

# FCC SAR TEST REPORT

FCC ID : 2ABZ2-EF14A  
Equipment : Smart Phone  
Brand Name : ONEPLUS  
Model Name : LE2127  
Applicant : OnePlus Technology (Shenzhen) Co., Ltd.  
18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building,  
Binhe Avenue North, Futian District, Shenzhen  
Manufacturer : OnePlus Technology (Shenzhen) Co., Ltd.  
18C02, 18C03, 18C04 and 18C05, Shum Yip Terra Building,  
Binhe Avenue North, Futian District, Shenzhen  
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Oct. 27, 2020 and testing was started from Dec. 01, 2020 and completed on Jan. 29, 2021. We, Sporton International (ShenZhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Hank Huang

Reviewed by: Hank Huang / Supervisor

Johnny Chen

Approved by: Johnny Chen / Manager



**Sporton International (ShenZhen) Inc.**

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People's Republic of China



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## History of this test report

Report No.	Version	Description	Issued Date
FA002703-02	01	Initial issue of report	Feb. 05, 2021



## 1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **OnePlus Technology (Shenzhen) Co., Ltd., Smart Phone, LE2127**, are as follows.

Frequency Band		Highest SAR Summary				Highest Simultaneous Transmission 1g SAR (W/kg)
		Head (Separation 0mm)	Body-worn (Separation 15mm)	Hotspot (Separation 10mm)	Product Specific (Separation 0mm)	
		1g SAR (W/kg)			10g SAR (W/kg)	
GSM	GSM850	0.83	0.39	0.77		1.52
	GSM1900	0.88	0.53	0.87		
CDMA	CDMA2000 BC0	1.18	0.28	0.58		
	CDMA2000 BC1	1.19	0.75	1.15	2.59	
	CDMA2000 BC10	1.15	0.27	0.58		
WCDMA	WCDMA V	1.10	0.35	0.67		
	WCDMA IV	1.05	0.68	1.18	2.10	
	WCDMA II	1.18	0.69	1.19	2.29	
LTE	LTE Band 71	1.19	0.23	0.65		
	LTE Band 12 / 17	1.13	0.30	0.58		
	LTE Band 13	1.14	0.30	0.66		
	LTE Band 5	1.10	0.34	0.51		
	LTE Band 26	0.93	0.32	0.50		
	LTE Band 66 / 4	1.09	0.69	1.18	2.02	
	LTE Band 25 / 2	1.09	0.60	1.00	2.31	
	LTE Band 30	0.91	0.58	0.78	2.38	
	LTE Band 7	1.16	0.54	0.97	2.13	
	LTE Band 41 / 38	0.86	0.46	1.14	2.47	
5G NR	LTE Band 48	1.15	0.42	1.04	2.34	
	N71	1.18	0.18	0.44		
	N5	0.83	0.29	0.64		
	N66	0.92	0.46	0.96	2.56	
	N2	1.17	0.55	1.04	2.13	
	N25	1.19	0.58	1.08	1.98	
	N7	0.99	0.54	0.99	1.83	
	N41	1.12	0.75	1.01	2.71	
WLAN	2.4GHz WLAN	0.98	0.25	1.08	0.96	1.39
	5GHz WLAN	0.92	1.15	1.09	2.09	1.52
2.4GHz Band	Bluetooth	0.14	0.14	0.35		1.36
Date of Testing:		2020/12/01 ~ 2021/1/29				

**Remark:**

This device supports both LTE B4/17/38/2 and B66/12/41/25. Since the supported frequency span for LTE B4/17/38/2 falls completely within the supports frequency span for LTE B66/12/41/25, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66/12/41/25.

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6W/kg as averaged over any 1 gram of tissue; 10-gram SAR for Product Specific 10g SAR, limit: 4.0W/kg) 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 (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

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

## **3. Guidance Applied**

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

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- FCC KDB 941225 D07 UMPC Mini Tablet v01r02



#### 4. Equipment Under Test (EUT) Information

##### 4.1 General Information

Product Feature & Specification	
Equipment Name	Smart Phone
Brand Name	ONEPLUS
Model Name	LE2127
FCC ID	2ABZ2-EF14A
IMEI Code	990016750036863
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 CDMA2000 BC0: 824.7 MHz ~ 848.31 MHz CDMA 2000 BC1: 1851.25 MHz ~ 1908.75 MHz CDMA 2000 BC10: 817.9 MHz ~ 823.1 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 25: 1850.7 MHz ~ 1914.3 MHz LTE Band 26: 814.7 MHz ~ 848.3 MHz LTE Band 30: 2307.5 MHz ~ 2312.5 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 48: 3552.5 MHz ~ 3697.5 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 n7: 2502.5 MHz ~ 2567.5 MHz 5G NR n25 : 1852.5 MHz ~ 1912.5 MHz 5G NR n41 : 2506.02 MHz ~ 2679.99 MHz 5G NR n66 : 1712.5 MHz ~ 1777.5 MHz 5G NR n71 : 665.5 MHz ~ 695.5 MHz 5G NR n77 : 3710.01MHz~ 3970.02MHz 5G NR n258 : 24.25GHz ~ 25.25GHz 5G NR n260 : 37GHz ~ 40GHz 5G NR n261 : 27.5GHz ~ 28.35GHz 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 ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz ANT+: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz WPC: 100kHz~ 148.5 kHz
Mode	GSM/GPRS/EGPRS AMR / RMC 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink) CDMA2000 : 1xRTT/1xEv-Do(Rel.0)/1xEv-Do(Rev.A) LTE: QPSK, 16QAM, 64QAM, 256QAM

	5G NR : CP-OFDM / DFT-s-OFDM , PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM WLAN 2.4GHz : 802.11b/g/n/ac HT20/HT40/VHT20/VHT40 WLAN 2.4GHz : 802.11ax HE20/HE40 WLAN 5GHz : 802.11a/n/ac/ax HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE ANT+: GFSK NFC: ASK WPC: ASK
<b>HW Version</b>	22
<b>SW Version</b>	11.2.0.0.LE5ACB
<b>GSM / (E)GPRS Transfer mode</b>	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
<b>EUT Stage</b>	Production Unit

**Remark:**

1. This device supports VoIP in GPRS, EGPRS, CDMA, WCDMA and LTE (e.g. for 3rd-party VoIP) and LTE supports VoLTE operation.
2. This device does not support DTM operation and supports GRPS/EGPRS mode up to multi-slot class 33.
3. This device has WWAN UAT and LAT transmitter antennas which can refer to antenna location chapter.
4. The 2.4GHz/5GHz WLAN can transmit in MIMO antenna mode. 2.4G WLAN ANT2 SISO antenna mode can only be enabled when transmitting simultaneously with Bluetooth.
5. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
6. The device implements the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot/extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description.
7. 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 section 21.
8. LTE band 41, 5GNR n41 supports HPUE, HPUE power and SAR testing performed separately.
9. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
10. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA standalone total power level SAR can represent NSA mode SAR.
11. 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.
12. 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.
13. 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.
14. RF exposure report for WPC (Wireless power charging) will be separately submitted.
15. 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
	n7	FDD	15	5, 10, 15, 20
	n25	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20
	n71	FDD	15	5, 10, 15, 20
	n41	TDD	30	20, 30, 40, 50, 80, 90, 100
	n77	TDD	30	20, 30, 40, 50, 60, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20
	n25	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20
	n71	FDD	15	5, 10, 15, 20
	n41	TDD	30	20, 30, 40, 50, 80, 90, 100



## 4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																										
FCC ID	2ABZ2-EF14A																																																																									
Equipment Name	Smart Phone																																																																									
Operating Frequency Range of each LTE transmission band	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 25: 1850.7 MHz ~ 1914.3 MHz LTE Band 26: 814.7 MHz ~ 848.3 MHz LTE Band 30: 2307.5 MHz ~ 2312.5 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 48: 3552.5 MHz ~ 3697.5 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5 MHz																																																																									
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																																									
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																																									
LTE Voice / Data requirements	Voice and Data																																																																									
LTE Release Version	R15, Cat 18																																																																									
CA Support	Yes, Uplink and Downlink																																																																									
LTE MPR permanently built-in by design	<table><tr><th colspan="8">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</th></tr><tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (<math>N_{RB}</math>)</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>&gt; 5</td><td>&gt; 4</td><td>&gt; 8</td><td>&gt; 12</td><td>&gt; 16</td><td>&gt; 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>64 QAM</td><td>&gt; 5</td><td>&gt; 4</td><td>&gt; 8</td><td>&gt; 12</td><td>&gt; 16</td><td>&gt; 18</td><td>≤ 2</td></tr><tr><td>256 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>256 QAM</td><td>&gt; 5</td><td>&gt; 4</td><td>&gt; 8</td><td>&gt; 12</td><td>&gt; 16</td><td>&gt; 18</td><td>≤ 3</td></tr><tr><td>256 QAM</td><td colspan="6">≥ 1</td><td>≤ 5</td></tr></table>				Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3								Modulation	Channel bandwidth / Transmission bandwidth ( $N_{RB}$ )						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	256 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	256 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
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16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1																																																																			
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256 QAM	≥ 1						≤ 5																																																																			
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																																									
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																									
Power reduction applied to satisfy SAR compliance	Yes, receiver detected /hotspot /proximity sensor will trigger reduced power for some LTE bands, the detail please referred to section 14.																																																																									
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section 14.																																																																									
LTE Carrier Aggregation Additional Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for LTE 41C/48C with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 7 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.																																																																									

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829				
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)	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)	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 25												
	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	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905

LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5		
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5		
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5		
LTE Band 30												
	Bandwidth 5 MHz					Bandwidth 10 MHz						
	Channel #		Freq.(MHz)			Channel #			Freq.(MHz)			
L	27685		2307.5			27710			2310			
M	27710		2310									
H	27735		2312.5									
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580	37850	2580		
M	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595		
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610	38150	2610		
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506	39750	2506		
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5	40185	2549.5		
M	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593		
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5	41055	2636.5		
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680	41490	2680		
LTE Band 48												
	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)		
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560	55340	3560		
LM	55810	3607	55815	3607.5	55820	3608	55830	3609	55830	3609		
MH	56170	3643	56165	3642.5	56160	3642	56150	3641	56150	3641		
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690	56640	3690		
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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133147	665.5	133172	668	133197	670.5	133222	673	133222	673	133222	673
M	133297	680.5	133297	680.5	133297	680.5	133322	683	133322	683	133322	683
H	133447	695.5	133422	693	133397	690.5	133372	688	133372	688	133372	688

5G NR FR1 Information	
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1852.5 MHz ~ 1907.5 MHz 5G NR n5 : 826.5 MHz ~ 846.5 MHz 5G NR n7: 2502.5 MHz ~ 2567.5 MHz 5G NR n25 : 1852.5 MHz ~ 1912.5 MHz 5G NR n41 : 2506.02 MHz ~ 2679.99 MHz 5G NR n66 : 1712.5 MHz ~ 1777.5 MHz 5G NR n71 : 665.5 MHz ~ 695.5 MHz 5G NR n77 : 3710.01MHz ~ 3970.02MHz
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n41: 20MHz, 30MHz, 40MHz, 50MHz, 80MHz, 90MHz, 100MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n77: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B5/12/13/66
LTE Anchor Bands for n5	LTE B2/7/48/66
LTE Anchor Bands for n7	LTE B5/66
LTE Anchor Bands for n25	LTE B12/66
LTE Anchor Bands for n41	LTE B2/66
LTE Anchor Bands for n66	LTE B2/5/7/12/13/48
LTE Anchor Bands for n71	LTE B2/66
LTE Anchor Bands for n77	LTE B5/13/66

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band																
NR Band 2																
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz						
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)					
L	370500	1852.5		371000	1855		371500	1857.5		372000	1860					
M	376000	1880		376000	1880		376000	1880		376000	1880					
H	381500	1907.5		381000	1905		380500	1902.5		380000	1900					
NR Band 5																
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz						
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)					
L	165300	826.5		165800	829		166300	831.5		166800	834					
M	167300	836.5		167300	836.5		167300	836.5		167300	836.5					
H	169300	846.5		168800	844		168300	841.5		167800	839					
NR Band 7																
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz						
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)					
L	500500	2502.5		501000	2505		501500	2507.5		502000	2510					
M	507000	2535		507000	2535		507000	2535		507000	2535					
H	513500	2567.5		513000	2565		512500	2562.5		512000	2560					
NR Band 25																
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz						
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)					
L	370500	1852.5		371000	1855		371500	1857.5		372000	1860					
M	376500	1882.5		376500	1882.5		376500	1882.5		376500	1882.5					
H	382500	1912.5		382000	1910		381500	1907.5		381000	1905					
NR Band 66																
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz						
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)					
L	342500	1712.5		343000	1715		343500	1717.5		344000	1720					
M	349000	1745		349000	1745		349000	1745		349000	1745					
H	355500	1777.5		355000	1775		354500	1772.5		354000	1770					
NR Band 71																
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz						
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)					
L	133100	665.5		133600	668		134100	670.5		134600	673					
M	136100	680.5		136100	680.5		136100	680.5		136100	680.5					
H	139100	695.5		138600	693		138100	690.5		137600	688					
NR Band 41																
	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	507204	2536.02	508200	2541	509202	2546.01		
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99		
H	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	529998	2649.99	528996	2644.98	528000	2640		
NR Band 77																
	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	664668	3970.02	664334	3965.01	664000	3960	663668	3955.02	663334	3950.01	662668	3940.02	662334	3935.01	662000	3930

## 5. Smart Transmit feature for RF Exposure compliance

WWAN bands are enabled with Qualcomm Smart Transmit feature. This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time.

Note that WLAN operations are not enabled with Smart Transmit.

The FCC RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with FCC RF exposure limit over a defined time window, for SAR (transmit frequency  $\leq 6\text{GHz}$ ). To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.

The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC SAR limits when transmitting in static transmission scenario at maximum allowable time-averaged power levels.

This report describes the procedures for the SAR char generation, and the parameters obtained from SAR characterization (referred to as SAR char, respectively) will be used as input for Smart Transmit. SAR char will be entered via the Embedded File System (EFS) to enable the Smart Transmit Feature.

### <Terminologies in this report>

$P_{\text{limit}}$	The time-averaged RF power which corresponds to SAR_design_target.
$P_{\text{max}}$	Maximum target power level
SAR_design_target:	The design target for SAR compliance. It should be less than regulatory SAR limit to account for all device design related uncertainties.
SAR char	$P_{\text{limit}}$ for all the technologies/bands for all applicable DSI

### <SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at 6 GHz or below. It will then be used as input for Smart Transmit to control and manage RF exposure for  $f < 6\text{GHz}$ .

### <SAR design target and uncertainty>

The detail SAR design target relate to each exposure conditions pls refer to operation description

	Uncertainty dB (k=2)
Total uncertainty	1.0

To account for total uncertainty, SAR\_design\_target should be determined as:

$$SAR_{\text{design\_target}} < SAR_{\text{regulatory\_limit}} \times 10^{\frac{-\text{total uncertainty}}{10}}$$

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR\_design\_target or PD\_design\_target, below the predefined time-averaged power limit (i.e., input.power.limit for 5G mmW NR), for each characterized technology and band (refer to RF exposure part0 report).

Smart Transmit allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit EFS settings and maximum tune up output power Pmax configured for this EUT for various transmit conditions (Device State Index DSI).

**<P<sub>limit</sub> for supported technologies and bands (P<sub>limit</sub> in EFS file)> for UAT**

Band	Antenna	Head	Head	Head	Head	Body	Hotspot	Extremity	Pmax*
		DSI 1	DSI 2	DSI 3	DSI 4	Worn	DSI 5	DSI 7	
GSM850(4 Tx slots)	0	21.6	20.1	20.1	20.1	28.8	21.6	24.0	24.0
GSM1900(2 Tx slots)	2	18.3	17.8	17.8	17.8	30.6	22.5	19.8	19.8
WCDMA II	2	19.0	17.5	17.5	17.5	27.1	22.7	22.3	22.3
WCDMA IV	2	18.3	16.8	16.8	16.8	26.9	22.8	22.3	22.3
WCDMA V	0	21.4	18.9	18.9	18.9	30.2	27.2	23.3	23.3
CDMA BC0	0	21.2	19.7	19.7	19.7	29.9	28.0	22.8	22.8
CDMA BC1	2	19.2	17.7	17.7	17.7	26.6	23.2	21.8	21.8
CDMA BC10	0	21.8	19.3	19.3	19.3	29.2	26.2	22.8	22.8
LTE B2/25	2	18.4	16.9	16.9	16.9	26.9	21.0	22.3	22.3
LTE B66/4	2	18.9	17.4	17.4	17.4	29.3	23.5	22.3	22.3
LTE B66/4 <sup>1,2</sup>	0	17.7	16.6	16.6	16.6	26.8	18.7	23.5	23.5
LTE B7 <sup>2</sup>	0	15.6	14.1	14.1	14.1	24.3	18.6	24.0	24.0
LTE B5	0	21.5	19.0	19.0	19.0	29.7	27.4	23.3	23.3
LTE B7	2	17.6	16.1	16.1	16.1	29.8	24.1	22.1	22.1
LTE B12/B17	0	22.4	20.4	20.4	20.4	29.3	26.4	23.3	23.3
LTE B13	0	22.5	20.5	20.5	20.5	29.0	25.8	23.3	23.3
LTE B26	0	20.8	19.3	19.3	19.3	30.9	29.2	23.3	23.3
LTE B30	2	21.1	21.1	21.1	21.1	29.9	24.2	21.6	21.6
LTE B41/38 PC3	2	20.8	20.8	20.8	20.8	29.5	23.3	19.2	18.8
LTE B41 PC2	2	20.8	20.8	20.8	20.8	29.5	23.3	19.2	19.2
LTE B48	9	18.5	17.0	17.0	17.0	24.9	20.1	21.8	21.8
LTE B71	0	21.9	19.9	19.9	19.9	30.3	28.0	23.3	23.3
NR_n71	0	23.8	20.5	20.5	20.5	30.6	27.4	22.5	22.5
NR_n5	0	21.5	20.5	20.5	20.5	29.1	25.8	22.5	22.5
NR_n66	2	17.8	16.8	16.8	16.8	28.9	22.6	20.8	20.8
NR_n66 <sup>2</sup>	0	16.8	15.8	15.8	15.8	25.5	19.3	23.8	23.8
NR_n2	2	17.8	16.8	16.8	16.8	28.7	22.5	20.8	20.8
NR_n25	2	17.8	16.8	16.8	16.8	28.7	22.5	20.8	20.8
NR_n7	2	18.3	17.3	17.3	17.3	28.0	21.6	20.8	20.8
NR_n41 PC3 <sup>2</sup>	0	15.8	14.8	14.8	14.8	25.8	18.8	25.8	22.8
NR_n41 PC2 <sup>2</sup>	0	15.8	14.8	14.8	14.8	25.8	18.8	25.8	25.8
NR_n41 PC3	2	20.3	19.3	19.3	19.3	29.6	24.1	22.8	20.8
NR_n41 PC2	2	20.3	19.3	19.3	19.3	29.6	24.1	22.8	22.8
NR_n77	9	19.8	18.3	18.3	18.3	29.4	24.8	23.8	23.8

Note1: LTE Band 66/4 ant 0 only for LTE inter-band uplink CA

Note2: LTE Band 66/7 and NR 41/66 ant 0 only for EN-DC combination

**<P<sub>limit</sub> for supported technologies and bands (P<sub>limit</sub> in EFS file)> for LAT**

Band	Antenna	Head	Head	Head	Head	Body	Hotspot	Extremity	P <sub>max</sub> *
		DSI 1	DSI 2	DSI 3	DSI 4	Worn	DSI 5	DSI 8	
GSM850(4 Tx slots)	1	31.8	31.8	31.8	31.8	29.4	27.1	25.3	25.3
GSM1900(2 Tx slots)	3	28.7	28.7	28.7	28.7	28.3	23.1	21.8	21.8
WCDMA II	3	28.3	28.3	28.3	28.3	26.7	21.2	21.2	23.8
WCDMA IV	3	29.0	29.0	29.0	29.0	26.2	21.6	21.6	23.8
WCDMA V	1	31.1	31.1	31.1	31.1	31.2	27.7	23.8	23.8
CDMA BC0	1	31.1	31.1	31.1	31.1	30.9	27.1	23.8	23.8
CDMA BC1	3	28.1	28.1	28.1	28.1	25.8	21.7	21.7	23.8
CDMA BC10	1	30.7	30.7	30.7	30.7	30.2	27.1	23.8	23.8
LTE B2/25	3	28.9	28.9	28.9	28.9	26.7	21.0	21.0	23.8
LTE B66/4	3	29.0	29.0	29.0	29.0	26.1	20.8	20.8	23.8
LTE B66/4 <sup>1,2</sup>	1	30.2	30.2	30.2	30.2	29.3	24.8	21.0	21.0
LTE B5	1	31.2	31.2	31.2	31.2	31.5	27.5	23.8	23.8
LTE B7	3	27.5	27.5	27.5	27.5	25.2	20.8	20.8	23.8
LTE B7 <sup>2</sup>	1	29.2	29.2	29.2	29.2	28.5	22.3	20.5	20.5
LTE B12/B17	1	30.5	30.5	30.5	30.5	30.6	26.9	23.8	23.8
LTE B13	1	30.0	30.0	30.0	30.0	30.3	26.6	23.8	23.8
LTE B26	1	31.5	31.5	31.5	31.5	31.2	28.4	23.8	23.8
LTE B30	3	28.1	28.1	28.1	28.1	25.1	20.0	20.0	23.8
LTE B41/38 PC3	3	27.9	27.9	27.9	27.9	25.9	20.6	22.2	21.8
LTE B41 PC2	3	27.9	27.9	27.9	27.9	25.9	20.6	22.2	22.2
LTE B71	1	31.3	31.3	31.3	31.3	31.1	28.4	23.8	23.8
NR_n71	1	32.3	32.3	32.3	32.3	32.3	28.1	23.8	23.8
NR_n5	1	32.0	32.0	32.0	32.0	32.3	27.7	23.8	23.8
NR_n66	3	30.9	30.9	30.9	30.9	27.9	22.3	24.3	23.8
NR_n66 <sup>2</sup>	1	30.0	30.0	30.0	30.0	30.3	26.2	20.8	20.8
NR_n2	3	29.5	29.5	29.5	29.5	26.9	21.8	21.8	23.8
NR_n25	3	29.5	29.5	29.5	29.5	26.9	21.8	21.8	23.8
NR_n7	3	29.3	29.3	29.3	29.3	27.2	20.8	20.8	23.8
NR_n41 PC3 <sup>2</sup>	1	30.5	30.5	30.5	30.5	27.9	23.2	22.3	19.3
NR_n41 PC2 <sup>2</sup>	1	30.5	30.5	30.5	30.5	27.9	23.2	22.3	22.3
NR_n41 PC3	3	28.4	28.4	28.4	28.4	27.8	20.8	20.8	23.8
NR_n41 PC2	3	28.4	28.4	28.4	28.4	27.8	20.8	20.8	25.8

Note1: LTE Band 66/4 ant 1 only for LTE inter-band uplink CA

Note2: LTE Band 66/7 and NR 41/66 ant 1 only for EN-DC combination

\*P<sub>max</sub> is used for RF tune up procedure. The maximum allowed output power is equal to P<sub>max</sub> + 1dB uncertainty.

\*\*All P<sub>limit</sub> power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & NR TDD).

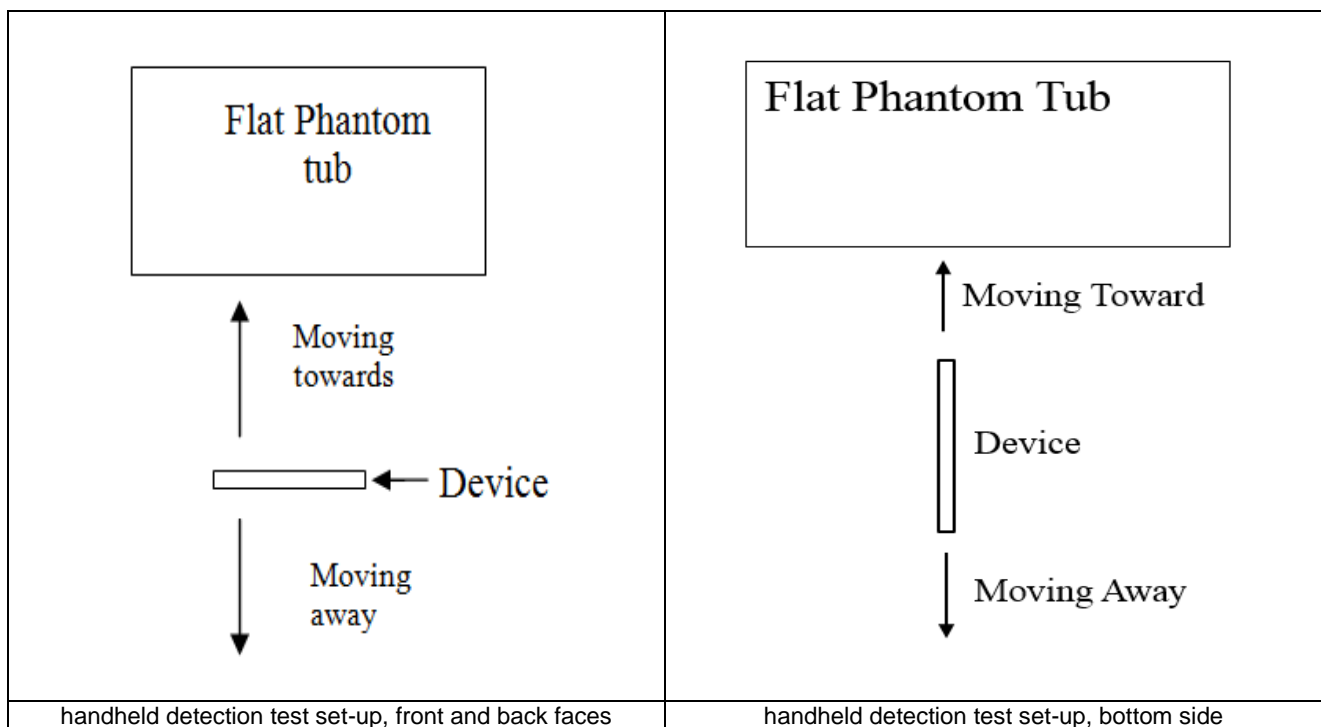
The max allowed output power is the P<sub>limit</sub> + 1dB device uncertainty, and if P<sub>limit</sub> is higher than P<sub>max</sub>, the device output power will be P<sub>max</sub> instead.



## 6. Proximity Reduced Triggering Test

### <Proximity Reduced Triggering Distance>:

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 (2600MHz) and lowest (1750MHz) frequency was used for proximity Sensor triggering testing.
  2. Capacitive proximity Sensor placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's hand at the front / back / bottom of the device.
  3. For LAT Antenna: When the sensor is active, the device will reduce maximum output powers on the WCDMA B2/B4, CDMA BC1 and LTE B7 / B25 / B2 / B30 / B66 / B4, FR1 n2/n7/n25/n41 transmitter.
  4. The proximity sensors trigger distance can refer to the following table.
  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 handheld:
- For LAT:  
 Front: [9 mm](#)  
 Back: [10 mm](#)  
 Bottom side: [10 mm](#)



	Proximity Sensor Trigger Distance (mm) for LAT					
Position	Front		Back		Bottom Side	
Position	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	10	10	11	12	11	11

## **7. RF Exposure Limits**

### **7.1 Uncontrolled Environment**

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

### **7.2 Controlled Environment**

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

**Limits for Occupational/Controlled Exposure (W/kg)**

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

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

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

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

## **8. Specific Absorption Rate (SAR)**

### **8.1 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.

### **8.2 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 ( $\rho$ ). The equation description is as below:

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

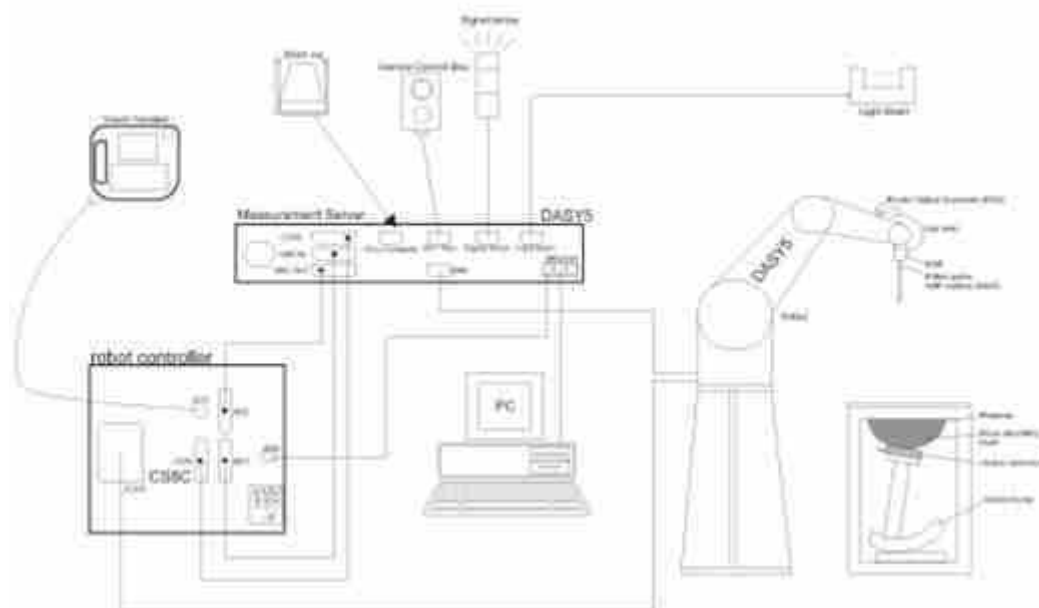
SAR is expressed in units of Watts per kilogram (W/kg)

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

Where:  $\sigma$  is the conductivity of the tissue,  $\rho$  is the mass density of the tissue and E is the RMS electrical field strength.

## 9. 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.

### **9.1 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>**

<b>Construction</b>	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
<b>Frequency</b>	10 MHz – >6 GHz Linearity: $\pm 0.2$ dB (30 MHz – 6 GHz)	
<b>Directivity</b>	$\pm 0.3$ dB in TSL (rotation around probe axis) $\pm 0.5$ dB in TSL (rotation normal to probe axis)	
<b>Dynamic Range</b>	10 $\mu$ W/g – >100 mW/g Linearity: $\pm 0.2$ dB (noise: typically <1 $\mu$ W/g)	
<b>Dimensions</b>	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	

### **9.2 Data Acquisition Electronics (DAE)**

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


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



**Fig 5.1 Photo of DAE**


### 9.3 Phantom

#### <SAM Twin Phantom>

<b>Shell Thickness</b>	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm	
<b>Filling Volume</b>	Approx. 25 liters	
<b>Dimensions</b>	Length: 1000 mm; Width: 500 mm; Height: adjustable feet	
<b>Measurement Areas</b>	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>

<b>Shell Thickness</b>	2 ± 0.2 mm (sagging: <1%)	
<b>Filling Volume</b>	Approx. 30 liters	
<b>Dimensions</b>	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.

## **9.4 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

## 10. 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

### 10.1 Spatial Peak SAR Evaluation

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

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

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

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



### 10.2 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 Reduced to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of Reduced calibration points to probe tip as defined in the probe properties.

### 10.3 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.

	$\leq 3$ GHz	$> 3$ GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	$5 \pm 1$ mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{Area}$ , $\Delta y_{Area}$	$\leq 2$ GHz: $\leq 15$ mm $2 - 3$ GHz: $\leq 12$ mm	$3 - 4$ GHz: $\leq 12$ mm $4 - 6$ GHz: $\leq 10$ mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

### 10.4 Zoom Scan

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

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

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

### 10.5 Volume Scan Procedures

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

### 10.6 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.



## **11. Test Equipment List**

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1099	Dec. 06, 2018	Nov. 24, 2021
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 05, 2018	Nov. 24, 2021
SPEAG	1750MHz System Validation Kit	D1750V2	1137	Jul. 30, 2018	Jul. 22, 2021
SPEAG	1900MHz System Validation Kit	D1900V2	5d182	Dec. 07, 2018	Nov. 24, 2021
SPEAG	2300MHz System Validation Kit	D2300V2	1056	Nov. 01, 2018	Oct. 31, 2021
SPEAG	2450MHz System Validation Kit	D2450V2	924	Sep. 02, 2020	Sep. 01, 2021
SPEAG	2600MHz System Validation Kit	D2600V2	1070	Dec. 07, 2018	Nov. 24, 2021
SPEAG	3500MHz System Validation Kit	D3500V2	1076	Apr. 29, 2019	Apr. 14, 2022
SPEAG	3700MHz System Validation Kit	D3700V2	1037	Apr. 29, 2019	Apr. 14, 2022
SPEAG	3900MHz System Validation Kit	D3900V2	1022	Jul. 11, 2019	Jul. 06, 2022
SPEAG	5000MHz System Validation Kit	D5GHzV2	1167	Aug. 03, 2018	Aug. 02, 2021
SPEAG	Data Acquisition Electronics	DAE4	715	Jul. 27, 2020	Jul. 26, 2021
SPEAG	Data Acquisition Electronics	DAE4	1210	Jul. 27, 2020	Jul. 26, 2021
SPEAG	Data Acquisition Electronics	DAE3	528	Mar. 16, 2020	Mar. 15, 2021
SPEAG	Data Acquisition Electronics	DAE4	1226	May 15, 2020	May 14, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	3819	Apr. 30, 2020	Apr. 29, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	7576	Jan. 22, 2020	Jan. 21, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	3826	May 20, 2020	May 19, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	7577	Sep. 30, 2020	Sep. 29, 2021
SPEAG	SAM Twin Phantom	QD 000 P40 CD	TP-1671	NCR	NCR
SPEAG	SAM Twin Phantom	QD 000 P40 CD	TP-1670	NCR	NCR
SPEAG	SAM Twin Phantom	SAM V5.0	1795	NCR	NCR
SPEAG	SAM Twin Phantom	QD000P40CC	TP-1500	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio communication analyzer	MT8820C	6201300653	Jul. 21, 2020	Jul. 20, 2021
Anritsu	Radio communication analyzer	MT8820C	6201341952	Dec. 25, 2020	Dec. 24, 2021
Anritsu	Radio communication analyzer	MT8820C	6201563813	Dec. 25, 2020	Dec. 24, 2021
Anritsu	Radio communication analyzer	MT8821C	6201588577	Mar. 26, 2020	Mar. 25, 2021
Anritsu	Radio communication analyzer	MT8821C	6262150052	Jul. 15, 2020	Jul. 14, 2021
Agilent	Wireless Communication Test Set	E5515C	MY50267224	Jul. 21, 2020	Jul. 20, 2021
Agilent	Network Analyzer	E5071C	MY46523671	Oct. 15, 2020	Oct. 14, 2021
Speag	Dielectric Assessment KIT	DAK-3.5	1138	May 19, 2020	May 18, 2021
Speag	Dielectric Assessment KIT	DAK-3.5	1144	Dec. 02, 2020	Dec. 01, 2021
Agilent	Signal Generator	N5181A	MY50145381	Dec. 26, 2019	Dec. 25, 2020
Agilent	Signal Generator	N5181A	MY50145381	Dec. 25, 2020	Dec. 24, 2021
Anritsu	Power Sensor	MA2411B	1306099	Jul. 21, 2020	Jul. 20, 2021
Anritsu	Power Sensor	MA2411B	1306099	Dec. 25, 2020	Dec. 24, 2021
Anritsu	Power Meter	ML2495A	1349001	Jul. 21, 2020	Jul. 20, 2021
Anritsu	Power Sensor	MA2411B	1207253	Dec. 26, 2019	Dec. 25, 2020
Anritsu	Power Sensor	MA2411B	1207253	Dec. 25, 2020	Dec. 24, 2021
Anritsu	Power Meter	ML2495A	1218010	Dec. 25, 2020	Dec. 24, 2021
R&S	CBT BLUETOOTH TESTER	CBT	100963	Dec. 26, 2019	Dec. 25, 2020
R&S	CBT BLUETOOTH TESTER	CBT	100963	Dec. 25, 2020	Dec. 24, 2021
R&S	Spectrum Analyzer	FSP7	100818	Jul. 21, 2020	Jul. 20, 2021
TES	Hygrometer	1310	200505600	Jul. 30, 2020	Jul. 29, 2021
Anymetre	Thermo-Hygrometer	JR593	2015030904	Jul. 21, 2020	Jul. 20, 2021
Anymetre	Thermo-Hygrometer	JR593	2018100801	Apr. 19, 2020	Apr. 18, 2021
Anymetre	Thermo-Hygrometer	JR593	2015102801	Jan. 05, 2021	Jan. 04, 2022
Anymetre	Thermo-Hygrometer	JR593	2018100802	Apr. 19, 2020	Apr. 18, 2021
Anymetre	Thermo-Hygrometer	JR593	2020062101	Jul. 21, 2020	Jul. 20, 2021
AR	Amplifier	5S1G4	0333096	Note 1	
mini-circuits	Amplifier	ZVE-3W-83+	599201528	Note 1	
ARRA	Power Divider	A3200-2	N/A	Note 1	

PASTERNAK	Dual Directional Coupler	PE2214-10	N/A	Note 1
Agilent	Dual Directional Coupler	778D	50422	Note 1
MCL	Attenuator 1	BW-S10W5	N/A	Note 1
Weinschel	Attenuator 2	3M-20	N/A	Note 1
Zhongjilianhe	Attenuator 3	MVE2214-03	N/A	Note 1

**General Note:**

1. Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.
2. 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.

