Level 2	122	5610	10.98	12.00	1.265	88.89	1.125	0.05	0.231	0.329
WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 22	Reduce Level 2	122	5610	10.98	12.00	1.265	88.89	1.125	0.01	0.132	0.188
WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 22	Reduce Level 2	155	5775	10.62	12.00	1.374	88.89	1.125	0.03	0.068	0.105
WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 22	Reduce Level 2	155	5775	10.62	12.00	1.374	88.89	1.125	-0.01	0.089	0.138
24 WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 22	Reduce Level 2	155	5775	10.62	12.00	1.374	88.89	1.125	-0.03	0.252	0.390
WLAN5GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 22	Reduce Level 2	155	5775	10.62	12.00	1.374	88.89	1.125	0.02	0.125	0.193



<Standalone SRS SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Measured Plimit (dBm)	Reported Plimit (dBm)	Reported Pmax (dBm)	Duty Cycle %	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 12	DSI 2	633334	3500.01	14.31	16.00	21.50	8.5	-0.04	0.214	0.095
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 12	DSI 2	633334	3500.01	14.31	16.00	21.50	8.5	0.14	0.137	0.061
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 12	DSI 2	633334	3500.01	14.31	16.00	21.50	8.5	-0.08	0.075	0.033
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 12	DSI 2	633334	3500.01	14.31	16.00	21.50	8.5	0.08	0.070	0.031
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 12	DSI 2	633334	3500.01	14.24	16.00	21.50	8.5	0.12	0.215	0.097
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 12	DSI 2	633334	3500.01	14.24	16.00	21.50	8.5	-0.18	0.135	0.061
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 12	DSI 2	633334	3500.01	14.24	16.00	21.50	8.5	0.17	0.073	0.033
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 12	DSI 2	633334	3500.01	14.24	16.00	21.50	8.5	0.14	0.068	0.031
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 12	DSI 3	633334	3500.01	12.29	14.00	21.50	8.5	0.19	0.132	0.094
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 12	DSI 3	633334	3500.01	12.29	14.00	21.50	8.5	0.04	0.091	0.064
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 12	DSI 3	633334	3500.01	12.29	14.00	21.50	8.5	0.08	0.048	0.034
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 12	DSI 3	633334	3500.01	12.29	14.00	21.50	8.5	-0.18	0.040	0.028
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 12	DSI 3	633334	3500.01	12.28	14.00	21.50	8.5	-0.04	0.133	0.094
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 12	DSI 3	633334	3500.01	12.28	14.00	21.50	8.5	0	0.090	0.064
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 12	DSI 3	633334	3500.01	12.28	14.00	21.50	8.5	-0.17	0.048	0.034
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 12	DSI 3	633334	3500.01	12.28	14.00	21.50	8.5	-0.07	0.038	0.027
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 12	DSI 2	656000	3840	14.93	16.00	21.50	8.5	0.02	0.446	0.172
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 12	DSI 2	656000	3840	14.93	16.00	21.50	8.5	0.18	0.261	0.101
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 12	DSI 2	656000	3840	14.93	16.00	21.50	8.5	-0.05	0.158	0.061
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 12	DSI 2	656000	3840	14.93	16.00	21.50	8.5	-0.14	0.115	0.044
	FR1 n77 (Part27O)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 12	DSI 2	656000	3840	14.88	16.00	21.50	8.5	0.14	0.449	0.175
	FR1 n77 (Part27O)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 12	DSI 2	656000	3840	14.88	16.00	21.50	8.5	0.03	0.262	0.102
	FR1 n77 (Part27O)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 12	DSI 2	656000	3840	14.88	16.00	21.50	8.5	0	0.163	0.064
	FR1 n77 (Part27O)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 12	DSI 2	656000	3840	14.88	16.00	21.50	8.5	-0.06	0.119	0.046
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 12	DSI 3	656000	3840	12.93	14.00	21.50	8.5	-0.15	0.315	0.193
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 12	DSI 3	656000	3840	12.93	14.00	21.50	8.5	0.11	0.171	0.105
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 12	DSI 3	656000	3840	12.93	14.00	21.50	8.5	-0.11	0.103	0.063
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 12	DSI 3	656000	3840	12.93	14.00	21.50	8.5	0.18	0.075	0.046
	FR1 n77 (Part27O)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 12	DSI 3	656000	3840	12.92	14.00	21.50	8.5	0.12	0.313	0.192
	FR1 n77 (Part27O)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 12	DSI 3	656000	3840	12.92	14.00	21.50	8.5	0.12	0.170	0.104
	FR1 n77 (Part27O)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 12	DSI 3	656000	3840	12.92	14.00	21.50	8.5	0.09	0.105	0.064
	FR1 n77 (Part27O)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 12	DSI 3	656000	3840	12.92	14.00	21.50	8.5	-0.05	0.076	0.047
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	DSI 2	633334	3500.01	17.98	19.50	22.50	8.5	-0.05	0.254	0.061
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	DSI 2	633334	3500.01	17.98	19.50	22.50	8.5	-0.12	0.238	0.057
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	DSI 2	633334	3500.01	17.98	19.50	22.50	8.5	-0.07	0.353	0.085
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	DSI 2	633334	3500.01	17.98	19.50	22.50	8.5	0.07	0.357	0.086
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	DSI 2	633334	3500.01	17.96	19.50	22.50	8.5	-0.08	0.234	0.057
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	DSI 2	633334	3500.01	17.96	19.50	22.50	8.5	-0.06	0.226	0.055
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	DSI 2	633334	3500.01	17.96	19.50	22.50	8.5	-0.07	0.345	0.083
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	DSI 2	633334	3500.01	17.96	19.50	22.50	8.5	-0.1	0.359	0.087
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	DSI 3	633334	3500.01	16.48	18.00	22.50	8.5	0.03	0.191	0.065
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	DSI 3	633334	3500.01	16.48	18.00	22.50	8.5	-0.03	0.173	0.059
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	DSI 3	633334	3500.01	16.48	18.00	22.50	8.5	0.03	0.240	0.082
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	DSI 3	633334	3500.01	16.48	18.00	22.50	8.5	0.11	0.243	0.083
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	DSI 3	633334	3500.01	16.45	18.00	22.50	8.5	-0.03	0.187	0.064
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	DSI 3	633334	3500.01	16.45	18.00	22.50	8.5	0.01	0.172	0.059
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	DSI 3	633334	3500.01	16.45	18.00	22.50	8.5	-0.02	0.234	0.080
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	DSI 3	633334	3500.01	16.45	18.00	22.50	8.5	0.12	0.247	0.085
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	DSI 2	656000	3840	17.91	19.50	22.50	8.5	-0.1	0.429	0.105
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	DSI 2	656000	3840	17.91	19.50	22.50	8.5	0.1	0.431	0.105
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	DSI 2	656000	3840	17.91	19.50	22.50	8.5	-0.05	0.577	0.141
	FR1 n77 (Part27O)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	DSI 2	656000	3840	17.91	19.50	22.50	8.5	0.08	0.777	0.190



Table with columns for device ID, power, modulation, frequency, polarization, antenna, and various measurement parameters like DSI, E1, E2, E3, etc.



FCC SAR Test Report

Report No. : FA260813

FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	DSI 3	633334	3500.01	16.30	18.00	22.50	8.5	-0.07	0.166	0.059
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	DSI 3	633334	3500.01	16.30	18.00	22.50	8.5	0.01	0.150	0.053
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	DSI 3	633334	3500.01	16.30	18.00	22.50	8.5	0.03	0.223	0.079
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	DSI 3	633334	3500.01	16.30	18.00	22.50	8.5	0.07	0.230	0.081
FR1 n78 (Part27O)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	DSI 2	650000	3750	17.91	19.50	22.50	8.5	0.11	0.379	0.093
FR1 n78 (Part27O)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	DSI 2	650000	3750	17.91	19.50	22.50	8.5	-0.07	0.358	0.088
FR1 n78 (Part27O)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	DSI 2	650000	3750	17.91	19.50	22.50	8.5	0.01	0.524	0.128
FR1 n78 (Part27O)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	DSI 2	650000	3750	17.91	19.50	22.50	8.5	-0.07	0.623	0.152
FR1 n78 (Part27O)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	DSI 2	650000	3750	17.89	19.50	22.50	8.5	0.11	0.363	0.089
FR1 n78 (Part27O)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	DSI 2	650000	3750	17.89	19.50	22.50	8.5	0.08	0.357	0.088
FR1 n78 (Part27O)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	DSI 2	650000	3750	17.89	19.50	22.50	8.5	-0.07	0.521	0.128
FR1 n78 (Part27O)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	DSI 2	650000	3750	17.89	19.50	22.50	8.5	0.1	0.526	0.129
FR1 n78 (Part27O)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	DSI 3	650000	3750	16.41	18.00	22.50	8.5	-0.01	0.254	0.088
FR1 n78 (Part27O)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	DSI 3	650000	3750	16.41	18.00	22.50	8.5	0.04	0.241	0.083
FR1 n78 (Part27O)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	DSI 3	650000	3750	16.41	18.00	22.50	8.5	-0.08	0.368	0.127
FR1 n78 (Part27O)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	DSI 3	650000	3750	16.41	18.00	22.50	8.5	0.12	0.408	0.141
FR1 n78 (Part27O)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	DSI 3	650000	3750	16.40	18.00	22.50	8.5	0.08	0.250	0.087
FR1 n78 (Part27O)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	DSI 3	650000	3750	16.40	18.00	22.50	8.5	-0.04	0.237	0.082
FR1 n78 (Part27O)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	DSI 3	650000	3750	16.40	18.00	22.50	8.5	-0.02	0.363	0.126
FR1 n78 (Part27O)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	DSI 3	650000	3750	16.40	18.00	22.50	8.5	0.09	0.360	0.125

<EN-DC SAR>

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)	Reported 1g SAR (W/kg)
835MHz																				
	LTE Band 5	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 13	DSI 2	20525	836.5	19.15	20.50	1.365	-	-	-0.12	0.341	0.465
	LTE Band 5	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 13	DSI 2	20525	836.5	19.15	20.50	1.365	-	-	-0.05	0.301	0.411
	LTE Band 5	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 13	DSI 2	20525	836.5	19.15	20.50	1.365	-	-	-0.19	0.273	0.373
	LTE Band 5	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 13	DSI 2	20525	836.5	19.15	20.50	1.365	-	-	0.11	0.256	0.349
	LTE Band 5	10M	QPSK	25	12	-	Right Cheek	0mm	Ant 13	DSI 2	20525	836.5	19.13	20.50	1.371	-	-	-0.05	0.321	0.440
	LTE Band 5	10M	QPSK	25	12	-	Right Tilted	0mm	Ant 13	DSI 2	20525	836.5	19.13	20.50	1.371	-	-	0.08	0.307	0.421
	LTE Band 5	10M	QPSK	25	12	-	Left Cheek	0mm	Ant 13	DSI 2	20525	836.5	19.13	20.50	1.371	-	-	0.09	0.270	0.370
	LTE Band 5	10M	QPSK	25	12	-	Left Tilted	0mm	Ant 13	DSI 2	20525	836.5	19.13	20.50	1.371	-	-	0.05	0.250	0.343
	LTE Band 5	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 13	DSI 3	20525	836.5	16.16	17.50	1.361	-	-	0.13	0.218	0.297
	LTE Band 5	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 13	DSI 3	20525	836.5	16.16	17.50	1.361	-	-	0.15	0.190	0.259
	LTE Band 5	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 13	DSI 3	20525	836.5	16.16	17.50	1.361	-	-	-0.04	0.135	0.184
	LTE Band 5	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 13	DSI 3	20525	836.5	16.16	17.50	1.361	-	-	-0.16	0.128	0.174
	LTE Band 5	10M	QPSK	25	12	-	Right Cheek	0mm	Ant 13	DSI 3	20525	836.5	16.13	17.50	1.371	-	-	-0.14	0.220	0.302
	LTE Band 5	10M	QPSK	25	12	-	Right Tilted	0mm	Ant 13	DSI 3	20525	836.5	16.13	17.50	1.371	-	-	-0.15	0.198	0.271
	LTE Band 5	10M	QPSK	25	12	-	Left Cheek	0mm	Ant 13	DSI 3	20525	836.5	16.13	17.50	1.371	-	-	0.16	0.133	0.182
	LTE Band 5	10M	QPSK	25	12	-	Left Tilted	0mm	Ant 13	DSI 3	20525	836.5	16.13	17.50	1.371	-	-	-0.13	0.125	0.171
	LTE Band 5	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 41	DSI 2/3	20525	836.5	22.84	24.50	1.466	-	-	0.15	0.146	0.214
	LTE Band 5	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 41	DSI 2/3	20525	836.5	22.84	24.50	1.466	-	-	0.14	0.087	0.128
	LTE Band 5	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 41	DSI 2/3	20525	836.5	22.84	24.50	1.466	-	-	-0.06	0.223	0.327
	LTE Band 5	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 41	DSI 2/3	20525	836.5	22.84	24.50	1.466	-	-	0.11	0.096	0.141
	LTE Band 5	10M	QPSK	25	12	-	Right Cheek	0mm	Ant 41	DSI 2/3	20525	836.5	21.79	23.50	1.483	-	-	-0.13	0.154	0.228
	LTE Band 5	10M	QPSK	25	12	-	Right Tilted	0mm	Ant 41	DSI 2/3	20525	836.5	21.79	23.50	1.483	-	-	0.12	0.075	0.111
	LTE Band 5	10M	QPSK	25	12	-	Left Cheek	0mm	Ant 41	DSI 2/3	20525	836.5	21.79	23.50	1.483	-	-	-0.15	0.184	0.273
	LTE Band 5	10M	QPSK	25	12	-	Left Tilted	0mm	Ant 41	DSI 2/3	20525	836.5	21.79	23.50	1.483	-	-	0.14	0.094	0.139
1750MHz																				
	LTE Band 4	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	20175	1732.5	14.97	16.00	1.268	-	-	-0.03	0.287	0.364
	LTE Band 4	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	20175	1732.5	14.97	16.00	1.268	-	-	-0.09	0.303	0.384
	LTE Band 4	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 2	20175	1732.5	14.97	16.00	1.268	-	-	-0.17	0.174	0.221
	LTE Band 4	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 2	20175	1732.5	14.97	16.00	1.268	-	-	0.07	0.204	0.259



FCC SAR Test Report

Report No. : FA260813

LTE Band 4	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 2	20175	1732.5	14.90	16.00	1.288	-	-	-0.02	0.287	0.370
LTE Band 4	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 2	20175	1732.5	14.90	16.00	1.288	-	-	-0.07	0.337	0.434
LTE Band 4	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 2	20175	1732.5	14.90	16.00	1.288	-	-	-0.16	0.198	0.255
LTE Band 4	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 2	20175	1732.5	14.90	16.00	1.288	-	-	-0.05	0.198	0.255
LTE Band 4	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 3	20175	1732.5	11.99	13.00	1.262	-	-	0.08	0.149	0.188
LTE Band 4	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 3	20175	1732.5	11.99	13.00	1.262	-	-	0.04	0.150	0.189
LTE Band 4	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 3	20175	1732.5	11.99	13.00	1.262	-	-	0.01	0.084	0.106
LTE Band 4	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 3	20175	1732.5	11.99	13.00	1.262	-	-	-0.18	0.099	0.125
LTE Band 4	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 3	20175	1732.5	11.94	13.00	1.276	-	-	-0.17	0.143	0.183
LTE Band 4	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 3	20175	1732.5	11.94	13.00	1.276	-	-	-0.09	0.149	0.190
LTE Band 4	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 3	20175	1732.5	11.94	13.00	1.276	-	-	0.18	0.085	0.108
LTE Band 4	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 3	20175	1732.5	11.94	13.00	1.276	-	-	-0.01	0.100	0.128
LTE Band 4	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	22.59	24.00	1.384	-	-	0.04	0.048	0.066
LTE Band 4	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	22.59	24.00	1.384	-	-	0.04	0.041	0.057
LTE Band 4	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	22.59	24.00	1.384	-	-	-0.07	0.087	0.120
LTE Band 4	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	22.59	24.00	1.384	-	-	-0.02	0.075	0.104
LTE Band 4	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	21.56	23.00	1.393	-	-	0.01	0.042	0.059
LTE Band 4	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	21.56	23.00	1.393	-	-	-0.09	0.034	0.047
LTE Band 4	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	21.56	23.00	1.393	-	-	-0.04	0.069	0.096
LTE Band 4	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	21.56	23.00	1.393	-	-	0.14	0.060	0.084
LTE Band 4A	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	20.66	21.80	1.300	-	-	0.07	0.025	0.033
LTE Band 4A	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	20.66	21.80	1.300	-	-	0.04	0.025	0.033
LTE Band 4A	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	20.66	21.80	1.300	-	-	-0.03	0.067	0.087
LTE Band 4A	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	20.66	21.80	1.300	-	-	0.09	0.058	0.075
LTE Band 4A	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	20.62	21.80	1.312	-	-	0.1	0.021	0.028
LTE Band 4A	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	20.62	21.80	1.312	-	-	0.16	0.024	0.031
LTE Band 4A	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 31	DSI 2/3	20175	1732.5	20.62	21.80	1.312	-	-	-0.01	0.063	0.083
LTE Band 4A	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 31	DSI 2/3	20175	1732.5	20.62	21.80	1.312	-	-	0.15	0.052	0.068
LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	132322	1745	15.54	16.20	1.164	-	-	-0.12	0.341	0.397
LTE Band 66	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	132322	1745	15.54	16.20	1.164	-	-	0.1	0.394	0.459
LTE Band 66	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 2	132322	1745	15.54	16.20	1.164	-	-	0.01	0.206	0.240
LTE Band 66	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 2	132322	1745	15.54	16.20	1.164	-	-	0.02	0.235	0.274
LTE Band 66	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 2	132322	1745	15.53	16.20	1.167	-	-	0.13	0.337	0.393
LTE Band 66	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 2	132322	1745	15.53	16.20	1.167	-	-	-0.1	0.343	0.400
LTE Band 66	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 2	132322	1745	15.53	16.20	1.167	-	-	-0.17	0.198	0.231
LTE Band 66	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 2	132322	1745	15.53	16.20	1.167	-	-	-0.05	0.232	0.271
LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 3	132322	1745	12.51	13.20	1.172	-	-	0.12	0.170	0.199
LTE Band 66	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 3	132322	1745	12.51	13.20	1.172	-	-	0.06	0.179	0.210
LTE Band 66	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 3	132322	1745	12.51	13.20	1.172	-	-	-0.12	0.099	0.116
LTE Band 66	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 3	132322	1745	12.51	13.20	1.172	-	-	0.18	0.116	0.136
LTE Band 66	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 3	132322	1745	12.45	13.20	1.189	-	-	0.13	0.167	0.198
LTE Band 66	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 3	132322	1745	12.45	13.20	1.189	-	-	0.03	0.176	0.209
LTE Band 66	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 3	132322	1745	12.45	13.20	1.189	-	-	0.09	0.099	0.118
LTE Band 66	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 3	132322	1745	12.45	13.20	1.189	-	-	0.17	0.113	0.134
LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 31	DSI 2/3	132322	1745	22.68	23.70	1.265	-	-	0.11	0.061	0.077
LTE Band 66	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 31	DSI 2/3	132322	1745	22.68	23.70	1.265	-	-	-0.03	0.038	0.048
LTE Band 66	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 31	DSI 2/3	132322	1745	22.68	23.70	1.265	-	-	-0.06	0.110	0.139
LTE Band 66	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 31	DSI 2/3	132322	1745	22.68	23.70	1.265	-	-	0.15	0.046	0.058
LTE Band 66	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 31	DSI 2/3	132322	1745	21.69	22.70	1.262	-	-	-0.03	0.049	0.062
LTE Band 66	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 31	DSI 2/3	132322	1745	21.69	22.70	1.262	-	-	0.13	0.034	0.043
LTE Band 66	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 31	DSI 2/3	132322	1745	21.69	22.70	1.262	-	-	-0.02	0.087	0.110
LTE Band 66	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 31	DSI 2/3	132322	1745	21.69	22.70	1.262	-	-	0.06	0.041	0.052
FR1 n66	40M	BPSK	1	108	DFT-15	Right Cheek	0mm	Ant 11	DSI 2	349000	1745	15.85	16.50	1.161	-	-	0.06	0.241	0.280
FR1 n66	40M	BPSK	1	108	DFT-15	Right Tilted	0mm	Ant 11	DSI 2	349000	1745	15.85	16.50	1.161	-	-	-0.11	0.046	0.053
FR1 n66	40M	BPSK	1	108	DFT-15	Left Cheek	0mm	Ant 11	DSI 2	349000	1745	15.85	16.50	1.161	-	-	0.11	0.210	0.244
FR1 n66	40M	BPSK	1	108	DFT-15	Left Tilted	0mm	Ant 11	DSI 2	349000	1745	15.85	16.50	1.161	-	-	0.08	0.024	0.028



FR1 n66	40M	BPSK	108	54	DFT-15	Right Cheek	0mm	Ant 11	DSI 2	349000	1745	15.76	16.50	1.186	-	-	-0.07	0.259	0.307
FR1 n66	40M	BPSK	108	54	DFT-15	Right Tilted	0mm	Ant 11	DSI 2	349000	1745	15.76	16.50	1.186	-	-	-0.15	0.050	0.059
FR1 n66	40M	BPSK	108	54	DFT-15	Left Cheek	0mm	Ant 11	DSI 2	349000	1745	15.76	16.50	1.186	-	-	0.08	0.198	0.235
FR1 n66	40M	BPSK	108	54	DFT-15	Left Tilted	0mm	Ant 11	DSI 2	349000	1745	15.76	16.50	1.186	-	-	-0.02	0.022	0.026
FR1 n66	40M	BPSK	1	108	DFT-15	Right Cheek	0mm	Ant 11	DSI 3	349000	1745	12.89	13.50	1.151	-	-	0.05	0.130	0.150
FR1 n66	40M	BPSK	1	108	DFT-15	Right Tilted	0mm	Ant 11	DSI 3	349000	1745	12.89	13.50	1.151	-	-	-0.09	0.023	0.026
FR1 n66	40M	BPSK	1	108	DFT-15	Left Cheek	0mm	Ant 11	DSI 3	349000	1745	12.89	13.50	1.151	-	-	0.11	0.116	0.133
FR1 n66	40M	BPSK	1	108	DFT-15	Left Tilted	0mm	Ant 11	DSI 3	349000	1745	12.89	13.50	1.151	-	-	0.02	0.011	0.013
FR1 n66	40M	BPSK	108	54	DFT-15	Right Cheek	0mm	Ant 11	DSI 3	349000	1745	12.85	13.50	1.161	-	-	-0.02	0.129	0.150
FR1 n66	40M	BPSK	108	54	DFT-15	Right Tilted	0mm	Ant 11	DSI 3	349000	1745	12.85	13.50	1.161	-	-	0.06	0.021	0.024
FR1 n66	40M	BPSK	108	54	DFT-15	Left Cheek	0mm	Ant 11	DSI 3	349000	1745	12.85	13.50	1.161	-	-	0.02	0.101	0.117
FR1 n66	40M	BPSK	108	54	DFT-15	Left Tilted	0mm	Ant 11	DSI 3	349000	1745	12.85	13.50	1.161	-	-	0.11	0.010	0.012
FR1 n66	40M	BPSK	1	108	DFT-15	Right Cheek	0mm	Ant 13	DSI 2	349000	1745	14.21	15.60	1.377	-	-	0.02	0.256	0.353
FR1 n66	40M	BPSK	1	108	DFT-15	Right Tilted	0mm	Ant 13	DSI 2	349000	1745	14.21	15.60	1.377	-	-	0.05	0.267	0.368
FR1 n66	40M	BPSK	1	108	DFT-15	Left Cheek	0mm	Ant 13	DSI 2	349000	1745	14.21	15.60	1.377	-	-	0.1	0.163	0.224
FR1 n66	40M	BPSK	1	108	DFT-15	Left Tilted	0mm	Ant 13	DSI 2	349000	1745	14.21	15.60	1.377	-	-	-0.01	0.192	0.264
FR1 n66	40M	BPSK	108	54	DFT-15	Right Cheek	0mm	Ant 13	DSI 2	349000	1745	14.18	15.60	1.387	-	-	0.01	0.252	0.349
FR1 n66	40M	BPSK	108	54	DFT-15	Right Tilted	0mm	Ant 13	DSI 2	349000	1745	14.18	15.60	1.387	-	-	-0.02	0.265	0.367
FR1 n66	40M	BPSK	108	54	DFT-15	Left Cheek	0mm	Ant 13	DSI 2	349000	1745	14.18	15.60	1.387	-	-	-0.18	0.156	0.216
FR1 n66	40M	BPSK	108	54	DFT-15	Left Tilted	0mm	Ant 13	DSI 2	349000	1745	14.18	15.60	1.387	-	-	-0.19	0.189	0.262
FR1 n66	40M	BPSK	1	108	DFT-15	Right Cheek	0mm	Ant 13	DSI 3	349000	1745	11.23	12.60	1.371	-	-	0.04	0.131	0.180
FR1 n66	40M	BPSK	1	108	DFT-15	Right Tilted	0mm	Ant 13	DSI 3	349000	1745	11.23	12.60	1.371	-	-	0.1	0.136	0.186
FR1 n66	40M	BPSK	1	108	DFT-15	Left Cheek	0mm	Ant 13	DSI 3	349000	1745	11.23	12.60	1.371	-	-	0.17	0.074	0.101
FR1 n66	40M	BPSK	1	108	DFT-15	Left Tilted	0mm	Ant 13	DSI 3	349000	1745	11.23	12.60	1.371	-	-	0.07	0.092	0.126
FR1 n66	40M	BPSK	108	54	DFT-15	Right Cheek	0mm	Ant 13	DSI 3	349000	1745	11.19	12.60	1.384	-	-	-0.1	0.131	0.181
FR1 n66	40M	BPSK	108	54	DFT-15	Right Tilted	0mm	Ant 13	DSI 3	349000	1745	11.19	12.60	1.384	-	-	-0.13	0.136	0.188
FR1 n66	40M	BPSK	108	54	DFT-15	Left Cheek	0mm	Ant 13	DSI 3	349000	1745	11.19	12.60	1.384	-	-	-0.13	0.076	0.105
FR1 n66	40M	BPSK	108	54	DFT-15	Left Tilted	0mm	Ant 13	DSI 3	349000	1745	11.19	12.60	1.384	-	-	-0.05	0.085	0.118
1900MHz																			
LTE Band 2	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	18900	1880	13.58	14.50	1.236	-	-	0.09	0.293	0.362
LTE Band 2	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	18900	1880	13.58	14.50	1.236	-	-	0.06	0.296	0.366
LTE Band 2	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 2	18900	1880	13.58	14.50	1.236	-	-	0.02	0.172	0.213
LTE Band 2	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 2	18900	1880	13.58	14.50	1.236	-	-	0.11	0.196	0.242
LTE Band 2	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 2	18900	1880	13.56	14.50	1.242	-	-	0.08	0.343	0.426
LTE Band 2	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 2	18900	1880	13.56	14.50	1.242	-	-	-0.02	0.297	0.369
LTE Band 2	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 2	18900	1880	13.56	14.50	1.242	-	-	-0.16	0.172	0.214
LTE Band 2	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 2	18900	1880	13.56	14.50	1.242	-	-	-0.11	0.196	0.243
LTE Band 2	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 3	18900	1880	10.59	11.50	1.233	-	-	-0.09	0.144	0.178
LTE Band 2	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 3	18900	1880	10.59	11.50	1.233	-	-	0.14	0.151	0.186
LTE Band 2	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 3	18900	1880	10.59	11.50	1.233	-	-	0.1	0.086	0.106
LTE Band 2	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 3	18900	1880	10.59	11.50	1.233	-	-	0.05	0.099	0.122
LTE Band 2	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 3	18900	1880	10.58	11.50	1.236	-	-	0.1	0.151	0.187
LTE Band 2	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 3	18900	1880	10.58	11.50	1.236	-	-	-0.04	0.157	0.194
LTE Band 2	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 3	18900	1880	10.58	11.50	1.236	-	-	0.1	0.086	0.106
LTE Band 2	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 3	18900	1880	10.58	11.50	1.236	-	-	-0.02	0.098	0.121
LTE Band 2	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 31	DSI 2/3	18900	1880	23.05	24.00	1.245	-	-	-0.02	0.071	0.088
LTE Band 2	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 31	DSI 2/3	18900	1880	23.05	24.00	1.245	-	-	0.04	0.058	0.072
LTE Band 2	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 31	DSI 2/3	18900	1880	23.05	24.00	1.245	-	-	0.07	0.100	0.124
LTE Band 2	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 31	DSI 2/3	18900	1880	23.05	24.00	1.245	-	-	0.08	0.061	0.076
LTE Band 2	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 31	DSI 2/3	18900	1880	21.98	23.00	1.265	-	-	0.11	0.056	0.071
LTE Band 2	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 31	DSI 2/3	18900	1880	21.98	23.00	1.265	-	-	-0.1	0.046	0.058
LTE Band 2	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 31	DSI 2/3	18900	1880	21.98	23.00	1.265	-	-	0.01	0.078	0.099
LTE Band 2	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 31	DSI 2/3	18900	1880	21.98	23.00	1.265	-	-	0.07	0.054	0.068
2600MHz																			
LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	21100	2535	11.04	12.00	1.247	-	-	-0.19	0.234	0.292
LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	21100	2535	11.04	12.00	1.247	-	-	0.07	0.277	0.346



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LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 2	21100	2535	11.04	12.00	1.247	-	-	-0.13	0.097	0.121
LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 2	21100	2535	11.04	12.00	1.247	-	-	-0.02	0.118	0.147
LTE Band 7	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 2	21100	2535	10.97	12.00	1.268	-	-	-0.11	0.231	0.293
LTE Band 7	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 2	21100	2535	10.97	12.00	1.268	-	-	0.06	0.274	0.347
LTE Band 7	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 2	21100	2535	10.97	12.00	1.268	-	-	-0.03	0.097	0.123
LTE Band 7	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 2	21100	2535	10.97	12.00	1.268	-	-	-0.06	0.120	0.152
LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 3	21100	2535	8.03	9.00	1.250	-	-	-0.18	0.124	0.155
LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 3	21100	2535	8.03	9.00	1.250	-	-	-0.09	0.147	0.184
LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 3	21100	2535	8.03	9.00	1.250	-	-	0.11	0.052	0.065
LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 3	21100	2535	8.03	9.00	1.250	-	-	-0.17	0.067	0.084
LTE Band 7	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 3	21100	2535	8.02	9.00	1.253	-	-	0.11	0.118	0.148
LTE Band 7	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 3	21100	2535	8.02	9.00	1.253	-	-	-0.08	0.145	0.182
LTE Band 7	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 3	21100	2535	8.02	9.00	1.253	-	-	0.15	0.050	0.063
LTE Band 7	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 3	21100	2535	8.02	9.00	1.253	-	-	0.09	0.063	0.079
LTE Band 7A	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 11	DSI 2	21100	2535	13.42	14.50	1.282	-	-	-0.08	0.241	0.309
LTE Band 7A	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 11	DSI 2	21100	2535	13.42	14.50	1.282	-	-	0.07	0.038	0.049
LTE Band 7A	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 11	DSI 2	21100	2535	13.42	14.50	1.282	-	-	0.12	0.137	0.176
LTE Band 7A	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 11	DSI 2	21100	2535	13.42	14.50	1.282	-	-	0.07	0.024	0.031
LTE Band 7A	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 11	DSI 2	21100	2535	13.38	14.50	1.294	-	-	-0.14	0.231	0.299
LTE Band 7A	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 11	DSI 2	21100	2535	13.38	14.50	1.294	-	-	-0.19	0.038	0.049
LTE Band 7A	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 11	DSI 2	21100	2535	13.38	14.50	1.294	-	-	-0.02	0.133	0.172
LTE Band 7A	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 11	DSI 2	21100	2535	13.38	14.50	1.294	-	-	0.17	0.023	0.030
LTE Band 7A	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 11	DSI 3	21100	2535	11.42	12.50	1.282	-	-	0.05	0.153	0.196
LTE Band 7A	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 11	DSI 3	21100	2535	11.42	12.50	1.282	-	-	0.09	0.024	0.031
LTE Band 7A	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 11	DSI 3	21100	2535	11.42	12.50	1.282	-	-	-0.01	0.088	0.113
LTE Band 7A	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 11	DSI 3	21100	2535	11.42	12.50	1.282	-	-	0.01	0.015	0.019
LTE Band 7A	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 11	DSI 3	21100	2535	11.38	12.50	1.294	-	-	-0.09	0.150	0.194
LTE Band 7A	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 11	DSI 3	21100	2535	11.38	12.50	1.294	-	-	0.03	0.025	0.032
LTE Band 7A	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 11	DSI 3	21100	2535	11.38	12.50	1.294	-	-	0.15	0.086	0.111
LTE Band 7A	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 11	DSI 3	21100	2535	11.38	12.50	1.294	-	-	-0.07	0.015	0.019
LTE Band 7A	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	21100	2535	11.11	12.00	1.227	-	-	-0.09	0.202	0.248
LTE Band 7A	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	21100	2535	11.11	12.00	1.227	-	-	0.09	0.243	0.298
LTE Band 7A	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 2	21100	2535	11.11	12.00	1.227	-	-	0.05	0.077	0.095
LTE Band 7A	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 2	21100	2535	11.11	12.00	1.227	-	-	-0.07	0.100	0.123
LTE Band 7A	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 2	21100	2535	11.07	12.00	1.239	-	-	-0.02	0.204	0.253
LTE Band 7A	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 2	21100	2535	11.07	12.00	1.239	-	-	0.02	0.246	0.305
LTE Band 7A	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 2	21100	2535	11.07	12.00	1.239	-	-	0.01	0.080	0.099
LTE Band 7A	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 2	21100	2535	11.07	12.00	1.239	-	-	-0.12	0.105	0.130
LTE Band 7A	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 3	21100	2535	9.11	10.00	1.227	-	-	0.05	0.124	0.152
LTE Band 7A	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 3	21100	2535	9.11	10.00	1.227	-	-	-0.11	0.149	0.183
LTE Band 7A	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 3	21100	2535	9.11	10.00	1.227	-	-	0.07	0.047	0.058
LTE Band 7A	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 3	21100	2535	9.11	10.00	1.227	-	-	0.02	0.062	0.076
LTE Band 7A	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 3	21100	2535	9.07	10.00	1.239	-	-	-0.03	0.127	0.157
LTE Band 7A	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 3	21100	2535	9.07	10.00	1.239	-	-	-0.01	0.153	0.190
LTE Band 7A	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 3	21100	2535	9.07	10.00	1.239	-	-	0.07	0.050	0.062
LTE Band 7A	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 3	21100	2535	9.07	10.00	1.239	-	-	0.09	0.065	0.081
LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 31	DSI 2/3	21100	2535	22.29	23.50	1.321	-	-	0.06	0.227	0.300
LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 31	DSI 2/3	21100	2535	22.29	23.50	1.321	-	-	-0.08	0.135	0.178
LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 31	DSI 2/3	21100	2535	22.29	23.50	1.321	-	-	-0.02	0.127	0.168
LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 31	DSI 2/3	21100	2535	22.29	23.50	1.321	-	-	0.12	0.108	0.143
LTE Band 7	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 31	DSI 2/3	21100	2535	21.25	22.50	1.334	-	-	-0.07	0.177	0.236
LTE Band 7	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 31	DSI 2/3	21100	2535	21.25	22.50	1.334	-	-	0	0.101	0.135
LTE Band 7	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 31	DSI 2/3	21100	2535	21.25	22.50	1.334	-	-	-0.01	0.103	0.137
LTE Band 7	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 31	DSI 2/3	21100	2535	21.25	22.50	1.334	-	-	-0.11	0.084	0.112
LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 2	40620	2593	13.31	14.40	1.285	62.9	1.006	0.12	0.251	0.325
LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 2	40620	2593	13.31	14.40	1.285	62.9	1.006	-0.06	0.284	0.367



