FCC SAR Test Report

APPLICANT	:	HMD Global Oy
EQUIPMENT	:	Smart Phone
BRAND NAME	:	NOKIA
MODEL NAME	:	TA-1243, TA-1251
FCC ID	:	2AJOTTA-1243
STANDARD	:	FCC 47 CFR Part 2 (2.1093) ANSI/IEEE C95.1-1992 IEEE 1528-2013

The product was received on May 12, 2020 and testing was started from Jul. 14, 2020 and completed on Jul. 30, 2020. We, Sporton International (Kunshan) Inc, would like to declare that the tested sample has been evaluated in accordance with the procedures and had 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 (Kunshan) Inc., the test report shall not be reproduced except in full.

Rose Wang

Reviewed by: Rose Wang / Supervisor

Kat Yin

Approved by: Kat Yin / Manager

Sporton International (Kunshan) Inc.
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

Table of Contents

Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA051228	Rev. 01	Initial issue of report	Aug. 24, 2020

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **HMD Global Oy, Smart Phone, TA-1243, TA-1251,** are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 10mm)	Body-worn (Separation 10mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
			1g SAR (W/kg)			
Licensed	GSM	GSM850	0.69	0.33	0.33	1.59
		GSM1900	1.15	0.50	0.22	
	WCDMA	Band II	1.01	1.09	0.52	
		Band IV	1.05	0.53	0.31	
		Band V	0.73	0.30	0.30	
	LTE	Band 5	0.60	0.22	0.22	
		Band 12/Band 17	0.49	0.26	0.13	
		Band 13	0.56	0.25	0.25	
		Band 71	0.49	0.26	0.14	
		Band 2	0.80	0.90	0.50	
		Band 66/Band 4	0.97	0.67	0.41	
		Band 7	0.97	0.84	0.76	
		Band 41/Band 38	1.15	0.43	0.43	
	5G NR	n2	0.55	0.56	0.40	
		n66	0.53	0.54	0.45	
		n5	0.46	0.27	0.27	
		n71	0.53	0.24	0.14	
		n41/n38	0.52	0.56	0.50	
DTS	WLAN	2.4GHz WLAN	**1.16**	0.36	0.36	1.57
NII		5GHz WLAN	0.34	**1.19**	**1.19**	1.59
DSS	Bluetooth	2.4GHz Bluetooth	0.10	<0.10	<0.10	1.59

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	5G NR	n41	**2.99**	3.69
NII	WLAN	5GHz WLAN	2.07	3.69
Date of Testing:			2020/7/14~2020/7/30	

Remark:

1. This device supports LTE B4 / B17 / B38 and B66 / B12 / B41. Since the supported frequency span for LTE B4 / B17 / B38 falls completely within the supports frequency span for LTE B66 / B12 / B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66 / B12 / B41.
2. This device supports 5GNR n38 and 5GNR n41. Since the supported frequency span for 5GNR n38 falls completely within the supports frequency span for 5GNR n41, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for 5GNR n41.

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 (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Testing Laboratory		
Test Firm	Sporton International (Kunshan) Inc.	
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958	
Test Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CN1257	314309

Applicant	
Company Name	HMD Global Oy
Address	Bertel Jungin aukio 9, 02600 Espoo, Finland

Manufacturer	
Company Name	HMD Global Oy
Address	Bertel Jungin aukio 9, 02600 Espoo, Finland

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	Smart Phone
Brand Name	NOKIA
Model Name	TA-1243, TA-1251
FCC ID	2AJOTTA-1243
IMEI Code	IMEI 1: 353137110002584 IMEI 2: 353137110002592
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz WCDMA Band IV: 1712.4 MHz ~ 1752.6 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 13: 779.5 MHz ~ 784.5 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~695.5 MHz 5G NR n2 : 1852.5 MHz ~ 1907.5 MHz 5G NR n5 : 826.5 MHz ~ 846.5 MHz 5G NR n38: 2580 MHz ~2610 MHz 5G NR n41 : 2506.02MHz ~ 2679.99MHz 5G NR n66 : 1712.5 MHz ~ 1777.5 MHz 5G NR n71 : 665.5 MHz ~ 695.5 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5700 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+(16QAM uplink is not supported) LTE: QPSK, 16QAM, 64QAM 5G NR : CP-OFDM / DFT-s-OFDM, PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE NFC:ASK
HW Version	HW03
SW Version	00WW_0_180
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	Identical Prototype
Remark: 1. 802.11n-HT40 is not supported in 2.4GHz WLAN.	

2. WLAN operation in 5600 MHz ~ 5650 MHz is notched.
3. This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
4. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
5. This device 2.4GHz WLAN/5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
6. This device does not support DTM operation and supports GRPS/EGRPS mode up to multi-slot class 12.
7. The device implements Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity).
   The device will invoke corresponding work scenarios power level, which are provided in the operational description.
8. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head / hotspot / body-worn / extremity.
9. For Hotspot SAR, the 5 GNR n2 full power can be tested pass at 10mm distance, so reduced power no need to be evaluated at front/back.
10. There are two types of EUT, the difference is that dual SIM card mobile phone (Model Name: TA-1243) and single SIM card mobile phone (Model Name: TA-1251), the others are the same. According to the difference, we choose dual SIM card mobile phone to perform full test.
11. 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.
12. This device implements antenna tuning techniques for several WWAN (cellular) operating modes and frequencies for the purpose of improving antenna efficiency over a broad range of frequencies. Specifically, these techniques are employed in the GSM, WCDMA, LTE and 5GNR modes. In this report SAR was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing. The detail descriptions of the antenna tuner and supplemental data for additional information on section17.
13. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
14. LTE Band 41 and 5GNR n41 supports HPUE, HPUE power and SAR testing performed separately. LTE Band 41C not supported HPUE.
15. For 5GNR n41 power level class 2 is higher than power level class 3, so performed full SAR testing with class 2.
16. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so NSA standalone total power level SAR can represent SA mode SAR.
17. 5GNR NSA mode, the power level is the same as 5GNR SA mode, so 5GNR NSA mode and SA mode power table only show one time.
18. 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.
19. 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.
20. This device supports 5GNR FR1 bands as following table, including NSA mode and SA mode.

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20
	n5	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20
	n71	FDD	15	5, 10, 15, 20
	n38	TDD	30	20
	n41	TDD	30	20, 40, 50, 60, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20
	n41	TDD	30	20, 40, 50, 60, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

<table>
<tr><th colspan="2">Summarized necessary items addressed in KDB 941225 D05 v02r05</th></tr>
<tr><td>FCC ID</td><td>2AJOTTA-1243</td></tr>
<tr><td>Equipment Name</td><td>Smart Phone</td></tr>
<tr><td>Operating Frequency Range of each LTE transmission band</td><td>LTE Band 2: 1850.7 MHz ~ 1909.3 MHz
LTE Band 4: 1710.7 MHz ~ 1754.3 MHz
LTE Band 5: 824.7 MHz ~ 848.3 MHz
LTE Band 7: 2502.5 MHz ~ 2567.5 MHz
LTE Band 12: 699.7 MHz ~ 715.3 MHz
LTE Band 13: 779.5 MHz ~ 784.5 MHz
LTE Band 17: 706.5 MHz ~ 713.5 MHz
LTE Band 38: 2572.5 MHz ~ 2617.5 MHz
LTE Band 41: 2498.5 MHz ~ 2687.5 MHz
LTE Band 66: 1710.7 MHz ~ 1779.3 MHz
LTE Band 71: 665.5 MHz ~695.5 MHz</td></tr>
<tr><td>Channel Bandwidth</td><td>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 38: 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz</td></tr>
<tr><td>uplink modulations used</td><td>QPSK / 16QAM / 64QAM</td></tr>
<tr><td>LTE Voice / Data requirements</td><td>Voice and Data</td></tr>
<tr><td>LTE Release Version</td><td>R10, Cat6</td></tr>
<tr><td>CA Support</td><td>Supported, Uplink and Downlink</td></tr>
<tr><td>LTE MPR permanently built-in by design</td><td>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3
<table>
<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>
<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">≥ 1</td><td>≤ 5</td></tr>
</table></td></tr>
<tr><td>LTE A-MPR</td><td>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)</td></tr>
<tr><td>Spectrum plots for RB configuration</td><td>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.</td></tr>
<tr><td>Power reduction applied to satisfy SAR compliance</td><td>Yes, head/body-worn/ hotspot/extremity will trigger reduced power for some LTE bands, the detail please referred to section 13.</td></tr>
<tr><td>LTE Carrier Aggregation Combinations</td><td>Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 13.</td></tr>
<tr><td>LTE Carrier Aggregation Additional Information</td><td>1. This device supports LTE Carrier Aggregation (CA) in the uplink for Intra band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance.
2. This device supports maximum of 4 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.</td></tr>
</table>

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz				Bandwidth 3 MHz				Bandwidth 5 MHz		Bandwidth 10 MHz	
	Ch. #	Freq. (MHz)			Ch. #	Freq. (MHz)			Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7			20415	825.5			20425	826.5	20450	829
M	20525	836.5			20525	836.5			20525	836.5	20525	836.5
H	20643	848.3			20635	847.5			20625	846.5	20600	844
LTE Band 7												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)			Ch. #	Freq. (MHz)			Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5			20800	2505			20825	2507.5	20850	2510
M	21100	2535			21100	2535			21100	2535	21100	2535
H	21425	2567.5			21400	2565			21375	2562.5	21350	2560
LTE Band 12												
	Bandwidth 1.4 MHz				Bandwidth 3 MHz				Bandwidth 5 MHz		Bandwidth 10 MHz	
	Ch. #	Freq. (MHz)			Ch. #	Freq. (MHz)			Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7			23025	700.5			23035	701.5	23060	704
M	23095	707.5			23095	707.5			23095	707.5	23095	707.5
H	23173	715.3			23165	714.5			23155	713.5	23130	711
LTE Band 13												
	Bandwidth 5 MHz						Bandwidth 10 MHz					
	Channel #		Freq.(MHz)				Channel #		Freq.(MHz)			
L	23205		779.5				23230		782			
M	23230		782									
H	23255		784.5									
LTE Band 17												
	Bandwidth 5 MHz						Bandwidth 10 MHz					
	Channel #		Freq.(MHz)				Channel #		Freq. (MHz)			
L	23755		706.5				23780		709			
M	23790		710				23790		710			
H	23825		713.5				23800		711			

LTE Band 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)
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)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680

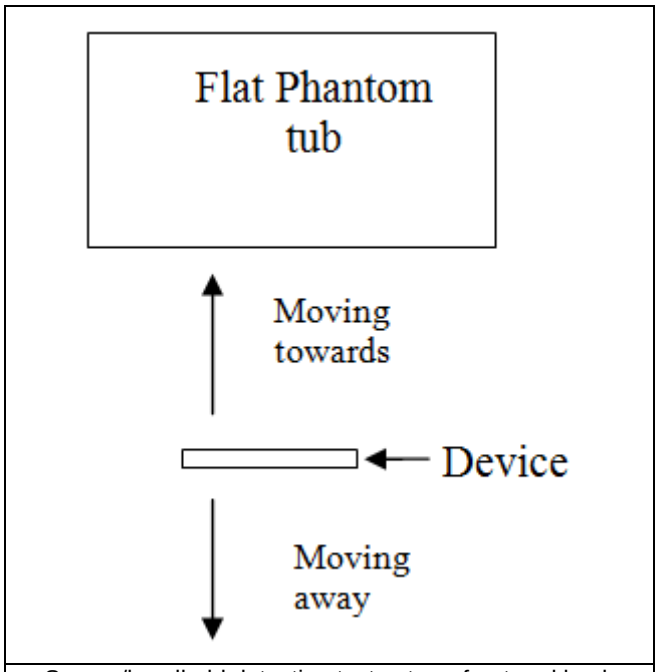
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	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

LTE Band 71								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133147	665.5	133172	668	133197	670.5	133222	673
M	133247	675.5	133272	678	133297	680.5	133322	683
H	133447	695.5	133422	693	133397	690.5	133372	688

5. Proximity Sensor Triggering Test

5.1 Proximity sensor triggering distances(Per KDB616217§6.2)

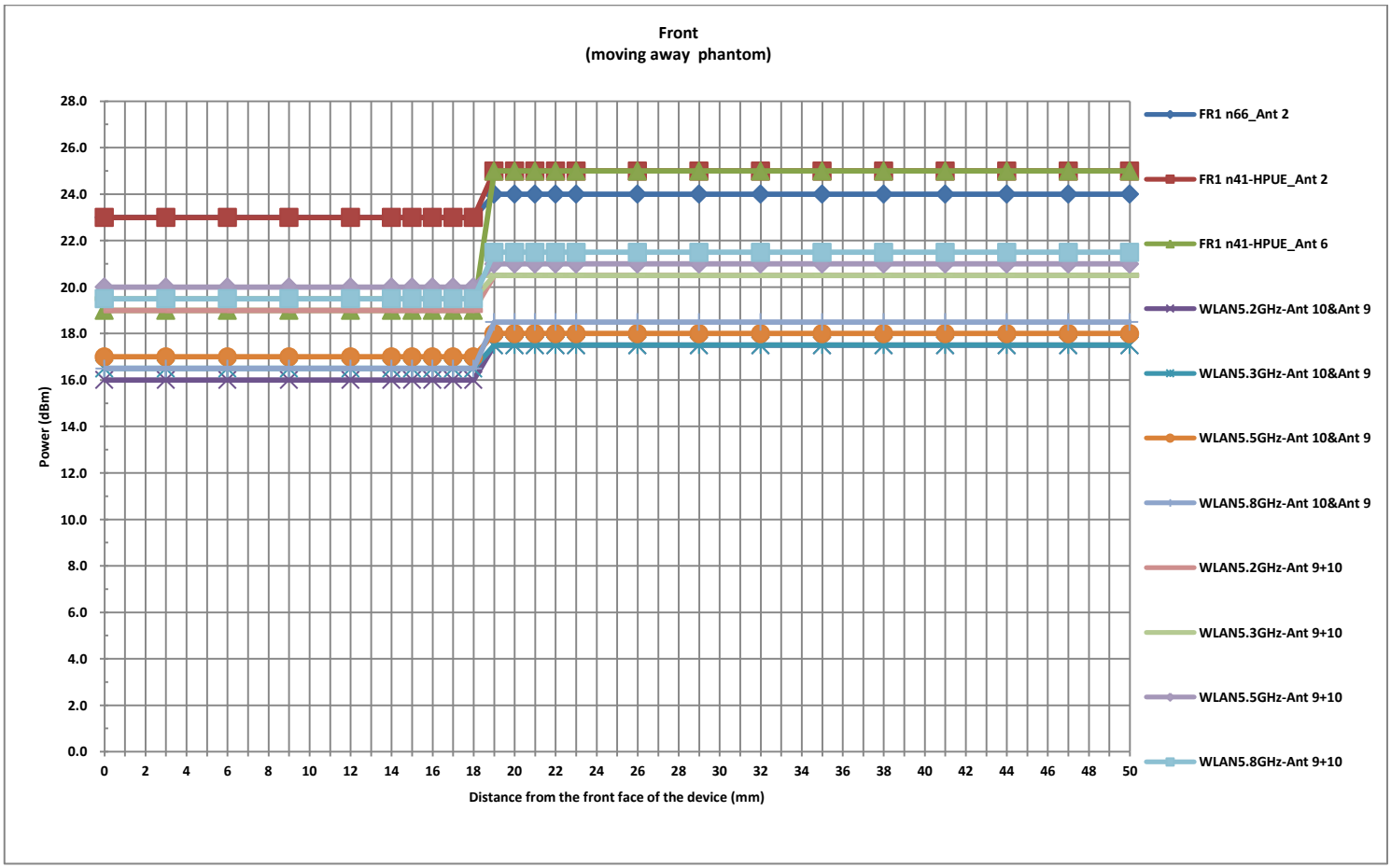
1. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (5825MHz) and lowest (1750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensor placed coincident with antenna elements at the bottom end of the phone are utilized to determine when the device comes in proximity of the user's body at the front or back or bottom or right or top side surface of the device. There is no need to do sensor coverage testing for the proximity sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the proximity sensor entirely covers the antenna.
3. When the proximity sensor is active, 5GNR n66 / n41 HPUE and WLAN5.2GHz / 5.3GHz / 5.5GHz / 5.8GHz reduced power will be active for front/ back body worn SAR.
4. The proximity sensors used to detect the proximity of the user's body at the front or back surface of the device use a detection threshold distance. The data shown in the sections below shows the distance(s).
5. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance was performed for body worn:
   Front: 14 mm
   Back: 17 mm

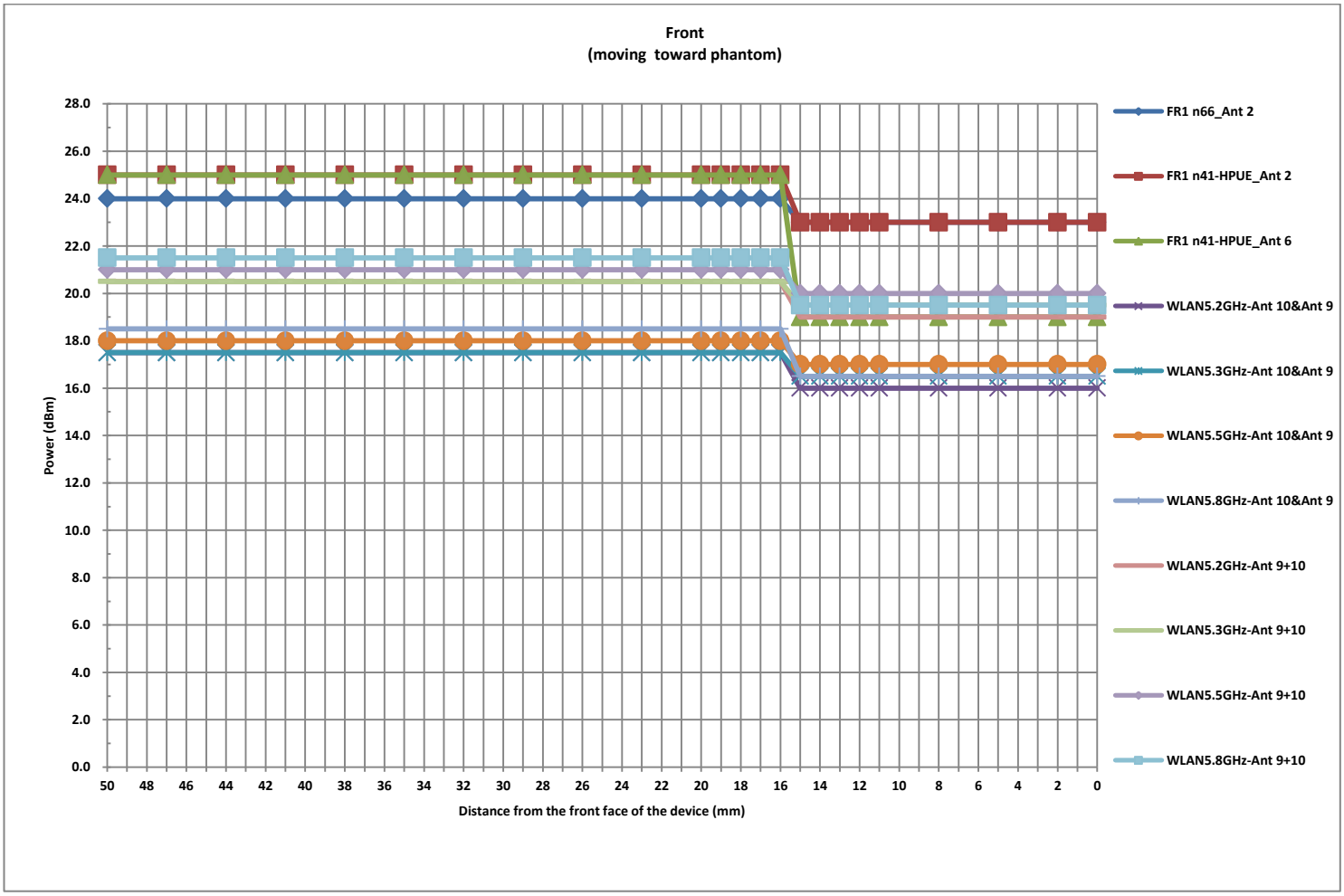


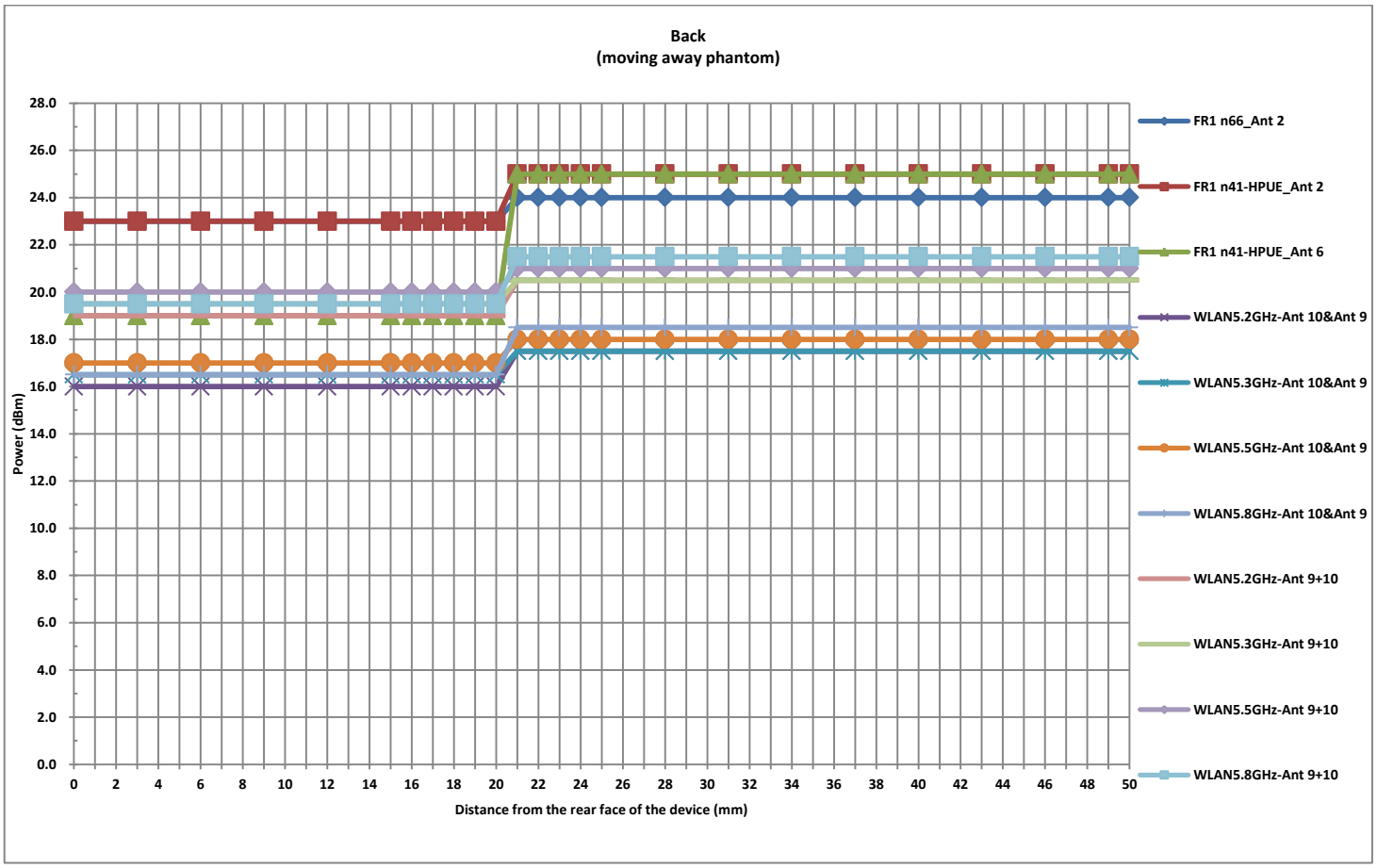
Sensor/handheld detection test set-up, front and back faces

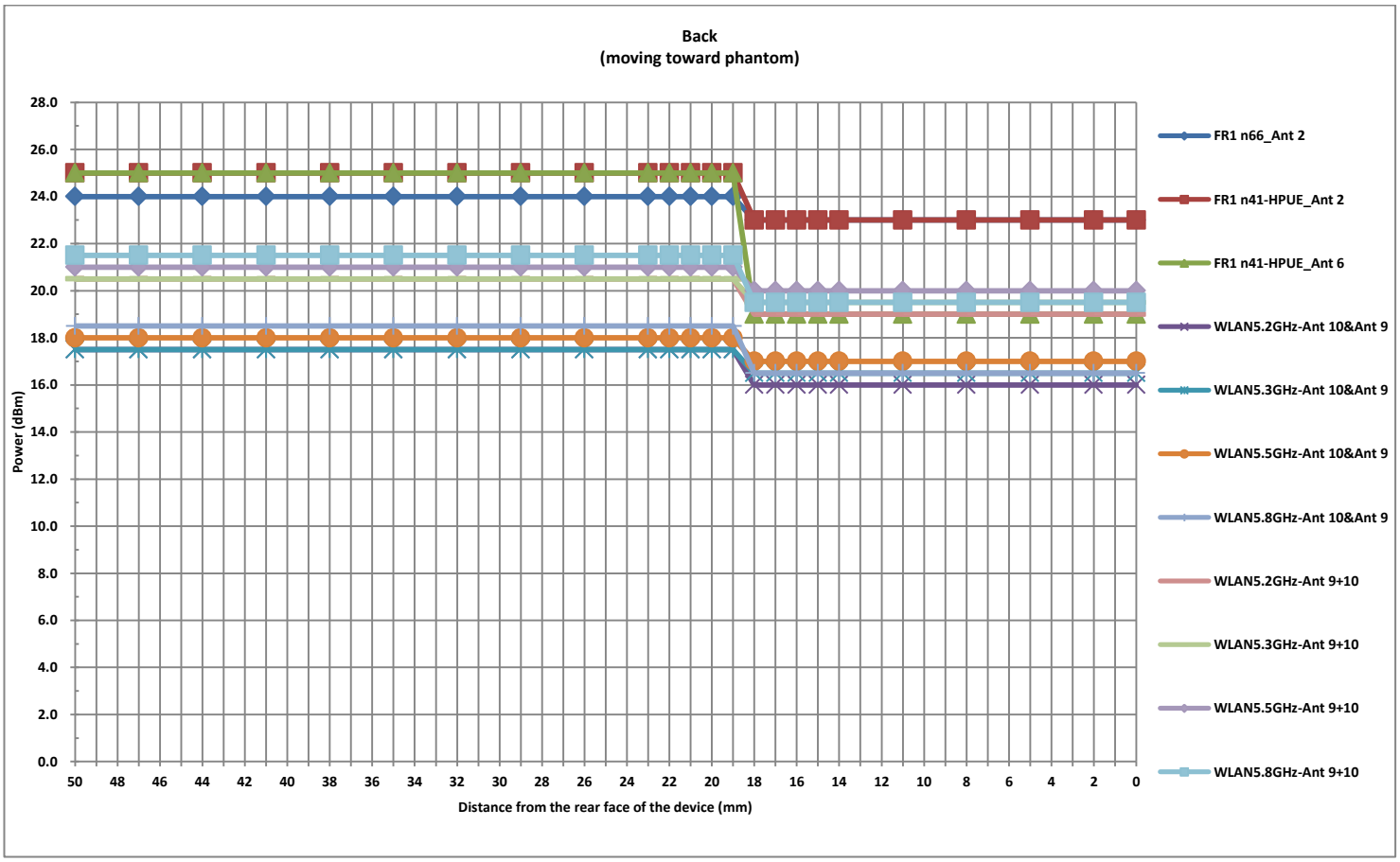
<P-Sensor>

Proximity Sensor Triggering Distance (mm)				
Position	Front		Back	
	Moving away	Moving towards	Moving away	Moving towards
Minimum	18	15	20	18




Front
(moving toward phantom)
Power (dBm)
28.0
26.0
24.0
22.0
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
50 48 46 44 42 40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0
Distance from the front face of the device (mm)
FR1 n66_Ant 2
FR1 n41-HPUE_Ant 2
FR1 n41-HPUE_Ant 6
WLAN5.2GHz-Ant 10&Ant 9
WLAN5.3GHz-Ant 10&Ant 9
WLAN5.5GHz-Ant 10&Ant 9
WLAN5.8GHz-Ant 10&Ant 9
WLAN5.2GHz-Ant 9+10
WLAN5.3GHz-Ant 9+10
WLAN5.5GHz-Ant 9+10
WLAN5.8GHz-Ant 9+10


Back
(moving away phantom)
Power (dBm)
Distance from the rear face of the device (mm)
FR1 n66_Ant 2
FR1 n41-HPUE_Ant 2
FR1 n41-HPUE_Ant 6
WLAN5.2GHz-Ant 10&Ant 9
WLAN5.3GHz-Ant 10&Ant 9
WLAN5.5GHz-Ant 10&Ant 9
WLAN5.8GHz-Ant 10&Ant 9
WLAN5.2GHz-Ant 9+10
WLAN5.3GHz-Ant 9+10
WLAN5.5GHz-Ant 9+10
WLAN5.8GHz-Ant 9+10


Back
(moving toward phantom)
Power (dBm)
28.0
26.0
24.0
22.0
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
50 48 46 44 42 40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0
Distance from the rear face of the device (mm)
FR1 n66_Ant 2
FR1 n41-HPUE_Ant 2
FR1 n41-HPUE_Ant 6
WLAN5.2GHz-Ant 10&Ant 9
WLAN5.3GHz-Ant 10&Ant 9
WLAN5.5GHz-Ant 10&Ant 9
WLAN5.8GHz-Ant 10&Ant 9
WLAN5.2GHz-Ant 9+10
WLAN5.3GHz-Ant 9+10
WLAN5.5GHz-Ant 9+10
WLAN5.8GHz-Ant 9+10

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

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:

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

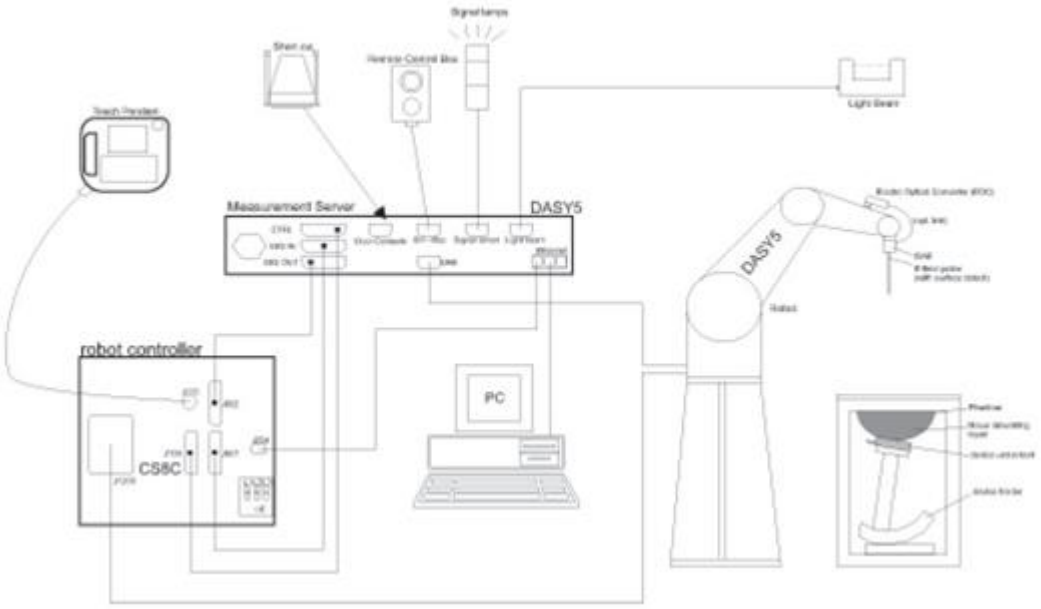
SAR is expressed in units of Watts per kilogram (W/kg)

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

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:



- 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 WinXP or Win7 and the DASY5 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.

<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

<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

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.

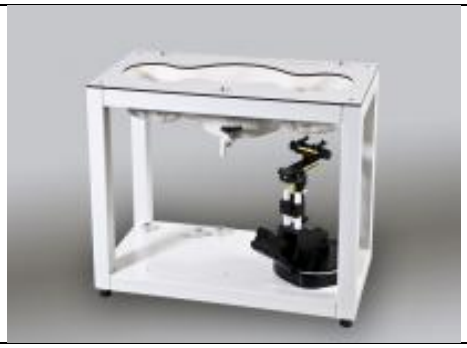
The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

Photo of DAE

8.3 Phantom

<SAM Twin Phantom>

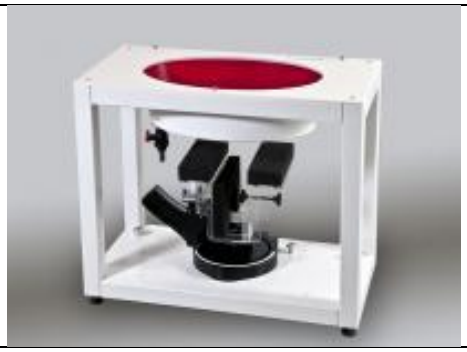
Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet
Measurement Areas	Left Hand, Right Hand, Flat Phantom



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:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

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 form 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 dB0 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	½·δ·ln(2) ± 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: Δx_{Area}, Δy_{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: Δx_{Zoom}, Δy_{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 1st 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	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
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 *reported* SAR from the *area scan based 1-g SAR estimation* 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	1087	2019/3/27	2022/3/26
SPEAG	835MHz System Validation Kit	D835V2	4d151	2019/3/27	2022/3/26
SPEAG	1750MHz System Validation Kit	D1750V2	1090	2019/3/27	2022/3/26
SPEAG	1900MHz System Validation Kit	D1900V2	5d170	2019/3/26	2022/3/25
SPEAG	2450MHz System Validation Kit	D2450V2	908	2019/3/25	2022/3/24
SPEAG	2600MHz System Validation Kit	D2600V2	1061	2018/12/7	2021/12/6
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	2019/9/24	2020/9/23
SPEAG	Data Acquisition Electronics	DAE4	1358	2020/4/28	2021/4/27
SPEAG	Data Acquisition Electronics	DAE4	656	2019/12/17	2020/12/16
SPEAG	Data Acquisition Electronics	DAE4	690	2020/3/26	2021/3/25
SPEAG	Data Acquisition Electronics	DAE4	1338	2019/11/20	2020/11/19
SPEAG	Dosimetric E-Field Probe	EX3DV4	3935	2020/5/27	2021/5/26
SPEAG	Dosimetric E-Field Probe	EX3DV4	7592	2020/5/22	2021/5/21
SPEAG	Dosimetric E-Field Probe	ES3DV3	3279	2020/6/2	2021/6/1
SPEAG	Dosimetric E-Field Probe	ES3DV3	3293	2019/11/25	2020/11/24
SPEAG	Dosimetric E-Field Probe	EX3DV4	3976	2020/1/27	2021/1/26
SPEAG	SAM Twin Phantom	QD 000 P40 CB	TP-1753	NCR	NCR
SPEAG	SAM Twin Phantom	QD 000 P40 CB	TP-1839	NCR	NCR
SPEAG	SAM Twin Phantom	QD 000 P40 CB	TP-1503	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8821C	6201432831	2020/4/16	2021/4/15
Agilent	Wireless Communication Test Set	E5515C	MY52102706	2020/4/16	2021/4/15
Agilent	ENA Series Network Analyzer	E5071C	MY46111157	2020/4/16	2021/4/15
SPEAG	Dielectric Probe Kit	DAK-3.5	1071	2019/10/28	2020/10/27
Anritsu	Vector Signal Generator	MG3710A	6201682672	2020/1/8	2021/1/7
Rohde & Schwarz	Power Meter	NRVD	102081	2019/8/15	2020/8/14
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	2019/8/14	2020/8/13
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	2019/8/14	2020/8/13
R&S	CBT BLUETOOTH TESTER	CBT	101641	2020/1/8	2021/1/7
EXA	Spectrum Analyzer	FSV7	101631	2020/1/8	2021/1/7
Testo	Hygrometer	608-H1	1241332088	2020/1/8	2021/1/7
FLUKE	DIGITAC THERMOMETER	51II	97240029	2019/8/15	2020/8/14
BONN	POWER AMPLIFIER	BLMA 0830-3	087193A	Note 1	
BONN	POWER AMPLIFIER	BLMA 2060-2	087193B	Note 1	
ARRA	Power Divider	A3200-2	N/A	Note 1	
MCL	Attenuation1	BW-S10W5+	N/A	Note 1	
MCL	Attenuation2	BW-S10W5+	N/A	Note 1	
MCL	Attenuation3	BW-S10W5+	N/A	Note 1	
Agilent	Dual Directional Coupler	778D	20500	Note 1	
Agilent	Dual Directional Coupler	11691D	MY48151020	Note 1	

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
2. Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged, or repaired during the interval.
3. The justification data of dipole can be found in appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.

11. System Verification

11.1 Tissue Simulating Liquids

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

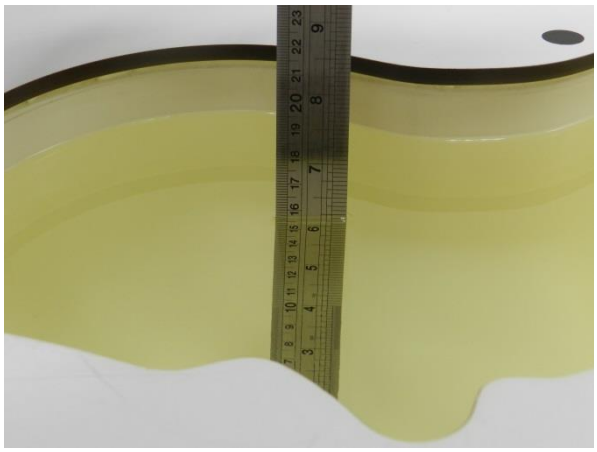


Fig 11.1 Photo of Liquid Height for Head SAR

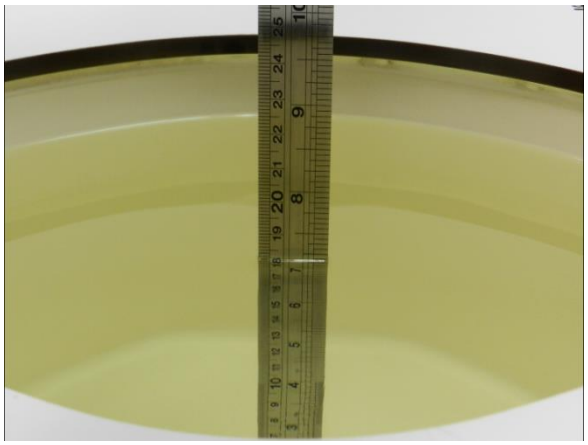


Fig 11.2 Photo of Liquid Height for Body SAR

11.2 Tissue Verification

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

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

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
750	Head	22.7	0.898	42.267	0.89	41.90	0.90	0.88	±5	2020/7/14
835	Head	22.8	0.905	41.314	0.90	41.50	0.56	-0.45	±5	2020/7/16
1750	Head	22.6	1.347	41.059	1.37	40.10	-1.68	2.39	±5	2020/7/18
1900	Head	22.7	1.440	40.480	1.40	40.00	2.86	1.20	±5	2020/7/20
2600	Head	22.6	2.005	39.895	1.96	39.00	2.30	2.29	±5	2020/7/22
750	Head	22.8	0.902	42.186	0.89	41.90	1.35	0.68	±5	2020/7/24
835	Head	22.7	0.924	42.621	0.90	41.50	2.67	2.70	±5	2020/7/22
1750	Head	22.9	1.386	38.586	1.37	40.10	1.17	-3.78	±5	2020/7/26
1900	Head	22.8	1.410	38.656	1.40	40.00	0.71	-3.36	±5	2020/7/28
2600	Head	22.8	2.008	37.793	1.96	39.00	2.45	-3.09	±5	2020/7/30
750	Head	22.7	0.921	41.620	0.89	41.90	3.48	-0.67	±5	2020/7/17
835	Head	22.6	0.904	42.418	0.90	41.50	0.44	2.21	±5	2020/7/19
1750	Head	22.6	1.351	40.380	1.37	40.10	-1.39	0.70	±5	2020/7/21
1900	Head	22.7	1.460	40.076	1.40	40.00	4.29	0.19	±5	2020/7/23
2600	Head	22.6	1.980	39.097	1.96	39.00	1.02	0.25	±5	2020/7/25
2450	Head	22.9	1.849	40.033	1.80	39.20	2.72	2.13	±5	2020/7/17
5250	Head	22.7	4.567	35.279	4.71	35.90	-3.04	-1.73	±5	2020/7/23
5600	Head	22.8	4.953	34.659	5.07	35.50	-2.31	-2.37	±5	2020/7/24
5750	Head	22.7	5.131	34.387	5.22	35.40	-1.70	-2.86	±5	2020/7/25
2450	Head	22.7	1.838	38.262	1.80	39.20	2.11	-2.39	±5	2020/7/15
5250	Head	22.7	4.595	36.399	4.71	35.90	-2.44	1.39	±5	2020/7/18
5600	Head	22.8	4.985	35.825	5.07	35.50	-1.68	0.92	±5	2020/7/20
5750	Head	22.6	5.160	35.569	5.22	35.40	-1.15	0.48	±5	2020/7/22

11.3 System Performance Check Results

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

<1g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2020/7/14	750	Head	250	1087	3935	1358	2.16	8.36	8.64	3.35
2020/7/16	835	Head	250	4d151	3935	1358	2.35	9.30	9.4	1.08
2020/7/18	1750	Head	250	1090	3935	1358	8.52	36.40	34.08	-6.37
2020/7/20	1900	Head	250	5d170	3935	1358	9.85	39.00	39.4	1.03
2020/7/22	2600	Head	250	1061	3935	1358	13.90	57.70	55.6	-3.64
2020/7/24	750	Head	250	1087	7592	656	2.16	8.36	8.64	3.35
2020/7/22	835	Head	250	4d151	7592	656	2.52	9.30	10.08	8.39
2020/7/26	1750	Head	250	1090	7592	656	9.73	36.40	38.92	6.92
2020/7/28	1900	Head	250	5d170	7592	656	9.78	39.00	39.12	0.31
2020/7/30	2600	Head	250	1061	7592	656	14.10	57.70	56.4	-2.25
2020/7/17	750	Head	250	1087	3279	690	2.09	8.36	8.36	0.00
2020/7/19	835	Head	250	4d151	3279	690	2.33	9.30	9.32	0.22
2020/7/21	1750	Head	250	1090	3279	690	8.87	36.40	35.48	-2.53
2020/7/23	1900	Head	250	5d170	3279	690	10.30	39.00	41.2	5.64
2020/7/25	2600	Head	250	1061	3279	690	14.10	57.70	56.4	-2.25
2020/7/17	2450	Head	250	908	3935	1358	12.70	52.80	50.8	-3.79
2020/7/23	5250	Head	100	1113	3935	1358	7.92	80.50	79.2	-1.61
2020/7/24	5600	Head	100	1113	3935	1358	7.78	83.40	77.8	-6.71
2020/7/25	5750	Head	100	1113	3935	1358	7.29	80.00	72.9	-8.87
2020/7/15	2450	Head	250	908	3293	1338	13.00	52.80	52	-1.52
2020/7/18	5250	Head	100	1113	3976	1338	8.47	80.50	84.7	5.22
2020/7/20	5600	Head	100	1113	3976	1338	8.93	83.40	89.3	7.07
2020/7/22	5750	Head	100	1113	3976	1338	8.52	80.00	85.2	6.50

<10g SAR>

Date	Frequency (MHz)	Tissue Type	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 (%)
2020/7/25	2600	Head	250	1061	3279	690	6.10	25.90	24.4	-5.79
2020/7/18	5250	Head	100	1113	3976	1338	2.47	23.10	24.7	6.93
2020/7/20	5600	Head	100	1113	3976	1338	2.59	23.80	25.9	8.82
2020/7/22	5750	Head	100	1113	3976	1338	2.46	22.80	24.6	7.89

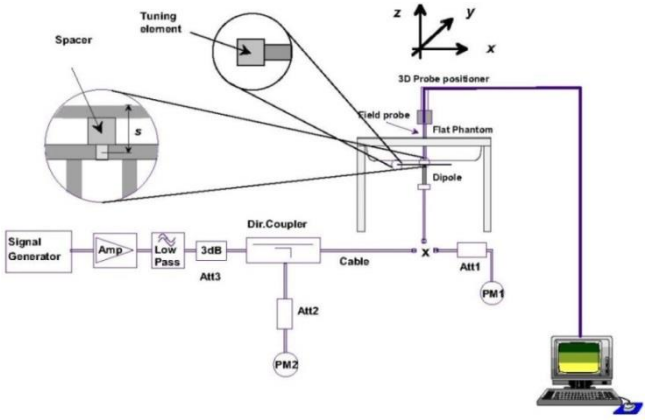


Fig 11.3.1 System Performance Check Setup

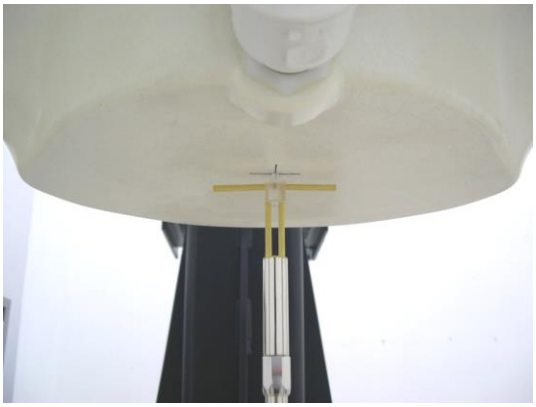


Fig 11.3.2 Setup Photo

12. RF Exposure Positions

12.1 Ear and handset reference point

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

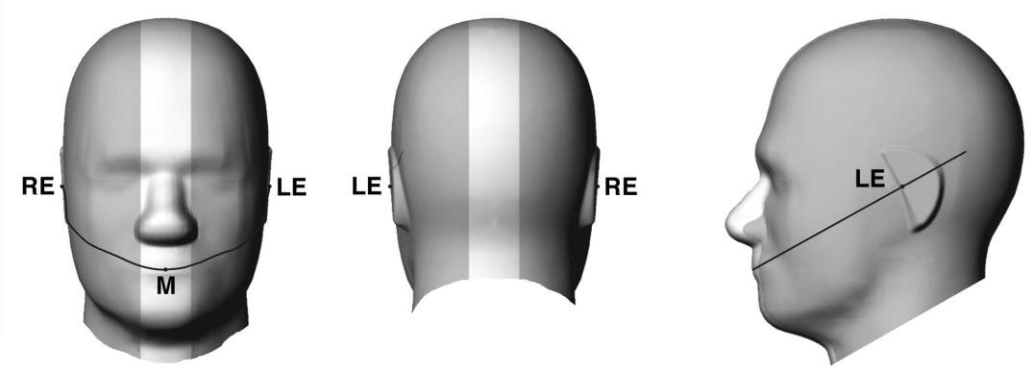


Fig 12.1.1 Front, back, and side views of SAM twin phantom

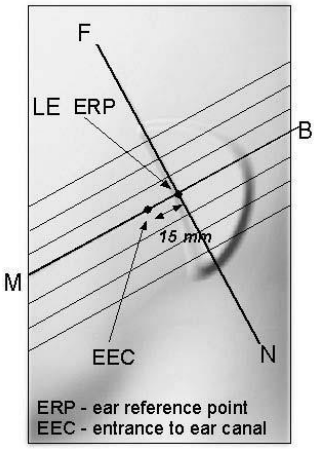


Fig 12.1.2 Close-up side view of phantom showing the ear region.