## **12. System Verification**

### **12.1 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. 10.1. 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. 10.2.



**Fig 10.1**Photo of Liquid Height for Head SAR



**Fig 10.2** Photo of Liquid Height for Body SAR



## 12.2 Tissue Verification

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

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

### Simulating Liquid for 5GHz, Manufactured by SPEAG

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

### <Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε <sub>r</sub> )	Conductivity Target (σ)	Permittivity Target (ε <sub>r</sub> )	Delta (σ) (%)	Delta (ε <sub>r</sub> ) (%)	Limit (%)	Date
750	Head	22.5	0.886	41.532	0.89	41.90	-0.45	-0.88	±5	2020/12/1
750	Head	22.4	0.878	40.673	0.89	41.90	-1.35	-2.93	±5	2020/12/27
750	Head	22.6	0.879	40.957	0.89	41.90	-1.24	-2.25	±5	2021/1/11
835	Head	22.6	0.913	40.859	0.90	41.50	1.44	-1.54	±5	2020/12/3
835	Head	22.5	0.938	42.518	0.90	41.50	4.22	2.45	±5	2020/12/25
835	Head	22.1	0.919	41.524	0.90	41.50	2.11	0.06	±5	2021/1/11
1750	Head	22.8	1.377	41.395	1.37	40.10	0.51	3.23	±5	2020/12/7
1750	Head	22.6	1.373	41.392	1.37	40.10	0.22	3.22	±5	2020/12/29
1750	Head	22.9	1.398	41.384	1.37	40.10	2.04	3.20	±5	2021/1/4
1900	Head	22.8	1.455	40.068	1.40	40.00	3.93	0.17	±5	2020/12/10
1900	Head	22.6	1.440	38.599	1.40	40.00	2.86	-3.50	±5	2020/12/31
1900	Head	22.9	1.450	40.038	1.40	40.00	3.57	0.09	±5	2021/1/6
2300	Head	22.4	1.699	38.749	1.67	39.50	1.74	-1.90	±5	2020/12/16
2300	Head	22.8	1.664	38.851	1.67	39.50	-0.36	-1.64	±5	2021/1/2
2300	Head	22.4	1.694	38.564	1.67	39.50	1.44	-2.37	±5	2021/1/7
2450	Head	22.4	1.820	39.753	1.80	39.20	1.11	1.41	±5	2020/12/18
2450	Head	22.6	1.881	37.273	1.80	39.20	4.50	-4.92	±5	2021/1/2
2450	Head	22.3	1.809	37.604	1.80	39.20	0.50	-4.07	±5	2021/1/4
2600	Head	22.7	2.050	38.344	1.96	39.00	4.59	-1.68	±5	2020/12/20
2600	Head	22.4	1.992	40.445	1.96	39.00	1.63	3.71	±5	2021/1/3
2600	Head	22.9	2.055	37.597	1.96	39.00	4.85	-3.60	±5	2021/1/3
3500	Head	22.9	2.905	39.577	2.91	37.90	-0.17	4.42	±5	2021/1/1
3700	Head	22.6	3.063	39.332	3.12	37.70	-1.83	4.33	±5	2021/1/3
5250	Head	22.3	4.597	36.241	4.71	35.95	-2.40	0.81	±5	2020/12/22
5250	Head	22.8	4.595	36.652	4.71	35.95	-2.44	1.95	±5	2021/1/6
5600	Head	22.4	4.954	35.793	5.07	35.50	-2.29	0.83	±5	2020/12/24
5600	Head	22.4	5.002	36.115	5.07	35.50	-1.34	1.73	±5	2021/1/9
5750	Head	22.4	5.119	35.497	5.22	35.35	-1.93	0.42	±5	2020/12/26
5750	Head	22.7	5.170	35.843	5.22	35.35	-0.96	1.39	±5	2021/1/13
3500	Head	22.5	2.858	38.432	2.91	37.90	-1.79	1.40	±5	2021/1/27
3700	Head	22.5	3.007	38.198	3.12	37.70	-3.62	1.32	±5	2021/1/28
3900	Head	22.6	3.167	37.998	3.33	37.51	-4.89	1.30	±5	2021/1/29

### 12.3 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.

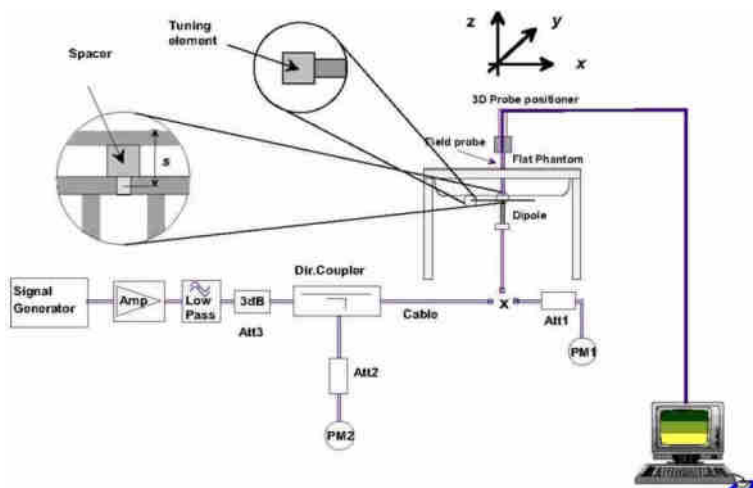
#### <1g SAR>

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 (%)
2020/12/1	750	Head	250	1099	3826	1210	2.21	8.52	8.84	3.76
2020/12/27	750	Head	250	1099	3826	1210	2.10	8.52	8.4	-1.41
2021/1/11	750	Head	250	1099	3819	1226	2.18	8.52	8.72	2.35
2020/12/3	835	Head	250	4d162	3826	1210	2.63	9.61	10.52	9.47
2020/12/25	835	Head	250	4d162	3826	1210	2.52	9.61	10.08	4.89
2021/1/11	835	Head	250	4d162	3819	1226	2.43	9.61	9.72	1.14
2020/12/7	1750	Head	250	1137	3826	1210	9.31	36.50	37.24	2.03
2020/12/29	1750	Head	250	1137	3826	1210	9.39	36.50	37.56	2.90
2021/1/4	1750	Head	250	1137	7576	528	9.46	36.50	37.84	3.67
2020/12/10	1900	Head	250	5d182	3826	1210	10.50	39.60	42	6.06
2020/12/31	1900	Head	250	5d182	3826	1210	10.10	39.60	40.4	2.02
2021/1/6	1900	Head	250	5d182	7576	528	10.20	39.60	40.8	3.03
2020/12/16	2300	Head	250	1056	3826	1210	11.70	49.90	46.8	-6.21
2021/1/2	2300	Head	250	1056	3826	1210	11.80	49.90	47.2	-5.41
2021/1/7	2300	Head	250	1056	7576	528	12.00	49.90	48	-3.81
2020/12/18	2450	Head	250	924	3826	1210	13.20	51.40	52.8	2.72
2021/1/2	2450	Head	250	924	7576	528	12.60	51.40	50.4	-1.95
2021/1/4	2450	Head	250	924	3826	1210	13.80	51.40	55.2	7.39
2020/12/20	2600	Head	250	1070	3826	1210	15.10	58.10	60.4	3.96
2021/1/3	2600	Head	250	1070	3826	1210	14.40	58.10	57.6	-0.86
2021/1/3	2600	Head	250	1070	7576	528	14.40	58.10	57.6	-0.86
2021/1/1	3500	Head	100	1076	7577	715	6.97	67.90	69.7	2.65
2021/1/3	3700	Head	100	1037	7577	715	7.13	68.50	71.3	4.09
2020/12/22	5250	Head	100	1167	3826	1210	7.42	77.00	74.2	-3.64
2021/1/6	5250	Head	100	1167	3826	1210	8.20	77.00	82	6.49
2020/12/24	5600	Head	100	1167	3826	1210	7.96	80.80	79.6	-1.49
2021/1/9	5600	Head	100	1167	3826	1210	8.33	80.80	83.3	3.09
2020/12/26	5750	Head	100	1167	3826	1210	7.39	76.90	73.9	-3.90
2021/1/13	5750	Head	100	1167	3826	1210	8.11	76.90	81.1	5.46
2021/1/27	3500	Head	100	1076	7577	528	6.53	67.90	65.3	-3.83
2021/1/28	3700	Head	100	1037	7577	528	6.51	68.50	65.1	-4.96
2021/1/29	3900	Head	100	1022	7577	528	6.42	70.50	64.2	-8.94



**<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 (%)
2020/12/1	750	Head	250	1099	3826	1210	1.48	5.64	5.92	4.96
2020/12/27	750	Head	250	1099	3826	1210	1.39	5.64	5.56	-1.42
2021/1/11	750	Head	250	1099	3819	1226	1.46	5.64	5.84	3.55
2020/12/3	835	Head	250	4d162	3826	1210	1.73	6.35	6.92	8.98
2020/12/25	835	Head	250	4d162	3826	1210	1.65	6.35	6.6	3.94
2021/1/11	835	Head	250	4d162	3819	1226	1.61	6.35	6.44	1.42
2020/12/7	1750	Head	250	1137	3826	1210	4.89	19.50	19.56	0.31
2020/12/29	1750	Head	250	1137	3826	1210	4.99	19.50	19.96	2.36
2021/1/4	1750	Head	250	1137	7576	528	5.07	19.50	20.28	4.00
2020/12/10	1900	Head	250	5d182	3826	1210	5.34	20.70	21.36	3.19
2020/12/31	1900	Head	250	5d182	3826	1210	5.24	20.70	20.96	1.26
2021/1/6	1900	Head	250	5d182	7576	528	5.26	20.70	21.04	1.64
2020/12/16	2300	Head	250	1056	3826	1210	5.44	23.80	21.76	-8.57
2021/1/2	2300	Head	250	1056	3826	1210	5.52	23.80	22.08	-7.23
2021/1/7	2300	Head	250	1056	7576	528	5.61	23.80	22.44	-5.71
2020/12/18	2450	Head	250	924	3826	1210	5.84	24.00	23.36	-2.67
2021/1/2	2450	Head	250	924	7576	528	5.71	24.00	22.84	-4.83
2021/1/4	2450	Head	250	924	3826	1210	6.17	24.00	24.68	2.83
2020/12/20	2600	Head	250	1070	3826	1210	6.50	26.10	26	-0.38
2021/1/3	2600	Head	250	1070	3826	1210	6.17	26.10	24.68	-5.44
2021/1/3	2600	Head	250	1070	7576	528	6.23	26.10	24.92	-4.52
2021/1/1	3500	Head	100	1076	7577	715	2.54	25.30	25.4	0.40
2021/1/3	3700	Head	100	1037	7577	715	2.59	24.80	25.9	4.44
2020/12/22	5250	Head	100	1167	3826	1210	2.04	22.00	20.4	-7.27
2021/1/6	5250	Head	100	1167	3826	1210	2.28	22.00	22.8	3.64
2020/12/24	5600	Head	100	1167	3826	1210	2.16	23.20	21.6	-6.90
2021/1/9	5600	Head	100	1167	3826	1210	2.35	23.20	23.5	1.29
2020/12/26	5750	Head	100	1167	3826	1210	2.03	21.60	20.3	-6.02
2021/1/13	5750	Head	100	1167	3826	1210	2.31	21.60	23.1	6.94


**Fig 8.3.1 System Performance Check Setup**

**Fig 8.3.2 Setup Photo**



## 13. RF Exposure Positions

### 13.1 Ear and handset reference point

Figure 9.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled "M," the left ear reference point (ERP) is marked "LE," and the right ERP is marked "RE." Each ERP is 15 mm along the B-M (back-mouth) line behind the entrance-to-ear-canal (EEC) point, as shown in Figure 9.1.2 The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (neck-front), also called the reference pivoting line, is normal to the Reference Plane and perpendicular to both a line passing through RE and LE and the B-M line (see Figure 9.1.3). Both N-F and B-M lines should be marked on the exterior of the phantom shell to facilitate handset positioning. Posterior to the N-F line the ear shape is a flat surface with 6 mm thickness at each ERP, and forward of the N-F line the ear is truncated, as illustrated in Figure 9.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

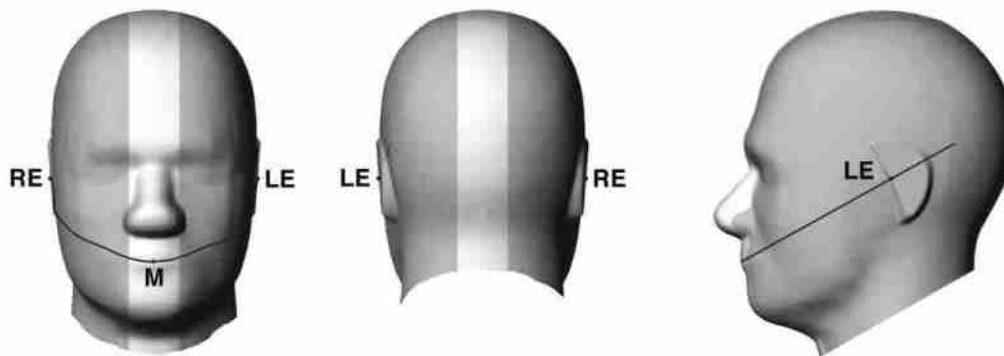


Fig 9.1.1 Front, back, and side views of SAM twin phantom

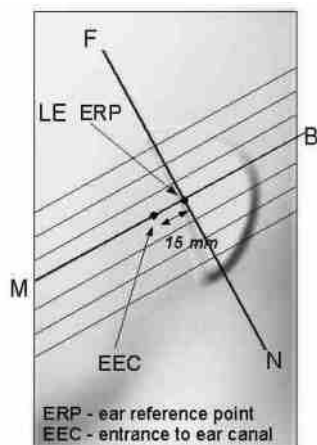


Fig 9.1.2 Close-up side view of phantom showing the ear region.

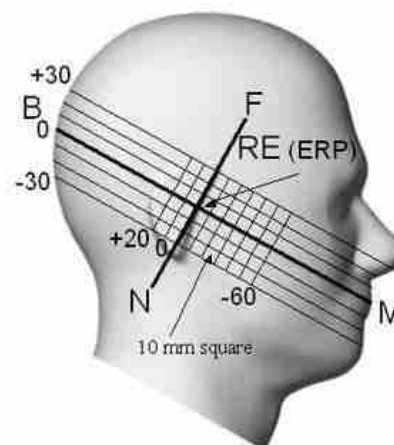
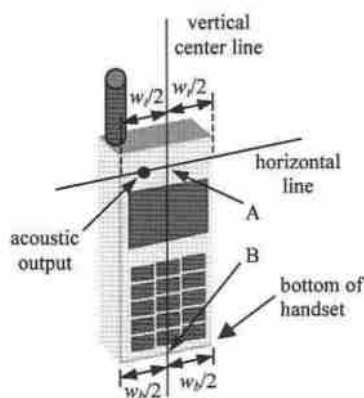


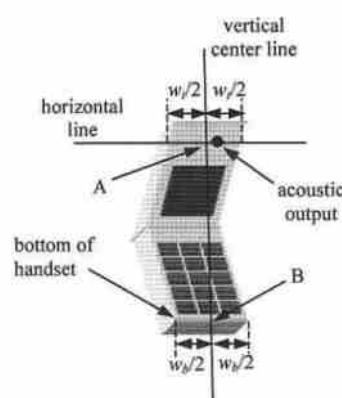
Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

### **13.2 Definition of the cheek position**

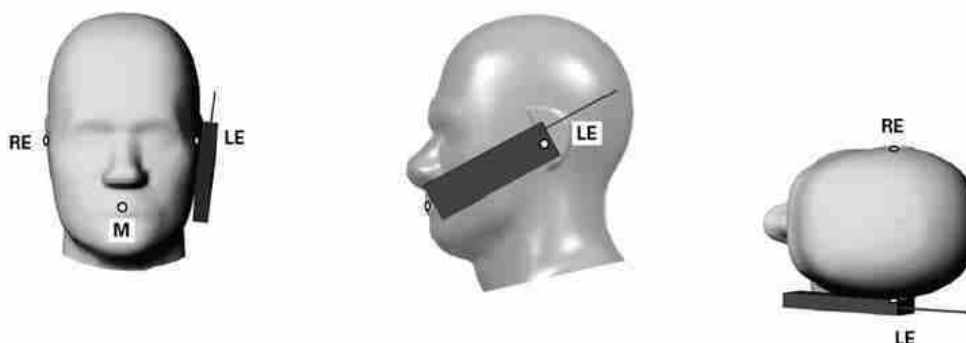
1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width  $w_t$  of the handset at the level of the acoustic output (point A in Figure 9.2.1 and Figure 9.2.2), and the midpoint of the width  $w_b$  of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 9.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 9.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
3. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 9.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
4. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP.
5. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
6. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.
7. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 9.2.3. The actual rotation angles should be documented in the test report.



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



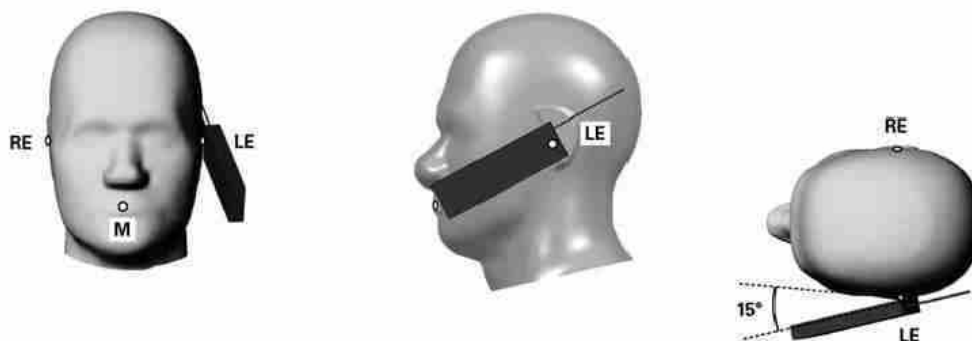
**Fig 9.2.2 Handset vertical and horizontal reference lines—“clam-shell case”**



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

### **13.3 Definition of the tilt position**

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15°.
3. Rotate the handset around the horizontal line by 15°.
4. While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. See Figure 9.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

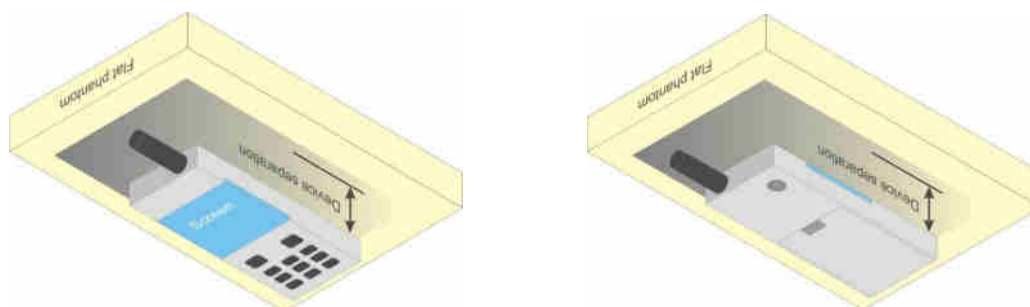


**Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.**

### **13.4 Body Worn Accessory**

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 9.4). Per KDB648474 D04v01r03, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is  $> 1.2 \text{ W/kg}$ , the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.



**Fig 9.4 Body Worn Position**

### **13.5 Product Specific Exposure**

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

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
2. The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at  $\leq 25$  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.<sup>6</sup> 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.

### **13.6 Wireless Router**

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

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

## **14. GSM/UMTS/CDMA/LTE Output Power (Unit: dBm)**

The detailed conducted power table can refer to Appendix E.

### **<GSM Conducted Power>**

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

### **<WCDMA Conducted Power>**

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

A summary of these settings are illustrated below:

### **HSDPA Setup Configuration:**

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
  - i. Set Gain Factors ( $\beta_c$  and  $\beta_d$ ) 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:  $\beta$  values for transmitter characteristics tests with HS-DPCCH

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{HS}$ (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5
<p>Note 1: <math>\Delta_{ACK}</math>, <math>\Delta_{NACK}</math> and <math>\Delta_{CQI} = 30/15</math> with <math>\beta_{HS} = 30/15 * \beta_c</math>.</p> <p>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, <math>\Delta_{ACK}</math> and <math>\Delta_{NACK} = 30/15</math> with <math>\beta_{HS} = 30/15 * \beta_c</math>, and <math>\Delta_{CQI} = 24/15</math> with <math>\beta_{HS} = 24/15 * \beta_c</math>.</p> <p>Note 3: CM = 1 for <math>\beta_c/\beta_d = 12/15</math>, <math>\beta_{HS}/\beta_c = 24/15</math>. 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.</p> <p>Note 4: For subtest 2 the <math>\beta_c/\beta_d</math> 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 <math>\beta_c = 11/15</math> and <math>\beta_d = 15/15</math>.</p>							

**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 ( $\beta_c$  and  $\beta_d$ ) 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:  $\beta$  values for transmitter characteristics tests with HS-DPCCH and E-DCH**

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{ES}$ (Note 1)	$\beta_{EC}$	$\beta_{ed}$ (Note 4) (Note 5)	$\beta_{ed}$ (SF)	$\beta_{ed}$ (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}$ : 47/15 $\beta_{ed2}$ : 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4,  $\Delta_{ACK}$ ,  $\Delta_{NACK}$  and  $\Delta_{CQI} = 30/15$  with  $\beta_{ht} = 30/15 * \beta_c$ . For sub-test 5,  $\Delta_{ACK}$ ,  $\Delta_{NACK}$  and  $\Delta_{CQI} = 5/15$  with  $\beta_{ht} = 5/15 * \beta_c$ .  
 Note 2: CM = 1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hd}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.  
 Note 3: For subtest 1 the  $\beta_c/\beta_d$  ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 10/15$  and  $\beta_d = 15/15$ .  
 Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.  
 Note 5:  $\beta_{ed}$  can not be set directly; It is set by Absolute Grant Value.  
 Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

**Setup Configuration**

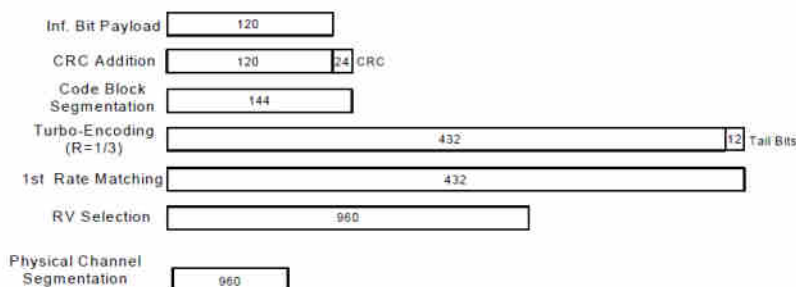
**DC-HSDPA 3GPP release 8 Setup Configuration:**

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

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

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

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


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



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

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

**Table C.11.1.4:  $\beta$  values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM**

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

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

**Setup Configuration**

**<WCDMA Conducted Power>****General Note:**

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

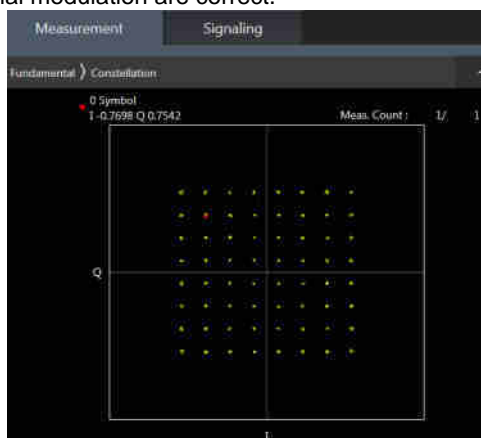
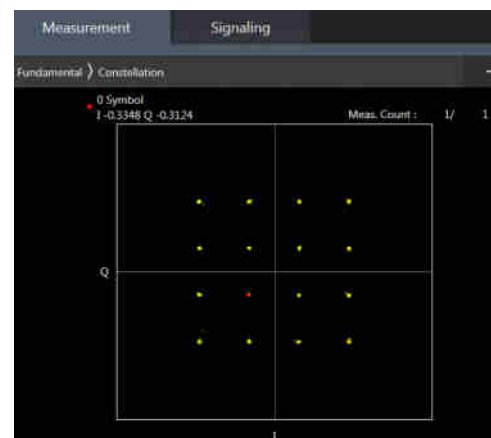
**<CDMA2000 Conducted Power>****General Note:**

1. Per KDB 941225 D01v03r01, SAR for head exposure is measured in RC3 with the handset configured to transmit at full rate in SO55.
2. Per KDB 941225 D01v03r01, in Hotspot mode EUT is treated as data device and SAR is tested with Ev-Do Rev 0 (RTAP 153.6kbps) as the primary mode.
3. Per KDB 941225 D01v03r01, for Body-worn accessory SAR is measured in RC3 with the handset configured in TDSO/SO32 to transmit at full rate on FCH only with all other code channels disabled. The body-worn accessory procedures in KDB Publication 447498 are applied. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCH), with FCH only as the primary mode.

# **<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  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / 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 band 2/4/17/38 SAR test was covered by Band 25/66/12/41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
  - a. the maximum output power, including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion
  - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
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.

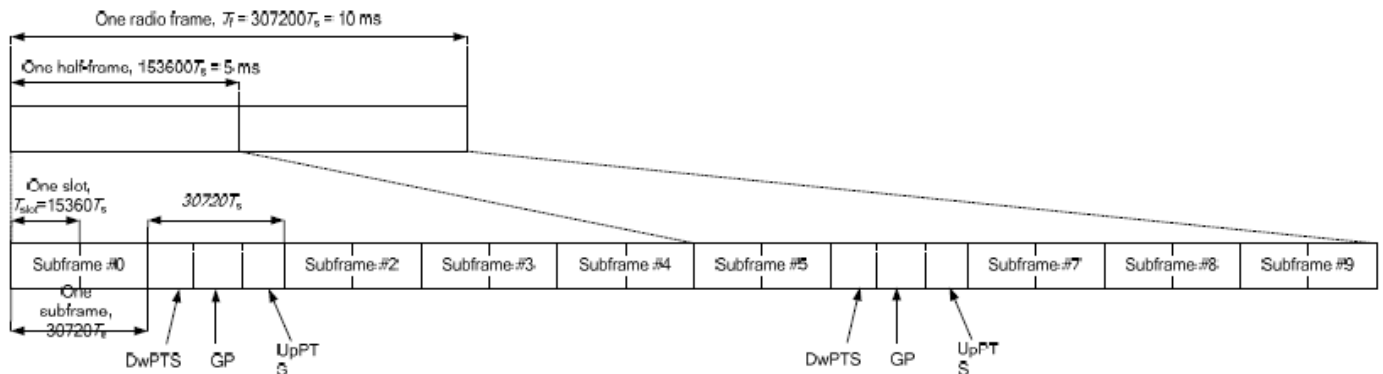

**64QAM**

**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.

- 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations
- “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
- 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	$26336 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$			$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$	-	-
8	$24144 \cdot T_s$			-		
9	$13168 \cdot T_s$			-		

Special subframe (30720·T <sub>s</sub> ): 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 <sub>s</sub> ): 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

- Uplink-downlink configuration: 1. In a half-frame consisted of 5 subframes, uplink operation is in 2 uplink subframes and 1 special subframe.
- special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
- for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is:  $(2+0.167)/5 = 43.3\%$
- for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is:  $(2+0.143)/5 = 42.9\%$
- 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

- Uplink-downlink configuration: 0. In a half-frame consisted of 5 subframes, uplink operation is in 3 uplink subframes and 1 special subframe.
- special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
- for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is:  $(3+0.167)/5 = 63.3\%$
- for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is:  $(3+0.143)/5 = 62.9\%$
- 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 combinations>****General Note:**

1. This device supports Carrier Aggregation on downlink for inter and intra band and uplink CA. For the device supports combination bands and configurations are according to 3GPP.
2. In applying the existing power measurement procedure of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of the frequency band and CCs in each row need consideration, and that configurations require power measurement should be highlighted in the below table.
3. All permutations exist. No restrictions on Pcell & SCell combinations. Only LTE Band 46A is limited to SCell.

2CC Downlink Carrier Aggregation					3CC Downlink Carrier Aggregation				
Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset
1	CA_2A-2A	2A, 2A-2A		3CC-1	1	CA_2A-2A-4A	2A, 4A, 2A-2A, 2A-4A, 2A-2A-4A		4CC-1
2	CA_2A-4A	2A, 4A, 2A-4A		3CC-1	2	CA_2A-2A-12A	2A, 2A-2A		4CC-3
3	CA_2A-5A	2A		3CC-6	3	CA_2A-2A-66A	2A, 66A, 2A-2A, 2A-66A, 2A-2A-66A		4CC-3
4	CA_2A-7A			3CC-7	4	CA_2A-2A-71A	2A, 2A-2A		4CC-5
5	CA_2A-12A	2A		3CC-8	5	CA_2A-4A-4A	2A, 4A, 2A-4A, 4A-4A, 2A-4A-4A		4CC-6
6	CA_2A-46A	2A	B46 SCC Only	3CC-14	6	CA_2A-4A-5A	2A, 4A, 2A-4A		
7	CA_2A-48A	2A		3CC-14	7	CA_2A-4A-7A			
8	CA_2A-66A	2A, 66A, 2A-66A		3CC-3	8	CA_2A-4A-12A	2A, 4A, 2A-4A		4CC-1
9	CA_2A-71A	2A		3CC-4	9	CA_2A-4A-71A	2A, 4A, 2A-4A		4CC-2
10	CA_2C	2C		3CC-23	10	CA_2A-5A-66A	2A, 66A, 2A-66A		
11	CA_4A-4A	4A, 4A-4A		3CC-24	11	CA_2A-7A-7A			
12	CA_4A-5A	4A		3CC-24	12	CA_2A-12A-66A	2A, 66A, 2A-66A		4CC-3
13	CA_4A-7A			3CC-25	13	CA_2A-46A-46A	2A	B46 SCC Only	4CC-8
14	CA_4A-12A	4A		3CC-26	14	CA_2A-46A-48A	2A-48A	B46 SCC Only	
15	CA_4A-46A	4A	B46 SCC Only	3CC-30	15	CA_2A-46A-66A	2A, 66A, 2A-66A	B46 SCC Only	4CC-8
16	CA_4A-71A	4A		3CC-27	16	CA_2A-48A-48A	2A-48A-48A		
17	CA_5A-7A			3CC-32	17	CA_2A-48A-66A	2A, 48A, 66A, 2A-48A, 2A-66A, 48A-66A, 2A-48A-66A		
18	CA_5A-66A	66A			18	CA_2A-66A-66A	2A, 66A, 2A-66A, 66A-66A, 2A-66A-66A		4CC-9
19	CA_5B			3CC-33	19	CA_2A-66A-71A	2A, 66A, 2A-66A		4CC-9
20	CA_7A-7A			3CC-11	20	CA_2A-46C	2A	B46 SCC Only	4CC-12
21	CA_7A-12A			3CC-30	21	CA_2A-48C	2A		4CC-13
22	CA_7A-32A	7A	B32 SCC Only		22	CA_2A-66C	2A, 66C, 2A-66C		4CC-11
23	CA_7A-46A		B46 SCC Only	3CC-34	23	CA_2C-66A	2C, 66A, 2C-66A		4CC-17
24	CA_7C				24	CA_4A-4A-5A	4A, 4A-4A		
25	CA_12A-66A	66A		3CC-35	25	CA_4A-4A-7A			
26	CA_25A-25A	25A, 25A-25A		3CC-39	26	CA_4A-4A-12A	4A, 4A-4A		
27	CA_25A-26A	25A		3CC-39	27	CA_4A-4A-71A	4A, 4A-4A		
28	CA_25A-41A	25A, 41A, 25A-41A		3CC-40	28	CA_4A-7A-7A			
29	CA_25A-46A	25A	B46 SCC Only	3CC-41	29	CA_4A-7A-12A			
30	CA_26A-41A	41A			30	CA_4A-46A-46A	4A	B46 SCC Only	
31	CA_38C	38C			31	CA_4A-46C	4A	B46 SCC Only	4CC-19
32	CA_41A-41A	41A, 41A-41A			32	CA_5A-7A-7A			
33	CA_41C	41C		3CC-42	33	CA_5B-46A		B46 SCC Only	
34	CA_46A-66A	66A	B46 SCC Only	3CC-44	34	CA_7A-46C		B46 SCC Only	
35	CA_48A-48A	48A, 48A-48A		3CC-47	35	CA_12A-66A-66A	66A, 66A-66A		4CC-7
36	CA_48A-66A	48A, 66A, 48A-66A		3CC-47	36	CA_12A-46C		B46 SCC Only	
37	CA_48C	48C		3CC-48	37	CA_12A-66C	66C		4CC-11
38	CA_66A-66A	66A, 66A-66A		3CC-51	38	CA_13A-66A-66A	66A, 66A-66A		
39	CA_66A-71A	66A		3CC-51	39	CA_25A-25A-26A	25A, 25A-25A		
40	CA_66B	66B			40	CA_25A-41C	25A, 41C, 25A-41C		
41	CA_66C	66C		3CC-53	41	CA_25A-46C	25A	B46 SCC Only	
42	CA_2A-13A	2A		3CC-54	42	CA_41A-41C	41A, 41C, 41A-41C		
43	CA_4A-13A	4A		3CC-65	43	CA_41D	41D		4CC-23
44	CA_4A-48A	4A, 48A, 4A-48A			44	CA_46A-46A-66A	66A	B46 SCC Only	4CC-8
45	CA_5A-5A				45	CA_46A-48A-66A	48A-66A	B46 SCC Only	