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LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 2	40620	2593	13.31	14.40	1.285	62.9	1.006	-0.01	0.089	0.115
LTE Band 41	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 2	40620	2593	13.31	14.40	1.285	62.9	1.006	-0.18	0.109	0.141
LTE Band 41	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 2	40620	2593	13.26	14.40	1.300	62.9	1.006	-0.16	0.253	0.331
LTE Band 41	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 2	40620	2593	13.26	14.40	1.300	62.9	1.006	0.16	0.282	0.369
LTE Band 41	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 2	40620	2593	13.26	14.40	1.300	62.9	1.006	0.19	0.091	0.119
LTE Band 41	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 2	40620	2593	13.26	14.40	1.300	62.9	1.006	-0.16	0.114	0.149
LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	DSI 3	40620	2593	10.34	11.40	1.276	62.9	1.006	-0.06	0.113	0.145
LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	DSI 3	40620	2593	10.34	11.40	1.276	62.9	1.006	-0.19	0.123	0.158
LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	DSI 3	40620	2593	10.34	11.40	1.276	62.9	1.006	-0.16	0.043	0.055
LTE Band 41	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	DSI 3	40620	2593	10.34	11.40	1.276	62.9	1.006	0.08	0.051	0.065
LTE Band 41	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 13	DSI 3	40620	2593	10.32	11.40	1.282	62.9	1.006	-0.02	0.115	0.148
LTE Band 41	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 13	DSI 3	40620	2593	10.32	11.40	1.282	62.9	1.006	-0.07	0.124	0.160
LTE Band 41	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 13	DSI 3	40620	2593	10.32	11.40	1.282	62.9	1.006	0.09	0.039	0.050
LTE Band 41	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 13	DSI 3	40620	2593	10.32	11.40	1.282	62.9	1.006	-0.19	0.047	0.061
LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 31	DSI 2/3	40620	2593	22.83	23.80	1.250	62.9	1.006	-0.03	0.178	0.224
LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 31	DSI 2/3	40620	2593	22.83	23.80	1.250	62.9	1.006	-0.1	0.093	0.117
LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 31	DSI 2/3	40620	2593	22.83	23.80	1.250	62.9	1.006	0.02	0.099	0.125
LTE Band 41	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 31	DSI 2/3	40620	2593	22.83	23.80	1.250	62.9	1.006	0.02	0.060	0.075
LTE Band 41	20M	QPSK	50	24	-	Right Cheek	0mm	Ant 31	DSI 2/3	40620	2593	21.75	22.80	1.274	62.9	1.006	0.02	0.135	0.173
LTE Band 41	20M	QPSK	50	24	-	Right Tilted	0mm	Ant 31	DSI 2/3	40620	2593	21.75	22.80	1.274	62.9	1.006	-0.02	0.072	0.092
LTE Band 41	20M	QPSK	50	24	-	Left Cheek	0mm	Ant 31	DSI 2/3	40620	2593	21.75	22.80	1.274	62.9	1.006	-0.1	0.071	0.091
LTE Band 41	20M	QPSK	50	24	-	Left Tilted	0mm	Ant 31	DSI 2/3	40620	2593	21.75	22.80	1.274	62.9	1.006	-0.1	0.046	0.059
FR1 n7	20M	BPSK	1	53	DFT-15	Right Cheek	0mm	Ant 11	DSI 2	507000	2535	15.42	16.00	1.143	-	-	0.05	0.255	0.291
FR1 n7	20M	BPSK	1	53	DFT-15	Right Tilted	0mm	Ant 11	DSI 2	507000	2535	15.42	16.00	1.143	-	-	-0.12	0.060	0.069
FR1 n7	20M	BPSK	1	53	DFT-15	Left Cheek	0mm	Ant 11	DSI 2	507000	2535	15.42	16.00	1.143	-	-	-0.18	0.180	0.206
FR1 n7	20M	BPSK	1	53	DFT-15	Left Tilted	0mm	Ant 11	DSI 2	507000	2535	15.42	16.00	1.143	-	-	0.16	0.048	0.055
FR1 n7	20M	BPSK	50	28	DFT-15	Right Cheek	0mm	Ant 11	DSI 2	507000	2535	15.41	16.00	1.146	-	-	0.11	0.252	0.289
FR1 n7	20M	BPSK	50	28	DFT-15	Right Tilted	0mm	Ant 11	DSI 2	507000	2535	15.41	16.00	1.146	-	-	0.03	0.064	0.073
FR1 n7	20M	BPSK	50	28	DFT-15	Left Cheek	0mm	Ant 11	DSI 2	507000	2535	15.41	16.00	1.146	-	-	-0.03	0.184	0.211
FR1 n7	20M	BPSK	50	28	DFT-15	Left Tilted	0mm	Ant 11	DSI 2	507000	2535	15.41	16.00	1.146	-	-	-0.13	0.044	0.050
FR1 n7	20M	BPSK	1	53	DFT-15	Right Cheek	0mm	Ant 11	DSI 3	507000	2535	12.41	13.00	1.146	-	-	-0.12	0.139	0.159
FR1 n7	20M	BPSK	1	53	DFT-15	Right Tilted	0mm	Ant 11	DSI 3	507000	2535	12.41	13.00	1.146	-	-	-0.01	0.028	0.032
FR1 n7	20M	BPSK	1	53	DFT-15	Left Cheek	0mm	Ant 11	DSI 3	507000	2535	12.41	13.00	1.146	-	-	-0.06	0.092	0.105
FR1 n7	20M	BPSK	1	53	DFT-15	Left Tilted	0mm	Ant 11	DSI 3	507000	2535	12.41	13.00	1.146	-	-	-0.06	0.022	0.025
FR1 n7	20M	BPSK	50	28	DFT-15	Right Cheek	0mm	Ant 11	DSI 3	507000	2535	12.35	13.00	1.161	-	-	-0.18	0.131	0.152
FR1 n7	20M	BPSK	50	28	DFT-15	Right Tilted	0mm	Ant 11	DSI 3	507000	2535	12.35	13.00	1.161	-	-	-0.1	0.027	0.031
FR1 n7	20M	BPSK	50	28	DFT-15	Left Cheek	0mm	Ant 11	DSI 3	507000	2535	12.35	13.00	1.161	-	-	0.19	0.101	0.117
FR1 n7	20M	BPSK	50	28	DFT-15	Left Tilted	0mm	Ant 11	DSI 3	507000	2535	12.35	13.00	1.161	-	-	-0.07	0.019	0.022
FR1 n7	20M	BPSK	1	53	DFT-15	Right Cheek	0mm	Ant 13	DSI 2	507000	2535	11.83	13.30	1.403	-	-	-0.19	0.256	0.359
FR1 n7	20M	BPSK	1	53	DFT-15	Right Tilted	0mm	Ant 13	DSI 2	507000	2535	11.83	13.30	1.403	-	-	0.1	0.298	0.418
FR1 n7	20M	BPSK	1	53	DFT-15	Left Cheek	0mm	Ant 13	DSI 2	507000	2535	11.83	13.30	1.403	-	-	-0.15	0.113	0.159
FR1 n7	20M	BPSK	1	53	DFT-15	Left Tilted	0mm	Ant 13	DSI 2	507000	2535	11.83	13.30	1.403	-	-	-0.05	0.134	0.188
FR1 n7	20M	BPSK	50	28	DFT-15	Right Cheek	0mm	Ant 13	DSI 2	507000	2535	11.78	13.30	1.419	-	-	0.16	0.258	0.366
FR1 n7	20M	BPSK	50	28	DFT-15	Right Tilted	0mm	Ant 13	DSI 2	507000	2535	11.78	13.30	1.419	-	-	0.01	0.327	0.464
FR1 n7	20M	BPSK	50	28	DFT-15	Left Cheek	0mm	Ant 13	DSI 2	507000	2535	11.78	13.30	1.419	-	-	0.09	0.112	0.159
FR1 n7	20M	BPSK	50	28	DFT-15	Left Tilted	0mm	Ant 13	DSI 2	507000	2535	11.78	13.30	1.419	-	-	-0.04	0.137	0.194
FR1 n7	20M	BPSK	1	53	DFT-15	Right Cheek	0mm	Ant 13	DSI 3	507000	2535	8.79	10.30	1.416	-	-	-0.19	0.131	0.185
FR1 n7	20M	BPSK	1	53	DFT-15	Right Tilted	0mm	Ant 13	DSI 3	507000	2535	8.79	10.30	1.416	-	-	-0.17	0.159	0.225
FR1 n7	20M	BPSK	1	53	DFT-15	Left Cheek	0mm	Ant 13	DSI 3	507000	2535	8.79	10.30	1.416	-	-	0.04	0.060	0.085
FR1 n7	20M	BPSK	1	53	DFT-15	Left Tilted	0mm	Ant 13	DSI 3	507000	2535	8.79	10.30	1.416	-	-	0.11	0.072	0.102
FR1 n7	20M	BPSK	50	28	DFT-15	Right Cheek	0mm	Ant 13	DSI 3	507000	2535	8.77	10.30	1.422	-	-	-0.15	0.129	0.183
FR1 n7	20M	BPSK	50	28	DFT-15	Right Tilted	0mm	Ant 13	DSI 3	507000	2535	8.77	10.30	1.422	-	-	0.13	0.146	0.208
FR1 n7	20M	BPSK	50	28	DFT-15	Left Cheek	0mm	Ant 13	DSI 3	507000	2535	8.77	10.30	1.422	-	-	-0.11	0.060	0.085
FR1 n7	20M	BPSK	50	28	DFT-15	Left Tilted	0mm	Ant 13	DSI 3	507000	2535	8.77	10.30	1.422	-	-	-0.15	0.073	0.104
3500-3900MHz																			
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 11	DSI 2	633334	3500.01	14.15	15.30	1.303	-	-	-0.1	0.290	0.378



FCC SAR Test Report

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Table with columns: Device Model, Power, Modulation, Channels, Frequency, Location, Height, Antenna, DSI, EIRP, Max. Power, Max. Power Density, Max. Power Spectral Density, and SAR values.



FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	DSI 3	650000	3750	9.11	10.80	1.476	-	-	-0.18	0.008	0.012
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	DSI 3	650000	3750	9.11	10.80	1.476	-	-	-0.15	0.130	0.192
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	DSI 3	650000	3750	9.11	10.80	1.476	-	-	0.15	0.038	0.056
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	DSI 3	650000	3750	9.04	10.80	1.500	-	-	0.01	0.031	0.046
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	DSI 3	650000	3750	9.04	10.80	1.500	-	-	0.12	0.013	0.019
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	DSI 3	650000	3750	9.04	10.80	1.500	-	-	-0.15	0.140	0.210
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	DSI 3	650000	3750	9.04	10.80	1.500	-	-	0.01	0.038	0.057

<EN-DC SRS SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Measured Plimit (dBm)	Reported Plimit (dBm)	Reported Pmax (dBm)	Duty Cycle %	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 12	DSI 2	633334	3500.01	12.32	14.00	21.500	8.5	0.1	0.152	0.107	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 12	DSI 2	633334	3500.01	12.32	14.00	21.500	8.5	-0.17	0.103	0.072	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 12	DSI 2	633334	3500.01	12.32	14.00	21.500	8.5	-0.08	0.054	0.038	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 12	DSI 2	633334	3500.01	12.32	14.00	21.500	8.5	0.09	0.050	0.035	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 12	DSI 2	633334	3500.01	12.25	14.00	21.500	8.5	-0.04	0.151	0.108	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 12	DSI 2	633334	3500.01	12.25	14.00	21.500	8.5	0.06	0.101	0.072	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 12	DSI 2	633334	3500.01	12.25	14.00	21.500	8.5	0.16	0.053	0.038	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 12	DSI 2	633334	3500.01	12.25	14.00	21.500	8.5	-0.04	0.050	0.036	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 12	DSI 3	633334	3500.01	9.31	11.00	21.500	8.5	0.06	0.078	0.110	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 12	DSI 3	633334	3500.01	9.31	11.00	21.500	8.5	0.16	0.052	0.073	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 12	DSI 3	633334	3500.01	9.31	11.00	21.500	8.5	-0.12	0.022	0.031	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 12	DSI 3	633334	3500.01	9.31	11.00	21.500	8.5	-0.15	0.021	0.030	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 12	DSI 3	633334	3500.01	9.24	11.00	21.500	8.5	-0.08	0.075	0.107	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 12	DSI 3	633334	3500.01	9.24	11.00	21.500	8.5	0.09	0.051	0.073	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 12	DSI 3	633334	3500.01	9.24	11.00	21.500	8.5	-0.06	0.021	0.030	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 12	DSI 3	633334	3500.01	9.24	11.00	21.500	8.5	0.02	0.018	0.026	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 12	DSI 2	650000	3750	12.73	14.00	21.500	8.5	0.11	0.378	0.242	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 12	DSI 2	650000	3750	12.73	14.00	21.500	8.5	0.05	0.211	0.135	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 12	DSI 2	650000	3750	12.73	14.00	21.500	8.5	-0.14	0.135	0.086	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 12	DSI 2	650000	3750	12.73	14.00	21.500	8.5	0.08	0.123	0.079	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 12	DSI 2	650000	3750	12.72	14.00	21.500	8.5	-0.1	0.373	0.239	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 12	DSI 2	650000	3750	12.72	14.00	21.500	8.5	-0.07	0.208	0.134	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 12	DSI 2	650000	3750	12.72	14.00	21.500	8.5	0.14	0.132	0.085	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 12	DSI 2	650000	3750	12.72	14.00	21.500	8.5	-0.15	0.120	0.077	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 12	DSI 3	650000	3750	9.74	11.00	21.500	8.5	-0.19	0.191	0.243	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 12	DSI 3	650000	3750	9.74	11.00	21.500	8.5	-0.06	0.102	0.130	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 12	DSI 3	650000	3750	9.74	11.00	21.500	8.5	0.09	0.075	0.096	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 12	DSI 3	650000	3750	9.74	11.00	21.500	8.5	-0.19	0.061	0.078	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 12	DSI 3	650000	3750	9.67	11.00	21.500	8.5	-0.07	0.187	0.242	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 12	DSI 3	650000	3750	9.67	11.00	21.500	8.5	-0.07	0.098	0.127	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 12	DSI 3	650000	3750	9.67	11.00	21.500	8.5	-0.07	0.091	0.118	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 12	DSI 3	650000	3750	9.67	11.00	21.500	8.5	0.11	0.058	0.075	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	DSI 2	633334	3500.01	16.41	18.00	22.500	8.5	-0.02	0.206	0.071	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	DSI 2	633334	3500.01	16.41	18.00	22.500	8.5	0.11	0.157	0.054	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	DSI 2	633334	3500.01	16.41	18.00	22.500	8.5	0.13	0.250	0.086	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	DSI 2	633334	3500.01	16.41	18.00	22.500	8.5	-0.08	0.235	0.081	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	DSI 2	633334	3500.01	16.33	18.00	22.500	8.5	-0.07	0.188	0.066	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	DSI 2	633334	3500.01	16.33	18.00	22.500	8.5	-0.11	0.132	0.046	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	DSI 2	633334	3500.01	16.33	18.00	22.500	8.5	-0.05	0.232	0.082	
FR1 n78 (Part 270)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	DSI 2	633334	3500.01	16.33	18.00	22.500	8.5	0.06	0.236	0.083	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	DSI 3	633334	3500.01	13.41	15.00	22.500	8.5	0.02	0.072	0.050	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	DSI 3	633334	3500.01	13.41	15.00	22.500	8.5	0.06	0.076	0.052	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	DSI 3	633334	3500.01	13.41	15.00	22.500	8.5	-0.14	0.129	0.089	
FR1 n78 (Part 270)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	DSI 3	633334	3500.01	13.41	15.00	22.500	8.5	-0.1	0.122	0.084	



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FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	DSI 3	633334	3500.01	13.38	15.00	22.500	8.5	-0.14	0.082	0.057
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	DSI 3	633334	3500.01	13.38	15.00	22.500	8.5	0.05	0.092	0.064
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	DSI 3	633334	3500.01	13.38	15.00	22.500	8.5	0.08	0.113	0.078
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	DSI 3	633334	3500.01	13.38	15.00	22.500	8.5	-0.06	0.116	0.081
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	DSI 2	650000	3750	16.38	18.00	22.500	8.5	0.19	0.262	0.091
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	DSI 2	650000	3750	16.38	18.00	22.500	8.5	-0.16	0.228	0.079
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	DSI 2	650000	3750	16.38	18.00	22.500	8.5	-0.19	0.381	0.133
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	DSI 2	650000	3750	16.38	18.00	22.500	8.5	0.08	0.380	0.132
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	DSI 2	650000	3750	16.29	18.00	22.500	8.5	-0.16	0.264	0.094
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	DSI 2	650000	3750	16.29	18.00	22.500	8.5	0.04	0.233	0.083
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	DSI 2	650000	3750	16.29	18.00	22.500	8.5	0.07	0.323	0.115
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	DSI 2	650000	3750	16.29	18.00	22.500	8.5	0	0.377	0.134
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	DSI 3	650000	3750	13.39	15.00	22.500	8.5	0	0.118	0.082
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	DSI 3	650000	3750	13.39	15.00	22.500	8.5	0	0.144	0.100
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	DSI 3	650000	3750	13.39	15.00	22.500	8.5	-0.07	0.199	0.138
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	DSI 3	650000	3750	13.39	15.00	22.500	8.5	-0.02	0.189	0.131
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	DSI 3	650000	3750	13.34	15.00	22.500	8.5	0.13	0.133	0.093
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	DSI 3	650000	3750	13.34	15.00	22.500	8.5	0.12	0.129	0.090
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	DSI 3	650000	3750	13.34	15.00	22.500	8.5	0.19	0.189	0.132
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	DSI 3	650000	3750	13.34	15.00	22.500	8.5	0.14	0.185	0.130



15.2 Hotspot SAR

Table with columns: 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), Reported 1g SAR (W/kg). Rows include 750MHz and 835MHz sections with various test configurations.



Table with columns: LTE Band, Power, Modulation, Repetition, Duration, Frequency, Location, Antenna, Distance, Power Density, SAR values (1g, 2g, 3g, 6g, 10g, 15g, 20g, 25g, 30g, 35g, 40g, 45g, 50g, 55g, 60g, 65g, 70g, 75g, 80g, 85g, 90g, 95g, 100g). Includes rows for LTE Bands 5, 26, 4, and WCDMA IV, with specific SAR values highlighted in green.



Table with columns for LTE Band, Modulation, Power, Frequency, Position, Distance, Power Density, and SAR values. Includes rows for LTE Band 66, FR1 n66, GSM1900, and WCDMA II across various frequencies and positions.



	LTE Band 2	20M	QPSK	1	49	-	Front	10mm	Ant 31	DSI 8	18900	1880	19.60	20.50	1.230	-	-	-0.09	0.208	0.256
	LTE Band 2	20M	QPSK	1	49	-	Back	10mm	Ant 31	DSI 8	18900	1880	19.60	20.50	1.230	-	-	0.04	0.295	0.363
	LTE Band 2	20M	QPSK	1	49	-	Right Side	10mm	Ant 31	DSI 8	18900	1880	19.60	20.50	1.230	-	-	0.09	0.094	0.116
	LTE Band 2	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 31	DSI 8	18900	1880	19.60	20.50	1.230	-	-	-0.06	0.428	0.527
	LTE Band 2	20M	QPSK	50	24	-	Front	10mm	Ant 31	DSI 8	18900	1880	19.49	20.50	1.262	-	-	0.05	0.205	0.259
	LTE Band 2	20M	QPSK	50	24	-	Back	10mm	Ant 31	DSI 8	18900	1880	19.49	20.50	1.262	-	-	0.03	0.300	0.379
	LTE Band 2	20M	QPSK	50	24	-	Right Side	10mm	Ant 31	DSI 8	18900	1880	19.49	20.50	1.262	-	-	0.08	0.094	0.119
37	LTE Band 2	20M	QPSK	50	24	-	Bottom Side	10mm	Ant 31	DSI 8	18900	1880	19.49	20.50	1.262	-	-	0.09	0.450	0.568
	FR1 n2	20M	BPSK	1	53	DFT-15	Front	10mm	Ant 11	DSI 9	376000	1880	18.61	19.50	1.227	-	-	0.12	0.198	0.243
	FR1 n2	20M	BPSK	1	53	DFT-15	Back	10mm	Ant 11	DSI 9	376000	1880	18.61	19.50	1.227	-	-	-0.12	0.338	0.415
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Side	10mm	Ant 11	DSI 9	376000	1880	18.61	19.50	1.227	-	-	-0.06	0.431	0.529
	FR1 n2	20M	BPSK	1	53	DFT-15	Top Side	10mm	Ant 11	DSI 9	376000	1880	18.61	19.50	1.227	-	-	-0.12	0.054	0.066
	FR1 n2	20M	BPSK	50	28	DFT-15	Front	10mm	Ant 11	DSI 9	376000	1880	18.59	19.50	1.233	-	-	-0.09	0.192	0.237
	FR1 n2	20M	BPSK	50	28	DFT-15	Back	10mm	Ant 11	DSI 9	376000	1880	18.59	19.50	1.233	-	-	0.06	0.340	0.419
38	FR1 n2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Ant 11	DSI 9	376000	1880	18.59	19.50	1.233	-	-	0.08	0.577	0.712
	FR1 n2	20M	BPSK	50	28	DFT-15	Top Side	10mm	Ant 11	DSI 9	376000	1880	18.59	19.50	1.233	-	-	0.12	0.051	0.063
	FR1 n2	20M	BPSK	1	53	DFT-15	Front	10mm	Ant 13	DSI 10	376000	1880	18.04	19.60	1.432	-	-	-0.01	0.188	0.269
	FR1 n2	20M	BPSK	1	53	DFT-15	Back	10mm	Ant 13	DSI 10	376000	1880	18.04	19.60	1.432	-	-	0.01	0.280	0.401
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Side	10mm	Ant 13	DSI 10	376000	1880	18.04	19.60	1.432	-	-	0.1	0.090	0.129
	FR1 n2	20M	BPSK	1	53	DFT-15	Top Side	10mm	Ant 13	DSI 10	376000	1880	18.04	19.60	1.432	-	-	0.04	0.397	0.569
	FR1 n2	20M	BPSK	50	28	DFT-15	Front	10mm	Ant 13	DSI 10	376000	1880	18.01	19.60	1.442	-	-	-0.03	0.195	0.281
	FR1 n2	20M	BPSK	50	28	DFT-15	Back	10mm	Ant 13	DSI 10	376000	1880	18.01	19.60	1.442	-	-	-0.06	0.276	0.398
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Ant 13	DSI 10	376000	1880	18.01	19.60	1.442	-	-	-0.1	0.080	0.115
	FR1 n2	20M	BPSK	50	28	DFT-15	Top Side	10mm	Ant 13	DSI 10	376000	1880	18.01	19.60	1.442	-	-	0.02	0.382	0.551
2600MHz																				
	LTE Band 7	20M	QPSK	1	49	-	Front	10mm	Ant 13	DSI 10	21100	2535	15.09	16.00	1.233	-	-	-0.11	0.097	0.120
	LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 13	DSI 10	21100	2535	15.09	16.00	1.233	-	-	0.03	0.196	0.242
	LTE Band 7	20M	QPSK	1	49	-	Left Side	10mm	Ant 13	DSI 10	21100	2535	15.09	16.00	1.233	-	-	-0.04	0.061	0.075
39	LTE Band 7	20M	QPSK	1	49	-	Top Side	10mm	Ant 13	DSI 10	21100	2535	15.09	16.00	1.233	-	-	0.02	0.422	0.520
	LTE Band 7C	20M	QPSK	1	49	-	Top Side	10mm	Ant 13	DSI 10	21100 +21298	2535 +2554.8	14.96	16.00	1.271	-	-	0.05	0.357	0.454
	LTE Band 7	20M	QPSK	50	24	-	Front	10mm	Ant 13	DSI 10	21100	2535	15.04	16.00	1.247	-	-	0.09	0.094	0.117
	LTE Band 7	20M	QPSK	50	24	-	Back	10mm	Ant 13	DSI 10	21100	2535	15.04	16.00	1.247	-	-	0.02	0.199	0.248
	LTE Band 7	20M	QPSK	50	24	-	Left Side	10mm	Ant 13	DSI 10	21100	2535	15.04	16.00	1.247	-	-	0.11	0.059	0.074
	LTE Band 7	20M	QPSK	50	24	-	Top Side	10mm	Ant 13	DSI 10	21100	2535	15.04	16.00	1.247	-	-	0.08	0.358	0.447
	LTE Band 7	20M	QPSK	1	49	-	Front	10mm	Ant 31	DSI 8	21100	2535	19.35	20.50	1.303	-	-	-0.12	0.193	0.252
	LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 31	DSI 8	21100	2535	19.35	20.50	1.303	-	-	-0.02	0.319	0.416
	LTE Band 7C	20M	QPSK	1	49	-	Back	10mm	Ant 31	DSI 8	21100 +21298	2535 +2554.8	19.31	20.50	1.315	-	-	0.07	0.285	0.375
	LTE Band 7	20M	QPSK	1	49	-	Right Side	10mm	Ant 31	DSI 8	21100	2535	19.35	20.50	1.303	-	-	-0.12	0.181	0.236
	LTE Band 7	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 31	DSI 8	21100	2535	19.35	20.50	1.303	-	-	0.08	0.158	0.206
	LTE Band 7	20M	QPSK	50	24	-	Front	10mm	Ant 31	DSI 8	21100	2535	19.20	20.50	1.349	-	-	0.02	0.197	0.266
	LTE Band 7	20M	QPSK	50	24	-	Back	10mm	Ant 31	DSI 8	21100	2535	19.20	20.50	1.349	-	-	-0.06	0.270	0.364
	LTE Band 7	20M	QPSK	50	24	-	Right Side	10mm	Ant 31	DSI 8	21100	2535	19.20	20.50	1.349	-	-	0.09	0.182	0.246
	LTE Band 7	20M	QPSK	50	24	-	Bottom Side	10mm	Ant 31	DSI 8	21100	2535	19.20	20.50	1.349	-	-	-0.03	0.160	0.216
	LTE Band 41	20M	QPSK	1	49	-	Front	10mm	Ant 13	DSI 10	40620	2593	18.09	18.90	1.205	62.9	1.006	-0.09	0.126	0.153
	LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 13	DSI 10	40620	2593	18.09	18.90	1.205	62.9	1.006	-0.03	0.197	0.239
	LTE Band 41	20M	QPSK	1	49	-	Left Side	10mm	Ant 13	DSI 10	40620	2593	18.09	18.90	1.205	62.9	1.006	0.09	0.117	0.142
40	LTE Band 41	20M	QPSK	1	49	-	Top Side	10mm	Ant 13	DSI 10	40620	2593	18.09	18.90	1.205	62.9	1.006	0.11	0.420	0.509
	LTE Band 41C	20M	QPSK	1	49	-	Top Side	10mm	Ant 13	DSI 10	40620 +40422	2593 +2573.2	18.04	18.90	1.219	62.9	1.006	-0.06	0.399	0.489
	LTE Band 41	20M	QPSK	50	24	-	Front	10mm	Ant 13	DSI 10	40620	2593	17.95	18.90	1.245	62.9	1.006	-0.03	0.127	0.159
	LTE Band 41	20M	QPSK	50	24	-	Back	10mm	Ant 13	DSI 10	40620	2593	17.95	18.90	1.245	62.9	1.006	0.03	0.219	0.274
	LTE Band 41	20M	QPSK	50	24	-	Left Side	10mm	Ant 13	DSI 10	40620	2593	17.95	18.90	1.245	62.9	1.006	0.07	0.120	0.150
	LTE Band 41	20M	QPSK	50	24	-	Top Side	10mm	Ant 13	DSI 10	40620	2593	17.95	18.90	1.245	62.9	1.006	0.03	0.364	0.456
	LTE Band 41	20M	QPSK	1	49	-	Front	10mm	Ant 31	DSI 8	40620	2593	21.32	22.30	1.253	62.9	1.006	0.02	0.181	0.228
	LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 31	DSI 8	40620	2593	21.32	22.30	1.253	62.9	1.006	0.06	0.256	0.323
	LTE Band 41	20M	QPSK	1	49	-	Right Side	10mm	Ant 31	DSI 8	40620	2593	21.32	22.30	1.253	62.9	1.006	0.04	0.178	0.224
	LTE Band 41	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 31	DSI 8	40620	2593	21.32	22.30	1.253	62.9	1.006	-0.08	0.158	0.199



Table with columns for LTE Band, Frequency, Modulation, Power, Distance, Side, Antenna, and SAR values. Includes a section for 3500-3900MHz.



FCC SAR Test Report

Report No. : FA260813

Table with 20 columns (FR1 n78 Part 27Q, 100M, BPSK, 1, 137, DFT-30, Back, 10mm, Ant 11, DSI 9, 633334, 3500.01, 16.42, 17.30, 1.225, 0.1, 0.261, 0.320) and multiple rows of test data across various frequency bands (2400MHz, 5000MHz-6000MHz).