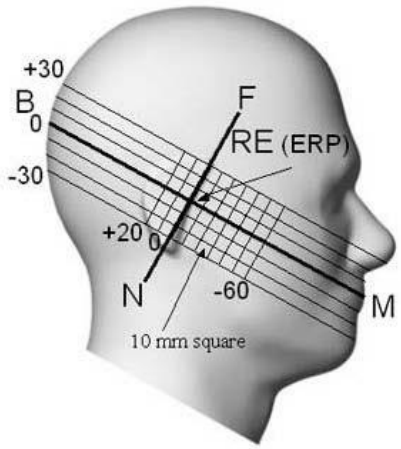


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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

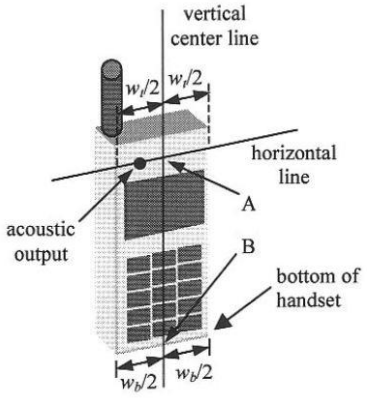


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case

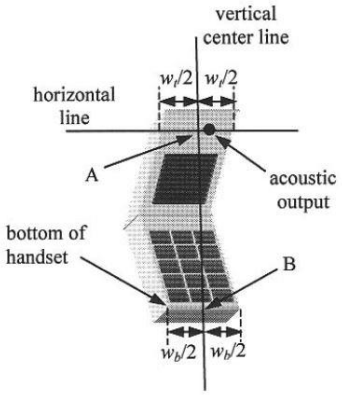


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

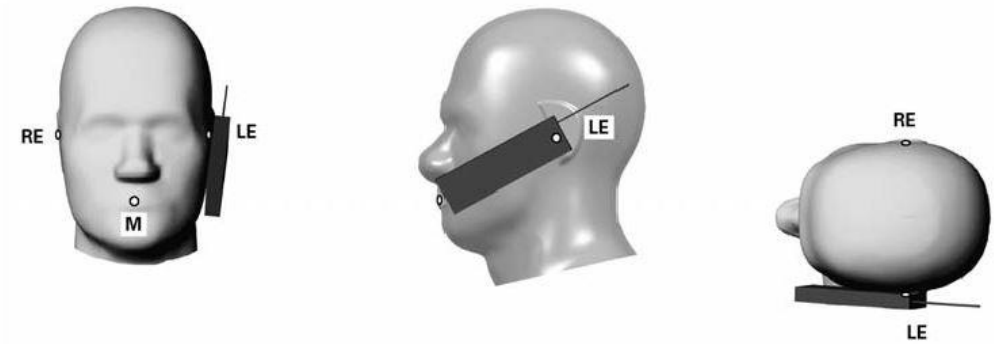


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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 12.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

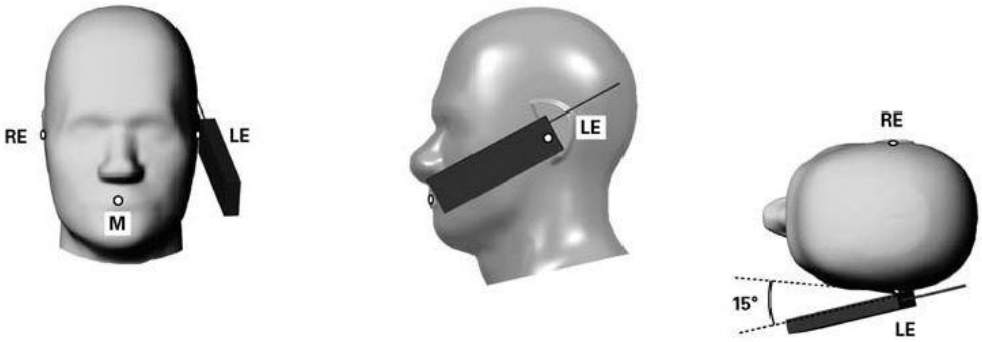


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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 12.4). 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 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

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

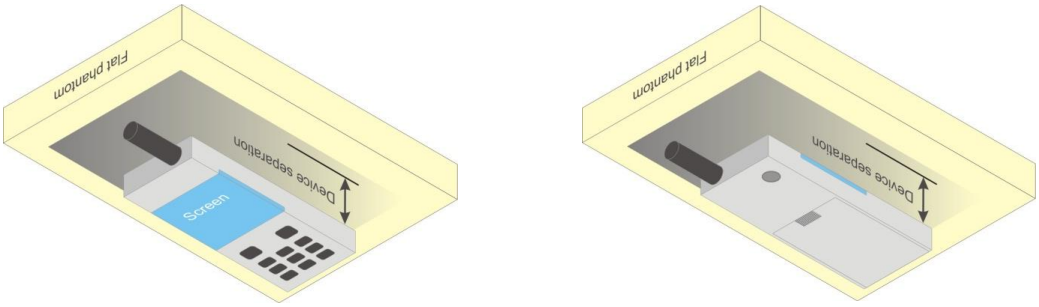


Fig 12.4 Body Worn Position

12.5 Product Specific 10g SAR Exposure

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that 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 x W ≥ 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 form 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 2Tx slots for GSM850/GSM1900 are 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 ≤ ¼ 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 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} (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_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 Δ_{NACK} = 30/15 with β_{hs} = 30/15 * β_c, and Δ_{CQI} = 24/15 with β_{hs} = 24/15 * β_c.

Note 3: CM = 1 for β_c/β_d =12/15, β_{hs}/β_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 β_c = 11/15 and β_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-TFCI
   viii. Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
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-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	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	$\beta_{ed}1$: 47/15 $\beta_{ed}2$: 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 Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c. For sub-test 5, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 5/15 with β_{hs} = 5/15 * β_c.

Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_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 β_c = 10/15 and β_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 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: β_c/β_d=2/15
      b). Subtest 2: β_c/β_d=12/15
      c). Subtest 3: β_c/β_d=15/8
      d). Subtest 4: β_c/β_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	Proces ses	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.		

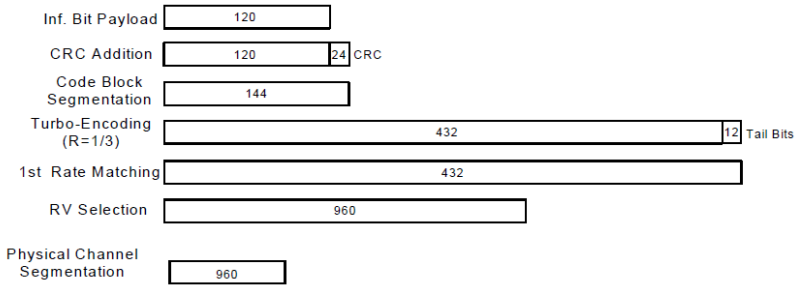


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

<WCDMA Conducted Power>

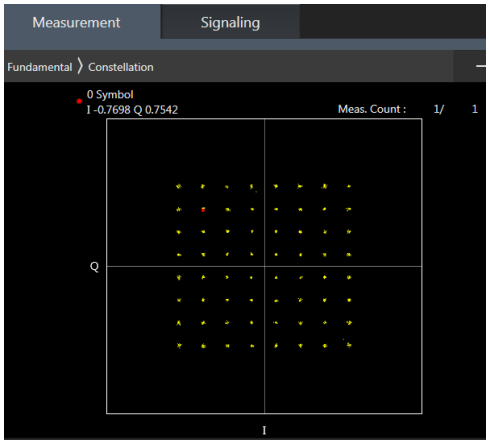
General Note:

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 ≤ ¼ 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 (HSDPA / HSUPA / DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA

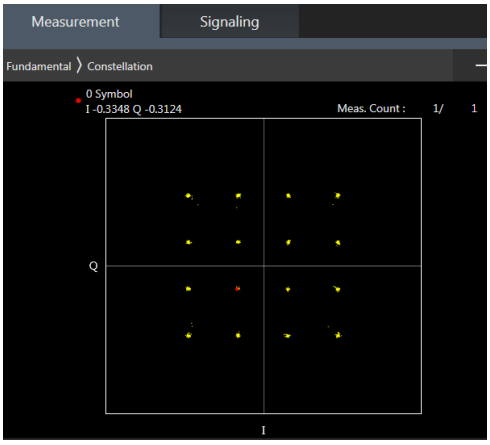
<LTE Conducted Power>

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/64QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > 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; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B38 / B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B4 / B17 / B38 SAR test was covered by B66 / B12 / B41; 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 ≤ the larger band to qualify for the SAR test exclusion
   b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to 2017 TCB workshop, for 64 QAM and 16 QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 64QAM and 16QAM signal modulation are correct.



64QAM



16QAM

<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.

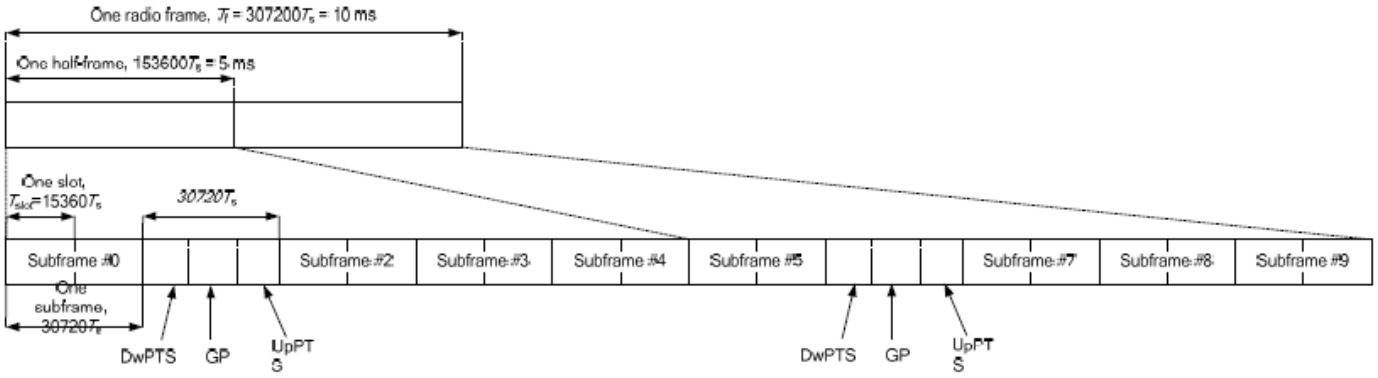


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

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:

For LTE Band 41 Power class 2

i. Uplink-downlink configuration: 1. In a half-frame consisted of 5 subfames, uplink operation is in 2 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: (2+0.167)/5 = 43.3%
iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (2+0.143)/5 = 42.9%
v. For TDD LTE SAR measurement, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 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.

For LTE Band 41 Power class 3

i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subfames, 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.

The device can adjust uplink/downlink configuration automatically according to the transmitting power class level, as followings:

LTE TDD Band	Power Class level	support uplink/downlink configuration
LTE Band 41	> 23	1,2,3,4,5
	=23	0,1,2,3,4,5,6
	< 23	0,1,2,3,4,5,6

<LTE Carrier Aggregation>

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.
3. The gray color table is covered by other combinations and no need to verify power.

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
2CC #1	CA_7A_7A		3CC #1	CA_2A_2A_12A	4CC #4
2CC #2	CA_7C	3CC #12	3CC #2	CA_2A_2A_13A	
2CC #3	CA_38C		3CC #3	CA_2A_2A_4A	
2CC #4	CA_41C	4CC #1	3CC #4	CA_2A_2A_5A	
2CC #5	CA_41A_41A	4CC #1	3CC #5	CA_2A_2A_66A	4CC #5
2CC #6	CA_12A_66A	4CC #2	3CC #6	CA_2A_4A_12A	
2CC #7	CA_12B	2CC #9	3CC #7	CA_2A_4A_13A	
2CC #8	CA_2A_12A	4CC #2	3CC #8	CA_2A_4A_4A	
2CC #9	CA_2A_12B		3CC #9	CA_2A_4A_5A	
2CC #10	CA_2A_13A	3CC #2	3CC #10	CA_2A_4A_7A	
2CC #11	CA_2A_2A	4CC #4	3CC #11	CA_2A_7A_12A	
2CC #12	CA_2A_4A	3CC #3	3CC #12	CA_2A_7C	
2CC #13	CA_2A_5A	4CC #7	3CC #13	CA_4A_4A_12A	
2CC #14	CA_2A_66A	4CC #5	3CC #14	CA_4A_4A_7A	
2CC #15	CA_2A_7A	3CC #11	3CC #15	CA_4A_7A_12A	
2CC #16	CA_4A_12A	3CC #13	3CC #16	CA_5A_7C	
2CC #17	CA_4A_12B				
2CC #18	CA_4A_13A	3CC #7			
2CC #19	CA_4A_4A	3CC #8			
2CC #20	CA_4A_5A	3CC #9			
2CC #21	CA_4A_7A	3CC #14			
2CC #22	CA_5A_5A				
2CC #23	CA_5A_7A	3CC #16			
2CC #24	CA_5B				
2CC #25	CA_66A_66A	4CC #2			
2CC #26	CA_7A_12A	3CC #11			
2CC #27	CA_7A_12B				
2CC #28	CA_7A_66A				

4CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset
4CC #1	CA_41A-41D	
4CC #2	CA_2A-12A-66A-66A	
4CC #3	CA_2A-12A-66C	
4CC #4	CA_2A-2A-12A-66A	
4CC #5	CA_2A-2A-66A-66A	
4CC #6	CA_2A-2A-66C	
4CC #7	CA_2A-5A-66A-66A	

4X4 MIMO	WWAN Band
	LTE Band: B2 / B4 / B7 / B38 / B41 / B66

LTE Carrier Aggregation Conducted Power (Downlink)

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 inter-band CA, the SCC selected highest bandwidth and near the middle of its transmission band. For SCC DL RB size and offset will base on the PCC corresponding RB allocation.

vi. 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.

vii. 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.

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

LTE Carrier Aggregation Conducted Power (Uplink)

1. This device supports uplink carrier aggregation for LTE CA_5B, LTE CA_7C, LTE CA_38C and LTE CA_41C 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. For the non-contiguously allocated resource blocks which the MPR level is determined by various RB separation and RB sizes requirement, and the allowed MPR levels, settings and the conducted powers are permanently implemented in this device per the 3GPP 36.36.101 section 6.2.3A.1.3 requirements.
2. According to FCC guidance, the output power with uplink CA active was measured for the high / middle / low channel configuration with the highest reported SAR for each exposure condition, the power was measured with wideband signal integration over both component carriers.
3. In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs
4. Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05. The required test channel should be associated with the UL PCC. For channels at the ends of a frequency band, the SCC and subsequent CCs are added to the side within the transmission band. Otherwise, the CCs should be added alternatively to either side of the PCC.

<Power Measurement Setup>

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2 / n5 / n66 / n71 / n38 / n41 is NSA mode.
2. 5G NR n2 / n41 also supports SA mode.
3. NR implementation of n2, n5, n66, n71, n38, and n41 is limited to EN-DC operations only (NSA), with LTE Bands 2/5/7/12/13/66/71 acting as anchor bands, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.
4. Following 5G NR n2/n5/n66/n71 support SCS 15KHz DFT/CP-OFDM, PI/2 BPSK/QPSK/16QAM/64QAM/ 256QAM, Bandwidth 5M/10M/15M/20M.
5. Following 5G NR n38 support SCS 30KHz DFT/CP-OFDM, PI/2 BPSK/QPSK/16QAM/64QAM/256QAM, Bandwidth 20M.
6. Following 5G NR n41 support SCS 30KHz DFT/CP-OFDM, PI/2 BPSK/QPSK/16QAM/64QAM/256QAM, Bandwidth 20M/40M/50M/60M/80M/90M/100M.
7. 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-QPSK and the reported SAR for the DFT-QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
   b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QMA/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QMA/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
8. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission.
9. For 5G NR NSA EN-DC mode, EN-DC total power level is the same as standalone LTE, so EN-DC SAR summed standalone LTE 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	≤ 3.5[1] ≤ 0.5[2]	≤ 1.2[1] ≤ 0.5[2]	≤ 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 configuration	LTE	NR
DC_2A_n66A	LTE 2	n66
DC_5A_n66A	LTE 5	n66
DC_12A_n66A	LTE 12	n66
DC_2A-7A_n66A	LTE 7	n66
DC_7A-66A_n66A		
DC_2A-13A_n66A	LTE 13	n66
DC_2A-71A_n66A	LTE 71	n66
DC_66A-71A_n66A		n66
DC_2A_n71A	LTE 2	n71
DC_7A_n71A	LTE 7	n71
DC_66A_n71A	LTE 66	n71
DC_66A_n2A	LTE 66	n2
DC_2A-12A_n2A	LTE 12	n2
DC_5A-66A_n2A	LTE 5	n2
DC_2A_n5A	LTE 2	n5
DC_66A_n5A	LTE 66	n5
DC_7A_n5A	LTE 7	n5
DC_66A_n41A	LTE 66	n41
DC_5A_n41A	LTE 5	n41
DC_2A_n41A	LTE 2	n41
DC_71A_n38A	LTE 71	n38

<WLAN Conducted Power>

General Note:

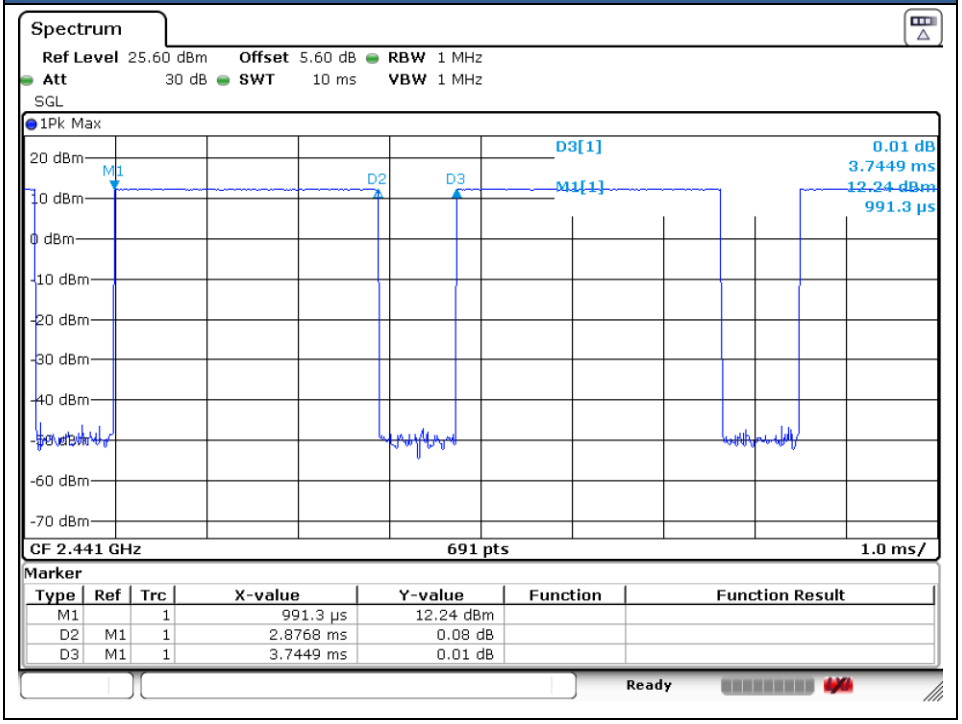
1. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. 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.
2. 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).
3. 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.
4. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
   a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
   b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
   c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

<2.4GHz Bluetooth>

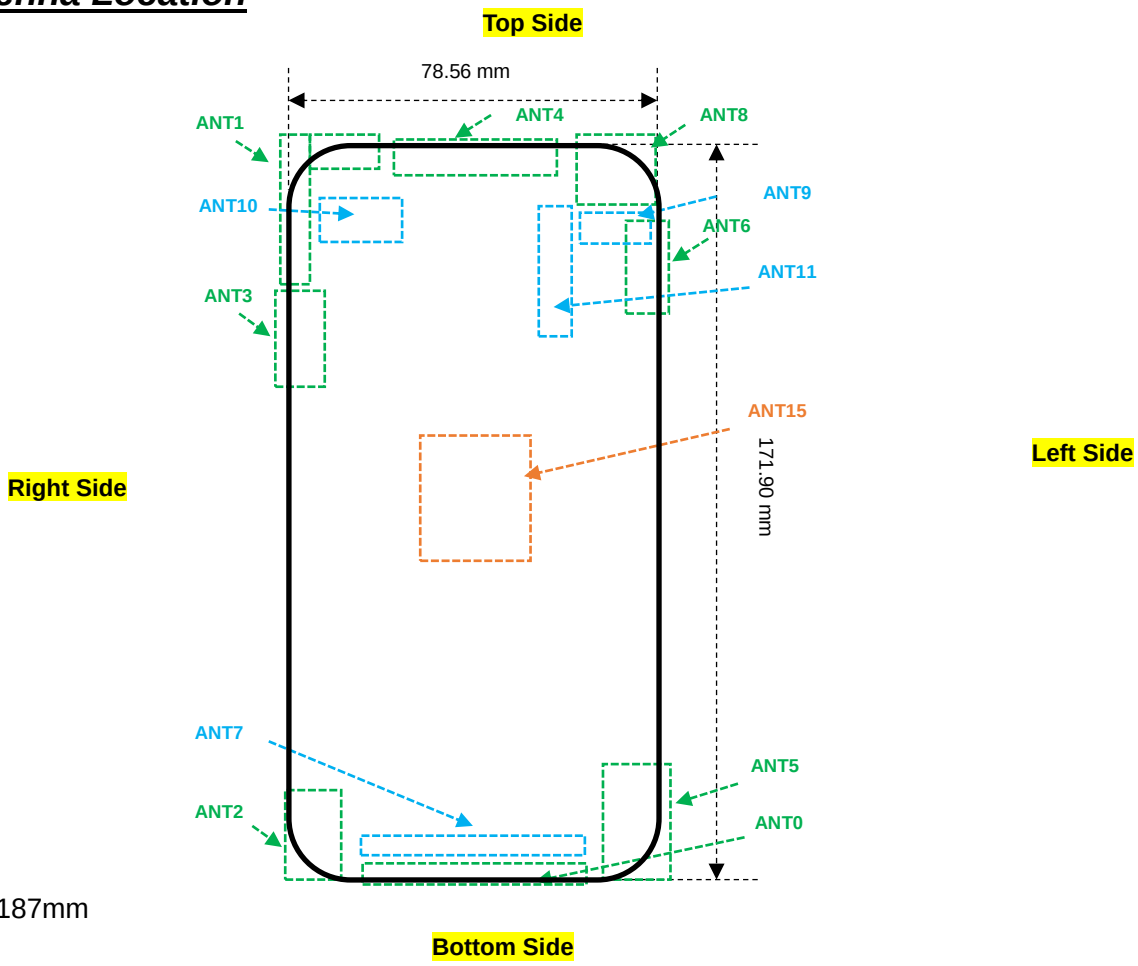
General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle is 76.82 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation

Bluetooth time-domain plot



14. Antenna Location



Diagonal: 187mm

Comments (Pls clarify the difference)	
RoW (EU, ANZ, MENA APAC)	
ANT0: LB(TRX),N78	GSM850/EGSM(TRX)
	WCDMA:5/8(TRX)
	LTE:5/8/12/13/17/20/28/71(TRX)
	5G-sub 6:N78(TRX),N5/8/28/71(TRX)
ANT1: LB(TRX),MHB(DRX),5G-sub 6	GSM850/EGSM(TRX),DCS/PCS(DRX)
	WCDMA:B5/B8(TRX),B1/B2/B4(DRX)
	LTE:5/8/12/13/17/20/28/71(TRX), B1/2/3/4/7/38/39/40/41/66(DRX)
	5G-sub 6:N78(TRX),N5/8/28/71(TRX)
ANT2: MHB(TRX)	DCS/PCS(TRX)
	WCDMA:B1/B2/B4(TRX)
	LTE:1/2/3/4/7/38/39/40/41/66(TRX)
	5G-sub 6:N1/2/3/4/7/38/40/41/66(TRX)
ANT3: MHB(RX)	DCS/PCS(RX)
	WCDMA:B1/B2/B4(RX)
	LTE:1/2/3/4/7/38/39/40/41/66(RX)
	5G-sub 6:N1/2/3/4/7/38/40/41/66(RX)
ANT4: B32,5G-sub 6	LTE:32(DRX)
	5G-sub 6:N78(TRX)
ANT5: B32,5G-sub 6	LTE:32(DRX)
	5G-sub 6:N78(TRX)
ANT6: MHB(TRX)	DCS/PCS(TRX)
	WCDMA:B1/B2/B4(TRX)
	LTE:1/2/3/4/7/38/39/40/41/66(TRX)
	5G-sub 6:N1/2/3/4/7/38/40/41/66(TRX)
ANT7: MHB(RX)	DCS/PCS(RX)
	WCDMA:B1/B2/B4(RX)
	LTE:1/2/3/4/7/38/39/40/41/66(RX)
	5G-sub 6:N1/2/3/4/7/38/40/41/66(RX)
ANT8:GPS&WIFI-2.4G	GPS-L1,WIFI-2.4G, BT
ANT9:WIFI-5G	WIFI-5G;
ANT10:WIFI MIMO-2.4&5G	WIFI-2.4&5G
ANT11:GPS	GPS-L5
ANT15:NFC	NFC

Distance of the Antenna to the EUT surface/edge						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN LAT(Ant.0)	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN LAT(Ant.2)	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	>25mm
WWAN UAT(Ant.1)	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
WWAN UAT(Ant.6)	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
BT&2.4GHz WLAN(Ant.8)	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
5GHz WLAN(Ant.9)	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
2.4GHz & 5GHz WLAN (Ant.10)	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm

Positions for SAR tests; Hotspot mode						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN LAT(Ant.0)	Yes	Yes	No	Yes	Yes	Yes
WWAN LAT(Ant.2)	Yes	Yes	No	Yes	Yes	No
WWAN UAT(Ant.1)	Yes	Yes	Yes	No	Yes	No
WWAN UAT(Ant.6)	Yes	Yes	Yes	No	No	Yes
BT&2.4GHz WLAN(Ant.8)	Yes	Yes	Yes	No	No	Yes
5GHz WLAN(Ant.9)	Yes	Yes	Yes	No	No	Yes
2.4GHz & 5GHz WLAN (Ant.10)	Yes	Yes	Yes	No	Yes	No

General Note:

1. Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm*5cm, the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.

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 BT/WLAN: 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 when the measured SAR is ≥ 0.8W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. Pre KDB648474 D04v01r03, when the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset. When headset SAR is less than or equal than without headset SAR, no need to verify the remaining channels for headset SAR.
5. The device implements Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity).
6. The device will invoke corresponding work scenarios power level, which are provided in the operational description.
7. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head / hotspot / body-worn / extremity.
8. 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/WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of 5GNR n41 HPUE and WLAN 5.8GHz 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.
9. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance was performed for body worn:
   Front: 14 mm
   Back: 17 mm

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 2Tx slots for GSM850/GSM1900 are 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 ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

WCDMA Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ 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 (HSDPA / HSUPA / DC-HSDPA) are less than ¼ 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/64QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > 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; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. This device supports HPUE for LTE band 41 with class 2 level, so HPUE SAR has been performed.
7. For LTE B4 / B5 / B12 / B17 / B38 / B71 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.
8. LTE B4 / B17 / B38 SAR test was covered by B66 / B12 / B41; 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 ≤ the larger band to qualify for the SAR test exclusion
   b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
2. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
3. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
4. 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
5. 16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, 16QAM/64QAM/256QAM SAR testing are not required.
6. 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

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.
6. Based on WLAN2.4GHz and Bluetooth share the same antenna, so Bluetooth RF exposure evaluation chose the worst positon of WLAN 2.4GHz Ant to perform Bluetooth SAR test, and used this Bluetooth SAR value conservatively represent other position do co-located analysis with WWAN.

15.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Power Reduction	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)
	GSM850_Ant 0	GPRS(2 Tx slots)	Right Cheek	Full	128	824.2	30.29	31.00	1.178	0.06	0.075	0.088
	GSM850_Ant 0	GPRS(2 Tx slots)	Right Tilted	Full	128	824.2	30.29	31.00	1.178	0.03	0.057	0.067
	GSM850_Ant 0	GPRS(2 Tx slots)	Left Cheek	Full	128	824.2	30.29	31.00	1.178	0.04	0.098	0.116
	GSM850_Ant 0	GPRS(2 Tx slots)	Left Tilted	Full	128	824.2	30.29	31.00	1.178	0.01	0.064	0.075
	GSM850_Ant 1	GPRS(2 Tx slots)	Right Cheek	Full	128	824.2	29.99	31.00	1.262	0.02	0.330	0.416
	GSM850_Ant 1	GPRS(2 Tx slots)	Right Tilted	Full	128	824.2	29.99	31.00	1.262	0.03	0.285	0.360
01	GSM850_Ant 1	GPRS(2 Tx slots)	Left Cheek	Full	128	824.2	29.99	31.00	1.262	-0.07	0.550	**0.694**
	GSM850_Ant 1	GPRS(2 Tx slots)	Left Tilted	Full	128	824.2	29.99	31.00	1.262	0.05	0.493	0.622
	GSM1900_Ant 2	GPRS(2 Tx slots)	Right Cheek	Full	512	1850.2	27.10	28.00	1.230	0.04	0.001	0.001
	GSM1900_Ant 2	GPRS(2 Tx slots)	Right Tilted	Full	512	1850.2	27.10	28.00	1.230	0.09	0.001	0.001
	GSM1900_Ant 2	GPRS(2 Tx slots)	Left Cheek	Full	512	1850.2	27.10	28.00	1.230	0.02	0.008	0.010
	GSM1900_Ant 2	GPRS(2 Tx slots)	Left Tilted	Full	512	1850.2	27.10	28.00	1.230	0.04	0.001	0.001
	GSM1900_Ant 6	GPRS(2 Tx slots)	Right Cheek	Full	512	1850.2	26.72	27.50	1.197	0.06	0.768	0.919
	GSM1900_Ant 6	GPRS(2 Tx slots)	Right Tilted	Full	512	1850.2	26.72	27.50	1.197	0.05	0.204	0.244
	GSM1900_Ant 6	GPRS(2 Tx slots)	Left Cheek	Full	512	1850.2	26.72	27.50	1.197	0.03	0.243	0.291
	GSM1900_Ant 6	GPRS(2 Tx slots)	Left Tilted	Full	512	1850.2	26.72	27.50	1.197	0.04	0.066	0.079
02	GSM1900_Ant 6	GPRS(2 Tx slots)	Right Cheek	Full	661	1880	26.71	27.50	1.199	-0.12	0.956	**1.147**
	GSM1900_Ant 6	GPRS(2 Tx slots)	Right Cheek	Full	810	1909.8	26.23	27.50	1.340	0.01	0.704	0.943

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Power Reduction	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)
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	Full	9400	1880	23.60	24.50	1.230	-0.07	0.105	0.129
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	Full	9400	1880	23.60	24.50	1.230	0.06	0.065	0.080
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	Full	9400	1880	23.60	24.50	1.230	0.05	0.079	0.097
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	Full	9400	1880	23.60	24.50	1.230	0.02	0.086	0.106
	WCDMA II_Ant 6	RMC 12.2Kbps	Right Cheek	Reduced	9400	1880	20.75	22.00	1.334	0.06	0.669	0.892
	WCDMA II_Ant 6	RMC 12.2Kbps	Right Tilted	Reduced	9400	1880	20.75	22.00	1.334	0.04	0.169	0.225
	WCDMA II_Ant 6	RMC 12.2Kbps	Left Cheek	Reduced	9400	1880	20.75	22.00	1.334	0.05	0.208	0.277
	WCDMA II_Ant 6	RMC 12.2Kbps	Left Tilted	Reduced	9400	1880	20.75	22.00	1.334	0.05	0.054	0.072
03	WCDMA II_Ant 6	RMC 12.2Kbps	Right Cheek	Reduced	9262	1852.4	20.73	22.00	1.340	0.06	0.756	**1.013**
	WCDMA II_Ant 6	RMC 12.2Kbps	Right Cheek	Reduced	9538	1907.6	20.72	22.00	1.343	0.02	0.618	0.830
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	Full	1312	1712.4	24.06	24.50	1.107	0.04	0.047	0.052
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	Full	1312	1712.4	24.06	24.50	1.107	0.05	0.001	0.001
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	Full	1312	1712.4	24.06	24.50	1.107	0.06	0.045	0.050
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	Full	1312	1712.4	24.06	24.50	1.107	0.04	0.001	0.001
04	WCDMA IV_Ant 6	RMC 12.2Kbps	Right Cheek	Reduced	1312	1712.4	22.25	23.00	1.189	0.07	0.881	**1.047**
	WCDMA IV_Ant 6	RMC 12.2Kbps	Right Tilted	Reduced	1312	1712.4	22.25	23.00	1.189	0.06	0.214	0.254
	WCDMA IV_Ant 6	RMC 12.2Kbps	Left Cheek	Reduced	1312	1712.4	22.25	23.00	1.189	0.09	0.245	0.291
	WCDMA IV_Ant 6	RMC 12.2Kbps	Left Tilted	Reduced	1312	1712.4	22.25	23.00	1.189	0.02	0.083	0.099
	WCDMA IV_Ant 6	RMC 12.2Kbps	Right Cheek	Reduced	1413	1732.6	22.17	23.00	1.211	0.03	0.768	0.930
	WCDMA IV_Ant 6	RMC 12.2Kbps	Right Cheek	Reduced	1513	1752.6	22.16	23.00	1.213	0.04	0.854	1.036
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	Full	4182	836.4	24.14	24.50	1.086	0.01	0.071	0.077
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	Full	4182	836.4	24.14	24.50	1.086	0.05	0.058	0.063
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	Full	4182	836.4	24.14	24.50	1.086	-0.06	0.115	0.125
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	Full	4182	836.4	24.14	24.50	1.086	0.06	0.051	0.055
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	Full	4182	836.4	23.21	24.00	1.199	-0.02	0.366	0.439
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	Full	4182	836.4	23.21	24.00	1.199	0.05	0.340	0.408
05	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	Full	4182	836.4	23.21	24.00	1.199	0.01	0.609	**0.730**
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	Full	4182	836.4	23.21	24.00	1.199	0.01	0.102	0.122

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Power Reduction	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)
	LTE Band 5_Ant 0	10M	QPSK	1	0	Right Cheek	Full	20525	836.5	23.22	24.00	1.197	0.05	0.047	0.056
	LTE Band 5_Ant 0	10M	QPSK	25	0	Right Cheek	Full	20525	836.5	22.21	23.00	1.199	0.06	0.001	0.001
	LTE Band 5_Ant 0	10M	QPSK	1	0	Right Tilted	Full	20525	836.5	23.22	24.00	1.197	0.05	0.001	0.001
	LTE Band 5_Ant 0	10M	QPSK	25	0	Right Tilted	Full	20525	836.5	22.21	23.00	1.199	0.05	0.001	0.001
	LTE Band 5_Ant 0	10M	QPSK	1	0	Left Cheek	Full	20525	836.5	23.22	24.00	1.197	0.06	0.077	0.092
	LTE CA_5B_Ant 0	10M	QPSK	1	0	Left Cheek	Full	20575+20476	841.5+831.6	23.01	24.00	1.256	-0.04	0.041	0.051
	LTE Band 5_Ant 0	10M	QPSK	25	0	Left Cheek	Full	20525	836.5	22.21	23.00	1.199	0.02	0.067	0.080
	LTE Band 5_Ant 0	10M	QPSK	1	0	Left Tilted	Full	20525	836.5	23.22	24.00	1.197	0.01	0.048	0.057
	LTE Band 5_Ant 0	10M	QPSK	25	0	Left Tilted	Full	20525	836.5	22.21	23.00	1.199	0.06	0.001	0.001
	LTE Band 5_Ant 1	10M	QPSK	1	0	Right Cheek	Full	20525	836.5	22.30	23.50	1.318	0.03	0.261	0.344
	LTE Band 5_Ant 1	10M	QPSK	25	0	Right Cheek	Full	20525	836.5	21.29	22.50	1.321	0.08	0.221	0.292
	LTE Band 5_Ant 1	10M	QPSK	1	0	Right Tilted	Full	20525	836.5	22.30	23.50	1.318	0.07	0.235	0.310
	LTE Band 5_Ant 1	10M	QPSK	25	0	Right Tilted	Full	20525	836.5	21.29	22.50	1.321	0.06	0.202	0.267
06	LTE Band 5_Ant 1	10M	QPSK	1	0	Left Cheek	Full	20525	836.5	22.30	23.50	1.318	0.02	0.454	**0.598**
	LTE CA_5B _Ant 1	10M	QPSK	1	0	Left Cheek	Full	20575+20476	841.5+831.6	22.04	23.50	1.400	0.09	0.402	0.563
	LTE Band 5_Ant 1	10M	QPSK	25	0	Left Cheek	Full	20525	836.5	21.29	22.50	1.321	0.02	0.359	0.474
	LTE Band 5_Ant 1	10M	QPSK	1	0	Left Tilted	Full	20525	836.5	22.30	23.50	1.318	0.01	0.404	0.533
	LTE Band 5_Ant 1	10M	QPSK	25	0	Left Tilted	Full	20525	836.5	21.29	22.50	1.321	0.06	0.301	0.398
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	Full	23095	707.5	23.30	24.00	1.175	0.04	0.001	0.001
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Cheek	Full	23095	707.5	22.35	23.00	1.161	0.05	0.001	0.001
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	Full	23095	707.5	23.30	24.00	1.175	0.06	0.001	0.001
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Tilted	Full	23095	707.5	22.35	23.00	1.161	0.04	0.001	0.001
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	Full	23095	707.5	23.30	24.00	1.175	0.01	0.041	0.048
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Cheek	Full	23095	707.5	22.35	23.00	1.161	0.02	0.001	0.001
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	Full	23095	707.5	23.30	24.00	1.175	0.06	0.001	0.001
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Tilted	Full	23095	707.5	22.35	23.00	1.161	0.09	0.001	0.001
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	Full	23095	707.5	22.35	23.50	1.303	0.01	0.168	0.219
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	Full	23095	707.5	21.48	22.50	1.265	0.02	0.152	0.192
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	Full	23095	707.5	22.35	23.50	1.303	0.06	0.157	0.205
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	Full	23095	707.5	21.48	22.50	1.265	0.02	0.139	0.176
07	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	Full	23095	707.5	22.35	23.50	1.303	-0.05	0.374	**0.487**
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	Full	23095	707.5	21.48	22.50	1.265	0.04	0.283	0.358
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	Full	23095	707.5	22.35	23.50	1.303	0.05	0.352	0.459
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	Full	23095	707.5	21.48	22.50	1.265	0.04	0.228	0.288
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Cheek	Full	23230	782	23.92	24.00	1.019	0.04	0.073	0.074
	LTE Band 13_Ant 0	10M	QPSK	25	0	Right Cheek	Full	23230	782	22.92	23.00	1.019	0.05	0.060	0.061
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Tilted	Full	23230	782	23.92	24.00	1.019	0.02	0.054	0.055
	LTE Band 13_Ant 0	10M	QPSK	25	0	Right Tilted	Full	23230	782	22.92	23.00	1.019	0.03	0.054	0.055
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Cheek	Full	23230	782	23.92	24.00	1.019	0.04	0.075	0.076
	LTE Band 13_Ant 0	10M	QPSK	25	0	Left Cheek	Full	23230	782	22.92	23.00	1.019	0.01	0.063	0.064
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Tilted	Full	23230	782	23.92	24.00	1.019	0.05	0.071	0.072
	LTE Band 13_Ant 0	10M	QPSK	25	0	Left Tilted	Full	23230	782	22.92	23.00	1.019	0.06	0.056	0.057
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	Full	23230	782	23.20	23.50	1.072	0.04	0.253	0.271
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Cheek	Full	23230	782	22.04	22.50	1.112	0.05	0.208	0.231
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	Full	23230	782	23.20	23.50	1.072	0.06	0.242	0.259
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Tilted	Full	23230	782	22.04	22.50	1.112	0.02	0.194	0.216
08	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	Full	23230	782	23.20	23.50	1.072	-0.06	0.523	**0.560**
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Cheek	Full	23230	782	22.04	22.50	1.112	0.01	0.364	0.405
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	Full	23230	782	23.20	23.50	1.072	-0.02	0.505	0.541
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Tilted	Full	23230	782	22.04	22.50	1.112	0.03	0.308	0.342