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46	CA_5A-46A		B46 SCC Only	3CC-67	46	CA_46C-66A	66A	B46 SCC Only	4CC-27
47	CA_5A-48A	48A		3CC-69	47	CA_48A-48A-66A	48A, 66A, 48A-66A, 48A-48A-66A		
48	CA_13A-46A		B46 SCC Only	3CC-77	48	CA_48A-48C	48A, 48C, 48A-48C		
49	CA_13A-48A	48A		3CC-80	49	CA_48C-66A	48C, 66A, 48C-66A		4CC-28
50	CA_13A-66A	66A		3CC-80	50	CA_48D	48D		4CC-32
					51	CA_66A-66A-71A	66A, 66A-66A		4CC-9
					52	CA_66A-66C	66A, 66C, 66A-66C		
					53	CA_66C-71A	66C		4CC-16
					54	CA_2A-13A-46A			
					55	CA_2A-13A-48A			
					56	CA_2A-13A-66A			
					57	CA_2A-2A-13A	2A, 2A-2A		
					58	CA_2A-2A-5A	2A, 2A-2A		
					59	CA_2A-4A-13A	2A, 4A, 2A-4A		
					60	CA_2A-5A-46A	2A	B46 SCC Only	
					61	CA_2A-5A-48A	2A, 48A, 2A-48A		
					62	CA_2A-5B	2A		
					63	CA_2A-66B	2A, 66B, 2A-66B		
					64	CA_4A-48C	4A, 48C, 4A-48C		
					65	CA_4A-4A-13A	4A, 4A-4A		
					66	CA_4A-5B	4A		
					67	CA_5A-46A-66A	66A	B46 SCC Only	
					68	CA_5A-46C		B46 SCC Only	
					69	CA_5A-48A-48A	48A, 48A-48A		
					70	CA_5A-48A-66A	48A, 66A, 48A-66A		
					71	CA_5A-48C	48C		
					72	CA_5A-5A-66A	66A		
					73	CA_5A-66A-66A	66A, 66A-66A		
					74	CA_5A-66B	66B		
					75	CA_5A-66C	66C		
					76	CA_5B-66A	66A		
					77	CA_13A-46A-66A	66A	B46 SCC Only	
					78	CA_13A-46C		B46 SCC Only	
					79	CA_13A-48A-48A	48A, 48A-48A		
					80	CA_13A-48A-66A	48A, 66A, 48A-66A		
					81	CA_13A-48C	48C		
					82	CA_13A-66B	66B		
					83	CA_13A-66C	66C		
					84	CA_66A-66A-66A	66A, 66A-66A, 66A-66A-66A		





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Report No. : FA002703-02

4CC Downlink Carrier Aggregation					5CC Downlink Carrier Aggregation				
Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset
1	CA_2A-2A-4A-12A	2A, 4A, 2A-2A, 2A-4A, 2A-2A-4A			1	CA_2A-46A-46C-66A	2A-66A	B46 SCC Only	
2	CA_2A-2A-4A-71A	2A, 4A, 2A-2A, 2A-4A, 2A-2A-4A			2	CA_2A-46A-46D	2A	B46 SCC Only	
3	CA_2A-2A-12A-66A	2A, 66A, 2A-2A, 2A-66A, 2A-2A-66A			3	CA_2A-46A-48D	2A-48D	B46 SCC Only	
4	CA_2A-2A-66A-66A	2A, 66A, 2A-2A, 2A-66A, 2A-2A-66A, 2A-66A-66A			4	CA_2A-46C-46C	2A	B46 SCC Only	
5	CA_2A-2A-66A-71A	2A, 66A, 2A-2A, 2A-66A, 2A-2A-66A			5	CA_2A-46C-48C	2A-48C	B46 SCC Only	
6	CA_2A-4A-4A-12A	2A, 4A, 2A-4A, 2A-4A-4A			6	CA_2A-46D-48A	2A-48A	B46 SCC Only	
7	CA_2A-12A-66A-66A	2A, 66A, 2A-66A, 66A-66A, 2A-66A-66A			7	CA_2A-46D-66A	2A, 66A, 2A-66A	B46 SCC Only	
8	CA_2A-46A-46A-66A	2A, 66A, 2A-66A	B46 SCC Only		8	CA_2A-46E	2A	B46 SCC Only	6CC-1
9	CA_2A-66A-66A-71A	2A, 66A, 2A-66A, 66A-66A, 2A-66A-66A			9	CA_4A-46A-46D	4A	B46 SCC Only	
10	CA_2A-2A-66B	2A, 66B, 2A-2A, 2A-66B, 2A-2A-66B			10	CA_12A-46E		B46 SCC Only	
11	CA_2A-12A-66C	2A, 66C, 2A-66C			11	CA_41C-41D	41C,41D,41C-41D		
12	CA_2A-46A-46C	2A	B46 SCC Only	5CC-1	12	CA_46A-46D-66A	66A	B46 SCC Only	
13	CA_2A-46A-48C	2A-48C	B46 SCC Only		13	CA_46A-48D-66A	48D-66A	B46 SCC Only	
14	CA_2A-46C-48A	2A-48A	B46 SCC Only		14	CA_46C-46C-66A	66A	B46 SCC Only	
15	CA_2A-46C-66A	2A, 66A, 2A-66A	B46 SCC Only	5CC-1	15	CA_46C-48C-66A	48C-66A	B46 SCC Only	
16	CA_2A-66C-71A	2A, 66C, 2A-66C			16	CA_46C-48D	48D	B46 SCC Only	
17	CA_2C-66A-66A	2C, 66A, 2C-66A, 66A-66A, 2C-66A-66A			17	CA_46D-48A-66A	48A-66A	B46 SCC Only	
18	CA_2A-46D	2A	B46 SCC Only	5CC-6	18	CA_46E-66A	66A	B46 SCC Only	6CC-4
19	CA_4A-46A-46C	4A	B46 SCC Only		19	CA_48E-66A	48E, 66A, 48E-66A		
20	CA_4A-46D	4A	B46 SCC Only	5CC-9	20	CA_48F	48F		
21	CA_25A-41D	25A-41D							
22	CA_25A-46D	25A	B46 SCC Only						
23	CA_41A-41D	41A-41D							
24	CA_41C-41C	41C-41C							
25	CA_41E	41E							
26	CA_46C-48A-66A	48A-66A	B46 SCC Only						
27	CA_46A-46C-66A	66A	B46 SCC Only						
28	CA_46A-48C-66A	48C-66A	B46 SCC Only						
29	CA_46A-48D	48D	B46 SCC Only						
30	CA_46D-48A	48A	B46 SCC Only	5CC-17					
31	CA_46D-66A	66A	B46 SCC Only	5CC-17					
32	CA_48D-66A	48D, 66A, 48D-66A		5CC-13					
33	CA_48E	48E		5CC-19					

6CC Downlink Carrier Aggregation					7CC Downlink Carrier Aggregation				
Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset
1	CA_2A-46E-66A	2A, 66A, 2A-66A	B46 SCC Only		1	CA_2A-46C-48E	2A	B46 SCC Only	
2	CA_46C-48D-66A	66A	B46 SCC Only		2	CA_46C-48E-66A	66A	B46 SCC Only	
3	CA_46A-46D-66C	66C			3	CA_46E-48C-66A	66A, 48C, 66A-48C	B46 SCC Only	
4	CA_46E-66C	66C							
5	CA_2A-46A-48E	48E							



# **<LTE Downlink Carrier Aggregation>**

## **General Note:**

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

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

**<LTE Uplink carrier aggregation>**

2CC Uplink Carrier Aggregation	
Number	Combination
1	41C
2	48C

**<Intra-band>**
**General Note:**

- The device supports intra-band uplink carrier aggregation for LTE B41/B48 with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
- According TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- Additional SAR measurement for LTE UL CA with other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.

**<Inter-band uplink carrier aggregation consideration>**

2CC Uplink Carrier Aggregation	
Number	Combination
1	2A-4A
2	2A-66A
3	2A-12A
4	4A-12A
5	12A-66A

**General Note:**

- According to October 2018 TCB workshop, uplink CA SAR test guidance as follows:
  - Provide the single uplink SAR values you have obtained for the relevant SAR configuration and frequency bands that employ inter-band uplink carrier aggregation.
  - If the single uplink 1g SAR values for each band are both less than 0.8W/kg and the algebraic summation of the 1g SAR values are less than 1.45W/kg, no additional measurements need to be performed.
  - If one of the single uplink 1g SAR values is greater than 0.8W/kg, instead of algebraically summing the 1g SAR values, sum up the SAR distributions, similar to the enlarged zoom scan (volume scan) procedures found in FCC KDB publication 865664 D01 SAR measurement 100MHz to 6GHz V01r04
  - If the algebraic sum of the 1g SAR values is > 1.45W/kg, additional measurements may have to be made. Submit a KDB inquiry for additional guidance.
- Test positions and test channels used for the testing below are based on the standalone SAR result. When the UL CA active reduced by 3dB for each frequency bands, therefore power and SAR was estimated based on standalone results to perform sim-Tx analysis with WiFi and Bluetooth.
- The single uplink 1g SAR values for each band are both less than 0.8W/kg and the algebraic summation of the 1g SAR value are less than 1.45W/kg, additional measurements are not required.
- Above note 1 to note 3 is general description, for this device supports Qualcomm Smart transmit for WWAN bands mentioned from page 14 to page 16. About Inter band CA uplink similar to EN-DC, they complied with TX-simultaneously analysis on page 131. For inter band CA uplink, the device supports Smart transmit and complied the Sim-Tx analysis principle mentioned on page 131, no need to sum CA standalone SAR together as inter band CA SAR when perform transmit simultaneously analysis with WLAN/BT.
- The device supports smart transmit and no need to do LTE inter CA summed SAR, although head SAR with higher than 0.8W/Kg, it is standalone SAR with total power, not inter band CA per LTE band standalone SAR. If the LTE standalone SAR co-located with WLAN/BT complied and inter band CA co-located with WLAN/BT will be also complied too.

## 15. 5G NR Output Power (Unit: dBm)

### General Note:

1. NR implementation of n71, n5, n66, n25, n2, n7, n41 and n77 supports NSA operations.
2. NR implementation of n71, n66, n25, n2, n7 and n41 supports SA operations.
3. Following 5G NR n2/n5/n7/n25/n66/n71 support SCS 15KHz DFT/CP-OFDM, PI/2 BPSK/QPSK/16QAM/64QAM/256QAM, Bandwidth 5M/10M/15M/20M.
4. Following 5G NR n41 supports SCS 30KHz DFT/CP-OFDM, PI/2 BPSK/QPSK/16QAM/64QAM/256QAM, Bandwidth 20M/30M/40M/50M/80M/90M/100M.
5. Following 5G NR n77 supports SCS 30KHz DFT/CP-OFDM, PI/2 BPSK/QPSK/16QAM/64QAM/256QAM, Bandwidth 20M/30M/40M/50M/60MHz/80M/90M/100M.
6. 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
7. 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.

**<3GPP 38.101 MPR for EN-DC>**
**Table 6.2.2-1 Maximum power reduction (MPR) for power class 3**

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

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	$\leq 3.5$	$\leq 0.5$	0
	QPSK	$\leq 3.5$	$\leq 1$	0
	16 QAM	$\leq 3.5$	$\leq 2$	$\leq 1$
	64 QAM	$\leq 3.5$	$\leq 2.5$	
	256 QAM	$\leq 4.5$		
CP-OFDM	QPSK	$\leq 3.5$	$\leq 3$	$\leq 1.5$
	16 QAM	$\leq 3.5$	$\leq 3$	$\leq 2$
	64 QAM	$\leq 3.5$		
	256 QAM	$\leq 6.5$		

**<Inter Band EN-DC Configuration>**

EN-DC configuration	Uplink EN-DC configuration	E-UTRA configuration	NR configuration
DC_2A_n5A	DC_2A_n5A	2A	n5A
DC_66A_n5A	DC_66A_n5A	66A	n5A
DC_66B_n5A	DC_66B_n5A	66B	n5A
DC_66C_n5A	DC_66C_n5A	66C	n5A
DC_7A_n5A	DC_7A_n5A	7A	n5A
DC_48A_n5A	DC_48A_n5A	48A	n5A
DC_66A_n71A	DC_66A_n71A	66A	n71A
DC_2A_n71A	DC_2A_n71A	2A	n71A
DC_5A_n2A	DC_5A_n2A	5A	n2A
DC_5B_n2A	DC_5B_n2A	5B	n2A
DC_13A_n2A	DC_13A_n2A	13A	n2A
DC_12A_n2A	DC_12A_n2A	12A	n2A
DC_66A_n2A	DC_66A_n2A	66A	n2A
DC_5A_n7A	DC_5A_n7A	5A	n7A
DC_66A_n7A	DC_66A_n7A	66A	n7A
DC_12A_n25A	DC_12A_n25A	12A	n25A
DC_66A_n25A	DC_66A_n25A	66A	n25A
DC_5A_n66A	DC_5A_n66A	5A	n66A
DC_5B_n66A	DC_5B_n66A	5B	n66A
DC_12A_n66A	DC_12A_n66A	12A	n66A
DC_13A_n66A	DC_13A_n66A	13A	n66A
DC_7A_n66A	DC_7A_n66A	7A	n66A
DC_2A_n66A	DC_2A_n66A	2A	n66A
DC_48A_n66A	DC_48A_n66A	48A	n66A
DC_2A_n41A	DC_2A_n41A	2A	n41A
DC_66A_n41A	DC_66A_n41A	66A	n41A
DC_5A_n77A	DC_5A_n77A	5A	n77A

DC_13A_n77A	DC_13A_n77A	13A	n77A
DC_66A_n77A	DC_66A_n77A	66A	n77A

Note: For 5G NR n41 supports 2X2 MIMO uplink.

## 16. WiFi/Bluetooth Output Power (Unit: dBm)

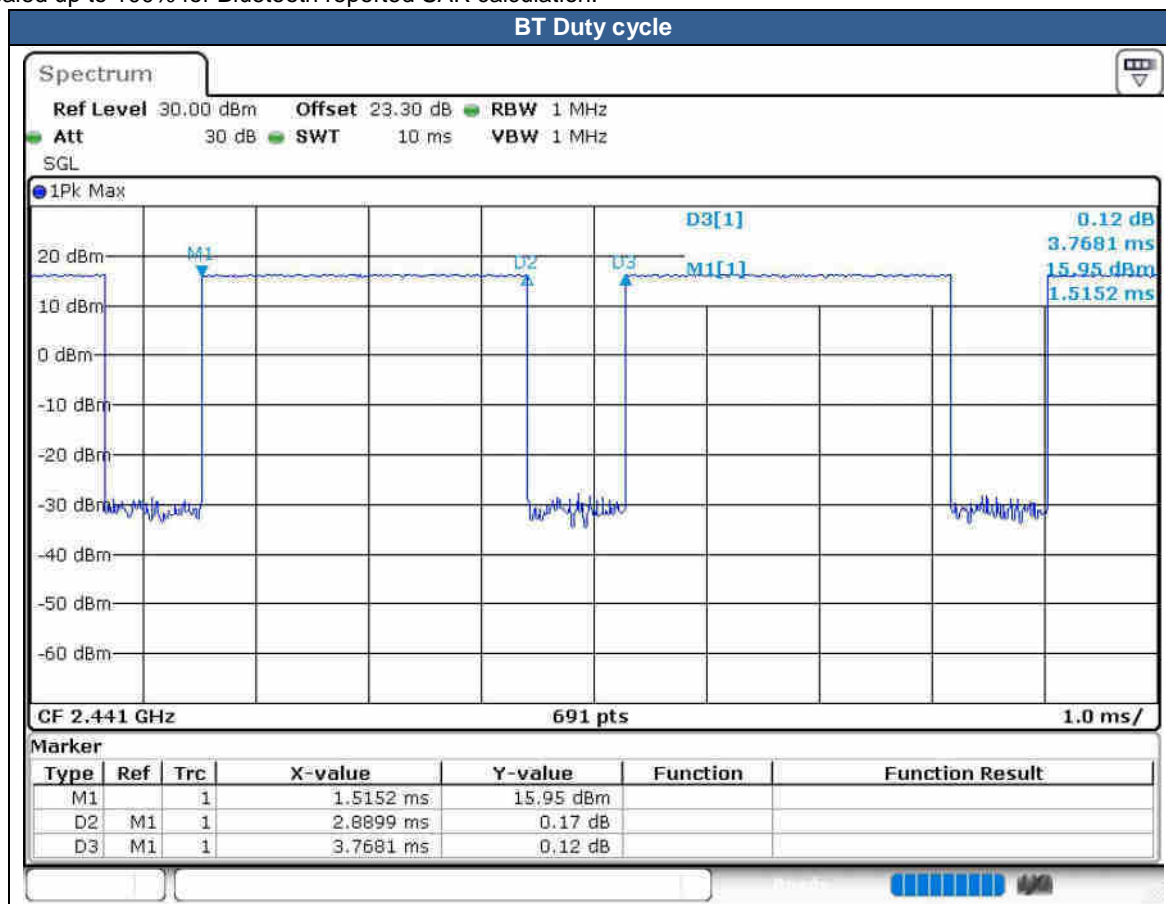
### General Note:

- 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.
- 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).
- 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.
- 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:
  - When the reported SAR of the initial test position is  $\leq 0.4$  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.
  - 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  $\leq 0.8$  W/kg or all required test position are tested.
  - 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  $\leq 1.2$  W/kg or all required channels are tested.
- Per 201904 TCBC workshops, General principles of FCC KDB Publication 248227 D01 can be applied to determine the SAR Initial Test Configurations and test reduction for 802.11ax SAR testing. For the table below the 802.11ax maximum power is SU (non-OFDMA).
- In applying the test guidance, the IEEE 802.11 mode with the maximum output power (out of all modes) should be considered for testing.
- For modes with the same maximum output power, the guidance from section 5.3.2 a) of FCC KDB Publication 248227 D01 should be applied, with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency bands
- When SAR testing for 802.11ax is required
  - If the maximum output power is highest for OFDMA scenarios, choose the tone size with the maximum number of tones and the highest maximum output power
  - Otherwise, consider the fully allocated channel for SAR testing
  - When SAR testing is required on RU sizes less than the fully allocated channel, use the RU number closest to the middle of the channel, choosing the higher RU number when two RUs are equidistant to the middle of the channel.
- 802.11ax full tone and partial tone supported for WLAN2.4GHz/WLAN5GHz, partial tone power level is far less than full tone power level including tune up power, we chose full tone power to perform SAR testing.

## <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 76.69% as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.



## 17. ANT+ Exclusions Applied

Mode Band	Max Average power(dBm)
ANT+	-2.0

**Note:**

- Per KDB 447498 D01v06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances*  $\leq 50$  mm are determined by:  

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$
 for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR
  - f(GHz) is the RF channel transmit frequency in GHz
  - Power and distance are rounded to the nearest mW and mm before calculation
  - The result is rounded to one decimal place for comparison

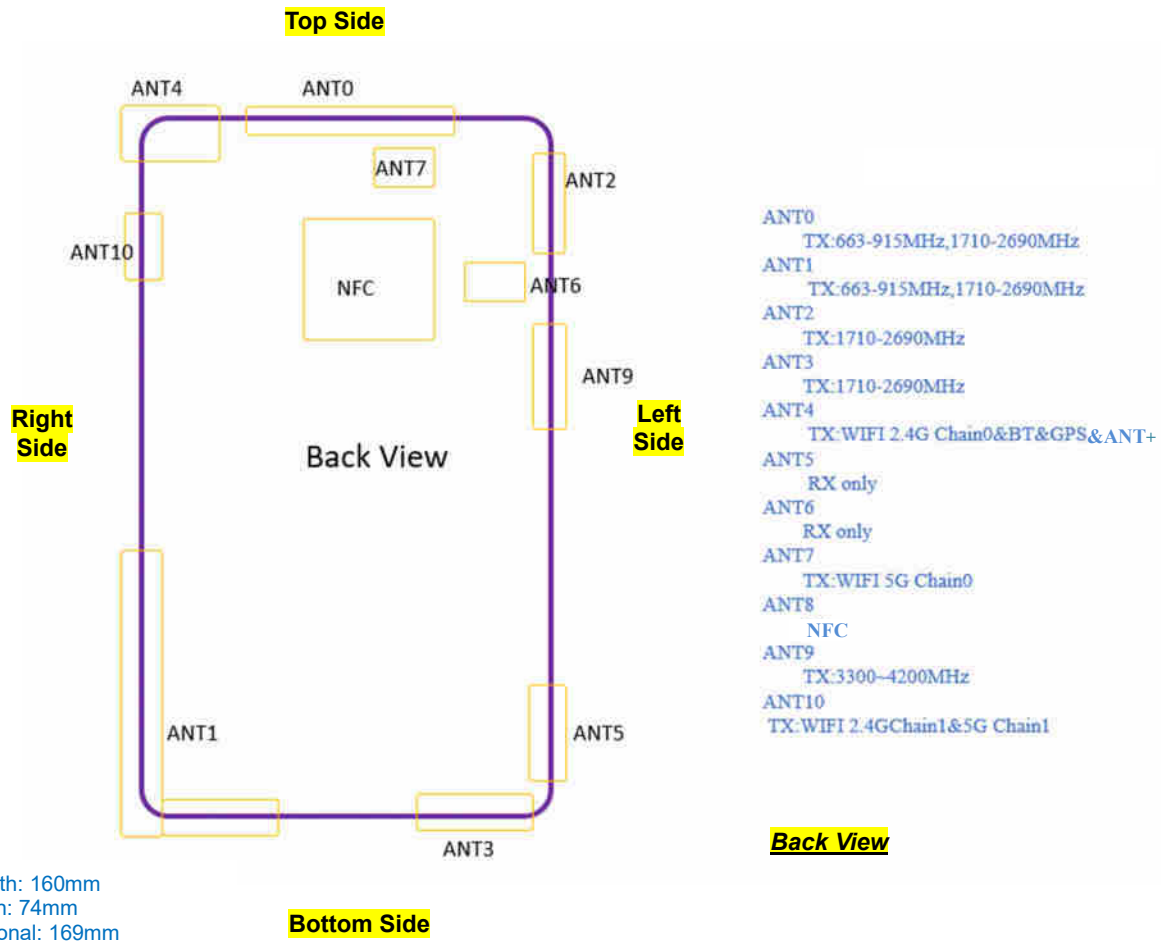
ANT+ Max Power (dBm)	Separation Distance (mm)	Frequency (GHz)	exclusion thresholds
-2.0	< 5	2.48	0.20

**Note:**

Per KDB 447498 D01v06, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 0.2 which is  $\leq 3$ , SAR testing is not required.



## 18. Antenna Location



Antennas Description	
WWAN UAT	ANT 0/2/9
WWAN LAT	ANT 1/3
WLAN 2.4GHz Antenna 1 & BT&GPS&ANT+	ANT 4
WLAN 5GHz Antenna 1	ANT 7
WLAN 2.4GHz Antenna 2 & 5GHz Antenna 2	ANT 10

### General Note:

1. LTE Band 66/4 ant 0&ant 1 only for LTE inter-band uplink CA
2. LTE Band 66/7 and NR 41/66 ant 0&ant 1 only for EN-DC combination

Distance of the Antenna to the EUT surface/edge						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN UAT ANT0	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
WWAN UAT ANT2	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
WWAN UAT ANT9	≤ 25mm	≤ 25mm	>25mm	>25mm	>25mm	≤ 25mm
WWAN LAT ANT1	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	>25mm
WWAN LAT ANT3	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm	≤ 25mm
BT&2.4GHz WLAN Chain 0&ANT+ ANT4	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
5GHz WLAN Chain 0 ANT7	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
2.4GHz&5GHz WLAN Chain 1 ANT10	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm	>25mm

Positions for SAR tests; Hotspot mode						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN UAT ANT0	Yes	Yes	Yes	No	Yes	Yes
WWAN UAT ANT2	Yes	Yes	Yes	No	No	Yes
WWAN UAT ANT9	Yes	Yes	No	No	No	Yes
WWAN LAT ANT1	Yes	Yes	No	Yes	Yes	No
WWAN LAT ANT3	Yes	Yes	No	Yes	No	Yes
BT&2.4GHz WLAN Chain 0&ANT+ ANT4	Yes	Yes	Yes	No	Yes	No
5GHz WLAN Chain 0 ANT7	Yes	Yes	Yes	No	No	Yes
2.4GHz&5GHz WLAN Chain 1 ANT10	Yes	Yes	No	No	Yes	No

**General Note:**

- 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

## 19. SAR Test Results

### General Note:

- Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
  - 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.
  - For SAR testing of BT/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)"
  - For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)\*Tune-up Scaling Factor
  - For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)\* Duty Cycle scaling factor \* Tune-up scaling factor
  - 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.
- 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
- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only 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.
- When the phone is in talking mode and receiver worked, then power reduction will be implemented immediately at Bluetooth.
- The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot/extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. The following power reduction level scenario table used for SAR testing.

WWAN for Head	Power level
WWAN (Standalone)/ WWAN + BT	Reduced Power level 1
WWAN +2.4G WIFI / WWAN +5G WIFI	Reduced Power level 2
WWAN +2.4G WIFI + 5G WIFI / WWAN + 5G WIFI + BT/ WWAN +2.4G Chain1 + 5G WIFI + BT	Reduced Power level 3

WLAN 2.4G	Power level	WLAN 5G	Power level
2.4G(Full)	Full Power	5G(Full)	Full Power
2.4G (Standalone)	Reduced Power level 1	5G (Standalone)	Reduced Power level 1
2.4G+WWAN	Reduced Power level 2	5G+WWAN	Reduced Power level 2
2.4G+5G	Reduced Power level 3	2.4G+5G	Reduced Power level 3
WWAN+2.4G+5G /2.4G+5G	Reduced Power level 4	WWAN+2.4G+5G /2.4G+5G	Reduced Power level 4
2.4G Chain1+ BT	Reduced Power level 5	5G + BT	Reduced Power level 5
WWAN+2.4G Chain1+5G+BT/ 2.4G Chain1+5G+BT	Reduced Power level 6	WWAN+2.4G Chain1+5G+BT/ 2.4G Chain1+5G+BT	Reduced Power level 6

- Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
- 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 product specific SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold, WCDMA B2/B4, CDMA BC1, LTE B7 / B25 / B30 / B66 / B41, 5G NR n41/n66 for LAT, LTE B48, 5G NR n2/n7/n25/n41 /n66, ENDC LTE B7/B66 for UAT is required to be tested.
- WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
- 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.

10. 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 handheld:

For LAT:

Front: [9 mm](#)

Back: [10 mm](#)

Bottom side: [10 mm](#)

11. UAT means Up Antenna (Top Antenna); LAT means Low Antenna (Bottom Antenna).

**GSM Note:**

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

**UMTS Note:**

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

**CDMA Note:**

1. Per KDB 941225 D01v03r01, SAR for next to the ear head exposure is measured in RC3 with the handset configured to transmit at full rate in SO55.
2. Per KDB 941225 D01v03r01, in Hotspot mode EUT is treated as data device and SAR is tested with Ev-Do Rev 0 (RTAP 153.6kbps) as the primary mode.
3. Per KDB 941225 D01v03r01, for Body-worn accessory SAR is measured in RC3 with the handset configured in TDSO/SO32 to transmit at full rate on FCH only with all other code channels disabled. The body-worn accessory procedures in KDB Publication 447498 are applied. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCH), with FCH only as the primary mode.

**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  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is  $> \text{not } \frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is  $> \text{not } \frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 / B26 / 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.
7. LTE band 2/4/17/38 SAR test was covered by Band 25/66/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
  - a. The maximum output power, including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion.
  - b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

**5G NR Note:**

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 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
3. 50% RB allocation for PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure
4. 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  $\leq 0.8$  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. QPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not  $\frac{1}{2}$  dB higher than the same configuration in 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.
6. Smaller bandwidth output power for each RB allocation configuration for this device will not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg, smaller bandwidth SAR testing is not required for this device

**WLAN 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  $\leq 1.2$  W/kg.
2. Per KDB 248227 D01v02r02, U-NII-1 or U-NII-2A SAR testing is not required when the U-NII-1 or U-NII-2A band highest reported SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band or U-NII-2A.
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  $\leq 0.8$  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  $\leq 1.2$  W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.



## 19.1 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_UAT	GPRS(4 Tx slots)	Right Cheek	Reduced Power Level 1	189	836.4	24.65	25.60	1.245	0.01	0.600	0.747
	GSM850_UAT	GPRS(4 Tx slots)	Right Tilted	Reduced Power Level 1	189	836.4	24.65	25.60	1.245	0.08	0.543	0.676
	GSM850_UAT	GPRS(4 Tx slots)	Left Cheek	Reduced Power Level 1	189	836.4	24.65	25.60	1.245	-0.12	0.528	0.657
	GSM850_UAT	GPRS(4 Tx slots)	Left Tilted	Reduced Power Level 1	189	836.4	24.65	25.60	1.245	-0.13	0.472	0.587
01	GSM850_UAT	GPRS(4 Tx slots)	Right Cheek	Reduced Power Level 1	128	824.2	24.52	25.60	1.282	-0.08	0.649	<b>0.832</b>
	GSM850_UAT	GPRS(4 Tx slots)	Right Cheek	Reduced Power Level 1	251	848.8	24.63	25.60	1.250	0.15	0.520	0.650
	GSM850_UAT	GPRS(4 Tx slots)	Right Cheek	Reduced Power Level 2/3	189	836.4	23.18	24.10	1.236	0.13	0.531	0.656
	GSM850_UAT	GPRS(4 Tx slots)	Right Tilted	Reduced Power Level 2/3	189	836.4	23.18	24.10	1.236	0.05	0.464	0.573
	GSM850_UAT	GPRS(4 Tx slots)	Left Cheek	Reduced Power Level 2/3	189	836.4	23.18	24.10	1.236	0.09	0.447	0.552
	GSM850_UAT	GPRS(4 Tx slots)	Left Tilted	Reduced Power Level 2/3	189	836.4	23.18	24.10	1.236	0.03	0.512	0.633
	GSM850_UAT	GPRS(4 Tx slots)	Right Cheek	Reduced Power Level 2/3	128	824.2	23.00	24.10	1.288	0.02	0.531	0.684
	GSM850_UAT	GPRS(4 Tx slots)	Right Cheek	Reduced Power Level 2/3	251	848.8	23.10	24.10	1.259	-0.06	0.481	0.606
	GSM850_LAT	GPRS(4 Tx slots)	Right Cheek	Full	128	824.2	27.43	29.30	1.538	0.07	0.173	0.266
	GSM850_LAT	GPRS(4 Tx slots)	Right Tilted	Full	128	824.2	27.43	29.30	1.538	0.14	0.090	0.138
	GSM850_LAT	GPRS(4 Tx slots)	Left Cheek	Full	128	824.2	27.43	29.30	1.538	0.18	0.155	0.238
	GSM850_LAT	GPRS(4 Tx slots)	Left Tilted	Full	128	824.2	27.43	29.30	1.538	0.1	0.080	0.123
	GSM850_LAT	GPRS(4 Tx slots)	Right Cheek	Full	189	836.4	27.34	29.30	1.570	0.08	0.149	0.234
	GSM850_LAT	GPRS(4 Tx slots)	Right Cheek	Full	251	848.8	27.42	29.30	1.542	0.09	0.161	0.248
	GSM1900_UAT	GPRS(2 Tx slots)	Right Cheek	Reduced Power Level 1	661	1880	24.63	25.30	1.167	0.12	0.741	0.865
	GSM1900_UAT	GPRS(2 Tx slots)	Right Tilted	Reduced Power Level 1	661	1880	24.63	25.30	1.167	0.18	0.221	0.258
	GSM1900_UAT	GPRS(2 Tx slots)	Left Cheek	Reduced Power Level 1	661	1880	24.63	25.30	1.167	0.11	0.189	0.221
	GSM1900_UAT	GPRS(2 Tx slots)	Left Tilted	Reduced Power Level 1	661	1880	24.63	25.30	1.167	0.08	0.153	0.179
02	GSM1900_UAT	GPRS(2 Tx slots)	Right Cheek	Reduced Power Level 1	512	1850.2	24.48	25.30	1.208	0.04	0.731	<b>0.883</b>
	GSM1900_UAT	GPRS(2 Tx slots)	Right Cheek	Reduced Power Level 1	810	1909.8	24.36	25.30	1.242	0.06	0.651	0.808
	GSM1900_UAT	GPRS(2 Tx slots)	Right Cheek	Reduced Power Level 2/3	661	1880	24.32	24.80	1.117	0.05	0.617	0.689
	GSM1900_UAT	GPRS(2 Tx slots)	Right Tilted	Reduced Power Level 2/3	661	1880	24.32	24.80	1.117	0.06	0.198	0.221
	GSM1900_UAT	GPRS(2 Tx slots)	Left Cheek	Reduced Power Level 2/3	661	1880	24.32	24.80	1.117	0.14	0.170	0.190
	GSM1900_UAT	GPRS(2 Tx slots)	Left Tilted	Reduced Power Level 2/3	661	1880	24.32	24.80	1.117	0.19	0.117	0.131
	GSM1900_UAT	GPRS(2 Tx slots)	Right Cheek	Reduced Power Level 2/3	512	1850.2	24.31	24.80	1.119	0.11	0.688	0.770
	GSM1900_UAT	GPRS(2 Tx slots)	Right Cheek	Reduced Power Level 2/3	810	1909.8	24.14	24.80	1.164	0.05	0.604	0.703
	GSM1900_LAT	GPRS(2 Tx slots)	Right Cheek	Full	661	1880	27.15	28.80	1.462	-0.05	0.148	0.216
	GSM1900_LAT	GPRS(2 Tx slots)	Right Tilted	Full	661	1880	27.15	28.80	1.462	-0.14	0.093	0.135
	GSM1900_LAT	GPRS(2 Tx slots)	Left Cheek	Full	661	1880	27.15	28.80	1.462	-0.06	0.140	0.205
	GSM1900_LAT	GPRS(2 Tx slots)	Left Tilted	Full	661	1880	27.15	28.80	1.462	-0.07	0.130	0.190
	GSM1900_LAT	GPRS(2 Tx slots)	Right Cheek	Full	512	1850.2	27.00	28.80	1.514	-0.03	0.140	0.212
	GSM1900_LAT	GPRS(2 Tx slots)	Right Cheek	Full	810	1909.8	27.11	28.80	1.476	-0.12	0.162	0.239