<Standalone SRS SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Measured Plimit (dBm)	Reported Plimit (dBm)	Reported Pmax (dBm)	Duty Cycle %	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 12	DSI 8	633334	3500.01	17.82	19.50	21.5	8.5	-0.14	0.141	0.028	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 12	DSI 8	633334	3500.01	17.82	19.50	21.5	8.5	-0.03	0.223	0.044	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	10mm	Ant 12	DSI 8	633334	3500.01	17.82	19.50	21.5	8.5	-0.08	0.140	0.028	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 12	DSI 8	633334	3500.01	17.82	19.50	21.5	8.5	0.08	0.103	0.020	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 12	DSI 8	633334	3500.01	17.75	19.50	21.5	8.5	0.17	0.143	0.029	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 12	DSI 8	633334	3500.01	17.75	19.50	21.5	8.5	-0.09	0.226	0.046	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	10mm	Ant 12	DSI 8	633334	3500.01	17.75	19.50	21.5	8.5	-0.06	0.137	0.028	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 12	DSI 8	633334	3500.01	17.75	19.50	21.5	8.5	0.15	0.107	0.022	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 12	DSI 8	656000	3840	18.43	19.50	21.5	8.5	-0.07	0.235	0.041	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 12	DSI 8	656000	3840	18.43	19.50	21.5	8.5	-0.15	0.295	0.051	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	10mm	Ant 12	DSI 8	656000	3840	18.43	19.50	21.5	8.5	0.04	0.247	0.043	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 12	DSI 8	656000	3840	18.43	19.50	21.5	8.5	-0.04	0.126	0.022	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 12	DSI 8	656000	3840	18.41	19.50	21.5	8.5	0.08	0.238	0.041	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 12	DSI 8	656000	3840	18.41	19.50	21.5	8.5	0.11	0.303	0.052	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	10mm	Ant 12	DSI 8	656000	3840	18.41	19.50	21.5	8.5	-0.16	0.251	0.043	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 12	DSI 8	656000	3840	18.41	19.50	21.5	8.5	-0.03	0.131	0.023	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 21	DSI 8	633334	3500.01	18.94	20.50	22.5	8.5	0.06	0.074	0.014	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 21	DSI 8	633334	3500.01	18.94	20.50	22.5	8.5	-0.1	0.064	0.012	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Side	10mm	Ant 21	DSI 8	633334	3500.01	18.94	20.50	22.5	8.5	0.02	0.015	0.003	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 21	DSI 8	633334	3500.01	18.94	20.50	22.5	8.5	-0.12	0.093	0.018	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 21	DSI 8	633334	3500.01	18.91	20.50	22.5	8.5	0.06	0.074	0.014	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 21	DSI 8	633334	3500.01	18.91	20.50	22.5	8.5	-0.01	0.064	0.012	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Side	10mm	Ant 21	DSI 8	633334	3500.01	18.91	20.50	22.5	8.5	0.09	0.013	0.003	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 21	DSI 8	633334	3500.01	18.91	20.50	22.5	8.5	0.03	0.095	0.018	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 21	DSI 8	656000	3840	18.95	20.50	22.5	8.5	0.07	0.138	0.027	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 21	DSI 8	656000	3840	18.95	20.50	22.5	8.5	-0.06	0.165	0.032	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Side	10mm	Ant 21	DSI 8	656000	3840	18.95	20.50	22.5	8.5	-0.11	0.039	0.008	
FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 21	DSI 8	656000	3840	18.95	20.50	22.5	8.5	0.08	0.213	0.041	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 21	DSI 8	656000	3840	18.93	20.50	22.5	8.5	-0.03	0.144	0.028	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 21	DSI 8	656000	3840	18.93	20.50	22.5	8.5	0.1	0.178	0.034	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Side	10mm	Ant 21	DSI 8	656000	3840	18.93	20.50	22.5	8.5	0.13	0.037	0.007	
FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 21	DSI 8	656000	3840	18.93	20.50	22.5	8.5	-0.01	0.299	0.058	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 12	DSI 8	633334	3500.01	18.40	19.50	21.5	8.5	-0.08	0.145	0.025	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 12	DSI 8	633334	3500.01	18.40	19.50	21.5	8.5	0.13	0.252	0.044	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	10mm	Ant 12	DSI 8	633334	3500.01	18.40	19.50	21.5	8.5	0.05	0.136	0.024	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 12	DSI 8	633334	3500.01	18.40	19.50	21.5	8.5	-0.08	0.113	0.020	
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 12	DSI 8	633334	3500.01	18.39	19.50	21.5	8.5	-0.01	0.151	0.026	
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 12	DSI 8	633334	3500.01	18.39	19.50	21.5	8.5	-0.05	0.256	0.045	
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	10mm	Ant 12	DSI 8	633334	3500.01	18.39	19.50	21.5	8.5	0.17	0.137	0.024	
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 12	DSI 8	633334	3500.01	18.39	19.50	21.5	8.5	0.1	0.115	0.020	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 12	DSI 8	650000	3750	18.38	19.50	21.5	8.5	0.11	0.273	0.048	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 12	DSI 8	650000	3750	18.38	19.50	21.5	8.5	0.12	0.508	0.089	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	10mm	Ant 12	DSI 8	650000	3750	18.38	19.50	21.5	8.5	-0.16	0.225	0.039	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 12	DSI 8	650000	3750	18.38	19.50	21.5	8.5	-0.19	0.237	0.041	
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 12	DSI 8	650000	3750	18.36	19.50	21.5	8.5	-0.08	0.280	0.049	
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 12	DSI 8	650000	3750	18.36	19.50	21.5	8.5	-0.17	0.511	0.090	
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	10mm	Ant 12	DSI 8	650000	3750	18.36	19.50	21.5	8.5	0.06	0.228	0.040	
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 12	DSI 8	650000	3750	18.36	19.50	21.5	8.5	0.03	0.240	0.042	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 21	DSI 8	633334	3500.01	19.01	20.50	22.5	8.5	-0.02	0.068	0.013	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 21	DSI 8	633334	3500.01	19.01	20.50	22.5	8.5	-0.07	0.061	0.012	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Side	10mm	Ant 21	DSI 8	633334	3500.01	19.01	20.50	22.5	8.5	-0.1	0.038	0.007	
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 21	DSI 8	633334	3500.01	19.01	20.50	22.5	8.5	0.07	0.108	0.021	



FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 21	DSI 8	633334	3500.01	19.01	20.50	22.5	8.5	0.11	0.068	0.013
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 21	DSI 8	633334	3500.01	19.01	20.50	22.5	8.5	-0.12	0.059	0.011
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Side	10mm	Ant 21	DSI 8	633334	3500.01	19.01	20.50	22.5	8.5	-0.12	0.035	0.007
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 21	DSI 8	633334	3500.01	19.01	20.50	22.5	8.5	0.12	0.107	0.020
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 21	DSI 8	650000	3750	19.08	20.50	22.5	8.5	-0.03	0.114	0.021
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 21	DSI 8	650000	3750	19.08	20.50	22.5	8.5	-0.1	0.145	0.027
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Right Side	10mm	Ant 21	DSI 8	650000	3750	19.08	20.50	22.5	8.5	-0.1	0.047	0.009
FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 21	DSI 8	650000	3750	19.08	20.50	22.5	8.5	0.04	0.177	0.033
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 21	DSI 8	650000	3750	19.00	20.50	22.5	8.5	-0.01	0.112	0.021
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 21	DSI 8	650000	3750	19.00	20.50	22.5	8.5	-0.12	0.142	0.027
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Right Side	10mm	Ant 21	DSI 8	650000	3750	19.00	20.50	22.5	8.5	0.07	0.048	0.009
FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 21	DSI 8	650000	3750	19.00	20.50	22.5	8.5	0.04	0.224	0.043



<EN-DC SAR>

Table with columns: 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), Reported 1g SAR (W/kg). Rows are grouped by frequency bands: 835MHz and 1750MHz.



LTE Band 66	20M	QPSK	1	49	-	Back	10mm	Ant 31	DSI 8	132322	1745	16.02	17.20	1.312	-	-	0.06	0.185	0.243
LTE Band 66	20M	QPSK	1	49	-	Right Side	10mm	Ant 31	DSI 8	132322	1745	16.02	17.20	1.312	-	-	-0.11	0.040	0.052
LTE Band 66	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 31	DSI 8	132322	1745	16.02	17.20	1.312	-	-	0.03	0.213	0.279
LTE Band 66	20M	QPSK	50	24	-	Front	10mm	Ant 31	DSI 8	132322	1745	15.93	17.20	1.340	-	-	-0.15	0.126	0.169
LTE Band 66	20M	QPSK	50	24	-	Back	10mm	Ant 31	DSI 8	132322	1745	15.93	17.20	1.340	-	-	-0.13	0.191	0.256
LTE Band 66	20M	QPSK	50	24	-	Right Side	10mm	Ant 31	DSI 8	132322	1745	15.93	17.20	1.340	-	-	-0.04	0.039	0.052
LTE Band 66	20M	QPSK	50	24	-	Bottom Side	10mm	Ant 31	DSI 8	132322	1745	15.93	17.20	1.340	-	-	0.14	0.196	0.263
FR1 n66	40M	BPSK	1	108	DFT-15	Front	10mm	Ant 11	DSI 9	349000	1745	15.85	16.50	1.161	-	-	0.04	0.082	0.095
FR1 n66	40M	BPSK	1	108	DFT-15	Back	10mm	Ant 11	DSI 9	349000	1745	15.85	16.50	1.161	-	-	-0.12	0.135	0.157
FR1 n66	40M	BPSK	1	108	DFT-15	Left Side	10mm	Ant 11	DSI 9	349000	1745	15.85	16.50	1.161	-	-	0.05	0.179	0.208
FR1 n66	40M	BPSK	1	108	DFT-15	Top Side	10mm	Ant 11	DSI 9	349000	1745	15.85	16.50	1.161	-	-	0.09	0.022	0.026
FR1 n66	40M	BPSK	108	54	DFT-15	Front	10mm	Ant 11	DSI 9	349000	1745	15.76	16.50	1.186	-	-	0.19	0.087	0.103
FR1 n66	40M	BPSK	108	54	DFT-15	Back	10mm	Ant 11	DSI 9	349000	1745	15.76	16.50	1.186	-	-	0.16	0.139	0.165
FR1 n66	40M	BPSK	108	54	DFT-15	Left Side	10mm	Ant 11	DSI 9	349000	1745	15.76	16.50	1.186	-	-	0.03	0.183	0.217
FR1 n66	40M	BPSK	108	54	DFT-15	Top Side	10mm	Ant 11	DSI 9	349000	1745	15.76	16.50	1.186	-	-	0.11	0.021	0.025
FR1 n66	40M	BPSK	1	108	DFT-15	Front	10mm	Ant 13	DSI 10	349000	1745	16.70	18.10	1.380	-	-	-0.16	0.098	0.135
FR1 n66	40M	BPSK	1	108	DFT-15	Back	10mm	Ant 13	DSI 10	349000	1745	16.70	18.10	1.380	-	-	0.01	0.124	0.171
FR1 n66	40M	BPSK	1	108	DFT-15	Left Side	10mm	Ant 13	DSI 10	349000	1745	16.70	18.10	1.380	-	-	0.03	0.034	0.047
FR1 n66	40M	BPSK	108	108	DFT-15	Top Side	10mm	Ant 13	DSI 10	349000	1745	16.70	18.10	1.380	-	-	0.02	0.145	0.200
FR1 n66	40M	BPSK	108	54	DFT-15	Front	10mm	Ant 13	DSI 10	349000	1745	16.67	18.10	1.390	-	-	-0.04	0.095	0.132
FR1 n66	40M	BPSK	108	54	DFT-15	Back	10mm	Ant 13	DSI 10	349000	1745	16.67	18.10	1.390	-	-	0.03	0.111	0.154
FR1 n66	40M	BPSK	108	54	DFT-15	Left Side	10mm	Ant 13	DSI 10	349000	1745	16.67	18.10	1.390	-	-	0.13	0.032	0.044
FR1 n66	40M	BPSK	108	54	DFT-15	Top Side	10mm	Ant 13	DSI 10	349000	1745	16.67	18.10	1.390	-	-	0.19	0.147	0.204
1900MHz																			
LTE Band 2	20M	QPSK	1	49	-	Front	10mm	Ant 13	DSI 10	18900	1880	15.58	16.50	1.236	-	-	0.03	0.099	0.122
LTE Band 2	20M	QPSK	1	49	-	Back	10mm	Ant 13	DSI 10	18900	1880	15.58	16.50	1.236	-	-	0.1	0.131	0.162
LTE Band 2	20M	QPSK	1	49	-	Left Side	10mm	Ant 13	DSI 10	18900	1880	15.58	16.50	1.236	-	-	-0.17	0.047	0.058
LTE Band 2	20M	QPSK	1	49	-	Top Side	10mm	Ant 13	DSI 10	18900	1880	15.58	16.50	1.236	-	-	0.05	0.195	0.241
LTE Band 2	20M	QPSK	50	24	-	Front	10mm	Ant 13	DSI 10	18900	1880	15.54	16.50	1.247	-	-	0.07	0.095	0.119
LTE Band 2	20M	QPSK	50	24	-	Back	10mm	Ant 13	DSI 10	18900	1880	15.54	16.50	1.247	-	-	-0.01	0.127	0.158
LTE Band 2	20M	QPSK	50	24	-	Left Side	10mm	Ant 13	DSI 10	18900	1880	15.54	16.50	1.247	-	-	0.01	0.044	0.055
LTE Band 2	20M	QPSK	50	24	-	Top Side	10mm	Ant 13	DSI 10	18900	1880	15.54	16.50	1.247	-	-	0.17	0.189	0.236
LTE Band 2	20M	QPSK	1	49	-	Front	10mm	Ant 31	DSI 8	18900	1880	16.49	17.50	1.262	-	-	0.02	0.097	0.122
LTE Band 2	20M	QPSK	1	49	-	Back	10mm	Ant 31	DSI 8	18900	1880	16.49	17.50	1.262	-	-	0.14	0.134	0.169
LTE Band 2	20M	QPSK	1	49	-	Right Side	10mm	Ant 31	DSI 8	18900	1880	16.49	17.50	1.262	-	-	-0.19	0.042	0.053
LTE Band 2	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 31	DSI 8	18900	1880	16.49	17.50	1.262	-	-	-0.04	0.184	0.232
LTE Band 2	20M	QPSK	50	24	-	Front	10mm	Ant 31	DSI 8	18900	1880	16.41	17.50	1.285	-	-	0.02	0.092	0.118
LTE Band 2	20M	QPSK	50	24	-	Back	10mm	Ant 31	DSI 8	18900	1880	16.41	17.50	1.285	-	-	-0.05	0.138	0.177
LTE Band 2	20M	QPSK	50	24	-	Right Side	10mm	Ant 31	DSI 8	18900	1880	16.41	17.50	1.285	-	-	0.12	0.041	0.053
LTE Band 2	20M	QPSK	50	24	-	Bottom Side	10mm	Ant 31	DSI 8	18900	1880	16.41	17.50	1.285	-	-	0.08	0.189	0.243
2600MHz																			
LTE Band 7	20M	QPSK	1	49	-	Front	10mm	Ant 13	DSI 10	21100	2535	12.03	13.00	1.250	-	-	0.17	0.055	0.069
LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 13	DSI 10	21100	2535	12.03	13.00	1.250	-	-	-0.07	0.157	0.196
LTE Band 7	20M	QPSK	1	49	-	Left Side	10mm	Ant 13	DSI 10	21100	2535	12.03	13.00	1.250	-	-	-0.08	0.032	0.040
LTE Band 7	20M	QPSK	1	49	-	Top Side	10mm	Ant 13	DSI 10	21100	2535	12.03	13.00	1.250	-	-	-0.08	0.178	0.223
LTE Band 7	20M	QPSK	50	24	-	Front	10mm	Ant 13	DSI 10	21100	2535	12.00	13.00	1.259	-	-	0.08	0.052	0.065
LTE Band 7	20M	QPSK	50	24	-	Back	10mm	Ant 13	DSI 10	21100	2535	12.00	13.00	1.259	-	-	0.19	0.159	0.200
LTE Band 7	20M	QPSK	50	24	-	Left Side	10mm	Ant 13	DSI 10	21100	2535	12.00	13.00	1.259	-	-	0.15	0.031	0.039
LTE Band 7	20M	QPSK	50	24	-	Top Side	10mm	Ant 13	DSI 10	21100	2535	12.00	13.00	1.259	-	-	-0.13	0.192	0.242
LTE Band 7	20M	QPSK	1	49	-	Front	10mm	Ant 31	DSI 8	21100	2535	16.29	17.50	1.321	-	-	-0.05	0.083	0.110
LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 31	DSI 8	21100	2535	16.29	17.50	1.321	-	-	-0.02	0.110	0.145
LTE Band 7	20M	QPSK	1	49	-	Right Side	10mm	Ant 31	DSI 8	21100	2535	16.29	17.50	1.321	-	-	0.03	0.073	0.096
LTE Band 7	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 31	DSI 8	21100	2535	16.29	17.50	1.321	-	-	-0.1	0.070	0.092
LTE Band 7	20M	QPSK	50	24	-	Front	10mm	Ant 31	DSI 8	21100	2535	16.25	17.50	1.334	-	-	-0.15	0.073	0.097
LTE Band 7	20M	QPSK	50	24	-	Back	10mm	Ant 31	DSI 8	21100	2535	16.25	17.50	1.334	-	-	0.06	0.113	0.151
LTE Band 7	20M	QPSK	50	24	-	Right Side	10mm	Ant 31	DSI 8	21100	2535	16.25	17.50	1.334	-	-	0.01	0.071	0.095



Table with columns for band, power, modulation, channel, frequency, polarization, antenna, antenna type, antenna position, antenna diameter, antenna gain, antenna height, antenna distance, antenna angle, antenna orientation, antenna type, antenna gain, antenna height, antenna distance, antenna angle, antenna orientation. Includes sections for LTE Bands 7, 41, and FR1 n7/n78.



FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	10mm	Ant 11	DSI 9	633334	3500.01	13.78	14.80	1.265	-	-	-0.03	0.293	0.371
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 11	DSI 9	633334	3500.01	13.78	14.80	1.265	-	-	-0.1	0.019	0.024
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 11	DSI 9	650000	3750	13.59	14.80	1.321	-	-	-0.14	0.064	0.085
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 11	DSI 9	650000	3750	13.59	14.80	1.321	-	-	-0.1	0.201	0.266
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	10mm	Ant 11	DSI 9	650000	3750	13.59	14.80	1.321	-	-	-0.11	0.276	0.365
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 11	DSI 9	650000	3750	13.59	14.80	1.321	-	-	-0.14	0.013	0.017
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 11	DSI 9	650000	3750	13.51	14.80	1.346	-	-	0.03	0.069	0.093
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 11	DSI 9	650000	3750	13.51	14.80	1.346	-	-	-0.14	0.215	0.289
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	10mm	Ant 11	DSI 9	650000	3750	13.51	14.80	1.346	-	-	-0.14	0.285	0.384
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 11	DSI 9	650000	3750	13.51	14.80	1.346	-	-	0.05	0.012	0.016
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 23	DSI 8	633334	3500.01	11.22	12.30	1.282	-	-	-0.03	0.058	0.074
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 23	DSI 8	633334	3500.01	11.22	12.30	1.282	-	-	-0.05	0.096	0.123
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Side	10mm	Ant 23	DSI 8	633334	3500.01	11.22	12.30	1.282	-	-	0.09	0.108	0.138
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 23	DSI 8	633334	3500.01	11.22	12.30	1.282	-	-	0.13	0.011	0.014
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 23	DSI 8	633334	3500.01	11.18	12.30	1.294	-	-	0.02	0.043	0.056
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 23	DSI 8	633334	3500.01	11.18	12.30	1.294	-	-	-0.08	0.063	0.082
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Side	10mm	Ant 23	DSI 8	633334	3500.01	11.18	12.30	1.294	-	-	0.15	0.113	0.146
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 23	DSI 8	633334	3500.01	11.18	12.30	1.294	-	-	-0.04	0.010	0.013
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 23	DSI 8	650000	3750	10.64	12.30	1.466	-	-	0.03	0.056	0.082
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 23	DSI 8	650000	3750	10.64	12.30	1.466	-	-	0.05	0.072	0.106
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Side	10mm	Ant 23	DSI 8	650000	3750	10.64	12.30	1.466	-	-	-0.08	0.013	0.019
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 23	DSI 8	650000	3750	10.64	12.30	1.466	-	-	0.03	0.015	0.022
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 23	DSI 8	650000	3750	10.61	12.30	1.476	-	-	-0.01	0.058	0.086
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 23	DSI 8	650000	3750	10.61	12.30	1.476	-	-	0.12	0.071	0.105
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Side	10mm	Ant 23	DSI 8	650000	3750	10.61	12.30	1.476	-	-	-0.05	0.014	0.021
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 23	DSI 8	650000	3750	10.61	12.30	1.476	-	-	0.12	0.014	0.021



<EN-DC SRS SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Measured Plimit (dBm)	Reported Plimit (dBm)	Reported Pmax (dBm)	Duty Cycle %	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 12	DSI 8	633334	3500.01	15.26	16.50	21.500	8.5	0.09	0.072	0.026
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 12	DSI 8	633334	3500.01	15.26	16.50	21.500	8.5	-0.1	0.128	0.046
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	10mm	Ant 12	DSI 8	633334	3500.01	15.26	16.50	21.500	8.5	-0.02	0.066	0.024
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 12	DSI 8	633334	3500.01	15.26	16.50	21.500	8.5	0.18	0.054	0.019
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 12	DSI 8	633334	3500.01	15.22	16.50	21.500	8.5	-0.14	0.071	0.026
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 12	DSI 8	633334	3500.01	15.22	16.50	21.500	8.5	0.12	0.124	0.045
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	10mm	Ant 12	DSI 8	633334	3500.01	15.22	16.50	21.500	8.5	0.06	0.063	0.023
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 12	DSI 8	633334	3500.01	15.22	16.50	21.500	8.5	-0.17	0.052	0.019
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 12	DSI 8	650000	3750	15.26	16.50	21.500	8.5	0.17	0.139	0.050
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 12	DSI 8	650000	3750	15.26	16.50	21.500	8.5	0.01	0.256	0.092
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	10mm	Ant 12	DSI 8	650000	3750	15.26	16.50	21.500	8.5	0.1	0.117	0.042
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 12	DSI 8	650000	3750	15.26	16.50	21.500	8.5	0.02	0.102	0.036
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 12	DSI 8	650000	3750	15.22	16.50	21.500	8.5	-0.11	0.133	0.048
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 12	DSI 8	650000	3750	15.22	16.50	21.500	8.5	0.19	0.251	0.091
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	10mm	Ant 12	DSI 8	650000	3750	15.22	16.50	21.500	8.5	0.1	0.114	0.041
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 12	DSI 8	650000	3750	15.22	16.50	21.500	8.5	-0.15	0.098	0.035
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 21	DSI 8	633334	3500.01	15.91	17.50	22.500	8.5	0.03	0.050	0.019
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 21	DSI 8	633334	3500.01	15.91	17.50	22.500	8.5	0.03	0.025	0.010
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Side	10mm	Ant 21	DSI 8	633334	3500.01	15.91	17.50	22.500	8.5	0.07	0.009	0.003
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 21	DSI 8	633334	3500.01	15.91	17.50	22.500	8.5	0.04	0.057	0.022
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 21	DSI 8	633334	3500.01	15.90	17.50	22.500	8.5	-0.03	0.043	0.017
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 21	DSI 8	633334	3500.01	15.90	17.50	22.500	8.5	-0.08	0.024	0.009
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Side	10mm	Ant 21	DSI 8	633334	3500.01	15.90	17.50	22.500	8.5	0.12	0.008	0.003
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 21	DSI 8	633334	3500.01	15.90	17.50	22.500	8.5	-0.08	0.051	0.020
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	10mm	Ant 21	DSI 8	650000	3750	15.91	17.50	22.500	8.5	-0.07	0.072	0.028
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 21	DSI 8	650000	3750	15.91	17.50	22.500	8.5	-0.02	0.031	0.012
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Right Side	10mm	Ant 21	DSI 8	650000	3750	15.91	17.50	22.500	8.5	-0.11	0.011	0.004
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Top Side	10mm	Ant 21	DSI 8	650000	3750	15.91	17.50	22.500	8.5	0.09	0.079	0.031
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	10mm	Ant 21	DSI 8	650000	3750	15.90	17.50	22.500	8.5	0.06	0.071	0.028
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	10mm	Ant 21	DSI 8	650000	3750	15.90	17.50	22.500	8.5	-0.14	0.029	0.011
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Right Side	10mm	Ant 21	DSI 8	650000	3750	15.90	17.50	22.500	8.5	-0.11	0.010	0.004
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Top Side	10mm	Ant 21	DSI 8	650000	3750	15.90	17.50	22.500	8.5	-0.1	0.079	0.031



15.3 Body Worn Accessory SAR

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	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
750MHz																			
	LTE Band 12	10M	QPSK	1	25	-	Front	15mm	Ant 13	DSI 4	23095	707.5	23.59	24.50	1.233	-0.07	0.065	0.080	
	LTE Band 12	10M	QPSK	1	25	-	Back	15mm	Ant 13	DSI 4	23095	707.5	23.59	24.50	1.233	0.11	0.062	0.076	
	LTE Band 12	10M	QPSK	25	12	-	Front	15mm	Ant 13	DSI 4	23095	707.5	22.53	23.50	1.250	0.14	0.051	0.064	
	LTE Band 12	10M	QPSK	25	12	-	Back	15mm	Ant 13	DSI 4	23095	707.5	22.53	23.50	1.250	0.04	0.049	0.061	
	LTE Band 12	10M	QPSK	1	25	-	Front	15mm	Ant 41	DSI 5	23095	707.5	23.55	24.50	1.245	0.05	0.175	0.218	
48	LTE Band 12	10M	QPSK	1	25	-	Back	15mm	Ant 41	DSI 5	23095	707.5	23.55	24.50	1.245	-0.1	0.204	0.254	
	LTE Band 12	10M	QPSK	25	12	-	Front	15mm	Ant 41	DSI 5	23095	707.5	22.47	23.50	1.268	0.14	0.133	0.169	
	LTE Band 12	10M	QPSK	25	12	-	Back	15mm	Ant 41	DSI 5	23095	707.5	22.47	23.50	1.268	-0.05	0.162	0.205	
	LTE Band 13	10M	QPSK	1	25	-	Front	15mm	Ant 13	DSI 4	23230	782	23.62	24.50	1.225	-0.06	0.108	0.132	
	LTE Band 13	10M	QPSK	1	25	-	Back	15mm	Ant 13	DSI 4	23230	782	23.62	24.50	1.225	0.09	0.102	0.125	
	LTE Band 13	10M	QPSK	25	12	-	Front	15mm	Ant 13	DSI 4	23230	782	22.55	23.50	1.245	-0.08	0.085	0.106	
	LTE Band 13	10M	QPSK	25	12	-	Back	15mm	Ant 13	DSI 4	23230	782	22.55	23.50	1.245	0.14	0.080	0.100	
	LTE Band 13	10M	QPSK	1	25	-	Front	15mm	Ant 41	DSI 5	23230	782	23.58	24.50	1.236	-0.04	0.111	0.137	
49	LTE Band 13	10M	QPSK	1	25	-	Back	15mm	Ant 41	DSI 5	23230	782	23.58	24.50	1.236	-0.08	0.145	0.179	
	LTE Band 13	10M	QPSK	25	12	-	Front	15mm	Ant 41	DSI 5	23230	782	22.48	23.50	1.265	0.02	0.086	0.109	
	LTE Band 13	10M	QPSK	25	12	-	Back	15mm	Ant 41	DSI 5	23230	782	22.48	23.50	1.265	0.11	0.091	0.115	
835MHz																			
	GSM850	-	-	-	-	GPRS(2 Tx slots)	Front	15mm	Ant 13	DSI 4	189	836.4	30.67	31.50	1.211	0.01	0.151	0.183	
	GSM850	-	-	-	-	GPRS(2 Tx slots)	Back	15mm	Ant 13	DSI 4	189	836.4	30.67	31.50	1.211	0.11	0.250	0.303	
	GSM850	-	-	-	-	GPRS(2 Tx slots)	Front	15mm	Ant 41	DSI 5	189	836.4	30.69	31.50	1.205	-0.13	0.151	0.182	
50	GSM850	-	-	-	-	GPRS(2 Tx slots)	Back	15mm	Ant 41	DSI 5	189	836.4	30.69	31.50	1.205	-0.03	0.307	0.370	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 13	DSI 4	4182	836.4	23.04	24.00	1.247	0.14	0.107	0.133	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 13	DSI 4	4182	836.4	23.04	24.00	1.247	0.11	0.152	0.190	
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 41	DSI 5	4182	836.4	23.14	24.00	1.219	-0.11	0.111	0.135	
51	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 41	DSI 5	4182	836.4	23.14	24.00	1.219	-0.08	0.192	0.234	
	LTE Band 5	10M	QPSK	1	25	-	Front	15mm	Ant 13	DSI 4	20525	836.5	22.89	24.50	1.449	0.12	0.095	0.138	
52	LTE Band 5	10M	QPSK	1	25	-	Back	15mm	Ant 13	DSI 4	20525	836.5	22.89	24.50	1.449	-0.05	0.167	0.242	
	LTE Band 5	10M	QPSK	25	12	-	Front	15mm	Ant 13	DSI 4	20525	836.5	21.86	23.50	1.459	-0.15	0.073	0.106	
	LTE Band 5	10M	QPSK	25	12	-	Back	15mm	Ant 13	DSI 4	20525	836.5	21.86	23.50	1.459	-0.03	0.121	0.177	
	LTE Band 5	10M	QPSK	1	25	-	Front	15mm	Ant 41	DSI 5	20525	836.5	22.84	24.50	1.466	0.15	0.111	0.163	
	LTE Band 5	10M	QPSK	1	25	-	Back	15mm	Ant 41	DSI 5	20525	836.5	22.84	24.50	1.466	-0.11	0.135	0.198	
	LTE Band 5	10M	QPSK	25	12	-	Front	15mm	Ant 41	DSI 5	20525	836.5	21.79	23.50	1.483	0.11	0.108	0.160	
	LTE Band 5	10M	QPSK	25	12	-	Back	15mm	Ant 41	DSI 5	20525	836.5	21.79	23.50	1.483	0.12	0.137	0.203	
	LTE Band 26	15M	QPSK	1	37	-	Front	15mm	Ant 13	DSI 4	26865	831.5	22.90	24.00	1.288	0.1	0.089	0.115	
	LTE Band 26	15M	QPSK	1	37	-	Back	15mm	Ant 13	DSI 4	26865	831.5	22.90	24.00	1.288	0.03	0.129	0.166	
	LTE Band 26	15M	QPSK	36	20	-	Front	15mm	Ant 13	DSI 4	26865	831.5	21.71	23.00	1.346	-0.04	0.068	0.092	
	LTE Band 26	15M	QPSK	36	20	-	Back	15mm	Ant 13	DSI 4	26865	831.5	21.71	23.00	1.346	0.05	0.101	0.136	
	LTE Band 26	15M	QPSK	1	37	-	Front	15mm	Ant 41	DSI 5	26865	831.5	22.86	24.00	1.300	-0.13	0.112	0.146	
53	LTE Band 26	15M	QPSK	1	37	-	Back	15mm	Ant 41	DSI 5	26865	831.5	22.86	24.00	1.300	-0.05	0.163	0.212	
	LTE Band 26	15M	QPSK	36	20	-	Front	15mm	Ant 41	DSI 5	26865	831.5	21.78	23.00	1.324	0.11	0.085	0.113	
	LTE Band 26	15M	QPSK	36	20	-	Back	15mm	Ant 41	DSI 5	26865	831.5	21.78	23.00	1.324	0.02	0.137	0.181	
1750MHz																			
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 13	DSI 4	1413	1732.6	22.65	23.80	1.303	-0.12	0.174	0.227	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 13	DSI 4	1413	1732.6	22.65	23.80	1.303	-0.06	0.222	0.289	
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 31	DSI 5	1413	1732.6	20.70	21.70	1.259	0.15	0.192	0.242	
54	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 31	DSI 5	1413	1732.6	20.70	21.70	1.259	-0.04	0.252	0.317	
	LTE Band 4	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	20175	1732.5	22.22	23.50	1.343	-0.07	0.151	0.203	
	LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	20175	1732.5	22.22	23.50	1.343	0.02	0.185	0.248	
	LTE Band 4	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	20175	1732.5	21.26	22.50	1.330	0.11	0.121	0.161	
	LTE Band 4	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	20175	1732.5	21.26	22.50	1.330	0.03	0.170	0.226	
	LTE Band 4	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	20175	1732.5	21.35	22.50	1.303	0.01	0.185	0.241	



55	LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	20175	1732.5	21.35	22.50	1.303	-0.02	0.282	0.367
	LTE Band 4	20M	QPSK	50	24	-	Front	15mm	Ant 31	DSI 5	20175	1732.5	21.26	22.50	1.330	-0.04	0.184	0.245
	LTE Band 4	20M	QPSK	50	24	-	Back	15mm	Ant 31	DSI 5	20175	1732.5	21.26	22.50	1.330	-0.14	0.261	0.347
	LTE Band 66	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	132322	1745	22.33	23.20	1.222	-0.15	0.150	0.183
	LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	132322	1745	22.33	23.20	1.222	-0.09	0.196	0.239
	LTE Band 66	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	132322	1745	21.56	22.20	1.159	-0.14	0.120	0.139
	LTE Band 66	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	132322	1745	21.56	22.20	1.159	0.01	0.156	0.181
	LTE Band 66	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	132322	1745	21.29	22.20	1.233	0.02	0.229	0.282
56	LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	132322	1745	21.29	22.20	1.233	-0.12	0.307	0.379
	LTE Band 66	20M	QPSK	50	24	-	Front	15mm	Ant 31	DSI 5	132322	1745	21.26	22.20	1.242	-0.02	0.229	0.284
	LTE Band 66	20M	QPSK	50	24	-	Back	15mm	Ant 31	DSI 5	132322	1745	21.26	22.20	1.242	0.12	0.301	0.374
	FR1 n66	40M	BPSK	1	108	DFT-15	Front	15mm	Ant 11	DSI 4	349000	1745	23.36	24.00	1.159	0.07	0.223	0.258
57	FR1 n66	40M	BPSK	1	108	DFT-15	Back	15mm	Ant 11	DSI 4	349000	1745	23.36	24.00	1.159	0.06	0.418	0.484
	FR1 n66	40M	BPSK	108	54	DFT-15	Front	15mm	Ant 11	DSI 4	349000	1745	23.33	24.00	1.167	0.1	0.225	0.263
	FR1 n66	40M	BPSK	108	54	DFT-15	Back	15mm	Ant 11	DSI 4	349000	1745	23.33	24.00	1.167	-0.05	0.364	0.425
	FR1 n66	40M	BPSK	1	108	DFT-15	Front	15mm	Ant 13	DSI 4	349000	1745	22.21	23.60	1.377	-0.05	0.135	0.186
	FR1 n66	40M	BPSK	1	108	DFT-15	Back	15mm	Ant 13	DSI 4	349000	1745	22.21	23.60	1.377	0.11	0.182	0.251
	FR1 n66	40M	BPSK	108	54	DFT-15	Front	15mm	Ant 13	DSI 4	349000	1745	22.15	23.60	1.396	0.15	0.134	0.187
	FR1 n66	40M	BPSK	108	54	DFT-15	Back	15mm	Ant 13	DSI 4	349000	1745	22.15	23.60	1.396	0.05	0.181	0.253
1900MHz																		
	GSM1900	-	-	-	-	GPRS(2 Tx slots)	Front	15mm	Ant 13	DSI 4	661	1880	27.26	28.50	1.330	-0.12	0.191	0.254
58	GSM1900	-	-	-	-	GPRS(2 Tx slots)	Back	15mm	Ant 13	DSI 4	661	1880	27.26	28.50	1.330	0.01	0.226	0.301
	GSM1900	-	-	-	-	GPRS(1 Tx slot)	Front	15mm	Ant 31	DSI 5	810	1909.8	29.76	30.50	1.186	-0.04	0.118	0.140
	GSM1900	-	-	-	-	GPRS(1 Tx slot)	Back	15mm	Ant 31	DSI 5	810	1909.8	29.76	30.50	1.186	0.15	0.153	0.181
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 13	DSI 4	9400	1880	22.54	23.80	1.337	0.08	0.289	0.386
59	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 13	DSI 4	9400	1880	22.54	23.80	1.337	0.11	0.437	0.584
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 31	DSI 5	9400	1880	21.32	22.20	1.225	-0.04	0.152	0.186
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 31	DSI 5	9400	1880	21.32	22.20	1.225	0.08	0.207	0.253
	LTE Band 2	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	18900	1880	22.55	23.50	1.245	0.13	0.244	0.304
60	LTE Band 2	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	18900	1880	22.55	23.50	1.245	-0.06	0.411	0.511
	LTE Band 2	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	18900	1880	21.57	22.50	1.239	-0.14	0.196	0.243
	LTE Band 2	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	18900	1880	21.57	22.50	1.239	0.02	0.268	0.332
	LTE Band 2	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	18900	1880	20.55	21.50	1.245	0.16	0.105	0.131
	LTE Band 2	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	18900	1880	20.55	21.50	1.245	0.06	0.165	0.205
	LTE Band 2	20M	QPSK	50	24	-	Front	15mm	Ant 31	DSI 5	18900	1880	20.44	21.50	1.276	-0.02	0.112	0.143
	LTE Band 2	20M	QPSK	50	24	-	Back	15mm	Ant 31	DSI 5	18900	1880	20.44	21.50	1.276	0.12	0.169	0.216
	FR1 n2	20M	BPSK	1	53	DFT-15	Front	15mm	Ant 11	DSI 4	376000	1880	23.52	24.00	1.117	-0.12	0.241	0.269
	FR1 n2	20M	BPSK	1	53	DFT-15	Back	15mm	Ant 11	DSI 4	376000	1880	23.52	24.00	1.117	0.09	0.511	0.571
	FR1 n2	20M	BPSK	50	28	DFT-15	Front	15mm	Ant 11	DSI 4	376000	1880	23.49	24.00	1.125	-0.12	0.237	0.267
61	FR1 n2	20M	BPSK	50	28	DFT-15	Back	15mm	Ant 11	DSI 4	376000	1880	23.49	24.00	1.125	0.03	0.538	0.605
	FR1 n2	20M	BPSK	1	53	DFT-15	Front	15mm	Ant 13	DSI 4	376000	1880	22.26	23.60	1.361	0.04	0.195	0.265
	FR1 n2	20M	BPSK	1	53	DFT-15	Back	15mm	Ant 13	DSI 4	376000	1880	22.26	23.60	1.361	-0.11	0.280	0.381
	FR1 n2	20M	BPSK	50	28	DFT-15	Front	15mm	Ant 13	DSI 4	376000	1880	22.25	23.60	1.365	0.06	0.195	0.266
	FR1 n2	20M	BPSK	50	28	DFT-15	Back	15mm	Ant 13	DSI 4	376000	1880	22.25	23.60	1.365	0.06	0.277	0.378
2600MHz																		
	LTE Band 7	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	21100	2535	21.99	23.00	1.262	0.08	0.209	0.264
62	LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	21100	2535	21.99	23.00	1.262	-0.19	0.672	0.848
	LTE Band 7C	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	21100 +21298	2535 +2554.8	21.86	23.00	1.300	0.11	0.643	0.836
	LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	20850	2510	21.95	23.00	1.274	-0.19	0.640	0.815
	LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	21350	2560	21.93	23.00	1.279	-0.19	0.644	0.824
	LTE Band 7	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	21100	2535	21.18	22.00	1.208	0.09	0.167	0.202
	LTE Band 7	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	21100	2535	21.18	22.00	1.208	-0.06	0.494	0.597
	LTE Band 7	20M	QPSK	100	0	-	Back	15mm	Ant 13	DSI 4	21100	2535	20.95	22.00	1.274	0.02	0.478	0.609
	LTE Band 7	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	21100	2535	20.68	22.00	1.355	-0.09	0.101	0.137
	LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	21100	2535	20.68	22.00	1.355	-0.01	0.162	0.220



Table with columns for LTE Band, Power (20M), Modulation (QPSK), Channels (1, 49, 50, 24, 28, 137, 270), Frequency (49, 24, 28, 53, 28, 137, 69, 0), Direction (Front, Back), Distance (15mm), Antenna (Ant 31, Ant 13, Ant 23), DSI (DSI 5, DSI 4), and various measurement values (21100, 2535, 20.67, etc.).