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Power Reduction	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)
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Cheek	Full	133322	683	23.28	24.00	1.180	0.01	0.001	0.001
	LTE Band 71_Ant 0	20M	QPSK	50	0	Right Cheek	Full	133322	683	22.27	23.00	1.183	-0.02	0.001	0.001
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Tilted	Full	133322	683	23.28	24.00	1.180	-0.06	0.001	0.001
	LTE Band 71_Ant 0	20M	QPSK	50	0	Right Tilted	Full	133322	683	22.27	23.00	1.183	0.02	0.001	0.001
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Cheek	Full	133322	683	23.28	24.00	1.180	0.01	0.049	0.057
	LTE Band 71_Ant 0	20M	QPSK	50	0	Left Cheek	Full	133322	683	22.27	23.00	1.183	0.04	0.001	0.001
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Tilted	Full	133322	683	23.28	24.00	1.180	0.05	0.001	0.001
	LTE Band 71_Ant 0	20M	QPSK	50	0	Left Tilted	Full	133322	683	22.27	23.00	1.183	0.06	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	Full	133322	683	22.35	23.50	1.303	0.04	0.223	0.291
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Cheek	Full	133322	683	21.26	22.50	1.330	-0.05	0.181	0.241
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	Full	133322	683	22.35	23.50	1.303	0.02	0.180	0.235
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Tilted	Full	133322	683	21.26	22.50	1.330	-0.04	0.149	0.198
09	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	Full	133322	683	22.35	23.50	1.303	0.06	0.375	**0.489**
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Cheek	Full	133322	683	21.26	22.50	1.330	0.03	0.342	0.455
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	Full	133322	683	22.35	23.50	1.303	0.02	0.343	0.447
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Tilted	Full	133322	683	21.26	22.50	1.330	0.01	0.282	0.375
	LTE Band 2_Ant 2	20M	QPSK	1	0	Right Cheek	Full	18900	1880	22.69	24.00	1.352	-0.07	0.059	0.079
	LTE Band 2_Ant 2	20M	QPSK	50	0	Right Cheek	Full	18900	1880	21.82	23.00	1.312	0.04	0.057	0.075
	LTE Band 2_Ant 2	20M	QPSK	1	0	Right Tilted	Full	18900	1880	22.69	24.00	1.352	0.05	0.050	0.068
	LTE Band 2_Ant 2	20M	QPSK	50	0	Right Tilted	Full	18900	1880	21.82	23.00	1.312	0.06	0.001	0.001
	LTE Band 2_Ant 2	20M	QPSK	1	0	Left Cheek	Full	18900	1880	22.69	24.00	1.352	0.02	0.052	0.070
	LTE Band 2_Ant 2	20M	QPSK	50	0	Left Cheek	Full	18900	1880	21.82	23.00	1.312	0.01	0.042	0.055
	LTE Band 2_Ant 2	20M	QPSK	1	0	Left Tilted	Full	18900	1880	22.69	24.00	1.352	0.02	0.054	0.073
	LTE Band 2_Ant 2	20M	QPSK	50	0	Left Tilted	Full	18900	1880	21.82	23.00	1.312	0.04	0.001	0.001
10	LTE Band 2_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	18900	1880	20.86	21.50	1.159	0.15	0.687	**0.796**
	LTE Band 2_Ant 6	20M	QPSK	1	0	Right Cheek	ENDC	18900	1880	17.99	18.50	1.125	0.07	0.338	0.380
	LTE Band 2_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	18900	1880	20.69	21.50	1.205	0.04	0.655	0.789
	LTE Band 2_Ant 6	20M	QPSK	1	0	Right Tilted	Reduced	18900	1880	20.86	21.50	1.159	-0.05	0.123	0.143
	LTE Band 2_Ant 6	20M	QPSK	50	0	Right Tilted	Reduced	18900	1880	20.69	21.50	1.205	0.02	0.135	0.163
	LTE Band 2_Ant 6	20M	QPSK	1	0	Left Cheek	Reduced	18900	1880	20.86	21.50	1.159	-0.04	0.197	0.228
	LTE Band 2_Ant 6	20M	QPSK	50	0	Left Cheek	Reduced	18900	1880	20.69	21.50	1.205	0.02	0.202	0.243
	LTE Band 2_Ant 6	20M	QPSK	1	0	Left Tilted	Reduced	18900	1880	20.86	21.50	1.159	0.01	0.051	0.059
	LTE Band 2_Ant 6	20M	QPSK	50	0	Left Tilted	Reduced	18900	1880	20.69	21.50	1.205	0.03	0.051	0.061
	LTE Band 2_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	18700	1860	20.79	21.50	1.178	0.02	0.616	0.725
	LTE Band 2_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	19100	1900	20.84	21.50	1.164	0.04	0.682	0.794
	LTE Band 2_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	18700	1860	20.68	21.50	1.208	0.05	0.656	0.792
	LTE Band 2_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	19100	1900	20.61	21.50	1.227	0.06	0.630	0.773
	LTE Band 2_Ant 6	20M	QPSK	100	0	Right Cheek	Reduced	18900	1880	20.64	21.50	1.219	0.03	0.650	0.792

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Power Reduction	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)
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	Full	132572	1770	22.88	24.00	1.294	-0.04	0.053	0.069
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Cheek	Full	132572	1770	21.99	23.00	1.262	0.05	0.043	0.054
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	Full	132572	1770	22.88	24.00	1.294	0.03	0.001	0.001
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Tilted	Full	132572	1770	21.99	23.00	1.262	0.01	0.001	0.001
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	Full	132572	1770	22.88	24.00	1.294	0.05	0.001	0.001
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Cheek	Full	132572	1770	21.99	23.00	1.262	-0.03	0.001	0.001
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	Full	132572	1770	22.88	24.00	1.294	0.11	0.001	0.001
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Tilted	Full	132572	1770	21.99	23.00	1.262	0.04	0.001	0.001
11	LTE Band 66_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	132572	1770	21.81	22.50	1.172	0.07	0.829	**0.972**
	LTE Band 66_Ant 6	20M	QPSK	1	0	Right Cheek	ENDC	132572	1770	18.61	19.50	1.227	0.02	0.393	0.482
	LTE Band 66_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	132572	1770	21.73	22.50	1.194	0.03	0.810	0.967
	LTE Band 66_Ant 6	20M	QPSK	1	0	Right Tilted	Reduced	132572	1770	21.81	22.50	1.172	0.05	0.181	0.212
	LTE Band 66_Ant 6	20M	QPSK	50	0	Right Tilted	Reduced	132572	1770	21.73	22.50	1.194	0.01	0.191	0.228
	LTE Band 66_Ant 6	20M	QPSK	1	0	Left Cheek	Reduced	132572	1770	21.81	22.50	1.172	0.03	0.247	0.290
	LTE Band 66_Ant 6	20M	QPSK	50	0	Left Cheek	Reduced	132572	1770	21.73	22.50	1.194	-0.06	0.261	0.312
	LTE Band 66_Ant 6	20M	QPSK	1	0	Left Tilted	Reduced	132572	1770	21.81	22.50	1.172	0.01	0.068	0.080
	LTE Band 66_Ant 6	20M	QPSK	50	0	Left Tilted	Reduced	132572	1770	21.73	22.50	1.194	0.02	0.069	0.082
	LTE Band 66_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	132072	1720	21.76	22.50	1.186	0.05	0.524	0.621
	LTE Band 66_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	132322	1745	21.50	22.50	1.259	0.08	0.668	0.841
	LTE Band 66_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	132072	1720	21.32	22.50	1.312	0.09	0.559	0.734
	LTE Band 66_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	132322	1745	21.60	22.50	1.230	0.01	0.699	0.860
	LTE Band 66_Ant 6	20M	QPSK	100	0	Right Cheek	Reduced	132572	1770	21.72	22.50	1.197	0.03	0.806	0.965
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	Full	21100	2535	23.39	24.00	1.151	0.06	0.116	0.133
	LTE CA_7C_Ant 2	20M	QPSK	1	0	Right Cheek	Full	21100+20902	2535+2515.2	22.71	24.00	1.346	0.05	0.093	0.125
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Cheek	Full	21100	2535	22.43	23.00	1.140	-0.07	0.095	0.108
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Tilted	Full	21100	2535	23.39	24.00	1.151	0.03	0.057	0.066
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Tilted	Full	21100	2535	22.43	23.00	1.140	0.05	0.047	0.054
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	Full	21100	2535	23.39	24.00	1.151	0.01	0.105	0.121
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Cheek	Full	21100	2535	22.43	23.00	1.140	0.03	0.087	0.099
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Tilted	Full	21100	2535	23.39	24.00	1.151	-0.06	0.102	0.117
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Tilted	Full	21100	2535	22.43	23.00	1.140	0.01	0.087	0.099
12	LTE Band 7_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	21100	2535	19.23	20.00	1.194	0.01	0.810	**0.967**
	LTE CA_7C_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	21100+20902	2535+2515.2	18.67	20.00	1.358	0.05	0.701	0.952
	LTE Band 7_Ant 6	20M	QPSK	1	0	Right Cheek	ENDC	21100	2535	15.24	16.00	1.191	-0.05	0.318	0.379
	LTE Band 7_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	21100	2535	19.10	20.00	1.230	0.02	0.784	0.965
	LTE Band 7_Ant 6	20M	QPSK	1	0	Right Tilted	Reduced	21100	2535	19.23	20.00	1.194	-0.04	0.189	0.226
	LTE Band 7_Ant 6	20M	QPSK	50	0	Right Tilted	Reduced	21100	2535	19.10	20.00	1.230	0.02	0.192	0.236
	LTE Band 7_Ant 6	20M	QPSK	1	0	Left Cheek	Reduced	21100	2535	19.23	20.00	1.194	0.01	0.257	0.307
	LTE Band 7_Ant 6	20M	QPSK	50	0	Left Cheek	Reduced	21100	2535	19.10	20.00	1.230	0.03	0.270	0.332
	LTE Band 7_Ant 6	20M	QPSK	1	0	Left Tilted	Reduced	21100	2535	19.23	20.00	1.194	0.02	0.070	0.084
	LTE Band 7_Ant 6	20M	QPSK	50	0	Left Tilted	Reduced	21100	2535	19.10	20.00	1.230	0.04	0.072	0.089
	LTE Band 7_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	20850	2510	19.21	20.00	1.199	0.05	0.754	0.904
	LTE Band 7_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	21350	2560	19.09	20.00	1.233	-0.07	0.711	0.877
	LTE Band 7_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	20850	2510	19.06	20.00	1.242	0.03	0.759	0.942
	LTE Band 7_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	21350	2560	19.02	20.00	1.253	0.05	0.770	0.965
	LTE Band 7_Ant 6	20M	QPSK	100	0	Right Cheek	Reduced	21100	2535	19.02	20.00	1.253	0.01	0.762	0.955

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Power Reduction	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)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	0.06	0.065	0.076
	LTE CA_41C_Ant 2	20M	QPSK	1	0	Right Cheek	Full	41490+41292	2680+2660.2	23.22	24.00	1.197	62.9	1.006	-0.06	0.033	0.040
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Cheek	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.05	0.052	0.061
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Tilted	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	0.06	0.001	0.001
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Tilted	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.01	0.001	0.001
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Cheek	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	0.12	0.049	0.058
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Cheek	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	-0.03	0.001	0.001
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Tilted	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	-0.02	0.059	0.069
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Tilted	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.01	0.040	0.047
	LTE Band 41-HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	Full	41490	2680	24.85	26.00	1.303	42.9	1.009	0.03	0.057	0.075
	LTE Band 41_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	41490	2680	20.30	21.00	1.175	62.9	1.006	-0.01	0.968	1.144
	LTE Band 41_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	41490	2680	20.12	21.00	1.225	62.9	1.006	0.03	0.889	1.095
	LTE Band 41_Ant 6	20M	QPSK	1	0	Right Tilted	Reduced	41490	2680	20.30	21.00	1.175	62.9	1.006	-0.01	0.254	0.300
	LTE Band 41_Ant 6	20M	QPSK	50	0	Right Tilted	Reduced	41490	2680	20.12	21.00	1.225	62.9	1.006	0.02	0.205	0.253
	LTE Band 41_Ant 6	20M	QPSK	1	0	Left Cheek	Reduced	41490	2680	20.30	21.00	1.175	62.9	1.006	0.13	0.308	0.364
	LTE Band 41_Ant 6	20M	QPSK	50	0	Left Cheek	Reduced	41490	2680	20.12	21.00	1.225	62.9	1.006	0.02	0.245	0.302
	LTE Band 41_Ant 6	20M	QPSK	1	0	Left Tilted	Reduced	41490	2680	20.30	21.00	1.175	62.9	1.006	0.04	0.102	0.121
	LTE Band 41_Ant 6	20M	QPSK	50	0	Left Tilted	Reduced	41490	2680	20.12	21.00	1.225	62.9	1.006	0.09	0.078	0.096
	LTE Band 41_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	39750	2506	20.21	21.00	1.199	62.9	1.006	0.06	0.950	1.146
	LTE Band 41_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	40620	2593	20.11	21.00	1.227	62.9	1.006	0.02	0.929	1.147
	LTE Band 41_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	40185	2549.5	20.12	21.00	1.225	62.9	1.006	0.01	0.930	1.146
	LTE Band 41_Ant 6	20M	QPSK	1	0	Right Cheek	Reduced	41055	2636.5	20.22	21.00	1.197	62.9	1.006	0.02	0.937	1.128
13	LTE Band 41_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	39750	2506	19.65	21.00	1.365	62.9	1.006	0.08	0.837	**1.149**
	LTE CA_41C_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	39750+39948	2506+2525.8	19.84	21.00	1.306	62.9	1.006	0.08	0.794	1.043
	LTE Band 41-HPUE_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	39750	2506	19.75	21.00	1.334	42.9	1.009	0.07	0.639	0.860
	LTE Band 41_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	40620	2593	19.95	21.00	1.274	62.9	1.006	0.01	0.748	0.958
	LTE Band 41_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	40185	2549.5	19.82	21.00	1.312	62.9	1.006	0.12	0.850	1.122
	LTE Band 41_Ant 6	20M	QPSK	50	0	Right Cheek	Reduced	41055	2636.5	20.09	21.00	1.233	62.9	1.006	-0.03	0.870	1.079
	LTE Band 41_Ant 6	20M	QPSK	100	0	Right Cheek	Reduced	41490	2680	20.09	21.00	1.233	62.9	1.006	0.04	0.783	0.971

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Power Reduction	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)
	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Right Cheek	Full	376000	1880	23.45	24.00	1.135	0.02	0.073	0.083
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Right Cheek	Full	376000	1880	23.09	24.00	1.233	0.07	0.089	0.109
	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Right Tilted	Full	376000	1880	23.45	24.00	1.135	0.09	0.037	0.042
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Right Tilted	Full	376000	1880	23.09	24.00	1.233	0.05	0.041	0.050
	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Left Cheek	Full	376000	1880	23.45	24.00	1.135	-0.06	0.052	0.059
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Left Cheek	Full	376000	1880	23.09	24.00	1.233	0.07	0.064	0.079
	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Left Tilted	Full	376000	1880	23.45	24.00	1.135	0.12	0.048	0.054
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Left Tilted	Full	376000	1880	23.09	24.00	1.233	0.09	0.063	0.077
14	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Right Cheek	Reduced	376000	1880	13.66	15.00	1.361	0.03	0.404	**0.550**
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Right Cheek	Reduced	376000	1880	13.41	15.00	1.442	0.02	0.329	0.474
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Right Tilted	Reduced	376000	1880	13.66	15.00	1.361	0.06	0.074	0.101
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Right Tilted	Reduced	376000	1880	13.41	15.00	1.442	-0.04	0.078	0.112
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Left Cheek	Reduced	376000	1880	13.66	15.00	1.361	0.03	0.098	0.133
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Left Cheek	Reduced	376000	1880	13.41	15.00	1.442	-0.02	0.106	0.153
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Left Tilted	Reduced	376000	1880	13.66	15.00	1.361	-0.12	0.032	0.044
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Left Tilted	Reduced	376000	1880	13.41	15.00	1.442	0.07	0.026	0.037
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Right Cheek	Full	349000	1745	22.93	24.00	1.279	0.04	0.031	0.039
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Right Cheek	Full	349000	1745	22.77	24.00	1.327	0.02	0.028	0.037
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Right Tilted	Full	349000	1745	22.93	24.00	1.279	0.02	0.010	0.012
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Right Tilted	Full	349000	1745	22.77	24.00	1.327	0.03	0.009	0.011
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Left Cheek	Full	349000	1745	22.93	24.00	1.279	0.01	0.026	0.033
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Left Cheek	Full	349000	1745	22.77	24.00	1.327	0.04	0.025	0.033
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Left Tilted	Full	349000	1745	22.93	24.00	1.279	0.02	0.012	0.015
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Left Tilted	Full	349000	1745	22.77	24.00	1.327	0.05	0.012	0.016
15	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Right Cheek	Reduced	349000	1745	15.93	17.00	1.279	0.03	0.417	**0.534**
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Right Cheek	Reduced	349000	1745	15.79	17.00	1.321	-0.02	0.401	0.530
	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Right Tilted	Reduced	349000	1745	15.93	17.00	1.279	0.06	0.088	0.112
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Right Tilted	Reduced	349000	1745	15.79	17.00	1.321	-0.041	0.076	0.101
	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Left Cheek	Reduced	349000	1745	15.93	17.00	1.279	0.08	0.111	0.142
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Left Cheek	Reduced	349000	1745	15.79	17.00	1.321	0.05	0.100	0.132
	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Left Tilted	Reduced	349000	1745	15.93	17.00	1.279	0.02	0.037	0.048
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Left Tilted	Reduced	349000	1745	15.79	17.00	1.321	0.06	0.088	0.117
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Right Cheek	Full	167300	836.5	23.30	24.00	1.175	0.04	0.053	0.062
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Right Cheek	Full	167300	836.5	23.15	24.00	1.216	0.07	0.060	0.073
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Right Tilted	Full	167300	836.5	23.30	24.00	1.175	-0.02	0.031	0.037
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Right Tilted	Full	167300	836.5	23.15	24.00	1.216	0.05	0.040	0.048
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Left Cheek	Full	167300	836.5	23.30	24.00	1.175	0.07	0.068	0.080
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Left Cheek	Full	167300	836.5	23.15	24.00	1.216	0.02	0.082	0.100
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Left Tilted	Full	167300	836.5	23.30	24.00	1.175	0.03	0.028	0.032
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Left Tilted	Full	167300	836.5	23.15	24.00	1.216	0.07	0.032	0.039
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Right Cheek	Reduced	167300	836.5	21.54	22.00	1.112	-0.12	0.210	0.233
	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Right Cheek	Reduced	167300	836.5	21.32	22.00	1.169	-0.08	0.185	0.216
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Right Tilted	Reduced	167300	836.5	21.54	22.00	1.112	-0.03	0.227	0.252
	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Right Tilted	Reduced	167300	836.5	21.32	22.00	1.169	0.05	0.152	0.178
16	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Left Cheek	Reduced	167300	836.5	21.54	22.00	1.112	-0.04	0.411	**0.457**
	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Left Cheek	Reduced	167300	836.5	21.32	22.00	1.169	0.06	0.331	0.387
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Left Tilted	Reduced	167300	836.5	21.54	22.00	1.112	0.03	0.317	0.352
	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Left Tilted	Reduced	167300	836.5	21.32	22.00	1.169	0.02	0.264	0.309

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Power Reduction	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)
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Right Cheek	Full	136100	680.5	23.49	24.00	1.125	0.06	0.050	0.056
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Right Cheek	Full	136100	680.5	23.39	24.00	1.151	0.03	0.058	0.066
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Right Tilted	Full	136100	680.5	23.49	24.00	1.125	0.03	0.028	0.031
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Right Tilted	Full	136100	680.5	23.39	24.00	1.151	0.02	0.031	0.035
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Left Cheek	Full	136100	680.5	23.49	24.00	1.125	0.03	0.056	0.063
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Left Cheek	Full	136100	680.5	23.39	24.00	1.151	0.04	0.064	0.074
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Left Tilted	Full	136100	680.5	23.49	24.00	1.125	0.06	0.017	0.019
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Left Tilted	Full	136100	680.5	23.39	24.00	1.151	-0.05	0.027	0.031
	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Right Cheek	Full	136100	680.5	22.59	23.00	1.099	0.05	0.174	0.191
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Right Cheek	Full	136100	680.5	22.16	23.00	1.213	0.06	0.188	0.228
	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Right Tilted	Full	136100	680.5	22.59	23.00	1.099	-0.12	0.106	0.116
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Right Tilted	Full	136100	680.5	22.16	23.00	1.213	0.1	0.147	0.178
	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Left Cheek	Full	136100	680.5	22.59	23.00	1.099	-0.04	0.315	0.346
17	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Left Cheek	Full	136100	680.5	22.16	23.00	1.213	0.01	0.438	**0.531**
	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Left Tilted	Full	136100	680.5	22.59	23.00	1.099	0.04	0.262	0.288
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Left Tilted	Full	136100	680.5	22.16	23.00	1.213	-0.01	0.376	0.456
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	1	DFT-30KHz	Right Cheek	Full	528000	2640	24.26	25.00	1.186	0.02	0.144	0.171
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Right Cheek	Full	528000	2640	24.12	25.00	1.225	-0.09	0.122	0.149
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	1	DFT-30KHz	Right Tilted	Full	528000	2640	24.26	25.00	1.186	0.06	0.050	0.059
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Right Tilted	Full	528000	2640	24.12	25.00	1.225	-0.04	0.048	0.059
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	1	DFT-30KHz	Left Cheek	Full	528000	2640	24.26	25.00	1.186	0.09	0.099	0.117
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Left Cheek	Full	528000	2640	24.12	25.00	1.225	0.02	0.090	0.110
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	1	DFT-30KHz	Left Tilted	Full	528000	2640	24.26	25.00	1.186	0.03	0.097	0.115
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Left Tilted	Full	528000	2640	24.12	25.00	1.225	0.08	0.093	0.114
18	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Right Cheek	Reduced	518598	2592.99	14.53	15.50	1.250	0.08	0.418	**0.523**
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Right Cheek	Reduced	518598	2592.99	14.39	15.50	1.291	0.04	0.387	0.500
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Right Tilted	Reduced	518598	2592.99	14.53	15.50	1.250	-0.03	0.095	0.119
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Right Tilted	Reduced	518598	2592.99	14.39	15.50	1.291	0.02	0.092	0.119
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Left Cheek	Reduced	518598	2592.99	14.53	15.50	1.250	0.05	0.106	0.133
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Left Cheek	Reduced	518598	2592.99	14.39	15.50	1.291	0.01	0.122	0.158
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Left Tilted	Reduced	518598	2592.99	14.53	15.50	1.250	-	n/a	n/a
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Left Tilted	Reduced	518598	2592.99	14.39	15.50	1.291	-	n/a	n/a

<WLAN2.4G SAR>

Plot No.	Band	Mode	Test Position	Antenna	Power Reduction	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)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	0.02	0.983	1.123
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 8	Full	1	2412	17.87	18.50	1.156	100	1.000	-0.09	0.911	1.053
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	0.01	0.846	0.967
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 8	Full	1	2412	17.87	18.50	1.156	100	1.000	0.06	0.790	0.913
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	0.02	0.438	0.501
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	0.06	0.507	0.579
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 8	Reduced-Simultaneous	6	2437	12.74	13.00	1.062	100	1.000	0.04	0.298	0.316
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 8	Reduced-Simultaneous	6	2437	12.74	13.00	1.062	100	1.000	0.01	0.261	0.277
19	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.05	1.010	**1.157**
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 8+10	Full	6	2437	20.90	21.50	1.148	100	1.000	0.07	0.872	1.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.04	0.967	1.108
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 8+10	Full	6	2437	20.90	21.50	1.148	100	1.000	0.02	0.892	1.024
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.05	0.428	0.490
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.03	0.488	0.559
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 8+10	Reduced-Simultaneous	1	2412	15.76	16.00	1.057	100	1.000	0.04	0.334	0.353
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 8+10	Reduced-Simultaneous	1	2412	15.76	16.00	1.057	100	1.000	0.03	0.313	0.331

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Antenna	Power Reduction	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)
	Bluetooth	1Mbps	Right Cheek	Ant 8	Full	0	2402	11.20	13.50	1.700	76.82	1.084	0.05	0.052	0.097
	Bluetooth	1Mbps	Right Cheek	Ant 8	Full	39	2441	12.63	13.50	1.223	76.82	1.084	0.06	0.074	0.097
20	Bluetooth	1Mbps	Right Cheek	Ant 8	Full	78	2480	11.41	13.50	1.620	76.82	1.084	-0.01	0.056	**0.099**

<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Antenna	Power Reduction	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)
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 9	Full	52	5260	17.41	17.50	1.021	98.28	1.018	-0.09	0.315	0.327
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant 9	Full	52	5260	17.41	17.50	1.021	98.28	1.018	-0.08	0.180	0.187
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 9	Full	52	5260	17.41	17.50	1.021	98.28	1.018	0.06	0.132	0.137
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant 9	Full	52	5260	17.41	17.50	1.021	98.28	1.018	-0.09	0.083	0.086
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	0.01	0.077	0.101
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	0.01	0.121	0.159
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	0.01	0.093	0.122
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	0.02	0.109	0.143
21	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 9+10	Full	52	5260	19.78	20.50	1.179	98.28	1.018	-0.03	0.284	**0.341**
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant 9+10	Full	52	5260	19.78	20.50	1.179	98.28	1.018	0.05	0.198	0.238
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 9+10	Full	52	5260	19.78	20.50	1.179	98.28	1.018	-0.09	0.112	0.134
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant 9+10	Full	52	5260	19.78	20.50	1.179	98.28	1.018	0.14	0.112	0.134
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 9	Full	140	5700	17.66	18.00	1.081	98.28	1.018	-0.03	0.196	0.216
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant 9	Full	140	5700	17.66	18.00	1.081	98.28	1.018	0.05	0.157	0.173
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 9	Full	140	5700	17.66	18.00	1.081	98.28	1.018	-0.09	0.080	0.088
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant 9	Full	140	5700	17.66	18.00	1.081	98.28	1.018	0.14	0.102	0.112
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	-0.06	0.079	0.098
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	0.01	0.082	0.102
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	0.02	0.073	0.091
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	-0.09	0.089	0.111
22	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 9+10	Full	140	5700	20.19	21.00	1.206	98.28	1.018	0.05	0.182	**0.223**
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant 9+10	Full	140	5700	20.19	21.00	1.206	98.28	1.018	0.05	0.153	0.188
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 9+10	Full	140	5700	20.19	21.00	1.206	98.28	1.018	0.08	0.137	0.168
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant 9+10	Full	140	5700	20.19	21.00	1.206	98.28	1.018	0.14	0.154	0.189
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant 9	Full	149	5745	17.93	18.50	1.140	98.28	1.018	0.05	0.146	0.169
	WLAN5.8GHz	802.11a 6Mbps	Right Tilted	Ant 9	Full	149	5745	17.93	18.50	1.140	98.28	1.018	0.05	0.157	0.182
	WLAN5.8GHz	802.11a 6Mbps	Left Cheek	Ant 9	Full	149	5745	17.93	18.50	1.140	98.28	1.018	0.08	0.082	0.095
	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	Ant 9	Full	149	5745	17.93	18.50	1.140	98.28	1.018	0.14	0.089	0.103
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant 10	Full	165	5825	17.70	18.50	1.202	98.28	1.018	-0.09	0.083	0.102
	WLAN5.8GHz	802.11a 6Mbps	Right Tilted	Ant 10	Full	165	5825	17.70	18.50	1.202	98.28	1.018	-0.08	0.094	0.115
	WLAN5.8GHz	802.11a 6Mbps	Left Cheek	Ant 10	Full	165	5825	17.70	18.50	1.202	98.28	1.018	0.06	0.074	0.090
	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	Ant 10	Full	165	5825	17.70	18.50	1.202	98.28	1.018	-0.09	0.101	0.124
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant 9+10	Full	165	5825	20.82	21.50	1.169	98.28	1.018	-0.06	0.121	0.144
23	WLAN5.8GHz	802.11a 6Mbps	Right Tilted	Ant 9+10	Full	165	5825	20.82	21.50	1.169	98.28	1.018	0.03	0.154	**0.183**
	WLAN5.8GHz	802.11a 6Mbps	Left Cheek	Ant 9+10	Full	165	5825	20.82	21.50	1.169	98.28	1.018	0.02	0.124	0.148
	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	Ant 9+10	Full	165	5825	20.82	21.50	1.169	98.28	1.018	0.05	0.101	0.120

15.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	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)
	GSM850_Ant 0	GPRS(2 Tx slots)	Front	10mm	Full	128	824.2	30.29	31	1.178	0.04	0.240	0.283
24	GSM850_Ant 0	GPRS(2 Tx slots)	Back	10mm	Full	128	824.2	30.29	31	1.178	-0.04	0.282	**0.332**
	GSM850_Ant 0	GPRS(2 Tx slots)	Left Side	10mm	Full	128	824.2	30.29	31	1.178	0.06	0.112	0.132
	GSM850_Ant 0	GPRS(2 Tx slots)	Right Side	10mm	Full	128	824.2	30.29	31.00	1.178	0.07	0.001	0.001
	GSM850_Ant 0	GPRS(2 Tx slots)	Bottom Side	10mm	Full	128	824.2	30.29	31.00	1.178	0.08	0.230	0.271
	GSM850_Ant 1	GPRS(2 Tx slots)	Front	10mm	Full	128	824.2	29.99	31.00	1.262	0.09	0.182	0.230
	GSM850_Ant 1	GPRS(2 Tx slots)	Back	10mm	Full	128	824.2	29.99	31.00	1.262	-0.07	0.239	0.302
	GSM850_Ant 1	GPRS(2 Tx slots)	Left Side	10mm	Full	128	824.2	29.99	31.00	1.262	0.04	0.076	0.096
	GSM850_Ant 1	GPRS(2 Tx slots)	Right Side	10mm	Full	128	824.2	29.99	31.00	1.262	0.05	0.138	0.174
	GSM850_Ant 1	GPRS(2 Tx slots)	Top Side	10mm	Full	128	824.2	29.99	31.00	1.262	0.06	0.197	0.249
	GSM1900_Ant 2	GPRS(2 Tx slots)	Front	10mm	Full	512	1850.2	27.10	28.00	1.230	0.07	0.160	0.197
	GSM1900_Ant 2	GPRS(2 Tx slots)	Back	10mm	Full	512	1850.2	27.10	28.00	1.230	0.08	0.175	0.215
	GSM1900_Ant 2	GPRS(2 Tx slots)	Left Side	10mm	Full	512	1850.2	27.10	28.00	1.230	0.05	0.001	0.001
	GSM1900_Ant 2	GPRS(2 Tx slots)	Right Side	10mm	Full	512	1850.2	27.10	28.00	1.230	0.06	0.139	0.171
25	GSM1900_Ant 2	GPRS(2 Tx slots)	Bottom Side	10mm	Full	512	1850.2	27.10	28.00	1.230	-0.02	0.409	**0.503**
	GSM1900_Ant 6	GPRS(2 Tx slots)	Front	10mm	Full	512	1850.2	26.72	27.50	1.197	0.05	0.143	0.171
	GSM1900_Ant 6	GPRS(2 Tx slots)	Back	10mm	Full	512	1850.2	26.72	27.50	1.197	0.04	0.103	0.123
	GSM1900_Ant 6	GPRS(2 Tx slots)	Left Side	10mm	Full	512	1850.2	26.72	27.50	1.197	0.06	0.241	0.288
	GSM1900_Ant 6	GPRS(2 Tx slots)	Right Side	10mm	Full	512	1850.2	26.72	27.50	1.197	0.04	0.001	0.001
	GSM1900_Ant 6	GPRS(2 Tx slots)	Top Side	10mm	Full	512	1850.2	26.72	27.50	1.197	0.03	0.061	0.073

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	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)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	Full	9400	1880	23.60	24.50	1.230	0.07	0.373	0.459
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Full	9400	1880	23.60	24.50	1.230	-0.06	0.421	0.518
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Side	10mm	Full	9400	1880	23.60	24.50	1.230	0.05	0.085	0.105
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	Full	9400	1880	23.60	24.50	1.230	0.06	0.400	0.492
26	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Full	9400	1880	23.60	24.50	1.230	-0.06	0.883	**1.086**
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Full	9262	1852.4	23.43	24.50	1.279	0.1	0.666	0.852
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Full	9538	1907.6	23.48	24.50	1.265	0.02	0.784	0.992
	WCDMA II_Ant 6	RMC 12.2Kbps	Front	10mm	Full	9400	1880	22.84	24.00	1.306	0.01	0.287	0.375
	WCDMA II_Ant 6	RMC 12.2Kbps	Back	10mm	Full	9400	1880	22.84	24.00	1.306	0.04	0.221	0.289
	WCDMA II_Ant 6	RMC 12.2Kbps	Left Side	10mm	Full	9400	1880	22.84	24.00	1.306	-0.02	0.481	0.628
	WCDMA II_Ant 6	RMC 12.2Kbps	Right Side	10mm	Full	9400	1880	22.84	24.00	1.306	0.05	0.001	0.001
	WCDMA II_Ant 6	RMC 12.2Kbps	Top Side	10mm	Full	9400	1880	22.84	24.00	1.306	0.03	0.092	0.120
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	Full	1312	1712.4	24.06	24.5	1.107	0.01	0.168	0.186
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Full	1312	1712.4	24.06	24.5	1.107	-0.09	0.202	0.224
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Side	10mm	Full	1312	1712.4	24.06	24.5	1.107	0.05	0.001	0.001
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	Full	1312	1712.4	24.06	24.5	1.107	0.06	0.172	0.190
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Full	1312	1712.4	24.06	24.5	1.107	-0.05	0.389	0.430
	WCDMA IV_Ant 6	RMC 12.2Kbps	Front	10mm	Full	1312	1712.4	23.25	24	1.189	0.04	0.257	0.305
	WCDMA IV_Ant 6	RMC 12.2Kbps	Back	10mm	Full	1312	1712.4	23.25	24	1.189	0.05	0.232	0.276
27	WCDMA IV_Ant 6	RMC 12.2Kbps	Left Side	10mm	Full	1312	1712.4	23.25	24	1.189	-0.03	0.443	**0.527**
	WCDMA IV_Ant 6	RMC 12.2Kbps	Right Side	10mm	Full	1312	1712.4	23.25	24	1.189	0.04	0.001	0.001
	WCDMA IV_Ant 6	RMC 12.2Kbps	Top Side	10mm	Full	1312	1712.4	23.25	24	1.189	0.04	0.116	0.138
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Full	4182	836.4	24.14	24.5	1.086	0.03	0.236	0.256
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Full	4182	836.4	24.14	24.5	1.086	-0.08	0.264	0.287
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	Full	4182	836.4	24.14	24.5	1.086	0.06	0.122	0.133
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Side	10mm	Full	4182	836.4	24.14	24.50	1.086	-0.02	0.001	0.001
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Full	4182	836.4	24.14	24.50	1.086	0.03	0.211	0.229
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	Full	4182	836.4	23.21	24.00	1.199	0.01	0.205	0.246
28	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Full	4182	836.4	23.21	24.00	1.199	0.04	0.250	**0.300**
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	Full	4182	836.4	23.21	24.00	1.199	0.05	0.054	0.065
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Side	10mm	Full	4182	836.4	23.21	24.00	1.199	0.08	0.121	0.145
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	Full	4182	836.4	23.21	24.00	1.199	0.04	0.182	0.218

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	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)
	LTE Band 5_Ant 0	10M	QPSK	1	0	Front	10mm	Full	20525	836.5	23.22	24.00	1.197	0.03	0.163	0.195
	LTE Band 5_Ant 0	10M	QPSK	25	0	Front	10mm	Full	20525	836.5	22.21	23.00	1.199	-0.03	0.140	0.168
29	LTE Band 5_Ant 0	10M	QPSK	1	0	Back	10mm	Full	20525	836.5	23.22	24.00	1.197	-0.06	0.182	**0.218**
	LTE CA_5B_Ant 0	10M	QPSK	1	0	Back	10mm	Full	20575+20476	841.5+831.6	23.01	24.00	1.256	0.04	0.122	0.153
	LTE Band 5_Ant 0	10M	QPSK	25	0	Back	10mm	Full	20525	836.5	22.21	23.00	1.199	-0.02	0.157	0.188
	LTE Band 5_Ant 0	10M	QPSK	1	0	Left Side	10mm	Full	20525	836.5	23.22	24.00	1.197	0.06	0.085	0.102
	LTE Band 5_Ant 0	10M	QPSK	25	0	Left Side	10mm	Full	20525	836.5	22.21	23.00	1.199	-0.02	0.073	0.088
	LTE Band 5_Ant 0	10M	QPSK	1	0	Right Side	10mm	Full	20525	836.5	23.22	24.00	1.197	0.07	0.001	0.001
	LTE Band 5_Ant 0	10M	QPSK	25	0	Right Side	10mm	Full	20525	836.5	22.21	23.00	1.199	-0.08	0.001	0.001
	LTE Band 5_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Full	20525	836.5	23.22	24.00	1.197	0.05	0.157	0.188
	LTE Band 5_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	Full	20525	836.5	22.21	23.00	1.199	0.01	0.128	0.154
	LTE Band 5_Ant 1	10M	QPSK	1	0	Front	10mm	Full	20525	836.5	22.30	23.50	1.318	0.18	0.137	0.181
	LTE CA_5B_Ant 1	10M	QPSK	1	0	Front	10mm	Full	20575+20476	841.5+831.6	22.04	23.50	1.400	0.04	0.111	0.155
	LTE Band 5_Ant 1	10M	QPSK	25	0	Front	10mm	Full	20525	836.5	21.29	22.50	1.321	0.05	0.114	0.151
	LTE Band 5_Ant 1	10M	QPSK	1	0	Back	10mm	Full	20525	836.5	22.30	23.50	1.318	0.06	0.128	0.169
	LTE Band 5_Ant 1	10M	QPSK	25	0	Back	10mm	Full	20525	836.5	21.29	22.50	1.321	0.02	0.119	0.157
	LTE Band 5_Ant 1	10M	QPSK	1	0	Left Side	10mm	Full	20525	836.5	22.30	23.50	1.318	0.01	0.001	0.001
	LTE Band 5_Ant 1	10M	QPSK	25	0	Left Side	10mm	Full	20525	836.5	21.29	22.50	1.321	0.08	0.001	0.001
	LTE Band 5_Ant 1	10M	QPSK	1	0	Right Side	10mm	Full	20525	836.5	22.30	23.50	1.318	0.06	0.095	0.125
	LTE Band 5_Ant 1	10M	QPSK	25	0	Right Side	10mm	Full	20525	836.5	21.29	22.50	1.321	0.02	0.075	0.099
	LTE Band 5_Ant 1	10M	QPSK	1	0	Top Side	10mm	Full	20525	836.5	22.30	23.50	1.318	0.03	0.116	0.153
	LTE Band 5_Ant 1	10M	QPSK	25	0	Top Side	10mm	Full	20525	836.5	21.29	22.50	1.321	0.04	0.104	0.137
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	Full	23095	707.5	23.30	24.00	1.175	0.01	0.075	0.088
	LTE Band 12_Ant 0	10M	QPSK	25	0	Front	10mm	Full	23095	707.5	22.35	23.00	1.161	0.06	0.064	0.074
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	Full	23095	707.5	23.30	24.00	1.175	-0.06	0.085	0.100
	LTE Band 12_Ant 0	10M	QPSK	25	0	Back	10mm	Full	23095	707.5	22.35	23.00	1.161	0.01	0.075	0.087
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Side	10mm	Full	23095	707.5	23.3	24	1.175	0.02	0.078	0.092
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Side	10mm	Full	23095	707.5	22.35	23	1.161	-0.03	0.067	0.078
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Side	10mm	Full	23095	707.5	23.3	24	1.175	0.04	0.001	0.001
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Side	10mm	Full	23095	707.5	22.35	23	1.161	0.05	0.001	0.001
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Full	23095	707.5	23.3	24	1.175	0.06	0.077	0.090
	LTE Band 12_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	Full	23095	707.5	22.35	23	1.161	0.02	0.069	0.080
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	Full	23095	707.5	22.35	23.5	1.303	-0.02	0.101	0.132
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	Full	23095	707.5	21.48	22.5	1.265	0.06	0.083	0.105
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Full	23095	707.5	22.35	23.5	1.303	0.02	0.090	0.117
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	10mm	Full	23095	707.5	21.48	22.5	1.265	0.04	0.081	0.102
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	Full	23095	707.5	22.35	23.5	1.303	0.08	0.072	0.094
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Side	10mm	Full	23095	707.5	21.48	22.5	1.265	0.06	0.056	0.071
30	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Side	10mm	Full	23095	707.5	22.35	23.5	1.303	-0.13	0.201	**0.262**
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Side	10mm	Full	23095	707.5	21.48	22.50	1.265	0.01	0.158	0.200
	LTE Band 12_Ant 1	10M	QPSK	1	0	Top Side	10mm	Full	23095	707.5	22.35	23.50	1.303	0.02	0.120	0.156
	LTE Band 12_Ant 1	10M	QPSK	25	0	Top Side	10mm	Full	23095	707.5	21.48	22.50	1.265	0.04	0.099	0.125