# FCC SAR TEST REPORT

Report No. : FA002703-02

## <CDMA 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)
	CDMA2000 BC0_UAT	RC3 SO55	Right Cheek	Reduced Power Level 1	384	836.52	21.39	22.20	1.205	-0.05	0.926	1.116
	CDMA2000 BC0_UAT	RC3 SO55	Right Tilted	Reduced Power Level 1	384	836.52	21.39	22.20	1.205	0.06	0.766	0.923
	CDMA2000 BC0_UAT	RC3 SO55	Left Cheek	Reduced Power Level 1	384	836.52	21.39	22.20	1.205	-0.14	0.656	0.791
	CDMA2000 BC0_UAT	RC3 SO55	Left Tilted	Reduced Power Level 1	384	836.52	21.39	22.20	1.205	0.03	0.559	0.674
	CDMA2000 BC0_UAT	RC3 SO55	Right Tilted	Reduced Power Level 1	1013	824.7	21.33	22.20	1.222	0.09	0.576	0.704
	CDMA2000 BC0_UAT	RC3 SO55	Right Tilted	Reduced Power Level 1	777	848.31	21.36	22.20	1.213	0.01	0.747	0.906
	CDMA2000 BC0_UAT	RC3 SO55	Right Cheek	Reduced Power Level 1	1013	824.7	21.33	22.20	1.222	-0.05	0.815	0.996
03	CDMA2000 BC0_UAT	RC3 SO55	Right Cheek	Reduced Power Level 1	777	848.31	21.36	22.20	1.213	-0.04	0.972	1.179
	CDMA2000 BC0_UAT	RC3 SO55	Right Cheek	Reduced Power Level 2/3	384	836.52	19.80	20.70	1.230	-0.07	0.561	0.690
	CDMA2000 BC0_UAT	RC3 SO55	Right Tilted	Reduced Power Level 2/3	384	836.52	19.80	20.70	1.230	-0.14	0.386	0.475
	CDMA2000 BC0_UAT	RC3 SO55	Left Cheek	Reduced Power Level 2/3	384	836.52	19.80	20.70	1.230	0.18	0.403	0.496
	CDMA2000 BC0_UAT	RC3 SO55	Left Tilted	Reduced Power Level 2/3	384	836.52	19.80	20.70	1.230	0.03	0.325	0.400
	CDMA2000 BC0_UAT	RC3 SO55	Right Cheek	Reduced Power Level 2/3	1013	824.7	19.74	20.70	1.247	-0.08	0.501	0.625
	CDMA2000 BC0_UAT	RC3 SO55	Right Cheek	Reduced Power Level 2/3	777	848.31	19.72	20.70	1.253	0.09	0.596	0.747
	CDMA2000 BC0_LAT	RC3 SO55	Right Cheek	Full	384	836.52	23.74	24.80	1.276	0.01	0.174	0.222
	CDMA2000 BC0_LAT	RC3 SO55	Right Tilted	Full	384	836.52	23.74	24.80	1.276	0.08	0.080	0.102
	CDMA2000 BC0_LAT	RC3 SO55	Left Cheek	Full	384	836.52	23.74	24.80	1.276	-0.05	0.135	0.172
	CDMA2000 BC0_LAT	RC3 SO55	Left Tilted	Full	384	836.52	23.74	24.80	1.276	0.06	0.070	0.090
	CDMA2000 BC0_LAT	RC3 SO55	Right Cheek	Full	1013	824.7	23.73	24.80	1.279	-0.18	0.173	0.221
	CDMA2000 BC0_LAT	RC3 SO55	Right Cheek	Full	777	848.31	23.72	24.80	1.282	-0.13	0.144	0.185
	CDMA2000 BC1_UAT	RC3 SO55	Right Cheek	Reduced Power Level 1	600	1880	19.42	20.20	1.197	0.01	0.901	1.078
	CDMA2000 BC1_UAT	RC3 SO55	Right Tilted	Reduced Power Level 1	600	1880	19.42	20.20	1.197	0.05	0.362	0.433
	CDMA2000 BC1_UAT	RC3 SO55	Left Cheek	Reduced Power Level 1	600	1880	19.42	20.20	1.197	0.06	0.271	0.324
	CDMA2000 BC1_UAT	RC3 SO55	Left Tilted	Reduced Power Level 1	600	1880	19.42	20.20	1.197	0.08	0.189	0.226
	CDMA2000 BC1_UAT	RC3 SO55	Right Cheek	Reduced Power Level 1	25	1851.25	19.30	20.20	1.230	0.11	0.961	1.182
04	CDMA2000 BC1_UAT	RC3 SO55	Right Cheek	Reduced Power Level 1	1175	1908.75	19.40	20.20	1.202	-0.12	0.986	1.185
	CDMA2000 BC1_UAT	RC3 SO55	Right Cheek	Reduced Power Level 2/3	600	1880	17.35	18.70	1.365	-0.09	0.680	0.928
	CDMA2000 BC1_UAT	RC3 SO55	Right Tilted	Reduced Power Level 2/3	600	1880	17.35	18.70	1.365	0.08	0.225	0.307
	CDMA2000 BC1_UAT	RC3 SO55	Left Cheek	Reduced Power Level 2/3	600	1880	17.35	18.70	1.365	0.01	0.167	0.228
	CDMA2000 BC1_UAT	RC3 SO55	Left Tilted	Reduced Power Level 2/3	600	1880	17.35	18.70	1.365	0.04	0.111	0.151
	CDMA2000 BC1_UAT	RC3 SO55	Right Cheek	Reduced Power Level 2/3	25	1851.25	17.27	18.70	1.390	-0.09	0.593	0.824
	CDMA2000 BC1_UAT	RC3 SO55	Right Cheek	Reduced Power Level 2/3	1175	1908.75	17.24	18.70	1.400	-0.13	0.676	0.946
	CDMA2000 BC1_LAT	RC3 SO55	Right Cheek	Full	600	1880	23.72	24.80	1.282	0.05	0.317	0.406
	CDMA2000 BC1_LAT	RC3 SO55	Right Tilted	Full	600	1880	23.72	24.80	1.282	-0.04	0.209	0.268
	CDMA2000 BC1_LAT	RC3 SO55	Left Cheek	Full	600	1880	23.72	24.80	1.282	-0.15	0.277	0.355
	CDMA2000 BC1_LAT	RC3 SO55	Left Tilted	Full	600	1880	23.72	24.80	1.282	-0.01	0.213	0.273
	CDMA2000 BC1_LAT	RC3 SO55	Right Cheek	Full	25	1851.25	23.61	24.80	1.315	-0.09	0.282	0.371
	CDMA2000 BC1_LAT	RC3 SO55	Right Cheek	Full	1175	1908.75	23.67	24.80	1.297	0.06	0.342	0.444
	CDMA2000 BC10_UAT	RC3 SO55	Right Cheek	Reduced Power Level 1	580	820.5	21.86	22.80	1.242	-0.14	0.858	1.065
	CDMA2000 BC10_UAT	RC3 SO55	Right Tilted	Reduced Power Level 1	580	820.5	21.86	22.80	1.242	-0.08	0.680	0.844
	CDMA2000 BC10_UAT	RC3 SO55	Left Cheek	Reduced Power Level 1	580	820.5	21.86	22.80	1.242	0.05	0.784	0.973
	CDMA2000 BC10_UAT	RC3 SO55	Left Tilted	Reduced Power Level 1	580	820.5	21.86	22.80	1.242	-0.04	0.626	0.777
	CDMA2000 BC10_UAT	RC3 SO55	Right Tilted	Reduced Power Level 1	476	817.9	21.82	22.80	1.253	0.08	0.620	0.777
	CDMA2000 BC10_UAT	RC3 SO55	Left Cheek	Reduced Power Level 1	476	817.9	21.82	22.80	1.253	-0.05	0.766	0.960
	CDMA2000 BC10_UAT	RC3 SO55	Left Cheek	Reduced Power Level 1	684	823.1	21.85	22.80	1.245	0.08	0.584	0.727
	CDMA2000 BC10_UAT	RC3 SO55	Right Cheek	Reduced Power Level 1	476	817.9	21.82	22.80	1.253	-0.09	0.897	1.124
05	CDMA2000 BC10_UAT	RC3 SO55	Right Cheek	Reduced Power Level 1	684	823.1	21.85	22.80	1.245	-0.02	0.926	1.152
	CDMA2000 BC10_UAT	RC3 SO55	Right Cheek	Reduced Power Level 2/3	580	820.5	19.22	20.30	1.282	-0.09	0.413	0.530
	CDMA2000 BC10_UAT	RC3 SO55	Right Tilted	Reduced Power Level 2/3	580	820.5	19.22	20.30	1.282	0.13	0.359	0.460
	CDMA2000 BC10_UAT	RC3 SO55	Left Cheek	Reduced Power Level 2/3	580	820.5	19.22	20.30	1.282	-0.15	0.358	0.459
	CDMA2000 BC10_UAT	RC3 SO55	Left Tilted	Reduced Power Level 2/3	580	820.5	19.22	20.30	1.282	0.04	0.283	0.363
	CDMA2000 BC10_UAT	RC3 SO55	Right Cheek	Reduced Power Level 2/3	476	817.9	19.18	20.30	1.294	0.01	0.412	0.533
	CDMA2000 BC10_UAT	RC3 SO55	Right Cheek	Reduced Power Level 2/3	684	823.1	19.21	20.30	1.285	-0.13	0.400	0.514
	CDMA2000 BC10_LAT	RC3 SO55	Right Cheek	Full	580	820.5	23.47	24.80	1.358	0.14	0.172	0.234
	CDMA2000 BC10_LAT	RC3 SO55	Right Tilted	Full	580	820.5	23.47	24.80	1.358	-0.08	0.081	0.110
	CDMA2000 BC10_LAT	RC3 SO55	Left Cheek	Full	580	820.5	23.47	24.80	1.358	0.05	0.143	0.194
	CDMA2000 BC10_LAT	RC3 SO55	Left Tilted	Full	580	820.5	23.47	24.80	1.358	0.08	0.072	0.098
	CDMA2000 BC10_LAT	RC3 SO55	Right Cheek	Full	476	817.9	23.46	24.80	1.361	0.11	0.159	0.216
	CDMA2000 BC10_LAT	RC3 SO55	Right Cheek	Full	684	823.1	23.45	24.80	1.365	-0.02	0.176	0.240





# FCC SAR TEST REPORT

Report No. : FA002703-02

## <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)
06	WCDMA V_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 1	4233	846.6	21.55	22.40	1.216	-0.07	0.906	1.102
	WCDMA V_UAT	RMC 12.2Kbps	Right Tilted	Reduced Power Level 1	4233	846.6	21.55	22.40	1.216	0.08	0.653	0.794
	WCDMA V_UAT	RMC 12.2Kbps	Left Cheek	Reduced Power Level 1	4233	846.6	21.55	22.40	1.216	0.14	0.637	0.775
	WCDMA V_UAT	RMC 12.2Kbps	Left Tilted	Reduced Power Level 1	4233	846.6	21.55	22.40	1.216	0.18	0.530	0.645
	WCDMA V_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 1	4132	826.4	21.44	22.40	1.247	-0.03	0.826	1.030
	WCDMA V_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 1	4182	836.4	21.46	22.40	1.242	-0.08	0.865	1.074
	WCDMA V_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 2/3	4233	846.6	19.01	19.90	1.227	0.05	0.502	0.616
	WCDMA V_UAT	RMC 12.2Kbps	Right Tilted	Reduced Power Level 2/3	4233	846.6	19.01	19.90	1.227	-0.04	0.389	0.477
	WCDMA V_UAT	RMC 12.2Kbps	Left Cheek	Reduced Power Level 2/3	4233	846.6	19.01	19.90	1.227	0.05	0.390	0.479
	WCDMA V_UAT	RMC 12.2Kbps	Left Tilted	Reduced Power Level 2/3	4233	846.6	19.01	19.90	1.227	-0.04	0.345	0.423
	WCDMA V_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 2/3	4132	826.4	18.98	19.90	1.236	0.01	0.462	0.571
	WCDMA V_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 2/3	4182	836.4	18.96	19.90	1.242	-0.02	0.490	0.608
	WCDMA V_LAT	RMC 12.2Kbps	Right Cheek	Full	4233	846.6	24.05	24.80	1.189	0.01	0.154	0.183
	WCDMA V_LAT	RMC 12.2Kbps	Right Tilted	Full	4233	846.6	24.05	24.80	1.189	0.08	0.090	0.107
	WCDMA V_LAT	RMC 12.2Kbps	Left Cheek	Full	4233	846.6	24.05	24.80	1.189	-0.11	0.152	0.181
	WCDMA V_LAT	RMC 12.2Kbps	Left Tilted	Full	4233	846.6	24.05	24.80	1.189	0.06	0.109	0.130
	WCDMA V_LAT	RMC 12.2Kbps	Right Cheek	Full	4132	826.4	24.01	24.80	1.199	0.16	0.185	0.222
	WCDMA V_LAT	RMC 12.2Kbps	Right Cheek	Full	4182	836.4	24.04	24.80	1.191	-0.05	0.169	0.201
07	WCDMA IV_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 1	1413	1732.6	18.59	19.30	1.178	-0.12	0.887	1.045
	WCDMA IV_UAT	RMC 12.2Kbps	Right Tilted	Reduced Power Level 1	1413	1732.6	18.59	19.30	1.178	0.11	0.355	0.418
	WCDMA IV_UAT	RMC 12.2Kbps	Left Cheek	Reduced Power Level 1	1413	1732.6	18.59	19.30	1.178	-0.08	0.277	0.326
	WCDMA IV_UAT	RMC 12.2Kbps	Left Tilted	Reduced Power Level 1	1413	1732.6	18.59	19.30	1.178	-0.03	0.228	0.268
	WCDMA IV_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 1	1312	1712.4	18.50	19.30	1.202	0.04	0.838	1.007
	WCDMA IV_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 1	1513	1752.6	18.39	19.30	1.233	0.01	0.832	1.026
	WCDMA IV_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 2/3	1413	1732.6	17.08	17.80	1.180	0.13	0.624	0.737
	WCDMA IV_UAT	RMC 12.2Kbps	Right Tilted	Reduced Power Level 2/3	1413	1732.6	17.08	17.80	1.180	-0.11	0.238	0.281
	WCDMA IV_UAT	RMC 12.2Kbps	Left Cheek	Reduced Power Level 2/3	1413	1732.6	17.08	17.80	1.180	-0.06	0.182	0.215
	WCDMA IV_UAT	RMC 12.2Kbps	Left Tilted	Reduced Power Level 2/3	1413	1732.6	17.08	17.80	1.180	0.03	0.164	0.194
	WCDMA IV_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 2/3	1312	1712.4	16.94	17.80	1.219	-0.08	0.605	0.737
	WCDMA IV_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 2/3	1513	1752.6	16.89	17.80	1.233	0.1	0.581	0.716
	WCDMA IV_LAT	RMC 12.2Kbps	Right Cheek	Full	1413	1732.6	23.91	24.80	1.227	0.01	0.218	0.268
	WCDMA IV_LAT	RMC 12.2Kbps	Right Tilted	Full	1413	1732.6	23.91	24.80	1.227	0.11	0.150	0.184
	WCDMA IV_LAT	RMC 12.2Kbps	Left Cheek	Full	1413	1732.6	23.91	24.80	1.227	0.13	0.234	0.287
	WCDMA IV_LAT	RMC 12.2Kbps	Left Tilted	Full	1413	1732.6	23.91	24.80	1.227	0.08	0.062	0.076
	WCDMA IV_LAT	RMC 12.2Kbps	Left Cheek	Full	1312	1712.4	23.69	24.80	1.291	0.09	0.230	0.297
	WCDMA IV_LAT	RMC 12.2Kbps	Left Cheek	Full	1513	1752.6	23.76	24.80	1.271	-0.14	0.278	0.353
	WCDMA II_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 1	9400	1880	19.50	20.00	1.122	0.01	1.020	1.144
	WCDMA II_UAT	RMC 12.2Kbps	Right Tilted	Reduced Power Level 1	9400	1880	19.50	20.00	1.122	-0.05	0.403	0.452
	WCDMA II_UAT	RMC 12.2Kbps	Left Cheek	Reduced Power Level 1	9400	1880	19.50	20.00	1.122	-0.11	0.277	0.311
	WCDMA II_UAT	RMC 12.2Kbps	Left Tilted	Reduced Power Level 1	9400	1880	19.50	20.00	1.122	0.01	0.206	0.231
	WCDMA II_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 1	9262	1852.4	19.45	20.00	1.135	0.16	1.040	1.180
08	WCDMA II_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 1	9538	1907.6	19.48	20.00	1.127	0.04	1.050	1.184
	WCDMA II_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 2/3	9400	1880	17.91	18.50	1.146	0.05	0.801	0.918
	WCDMA II_UAT	RMC 12.2Kbps	Right Tilted	Reduced Power Level 2/3	9400	1880	17.91	18.50	1.146	0.08	0.291	0.333
	WCDMA II_UAT	RMC 12.2Kbps	Left Cheek	Reduced Power Level 2/3	9400	1880	17.91	18.50	1.146	-0.15	0.218	0.250
	WCDMA II_UAT	RMC 12.2Kbps	Left Tilted	Reduced Power Level 2/3	9400	1880	17.91	18.50	1.146	-0.13	0.161	0.184
	WCDMA II_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 2/3	9262	1852.4	17.85	18.50	1.161	-0.09	0.824	0.957
	WCDMA II_UAT	RMC 12.2Kbps	Right Cheek	Reduced Power Level 2/3	9538	1907.6	17.81	18.50	1.172	0.05	0.727	0.852
	WCDMA II_LAT	RMC 12.2Kbps	Right Cheek	Full	9400	1880	23.92	24.80	1.225	0.15	0.309	0.378
	WCDMA II_LAT	RMC 12.2Kbps	Right Tilted	Full	9400	1880	23.92	24.80	1.225	0.13	0.218	0.267
	WCDMA II_LAT	RMC 12.2Kbps	Left Cheek	Full	9400	1880	23.92	24.80	1.225	-0.06	0.214	0.262
	WCDMA II_LAT	RMC 12.2Kbps	Left Tilted	Full	9400	1880	23.92	24.80	1.225	0.04	0.213	0.261
	WCDMA II_LAT	RMC 12.2Kbps	Right Cheek	Full	9262	1852.4	23.78	24.80	1.265	0.09	0.281	0.355
	WCDMA II_LAT	RMC 12.2Kbps	Right Cheek	Full	9538	1907.6	23.77	24.80	1.268	-0.04	0.329	0.417



**<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 71_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	133322	683	22.09	22.90	1.205	0.04	0.921	1.110
	LTE Band 71_UAT	20M	QPSK	1	0	Right Tilted	Reduced Power Level 1	133322	683	22.09	22.90	1.205	0.06	0.807	0.972
	LTE Band 71_UAT	20M	QPSK	1	0	Left Cheek	Reduced Power Level 1	133322	683	22.09	22.90	1.205	-0.11	0.713	0.859
	LTE Band 71_UAT	20M	QPSK	1	0	Left Tilted	Reduced Power Level 1	133322	683	22.09	22.90	1.205	-0.13	0.543	0.654
09	LTE Band 71_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	133322	683	22.00	22.90	1.230	-0.09	0.967	<b>1.190</b>
	LTE Band 71_UAT	20M	QPSK	50	0	Right Tilted	Reduced Power Level 1	133322	683	22.00	22.90	1.230	0.17	0.850	1.046
	LTE Band 71_UAT	20M	QPSK	50	0	Left Cheek	Reduced Power Level 1	133322	683	22.00	22.90	1.230	0.13	0.666	0.819
	LTE Band 71_UAT	20M	QPSK	50	0	Left Tilted	Reduced Power Level 1	133322	683	22.00	22.90	1.230	-0.04	0.572	0.704
	LTE Band 71_UAT	20M	QPSK	100	0	Right Cheek	Reduced Power Level 1	133322	683	21.72	22.90	1.312	-0.16	0.887	1.164
	LTE Band 71_UAT	20M	QPSK	100	0	Right Tilted	Reduced Power Level 1	133322	683	21.72	22.90	1.312	0.01	0.844	1.107
	LTE Band 71_UAT	20M	QPSK	100	0	Left Cheek	Reduced Power Level 1	133322	683	21.72	22.90	1.312	0.16	0.663	0.870
	LTE Band 71_UAT	20M	QPSK	100	0	Left Tilted	Reduced Power Level 1	133322	683	21.72	22.90	1.312	0.04	0.561	0.736
	LTE Band 71_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	133322	683	19.99	20.90	1.233	0.11	0.454	0.560
	LTE Band 71_UAT	20M	QPSK	1	0	Right Tilted	Reduced Power Level 2/3	133322	683	19.99	20.90	1.233	-0.04	0.408	0.503
	LTE Band 71_UAT	20M	QPSK	1	0	Left Cheek	Reduced Power Level 2/3	133322	683	19.99	20.90	1.233	0.03	0.399	0.492
	LTE Band 71_UAT	20M	QPSK	1	0	Left Tilted	Reduced Power Level 2/3	133322	683	19.99	20.90	1.233	-0.01	0.344	0.424
	LTE Band 71_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 2/3	133322	683	19.88	20.90	1.265	0.06	0.621	0.785
	LTE Band 71_UAT	20M	QPSK	50	0	Right Tilted	Reduced Power Level 2/3	133322	683	19.88	20.90	1.265	0.18	0.428	0.541
	LTE Band 71_UAT	20M	QPSK	50	0	Left Cheek	Reduced Power Level 2/3	133322	683	19.88	20.90	1.265	-0.14	0.416	0.526
	LTE Band 71_UAT	20M	QPSK	50	0	Left Tilted	Reduced Power Level 2/3	133322	683	19.88	20.90	1.265	-0.08	0.356	0.450
	LTE Band 71_LAT	20M	QPSK	1	0	Right Cheek	Full	133322	683	23.75	24.80	1.274	-0.16	0.167	0.213
	LTE Band 71_LAT	20M	QPSK	1	0	Right Tilted	Full	133322	683	23.75	24.80	1.274	-0.09	0.075	0.096
	LTE Band 71_LAT	20M	QPSK	1	0	Left Cheek	Full	133322	683	23.75	24.80	1.274	-0.01	0.124	0.158
	LTE Band 71_LAT	20M	QPSK	1	0	Left Tilted	Full	133322	683	23.75	24.80	1.274	0.05	0.070	0.089
	LTE Band 71_LAT	20M	QPSK	50	0	Right Cheek	Full	133322	683	22.78	23.80	1.265	0.17	0.129	0.163
	LTE Band 71_LAT	20M	QPSK	50	0	Right Tilted	Full	133322	683	22.78	23.80	1.265	0.01	0.063	0.080
	LTE Band 71_LAT	20M	QPSK	50	0	Left Cheek	Full	133322	683	22.78	23.80	1.265	-0.04	0.103	0.130
	LTE Band 71_LAT	20M	QPSK	50	0	Left Tilted	Full	133322	683	22.78	23.80	1.265	0.03	0.059	0.075



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 12_UAT	10M	QPSK	1	0	Right Cheek	Reduced Power Level 1	23095	707.5	22.72	23.40	1.169	-0.08	0.903	1.056
	LTE Band 12_UAT	10M	QPSK	1	0	Right Tilted	Reduced Power Level 1	23095	707.5	22.72	23.40	1.169	-0.17	0.871	1.019
	LTE Band 12_UAT	10M	QPSK	1	0	Left Cheek	Reduced Power Level 1	23095	707.5	22.72	23.40	1.169	0.04	0.878	1.027
	LTE Band 12_UAT	10M	QPSK	1	0	Left Tilted	Reduced Power Level 1	23095	707.5	22.72	23.40	1.169	0.16	0.628	0.734
	LTE Band 12_UAT	10M	QPSK	25	25	Right Cheek	Reduced Power Level 1	23095	707.5	22.11	23.40	1.346	0.06	0.739	0.995
	LTE Band 12_UAT	10M	QPSK	25	25	Right Tilted	Reduced Power Level 1	23095	707.5	22.11	23.40	1.346	0.1	0.603	0.812
	LTE Band 12_UAT	10M	QPSK	25	25	Left Cheek	Reduced Power Level 1	23095	707.5	22.11	23.40	1.346	-0.14	0.675	0.908
	LTE Band 12_UAT	10M	QPSK	25	25	Left Tilted	Reduced Power Level 1	23095	707.5	22.11	23.40	1.346	0.15	0.514	0.692
10	LTE Band 12_UAT	10M	QPSK	50	0	Right Cheek	Reduced Power Level 1	23095	707.5	22.05	23.40	1.365	0.09	0.830	<b>1.133</b>
	LTE Band 12_UAT	10M	QPSK	50	0	Right Tilted	Reduced Power Level 1	23095	707.5	22.05	23.40	1.365	0.04	0.657	0.897
	LTE Band 12_UAT	10M	QPSK	50	0	Left Cheek	Reduced Power Level 1	23095	707.5	22.05	23.40	1.365	0.06	0.701	0.957
	LTE Band 12_UAT	10M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	23095	707.5	20.90	21.40	1.122	-0.11	0.584	0.655
	LTE Band 12_UAT	10M	QPSK	1	0	Right Tilted	Reduced Power Level 2/3	23095	707.5	20.90	21.40	1.122	0.01	0.498	0.559
	LTE Band 12_UAT	10M	QPSK	1	0	Left Cheek	Reduced Power Level 2/3	23095	707.5	20.90	21.40	1.122	0.16	0.519	0.582
	LTE Band 12_UAT	10M	QPSK	1	0	Left Tilted	Reduced Power Level 2/3	23095	707.5	20.90	21.40	1.122	0.04	0.411	0.461
	LTE Band 12_UAT	10M	QPSK	25	25	Right Cheek	Reduced Power Level 2/3	23095	707.5	20.87	21.40	1.130	-0.11	0.634	0.716
	LTE Band 12_UAT	10M	QPSK	25	25	Right Tilted	Reduced Power Level 2/3	23095	707.5	20.87	21.40	1.130	0.06	0.600	0.678
	LTE Band 12_UAT	10M	QPSK	25	25	Left Cheek	Reduced Power Level 2/3	23095	707.5	20.87	21.40	1.130	0.16	0.455	0.514
	LTE Band 12_UAT	10M	QPSK	25	25	Left Tilted	Reduced Power Level 2/3	23095	707.5	20.87	21.40	1.130	-0.05	0.391	0.442
	LTE Band 12_LAT	10M	QPSK	1	0	Right Cheek	Full	23095	707.5	24.02	24.80	1.197	0.14	0.210	0.251
	LTE Band 12_LAT	10M	QPSK	1	0	Right Tilted	Full	23095	707.5	24.02	24.80	1.197	0.18	0.107	0.128
	LTE Band 12_LAT	10M	QPSK	1	0	Left Cheek	Full	23095	707.5	24.02	24.80	1.197	-0.03	0.152	0.182
	LTE Band 12_LAT	10M	QPSK	1	0	Left Tilted	Full	23095	707.5	24.02	24.80	1.197	-0.08	0.078	0.093
	LTE Band 12_LAT	10M	QPSK	25	25	Right Cheek	Full	23095	707.5	23.07	23.80	1.183	0.13	0.159	0.188
	LTE Band 12_LAT	10M	QPSK	25	25	Right Tilted	Full	23095	707.5	23.07	23.80	1.183	-0.06	0.080	0.095
	LTE Band 12_LAT	10M	QPSK	25	25	Left Cheek	Full	23095	707.5	23.07	23.80	1.183	0.04	0.113	0.134
	LTE Band 12_LAT	10M	QPSK	25	25	Left Tilted	Full	23095	707.5	23.07	23.80	1.183	0.09	0.077	0.091



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
11	LTE Band 13_UAT	10M	QPSK	1	25	Right Cheek	Reduced Power Level 1	23230	782	22.36	23.50	1.300	-0.12	0.879	1.143
	LTE Band 13_UAT	10M	QPSK	1	25	Right Tilted	Reduced Power Level 1	23230	782	22.36	23.50	1.300	0.13	0.777	1.010
	LTE Band 13_UAT	10M	QPSK	1	25	Left Cheek	Reduced Power Level 1	23230	782	22.36	23.50	1.300	0.11	0.849	1.104
	LTE Band 13_UAT	10M	QPSK	1	25	Left Tilted	Reduced Power Level 1	23230	782	22.36	23.50	1.300	0.05	0.520	0.676
	LTE Band 13_UAT	10M	QPSK	25	25	Right Cheek	Reduced Power Level 1	23230	782	21.85	22.50	1.161	0.11	0.791	0.919
	LTE Band 13_UAT	10M	QPSK	25	25	Right Tilted	Reduced Power Level 1	23230	782	21.85	22.50	1.161	0.13	0.687	0.798
	LTE Band 13_UAT	10M	QPSK	25	25	Left Cheek	Reduced Power Level 1	23230	782	21.85	22.50	1.161	0.08	0.776	0.901
	LTE Band 13_UAT	10M	QPSK	25	25	Left Tilted	Reduced Power Level 1	23230	782	21.85	22.50	1.161	0.09	0.492	0.571
	LTE Band 13_UAT	10M	QPSK	50	0	Right Cheek	Reduced Power Level 1	23230	782	21.81	22.50	1.172	0.18	0.886	1.039
	LTE Band 13_UAT	10M	QPSK	50	0	Right Tilted	Reduced Power Level 1	23230	782	21.81	22.50	1.172	0.1	0.550	0.645
	LTE Band 13_UAT	10M	QPSK	50	0	Left Cheek	Reduced Power Level 1	23230	782	21.81	22.50	1.172	0.08	0.757	0.887
	LTE Band 13_UAT	10M	QPSK	1	25	Right Cheek	Reduced Power Level 2/3	23230	782	20.62	21.50	1.225	0.09	0.590	0.723
	LTE Band 13_UAT	10M	QPSK	1	25	Right Tilted	Reduced Power Level 2/3	23230	782	20.62	21.50	1.225	0.04	0.447	0.547
	LTE Band 13_UAT	10M	QPSK	1	25	Left Cheek	Reduced Power Level 2/3	23230	782	20.62	21.50	1.225	0.06	0.396	0.485
	LTE Band 13_UAT	10M	QPSK	1	25	Left Tilted	Reduced Power Level 2/3	23230	782	20.62	21.50	1.225	-0.11	0.345	0.422
	LTE Band 13_UAT	10M	QPSK	25	25	Right Cheek	Reduced Power Level 2/3	23230	782	20.56	21.50	1.242	0.01	0.708	0.879
	LTE Band 13_UAT	10M	QPSK	25	25	Right Tilted	Reduced Power Level 2/3	23230	782	20.56	21.50	1.242	0.16	0.487	0.605
	LTE Band 13_UAT	10M	QPSK	25	25	Left Cheek	Reduced Power Level 2/3	23230	782	20.56	21.50	1.242	0.04	0.434	0.539
	LTE Band 13_UAT	10M	QPSK	25	25	Left Tilted	Reduced Power Level 2/3	23230	782	20.56	21.50	1.242	0.11	0.393	0.488
	LTE Band 13_UAT	10M	QPSK	50	0	Right Cheek	Reduced Power Level 2/3	23230	782	20.52	21.50	1.253	0.06	0.624	0.782
	LTE Band 13_LAT	10M	QPSK	1	25	Right Cheek	Full	23230	782	23.97	24.80	1.211	-0.12	0.235	0.284
	LTE Band 13_LAT	10M	QPSK	1	25	Right Tilted	Full	23230	782	23.97	24.80	1.211	0.11	0.100	0.121
	LTE Band 13_LAT	10M	QPSK	1	25	Left Cheek	Full	23230	782	23.97	24.80	1.211	-0.08	0.181	0.219
	LTE Band 13_LAT	10M	QPSK	1	25	Left Tilted	Full	23230	782	23.97	24.80	1.211	-0.03	0.085	0.103
	LTE Band 13_LAT	10M	QPSK	25	12	Right Cheek	Full	23230	782	22.98	23.80	1.208	0.05	0.182	0.220
	LTE Band 13_LAT	10M	QPSK	25	12	Right Tilted	Full	23230	782	22.98	23.80	1.208	-0.04	0.083	0.100
	LTE Band 13_LAT	10M	QPSK	25	12	Left Cheek	Full	23230	782	22.98	23.80	1.208	-0.09	0.150	0.181
	LTE Band 13_LAT	10M	QPSK	25	12	Left Tilted	Full	23230	782	22.98	23.80	1.208	-0.02	0.072	0.087
	LTE Band 5_UAT	10M	QPSK	1	49	Right Cheek	Reduced Power Level 1	20525	836.5	20.99	22.50	1.416	0.18	0.765	1.083
	LTE Band 5_UAT	10M	QPSK	1	49	Right Tilted	Reduced Power Level 1	20525	836.5	20.99	22.50	1.416	0.11	0.626	0.886
	LTE Band 5_UAT	10M	QPSK	1	49	Left Cheek	Reduced Power Level 1	20525	836.5	20.99	22.50	1.416	0.08	0.697	0.987
	LTE Band 5_UAT	10M	QPSK	1	49	Left Tilted	Reduced Power Level 1	20525	836.5	20.99	22.50	1.416	0.04	0.595	0.842
12	LTE Band 5_UAT	10M	QPSK	25	25	Right Cheek	Reduced Power Level 1	20525	836.5	20.84	22.50	1.466	-0.13	0.753	1.104
	LTE Band 5_UAT	10M	QPSK	25	25	Right Tilted	Reduced Power Level 1	20525	836.5	20.84	22.50	1.466	0.11	0.601	0.881
	LTE Band 5_UAT	10M	QPSK	25	25	Left Cheek	Reduced Power Level 1	20525	836.5	20.84	22.50	1.466	-0.08	0.750	1.099
	LTE Band 5_UAT	10M	QPSK	25	25	Left Tilted	Reduced Power Level 1	20525	836.5	20.84	22.50	1.466	-0.01	0.575	0.843
	LTE Band 5_UAT	10M	QPSK	50	0	Right Cheek	Reduced Power Level 1	20525	836.5	20.78	22.50	1.486	-0.08	0.653	0.970
	LTE Band 5_UAT	10M	QPSK	50	0	Right Tilted	Reduced Power Level 1	20525	836.5	20.78	22.50	1.486	-0.03	0.539	0.801
	LTE Band 5_UAT	10M	QPSK	50	0	Left Cheek	Reduced Power Level 1	20525	836.5	20.78	22.50	1.486	0.04	0.631	0.938
	LTE Band 5_UAT	10M	QPSK	50	0	Left Tilted	Reduced Power Level 1	20525	836.5	20.78	22.50	1.486	0.01	0.571	0.848
	LTE Band 5_UAT	10M	QPSK	1	49	Right Cheek	Reduced Power Level 2/3	20525	836.5	19.04	20.00	1.247	-0.09	0.439	0.548
	LTE Band 5_UAT	10M	QPSK	1	49	Right Tilted	Reduced Power Level 2/3	20525	836.5	19.04	20.00	1.247	0.13	0.363	0.453
	LTE Band 5_UAT	10M	QPSK	1	49	Left Cheek	Reduced Power Level 2/3	20525	836.5	19.04	20.00	1.247	-0.15	0.339	0.423
	LTE Band 5_UAT	10M	QPSK	1	49	Left Tilted	Reduced Power Level 2/3	20525	836.5	19.04	20.00	1.247	0.04	0.271	0.338
	LTE Band 5_UAT	10M	QPSK	25	25	Right Cheek	Reduced Power Level 2/3	20525	836.5	18.96	20.00	1.271	0.06	0.415	0.527
	LTE Band 5_UAT	10M	QPSK	25	25	Right Tilted	Reduced Power Level 2/3	20525	836.5	18.96	20.00	1.271	0.08	0.375	0.476
	LTE Band 5_UAT	10M	QPSK	25	25	Left Cheek	Reduced Power Level 2/3	20525	836.5	18.96	20.00	1.271	0.11	0.356	0.452
	LTE Band 5_UAT	10M	QPSK	25	25	Left Tilted	Reduced Power Level 2/3	20525	836.5	18.96	20.00	1.271	-0.12	0.288	0.366
	LTE Band 5_LAT	10M	QPSK	1	0	Right Cheek	Full	20525	836.5	23.76	24.80	1.271	0.17	0.168	0.213
	LTE Band 5_LAT	10M	QPSK	1	0	Right Tilted	Full	20525	836.5	23.76	24.80	1.271	0.11	0.040	0.051
	LTE Band 5_LAT	10M	QPSK	1	0	Left Cheek	Full	20525	836.5	23.76	24.80	1.271	-0.04	0.125	0.159
	LTE Band 5_LAT	10M	QPSK	1	0	Left Tilted	Full	20525	836.5	23.76	24.80	1.271	0.03	0.035	0.044
	LTE Band 5_LAT	10M	QPSK	25	12	Right Cheek	Full	20525	836.5	22.90	23.80	1.230	-0.08	0.125	0.154
	LTE Band 5_LAT	10M	QPSK	25	12	Right Tilted	Full	20525	836.5	22.90	23.80	1.230	-0.01	0.035	0.044
	LTE Band 5_LAT	10M	QPSK	25	12	Left Cheek	Full	20525	836.5	22.90	23.80	1.230	0.04	0.064	0.079
	LTE Band 5_LAT	10M	QPSK	25	12	Left Tilted	Full	20525	836.5	22.90	23.80	1.230	0.16	0.030	0.037