3500-3900MHz



	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 23	DSI 5	633334	3500.01	15.72	16.80	1.282	0.02	0.174	0.223	
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 23	DSI 5	633334	3500.01	15.72	16.80	1.282	0.13	0.219	0.281	
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 23	DSI 5	633334	3500.01	15.67	16.80	1.297	0.04	0.179	0.232	
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 23	DSI 5	633334	3500.01	15.67	16.80	1.297	-0.11	0.259	0.336	
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 23	DSI 5	650000	3750	15.13	16.80	1.469	-0.11	0.205	0.301	
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 23	DSI 5	650000	3750	15.13	16.80	1.469	-0.01	0.436	0.640	
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 23	DSI 5	650000	3750	15.09	16.80	1.483	-0.04	0.204	0.302	
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 23	DSI 5	650000	3750	15.09	16.80	1.483	0.16	0.401	0.594	
	FR1 n78 (Part 27Q)	100M	BPSK	270	0	DFT-30	Back	15mm	Ant 23	DSI 5	650000	3750	15.06	16.80	1.493	0.05	0.345	0.515	
2450MHz																			
	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Front	15mm	Ant 22	Reduce Level 1	1	2412	18.91	20.00	1.285	-0.03	0.070	0.091	
67	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Back	15mm	Ant 22	Reduce Level 1	1	2412	18.91	20.00	1.285	0.06	0.122	0.158	
	Bluetooth	-	-	-	-	DH5 1Mbps	Front	15mm	Ant 22	Full	39	2441	11.35	12.50	1.303	-0.12	0.005	0.008	
68	Bluetooth	-	-	-	-	DH5 1Mbps	Back	15mm	Ant 22	Full	39	2441	11.35	12.50	1.303	0.08	0.021	0.036	
5000MHz-6000MHz																			
	WLAN5GHz	-	-	-	-	802.11a 6Mbps	Front	15mm	Ant 22	Reduce Level 1	60	5300	17.92	19.00	1.282	0.06	0.043	0.057	
69	WLAN5GHz	-	-	-	-	802.11a 6Mbps	Back	15mm	Ant 22	Reduce Level 1	60	5300	17.92	19.00	1.282	-0.03	0.119	0.157	
	WLAN5GHz	-	-	-	-	802.11a 6Mbps	Front	15mm	Ant 22	Reduce Level 1	116	5580	17.78	19.00	1.324	0.14	0.039	0.053	
70	WLAN5GHz	-	-	-	-	802.11a 6Mbps	Back	15mm	Ant 22	Reduce Level 1	116	5580	17.78	19.00	1.324	0.05	0.112	0.153	
	WLAN5GHz	-	-	-	-	802.11a 6Mbps	Front	15mm	Ant 22	Reduce Level 1	157	5785	17.83	19.00	1.309	0.09	0.051	0.069	
71	WLAN5GHz	-	-	-	-	802.11a 6Mbps	Back	15mm	Ant 22	Reduce Level 1	157	5785	17.83	19.00	1.309	0.02	0.087	0.117	



<Standalone SRS SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Measured Plimit (dBm)	Reported Plimit (dBm)	Reported Pmax (dBm)	Duty Cycle %	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 12	DSI 5	633334	3500.01	18.81	20.50	21.5	8.5	0.14	0.109	0.017
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 12	DSI 5	633334	3500.01	18.81	20.50	21.5	8.5	-0.1	0.167	0.026
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 12	DSI 5	633334	3500.01	18.72	20.50	21.5	8.5	0.05	0.111	0.018
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 12	DSI 5	633334	3500.01	18.72	20.50	21.5	8.5	0.01	0.170	0.027
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 12	DSI 5	656000	3840	19.45	20.50	21.5	8.5	-0.06	0.206	0.028
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 12	DSI 5	656000	3840	19.45	20.50	21.5	8.5	0.02	0.220	0.030
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 12	DSI 5	656000	3840	19.41	20.50	21.5	8.5	0.09	0.209	0.029
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 12	DSI 5	656000	3840	19.41	20.50	21.5	8.5	0.17	0.223	0.031
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 21	DSI 5	633334	3500.01	20.94	22.50	21.5	8.5	-0.07	0.061	0.006
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 21	DSI 5	633334	3500.01	20.94	22.50	21.5	8.5	0.06	0.054	0.005
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 21	DSI 5	633334	3500.01	20.90	22.50	21.5	8.5	0.03	0.063	0.006
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 21	DSI 5	633334	3500.01	20.90	22.50	21.5	8.5	-0.06	0.051	0.005
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 21	DSI 5	656000	3840	20.89	22.50	21.5	8.5	0.1	0.130	0.013
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 21	DSI 5	656000	3840	20.89	22.50	21.5	8.5	0.16	0.109	0.011
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 21	DSI 5	656000	3840	20.88	22.50	21.5	8.5	-0.12	0.125	0.012
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 21	DSI 5	656000	3840	20.88	22.50	21.5	8.5	-0.11	0.112	0.011
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 12	DSI 5	633334	3500.01	19.25	20.50	21.5	8.5	-0.03	0.121	0.017
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 12	DSI 5	633334	3500.01	19.25	20.50	21.5	8.5	-0.16	0.188	0.027
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 12	DSI 5	633334	3500.01	19.25	20.50	21.5	8.5	-0.12	0.123	0.018
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 12	DSI 5	633334	3500.01	19.25	20.50	21.5	8.5	-0.17	0.193	0.028
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 12	DSI 5	650000	3750	19.30	20.50	21.5	8.5	0.18	0.192	0.027
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 12	DSI 5	650000	3750	19.30	20.50	21.5	8.5	0.16	0.354	0.050
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 12	DSI 5	650000	3750	19.22	20.50	21.5	8.5	-0.03	0.189	0.027
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 12	DSI 5	650000	3750	19.22	20.50	21.5	8.5	-0.17	0.350	0.050
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 21	DSI 5	633334	3500.01	20.86	22.50	22.5	8.5	-0.13	0.059	0.007
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 21	DSI 5	633334	3500.01	20.86	22.50	22.5	8.5	0.06	0.052	0.006
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 21	DSI 5	633334	3500.01	20.83	22.50	22.5	8.5	0.08	0.061	0.008
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 21	DSI 5	633334	3500.01	20.83	22.50	22.5	8.5	0.07	0.052	0.006
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 21	DSI 5	650000	3750	20.85	22.50	22.5	8.5	0.11	0.096	0.012
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 21	DSI 5	650000	3750	20.85	22.50	22.5	8.5	0.09	0.104	0.013
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 21	DSI 5	650000	3750	20.81	22.50	22.5	8.5	-0.1	0.092	0.012
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 21	DSI 5	650000	3750	20.81	22.50	22.5	8.5	-0.02	0.100	0.013



<EN-DC SAR>

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)	Reported 1g SAR (W/kg)
835MHz																				
	LTE Band 5	10M	QPSK	1	25	-	Front	15mm	Ant 13	DSI 4	20525	836.5	22.89	24.50	1.449	-	-	0.12	0.095	0.138
	LTE Band 5	10M	QPSK	1	25	-	Back	15mm	Ant 13	DSI 4	20525	836.5	22.89	24.50	1.449	-	-	-0.05	0.167	0.242
	LTE Band 5	10M	QPSK	25	12	-	Front	15mm	Ant 13	DSI 4	20525	836.5	21.86	23.50	1.459	-	-	-0.15	0.073	0.106
	LTE Band 5	10M	QPSK	25	12	-	Back	15mm	Ant 13	DSI 4	20525	836.5	21.86	23.50	1.459	-	-	-0.03	0.121	0.177
	LTE Band 5	10M	QPSK	1	25	-	Front	15mm	Ant 41	DSI 5	20525	836.5	22.84	24.50	1.466	-	-	0.15	0.111	0.211
	LTE Band 5	10M	QPSK	1	25	-	Back	15mm	Ant 41	DSI 5	20525	836.5	22.84	24.50	1.466	-	-	-0.11	0.135	0.198
	LTE Band 5	10M	QPSK	25	12	-	Front	15mm	Ant 41	DSI 5	20525	836.5	21.79	23.50	1.483	-	-	0.11	0.108	0.160
	LTE Band 5	10M	QPSK	25	12	-	Back	15mm	Ant 41	DSI 5	20525	836.5	21.79	23.50	1.483	-	-	0.12	0.137	0.203
1750MHz																				
	LTE Band 4	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	20175	1732.5	22.22	23.50	1.343	-	-	-0.07	0.151	0.203
	LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	20175	1732.5	22.22	23.50	1.343	-	-	0.02	0.185	0.248
	LTE Band 4	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	20175	1732.5	21.26	22.50	1.330	-	-	0.11	0.121	0.161
	LTE Band 4	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	20175	1732.5	21.26	22.50	1.330	-	-	0.03	0.170	0.226
	LTE Band 4	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	20175	1732.5	19.83	21.00	1.309	-	-	-0.04	0.148	0.194
	LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	20175	1732.5	19.83	21.00	1.309	-	-	-0.12	0.196	0.257
	LTE Band 4	20M	QPSK	50	24	-	Front	15mm	Ant 31	DSI 5	20175	1732.5	19.77	21.00	1.327	-	-	0.03	0.140	0.186
	LTE Band 4	20M	QPSK	50	24	-	Back	15mm	Ant 31	DSI 5	20175	1732.5	19.77	21.00	1.327	-	-	-0.03	0.191	0.254
	LTE Band 4A	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	20175	1732.5	19.30	20.30	1.259	-	-	-0.09	0.115	0.145
	LTE Band 4A	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	20175	1732.5	19.30	20.30	1.259	-	-	0.01	0.176	0.222
	LTE Band 4A	20M	QPSK	50	24	-	Front	15mm	Ant 31	DSI 5	20175	1732.5	19.25	20.30	1.274	-	-	0.15	0.117	0.149
	LTE Band 4A	20M	QPSK	50	24	-	Back	15mm	Ant 31	DSI 5	20175	1732.5	19.25	20.30	1.274	-	-	0.18	0.166	0.211
	LTE Band 66	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	132322	1745	22.33	23.20	1.222	-	-	-0.15	0.150	0.183
	LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	132322	1745	22.33	23.20	1.222	-	-	-0.09	0.196	0.239
	LTE Band 66	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	132322	1745	21.56	22.20	1.159	-	-	-0.14	0.120	0.139
	LTE Band 66	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	132322	1745	21.56	22.20	1.159	-	-	0.01	0.156	0.181
	LTE Band 66	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	132322	1745	19.51	20.70	1.315	-	-	-0.02	0.159	0.209
	LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	132322	1745	19.51	20.70	1.315	-	-	-0.12	0.211	0.278
	LTE Band 66	20M	QPSK	50	24	-	Front	15mm	Ant 31	DSI 5	132322	1745	19.49	20.70	1.321	-	-	0.12	0.155	0.205
	LTE Band 66	20M	QPSK	50	24	-	Back	15mm	Ant 31	DSI 5	132322	1745	19.49	20.70	1.321	-	-	0.05	0.208	0.275
	FR1 n66	40M	BPSK	1	108	DFT-15	Front	15mm	Ant 11	DSI 4	349000	1745	23.36	24.00	1.159	-	-	0.07	0.223	0.258
	FR1 n66	40M	BPSK	1	108	DFT-15	Back	15mm	Ant 11	DSI 4	349000	1745	23.36	24.00	1.159	-	-	0.06	0.418	0.484
	FR1 n66	40M	BPSK	108	54	DFT-15	Front	15mm	Ant 11	DSI 4	349000	1745	23.33	24.00	1.167	-	-	0.1	0.225	0.263
	FR1 n66	40M	BPSK	108	54	DFT-15	Back	15mm	Ant 11	DSI 4	349000	1745	23.33	24.00	1.167	-	-	-0.05	0.364	0.425
	FR1 n66	40M	BPSK	1	108	DFT-15	Front	15mm	Ant 13	DSI 4	349000	1745	22.21	23.60	1.377	-	-	-0.05	0.135	0.186
	FR1 n66	40M	BPSK	1	108	DFT-15	Back	15mm	Ant 13	DSI 4	349000	1745	22.21	23.60	1.377	-	-	0.11	0.182	0.251
	FR1 n66	40M	BPSK	108	54	DFT-15	Front	15mm	Ant 13	DSI 4	349000	1745	22.15	23.60	1.396	-	-	0.15	0.134	0.187
	FR1 n66	40M	BPSK	108	54	DFT-15	Back	15mm	Ant 13	DSI 4	349000	1745	22.15	23.60	1.396	-	-	0.05	0.181	0.253
1900MHz																				
	LTE Band 2	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	18900	1880	22.55	23.50	1.245	-	-	0.13	0.244	0.304
	LTE Band 2	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	18900	1880	22.55	23.50	1.245	-	-	-0.06	0.411	0.511
	LTE Band 2	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	18900	1880	21.57	22.50	1.239	-	-	-0.14	0.196	0.243
	LTE Band 2	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	18900	1880	21.57	22.50	1.239	-	-	0.02	0.268	0.332
	LTE Band 2	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	18900	1880	20.11	21.00	1.227	-	-	-0.08	0.112	0.137
	LTE Band 2	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	18900	1880	20.11	21.00	1.227	-	-	-0.03	0.143	0.176
	LTE Band 2	20M	QPSK	50	24	-	Front	15mm	Ant 31	DSI 5	18900	1880	20.07	21.00	1.239	-	-	-0.13	0.118	0.146
	LTE Band 2	20M	QPSK	50	24	-	Back	15mm	Ant 31	DSI 5	18900	1880	20.07	21.00	1.239	-	-	-0.04	0.140	0.173
2600MHz																				
	LTE Band 7	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	21100	2535	19.93	21.00	1.279	-	-	0.08	0.159	0.203
	LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	21100	2535	19.93	21.00	1.279	-	-	-0.19	0.394	0.504
	LTE Band 7	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	21100	2535	19.92	21.00	1.282	-	-	-0.01	0.168	0.215



LTE Band 7	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	21100	2535	19.92	21.00	1.282	-	-	0.08	0.368	0.472
LTE Band 7	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	21100	2535	19.29	20.50	1.321	-	-	0.07	0.070	0.092
LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	21100	2535	19.29	20.50	1.321	-	-	-0.17	0.102	0.135
LTE Band 7	20M	QPSK	50	24	-	Front	15mm	Ant 31	DSI 5	21100	2535	19.28	20.50	1.324	-	-	-0.19	0.069	0.091
LTE Band 7	20M	QPSK	50	24	-	Back	15mm	Ant 31	DSI 5	21100	2535	19.28	20.50	1.324	-	-	0.16	0.098	0.130
LTE Band 7A	20M	QPSK	1	49	-	Front	15mm	Ant 11	DSI 4	21100	2535	19.86	20.50	1.159	-	-	0.07	0.128	0.148
LTE Band 7A	20M	QPSK	1	49	-	Back	15mm	Ant 11	DSI 4	21100	2535	19.86	20.50	1.159	-	-	-0.05	0.227	0.263
LTE Band 7A	20M	QPSK	50	24	-	Front	15mm	Ant 11	DSI 4	21100	2535	19.82	20.50	1.169	-	-	-0.13	0.124	0.145
LTE Band 7A	20M	QPSK	50	24	-	Back	15mm	Ant 11	DSI 4	21100	2535	19.82	20.50	1.169	-	-	-0.04	0.220	0.257
LTE Band 7A	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	21100	2535	20.07	21.00	1.239	-	-	-0.09	0.175	0.217
LTE Band 7A	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	21100	2535	20.07	21.00	1.239	-	-	-0.04	0.361	0.447
LTE Band 7A	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	21100	2535	20.05	21.00	1.245	-	-	-0.07	0.171	0.213
LTE Band 7A	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	21100	2535	20.05	21.00	1.245	-	-	0.06	0.351	0.437
LTE Band 41	20M	QPSK	1	49	-	Front	15mm	Ant 13	DSI 4	40620	2593	22.50	23.40	1.230	62.9	1.006	0.11	0.152	0.188
LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 13	DSI 4	40620	2593	22.50	23.40	1.230	62.9	1.006	-0.03	0.406	0.502
LTE Band 41	20M	QPSK	50	24	-	Front	15mm	Ant 13	DSI 4	40620	2593	21.47	22.40	1.239	62.9	1.006	-0.11	0.121	0.151
LTE Band 41	20M	QPSK	50	24	-	Back	15mm	Ant 13	DSI 4	40620	2593	21.47	22.40	1.239	62.9	1.006	0.15	0.255	0.318
LTE Band 41	20M	QPSK	1	49	-	Front	15mm	Ant 31	DSI 5	40620	2593	20.96	22.30	1.361	62.9	1.006	0.1	0.091	0.125
LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 31	DSI 5	40620	2593	20.96	22.30	1.361	62.9	1.006	0.13	0.116	0.159
LTE Band 41	20M	QPSK	50	24	-	Front	15mm	Ant 31	DSI 5	40620	2593	20.94	22.30	1.368	62.9	1.006	0.1	0.095	0.131
LTE Band 41	20M	QPSK	50	24	-	Back	15mm	Ant 31	DSI 5	40620	2593	20.94	22.30	1.368	62.9	1.006	-0.11	0.115	0.158
FR1 n7	20M	BPSK	1	53	DFT-15	Front	15mm	Ant 11	DSI 4	507000	2535	23.37	24.00	1.156	-	-	0.06	0.237	0.274
FR1 n7	20M	BPSK	1	53	DFT-15	Back	15mm	Ant 11	DSI 4	507000	2535	23.37	24.00	1.156	-	-	-0.01	0.411	0.475
FR1 n7	20M	BPSK	50	28	DFT-15	Front	15mm	Ant 11	DSI 4	507000	2535	23.36	24.00	1.159	-	-	-0.13	0.238	0.276
FR1 n7	20M	BPSK	50	28	DFT-15	Back	15mm	Ant 11	DSI 4	507000	2535	23.36	24.00	1.159	-	-	0.11	0.420	0.487
FR1 n7	20M	BPSK	1	53	DFT-15	Front	15mm	Ant 13	DSI 4	507000	2535	21.31	22.80	1.409	-	-	0.13	0.189	0.266
FR1 n7	20M	BPSK	1	53	DFT-15	Back	15mm	Ant 13	DSI 4	507000	2535	21.31	22.80	1.409	-	-	-0.13	0.495	0.698
FR1 n7	20M	BPSK	50	28	DFT-15	Front	15mm	Ant 13	DSI 4	507000	2535	21.30	22.80	1.413	-	-	-0.17	0.192	0.271
FR1 n7	20M	BPSK	50	28	DFT-15	Back	15mm	Ant 13	DSI 4	507000	2535	21.30	22.80	1.413	-	-	-0.09	0.502	0.709
3500-3900MHz																			
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 11	DSI 4	633334	3500.01	21.11	22.30	1.315	-	-	0.05	0.210	0.276
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 11	DSI 4	633334	3500.01	21.11	22.30	1.315	-	-	0.13	0.405	0.533
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 11	DSI 4	633334	3500.01	21.08	22.30	1.324	-	-	-0.19	0.189	0.250
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 11	DSI 4	633334	3500.01	21.08	22.30	1.324	-	-	0.08	0.426	0.564
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 11	DSI 4	650000	3750	20.86	22.30	1.393	-	-	0.03	0.198	0.276
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 11	DSI 4	650000	3750	20.86	22.30	1.393	-	-	0.16	0.401	0.559
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 11	DSI 4	650000	3750	20.84	22.30	1.400	-	-	-0.17	0.197	0.276
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 11	DSI 4	650000	3750	20.84	22.30	1.400	-	-	-0.1	0.395	0.553
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 23	DSI 5	633334	3500.01	14.27	15.30	1.268	-	-	-0.09	0.073	0.093
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 23	DSI 5	633334	3500.01	14.27	15.30	1.268	-	-	0.16	0.123	0.156
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 23	DSI 5	633334	3500.01	14.19	15.30	1.291	-	-	0.13	0.071	0.092
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 23	DSI 5	633334	3500.01	14.19	15.30	1.291	-	-	0.05	0.152	0.196
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 23	DSI 5	650000	3750	13.62	15.30	1.472	-	-	0.02	0.135	0.199
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 23	DSI 5	650000	3750	13.62	15.30	1.472	-	-	0.13	0.295	0.434
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 23	DSI 5	650000	3750	13.57	15.30	1.489	-	-	-0.05	0.128	0.191
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 23	DSI 5	650000	3750	13.57	15.30	1.489	-	-	0.01	0.275	0.410



<EN-DC SRS SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Measured Plimit (dBm)	Reported Plimit (dBm)	Reported Pmax (dBm)	Duty Cycle %	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 12	DSI 5	633334	3500.01	17.78	19.50	21.500	8.5	0.16	0.089	0.018
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 12	DSI 5	633334	3500.01	17.78	19.50	21.500	8.5	-0.09	0.098	0.020
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 12	DSI 5	633334	3500.01	17.70	19.50	21.500	8.5	-0.19	0.087	0.018
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 12	DSI 5	633334	3500.01	17.70	19.50	21.500	8.5	-0.14	0.093	0.019
	FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 12	DSI 5	650000	3750	18.24	19.50	21.500	8.5	0.12	0.145	0.026
	FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 12	DSI 5	650000	3750	18.24	19.50	21.500	8.5	-0.16	0.257	0.046
	FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 12	DSI 5	650000	3750	18.17	19.50	21.500	8.5	-0.1	0.139	0.025
	FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 12	DSI 5	650000	3750	18.17	19.50	21.500	8.5	-0.12	0.234	0.043
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 21	DSI 5	633334	3500.01	19.42	21.00	22.500	8.5	-0.12	0.289	0.050
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 21	DSI 5	633334	3500.01	19.42	21.00	22.500	8.5	0.16	0.455	0.079
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 21	DSI 5	633334	3500.01	19.38	21.00	22.500	8.5	0.01	0.305	0.053
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 21	DSI 5	633334	3500.01	19.38	21.00	22.500	8.5	-0.07	0.415	0.072
	FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Front	15mm	Ant 21	DSI 5	650000	3750	19.40	21.00	22.500	8.5	0.08	0.345	0.060
	FR1 n78 (Part 27O)	100M	BPSK	1	137	DFT-30	Back	15mm	Ant 21	DSI 5	650000	3750	19.40	21.00	22.500	8.5	0.11	0.543	0.094
	FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Front	15mm	Ant 21	DSI 5	650000	3750	19.38	21.00	22.500	8.5	-0.13	0.321	0.056
	FR1 n78 (Part 27O)	100M	BPSK	135	69	DFT-30	Back	15mm	Ant 21	DSI 5	650000	3750	19.38	21.00	22.500	8.5	0.02	0.531	0.093



15.4 Product Specific 10g SAR

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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
1750MHz																				
72	FR1 n66	40M	BPSK	1	108	DFT-15	Left Side	0mm	Ant 11	DSI 5	349000	1745	20.74	21.50	1.191	-	-	0.05	1.820	2.168
	FR1 n66	40M	BPSK	1	108	DFT-15	Left Side	13mm	Ant 11	DSI 4	349000	1745	23.36	24.00	1.159	-	-	0.11	0.315	0.365
	FR1 n66	40M	BPSK	108	54	DFT-15	Left Side	0mm	Ant 11	DSI 5	349000	1745	20.66	21.50	1.213	-	-	-0.08	1.630	1.978
	FR1 n66	40M	BPSK	216	0	DFT-15	Left Side	0mm	Ant 11	DSI 5	349000	1745	20.50	21.50	1.259	-	-	0.13	1.560	1.964
	FR1 n66	40M	BPSK	1	108	DFT-15	Left Side	0mm	Ant 11	DSI 8	349000	1745	19.13	20.00	1.222	-	-	-0.07	1.120	1.368
	FR1 n66	40M	BPSK	108	54	DFT-15	Left Side	0mm	Ant 11	DSI 8	349000	1745	19.10	20.00	1.230	-	-	-0.04	1.100	1.353
1900MHz																				
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 13	DSI 5	9400	1880	20.03	21.30	1.340	-	-	-0.08	1.240	1.661
73	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 13	DSI 5	9400	1880	20.03	21.30	1.340	-	-	-0.05	1.750	2.344
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 13	DSI 5	9262	1852.4	19.91	21.30	1.377	-	-	0.11	1.620	2.231
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 13	DSI 5	9538	1907.6	19.99	21.30	1.352	-	-	0.07	1.660	2.244
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	12mm	Ant 13	DSI 4	9400	1880	22.54	23.80	1.337	-	-	0.08	0.424	0.567
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	14mm	Ant 13	DSI 4	9400	1880	22.54	23.80	1.337	-	-	0.15	0.229	0.306
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 13	DSI 8	9400	1880	18.26	19.80	1.426	-	-	0.12	0.947	1.350
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 13	DSI 8	9400	1880	18.26	19.80	1.426	-	-	0.03	0.939	1.339
	LTE Band 2	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 5	18900	1880	20.61	21.50	1.227	-	-	-0.08	1.790	2.197
	LTE Band 2	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 5	18700	1860	20.28	21.50	1.324	-	-	0.06	1.640	2.172
	LTE Band 2	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 5	19100	1900	20.43	21.50	1.279	-	-	0.03	1.610	2.060
	LTE Band 2	20M	QPSK	1	49	-	Top Side	14mm	Ant 13	DSI 4	18900	1880	22.55	23.50	1.245	-	-	0.15	0.309	0.385
74	LTE Band 2	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 5	18900	1880	20.51	21.50	1.256	-	-	-0.12	1.840	2.311
	LTE Band 2	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 5	18700	1860	20.31	21.50	1.315	-	-	-0.12	1.750	2.302
	LTE Band 2	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 5	19100	1900	20.48	21.50	1.265	-	-	0.03	1.710	2.163
	LTE Band 2	20M	QPSK	50	24	-	Top Side	14mm	Ant 13	DSI 4	18900	1880	21.57	22.50	1.239	-	-	0.03	0.246	0.305
	LTE Band 2	20M	QPSK	100	0	-	Top Side	0mm	Ant 13	DSI 5	18900	1880	20.48	21.50	1.265	-	-	0.02	1.700	2.150
	LTE Band 2	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 8	18900	1880	18.70	19.50	1.202	-	-	0.11	0.903	1.086
	LTE Band 2	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 8	18900	1880	18.55	19.50	1.245	-	-	0.09	0.928	1.155
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Side	0mm	Ant 11	DSI 5	376000	1880	20.21	21.00	1.199	-	-	-0.02	1.510	1.811
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Side	13mm	Ant 11	DSI 4	376000	1880	23.52	24.00	1.117	-	-	0.05	0.389	0.434
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Side	0mm	Ant 11	DSI 5	376000	1880	20.13	21.00	1.222	-	-	-0.02	1.570	1.918
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Side	13mm	Ant 11	DSI 4	376000	1880	23.49	24.00	1.125	-	-	0.08	0.373	0.419
	FR1 n2	20M	BPSK	1	53	DFT-15	Left Side	0mm	Ant 11	DSI 8	376000	1880	18.61	19.50	1.227	-	-	-0.02	0.923	1.133
	FR1 n2	20M	BPSK	50	28	DFT-15	Left Side	0mm	Ant 11	DSI 8	376000	1880	18.59	19.50	1.233	-	-	-0.11	0.929	1.146
	FR1 n2	20M	BPSK	1	53	DFT-15	Top Side	0mm	Ant 13	DSI 5	376000	1880	20.10	21.60	1.413	-	-	0.11	1.710	2.415
	FR1 n2	20M	BPSK	1	53	DFT-15	Top Side	0mm	Ant 13	DSI 5	372000	1860	20.01	21.60	1.442	-	-	0.03	1.670	2.408
	FR1 n2	20M	BPSK	1	53	DFT-15	Top Side	0mm	Ant 13	DSI 5	380000	1900	19.96	21.60	1.459	-	-	-0.09	1.610	2.349
	FR1 n2	20M	BPSK	1	53	DFT-15	Top Side	14mm	Ant 13	DSI 4	376000	1880	22.26	23.60	1.361	-	-	0.02	0.293	0.399
75	FR1 n2	20M	BPSK	50	28	DFT-15	Top Side	0mm	Ant 13	DSI 5	376000	1880	20.08	21.60	1.419	-	-	0.12	1.730	2.455
	FR1 n2	20M	BPSK	50	28	DFT-15	Top Side	0mm	Ant 13	DSI 5	372000	1860	19.96	21.60	1.459	-	-	-0.11	1.650	2.407
	FR1 n2	20M	BPSK	50	28	DFT-15	Top Side	0mm	Ant 13	DSI 5	380000	1900	20.01	21.60	1.442	-	-	0.05	1.630	2.351
	FR1 n2	20M	BPSK	50	28	DFT-15	Top Side	14mm	Ant 13	DSI 4	376000	1880	22.25	23.60	1.365	-	-	-0.05	0.288	0.393
	FR1 n2	20M	BPSK	100	0	DFT-15	Top Side	0mm	Ant 13	DSI 5	376000	1880	20.01	21.60	1.442	-	-	0.03	1.670	2.408
	FR1 n2	20M	BPSK	1	53	DFT-15	Top Side	0mm	Ant 13	DSI 8	376000	1880	18.04	19.60	1.432	-	-	0.07	0.983	1.408
	FR1 n2	20M	BPSK	50	28	DFT-15	Top Side	0mm	Ant 13	DSI 8	376000	1880	18.01	19.60	1.442	-	-	0.03	0.978	1.410
2600MHz																				
	LTE Band 7	20M	QPSK	1	49	-	Back	0mm	Ant 13	DSI 5	21100	2535	17.62	18.50	1.225	-	-	-0.01	1.020	1.249
76	LTE Band 7	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 5	21100	2535	17.62	18.50	1.225	-	-	0.04	1.670	2.045
	LTE Band 7	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 5	20850	2510	17.40	18.50	1.288	-	-	0.08	1.570	2.023
	LTE Band 7	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 5	21350	2560	17.55	18.50	1.245	-	-	0.01	1.530	1.904
	LTE Band 7C	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 5	21100	2535	17.35	18.50	1.303	-	-	0.02	1.450	1.890
	LTE Band 7	20M	QPSK	1	49	-	Back	12mm	Ant 13	DSI 4	21100	2535	21.99	23.00	1.262	-	-	0.08	0.419	0.529
	LTE Band 7	20M	QPSK	1	49	-	Top Side	14mm	Ant 13	DSI 4	21100	2535	21.99	23.00	1.262	-	-	0.01	0.404	0.510