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	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)
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	Full	23230	782	23.92	24.00	1.019	0.06	0.206	0.210
	LTE Band 13_Ant 0	10M	QPSK	25	0	Front	10mm	Full	23230	782	22.92	23.00	1.019	0.02	0.172	0.175
31	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	Full	23230	782	23.92	24.00	1.019	-0.02	0.241	**0.245**
	LTE Band 13_Ant 0	10M	QPSK	25	0	Back	10mm	Full	23230	782	22.92	23.00	1.019	0.01	0.196	0.200
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Side	10mm	Full	23230	782	23.92	24.00	1.019	0.02	0.146	0.149
	LTE Band 13_Ant 0	10M	QPSK	25	0	Left Side	10mm	Full	23230	782	22.92	23.00	1.019	-0.03	0.117	0.119
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Side	10mm	Full	23230	782	23.92	24.00	1.019	0.04	0.047	0.048
	LTE Band 13_Ant 0	10M	QPSK	25	0	Right Side	10mm	Full	23230	782	22.92	23.00	1.019	0.01	0.001	0.001
	LTE Band 13_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Full	23230	782	23.92	24.00	1.019	0.02	0.187	0.190
	LTE Band 13_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	Full	23230	782	22.92	23.00	1.019	0.08	0.169	0.172
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	Full	23230	782	23.20	23.50	1.072	0.04	0.153	0.164
	LTE Band 13_Ant 1	10M	QPSK	25	0	Front	10mm	Full	23230	782	22.04	22.50	1.112	0.06	0.124	0.138
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	Full	23230	782	23.20	23.50	1.072	0.06	0.212	0.227
	LTE Band 13_Ant 1	10M	QPSK	25	0	Back	10mm	Full	23230	782	22.04	22.50	1.112	0.07	0.126	0.140
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Side	10mm	Full	23230	782	23.20	23.50	1.072	0.08	0.065	0.070
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Side	10mm	Full	23230	782	22.04	22.50	1.112	0.02	0.053	0.059
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Side	10mm	Full	23230	782	23.20	23.50	1.072	0.01	0.140	0.150
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Side	10mm	Full	23230	782	22.04	22.50	1.112	0.03	0.117	0.130
	LTE Band 13_Ant 1	10M	QPSK	1	0	Top Side	10mm	Full	23230	782	23.20	23.50	1.072	0.08	0.149	0.160
	LTE Band 13_Ant 1	10M	QPSK	25	0	Top Side	10mm	Full	23230	782	22.04	22.50	1.112	0.04	0.122	0.136
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	Full	133322	683	23.28	24.00	1.180	0.08	0.070	0.083
	LTE Band 71_Ant 0	20M	QPSK	50	0	Front	10mm	Full	133322	683	22.27	23.00	1.183	0.04	0.060	0.071
	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	Full	133322	683	23.28	24.00	1.180	0.14	0.078	0.092
	LTE Band 71_Ant 0	20M	QPSK	50	0	Back	10mm	Full	133322	683	22.27	23.00	1.183	0.03	0.061	0.072
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Side	10mm	Full	133322	683	23.28	24.00	1.180	0.11	0.087	0.103
	LTE Band 71_Ant 0	20M	QPSK	50	0	Left Side	10mm	Full	133322	683	22.27	23.00	1.183	0.02	0.079	0.093
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Side	10mm	Full	133322	683	23.28	24.00	1.180	-0.04	0.051	0.060
	LTE Band 71_Ant 0	20M	QPSK	50	0	Right Side	10mm	Full	133322	683	22.27	23.00	1.183	0.02	0.001	0.001
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	Full	133322	683	23.28	24.00	1.180	-0.07	0.065	0.076
	LTE Band 71_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	Full	133322	683	22.27	23	1.183	0.04	0.077	0.091
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	Full	133322	683	22.35	23.5	1.303	0.01	0.095	0.124
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	10mm	Full	133322	683	21.26	22.5	1.330	0.03	0.076	0.101
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Full	133322	683	22.35	23.5	1.303	-0.02	0.106	0.138
	LTE Band 71_Ant 1	20M	QPSK	50	0	Back	10mm	Full	133322	683	21.26	22.5	1.330	-0.06	0.079	0.105
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	10mm	Full	133322	683	22.35	23.5	1.303	0.02	0.077	0.100
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Side	10mm	Full	133322	683	21.26	22.5	1.330	0.01	0.066	0.088
32	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Side	10mm	Full	133322	683	22.35	23.5	1.303	-0.15	0.202	**0.263**
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Side	10mm	Full	133322	683	21.26	22.5	1.330	0.11	0.175	0.233
	LTE Band 71_Ant 1	20M	QPSK	1	0	Top Side	10mm	Full	133322	683	22.35	23.5	1.303	0.03	0.102	0.133
	LTE Band 71_Ant 1	20M	QPSK	50	0	Top Side	10mm	Full	133322	683	21.26	22.5	1.330	0.01	0.086	0.114

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	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)
	LTE Band 2_Ant 2	20M	QPSK	1	0	Front	10mm	Full	18900	1880	22.69	24	1.352	0.05	0.284	0.384
	LTE Band 2_Ant 2	20M	QPSK	50	0	Front	10mm	Full	18900	1880	21.82	23	1.312	0.05	0.227	0.298
	LTE Band 2_Ant 2	20M	QPSK	1	0	Back	10mm	Full	18900	1880	22.69	24.00	1.352	-0.18	0.372	0.503
	LTE Band 2_Ant 2	20M	QPSK	50	0	Back	10mm	Full	18900	1880	21.82	23.00	1.312	0.04	0.305	0.400
	LTE Band 2_Ant 2	20M	QPSK	1	0	Left Side	10mm	Full	18900	1880	22.69	24.00	1.352	0.05	0.071	0.096
	LTE Band 2_Ant 2	20M	QPSK	50	0	Left Side	10mm	Full	18900	1880	21.82	23.00	1.312	0.03	0.057	0.075
	LTE Band 2_Ant 2	20M	QPSK	1	0	Right Side	10mm	Full	18900	1880	22.69	24.00	1.352	0.03	0.286	0.387
	LTE Band 2_Ant 2	20M	QPSK	50	0	Right Side	10mm	Full	18900	1880	21.82	23.00	1.312	0.01	0.234	0.307
33	LTE Band 2_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Full	18900	1880	22.69	24.00	1.352	-0.09	0.662	**0.895**
	LTE Band 2_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	ENDC	18900	1880	21.29	22.00	1.178	-0.17	0.359	0.423
	LTE Band 2_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Full	18700	1860	22.67	24.00	1.358	0.08	0.526	0.714
	LTE Band 2_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Full	19100	1900	22.64	24.00	1.368	0.09	0.503	0.688
	LTE Band 2_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Full	18900	1880	21.82	23.00	1.312	-0.02	0.551	0.723
	LTE Band 2_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	Full	18900	1880	21.71	23.00	1.346	-0.04	0.468	0.630
	LTE Band 2_Ant 6	20M	QPSK	1	0	Front	10mm	Full	18900	1880	21.89	23.50	1.449	0.12	0.196	0.284
	LTE Band 2_Ant 6	20M	QPSK	50	0	Front	10mm	Full	18900	1880	20.99	22.50	1.416	0.04	0.144	0.204
	LTE Band 2_Ant 6	20M	QPSK	1	0	Back	10mm	Full	18900	1880	21.89	23.50	1.449	0.06	0.168	0.243
	LTE Band 2_Ant 6	20M	QPSK	50	0	Back	10mm	Full	18900	1880	20.99	22.50	1.416	0.02	0.134	0.190
	LTE Band 2_Ant 6	20M	QPSK	1	0	Left Side	10mm	Full	18900	1880	21.89	23.50	1.449	-0.05	0.324	0.469
	LTE Band 2_Ant 6	20M	QPSK	50	0	Left Side	10mm	Full	18900	1880	20.99	22.50	1.416	0.03	0.220	0.311
	LTE Band 2_Ant 6	20M	QPSK	1	0	Right Side	10mm	Full	18900	1880	21.89	23.50	1.449	0.08	0.001	0.001
	LTE Band 2_Ant 6	20M	QPSK	50	0	Right Side	10mm	Full	18900	1880	20.99	22.50	1.416	0.07	0.001	0.001
	LTE Band 2_Ant 6	20M	QPSK	1	0	Top Side	10mm	Full	18900	1880	21.89	23.50	1.449	0.06	0.084	0.122
	LTE Band 2_Ant 6	20M	QPSK	50	0	Top Side	10mm	Full	18900	1880	20.99	22.50	1.416	0.04	0.055	0.078
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	Full	132572	1770	22.88	24.00	1.294	0.01	0.196	0.254
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	Full	132572	1770	21.99	23.00	1.262	0.08	0.167	0.211
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	Full	132572	1770	22.88	24.00	1.294	-0.01	0.250	0.324
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	Full	132572	1770	21.99	23.00	1.262	0.01	0.222	0.280
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Side	10mm	Full	132572	1770	22.88	24.00	1.294	0.02	0.001	0.001
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Side	10mm	Full	132572	1770	21.99	23.00	1.262	0.06	0.001	0.001
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Side	10mm	Full	132572	1770	22.88	24.00	1.294	0.04	0.208	0.269
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Side	10mm	Full	132572	1770	21.99	23.00	1.262	0.08	0.177	0.223
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Full	132572	1770	22.88	24.00	1.294	-0.03	0.371	0.480
	LTE Band 66_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Full	132572	1770	21.99	23.00	1.262	0.09	0.347	0.438
	LTE Band 66_Ant 6	20M	QPSK	1	0	Front	10mm	Full	132572	1770	21.9	23.5	1.445	-0.06	0.282	0.408
	LTE Band 66_Ant 6	20M	QPSK	50	0	Front	10mm	Full	132572	1770	21.04	22.5	1.400	0.01	0.199	0.279
	LTE Band 66_Ant 6	20M	QPSK	1	0	Back	10mm	Full	132572	1770	21.9	23.5	1.445	0.05	0.235	0.340
	LTE Band 66_Ant 6	20M	QPSK	50	0	Back	10mm	Full	132572	1770	21.04	22.5	1.400	0.06	0.179	0.251
34	LTE Band 66_Ant 6	20M	QPSK	1	0	Left Side	10mm	Full	132572	1770	21.9	23.5	1.445	0.02	0.464	**0.671**
	LTE Band 66_Ant 6	20M	QPSK	1	0	Left Side	10mm	Full-ENDC	132572	1770	21.9	23	1.288	0.02	0.464	0.598
	LTE Band 66_Ant 6	20M	QPSK	50	0	Left Side	10mm	Full	132572	1770	21.04	22.5	1.400	0.02	0.323	0.452
	LTE Band 66_Ant 6	20M	QPSK	1	0	Right Side	10mm	Full	132572	1770	21.9	23.5	1.445	-0.03	0.001	0.001
	LTE Band 66_Ant 6	20M	QPSK	50	0	Right Side	10mm	Full	132572	1770	21.04	22.5	1.400	0.04	0.001	0.001
	LTE Band 66_Ant 6	20M	QPSK	1	0	Top Side	10mm	Full	132572	1770	21.9	23.5	1.445	-0.05	0.140	0.202
	LTE Band 66_Ant 6	20M	QPSK	50	0	Top Side	10mm	Full	132572	1770	21.04	22.5	1.400	0.06	0.109	0.153

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	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)
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	Full	21100	2535	23.39	24	1.151	0.05	0.518	0.596
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	Full	21100	2535	22.43	23	1.140	0.01	0.428	0.488
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Full	21100	2535	23.39	24.00	1.151	0.13	0.658	0.757
	LTE CA_7C_Ant 2	20M	QPSK	1	0	Back	10mm	Full	21100+20902	2535+2515.2	23.14	24.00	1.219	0.11	0.544	0.663
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	ENDC	21100	2535	21.50	22.00	1.122	0.13	0.370	0.415
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	Full	21100	2535	22.43	23.00	1.140	-0.05	0.489	0.558
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Side	10mm	Full	21100	2535	23.39	24.00	1.151	0.06	0.091	0.105
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Side	10mm	Full	21100	2535	22.43	23.00	1.140	0.07	0.086	0.098
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	Full	21100	2535	23.39	24.00	1.151	0.05	0.321	0.369
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Side	10mm	Full	21100	2535	22.43	23.00	1.140	0.01	0.253	0.288
35	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Full	21100	2535	23.39	24.00	1.151	-0.03	0.733	**0.844**
	LTE CA_7C_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Full	21100+20902	2535+2515.2	23.14	24.00	1.219	0.09	0.689	0.840
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	ENDC	21100	2535	21.50	22.00	1.122	-0.16	0.417	0.468
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Full	20850	2510	23.16	24.00	1.213	-0.15	0.629	0.763
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Full	21350	2560	23.20	24.00	1.202	0.08	0.628	0.755
	LTE Band 7_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Full	21100	2535	22.43	23.00	1.140	0.04	0.636	0.725
	LTE Band 7_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	Full	21100	2535	22.38	23.00	1.153	-0.13	0.564	0.651
	LTE Band 7_Ant 6	20M	QPSK	1	0	Front	10mm	Full	21100	2535	22.80	23.50	1.175	0.07	0.333	0.391
	LTE Band 7_Ant 6	20M	QPSK	50	0	Front	10mm	Full	21100	2535	21.83	22.50	1.167	0.04	0.295	0.344
	LTE Band 7_Ant 6	20M	QPSK	1	0	Back	10mm	Full	21100	2535	22.80	23.50	1.175	0.05	0.346	0.407
	LTE CA_7C_Ant 6	20M	QPSK	1	0	Back	10mm	Full	21100+20902	2535+2515.2	22.71	23.50	1.199	0.04	0.298	0.357
	LTE Band 7_Ant 6	20M	QPSK	50	0	Back	10mm	Full	21100	2535	21.83	22.50	1.167	0.06	0.284	0.331
	LTE Band 7_Ant 6	20M	QPSK	1	0	Left Side	10mm	Full	21100	2535	22.80	23.50	1.175	-0.09	0.677	0.795
	LTE CA_7C_Ant 6	20M	QPSK	1	0	Left Side	10mm	Full	21100+20902	2535+2515.2	22.71	23.50	1.199	-0.04	0.512	0.614
	LTE Band 7_Ant 6	20M	QPSK	1	0	Left Side	10mm	ENDC	21100	2535	21.58	22.00	1.102	0.01	0.458	0.505
	LTE Band 7_Ant 6	20M	QPSK	50	0	Left Side	10mm	Full	21100	2535	21.83	22.50	1.167	0.02	0.558	0.651
	LTE Band 7_Ant 6	20M	QPSK	1	0	Right Side	10mm	Full	21100	2535	22.80	23.50	1.175	0.06	0.030	0.035
	LTE Band 7_Ant 6	20M	QPSK	50	0	Right Side	10mm	Full	21100	2535	21.83	22.50	1.167	-	n/a	n/a
	LTE Band 7_Ant 6	20M	QPSK	1	0	Top Side	10mm	Full	21100	2535	22.80	23.50	1.175	0.07	0.154	0.181
	LTE Band 7_Ant 6	20M	QPSK	50	0	Top Side	10mm	Full	21100	2535	21.83	22.50	1.167	0.06	0.126	0.147

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	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)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	0.05	0.290	0.340
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.07	0.232	0.271
36	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	0.08	0.364	**0.427**
	LTE CA_41C_Ant 2	20M	QPSK	1	0	Back	10mm	Full	41490+ 41292	2680+ 2660.2	23.22	24.00	1.197	62.9	1.006	-0.02	0.291	0.350
	LTE Band 41-HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	Full	41490	2680	24.85	26.00	1.303	42.9	1.009	-0.02	0.321	0.422
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.05	0.270	0.315
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Side	10mm	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	0.06	0.053	0.062
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Side	10mm	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.02	0.042	0.049
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	0.06	0.184	0.216
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.08	0.145	0.169
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	-0.01	0.336	0.394
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.07	0.273	0.319
	LTE Band 41_Ant 6	20M	QPSK	1	0	Front	10mm	Full	41490	2680	22.7	23.5	1.202	62.9	1.006	0.03	0.158	0.191
	LTE Band 41_Ant 6	20M	QPSK	50	0	Front	10mm	Full	41490	2680	21.34	22.5	1.306	62.9	1.006	0.09	0.127	0.167
	LTE Band 41_Ant 6	20M	QPSK	1	0	Back	10mm	Full	41490	2680	22.7	23.5	1.202	62.9	1.006	0.08	0.265	0.321
	LTE CA_41C_Ant 6	20M	QPSK	1	0	Back	10mm	Full	41490+ 41292	2680+ 2660.2	22.17	23.5	1.358	62.9	1.006	-0.04	0.199	0.272
	LTE Band 41_Ant 6	20M	QPSK	50	0	Back	10mm	Full	41490	2680	21.34	22.5	1.306	62.9	1.006	0.03	0.130	0.171
	LTE Band 41_Ant 6	20M	QPSK	1	0	Left Side	10mm	Full	41490	2680	22.7	23.5	1.202	62.9	1.006	-0.03	0.345	0.417
	LTE CA_41C_Ant 6	20M	QPSK	1	0	Left Side	10mm	Full	41490+ 41292	2680+ 2660.2	22.17	23.5	1.358	62.9	1.006	0.05	0.284	0.388
	LTE Band 41-HPUE_Ant 6	20M	QPSK	1	0	Left Side	10mm	Full	41490	2680	24.34	25.5	1.306	42.9	1.009	-0.02	0.311	0.410
	LTE Band 41_Ant 6	20M	QPSK	50	0	Left Side	10mm	Full	41490	2680	21.34	22.5	1.306	62.9	1.006	0.02	0.240	0.315
	LTE Band 41_Ant 6	20M	QPSK	1	0	Right Side	10mm	Full	41490	2680	22.7	23.5	1.202	62.9	1.006	-	n/a	n/a
	LTE Band 41_Ant 6	20M	QPSK	50	0	Right Side	10mm	Full	41490	2680	21.34	22.5	1.306	62.9	1.006	0.01	0.014	0.018
	LTE Band 41_Ant 6	20M	QPSK	1	0	Top Side	10mm	Full	41490	2680	22.7	23.5	1.202	62.9	1.006	0.04	0.089	0.108
	LTE Band 41_Ant 6	20M	QPSK	50	0	Top Side	10mm	Full	41490	2680	21.34	22.5	1.306	62.9	1.006	-0.08	0.074	0.097

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	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)
	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	376000	1880	23.45	24.00	1.135	0.12	0.292	0.331
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	376000	1880	23.09	24.00	1.233	0.03	0.213	0.263
	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	376000	1880	23.45	24.00	1.135	0.18	0.356	0.404
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	376000	1880	23.09	24.00	1.233	0.02	0.300	0.370
	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Left Side	10mm	Reduced	376000	1880	21.63	22.00	1.089	0.05	0.074	0.080
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Left Side	10mm	Reduced	376000	1880	21.42	22.00	1.143	0.02	0.071	0.081
	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Right Side	10mm	Reduced	376000	1880	21.63	22.00	1.089	0.04	0.320	0.348
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Right Side	10mm	Reduced	376000	1880	21.42	22.00	1.143	0.01	0.253	0.289
37	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Bottom Side	10mm	Reduced	376000	1880	21.63	22.00	1.089	-0.03	0.511	**0.556**
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Bottom Side	10mm	Reduced	376000	1880	21.42	22.00	1.143	0.09	0.412	0.471
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	376000	1880	22.58	24.00	1.387	0.09	0.202	0.280
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Front	10mm	Full	376000	1880	22.20	24.00	1.514	0.04	0.151	0.229
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	376000	1880	22.58	24.00	1.387	-0.08	0.223	0.309
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Back	10mm	Full	376000	1880	22.20	24.00	1.514	0.07	0.171	0.259
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Left Side	10mm	Full	376000	1880	22.58	24.00	1.387	0.03	0.314	0.435
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Left Side	10mm	Full	376000	1880	22.20	24.00	1.514	0.02	0.274	0.415
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Right Side	10mm	Full	376000	1880	22.58	24.00	1.387	0.03	0.007	0.009
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Right Side	10mm	Full	376000	1880	22.20	24.00	1.514	0.09	0.008	0.012
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Top Side	10mm	Full	376000	1880	22.58	24.00	1.387	0.01	0.016	0.022
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Top Side	10mm	Full	376000	1880	22.20	24.00	1.514	-0.06	0.010	0.015
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Reduced	349000	1745	22.93	23.00	1.016	0.11	0.183	0.186
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Front	10mm	Reduced	349000	1745	22.77	23.00	1.054	0.09	0.218	0.230
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Reduced	349000	1745	22.93	23.00	1.016	-0.01	0.226	0.230
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Back	10mm	Reduced	349000	1745	22.77	23.00	1.054	0.12	0.242	0.255
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Left Side	10mm	Reduced	349000	1745	22.93	23.00	1.016	-0.09	0.040	0.041
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Left Side	10mm	Reduced	349000	1745	22.77	23.00	1.054	0.07	0.073	0.077
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Right Side	10mm	Reduced	349000	1745	22.93	23.00	1.016	0.05	0.207	0.210
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Right Side	10mm	Reduced	349000	1745	22.77	23.00	1.054	0.08	0.296	0.312
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Bottom Side	10mm	Reduced	349000	1745	22.93	23.00	1.016	0.03	0.322	0.327
38	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Bottom Side	10mm	Reduced	349000	1745	22.77	23.00	1.054	-0.10	0.511	**0.539**
	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	349000	1745	22.08	23.00	1.236	0.01	0.176	0.218
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	349000	1745	22.01	23.00	1.256	0.03	0.159	0.200
	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	349000	1745	22.08	23.00	1.236	0.01	0.363	0.449
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	349000	1745	22.01	23.00	1.256	0.08	0.166	0.209
	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Left Side	10mm	Full	349000	1745	22.08	23.00	1.236	0.07	0.269	0.332
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Left Side	10mm	Full	349000	1745	22.01	23.00	1.256	0.01	0.303	0.381
	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Right Side	10mm	Full	349000	1745	22.08	23.00	1.236	0.03	0.004	0.005
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Right Side	10mm	Full	349000	1745	22.01	23.00	1.256	0.08	0.004	0.005
	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Top Side	10mm	Full	349000	1745	22.08	23.00	1.236	0.02	0.122	0.151
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Top Side	10mm	Full	349000	1745	22.01	23.00	1.256	0.02	0.067	0.084

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	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)
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	167300	836.5	23.3	24.00	1.175	0.07	0.125	0.147
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	167300	836.5	23.15	24.00	1.216	0.09	0.149	0.181
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	167300	836.5	23.30	24.00	1.175	0.08	0.130	0.153
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	167300	836.5	23.15	24.00	1.216	0.05	0.165	0.201
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Left Side	10mm	Full	167300	836.5	23.30	24.00	1.175	0.01	0.069	0.081
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Left Side	10mm	Full	167300	836.5	23.15	24.00	1.216	0.08	0.086	0.105
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Right Side	10mm	Full	167300	836.5	23.30	24.00	1.175	0.01	0.021	0.025
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Right Side	10mm	Full	167300	836.5	23.15	24.00	1.216	0.08	0.027	0.032
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Bottom Side	10mm	Full	167300	836.5	23.30	24.00	1.175	0.01	0.119	0.140
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Bottom Side	10mm	Full	167300	836.5	23.15	24.00	1.216	0.09	0.160	0.195
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	167300	836.5	22.47	23.00	1.130	0.07	0.127	0.143
	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Front	10mm	Full	167300	836.5	22.19	23.00	1.205	0.08	0.137	0.165
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	167300	836.5	22.47	23.00	1.130	-0.06	0.060	0.068
39	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Back	10mm	Full	167300	836.5	22.19	23.00	1.205	-0.12	0.221	**0.266**
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Left Side	10mm	Full	167300	836.5	22.47	23.00	1.130	0.02	0.033	0.038
	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Left Side	10mm	Full	167300	836.5	22.19	23.00	1.205	0.04	0.034	0.041
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Right Side	10mm	Full	167300	836.5	22.47	23.00	1.130	0.03	0.117	0.132
	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Right Side	10mm	Full	167300	836.5	22.19	23.00	1.205	0.08	0.100	0.120
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Top Side	10mm	Full	167300	836.5	22.47	23.00	1.130	0.03	0.138	0.156
	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Top Side	10mm	Full	167300	836.5	22.19	23.00	1.205	0.02	0.128	0.154
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	136100	680.5	23.49	24.00	1.125	0.04	0.062	0.070
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	136100	680.5	23.39	24.00	1.151	0.05	0.066	0.076
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	136100	680.5	23.49	24.00	1.125	-0.02	0.071	0.080
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	136100	680.5	23.39	24.00	1.151	0.04	0.068	0.078
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Left Side	10mm	Full	136100	680.5	23.49	24.00	1.125	0.02	0.072	0.081
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Left Side	10mm	Full	136100	680.5	23.39	24.00	1.151	0.04	0.082	0.094
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Right Side	10mm	Full	136100	680.5	23.49	24.00	1.125	0.08	0.038	0.043
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Right Side	10mm	Full	136100	680.5	23.39	24.00	1.151	0.03	0.043	0.049
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Bottom Side	10mm	Full	136100	680.5	23.49	24.00	1.125	0.07	0.063	0.071
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Bottom Side	10mm	Full	136100	680.5	23.39	24.00	1.151	0.02	0.070	0.081
	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	136100	680.5	22.59	23.00	1.099	-0.03	0.073	0.080
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	136100	680.5	22.16	23.00	1.213	0.04	0.073	0.088
	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	136100	680.5	22.59	23.00	1.099	0.09	0.125	0.137
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	136100	680.5	22.16	23.00	1.213	0.02	0.091	0.110
	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Left Side	10mm	Full	136100	680.5	22.59	23.00	1.099	0.08	0.040	0.043
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Left Side	10mm	Full	136100	680.5	22.16	23.00	1.213	0.07	0.040	0.049
40	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Right Side	10mm	Full	136100	680.5	22.59	23.00	1.099	-0.04	0.221	**0.243**
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Right Side	10mm	Full	136100	680.5	22.16	23.00	1.213	0.06	0.145	0.176
	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Top Side	10mm	Full	136100	680.5	22.59	23.00	1.099	0.09	0.099	0.109
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Top Side	10mm	Full	136100	680.5	22.16	23.00	1.213	0.02	0.072	0.088

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	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)
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	137	DFT-30KHz	Front	10mm	Reduced	518598	2592.99	22.16	23.00	1.213	0.02	0.380	0.461
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Front	10mm	Reduced	518598	2592.99	22.14	23.00	1.219	0.01	0.373	0.455
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	137	DFT-30KHz	Back	10mm	Reduced	518598	2592.99	22.16	23.00	1.213	0.05	0.411	0.499
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Back	10mm	Reduced	518598	2592.99	22.14	23.00	1.219	-0.02	0.406	0.495
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	137	DFT-30KHz	Left Side	10mm	Reduced	518598	2592.99	22.16	23.00	1.213	-0.04	0.070	0.085
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Left Side	10mm	Reduced	518598	2592.99	22.14	23.00	1.219	0.06	0.061	0.074
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	137	DFT-30KHz	Right Side	10mm	Reduced	518598	2592.99	22.16	23.00	1.213	0.03	0.205	0.249
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Right Side	10mm	Reduced	518598	2592.99	22.14	23.00	1.219	0.08	0.221	0.269
41	FR1 n41-HPUE_Ant 2	100M	QPSK	1	137	DFT-30KHz	Bottom Side	10mm	Reduced	518598	2592.99	22.16	23.00	1.213	-0.14	0.459	**0.557**
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Bottom Side	10mm	Reduced	518598	2592.99	22.14	23.00	1.219	-0.09	0.403	0.491
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Front	10mm	Reduced	518598	2592.99	18.45	19.00	1.135	0.02	0.168	0.191
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Front	10mm	Reduced	518598	2592.99	18.27	19.00	1.183	0.03	0.160	0.189
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Back	10mm	Reduced	518598	2592.99	18.45	19.00	1.135	-0.01	0.234	0.266
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Back	10mm	Reduced	518598	2592.99	18.27	19.00	1.183	0.01	0.169	0.200
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Left Side	10mm	Reduced	518598	2592.99	18.45	19.00	1.135	-0.08	0.333	0.378
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Left Side	10mm	Reduced	518598	2592.99	18.27	19.00	1.183	0.02	0.316	0.374
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Right Side	10mm	Reduced	518598	2592.99	18.45	19.00	1.135	0.03	0.025	0.028
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Right Side	10mm	Reduced	518598	2592.99	18.27	19.00	1.183	0.07	0.024	0.028
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Top Side	10mm	Reduced	518598	2592.99	18.45	19.00	1.135	-0.02	0.047	0.053
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Top Side	10mm	Reduced	518598	2592.99	18.27	19.00	1.183	-0.12	0.045	0.053

<WLAN2.4G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	0.09	0.144	0.165
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	-0.06	0.231	0.264
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	0.03	0.076	0.086
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	0.02	0.023	0.027
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	-0.06	0.196	0.224
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.05	0.019	0.022
42	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.09	0.314	**0.360**
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.04	0.003	0.003
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.04	0.030	0.035
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	-0.03	0.028	0.032

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
43	Bluetooth	1Mbps	Back	10mm	Ant 8	Full	39	2441	12.63	13.50	1.223	76.82	1.084	0.05	0.022	**0.029**
	Bluetooth	1Mbps	Back	10mm	Ant 8	Full	0	2402	11.20	13.50	1.700	76.82	1.084	-0.01	0.015	0.028
	Bluetooth	1Mbps	Back	10mm	Ant 8	Full	78	2480	11.41	13.50	1.620	76.82	1.084	0.01	0.014	0.025

<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 9	Full	48	5240	17.47	17.50	1.007	98.28	1.018	0.02	0.067	0.069
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 9	Full	48	5240	17.47	17.50	1.007	98.28	1.018	0.04	0.236	0.242
	WLAN5.2GHz	802.11a 6Mbps	Left Side	10mm	Ant 9	Full	48	5240	17.47	17.50	1.007	98.28	1.018	0.06	0.311	0.319
	WLAN5.2GHz	802.11a 6Mbps	Right Side	10mm	Ant 9	Full	48	5240	17.47	17.50	1.007	98.28	1.018	0.08	0.078	0.080
	WLAN5.2GHz	802.11a 6Mbps	Top Side	10mm	Ant 9	Full	48	5240	17.47	17.50	1.007	98.28	1.018	0.04	0.136	0.139
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 10	Reduced	40	5200	14.86	16	1.300	98.28	1.018	-0.04	0.021	0.028
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 10	Reduced	40	5200	14.86	16	1.300	98.28	1.018	-0.07	0.829	1.097
44	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 10	Reduced	44	5220	14.79	16	1.321	98.28	1.018	0.07	0.835	**1.123**
	WLAN5.2GHz	802.11a 6Mbps	Left Side	10mm	Ant 10	Reduced	40	5200	14.86	16	1.300	98.28	1.018	0.04	0.026	0.034
	WLAN5.2GHz	802.11a 6Mbps	Right Side	10mm	Ant 10	Reduced	40	5200	14.86	16	1.300	98.28	1.018	0.02	0.153	0.203
	WLAN5.2GHz	802.11a 6Mbps	Top Side	10mm	Ant 10	Reduced	40	5200	14.86	16	1.300	98.28	1.018	0.08	0.211	0.279
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 10	Reduced-Simultaneous	44	5220	10.22	11	1.197	98.28	1.018	0.04	0.290	0.353
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 9+10	Reduced	44	5220	18.55	19.00	1.109	98.28	1.018	0.03	0.083	0.094
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 9+10	Reduced	44	5220	18.55	19.00	1.109	98.28	1.018	0.08	0.883	0.997
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 9+10	Reduced	48	5240	18.52	19.00	1.117	98.28	1.018	0.08	0.801	0.911
	WLAN5.2GHz	802.11a 6Mbps	Left Side	10mm	Ant 9+10	Reduced	44	5220	18.55	19.00	1.109	98.28	1.018	0.05	0.351	0.396
	WLAN5.2GHz	802.11a 6Mbps	Right Side	10mm	Ant 9+10	Reduced	44	5220	18.55	19.00	1.109	98.28	1.018	0.02	0.010	0.011
	WLAN5.2GHz	802.11a 6Mbps	Top Side	10mm	Ant 9+10	Reduced	44	5220	18.55	19.00	1.109	98.28	1.018	-0.03	0.141	0.159
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 9+10	Reduced-Simultaneous	44	5220	13.67	14.00	1.079	98.28	1.018	0.01	0.293	0.322
	WLAN5.8GHz	802.11a 6Mbps	Front	10mm	Ant 9	Full	149	5745	17.93	18.50	1.140	98.28	1.018	-0.08	0.092	0.107
	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	Ant 9	Full	149	5745	17.93	18.50	1.140	98.28	1.018	0.04	0.294	0.341
	WLAN5.8GHz	802.11a 6Mbps	Left Side	10mm	Ant 9	Full	149	5745	17.93	18.50	1.140	98.28	1.018	0.06	0.268	0.311
	WLAN5.8GHz	802.11a 6Mbps	Right Side	10mm	Ant 9	Full	149	5745	17.93	18.50	1.140	98.28	1.018	0.06	0.078	0.091
	WLAN5.8GHz	802.11a 6Mbps	Top Side	10mm	Ant 9	Full	149	5745	17.93	18.50	1.140	98.28	1.018	0.04	0.158	0.183
	WLAN5.8GHz	802.11a 6Mbps	Front	10mm	Ant 10	Reduced	165	5825	15.4	16.5	1.288	98.28	1.018	-0.08	0.049	0.064
	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	Ant 10	Reduced	165	5825	15.4	16.5	1.288	98.28	1.018	0.06	0.863	1.132
	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	Ant 10	Reduced	157	5785	15.23	16.5	1.340	98.28	1.018	0.04	0.788	1.075
	WLAN5.8GHz	802.11a 6Mbps	Left Side	10mm	Ant 10	Reduced	165	5825	15.4	16.5	1.288	98.28	1.018	0.08	0.240	0.315
	WLAN5.8GHz	802.11a 6Mbps	Right Side	10mm	Ant 10	Reduced	165	5825	15.4	16.5	1.288	98.28	1.018	0.03	0.026	0.034
	WLAN5.8GHz	802.11a 6Mbps	Top Side	10mm	Ant 10	Reduced	165	5825	15.4	16.5	1.288	98.28	1.018	-0.03	0.177	0.232
	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	Ant 10	Reduced-Simultaneous	165	5825	11.69	12.00	1.074	98.28	1.018	0.05	0.306	0.335
	WLAN5.8GHz	802.11a 6Mbps	Front	10mm	Ant 9+10	Reduced	165	5825	18.63	19.50	1.222	98.28	1.018	0.05	0.048	0.059
45	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	Ant 9+10	Reduced	165	5825	18.63	19.50	1.222	98.28	1.018	-0.08	0.955	**1.188**
	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	Ant 9+10	Reduced	149	5745	18.47	19.50	1.268	98.28	1.018	-0.11	0.911	1.176
	WLAN5.8GHz	802.11a 6Mbps	Left Side	10mm	Ant 9+10	Reduced	165	5825	18.63	19.50	1.222	98.28	1.018	0.04	0.219	0.272
	WLAN5.8GHz	802.11a 6Mbps	Right Side	10mm	Ant 9+10	Reduced	165	5825	18.63	19.50	1.222	98.28	1.018	0.06	0.052	0.065
	WLAN5.8GHz	802.11a 6Mbps	Top Side	10mm	Ant 9+10	Reduced	165	5825	18.63	19.50	1.222	98.28	1.018	0.06	0.126	0.157
	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	Ant 9+10	Reduced-Simultaneous	165	5825	14.73	15.00	1.064	98.28	1.018	0.04	0.319	0.346

15.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	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)
	GSM850_Ant 0	GPRS(2 Tx slots)	Front	10mm	Full	128	824.2	30.29	31	1.178	0.04	0.240	0.283
46	GSM850_Ant 0	GPRS(2 Tx slots)	Back	10mm	Full	128	824.2	30.29	31	1.178	-0.04	0.282	**0.332**
	GSM850_Ant 1	GPRS(2 Tx slots)	Front	10mm	Full	128	824.2	29.99	31.00	1.262	0.09	0.182	0.230
	GSM850_Ant 1	GPRS(2 Tx slots)	Back	10mm	Full	128	824.2	29.99	31.00	1.262	-0.07	0.239	0.302
	GSM1900_Ant 2	GPRS(2 Tx slots)	Front	10mm	Full	512	1850.2	27.10	28.00	1.230	0.07	0.160	0.197
47	GSM1900_Ant 2	GPRS(2 Tx slots)	Back	10mm	Full	512	1850.2	27.10	28.00	1.230	0.12	0.175	**0.215**
	GSM1900_Ant 6	GPRS(2 Tx slots)	Front	10mm	Full	512	1850.2	26.72	27.50	1.197	0.05	0.143	0.171
	GSM1900_Ant 6	GPRS(2 Tx slots)	Back	10mm	Full	512	1850.2	26.72	27.50	1.197	0.04	0.103	0.123

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	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)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	Full	9400	1880	23.60	24.50	1.230	0.07	0.373	0.459
48	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Full	9400	1880	23.60	24.50	1.230	-0.06	0.421	**0.518**
	WCDMA II_Ant 6	RMC 12.2Kbps	Front	10mm	Full	9400	1880	22.84	24.00	1.306	0.01	0.287	0.375
	WCDMA II_Ant 6	RMC 12.2Kbps	Back	10mm	Full	9400	1880	22.84	24.00	1.306	0.04	0.221	0.289
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	Full	1312	1712.4	24.06	24.5	1.107	0.01	0.168	0.186
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Full	1312	1712.4	24.06	24.5	1.107	-0.09	0.202	0.224
49	WCDMA IV_Ant 6	RMC 12.2Kbps	Front	10mm	Full	1312	1712.4	23.25	24	1.189	0.04	0.257	**0.305**
	WCDMA IV_Ant 6	RMC 12.2Kbps	Back	10mm	Full	1312	1712.4	23.25	24	1.189	0.05	0.232	0.276
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Full	4182	836.4	24.14	24.5	1.086	0.03	0.236	0.256
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Full	4182	836.4	24.14	24.5	1.086	-0.08	0.264	0.287
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	Full	4182	836.4	23.21	24.00	1.199	0.01	0.205	0.246
50	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Full	4182	836.4	23.21	24.00	1.199	0.04	0.250	**0.300**

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	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)
	LTE Band 5_Ant 0	10M	QPSK	1	0	Front	10mm	Full	20525	836.5	23.22	24.00	1.197	0.03	0.163	0.195
	LTE Band 5_Ant 0	10M	QPSK	25	0	Front	10mm	Full	20525	836.5	22.21	23.00	1.199	-0.03	0.140	0.168
51	LTE Band 5_Ant 0	10M	QPSK	1	0	Back	10mm	Full	20525	836.5	23.22	24.00	1.197	-0.06	0.182	**0.218**
	LTE CA_5B_Ant 0	10M	QPSK	1	0	Back	10mm	Full	20575+20476	841.5+831.6	23.01	24.00	1.256	0.04	0.122	0.153
	LTE Band 5_Ant 0	10M	QPSK	25	0	Back	10mm	Full	20525	836.5	22.21	23.00	1.199	-0.02	0.157	0.188
	LTE Band 5_Ant 1	10M	QPSK	1	0	Front	10mm	Full	20525	836.5	22.30	23.50	1.318	0.18	0.137	0.181
	LTE CA_5B_Ant 1	10M	QPSK	1	0	Front	10mm	Full	20575+20476	841.5+831.6	22.04	23.50	1.400	0.04	0.111	0.155
	LTE Band 5_Ant 1	10M	QPSK	25	0	Front	10mm	Full	20525	836.5	21.29	22.50	1.321	0.05	0.114	0.151
	LTE Band 5_Ant 1	10M	QPSK	1	0	Back	10mm	Full	20525	836.5	22.30	23.50	1.318	0.06	0.128	0.169
	LTE Band 5_Ant 1	10M	QPSK	25	0	Back	10mm	Full	20525	836.5	21.29	22.50	1.321	0.02	0.119	0.157
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	Full	23095	707.5	23.30	24.00	1.175	0.01	0.075	0.088
	LTE Band 12_Ant 0	10M	QPSK	25	0	Front	10mm	Full	23095	707.5	22.35	23.00	1.161	0.06	0.064	0.074
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	Full	23095	707.5	23.30	24.00	1.175	-0.06	0.085	0.100
	LTE Band 12_Ant 0	10M	QPSK	25	0	Back	10mm	Full	23095	707.5	22.35	23.00	1.161	0.01	0.075	0.087
52	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	Full	23095	707.5	22.35	23.5	1.303	-0.02	0.101	**0.132**
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	Full	23095	707.5	21.48	22.5	1.265	0.06	0.083	0.105
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Full	23095	707.5	22.35	23.5	1.303	0.02	0.090	0.117
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	10mm	Full	23095	707.5	21.48	22.5	1.265	0.04	0.081	0.102
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	Full	23230	782	23.92	24.00	1.019	0.06	0.206	0.210
	LTE Band 13_Ant 0	10M	QPSK	25	0	Front	10mm	Full	23230	782	22.92	23.00	1.019	0.02	0.172	0.175
53	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	Full	23230	782	23.92	24.00	1.019	-0.02	0.241	**0.245**
	LTE Band 13_Ant 0	10M	QPSK	25	0	Back	10mm	Full	23230	782	22.92	23.00	1.019	0.01	0.196	0.200
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	Full	23230	782	23.20	23.50	1.072	0.04	0.153	0.164
	LTE Band 13_Ant 1	10M	QPSK	25	0	Front	10mm	Full	23230	782	22.04	22.50	1.112	0.06	0.124	0.138
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	Full	23230	782	23.20	23.50	1.072	0.06	0.212	0.227
	LTE Band 13_Ant 1	10M	QPSK	25	0	Back	10mm	Full	23230	782	22.04	22.50	1.112	0.07	0.126	0.140
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	Full	133322	683	23.28	24.00	1.180	0.08	0.070	0.083
	LTE Band 71_Ant 0	20M	QPSK	50	0	Front	10mm	Full	133322	683	22.27	23.00	1.183	0.04	0.060	0.071
	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	Full	133322	683	23.28	24.00	1.180	0.14	0.078	0.092
	LTE Band 71_Ant 0	20M	QPSK	50	0	Back	10mm	Full	133322	683	22.27	23.00	1.183	0.03	0.061	0.072
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	Full	133322	683	22.35	23.5	1.303	0.01	0.095	0.124
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	10mm	Full	133322	683	21.26	22.5	1.330	0.03	0.076	0.101
54	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Full	133322	683	22.35	23.5	1.303	-0.02	0.106	**0.138**
	LTE Band 71_Ant 1	20M	QPSK	50	0	Back	10mm	Full	133322	683	21.26	22.5	1.330	-0.06	0.079	0.105
	LTE Band 2_Ant 2	20M	QPSK	1	0	Front	10mm	Full	18900	1880	22.69	24	1.352	0.05	0.284	0.384
	LTE Band 2_Ant 2	20M	QPSK	50	0	Front	10mm	Full	18900	1880	21.82	23	1.312	0.05	0.227	0.298
55	LTE Band 2_Ant 2	20M	QPSK	1	0	Back	10mm	Full	18900	1880	22.69	24.00	1.352	-0.18	0.372	**0.503**
	LTE Band 2_Ant 2	20M	QPSK	50	0	Back	10mm	Full	18900	1880	21.82	23.00	1.312	0.04	0.305	0.400
	LTE Band 2_Ant 6	20M	QPSK	1	0	Front	10mm	Full	18900	1880	21.89	23.50	1.449	0.12	0.196	0.284
	LTE Band 2_Ant 6	20M	QPSK	50	0	Front	10mm	Full	18900	1880	20.99	22.50	1.416	0.04	0.144	0.204
	LTE Band 2_Ant 6	20M	QPSK	1	0	Back	10mm	Full	18900	1880	21.89	23.50	1.449	0.06	0.168	0.243
	LTE Band 2_Ant 6	20M	QPSK	50	0	Back	10mm	Full	18900	1880	20.99	22.50	1.416	0.02	0.134	0.190
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	Full	132572	1770	22.88	24.00	1.294	0.01	0.196	0.254
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	Full	132572	1770	21.99	23.00	1.262	0.08	0.167	0.211
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	Full	132572	1770	22.88	24.00	1.294	-0.01	0.250	0.324
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	Full	132572	1770	21.99	23.00	1.262	0.01	0.222	0.280
56	LTE Band 66_Ant 6	20M	QPSK	1	0	Front	10mm	Full	132572	1770	21.9	23.5	1.445	-0.06	0.282	**0.408**
	LTE Band 66_Ant 6	20M	QPSK	50	0	Front	10mm	Full	132572	1770	21.04	22.5	1.400	0.01	0.199	0.279
	LTE Band 66_Ant 6	20M	QPSK	1	0	Back	10mm	Full	132572	1770	21.9	23.5	1.445	0.05	0.235	0.340
	LTE Band 66_Ant 6	20M	QPSK	50	0	Back	10mm	Full	132572	1770	21.04	22.5	1.400	0.06	0.179	0.251