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 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced Power Level 1	26865	831.5	21.15	21.80	1.161	0.01	0.678	0.787
	LTE Band 26_UAT	15M	QPSK	1	0	Right Tilted	Reduced Power Level 1	26865	831.5	21.15	21.80	1.161	-0.05	0.664	0.771
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced Power Level 1	26865	831.5	21.15	21.80	1.161	-0.11	0.591	0.686
	LTE Band 26_UAT	15M	QPSK	1	0	Left Tilted	Reduced Power Level 1	26865	831.5	21.15	21.80	1.161	0.01	0.550	0.639
	LTE Band 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced Power Level 1	26765	821.5	21.14	21.80	1.164	0.16	0.601	0.700
13	LTE Band 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced Power Level 1	26965	841.5	20.98	21.80	1.208	-0.02	0.771	<b>0.931</b>
	LTE Band 26_UAT	15M	QPSK	36	39	Right Cheek	Reduced Power Level 1	26865	831.5	21.13	21.80	1.167	-0.06	0.563	0.657
	LTE Band 26_UAT	15M	QPSK	36	39	Right Tilted	Reduced Power Level 1	26865	831.5	21.13	21.80	1.167	0.03	0.564	0.658
	LTE Band 26_UAT	15M	QPSK	36	39	Left Cheek	Reduced Power Level 1	26865	831.5	21.13	21.80	1.167	-0.08	0.538	0.628
	LTE Band 26_UAT	15M	QPSK	36	39	Left Tilted	Reduced Power Level 1	26865	831.5	21.13	21.80	1.167	0.12	0.455	0.531
	LTE Band 26_UAT	15M	QPSK	75	0	Right Cheek	Reduced Power Level 1	26865	831.5	21.09	21.80	1.178	-0.05	0.568	0.669
	LTE Band 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	26865	831.5	19.70	20.30	1.148	-0.12	0.588	0.675
	LTE Band 26_UAT	15M	QPSK	1	0	Right Tilted	Reduced Power Level 2/3	26865	831.5	19.70	20.30	1.148	0.11	0.558	0.641
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced Power Level 2/3	26865	831.5	19.70	20.30	1.148	0.08	0.480	0.551
	LTE Band 26_UAT	15M	QPSK	1	0	Left Tilted	Reduced Power Level 2/3	26865	831.5	19.70	20.30	1.148	-0.03	0.288	0.331
	LTE Band 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	26765	821.5	19.65	20.30	1.161	0.04	0.428	0.497
	LTE Band 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	26965	841.5	19.58	20.30	1.180	0.01	0.556	0.656
	LTE Band 26_UAT	15M	QPSK	36	39	Right Cheek	Reduced Power Level 2/3	26865	831.5	19.68	20.30	1.153	-0.11	0.568	0.655
	LTE Band 26_UAT	15M	QPSK	36	39	Right Tilted	Reduced Power Level 2/3	26865	831.5	19.68	20.30	1.153	0.01	0.482	0.556
	LTE Band 26_UAT	15M	QPSK	36	39	Left Cheek	Reduced Power Level 2/3	26865	831.5	19.68	20.30	1.153	0.16	0.437	0.504
	LTE Band 26_UAT	15M	QPSK	36	39	Left Tilted	Reduced Power Level 2/3	26865	831.5	19.68	20.30	1.153	-0.02	0.292	0.337
	LTE Band 26_LAT	15M	QPSK	1	0	Right Cheek	Full	26865	831.5	24.01	24.80	1.199	0.05	0.143	0.172
	LTE Band 26_LAT	15M	QPSK	1	0	Right Tilted	Full	26865	831.5	24.01	24.80	1.199	0.06	0.069	0.082
	LTE Band 26_LAT	15M	QPSK	1	0	Left Cheek	Full	26865	831.5	24.01	24.80	1.199	0.14	0.115	0.138
	LTE Band 26_LAT	15M	QPSK	1	0	Left Tilted	Full	26865	831.5	24.01	24.80	1.199	0.19	0.056	0.067
	LTE Band 26_LAT	15M	QPSK	1	0	Right Cheek	Full	26765	821.5	23.85	24.80	1.245	0.11	0.133	0.166
	LTE Band 26_LAT	15M	QPSK	1	0	Right Cheek	Full	26965	841.5	23.75	24.80	1.274	0.05	0.158	0.201
	LTE Band 26_LAT	15M	QPSK	36	20	Right Cheek	Full	26865	831.5	23.00	23.80	1.202	0.11	0.123	0.148
	LTE Band 26_LAT	15M	QPSK	36	20	Right Tilted	Full	26865	831.5	23.00	23.80	1.202	0.08	0.052	0.063
	LTE Band 26_LAT	15M	QPSK	36	20	Left Cheek	Full	26865	831.5	23.00	23.80	1.202	-0.03	0.095	0.114
	LTE Band 26_LAT	15M	QPSK	36	20	Left Tilted	Full	26865	831.5	23.00	23.80	1.202	0.04	0.044	0.053





# FCC SAR TEST REPORT

Report No. : FA002703-02

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_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	132322	1745	19.25	19.90	1.161	0.19	0.759	0.882
	LTE Band 66_UAT	20M	QPSK	1	0	Right Tilted	Reduced Power Level 1	132322	1745	19.25	19.90	1.161	0.11	0.385	0.447
	LTE Band 66_UAT	20M	QPSK	1	0	Left Cheek	Reduced Power Level 1	132322	1745	19.25	19.90	1.161	0.05	0.251	0.292
	LTE Band 66_UAT	20M	QPSK	1	0	Left Tilted	Reduced Power Level 1	132322	1745	19.25	19.90	1.161	-0.06	0.141	0.164
	LTE Band 66_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	132072	1720	19.07	19.90	1.211	0.13	0.739	0.895
14	LTE Band 66_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	132572	1770	18.91	19.90	1.256	-0.12	0.868	1.090
	LTE Band 66_UAT	20M	QPSK	50	24	Right Cheek	Reduced Power Level 1	132322	1745	19.16	19.90	1.186	0.05	0.782	0.927
	LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Reduced Power Level 1	132322	1745	19.16	19.90	1.186	0.08	0.383	0.454
	LTE Band 66_UAT	20M	QPSK	50	24	Left Cheek	Reduced Power Level 1	132322	1745	19.16	19.90	1.186	-0.15	0.258	0.306
	LTE Band 66_UAT	20M	QPSK	50	24	Left Tilted	Reduced Power Level 1	132322	1745	19.16	19.90	1.186	0.01	0.133	0.158
	LTE Band 66_UAT	20M	QPSK	50	24	Right Cheek	Reduced Power Level 1	132072	1720	19.04	19.90	1.219	-0.09	0.782	0.953
	LTE Band 66_UAT	20M	QPSK	50	24	Right Cheek	Reduced Power Level 1	132572	1770	18.85	19.90	1.274	0.05	0.779	0.992
	LTE Band 66_UAT	20M	QPSK	100	0	Right Cheek	Reduced Power Level 1	132322	1745	19.03	19.90	1.222	-0.01	0.781	0.954
	LTE Band 66_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	132322	1745	17.86	18.40	1.132	-0.08	0.623	0.705
	LTE Band 66_UAT	20M	QPSK	1	0	Right Tilted	Reduced Power Level 2/3	132322	1745	17.86	18.40	1.132	-0.01	0.254	0.288
	LTE Band 66_UAT	20M	QPSK	1	0	Left Cheek	Reduced Power Level 2/3	132322	1745	17.86	18.40	1.132	0.04	0.177	0.200
	LTE Band 66_UAT	20M	QPSK	1	0	Left Tilted	Reduced Power Level 2/3	132322	1745	17.86	18.40	1.132	0.16	0.095	0.108
	LTE Band 66_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	132072	1720	17.63	18.40	1.194	0.14	0.384	0.458
	LTE Band 66_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	132572	1770	17.51	18.40	1.227	0.19	0.606	0.744
	LTE Band 66_UAT	20M	QPSK	50	24	Right Cheek	Reduced Power Level 2/3	132322	1745	17.78	18.40	1.153	0.05	0.604	0.697
	LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Reduced Power Level 2/3	132322	1745	17.78	18.40	1.153	-0.06	0.253	0.292
	LTE Band 66_UAT	20M	QPSK	50	24	Left Cheek	Reduced Power Level 2/3	132322	1745	17.78	18.40	1.153	-0.08	0.190	0.219
	LTE Band 66_UAT	20M	QPSK	50	24	Left Tilted	Reduced Power Level 2/3	132322	1745	17.78	18.40	1.153	-0.01	0.084	0.097
	LTE Band 66_LAT	20M	QPSK	1	0	Right Cheek	Full	132322	1745	23.51	24.80	1.346	0.05	0.202	0.272
	LTE Band 66_LAT	20M	QPSK	1	0	Right Tilted	Full	132322	1745	23.51	24.80	1.346	0.08	0.163	0.219
	LTE Band 66_LAT	20M	QPSK	1	0	Left Cheek	Full	132322	1745	23.51	24.80	1.346	-0.15	0.203	0.273
	LTE Band 66_LAT	20M	QPSK	1	0	Left Tilted	Full	132322	1745	23.51	24.80	1.346	0.01	0.139	0.187
	LTE Band 66_LAT	20M	QPSK	1	0	Left Cheek	Full	132072	1720	23.43	24.80	1.371	0.13	0.206	0.282
	LTE Band 66_LAT	20M	QPSK	1	0	Left Cheek	Full	132572	1770	23.41	24.80	1.377	-0.12	0.261	0.359
	LTE Band 66_LAT	20M	QPSK	50	24	Right Cheek	Full	132322	1745	22.50	23.80	1.349	-0.11	0.158	0.213
	LTE Band 66_LAT	20M	QPSK	50	24	Right Tilted	Full	132322	1745	22.50	23.80	1.349	0.01	0.141	0.190
	LTE Band 66_LAT	20M	QPSK	50	24	Left Cheek	Full	132322	1745	22.50	23.80	1.349	0.03	0.181	0.244
	LTE Band 66_LAT	20M	QPSK	50	24	Left Tilted	Full	132322	1745	22.50	23.80	1.349	0.04	0.108	0.146
5G NR EN-DC															
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	Full	132322	1745	20.91	22.00	1.285	0.02	0.092	0.118
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Tilted	Full	132322	1745	20.91	22.00	1.285	0.05	0.045	0.058
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Cheek	Full	132322	1745	20.91	22.00	1.285	0.09	0.048	0.062
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Tilted	Full	132322	1745	20.91	22.00	1.285	0.01	0.048	0.062
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	Full	132072	1720	20.68	22.00	1.355	0.02	0.105	0.142
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	Full	132572	1770	20.59	22.00	1.384	0.05	0.089	0.123
	LTE Band 66_Ant 1	20M	QPSK	50	24	Right Cheek	Full	132322	1745	19.92	21.00	1.282	-0.05	0.073	0.094
	LTE Band 66_Ant 1	20M	QPSK	50	24	Right Tilted	Full	132322	1745	19.92	21.00	1.282	0.02	0.035	0.045
	LTE Band 66_Ant 1	20M	QPSK	50	24	Left Cheek	Full	132322	1745	19.92	21.00	1.282	0.1	0.037	0.047
	LTE Band 66_Ant 1	20M	QPSK	50	24	Left Tilted	Full	132322	1745	19.92	21.00	1.282	0.08	0.037	0.047
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	132322	1745	17.79	18.70	1.233	0.030	0.602	0.742
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Tilted	Reduced Power Level 1	132322	1745	17.79	18.70	1.233	0.05	0.610	0.752
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	Reduced Power Level 1	132322	1745	17.79	18.70	1.233	0.05	0.446	0.550
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Tilted	Reduced Power Level 1	132322	1745	17.79	18.70	1.233	0.09	0.592	0.730
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Cheek	Reduced Power Level 1	132322	1745	17.70	18.70	1.259	-0.12	0.603	0.759
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Tilted	Reduced Power Level 1	132322	1745	17.70	18.70	1.259	0.05	0.606	0.763
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Cheek	Reduced Power Level 1	132322	1745	17.70	18.70	1.259	0.02	0.458	0.577
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Tilted	Reduced Power Level 1	132322	1745	17.70	18.70	1.259	0.01	0.598	0.753
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Tilted	Reduced Power Level 1	132072	1720	17.67	18.70	1.268	0.06	0.631	0.800
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Tilted	Reduced Power Level 1	132572	1770	17.47	18.70	1.327	-0.08	0.755	1.002



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LTE Band 66_Ant 0	20M	QPSK	100	0	Right Tilted	Reduced Power Level 1	132322	1745	17.49	18.70	1.321	0.06	0.566	0.748
LTE Band 66_Ant 0	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2	132322	1745	16.70	17.60	1.230	-0.06	0.432	0.531
LTE Band 66_Ant 0	20M	QPSK	1	0	Right Tilted	Reduced Power Level 2	132322	1745	16.70	17.60	1.230	0.05	0.491	0.604
LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	Reduced Power Level 2	132322	1745	16.70	17.60	1.230	0.02	0.328	0.404
LTE Band 66_Ant 0	20M	QPSK	1	0	Left Tilted	Reduced Power Level 2	132322	1745	16.70	17.60	1.230	0.03	0.454	0.559
LTE Band 66_Ant 0	20M	QPSK	50	24	Right Cheek	Reduced Power Level 2	132322	1745	16.63	17.60	1.250	0.01	0.425	0.531
LTE Band 66_Ant 0	20M	QPSK	50	24	Right Tilted	Reduced Power Level 2	132322	1745	16.63	17.60	1.250	-0.05	0.558	0.698
LTE Band 66_Ant 0	20M	QPSK	50	24	Left Cheek	Reduced Power Level 2	132322	1745	16.63	17.60	1.250	0.03	0.330	0.413
LTE Band 66_Ant 0	20M	QPSK	50	24	Left Tilted	Reduced Power Level 2	132322	1745	16.63	17.60	1.250	0.08	0.433	0.541
LTE Band 66_Ant 0	20M	QPSK	50	24	Right Tilted	Reduced Power Level 2	132072	1720	16.57	17.60	1.268	0.01	0.492	0.624
LTE Band 66_Ant 0	20M	QPSK	50	24	Right Tilted	Reduced Power Level 2	132572	1770	16.45	17.60	1.303	0.03	0.617	0.804
LTE Band 66_Ant 0	20M	QPSK	100	0	Right Tilted	Reduced Power Level 2	132322	1745	16.42	17.60	1.312	0.06	0.411	0.539





# FCC SAR TEST REPORT

Report No. : FA002703-02

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 25_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	26340	1880	18.89	19.40	1.125	0.05	0.835	0.939
	LTE Band 25_UAT	20M	QPSK	1	0	Right Tilted	Reduced Power Level 1	26340	1880	18.89	19.40	1.125	0.08	0.341	0.383
	LTE Band 25_UAT	20M	QPSK	1	0	Left Cheek	Reduced Power Level 1	26340	1880	18.89	19.40	1.125	-0.15	0.212	0.238
	LTE Band 25_UAT	20M	QPSK	1	0	Left Tilted	Reduced Power Level 1	26340	1880	18.89	19.40	1.125	0.04	0.137	0.154
	LTE Band 25_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	26140	1860	18.75	19.40	1.161	0.16	0.921	1.070
15	LTE Band 25_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	26590	1905	18.69	19.40	1.178	-0.04	0.927	1.092
	LTE Band 25_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	26340	1880	18.85	19.40	1.135	-0.12	0.862	0.978
	LTE Band 25_UAT	20M	QPSK	50	0	Right Tilted	Reduced Power Level 1	26340	1880	18.85	19.40	1.135	0.11	0.342	0.388
	LTE Band 25_UAT	20M	QPSK	50	0	Left Cheek	Reduced Power Level 1	26340	1880	18.85	19.40	1.135	0.08	0.217	0.246
	LTE Band 25_UAT	20M	QPSK	50	0	Left Tilted	Reduced Power Level 1	26340	1880	18.85	19.40	1.135	-0.15	0.151	0.171
	LTE Band 25_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	26140	1860	18.72	19.40	1.169	0.01	0.860	1.006
	LTE Band 25_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	26590	1905	18.64	19.40	1.191	-0.09	0.869	1.035
	LTE Band 25_UAT	20M	QPSK	100	0	Right Cheek	Reduced Power Level 1	26340	1880	18.80	19.40	1.148	-0.06	0.857	0.984
	LTE Band 25_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	26340	1880	17.33	17.90	1.140	0.16	0.646	0.737
	LTE Band 25_UAT	20M	QPSK	1	0	Right Tilted	Reduced Power Level 2/3	26340	1880	17.33	17.90	1.140	0.14	0.228	0.260
	LTE Band 25_UAT	20M	QPSK	1	0	Left Cheek	Reduced Power Level 2/3	26340	1880	17.33	17.90	1.140	0.19	0.163	0.186
	LTE Band 25_UAT	20M	QPSK	1	0	Left Tilted	Reduced Power Level 2/3	26340	1880	17.33	17.90	1.140	0.01	0.104	0.119
	LTE Band 25_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	26140	1860	17.13	17.90	1.194	0.13	0.635	0.758
	LTE Band 25_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	26590	1905	17.08	17.90	1.208	-0.12	0.654	0.790
	LTE Band 25_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 2/3	26340	1880	17.29	17.90	1.151	-0.09	0.620	0.713
	LTE Band 25_UAT	20M	QPSK	50	0	Right Tilted	Reduced Power Level 2/3	26340	1880	17.29	17.90	1.151	0.05	0.220	0.253
	LTE Band 25_UAT	20M	QPSK	50	0	Left Cheek	Reduced Power Level 2/3	26340	1880	17.29	17.90	1.151	0.11	0.158	0.182
	LTE Band 25_UAT	20M	QPSK	50	0	Left Tilted	Reduced Power Level 2/3	26340	1880	17.29	17.90	1.151	0.08	0.104	0.120
	LTE Band 25_LAT	20M	QPSK	1	0	Right Cheek	Full	26340	1880	23.65	24.80	1.303	-0.12	0.194	0.253
	LTE Band 25_LAT	20M	QPSK	1	0	Right Tilted	Full	26340	1880	23.65	24.80	1.303	0.11	0.109	0.142
	LTE Band 25_LAT	20M	QPSK	1	0	Left Cheek	Full	26340	1880	23.65	24.80	1.303	0.08	0.233	0.304
	LTE Band 25_LAT	20M	QPSK	1	0	Left Tilted	Full	26340	1880	23.65	24.80	1.303	-0.15	0.173	0.225
	LTE Band 25_LAT	20M	QPSK	1	0	Left Cheek	Full	26140	1860	23.55	24.80	1.334	0.11	0.253	0.337
	LTE Band 25_LAT	20M	QPSK	1	0	Left Cheek	Full	26590	1905	23.52	24.80	1.343	0.08	0.273	0.367
	LTE Band 25_LAT	20M	QPSK	50	24	Right Cheek	Full	26340	1880	22.75	23.80	1.274	0.08	0.167	0.213
	LTE Band 25_LAT	20M	QPSK	50	24	Right Tilted	Full	26340	1880	22.75	23.80	1.274	-0.15	0.094	0.120
	LTE Band 25_LAT	20M	QPSK	50	24	Left Cheek	Full	26340	1880	22.75	23.80	1.274	0.01	0.182	0.232
	LTE Band 25_LAT	20M	QPSK	50	24	Left Tilted	Full	26340	1880	22.75	23.80	1.274	0.13	0.136	0.173
16	LTE Band 30_UAT	10M	QPSK	1	25	Right Cheek	Reduced Power Level 1/2	27710	2310	21.25	22.10	1.216	-0.01	0.746	0.907
	LTE Band 30_UAT	10M	QPSK	1	25	Right Tilted	Reduced Power Level 1/2	27710	2310	21.25	22.10	1.216	0.01	0.216	0.263
	LTE Band 30_UAT	10M	QPSK	1	25	Left Cheek	Reduced Power Level 1/2	27710	2310	21.25	22.10	1.216	0.13	0.216	0.263
	LTE Band 30_UAT	10M	QPSK	1	25	Left Tilted	Reduced Power Level 1/2	27710	2310	21.25	22.10	1.216	-0.12	0.132	0.161
	LTE Band 30_UAT	10M	QPSK	25	25	Right Cheek	Reduced Power Level 1/2	27710	2310	20.83	21.60	1.194	-0.12	0.695	0.830
	LTE Band 30_UAT	10M	QPSK	25	25	Right Tilted	Reduced Power Level 1/2	27710	2310	20.83	21.60	1.194	0.11	0.196	0.234
	LTE Band 30_UAT	10M	QPSK	25	25	Left Cheek	Reduced Power Level 1/2	27710	2310	20.83	21.60	1.194	0.08	0.188	0.224
	LTE Band 30_UAT	10M	QPSK	25	25	Left Tilted	Reduced Power Level 1/2	27710	2310	20.83	21.60	1.194	-0.01	0.114	0.136
	LTE Band 30_UAT	10M	QPSK	50	0	Right Cheek	Reduced Power Level 1/2	27710	2310	20.69	21.60	1.233	0.16	0.670	0.826
	LTE Band 30_LAT	10M	QPSK	1	0	Right Cheek	Full	27710	2310	23.52	24.80	1.343	-0.09	0.242	0.325
	LTE Band 30_LAT	10M	QPSK	1	0	Right Tilted	Full	27710	2310	23.52	24.80	1.343	0.05	0.131	0.176
	LTE Band 30_LAT	10M	QPSK	1	0	Left Cheek	Full	27710	2310	23.52	24.80	1.343	0.08	0.329	0.442
	LTE Band 30_LAT	10M	QPSK	1	0	Left Tilted	Full	27710	2310	23.52	24.80	1.343	-0.15	0.150	0.201
	LTE Band 30_LAT	10M	QPSK	25	25	Right Cheek	Full	27710	2310	22.61	23.80	1.315	0.01	0.188	0.247
	LTE Band 30_LAT	10M	QPSK	25	25	Right Tilted	Full	27710	2310	22.61	23.80	1.315	0.13	0.109	0.143
	LTE Band 30_LAT	10M	QPSK	25	25	Left Cheek	Full	27710	2310	22.61	23.80	1.315	-0.12	0.282	0.371
	LTE Band 30_LAT	10M	QPSK	25	25	Left Tilted	Full	27710	2310	22.61	23.80	1.315	-0.15	0.094	0.124



# FCC SAR TEST REPORT

Report No. : FA002703-02

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 7_UAT	20M	QPSK	1	99	Right Cheek	Reduced Power Level 1	21100	2535	18.13	18.60	1.114	0.02	0.738	0.822
	LTE Band 7_UAT	20M	QPSK	1	99	Right Tilted	Reduced Power Level 1	21100	2535	18.13	18.60	1.114	0.05	0.255	0.284
	LTE Band 7_UAT	20M	QPSK	1	99	Left Cheek	Reduced Power Level 1	21100	2535	18.13	18.60	1.114	-0.04	0.168	0.187
	LTE Band 7_UAT	20M	QPSK	1	99	Left Tilted	Reduced Power Level 1	21100	2535	18.13	18.60	1.114	0.05	0.097	0.108
	LTE Band 7_UAT	20M	QPSK	1	99	Right Cheek	Reduced Power Level 1	20850	2510	17.87	18.60	1.183	0.09	0.578	0.684
	LTE Band 7_UAT	20M	QPSK	1	99	Right Cheek	Reduced Power Level 1	21350	2560	18.03	18.60	1.140	-0.08	0.752	0.857
	LTE Band 7_UAT	20M	QPSK	50	50	Right Cheek	Reduced Power Level 1	21100	2535	17.56	18.60	1.271	0.02	0.750	0.953
	LTE Band 7_UAT	20M	QPSK	50	50	Right Tilted	Reduced Power Level 1	21100	2535	17.56	18.60	1.271	0.04	0.256	0.325
	LTE Band 7_UAT	20M	QPSK	50	50	Left Cheek	Reduced Power Level 1	21100	2535	17.56	18.60	1.271	0.13	0.167	0.212
	LTE Band 7_UAT	20M	QPSK	50	50	Left Tilted	Reduced Power Level 1	21100	2535	17.56	18.60	1.271	0.02	0.095	0.120
	LTE Band 7_UAT	20M	QPSK	50	50	Right Cheek	Reduced Power Level 1	20850	2510	17.21	18.60	1.377	-0.07	0.602	0.829
	LTE Band 7_UAT	20M	QPSK	50	50	Right Cheek	Reduced Power Level 1	21350	2560	17.45	18.60	1.303	0.05	0.777	1.013
	LTE Band 7_UAT	20M	QPSK	100	0	Right Cheek	Reduced Power Level 1	21100	2535	17.46	18.60	1.300	0.02	0.724	0.941
	LTE Band 7_UAT	20M	QPSK	1	99	Right Cheek	Reduced Power Level 2/3	21100	2535	16.53	17.10	1.140	0.12	0.569	0.649
	LTE Band 7_UAT	20M	QPSK	1	99	Right Tilted	Reduced Power Level 2/3	21100	2535	16.53	17.10	1.140	0.08	0.177	0.202
	LTE Band 7_UAT	20M	QPSK	1	99	Left Cheek	Reduced Power Level 2/3	21100	2535	16.53	17.10	1.140	0.04	0.129	0.147
	LTE Band 7_UAT	20M	QPSK	1	99	Left Tilted	Reduced Power Level 2/3	21100	2535	16.53	17.10	1.140	0.01	0.066	0.075
	LTE Band 7_UAT	20M	QPSK	50	50	Right Cheek	Reduced Power Level 2/3	21100	2535	16.44	17.10	1.164	0.06	0.579	0.674
	LTE Band 7_UAT	20M	QPSK	50	50	Right Tilted	Reduced Power Level 2/3	21100	2535	16.44	17.10	1.164	0.05	0.192	0.224
	LTE Band 7_UAT	20M	QPSK	50	50	Left Cheek	Reduced Power Level 2/3	21100	2535	16.44	17.10	1.164	0.11	0.130	0.151
	LTE Band 7_UAT	20M	QPSK	50	50	Left Tilted	Reduced Power Level 2/3	21100	2535	16.44	17.10	1.164	0.02	0.065	0.076
	LTE Band 7_UAT	20M	QPSK	50	50	Right Cheek	Reduced Power Level 2/3	20850	2510	16.15	17.10	1.245	0.04	0.417	0.519
	LTE Band 7_UAT	20M	QPSK	50	50	Right Cheek	Reduced Power Level 2/3	21350	2560	16.19	17.10	1.233	0.06	0.540	0.666
	LTE Band 7_LAT	20M	QPSK	1	99	Right Cheek	Full	21100	2535	23.77	24.80	1.268	0.05	0.232	0.294
	LTE Band 7_LAT	20M	QPSK	1	99	Right Tilted	Full	21100	2535	23.77	24.80	1.268	0.04	0.179	0.227
	LTE Band 7_LAT	20M	QPSK	1	99	Left Cheek	Full	21100	2535	23.77	24.80	1.268	0.11	0.368	0.466
	LTE Band 7_LAT	20M	QPSK	1	99	Left Tilted	Full	21100	2535	23.77	24.80	1.268	0.09	0.145	0.184
	LTE Band 7_LAT	20M	QPSK	1	99	Left Cheek	Full	20850	2510	23.33	24.80	1.403	0.02	0.359	0.504
	LTE Band 7_LAT	20M	QPSK	1	99	Left Cheek	Full	21350	2560	23.62	24.80	1.312	0.01	0.342	0.449
	LTE Band 7_LAT	20M	QPSK	50	50	Right Cheek	Full	21100	2535	22.89	23.80	1.233	0.08	0.197	0.243
	LTE Band 7_LAT	20M	QPSK	50	50	Right Tilted	Full	21100	2535	22.89	23.80	1.233	0.04	0.145	0.179
	LTE Band 7_LAT	20M	QPSK	50	50	Left Cheek	Full	21100	2535	22.89	23.80	1.233	0.03	0.297	0.366
	LTE Band 7_LAT	20M	QPSK	50	50	Left Tilted	Full	21100	2535	22.89	23.80	1.233	0.09	0.117	0.144
5G NR EN-DC															
	LTE Band 7_Ant 1	20M	QPSK	1	99	Right Cheek	Full	21100	2535	20.52	21.50	1.253	0.08	0.117	0.147
	LTE Band 7_Ant 1	20M	QPSK	1	99	Right Tilted	Full	21100	2535	20.52	21.50	1.253	0.06	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	1	99	Left Cheek	Full	21100	2535	20.52	21.50	1.253	0.05	0.064	0.080
	LTE Band 7_Ant 1	20M	QPSK	1	99	Left Tilted	Full	21100	2535	20.52	21.50	1.253	0.11	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	1	99	Right Cheek	Full	20850	2510	20.35	21.50	1.303	0.03	0.121	0.158
	LTE Band 7_Ant 1	20M	QPSK	1	99	Right Cheek	Full	21350	2560	20.38	21.50	1.294	0.01	0.097	0.126
	LTE Band 7_Ant 1	20M	QPSK	50	50	Right Cheek	Full	21100	2535	19.57	20.50	1.239	-0.05	0.093	0.115
	LTE Band 7_Ant 1	20M	QPSK	50	50	Right Tilted	Full	21100	2535	19.57	20.50	1.239	-0.16	0.001	0.002
	LTE Band 7_Ant 1	20M	QPSK	50	50	Left Cheek	Full	21100	2535	19.57	20.50	1.239	0.06	0.053	0.066
	LTE Band 7_Ant 1	20M	QPSK	50	50	Left Tilted	Full	21100	2535	19.57	20.50	1.239	0.17	0.001	0.002
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Cheek	Reduced Power Level 1	21100	2535	15.60	16.60	1.259	0.03	0.785	0.988
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	Reduced Power Level 1	21100	2535	15.60	16.60	1.259	0.05	0.832	1.047
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Cheek	Reduced Power Level 1	21100	2535	15.60	16.60	1.259	0.07	0.472	0.594
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Tilted	Reduced Power Level 1	21100	2535	15.60	16.60	1.259	-0.06	0.502	0.632
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Cheek	Reduced Power Level 1	20850	2510	15.43	16.60	1.309	0.01	0.827	1.083
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Cheek	Reduced Power Level 1	21350	2560	15.58	16.60	1.265	0.01	0.798	1.009
17	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	Reduced Power Level 1	20850	2510	15.43	16.60	1.309	-0.09	0.889	1.164
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	Reduced Power Level 1	21350	2560	15.58	16.60	1.265	0.09	0.855	1.081
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Tilted	Reduced Power Level 1	20850	2510	15.43	16.60	1.309	0.03	0.549	0.719
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Tilted	Reduced Power Level 1	21350	2560	15.58	16.60	1.265	0.01	0.527	0.667



# FCC SAR TEST REPORT

Report No. : FA002703-02

LTE Band 7_Ant 0	20M	QPSK	50	50	Right Cheek	Reduced Power Level 1	21100	2535	15.56	16.60	1.271	-0.05	0.749	0.952
LTE Band 7_Ant 0	20M	QPSK	50	50	Right Tilted	Reduced Power Level 1	21100	2535	15.56	16.60	1.271	0.03	0.801	1.018
LTE Band 7_Ant 0	20M	QPSK	50	50	Left Cheek	Reduced Power Level 1	21100	2535	15.56	16.60	1.271	-0.09	0.441	0.560
LTE Band 7_Ant 0	20M	QPSK	50	50	Left Tilted	Reduced Power Level 1	21100	2535	15.56	16.60	1.271	0.03	0.475	0.604
LTE Band 7_Ant 0	20M	QPSK	50	50	Right Cheek	Reduced Power Level 1	20850	2510	15.38	16.60	1.324	0.01	0.802	1.062
LTE Band 7_Ant 0	20M	QPSK	50	50	Right Cheek	Reduced Power Level 1	21350	2560	15.47	16.60	1.297	0.05	0.763	0.990
LTE Band 7_Ant 0	20M	QPSK	50	50	Right Tilted	Reduced Power Level 1	20850	2510	15.38	16.60	1.324	-0.03	0.861	1.140
LTE Band 7_Ant 0	20M	QPSK	50	50	Right Tilted	Reduced Power Level 1	21350	2560	15.47	16.60	1.297	0.12	0.822	1.066
LTE Band 7_Ant 0	20M	QPSK	50	50	Left Tilted	Reduced Power Level 1	20850	2510	15.38	16.60	1.324	0.02	0.525	0.695
LTE Band 7_Ant 0	20M	QPSK	50	50	Left Tilted	Reduced Power Level 1	21350	2560	15.47	16.60	1.297	0.06	0.496	0.643
LTE Band 7_Ant 0	20M	QPSK	100	0	Right Cheek	Reduced Power Level 1	21100	2535	15.47	16.60	1.297	-0.08	0.773	1.003
LTE Band 7_Ant 0	20M	QPSK	100	0	Right Tilted	Reduced Power Level 1	21100	2535	15.47	16.60	1.297	0.02	0.809	1.049
LTE Band 7_Ant 0	20M	QPSK	100	0	Left Tilted	Reduced Power Level 1	21100	2535	15.47	16.60	1.297	0.01	0.485	0.629
LTE Band 7_Ant 0	20M	QPSK	1	99	Right Cheek	Reduced Power Level 2	21100	2535	13.90	15.10	1.318	0.06	0.538	0.709
LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	Reduced Power Level 2	21100	2535	13.90	15.10	1.318	-0.05	0.562	0.741
LTE Band 7_Ant 0	20M	QPSK	1	99	Left Cheek	Reduced Power Level 2	21100	2535	13.90	15.10	1.318	0.04	0.325	0.428
LTE Band 7_Ant 0	20M	QPSK	1	99	Left Tilted	Reduced Power Level 2	21100	2535	13.90	15.10	1.318	0.01	0.363	0.479
LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	Reduced Power Level 2	20850	2510	13.83	15.10	1.340	-0.08	0.612	0.820
LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	Reduced Power Level 2	21350	2560	13.88	15.10	1.324	0.04	0.567	0.751
LTE Band 7_Ant 0	20M	QPSK	50	50	Right Cheek	Reduced Power Level 2	21100	2535	13.77	15.10	1.358	0.03	0.515	0.700
LTE Band 7_Ant 0	20M	QPSK	50	50	Right Tilted	Reduced Power Level 2	21100	2535	13.77	15.10	1.358	0.01	0.542	0.736
LTE Band 7_Ant 0	20M	QPSK	50	50	Left Cheek	Reduced Power Level 2	21100	2535	13.77	15.10	1.358	0.05	0.306	0.416
LTE Band 7_Ant 0	20M	QPSK	50	50	Left Tilted	Reduced Power Level 2	21100	2535	13.77	15.10	1.358	0.01	0.348	0.473
LTE Band 7_Ant 0	20M	QPSK	100	0	Right Tilted	Reduced Power Level 2	21100	2535	13.77	15.10	1.358	0.06	0.555	0.754



# FCC SAR TEST REPORT

Report No. : FA002703-02

## <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)	1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_UAT	20M	QPSK	1	49	Right Cheek	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	-0.12	0.615	0.817
	LTE Band 41_UAT	20M	QPSK	1	49	Right Tilted	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	0.11	0.148	0.197
	LTE Band 41_UAT	20M	QPSK	1	49	Left Cheek	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	0.08	0.107	0.142
	LTE Band 41_UAT	20M	QPSK	1	49	Left Tilted	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	-0.15	0.061	0.082
18	LTE Band 41_UAT	20M	QPSK	1	49	Right Cheek	Full	39750	2506	20.38	21.80	1.387	62.9	1.006	0.05	0.614	0.856
	LTE Band 41_UAT	20M	QPSK	1	49	Right Cheek	Full	40620	2593	20.27	21.80	1.422	62.9	1.006	0.05	0.471	0.674
	LTE Band 41_UAT	20M	QPSK	1	49	Right Cheek	Full	41055	2636.5	20.25	21.80	1.429	62.9	1.006	0.08	0.415	0.597
	LTE Band 41_UAT	20M	QPSK	1	49	Right Cheek	Full	41490	2680	20.26	21.80	1.426	62.9	1.006	-0.15	0.330	0.473
	LTE Band 41C_UAT	20M	QPSK	1	49	Right Cheek	Full	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	20.61	21.80	1.315	62.9	1.006	0.1	0.386	0.511
	LTE Band 41C_UAT	20M	QPSK	1	49	Right Cheek	Full	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	20.41	21.80	1.377	62.9	1.006	0.05	0.287	0.398
	LTE Band 41C_UAT	20M	QPSK	1	49	Right Cheek	Full	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	20.47	21.80	1.358	62.9	1.006	0.01	0.309	0.422
	LTE Band 41C_UAT	20M	QPSK	1	49	Right Cheek	Full	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	20.56	21.80	1.330	62.9	1.006	0.12	0.289	0.387
	LTE Band 41C_UAT	20M	QPSK	1	49	Right Cheek	Full	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	20.54	21.80	1.337	62.9	1.006	0.06	0.279	0.375
	LTE Band 41_UAT	20M	QPSK	50	50	Right Cheek	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	0.13	0.506	0.648
	LTE Band 41_UAT	20M	QPSK	50	50	Right Tilted	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	-0.12	0.121	0.155
	LTE Band 41_UAT	20M	QPSK	50	50	Left Cheek	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	-0.09	0.086	0.110
	LTE Band 41_UAT	20M	QPSK	50	50	Left Tilted	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	0.05	0.051	0.065
	LTE Band 41_UAT	20M	QPSK	50	50	Right Cheek	Full	39750	2506	19.54	20.80	1.337	62.9	1.006	0.08	0.527	0.709
	LTE Band 41_UAT	20M	QPSK	50	50	Right Cheek	Full	40620	2593	19.41	20.80	1.377	62.9	1.006	0.09	0.463	0.641
	LTE Band 41_UAT	20M	QPSK	50	50	Right Cheek	Full	41055	2636.5	19.42	20.80	1.374	62.9	1.006	0.12	0.401	0.554
	LTE Band 41_UAT	20M	QPSK	50	50	Right Cheek	Full	41490	2680	19.43	20.80	1.371	62.9	1.006	-0.04	0.328	0.452
	LTE Band 41_UAT	20M	QPSK	100	0	Right Cheek	Full	40185	2549.5	19.64	20.80	1.306	62.9	1.006	0.08	0.498	0.654
	LTE Band 41_LAT	20M	QPSK	1	49	Right Cheek	Full	40185	2549.5	23.91	24.80	1.227	62.9	1.006	0.11	0.129	0.159
	LTE Band 41_LAT	20M	QPSK	1	49	Right Tilted	Full	40185	2549.5	23.91	24.80	1.227	62.9	1.006	0.08	0.108	0.133
	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	40185	2549.5	23.91	24.80	1.227	62.9	1.006	-0.15	0.201	0.248
	LTE Band 41_LAT	20M	QPSK	1	49	Left Tilted	Full	40185	2549.5	23.91	24.80	1.227	62.9	1.006	0.11	0.068	0.084
	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	39750	2506	23.40	24.80	1.380	62.9	1.006	-0.15	0.212	0.294
	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	40620	2593	23.54	24.80	1.337	62.9	1.006	0.08	0.149	0.200
	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	41055	2636.5	23.60	24.80	1.318	62.9	1.006	-0.15	0.129	0.171
	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	41490	2680	23.67	24.80	1.297	62.9	1.006	0.08	0.105	0.137
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	23.49	24.80	1.352	62.9	1.006	0.04	0.095	0.129
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	23.43	24.80	1.371	62.9	1.006	-0.06	0.103	0.142
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	23.69	24.80	1.291	62.9	1.006	0.11	0.076	0.099
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	23.66	24.80	1.300	62.9	1.006	0.04	0.068	0.089
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	23.78	24.80	1.265	62.9	1.006	0.09	0.058	0.074
	LTE Band 41_LAT	20M	QPSK	50	50	Right Cheek	Full	40185	2549.5	22.96	23.80	1.213	62.9	1.006	0.08	0.105	0.128
	LTE Band 41_LAT	20M	QPSK	50	50	Right Tilted	Full	40185	2549.5	22.96	23.80	1.213	62.9	1.006	-0.01	0.089	0.109
	LTE Band 41_LAT	20M	QPSK	50	50	Left Cheek	Full	40185	2549.5	22.96	23.80	1.213	62.9	1.006	-0.08	0.156	0.190
	LTE Band 41_LAT	20M	QPSK	50	50	Left Tilted	Full	40185	2549.5	22.96	23.80	1.213	62.9	1.006	0.05	0.056	0.068
	LTE Band 41-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	-0.12	0.558	0.739
	LTE Band 41-HPUE_UAT	20M	QPSK	1	99	Right Tilted	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	0.11	0.136	0.180
	LTE Band 41-HPUE_UAT	20M	QPSK	1	99	Left Cheek	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	0.08	0.107	0.142
	LTE Band 41-HPUE_UAT	20M	QPSK	1	99	Left Tilted	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	-0.06	0.063	0.083
	LTE Band 41-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	39750	2506	22.41	23.80	1.377	42.9	1.009	-0.07	0.587	0.816
	LTE Band 41-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	40620	2593	22.40	23.80	1.380	42.9	1.009	-0.15	0.540	0.752
	LTE Band 41-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	41055	2636.5	22.45	23.80	1.365	42.9	1.009	0.01	0.490	0.675
	LTE Band 41-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	41490	2680	22.37	23.80	1.390	42.9	1.009	-0.09	0.463	0.649
	LTE Band 41C-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	21.73	22.80	1.279	42.9	1.009	0.11	0.415	0.536
	LTE Band 41C-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	21.41	22.80	1.377	42.9	1.009	0.04	0.368	0.511