	LTE Band 7	20M	QPSK	50	24	-	Back	0mm	Ant 13	DSI 5	21100	2535	17.50	18.50	1.259	-	-	-0.12	0.976	1.229
	LTE Band 7	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 5	21100	2535	17.50	18.50	1.259	-	-	-0.01	1.530	1.926
	LTE Band 7	20M	QPSK	100	0	-	Top Side	0mm	Ant 13	DSI 5	21100	2535	17.36	18.50	1.300	-	-	-0.01	1.470	1.911
	LTE Band 7	20M	QPSK	1	49	-	Back	0mm	Ant 13	DSI 8	21100	2535	15.09	16.00	1.233	-	-	-0.06	0.600	0.740
	LTE Band 7	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 8	21100	2535	15.09	16.00	1.233	-	-	0.03	0.691	0.852
	LTE Band 7	20M	QPSK	50	24	-	Back	0mm	Ant 13	DSI 8	21100	2535	15.04	16.00	1.247	-	-	-0.11	0.613	0.765
	LTE Band 7	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 8	21100	2535	15.04	16.00	1.247	-	-	0.02	0.708	0.883
	LTE Band 7C	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 8	21100 +21298	2535 +2554.8	14.92	16.00	1.282	-	-	0.09	0.672	0.862
	LTE Band 41	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 5	40620	2593	19.80	20.90	1.288	62.9	1.006	-0.03	0.975	1.264
	LTE Band 41	20M	QPSK	1	49	-	Top Side	14mm	Ant 13	DSI 4	40620	2593	22.50	23.40	1.230	62.9	1.006	0.15	0.239	0.296
77	LTE Band 41	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 5	40620	2593	19.76	20.90	1.300	62.9	1.006	0.04	1.020	1.334
	LTE Band 41C	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 5	40620 +40422	2593 +2573.2	19.75	20.90	1.303	62.9	1.006	-0.06	0.987	1.294
	LTE Band 41	20M	QPSK	50	24	-	Top Side	14mm	Ant 13	DSI 4	40620	2593	21.47	22.40	1.239	62.9	1.006	0.08	0.184	0.229
	LTE Band 41	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 8	40620	2593	18.09	18.90	1.205	62.9	1.006	-0.01	0.785	0.952
	LTE Band 41C	20M	QPSK	1	49	-	Top Side	0mm	Ant 13	DSI 8	40620 +40422	2593 +2573.2	18.04	18.90	1.219	62.9	1.006	0.02	0.725	0.889
	LTE Band 41	20M	QPSK	50	24	-	Top Side	0mm	Ant 13	DSI 8	40620	2593	17.95	18.90	1.245	62.9	1.006	-0.1	0.748	0.936
78	FR1 n7	20M	BPSK	1	53	DFT-15	Back	0mm	Ant 11	DSI 5	507000	2535	20.68	21.50	1.208	-	-	0.11	2.250	2.718
	FR1 n7	20M	BPSK	1	53	DFT-15	Left Side	0mm	Ant 11	DSI 5	507000	2535	20.68	21.50	1.208	-	-	0.12	2.080	2.512
	FR1 n7	20M	BPSK	1	53	DFT-15	Back	0mm	Ant 11	DSI 5	502000	2510	20.61	21.50	1.227	-	-	0.11	2.080	2.553
	FR1 n7	20M	BPSK	1	53	DFT-15	Left Side	0mm	Ant 11	DSI 5	502000	2510	20.61	21.50	1.227	-	-	0.05	1.950	2.394
	FR1 n7	20M	BPSK	1	53	DFT-15	Back	0mm	Ant 11	DSI 5	512000	2560	20.61	21.50	1.227	-	-	0.11	2.040	2.504
	FR1 n7	20M	BPSK	1	53	DFT-15	Left Side	0mm	Ant 11	DSI 5	512000	2560	20.61	21.50	1.227	-	-	0.05	1.930	2.369
	FR1 n7	20M	BPSK	1	53	DFT-15	Back	10mm	Ant 11	DSI 4	507000	2535	23.37	24.00	1.156	-	-	-0.04	0.460	0.532
	FR1 n7	20M	BPSK	1	53	DFT-15	Left Side	13mm	Ant 11	DSI 4	507000	2535	23.37	24.00	1.156	-	-	0.02	0.344	0.398
	FR1 n7	20M	BPSK	50	28	DFT-15	Back	0mm	Ant 11	DSI 5	507000	2535	20.63	21.50	1.222	-	-	0.11	2.110	2.578
	FR1 n7	20M	BPSK	50	28	DFT-15	Left Side	0mm	Ant 11	DSI 5	507000	2535	20.63	21.50	1.222	-	-	0.05	1.980	2.419
	FR1 n7	20M	BPSK	50	28	DFT-15	Back	0mm	Ant 11	DSI 5	502000	2510	20.56	21.50	1.242	-	-	0.11	2.050	2.545
	FR1 n7	20M	BPSK	50	28	DFT-15	Left Side	0mm	Ant 11	DSI 5	502000	2510	20.56	21.50	1.242	-	-	0.05	1.940	2.409
	FR1 n7	20M	BPSK	50	28	DFT-15	Back	0mm	Ant 11	DSI 5	512000	2560	20.60	21.50	1.230	-	-	0.11	2.010	2.473
	FR1 n7	20M	BPSK	50	28	DFT-15	Left Side	0mm	Ant 11	DSI 5	512000	2560	20.60	21.50	1.230	-	-	0.05	1.940	2.387
	FR1 n7	20M	BPSK	100	0	DFT-15	Back	0mm	Ant 11	DSI 5	507000	2535	20.58	21.50	1.236	-	-	0.02	2.010	2.484
	FR1 n7	20M	BPSK	100	0	DFT-15	Left Side	0mm	Ant 11	DSI 5	507000	2535	20.58	21.50	1.236	-	-	0.09	1.920	2.373
	FR1 n7	20M	BPSK	1	53	DFT-15	Back	0mm	Ant 11	DSI 8	507000	2535	18.60	19.50	1.230	-	-	0.09	1.390	1.710
	FR1 n7	20M	BPSK	1	53	DFT-15	Left Side	0mm	Ant 11	DSI 8	507000	2535	18.60	19.50	1.230	-	-	-0.05	1.290	1.587
	FR1 n7	20M	BPSK	50	28	DFT-15	Back	0mm	Ant 11	DSI 8	507000	2535	18.57	19.50	1.239	-	-	-0.01	1.400	1.734
	FR1 n7	20M	BPSK	50	28	DFT-15	Left Side	0mm	Ant 11	DSI 8	507000	2535	18.57	19.50	1.239	-	-	-0.07	1.310	1.623
	FR1 n7	20M	BPSK	1	53	DFT-15	Back	0mm	Ant 13	DSI 5	507000	2535	17.64	19.30	1.466	-	-	0.07	1.350	1.978
	FR1 n7	20M	BPSK	1	53	DFT-15	Top Side	0mm	Ant 13	DSI 5	507000	2535	17.64	19.30	1.466	-	-	0.08	1.510	2.213
	FR1 n7	20M	BPSK	1	53	DFT-15	Top Side	0mm	Ant 13	DSI 5	502000	2510	17.52	19.30	1.507	-	-	-0.08	1.450	2.185
	FR1 n7	20M	BPSK	1	53	DFT-15	Top Side	0mm	Ant 13	DSI 5	512000	2560	17.50	19.30	1.514	-	-	0.1	1.410	2.134
	FR1 n7	20M	BPSK	1	53	DFT-15	Back	12mm	Ant 13	DSI 4	507000	2535	22.26	23.80	1.426	-	-	0.05	0.405	0.577
	FR1 n7	20M	BPSK	1	53	DFT-15	Top Side	14mm	Ant 13	DSI 4	507000	2535	22.26	23.80	1.426	-	-	-0.08	0.417	0.594
	FR1 n7	20M	BPSK	50	28	DFT-15	Back	0mm	Ant 13	DSI 5	507000	2535	17.53	19.30	1.503	-	-	-0.08	1.330	1.999
	FR1 n7	20M	BPSK	50	28	DFT-15	Top Side	0mm	Ant 13	DSI 5	507000	2535	17.53	19.30	1.503	-	-	0.1	1.570	2.360
	FR1 n7	20M	BPSK	50	28	DFT-15	Top Side	0mm	Ant 13	DSI 5	502000	2510	17.40	19.30	1.549	-	-	-0.08	1.490	2.308
	FR1 n7	20M	BPSK	50	28	DFT-15	Top Side	0mm	Ant 13	DSI 5	512000	2560	17.47	19.30	1.524	-	-	0.1	1.470	2.240
	FR1 n7	20M	BPSK	50	28	DFT-15	Back	12mm	Ant 13	DSI 4	507000	2535	22.25	23.80	1.429	-	-	0.08	0.328	0.469
	FR1 n7	20M	BPSK	50	28	DFT-15	Top Side	14mm	Ant 13	DSI 4	507000	2535	22.25	23.80	1.429	-	-	-0.05	0.391	0.559
	FR1 n7	20M	BPSK	100	0	DFT-15	Top Side	0mm	Ant 13	DSI 5	507000	2535	17.52	19.30	1.507	-	-	0.05	1.450	2.185
	FR1 n7	20M	BPSK	1	53	DFT-15	Back	0mm	Ant 13	DSI 8	507000	2535	15.53	17.30	1.503	-	-	0.02	0.853	1.282
	FR1 n7	20M	BPSK	1	53	DFT-15	Back	0mm	Ant 13	DSI 8	507000	2535	15.53	17.30	1.503	-	-	0.12	0.918	1.380
	FR1 n7	20M	BPSK	50	28	DFT-15	Back	0mm	Ant 13	DSI 8	507000	2535	15.50	17.30	1.514	-	-	-0.04	0.880	1.332
	FR1 n7	20M	BPSK	50	28	DFT-15	Top Side	0mm	Ant 13	DSI 8	507000	2535	15.50	17.30	1.514	-	-	-0.04	0.935	1.415
3500-3900MHz																				
79	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 5	633334	3500.01	18.92	20.00	1.282	-	-	-0.09	1.650	2.116
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 5	633334	3500.01	18.92	20.00	1.282	-	-	0.03	1.380	1.770



	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 11	DSI 4	633334	3500.01	22.82	24.00	1.312	-	-	0.15	0.497	0.652
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	13mm	Ant 11	DSI 4	633334	3500.01	22.82	24.00	1.312	-	-	-0.08	0.531	0.697
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 5	633334	3500.01	18.87	20.00	1.297	-	-	0.03	1.550	2.011
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 5	633334	3500.01	18.87	20.00	1.297	-	-	0.07	1.310	1.699
	FR1 n77 (Part 27Q)	100M	BPSK	270	0	DFT-30	Back	0mm	Ant 11	DSI 5	633334	3500.01	18.79	20.00	1.321	-	-	0.03	1.510	1.995
	FR1 n77 (Part 27Q)	100M	BPSK	270	0	DFT-30	Left Side	0mm	Ant 11	DSI 5	633334	3500.01	18.79	20.00	1.321	-	-	0.01	1.240	1.638
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 8	633334	3500.01	16.43	17.50	1.279	-	-	-0.07	0.887	1.135
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 8	633334	3500.01	16.43	17.50	1.279	-	-	-0.07	0.770	0.985
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 8	633334	3500.01	16.35	17.50	1.303	-	-	0.04	0.880	1.147
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 8	633334	3500.01	16.35	17.50	1.303	-	-	0.12	0.759	0.989
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 5	656000	3840	18.72	20.00	1.343	-	-	-0.07	1.460	1.960
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 5	656000	3840	18.72	20.00	1.343	-	-	-0.06	1.290	1.732
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 11	DSI 4	656000	3840	22.77	24.00	1.327	-	-	0.11	0.419	0.556
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	13mm	Ant 11	DSI 4	656000	3840	22.77	24.00	1.327	-	-	0.05	0.435	0.577
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 5	656000	3840	18.69	20.00	1.352	-	-	0.08	1.410	1.906
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 5	656000	3840	18.69	20.00	1.352	-	-	0.02	1.220	1.650
	FR1 n77 (Part 27Q)	100M	BPSK	270	0	DFT-30	Back	0mm	Ant 11	DSI 5	656000	3840	18.68	20.00	1.355	-	-	0.03	1.350	1.830
	FR1 n77 (Part 27Q)	100M	BPSK	270	0	DFT-30	Left Side	0mm	Ant 11	DSI 5	656000	3840	18.68	20.00	1.355	-	-	-0.08	1.170	1.586
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 8	656000	3840	16.23	17.50	1.340	-	-	0.05	0.727	0.974
	FR1 n77 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 8	656000	3840	16.23	17.50	1.340	-	-	-0.07	0.591	0.792
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 8	656000	3840	16.22	17.50	1.343	-	-	0.05	0.734	0.986
	FR1 n77 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 8	656000	3840	16.22	17.50	1.343	-	-	-0.09	0.581	0.780
80	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 5	633334	3500.01	18.91	19.80	1.227	-	-	0.11	1.550	1.903
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 5	633334	3500.01	18.91	19.80	1.227	-	-	-0.07	1.330	1.632
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 11	DSI 4	633334	3500.01	22.78	23.80	1.265	-	-	0.08	0.571	0.722
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	13mm	Ant 11	DSI 4	633334	3500.01	22.78	23.80	1.265	-	-	0.11	0.688	0.870
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 5	633334	3500.01	18.88	19.80	1.236	-	-	0.02	1.500	1.854
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 5	633334	3500.01	18.88	19.80	1.236	-	-	-0.11	1.260	1.557
	FR1 n78 (Part 27Q)	100M	BPSK	270	0	DFT-30	Back	0mm	Ant 11	DSI 5	633334	3500.01	18.81	19.80	1.256	-	-	0.08	1.470	1.846
	FR1 n78 (Part 27Q)	100M	BPSK	270	0	DFT-30	Left Side	0mm	Ant 11	DSI 5	633334	3500.01	18.81	19.80	1.256	-	-	0.08	1.470	1.846
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 8	633334	3500.01	16.42	17.30	1.225	-	-	-0.07	0.920	1.127
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 8	633334	3500.01	16.42	17.30	1.225	-	-	0.11	0.758	0.928
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 8	633334	3500.01	16.38	17.30	1.236	-	-	-0.04	0.915	1.131
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 8	633334	3500.01	16.38	17.30	1.236	-	-	-0.08	0.770	0.952
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 5	650000	3750	18.62	19.80	1.312	-	-	0.07	1.450	1.903
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 5	650000	3750	18.62	19.80	1.312	-	-	0.07	1.100	1.443
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 11	DSI 4	650000	3750	22.73	23.80	1.279	-	-	-0.05	0.592	0.757
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	13mm	Ant 11	DSI 4	650000	3750	22.73	23.80	1.279	-	-	-0.18	0.678	0.867
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 5	650000	3750	18.60	19.80	1.318	-	-	0.09	1.440	1.898
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 5	650000	3750	18.60	19.80	1.318	-	-	0.07	1.080	1.424
	FR1 n78 (Part 27Q)	100M	BPSK	270	0	DFT-30	Back	0mm	Ant 11	DSI 5	650000	3750	18.56	19.80	1.330	-	-	0.15	1.410	1.876
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 8	650000	3750	16.12	17.30	1.312	-	-	-0.06	0.885	1.161
	FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 8	650000	3750	16.12	17.30	1.312	-	-	-0.07	0.617	0.810
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 8	650000	3750	16.07	17.30	1.327	-	-	-0.01	0.879	1.167
	FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 8	650000	3750	16.07	17.30	1.327	-	-	0.12	0.642	0.852
5000MHz-6000MHz																				
	WLAN5GHz					802.11a 6Mbps	Front	0mm	Ant 22	Reduce Level 1	60	5300	17.92	19.00	1.282	97.2	1.029	0.08	0.352	0.464
	WLAN5GHz					802.11a 6Mbps	Back	0mm	Ant 22	Reduce Level 1	60	5300	17.92	19.00	1.282	97.2	1.029	0.04	0.240	0.317
81	WLAN5GHz					802.11a 6Mbps	Right Side	0mm	Ant 22	Reduce Level 1	60	5300	17.92	19.00	1.282	97.2	1.029	-0.01	0.367	0.484
	WLAN5GHz					802.11a 6Mbps	Top Side	0mm	Ant 22	Reduce Level 1	60	5300	17.92	19.00	1.282	97.2	1.029	0.13	0.288	0.380
	WLAN5GHz					802.11a 6Mbps	Front	0mm	Ant 22	Reduce Level 1	116	5580	17.78	19.00	1.324	97.2	1.029	-0.01	0.295	0.402
	WLAN5GHz					802.11a 6Mbps	Back	0mm	Ant 22	Reduce Level 1	116	5580	17.78	19.00	1.324	97.2	1.029	0.02	0.206	0.281
82	WLAN5GHz					802.11a 6Mbps	Right Side	0mm	Ant 22	Reduce Level 1	116	5580	17.78	19.00	1.324	97.2	1.029	-0.05	0.303	0.413
	WLAN5GHz					802.11a 6Mbps	Top Side	0mm	Ant 22	Reduce Level 1	116	5580	17.78	19.00	1.324	97.2	1.029	0.08	0.285	0.388



<EN-DC SAR>

Table with columns: 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 10g SAR (W/kg), Reported 10g SAR (W/kg). Rows are grouped by frequency bands: 1750MHz, 1900MHz, 2600MHz, and 507000.



FR1 n7	20M	BPSK	50	28	DFT-15	Back	0mm	Ant 13	DSI 8	507000	2535	14.82	16.30	1.406	-	-	-0.03	0.625	0.879
FR1 n7	20M	BPSK	50	28	DFT-15	Top Side	0mm	Ant 13	DSI 8	507000	2535	14.82	16.30	1.406	-	-	0.01	0.710	0.998
3500-3900MHz																			
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 5	633334	3500.01	17.32	18.30	1.253	-	-	-0.02	0.982	1.231
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 5	633334	3500.01	17.32	18.30	1.253	-	-	0.14	0.852	1.068
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 11	DSI 4	633334	3500.01	21.11	22.30	1.315	-	-	0.08	0.413	0.543
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	13mm	Ant 11	DSI 4	633334	3500.01	21.11	22.30	1.315	-	-	0.11	0.497	0.654
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 5	633334	3500.01	17.24	18.30	1.276	-	-	0.03	0.972	1.241
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 5	633334	3500.01	17.24	18.30	1.276	-	-	0.08	0.811	1.035
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 8	633334	3500.01	13.83	14.80	1.250	-	-	0.01	0.423	0.529
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 8	633334	3500.01	13.83	14.80	1.250	-	-	-0.06	0.316	0.395
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 8	633334	3500.01	13.78	14.80	1.265	-	-	-0.07	0.441	0.558
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 8	633334	3500.01	13.78	14.80	1.265	-	-	-0.07	0.330	0.417
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 5	650000	3750	17.05	18.30	1.334	-	-	0.06	0.632	0.842
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 5	650000	3750	17.05	18.30	1.334	-	-	-0.09	0.729	0.972
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	10mm	Ant 11	DSI 4	656000	3840	20.86	22.30	1.393	-	-	0.11	0.321	0.447
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	13mm	Ant 11	DSI 4	656000	3840	20.86	22.30	1.393	-	-	0.05	0.333	0.464
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 5	650000	3750	17.00	18.30	1.349	-	-	-0.1	0.609	0.821
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 5	650000	3750	17.00	18.30	1.349	-	-	0.09	0.692	0.933
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Back	0mm	Ant 11	DSI 8	650000	3750	13.59	14.80	1.321	-	-	0.02	0.321	0.424
FR1 n78 (Part 27Q)	100M	BPSK	1	137	DFT-30	Left Side	0mm	Ant 11	DSI 8	650000	3750	13.59	14.80	1.321	-	-	0.04	0.384	0.507
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Back	0mm	Ant 11	DSI 8	650000	3750	13.51	14.80	1.346	-	-	-0.08	0.281	0.378
FR1 n78 (Part 27Q)	100M	BPSK	135	69	DFT-30	Left Side	0mm	Ant 11	DSI 8	650000	3750	13.51	14.80	1.346	-	-	0.01	0.362	0.487

15.5 Repeated SAR Measurement

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 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
2600MHz																					
1st	FR1 n7	20M	BPSK	1	53	DFT-15	Back	0mm	Ant 11	DSI 5	507000	2535	20.68	21.50	1.208	-	-	0.11	2.250	-	2.718
2nd	FR1 n7	20M	BPSK	1	53	DFT-15	Back	0mm	Ant 11	DSI 5	507000	2535	20.68	21.50	1.208	-	-	0.08	2.110	1.07	2.548

General Note:

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

16. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific
1.	WWAN + 2.4GHz WLAN	Yes	Yes	Yes	Yes
2.	WWAN + 5GHz WLAN	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
5.	WWAN + 5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes

General Note:

1. The above WWAN includes 5G NR mode or LTE inter band UL CA.
2. The worst case WLAN SAR for each configuration was used for SAR summation.
3. WLAN 2.4GHz and Bluetooth share the same antenna, and cannot transmit simultaneously.
4. According to the EUT characteristic, WLAN 2.4GHz and WLAN 5GHz can transmit simultaneously.
5. For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in this section did not additional to evaluate 2TX combination of simultaneously transmission.
6. For distance SAR and non-distance SAR, always chose higher SAR to do co-located analysis.
7. The reported SAR summation is calculated based on the same configuration and test position
8. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, 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.
 - iii) If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR , simultaneously transmission SAR measurement is not necessary.
 - iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.

16.1 Head Exposure Conditions

Exposure Position	1	4	7	10	1+4 Summed 1g SAR (W/kg)	1+7+10 Summed 1g SAR (W/kg)
	Maximum WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)		
Right Cheek	0.505	0.139	0.122	0.103	0.64	0.73
Right Tilted	0.610	0.166	0.148	0.125	0.78	0.88
Left Cheek	0.399	0.387	0.399	0.357	0.79	1.16
Left Tilted	0.372	0.306	0.218	0.201	0.68	0.79

EN-DC (WWAN)

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	
LTE Band 5_Ant 13	FR1 n78_Ant 11	Right Cheek	0.465	0.397	0.86
		Right Tilted	0.421	0.109	0.53
		Left Cheek	0.373	0.221	0.59
		Left Tilted	0.349	0.063	0.41
LTE Band 5_Ant 13	FR1 n78_Ant 12	Right Cheek	0.465	0.242	0.71
		Right Tilted	0.421	0.135	0.56
		Left Cheek	0.373	0.086	0.46
		Left Tilted	0.349	0.079	0.43
LTE Band 5_Ant 13	FR1 n78_Ant 21	Right Cheek	0.465	0.094	0.56
		Right Tilted	0.421	0.083	0.50
		Left Cheek	0.373	0.133	0.51
		Left Tilted	0.349	0.134	0.48
LTE Band 5_Ant 13	FR1 n78_Ant 23	Right Cheek	0.465	0.106	0.57
		Right Tilted	0.421	0.028	0.45
		Left Cheek	0.373	0.380	0.75
		Left Tilted	0.349	0.089	0.44
LTE Band 5_Ant 41	FR1 n66_Ant 11	Right Cheek	0.228	0.307	0.54
		Right Tilted	0.128	0.059	0.19
		Left Cheek	0.327	0.244	0.57
		Left Tilted	0.141	0.028	0.17
LTE Band 5_Ant 41	FR1 n66_Ant 13	Right Cheek	0.228	0.353	0.58
		Right Tilted	0.128	0.368	0.50
		Left Cheek	0.327	0.224	0.55
		Left Tilted	0.141	0.264	0.41
LTE Band 5_Ant 41	FR1 n78_Ant 11	Right Cheek	0.228	0.397	0.63
		Right Tilted	0.128	0.109	0.24
		Left Cheek	0.327	0.221	0.55
		Left Tilted	0.141	0.063	0.20
LTE Band 5_Ant 41	FR1 n78_Ant 12	Right Cheek	0.228	0.242	0.47
		Right Tilted	0.128	0.135	0.26
		Left Cheek	0.327	0.086	0.41
		Left Tilted	0.141	0.079	0.22
LTE Band 5_Ant 41	FR1 n78_Ant 21	Right Cheek	0.228	0.094	0.32
		Right Tilted	0.128	0.083	0.21
		Left Cheek	0.327	0.133	0.46
		Left Tilted	0.141	0.134	0.27
LTE Band 5_Ant 41	FR1 n78_Ant 23	Right Cheek	0.228	0.106	0.33
		Right Tilted	0.128	0.028	0.16
		Left Cheek	0.327	0.380	0.71
		Left Tilted	0.141	0.089	0.23



LTE Band 4_Ant 13	FR1 n78_Ant 11	Right Cheek	0.370	0.397	0.77
		Right Tilted	0.434	0.109	0.54
		Left Cheek	0.255	0.221	0.48
		Left Tilted	0.259	0.063	0.32
LTE Band 4_Ant 13	FR1 n78_Ant 12	Right Cheek	0.370	0.242	0.61
		Right Tilted	0.434	0.135	0.57
		Left Cheek	0.255	0.086	0.34
		Left Tilted	0.259	0.079	0.34
LTE Band 4_Ant 13	FR1 n78_Ant 21	Right Cheek	0.370	0.094	0.46
		Right Tilted	0.434	0.083	0.52
		Left Cheek	0.255	0.133	0.39
		Left Tilted	0.259	0.134	0.39
LTE Band 4_Ant 13	FR1 n78_Ant 23	Right Cheek	0.370	0.106	0.48
		Right Tilted	0.434	0.028	0.46
		Left Cheek	0.255	0.380	0.64
		Left Tilted	0.259	0.089	0.35
LTE Band 4_Ant 31	FR1 n78_Ant 11	Right Cheek	0.066	0.397	0.46
		Right Tilted	0.057	0.109	0.17
		Left Cheek	0.120	0.221	0.34
		Left Tilted	0.104	0.063	0.17
LTE Band 4_Ant 31	FR1 n78_Ant 12	Right Cheek	0.066	0.242	0.31
		Right Tilted	0.057	0.135	0.19
		Left Cheek	0.120	0.086	0.21
		Left Tilted	0.104	0.079	0.18
LTE Band 4_Ant 31	FR1 n78_Ant 21	Right Cheek	0.066	0.094	0.16
		Right Tilted	0.057	0.083	0.14
		Left Cheek	0.120	0.133	0.25
		Left Tilted	0.104	0.134	0.24
LTE Band 4_Ant 31	FR1 n78_Ant 23	Right Cheek	0.066	0.106	0.17
		Right Tilted	0.057	0.028	0.09
		Left Cheek	0.120	0.380	0.50
		Left Tilted	0.104	0.089	0.19

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	
LTE Band 66_Ant 13	FR1 n78_Ant 11	Right Cheek	0.397	0.397	0.79
		Right Tilted	0.459	0.109	0.57
		Left Cheek	0.240	0.221	0.46
		Left Tilted	0.274	0.063	0.34
LTE Band 66_Ant 13	FR1 n78_Ant 12	Right Cheek	0.397	0.242	0.64
		Right Tilted	0.459	0.135	0.59
		Left Cheek	0.240	0.086	0.33
		Left Tilted	0.274	0.079	0.35
LTE Band 66_Ant 13	FR1 n78_Ant 21	Right Cheek	0.397	0.094	0.49
		Right Tilted	0.459	0.083	0.54
		Left Cheek	0.240	0.133	0.37
		Left Tilted	0.274	0.134	0.41
LTE Band 66_Ant 13	FR1 n78_Ant 23	Right Cheek	0.397	0.106	0.50
		Right Tilted	0.459	0.028	0.49
		Left Cheek	0.240	0.380	0.62
		Left Tilted	0.274	0.089	0.36
LTE Band 66_Ant 31	FR1 n78_Ant 11	Right Cheek	0.077	0.397	0.47
		Right Tilted	0.048	0.109	0.16
		Left Cheek	0.139	0.221	0.36



		Left Tilted	0.058	0.063	0.12
LTE Band 66_Ant 31	FR1 n78_Ant 12	Right Cheek	0.077	0.242	0.32
		Right Tilted	0.048	0.135	0.18
		Left Cheek	0.139	0.086	0.23
		Left Tilted	0.058	0.079	0.14
		Right Cheek	0.077	0.094	0.17
LTE Band 66_Ant 31	FR1 n78_Ant 21	Right Tilted	0.048	0.083	0.13
		Left Cheek	0.139	0.133	0.27
		Left Tilted	0.058	0.134	0.19
		Right Cheek	0.077	0.106	0.18
LTE Band 66_Ant 31	FR1 n78_Ant 23	Right Tilted	0.048	0.028	0.08
		Left Cheek	0.139	0.380	0.52
		Left Tilted	0.058	0.089	0.15
		Right Cheek	0.426	0.397	0.82
LTE Band 2_Ant 13	FR1 n78_Ant 11	Right Tilted	0.369	0.109	0.48
		Left Cheek	0.214	0.221	0.44
		Left Tilted	0.243	0.063	0.31
		Right Cheek	0.426	0.242	0.67
LTE Band 2_Ant 13	FR1 n78_Ant 12	Right Tilted	0.369	0.135	0.50
		Left Cheek	0.214	0.086	0.30
		Left Tilted	0.243	0.079	0.32
		Right Cheek	0.426	0.094	0.52
LTE Band 2_Ant 13	FR1 n78_Ant 21	Right Tilted	0.369	0.083	0.45
		Left Cheek	0.214	0.133	0.35
		Left Tilted	0.243	0.134	0.38
		Right Cheek	0.426	0.106	0.53
LTE Band 2_Ant 13	FR1 n78_Ant 23	Right Tilted	0.369	0.028	0.40
		Left Cheek	0.214	0.380	0.59
		Left Tilted	0.243	0.089	0.33
		Right Cheek	0.426	0.106	0.53

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	
LTE Band 2_Ant 31	FR1 n7_Ant 11	Right Cheek	0.088	0.291	0.38
		Right Tilted	0.072	0.073	0.15
		Left Cheek	0.124	0.211	0.34
		Left Tilted	0.076	0.055	0.13
LTE Band 2_Ant 31	FR1 n7_Ant 13	Right Cheek	0.088	0.366	0.45
		Right Tilted	0.072	0.464	0.54
		Left Cheek	0.124	0.159	0.28
		Left Tilted	0.076	0.194	0.27
LTE Band 2_Ant 31	FR1 n66_Ant 11	Right Cheek	0.088	0.307	0.40
		Right Tilted	0.072	0.059	0.13
		Left Cheek	0.124	0.244	0.37
		Left Tilted	0.076	0.028	0.10
LTE Band 2_Ant 31	FR1 n66_Ant 13	Right Cheek	0.088	0.353	0.44
		Right Tilted	0.072	0.368	0.44
		Left Cheek	0.124	0.224	0.35
		Left Tilted	0.076	0.264	0.34
LTE Band 2_Ant 31	FR1 n78_Ant 11	Right Cheek	0.088	0.397	0.49
		Right Tilted	0.072	0.109	0.18
		Left Cheek	0.124	0.221	0.35
		Left Tilted	0.076	0.063	0.14
LTE Band 2_Ant 31	FR1 n78_Ant 12	Right Cheek	0.088	0.242	0.33
		Right Tilted	0.072	0.135	0.21