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	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)
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	Full	21100	2535	23.39	24	1.151	0.05	0.518	0.596
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	Full	21100	2535	22.43	23	1.140	0.01	0.428	0.488
57	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Full	21100	2535	23.39	24.00	1.151	0.03	0.658	**0.757**
	LTE CA_7C_Ant 2	20M	QPSK	1	0	Back	10mm	Full	21100+20902	2535+2515.2	23.14	24.00	1.219	0.11	0.544	0.663
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	ENDC	21100	2535	21.50	22.00	1.122	0.13	0.370	0.415
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	Full	21100	2535	22.43	23.00	1.140	-0.05	0.489	0.558
	LTE Band 7_Ant 6	20M	QPSK	1	0	Front	10mm	Full	21100	2535	22.80	23.50	1.175	0.07	0.333	0.391
	LTE Band 7_Ant 6	20M	QPSK	50	0	Front	10mm	Full	21100	2535	21.83	22.50	1.167	0.04	0.295	0.344
	LTE Band 7_Ant 6	20M	QPSK	1	0	Back	10mm	Full	21100	2535	22.80	23.50	1.175	0.05	0.346	0.407
	LTE CA_7C_Ant 6	20M	QPSK	1	0	Back	10mm	Full	21100+20902	2535+2515.2	22.71	23.50	1.199	0.04	0.298	0.357
	LTE Band 7_Ant 6	20M	QPSK	50	0	Back	10mm	Full	21100	2535	21.83	22.50	1.167	0.06	0.284	0.331

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	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)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	0.05	0.290	0.340
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.07	0.232	0.271
58	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Full	41490	2680	23.33	24.00	1.167	62.9	1.006	0.08	0.364	**0.427**
	LTE CA_41C_Ant 2	20M	QPSK	1	0	Back	10mm	Full	41490+41292	2680+2660.2	23.22	24.00	1.197	62.9	1.006	-0.02	0.291	0.350
	LTE Band 41-HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	Full	41490	2680	24.85	26.00	1.303	42.9	1.009	-0.02	0.321	0.422
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Full	41490	2680	22.35	23.00	1.161	62.9	1.006	0.05	0.270	0.315
	LTE Band 41_Ant 6	20M	QPSK	1	0	Front	10mm	Full	41490	2680	22.7	23.5	1.202	62.9	1.006	0.03	0.158	0.191
	LTE Band 41_Ant 6	20M	QPSK	50	0	Front	10mm	Full	41490	2680	21.34	22.5	1.306	62.9	1.006	0.09	0.127	0.167
	LTE Band 41_Ant 6	20M	QPSK	1	0	Back	10mm	Full	41490	2680	22.7	23.5	1.202	62.9	1.006	0.08	0.265	0.321
	LTE CA_41C_Ant 6	20M	QPSK	1	0	Back	10mm	Full	41490+41292	2680+2660.2	22.17	23.5	1.358	62.9	1.006	-0.04	0.199	0.272
	LTE Band 41-HPUE_Ant 6	20M	QPSK	1	0	Back	10mm	Full	41490	2680	24.34	25.5	1.306	42.9	1.009	-0.02	0.243	0.320
	LTE Band 41_Ant 6	20M	QPSK	50	0	Back	10mm	Full	41490	2680	21.34	22.5	1.306	62.9	1.006	0.03	0.130	0.171

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	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)
	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	376000	1880	23.45	24.00	1.135	0.12	0.292	0.331
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	376000	1880	23.09	24.00	1.233	0.03	0.213	0.263
59	FR1 n2_Ant 2	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	376000	1880	23.45	24.00	1.135	0.18	0.356	**0.404**
	FR1 n2_Ant 2	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	376000	1880	23.09	24.00	1.233	0.02	0.300	0.370
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	376000	1880	22.58	24.00	1.387	0.09	0.202	0.280
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Front	10mm	Full	376000	1880	22.20	24.00	1.514	0.04	0.151	0.229
	FR1 n2_Ant 6	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	376000	1880	22.58	24.00	1.387	-0.08	0.223	0.309
	FR1 n2_Ant 6	20M	QPSK	50	28	DFT-15KHz	Back	10mm	Full	376000	1880	22.20	24.00	1.514	0.07	0.171	0.259
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Reduced	349000	1745	22.93	23.00	1.016	0.11	0.183	0.186
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Front	10mm	Reduced	349000	1745	22.77	23.00	1.054	0.09	0.218	0.230
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Reduced	349000	1745	22.93	23.00	1.016	-0.01	0.226	0.230
	FR1 n66_Ant 2	20M	QPSK	50	28	DFT-15KHz	Back	10mm	Reduced	349000	1745	22.77	23.00	1.054	0.12	0.242	0.255
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Front	14mm	Full	349000	1745	22.93	24.00	1.279	0.02	0.112	0.143
	FR1 n66_Ant 2	20M	QPSK	1	1	DFT-15KHz	Back	17mm	Full	349000	1745	22.93	24.00	1.279	0.03	0.119	0.152
	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	349000	1745	22.08	23.00	1.236	0.01	0.176	0.218
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	349000	1745	22.01	23.00	1.256	0.03	0.159	0.200
60	FR1 n66_Ant 6	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	349000	1745	22.08	23.00	1.236	-0.01	0.363	**0.449**
	FR1 n66_Ant 6	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	349000	1745	22.01	23.00	1.256	0.08	0.166	0.209
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	167300	836.5	23.3	24.00	1.175	0.07	0.125	0.147
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	167300	836.5	23.15	24.00	1.216	0.09	0.149	0.181
	FR1 n5_Ant 0	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	167300	836.5	23.30	24.00	1.175	0.08	0.130	0.153
	FR1 n5_Ant 0	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	167300	836.5	23.15	24.00	1.216	0.05	0.165	0.201
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	167300	836.5	22.47	23.00	1.130	0.07	0.127	0.143
	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Front	10mm	Full	167300	836.5	22.19	23.00	1.205	0.08	0.137	0.165
	FR1 n5_Ant 1	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	167300	836.5	22.47	23.00	1.130	-0.06	0.060	0.068
61	FR1 n5_Ant 1	20M	QPSK	50	28	DFT-15KHz	Back	10mm	Full	167300	836.5	22.19	23.00	1.205	-0.12	0.221	**0.266**
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	136100	680.5	23.49	24.00	1.125	0.04	0.062	0.070
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	136100	680.5	23.39	24.00	1.151	0.05	0.066	0.076
	FR1 n71_Ant 0	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	136100	680.5	23.49	24.00	1.125	-0.02	0.071	0.080
	FR1 n71_Ant 0	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	136100	680.5	23.39	24.00	1.151	0.04	0.068	0.078
	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Front	10mm	Full	136100	680.5	22.59	23.00	1.099	-0.03	0.073	0.080
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Front	10mm	Full	136100	680.5	22.16	23.00	1.213	0.04	0.073	0.088
62	FR1 n71_Ant 1	20M	QPSK	1	1	DFT-15KHz	Back	10mm	Full	136100	680.5	22.59	23.00	1.099	0.09	0.125	**0.137**
	FR1 n71_Ant 1	20M	QPSK	50	0	DFT-15KHz	Back	10mm	Full	136100	680.5	22.16	23.00	1.213	0.02	0.091	0.110
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	1	DFT-30KHz	Front	10mm	Reduced	518598	2592.99	22.16	23.00	1.213	0.02	0.380	0.461
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Front	10mm	Reduced	518598	2592.99	22.14	23.00	1.219	0.01	0.373	0.455
63	FR1 n41-HPUE_Ant 2	100M	QPSK	1	1	DFT-30KHz	Back	10mm	Reduced	518598	2592.99	22.16	23.00	1.213	0.05	0.411	**0.499**
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Back	10mm	Reduced	518598	2592.99	22.14	23.00	1.219	-0.02	0.406	0.495
	FR1 n41-HPUE_Ant 2	100M	QPSK	1	137	DFT-30KHz	Front	14mm	Full	518598	2592.99	23.41	25.00	1.442	0.04	0.187	0.270
	FR1 n41-HPUE_Ant 2	100M	QPSK	135	69	DFT-30KHz	Back	17mm	Full	518598	2592.99	23.41	25.00	1.442	0.03	0.211	0.304
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Front	10mm	Reduced	518598	2592.99	18.45	19.00	1.135	0.02	0.168	0.191
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Front	10mm	Reduced	518598	2592.99	18.27	19.00	1.183	0.03	0.160	0.189
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Back	10mm	Reduced	518598	2592.99	18.45	19.00	1.135	-0.01	0.234	0.266
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Back	10mm	Reduced	518598	2592.99	18.27	19.00	1.183	0.01	0.169	0.200
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Front	14mm	Full	518598	2592.99	23.57	25.00	1.390	0.03	0.132	0.183
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Back	17mm	Full	518598	2592.99	23.57	25.00	1.390	0.05	0.184	0.256

<WLAN2.4G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	0.09	0.144	0.165
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8	Full	6	2437	17.92	18.50	1.143	100	1.000	-0.06	0.231	0.264
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.05	0.019	0.022
64	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.09	0.314	**0.360**

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
65	Bluetooth	1Mbps	Back	10mm	Ant 8	Full	39	2441	12.63	13.50	1.223	76.82	1.084	0.05	0.022	**0.029**
	Bluetooth	1Mbps	Back	10mm	Ant 8	Full	0	2402	11.20	13.50	1.700	76.82	1.084	-0.01	0.015	0.028
	Bluetooth	1Mbps	Back	10mm	Ant 8	Full	78	2480	11.41	13.50	1.620	76.82	1.084	0.01	0.014	0.025

<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 9	Full	48	5240	17.47	17.50	1.007	98.28	1.018	0.02	0.067	0.069
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 9	Full	48	5240	17.47	17.50	1.007	98.28	1.018	0.04	0.236	0.242
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 10	Reduced	40	5200	14.86	16	1.300	98.28	1.018	-0.04	0.021	0.028
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 10	Reduced	40	5200	14.86	16	1.300	98.28	1.018	-0.07	0.829	1.097
66	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 10	Reduced	44	5220	14.79	16	1.321	98.28	1.018	0.07	0.835	**1.123**
	WLAN5.2GHz	802.11a 6Mbps	Back	17mm	Ant 10	Full	44	5220	16.34	17.5	1.306	98.28	1.018	-0.09	0.667	0.887
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 10	Reduced-Simultaneous	44	5220	10.22	11	1.197	98.28	1.018	0.04	0.290	0.353
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 9+10	Reduced	44	5220	18.55	19.00	1.109	98.28	1.018	0.03	0.083	0.094
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 9+10	Reduced	44	5220	18.55	19.00	1.109	98.28	1.018	0.08	0.883	0.997
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 9+10	Reduced	48	5240	18.52	19.00	1.117	98.28	1.018	0.08	0.801	0.911
	WLAN5.2GHz	802.11a 6Mbps	Back	17mm	Ant 9+10	Full	44	5220	19.94	20.50	1.138	98.28	1.018	0.08	0.656	0.760
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 9+10	Reduced-Simultaneous	44	5220	13.67	14.00	1.079	98.28	1.018	0.01	0.293	0.322
	WLAN5.3GHz	802.11a 6Mbps	Front	10 mm	Ant 9	Full	52	5260	17.41	17.5	1.021	98.28	1.018	0.02	0.094	0.098
	WLAN5.3GHz	802.11a 6Mbps	Back	10 mm	Ant 9	Full	52	5260	17.41	17.5	1.021	98.28	1.018	0.06	0.204	0.212
	WLAN5.3GHz	802.11a 6Mbps	Front	10 mm	Ant 10	Reduced	64	5320	15.24	16.50	1.337	98.28	1.018	0.03	0.023	0.031
	WLAN5.3GHz	802.11a 6Mbps	Back	10 mm	Ant 10	Reduced	64	5320	15.24	16.50	1.337	98.28	1.018	0.06	0.683	0.929
	WLAN5.3GHz	802.11a 6Mbps	Back	10 mm	Ant 10	Reduced	60	5300	15.13	16.50	1.371	98.28	1.018	0.05	0.732	1.022
	WLAN5.3GHz	802.11a 6Mbps	Back	17 mm	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	0.01	0.542	0.712
	WLAN5.3GHz	802.11a 6Mbps	Back	10 mm	Ant 10	Reduced-Simultaneous	60	5300	11.26	12.50	1.330	98.28	1.018	0.06	0.244	0.330
	WLAN5.3GHz	802.11a 6Mbps	Front	10 mm	Ant 9+10	Reduced	52	5260	18.51	19.50	1.256	98.28	1.018	0.01	0.102	0.130
	WLAN5.3GHz	802.11a 6Mbps	Back	10 mm	Ant 9+10	Reduced	52	5260	18.51	19.50	1.256	98.28	1.018	-0.07	0.869	1.111
67	WLAN5.3GHz	802.11a 6Mbps	Back	10 mm	Ant 9+10	Reduced	60	5300	18.40	19.50	1.288	98.28	1.018	-0.01	0.882	**1.157**
	WLAN5.3GHz	802.11a 6Mbps	Back	17 mm	Ant 9+10	Full	60	5300	19.77	20.50	1.183	98.28	1.018	0.08	0.600	0.723
	WLAN5.3GHz	802.11a 6Mbps	Back	10 mm	Ant 9+10	Reduced-Simultaneous	60	5300	14.66	15.50	1.213	98.28	1.018	0.06	0.285	0.352
	WLAN5.5GHz	802.11a 6Mbps	Front	10 mm	Ant 9	Full	140	5700	17.66	18	1.081	98.28	1.018	0.05	0.076	0.084
	WLAN5.5GHz	802.11a 6Mbps	Back	10 mm	Ant 9	Full	140	5700	17.66	18	1.081	98.28	1.018	0.08	0.266	0.293
	WLAN5.5GHz	802.11a 6Mbps	Front	10 mm	Ant 10	Reduced	116	5580	15.90	17.00	1.288	98.28	1.018	0.01	0.016	0.020
68	WLAN5.5GHz	802.11a 6Mbps	Back	10 mm	Ant 10	Reduced	116	5580	15.90	17.00	1.288	98.28	1.018	0.02	0.876	**1.149**
	WLAN5.5GHz	802.11a 6Mbps	Back	10 mm	Ant 10	Reduced	132	5660	15.70	17.00	1.349	98.28	1.018	0.05	0.757	1.040
	WLAN5.5GHz	802.11a 6Mbps	Back	17 mm	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	0.09	0.701	0.872
	WLAN5.5GHz	802.11a 6Mbps	Back	10 mm	Ant 10	Reduced-Simultaneous	116	5580	11.50	12.50	1.259	98.28	1.018	0.05	0.259	0.332
	WLAN5.5GHz	802.11a 6Mbps	Front	10 mm	Ant 9+10	Reduced	100	5500	19.44	20.00	1.138	98.28	1.018	0.01	0.086	0.099
	WLAN5.5GHz	802.11a 6Mbps	Back	10 mm	Ant 9+10	Reduced	100	5500	19.44	20.00	1.138	98.28	1.018	-0.03	0.738	0.855
	WLAN5.5GHz	802.11a 6Mbps	Back	10 mm	Ant 9+10	Reduced	140	5700	18.99	20.00	1.262	98.28	1.018	-0.01	0.660	0.848
	WLAN5.5GHz	802.11a 6Mbps	Back	17 mm	Ant 9+10	Full	100	5500	19.99	21.00	1.262	98.28	1.018	-0.02	0.588	0.755
	WLAN5.5GHz	802.11a 6Mbps	Back	10 mm	Ant 9+10	Reduced-Simultaneous	100	5500	14.81	15.50	1.172	98.28	1.018	0.07	0.302	0.360
	WLAN5.8GHz	802.11a 6Mbps	Front	10 mm	Ant 9	Full	149	5745	17.93	18.5	1.140	98.28	1.018	0.05	0.097	0.113
	WLAN5.8GHz	802.11a 6Mbps	Back	10 mm	Ant 9	Full	149	5745	17.93	18.5	1.140	98.28	1.018	0.08	0.286	0.332
	WLAN5.8GHz	802.11a 6Mbps	Front	10 mm	Ant 10	Reduced	165	5825	15.40	16.50	1.288	98.28	1.018	-0.08	0.049	0.064
	WLAN5.8GHz	802.11a 6Mbps	Back	10 mm	Ant 10	Reduced	165	5825	15.40	16.50	1.288	98.28	1.018	0.06	0.863	1.132
	WLAN5.8GHz	802.11a 6Mbps	Back	10 mm	Ant 10	Reduced	157	5785	15.23	16.50	1.340	98.28	1.018	0.04	0.788	1.075
	WLAN5.8GHz	802.11a 6Mbps	Back	17 mm	Ant 10	Full	165	5825	17.70	18.50	1.202	98.28	1.018	0.01	0.613	0.750
	WLAN5.8GHz	802.11a 6Mbps	Back	10 mm	Ant 10	Reduced-Simultaneous	165	5825	11.69	12.00	1.074	98.28	1.018	0.05	0.306	0.335
	WLAN5.8GHz	802.11a 6Mbps	Front	10 mm	Ant 9+10	Reduced	165	5825	18.63	19.50	1.222	98.28	1.018	0.05	0.048	0.059
69	WLAN5.8GHz	802.11a 6Mbps	Back	10 mm	Ant 9+10	Reduced	165	5825	18.63	19.50	1.222	98.28	1.018	-0.08	0.955	**1.188**
	WLAN5.8GHz	802.11a 6Mbps	Back	10 mm	Ant 9+10	Reduced	149	5745	18.47	19.50	1.268	98.28	1.018	-0.11	0.911	1.176
	WLAN5.8GHz	802.11a 6Mbps	Back	17 mm	Ant 9+10	Full	165	5825	20.82	21.50	1.169	98.28	1.018	-0.08	0.791	0.942
	WLAN5.8GHz	802.11a 6Mbps	Back	10 mm	Ant 9+10	Reduced-Simultaneous	165	5825	14.73	15.00	1.064	98.28	1.018	0.04	0.319	0.346

15.4 Product Specific SAR

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Left Side	0mm	Full	518598	2592.99	23.57	25.00	1.390	-0.03	2.005	2.787
70	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Left Side	0mm	Full	509202	2546.01	23.45	25.00	1.429	0.02	2.090	**2.986**
	FR1 n41-HPUE_Ant 6	100M	QPSK	1	137	DFT-30KHz	Left Side	0mm	Full	528000	2640	23.43	25.00	1.435	0.03	1.939	2.783
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Left Side	0mm	Full	518598	2592.99	23.56	25.00	1.393	0.06	2.139	2.980
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Left Side	0mm	Full	509202	2546.01	23.32	25.00	1.472	0.08	2.010	2.959
	FR1 n41-HPUE_Ant 6	100M	QPSK	135	69	DFT-30KHz	Left Side	0mm	Full	528000	2640	23.41	25.00	1.442	0.09	1.776	2.561
	FR1 n41-HPUE_Ant 6	100M	QPSK	270	0	DFT-30KHz	Left Side	0mm	Full	518598	2592.99	22.78	24.00	1.324	0.01	1.748	2.315

<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 9	Full	52	5260	17.41	17.50	1.021	98.28	1.018	0.02	0.272	0.283
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 9	Full	52	5260	17.41	17.50	1.021	98.28	1.018	0.03	0.820	0.852
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 9	Full	52	5260	17.41	17.50	1.021	98.28	1.018	0.05	0.679	0.706
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 9	Full	52	5260	17.41	17.50	1.021	98.28	1.018	0.06	0.016	0.017
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 9	Full	52	5260	17.41	17.50	1.021	98.28	1.018	0.07	0.206	0.214
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	0.05	0.035	0.046
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	-0.03	1.220	1.604
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	0.03	0.015	0.019
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	0.04	0.133	0.175
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 10	Full	60	5300	16.39	17.50	1.291	98.28	1.018	0.05	0.233	0.306
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 10	Reduced-Simultaneous	60	5300	12.76	14.00	1.330	98.28	1.018	0.01	0.690	0.935
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 9+10	Full	52	5260	19.78	20.50	1.179	98.28	1.018	0.07	0.245	0.294
71	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 9+10	Full	52	5260	19.78	20.50	1.179	98.28	1.018	-0.03	1.560	**1.873**
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 9+10	Full	60	5300	19.77	20.50	1.183	98.28	1.018	-0.05	1.250	1.505
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 9+10	Full	52	5260	19.78	20.50	1.179	98.28	1.018	-0.04	0.898	1.078
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 9+10	Full	52	5260	19.78	20.50	1.179	98.28	1.018	0	0.001	0.002
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 9+10	Full	52	5260	19.78	20.50	1.179	98.28	1.018	0.03	0.169	0.203
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 9+10	Reduced-Simultaneous	52	5260	16.20	17.00	1.202	98.28	1.018	-0.03	0.597	0.731
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 9+10	Reduced-Simultaneous	52	5260	16.20	17.00	1.202	98.28	1.018	-0.02	0.361	0.442
	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 9	Full	140	5700	17.66	18.00	1.081	98.28	1.018	0.09	0.156	0.172
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 9	Full	140	5700	17.66	18.00	1.081	98.28	1.018	0.05	0.692	0.762
	WLAN5.5GHz	802.11a 6Mbps	Left Side	0mm	Ant 9	Full	140	5700	17.66	18.00	1.081	98.28	1.018	0.03	0.570	0.628
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 9	Full	140	5700	17.66	18.00	1.081	98.28	1.018	-0.01	0.016	0.018
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 9	Full	140	5700	17.66	18.00	1.081	98.28	1.018	0.08	0.190	0.209
	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	0.02	0.044	0.054
72	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	-0.06	1.400	**1.741**
	WLAN5.5GHz	802.11a 6Mbps	Left Side	0mm	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	0.06	0.016	0.019
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	0.02	0.133	0.165
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 10	Full	116	5580	17.13	18.00	1.222	98.28	1.018	0.01	0.232	0.289
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 10	Reduced-Simultaneous	116	5580	14.40	15.50	1.288	98.28	1.018	0.01	0.718	0.942
	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 9+10	Full	140	5700	20.19	21.00	1.205	98.28	1.018	0.02	0.128	0.157
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 9+10	Full	140	5700	20.19	21.00	1.205	98.28	1.018	-0.01	1.070	1.313
	WLAN5.5GHz	802.11a 6Mbps	Left Side	0mm	Ant 9+10	Full	140	5700	20.19	21.00	1.205	98.28	1.018	0.06	0.436	0.535
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 9+10	Full	140	5700	20.19	21.00	1.205	98.28	1.018	0.04	0.004	0.005
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 9+10	Full	140	5700	20.19	21.00	1.205	98.28	1.018	0.07	0.195	0.239
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 9+10	Reduced-Simultaneous	140	5700	17.85	18.50	1.161	98.28	1.018	-0.01	0.795	0.940
73	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 10	Full	165	5825	17.70	18.50	1.202	98.28	1.018	-0.06	1.690	**2.068**
	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 10	Full	157	5785	17.46	18.50	1.271	98.28	1.018	-0.06	1.450	1.875
	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 10	Reduced-Simultaneous	165	5825	15.01	15.50	1.119	98.28	1.018	0.02	0.782	0.891
	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 9+10	Full	165	5825	20.82	21.50	1.169	98.28	1.018	-0.04	1.610	1.916
	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 9+10	Reduced-Simultaneous	165	5825	18.21	18.50	1.069	98.28	1.018	0.01	0.801	0.872

15.5 Repeated SAR Measurement

No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	GSM1900	-	-	-	-	GPRS(2 Tx slots)	Right Cheek	0	Ant 6	Full	661	1880	26.71	27.50	1.199	-	-	-0.12	0.966	1	1.159
2nd	GSM1900	-	-	-	-	GPRS(2 Tx slots)	Right Cheek	0	Ant 6	Full	661	1880	26.71	27.50	1.199	-	-	0.1	0.951	1.016	1.141
1st	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0	Ant 6	Reduced	1312	1712.4	22.25	23.00	1.189	-	-	0.07	0.881	1	1.047
2nd	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0	Ant 6	Reduced	1312	1712.4	22.25	23.00	1.189	-	-	0.02	0.878	1.003	1.044
1st	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0	Ant 6	Reduced	41490	2680	20.30	21.00	1.175	62.9	1.006	-0.01	0.968	1	1.144
2nd	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0	Ant 6	Reduced	41490	2680	20.30	21.00	1.175	62.9	1.006	0.03	0.959	1.009	1.133
1st	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Right Cheek	0	8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.05	1.010	1	1.157
2nd	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Right Cheek	0	8+10	Full	1	2412	20.91	21.50	1.146	100	1.000	0.01	0.992	1.018	1.136
1st	WLAN5.2GHz	-	-	-	-	802.11a 6Mbps	Back	10	9+10	Reduced	44	5220	18.55	19.00	1.109	98.28	1.018	0.08	0.883	1	0.997
2nd	WLAN5.2GHz	-	-	-	-	802.11a 6Mbps	Back	10	9+10	Reduced	44	5220	18.55	19.00	1.109	98.28	1.018	0.03	0.879	1.005	0.993
1st	WLAN5.8GHz	-	-	-	-	802.11a 6Mbps	Back	10	9+10	Reduced	165	5825	18.63	19.50	1.222	98.28	1.018	-0.08	0.955	1	1.188
2nd	WLAN5.8GHz	-	-	-	-	802.11a 6Mbps	Back	10	9+10	Reduced	165	5825	18.63	19.50	1.222	98.28	1.018	-0.02	0.946	1.010	1.177
1st	WLAN5.3GHz	-	-	-	-	802.11a 6Mbps	Back	10	9+10	Reduced	60	5300	18.40	19.50	1.288	98.28	1.018	-0.01	0.882	1	1.157
2nd	WLAN5.3GHz	-	-	-	-	802.11a 6Mbps	Back	10	9+10	Reduced	60	5300	18.40	19.50	1.288	98.28	1.018	0.04	0.868	1.016	1.138
1st	WLAN5.5GHz	-	-	-	-	802.11a 6Mbps	Back	10	10	Reduced	116	5580	15.90	17.00	1.288	98.28	1.018	0.02	0.876	1	1.149
2nd	WLAN5.5GHz	-	-	-	-	802.11a 6Mbps	Back	10	10	Reduced	116	5580	15.90	17.00	1.288	98.28	1.018	0.04	0.861	1.017	1.129

General Note:

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

15.6 TDD B41 Linearity Data Analysis

General Note:
This device support Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required

LTE Band 41_Ant 2(HPUE)-Linearity Data for Head		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	26.00
Reported 1g SAR (W/kg)	0.076	0.075
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	172.38
Linearity SAR (W/kg)	0.082	
% deviation from expected linearity		-8.97%

LTE Band 41_Ant 6(HPUE)-Linearity Data for Head		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	21.00
Reported 1g SAR (W/kg)	1.149	0.860
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	79.69	54.51
Linearity SAR (W/kg)	0.786	
% deviation from expected linearity		9.42%

LTE Band 41_Ant 2(HPUE)-Linearity Data for Hotspot		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	26.00
Reported 1g SAR (W/kg)	0.427	0.422
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	172.38
Linearity SAR (W/kg)	0.463	
% deviation from expected linearity		-8.84%

LTE Band 41_Ant 6(HPUE)-Linearity Data for Hotspot		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	23.50	25.50
Reported 1g SAR (W/kg)	0.417	0.410
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	141.71	153.63
Linearity SAR (W/kg)	0.452	
% deviation from expected linearity		-9.31%

LTE Band 41_Ant 2(HPUE)-Linearity Data for Body-worn		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	26.00
Reported 1g SAR (W/kg)	0.427	0.422
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	172.38
Linearity SAR (W/kg)	0.463	
% deviation from expected linearity		-8.84%

LTE Band 41_Ant 6(HPUE)-Linearity Data for Body-worn		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	23.50	25.50
Reported 1g SAR (W/kg)	0.321	0.320
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	141.71	153.63
Linearity SAR (W/kg)	0.348	
% deviation from expected linearity		-8.05%

16. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product Specific
1.	GSM Voice + WLAN2.4GHz Ant.8	Yes	Yes		Yes
2.	GPRS/EDGE + WLAN2.4GHz Ant.8	Yes	Yes	Yes	Yes
3.	WCDMA + WLAN2.4GHz Ant.8	Yes	Yes	Yes	Yes
4.	LTE + WLAN2.4GHz Ant.8	Yes	Yes	Yes	Yes
5.	GSM Voice +5.3/5.5GHz WLAN Ant.9	Yes	Yes		Yes
6.	GPRS/EDGE + 5.3/5.5GHz WLAN Ant.9	Yes	Yes		Yes
7.	WCDMA + 5.3/5.5GHz WLAN Ant.9	Yes	Yes		Yes
8.	LTE + 5.3/5.5GHz WLAN Ant.9	Yes	Yes		Yes
9.	GSM Voice + 5.2/5.8GHz WLAN Ant.9	Yes	Yes		Yes
10.	GPRS/EDGE + 5.2/5.8GHz WLAN Ant.9	Yes	Yes	Yes	Yes
11.	WCDMA + 5.2/5.8GHz WLAN Ant.9	Yes	Yes	Yes	Yes
12.	LTE + 5.2/5.8GHz WLAN Ant.9	Yes	Yes	Yes	Yes
13.	GSM Voice + Bluetooth	Yes	Yes		Yes
14.	GPRS/EDGE + Bluetooth	Yes	Yes	Yes	Yes
15.	WCDMA + Bluetooth	Yes	Yes	Yes	Yes
16.	LTE + Bluetooth	Yes	Yes	Yes	Yes
17.	GSM Voice + WLAN2.4GHz MIMO	Yes	Yes		Yes
18.	GPRS/EDGE + WLAN2.4GHz MIMO	Yes	Yes	Yes	Yes
19.	WCDMA + WLAN2.4GHz MIMO	Yes	Yes	Yes	Yes
20.	LTE + WLAN2.4GHz MIMO	Yes	Yes	Yes	Yes
21.	GSM Voice + 5.3/5.5GHz WLAN MIMO	Yes	Yes		Yes
22.	GPRS/EDGE + 5.3/5.5GHz WLAN MIMO	Yes	Yes		Yes
23.	WCDMA + 5.3/5.5GHz WLAN MIMO	Yes	Yes		Yes
24.	LTE + 5.3/5.5GHz WLAN MIMO	Yes	Yes		Yes
25.	GSM Voice + 5.2/5.8GHz WLAN MIMO	Yes	Yes		Yes
26.	GPRS/EDGE + 5.2/5.8GHz WLAN MIMO	Yes	Yes	Yes	Yes
27.	WCDMA + 5.2/5.8GHz WLAN MIMO	Yes	Yes	Yes	Yes
28.	LTE + 5.2/5.8GHz WLAN MIMO	Yes	Yes	Yes	Yes
29.	GSM Voice + WLAN2.4GHz Ant.8 + 5.3/5.5GHz WLAN Ant.10	Yes	Yes		Yes
30.	GPRS/EDGE + WLAN2.4GHz Ant.8 + 5.3/5.5GHz WLAN Ant.10	Yes	Yes		Yes
31.	WCDMA + WLAN2.4GHz Ant.8 + 5.3/5.5GHz WLAN Ant.10	Yes	Yes		Yes
32.	LTE + WLAN2.4GHz Ant.8 + 5.3/5.5GHz WLAN Ant.10	Yes	Yes		Yes
33.	GSM Voice + WLAN2.4GHz Ant.8 + 5.2/5.8GHz WLAN Ant.10	Yes	Yes		Yes
34.	GPRS/EDGE + WLAN2.4GHz Ant.8 + 5.2/5.8GHz WLAN Ant.10	Yes	Yes	Yes	Yes
35.	WCDMA + WLAN2.4GHz Ant.8 + 5.2/5.8GHz WLAN Ant.10	Yes	Yes	Yes	Yes
36.	LTE + WLAN2.4GHz Ant.8 + 5.2/5.8GHz WLAN Ant.10	Yes	Yes	Yes	Yes
37.	GSM Voice + 5.3/5.5GHz WLAN Ant.9 + Bluetooth	Yes	Yes		Yes
38.	GPRS/EDGE +5.3/5.5GHz WLAN Ant.9 + Bluetooth	Yes	Yes		Yes
39.	WCDMA + 5.3/5.5GHz WLAN Ant.9 + Bluetooth	Yes	Yes		Yes
40.	LTE + 5.3/5.5GHz WLAN Ant.9 + Bluetooth	Yes	Yes		Yes
41.	GSM Voice + 5.2/5.8GHz WLAN Ant.9+ Bluetooth	Yes	Yes		Yes
42.	GPRS/EDGE + 5.2/5.8GHz WLAN Ant.9+ Bluetooth	Yes	Yes	Yes	Yes
43.	WCDMA + 5.2/5.8GHz WLAN Ant.9+ Bluetooth	Yes	Yes	Yes	Yes
44.	LTE + 5.2/5.8GHz WLAN Ant.9+ Bluetooth	Yes	Yes	Yes	Yes
45.	5.3/5.5GHz WLAN Ant.9 + Bluetooth	Yes	Yes		Yes
46.	5.2/5.8GHz WLAN Ant.9 + Bluetooth	Yes	Yes	Yes	Yes
47.	GSM Voice + 5.3/5.5GHz MIMO+ Bluetooth	Yes	Yes		Yes
48.	GPRS/EDGE + 5.3/5.5GHz MIMO+ Bluetooth	Yes	Yes		Yes
49.	WCDMA + 5.3/5.5GHz MIMO+ Bluetooth	Yes	Yes		Yes
50.	LTE + 5.3/5.5GHz MIMO+ Bluetooth	Yes	Yes		Yes
51.	GSM Voice + 5.2/5.8GHz MIMO+ Bluetooth	Yes	Yes		Yes
52.	GPRS/EDGE + 5.2/5.8GHz MIMO+ Bluetooth	Yes	Yes	Yes	Yes
53.	WCDMA + 5.2/5.8GHz MIMO+ Bluetooth	Yes	Yes	Yes	Yes
54.	LTE + 5.2/5.8GHz MIMO+ Bluetooth	Yes	Yes	Yes	Yes
55.	EN-DC(LTE + 5G NR)+ WLAN2.4GHz Ant.8	Yes	Yes	Yes	Yes
56.	EN-DC(LTE + 5G NR)+ 5.3/5.5GHz WLAN Ant.9	Yes	Yes		Yes
57.	EN-DC(LTE + 5G NR)+ 5.2/5.8GHz WLAN Ant.9	Yes	Yes	Yes	Yes
58.	EN-DC(LTE + 5G NR)+ Bluetooth	Yes	Yes	Yes	Yes
59.	EN-DC(LTE + 5G NR)+ WLAN2.4GHz MIMO	Yes	Yes	Yes	Yes
60.	EN-DC(LTE + 5G NR) + 5.3/5.5GHz MIMO	Yes	Yes		Yes
61.	EN-DC(LTE + 5G NR) + 5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes
62.	EN-DC(LTE + 5G NR) + 5.3/5.5GHz MIMO+ Bluetooth	Yes	Yes		Yes

63.	EN-DC(LTE + 5G NR) + 5.2/5.8GHz MIMO+ Bluetooth	Yes	Yes	Yes	Yes
64.	EN-DC(LTE + 5G NR + WLAN2.4GHz Ant.8 + 5.3/5.5GHz WLAN Ant.10	Yes	Yes	Yes	Yes
65.	EN-DC(LTE + 5G NR + WLAN2.4GHz Ant.8 + 5.2/5.8GHz WLAN Ant.10	Yes	Yes	Yes	Yes
66.	EN-DC(LTE + 5G NR)+ 5.3/5.5GHz WLAN Ant.9 + Bluetooth	Yes	Yes		Yes
67.	EN-DC(LTE + 5G NR)+ 5.2/5.8GHz WLAN Ant.9+ Bluetooth	Yes	Yes	Yes	Yes

General Note:

1. This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP) and LTE supports VoLTE function.
2. EUT will choose each GSM, WCDMA and LTE according to the network signal condition; therefore, they will not operate simultaneously at any moment.
3. This device 2.4GHz WLAN/ 5.8GHz WLAN support hotspot operation, and 5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.2GHz / 5.5GHz supports WLAN Direct (GC only).
4. WWAN UAT antenna and WWAN LAT antenna can't transmit simultaneously.
5. The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
6. 2.4GHz WLAN and Bluetooth share the same antenna, and cannot transmit simultaneously.
7. All licensed modes share the same antenna part and cannot transmit simultaneously.
8. According to the EUT character, WLAN 5GHz and Bluetooth can transmit simultaneously.
9. 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.
10. The Scaled SAR summation is calculated based on the same configuration and test position.
11. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
    i) Scalar SAR summation < 1.6W/kg.
    ii) SPLSR = (SAR1 + SAR2)^1.5 / (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 ≤ 0.04, simultaneously transmission SAR measurement is not necessary.
    iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

16.1 Head Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	5	6	8	1+2+5	1+3	1+4+6	1+6+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_Ant 1	Right Cheek	0.416	0.316	0.353	0.341	0.102	0.099	0.327	0.83	0.77	0.86	0.84
		Right Tilted	0.360	0.277	0.331	0.238	0.159	0.099	0.187	0.80	0.69	0.70	0.65
		Left Cheek	0.694	0.501	0.490	0.168	0.122	0.099	0.137	1.32	1.18	0.96	0.93
		Left Tilted	0.622	0.579	0.559	0.189	0.143	0.099	0.112	1.34	1.18	0.91	0.83
	GSM1900_Ant 6	Right Cheek	1.147	0.316	0.353	0.341	0.102	0.099	0.327	1.57	1.50	1.59	1.57
		Right Tilted	0.244	0.277	0.331	0.238	0.159	0.099	0.187	0.68	0.58	0.58	0.53
		Left Cheek	0.291	0.501	0.490	0.168	0.122	0.099	0.137	0.91	0.78	0.56	0.53
		Left Tilted	0.079	0.579	0.559	0.189	0.143	0.099	0.112	0.80	0.64	0.37	0.29
WCDMA	WCDMA II_Ant 6	Right Cheek	1.013	0.316	0.353	0.341	0.102	0.099	0.327	1.43	1.37	1.45	1.44
		Right Tilted	0.225	0.277	0.331	0.238	0.159	0.099	0.187	0.66	0.56	0.56	0.51
		Left Cheek	0.277	0.501	0.490	0.168	0.122	0.099	0.137	0.90	0.77	0.54	0.51
		Left Tilted	0.072	0.579	0.559	0.189	0.143	0.099	0.112	0.79	0.63	0.36	0.28
	WCDMA IV_Ant 6	Right Cheek	1.047	0.316	0.353	0.341	0.102	0.099	0.327	1.47	1.40	1.49	1.47
		Right Tilted	0.254	0.277	0.331	0.238	0.159	0.099	0.187	0.69	0.59	0.59	0.54
		Left Cheek	0.291	0.501	0.490	0.168	0.122	0.099	0.137	0.91	0.78	0.56	0.53
		Left Tilted	0.099	0.579	0.559	0.189	0.143	0.099	0.112	0.82	0.66	0.39	0.31
	WCDMA V_Ant 1	Right Cheek	0.439	0.316	0.353	0.341	0.102	0.099	0.327	0.86	0.79	0.88	0.87
		Right Tilted	0.408	0.277	0.331	0.238	0.159	0.099	0.187	0.84	0.74	0.75	0.69
		Left Cheek	0.730	0.501	0.490	0.168	0.122	0.099	0.137	1.35	1.22	1.00	0.97
		Left Tilted	0.122	0.579	0.559	0.189	0.143	0.099	0.112	0.84	0.68	0.41	0.33
LTE	LTE Band 5_Ant 1	Right Cheek	0.344	0.316	0.353	0.341	0.102	0.099	0.327	0.76	0.70	0.78	0.77
		Right Tilted	0.310	0.277	0.331	0.238	0.159	0.099	0.187	0.75	0.64	0.65	0.60
		Left Cheek	0.598	0.501	0.490	0.168	0.122	0.099	0.137	1.22	1.09	0.87	0.83
		Left Tilted	0.533	0.579	0.559	0.189	0.143	0.099	0.112	1.26	1.09	0.82	0.74
	LTE Band 12_Ant 1	Right Cheek	0.219	0.316	0.353	0.341	0.102	0.099	0.327	0.64	0.57	0.66	0.65
		Right Tilted	0.205	0.277	0.331	0.238	0.159	0.099	0.187	0.64	0.54	0.54	0.49
		Left Cheek	0.487	0.501	0.490	0.168	0.122	0.099	0.137	1.11	0.98	0.75	0.72
		Left Tilted	0.459	0.579	0.559	0.189	0.143	0.099	0.112	1.18	1.02	0.75	0.67
	LTE Band 13_Ant 1	Right Cheek	0.271	0.316	0.353	0.341	0.102	0.099	0.327	0.69	0.62	0.71	0.70
		Right Tilted	0.259	0.277	0.331	0.238	0.159	0.099	0.187	0.70	0.59	0.60	0.55
		Left Cheek	0.560	0.501	0.490	0.168	0.122	0.099	0.137	1.18	1.05	0.83	0.80
		Left Tilted	0.541	0.579	0.559	0.189	0.143	0.099	0.112	1.26	1.10	0.83	0.75
	LTE Band 71_Ant 1	Right Cheek	0.291	0.316	0.353	0.341	0.102	0.099	0.327	0.71	0.64	0.73	0.72
		Right Tilted	0.235	0.277	0.331	0.238	0.159	0.099	0.187	0.67	0.57	0.57	0.52
		Left Cheek	0.489	0.501	0.490	0.168	0.122	0.099	0.137	1.11	0.98	0.76	0.73
		Left Tilted	0.447	0.579	0.559	0.189	0.143	0.099	0.112	1.17	1.01	0.74	0.66
	LTE Band 2_Ant 6	Right Cheek	0.796	0.316	0.353	0.341	0.102	0.099	0.327	1.21	1.15	1.24	1.22
		Right Tilted	0.163	0.277	0.331	0.238	0.159	0.099	0.187	0.60	0.49	0.50	0.45
		Left Cheek	0.243	0.501	0.490	0.168	0.122	0.099	0.137	0.87	0.73	0.51	0.48
		Left Tilted	0.061	0.579	0.559	0.189	0.143	0.099	0.112	0.78	0.62	0.35	0.27
	LTE Band 66_Ant 6	Right Cheek	0.972	0.316	0.353	0.341	0.102	0.099	0.327	1.39	1.33	1.41	1.40
		Right Tilted	0.228	0.277	0.331	0.238	0.159	0.099	0.187	0.66	0.56	0.57	0.51
		Left Cheek	0.312	0.501	0.490	0.168	0.122	0.099	0.137	0.94	0.80	0.58	0.55
		Left Tilted	0.082	0.579	0.559	0.189	0.143	0.099	0.112	0.80	0.64	0.37	0.29
	LTE Band 7_Ant 6	Right Cheek	0.967	0.316	0.353	0.341	0.102	0.099	0.327	1.39	1.32	1.41	1.39
		Right Tilted	0.236	0.277	0.331	0.238	0.159	0.099	0.187	0.67	0.57	0.57	0.52
		Left Cheek	0.332	0.501	0.490	0.168	0.122	0.099	0.137	0.96	0.82	0.60	0.57