# FCC SAR TEST REPORT

Report No. : FA002703-02

LTE Band 41C-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	21.80	22.80	1.259	42.9	1.009	0.02	0.357	0.453
LTE Band 41C-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	21.79	22.80	1.262	42.9	1.009	0.13	0.339	0.432
LTE Band 41C-HPUE_UAT	20M	QPSK	1	99	Right Cheek	Full	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	21.72	22.80	1.282	42.9	1.009	0.08	0.330	0.427
LTE Band 41-HPUE_UAT	20M	QPSK	50	0	Right Cheek	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	0.13	0.309	0.385
LTE Band 41-HPUE_UAT	20M	QPSK	50	0	Right Tilted	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	-0.12	0.122	0.152
LTE Band 41-HPUE_UAT	20M	QPSK	50	0	Left Cheek	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	-0.09	0.088	0.110
LTE Band 41-HPUE_UAT	20M	QPSK	50	0	Left Tilted	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	0.05	0.052	0.065
LTE Band 41-HPUE_UAT	20M	QPSK	100	0	Right Cheek	Full	40185	2549.5	21.82	22.80	1.253	42.9	1.009	0.08	0.350	0.443
LTE Band 41-HPUE_LAT	20M	QPSK	1	99	Right Cheek	Full	40185	2549.5	25.77	26.80	1.268	42.9	1.009	0.05	0.129	0.165
LTE Band 41-HPUE_LAT	20M	QPSK	1	99	Right Tilted	Full	40185	2549.5	25.77	26.80	1.268	42.9	1.009	0.06	0.110	0.141
LTE Band 41-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	40185	2549.5	25.77	26.80	1.268	42.9	1.009	0.08	0.220	0.281
LTE Band 41-HPUE_LAT	20M	QPSK	1	99	Left Tilted	Full	40185	2549.5	25.77	26.80	1.268	42.9	1.009	-0.09	0.072	0.091
LTE Band 41-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	39750	2506	25.40	26.80	1.380	42.9	1.009	-0.01	0.222	0.309
LTE Band 41-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	40620	2593	25.56	26.80	1.330	42.9	1.009	-0.04	0.182	0.244
LTE Band 41-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	41055	2636.5	25.55	26.80	1.334	42.9	1.009	0.11	0.150	0.202
LTE Band 41-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	41490	2680	25.45	26.80	1.365	42.9	1.009	-0.01	0.123	0.169
LTE Band 41C-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	24.76	25.80	1.271	42.9	1.009	-0.04	0.089	0.114
LTE Band 41C-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	24.60	25.80	1.318	42.9	1.009	0.07	0.092	0.122
LTE Band 41C-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	24.98	25.80	1.208	42.9	1.009	-0.01	0.063	0.077
LTE Band 41C-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	24.80	25.80	1.259	42.9	1.009	0.02	0.058	0.074
LTE Band 41C-HPUE_LAT	20M	QPSK	1	99	Left Cheek	Full	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	24.82	25.80	1.253	42.9	1.009	0.07	0.055	0.070
LTE Band 41-HPUE_LAT	20M	QPSK	50	24	Right Cheek	Full	40185	2549.5	24.91	25.80	1.227	42.9	1.009	0.05	0.096	0.119
LTE Band 41-HPUE_LAT	20M	QPSK	50	24	Right Tilted	Full	40185	2549.5	24.91	25.80	1.227	42.9	1.009	-0.04	0.086	0.107
LTE Band 41-HPUE_LAT	20M	QPSK	50	24	Left Cheek	Full	40185	2549.5	24.91	25.80	1.227	42.9	1.009	-0.18	0.192	0.238
LTE Band 41-HPUE_LAT	20M	QPSK	50	24	Left Tilted	Full	40185	2549.5	24.91	25.80	1.227	42.9	1.009	-0.13	0.062	0.077





# FCC SAR TEST REPORT

Report No. : FA002703-02

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 48_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	55830	3609	20.79	21.50	1.178	62.9	1.006	-0.09	0.873	1.034
	LTE Band 48_UAT	20M	QPSK	1	0	Right Tilted	Reduced Power Level 1	55830	3609	20.79	21.50	1.178	62.9	1.006	-0.01	0.106	0.126
	LTE Band 48_UAT	20M	QPSK	1	0	Left Cheek	Reduced Power Level 1	55830	3609	20.79	21.50	1.178	62.9	1.006	0.15	0.479	0.567
	LTE Band 48_UAT	20M	QPSK	1	0	Left Tilted	Reduced Power Level 1	55830	3609	20.79	21.50	1.178	62.9	1.006	0.08	0.001	0.001
	LTE Band 48_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	55340	3560	20.75	21.50	1.189	62.9	1.006	-0.15	0.960	1.148
	LTE Band 48_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	56150	3641	20.75	21.50	1.189	62.9	1.006	0.11	0.806	0.964
	LTE Band 48_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 1	56640	3690	20.74	21.50	1.191	62.9	1.006	-0.01	0.756	0.906
	LTE Band 48_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	55830	3609	20.78	21.50	1.180	62.9	1.006	-0.09	0.897	1.065
	LTE Band 48_UAT	20M	QPSK	50	0	Right Tilted	Reduced Power Level 1	55830	3609	20.78	21.50	1.180	62.9	1.006	-0.01	0.112	0.133
	LTE Band 48_UAT	20M	QPSK	50	0	Left Cheek	Reduced Power Level 1	55830	3609	20.78	21.50	1.180	62.9	1.006	-0.04	0.502	0.596
	LTE Band 48_UAT	20M	QPSK	50	0	Left Tilted	Reduced Power Level 1	55830	3609	20.78	21.50	1.180	62.9	1.006	-0.18	0.001	0.001
19	LTE Band 48_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	55340	3560	20.70	21.50	1.202	62.9	1.006	0.12	0.950	1.149
	LTE Band 48_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	56150	3641	20.73	21.50	1.194	62.9	1.006	0.15	0.856	1.028
	LTE Band 48_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	56640	3690	20.71	21.50	1.199	62.9	1.006	-0.04	0.791	0.954
	LTE Band 48C_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	55830(PCC)+55632(SCC)	3609(PCC)+3589.2(SCC)	13.98	14.80	1.208	62.9	1.006	0.09	0.107	0.130
	LTE Band 48C_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	55340(PCC)+55538(SCC)	3560(PCC)+3579.8(SCC)	13.79	14.80	1.262	62.9	1.006	-0.08	0.065	0.083
	LTE Band 48C_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	56150(PCC)+55952(SCC)	3641(PCC)+3621.2(SCC)	13.82	14.80	1.253	62.9	1.006	0.11	0.065	0.082
	LTE Band 48C_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 1	56640(PCC)+56442(SCC)	3690(PCC)+3670.2(SCC)	13.74	14.80	1.276	62.9	1.006	0.04	0.001	0.001
	LTE Band 48_UAT	20M	QPSK	100	0	Right Cheek	Reduced Power Level 1	55830	3609	20.76	21.50	1.186	62.9	1.006	-0.13	0.868	1.035
	LTE Band 48_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	55830	3609	19.50	20.00	1.122	62.9	1.006	0.15	0.634	0.716
	LTE Band 48_UAT	20M	QPSK	1	0	Right Tilted	Reduced Power Level 2/3	55830	3609	19.50	20.00	1.122	62.9	1.006	0.08	0.084	0.095
	LTE Band 48_UAT	20M	QPSK	1	0	Left Cheek	Reduced Power Level 2/3	55830	3609	19.50	20.00	1.122	62.9	1.006	-0.15	0.310	0.350
	LTE Band 48_UAT	20M	QPSK	1	0	Left Tilted	Reduced Power Level 2/3	55830	3609	19.50	20.00	1.122	62.9	1.006	0.05	0.001	0.001
	LTE Band 48_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	55340	3560	19.28	20.00	1.180	62.9	1.006	-0.04	0.702	0.834
	LTE Band 48_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	56150	3641	19.42	20.00	1.143	62.9	1.006	-0.04	0.628	0.722
	LTE Band 48_UAT	20M	QPSK	1	0	Right Cheek	Reduced Power Level 2/3	56640	3690	19.21	20.00	1.199	62.9	1.006	-0.18	0.536	0.647
	LTE Band 48_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 2/3	55830	3609	19.49	20.00	1.125	62.9	1.006	-0.01	0.653	0.739
	LTE Band 48_UAT	20M	QPSK	50	0	Right Tilted	Reduced Power Level 2/3	55830	3609	19.49	20.00	1.125	62.9	1.006	-0.08	0.084	0.095
	LTE Band 48_UAT	20M	QPSK	50	0	Left Cheek	Reduced Power Level 2/3	55830	3609	19.49	20.00	1.125	62.9	1.006	0.05	0.323	0.365
	LTE Band 48_UAT	20M	QPSK	50	0	Left Tilted	Reduced Power Level 2/3	55830	3609	19.49	20.00	1.125	62.9	1.006	0.15	0.001	0.001
	LTE Band 48_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 2/3	55340	3560	19.38	20.00	1.153	62.9	1.006	0.08	0.742	0.861
	LTE Band 48_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 2/3	56150	3641	19.48	20.00	1.127	62.9	1.006	0.05	0.656	0.744
	LTE Band 48_UAT	20M	QPSK	50	0	Right Cheek	Reduced Power Level 2/3	56640	3690	19.31	20.00	1.172	62.9	1.006	-0.04	0.591	0.697
	LTE Band 48_UAT	20M	QPSK	100	0	Right Cheek	Reduced Power Level 2/3	55830	3609	19.48	20.00	1.127	62.9	1.006	0.15	0.740	0.839



## &lt;5G NR SAR&gt;

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)
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Right Cheek	Full	136100	680.5	22.52	23.50	1.253	0.03	0.886	1.110
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Full	136100	680.5	22.52	23.50	1.253	0.01	0.666	0.835
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Left Cheek	Full	136100	680.5	22.52	23.50	1.253	0.05	0.636	0.797
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Left Tilted	Full	136100	680.5	22.52	23.50	1.253	0.07	0.551	0.690
20	N71_Ant 0	20M	BPSK	50	28	DFT-15	Right Cheek	Full	136100	680.5	22.40	23.50	1.288	0.04	0.912	1.175
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Right Tilted	Full	136100	680.5	22.40	23.50	1.288	-0.01	0.805	1.037
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Left Cheek	Full	136100	680.5	22.40	23.50	1.288	0.03	0.774	0.997
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Left Tilted	Full	136100	680.5	22.40	23.50	1.288	-0.02	0.720	0.928
	N71_Ant 0	20M	BPSK	100	0	DFT-15	Right Cheek	Full	136100	680.5	21.83	23.00	1.309	0.12	0.796	1.042
	N71_Ant 0	20M	BPSK	100	0	DFT-15	Right Tilted	Full	136100	680.5	21.83	23.00	1.309	-0.05	0.727	0.952
	N71_Ant 0	20M	BPSK	100	0	DFT-15	Left Cheek	Full	136100	680.5	21.83	23.00	1.309	0.11	0.621	0.813
	N71_Ant 0	20M	BPSK	100	0	DFT-15	Left Tilted	Full	136100	680.5	21.83	23.00	1.309	0.02	0.502	0.657
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 2	136100	680.5	20.54	21.50	1.247	-0.01	0.523	0.652
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 2	136100	680.5	20.54	21.50	1.247	0.03	0.369	0.460
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Left Cheek	Reduced Power Level 2	136100	680.5	20.54	21.50	1.247	0.05	0.374	0.467
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Left Tilted	Reduced Power Level 2	136100	680.5	20.54	21.50	1.247	0.06	0.322	0.402
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	136100	680.5	20.48	21.50	1.265	0.02	0.526	0.665
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 2	136100	680.5	20.48	21.50	1.265	-0.07	0.448	0.567
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 2	136100	680.5	20.48	21.50	1.265	0.01	0.412	0.521
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 2	136100	680.5	20.48	21.50	1.265	0.12	0.356	0.450
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Right Cheek	Full	136100	680.5	24.13	24.80	1.167	0.1	0.131	0.153
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Right Tilted	Full	136100	680.5	24.13	24.80	1.167	0.16	0.001	0.001
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Left Cheek	Full	136100	680.5	24.13	24.80	1.167	0.05	0.061	0.071
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Left Tilted	Full	136100	680.5	24.13	24.80	1.167	0.09	0.001	0.001
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Right Cheek	Full	136100	680.5	24.07	24.80	1.183	-0.05	0.140	0.166
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Right Tilted	Full	136100	680.5	24.07	24.80	1.183	0.12	0.000	0.000
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Left Cheek	Full	136100	680.5	24.07	24.80	1.183	-0.06	0.066	0.078
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Left Tilted	Full	136100	680.5	24.07	24.80	1.183	0.13	0.001	0.001
21	N5_Ant 0	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 1	167300	836.5	21.93	22.50	1.140	0.01	0.729	0.831
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 1	167300	836.5	21.93	22.50	1.140	-0.01	0.650	0.741
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Left Cheek	Reduced Power Level 1	167300	836.5	21.93	22.50	1.140	0.05	0.688	0.784
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Left Tilted	Reduced Power Level 1	167300	836.5	21.93	22.50	1.140	0.03	0.564	0.643
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	167300	836.5	21.90	22.50	1.148	-0.07	0.624	0.716
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 1	167300	836.5	21.90	22.50	1.148	0.01	0.554	0.636
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 1	167300	836.5	21.90	22.50	1.148	-0.02	0.579	0.665
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 1	167300	836.5	21.90	22.50	1.148	0.09	0.513	0.589
	N5_Ant 0	20M	BPSK	100	0	DFT-15	Right Cheek	Reduced Power Level 1	167300	836.5	21.87	22.50	1.156	0.01	0.682	0.788
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 2	167300	836.5	20.93	21.50	1.140	0.05	0.563	0.642
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 2	167300	836.5	20.93	21.50	1.140	-0.08	0.511	0.583
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Left Cheek	Reduced Power Level 2	167300	836.5	20.93	21.50	1.140	0.06	0.548	0.625
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Left Tilted	Reduced Power Level 2	167300	836.5	20.93	21.50	1.140	0.01	0.444	0.506
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	167300	836.5	20.85	21.50	1.161	-0.08	0.509	0.591
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 2	167300	836.5	20.85	21.50	1.161	0.03	0.449	0.521
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 2	167300	836.5	20.85	21.50	1.161	0.07	0.472	0.548
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 2	167300	836.5	20.85	21.50	1.161	0.13	0.393	0.456
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Right Cheek	Full	167300	836.5	24.06	24.80	1.186	0.11	0.146	0.173
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Right Tilted	Full	167300	836.5	24.06	24.80	1.186	0.02	0.061	0.072
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Cheek	Full	167300	836.5	24.06	24.80	1.186	0.06	0.116	0.138
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Tilted	Full	167300	836.5	24.06	24.80	1.186	0.08	0.063	0.075
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Right Cheek	Full	167300	836.5	23.93	24.80	1.222	-0.09	0.146	0.178
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Right Tilted	Full	167300	836.5	23.93	24.80	1.222	0.03	0.064	0.078
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Left Cheek	Full	167300	836.5	23.93	24.80	1.222	0.02	0.114	0.139
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Left Tilted	Full	167300	836.5	23.93	24.80	1.222	0.05	0.058	0.070





# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 1	344000	1720	17.95	18.80	1.216	0.01	0.674	0.820
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 1	344000	1720	17.95	18.80	1.216	0.03	0.293	0.356
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Left Cheek	Reduced Power Level 1	344000	1720	17.95	18.80	1.216	-0.06	0.224	0.272
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Left Tilted	Reduced Power Level 1	344000	1720	17.95	18.80	1.216	0.05	0.185	0.225
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 1	349000	1745	17.78	18.80	1.265	0.02	0.713	0.902
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 1	354000	1770	17.66	18.80	1.300	0.04	0.627	0.815
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	344000	1720	17.83	18.80	1.250	-0.03	0.681	0.851
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 1	344000	1720	17.83	18.80	1.250	0.02	0.309	0.386
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 1	344000	1720	17.83	18.80	1.250	0.01	0.235	0.294
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 1	344000	1720	17.83	18.80	1.250	0.05	0.189	0.236
22	N66_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	349000	1745	17.67	18.80	1.297	-0.16	0.711	0.922
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	354000	1770	17.59	18.80	1.321	0.07	0.625	0.826
	N66_Ant 2	20M	BPSK	100	0	DFT-15	Right Cheek	Reduced Power Level 1	344000	1720	17.78	18.80	1.265	0.02	0.686	0.868
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 2	344000	1720	16.96	17.80	1.213	-0.01	0.540	0.655
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 2	344000	1720	16.96	17.80	1.213	0.06	0.163	0.198
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Left Cheek	Reduced Power Level 2	344000	1720	16.96	17.80	1.213	0.05	0.183	0.222
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Left Tilted	Reduced Power Level 2	344000	1720	16.96	17.80	1.213	0.03	0.153	0.186
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	344000	1720	16.84	17.80	1.247	-0.13	0.552	0.689
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 2	344000	1720	16.84	17.80	1.247	0.14	0.146	0.182
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 2	344000	1720	16.84	17.80	1.247	0.01	0.177	0.221
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 2	344000	1720	16.84	17.80	1.247	0.03	0.139	0.173
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	349000	1745	16.79	17.80	1.262	0.06	0.572	0.722
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	354000	1770	16.67	17.80	1.297	0.08	0.489	0.634
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 1	354000	1720	16.88	17.80	1.236	0.03	0.451	0.557
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 1	344000	1720	16.88	17.80	1.236	0.09	0.634	0.784
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Left Cheek	Reduced Power Level 1	344000	1720	16.88	17.80	1.236	-0.07	0.328	0.405
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Left Tilted	Reduced Power Level 1	344000	1720	16.88	17.80	1.236	0.03	0.429	0.530
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 1	349000	1745	16.68	17.80	1.294	0.11	0.630	0.815
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 1	354000	1770	16.60	17.80	1.318	0.03	0.636	0.838
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	344000	1720	16.75	17.80	1.274	0.03	0.405	0.516
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 1	344000	1720	16.75	17.80	1.274	0.01	0.608	0.774
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 1	344000	1720	16.75	17.80	1.274	0.05	0.307	0.391
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 1	344000	1720	16.75	17.80	1.274	0.08	0.420	0.535
	N66_Ant 0	20M	BPSK	100	0	DFT-15	Right Tilted	Reduced Power Level 1	344000	1720	16.69	17.80	1.291	0.03	0.640	0.826
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 2	344000	1720	16.06	16.80	1.186	-0.1	0.384	0.455
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 2	344000	1720	16.06	16.80	1.186	0.03	0.504	0.598
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Left Cheek	Reduced Power Level 2	344000	1720	16.06	16.80	1.186	0.05	0.253	0.300
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Left Tilted	Reduced Power Level 2	344000	1720	16.06	16.80	1.186	0.09	0.355	0.421
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 2	349000	1745	15.93	16.80	1.222	0.07	0.493	0.602
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 2	354000	1770	15.77	16.80	1.268	-0.02	0.486	0.616
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	344000	1720	15.95	16.80	1.216	0.01	0.373	0.454
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 2	344000	1720	15.95	16.80	1.216	-0.01	0.490	0.596
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 2	344000	1720	15.95	16.80	1.216	0.02	0.237	0.288
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 2	344000	1720	15.95	16.80	1.216	0.05	0.333	0.405
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Right Cheek	Full	349000	1745	21.16	21.80	1.159	0.03	0.094	0.109
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Right Tilted	Full	349000	1745	21.16	21.80	1.159	0.06	0.044	0.051
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Left Cheek	Full	349000	1745	21.16	21.80	1.159	-0.08	0.045	0.052
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Left Tilted	Full	349000	1745	21.16	21.80	1.159	0.04	0.043	0.050
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Right Cheek	Full	344000	1720	21.03	21.80	1.194	0.02	0.085	0.101
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Right Cheek	Full	354000	1770	20.79	21.80	1.262	0.07	0.114	0.144
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Right Cheek	Full	349000	1745	21.01	21.80	1.199	-0.08	0.087	0.104
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Right Tilted	Full	349000	1745	21.01	21.80	1.199	0.03	0.042	0.050
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Left Cheek	Full	349000	1745	21.01	21.80	1.199	0.01	0.045	0.054
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Left Tilted	Full	349000	1745	21.01	21.80	1.199	0.02	0.042	0.050
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Right Cheek	Full	344000	1720	24.14	24.80	1.164	-0.05	0.190	0.221
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Right Tilted	Full	344000	1720	24.14	24.80	1.164	0.02	0.109	0.127
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Left Cheek	Full	344000	1720	24.14	24.80	1.164	0.03	0.149	0.173
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Left Tilted	Full	344000	1720	24.14	24.80	1.164	0.08	0.096	0.112
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Right Cheek	Full	344000	1720	23.70	24.80	1.288	0.01	0.179	0.231
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Right Tilted	Full	344000	1720	23.70	24.80	1.288	0.05	0.105	0.135
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Left Cheek	Full	344000	1720	23.70	24.80	1.288	0.08	0.155	0.200
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Left Tilted	Full	344000	1720	23.70	24.80	1.288	0.01	0.096	0.124
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Right Cheek	Full	349000	1745	23.66	24.80	1.300	0.06	0.151	0.196
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Right Cheek	Full	354000	1770	23.68	24.80	1.294	0.01	0.132	0.171



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Right Cheek	Reduced Power Level 1	376000	1880	18.14	18.80	1.164	-0.05	0.992	1.155
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Right Tilted	Reduced Power Level 1	376000	1880	18.14	18.80	1.164	0.03	0.227	0.264
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Left Cheek	Reduced Power Level 1	376000	1880	18.14	18.80	1.164	0.02	0.220	0.256
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Left Tilted	Reduced Power Level 1	376000	1880	18.14	18.80	1.164	0.01	0.143	0.166
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Right Cheek	Reduced Power Level 1	372000	1860	18.08	18.80	1.180	0.06	0.863	1.019
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Right Cheek	Reduced Power Level 1	380000	1900	17.99	18.80	1.205	0.08	0.822	0.991
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	376000	1880	18.09	18.80	1.178	-0.01	0.899	1.059
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 1	376000	1880	18.09	18.80	1.178	0.02	0.248	0.292
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 1	376000	1880	18.09	18.80	1.178	0.05	0.228	0.268
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 1	376000	1880	18.09	18.80	1.178	0.07	0.145	0.171
23	N2_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	372000	1860	18.04	18.80	1.191	-0.18	0.981	1.169
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	380000	1900	17.93	18.80	1.222	0.01	0.795	0.971
	N2_Ant 2	20M	BPSK	100	0	DFT-15	Right Cheek	Reduced Power Level 1	376000	1880	18.02	18.80	1.197	0.05	0.835	0.999
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Right Cheek	Reduced Power Level 2	376000	1880	17.09	17.80	1.178	-0.03	0.677	0.797
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Right Tilted	Reduced Power Level 2	376000	1880	17.09	17.80	1.178	0.02	0.275	0.324
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Left Cheek	Reduced Power Level 2	376000	1880	17.09	17.80	1.178	0.05	0.170	0.200
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Left Tilted	Reduced Power Level 2	376000	1880	17.09	17.80	1.178	0.03	0.113	0.133
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	376000	1880	16.94	17.80	1.219	0.04	0.715	0.872
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 2	376000	1880	16.94	17.80	1.219	0.01	0.284	0.346
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 2	376000	1880	16.94	17.80	1.219	0.02	0.168	0.205
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 2	376000	1880	16.94	17.80	1.219	0.06	0.114	0.139
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	372000	1860	16.89	17.80	1.233	0.07	0.759	0.936
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	380000	1900	16.78	17.80	1.265	0.09	0.698	0.883
	N2_Ant 2	20M	BPSK	100	0	DFT-15	Right Cheek	Reduced Power Level 2	376000	1880	16.87	17.80	1.239	0.01	0.653	0.809
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Right Cheek	Full	372000	1860	23.91	24.80	1.227	0.02	0.196	0.241
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Right Tilted	Full	372000	1860	23.91	24.80	1.227	0.03	0.162	0.199
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Left Cheek	Full	372000	1860	23.91	24.80	1.227	0.07	0.151	0.185
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Left Tilted	Full	372000	1860	23.91	24.80	1.227	0.08	0.128	0.157
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Right Cheek	Full	372000	1860	23.81	24.80	1.256	0.06	0.206	0.259
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Right Tilted	Full	372000	1860	23.81	24.80	1.256	0.01	0.171	0.215
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Left Cheek	Full	372000	1860	23.81	24.80	1.256	0.02	0.158	0.198
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Left Tilted	Full	372000	1860	23.81	24.80	1.256	0.05	0.134	0.168
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Right Cheek	Full	376000	1880	23.70	24.80	1.288	0.08	0.262	0.338
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Right Cheek	Full	380000	1900	23.77	24.80	1.268	0.07	0.212	0.269



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)
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 1	381000	1905	18.04	18.80	1.191	0.01	0.867	1.033
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 1	381000	1905	18.04	18.80	1.191	0.02	0.282	0.336
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Left Cheek	Reduced Power Level 1	381000	1905	18.04	18.80	1.191	0.05	0.219	0.261
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Left Tilted	Reduced Power Level 1	381000	1905	18.04	18.80	1.191	0.06	0.160	0.191
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 1	372000	1860	17.93	18.80	1.222	0.07	0.971	1.186
24	N25_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 1	376500	1882.5	17.95	18.80	1.216	0.02	0.978	1.189
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	381000	1905	17.98	18.80	1.208	0.03	0.885	1.069
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 1	381000	1905	17.98	18.80	1.208	0.02	0.279	0.337
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 1	381000	1905	17.98	18.80	1.208	0.01	0.216	0.261
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 1	381000	1905	17.98	18.80	1.208	0.08	0.158	0.191
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	372000	1860	17.83	18.80	1.250	0.05	0.938	1.173
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	376500	1882.5	17.94	18.80	1.219	0.03	0.942	1.148
	N25_Ant 2	20M	BPSK	100	0	DFT-15	Right Cheek	Reduced Power Level 1	381000	1905	17.97	18.80	1.211	0.03	0.922	1.116
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 2	381000	1905	17.19	17.80	1.151	0.01	0.702	0.808
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Right Tilted	Reduced Power Level 2	381000	1905	17.19	17.80	1.151	0.02	0.244	0.281
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Left Cheek	Reduced Power Level 2	381000	1905	17.19	17.80	1.151	0.05	0.175	0.201
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Left Tilted	Reduced Power Level 2	381000	1905	17.19	17.80	1.151	0.07	0.134	0.154
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 2	372000	1860	17.05	17.80	1.189	0.06	0.767	0.912
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Right Cheek	Reduced Power Level 2	376500	1882.5	17.10	17.80	1.175	0.09	0.744	0.874
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	381000	1905	17.09	17.80	1.178	-0.02	0.695	0.818
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 2	381000	1905	17.09	17.80	1.178	0.03	0.226	0.266
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 2	381000	1905	17.09	17.80	1.178	-0.05	0.170	0.200
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 2	381000	1905	17.09	17.80	1.178	0.01	0.124	0.146
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	372000	1860	17.03	17.80	1.194	0.03	0.687	0.820
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	376500	1882.5	17.08	17.80	1.180	0.02	0.731	0.863
	N25_Ant 2	20M	BPSK	100	0	DFT-15	Right Cheek	Reduced Power Level 2	381000	1905	17.07	17.80	1.183	-0.06	0.721	0.853
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Right Cheek	Full	376500	1882.5	23.88	24.80	1.236	0.02	0.259	0.320
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Right Tilted	Full	376500	1882.5	23.88	24.80	1.236	0.03	0.184	0.227
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Left Cheek	Full	376500	1882.5	23.88	24.80	1.236	0.04	0.168	0.208
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Left Tilted	Full	376500	1882.5	23.88	24.80	1.236	0.08	0.139	0.172
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Right Cheek	Full	372000	1860	23.84	24.80	1.247	0.01	0.183	0.228
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Right Cheek	Full	381000	1905	23.68	24.80	1.294	0.03	0.190	0.246
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Right Cheek	Full	376500	1882.5	23.67	24.80	1.297	-0.02	0.242	0.314
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Right Tilted	Full	376500	1882.5	23.67	24.80	1.297	0.03	0.177	0.230
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Left Cheek	Full	376500	1882.5	23.67	24.80	1.297	0.05	0.153	0.198
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Left Tilted	Full	376500	1882.5	23.67	24.80	1.297	0.06	0.140	0.182



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Right Cheek	Reduced Power Level 1	502000	2510	18.15	19.30	1.303	-0.03	0.579	0.755
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Right Tilted	Reduced Power Level 1	502000	2510	18.15	19.30	1.303	0.01	0.217	0.283
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Left Cheek	Reduced Power Level 1	502000	2510	18.15	19.30	1.303	0.07	0.231	0.301
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Left Tilted	Reduced Power Level 1	502000	2510	18.15	19.30	1.303	0.02	0.091	0.119
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	502000	2510	18.07	19.30	1.327	0.03	0.596	0.791
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 1	502000	2510	18.07	19.30	1.327	0.01	0.219	0.291
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 1	502000	2510	18.07	19.30	1.327	0.05	0.236	0.313
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 1	502000	2510	18.07	19.30	1.327	0.05	0.095	0.126
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	507000	2535	18.03	19.30	1.340	-0.06	0.720	0.965
25	N7_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 1	512000	2560	17.96	19.30	1.361	-0.07	0.725	0.987
	N7_Ant 2	20M	BPSK	100	0	DFT-15	Right Cheek	Reduced Power Level 1	502000	2510	18.03	19.30	1.340	0.01	0.580	0.777
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Right Cheek	Reduced Power Level 2	502000	2510	17.10	18.30	1.318	-0.06	0.491	0.647
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Right Tilted	Reduced Power Level 2	502000	2510	17.10	18.30	1.318	0.03	0.152	0.200
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Left Cheek	Reduced Power Level 2	502000	2510	17.10	18.30	1.318	0.02	0.170	0.224
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Left Tilted	Reduced Power Level 2	502000	2510	17.10	18.30	1.318	0.01	0.070	0.092
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	502000	2510	16.98	18.30	1.355	0.03	0.503	0.682
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Right Tilted	Reduced Power Level 2	502000	2510	16.98	18.30	1.355	0.02	0.163	0.221
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Left Cheek	Reduced Power Level 2	502000	2510	16.98	18.30	1.355	0.05	0.185	0.251
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Left Tilted	Reduced Power Level 2	502000	2510	16.98	18.30	1.355	0.08	0.072	0.098
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	507000	2535	16.92	18.30	1.374	0.04	0.609	0.837
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Right Cheek	Reduced Power Level 2	512000	2560	16.91	18.30	1.377	-0.01	0.614	0.846
	N7_Ant 2	20M	BPSK	100	0	DFT-15	Right Cheek	Reduced Power Level 2	502000	2510	16.98	18.30	1.355	0.03	0.500	0.678
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Right Cheek	Full	507000	2535	23.91	24.80	1.227	-0.09	0.154	0.189
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Right Tilted	Full	507000	2535	23.91	24.80	1.227	0.03	0.124	0.152
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Left Cheek	Full	507000	2535	23.91	24.80	1.227	0.02	0.268	0.329
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Left Tilted	Full	507000	2535	23.91	24.80	1.227	0.01	0.111	0.136
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Left Cheek	Full	502000	2510	23.74	24.80	1.276	0.02	0.227	0.290
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Left Cheek	Full	512000	2560	23.58	24.80	1.324	0.05	0.251	0.332
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Right Cheek	Full	507000	2535	23.85	24.80	1.245	-0.03	0.150	0.187
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Right Tilted	Full	507000	2535	23.85	24.80	1.245	0.04	0.122	0.152
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Left Cheek	Full	507000	2535	23.85	24.80	1.245	0.08	0.262	0.326
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Left Tilted	Full	507000	2535	23.85	24.80	1.245	0.01	0.105	0.131