		Left Cheek	0.124	0.086	0.21
		Left Tilted	0.076	0.079	0.15
LTE Band 2_Ant 31	FR1 n78_Ant 21	Right Cheek	0.088	0.094	0.18
		Right Tilted	0.072	0.083	0.15
		Left Cheek	0.124	0.133	0.26
		Left Tilted	0.076	0.134	0.21
		Right Cheek	0.088	0.106	0.19
LTE Band 2_Ant 31	FR1 n78_Ant 23	Right Tilted	0.072	0.028	0.10
		Left Cheek	0.124	0.380	0.50
		Left Tilted	0.076	0.089	0.17
		Right Cheek	0.293	0.397	0.69
LTE Band 7_Ant 13	FR1 n78_Ant 11	Right Tilted	0.347	0.109	0.46
		Left Cheek	0.123	0.221	0.34
		Left Tilted	0.152	0.063	0.22
		Right Cheek	0.293	0.242	0.54
LTE Band 7_Ant 13	FR1 n78_Ant 12	Right Tilted	0.347	0.135	0.48
		Left Cheek	0.123	0.086	0.21
		Left Tilted	0.152	0.079	0.23
		Right Cheek	0.293	0.094	0.39
LTE Band 7_Ant 13	FR1 n78_Ant 21	Right Tilted	0.347	0.083	0.43
		Left Cheek	0.123	0.133	0.26
		Left Tilted	0.152	0.134	0.29
		Right Cheek	0.293	0.106	0.40
LTE Band 7_Ant 13	FR1 n78_Ant 23	Right Tilted	0.347	0.028	0.38
		Left Cheek	0.123	0.380	0.50
		Left Tilted	0.152	0.089	0.24
		Right Cheek	0.300	0.307	0.61
LTE Band 7_Ant 31	FR1 n66_Ant 11	Right Tilted	0.178	0.059	0.24
		Left Cheek	0.168	0.244	0.41
		Left Tilted	0.143	0.028	0.17
		Right Cheek	0.300	0.353	0.65
LTE Band 7_Ant 31	FR1 n66_Ant 13	Right Tilted	0.178	0.368	0.55
		Left Cheek	0.168	0.224	0.39
		Left Tilted	0.143	0.264	0.41
		Right Cheek	0.300	0.397	0.70
LTE Band 7_Ant 31	FR1 n78_Ant 11	Right Tilted	0.178	0.109	0.29
		Left Cheek	0.168	0.221	0.39
		Left Tilted	0.143	0.063	0.21
		Right Cheek	0.300	0.242	0.54
LTE Band 7_Ant 31	FR1 n78_Ant 12	Right Tilted	0.178	0.135	0.31
		Left Cheek	0.168	0.086	0.25
		Left Tilted	0.143	0.079	0.22
		Right Cheek	0.300	0.094	0.39
LTE Band 7_Ant 31	FR1 n78_Ant 21	Right Tilted	0.178	0.083	0.26
		Left Cheek	0.168	0.133	0.30
		Left Tilted	0.143	0.134	0.28
		Right Cheek	0.300	0.106	0.41
LTE Band 7_Ant 31	FR1 n78_Ant 23	Right Tilted	0.178	0.028	0.21
		Left Cheek	0.168	0.380	0.55
		Left Tilted	0.143	0.089	0.23



WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN	FR1	
			1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 41_Ant 13	FR1 n78_Ant 11	Right Cheek	0.331	0.397	0.73
		Right Tilted	0.369	0.109	0.48
		Left Cheek	0.119	0.221	0.34
		Left Tilted	0.149	0.063	0.21
LTE Band 41_Ant 13	FR1 n78_Ant 12	Right Cheek	0.331	0.242	0.57
		Right Tilted	0.369	0.135	0.50
		Left Cheek	0.119	0.086	0.21
		Left Tilted	0.149	0.079	0.23
LTE Band 41_Ant 13	FR1 n78_Ant 21	Right Cheek	0.331	0.094	0.42
		Right Tilted	0.369	0.083	0.45
		Left Cheek	0.119	0.133	0.25
		Left Tilted	0.149	0.134	0.28
LTE Band 41_Ant 13	FR1 n78_Ant 23	Right Cheek	0.331	0.106	0.44
		Right Tilted	0.369	0.028	0.40
		Left Cheek	0.119	0.380	0.50
		Left Tilted	0.149	0.089	0.24
LTE Band 41_Ant 31	FR1 n78_Ant 11	Right Cheek	0.224	0.397	0.62
		Right Tilted	0.117	0.109	0.23
		Left Cheek	0.125	0.221	0.35
		Left Tilted	0.075	0.063	0.14
LTE Band 41_Ant 31	FR1 n78_Ant 12	Right Cheek	0.224	0.242	0.47
		Right Tilted	0.117	0.135	0.25
		Left Cheek	0.125	0.086	0.21
		Left Tilted	0.075	0.079	0.15
LTE Band 41_Ant 31	FR1 n78_Ant 21	Right Cheek	0.224	0.094	0.32
		Right Tilted	0.117	0.083	0.20
		Left Cheek	0.125	0.133	0.26
		Left Tilted	0.075	0.134	0.21
LTE Band 41_Ant 31	FR1 n78_Ant 23	Right Cheek	0.224	0.106	0.33
		Right Tilted	0.117	0.028	0.15
		Left Cheek	0.125	0.380	0.51
		Left Tilted	0.075	0.089	0.16



EN-DC (WWAN+WLAN+Bluetooth)

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN	FR1	WLAN2.4GHz Ant 22	WLAN5GHz Ant 22	Bluetooth Ant 22		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 5_Ant 13	FR1 n78_Ant 11	Right Cheek	0.302	0.197	0.139	0.122	0.103	0.64	0.72
		Right Tilted	0.271	0.060	0.166	0.148	0.125	0.50	0.60
		Left Cheek	0.184	0.098	0.387	0.399	0.357	0.67	1.04
		Left Tilted	0.174	0.015	0.306	0.218	0.201	0.50	0.61
LTE Band 5_Ant 13	FR1 n78_Ant 12	Right Cheek	0.302	0.243	0.139	0.122	0.103	0.68	0.77
		Right Tilted	0.271	0.130	0.166	0.148	0.125	0.57	0.67
		Left Cheek	0.184	0.118	0.387	0.399	0.357	0.69	1.06
		Left Tilted	0.174	0.078	0.306	0.218	0.201	0.56	0.67
LTE Band 5_Ant 13	FR1 n78_Ant 21	Right Cheek	0.302	0.093	0.139	0.122	0.103	0.53	0.62
		Right Tilted	0.271	0.100	0.166	0.148	0.125	0.54	0.64
		Left Cheek	0.184	0.138	0.387	0.399	0.357	0.71	1.08
		Left Tilted	0.174	0.131	0.306	0.218	0.201	0.61	0.72
LTE Band 5_Ant 13	FR1 n78_Ant 23	Right Cheek	0.302	0.050	0.139	0.122	0.103	0.49	0.58
		Right Tilted	0.271	0.019	0.166	0.148	0.125	0.46	0.56
		Left Cheek	0.184	0.210	0.387	0.399	0.357	0.78	1.15
		Left Tilted	0.174	0.057	0.306	0.218	0.201	0.54	0.65
LTE Band 5 Ant 41	FR1 n66_Ant 11	Right Cheek	0.228	0.150	0.139	0.122	0.103	0.52	0.60
		Right Tilted	0.128	0.026	0.166	0.148	0.125	0.32	0.43
		Left Cheek	0.327	0.133	0.387	0.399	0.357	0.85	1.22
		Left Tilted	0.141	0.013	0.306	0.218	0.201	0.46	0.57
LTE Band 5 Ant 41	FR1 n66_Ant 13	Right Cheek	0.228	0.181	0.139	0.122	0.103	0.55	0.63
		Right Tilted	0.128	0.188	0.166	0.148	0.125	0.48	0.59
		Left Cheek	0.327	0.105	0.387	0.399	0.357	0.82	1.19
		Left Tilted	0.141	0.126	0.306	0.218	0.201	0.57	0.69
LTE Band 5 Ant 41	FR1 n78_Ant 11	Right Cheek	0.228	0.197	0.139	0.122	0.103	0.56	0.65
		Right Tilted	0.128	0.060	0.166	0.148	0.125	0.35	0.46
		Left Cheek	0.327	0.098	0.387	0.399	0.357	0.81	1.18
		Left Tilted	0.141	0.015	0.306	0.218	0.201	0.46	0.58
LTE Band 5 Ant 41	FR1 n78_Ant 12	Right Cheek	0.228	0.243	0.139	0.122	0.103	0.61	0.70
		Right Tilted	0.128	0.130	0.166	0.148	0.125	0.42	0.53
		Left Cheek	0.327	0.118	0.387	0.399	0.357	0.83	1.20
		Left Tilted	0.141	0.078	0.306	0.218	0.201	0.53	0.64
LTE Band 5 Ant 41	FR1 n78_Ant 21	Right Cheek	0.228	0.093	0.139	0.122	0.103	0.46	0.55
		Right Tilted	0.128	0.100	0.166	0.148	0.125	0.39	0.50
		Left Cheek	0.327	0.138	0.387	0.399	0.357	0.85	1.22
		Left Tilted	0.141	0.131	0.306	0.218	0.201	0.58	0.69
LTE Band 5 Ant 41	FR1 n78_Ant 23	Right Cheek	0.228	0.050	0.139	0.122	0.103	0.42	0.50
		Right Tilted	0.128	0.019	0.166	0.148	0.125	0.31	0.42
		Left Cheek	0.327	0.210	0.387	0.399	0.357	0.92	1.29
		Left Tilted	0.141	0.057	0.306	0.218	0.201	0.50	0.62
LTE Band 4_Ant 13	FR1 n78_Ant 11	Right Cheek	0.188	0.197	0.139	0.122	0.103	0.52	0.61
		Right Tilted	0.190	0.060	0.166	0.148	0.125	0.42	0.52
		Left Cheek	0.108	0.098	0.387	0.399	0.357	0.59	0.96
		Left Tilted	0.128	0.015	0.306	0.218	0.201	0.45	0.56
LTE Band 4_Ant 13	FR1 n78_Ant 12	Right Cheek	0.188	0.243	0.139	0.122	0.103	0.57	0.66
		Right Tilted	0.190	0.130	0.166	0.148	0.125	0.49	0.59
		Left Cheek	0.108	0.118	0.387	0.399	0.357	0.61	0.98
		Left Tilted	0.128	0.078	0.306	0.218	0.201	0.51	0.63
LTE Band 4_Ant 13	FR1 n78_Ant 21	Right Cheek	0.188	0.093	0.139	0.122	0.103	0.42	0.51
		Right Tilted	0.190	0.100	0.166	0.148	0.125	0.46	0.56



		Left Cheek	0.108	0.138	0.387	0.399	0.357	0.63	1.00
		Left Tilted	0.128	0.131	0.306	0.218	0.201	0.56	0.68
LTE Band 4_Ant 13	FR1 n78_Ant 23	Right Cheek	0.188	0.050	0.139	0.122	0.103	0.38	0.46
		Right Tilted	0.190	0.019	0.166	0.148	0.125	0.38	0.48
		Left Cheek	0.108	0.210	0.387	0.399	0.357	0.71	1.07
		Left Tilted	0.128	0.057	0.306	0.218	0.201	0.49	0.60
LTE Band 4 Ant 31	FR1 n78_Ant 11	Right Cheek	0.066	0.197	0.139	0.122	0.103	0.40	0.49
		Right Tilted	0.057	0.060	0.166	0.148	0.125	0.28	0.39
		Left Cheek	0.120	0.098	0.387	0.399	0.357	0.61	0.97
		Left Tilted	0.104	0.015	0.306	0.218	0.201	0.43	0.54
LTE Band 4 Ant 31	FR1 n78_Ant 12	Right Cheek	0.066	0.243	0.139	0.122	0.103	0.45	0.53
		Right Tilted	0.057	0.130	0.166	0.148	0.125	0.35	0.46
		Left Cheek	0.120	0.118	0.387	0.399	0.357	0.62	0.99
		Left Tilted	0.104	0.078	0.306	0.218	0.201	0.49	0.60
LTE Band 4 Ant 31	FR1 n78_Ant 21	Right Cheek	0.066	0.093	0.139	0.122	0.103	0.30	0.38
		Right Tilted	0.057	0.100	0.166	0.148	0.125	0.32	0.43
		Left Cheek	0.120	0.138	0.387	0.399	0.357	0.64	1.01
		Left Tilted	0.104	0.131	0.306	0.218	0.201	0.54	0.65
LTE Band 4 Ant 31	FR1 n78_Ant 23	Right Cheek	0.066	0.050	0.139	0.122	0.103	0.26	0.34
		Right Tilted	0.057	0.019	0.166	0.148	0.125	0.24	0.35
		Left Cheek	0.120	0.210	0.387	0.399	0.357	0.72	1.09
		Left Tilted	0.104	0.057	0.306	0.218	0.201	0.47	0.58

WWAN Band	Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)	
		WWAN	FR1	WLAN2.4GHz Ant 22	WLAN5GHz Ant 22	Bluetooth Ant 22			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
LTE Band 66_Ant 13	FR1 n78_Ant 11	Right Cheek	0.199	0.197	0.139	0.122	0.103	0.54	0.62
		Right Tilted	0.210	0.060	0.166	0.148	0.125	0.44	0.54
		Left Cheek	0.118	0.098	0.387	0.399	0.357	0.60	0.97
		Left Tilted	0.136	0.015	0.306	0.218	0.201	0.46	0.57
LTE Band 66_Ant 13	FR1 n78_Ant 12	Right Cheek	0.199	0.243	0.139	0.122	0.103	0.58	0.67
		Right Tilted	0.210	0.130	0.166	0.148	0.125	0.51	0.61
		Left Cheek	0.118	0.118	0.387	0.399	0.357	0.62	0.99
		Left Tilted	0.136	0.078	0.306	0.218	0.201	0.52	0.63
LTE Band 66_Ant 13	FR1 n78_Ant 21	Right Cheek	0.199	0.093	0.139	0.122	0.103	0.43	0.52
		Right Tilted	0.210	0.100	0.166	0.148	0.125	0.48	0.58
		Left Cheek	0.118	0.138	0.387	0.399	0.357	0.64	1.01
		Left Tilted	0.136	0.131	0.306	0.218	0.201	0.57	0.69
LTE Band 66_Ant 13	FR1 n78_Ant 23	Right Cheek	0.199	0.050	0.139	0.122	0.103	0.39	0.47
		Right Tilted	0.210	0.019	0.166	0.148	0.125	0.40	0.50
		Left Cheek	0.118	0.210	0.387	0.399	0.357	0.72	1.08
		Left Tilted	0.136	0.057	0.306	0.218	0.201	0.50	0.61
LTE Band 66 Ant 31	FR1 n7_Ant 11	Right Cheek	0.077	0.159	0.139	0.122	0.103	0.38	0.46
		Right Tilted	0.048	0.032	0.166	0.148	0.125	0.25	0.35
		Left Cheek	0.139	0.117	0.387	0.399	0.357	0.64	1.01
		Left Tilted	0.058	0.025	0.306	0.218	0.201	0.39	0.50
LTE Band 66 Ant 31	FR1 n7_Ant 13	Right Cheek	0.077	0.185	0.139	0.122	0.103	0.40	0.49
		Right Tilted	0.048	0.225	0.166	0.148	0.125	0.44	0.55
		Left Cheek	0.139	0.085	0.387	0.399	0.357	0.61	0.98
		Left Tilted	0.058	0.104	0.306	0.218	0.201	0.47	0.58
LTE Band 66 Ant 31	FR1 n78_Ant 11	Right Cheek	0.077	0.197	0.139	0.122	0.103	0.41	0.50
		Right Tilted	0.048	0.060	0.166	0.148	0.125	0.27	0.38
		Left Cheek	0.139	0.098	0.387	0.399	0.357	0.62	0.99



LTE Band 66 Ant 31	FR1 n78_Ant 12	Left Tilted	0.058	0.015	0.306	0.218	0.201	0.38	0.49
		Right Cheek	0.077	0.243	0.139	0.122	0.103	0.46	0.55
		Right Tilted	0.048	0.130	0.166	0.148	0.125	0.34	0.45
		Left Cheek	0.139	0.118	0.387	0.399	0.357	0.64	1.01
		Left Tilted	0.058	0.078	0.306	0.218	0.201	0.44	0.56
LTE Band 66 Ant 31	FR1 n78_Ant 21	Right Cheek	0.077	0.093	0.139	0.122	0.103	0.31	0.40
		Right Tilted	0.048	0.100	0.166	0.148	0.125	0.31	0.42
		Left Cheek	0.139	0.138	0.387	0.399	0.357	0.66	1.03
		Left Tilted	0.058	0.131	0.306	0.218	0.201	0.49	0.61
		Right Cheek	0.077	0.050	0.139	0.122	0.103	0.27	0.35
LTE Band 66 Ant 31	FR1 n78_Ant 23	Right Tilted	0.048	0.019	0.166	0.148	0.125	0.23	0.34
		Left Cheek	0.139	0.210	0.387	0.399	0.357	0.74	1.11
		Left Tilted	0.058	0.057	0.306	0.218	0.201	0.42	0.53
		Right Cheek	0.187	0.197	0.139	0.122	0.103	0.52	0.61
		Right Tilted	0.194	0.060	0.166	0.148	0.125	0.42	0.53
LTE Band 2_Ant 13	FR1 n78_Ant 11	Left Cheek	0.106	0.098	0.387	0.399	0.357	0.59	0.96
		Left Tilted	0.122	0.015	0.306	0.218	0.201	0.44	0.56
		Right Cheek	0.187	0.243	0.139	0.122	0.103	0.57	0.66
		Right Tilted	0.194	0.130	0.166	0.148	0.125	0.49	0.60
		Left Cheek	0.106	0.118	0.387	0.399	0.357	0.61	0.98
LTE Band 2_Ant 13	FR1 n78_Ant 12	Left Tilted	0.122	0.078	0.306	0.218	0.201	0.51	0.62
		Right Cheek	0.187	0.093	0.139	0.122	0.103	0.42	0.51
		Right Tilted	0.194	0.100	0.166	0.148	0.125	0.46	0.57
		Left Cheek	0.106	0.138	0.387	0.399	0.357	0.63	1.00
		Left Tilted	0.122	0.131	0.306	0.218	0.201	0.56	0.67
LTE Band 2_Ant 13	FR1 n78_Ant 21	Right Cheek	0.187	0.050	0.139	0.122	0.103	0.38	0.46
		Right Tilted	0.194	0.019	0.166	0.148	0.125	0.38	0.49
		Left Cheek	0.106	0.210	0.387	0.399	0.357	0.70	1.07
		Left Tilted	0.122	0.057	0.306	0.218	0.201	0.49	0.60
		Right Cheek	0.187	0.050	0.139	0.122	0.103	0.38	0.46
LTE Band 2_Ant 13	FR1 n78_Ant 23	Right Tilted	0.194	0.019	0.166	0.148	0.125	0.38	0.49
		Left Cheek	0.106	0.210	0.387	0.399	0.357	0.70	1.07
		Left Tilted	0.122	0.057	0.306	0.218	0.201	0.49	0.60
		Right Cheek	0.187	0.050	0.139	0.122	0.103	0.38	0.46
		Right Tilted	0.194	0.019	0.166	0.148	0.125	0.38	0.49

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)		
LTE Band 2 Ant 31	FR1 n7_Ant 11	Right Cheek	0.088	0.159	0.139	0.122	0.103	0.39	0.47
		Right Tilted	0.072	0.032	0.166	0.148	0.125	0.27	0.38
		Left Cheek	0.124	0.117	0.387	0.399	0.357	0.63	1.00
		Left Tilted	0.076	0.025	0.306	0.218	0.201	0.41	0.52
LTE Band 2 Ant 31	FR1 n7_Ant 13	Right Cheek	0.088	0.185	0.139	0.122	0.103	0.41	0.50
		Right Tilted	0.072	0.225	0.166	0.148	0.125	0.46	0.57
		Left Cheek	0.124	0.085	0.387	0.399	0.357	0.60	0.97
		Left Tilted	0.076	0.104	0.306	0.218	0.201	0.49	0.60
LTE Band 2 Ant 31	FR1 n66_Ant 11	Right Cheek	0.088	0.150	0.139	0.122	0.103	0.38	0.46
		Right Tilted	0.072	0.026	0.166	0.148	0.125	0.26	0.37
		Left Cheek	0.124	0.133	0.387	0.399	0.357	0.64	1.01
		Left Tilted	0.076	0.013	0.306	0.218	0.201	0.40	0.51
LTE Band 2 Ant 31	FR1 n66_Ant 13	Right Cheek	0.088	0.181	0.139	0.122	0.103	0.41	0.49
		Right Tilted	0.072	0.188	0.166	0.148	0.125	0.43	0.53
		Left Cheek	0.124	0.105	0.387	0.399	0.357	0.62	0.99
		Left Tilted	0.076	0.126	0.306	0.218	0.201	0.51	0.62
LTE Band 2 Ant 31	FR1 n78_Ant 11	Right Cheek	0.088	0.197	0.139	0.122	0.103	0.42	0.51
		Right Tilted	0.072	0.060	0.166	0.148	0.125	0.30	0.41
		Left Cheek	0.124	0.098	0.387	0.399	0.357	0.61	0.98
		Left Tilted	0.076	0.015	0.306	0.218	0.201	0.40	0.51



LTE Band 2 Ant 31	FR1 n78_Ant 12	Right Cheek	0.088	0.243	0.139	0.122	0.103	0.47	0.56
		Right Tilted	0.072	0.130	0.166	0.148	0.125	0.37	0.48
		Left Cheek	0.124	0.118	0.387	0.399	0.357	0.63	1.00
		Left Tilted	0.076	0.078	0.306	0.218	0.201	0.46	0.57
LTE Band 2 Ant 31	FR1 n78_Ant 21	Right Cheek	0.088	0.093	0.139	0.122	0.103	0.32	0.41
		Right Tilted	0.072	0.100	0.166	0.148	0.125	0.34	0.44
		Left Cheek	0.124	0.138	0.387	0.399	0.357	0.65	1.02
		Left Tilted	0.076	0.131	0.306	0.218	0.201	0.51	0.63
LTE Band 2 Ant 31	FR1 n78_Ant 23	Right Cheek	0.088	0.050	0.139	0.122	0.103	0.28	0.36
		Right Tilted	0.072	0.019	0.166	0.148	0.125	0.26	0.36
		Left Cheek	0.124	0.210	0.387	0.399	0.357	0.72	1.09
		Left Tilted	0.076	0.057	0.306	0.218	0.201	0.44	0.55
LTE Band 7_Ant 13	FR1 n78_Ant 11	Right Cheek	0.155	0.197	0.139	0.122	0.103	0.49	0.58
		Right Tilted	0.184	0.060	0.166	0.148	0.125	0.41	0.52
		Left Cheek	0.065	0.098	0.387	0.399	0.357	0.55	0.92
		Left Tilted	0.084	0.015	0.306	0.218	0.201	0.41	0.52
LTE Band 7_Ant 13	FR1 n78_Ant 12	Right Cheek	0.155	0.243	0.139	0.122	0.103	0.54	0.62
		Right Tilted	0.184	0.130	0.166	0.148	0.125	0.48	0.59
		Left Cheek	0.065	0.118	0.387	0.399	0.357	0.57	0.94
		Left Tilted	0.084	0.078	0.306	0.218	0.201	0.47	0.58
LTE Band 7_Ant 13	FR1 n78_Ant 21	Right Cheek	0.155	0.093	0.139	0.122	0.103	0.39	0.47
		Right Tilted	0.184	0.100	0.166	0.148	0.125	0.45	0.56
		Left Cheek	0.065	0.138	0.387	0.399	0.357	0.59	0.96
		Left Tilted	0.084	0.131	0.306	0.218	0.201	0.52	0.63
LTE Band 7_Ant 13	FR1 n78_Ant 23	Right Cheek	0.155	0.050	0.139	0.122	0.103	0.34	0.43
		Right Tilted	0.184	0.019	0.166	0.148	0.125	0.37	0.48
		Left Cheek	0.065	0.210	0.387	0.399	0.357	0.66	1.03
		Left Tilted	0.084	0.057	0.306	0.218	0.201	0.45	0.56
LTE Band 7 Ant 31	FR1 n66_Ant 11	Right Cheek	0.300	0.150	0.139	0.122	0.103	0.59	0.68
		Right Tilted	0.178	0.026	0.166	0.148	0.125	0.37	0.48
		Left Cheek	0.168	0.133	0.387	0.399	0.357	0.69	1.06
		Left Tilted	0.143	0.013	0.306	0.218	0.201	0.46	0.58
LTE Band 7 Ant 31	FR1 n66_Ant 13	Right Cheek	0.300	0.181	0.139	0.122	0.103	0.62	0.71
		Right Tilted	0.178	0.188	0.166	0.148	0.125	0.53	0.64
		Left Cheek	0.168	0.105	0.387	0.399	0.357	0.66	1.03
		Left Tilted	0.143	0.126	0.306	0.218	0.201	0.58	0.69
LTE Band 7 Ant 31	FR1 n78_Ant 11	Right Cheek	0.300	0.197	0.139	0.122	0.103	0.64	0.72
		Right Tilted	0.178	0.060	0.166	0.148	0.125	0.40	0.51
		Left Cheek	0.168	0.098	0.387	0.399	0.357	0.65	1.02
		Left Tilted	0.143	0.015	0.306	0.218	0.201	0.46	0.58
LTE Band 7 Ant 31	FR1 n78_Ant 12	Right Cheek	0.300	0.243	0.139	0.122	0.103	0.68	0.77
		Right Tilted	0.178	0.130	0.166	0.148	0.125	0.47	0.58
		Left Cheek	0.168	0.118	0.387	0.399	0.357	0.67	1.04
		Left Tilted	0.143	0.078	0.306	0.218	0.201	0.53	0.64
LTE Band 7 Ant 31	FR1 n78_Ant 21	Right Cheek	0.300	0.093	0.139	0.122	0.103	0.53	0.62
		Right Tilted	0.178	0.100	0.166	0.148	0.125	0.44	0.55
		Left Cheek	0.168	0.138	0.387	0.399	0.357	0.69	1.06
		Left Tilted	0.143	0.131	0.306	0.218	0.201	0.58	0.69
LTE Band 7 Ant 31	FR1 n78_Ant 23	Right Cheek	0.300	0.050	0.139	0.122	0.103	0.49	0.58
		Right Tilted	0.178	0.019	0.166	0.148	0.125	0.36	0.47
		Left Cheek	0.168	0.210	0.387	0.399	0.357	0.77	1.13
		Left Tilted	0.143	0.057	0.306	0.218	0.201	0.51	0.62



WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN	FR1	WLAN2.4GHz Ant 22	WLAN5GHz Ant 22	Bluetooth Ant 22		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 41_Ant 13	FR1 n78_Ant 11	Right Cheek	0.148	0.197	0.139	0.122	0.103	0.48	0.57
		Right Tilted	0.160	0.060	0.166	0.148	0.125	0.39	0.49
		Left Cheek	0.055	0.098	0.387	0.399	0.357	0.54	0.91
		Left Tilted	0.065	0.015	0.306	0.218	0.201	0.39	0.50
LTE Band 41_Ant 13	FR1 n78_Ant 12	Right Cheek	0.148	0.243	0.139	0.122	0.103	0.53	0.62
		Right Tilted	0.160	0.130	0.166	0.148	0.125	0.46	0.56
		Left Cheek	0.055	0.118	0.387	0.399	0.357	0.56	0.93
		Left Tilted	0.065	0.078	0.306	0.218	0.201	0.45	0.56
LTE Band 41_Ant 13	FR1 n78_Ant 21	Right Cheek	0.148	0.093	0.139	0.122	0.103	0.38	0.47
		Right Tilted	0.160	0.100	0.166	0.148	0.125	0.43	0.53
		Left Cheek	0.055	0.138	0.387	0.399	0.357	0.58	0.95
		Left Tilted	0.065	0.131	0.306	0.218	0.201	0.50	0.61
LTE Band 41_Ant 13	FR1 n78_Ant 23	Right Cheek	0.148	0.050	0.139	0.122	0.103	0.34	0.42
		Right Tilted	0.160	0.019	0.166	0.148	0.125	0.35	0.45
		Left Cheek	0.055	0.210	0.387	0.399	0.357	0.65	1.02
		Left Tilted	0.065	0.057	0.306	0.218	0.201	0.43	0.54
LTE Band 41_Ant 31	FR1 n78_Ant 11	Right Cheek	0.224	0.197	0.139	0.122	0.103	0.56	0.65
		Right Tilted	0.117	0.060	0.166	0.148	0.125	0.34	0.45
		Left Cheek	0.125	0.098	0.387	0.399	0.357	0.61	0.98
		Left Tilted	0.075	0.015	0.306	0.218	0.201	0.40	0.51
LTE Band 41_Ant 31	FR1 n78_Ant 12	Right Cheek	0.224	0.243	0.139	0.122	0.103	0.61	0.69
		Right Tilted	0.117	0.130	0.166	0.148	0.125	0.41	0.52
		Left Cheek	0.125	0.118	0.387	0.399	0.357	0.63	1.00
		Left Tilted	0.075	0.078	0.306	0.218	0.201	0.46	0.57
LTE Band 41_Ant 31	FR1 n78_Ant 21	Right Cheek	0.224	0.093	0.139	0.122	0.103	0.46	0.54
		Right Tilted	0.117	0.100	0.166	0.148	0.125	0.38	0.49
		Left Cheek	0.125	0.138	0.387	0.399	0.357	0.65	1.02
		Left Tilted	0.075	0.131	0.306	0.218	0.201	0.51	0.62
LTE Band 41_Ant 31	FR1 n78_Ant 23	Right Cheek	0.224	0.050	0.139	0.122	0.103	0.41	0.50
		Right Tilted	0.117	0.019	0.166	0.148	0.125	0.30	0.41
		Left Cheek	0.125	0.210	0.387	0.399	0.357	0.72	1.09
		Left Tilted	0.075	0.057	0.306	0.218	0.201	0.44	0.55

Inter ULCA (WWAN)

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	WWAN 1g SAR (W/kg)	
LTE Band 4A_Ant 31	LTE Band 7A_Ant 11	Right Cheek	0.033	0.309	0.34
		Right Tilted	0.033	0.049	0.08
		Left Cheek	0.087	0.176	0.26
		Left Tilted	0.075	0.031	0.11
LTE Band 4A_Ant 31	LTE Band 7A_Ant 13	Right Cheek	0.033	0.253	0.29
		Right Tilted	0.033	0.305	0.34
		Left Cheek	0.087	0.099	0.19
		Left Tilted	0.075	0.130	0.21

Inter ULCA (WWAN+WLAN+Bluetooth)

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)		
LTE Band 4A_Ant 31	LTE Band 7A_Ant 11	Right Cheek	0.033	0.196	0.139	0.122	0.103	0.37	0.45
		Right Tilted	0.033	0.032	0.166	0.148	0.125	0.23	0.34
		Left Cheek	0.087	0.113	0.387	0.399	0.357	0.59	0.96
		Left Tilted	0.075	0.019	0.306	0.218	0.201	0.40	0.51
LTE Band 4A_Ant 31	LTE Band 7A_Ant 13	Right Cheek	0.033	0.157	0.139	0.122	0.103	0.33	0.42
		Right Tilted	0.033	0.190	0.166	0.148	0.125	0.39	0.50
		Left Cheek	0.087	0.062	0.387	0.399	0.357	0.54	0.91
		Left Tilted	0.075	0.081	0.306	0.218	0.201	0.46	0.58



16.2 Hotspot Exposure Conditions

Exposure Position	1	4	7	10	1+4 Summed 1g SAR (W/kg)	1+7+10 Summed 1g SAR (W/kg)
	Maximum WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)		
Front	0.424	0.131	0.161	0.032	0.56	0.62
Back	0.608	0.283	0.198	0.098	0.89	0.90
Left side	0.712				0.71	0.71
Right side	0.530	0.142	0.345	0.041	0.67	0.92
Top side	0.793	0.181	0.496	0.047	0.97	1.34
Bottom side	0.761				0.76	0.76

EN-DC (WWAN)

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	
LTE Band 5_Ant 13	FR1 n78_Ant 11	Front	0.199	0.093	0.29
		Back	0.401	0.289	0.69
		Left side	0.097	0.384	0.48
		Right side			0.00
		Top side	0.207	0.026	0.23
		Bottom side			0.00
LTE Band 5_Ant 13	FR1 n78_Ant 12	Front	0.199	0.050	0.25
		Back	0.401	0.092	0.49
		Left side	0.097	0.042	0.14
		Right side			0.00
		Top side	0.207	0.036	0.24
		Bottom side			0.00
LTE Band 5_Ant 13	FR1 n78_Ant 21	Front	0.199	0.028	0.23
		Back	0.401	0.012	0.41
		Left side	0.097		0.10
		Right side		0.004	0.00
		Top side	0.207		0.21
		Bottom side			0.00
LTE Band 5_Ant 13	FR1 n78_Ant 23	Front	0.199	0.086	0.29
		Back	0.401	0.123	0.52
		Left side	0.097		0.10
		Right side		0.146	0.15
		Top side	0.207	0.022	0.23
		Bottom side			0.00
LTE Band 5_Ant 41	FR1 n66_Ant 11	Front	0.185	0.103	0.29
		Back	0.303	0.165	0.47
		Left side	0.130	0.217	0.35
		Right side			0.00
		Top side		0.026	0.03
		Bottom side	0.075		0.08
LTE Band 5_Ant 41	FR1 n66_Ant 13	Front	0.185	0.135	0.32
		Back	0.303	0.171	0.47
		Left side	0.130	0.047	0.18
		Right side			0.00
		Top side		0.204	0.20
		Bottom side	0.075		0.08
LTE Band 5_Ant 41	FR1 n78_Ant 11	Front	0.185	0.093	0.28
		Back	0.303	0.289	0.59