		Left Tilted	0.089	0.579	0.559	0.189	0.143	0.099	0.112	0.81	0.65	0.38	0.30
	LTE Band 41_Ant 6	Right Cheek	1.149	0.316	0.353	0.341	0.102	0.099	0.327	**1.57**	1.50	**1.59**	1.58
		Right Tilted	0.300	0.277	0.331	0.238	0.159	0.099	0.187	0.74	0.63	0.64	0.59
		Left Cheek	0.364	0.501	0.490	0.168	0.122	0.099	0.137	0.99	0.85	0.63	0.60
		Left Tilted	0.121	0.579	0.559	0.189	0.143	0.099	0.112	0.84	0.68	0.41	0.33

WWAN Band		Exposure Position	1	2	3	4	5	6	8	1+2+5	1+3	1+4+6	1+6+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_Ant 0	Right Cheek	0.088	0.316	0.353	0.341	0.102	0.099	0.327	0.51	0.44	0.53	0.51
		Right Tilted	0.067	0.277	0.331	0.238	0.159	0.099	0.187	0.50	0.40	0.40	0.35
		Left Cheek	0.116	0.501	0.490	0.168	0.122	0.099	0.137	0.74	0.61	0.38	0.35
		Left Tilted	0.075	0.579	0.559	0.189	0.143	0.099	0.112	0.80	0.63	0.36	0.29
	GSM1900_Ant 2	Right Cheek	0.001	0.316	0.353	0.341	0.102	0.099	0.327	0.42	0.35	0.44	0.43
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.187	0.44	0.33	0.34	0.29
		Left Cheek	0.010	0.501	0.490	0.168	0.122	0.099	0.137	0.63	0.50	0.28	0.25
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.112	0.72	0.56	0.29	0.21
WCDMA	WCDMA II_Ant 2	Right Cheek	0.129	0.316	0.353	0.341	0.102	0.099	0.327	0.55	0.48	0.57	0.56
		Right Tilted	0.080	0.277	0.331	0.238	0.159	0.099	0.187	0.52	0.41	0.42	0.37
		Left Cheek	0.097	0.501	0.490	0.168	0.122	0.099	0.137	0.72	0.59	0.36	0.33
		Left Tilted	0.106	0.579	0.559	0.189	0.143	0.099	0.112	0.83	0.67	0.39	0.32
	WCDMA IV_Ant 2	Right Cheek	0.052	0.316	0.353	0.341	0.102	0.099	0.327	0.47	0.41	0.49	0.48
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.187	0.44	0.33	0.34	0.29
		Left Cheek	0.050	0.501	0.490	0.168	0.122	0.099	0.137	0.67	0.54	0.32	0.29
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.112	0.72	0.56	0.29	0.21
	WCDMA V_Ant 0	Right Cheek	0.077	0.316	0.353	0.341	0.102	0.099	0.327	0.50	0.43	0.52	0.50
		Right Tilted	0.063	0.277	0.331	0.238	0.159	0.099	0.187	0.50	0.39	0.40	0.35
		Left Cheek	0.125	0.501	0.490	0.168	0.122	0.099	0.137	0.75	0.62	0.39	0.36
		Left Tilted	0.055	0.579	0.559	0.189	0.143	0.099	0.112	0.78	0.61	0.34	0.27
LTE	LTE Band 5_Ant 0	Right Cheek	0.056	0.316	0.353	0.341	0.102	0.099	0.327	0.47	0.41	0.50	0.48
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.187	0.44	0.33	0.34	0.29
		Left Cheek	0.092	0.501	0.490	0.168	0.122	0.099	0.137	0.72	0.58	0.36	0.33
		Left Tilted	0.057	0.579	0.559	0.189	0.143	0.099	0.112	0.78	0.62	0.35	0.27
	LTE Band 12_Ant 0	Right Cheek	0.001	0.316	0.353	0.341	0.102	0.099	0.327	0.42	0.35	0.44	0.43
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.187	0.44	0.33	0.34	0.29
		Left Cheek	0.048	0.501	0.490	0.168	0.122	0.099	0.137	0.67	0.54	0.32	0.28
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.112	0.72	0.56	0.29	0.21
	LTE Band 13_Ant 0	Right Cheek	0.074	0.316	0.353	0.341	0.102	0.099	0.327	0.49	0.43	0.51	0.50
		Right Tilted	0.055	0.277	0.331	0.238	0.159	0.099	0.187	0.49	0.39	0.39	0.34
		Left Cheek	0.076	0.501	0.490	0.168	0.122	0.099	0.137	0.70	0.57	0.34	0.31
		Left Tilted	0.072	0.579	0.559	0.189	0.143	0.099	0.112	0.79	0.63	0.36	0.28
	LTE Band 71_Ant 0	Right Cheek	0.001	0.316	0.353	0.341	0.102	0.099	0.327	0.42	0.35	0.44	0.43
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.187	0.44	0.33	0.34	0.29
		Left Cheek	0.057	0.501	0.490	0.168	0.122	0.099	0.137	0.68	0.55	0.32	0.29
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.112	0.72	0.56	0.29	0.21
	LTE Band 2_Ant 2	Right Cheek	0.079	0.316	0.353	0.341	0.102	0.099	0.327	0.50	0.43	0.52	0.51
		Right Tilted	0.068	0.277	0.331	0.238	0.159	0.099	0.187	0.50	0.40	0.41	0.35
		Left Cheek	0.070	0.501	0.490	0.168	0.122	0.099	0.137	0.69	0.56	0.34	0.31
		Left Tilted	0.073	0.579	0.559	0.189	0.143	0.099	0.112	0.80	0.63	0.36	0.28
	LTE Band 66_Ant 2	Right Cheek	0.069	0.316	0.353	0.341	0.102	0.099	0.327	0.49	0.42	0.51	0.50
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.187	0.44	0.33	0.34	0.29
		Left Cheek	0.001	0.501	0.490	0.168	0.122	0.099	0.137	0.62	0.49	0.27	0.24
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.112	0.72	0.56	0.29	0.21
	LTE Band 7_Ant 2	Right Cheek	0.133	0.316	0.353	0.341	0.102	0.099	0.327	0.55	0.49	0.57	0.56
		Right Tilted	0.066	0.277	0.331	0.238	0.159	0.099	0.187	0.50	0.40	0.40	0.35
		Left Cheek	0.121	0.501	0.490	0.168	0.122	0.099	0.137	0.74	0.61	0.39	0.36
		Left Tilted	0.117	0.579	0.559	0.189	0.143	0.099	0.112	0.84	0.68	0.41	0.33
	LTE Band 41_Ant 2	Right Cheek	0.076	0.316	0.353	0.341	0.102	0.099	0.327	0.49	0.43	0.52	0.50
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.187	0.44	0.33	0.34	0.29
		Left Cheek	0.058	0.501	0.490	0.168	0.122	0.099	0.137	0.68	0.55	0.33	0.29
		Left Tilted	0.069	0.579	0.559	0.189	0.143	0.099	0.112	0.79	0.63	0.36	0.28

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n2	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 5_Ant 0	Right Cheek	0.056	0.316	0.353	0.341	0.102	0.099	0.550	0.327	1.02	0.96	1.05	1.03
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.55	0.44	0.45	0.40
		Left Cheek	0.092	0.501	0.490	0.168	0.122	0.099	0.153	0.137	0.87	0.74	0.51	0.48
		Left Tilted	0.057	0.579	0.559	0.189	0.143	0.099	0.044	0.112	0.82	0.66	0.39	0.31
	LTE Band 5_Ant 0	Right Cheek	0.056	0.316	0.353	0.341	0.102	0.099	0.109	0.327	0.58	0.52	0.61	0.59
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.050	0.187	0.49	0.38	0.39	0.34
		Left Cheek	0.092	0.501	0.490	0.168	0.122	0.099	0.079	0.137	0.79	0.66	0.44	0.41
		Left Tilted	0.057	0.579	0.559	0.189	0.143	0.099	0.077	0.112	0.86	0.69	0.42	0.35
	LTE Band 5_Ant 1	Right Cheek	0.344	0.316	0.353	0.341	0.102	0.099	0.550	0.327	1.31	1.25	1.33	1.32
		Right Tilted	0.310	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.86	0.75	0.76	0.71
		Left Cheek	0.598	0.501	0.490	0.168	0.122	0.099	0.153	0.137	1.37	1.24	1.02	0.99
		Left Tilted	0.533	0.579	0.559	0.189	0.143	0.099	0.044	0.112	1.30	1.14	0.87	0.79
	LTE Band 5_Ant 1	Right Cheek	0.344	0.316	0.353	0.341	0.102	0.099	0.109	0.327	0.87	0.81	0.89	0.88
		Right Tilted	0.310	0.277	0.331	0.238	0.159	0.099	0.050	0.187	0.80	0.69	0.70	0.65
		Left Cheek	0.598	0.501	0.490	0.168	0.122	0.099	0.079	0.137	1.30	1.17	0.94	0.91
		Left Tilted	0.533	0.579	0.559	0.189	0.143	0.099	0.077	0.112	1.33	1.17	0.90	0.82
	LTE Band 12_Ant 0	Right Cheek	0.001	0.316	0.353	0.341	0.102	0.099	0.550	0.327	0.97	0.90	0.99	0.98
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.55	0.44	0.45	0.40
		Left Cheek	0.048	0.501	0.490	0.168	0.122	0.099	0.153	0.137	0.82	0.69	0.47	0.44
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.044	0.112	0.77	0.60	0.33	0.26
	LTE Band 12_Ant 0	Right Cheek	0.001	0.316	0.353	0.341	0.102	0.099	0.109	0.327	0.53	0.46	0.55	0.54
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.050	0.187	0.49	0.38	0.39	0.34
		Left Cheek	0.048	0.501	0.490	0.168	0.122	0.099	0.079	0.137	0.75	0.62	0.39	0.36
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.077	0.112	0.80	0.64	0.37	0.29
	LTE Band 12_Ant 1	Right Cheek	0.219	0.316	0.353	0.341	0.102	0.099	0.550	0.327	1.19	1.12	1.21	1.20
		Right Tilted	0.205	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.75	0.65	0.65	0.60
		Left Cheek	0.487	0.501	0.490	0.168	0.122	0.099	0.153	0.137	1.26	1.13	0.91	0.88
		Left Tilted	0.459	0.579	0.559	0.189	0.143	0.099	0.044	0.112	1.23	1.06	0.79	0.71
	LTE Band 12_Ant 1	Right Cheek	0.219	0.316	0.353	0.341	0.102	0.099	0.109	0.327	0.75	0.68	0.77	0.75
		Right Tilted	0.205	0.277	0.331	0.238	0.159	0.099	0.050	0.187	0.69	0.59	0.59	0.54
		Left Cheek	0.487	0.501	0.490	0.168	0.122	0.099	0.079	0.137	1.19	1.06	0.83	0.80
		Left Tilted	0.459	0.579	0.559	0.189	0.143	0.099	0.077	0.112	1.26	1.10	0.82	0.75
	LTE Band 66_Ant 2	Right Cheek	0.069	0.316	0.353	0.341	0.102	0.099	0.550	0.327	1.04	0.97	1.06	1.05
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.55	0.44	0.45	0.40
		Left Cheek	0.001	0.501	0.490	0.168	0.122	0.099	0.153	0.137	0.78	0.64	0.42	0.39
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.044	0.112	0.77	0.60	0.33	0.26
	LTE Band 66_Ant 6	Right Cheek	0.482	0.316	0.353	0.341	0.102	0.099	0.109	0.327	1.01	0.94	1.03	1.02
		Right Tilted	0.228	0.277	0.331	0.238	0.159	0.099	0.050	0.187	0.71	0.61	0.62	0.56
		Left Cheek	0.312	0.501	0.490	0.168	0.122	0.099	0.079	0.137	1.01	0.88	0.66	0.63
		Left Tilted	0.082	0.579	0.559	0.189	0.143	0.099	0.077	0.112	0.88	0.72	0.45	0.37

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n5	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Right Cheek	0.079	0.316	0.353	0.341	0.102	0.099	0.073	0.327	0.57	0.51	0.59	0.58
		Right Tilted	0.068	0.277	0.331	0.238	0.159	0.099	0.048	0.187	0.55	0.45	0.45	0.40
		Left Cheek	0.070	0.501	0.490	0.168	0.122	0.099	0.100	0.137	0.79	0.66	0.44	0.41
		Left Tilted	0.073	0.579	0.559	0.189	0.143	0.099	0.039	0.112	0.83	0.67	0.40	0.32
	LTE Band 2_Ant 2	Right Cheek	0.079	0.316	0.353	0.341	0.102	0.099	0.233	0.327	0.73	0.67	0.75	0.74
		Right Tilted	0.068	0.277	0.331	0.238	0.159	0.099	0.252	0.187	0.76	0.65	0.66	0.61
		Left Cheek	0.070	0.501	0.490	0.168	0.122	0.099	0.457	0.137	1.15	1.02	0.79	0.76
		Left Tilted	0.073	0.579	0.559	0.189	0.143	0.099	0.352	0.112	1.15	0.98	0.71	0.64
	LTE Band 66_Ant 2	Right Cheek	0.069	0.316	0.353	0.341	0.102	0.099	0.073	0.327	0.56	0.50	0.58	0.57
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.048	0.187	0.49	0.38	0.39	0.34
		Left Cheek	0.001	0.501	0.490	0.168	0.122	0.099	0.100	0.137	0.72	0.59	0.37	0.34
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.039	0.112	0.76	0.60	0.33	0.25
	LTE Band 66_Ant 2	Right Cheek	0.069	0.316	0.353	0.341	0.102	0.099	0.376	0.327	0.86	0.80	0.89	0.87
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.407	0.187	0.84	0.74	0.75	0.69
		Left Cheek	0.001	0.501	0.490	0.168	0.122	0.099	0.411	0.137	1.04	0.90	0.68	0.65
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.567	0.112	1.29	1.13	0.86	0.78
	LTE Band 7_Ant 2	Right Cheek	0.133	0.316	0.353	0.341	0.102	0.099	0.073	0.327	0.62	0.56	0.65	0.63
		Right Tilted	0.066	0.277	0.331	0.238	0.159	0.099	0.048	0.187	0.55	0.45	0.45	0.40
		Left Cheek	0.121	0.501	0.490	0.168	0.122	0.099	0.100	0.137	0.84	0.71	0.49	0.46
		Left Tilted	0.117	0.579	0.559	0.189	0.143	0.099	0.039	0.112	0.88	0.72	0.44	0.37
	LTE Band 7_Ant 2	Right Cheek	0.133	0.316	0.353	0.341	0.102	0.099	0.376	0.327	0.93	0.86	0.95	0.94
		Right Tilted	0.066	0.277	0.331	0.238	0.159	0.099	0.407	0.187	0.91	0.80	0.81	0.76
		Left Cheek	0.121	0.501	0.490	0.168	0.122	0.099	0.411	0.137	1.16	1.02	0.80	0.77
		Left Tilted	0.117	0.579	0.559	0.189	0.143	0.099	0.567	0.112	1.41	1.24	0.97	0.90
	LTE Band 2_Ant 6	Right Cheek	0.380	0.316	0.353	0.341	0.102	0.099	0.073	0.327	0.87	0.81	0.89	0.88
		Right Tilted	0.163	0.277	0.331	0.238	0.159	0.099	0.048	0.187	0.65	0.54	0.55	0.50
		Left Cheek	0.243	0.501	0.490	0.168	0.122	0.099	0.100	0.137	0.97	0.83	0.61	0.58
		Left Tilted	0.061	0.579	0.559	0.189	0.143	0.099	0.039	0.112	0.82	0.66	0.39	0.31
	LTE Band 2_Ant 6	Right Cheek	0.380	0.316	0.353	0.341	0.102	0.099	0.376	0.327	1.17	1.11	1.20	1.18
		Right Tilted	0.163	0.277	0.331	0.238	0.159	0.099	0.407	0.187	1.01	0.90	0.91	0.86
		Left Cheek	0.243	0.501	0.490	0.168	0.122	0.099	0.411	0.137	1.28	1.14	0.92	0.89
		Left Tilted	0.061	0.579	0.559	0.189	0.143	0.099	0.567	0.112	1.35	1.19	0.92	0.84
	LTE Band 66_Ant 6	Right Cheek	0.482	0.316	0.353	0.341	0.102	0.099	0.073	0.327	0.97	0.91	1.00	0.98
		Right Tilted	0.228	0.277	0.331	0.238	0.159	0.099	0.048	0.187	0.71	0.61	0.61	0.56
		Left Cheek	0.312	0.501	0.490	0.168	0.122	0.099	0.100	0.137	1.04	0.90	0.68	0.65
		Left Tilted	0.082	0.579	0.559	0.189	0.143	0.099	0.039	0.112	0.84	0.68	0.41	0.33
	LTE Band 66_Ant 6	Right Cheek	0.482	0.316	0.353	0.341	0.102	0.099	0.376	0.327	1.28	1.21	1.30	1.28
		Right Tilted	0.228	0.277	0.331	0.238	0.159	0.099	0.407	0.187	1.07	0.97	0.97	0.92
		Left Cheek	0.312	0.501	0.490	0.168	0.122	0.099	0.411	0.137	1.35	1.21	0.99	0.96
		Left Tilted	0.082	0.579	0.559	0.189	0.143	0.099	0.567	0.112	1.37	1.21	0.94	0.86
	LTE Band 7_Ant 6	Right Cheek	0.379	0.316	0.353	0.341	0.102	0.099	0.073	0.327	0.87	0.81	0.89	0.88
		Right Tilted	0.236	0.277	0.331	0.238	0.159	0.099	0.048	0.187	0.72	0.62	0.62	0.57
		Left Cheek	0.332	0.501	0.490	0.168	0.122	0.099	0.100	0.137	1.06	0.92	0.70	0.67
		Left Tilted	0.089	0.579	0.559	0.189	0.143	0.099	0.039	0.112	0.85	0.69	0.42	0.34
	LTE Band 7_Ant 6	Right Cheek	0.379	0.316	0.353	0.341	0.102	0.099	0.376	0.327	1.17	1.11	1.20	1.18
		Right Tilted	0.236	0.277	0.331	0.238	0.159	0.099	0.407	0.187	1.08	0.97	0.98	0.93
		Left Cheek	0.332	0.501	0.490	0.168	0.122	0.099	0.411	0.137	1.37	1.23	1.01	0.98
		Left Tilted	0.089	0.579	0.559	0.189	0.143	0.099	0.567	0.112	1.38	1.22	0.94	0.87

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n66	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Right Cheek	0.079	0.316	0.353	0.341	0.102	0.099	0.534	0.327	1.03	0.97	1.05	1.04
		Right Tilted	0.068	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.62	0.51	0.52	0.47
		Left Cheek	0.070	0.501	0.490	0.168	0.122	0.099	0.142	0.137	0.84	0.70	0.48	0.45
		Left Tilted	0.073	0.579	0.559	0.189	0.143	0.099	0.117	0.112	0.91	0.75	0.48	0.40
	LTE Band 2_Ant 6	Right Cheek	0.380	0.316	0.353	0.341	0.102	0.099	0.039	0.327	0.84	0.77	0.86	0.85
		Right Tilted	0.163	0.277	0.331	0.238	0.159	0.099	0.012	0.187	0.61	0.51	0.51	0.46
		Left Cheek	0.243	0.501	0.490	0.168	0.122	0.099	0.033	0.137	0.90	0.77	0.54	0.51
		Left Tilted	0.061	0.579	0.559	0.189	0.143	0.099	0.016	0.112	0.80	0.64	0.37	0.29
	LTE Band 5_Ant 0	Right Cheek	0.056	0.316	0.353	0.341	0.102	0.099	0.534	0.327	1.01	0.94	1.03	1.02
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.55	0.44	0.45	0.40
		Left Cheek	0.092	0.501	0.490	0.168	0.122	0.099	0.142	0.137	0.86	0.72	0.50	0.47
		Left Tilted	0.057	0.579	0.559	0.189	0.143	0.099	0.117	0.112	0.90	0.73	0.46	0.39
	LTE Band 5_Ant 0	Right Cheek	0.056	0.316	0.353	0.341	0.102	0.099	0.039	0.327	0.51	0.45	0.54	0.52
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.012	0.187	0.45	0.34	0.35	0.30
		Left Cheek	0.092	0.501	0.490	0.168	0.122	0.099	0.033	0.137	0.75	0.62	0.39	0.36
		Left Tilted	0.057	0.579	0.559	0.189	0.143	0.099	0.016	0.112	0.80	0.63	0.36	0.28
	LTE Band 5_Ant 1	Right Cheek	0.344	0.316	0.353	0.341	0.102	0.099	0.534	0.327	1.30	1.23	1.32	1.30
		Right Tilted	0.310	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.86	0.75	0.76	0.71
		Left Cheek	0.598	0.501	0.490	0.168	0.122	0.099	0.142	0.137	1.36	1.23	1.01	0.98
		Left Tilted	0.533	0.579	0.559	0.189	0.143	0.099	0.117	0.112	1.37	1.21	0.94	0.86
	LTE Band 5_Ant 1	Right Cheek	0.344	0.316	0.353	0.341	0.102	0.099	0.039	0.327	0.80	0.74	0.82	0.81
		Right Tilted	0.310	0.277	0.331	0.238	0.159	0.099	0.012	0.187	0.76	0.65	0.66	0.61
		Left Cheek	0.598	0.501	0.490	0.168	0.122	0.099	0.033	0.137	1.25	1.12	0.90	0.87
		Left Tilted	0.533	0.579	0.559	0.189	0.143	0.099	0.016	0.112	1.27	1.11	0.84	0.76
	LTE Band 13_Ant 0	Right Cheek	0.074	0.316	0.353	0.341	0.102	0.099	0.534	0.327	1.03	0.96	1.05	1.03
		Right Tilted	0.055	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.60	0.50	0.50	0.45
		Left Cheek	0.076	0.501	0.490	0.168	0.122	0.099	0.142	0.137	0.84	0.71	0.49	0.45
		Left Tilted	0.072	0.579	0.559	0.189	0.143	0.099	0.117	0.112	0.91	0.75	0.48	0.40
	LTE Band 13_Ant 0	Right Cheek	0.074	0.316	0.353	0.341	0.102	0.099	0.039	0.327	0.53	0.47	0.55	0.54
		Right Tilted	0.055	0.277	0.331	0.238	0.159	0.099	0.012	0.187	0.50	0.40	0.40	0.35
		Left Cheek	0.076	0.501	0.490	0.168	0.122	0.099	0.033	0.137	0.73	0.60	0.38	0.35
		Left Tilted	0.072	0.579	0.559	0.189	0.143	0.099	0.016	0.112	0.81	0.65	0.38	0.30
	LTE Band 13_Ant 1	Right Cheek	0.271	0.316	0.353	0.341	0.102	0.099	0.534	0.327	1.22	1.16	1.25	1.23
		Right Tilted	0.259	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.81	0.70	0.71	0.66
		Left Cheek	0.560	0.501	0.490	0.168	0.122	0.099	0.142	0.137	1.33	1.19	0.97	0.94
		Left Tilted	0.541	0.579	0.559	0.189	0.143	0.099	0.117	0.112	1.38	1.22	0.95	0.87
	LTE Band 13_Ant 1	Right Cheek	0.271	0.316	0.353	0.341	0.102	0.099	0.039	0.327	0.73	0.66	0.75	0.74
		Right Tilted	0.259	0.277	0.331	0.238	0.159	0.099	0.012	0.187	0.71	0.60	0.61	0.56
		Left Cheek	0.560	0.501	0.490	0.168	0.122	0.099	0.033	0.137	1.22	1.08	0.86	0.83
		Left Tilted	0.541	0.579	0.559	0.189	0.143	0.099	0.016	0.112	1.28	1.12	0.85	0.77
	LTE Band 7_Ant 2	Right Cheek	0.133	0.316	0.353	0.341	0.102	0.099	0.534	0.327	1.09	1.02	1.11	1.09
		Right Tilted	0.066	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.61	0.51	0.52	0.46
		Left Cheek	0.121	0.501	0.490	0.168	0.122	0.099	0.142	0.137	0.89	0.75	0.53	0.50
		Left Tilted	0.117	0.579	0.559	0.189	0.143	0.099	0.117	0.112	0.96	0.79	0.52	0.45
	LTE Band 7_Ant 6	Right Cheek	0.379	0.316	0.353	0.341	0.102	0.099	0.039	0.327	0.84	0.77	0.86	0.84
		Right Tilted	0.236	0.277	0.331	0.238	0.159	0.099	0.012	0.187	0.68	0.58	0.59	0.53
		Left Cheek	0.332	0.501	0.490	0.168	0.122	0.099	0.033	0.137	0.99	0.86	0.63	0.60
		Left Tilted	0.089	0.579	0.559	0.189	0.143	0.099	0.016	0.112	0.83	0.66	0.39	0.32
	LTE Band	Right Cheek	0.001	0.316	0.353	0.341	0.102	0.099	0.534	0.327	0.95	0.89	0.98	0.96

	71_Ant 0	Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.55	0.44	0.45	0.40
		Left Cheek	0.057	0.501	0.490	0.168	0.122	0.099	0.142	0.137	0.82	0.69	0.47	0.44
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.117	0.112	0.84	0.68	0.41	0.33
	LTE Band 71_Ant 0	Right Cheek	0.001	0.316	0.353	0.341	0.102	0.099	0.039	0.327	0.46	0.39	0.48	0.47
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.012	0.187	0.45	0.34	0.35	0.30
		Left Cheek	0.057	0.501	0.490	0.168	0.122	0.099	0.033	0.137	0.71	0.58	0.36	0.33
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.016	0.112	0.74	0.58	0.31	0.23
	LTE Band 71_Ant 1	Right Cheek	0.291	0.316	0.353	0.341	0.102	0.099	0.534	0.327	1.24	1.18	1.27	1.25
		Right Tilted	0.235	0.277	0.331	0.238	0.159	0.099	0.112	0.187	0.78	0.68	0.68	0.63
		Left Cheek	0.489	0.501	0.490	0.168	0.122	0.099	0.142	0.137	1.25	1.12	0.90	0.87
		Left Tilted	0.447	0.579	0.559	0.189	0.143	0.099	0.117	0.112	1.29	1.12	0.85	0.78
	LTE Band 71_Ant 1	Right Cheek	0.291	0.316	0.353	0.341	0.102	0.099	0.039	0.327	0.75	0.68	0.77	0.76
		Right Tilted	0.235	0.277	0.331	0.238	0.159	0.099	0.012	0.187	0.68	0.58	0.58	0.53
		Left Cheek	0.489	0.501	0.490	0.168	0.122	0.099	0.033	0.137	1.15	1.01	0.79	0.76
		Left Tilted	0.447	0.579	0.559	0.189	0.143	0.099	0.016	0.112	1.19	1.02	0.75	0.67

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n71	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Right Cheek	0.079	0.316	0.353	0.341	0.102	0.099	0.001	0.327	0.50	0.43	0.52	0.51
		Right Tilted	0.068	0.277	0.331	0.238	0.159	0.099	0.001	0.187	0.51	0.40	0.41	0.36
		Left Cheek	0.070	0.501	0.490	0.168	0.122	0.099	0.057	0.137	0.75	0.62	0.39	0.36
		Left Tilted	0.073	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.80	0.63	0.36	0.29
	LTE Band 2_Ant 2	Right Cheek	0.079	0.316	0.353	0.341	0.102	0.099	0.291	0.327	0.79	0.72	0.81	0.80
		Right Tilted	0.068	0.277	0.331	0.238	0.159	0.099	0.235	0.187	0.74	0.63	0.64	0.59
		Left Cheek	0.070	0.501	0.490	0.168	0.122	0.099	0.489	0.137	1.18	1.05	0.83	0.80
		Left Tilted	0.073	0.579	0.559	0.189	0.143	0.099	0.447	0.112	1.24	1.08	0.81	0.73
	LTE Band 2_Ant 6	Right Cheek	0.380	0.316	0.353	0.341	0.102	0.099	0.001	0.327	0.80	0.73	0.82	0.81
		Right Tilted	0.163	0.277	0.331	0.238	0.159	0.099	0.001	0.187	0.60	0.50	0.50	0.45
		Left Cheek	0.243	0.501	0.490	0.168	0.122	0.099	0.057	0.137	0.92	0.79	0.57	0.54
		Left Tilted	0.061	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.78	0.62	0.35	0.27
	LTE Band 2_Ant 6	Right Cheek	0.380	0.316	0.353	0.341	0.102	0.099	0.291	0.327	1.09	1.02	1.11	1.10
		Right Tilted	0.163	0.277	0.331	0.238	0.159	0.099	0.235	0.187	0.83	0.73	0.74	0.68
		Left Cheek	0.243	0.501	0.490	0.168	0.122	0.099	0.489	0.137	1.36	1.22	1.00	0.97
		Left Tilted	0.061	0.579	0.559	0.189	0.143	0.099	0.447	0.112	1.23	1.07	0.80	0.72
	LTE Band 7_Ant 2	Right Cheek	0.133	0.316	0.353	0.341	0.102	0.099	0.001	0.327	0.55	0.49	0.57	0.56
		Right Tilted	0.066	0.277	0.331	0.238	0.159	0.099	0.001	0.187	0.50	0.40	0.40	0.35
		Left Cheek	0.121	0.501	0.490	0.168	0.122	0.099	0.057	0.137	0.80	0.67	0.45	0.41
		Left Tilted	0.117	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.84	0.68	0.41	0.33
	LTE Band 7_Ant 2	Right Cheek	0.133	0.316	0.353	0.341	0.102	0.099	0.291	0.327	0.84	0.78	0.86	0.85
		Right Tilted	0.066	0.277	0.331	0.238	0.159	0.099	0.235	0.187	0.74	0.63	0.64	0.59
		Left Cheek	0.121	0.501	0.490	0.168	0.122	0.099	0.489	0.137	1.23	1.10	0.88	0.85
		Left Tilted	0.117	0.579	0.559	0.189	0.143	0.099	0.447	0.112	1.29	1.12	0.85	0.78
	LTE Band 7_Ant 6	Right Cheek	0.379	0.316	0.353	0.341	0.102	0.099	0.001	0.327	0.80	0.73	0.82	0.81
		Right Tilted	0.236	0.277	0.331	0.238	0.159	0.099	0.001	0.187	0.67	0.57	0.57	0.52
		Left Cheek	0.332	0.501	0.490	0.168	0.122	0.099	0.057	0.137	1.01	0.88	0.66	0.63
		Left Tilted	0.089	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.81	0.65	0.38	0.30
	LTE Band 7_Ant 6	Right Cheek	0.379	0.316	0.353	0.341	0.102	0.099	0.291	0.327	1.09	1.02	1.11	1.10
		Right Tilted	0.236	0.277	0.331	0.238	0.159	0.099	0.235	0.187	0.91	0.80	0.81	0.76
		Left Cheek	0.332	0.501	0.490	0.168	0.122	0.099	0.489	0.137	1.44	1.31	1.09	1.06
		Left Tilted	0.089	0.579	0.559	0.189	0.143	0.099	0.447	0.112	1.26	1.10	0.82	0.75
	LTE Band 66_Ant 2	Right Cheek	0.069	0.316	0.353	0.341	0.102	0.099	0.001	0.327	0.49	0.42	0.51	0.50
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.001	0.187	0.44	0.33	0.34	0.29
		Left Cheek	0.001	0.501	0.490	0.168	0.122	0.099	0.057	0.137	0.68	0.55	0.33	0.29
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.72	0.56	0.29	0.21
	LTE Band	Right Cheek	0.069	0.316	0.353	0.341	0.102	0.099	0.291	0.327	0.78	0.71	0.80	0.79

	66_Ant 2	Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.235	0.187	0.67	0.57	0.57	0.52
		Left Cheek	0.001	0.501	0.490	0.168	0.122	0.099	0.489	0.137	1.11	0.98	0.76	0.73
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.447	0.112	1.17	1.01	0.74	0.66
	LTE Band 66_Ant 6	Right Cheek	0.482	0.316	0.353	0.341	0.102	0.099	0.001	0.327	0.90	0.84	0.92	0.91
		Right Tilted	0.228	0.277	0.331	0.238	0.159	0.099	0.001	0.187	0.67	0.56	0.57	0.52
		Left Cheek	0.312	0.501	0.490	0.168	0.122	0.099	0.057	0.137	0.99	0.86	0.64	0.61
		Left Tilted	0.082	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.81	0.64	0.37	0.29
	LTE Band 66_Ant 6	Right Cheek	0.482	0.316	0.353	0.341	0.102	0.099	0.291	0.327	1.19	1.13	1.21	1.20
		Right Tilted	0.228	0.277	0.331	0.238	0.159	0.099	0.235	0.187	0.90	0.79	0.80	0.75
		Left Cheek	0.312	0.501	0.490	0.168	0.122	0.099	0.489	0.137	1.42	1.29	1.07	1.04
		Left Tilted	0.082	0.579	0.559	0.189	0.143	0.099	0.447	0.112	1.25	1.09	0.82	0.74

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n41/n38	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Right Cheek	0.079	0.316	0.353	0.341	0.102	0.099	0.523	0.327	1.02	0.96	1.04	1.03
		Right Tilted	0.068	0.277	0.331	0.238	0.159	0.099	0.119	0.187	0.62	0.52	0.52	0.47
		Left Cheek	0.070	0.501	0.490	0.168	0.122	0.099	0.158	0.137	0.85	0.72	0.50	0.46
		Left Tilted	0.073	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.80	0.63	0.36	0.29
	LTE Band 2_Ant 6	Right Cheek	0.380	0.316	0.353	0.341	0.102	0.099	0.171	0.327	0.97	0.90	0.99	0.98
		Right Tilted	0.163	0.277	0.331	0.238	0.159	0.099	0.059	0.187	0.66	0.55	0.56	0.51
		Left Cheek	0.243	0.501	0.490	0.168	0.122	0.099	0.117	0.137	0.98	0.85	0.63	0.60
		Left Tilted	0.061	0.579	0.559	0.189	0.143	0.099	0.115	0.112	0.90	0.74	0.46	0.39
	LTE Band 5_Ant 0	Right Cheek	0.056	0.316	0.353	0.341	0.102	0.099	0.523	0.327	1.00	0.93	1.02	1.01
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.119	0.187	0.56	0.45	0.46	0.41
		Left Cheek	0.092	0.501	0.490	0.168	0.122	0.099	0.158	0.137	0.87	0.74	0.52	0.49
		Left Tilted	0.057	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.78	0.62	0.35	0.27
	LTE Band 5_Ant 0	Right Cheek	0.056	0.316	0.353	0.341	0.102	0.099	0.171	0.327	0.65	0.58	0.67	0.65
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.059	0.187	0.50	0.39	0.40	0.35
		Left Cheek	0.092	0.501	0.490	0.168	0.122	0.099	0.117	0.137	0.83	0.70	0.48	0.45
		Left Tilted	0.057	0.579	0.559	0.189	0.143	0.099	0.115	0.112	0.89	0.73	0.46	0.38
	LTE Band 5_Ant 1	Right Cheek	0.344	0.316	0.353	0.341	0.102	0.099	0.523	0.327	1.29	1.22	1.31	1.29
		Right Tilted	0.310	0.277	0.331	0.238	0.159	0.099	0.119	0.187	0.87	0.76	0.77	0.72
		Left Cheek	0.598	0.501	0.490	0.168	0.122	0.099	0.158	0.137	1.38	1.25	1.02	0.99
		Left Tilted	0.533	0.579	0.559	0.189	0.143	0.099	0.001	0.112	1.26	1.09	0.82	0.75
	LTE Band 5_Ant 1	Right Cheek	0.344	0.316	0.353	0.341	0.102	0.099	0.171	0.327	0.93	0.87	0.96	0.94
		Right Tilted	0.310	0.277	0.331	0.238	0.159	0.099	0.059	0.187	0.81	0.70	0.71	0.66
		Left Cheek	0.598	0.501	0.490	0.168	0.122	0.099	0.117	0.137	1.34	1.21	0.98	0.95
		Left Tilted	0.533	0.579	0.559	0.189	0.143	0.099	0.115	0.112	1.37	1.21	0.94	0.86
	LTE Band 66_Ant 2	Right Cheek	0.069	0.316	0.353	0.341	0.102	0.099	0.523	0.327	1.01	0.95	1.03	1.02
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.119	0.187	0.56	0.45	0.46	0.41
		Left Cheek	0.001	0.501	0.490	0.168	0.122	0.099	0.158	0.137	0.78	0.65	0.43	0.40
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.72	0.56	0.29	0.21
	LTE Band 66_Ant 6	Right Cheek	0.482	0.316	0.353	0.341	0.102	0.099	0.171	0.327	1.07	1.01	1.09	1.08
		Right Tilted	0.228	0.277	0.331	0.238	0.159	0.099	0.059	0.187	0.72	0.62	0.62	0.57
		Left Cheek	0.312	0.501	0.490	0.168	0.122	0.099	0.117	0.137	1.05	0.92	0.70	0.67
		Left Tilted	0.082	0.579	0.559	0.189	0.143	0.099	0.115	0.112	0.92	0.76	0.49	0.41
	LTE Band 71_Ant 0	Right Cheek	0.001	0.316	0.353	0.341	0.102	0.099	0.523	0.327	0.94	0.88	0.96	0.95
		Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.119	0.187	0.56	0.45	0.46	0.41
		Left Cheek	0.057	0.501	0.490	0.168	0.122	0.099	0.158	0.137	0.84	0.71	0.48	0.45
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.001	0.112	0.72	0.56	0.29	0.21
	LTE	Right Cheek	0.001	0.316	0.353	0.341	0.102	0.099	0.171	0.327	0.59	0.53	0.61	0.60

	Band 71_Ant 0	Right Tilted	0.001	0.277	0.331	0.238	0.159	0.099	0.059	0.187	0.50	0.39	0.40	0.35
		Left Cheek	0.057	0.501	0.490	0.168	0.122	0.099	0.117	0.137	0.80	0.66	0.44	0.41
		Left Tilted	0.001	0.579	0.559	0.189	0.143	0.099	0.115	0.112	0.84	0.68	0.40	0.33
	LTE Band 71_Ant 1	Right Cheek	0.291	0.316	0.353	0.341	0.102	0.099	0.523	0.327	1.23	1.17	1.25	1.24
		Right Tilted	0.235	0.277	0.331	0.238	0.159	0.099	0.119	0.187	0.79	0.69	0.69	0.64
		Left Cheek	0.489	0.501	0.490	0.168	0.122	0.099	0.158	0.137	1.27	1.14	0.91	0.88
		Left Tilted	0.447	0.579	0.559	0.189	0.143	0.099	0.001	0.112	1.17	1.01	0.74	0.66
	LTE Band 71_Ant 1	Right Cheek	0.291	0.316	0.353	0.341	0.102	0.099	0.171	0.327	0.88	0.82	0.90	0.89
		Right Tilted	0.235	0.277	0.331	0.238	0.159	0.099	0.059	0.187	0.73	0.63	0.63	0.58
		Left Cheek	0.489	0.501	0.490	0.168	0.122	0.099	0.117	0.137	1.23	1.10	0.87	0.84
		Left Tilted	0.447	0.579	0.559	0.189	0.143	0.099	0.115	0.112	1.28	1.12	0.85	0.77