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	15.64	16.80	1.306	0.03	0.723	0.944
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	15.64	16.80	1.306	0.01	0.779	1.018
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Cheek	Reduced Power Level 1	518598	2592.99	15.64	16.80	1.306	0.02	0.429	0.560
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 1	518598	2592.99	15.64	16.80	1.306	-0.05	0.474	0.619
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	509202	2546.01	15.53	16.80	1.340	0.03	0.678	0.908
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	528000	2640	15.41	16.80	1.377	0.01	0.732	1.008
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 1	509202	2546.01	15.53	16.80	1.340	0.05	0.718	0.962
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 1	528000	2640	15.41	16.80	1.377	0.06	0.782	1.077
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 1	509202	2546.01	15.53	16.80	1.340	0.09	0.420	0.563
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 1	528000	2640	15.41	16.80	1.377	0.01	0.485	0.668
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	15.57	16.80	1.327	-0.05	0.748	0.993
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	15.57	16.80	1.327	0.02	0.797	1.058
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 1	518598	2592.99	15.57	16.80	1.327	0.03	0.447	0.593
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 1	518598	2592.99	15.57	16.80	1.327	0.04	0.497	0.660
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	509202	2546.01	15.46	16.80	1.361	0.01	0.702	0.956
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	528000	2640	15.34	16.80	1.400	0.09	0.752	1.052
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 1	509202	2546.01	15.46	16.80	1.361	0.1	0.747	1.017
26	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 1	528000	2640	15.34	16.80	1.400	-0.05	0.801	1.121
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 1	509202	2546.01	15.46	16.80	1.361	0.05	0.440	0.599
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 1	528000	2640	15.34	16.80	1.400	0.11	0.502	0.703
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	15.55	16.80	1.334	0.03	0.731	0.975
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	15.55	16.80	1.334	0.02	0.782	1.043
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Left Tilted	Reduced Power Level 1	518598	2592.99	15.55	16.80	1.334	0.01	0.481	0.641
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	14.69	15.80	1.291	-0.03	0.518	0.669
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	14.69	15.80	1.291	0.06	0.552	0.713
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Cheek	Reduced Power Level 2	518598	2592.99	14.69	15.80	1.291	0.02	0.317	0.409
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 2	518598	2592.99	14.69	15.80	1.291	-0.01	0.354	0.457
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2	509202	2546.01	14.58	15.80	1.324	0.02	0.482	0.638
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2	528000	2640	14.46	15.80	1.361	0.13	0.522	0.711
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 2	509202	2546.01	14.58	15.80	1.324	0.08	0.522	0.691
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 2	528000	2640	14.46	15.80	1.361	0.04	0.564	0.768
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	14.55	15.80	1.334	-0.01	0.538	0.717
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	14.55	15.80	1.334	0.05	0.575	0.767
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 2	518598	2592.99	14.55	15.80	1.334	0.01	0.329	0.439
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 2	518598	2592.99	14.55	15.80	1.334	0.02	0.363	0.484
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	509202	2546.01	14.44	15.80	1.368	0.05	0.502	0.687
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	528000	2640	14.32	15.80	1.406	-0.03	0.542	0.762
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 2	509202	2546.01	14.44	15.80	1.368	0.02	0.546	0.747
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 2	528000	2640	14.32	15.80	1.406	0.08	0.583	0.820
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	14.60	15.80	1.318	0.01	0.522	0.688
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	14.60	15.80	1.318	0.02	0.565	0.745
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	16.21	16.80	1.146	0.01	0.770	0.882
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	16.21	16.80	1.146	0.02	0.849	0.973
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Left Cheek	Reduced Power Level 1	518598	2592.99	16.21	16.80	1.146	0.01	0.452	0.518
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Left Tilted	Reduced Power Level 1	518598	2592.99	16.21	16.80	1.146	0.05	0.503	0.576
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Cheek	Reduced Power Level 1	509202	2546.01	16.10	16.80	1.175	0.08	0.703	0.826
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Cheek	Reduced Power Level 1	528000	2640	15.97	16.80	1.211	0.03	0.781	0.945
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Tilted	Reduced Power Level 1	509202	2546.01	16.10	16.80	1.175	-0.02	0.749	0.880
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Tilted	Reduced Power Level 1	528000	2640	15.97	16.80	1.211	0.12	0.865	1.047
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	16.14	16.80	1.164	-0.10	0.798	0.929
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	16.14	16.80	1.164	0.12	0.864	1.006
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 1	518598	2592.99	16.14	16.80	1.164	0.05	0.464	0.540
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 1	518598	2592.99	16.14	16.80	1.164	0.04	0.514	0.598
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	509202	2546.01	16.03	16.80	1.194	0.08	0.727	0.868
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	528000	2640	15.90	16.80	1.230	0.03	0.802	0.987
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 1	509202	2546.01	16.03	16.80	1.194	0.05	0.768	0.917





# FCC SAR TEST REPORT

Report No. : FA002703-02

N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 1	528000	2640	15.90	16.80	1.230	0.01	0.890	1.095
N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	16.07	16.80	1.183	0.02	0.522	0.618
N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	16.07	16.80	1.183	0.03	0.574	0.679
N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	15.26	15.80	1.132	-0.03	0.628	0.711
N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	15.26	15.80	1.132	0.06	0.701	0.794
N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Left Cheek	Reduced Power Level 2	518598	2592.99	15.26	15.80	1.132	0.05	0.362	0.410
N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Left Tilted	Reduced Power Level 2	518598	2592.99	15.26	15.80	1.132	0.09	0.408	0.462
N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Cheek	Reduced Power Level 2	509202	2546.01	15.15	15.80	1.161	0.08	0.576	0.669
N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Tilted	Reduced Power Level 2	528000	2640	15.02	15.80	1.197	0.02	0.635	0.760
N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Tilted	Reduced Power Level 2	509202	2546.01	15.15	15.80	1.161	-0.13	0.605	0.703
N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	15.22	15.80	1.143	0.03	0.694	0.793
N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	15.22	15.80	1.143	0.01	0.720	0.823
N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 2	518598	2592.99	15.22	15.80	1.143	0.08	0.379	0.433
N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 2	518598	2592.99	15.22	15.80	1.143	0.09	0.425	0.486
N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	509202	2546.01	15.08	15.80	1.180	0.02	0.583	0.688
N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	528000	2640	14.95	15.80	1.216	0.13	0.652	0.793
N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 2	509202	2546.01	15.08	15.80	1.180	0.05	0.622	0.734
N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 2	528000	2640	15.05	15.80	1.189	0.18	0.692	0.822
N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	15.12	15.80	1.169	0.03	0.642	0.751
N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	15.12	15.80	1.169	0.05	0.701	0.820
N41_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	20.27	21.30	1.268	0.01	0.640	0.811
N41_Ant 2	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	20.27	21.30	1.268	0.04	0.237	0.300
N41_Ant 2	100M	BPSK	1	1	DFT-30	Left Cheek	Reduced Power Level 1	518598	2592.99	20.27	21.30	1.268	0.05	0.234	0.297
N41_Ant 2	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 1	518598	2592.99	20.27	21.30	1.268	0.08	0.103	0.131
N41_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	509202	2546.01	20.16	21.30	1.300	0.07	0.845	1.098
N41_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	528000	2640	20.03	21.30	1.340	0.02	0.601	0.805
N41_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	20.13	21.30	1.309	0.11	0.627	0.821
N41_Ant 2	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	20.13	21.30	1.309	0.02	0.218	0.285
N41_Ant 2	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 1	518598	2592.99	20.13	21.30	1.309	0.03	0.222	0.291
N41_Ant 2	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 1	518598	2592.99	20.13	21.30	1.309	0.05	0.095	0.124
N41_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	509202	2546.01	20.00	21.30	1.349	0.08	0.763	1.029
N41_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	528000	2640	19.89	21.30	1.384	0.01	0.581	0.804
N41_Ant 2	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	20.07	21.30	1.327	0.03	0.616	0.818
N41_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	19.31	20.30	1.256	0.03	0.522	0.656
N41_Ant 2	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	19.31	20.30	1.256	0.02	0.188	0.236
N41_Ant 2	100M	BPSK	1	1	DFT-30	Left Cheek	Reduced Power Level 2	518598	2592.99	19.31	20.30	1.256	0.01	0.186	0.234
N41_Ant 2	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 2	518598	2592.99	19.31	20.30	1.256	0.08	0.081	0.102
N41_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2	509202	2546.01	19.19	20.30	1.291	0.06	0.678	0.875
N41_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2	528000	2640	19.12	20.30	1.312	0.02	0.505	0.663
N41_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	19.11	20.30	1.315	0.05	0.498	0.655
N41_Ant 2	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	19.11	20.30	1.315	0.09	0.165	0.217
N41_Ant 2	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 2	518598	2592.99	19.11	20.30	1.315	-0.05	0.162	0.213
N41_Ant 2	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 2	518598	2592.99	19.11	20.30	1.315	0.03	0.076	0.100
N41_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	509202	2546.01	18.99	20.30	1.352	0.06	0.615	0.832
N41_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	528000	2640	18.92	20.30	1.374	0.07	0.480	0.660
N41_Ant 2	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	19.03	20.30	1.340	0.02	0.635	0.851
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	20.27	21.30	1.268	0.03	0.640	0.811
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	20.27	21.30	1.268	-0.05	0.237	0.300
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Left Cheek	Reduced Power Level 1	518598	2592.99	20.27	21.30	1.268	0.01	0.234	0.297
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 1	518598	2592.99	20.27	21.30	1.268	0.05	0.103	0.131
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	509202	2546.01	20.16	21.30	1.300	0.03	0.845	1.098
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	528000	2640	20.03	21.30	1.340	0.13	0.601	0.805
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	20.13	21.30	1.309	0.06	0.627	0.821
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 1	518598	2592.99	20.13	21.30	1.309	0.03	0.218	0.285
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 1	518598	2592.99	20.13	21.30	1.309	0.01	0.222	0.291
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 1	518598	2592.99	20.13	21.30	1.309	0.08	0.095	0.124
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	509202	2546.01	20.00	21.30	1.349	0.02	0.763	1.029



# FCC SAR TEST REPORT

Report No. : FA002703-02

N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	528000	2640	19.89	21.30	1.384	0.03	0.581	0.804
N41(HPUE)_Ant 2	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 1	518598	2592.99	20.07	21.30	1.327	0.01	0.616	0.818
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	19.31	20.30	1.256	0.05	0.522	0.656
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	19.31	20.30	1.256	0.06	0.188	0.236
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Left Cheek	Reduced Power Level 2	518598	2592.99	19.31	20.30	1.256	0.05	0.186	0.234
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 2	518598	2592.99	19.31	20.30	1.256	0.01	0.081	0.102
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2	509202	2546.01	19.19	20.30	1.291	0.02	0.678	0.875
N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2	528000	2640	19.12	20.30	1.312	0.02	0.505	0.663
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	19.11	20.30	1.315	-0.02	0.498	0.655
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 2	518598	2592.99	19.11	20.30	1.315	0.05	0.165	0.217
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 2	518598	2592.99	19.11	20.30	1.315	0.03	0.162	0.213
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 2	518598	2592.99	19.11	20.30	1.315	0.08	0.076	0.100
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	509202	2546.01	18.99	20.30	1.352	0.07	0.615	0.832
N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2	528000	2640	18.92	20.30	1.374	0.02	0.480	0.660
N41(HPUE)_Ant 2	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 2	518598	2592.99	19.03	20.30	1.340	0.02	0.635	0.851
N41_Ant 1	100M	BPSK	1	1	DFT-30	Right Cheek	Full	518598	2592.99	19.60	20.30	1.175	0.01	0.057	0.067
N41_Ant 1	100M	BPSK	1	1	DFT-30	Right Tilted	Full	518598	2592.99	19.60	20.30	1.175	0.02	0.025	0.029
N41_Ant 1	100M	BPSK	1	1	DFT-30	Left Cheek	Full	518598	2592.99	19.60	20.30	1.175	0.08	0.038	0.045
N41_Ant 1	100M	BPSK	1	1	DFT-30	Left Tilted	Full	518598	2592.99	19.60	20.30	1.175	0.09	0.026	0.031
N41_Ant 1	100M	BPSK	1	1	DFT-30	Right Cheek	Full	509202	2546.01	19.57	20.30	1.183	0.02	0.080	0.094
N41_Ant 1	100M	BPSK	1	1	DFT-30	Right Cheek	Full	528000	2640	19.40	20.30	1.230	0.01	0.069	0.085
N41_Ant 1	100M	BPSK	135	69	DFT-30	Right Cheek	Full	518598	2592.99	19.33	20.30	1.250	0.03	0.053	0.066
N41_Ant 1	100M	BPSK	135	69	DFT-30	Right Tilted	Full	518598	2592.99	19.33	20.30	1.250	0.03	0.022	0.028
N41_Ant 1	100M	BPSK	135	69	DFT-30	Left Cheek	Full	518598	2592.99	19.33	20.30	1.250	0.01	0.036	0.044
N41_Ant 1	100M	BPSK	135	69	DFT-30	Left Tilted	Full	518598	2592.99	19.33	20.30	1.250	0.05	0.023	0.028
N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Right Cheek	Full	518598	2592.99	22.54	23.30	1.191	0.06	0.113	0.135
N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Right Tilted	Full	518598	2592.99	22.54	23.30	1.191	0.02	0.050	0.060
N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Left Cheek	Full	518598	2592.99	22.54	23.30	1.191	0.05	0.079	0.094
N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Left Tilted	Full	518598	2592.99	22.54	23.30	1.191	0.04	0.052	0.062
N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Right Cheek	Full	509202	2546.01	22.43	23.30	1.222	-0.02	0.148	0.181
N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Right Cheek	Full	528000	2640	22.27	23.30	1.268	0.01	0.132	0.167
N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Right Cheek	Full	518598	2592.99	22.41	23.30	1.227	0.09	0.108	0.133
N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Right Tilted	Full	518598	2592.99	22.41	23.30	1.227	0.05	0.047	0.058
N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Left Cheek	Full	518598	2592.99	22.41	23.30	1.227	-0.1	0.077	0.094
N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Left Tilted	Full	518598	2592.99	22.41	23.30	1.227	0.02	0.050	0.061
N41_Ant 3	100M	BPSK	1	1	DFT-30	Right Cheek	Full	518598	2592.99	23.87	24.80	1.239	0.08	0.187	0.232
N41_Ant 3	100M	BPSK	1	1	DFT-30	Right Tilted	Full	518598	2592.99	23.87	24.80	1.239	0.09	0.164	0.203
N41_Ant 3	100M	BPSK	1	1	DFT-30	Left Cheek	Full	518598	2592.99	23.87	24.80	1.239	0.14	0.329	0.407
N41_Ant 3	100M	BPSK	1	1	DFT-30	Left Tilted	Full	518598	2592.99	23.87	24.80	1.239	0.02	0.124	0.154
N41_Ant 3	100M	BPSK	1	1	DFT-30	Left Cheek	Full	509202	2546.01	23.77	24.80	1.268	0.03	0.321	0.407
N41_Ant 3	100M	BPSK	1	1	DFT-30	Left Cheek	Full	528000	2640	23.71	24.80	1.285	0.08	0.275	0.353
N41_Ant 3	100M	BPSK	135	69	DFT-30	Right Cheek	Full	518598	2592.99	23.81	24.80	1.256	0.02	0.173	0.217
N41_Ant 3	100M	BPSK	135	69	DFT-30	Right Tilted	Full	518598	2592.99	23.81	24.80	1.256	0.02	0.155	0.195
N41_Ant 3	100M	BPSK	135	69	DFT-30	Left Cheek	Full	518598	2592.99	23.81	24.80	1.256	0.03	0.282	0.354
N41_Ant 3	100M	BPSK	135	69	DFT-30	Left Tilted	Full	518598	2592.99	23.81	24.80	1.256	0.09	0.113	0.142
N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Right Cheek	Full	518598	2592.99	25.96	26.80	1.213	-0.11	0.218	0.265
N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Right Tilted	Full	518598	2592.99	25.96	26.80	1.213	0.02	0.186	0.226
N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Left Cheek	Full	518598	2592.99	25.96	26.80	1.213	0.08	0.367	0.445
N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Left Tilted	Full	518598	2592.99	25.96	26.80	1.213	0.03	0.139	0.169
N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Left Cheek	Full	509202	2546.01	25.82	26.80	1.253	0.06	0.355	0.445
N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Left Cheek	Full	528000	2640	25.76	26.80	1.271	0.04	0.303	0.385
N41(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Right Cheek	Full	518598	2592.99	25.63	26.80	1.309	0.05	0.206	0.270
N41(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Right Tilted	Full	518598	2592.99	25.63	26.80	1.309	-0.09	0.177	0.232
N41(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Left Cheek	Full	518598	2592.99	25.63	26.80	1.309	0.02	0.305	0.399
N41(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Left Tilted	Full	518598	2592.99	25.63	26.80	1.309	0.03	0.128	0.168





# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	656000	3840	19.65	20.80	1.303	-0.09	0.698	0.910
	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 1	656000	3840	19.65	20.80	1.303	-0.03	0.115	0.150
	N77_Ant9	100M	BPSK	1	1	DFT-30	Left Cheek	Reduced Power Level 1	656000	3840	19.65	20.80	1.303	-0.05	0.411	0.536
	N77_Ant9	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 1	656000	3840	19.65	20.80	1.303	-0.11	0.051	0.067
27	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	650000	3750	19.61	20.80	1.315	-0.04	0.856	1.126
	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 1	662000	3930	19.64	20.80	1.306	0.17	0.603	0.788
	N77_Ant9	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	656000	3840	19.64	20.80	1.306	-0.12	0.664	0.867
	N77_Ant9	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 1	656000	3840	19.64	20.80	1.306	0.11	0.107	0.140
	N77_Ant9	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 1	656000	3840	19.64	20.80	1.306	0.08	0.402	0.525
	N77_Ant9	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 1	656000	3840	19.64	20.80	1.306	0.05	0.039	0.051
	N77_Ant9	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	650000	3750	19.58	20.80	1.324	-0.06	0.765	1.013
	N77_Ant9	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 1	662000	3930	19.61	20.80	1.315	0.13	0.571	0.751
	N77_Ant9	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 1	656000	3840	19.58	20.80	1.324	0.05	0.601	0.796
	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2/3	656000	3840	18.16	19.30	1.300	0.11	0.492	0.640
	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Tilted	Reduced Power Level 2/3	656000	3840	18.16	19.30	1.300	0.01	0.093	0.121
	N77_Ant9	100M	BPSK	1	1	DFT-30	Left Cheek	Reduced Power Level 2/3	656000	3840	18.16	19.30	1.300	0.12	0.313	0.407
	N77_Ant9	100M	BPSK	1	1	DFT-30	Left Tilted	Reduced Power Level 2/3	656000	3840	18.16	19.30	1.300	0.02	0.033	0.043
	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2/3	650000	3750	18.11	19.30	1.315	-0.08	0.603	0.793
	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Cheek	Reduced Power Level 2/3	662000	3930	18.03	19.30	1.340	0.13	0.425	0.569
	N77_Ant9	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2/3	656000	3840	18.14	19.30	1.306	-0.05	0.460	0.601
	N77_Ant9	100M	BPSK	135	69	DFT-30	Right Tilted	Reduced Power Level 2/3	656000	3840	18.14	19.30	1.306	-0.06	0.091	0.119
	N77_Ant9	100M	BPSK	135	69	DFT-30	Left Cheek	Reduced Power Level 2/3	656000	3840	18.14	19.30	1.306	0.18	0.285	0.372
	N77_Ant9	100M	BPSK	135	69	DFT-30	Left Tilted	Reduced Power Level 2/3	656000	3840	18.14	19.30	1.306	0.06	0.028	0.037
	N77_Ant9	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2/3	650000	3750	18.08	19.30	1.324	0.1	0.556	0.736
	N77_Ant9	100M	BPSK	135	69	DFT-30	Right Cheek	Reduced Power Level 2/3	662000	3930	17.92	19.30	1.374	0.05	0.403	0.554
	N77_Ant9	100M	BPSK	270	0	DFT-30	Right Cheek	Reduced Power Level 2/3	656000	3840	18.11	19.30	1.315	0.14	0.408	0.537



# FCC SAR TEST REPORT

Report No. : FA002703-02

## <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 1+2	Reduced Power Level 1/3	1	2412	19.44	20.50	1.276	98.35	1.017	0.04	0.602	0.781
28	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced Power Level 1/3	1	2412	19.44	20.50	1.276	98.35	1.017	-0.02	0.752	0.976
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced Power Level 1/3	1	2412	19.44	20.50	1.276	98.35	1.017	0.05	0.653	0.848
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 1+2	Reduced Power Level 1/3	1	2412	19.44	20.50	1.276	98.35	1.017	-0.01	0.695	0.902
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced Power Level 1/3	6	2437	19.37	20.50	1.297	98.35	1.017	-0.04	0.656	0.865
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced Power Level 1/3	11	2462	19.04	20.50	1.400	98.35	1.017	-0.18	0.500	0.712
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced Power Level 1/3	6	2437	19.37	20.50	1.297	98.35	1.017	0.15	0.610	0.805
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced Power Level 1/3	11	2462	19.04	20.50	1.400	98.35	1.017	0.05	0.567	0.807
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 1+2	Reduced Power Level 1/3	6	2437	19.37	20.50	1.297	98.35	1.017	-0.04	0.733	0.967
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 1+2	Reduced Power Level 1/3	11	2462	19.04	20.50	1.400	98.35	1.017	-0.01	0.610	0.868
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 2	Reduced Power Level 5	1	2412	16.90	17.50	1.148	97.93	1.021	-0.15	0.111	0.130
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 2	Reduced Power Level 5	1	2412	16.90	17.50	1.148	97.93	1.021	0.05	0.065	0.076
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 2	Reduced Power Level 5	1	2412	16.90	17.50	1.148	97.93	1.021	-0.04	0.510	0.598
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 2	Reduced Power Level 5	1	2412	16.90	17.50	1.148	97.93	1.021	0.05	0.154	0.181
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 2	Reduced Power Level 5	6	2437	16.60	17.50	1.230	97.93	1.021	-0.01	0.690	0.867
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 2	Reduced Power Level 5	11	2462	16.50	17.50	1.259	97.93	1.021	-0.04	0.521	0.670
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 1+2	Reduced Power Level 2	1	2412	16.24	17.50	1.337	98.35	1.017	0.13	0.312	0.424
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced Power Level 2	1	2412	16.24	17.50	1.337	98.35	1.017	-0.12	0.405	0.551
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced Power Level 2	1	2412	16.24	17.50	1.337	98.35	1.017	-0.09	0.301	0.409
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 1+2	Reduced Power Level 2	1	2412	16.24	17.50	1.337	98.35	1.017	0.05	0.366	0.498
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced Power Level 2	6	2437	16.17	17.50	1.358	98.35	1.017	-0.04	0.413	0.571
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced Power Level 2	11	2462	15.84	17.50	1.466	98.35	1.017	0.05	0.304	0.453
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 1+2	Reduced Power Level 4	1	2412	14.24	15.50	1.337	98.35	1.017	-0.12	0.179	0.243
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced Power Level 4	1	2412	14.24	15.50	1.337	98.35	1.017	0.11	0.208	0.283
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced Power Level 4	1	2412	14.24	15.50	1.337	98.35	1.017	0.08	0.181	0.246
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 1+2	Reduced Power Level 4	1	2412	14.24	15.50	1.337	98.35	1.017	-0.15	0.206	0.280
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced Power Level 4	6	2437	14.17	15.50	1.358	98.35	1.017	0.05	0.253	0.349
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced Power Level 4	11	2462	13.84	15.50	1.466	98.35	1.017	-0.08	0.177	0.264
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 2	Reduced Power Level 6	1	2412	11.70	12.50	1.202	97.93	1.021	0.08	0.050	0.061
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 2	Reduced Power Level 6	1	2412	11.70	12.50	1.202	97.93	1.021	-0.15	0.030	0.037
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 2	Reduced Power Level 6	1	2412	11.70	12.50	1.202	97.93	1.021	-0.09	0.189	0.232
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 2	Reduced Power Level 6	1	2412	11.70	12.50	1.202	97.93	1.021	-0.01	0.057	0.070
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 2	Reduced Power Level 6	6	2437	11.40	12.50	1.288	97.93	1.021	0.15	0.172	0.226
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 2	Reduced Power Level 6	11	2462	11.30	12.50	1.318	97.93	1.021	0.08	0.188	0.253



# FCC SAR TEST REPORT

Report No. : FA002703-02

## <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	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.12	0.447	0.556
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.04	0.344	0.428
29	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.01	0.555	0.691
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.08	0.403	0.502
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 1/5	54	5270	20.93	22.00	1.279	100	1.000	-0.04	0.464	0.594
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced Power Level 2/3	62	5310	19.05	20.00	1.245	100	1.000	-0.01	0.322	0.401
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced Power Level 2/3	62	5310	19.05	20.00	1.245	100	1.000	-0.04	0.271	0.337
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 2/3	62	5310	19.05	20.00	1.245	100	1.000	-0.18	0.388	0.483
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced Power Level 2/3	62	5310	19.05	20.00	1.245	100	1.000	0.15	0.321	0.399
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 2/3	54	5270	18.93	20.00	1.279	100	1.000	-0.12	0.394	0.504
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced Power Level 4/6	62	5310	17.15	18.00	1.216	100	1.000	0.05	0.142	0.173
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced Power Level 4/6	62	5310	17.15	18.00	1.216	100	1.000	-0.04	0.139	0.169
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 4/6	62	5310	17.15	18.00	1.216	100	1.000	0.05	0.188	0.229
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced Power Level 4/6	62	5310	17.15	18.00	1.216	100	1.000	0.01	0.173	0.210
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 4/6	54	5270	17.03	18.00	1.250	100	1.000	-0.05	0.218	0.273
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	-0.18	0.225	0.269
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	0.15	0.322	0.384
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	-0.12	0.495	0.591
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	-0.09	0.324	0.387
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 1/5	102	5510	20.98	22.00	1.266	100	1.000	-0.01	0.435	0.551
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 1/5	126	5630	21.11	22.00	1.227	100	1.000	0.15	0.616	0.756
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 1/5	134	5670	20.97	22.00	1.269	100	1.000	0.16	0.594	0.754
30	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 1/5	142	5710	20.92	22.00	1.281	100	1.000	0.1	0.719	0.921
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced Power Level 2/3	110	5550	19.23	20.00	1.194	100	1.000	-0.15	0.166	0.198
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced Power Level 2/3	110	5550	19.23	20.00	1.194	100	1.000	-0.09	0.137	0.164
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 2/3	110	5550	19.23	20.00	1.194	100	1.000	-0.01	0.271	0.324
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced Power Level 2/3	110	5550	19.23	20.00	1.194	100	1.000	0.15	0.230	0.275
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 2/3	102	5510	18.98	20.00	1.266	100	1.000	0.08	0.261	0.330
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 2/3	126	5630	19.11	20.00	1.227	100	1.000	-0.18	0.283	0.347
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 2/3	134	5670	18.97	20.00	1.269	100	1.000	0.15	0.409	0.519
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 2/3	142	5710	18.92	20.00	1.281	100	1.000	-0.12	0.396	0.507
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced Power Level 4/6	110	5550	17.33	18.00	1.167	100	1.000	0.05	0.080	0.093
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced Power Level 4/6	110	5550	17.33	18.00	1.167	100	1.000	0.01	0.073	0.085
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 4/6	110	5550	17.33	18.00	1.167	100	1.000	-0.01	0.170	0.198
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced Power Level 4/6	110	5550	17.33	18.00	1.167	100	1.000	-0.04	0.123	0.144
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 4/6	102	5510	17.08	18.00	1.236	100	1.000	-0.18	0.130	0.161
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 4/6	126	5630	17.21	18.00	1.199	100	1.000	0.15	0.190	0.228
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 4/6	134	5670	17.07	18.00	1.239	100	1.000	-0.12	0.223	0.276
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 4/6	142	5710	17.02	18.00	1.253	100	1.000	0.11	0.278	0.348
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced Power Level 1/5	159	5795	20.84	22.00	1.307	100	1.000	-0.09	0.154	0.201
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced Power Level 1/5	159	5795	20.84	22.00	1.307	100	1.000	-0.01	0.150	0.196
31	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 1/5	159	5795	20.84	22.00	1.307	100	1.000	0.14	0.680	0.889
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced Power Level 1/5	159	5795	20.84	22.00	1.307	100	1.000	0.08	0.460	0.601
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 1/5	151	5755	20.74	22.00	1.336	100	1.000	-0.18	0.601	0.803
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced Power Level 2/3	159	5795	18.84	20.00	1.307	100	1.000	0.05	0.101	0.132
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced Power Level 2/3	159	5795	18.84	20.00	1.307	100	1.000	-0.04	0.098	0.128
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 2/3	159	5795	18.84	20.00	1.307	100	1.000	0.05	0.375	0.490
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced Power Level 2/3	159	5795	18.84	20.00	1.307	100	1.000	-0.01	0.203	0.265
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 2/3	151	5755	18.74	20.00	1.336	100	1.000	-0.04	0.409	0.546
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced Power Level 4/6	159	5795	16.94	18.00	1.276	100	1.000	0.13	0.073	0.093
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced Power Level 4/6	159	5795	16.94	18.00	1.276	100	1.000	-0.12	0.068	0.087
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 4/6	159	5795	16.94	18.00	1.276	100	1.000	-0.09	0.222	0.283
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced Power Level 4/6	159	5795	16.94	18.00	1.276	100	1.000	0.05	0.000	0.000
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced Power Level 4/6	151	5755	16.84	18.00	1.306	100	1.000	-0.04	0.249	0.325

**<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	DH5 1Mbps	Right Cheek	Ant 1	Reduced	39	2441	9.40	11.40	1.585	76.69	1.304	-0.04	0.062	0.128
	Bluetooth	DH5 1Mbps	Right Tilted	Ant 1	Reduced	39	2441	9.40	11.40	1.585	76.69	1.304	0.05	0.065	0.133
32	Bluetooth	DH5 1Mbps	Left Cheek	Ant 1	Reduced	39	2441	9.40	11.40	1.585	76.69	1.304	0.11	0.067	<b>0.137</b>
	Bluetooth	DH5 1Mbps	Left Tilted	Ant 1	Reduced	39	2441	9.40	11.40	1.585	76.69	1.304	-0.01	0.063	0.130
	Bluetooth	DH5 1Mbps	Left Cheek	Ant 1	Reduced	0	2402	8.00	10.00	1.585	76.69	1.304	0.14	0.014	0.030
	Bluetooth	DH5 1Mbps	Left Cheek	Ant 1	Reduced	78	2480	8.30	10.30	1.585	76.69	1.304	0.05	0.054	0.112

## 19.2 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_UAT	GPRS(4 Tx slots)	Front	10mm	Reduced	189	836.4	24.67	25.60	1.239	-0.18	0.187	0.232
	GSM850_UAT	GPRS(4 Tx slots)	Back	10mm	Reduced	189	836.4	24.67	25.60	1.239	0.15	0.223	0.276
	GSM850_UAT	GPRS(4 Tx slots)	Left Side	10mm	Reduced	189	836.4	24.67	25.60	1.239	-0.12	0.079	0.098
	GSM850_UAT	GPRS(4 Tx slots)	Right Side	10mm	Reduced	189	836.4	24.67	25.60	1.239	0.11	0.001	0.001
	GSM850_UAT	GPRS(4 Tx slots)	Top Side	10mm	Reduced	189	836.4	24.67	25.60	1.239	0.06	0.152	0.188
	GSM850_UAT	GPRS(4 Tx slots)	Back	10mm	Reduced	128	824.2	24.66	25.60	1.242	-0.09	0.274	0.340
	GSM850_UAT	GPRS(4 Tx slots)	Back	10mm	Reduced	251	848.8	24.58	25.60	1.265	-0.01	0.239	0.302
	GSM850_LAT	GPRS(4 Tx slots)	Front	10mm	Full	128	824.2	27.43	29.30	1.538	0.08	0.210	0.323
	GSM850_LAT	GPRS(4 Tx slots)	Back	10mm	Full	128	824.2	27.43	29.30	1.538	-0.18	0.297	0.457
	GSM850_LAT	GPRS(4 Tx slots)	Left Side	10mm	Full	128	824.2	27.43	29.30	1.538	-0.12	0.072	0.111
33	GSM850_LAT	GPRS(4 Tx slots)	Right Side	10mm	Full	128	824.2	27.43	29.30	1.538	0.04	0.501	<b>0.771</b>
	GSM850_LAT	GPRS(4 Tx slots)	Bottom Side	10mm	Full	128	824.2	27.43	29.30	1.538	0.05	0.189	0.291
	GSM850_LAT	GPRS(4 Tx slots)	Right Side	10mm	Full	189	836.4	27.34	29.30	1.570	0.01	0.305	0.479
	GSM850_LAT	GPRS(4 Tx slots)	Right Side	10mm	Full	251	848.8	27.42	29.30	1.542	-0.01	0.376	0.580
	GSM1900_UAT	GPRS(2 Tx slots)	Front	10mm	Full	661	1880	25.24	26.80	1.432	-0.18	0.098	0.141
	GSM1900_UAT	GPRS(2 Tx slots)	Back	10mm	Full	661	1880	25.24	26.80	1.432	0.15	0.154	0.221
	GSM1900_UAT	GPRS(2 Tx slots)	Left Side	10mm	Full	661	1880	25.24	26.80	1.432	-0.12	0.318	0.455
	GSM1900_UAT	GPRS(2 Tx slots)	Right Side	10mm	Full	661	1880	25.24	26.80	1.432	0.11	0.019	0.027
	GSM1900_UAT	GPRS(2 Tx slots)	Top Side	10mm	Full	661	1880	25.24	26.80	1.432	0.05	0.012	0.017
	GSM1900_UAT	GPRS(2 Tx slots)	Left Side	10mm	Full	512	1850.2	24.83	26.80	1.574	-0.09	0.317	0.499
	GSM1900_UAT	GPRS(2 Tx slots)	Left Side	10mm	Full	810	1909.8	24.85	26.80	1.567	-0.01	0.274	0.429
	GSM1900_LAT	GPRS(2 Tx slots)	Front	10mm	Full	661	1880	27.15	28.80	1.462	-0.18	0.452	0.661
	GSM1900_LAT	GPRS(2 Tx slots)	Back	10mm	Full	661	1880	27.15	28.80	1.462	0.15	0.531	0.776
	GSM1900_LAT	GPRS(2 Tx slots)	Left Side	10mm	Full	661	1880	27.15	28.80	1.462	-0.12	0.208	0.304
	GSM1900_LAT	GPRS(2 Tx slots)	Right Side	10mm	Full	661	1880	27.15	28.80	1.462	0.11	0.115	0.168
	GSM1900_LAT	GPRS(2 Tx slots)	Bottom Side	10mm	Full	661	1880	27.15	28.80	1.462	0.06	0.590	0.863
	GSM1900_LAT	GPRS(2 Tx slots)	Bottom Side	10mm	Full	512	1850.2	27.00	28.80	1.514	-0.09	0.571	0.864
34	GSM1900_LAT	GPRS(2 Tx slots)	Bottom Side	10mm	Full	810	1909.8	27.11	28.80	1.476	-0.12	0.591	<b>0.872</b>



# FCC SAR TEST REPORT

Report No. : FA002703-02

## <CDMA 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)
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Front	10mm	Full	384	836.52	22.57	23.80	1.327	0.03	0.354	0.470
35	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Back	10mm	Full	384	836.52	22.57	23.80	1.327	-0.15	0.436	0.579
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Left Side	10mm	Full	384	836.52	22.57	23.80	1.327	-0.12	0.076	0.101
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Right Side	10mm	Full	384	836.52	22.57	23.80	1.327	-0.09	0.027	0.036
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Top Side	10mm	Full	384	836.52	22.57	23.80	1.327	-0.01	0.315	0.418
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Back	10mm	Full	1013	824.7	22.51	23.80	1.346	0.15	0.428	0.576
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Back	10mm	Full	777	848.31	22.55	23.80	1.334	0.16	0.390	0.520
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Front	10mm	Full	384	836.52	23.75	24.80	1.274	0.06	0.229	0.292
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Back	10mm	Full	384	836.52	23.75	24.80	1.274	-0.15	0.291	0.371
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Left Side	10mm	Full	384	836.52	23.75	24.80	1.274	-0.09	0.076	0.097
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Right Side	10mm	Full	384	836.52	23.75	24.80	1.274	-0.01	0.394	0.502
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Full	384	836.52	23.75	24.80	1.274	0.15	0.164	0.209
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Right Side	10mm	Full	1013	824.7	23.67	24.80	1.297	0.08	0.428	0.555
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Right Side	10mm	Full	777	848.31	23.65	24.80	1.303	-0.18	0.374	0.487
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Front	10mm	Full	600	1880	21.24	22.80	1.432	-0.12	0.221	0.317
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Back	10mm	Full	600	1880	21.24	22.80	1.432	0.11	0.284	0.407
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Left Side	10mm	Full	600	1880	21.24	22.80	1.432	0.05	0.644	0.922
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Right Side	10mm	Full	600	1880	21.24	22.80	1.432	-0.12	0.000	0.000
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Top Side	10mm	Full	600	1880	21.24	22.80	1.432	0.04	0.113	0.162
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Left Side	10mm	Full	25	1851.25	21.22	22.80	1.439	0.05	0.620	0.892
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Left Side	10mm	Full	1175	1908.75	21.17	22.80	1.455	0.01	0.605	0.881
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Front	10mm	Reduced	600	1880	21.83	22.70	1.222	-0.12	0.507	0.619
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Back	10mm	Reduced	600	1880	21.83	22.70	1.222	0.04	0.571	0.698
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	600	1880	21.83	22.70	1.222	0.05	0.267	0.326
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Right Side	10mm	Reduced	600	1880	21.83	22.70	1.222	0.01	0.106	0.130
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Reduced	600	1880	21.83	22.70	1.222	-0.01	0.823	1.006
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Reduced	25	1851.25	21.72	22.70	1.253	0.15	0.787	0.986
36	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Reduced	1175	1908.75	21.69	22.70	1.262	0.12	0.910	1.148
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Front	10mm	Full	580	820.5	22.55	23.80	1.334	0.11	0.333	0.444
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Back	10mm	Full	580	820.5	22.55	23.80	1.334	0.06	0.424	0.565
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Left Side	10mm	Full	580	820.5	22.55	23.80	1.334	-0.09	0.105	0.140
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Right Side	10mm	Full	580	820.5	22.55	23.80	1.334	-0.12	0.037	0.050
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Top Side	10mm	Full	580	820.5	22.55	23.80	1.334	0.05	0.327	0.436
37	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Back	10mm	Full	476	817.9	22.48	23.80	1.355	-0.17	0.426	0.577
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Back	10mm	Full	684	823.1	22.52	23.80	1.343	-0.01	0.390	0.524
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Front	10mm	Full	580	820.5	23.55	24.80	1.334	0.08	0.195	0.260
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Back	10mm	Full	580	820.5	23.55	24.80	1.334	-0.18	0.279	0.372
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Left Side	10mm	Full	580	820.5	23.55	24.80	1.334	-0.12	0.073	0.097
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Right Side	10mm	Full	580	820.5	23.55	24.80	1.334	0.04	0.366	0.488
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Full	580	820.5	23.55	24.80	1.334	0.05	0.137	0.183
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Right Side	10mm	Full	476	817.9	23.45	24.80	1.365	0.06	0.372	0.508
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Right Side	10mm	Full	684	823.1	23.47	24.80	1.358	0.09	0.407	0.553