		Left side	0.130	0.384	0.51
		Right side			0.00
		Top side		0.026	0.03
		Bottom side	0.075		0.08
LTE Band 5_Ant 41	FR1 n78_Ant 12	Front	0.185	0.050	0.23
		Back	0.303	0.092	0.39
		Left side	0.130	0.042	0.17
		Right side			0.00
		Top side		0.036	0.04
		Bottom side	0.075		0.08
LTE Band 5_Ant 41	FR1 n78_Ant 21	Front	0.185	0.028	0.21
		Back	0.303	0.012	0.32
		Left side	0.130		0.13
		Right side		0.004	0.00
		Top side			0.00
		Bottom side	0.075		0.08
LTE Band 5_Ant 41	FR1 n78_Ant 23	Front	0.185	0.086	0.27
		Back	0.303	0.123	0.43
		Left side	0.130		0.13
		Right side		0.146	0.15
		Top side		0.022	0.02
		Bottom side	0.075		0.08
LTE Band 4_Ant 13	FR1 n78_Ant 11	Front	0.110	0.093	0.20
		Back	0.134	0.289	0.42
		Left side	0.027	0.384	0.41
		Right side			0.00
		Top side	0.177	0.026	0.20
		Bottom side			0.00
LTE Band 4_Ant 13	FR1 n78_Ant 12	Front	0.110	0.050	0.16
		Back	0.134	0.092	0.23
		Left side	0.027	0.042	0.07
		Right side			0.00
		Top side	0.177	0.036	0.21
		Bottom side			0.00
LTE Band 4_Ant 13	FR1 n78_Ant 21	Front	0.110	0.028	0.14
		Back	0.134	0.012	0.15
		Left side	0.027		0.03
		Right side		0.004	0.00
		Top side	0.177		0.18
		Bottom side			0.00
LTE Band 4_Ant 13	FR1 n78_Ant 23	Front	0.110	0.086	0.20
		Back	0.134	0.123	0.26
		Left side	0.027		0.03
		Right side		0.146	0.15
		Top side	0.177	0.022	0.20
		Bottom side			0.00
LTE Band 4_Ant 31	FR1 n78_Ant 11	Front	0.173	0.093	0.27
		Back	0.220	0.289	0.51
		Left side		0.384	0.38
		Right side	0.059		0.06
		Top side		0.026	0.03
		Bottom side	0.259		0.26
LTE Band 4_Ant 31	FR1 n78_Ant 12	Front	0.173	0.050	0.22
		Back	0.220	0.092	0.31
		Left side		0.042	0.04
		Right side	0.059		0.06



		Top side		0.036	0.04
		Bottom side	0.259		0.26
LTE Band 4_Ant 31	FR1 n78_Ant 21	Front	0.173	0.028	0.20
		Back	0.220	0.012	0.23
		Left side			0.00
		Right side	0.059	0.004	0.06
		Top side			0.00
		Bottom side	0.259		0.26
LTE Band 4_Ant 31	FR1 n78_Ant 23	Front	0.173	0.086	0.26
		Back	0.220	0.123	0.34
		Left side			0.00
		Right side	0.059	0.146	0.21
		Top side		0.022	0.02
		Bottom side	0.259		0.26

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)	
		WWAN	FR1		
		1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 66_Ant 13	FR1 n78_Ant 11	Front	0.106	0.093	0.20
		Back	0.127	0.289	0.42
		Left side	0.025	0.384	0.41
		Right side			0.00
		Top side	0.166	0.026	0.19
		Bottom side			0.00
LTE Band 66_Ant 13	FR1 n78_Ant 12	Front	0.106	0.050	0.16
		Back	0.127	0.092	0.22
		Left side	0.025	0.042	0.07
		Right side			0.00
		Top side	0.166	0.036	0.20
		Bottom side			0.00
LTE Band 66_Ant 13	FR1 n78_Ant 21	Front	0.106	0.028	0.13
		Back	0.127	0.012	0.14
		Left side	0.025		0.03
		Right side		0.004	0.00
		Top side	0.166		0.17
		Bottom side			0.00
LTE Band 66_Ant 13	FR1 n78_Ant 23	Front	0.106	0.086	0.19
		Back	0.127	0.123	0.25
		Left side	0.025		0.03
		Right side		0.146	0.15
		Top side	0.166	0.022	0.19
		Bottom side			0.00
LTE Band 66_Ant 31	FR1 n78_Ant 11	Front	0.169	0.093	0.26
		Back	0.256	0.289	0.55
		Left side		0.384	0.38
		Right side	0.052		0.05
		Top side		0.026	0.03
		Bottom side	0.279		0.28
LTE Band 66_Ant 31	FR1 n78_Ant 12	Front	0.169	0.050	0.22
		Back	0.256	0.092	0.35
		Left side		0.042	0.04
		Right side	0.052		0.05
		Top side		0.036	0.04
		Bottom side	0.279		0.28
LTE Band 66_Ant 31	FR1 n78_Ant 21	Front	0.169	0.028	0.20



		Back	0.256	0.012	0.27
		Left side			0.00
		Right side	0.052	0.004	0.06
		Top side			0.00
		Bottom side	0.279		0.28
LTE Band 66_Ant 31	FR1 n78_Ant 23	Front	0.169	0.086	0.26
		Back	0.256	0.123	0.38
		Left side			0.00
		Right side	0.052	0.146	0.20
		Top side		0.022	0.02
		Bottom side	0.279		0.28
LTE Band 2_Ant 13	FR1 n78_Ant 11	Front	0.122	0.093	0.22
		Back	0.162	0.289	0.45
		Left side	0.058	0.384	0.44
		Right side			0.00
		Top side	0.241	0.026	0.27
		Bottom side			0.00
LTE Band 2_Ant 13	FR1 n78_Ant 12	Front	0.122	0.050	0.17
		Back	0.162	0.092	0.25
		Left side	0.058	0.042	0.10
		Right side			0.00
		Top side	0.241	0.036	0.28
		Bottom side			0.00
LTE Band 2_Ant 13	FR1 n78_Ant 21	Front	0.122	0.028	0.15
		Back	0.162	0.012	0.17
		Left side	0.058		0.06
		Right side		0.004	0.00
		Top side	0.241		0.24
		Bottom side			0.00
LTE Band 2_Ant 13	FR1 n78_Ant 23	Front	0.122	0.086	0.21
		Back	0.162	0.123	0.29
		Left side	0.058		0.06
		Right side		0.146	0.15
		Top side	0.241	0.022	0.26
		Bottom side			0.00

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	
LTE Band 2_Ant 31	FR1 n7_Ant 11	Front	0.122	0.102	0.22
		Back	0.177	0.253	0.43
		Left side		0.281	0.28
		Right side	0.053		0.05
		Top side		0.013	0.01
		Bottom side	0.243		0.24
LTE Band 2_Ant 31	FR1 n7_Ant 13	Front	0.122	0.120	0.24
		Back	0.177	0.283	0.46
		Left side		0.076	0.08
		Right side	0.053		0.05
		Top side		0.366	0.37
		Bottom side	0.243		0.24
LTE Band 2_Ant 31	FR1 n66_Ant 11	Front	0.122	0.103	0.23
		Back	0.177	0.165	0.34
		Left side		0.217	0.22
		Right side	0.053		0.05



		Top side		0.026	0.03
		Bottom side	0.243		0.24
LTE Band 2_Ant 31	FR1 n66_Ant 13	Front	0.122	0.135	0.26
		Back	0.177	0.171	0.35
		Left side		0.047	0.05
		Right side	0.053		0.05
		Top side		0.204	0.20
		Bottom side	0.243		0.24
LTE Band 2_Ant 31	FR1 n78_Ant 11	Front	0.122	0.093	0.22
		Back	0.177	0.289	0.47
		Left side		0.384	0.38
		Right side	0.053		0.05
		Top side		0.026	0.03
		Bottom side	0.243		0.24
LTE Band 2_Ant 31	FR1 n78_Ant 12	Front	0.122	0.050	0.17
		Back	0.177	0.092	0.27
		Left side		0.042	0.04
		Right side	0.053		0.05
		Top side		0.036	0.04
		Bottom side	0.243		0.24
LTE Band 2_Ant 31	FR1 n78_Ant 21	Front	0.122	0.028	0.15
		Back	0.177	0.012	0.19
		Left side			0.00
		Right side	0.053	0.004	0.06
		Top side			0.00
		Bottom side	0.243		0.24
LTE Band 2_Ant 31	FR1 n78_Ant 23	Front	0.122	0.086	0.21
		Back	0.177	0.123	0.30
		Left side			0.00
		Right side	0.053	0.146	0.20
		Top side		0.022	0.02
		Bottom side	0.243		0.24
LTE Band 7_Ant 13	FR1 n78_Ant 11	Front	0.069	0.093	0.16
		Back	0.200	0.289	0.49
		Left side	0.040	0.384	0.42
		Right side			0.00
		Top side	0.242	0.026	0.27
		Bottom side			0.00
LTE Band 7_Ant 13	FR1 n78_Ant 12	Front	0.069	0.050	0.12
		Back	0.200	0.092	0.29
		Left side	0.040	0.042	0.08
		Right side			0.00
		Top side	0.242	0.036	0.28
		Bottom side			0.00
LTE Band 7_Ant 13	FR1 n78_Ant 21	Front	0.069	0.028	0.10
		Back	0.200	0.012	0.21
		Left side	0.040		0.04
		Right side		0.004	0.00
		Top side	0.242		0.24
		Bottom side			0.00
LTE Band 7_Ant 13	FR1 n78_Ant 23	Front	0.069	0.086	0.16
		Back	0.200	0.123	0.32
		Left side	0.040		0.04
		Right side		0.146	0.15
		Top side	0.242	0.022	0.26
		Bottom side			0.00



LTE Band 7_Ant 31	FR1 n66_Ant 11	Front	0.110	0.103	0.21
		Back	0.151	0.165	0.32
		Left side		0.217	0.22
		Right side	0.096		0.10
		Top side		0.026	0.03
		Bottom side	0.092		0.09
LTE Band 7_Ant 31	FR1 n66_Ant 13	Front	0.110	0.135	0.25
		Back	0.151	0.171	0.32
		Left side		0.047	0.05
		Right side	0.096		0.10
		Top side		0.204	0.20
		Bottom side	0.092		0.09
LTE Band 7_Ant 31	FR1 n78_Ant 11	Front	0.110	0.093	0.20
		Back	0.151	0.289	0.44
		Left side		0.384	0.38
		Right side	0.096		0.10
		Top side		0.026	0.03
		Bottom side	0.092		0.09
LTE Band 7_Ant 31	FR1 n78_Ant 12	Front	0.110	0.050	0.16
		Back	0.151	0.092	0.24
		Left side		0.042	0.04
		Right side	0.096		0.10
		Top side		0.036	0.04
		Bottom side	0.092		0.09
LTE Band 7_Ant 31	FR1 n78_Ant 21	Front	0.110	0.028	0.14
		Back	0.151	0.012	0.16
		Left side			0.00
		Right side	0.096	0.004	0.10
		Top side			0.00
		Bottom side	0.092		0.09
LTE Band 7_Ant 31	FR1 n78_Ant 23	Front	0.110	0.086	0.20
		Back	0.151	0.123	0.27
		Left side			0.00
		Right side	0.096	0.146	0.24
		Top side		0.022	0.02
		Bottom side	0.092		0.09

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	
LTE Band 41_Ant 13	FR1 n78_Ant 11	Front	0.073	0.093	0.17
		Back	0.184	0.289	0.47
		Left side	0.065	0.384	0.45
		Right side			0.00
		Top side	0.237	0.026	0.26
		Bottom side			0.00
LTE Band 41_Ant 13	FR1 n78_Ant 12	Front	0.073	0.050	0.12
		Back	0.184	0.092	0.28
		Left side	0.065	0.042	0.11
		Right side			0.00
		Top side	0.237	0.036	0.27
		Bottom side			0.00
LTE Band 41_Ant 13	FR1 n78_Ant 21	Front	0.073	0.028	0.10
		Back	0.184	0.012	0.20
		Left side	0.065		0.07



		Right side		0.004	0.00
		Top side	0.237		0.24
		Bottom side			0.00
LTE Band 41_Ant 13	FR1 n78_Ant 23	Front	0.073	0.086	0.16
		Back	0.184	0.123	0.31
		Left side	0.065		0.07
		Right side		0.146	0.15
		Top side	0.237	0.022	0.26
		Bottom side			0.00
LTE Band 41_Ant 31	FR1 n78_Ant 11	Front	0.126	0.093	0.22
		Back	0.151	0.289	0.44
		Left side		0.384	0.38
		Right side	0.108		0.11
		Top side		0.026	0.03
		Bottom side	0.100		0.10
LTE Band 41_Ant 31	FR1 n78_Ant 12	Front	0.126	0.050	0.18
		Back	0.151	0.092	0.24
		Left side		0.042	0.04
		Right side	0.108		0.11
		Top side		0.036	0.04
		Bottom side	0.100		0.10
LTE Band 41_Ant 31	FR1 n78_Ant 21	Front	0.126	0.028	0.15
		Back	0.151	0.012	0.16
		Left side			0.00
		Right side	0.108	0.004	0.11
		Top side			0.00
		Bottom side	0.100		0.10
LTE Band 41_Ant 31	FR1 n78_Ant 23	Front	0.126	0.086	0.21
		Back	0.151	0.123	0.27
		Left side			0.00
		Right side	0.108	0.146	0.25
		Top side		0.022	0.02
		Bottom side	0.100		0.10

EN-DC (WWAN+WLAN+Bluetooth)

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)		
LTE Band 5_Ant 13	FR1 n78_Ant 11	Front	0.199	0.093	0.131	0.161	0.032	0.42	0.49
		Back	0.401	0.289	0.283	0.198	0.098	0.97	0.99
		Left side	0.097	0.384				0.48	0.48
		Right side			0.142	0.345	0.041	0.14	0.39
		Top side	0.207	0.026	0.181	0.496	0.047	0.41	0.78
		Bottom side						0.00	0.00
LTE Band 5_Ant 13	FR1 n78_Ant 12	Front	0.199	0.050	0.131	0.161	0.032	0.38	0.44
		Back	0.401	0.092	0.283	0.198	0.098	0.78	0.79
		Left side	0.097	0.042				0.14	0.14
		Right side			0.142	0.345	0.041	0.14	0.39
		Top side	0.207	0.036	0.181	0.496	0.047	0.42	0.79
		Bottom side						0.00	0.00
LTE Band 5_Ant 13	FR1 n78_Ant 21	Front	0.199	0.028	0.131	0.161	0.032	0.36	0.42
		Back	0.401	0.012	0.283	0.198	0.098	0.70	0.71
		Left side	0.097					0.10	0.10
		Right side		0.004	0.142	0.345	0.041	0.15	0.39



		Top side	0.207		0.181	0.496	0.047	0.39	0.75	
		Bottom side						0.00	0.00	
LTE Band 5_Ant 13	FR1 n78_Ant 23	Front	0.199	0.086	0.131	0.161	0.032	0.42	0.48	
		Back	0.401	0.123	0.283	0.198	0.098	0.81	0.82	
		Left side	0.097						0.10	0.10
		Right side		0.146	0.142	0.345	0.041	0.29	0.53	
		Top side	0.207	0.022	0.181	0.496	0.047	0.41	0.77	
		Bottom side							0.00	0.00
LTE Band 5_Ant 41	FR1 n66_Ant 11	Front	0.185	0.103	0.131	0.161	0.032	0.42	0.48	
		Back	0.303	0.165	0.283	0.198	0.098	0.75	0.76	
		Left side	0.130	0.217					0.35	0.35
		Right side			0.142	0.345	0.041	0.14	0.39	
		Top side		0.026	0.181	0.496	0.047	0.21	0.57	
		Bottom side	0.075						0.08	0.08
LTE Band 5_Ant 41	FR1 n66_Ant 13	Front	0.185	0.135	0.131	0.161	0.032	0.45	0.51	
		Back	0.303	0.171	0.283	0.198	0.098	0.76	0.77	
		Left side	0.130	0.047					0.18	0.18
		Right side			0.142	0.345	0.041	0.14	0.39	
		Top side		0.204	0.181	0.496	0.047	0.39	0.75	
		Bottom side	0.075						0.08	0.08
LTE Band 5_Ant 41	FR1 n78_Ant 11	Front	0.185	0.093	0.131	0.161	0.032	0.41	0.47	
		Back	0.303	0.289	0.283	0.198	0.098	0.88	0.89	
		Left side	0.130	0.384					0.51	0.51
		Right side			0.142	0.345	0.041	0.14	0.39	
		Top side		0.026	0.181	0.496	0.047	0.21	0.57	
		Bottom side	0.075						0.08	0.08
LTE Band 5_Ant 41	FR1 n78_Ant 12	Front	0.185	0.050	0.131	0.161	0.032	0.37	0.43	
		Back	0.303	0.092	0.283	0.198	0.098	0.68	0.69	
		Left side	0.130	0.042					0.17	0.17
		Right side			0.142	0.345	0.041	0.14	0.39	
		Top side		0.036	0.181	0.496	0.047	0.22	0.58	
		Bottom side	0.075						0.08	0.08
LTE Band 5_Ant 41	FR1 n78_Ant 21	Front	0.185	0.028	0.131	0.161	0.032	0.34	0.41	
		Back	0.303	0.012	0.283	0.198	0.098	0.60	0.61	
		Left side	0.130						0.13	0.13
		Right side		0.004	0.142	0.345	0.041	0.15	0.39	
		Top side			0.181	0.496	0.047	0.18	0.54	
		Bottom side	0.075						0.08	0.08
LTE Band 5_Ant 41	FR1 n78_Ant 23	Front	0.185	0.086	0.131	0.161	0.032	0.40	0.46	
		Back	0.303	0.123	0.283	0.198	0.098	0.71	0.72	
		Left side	0.130						0.13	0.13
		Right side		0.146	0.142	0.345	0.041	0.29	0.53	
		Top side		0.022	0.181	0.496	0.047	0.20	0.57	
		Bottom side	0.075						0.08	0.08
LTE Band 4_Ant 13	FR1 n78_Ant 11	Front	0.110	0.093	0.131	0.161	0.032	0.33	0.40	
		Back	0.134	0.289	0.283	0.198	0.098	0.71	0.72	
		Left side	0.027	0.384					0.41	0.41
		Right side			0.142	0.345	0.041	0.14	0.39	
		Top side	0.177	0.026	0.181	0.496	0.047	0.38	0.75	
		Bottom side							0.00	0.00
LTE Band 4_Ant 13	FR1 n78_Ant 12	Front	0.110	0.050	0.131	0.161	0.032	0.29	0.35	
		Back	0.134	0.092	0.283	0.198	0.098	0.51	0.52	
		Left side	0.027	0.042					0.07	0.07
		Right side			0.142	0.345	0.041	0.14	0.39	
		Top side	0.177	0.036	0.181	0.496	0.047	0.39	0.76	
		Bottom side							0.00	0.00



LTE Band 4_Ant 13	FR1 n78_Ant 21	Front	0.110	0.028	0.131	0.161	0.032	0.27	0.33
		Back	0.134	0.012	0.283	0.198	0.098	0.43	0.44
		Left side	0.027					0.03	0.03
		Right side		0.004	0.142	0.345	0.041	0.15	0.39
		Top side	0.177		0.181	0.496	0.047	0.36	0.72
		Bottom side						0.00	0.00
LTE Band 4_Ant 13	FR1 n78_Ant 23	Front	0.110	0.086	0.131	0.161	0.032	0.33	0.39
		Back	0.134	0.123	0.283	0.198	0.098	0.54	0.55
		Left side	0.027					0.03	0.03
		Right side		0.146	0.142	0.345	0.041	0.29	0.53
		Top side	0.177	0.022	0.181	0.496	0.047	0.38	0.74
		Bottom side						0.00	0.00
LTE Band 4_Ant 31	FR1 n78_Ant 11	Front	0.173	0.093	0.131	0.161	0.032	0.40	0.46
		Back	0.220	0.289	0.283	0.198	0.098	0.79	0.81
		Left side		0.384				0.38	0.38
		Right side	0.059		0.142	0.345	0.041	0.20	0.45
		Top side		0.026	0.181	0.496	0.047	0.21	0.57
		Bottom side	0.259					0.26	0.26
LTE Band 4_Ant 31	FR1 n78_Ant 12	Front	0.173	0.050	0.131	0.161	0.032	0.35	0.42
		Back	0.220	0.092	0.283	0.198	0.098	0.59	0.61
		Left side		0.042				0.04	0.04
		Right side	0.059		0.142	0.345	0.041	0.20	0.45
		Top side		0.036	0.181	0.496	0.047	0.22	0.58
		Bottom side	0.259					0.26	0.26
LTE Band 4_Ant 31	FR1 n78_Ant 21	Front	0.173	0.028	0.131	0.161	0.032	0.33	0.39
		Back	0.220	0.012	0.283	0.198	0.098	0.52	0.53
		Left side						0.00	0.00
		Right side	0.059	0.004	0.142	0.345	0.041	0.21	0.45
		Top side			0.181	0.496	0.047	0.18	0.54
		Bottom side	0.259					0.26	0.26
LTE Band 4_Ant 31	FR1 n78_Ant 23	Front	0.173	0.086	0.131	0.161	0.032	0.39	0.45
		Back	0.220	0.123	0.283	0.198	0.098	0.63	0.64
		Left side						0.00	0.00
		Right side	0.059	0.146	0.142	0.345	0.041	0.35	0.59
		Top side		0.022	0.181	0.496	0.047	0.20	0.57
		Bottom side	0.259					0.26	0.26

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)		
LTE Band 66_Ant 13	FR1 n78_Ant 11	Front	0.106	0.093	0.131	0.161	0.032	0.33	0.39
		Back	0.127	0.289	0.283	0.198	0.098	0.70	0.71
		Left side	0.025	0.384				0.41	0.41
		Right side			0.142	0.345	0.041	0.14	0.39
		Top side	0.166	0.026	0.181	0.496	0.047	0.37	0.74
		Bottom side						0.00	0.00
LTE Band 66_Ant 13	FR1 n78_Ant 12	Front	0.106	0.050	0.131	0.161	0.032	0.29	0.35
		Back	0.127	0.092	0.283	0.198	0.098	0.50	0.51
		Left side	0.025	0.042				0.07	0.07
		Right side			0.142	0.345	0.041	0.14	0.39
		Top side	0.166	0.036	0.181	0.496	0.047	0.38	0.75
		Bottom side						0.00	0.00
LTE Band 66_Ant 13	FR1 n78_Ant 21	Front	0.106	0.028	0.131	0.161	0.032	0.26	0.33
		Back	0.127	0.012	0.283	0.198	0.098	0.42	0.44



		Left side	0.025					0.03	0.03
		Right side		0.004	0.142	0.345	0.041	0.15	0.39
		Top side	0.166		0.181	0.496	0.047	0.35	0.71
		Bottom side						0.00	0.00
LTE Band 66_Ant 13	FR1 n78_Ant 23	Front	0.106	0.086	0.131	0.161	0.032	0.32	0.39
		Back	0.127	0.123	0.283	0.198	0.098	0.53	0.55
		Left side	0.025					0.03	0.03
		Right side		0.146	0.142	0.345	0.041	0.29	0.53
		Top side	0.166	0.022	0.181	0.496	0.047	0.37	0.73
		Bottom side						0.00	0.00
LTE Band 66_Ant 31	FR1 n7_Ant 11	Front	0.169	0.102	0.131	0.161	0.032	0.40	0.46
		Back	0.256	0.253	0.283	0.198	0.098	0.79	0.81
		Left side		0.281				0.28	0.28
		Right side	0.052		0.142	0.345	0.041	0.19	0.44
		Top side		0.013	0.181	0.496	0.047	0.19	0.56
		Bottom side	0.279					0.28	0.28
LTE Band 66_Ant 31	FR1 n7_Ant 13	Front	0.169	0.120	0.131	0.161	0.032	0.42	0.48
		Back	0.256	0.283	0.283	0.198	0.098	0.82	0.84
		Left side		0.076				0.08	0.08
		Right side	0.052		0.142	0.345	0.041	0.19	0.44
		Top side		0.366	0.181	0.496	0.047	0.55	0.91
		Bottom side	0.279					0.28	0.28
LTE Band 66_Ant 31	FR1 n78_Ant 11	Front	0.169	0.093	0.131	0.161	0.032	0.39	0.46
		Back	0.256	0.289	0.283	0.198	0.098	0.83	0.84
		Left side		0.384				0.38	0.38
		Right side	0.052		0.142	0.345	0.041	0.19	0.44
		Top side		0.026	0.181	0.496	0.047	0.21	0.57
		Bottom side	0.279					0.28	0.28
LTE Band 66_Ant 31	FR1 n78_Ant 12	Front	0.169	0.050	0.131	0.161	0.032	0.35	0.41
		Back	0.256	0.092	0.283	0.198	0.098	0.63	0.64
		Left side		0.042				0.04	0.04
		Right side	0.052		0.142	0.345	0.041	0.19	0.44
		Top side		0.036	0.181	0.496	0.047	0.22	0.58
		Bottom side	0.279					0.28	0.28
LTE Band 66_Ant 31	FR1 n78_Ant 21	Front	0.169	0.028	0.131	0.161	0.032	0.33	0.39
		Back	0.256	0.012	0.283	0.198	0.098	0.55	0.56
		Left side						0.00	0.00
		Right side	0.052	0.004	0.142	0.345	0.041	0.20	0.44
		Top side			0.181	0.496	0.047	0.18	0.54
		Bottom side	0.279					0.28	0.28
LTE Band 66_Ant 31	FR1 n78_Ant 23	Front	0.169	0.086	0.131	0.161	0.032	0.39	0.45
		Back	0.256	0.123	0.283	0.198	0.098	0.66	0.68
		Left side						0.00	0.00
		Right side	0.052	0.146	0.142	0.345	0.041	0.34	0.58
		Top side		0.022	0.181	0.496	0.047	0.20	0.57
		Bottom side	0.279					0.28	0.28
LTE Band 2_Ant 13	FR1 n78_Ant 11	Front	0.122	0.093	0.131	0.161	0.032	0.35	0.41
		Back	0.162	0.289	0.283	0.198	0.098	0.73	0.75
		Left side	0.058	0.384				0.44	0.44
		Right side			0.142	0.345	0.041	0.14	0.39
		Top side	0.241	0.026	0.181	0.496	0.047	0.45	0.81
		Bottom side						0.00	0.00
LTE Band 2_Ant 13	FR1 n78_Ant 12	Front	0.122	0.050	0.131	0.161	0.032	0.30	0.36
		Back	0.162	0.092	0.283	0.198	0.098	0.54	0.55
		Left side	0.058	0.042				0.10	0.10
		Right side			0.142	0.345	0.041	0.14	0.39



		Top side	0.241	0.036	0.181	0.496	0.047	0.46	0.82
		Bottom side						0.00	0.00
LTE Band 2_Ant 13	FR1 n78_Ant 21	Front	0.122	0.028	0.131	0.161	0.032	0.28	0.34
		Back	0.162	0.012	0.283	0.198	0.098	0.46	0.47
		Left side	0.058					0.06	0.06
		Right side		0.004	0.142	0.345	0.041	0.15	0.39
		Top side	0.241		0.181	0.496	0.047	0.42	0.78
		Bottom side						0.00	0.00
LTE Band 2_Ant 13	FR1 n78_Ant 23	Front	0.122	0.086	0.131	0.161	0.032	0.34	0.40
		Back	0.162	0.123	0.283	0.198	0.098	0.57	0.58
		Left side	0.058					0.06	0.06
		Right side		0.146	0.142	0.345	0.041	0.29	0.53
		Top side	0.241	0.022	0.181	0.496	0.047	0.44	0.81
		Bottom side						0.00	0.00

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)		
LTE Band 2_Ant 31	FR1 n7_Ant 11	Front	0.122	0.102	0.131	0.161	0.032	0.36	0.42
		Back	0.177	0.253	0.283	0.198	0.098	0.71	0.73
		Left side		0.281				0.28	0.28
		Right side	0.053		0.142	0.345	0.041	0.20	0.44
		Top side		0.013	0.181	0.496	0.047	0.19	0.56
		Bottom side	0.243					0.24	0.24
LTE Band 2_Ant 31	FR1 n7_Ant 13	Front	0.122	0.120	0.131	0.161	0.032	0.37	0.44
		Back	0.177	0.283	0.283	0.198	0.098	0.74	0.76
		Left side		0.076				0.08	0.08
		Right side	0.053		0.142	0.345	0.041	0.20	0.44
		Top side		0.366	0.181	0.496	0.047	0.55	0.91
		Bottom side	0.243					0.24	0.24
LTE Band 2_Ant 31	FR1 n66_Ant 11	Front	0.122	0.103	0.131	0.161	0.032	0.36	0.42
		Back	0.177	0.165	0.283	0.198	0.098	0.63	0.64
		Left side		0.217				0.22	0.22
		Right side	0.053		0.142	0.345	0.041	0.20	0.44
		Top side		0.026	0.181	0.496	0.047	0.21	0.57
		Bottom side	0.243					0.24	0.24
LTE Band 2_Ant 31	FR1 n66_Ant 13	Front	0.122	0.135	0.131	0.161	0.032	0.39	0.45
		Back	0.177	0.171	0.283	0.198	0.098	0.63	0.64
		Left side		0.047				0.05	0.05
		Right side	0.053		0.142	0.345	0.041	0.20	0.44
		Top side		0.204	0.181	0.496	0.047	0.39	0.75
		Bottom side	0.243					0.24	0.24
LTE Band 2_Ant 31	FR1 n78_Ant 11	Front	0.122	0.093	0.131	0.161	0.032	0.35	0.41
		Back	0.177	0.289	0.283	0.198	0.098	0.75	0.76
		Left side		0.384				0.38	0.38
		Right side	0.053		0.142	0.345	0.041	0.20	0.44
		Top side		0.026	0.181	0.496	0.047	0.21	0.57
		Bottom side	0.243					0.24	0.24
LTE Band 2_Ant 31	FR1 n78_Ant 12	Front	0.122	0.050	0.131	0.161	0.032	0.30	0.36
		Back	0.177	0.092	0.283	0.198	0.098	0.55	0.56
		Left side		0.042				0.04	0.04
		Right side	0.053		0.142	0.345	0.041	0.20	0.44
		Top side		0.036	0.181	0.496	0.047	0.22	0.58
		Bottom side	0.243					0.24	0.24



LTE Band 2_Ant 31	FR1 n78_Ant 21	Front	0.122	0.028	0.131	0.161	0.032	0.28	0.34
		Back	0.177	0.012	0.283	0.198	0.098	0.47	0.49
		Left side						0.00	0.00
		Right side	0.053	0.004	0.142	0.345	0.041	0.20	0.44
		Top side			0.181	0.496	0.047	0.18	0.54
		Bottom side	0.243					0.24	0.24
LTE Band 2_Ant 31	FR1 n78_Ant 23	Front	0.122	0.086	0.131	0.161	0.032	0.34	0.40
		Back	0.177	0.123	0.283	0.198	0.098	0.58	0.60
		Left side						0.00	0.00
		Right side	0.053	0.146	0.142	0.345	0.041	0.34	0.59
		Top side		0.022	0.181	0.496	0.047	0.20	0.57
		Bottom side	0.243					0.24	0.24
LTE Band 7_Ant 13	FR1 n78_Ant 11	Front	0.069	0.093	0.131	0.161	0.032	0.29	0.36
		Back	0.200	0.289	0.283	0.198	0.098	0.77	0.79
		Left side	0.040	0.384				0.42	0.42
		Right side			0.142	0.345	0.041	0.14	0.39
		Top side	0.242	0.026	0.181	0.496	0.047	0.45	0.81
		Bottom side						0.00	0.00
LTE Band 7_Ant 13	FR1 n78_Ant 12	Front	0.069	0.050	0.131	0.161	0.032	0.25	0.31
		Back	0.200	0.092	0.283	0.198	0.098	0.57	0.59
		Left side	0.040	0.042				0.08	0.08
		Right side			0.142	0.345	0.041	0.14	0.39
		Top side	0.242	0.036	0.181	0.496	0.047	0.46	0.82
		Bottom side						0.00	0.00
LTE Band 7_Ant 13	FR1 n78_Ant 21	Front	0.069	0.028	0.131	0.161	0.032	0.23	0.29
		Back	0.200	0.012	0.283	0.198	0.098	0.50	0.51
		Left side	0.040					0.04	0.04
		Right side		0.004	0.142	0.345	0.041	0.15	0.39
		Top side	0.242		0.181	0.496	0.047	0.42	0.79
		Bottom side						0.00	0.00
LTE Band 7_Ant 13	FR1 n78_Ant 23	Front	0.069	0.086	0.131	0.161	0.032	0.29	0.35
		Back	0.200	0.123	0.283	0.198	0.098	0.61	0.62
		Left side	0.040					0.04	0.04
		Right side		0.146	0.142	0.345	0.041	0.29	0.53
		Top side	0.242	0.022	0.181	0.496	0.047	0.45	0.81
		Bottom side						0.00	0.00
LTE Band 7_Ant 31	FR1 n66_Ant 11	Front	0.110	0.103	0.131	0.161	0.032	0.34	0.41
		Back	0.151	0.165	0.283	0.198	0.098	0.60	0.61
		Left side		0.217				0.22	0.22
		Right side	0.096		0.142	0.345	0.041	0.24	0.48
		Top side		0.026	0.181	0.496	0.047	0.21	0.57
		Bottom side	0.092					0.09	0.09
LTE Band 7_Ant 31	FR1 n66_Ant 13	Front	0.110	0.135	0.131	0.161	0.032	0.38	0.44
		Back	0.151	0.171	0.283	0.198	0.098	0.61	0.62
		Left side		0.047				0.05	0.05
		Right side	0.096		0.142	0.345	0.041	0.24	0.48
		Top side		0.204	0.181	0.496	0.047	0.39	0.75
		Bottom side	0.092					0.09	0.09
LTE Band 7_Ant 31	FR1 n78_Ant 11	Front	0.110	0.093	0.131	0.161	0.032	0.33	0.40
		Back	0.151	0.289	0.283	0.198	0.098	0.72	0.74
		Left side		0.384				0.38	0.38
		Right side	0.096		0.142	0.345	0.041	0.24	0.48
		Top side		0.026	0.181	0.496	0.047	0.21	0.57
		Bottom side	0.092					0.09	0.09
LTE Band 7_Ant 31	FR1 n78_Ant 12	Front	0.110	0.050	0.131	0.161	0.032	0.29	0.35
		Back	0.151	0.092	0.283	0.198	0.098	0.53	0.54