16.2 Hotspot Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	5	6	8	1+2+5	1+3	1+4+6	1+6+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_Ant 1	Front	0.230	0.165	0.022	0.094	0.064	0.029	0.107	0.46	0.25	0.35	0.37
		Back	0.302	0.264	0.360	0.346	0.353	0.029	0.341	0.92	0.66	0.68	0.67
		Left side	0.096	0.086	0.003	0.396	0.315	0.029	0.319	0.50	0.10	0.52	0.44
		Right side	0.174	0.027	0.035	0.065	0.203	0.029	0.091	0.40	0.21	0.27	0.29
		Top side	0.249	0.224	0.032	0.159	0.279	0.029	0.183	0.75	0.28	0.44	0.46
		Bottom side						0.029		0.00	0.00	0.03	0.03
	GSM1900_Ant 6	Front	0.171	0.165	0.022	0.094	0.064	0.029	0.107	0.40	0.19	0.29	0.31
		Back	0.123	0.264	0.360	0.346	0.353	0.029	0.341	0.74	0.48	0.50	0.49
		Left side	0.288	0.086	0.003	0.396	0.315	0.029	0.319	0.69	0.29	0.71	0.64
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.091	0.23	0.04	0.10	0.12
		Top side	0.073	0.224	0.032	0.159	0.279	0.029	0.183	0.58	0.11	0.26	0.29
		Bottom side						0.029		0.00	0.00	0.03	0.03
WCDMA	WCDMA II_Ant 6	Front	0.375	0.165	0.022	0.094	0.064	0.029	0.107	0.60	0.40	0.50	0.51
		Back	0.289	0.264	0.360	0.346	0.353	0.029	0.341	0.91	0.65	0.66	0.66
		Left side	0.628	0.086	0.003	0.396	0.315	0.029	0.319	1.03	0.63	1.05	0.98
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.091	0.23	0.04	0.10	0.12
		Top side	0.120	0.224	0.032	0.159	0.279	0.029	0.183	0.62	0.15	0.31	0.33
		Bottom side						0.029		0.00	0.00	0.03	0.03
	WCDMA IV_Ant 6	Front	0.305	0.165	0.022	0.094	0.064	0.029	0.107	0.53	0.33	0.43	0.44
		Back	0.276	0.264	0.360	0.346	0.353	0.029	0.341	0.89	0.64	0.65	0.65
		Left side	0.527	0.086	0.003	0.396	0.315	0.029	0.319	0.93	0.53	0.95	0.88
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.091	0.23	0.04	0.10	0.12
		Top side	0.138	0.224	0.032	0.159	0.279	0.029	0.183	0.64	0.17	0.33	0.35
		Bottom side						0.029		0.00	0.00	0.03	0.03
	WCDMA V_Ant 1	Front	0.246	0.165	0.022	0.094	0.064	0.029	0.107	0.48	0.27	0.37	0.38
		Back	0.300	0.264	0.360	0.346	0.353	0.029	0.341	0.92	0.66	0.68	0.67
		Left side	0.065	0.086	0.003	0.396	0.315	0.029	0.319	0.47	0.07	0.49	0.41
		Right side	0.145	0.027	0.035	0.065	0.203	0.029	0.091	0.38	0.18	0.24	0.27
		Top side	0.218	0.224	0.032	0.159	0.279	0.029	0.183	0.72	0.25	0.41	0.43
		Bottom side						0.029		0.00	0.00	0.03	0.03
LTE	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.094	0.064	0.029	0.107	0.41	0.20	0.30	0.32
		Back	0.169	0.264	0.360	0.346	0.353	0.029	0.341	0.79	0.53	0.54	0.54
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.319	0.40	0.00	0.43	0.35
		Right side	0.125	0.027	0.035	0.065	0.203	0.029	0.091	0.36	0.16	0.22	0.25
		Top side	0.153	0.224	0.032	0.159	0.279	0.029	0.183	0.66	0.19	0.34	0.37

		Bottom side						0.029		0.00	0.00	0.03	0.03
	LTE Band 12_Ant 1	Front	0.132	0.165	0.022	0.094	0.064	0.029	0.107	0.36	0.15	0.26	0.27
		Back	0.117	0.264	0.360	0.346	0.353	0.029	0.341	0.73	0.48	0.49	0.49
		Left side	0.094	0.086	0.003	0.396	0.315	0.029	0.319	0.50	0.10	0.52	0.44
		Right side	0.262	0.027	0.035	0.065	0.203	0.029	0.091	0.49	0.30	0.36	0.38
		Top side	0.156	0.224	0.032	0.159	0.279	0.029	0.183	0.66	0.19	0.34	0.37
		Bottom side						0.029		0.00	0.00	0.03	0.03
	LTE Band 13_Ant 1	Front	0.164	0.165	0.022	0.094	0.064	0.029	0.107	0.39	0.19	0.29	0.30
		Back	0.227	0.264	0.360	0.346	0.353	0.029	0.341	0.84	0.59	0.60	0.60
		Left side	0.070	0.086	0.003	0.396	0.315	0.029	0.319	0.47	0.07	0.50	0.42
		Right side	0.150	0.027	0.035	0.065	0.203	0.029	0.091	0.38	0.19	0.24	0.27
		Top side	0.160	0.224	0.032	0.159	0.279	0.029	0.183	0.66	0.19	0.35	0.37
		Bottom side						0.029		0.00	0.00	0.03	0.03
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.094	0.064	0.029	0.107	0.35	0.15	0.25	0.26
		Back	0.138	0.264	0.360	0.346	0.353	0.029	0.341	0.76	0.50	0.51	0.51
		Left side	0.100	0.086	0.003	0.396	0.315	0.029	0.319	0.50	0.10	0.53	0.45
		Right side	0.263	0.027	0.035	0.065	0.203	0.029	0.091	0.49	0.30	0.36	0.38
		Top side	0.133	0.224	0.032	0.159	0.279	0.029	0.183	0.64	0.17	0.32	0.35
		Bottom side						0.029		0.00	0.00	0.03	0.03
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.094	0.064	0.029	0.107	0.51	0.31	0.41	0.42
		Back	0.243	0.264	0.360	0.346	0.353	0.029	0.341	0.86	0.60	0.62	0.61
		Left side	0.469	0.086	0.003	0.396	0.315	0.029	0.319	0.87	0.47	0.89	0.82
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.091	0.23	0.04	0.10	0.12
		Top side	0.122	0.224	0.032	0.159	0.279	0.029	0.183	0.63	0.15	0.31	0.33
		Bottom side						0.029		0.00	0.00	0.03	0.03
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.094	0.064	0.029	0.107	0.64	0.43	0.53	0.54
		Back	0.340	0.264	0.360	0.346	0.353	0.029	0.341	0.96	0.70	0.72	0.71
		Left side	0.671	0.086	0.003	0.396	0.315	0.029	0.319	1.07	0.67	1.10	1.02
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.091	0.23	0.04	0.10	0.12
		Top side	0.202	0.224	0.032	0.159	0.279	0.029	0.183	0.71	0.23	0.39	0.41
		Bottom side						0.029		0.00	0.00	0.03	0.03
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.094	0.064	0.029	0.107	0.62	0.41	0.51	0.53
		Back	0.407	0.264	0.360	0.346	0.353	0.029	0.341	1.02	0.77	0.78	0.78
		Left side	0.795	0.086	0.003	0.396	0.315	0.029	0.319	1.20	0.80	1.22	1.14
		Right side	0.035	0.027	0.035	0.065	0.203	0.029	0.091	0.27	0.07	0.13	0.16
		Top side	0.181	0.224	0.032	0.159	0.279	0.029	0.183	0.68	0.21	0.37	0.39
		Bottom side						0.029		0.00	0.00	0.03	0.03
	LTE Band 41_Ant 6	Front	0.191	0.165	0.022	0.094	0.064	0.029	0.107	0.42	0.21	0.31	0.33
		Back	0.321	0.264	0.360	0.346	0.353	0.029	0.341	0.94	0.68	0.70	0.69
		Left side	0.417	0.086	0.003	0.396	0.315	0.029	0.319	0.82	0.42	0.84	0.77
		Right side	0.018	0.027	0.035	0.065	0.203	0.029	0.091	0.25	0.05	0.11	0.14
		Top side	0.108	0.224	0.032	0.159	0.279	0.029	0.183	0.61	0.14	0.30	0.32
		Bottom side						0.029		0.00	0.00	0.03	0.03

WWAN Band		Exposure Position	1	2	3	4	5	6	8	1+2+5	1+3	1+4+6	1+6+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_Ant 0	Front	0.283	0.165	0.022	0.094	0.064	0.029	0.107	0.51	0.31	0.41	0.42
		Back	0.332	0.264	0.360	0.346	0.353	0.029	0.341	0.95	0.69	0.71	0.70
		Left side	0.132	0.086	0.003	0.396	0.315	0.029	0.319	0.53	0.14	0.56	0.48
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.091	0.23	0.04	0.10	0.12
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.271					0.029		0.27	0.27	0.30	0.30
	GSM1900_Ant 2	Front	0.197	0.165	0.022	0.094	0.064	0.029	0.107	0.43	0.22	0.32	0.33
		Back	0.215	0.264	0.360	0.346	0.353	0.029	0.341	0.83	0.58	0.59	0.59
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.319	0.40	0.00	0.43	0.35
		Right side	0.171	0.027	0.035	0.065	0.203	0.029	0.091	0.40	0.21	0.27	0.29
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.503					0.029		0.50	0.50	0.53	0.53
WCDMA	WCDMA II_Ant 2	Front	0.459	0.165	0.022	0.094	0.064	0.029	0.107	0.69	0.48	0.58	0.60
		Back	0.518	0.264	0.360	0.346	0.353	0.029	0.341	1.14	0.88	0.89	0.89
		Left side	0.105	0.086	0.003	0.396	0.315	0.029	0.319	0.51	0.11	0.53	0.45
		Right side	0.492	0.027	0.035	0.065	0.203	0.029	0.091	0.72	0.53	0.59	0.61
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	1.086					0.029		1.09	1.09	1.12	1.12
	WCDMA IV_Ant 2	Front	0.186	0.165	0.022	0.094	0.064	0.029	0.107	0.42	0.21	0.31	0.32
		Back	0.224	0.264	0.360	0.346	0.353	0.029	0.341	0.84	0.58	0.60	0.59
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.319	0.40	0.00	0.43	0.35
		Right side	0.190	0.027	0.035	0.065	0.203	0.029	0.091	0.42	0.23	0.28	0.31
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.430					0.029		0.43	0.43	0.46	0.46
	WCDMA V_Ant 0	Front	0.256	0.165	0.022	0.094	0.064	0.029	0.107	0.49	0.28	0.38	0.39
		Back	0.287	0.264	0.360	0.346	0.353	0.029	0.341	0.90	0.65	0.66	0.66
		Left side	0.133	0.086	0.003	0.396	0.315	0.029	0.319	0.53	0.14	0.56	0.48
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.091	0.23	0.04	0.10	0.12
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.229					0.029		0.23	0.23	0.26	0.26
LTE	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.094	0.064	0.029	0.107	0.42	0.22	0.32	0.33
		Back	0.218	0.264	0.360	0.346	0.353	0.029	0.341	0.84	0.58	0.59	0.59
		Left side	0.102	0.086	0.003	0.396	0.315	0.029	0.319	0.50	0.11	0.53	0.45
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.091	0.23	0.04	0.10	0.12
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.188					0.029		0.19	0.19	0.22	0.22
	LTE Band	Front	0.088	0.165	0.022	0.094	0.064	0.029	0.107	0.32	0.11	0.21	0.22

	12_Ant 0	Back	0.100	0.264	0.360	0.346	0.353	0.029	0.341	0.72	0.46	0.48	0.47
		Left side	0.092	0.086	0.003	0.396	0.315	0.029	0.319	0.49	0.10	0.52	0.44
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.091	0.23	0.04	0.10	0.12
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.090					0.029		0.09	0.09	0.12	0.12
	LTE Band 13_Ant 0	Front	0.210	0.165	0.022	0.094	0.064	0.029	0.107	0.44	0.23	0.33	0.35
		Back	0.245	0.264	0.360	0.346	0.353	0.029	0.341	0.86	0.61	0.62	0.62
		Left side	0.149	0.086	0.003	0.396	0.315	0.029	0.319	0.55	0.15	0.57	0.50
		Right side	0.048	0.027	0.035	0.065	0.203	0.029	0.091	0.28	0.08	0.14	0.17
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.190					0.029		0.19	0.19	0.22	0.22
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.094	0.064	0.029	0.107	0.31	0.11	0.21	0.22
		Back	0.092	0.264	0.360	0.346	0.353	0.029	0.341	0.71	0.45	0.47	0.46
		Left side	0.103	0.086	0.003	0.396	0.315	0.029	0.319	0.50	0.11	0.53	0.45
		Right side	0.060	0.027	0.035	0.065	0.203	0.029	0.091	0.29	0.10	0.15	0.18
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.091					0.029		0.09	0.09	0.12	0.12
	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.094	0.064	0.029	0.107	0.61	0.41	0.51	0.52
		Back	0.503	0.264	0.360	0.346	0.353	0.029	0.341	1.12	0.86	0.88	0.87
		Left side	0.096	0.086	0.003	0.396	0.315	0.029	0.319	0.50	0.10	0.52	0.44
		Right side	0.387	0.027	0.035	0.065	0.203	0.029	0.091	0.62	0.42	0.48	0.51
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.895					0.029		0.90	0.90	0.92	0.92
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.094	0.064	0.029	0.107	0.48	0.28	0.38	0.39
		Back	0.324	0.264	0.360	0.346	0.353	0.029	0.341	0.94	0.68	0.70	0.69
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.319	0.40	0.00	0.43	0.35
		Right side	0.269	0.027	0.035	0.065	0.203	0.029	0.091	0.50	0.30	0.36	0.39
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.480					0.029		0.48	0.48	0.51	0.51
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.094	0.064	0.029	0.107	0.83	0.62	0.72	0.73
		Back	0.757	0.264	0.360	0.346	0.353	0.029	0.341	1.37	1.12	1.13	1.13
		Left side	0.105	0.086	0.003	0.396	0.315	0.029	0.319	0.51	0.11	0.53	0.45
		Right side	0.369	0.027	0.035	0.065	0.203	0.029	0.091	0.60	0.40	0.46	0.49
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.844					0.029		0.84	0.84	0.87	0.87
	LTE Band 41_Ant 2	Front	0.340	0.165	0.022	0.094	0.064	0.029	0.107	0.57	0.36	0.46	0.48
		Back	0.427	0.264	0.360	0.346	0.353	0.029	0.341	1.04	0.79	0.80	0.80
		Left side	0.062	0.086	0.003	0.396	0.315	0.029	0.319	0.46	0.07	0.49	0.41
		Right side	0.216	0.027	0.035	0.065	0.203	0.029	0.091	0.45	0.25	0.31	0.34
		Top side		0.224	0.032	0.159	0.279	0.029	0.183	0.50	0.03	0.19	0.21
		Bottom side	0.394					0.029		0.39	0.39	0.42	0.42

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n2	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.094	0.064	0.029	0.280	0.107	0.70	0.50	0.60	0.61
		Back	0.218	0.264	0.360	0.346	0.353	0.029	0.309	0.341	1.14	0.89	0.90	0.90
		Left side	0.102	0.086	0.003	0.396	0.315	0.029	0.435	0.319	0.94	0.54	0.96	0.89
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.012	0.091	0.24	0.05	0.11	0.13
		Top side		0.224	0.032	0.159	0.279	0.029	0.022	0.183	0.53	0.05	0.21	0.23
		Bottom side	0.188					0.029			0.19	0.19	0.22	0.22
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.094	0.064	0.029	0.331	0.107	0.76	0.55	0.65	0.66
		Back	0.218	0.264	0.360	0.346	0.353	0.029	0.404	0.341	1.24	0.98	1.00	0.99
		Left side	0.102	0.086	0.003	0.396	0.315	0.029	0.081	0.319	0.58	0.19	0.61	0.53
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.348	0.091	0.58	0.38	0.44	0.47
		Top side		0.224	0.032	0.159	0.279	0.029	0.556	0.183	1.06	0.59	0.74	0.77
		Bottom side	0.188					0.029			0.19	0.19	0.22	0.22
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.094	0.064	0.029	0.280	0.107	0.69	0.48	0.58	0.60
		Back	0.169	0.264	0.360	0.346	0.353	0.029	0.309	0.341	1.10	0.84	0.85	0.85
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.435	0.319	0.84	0.44	0.86	0.78
		Right side	0.125	0.027	0.035	0.065	0.203	0.029	0.012	0.091	0.37	0.17	0.23	0.26
		Top side	0.153	0.224	0.032	0.159	0.279	0.029	0.022	0.183	0.68	0.21	0.36	0.39
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.094	0.064	0.029	0.331	0.107	0.74	0.53	0.64	0.65
		Back	0.169	0.264	0.360	0.346	0.353	0.029	0.404	0.341	1.19	0.93	0.95	0.94
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.081	0.319	0.48	0.09	0.51	0.43
		Right side	0.125	0.027	0.035	0.065	0.203	0.029	0.348	0.091	0.70	0.51	0.57	0.59
		Top side	0.153	0.224	0.032	0.159	0.279	0.029	0.556	0.183	1.21	0.74	0.90	0.92
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 12_Ant 0	Front	0.088	0.165	0.022	0.094	0.064	0.029	0.280	0.107	0.60	0.39	0.49	0.50
		Back	0.100	0.264	0.360	0.346	0.353	0.029	0.309	0.341	1.03	0.77	0.78	0.78
		Left side	0.092	0.086	0.003	0.396	0.315	0.029	0.435	0.319	0.93	0.53	0.95	0.88
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.012	0.091	0.24	0.05	0.11	0.13
		Top side		0.224	0.032	0.159	0.279	0.029	0.022	0.183	0.53	0.05	0.21	0.23
		Bottom side	0.090					0.029			0.09	0.09	0.12	0.12
	LTE Band 12_Ant 0	Front	0.088	0.165	0.022	0.094	0.064	0.029	0.331	0.107	0.65	0.44	0.54	0.56
		Back	0.100	0.264	0.360	0.346	0.353	0.029	0.404	0.341	1.12	0.86	0.88	0.87
		Left side	0.092	0.086	0.003	0.396	0.315	0.029	0.081	0.319	0.57	0.18	0.60	0.52
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.348	0.091	0.58	0.38	0.44	0.47
		Top side		0.224	0.032	0.159	0.279	0.029	0.556	0.183	1.06	0.59	0.74	0.77
		Bottom side	0.090					0.029			0.09	0.09	0.12	0.12
	LTE Band	Front	0.132	0.165	0.022	0.094	0.064	0.029	0.280	0.107	0.64	0.43	0.54	0.55

	12_Ant 1	Back	0.117	0.264	0.360	0.346	0.353	0.029	0.309	0.341	1.04	0.79	0.80	0.80
		Left side	0.094	0.086	0.003	0.396	0.315	0.029	0.435	0.319	0.93	0.53	0.95	0.88
		Right side	0.262	0.027	0.035	0.065	0.203	0.029	0.012	0.091	0.50	0.31	0.37	0.39
		Top side	0.156	0.224	0.032	0.159	0.279	0.029	0.022	0.183	0.68	0.21	0.37	0.39
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 12_Ant 1	Front	0.132	0.165	0.022	0.094	0.064	0.029	0.331	0.107	0.69	0.49	0.59	0.60
		Back	0.117	0.264	0.360	0.346	0.353	0.029	0.404	0.341	1.14	0.88	0.90	0.89
		Left side	0.094	0.086	0.003	0.396	0.315	0.029	0.081	0.319	0.58	0.18	0.60	0.52
		Right side	0.262	0.027	0.035	0.065	0.203	0.029	0.348	0.091	0.84	0.65	0.70	0.73
		Top side	0.156	0.224	0.032	0.159	0.279	0.029	0.556	0.183	1.22	0.74	0.90	0.92
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.094	0.064	0.029	0.280	0.107	0.76	0.56	0.66	0.67
		Back	0.324	0.264	0.360	0.346	0.353	0.029	0.309	0.341	1.25	0.99	1.01	1.00
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.435	0.319	0.84	0.44	0.86	0.78
		Right side	0.269	0.027	0.035	0.065	0.203	0.029	0.012	0.091	0.51	0.32	0.38	0.40
		Top side		0.224	0.032	0.159	0.279	0.029	0.022	0.183	0.53	0.05	0.21	0.23
		Bottom side	0.480					0.029			0.48	0.48	0.51	0.51
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.094	0.064	0.029	0.331	0.107	0.97	0.76	0.86	0.88
		Back	0.340	0.264	0.360	0.346	0.353	0.029	0.404	0.341	1.36	1.10	1.12	1.11
		Left side	0.671	0.086	0.003	0.396	0.315	0.029	0.081	0.319	1.15	0.76	1.18	1.10
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.348	0.091	0.58	0.38	0.44	0.47
		Top side	0.202	0.224	0.032	0.159	0.279	0.029	0.556	0.183	1.26	0.79	0.95	0.97
		Bottom side						0.029			0.00	0.00	0.03	0.03

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n5	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.094	0.064	0.029	0.181	0.107	0.79	0.59	0.69	0.70
		Back	0.503	0.264	0.360	0.346	0.353	0.029	0.201	0.341	1.32	1.06	1.08	1.07
		Left side	0.096	0.086	0.003	0.396	0.315	0.029	0.105	0.319	0.60	0.20	0.63	0.55
		Right side	0.387	0.027	0.035	0.065	0.203	0.029	0.032	0.091	0.65	0.45	0.51	0.54
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.423					0.029	0.195		0.62	0.62	0.65	0.65
	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.094	0.064	0.029	0.165	0.107	0.78	0.57	0.67	0.69
		Back	0.503	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.39	1.13	1.14	1.14
		Left side	0.096	0.086	0.003	0.396	0.315	0.029	0.041	0.319	0.54	0.14	0.56	0.49
		Right side	0.387	0.027	0.035	0.065	0.203	0.029	0.132	0.091	0.75	0.55	0.61	0.64
		Top side		0.224	0.032	0.159	0.279	0.029	0.156	0.183	0.66	0.19	0.34	0.37
		Bottom side	0.423					0.029			0.42	0.42	0.45	0.45
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.094	0.064	0.029	0.181	0.107	0.66	0.46	0.56	0.57
		Back	0.324	0.264	0.360	0.346	0.353	0.029	0.201	0.341	1.14	0.89	0.90	0.90
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.105	0.319	0.51	0.11	0.53	0.45
		Right side	0.269	0.027	0.035	0.065	0.203	0.029	0.032	0.091	0.53	0.34	0.40	0.42
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.480					0.029	0.195		0.68	0.68	0.70	0.70
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.094	0.064	0.029	0.165	0.107	0.65	0.44	0.54	0.56
		Back	0.324	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.21	0.95	0.97	0.96
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.041	0.319	0.44	0.05	0.47	0.39
		Right side	0.269	0.027	0.035	0.065	0.203	0.029	0.132	0.091	0.63	0.44	0.50	0.52
		Top side		0.224	0.032	0.159	0.279	0.029	0.156	0.183	0.66	0.19	0.34	0.37
		Bottom side	0.480					0.029			0.48	0.48	0.51	0.51
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.094	0.064	0.029	0.181	0.107	1.01	0.80	0.90	0.91
		Back	0.415	0.264	0.360	0.346	0.353	0.029	0.201	0.341	1.23	0.98	0.99	0.99
		Left side	0.105	0.086	0.003	0.396	0.315	0.029	0.105	0.319	0.61	0.21	0.64	0.56
		Right side	0.369	0.027	0.035	0.065	0.203	0.029	0.032	0.091	0.63	0.44	0.50	0.52
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.468					0.029	0.195		0.66	0.66	0.69	0.69
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.094	0.064	0.029	0.165	0.107	0.99	0.78	0.88	0.90
		Back	0.415	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.30	1.04	1.06	1.05
		Left side	0.105	0.086	0.003	0.396	0.315	0.029	0.041	0.319	0.55	0.15	0.57	0.49
		Right side	0.369	0.027	0.035	0.065	0.203	0.029	0.132	0.091	0.73	0.54	0.60	0.62
		Top side		0.224	0.032	0.159	0.279	0.029	0.156	0.183	0.66	0.19	0.34	0.37
		Bottom side	0.468					0.029			0.47	0.47	0.50	0.50
	LTE Band	Front	0.284	0.165	0.022	0.094	0.064	0.029	0.181	0.107	0.69	0.49	0.59	0.60

	2_Ant 6	Back	0.243	0.264	0.360	0.346	0.353	0.029	0.201	0.341	1.06	0.80	0.82	0.81
		Left side	0.469	0.086	0.003	0.396	0.315	0.029	0.105	0.319	0.98	0.58	1.00	0.92
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.032	0.091	0.26	0.07	0.13	0.15
		Top side	0.122	0.224	0.032	0.159	0.279	0.029		0.183	0.63	0.15	0.31	0.33
		Bottom side						0.029	0.195		0.20	0.20	0.22	0.22
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.094	0.064	0.029	0.165	0.107	0.68	0.47	0.57	0.59
		Back	0.243	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.13	0.87	0.88	0.88
		Left side	0.469	0.086	0.003	0.396	0.315	0.029	0.041	0.319	0.91	0.51	0.94	0.86
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.132	0.091	0.36	0.17	0.23	0.25
		Top side	0.122	0.224	0.032	0.159	0.279	0.029	0.156	0.183	0.78	0.31	0.47	0.49
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.094	0.064	0.029	0.181	0.107	0.82	0.61	0.71	0.73
		Back	0.340	0.264	0.360	0.346	0.353	0.029	0.201	0.341	1.16	0.90	0.92	0.91
		Left side	0.598	0.086	0.003	0.396	0.315	0.029	0.105	0.319	1.10	0.71	1.13	1.05
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.032	0.091	0.26	0.07	0.13	0.15
		Top side	0.202	0.224	0.032	0.159	0.279	0.029		0.183	0.71	0.23	0.39	0.41
		Bottom side						0.029	0.195		0.20	0.20	0.22	0.22
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.094	0.064	0.029	0.165	0.107	0.80	0.60	0.70	0.71
		Back	0.340	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.22	0.97	0.98	0.98
		Left side	0.598	0.086	0.003	0.396	0.315	0.029	0.041	0.319	1.04	0.64	1.06	0.99
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.132	0.091	0.36	0.17	0.23	0.25
		Top side	0.202	0.224	0.032	0.159	0.279	0.029	0.156	0.183	0.86	0.39	0.55	0.57
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.094	0.064	0.029	0.181	0.107	0.80	0.59	0.70	0.71
		Back	0.407	0.264	0.360	0.346	0.353	0.029	0.201	0.341	1.23	0.97	0.98	0.98
		Left side	0.505	0.086	0.003	0.396	0.315	0.029	0.105	0.319	1.01	0.61	1.04	0.96
		Right side	0.035	0.027	0.035	0.065	0.203	0.029	0.032	0.091	0.30	0.10	0.16	0.19
		Top side	0.181	0.224	0.032	0.159	0.279	0.029		0.183	0.68	0.21	0.37	0.39
		Bottom side						0.029	0.195		0.20	0.20	0.22	0.22
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.094	0.064	0.029	0.165	0.107	0.79	0.58	0.68	0.69
		Back	0.407	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.29	1.03	1.05	1.04
		Left side	0.505	0.086	0.003	0.396	0.315	0.029	0.041	0.319	0.95	0.55	0.97	0.89
		Right side	0.035	0.027	0.035	0.065	0.203	0.029	0.132	0.091	0.40	0.20	0.26	0.29
		Top side	0.181	0.224	0.032	0.159	0.279	0.029	0.156	0.183	0.84	0.37	0.53	0.55
		Bottom side						0.029			0.00	0.00	0.03	0.03

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n66	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.094	0.064	0.029	0.218	0.107	0.83	0.62	0.73	0.74
		Back	0.503	0.264	0.360	0.346	0.353	0.029	0.449	0.341	1.57	1.31	1.33	1.32
		Left side	0.096	0.086	0.003	0.396	0.315	0.029	0.381	0.319	0.88	0.48	0.90	0.83
		Right side	0.387	0.027	0.035	0.065	0.203	0.029	0.005	0.091	0.62	0.43	0.49	0.51
		Top side		0.224	0.032	0.159	0.279	0.029	0.151	0.183	0.65	0.18	0.34	0.36
		Bottom side	0.423					0.029			0.42	0.42	0.45	0.45
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.094	0.064	0.029	0.230	0.107	0.74	0.54	0.64	0.65
		Back	0.243	0.264	0.360	0.346	0.353	0.029	0.255	0.341	1.12	0.86	0.87	0.87
		Left side	0.469	0.086	0.003	0.396	0.315	0.029	0.077	0.319	0.95	0.55	0.97	0.89
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.312	0.091	0.54	0.35	0.41	0.43
		Top side	0.122	0.224	0.032	0.159	0.279	0.029		0.183	0.63	0.15	0.31	0.33
		Bottom side						0.029	0.539		0.54	0.54	0.57	0.57
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.094	0.064	0.029	0.218	0.107	0.64	0.44	0.54	0.55
		Back	0.218	0.264	0.360	0.346	0.353	0.029	0.449	0.341	1.28	1.03	1.04	1.04
		Left side	0.102	0.086	0.003	0.396	0.315	0.029	0.381	0.319	0.88	0.49	0.91	0.83
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.005	0.091	0.24	0.04	0.10	0.13
		Top side		0.224	0.032	0.159	0.279	0.029	0.151	0.183	0.65	0.18	0.34	0.36
		Bottom side	0.188					0.029			0.19	0.19	0.22	0.22
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.094	0.064	0.029	0.230	0.107	0.65	0.45	0.55	0.56
		Back	0.218	0.264	0.360	0.346	0.353	0.029	0.255	0.341	1.09	0.83	0.85	0.84
		Left side	0.102	0.086	0.003	0.396	0.315	0.029	0.077	0.319	0.58	0.18	0.60	0.53
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.312	0.091	0.54	0.35	0.41	0.43
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.188					0.029	0.539		0.73	0.73	0.76	0.76
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.094	0.064	0.029	0.218	0.107	0.63	0.42	0.52	0.54
		Back	0.169	0.264	0.360	0.346	0.353	0.029	0.449	0.341	1.24	0.98	0.99	0.99
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.381	0.319	0.78	0.39	0.81	0.73
		Right side	0.125	0.027	0.035	0.065	0.203	0.029	0.005	0.091	0.36	0.17	0.22	0.25
		Top side	0.153	0.224	0.032	0.159	0.279	0.029	0.151	0.183	0.81	0.34	0.49	0.52
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.094	0.064	0.029	0.230	0.107	0.64	0.43	0.53	0.55
		Back	0.169	0.264	0.360	0.346	0.353	0.029	0.255	0.341	1.04	0.78	0.80	0.79
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.077	0.319	0.48	0.08	0.50	0.43
		Right side	0.125	0.027	0.035	0.065	0.203	0.029	0.312	0.091	0.67	0.47	0.53	0.56
		Top side	0.153	0.224	0.032	0.159	0.279	0.029		0.183	0.66	0.19	0.34	0.37
		Bottom side						0.029	0.539		0.54	0.54	0.57	0.57
	LTE Band	Front	0.210	0.165	0.022	0.094	0.064	0.029	0.218	0.107	0.66	0.45	0.55	0.56

	13_Ant 0	Back	0.245	0.264	0.360	0.346	0.353	0.029	0.449	0.341	1.31	1.05	1.07	1.06
		Left side	0.149	0.086	0.003	0.396	0.315	0.029	0.381	0.319	0.93	0.53	0.96	0.88
		Right side	0.048	0.027	0.035	0.065	0.203	0.029	0.005	0.091	0.28	0.09	0.15	0.17
		Top side		0.224	0.032	0.159	0.279	0.029	0.151	0.183	0.65	0.18	0.34	0.36
		Bottom side	0.190					0.029			0.19	0.19	0.22	0.22
	LTE Band 13_Ant 0	Front	0.210	0.165	0.022	0.094	0.064	0.029	0.230	0.107	0.67	0.46	0.56	0.58
		Back	0.245	0.264	0.360	0.346	0.353	0.029	0.255	0.341	1.12	0.86	0.88	0.87
		Left side	0.149	0.086	0.003	0.396	0.315	0.029	0.077	0.319	0.63	0.23	0.65	0.57
		Right side	0.048	0.027	0.035	0.065	0.203	0.029	0.312	0.091	0.59	0.40	0.45	0.48
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.190					0.029	0.539		0.73	0.73	0.76	0.76
	LTE Band 13_Ant 1	Front	0.164	0.165	0.022	0.094	0.064	0.029	0.218	0.107	0.61	0.40	0.51	0.52
		Back	0.227	0.264	0.360	0.346	0.353	0.029	0.449	0.341	1.29	1.04	1.05	1.05
		Left side	0.070	0.086	0.003	0.396	0.315	0.029	0.381	0.319	0.85	0.45	0.88	0.80
		Right side	0.150	0.027	0.035	0.065	0.203	0.029	0.005	0.091	0.39	0.19	0.25	0.28
		Top side	0.160	0.224	0.032	0.159	0.279	0.029	0.151	0.183	0.81	0.34	0.50	0.52
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 13_Ant 1	Front	0.164	0.165	0.022	0.094	0.064	0.029	0.230	0.107	0.62	0.42	0.52	0.53
		Back	0.227	0.264	0.360	0.346	0.353	0.029	0.255	0.341	1.10	0.84	0.86	0.85
		Left side	0.070	0.086	0.003	0.396	0.315	0.029	0.077	0.319	0.55	0.15	0.57	0.50
		Right side	0.150	0.027	0.035	0.065	0.203	0.029	0.312	0.091	0.69	0.50	0.56	0.58
		Top side	0.160	0.224	0.032	0.159	0.279	0.029		0.183	0.66	0.19	0.35	0.37
		Bottom side						0.029	0.539		0.54	0.54	0.57	0.57
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.094	0.064	0.029	0.218	0.107	1.04	0.84	0.94	0.95
		Back	0.415	0.264	0.360	0.346	0.353	0.029	0.449	0.341	1.48	1.22	1.24	1.23
		Left side	0.105	0.086	0.003	0.396	0.315	0.029	0.381	0.319	0.89	0.49	0.91	0.83
		Right side	0.369	0.027	0.035	0.065	0.203	0.029	0.005	0.091	0.60	0.41	0.47	0.49
		Top side		0.224	0.032	0.159	0.279	0.029	0.151	0.183	0.65	0.18	0.34	0.36
		Bottom side	0.468					0.029			0.47	0.47	0.50	0.50
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.094	0.064	0.029	0.230	0.107	0.85	0.64	0.74	0.76
		Back	0.407	0.264	0.360	0.346	0.353	0.029	0.255	0.341	1.28	1.02	1.04	1.03
		Left side	0.505	0.086	0.003	0.396	0.315	0.029	0.077	0.319	0.98	0.59	1.01	0.93
		Right side	0.035	0.027	0.035	0.065	0.203	0.029	0.312	0.091	0.58	0.38	0.44	0.47
		Top side	0.181	0.224	0.032	0.159	0.279	0.029		0.183	0.68	0.21	0.37	0.39
		Bottom side						0.029	0.539		0.54	0.54	0.57	0.57
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.094	0.064	0.029	0.218	0.107	0.53	0.32	0.42	0.44
		Back	0.092	0.264	0.360	0.346	0.353	0.029	0.449	0.341	1.16	0.90	0.92	0.91
		Left side	0.103	0.086	0.003	0.396	0.315	0.029	0.381	0.319	0.89	0.49	0.91	0.83
		Right side	0.060	0.027	0.035	0.065	0.203	0.029	0.005	0.091	0.30	0.10	0.16	0.19
		Top side		0.224	0.032	0.159	0.279	0.029	0.151	0.183	0.65	0.18	0.34	0.36
		Bottom side	0.091					0.029			0.09	0.09	0.12	0.12
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.094	0.064	0.029	0.230	0.107	0.54	0.34	0.44	0.45
		Back	0.092	0.264	0.360	0.346	0.353	0.029	0.255	0.341	0.96	0.71	0.72	0.72

		Left side	0.103	0.086	0.003	0.396	0.315	0.029	0.077	0.319	0.58	0.18	0.61	0.53
		Right side	0.060	0.027	0.035	0.065	0.203	0.029	0.312	0.091	0.60	0.41	0.47	0.49
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.091					0.029	0.539		0.63	0.63	0.66	0.66
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.094	0.064	0.029	0.218	0.107	0.57	0.36	0.47	0.48
		Back	0.138	0.264	0.360	0.346	0.353	0.029	0.449	0.341	1.20	0.95	0.96	0.96
		Left side	0.100	0.086	0.003	0.396	0.315	0.029	0.381	0.319	0.88	0.48	0.91	0.83
		Right side	0.263	0.027	0.035	0.065	0.203	0.029	0.005	0.091	0.50	0.30	0.36	0.39
		Top side	0.133	0.224	0.032	0.159	0.279	0.029	0.151	0.183	0.79	0.32	0.47	0.50
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.094	0.064	0.029	0.230	0.107	0.58	0.38	0.48	0.49
		Back	0.138	0.264	0.360	0.346	0.353	0.029	0.255	0.341	1.01	0.75	0.77	0.76
		Left side	0.100	0.086	0.003	0.396	0.315	0.029	0.077	0.319	0.58	0.18	0.60	0.53
		Right side	0.263	0.027	0.035	0.065	0.203	0.029	0.312	0.091	0.81	0.61	0.67	0.70
		Top side	0.133	0.224	0.032	0.159	0.279	0.029		0.183	0.64	0.17	0.32	0.35
		Bottom side						0.029	0.539		0.54	0.54	0.57	0.57

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n71	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.094	0.064	0.029	0.076	0.107	0.69	0.48	0.58	0.60
		Back	0.503	0.264	0.360	0.346	0.353	0.029	0.080	0.341	1.20	0.94	0.96	0.95
		Left side	0.096	0.086	0.003	0.396	0.315	0.029	0.094	0.319	0.59	0.19	0.62	0.54
		Right side	0.387	0.027	0.035	0.065	0.203	0.029	0.049	0.091	0.67	0.47	0.53	0.56
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.423					0.029	0.081		0.50	0.50	0.53	0.53
	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.094	0.064	0.029	0.088	0.107	0.70	0.49	0.60	0.61
		Back	0.503	0.264	0.360	0.346	0.353	0.029	0.137	0.341	1.26	1.00	1.02	1.01
		Left side	0.096	0.086	0.003	0.396	0.315	0.029	0.049	0.319	0.55	0.15	0.57	0.49
		Right side	0.387	0.027	0.035	0.065	0.203	0.029	0.243	0.091	0.86	0.67	0.72	0.75
		Top side		0.224	0.032	0.159	0.279	0.029	0.109	0.183	0.61	0.14	0.30	0.32
		Bottom side	0.423					0.029			0.42	0.42	0.45	0.45
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.094	0.064	0.029	0.076	0.107	0.59	0.38	0.48	0.50
		Back	0.243	0.264	0.360	0.346	0.353	0.029	0.080	0.341	0.94	0.68	0.70	0.69
		Left side	0.469	0.086	0.003	0.396	0.315	0.029	0.094	0.319	0.96	0.57	0.99	0.91
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.049	0.091	0.28	0.09	0.14	0.17
		Top side	0.122	0.224	0.032	0.159	0.279	0.029		0.183	0.63	0.15	0.31	0.33
		Bottom side						0.029	0.081		0.08	0.08	0.11	0.11
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.094	0.064	0.029	0.088	0.107	0.60	0.39	0.50	0.51
		Back	0.243	0.264	0.360	0.346	0.353	0.029	0.137	0.341	1.00	0.74	0.76	0.75
		Left side	0.469	0.086	0.003	0.396	0.315	0.029	0.049	0.319	0.92	0.52	0.94	0.87
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.243	0.091	0.47	0.28	0.34	0.36
		Top side	0.122	0.224	0.032	0.159	0.279	0.029	0.109	0.183	0.73	0.26	0.42	0.44
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.094	0.064	0.029	0.076	0.107	0.90	0.69	0.80	0.81
		Back	0.415	0.264	0.360	0.346	0.353	0.029	0.080	0.341	1.11	0.86	0.87	0.87
		Left side	0.105	0.086	0.003	0.396	0.315	0.029	0.094	0.319	0.60	0.20	0.62	0.55
		Right side	0.369	0.027	0.035	0.065	0.203	0.029	0.049	0.091	0.65	0.45	0.51	0.54
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.468					0.029	0.081		0.55	0.55	0.58	0.58
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.094	0.064	0.029	0.088	0.107	0.91	0.71	0.81	0.82
		Back	0.415	0.264	0.360	0.346	0.353	0.029	0.137	0.341	1.17	0.91	0.93	0.92
		Left side	0.105	0.086	0.003	0.396	0.315	0.029	0.049	0.319	0.56	0.16	0.58	0.50
		Right side	0.369	0.027	0.035	0.065	0.203	0.029	0.243	0.091	0.84	0.65	0.71	0.73
		Top side		0.224	0.032	0.159	0.279	0.029	0.109	0.183	0.61	0.14	0.30	0.32
		Bottom side	0.468					0.029			0.47	0.47	0.50	0.50
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.094	0.064	0.029	0.076	0.107	0.70	0.49	0.59	0.60
		Back	0.407	0.264	0.360	0.346	0.353	0.029	0.080	0.341	1.10	0.85	0.86	0.86
		Left side	0.505	0.086	0.003	0.396	0.315	0.029	0.094	0.319	1.00	0.60	1.02	0.95
		Right side	0.035	0.027	0.035	0.065	0.203	0.029	0.049	0.091	0.31	0.12	0.18	0.20
		Top side	0.181	0.224	0.032	0.159	0.279	0.029		0.183	0.68	0.21	0.37	0.39
		Bottom side						0.029	0.081		0.08	0.08	0.11	0.11

	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.094	0.064	0.029	0.088	0.107	0.71	0.50	0.60	0.62
		Back	0.407	0.264	0.360	0.346	0.353	0.029	0.137	0.341	1.16	0.90	0.92	0.91
		Left side	0.505	0.086	0.003	0.396	0.315	0.029	0.049	0.319	0.96	0.56	0.98	0.90
		Right side	0.035	0.027	0.035	0.065	0.203	0.029	0.243	0.091	0.51	0.31	0.37	0.40
		Top side	0.181	0.224	0.032	0.159	0.279	0.029	0.109	0.183	0.79	0.32	0.48	0.50
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.094	0.064	0.029	0.076	0.107	0.56	0.35	0.45	0.47
		Back	0.324	0.264	0.360	0.346	0.353	0.029	0.080	0.341	1.02	0.76	0.78	0.77
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.094	0.319	0.50	0.10	0.52	0.44
		Right side	0.269	0.027	0.035	0.065	0.203	0.029	0.049	0.091	0.55	0.35	0.41	0.44
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.480					0.029	0.081		0.56	0.56	0.59	0.59
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.094	0.064	0.029	0.088	0.107	0.57	0.36	0.47	0.48
		Back	0.324	0.264	0.360	0.346	0.353	0.029	0.137	0.341	1.08	0.82	0.84	0.83
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.049	0.319	0.45	0.05	0.48	0.40
		Right side	0.269	0.027	0.035	0.065	0.203	0.029	0.243	0.091	0.74	0.55	0.61	0.63
		Top side		0.224	0.032	0.159	0.279	0.029	0.109	0.183	0.61	0.14	0.30	0.32
		Bottom side	0.480					0.029			0.48	0.48	0.51	0.51
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.094	0.064	0.029	0.076	0.107	0.71	0.51	0.61	0.62
		Back	0.340	0.264	0.360	0.346	0.353	0.029	0.080	0.341	1.04	0.78	0.80	0.79
		Left side	0.598	0.086	0.003	0.396	0.315	0.029	0.094	0.319	1.09	0.70	1.12	1.04
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.049	0.091	0.28	0.09	0.14	0.17
		Top side	0.202	0.224	0.032	0.159	0.279	0.029		0.183	0.71	0.23	0.39	0.41
		Bottom side						0.029	0.081		0.08	0.08	0.11	0.11
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.094	0.064	0.029	0.088	0.107	0.73	0.52	0.62	0.63
		Back	0.340	0.264	0.360	0.346	0.353	0.029	0.137	0.341	1.09	0.84	0.85	0.85
		Left side	0.598	0.086	0.003	0.396	0.315	0.029	0.049	0.319	1.05	0.65	1.07	1.00
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.243	0.091	0.47	0.28	0.34	0.36
		Top side	0.202	0.224	0.032	0.159	0.279	0.029	0.109	0.183	0.81	0.34	0.50	0.52
		Bottom side						0.029			0.00	0.00	0.03	0.03

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n41/n38	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.094	0.064	0.029	0.191	0.107	0.80	0.60	0.70	0.71
		Back	0.503	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.39	1.13	1.14	1.14
		Left side	0.096	0.086	0.003	0.396	0.315	0.029	0.378	0.319	0.88	0.48	0.90	0.82
		Right side	0.387	0.027	0.035	0.065	0.203	0.029	0.028	0.091	0.65	0.45	0.51	0.54
		Top side		0.224	0.032	0.159	0.279	0.029	0.053	0.183	0.56	0.09	0.24	0.27
		Bottom side	0.423					0.029			0.42	0.42	0.45	0.45
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.094	0.064	0.029	0.461	0.107	0.97	0.77	0.87	0.88
		Back	0.243	0.264	0.360	0.346	0.353	0.029	0.499	0.341	1.36	1.10	1.12	1.11
		Left side	0.469	0.086	0.003	0.396	0.315	0.029	0.085	0.319	0.96	0.56	0.98	0.90
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.269	0.091	0.50	0.31	0.36	0.39
		Top side	0.122	0.224	0.032	0.159	0.279	0.029		0.183	0.63	0.15	0.31	0.33
		Bottom side						0.029	0.557		0.56	0.56	0.59	0.59
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.094	0.064	0.029	0.191	0.107	0.62	0.41	0.51	0.52
		Back	0.218	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.10	0.84	0.86	0.85
		Left side	0.102	0.086	0.003	0.396	0.315	0.029	0.378	0.319	0.88	0.48	0.91	0.83
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.028	0.091	0.26	0.06	0.12	0.15
		Top side		0.224	0.032	0.159	0.279	0.029	0.053	0.183	0.56	0.09	0.24	0.27
		Bottom side	0.188					0.029			0.19	0.19	0.22	0.22
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.094	0.064	0.029	0.461	0.107	0.89	0.68	0.78	0.79
		Back	0.218	0.264	0.360	0.346	0.353	0.029	0.499	0.341	1.33	1.08	1.09	1.09
		Left side	0.102	0.086	0.003	0.396	0.315	0.029	0.085	0.319	0.59	0.19	0.61	0.54
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.269	0.091	0.50	0.31	0.36	0.39
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.188					0.029	0.557		0.75	0.75	0.77	0.77
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.094	0.064	0.029	0.191	0.107	0.60	0.39	0.50	0.51
		Back	0.169	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.05	0.80	0.81	0.81
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.378	0.319	0.78	0.38	0.80	0.73
		Right side	0.125	0.027	0.035	0.065	0.203	0.029	0.028	0.091	0.38	0.19	0.25	0.27
		Top side	0.153	0.224	0.032	0.159	0.279	0.029	0.053	0.183	0.71	0.24	0.39	0.42
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.094	0.064	0.029	0.461	0.107	0.87	0.66	0.77	0.78
		Back	0.169	0.264	0.360	0.346	0.353	0.029	0.499	0.341	1.29	1.03	1.04	1.04
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.085	0.319	0.49	0.09	0.51	0.43
		Right side	0.125	0.027	0.035	0.065	0.203	0.029	0.269	0.091	0.62	0.43	0.49	0.51
		Top side	0.153	0.224	0.032	0.159	0.279	0.029		0.183	0.66	0.19	0.34	0.37
		Bottom side						0.029	0.557		0.56	0.56	0.59	0.59
	LTE Band	Front	0.254	0.165	0.022	0.094	0.064	0.029	0.191	0.107	0.67	0.47	0.57	0.58

	66_Ant 2	Back	0.324	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.21	0.95	0.97	0.96
		Left side	0.001	0.086	0.003	0.396	0.315	0.029	0.378	0.319	0.78	0.38	0.80	0.73
		Right side	0.269	0.027	0.035	0.065	0.203	0.029	0.028	0.091	0.53	0.33	0.39	0.42
		Top side		0.224	0.032	0.159	0.279	0.029	0.053	0.183	0.56	0.09	0.24	0.27
		Bottom side	0.480					0.029			0.48	0.48	0.51	0.51
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.094	0.064	0.029	0.461	0.107	1.10	0.89	0.99	1.01
		Back	0.340	0.264	0.360	0.346	0.353	0.029	0.499	0.341	1.46	1.20	1.21	1.21
		Left side	0.598	0.086	0.003	0.396	0.315	0.029	0.085	0.319	1.08	0.69	1.11	1.03
		Right side	0.001	0.027	0.035	0.065	0.203	0.029	0.269	0.091	0.50	0.31	0.36	0.39
		Top side	0.202	0.224	0.032	0.159	0.279	0.029		0.183	0.71	0.23	0.39	0.41
		Bottom side						0.029	0.557		0.56	0.56	0.59	0.59
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.094	0.064	0.029	0.191	0.107	0.50	0.30	0.40	0.41
		Back	0.092	0.264	0.360	0.346	0.353	0.029	0.266	0.341	0.98	0.72	0.73	0.73
		Left side	0.103	0.086	0.003	0.396	0.315	0.029	0.378	0.319	0.88	0.48	0.91	0.83
		Right side	0.060	0.027	0.035	0.065	0.203	0.029	0.028	0.091	0.32	0.12	0.18	0.21
		Top side		0.224	0.032	0.159	0.279	0.029	0.053	0.183	0.56	0.09	0.24	0.27
		Bottom side	0.091					0.029			0.09	0.09	0.12	0.12
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.094	0.064	0.029	0.461	0.107	0.77	0.57	0.67	0.68
		Back	0.092	0.264	0.360	0.346	0.353	0.029	0.499	0.341	1.21	0.95	0.97	0.96
		Left side	0.103	0.086	0.003	0.396	0.315	0.029	0.085	0.319	0.59	0.19	0.61	0.54
		Right side	0.060	0.027	0.035	0.065	0.203	0.029	0.269	0.091	0.56	0.36	0.42	0.45
		Top side		0.224	0.032	0.159	0.279	0.029		0.183	0.50	0.03	0.19	0.21
		Bottom side	0.091					0.029	0.557		0.65	0.65	0.68	0.68
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.094	0.064	0.029	0.191	0.107	0.54	0.34	0.44	0.45
		Back	0.138	0.264	0.360	0.346	0.353	0.029	0.266	0.341	1.02	0.76	0.78	0.77
		Left side	0.100	0.086	0.003	0.396	0.315	0.029	0.378	0.319	0.88	0.48	0.90	0.83
		Right side	0.263	0.027	0.035	0.065	0.203	0.029	0.028	0.091	0.52	0.33	0.39	0.41
		Top side	0.133	0.224	0.032	0.159	0.279	0.029	0.053	0.183	0.69	0.22	0.37	0.40
		Bottom side						0.029			0.00	0.00	0.03	0.03
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.094	0.064	0.029	0.461	0.107	0.81	0.61	0.71	0.72
		Back	0.138	0.264	0.360	0.346	0.353	0.029	0.499	0.341	1.25	1.00	1.01	1.01
		Left side	0.100	0.086	0.003	0.396	0.315	0.029	0.085	0.319	0.59	0.19	0.61	0.53
		Right side	0.263	0.027	0.035	0.065	0.203	0.029	0.269	0.091	0.76	0.57	0.63	0.65
		Top side	0.133	0.224	0.032	0.159	0.279	0.029		0.183	0.64	0.17	0.32	0.35
		Bottom side						0.029	0.557		0.56	0.56	0.59	0.59

16.3 Body-Worn Accessory Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	5	6	8	1+2+5	1+3	1+4+6	1+6+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_Ant 1	Front	0.230	0.165	0.022	0.130	0.057	0.029	0.113	0.45	0.25	0.39	0.37
		Back	0.302	0.264	0.360	0.360	0.335	0.029	0.332	0.90	0.66	0.69	0.66
	GSM1900_Ant 6	Front	0.171	0.165	0.022	0.130	0.057	0.029	0.113	0.39	0.19	0.33	0.31
		Back	0.123	0.264	0.360	0.360	0.335	0.029	0.332	0.72	0.48	0.51	0.48
WCDMA	WCDMA II_Ant 6	Front	0.375	0.165	0.022	0.130	0.057	0.029	0.113	0.60	0.40	0.53	0.52
		Back	0.289	0.264	0.360	0.360	0.335	0.029	0.332	0.89	0.65	0.68	0.65
	WCDMA IV_Ant 6	Front	0.305	0.165	0.022	0.130	0.057	0.029	0.113	0.53	0.33	0.46	0.45
		Back	0.276	0.264	0.360	0.360	0.335	0.029	0.332	0.88	0.64	0.67	0.64
	WCDMA V_Ant 1	Front	0.246	0.165	0.022	0.130	0.057	0.029	0.113	0.47	0.27	0.41	0.39
		Back	0.300	0.264	0.360	0.360	0.335	0.029	0.332	0.90	0.66	0.69	0.66
LTE	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.130	0.057	0.029	0.113	0.40	0.20	0.34	0.32
		Back	0.169	0.264	0.360	0.360	0.335	0.029	0.332	0.77	0.53	0.56	0.53
	LTE Band 12_Ant 1	Front	0.132	0.165	0.022	0.130	0.057	0.029	0.113	0.35	0.15	0.29	0.27
		Back	0.117	0.264	0.360	0.360	0.335	0.029	0.332	0.72	0.48	0.51	0.48
	LTE Band 13_Ant 1	Front	0.164	0.165	0.022	0.130	0.057	0.029	0.113	0.39	0.19	0.32	0.31
		Back	0.227	0.264	0.360	0.360	0.335	0.029	0.332	0.83	0.59	0.62	0.59
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.130	0.057	0.029	0.113	0.35	0.15	0.28	0.27
		Back	0.138	0.264	0.360	0.360	0.335	0.029	0.332	0.74	0.50	0.53	0.50
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.130	0.057	0.029	0.113	0.51	0.31	0.44	0.43
		Back	0.243	0.264	0.360	0.360	0.335	0.029	0.332	0.84	0.60	0.63	0.60
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.130	0.057	0.029	0.113	0.63	0.43	0.57	0.55
		Back	0.340	0.264	0.360	0.360	0.335	0.029	0.332	0.94	0.70	0.73	0.70
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.130	0.057	0.029	0.113	0.61	0.41	0.55	0.53
		Back	0.407	0.264	0.360	0.360	0.335	0.029	0.332	1.01	0.77	0.80	0.77
	LTE Band 41_Ant 6	Front	0.191	0.165	0.022	0.130	0.057	0.029	0.113	0.41	0.21	0.35	0.33
		Back	0.321	0.264	0.360	0.360	0.335	0.029	0.332	0.92	0.68	0.71	0.68

WWAN Band		Exposure Position	1	2	3	4	5	6	8	1+2+5	1+3	1+4+6	1+6+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_Ant 0	Front	0.283	0.165	0.022	0.130	0.057	0.029	0.113	0.51	0.31	0.44	0.43
		Back	0.332	0.264	0.360	0.360	0.335	0.029	0.332	0.93	0.69	0.72	0.69
	GSM1900_Ant 2	Front	0.197	0.165	0.022	0.130	0.057	0.029	0.113	0.42	0.22	0.36	0.34
		Back	0.215	0.264	0.360	0.360	0.335	0.029	0.332	0.81	0.58	0.60	0.58
WCDMA	WCDMA II_Ant 2	Front	0.459	0.165	0.022	0.130	0.057	0.029	0.113	0.68	0.48	0.62	0.60
		Back	0.518	0.264	0.360	0.360	0.335	0.029	0.332	1.12	0.88	0.91	0.88
	WCDMA IV_Ant 2	Front	0.186	0.165	0.022	0.130	0.057	0.029	0.113	0.41	0.21	0.35	0.33
		Back	0.224	0.264	0.360	0.360	0.335	0.029	0.332	0.82	0.58	0.61	0.59
	WCDMA V_Ant 0	Front	0.256	0.165	0.022	0.130	0.057	0.029	0.113	0.48	0.28	0.42	0.40
		Back	0.287	0.264	0.360	0.360	0.335	0.029	0.332	0.89	0.65	0.68	0.65
LTE	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.130	0.057	0.029	0.113	0.42	0.22	0.35	0.34
		Back	0.218	0.264	0.360	0.360	0.335	0.029	0.332	0.82	0.58	0.61	0.58
	LTE Band 12_Ant 0	Front	0.088	0.165	0.022	0.130	0.057	0.029	0.113	0.31	0.11	0.25	0.23
		Back	0.100	0.264	0.360	0.360	0.335	0.029	0.332	0.70	0.46	0.49	0.46
	LTE Band 13_Ant 0	Front	0.210	0.165	0.022	0.130	0.057	0.029	0.113	0.43	0.23	0.37	0.35
		Back	0.245	0.264	0.360	0.360	0.335	0.029	0.332	0.84	0.61	0.63	0.61
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.130	0.057	0.029	0.113	0.31	0.11	0.24	0.23
		Back	0.092	0.264	0.360	0.360	0.335	0.029	0.332	0.69	0.45	0.48	0.45
	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.130	0.057	0.029	0.113	0.61	0.41	0.54	0.53
		Back	0.503	0.264	0.360	0.360	0.335	0.029	0.332	1.10	0.86	0.89	0.86
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.130	0.057	0.029	0.113	0.48	0.28	0.41	0.40
		Back	0.324	0.264	0.360	0.360	0.335	0.029	0.332	0.92	0.68	0.71	0.69
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.130	0.057	0.029	0.113	0.82	0.62	0.76	0.74
		Back	0.757	0.264	0.360	0.360	0.335	0.029	0.332	1.36	1.12	1.15	1.12
	LTE Band 41_Ant 2	Front	0.340	0.165	0.022	0.130	0.057	0.029	0.113	0.56	0.36	0.50	0.48
		Back	0.427	0.264	0.360	0.360	0.335	0.029	0.332	1.03	0.79	0.82	0.79

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n2	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.130	0.057	0.029	0.280	0.113	0.70	0.50	0.63	0.62
		Back	0.218	0.264	0.360	0.360	0.335	0.029	0.309	0.332	1.13	0.89	0.92	0.89
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.130	0.057	0.029	0.331	0.113	0.75	0.55	0.69	0.67
		Back	0.218	0.264	0.360	0.360	0.335	0.029	0.404	0.332	1.22	0.98	1.01	0.98
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.130	0.057	0.029	0.280	0.113	0.68	0.48	0.62	0.60
		Back	0.169	0.264	0.360	0.360	0.335	0.029	0.309	0.332	1.08	0.84	0.87	0.84
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.130	0.057	0.029	0.331	0.113	0.73	0.53	0.67	0.65
		Back	0.169	0.264	0.360	0.360	0.335	0.029	0.404	0.332	1.17	0.93	0.96	0.93
	LTE Band 12_Ant 0	Front	0.088	0.165	0.022	0.130	0.057	0.029	0.280	0.113	0.59	0.39	0.53	0.51
		Back	0.100	0.264	0.360	0.360	0.335	0.029	0.309	0.332	1.01	0.77	0.80	0.77
	LTE Band 12_Ant 0	Front	0.088	0.165	0.022	0.130	0.057	0.029	0.331	0.113	0.64	0.44	0.58	0.56
		Back	0.100	0.264	0.360	0.360	0.335	0.029	0.404	0.332	1.10	0.86	0.89	0.87
	LTE Band 12_Ant 1	Front	0.132	0.165	0.022	0.130	0.057	0.029	0.280	0.113	0.63	0.43	0.57	0.55
		Back	0.117	0.264	0.360	0.360	0.335	0.029	0.309	0.332	1.03	0.79	0.82	0.79
	LTE Band 12_Ant 1	Front	0.132	0.165	0.022	0.130	0.057	0.029	0.331	0.113	0.69	0.49	0.62	0.61
		Back	0.117	0.264	0.360	0.360	0.335	0.029	0.404	0.332	1.12	0.88	0.91	0.88
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.130	0.057	0.029	0.280	0.113	0.76	0.56	0.69	0.68
		Back	0.324	0.264	0.360	0.360	0.335	0.029	0.309	0.332	1.23	0.99	1.02	0.99
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.130	0.057	0.029	0.331	0.113	0.96	0.76	0.90	0.88
		Back	0.340	0.264	0.360	0.360	0.335	0.029	0.404	0.332	1.34	1.10	1.13	1.11

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5	1+3	1+4+6	1+5+6
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n5	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.130	0.057	0.029	0.181	0.113	0.79	0.59	0.72	0.71
		Back	0.503	0.264	0.360	0.360	0.335	0.029	0.201	0.332	1.30	1.06	1.09	1.07
	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.130	0.057	0.029	0.165	0.113	0.77	0.57	0.71	0.69
		Back	0.503	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.37	1.13	1.16	1.13
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.130	0.057	0.029	0.181	0.113	0.66	0.46	0.59	0.58
		Back	0.324	0.264	0.360	0.360	0.335	0.029	0.201	0.332	1.12	0.89	0.91	0.89
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.130	0.057	0.029	0.165	0.113	0.64	0.44	0.58	0.56
		Back	0.324	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.19	0.95	0.98	0.95
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.130	0.057	0.029	0.181	0.113	1.00	0.80	0.94	0.92
		Back	0.415	0.264	0.360	0.360	0.335	0.029	0.201	0.332	1.22	0.98	1.01	0.98
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.130	0.057	0.029	0.165	0.113	0.98	0.78	0.92	0.90
		Back	0.415	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.28	1.04	1.07	1.04
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.130	0.057	0.029	0.181	0.113	0.69	0.49	0.62	0.61
		Back	0.243	0.264	0.360	0.360	0.335	0.029	0.201	0.332	1.04	0.80	0.83	0.81
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.130	0.057	0.029	0.165	0.113	0.67	0.47	0.61	0.59
		Back	0.243	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.11	0.87	0.90	0.87
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.130	0.057	0.029	0.181	0.113	0.81	0.61	0.75	0.73
		Back	0.340	0.264	0.360	0.360	0.335	0.029	0.201	0.332	1.14	0.90	0.93	0.90
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.130	0.057	0.029	0.165	0.113	0.80	0.60	0.73	0.72
		Back	0.340	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.21	0.97	1.00	0.97
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.130	0.057	0.029	0.181	0.113	0.79	0.59	0.73	0.71
		Back	0.407	0.264	0.360	0.360	0.335	0.029	0.201	0.332	1.21	0.97	1.00	0.97
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.130	0.057	0.029	0.165	0.113	0.78	0.58	0.72	0.70
		Back	0.407	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.27	1.03	1.06	1.03

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n66	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.130	0.057	0.029	0.408	0.113	1.01	0.81	0.95	0.93
		Back	0.503	0.264	0.360	0.360	0.335	0.029	0.340	0.332	1.44	1.20	1.23	1.20
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.130	0.057	0.029	0.254	0.113	0.76	0.56	0.70	0.68
		Back	0.243	0.264	0.360	0.360	0.335	0.029	0.324	0.332	1.17	0.93	0.96	0.93
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.130	0.057	0.029	0.408	0.113	0.83	0.63	0.76	0.75
		Back	0.218	0.264	0.360	0.360	0.335	0.029	0.340	0.332	1.16	0.92	0.95	0.92
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.130	0.057	0.029	0.254	0.113	0.67	0.47	0.61	0.59
		Back	0.218	0.264	0.360	0.360	0.335	0.029	0.324	0.332	1.14	0.90	0.93	0.90
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.130	0.057	0.029	0.408	0.113	0.81	0.61	0.75	0.73
		Back	0.169	0.264	0.360	0.360	0.335	0.029	0.340	0.332	1.11	0.87	0.90	0.87
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.130	0.057	0.029	0.254	0.113	0.66	0.46	0.59	0.58
		Back	0.169	0.264	0.360	0.360	0.335	0.029	0.324	0.332	1.09	0.85	0.88	0.85
	LTE Band 13_Ant 0	Front	0.210	0.165	0.022	0.130	0.057	0.029	0.408	0.113	0.84	0.64	0.78	0.76
		Back	0.245	0.264	0.360	0.360	0.335	0.029	0.340	0.332	1.18	0.95	0.97	0.95
	LTE Band 13_Ant 0	Front	0.210	0.165	0.022	0.130	0.057	0.029	0.254	0.113	0.69	0.49	0.62	0.61
		Back	0.245	0.264	0.360	0.360	0.335	0.029	0.324	0.332	1.17	0.93	0.96	0.93
	LTE Band 13_Ant 1	Front	0.164	0.165	0.022	0.130	0.057	0.029	0.408	0.113	0.79	0.59	0.73	0.71
		Back	0.227	0.264	0.360	0.360	0.335	0.029	0.340	0.332	1.17	0.93	0.96	0.93
	LTE Band 13_Ant 1	Front	0.164	0.165	0.022	0.130	0.057	0.029	0.254	0.113	0.64	0.44	0.58	0.56
		Back	0.227	0.264	0.360	0.360	0.335	0.029	0.324	0.332	1.15	0.91	0.94	0.91
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.130	0.057	0.029	0.408	0.113	1.23	1.03	1.16	1.15
		Back	0.415	0.264	0.360	0.360	0.335	0.029	0.340	0.332	1.35	1.12	1.14	1.12
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.130	0.057	0.029	0.254	0.113	0.87	0.67	0.80	0.79
		Back	0.407	0.264	0.360	0.360	0.335	0.029	0.324	0.332	1.33	1.09	1.12	1.09
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.130	0.057	0.029	0.408	0.113	0.71	0.51	0.65	0.63
		Back	0.092	0.264	0.360	0.360	0.335	0.029	0.340	0.332	1.03	0.79	0.82	0.79
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.130	0.057	0.029	0.254	0.113	0.56	0.36	0.50	0.48
		Back	0.092	0.264	0.360	0.360	0.335	0.029	0.324	0.332	1.02	0.78	0.81	0.78
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.130	0.057	0.029	0.408	0.113	0.75	0.55	0.69	0.67
		Back	0.138	0.264	0.360	0.360	0.335	0.029	0.340	0.332	1.08	0.84	0.87	0.84
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.130	0.057	0.029	0.254	0.113	0.60	0.40	0.54	0.52
		Back	0.138	0.264	0.360	0.360	0.335	0.029	0.324	0.332	1.06	0.82	0.85	0.82

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n71	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.130	0.057	0.029	0.076	0.113	0.68	0.48	0.62	0.60
		Back	0.503	0.264	0.360	0.360	0.335	0.029	0.080	0.332	1.18	0.94	0.97	0.94
	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.130	0.057	0.029	0.088	0.113	0.69	0.49	0.63	0.61
		Back	0.503	0.264	0.360	0.360	0.335	0.029	0.137	0.332	1.24	1.00	1.03	1.00
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.130	0.057	0.029	0.076	0.113	0.58	0.38	0.52	0.50
		Back	0.243	0.264	0.360	0.360	0.335	0.029	0.080	0.332	0.92	0.68	0.71	0.68
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.130	0.057	0.029	0.088	0.113	0.59	0.39	0.53	0.51
		Back	0.243	0.264	0.360	0.360	0.335	0.029	0.137	0.332	0.98	0.74	0.77	0.74
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.130	0.057	0.029	0.076	0.113	0.89	0.69	0.83	0.81
		Back	0.415	0.264	0.360	0.360	0.335	0.029	0.080	0.332	1.09	0.86	0.88	0.86
	LTE Band 7_Ant 2	Front	0.596	0.165	0.022	0.130	0.057	0.029	0.088	0.113	0.91	0.71	0.84	0.83
		Back	0.415	0.264	0.360	0.360	0.335	0.029	0.137	0.332	1.15	0.91	0.94	0.91
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.130	0.057	0.029	0.076	0.113	0.69	0.49	0.63	0.61
		Back	0.407	0.264	0.360	0.360	0.335	0.029	0.080	0.332	1.09	0.85	0.88	0.85
	LTE Band 7_Ant 6	Front	0.391	0.165	0.022	0.130	0.057	0.029	0.088	0.113	0.70	0.50	0.64	0.62
		Back	0.407	0.264	0.360	0.360	0.335	0.029	0.137	0.332	1.14	0.90	0.93	0.91
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.130	0.057	0.029	0.076	0.113	0.55	0.35	0.49	0.47
		Back	0.324	0.264	0.360	0.360	0.335	0.029	0.080	0.332	1.00	0.76	0.79	0.77
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.130	0.057	0.029	0.088	0.113	0.56	0.36	0.50	0.48
		Back	0.324	0.264	0.360	0.360	0.335	0.029	0.137	0.332	1.06	0.82	0.85	0.82
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.130	0.057	0.029	0.076	0.113	0.71	0.51	0.64	0.63
		Back	0.340	0.264	0.360	0.360	0.335	0.029	0.080	0.332	1.02	0.78	0.81	0.78
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.130	0.057	0.029	0.088	0.113	0.72	0.52	0.66	0.64
		Back	0.340	0.264	0.360	0.360	0.335	0.029	0.137	0.332	1.08	0.84	0.87	0.84

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	1+2+5+7	1+3+7	1+4+6+7	1+6+7+8
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 10	Bluetooth Ant 8	FR1 n41/n38	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE	LTE Band 2_Ant 2	Front	0.384	0.165	0.022	0.130	0.057	0.029	0.191	0.113	0.80	0.60	0.73	0.72
		Back	0.503	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.37	1.13	1.16	1.13
	LTE Band 2_Ant 6	Front	0.284	0.165	0.022	0.130	0.057	0.029	0.461	0.113	0.97	0.77	0.90	0.83
		Back	0.243	0.264	0.360	0.360	0.335	0.029	0.499	0.332	1.34	1.10	1.13	1.11
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.130	0.057	0.029	0.191	0.113	0.61	0.41	0.55	0.47
		Back	0.218	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.08	0.84	0.87	0.85
	LTE Band 5_Ant 0	Front	0.195	0.165	0.022	0.130	0.057	0.029	0.461	0.113	0.88	0.68	0.82	0.74
		Back	0.218	0.264	0.360	0.360	0.335	0.029	0.499	0.332	1.32	1.08	1.11	1.08
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.130	0.057	0.029	0.191	0.113	0.59	0.39	0.53	0.46
		Back	0.169	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.03	0.80	0.82	0.80
	LTE Band 5_Ant 1	Front	0.181	0.165	0.022	0.130	0.057	0.029	0.461	0.113	0.86	0.66	0.80	0.73
		Back	0.169	0.264	0.360	0.360	0.335	0.029	0.499	0.332	1.27	1.03	1.06	1.03
	LTE Band 66_Ant 2	Front	0.254	0.165	0.022	0.130	0.057	0.029	0.191	0.113	0.67	0.47	0.60	0.53
		Back	0.324	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.19	0.95	0.98	0.95
	LTE Band 66_Ant 6	Front	0.408	0.165	0.022	0.130	0.057	0.029	0.461	0.113	1.09	0.89	1.03	0.96
		Back	0.340	0.264	0.360	0.360	0.335	0.029	0.499	0.332	1.44	1.20	1.23	1.20
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.130	0.057	0.029	0.191	0.113	0.50	0.30	0.43	0.36
		Back	0.092	0.264	0.360	0.360	0.335	0.029	0.266	0.332	0.96	0.72	0.75	0.72
	LTE Band 71_Ant 0	Front	0.083	0.165	0.022	0.130	0.057	0.029	0.461	0.113	0.77	0.57	0.70	0.63
		Back	0.092	0.264	0.360	0.360	0.335	0.029	0.499	0.332	1.19	0.95	0.98	0.96
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.130	0.057	0.029	0.191	0.113	0.54	0.34	0.47	0.40
		Back	0.138	0.264	0.360	0.360	0.335	0.029	0.266	0.332	1.00	0.76	0.79	0.77
	LTE Band 71_Ant 1	Front	0.124	0.165	0.022	0.130	0.057	0.029	0.461	0.113	0.81	0.61	0.74	0.67
		Back	0.138	0.264	0.360	0.360	0.335	0.029	0.499	0.332	1.24	1.00	1.03	1.00

WWAN Band		Exposure Position	1	2	3	4	5	1+4	1+5	1+2	1+3
			WWAN	2.4GHz WLAN Ant 8	2.4GHz WLAN Ant 8+10	5GHz WLAN Ant 9+10	5GHz WLAN Ant 9	Summed	Summed	Summed	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
FR1	FR1 n66_Ant 2	Front at 14mm	0.143	0.165	0.022			0.14	0.14	0.31	0.17
		Back at 17mm	0.152	0.264	0.360	0.942	0.332	1.09	0.48	0.42	0.51
	FR1 n41-HPUE_Ant 2	Front at 14mm	0.270	0.165	0.022			0.27	0.27	0.44	0.29
		Back at 17mm	0.304	0.264	0.360	0.942	0.332	1.25	0.64	0.57	0.66
	FR1 n41-HPUE_Ant 6	Front at 14mm	0.183	0.165	0.022			0.18	0.18	0.35	0.21
		Back at 17mm	0.256	0.264	0.360	0.942	0.332	1.20	0.59	0.52	0.62

16.4 Product specific 10g SAR Exposure Conditions

WWAN Band		Exposure Position	1	4	8	1+4 Summed 10g SAR (W/kg)	1+8 Summed 10g SAR (W/kg)
			WWAN	5GHz WLAN Ant 9+10	5GHz WLAN Ant 9		
			10g SAR (W/kg)	10g SAR (W/kg)	1g SAR (W/kg)		
GSM	FR1 n41-HPUE_Ant 6	Front		0.294	0.283	0.29	0.28
		Back		0.940	0.852	0.94	0.85
		Left side	2.986	0.535	0.706	3.52	**3.69**
		Right side		0.005	0.018	0.01	0.02
		Top side		0.239	0.214	0.24	0.21

17. Supplemental Tuner Tests Results

General Note:

1. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence to the antenna characteristics, other than impedance matching.
2. To evaluate all of the tuner states, the 192 tuner states are divided evenly among bands (GSM850/WCDMA V/LTE B5/B12/B17/B13/B71/FR1 n5/ FR1 n71), mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single point time-sweep measurements will be performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state will be established remotely so that the device is not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe will remain stationary at the same position throughout the entire series of single point measurements for each combination.
3. This device supports LTE B17/B12. Since the supported frequency span for LTE B17 falls completely within the supports frequency span for LTE B12, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, chose LTE B12 for dynamic antenna analysis.
4. The operational decryption contains more information about the design and implementation of the dynamic antenna tuning.

17.1 Supplemental Tuner Head & Body SAR Results

Please refer to Appendix F.

Test Engineer： Nick Hu, Yuan Zhao, Jiaxing Chang, Yuankai Kong

18. 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 ≤ 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.

19. References

[1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”

[2] ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992

[3] IEEE Std. 1528-2013, “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, Sep 2013

[4] SPEAG DASY System Handbook

[5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.

[6] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.

[7] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

[8] FCC KDB 648474 D04 v01r03, “SAR Evaluation Considerations for Wireless Handsets”, Oct 2015.

[9] FCC KDB 248227 D01 v02r02, “SAR Guidance for IEEE 802.11 (WiFi) Transmitters”, Oct 2015.

[10] FCC KDB 616217 D04 v01r02, “SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers”, Oct 2015

[11] FCC KDB 941225 D01 v03r01, “3G SAR MEAUREMENT PROCEDURES”, Oct 2015

[12] FCC KDB 941225 D05 v02r05, “SAR Evaluation Considerations for LTE Devices”, Dec 2015

[13] FCC KDB 941225 D05A v01r02, “Rel. 10 LTE SAR Test Guidance and KDB Inquiries”, Oct 2015

[14] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.

------THE END------

Appendix A. Plots of System Performance Check

The plots are shown as follows.

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2020.7.14

System Check_Head_750MHz

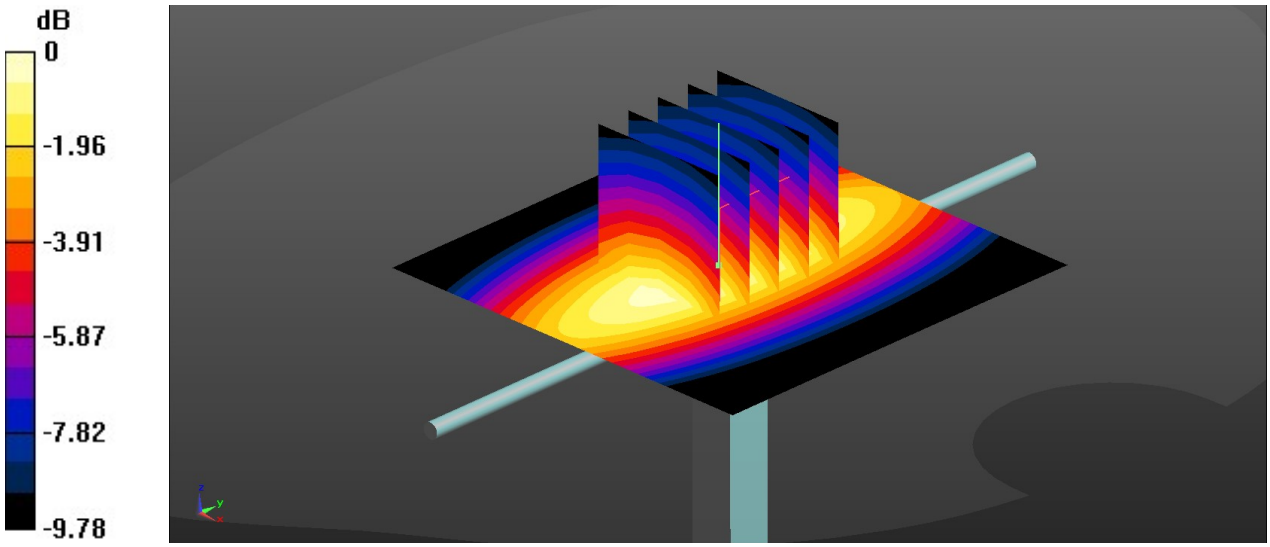
DUT: D750V3 - SN:1087

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: HSL_750 Medium parameters used: f = 750 MHz; σ = 0.898 S/m; ε_r = 42.267; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.58, 10.58, 10.58); Calibrated: 2020.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2020.4.28
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.70 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50.66 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.19 W/kg
SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.45 W/kg
Maximum value of SAR (measured) = 2.73 W/kg



0 dB = 2.73 W/kg = 4.36 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2020.7.16

System Check_Head_835MHz

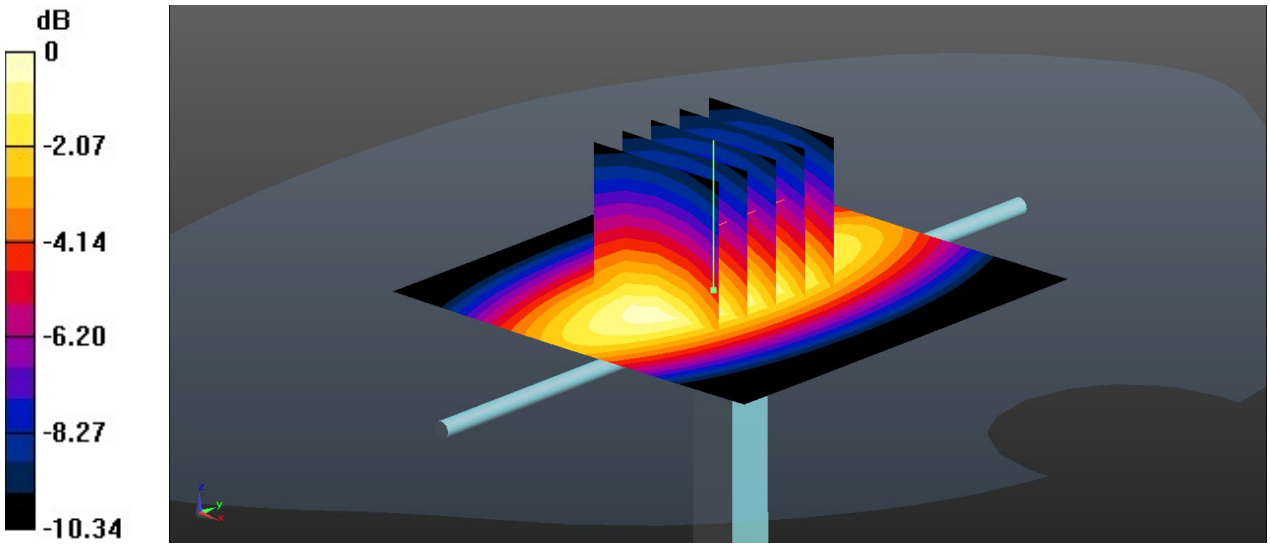
DUT: D835V2 - SN:4d151

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL_835 Medium parameters used: f = 835 MHz; σ = 0.905 S/m; ε_r = 41.314; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.31, 10.31, 10.31); Calibrated: 2020.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2020.4.28
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.78 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 58.16 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 3.38 W/kg
SAR(1 g) = 2.35 W/kg; SAR(10 g) = 1.56 W/kg
Maximum value of SAR (measured) = 2.75 W/kg



0 dB = 2.75 W/kg = 4.39 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2020.7.18

System Check_Head_1750MHz

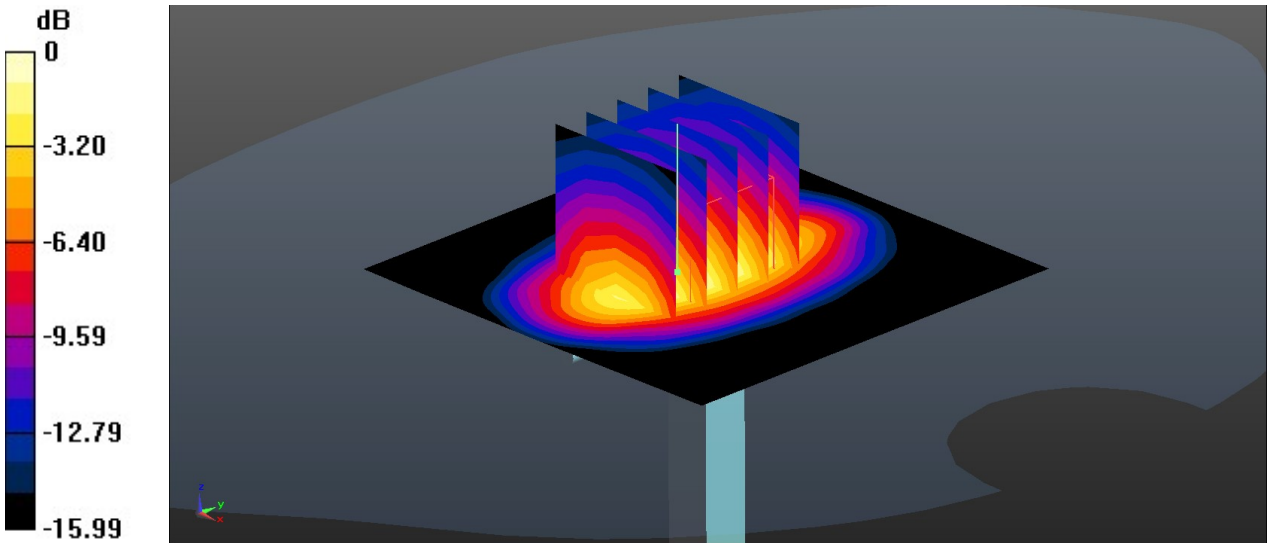
DUT: D1750V2 - SN:1090

Communication System: UID 0, CW (0); Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: HSL_1750 Medium parameters used: f = 1750 MHz; σ = 1.347 S/m; ε_r = 41.059; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.6, 8.6, 8.6); Calibrated: 2020.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2020.4.28
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 11.0 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 92.55 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 14.4 W/kg
SAR(1 g) = 8.52 W/kg; SAR(10 g) = 4.67 W/kg
Maximum value of SAR (measured) = 10.5 W/kg



0 dB = 10.5 W/kg = 10.21 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2020.7.20

System Check_Head_1900MHz

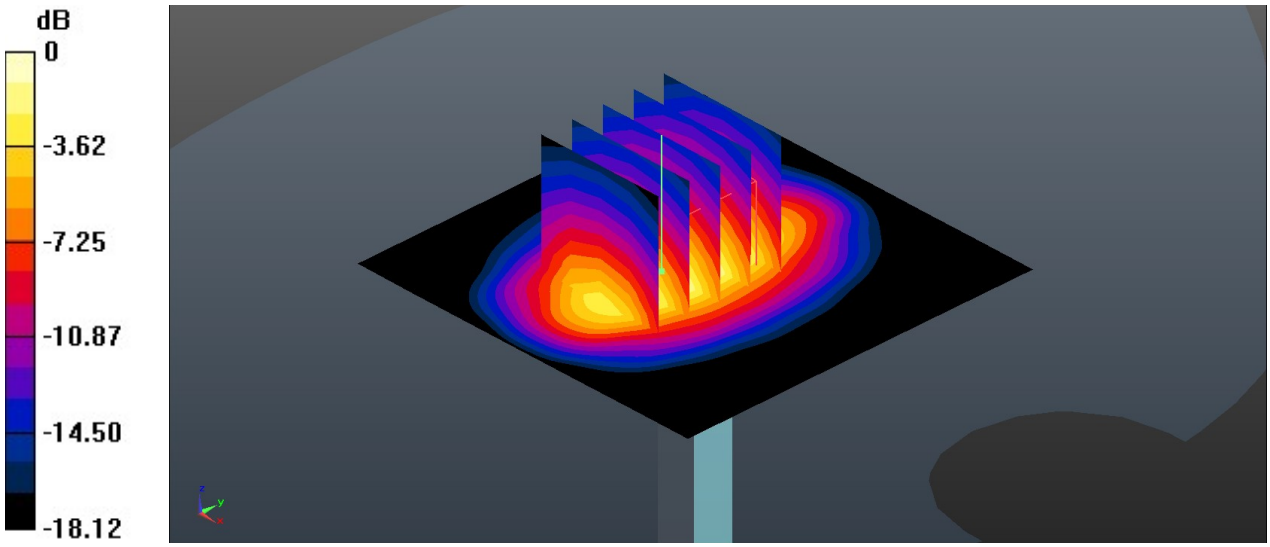
DUT: D1900V2 - SN:5d170

Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL_1900 Medium parameters used: f = 1900 MHz; σ = 1.44 S/m; ε_r = 40.48; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.35, 8.35, 8.35); Calibrated: 2020.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2020.4.28
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 12.6 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 92.26 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 17.6 W/kg
SAR(1 g) = 9.85 W/kg; SAR(10 g) = 5.17 W/kg
Maximum value of SAR (measured) = 12.3 W/kg



0 dB = 12.3 W/kg = 10.90 dBW/kg