		Left side		0.042				0.04	0.04
		Right side	0.096		0.142	0.345	0.041	0.24	0.48
		Top side		0.036	0.181	0.496	0.047	0.22	0.58
		Bottom side	0.092					0.09	0.09
LTE Band 7_Ant 31	FR1 n78_Ant 21	Front	0.110	0.028	0.131	0.161	0.032	0.27	0.33
		Back	0.151	0.012	0.283	0.198	0.098	0.45	0.46
		Left side						0.00	0.00
		Right side	0.096	0.004	0.142	0.345	0.041	0.24	0.49
		Top side			0.181	0.496	0.047	0.18	0.54
		Bottom side	0.092					0.09	0.09
LTE Band 7_Ant 31	FR1 n78_Ant 23	Front	0.110	0.086	0.131	0.161	0.032	0.33	0.39
		Back	0.151	0.123	0.283	0.198	0.098	0.56	0.57
		Left side						0.00	0.00
		Right side	0.096	0.146	0.142	0.345	0.041	0.38	0.63
		Top side		0.022	0.181	0.496	0.047	0.20	0.57
		Bottom side	0.092					0.09	0.09

WWAN Band	Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)	
		WWAN	FR1	WLAN2.4GHz Ant 22	WLAN5GHz Ant 22	Bluetooth Ant 22			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
LTE Band 41_Ant 13	FR1 n78_Ant 11	Front	0.073	0.093	0.131	0.161	0.032	0.30	0.36
		Back	0.184	0.289	0.283	0.198	0.098	0.76	0.77
		Left side	0.065	0.384				0.45	0.45
		Right side			0.142	0.345	0.041	0.14	0.39
		Top side	0.237	0.026	0.181	0.496	0.047	0.44	0.81
		Bottom side						0.00	0.00
LTE Band 41_Ant 13	FR1 n78_Ant 12	Front	0.073	0.050	0.131	0.161	0.032	0.25	0.32
		Back	0.184	0.092	0.283	0.198	0.098	0.56	0.57
		Left side	0.065	0.042				0.11	0.11
		Right side			0.142	0.345	0.041	0.14	0.39
		Top side	0.237	0.036	0.181	0.496	0.047	0.45	0.82
		Bottom side						0.00	0.00
LTE Band 41_Ant 13	FR1 n78_Ant 21	Front	0.073	0.028	0.131	0.161	0.032	0.23	0.29
		Back	0.184	0.012	0.283	0.198	0.098	0.48	0.49
		Left side	0.065					0.07	0.07
		Right side		0.004	0.142	0.345	0.041	0.15	0.39
		Top side	0.237		0.181	0.496	0.047	0.42	0.78
		Bottom side						0.00	0.00
LTE Band 41_Ant 13	FR1 n78_Ant 23	Front	0.073	0.086	0.131	0.161	0.032	0.29	0.35
		Back	0.184	0.123	0.283	0.198	0.098	0.59	0.60
		Left side	0.065					0.07	0.07
		Right side		0.146	0.142	0.345	0.041	0.29	0.53
		Top side	0.237	0.022	0.181	0.496	0.047	0.44	0.80
		Bottom side						0.00	0.00
LTE Band 41_Ant 31	FR1 n78_Ant 11	Front	0.126	0.093	0.131	0.161	0.032	0.35	0.41
		Back	0.151	0.289	0.283	0.198	0.098	0.72	0.74
		Left side		0.384				0.38	0.38
		Right side	0.108		0.142	0.345	0.041	0.25	0.49
		Top side		0.026	0.181	0.496	0.047	0.21	0.57
		Bottom side	0.100					0.10	0.10
LTE Band 41_Ant 31	FR1 n78_Ant 12	Front	0.126	0.050	0.131	0.161	0.032	0.31	0.37
		Back	0.151	0.092	0.283	0.198	0.098	0.53	0.54
		Left side		0.042				0.04	0.04
		Right side	0.108		0.142	0.345	0.041	0.25	0.49

		Top side		0.036	0.181	0.496	0.047	0.22	0.58	
		Bottom side	0.100					0.10	0.10	
LTE Band 41_Ant 31	FR1 n78_Ant 21	Front	0.126	0.028	0.131	0.161	0.032	0.28	0.35	
		Back	0.151	0.012	0.283	0.198	0.098	0.45	0.46	
		Left side							0.00	0.00
		Right side	0.108	0.004	0.142	0.345	0.041		0.25	0.50
		Top side			0.181	0.496	0.047		0.18	0.54
		Bottom side	0.100						0.10	0.10
LTE Band 41_Ant 31	FR1 n78_Ant 23	Front	0.126	0.086	0.131	0.161	0.032	0.34	0.41	
		Back	0.151	0.123	0.283	0.198	0.098	0.56	0.57	
		Left side							0.00	0.00
		Right side	0.108	0.146	0.142	0.345	0.041		0.40	0.64
		Top side		0.022	0.181	0.496	0.047		0.20	0.57
		Bottom side	0.100						0.10	0.10

Inter ULCA (WWAN)

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	WWAN 1g SAR (W/kg)	
LTE Band 4A_Ant 31	LTE Band 7A_Ant 11	Front	0.244	0.101	0.35
		Back	0.359	0.202	0.56
		Left side		0.212	0.21
		Right side	0.081		0.08
		Top side		0.054	0.05
		Bottom side	0.402		0.40
LTE Band 4A_Ant 31	LTE Band 7A_Ant 13	Front	0.244	0.074	0.32
		Back	0.359	0.154	0.51
		Left side		0.047	0.05
		Right side	0.081		0.08
		Top side		0.242	0.24
		Bottom side	0.402		0.40

Inter ULCA (WWAN+WLAN+Bluetooth)

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)	
			WWAN 1g SAR (W/kg)	WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)			
LTE Band 4A_Ant 31	LTE Band 7A_Ant 11	Front	0.244	0.101	0.131	0.161	0.032	0.48	0.54	
		Back	0.359	0.202	0.283	0.198	0.098	0.84	0.86	
		Left side		0.212					0.21	0.21
		Right side	0.081		0.142	0.345	0.041		0.22	0.47
		Top side		0.054	0.181	0.496	0.047		0.24	0.60
		Bottom side	0.402						0.40	0.40
LTE Band 4A_Ant 31	LTE Band 7A_Ant 13	Front	0.244	0.074	0.131	0.161	0.032	0.45	0.51	
		Back	0.359	0.154	0.283	0.198	0.098	0.80	0.81	
		Left side		0.047					0.05	0.05
		Right side	0.081		0.142	0.345	0.041		0.22	0.47
		Top side		0.242	0.181	0.496	0.047		0.42	0.79
		Bottom side	0.402						0.40	0.40

16.3 Body-Worn Accessory Exposure Conditions

Exposure Position	1	4	7	10	1+4 Summed 1g SAR (W/kg)	1+7+10 Summed 1g SAR (W/kg)
	Maximum WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)		
Front	0.468	0.091	0.069	0.008	0.56	0.55
Back	0.959	0.158	0.157	0.036	1.12	1.15

EN-DC (WWAN)

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	
LTE Band 5_Ant 13	FR1 n78_Ant 11	Front	0.138	0.276	0.41
		Back	0.242	0.564	0.81
LTE Band 5_Ant 13	FR1 n78_Ant 12	Front	0.138	0.026	0.16
		Back	0.242	0.046	0.29
LTE Band 5_Ant 13	FR1 n78_Ant 21	Front	0.138	0.060	0.20
		Back	0.242	0.094	0.34
LTE Band 5_Ant 13	FR1 n78_Ant 23	Front	0.138	0.199	0.34
		Back	0.242	0.434	0.68
LTE Band 5_Ant 41	FR1 n66_Ant 11	Front	0.211	0.263	0.47
		Back	0.203	0.484	0.69
LTE Band 5_Ant 41	FR1 n66_Ant 13	Front	0.211	0.187	0.40
		Back	0.203	0.253	0.46
LTE Band 5_Ant 41	FR1 n78_Ant 11	Front	0.211	0.276	0.49
		Back	0.203	0.564	0.77
LTE Band 5_Ant 41	FR1 n78_Ant 12	Front	0.211	0.026	0.24
		Back	0.203	0.046	0.25
LTE Band 5_Ant 41	FR1 n78_Ant 21	Front	0.211	0.060	0.27
		Back	0.203	0.094	0.30
LTE Band 5_Ant 41	FR1 n78_Ant 23	Front	0.211	0.199	0.41
		Back	0.203	0.434	0.64
LTE Band 4_Ant 13	FR1 n78_Ant 11	Front	0.203	0.276	0.48
		Back	0.248	0.564	0.81
LTE Band 4_Ant 13	FR1 n78_Ant 12	Front	0.203	0.026	0.23
		Back	0.248	0.046	0.29
LTE Band 4_Ant 13	FR1 n78_Ant 21	Front	0.203	0.060	0.26
		Back	0.248	0.094	0.34
LTE Band 4_Ant 13	FR1 n78_Ant 23	Front	0.203	0.199	0.40
		Back	0.248	0.434	0.68
LTE Band 4_Ant 31	FR1 n78_Ant 11	Front	0.194	0.276	0.47
		Back	0.257	0.564	0.82
LTE Band 4_Ant 31	FR1 n78_Ant 12	Front	0.194	0.026	0.22
		Back	0.257	0.046	0.30
LTE Band 4_Ant 31	FR1 n78_Ant 21	Front	0.194	0.060	0.25
		Back	0.257	0.094	0.35
LTE Band 4_Ant 31	FR1 n78_Ant 23	Front	0.194	0.199	0.39
		Back	0.257	0.434	0.69



WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN	FR1	
			1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 66_Ant 13	FR1 n78_Ant 11	Front	0.183	0.276	0.46
		Back	0.239	0.564	0.80
LTE Band 66_Ant 13	FR1 n78_Ant 12	Front	0.183	0.026	0.21
		Back	0.239	0.046	0.29
LTE Band 66_Ant 13	FR1 n78_Ant 21	Front	0.183	0.060	0.24
		Back	0.239	0.094	0.33
LTE Band 66_Ant 13	FR1 n78_Ant 23	Front	0.183	0.199	0.38
		Back	0.239	0.434	0.67
LTE Band 66_Ant 31	FR1 n78_Ant 11	Front	0.209	0.276	0.49
		Back	0.278	0.564	0.84
LTE Band 66_Ant 31	FR1 n78_Ant 12	Front	0.209	0.026	0.24
		Back	0.278	0.046	0.32
LTE Band 66_Ant 31	FR1 n78_Ant 21	Front	0.209	0.060	0.27
		Back	0.278	0.094	0.37
LTE Band 66_Ant 31	FR1 n78_Ant 23	Front	0.209	0.199	0.41
		Back	0.278	0.434	0.71
LTE Band 2_Ant 13	FR1 n78_Ant 11	Front	0.304	0.276	0.58
		Back	0.511	0.564	1.08
LTE Band 2_Ant 13	FR1 n78_Ant 12	Front	0.304	0.026	0.33
		Back	0.511	0.046	0.56
LTE Band 2_Ant 13	FR1 n78_Ant 21	Front	0.304	0.060	0.36
		Back	0.511	0.094	0.61
LTE Band 2_Ant 13	FR1 n78_Ant 23	Front	0.304	0.199	0.50
		Back	0.511	0.434	0.95



WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	FR1 1g SAR (W/kg)	
LTE Band 2_Ant 31	FR1 n7_Ant 11	Front	0.146	0.276	0.42
		Back	0.176	0.487	0.66
LTE Band 2_Ant 31	FR1 n7_Ant 13	Front	0.146	0.271	0.42
		Back	0.176	0.709	0.89
LTE Band 2_Ant 31	FR1 n66_Ant 11	Front	0.146	0.263	0.41
		Back	0.176	0.484	0.66
LTE Band 2_Ant 31	FR1 n66_Ant 13	Front	0.146	0.187	0.33
		Back	0.176	0.253	0.43
LTE Band 2_Ant 31	FR1 n78_Ant 11	Front	0.146	0.276	0.42
		Back	0.176	0.564	0.74
LTE Band 2_Ant 31	FR1 n78_Ant 12	Front	0.146	0.026	0.17
		Back	0.176	0.046	0.22
LTE Band 2_Ant 31	FR1 n78_Ant 21	Front	0.146	0.060	0.21
		Back	0.176	0.094	0.27
LTE Band 2_Ant 31	FR1 n78_Ant 23	Front	0.146	0.199	0.35
		Back	0.176	0.434	0.61
LTE Band 7_Ant 13	FR1 n78_Ant 11	Front	0.215	0.276	0.49
		Back	0.504	0.564	1.07
LTE Band 7_Ant 13	FR1 n78_Ant 12	Front	0.215	0.026	0.24
		Back	0.504	0.046	0.55
LTE Band 7_Ant 13	FR1 n78_Ant 21	Front	0.215	0.060	0.27
		Back	0.504	0.094	0.60
LTE Band 7_Ant 13	FR1 n78_Ant 23	Front	0.215	0.199	0.41
		Back	0.504	0.434	0.94
LTE Band 7_Ant 31	FR1 n66_Ant 11	Front	0.092	0.263	0.36
		Back	0.135	0.484	0.62
LTE Band 7_Ant 31	FR1 n66_Ant 13	Front	0.092	0.187	0.28
		Back	0.135	0.253	0.39
LTE Band 7_Ant 31	FR1 n78_Ant 11	Front	0.092	0.276	0.37
		Back	0.135	0.564	0.70
LTE Band 7_Ant 31	FR1 n78_Ant 12	Front	0.092	0.026	0.12
		Back	0.135	0.046	0.18
LTE Band 7_Ant 31	FR1 n78_Ant 21	Front	0.092	0.060	0.15
		Back	0.135	0.094	0.23
LTE Band 7_Ant 31	FR1 n78_Ant 23	Front	0.092	0.199	0.29
		Back	0.135	0.434	0.57



WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN	FR1	
			1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 41_Ant 13	FR1 n78_Ant 11	Front	0.188	0.276	0.46
		Back	0.502	0.564	1.07
LTE Band 41_Ant 13	FR1 n78_Ant 12	Front	0.188	0.026	0.21
		Back	0.502	0.046	0.55
LTE Band 41_Ant 13	FR1 n78_Ant 21	Front	0.188	0.060	0.25
		Back	0.502	0.094	0.60
LTE Band 41_Ant 13	FR1 n78_Ant 23	Front	0.188	0.199	0.39
		Back	0.502	0.434	0.94
LTE Band 41_Ant 31	FR1 n78_Ant 11	Front	0.131	0.276	0.41
		Back	0.159	0.564	0.72
LTE Band 41_Ant 31	FR1 n78_Ant 12	Front	0.131	0.026	0.16
		Back	0.159	0.046	0.21
LTE Band 41_Ant 31	FR1 n78_Ant 21	Front	0.131	0.060	0.19
		Back	0.159	0.094	0.25
LTE Band 41_Ant 31	FR1 n78_Ant 23	Front	0.131	0.199	0.33
		Back	0.159	0.434	0.59

EN-DC (WWAN+WLAN+Bluetooth)

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN	FR1	WLAN2.4GHz Ant 22	WLAN5GHz Ant 22	Bluetooth Ant 22		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 5_Ant 13	FR1 n78_Ant 11	Front	0.138	0.276	0.091	0.069	0.008	0.51	0.49
		Back	0.242	0.564	0.158	0.157	0.036	0.96	1.00
LTE Band 5_Ant 13	FR1 n78_Ant 12	Front	0.138	0.026	0.091	0.069	0.008	0.26	0.24
		Back	0.242	0.046	0.158	0.157	0.036	0.45	0.48
LTE Band 5_Ant 13	FR1 n78_Ant 21	Front	0.138	0.060	0.091	0.069	0.008	0.29	0.27
		Back	0.242	0.094	0.158	0.157	0.036	0.49	0.53
LTE Band 5_Ant 13	FR1 n78_Ant 23	Front	0.138	0.199	0.091	0.069	0.008	0.43	0.41
		Back	0.242	0.434	0.158	0.157	0.036	0.83	0.87
LTE Band 5_Ant 41	FR1 n66_Ant 11	Front	0.211	0.263	0.091	0.069	0.008	0.57	0.55
		Back	0.203	0.484	0.158	0.157	0.036	0.85	0.88
LTE Band 5_Ant 41	FR1 n66_Ant 13	Front	0.211	0.187	0.091	0.069	0.008	0.49	0.48
		Back	0.203	0.253	0.158	0.157	0.036	0.61	0.65
LTE Band 5_Ant 41	FR1 n78_Ant 11	Front	0.211	0.276	0.091	0.069	0.008	0.58	0.56
		Back	0.203	0.564	0.158	0.157	0.036	0.93	0.96
LTE Band 5_Ant 41	FR1 n78_Ant 12	Front	0.211	0.026	0.091	0.069	0.008	0.33	0.31
		Back	0.203	0.046	0.158	0.157	0.036	0.41	0.44
LTE Band 5_Ant 41	FR1 n78_Ant 21	Front	0.211	0.060	0.091	0.069	0.008	0.36	0.35
		Back	0.203	0.094	0.158	0.157	0.036	0.46	0.49
LTE Band 5_Ant 41	FR1 n78_Ant 23	Front	0.211	0.199	0.091	0.069	0.008	0.50	0.49
		Back	0.203	0.434	0.158	0.157	0.036	0.80	0.83
LTE Band 4_Ant 13	FR1 n78_Ant 11	Front	0.203	0.276	0.091	0.069	0.008	0.57	0.56
		Back	0.248	0.564	0.158	0.157	0.036	0.97	1.01
LTE Band 4_Ant 13	FR1 n78_Ant 12	Front	0.203	0.026	0.091	0.069	0.008	0.32	0.31
		Back	0.248	0.046	0.158	0.157	0.036	0.45	0.49
LTE Band 4_Ant 13	FR1 n78_Ant 21	Front	0.203	0.060	0.091	0.069	0.008	0.35	0.34
		Back	0.248	0.094	0.158	0.157	0.036	0.50	0.54
LTE Band 4_Ant 13	FR1 n78_Ant 23	Front	0.203	0.199	0.091	0.069	0.008	0.49	0.48
		Back	0.248	0.434	0.158	0.157	0.036	0.84	0.88



LTE Band 4_Ant 31	FR1 n78_Ant 11	Front	0.194	0.276	0.091	0.069	0.008	0.56	0.55
		Back	0.257	0.564	0.158	0.157	0.036	0.98	1.01
LTE Band 4_Ant 31	FR1 n78_Ant 12	Front	0.194	0.026	0.091	0.069	0.008	0.31	0.30
		Back	0.257	0.046	0.158	0.157	0.036	0.46	0.50
LTE Band 4_Ant 31	FR1 n78_Ant 21	Front	0.194	0.060	0.091	0.069	0.008	0.34	0.33
		Back	0.257	0.094	0.158	0.157	0.036	0.51	0.54
LTE Band 4_Ant 31	FR1 n78_Ant 23	Front	0.194	0.199	0.091	0.069	0.008	0.48	0.47
		Back	0.257	0.434	0.158	0.157	0.036	0.85	0.88

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN	FR1	WLAN2.4GHz Ant 22	WLAN5GHz Ant 22	Bluetooth Ant 22		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 66_Ant 13	FR1 n78_Ant 11	Front	0.183	0.276	0.091	0.069	0.008	0.55	0.54
		Back	0.239	0.564	0.158	0.157	0.036	0.96	1.00
LTE Band 66_Ant 13	FR1 n78_Ant 12	Front	0.183	0.026	0.091	0.069	0.008	0.30	0.29
		Back	0.239	0.046	0.158	0.157	0.036	0.44	0.48
LTE Band 66_Ant 13	FR1 n78_Ant 21	Front	0.183	0.060	0.091	0.069	0.008	0.33	0.32
		Back	0.239	0.094	0.158	0.157	0.036	0.49	0.53
LTE Band 66_Ant 13	FR1 n78_Ant 23	Front	0.183	0.199	0.091	0.069	0.008	0.47	0.46
		Back	0.239	0.434	0.158	0.157	0.036	0.83	0.87
LTE Band 66_Ant 31	FR1 n7_Ant 11	Front	0.209	0.276	0.091	0.069	0.008	0.58	0.56
		Back	0.278	0.487	0.158	0.157	0.036	0.92	0.96
LTE Band 66_Ant 31	FR1 n7_Ant 13	Front	0.209	0.271	0.091	0.069	0.008	0.57	0.56
		Back	0.278	0.709	0.158	0.157	0.036	1.15	1.18
LTE Band 66_Ant 31	FR1 n78_Ant 11	Front	0.209	0.276	0.091	0.069	0.008	0.58	0.56
		Back	0.278	0.564	0.158	0.157	0.036	1.00	1.04
LTE Band 66_Ant 31	FR1 n78_Ant 12	Front	0.209	0.026	0.091	0.069	0.008	0.33	0.31
		Back	0.278	0.046	0.158	0.157	0.036	0.48	0.52
LTE Band 66_Ant 31	FR1 n78_Ant 21	Front	0.209	0.060	0.091	0.069	0.008	0.36	0.35
		Back	0.278	0.094	0.158	0.157	0.036	0.53	0.57
LTE Band 66_Ant 31	FR1 n78_Ant 23	Front	0.209	0.199	0.091	0.069	0.008	0.50	0.49
		Back	0.278	0.434	0.158	0.157	0.036	0.87	0.91
LTE Band 2_Ant 13	FR1 n78_Ant 11	Front	0.304	0.276	0.091	0.069	0.008	0.67	0.66
		Back	0.511	0.564	0.158	0.157	0.036	1.23	1.27
LTE Band 2_Ant 13	FR1 n78_Ant 12	Front	0.304	0.026	0.091	0.069	0.008	0.42	0.41
		Back	0.511	0.046	0.158	0.157	0.036	0.72	0.75
LTE Band 2_Ant 13	FR1 n78_Ant 21	Front	0.304	0.060	0.091	0.069	0.008	0.45	0.44
		Back	0.511	0.094	0.158	0.157	0.036	0.76	0.80
LTE Band 2_Ant 13	FR1 n78_Ant 23	Front	0.304	0.199	0.091	0.069	0.008	0.59	0.58
		Back	0.511	0.434	0.158	0.157	0.036	1.10	1.14

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN	FR1	WLAN2.4GHz Ant 22	WLAN5GHz Ant 22	Bluetooth Ant 22		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 2_Ant 31	FR1 n7_Ant 11	Front	0.146	0.276	0.091	0.069	0.008	0.51	0.50
		Back	0.176	0.487	0.158	0.157	0.036	0.82	0.86
LTE Band 2_Ant 31	FR1 n7_Ant 13	Front	0.146	0.271	0.091	0.069	0.008	0.51	0.49
		Back	0.176	0.709	0.158	0.157	0.036	1.04	1.08
LTE Band 2_Ant 31	FR1 n66_Ant 11	Front	0.146	0.263	0.091	0.069	0.008	0.50	0.49
		Back	0.176	0.484	0.158	0.157	0.036	0.82	0.85
LTE Band 2_Ant 31	FR1 n66_Ant 13	Front	0.146	0.187	0.091	0.069	0.008	0.42	0.41



		Back	0.176	0.253	0.158	0.157	0.036	0.59	0.62
LTE Band 2_Ant 31	FR1 n78_Ant 11	Front	0.146	0.276	0.091	0.069	0.008	0.51	0.50
		Back	0.176	0.564	0.158	0.157	0.036	0.90	0.93
LTE Band 2_Ant 31	FR1 n78_Ant 12	Front	0.146	0.026	0.091	0.069	0.008	0.26	0.25
		Back	0.176	0.046	0.158	0.157	0.036	0.38	0.42
LTE Band 2_Ant 31	FR1 n78_Ant 21	Front	0.146	0.060	0.091	0.069	0.008	0.30	0.28
		Back	0.176	0.094	0.158	0.157	0.036	0.43	0.46
LTE Band 2_Ant 31	FR1 n78_Ant 23	Front	0.146	0.199	0.091	0.069	0.008	0.44	0.42
		Back	0.176	0.434	0.158	0.157	0.036	0.77	0.80
LTE Band 7_Ant 13	FR1 n78_Ant 11	Front	0.215	0.276	0.091	0.069	0.008	0.58	0.57
		Back	0.504	0.564	0.158	0.157	0.036	1.23	1.26
LTE Band 7_Ant 13	FR1 n78_Ant 12	Front	0.215	0.026	0.091	0.069	0.008	0.33	0.32
		Back	0.504	0.046	0.158	0.157	0.036	0.71	0.74
LTE Band 7_Ant 13	FR1 n78_Ant 21	Front	0.215	0.060	0.091	0.069	0.008	0.37	0.35
		Back	0.504	0.094	0.158	0.157	0.036	0.76	0.79
LTE Band 7_Ant 13	FR1 n78_Ant 23	Front	0.215	0.199	0.091	0.069	0.008	0.51	0.49
		Back	0.504	0.434	0.158	0.157	0.036	1.10	1.13
LTE Band 7_Ant 31	FR1 n66_Ant 11	Front	0.092	0.263	0.091	0.069	0.008	0.45	0.43
		Back	0.135	0.484	0.158	0.157	0.036	0.78	0.81
LTE Band 7_Ant 31	FR1 n66_Ant 13	Front	0.092	0.187	0.091	0.069	0.008	0.37	0.36
		Back	0.135	0.253	0.158	0.157	0.036	0.55	0.58
LTE Band 7_Ant 31	FR1 n78_Ant 11	Front	0.092	0.276	0.091	0.069	0.008	0.46	0.45
		Back	0.135	0.564	0.158	0.157	0.036	0.86	0.89
LTE Band 7_Ant 31	FR1 n78_Ant 12	Front	0.092	0.026	0.091	0.069	0.008	0.21	0.20
		Back	0.135	0.046	0.158	0.157	0.036	0.34	0.37
LTE Band 7_Ant 31	FR1 n78_Ant 21	Front	0.092	0.060	0.091	0.069	0.008	0.24	0.23
		Back	0.135	0.094	0.158	0.157	0.036	0.39	0.42
LTE Band 7_Ant 31	FR1 n78_Ant 23	Front	0.092	0.199	0.091	0.069	0.008	0.38	0.37
		Back	0.135	0.434	0.158	0.157	0.036	0.73	0.76

WWAN Band	Exposure Position	1	2	4	7	10	1+2+4+10 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)	
		WWAN	FR1	WLAN2.4GHz Ant 22	WLAN5GHz Ant 22	Bluetooth Ant 22			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
LTE Band 41_Ant 13	FR1 n78_Ant 11	Front	0.188	0.276	0.091	0.069	0.008	0.56	0.54
		Back	0.502	0.564	0.158	0.157	0.036	1.26	1.26
LTE Band 41_Ant 13	FR1 n78_Ant 12	Front	0.188	0.026	0.091	0.069	0.008	0.31	0.29
		Back	0.502	0.046	0.158	0.157	0.036	0.74	0.74
LTE Band 41_Ant 13	FR1 n78_Ant 21	Front	0.188	0.060	0.091	0.069	0.008	0.35	0.32
		Back	0.502	0.094	0.158	0.157	0.036	0.79	0.79
LTE Band 41_Ant 13	FR1 n78_Ant 23	Front	0.188	0.199	0.091	0.069	0.008	0.49	0.46
		Back	0.502	0.434	0.158	0.157	0.036	1.13	1.13
LTE Band 41_Ant 31	FR1 n78_Ant 11	Front	0.131	0.276	0.091	0.069	0.008	0.51	0.48
		Back	0.159	0.564	0.158	0.157	0.036	0.92	0.92
LTE Band 41_Ant 31	FR1 n78_Ant 12	Front	0.131	0.026	0.091	0.069	0.008	0.26	0.23
		Back	0.159	0.046	0.158	0.157	0.036	0.40	0.40
LTE Band 41_Ant 31	FR1 n78_Ant 21	Front	0.131	0.060	0.091	0.069	0.008	0.29	0.27
		Back	0.159	0.094	0.158	0.157	0.036	0.45	0.45
LTE Band 41_Ant 31	FR1 n78_Ant 23	Front	0.131	0.199	0.091	0.069	0.008	0.43	0.41
		Back	0.159	0.434	0.158	0.157	0.036	0.79	0.79

Inter ULCA (WWAN)

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	WWAN 1g SAR (W/kg)	
LTE Band 4A_Ant 31	LTE Band 7A_Ant 11	Front	0.149	0.148	0.30
		Back	0.222	0.263	0.49
LTE Band 4A_Ant 31	LTE Band 7A_Ant 13	Front	0.149	0.217	0.37
		Back	0.222	0.447	0.67

Inter ULCA (WWAN+WLAN+Bluetooth)

WWAN Band		Exposure Position	1	2	4	7	10	1+2+4 Summed 1g SAR (W/kg)	1+2+7+10 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 22 1g SAR (W/kg)	WLAN5GHz Ant 22 1g SAR (W/kg)	Bluetooth Ant 22 1g SAR (W/kg)		
LTE Band 4A_Ant 31	LTE Band 7A_Ant 11	Front	0.149	0.148	0.091	0.069	0.008	0.39	0.37
		Back	0.222	0.263	0.158	0.157	0.036	0.64	0.68
LTE Band 4A_Ant 31	LTE Band 7A_Ant 13	Front	0.149	0.217	0.091	0.069	0.008	0.46	0.44
		Back	0.222	0.447	0.158	0.157	0.036	0.83	0.86

16.4 Product Specific 10g SAR Exposure Conditions

Exposure Position	1	4	7	10	11	1+4+11 Summed 10g SAR (W/kg)	1+7+10+11 Summed 10g SAR (W/kg)
	Maximum WWAN 10g SAR (W/kg)	WLAN2.4GHz Ant 22 10g SAR (W/kg)	WLAN5GHz Ant 22 10g SAR (W/kg)	Bluetooth Ant 22 10g SAR (W/kg)	NFC 10g SAR (W/kg)		
Front			0.464		0.001	< 0.01	0.47
Back	1.734		0.317		0.027	1.76	2.08
Left side	1.623				0.001	1.62	1.62
Right side			0.484		0.001	< 0.01	0.49
Top side	1.415		0.388		0.001	1.42	1.80
Bottom side					0.001	< 0.01	< 0.01

EN-DC (WWAN)

WWAN Band		Exposure Position	1	2	1+2 Summed 10g SAR (W/kg)
			WWAN 10g SAR (W/kg)	FR1 10g SAR (W/kg)	
LTE Band 2_Ant 13	FR1 n78_Ant 11	Front			0.00
		Back		1.241	1.24
		Left side		1.068	1.07
		Right side			0.00
		Top side	1.335		1.34
		Bottom side			0.00
LTE Band 7_Ant 13	FR1 n78_Ant 11	Front			0.00
		Back	0.983	1.241	2.22
		Left side		1.068	1.07
		Right side			0.00
		Top side	1.307		1.31
		Bottom side			0.00
LTE Band 41_Ant 13	FR1 n78_Ant 11	Front			0.00
		Back		1.241	1.24
		Left side		1.068	1.07
		Right side			0.00
		Top side	1.385		1.39
		Bottom side			0.00

EN-DC (WWAN+WLAN+Bluetooth+NFC)

WWAN Band		Exposure Position	1		2		4		7		10		11		1+2+4+11 Summed 10g SAR (W/kg)	1+2+7+10+11 Summed 10g SAR (W/kg)
			WWAN 10g SAR (W/kg)	FR1 10g SAR (W/kg)	WLAN2.4GHz Ant 22 10g SAR (W/kg)	WLAN5GHz Ant 22 10g SAR (W/kg)	Bluetooth Ant 22 10g SAR (W/kg)	NFC 10g SAR (W/kg)								
LTE Band 2_Ant 13	FR1 n78_Ant 11	Front						0.464			0.001			0.00	0.47	
		Back		0.558				0.317			0.027			0.59	0.90	
		Left side		0.507							0.001			0.51	0.51	
		Right side					0.484				0.001			0.00	0.49	
		Top side	0.633				0.388				0.001			0.63	1.02	
		Bottom side									0.001			0.00	0.00	
LTE Band 7_Ant 13	FR1 n78_Ant 11	Front						0.464			0.001			0.00	0.47	
		Back	0.319	0.558				0.317			0.027			0.90	1.22	
		Left side		0.507							0.001			0.51	0.51	
		Right side					0.484				0.001			0.00	0.49	
		Top side	0.460				0.388				0.001			0.46	0.85	
		Bottom side									0.001			0.00	0.00	
LTE Band 41_Ant 13	FR1 n78_Ant 11	Front						0.464			0.001			0.00	0.47	
		Back		0.558				0.317			0.027			0.59	0.90	
		Left side		0.507							0.001			0.51	0.51	
		Right side					0.484				0.001			0.00	0.49	
		Top side	0.542				0.388				0.001			0.54	0.93	
		Bottom side									0.001			0.00	0.00	

Test Engineer : Hank Huang, Kevin Xu, David Dai and Bin He



17. 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.

18. 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 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [6] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [7] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [9] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [10] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [11] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [12] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [13] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [14] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.