## <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 V_UAT	RMC 12.2Kbps	Front	10mm	Full	4233	846.6	22.83	24.30	1.403	0.06	0.345	0.484
	WCDMA V_UAT	RMC 12.2Kbps	Back	10mm	Full	4233	846.6	22.83	24.30	1.403	-0.15	0.465	0.652
	WCDMA V_UAT	RMC 12.2Kbps	Left Side	10mm	Full	4233	846.6	22.83	24.30	1.403	-0.09	0.127	0.178
	WCDMA V_UAT	RMC 12.2Kbps	Right Side	10mm	Full	4233	846.6	22.83	24.30	1.403	-0.01	0.037	0.051
	WCDMA V_UAT	RMC 12.2Kbps	Top Side	10mm	Full	4233	846.6	22.83	24.30	1.403	0.15	0.397	0.557
	WCDMA V_UAT	RMC 12.2Kbps	Back	10mm	Full	4132	826.4	22.81	24.30	1.409	0.08	0.402	0.567
38	WCDMA V_UAT	RMC 12.2Kbps	Back	10mm	Full	4182	836.4	22.78	24.30	1.419	-0.05	0.473	0.671
	WCDMA V_LAT	RMC 12.2Kbps	Front	10mm	Full	4233	846.6	24.05	24.80	1.189	-0.15	0.134	0.159
	WCDMA V_LAT	RMC 12.2Kbps	Back	10mm	Full	4233	846.6	24.05	24.80	1.189	0.05	0.169	0.201
	WCDMA V_LAT	RMC 12.2Kbps	Left Side	10mm	Full	4233	846.6	24.05	24.80	1.189	-0.04	0.072	0.085
	WCDMA V_LAT	RMC 12.2Kbps	Right Side	10mm	Full	4233	846.6	24.05	24.80	1.189	0.05	0.405	0.481
	WCDMA V_LAT	RMC 12.2Kbps	Bottom Side	10mm	Full	4233	846.6	24.05	24.80	1.189	-0.01	0.208	0.247
	WCDMA V_LAT	RMC 12.2Kbps	Right Side	10mm	Full	4132	826.4	24.01	24.80	1.199	-0.04	0.375	0.450
	WCDMA V_LAT	RMC 12.2Kbps	Right Side	10mm	Full	4182	836.4	24.04	24.80	1.191	0.06	0.367	0.437
	WCDMA IV_UAT	RMC 12.2Kbps	Front	10mm	Full	1413	1732.6	22.23	23.30	1.279	-0.12	0.286	0.366
	WCDMA IV_UAT	RMC 12.2Kbps	Back	10mm	Full	1413	1732.6	22.23	23.30	1.279	0.05	0.334	0.427
39	WCDMA IV_UAT	RMC 12.2Kbps	Left Side	10mm	Full	1413	1732.6	22.23	23.30	1.279	-0.07	0.921	1.178
	WCDMA IV_UAT	RMC 12.2Kbps	Right Side	10mm	Full	1413	1732.6	22.23	23.30	1.279	0.04	0.164	0.210
	WCDMA IV_UAT	RMC 12.2Kbps	Top Side	10mm	Full	1413	1732.6	22.23	23.30	1.279	-0.02	0.164	0.210
	WCDMA IV_UAT	RMC 12.2Kbps	Left Side	10mm	Full	1312	1712.4	22.04	23.30	1.337	0.05	0.868	1.160
	WCDMA IV_UAT	RMC 12.2Kbps	Left Side	10mm	Full	1513	1752.6	22.09	23.30	1.321	-0.01	0.882	1.165
	WCDMA IV_LAT	RMC 12.2Kbps	Front	10mm	Reduced	1413	1732.6	21.90	22.60	1.175	-0.18	0.465	0.546
	WCDMA IV_LAT	RMC 12.2Kbps	Back	10mm	Reduced	1413	1732.6	21.90	22.60	1.175	0.15	0.492	0.578
	WCDMA IV_LAT	RMC 12.2Kbps	Left Side	10mm	Reduced	1413	1732.6	21.90	22.60	1.175	-0.12	0.193	0.227
	WCDMA IV_LAT	RMC 12.2Kbps	Right Side	10mm	Reduced	1413	1732.6	21.90	22.60	1.175	0.11	0.087	0.102
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	1413	1732.6	21.90	22.60	1.175	0.06	0.772	0.907
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	1312	1712.4	21.81	22.60	1.199	-0.09	0.707	0.848
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	1513	1752.6	21.71	22.60	1.227	-0.15	0.723	0.887
	WCDMA II_UAT	RMC 12.2Kbps	Front	10mm	Full	9400	1880	22.12	23.30	1.312	-0.09	0.261	0.342
	WCDMA II_UAT	RMC 12.2Kbps	Back	10mm	Full	9400	1880	22.12	23.30	1.312	0.06	0.326	0.428
	WCDMA II_UAT	RMC 12.2Kbps	Left Side	10mm	Full	9400	1880	22.12	23.30	1.312	0.08	0.877	1.151
	WCDMA II_UAT	RMC 12.2Kbps	Right Side	10mm	Full	9400	1880	22.12	23.30	1.312	-0.18	0.058	0.076
	WCDMA II_UAT	RMC 12.2Kbps	Top Side	10mm	Full	9400	1880	22.12	23.30	1.312	0.13	0.149	0.196
40	WCDMA II_UAT	RMC 12.2Kbps	Left Side	10mm	Full	9262	1852.4	22.08	23.30	1.324	-0.12	0.898	1.189
	WCDMA II_UAT	RMC 12.2Kbps	Left Side	10mm	Full	9538	1907.6	21.92	23.30	1.374	0.15	0.819	1.125
	WCDMA II_LAT	RMC 12.2Kbps	Front	10mm	Reduced	9400	1880	21.50	22.20	1.175	-0.12	0.425	0.499
	WCDMA II_LAT	RMC 12.2Kbps	Back	10mm	Reduced	9400	1880	21.50	22.20	1.175	0.05	0.502	0.590
	WCDMA II_LAT	RMC 12.2Kbps	Left Side	10mm	Reduced	9400	1880	21.50	22.20	1.175	-0.17	0.214	0.251
	WCDMA II_LAT	RMC 12.2Kbps	Right Side	10mm	Reduced	9400	1880	21.50	22.20	1.175	-0.01	0.133	0.156
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	9400	1880	21.50	22.20	1.175	0.15	0.750	0.881
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	9262	1852.4	21.35	22.20	1.216	0.12	0.684	0.832
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	9538	1907.6	21.37	22.20	1.211	0.11	0.785	0.950





**<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 71_UAT	20M	QPSK	1	0	Front	10mm	Full	133322	683	22.93	24.30	1.371	-0.12	0.241	0.330
	LTE Band 71_UAT	20M	QPSK	1	0	Back	10mm	Full	133322	683	22.93	24.30	1.371	0.11	0.295	0.404
	LTE Band 71_UAT	20M	QPSK	1	0	Left Side	10mm	Full	133322	683	22.93	24.30	1.371	0.01	0.126	0.173
	LTE Band 71_UAT	20M	QPSK	1	0	Right Side	10mm	Full	133322	683	22.93	24.30	1.371	-0.01	0.047	0.064
	LTE Band 71_UAT	20M	QPSK	1	0	Top Side	10mm	Full	133322	683	22.93	24.30	1.371	0.15	0.246	0.337
	LTE Band 71_UAT	20M	QPSK	50	0	Front	10mm	Full	133322	683	22.03	23.30	1.340	0.11	0.204	0.273
	LTE Band 71_UAT	20M	QPSK	50	0	Back	10mm	Full	133322	683	22.03	23.30	1.340	0.05	0.281	0.376
	LTE Band 71_UAT	20M	QPSK	50	0	Left Side	10mm	Full	133322	683	22.03	23.30	1.340	0.01	0.104	0.139
	LTE Band 71_UAT	20M	QPSK	50	0	Right Side	10mm	Full	133322	683	22.03	23.30	1.340	0.06	0.038	0.050
	LTE Band 71_UAT	20M	QPSK	50	0	Top Side	10mm	Full	133322	683	22.03	23.30	1.340	0.11	0.209	0.280
	LTE Band 71_LAT	20M	QPSK	1	0	Front	10mm	Full	133322	683	23.75	24.80	1.274	-0.09	0.167	0.213
	LTE Band 71_LAT	20M	QPSK	1	0	Back	10mm	Full	133322	683	23.75	24.80	1.274	-0.12	0.244	0.311
	LTE Band 71_LAT	20M	QPSK	1	0	Left Side	10mm	Full	133322	683	23.75	24.80	1.274	-0.06	0.135	0.172
41	LTE Band 71_LAT	20M	QPSK	1	0	Right Side	10mm	Full	133322	683	23.75	24.80	1.274	-0.08	0.511	0.651
	LTE Band 71_LAT	20M	QPSK	1	0	Bottom Side	10mm	Full	133322	683	23.75	24.80	1.274	0.13	0.178	0.227
	LTE Band 71_LAT	20M	QPSK	50	0	Front	10mm	Full	133322	683	22.78	23.80	1.265	-0.01	0.148	0.187
	LTE Band 71_LAT	20M	QPSK	50	0	Back	10mm	Full	133322	683	22.78	23.80	1.265	0.15	0.204	0.258
	LTE Band 71_LAT	20M	QPSK	50	0	Left Side	10mm	Full	133322	683	22.78	23.80	1.265	0.08	0.111	0.140
	LTE Band 71_LAT	20M	QPSK	50	0	Right Side	10mm	Full	133322	683	22.78	23.80	1.265	-0.18	0.421	0.532
	LTE Band 71_LAT	20M	QPSK	50	0	Bottom Side	10mm	Full	133322	683	22.78	23.80	1.265	0.15	0.148	0.187



# FCC SAR TEST REPORT

Report No. : FA002703-02

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 12_UAT	10M	QPSK	1	0	Front	10mm	Full	23095	707.5	22.67	24.30	1.455	0.11	0.282	0.410
42	LTE Band 12_UAT	10M	QPSK	1	0	Back	10mm	Full	23095	707.5	22.67	24.30	1.455	-0.18	0.398	0.579
	LTE Band 12_UAT	10M	QPSK	1	0	Left Side	10mm	Full	23095	707.5	22.67	24.30	1.455	0.01	0.173	0.252
	LTE Band 12_UAT	10M	QPSK	1	0	Right Side	10mm	Full	23095	707.5	22.67	24.30	1.455	0.08	0.039	0.057
	LTE Band 12_UAT	10M	QPSK	1	0	Top Side	10mm	Full	23095	707.5	22.67	24.30	1.455	0.09	0.290	0.422
	LTE Band 12_UAT	10M	QPSK	25	25	Front	10mm	Full	23095	707.5	21.93	23.40	1.403	0.06	0.173	0.243
	LTE Band 12_UAT	10M	QPSK	25	25	Back	10mm	Full	23095	707.5	21.93	23.40	1.403	-0.09	0.306	0.429
	LTE Band 12_UAT	10M	QPSK	25	25	Left Side	10mm	Full	23095	707.5	21.93	23.40	1.403	-0.12	0.132	0.185
	LTE Band 12_UAT	10M	QPSK	25	25	Right Side	10mm	Full	23095	707.5	21.93	23.40	1.403	0.05	0.027	0.038
	LTE Band 12_UAT	10M	QPSK	25	25	Top Side	10mm	Full	23095	707.5	21.93	23.40	1.403	-0.17	0.270	0.379
	LTE Band 12_LAT	10M	QPSK	1	0	Front	10mm	Full	23095	707.5	24.02	24.80	1.197	0.13	0.132	0.158
	LTE Band 12_LAT	10M	QPSK	1	0	Back	10mm	Full	23095	707.5	24.02	24.80	1.197	0.08	0.199	0.238
	LTE Band 12_LAT	10M	QPSK	1	0	Left Side	10mm	Full	23095	707.5	24.02	24.80	1.197	-0.18	0.142	0.170
	LTE Band 12_LAT	10M	QPSK	1	0	Right Side	10mm	Full	23095	707.5	24.02	24.80	1.197	-0.12	0.480	0.574
	LTE Band 12_LAT	10M	QPSK	1	0	Bottom Side	10mm	Full	23095	707.5	24.02	24.80	1.197	0.04	0.129	0.154
	LTE Band 12_LAT	10M	QPSK	25	25	Front	10mm	Full	23095	707.5	23.07	23.80	1.183	0.06	0.129	0.153
	LTE Band 12_LAT	10M	QPSK	25	25	Back	10mm	Full	23095	707.5	23.07	23.80	1.183	0.15	0.180	0.213
	LTE Band 12_LAT	10M	QPSK	25	25	Left Side	10mm	Full	23095	707.5	23.07	23.80	1.183	0.08	0.114	0.135
	LTE Band 12_LAT	10M	QPSK	25	25	Right Side	10mm	Full	23095	707.5	23.07	23.80	1.183	-0.18	0.412	0.487
	LTE Band 12_LAT	10M	QPSK	25	25	Bottom Side	10mm	Full	23095	707.5	23.07	23.80	1.183	0.01	0.128	0.151
	LTE Band 13_UAT	10M	QPSK	1	25	Front	10mm	Full	23230	782	22.71	24.30	1.442	0.13	0.361	0.521
43	LTE Band 13_UAT	10M	QPSK	1	25	Back	10mm	Full	23230	782	22.71	24.30	1.442	-0.11	0.456	0.658
	LTE Band 13_UAT	10M	QPSK	1	25	Left Side	10mm	Full	23230	782	22.71	24.30	1.442	0.15	0.160	0.231
	LTE Band 13_UAT	10M	QPSK	1	25	Right Side	10mm	Full	23230	782	22.71	24.30	1.442	0.08	0.043	0.062
	LTE Band 13_UAT	10M	QPSK	1	25	Top Side	10mm	Full	23230	782	22.71	24.30	1.442	-0.18	0.416	0.600
	LTE Band 13_UAT	10M	QPSK	25	25	Front	10mm	Full	23230	782	21.64	23.30	1.466	0.12	0.325	0.476
	LTE Band 13_UAT	10M	QPSK	25	25	Back	10mm	Full	23230	782	21.64	23.30	1.466	0.18	0.382	0.560
	LTE Band 13_UAT	10M	QPSK	25	25	Left Side	10mm	Full	23230	782	21.64	23.30	1.466	0.11	0.130	0.191
	LTE Band 13_UAT	10M	QPSK	25	25	Right Side	10mm	Full	23230	782	21.64	23.30	1.466	0.08	0.036	0.053
	LTE Band 13_UAT	10M	QPSK	25	25	Top Side	10mm	Full	23230	782	21.64	23.30	1.466	0.04	0.336	0.492
	LTE Band 13_LAT	10M	QPSK	1	25	Front	10mm	Full	23230	782	23.97	24.80	1.211	-0.04	0.188	0.228
	LTE Band 13_LAT	10M	QPSK	1	25	Back	10mm	Full	23230	782	23.97	24.80	1.211	0.05	0.192	0.232
	LTE Band 13_LAT	10M	QPSK	1	25	Left Side	10mm	Full	23230	782	23.97	24.80	1.211	0.06	0.105	0.127
	LTE Band 13_LAT	10M	QPSK	1	25	Right Side	10mm	Full	23230	782	23.97	24.80	1.211	0.14	0.515	0.623
	LTE Band 13_LAT	10M	QPSK	1	25	Bottom Side	10mm	Full	23230	782	23.97	24.80	1.211	0.19	0.205	0.248
	LTE Band 13_LAT	10M	QPSK	25	12	Front	10mm	Full	23230	782	22.98	23.80	1.208	0.05	0.155	0.187
	LTE Band 13_LAT	10M	QPSK	25	12	Back	10mm	Full	23230	782	22.98	23.80	1.208	0.06	0.160	0.193
	LTE Band 13_LAT	10M	QPSK	25	12	Left Side	10mm	Full	23230	782	22.98	23.80	1.208	-0.05	0.087	0.105
	LTE Band 13_LAT	10M	QPSK	25	12	Right Side	10mm	Full	23230	782	22.98	23.80	1.208	-0.14	0.386	0.466
	LTE Band 13_LAT	10M	QPSK	25	12	Bottom Side	10mm	Full	23230	782	22.98	23.80	1.208	-0.06	0.152	0.184



# FCC SAR TEST REPORT

Report No. : FA002703-02

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_UAT	10M	QPSK	1	49	Front	10mm	Full	20525	836.5	22.67	24.30	1.455	-0.03	0.240	0.349
	LTE Band 5_UAT	10M	QPSK	1	49	Back	10mm	Full	20525	836.5	22.67	24.30	1.455	-0.12	0.316	0.460
	LTE Band 5_UAT	10M	QPSK	1	49	Left Side	10mm	Full	20525	836.5	22.67	24.30	1.455	0.05	0.121	0.176
	LTE Band 5_UAT	10M	QPSK	1	49	Right Side	10mm	Full	20525	836.5	22.67	24.30	1.455	-0.05	0.026	0.038
	LTE Band 5_UAT	10M	QPSK	1	49	Top Side	10mm	Full	20525	836.5	22.67	24.30	1.455	0.06	0.245	0.357
	LTE Band 5_UAT	10M	QPSK	25	25	Front	10mm	Full	20525	836.5	21.93	23.30	1.371	0.03	0.209	0.287
	LTE Band 5_UAT	10M	QPSK	25	25	Back	10mm	Full	20525	836.5	21.93	23.30	1.371	-0.05	0.270	0.370
	LTE Band 5_UAT	10M	QPSK	25	25	Left Side	10mm	Full	20525	836.5	21.93	23.30	1.371	-0.04	0.066	0.090
	LTE Band 5_UAT	10M	QPSK	25	25	Right Side	10mm	Full	20525	836.5	21.93	23.30	1.371	0.18	0.049	0.068
	LTE Band 5_UAT	10M	QPSK	25	25	Top Side	10mm	Full	20525	836.5	21.93	23.30	1.371	0.11	0.197	0.270
	LTE Band 5_LAT	10M	QPSK	1	0	Front	10mm	Full	20525	836.5	23.76	24.80	1.271	-0.11	0.229	0.291
	LTE Band 5_LAT	10M	QPSK	1	0	Back	10mm	Full	20525	836.5	23.76	24.80	1.271	0.15	0.283	0.360
	LTE Band 5_LAT	10M	QPSK	1	0	Left Side	10mm	Full	20525	836.5	23.76	24.80	1.271	0.08	0.067	0.084
44	LTE Band 5_LAT	10M	QPSK	1	0	Right Side	10mm	Full	20525	836.5	23.76	24.80	1.271	0.17	0.400	0.508
	LTE Band 5_LAT	10M	QPSK	1	0	Bottom Side	10mm	Full	20525	836.5	23.76	24.80	1.271	-0.12	0.184	0.234
	LTE Band 5_LAT	10M	QPSK	25	12	Front	10mm	Full	20525	836.5	22.90	23.80	1.230	-0.17	0.186	0.229
	LTE Band 5_LAT	10M	QPSK	25	12	Back	10mm	Full	20525	836.5	22.90	23.80	1.230	0.18	0.229	0.282
	LTE Band 5_LAT	10M	QPSK	25	12	Left Side	10mm	Full	20525	836.5	22.90	23.80	1.230	0.11	0.052	0.064
	LTE Band 5_LAT	10M	QPSK	25	12	Right Side	10mm	Full	20525	836.5	22.90	23.80	1.230	0.08	0.313	0.385
	LTE Band 5_LAT	10M	QPSK	25	12	Bottom Side	10mm	Full	20525	836.5	22.90	23.80	1.230	0.04	0.148	0.182
45	LTE Band 26_UAT	15M	QPSK	1	0	Front	10mm	Full	26865	831.5	22.64	24.30	1.466	-0.06	0.340	0.498
	LTE Band 26_UAT	15M	QPSK	1	0	Back	10mm	Full	26865	831.5	22.64	24.30	1.466	-0.09	0.246	0.361
	LTE Band 26_UAT	15M	QPSK	1	0	Left Side	10mm	Full	26865	831.5	22.64	24.30	1.466	-0.01	0.081	0.118
	LTE Band 26_UAT	15M	QPSK	1	0	Right Side	10mm	Full	26865	831.5	22.64	24.30	1.466	0.15	0.031	0.045
	LTE Band 26_UAT	15M	QPSK	1	0	Top Side	10mm	Full	26865	831.5	22.64	24.30	1.466	0.08	0.244	0.358
	LTE Band 26_UAT	15M	QPSK	1	0	Front	10mm	Full	26765	821.5	22.62	24.30	1.472	-0.15	0.205	0.302
	LTE Band 26_UAT	15M	QPSK	1	0	Front	10mm	Full	26965	841.5	22.46	24.30	1.528	0.05	0.298	0.455
	LTE Band 26_UAT	15M	QPSK	36	39	Front	10mm	Full	26865	831.5	21.75	23.30	1.429	-0.01	0.264	0.377
	LTE Band 26_UAT	15M	QPSK	36	39	Back	10mm	Full	26865	831.5	21.75	23.30	1.429	0.06	0.208	0.297
	LTE Band 26_UAT	15M	QPSK	36	39	Left Side	10mm	Full	26865	831.5	21.75	23.30	1.429	-0.13	0.063	0.090
	LTE Band 26_UAT	15M	QPSK	36	39	Right Side	10mm	Full	26865	831.5	21.75	23.30	1.429	-0.09	0.019	0.027
	LTE Band 26_UAT	15M	QPSK	36	39	Top Side	10mm	Full	26865	831.5	21.75	23.30	1.429	-0.01	0.203	0.290
	LTE Band 26_LAT	15M	QPSK	1	0	Front	10mm	Full	26865	831.5	24.01	24.80	1.199	-0.18	0.250	0.300
	LTE Band 26_LAT	15M	QPSK	1	0	Back	10mm	Full	26865	831.5	24.01	24.80	1.199	0.12	0.328	0.393
	LTE Band 26_LAT	15M	QPSK	1	0	Left Side	10mm	Full	26865	831.5	24.01	24.80	1.199	-0.01	0.048	0.058
	LTE Band 26_LAT	15M	QPSK	1	0	Right Side	10mm	Full	26865	831.5	24.01	24.80	1.199	0.15	0.409	0.491
	LTE Band 26_LAT	15M	QPSK	1	0	Bottom Side	10mm	Full	26865	831.5	24.01	24.80	1.199	-0.04	0.186	0.223
	LTE Band 26_LAT	15M	QPSK	1	0	Right Side	10mm	Full	26765	821.5	23.85	24.80	1.245	-0.04	0.377	0.469
	LTE Band 26_LAT	15M	QPSK	1	0	Right Side	10mm	Full	26965	841.5	23.75	24.80	1.274	0.05	0.223	0.284
	LTE Band 26_LAT	15M	QPSK	36	20	Front	10mm	Full	26865	831.5	23.00	23.80	1.202	0.15	0.228	0.274
	LTE Band 26_LAT	15M	QPSK	36	20	Back	10mm	Full	26865	831.5	23.00	23.80	1.202	0.08	0.299	0.359
	LTE Band 26_LAT	15M	QPSK	36	20	Left Side	10mm	Full	26865	831.5	23.00	23.80	1.202	-0.15	0.040	0.048
	LTE Band 26_LAT	15M	QPSK	36	20	Right Side	10mm	Full	26865	831.5	23.00	23.80	1.202	0.05	0.345	0.415
	LTE Band 26_LAT	15M	QPSK	36	20	Bottom Side	10mm	Full	26865	831.5	23.00	23.80	1.202	-0.04	0.153	0.184



# FCC SAR TEST REPORT

Report No. : FA002703-02

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 66_UAT	20M	QPSK	1	0	Front	10mm	Full	132322	1745	22.18	23.30	1.294	-0.04	0.261	0.338
	LTE Band 66_UAT	20M	QPSK	1	0	Back	10mm	Full	132322	1745	22.18	23.30	1.294	0.15	0.304	0.393
	LTE Band 66_UAT	20M	QPSK	1	0	Left Side	10mm	Full	132322	1745	22.18	23.30	1.294	0.08	0.872	1.129
	LTE Band 66_UAT	20M	QPSK	1	0	Right Side	10mm	Full	132322	1745	22.18	23.30	1.294	-0.15	0.050	0.065
	LTE Band 66_UAT	20M	QPSK	1	0	Top Side	10mm	Full	132322	1745	22.18	23.30	1.294	0.02	0.157	0.203
	LTE Band 66_UAT	20M	QPSK	1	0	Left Side	10mm	Full	132072	1720	22.01	23.30	1.346	0.11	0.656	0.883
46	LTE Band 66_UAT	20M	QPSK	1	0	Left Side	10mm	Full	132572	1770	22.00	23.30	1.349	0.17	0.877	1.183
	LTE Band 66_UAT	20M	QPSK	50	24	Front	10mm	Full	132322	1745	21.06	22.30	1.330	0.12	0.158	0.210
	LTE Band 66_UAT	20M	QPSK	50	24	Back	10mm	Full	132322	1745	21.06	22.30	1.330	0.18	0.245	0.326
	LTE Band 66_UAT	20M	QPSK	50	24	Left Side	10mm	Full	132322	1745	21.06	22.30	1.330	0.11	0.601	0.800
	LTE Band 66_UAT	20M	QPSK	50	24	Right Side	10mm	Full	132322	1745	21.06	22.30	1.330	0.08	0.000	0.000
	LTE Band 66_UAT	20M	QPSK	50	24	Top Side	10mm	Full	132322	1745	21.06	22.30	1.330	0.04	0.125	0.166
	LTE Band 66_UAT	20M	QPSK	50	24	Left Side	10mm	Full	132072	1720	20.98	22.30	1.355	0.01	0.686	0.930
	LTE Band 66_UAT	20M	QPSK	50	24	Left Side	10mm	Full	132572	1770	20.80	22.30	1.413	-0.04	0.527	0.744
	LTE Band 66_UAT	20M	QPSK	100	0	Left Side	10mm	Full	132322	1745	21.01	22.30	1.346	0.06	0.670	0.902
	LTE Band 66_LAT	20M	QPSK	1	0	Front	10mm	Reduced	132322	1745	21.36	21.80	1.107	0.19	0.373	0.413
	LTE Band 66_LAT	20M	QPSK	1	0	Back	10mm	Reduced	132322	1745	21.36	21.80	1.107	-0.09	0.359	0.397
	LTE Band 66_LAT	20M	QPSK	1	0	Left Side	10mm	Reduced	132322	1745	21.36	21.80	1.107	0.05	0.150	0.166
	LTE Band 66_LAT	20M	QPSK	1	0	Right Side	10mm	Reduced	132322	1745	21.36	21.80	1.107	0.06	0.072	0.080
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	132322	1745	21.36	21.80	1.107	-0.05	0.597	0.661
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	132072	1720	21.29	21.80	1.125	-0.14	0.572	0.643
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	132572	1770	21.21	21.80	1.146	-0.06	0.598	0.685
	LTE Band 66_LAT	20M	QPSK	50	24	Front	10mm	Reduced	132322	1745	21.20	21.80	1.148	-0.03	0.398	0.457
	LTE Band 66_LAT	20M	QPSK	50	24	Back	10mm	Reduced	132322	1745	21.20	21.80	1.148	-0.12	0.382	0.439
	LTE Band 66_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	132322	1745	21.20	21.80	1.148	0.05	0.158	0.181
	LTE Band 66_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	132322	1745	21.20	21.80	1.148	-0.05	0.073	0.084
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132322	1745	21.20	21.80	1.148	0.06	0.549	0.630
5G NR EN-DC																
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	10mm	Full	132322	1745	20.91	22.00	1.285	0.12	0.201	0.258
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Full	132322	1745	20.91	22.00	1.285	0.11	0.160	0.206
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	Full	132322	1745	20.91	22.00	1.285	0.05	0.001	0.001
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Side	10mm	Full	132322	1745	20.91	22.00	1.285	0.01	0.158	0.203
	LTE Band 66_Ant 1	20M	QPSK	1	0	Bottom Side	10mm	Full	132322	1745	20.91	22.00	1.285	0.04	0.179	0.230
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	10mm	Full	132072	1720	20.68	22.00	1.355	0.09	0.363	0.492
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	10mm	Full	132572	1770	20.59	22.00	1.384	-0.04	0.186	0.257
	LTE Band 66_Ant 1	20M	QPSK	50	24	Front	10mm	Full	132322	1745	19.92	21.00	1.282	-0.18	0.155	0.199
	LTE Band 66_Ant 1	20M	QPSK	50	24	Back	10mm	Full	132322	1745	19.92	21.00	1.282	-0.12	0.130	0.167
	LTE Band 66_Ant 1	20M	QPSK	50	24	Left Side	10mm	Full	132322	1745	19.92	21.00	1.282	0.04	0.001	0.001
	LTE Band 66_Ant 1	20M	QPSK	50	24	Right Side	10mm	Full	132322	1745	19.92	21.00	1.282	0.05	0.127	0.163
	LTE Band 66_Ant 1	20M	QPSK	50	24	Bottom Side	10mm	Full	132322	1745	19.92	21.00	1.282	0.06	0.150	0.192
	LTE Band 66_Ant 1	20M	QPSK	50	24	Front	10mm	Full	132072	1720	19.75	21.00	1.334	0.09	0.163	0.217
	LTE Band 66_Ant 1	20M	QPSK	50	24	Front	10mm	Full	132572	1770	19.68	21.00	1.355	-0.05	0.146	0.198
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	Reduced	132322	1745	19.05	19.70	1.161	-0.04	0.227	0.264
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	Reduced	132322	1745	19.05	19.70	1.161	0.05	0.322	0.374
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Side	10mm	Reduced	132322	1745	19.05	19.70	1.161	-0.01	0.069	0.080
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Side	10mm	Reduced	132322	1745	19.05	19.70	1.161	-0.04	0.001	0.001
	LTE Band 66_Ant 0	20M	QPSK	1	0	Top Side	10mm	Reduced	132322	1745	19.05	19.70	1.161	0.13	0.563	0.654
	LTE Band 66_Ant 0	20M	QPSK	1	0	Top Side	10mm	Reduced	132072	1720	18.95	19.70	1.189	0.11	0.433	0.515
	LTE Band 66_Ant 0	20M	QPSK	1	0	Top Side	10mm	Reduced	132572	1770	18.89	19.70	1.205	0.02	0.568	0.684
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	10mm	Reduced	132322	1745	18.98	19.70	1.180	-0.12	0.184	0.217
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	Reduced	132322	1745	18.98	19.70	1.180	0.11	0.215	0.254
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Side	10mm	Reduced	132322	1745	18.98	19.70	1.180	0.06	0.049	0.058
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Side	10mm	Reduced	132322	1745	18.98	19.70	1.180	-0.09	0.001	0.001
	LTE Band 66_Ant 0	20M	QPSK	50	24	Top Side	10mm	Reduced	132322	1745	18.98	19.70	1.180	-0.15	0.447	0.528



# FCC SAR TEST REPORT

Report No. : FA002703-02

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 25_UAT	20M	QPSK	1	0	Front	10mm	Full	26340	1880	21.19	22.00	1.205	-0.04	0.271	0.327
	LTE Band 25_UAT	20M	QPSK	1	0	Back	10mm	Full	26340	1880	21.19	22.00	1.205	0.05	0.343	0.413
	LTE Band 25_UAT	20M	QPSK	1	0	Left Side	10mm	Full	26340	1880	21.19	22.00	1.205	0.06	0.729	0.878
	LTE Band 25_UAT	20M	QPSK	1	0	Right Side	10mm	Full	26340	1880	21.19	22.00	1.205	0.14	0.024	0.029
	LTE Band 25_UAT	20M	QPSK	1	0	Top Side	10mm	Full	26340	1880	21.19	22.00	1.205	0.19	0.099	0.119
	LTE Band 25_UAT	20M	QPSK	1	0	Left Side	10mm	Full	26140	1860	21.05	22.00	1.245	0.18	0.739	0.920
	LTE Band 25_UAT	20M	QPSK	1	0	Left Side	10mm	Full	26590	1905	20.99	22.00	1.262	0.02	0.695	0.877
	LTE Band 25_UAT	20M	QPSK	50	0	Front	10mm	Full	26340	1880	21.15	22.00	1.216	0.18	0.259	0.315
	LTE Band 25_UAT	20M	QPSK	50	0	Back	10mm	Full	26340	1880	21.15	22.00	1.216	0.11	0.330	0.401
	LTE Band 25_UAT	20M	QPSK	50	0	Left Side	10mm	Full	26340	1880	21.15	22.00	1.216	0.08	0.637	0.775
	LTE Band 25_UAT	20M	QPSK	50	0	Right Side	10mm	Full	26340	1880	21.15	22.00	1.216	0.04	0.021	0.025
	LTE Band 25_UAT	20M	QPSK	50	0	Top Side	10mm	Full	26340	1880	21.15	22.00	1.216	-0.01	0.096	0.117
	LTE Band 25_UAT	20M	QPSK	100	0	Left Side	10mm	Full	26340	1880	21.10	22.00	1.230	0.03	0.634	0.780
	LTE Band 25_LAT	20M	QPSK	1	0	Front	10mm	Reduced	26340	1880	21.25	22.00	1.189	0.13	0.386	0.459
	LTE Band 25_LAT	20M	QPSK	1	0	Back	10mm	Reduced	26340	1880	21.25	22.00	1.189	-0.11	0.427	0.507
	LTE Band 25_LAT	20M	QPSK	1	0	Left Side	10mm	Reduced	26340	1880	21.25	22.00	1.189	0.15	0.218	0.259
	LTE Band 25_LAT	20M	QPSK	1	0	Right Side	10mm	Reduced	26340	1880	21.25	22.00	1.189	0.08	0.108	0.128
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	26340	1880	21.25	22.00	1.189	-0.18	0.744	0.884
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	26140	1860	21.04	22.00	1.247	0.05	0.676	0.843
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	26590	1905	21.01	22.00	1.256	0.12	0.788	0.990
	LTE Band 25_LAT	20M	QPSK	50	24	Front	10mm	Reduced	26340	1880	21.21	22.00	1.199	0.11	0.391	0.469
	LTE Band 25_LAT	20M	QPSK	50	24	Back	10mm	Reduced	26340	1880	21.21	22.00	1.199	0.08	0.465	0.558
	LTE Band 25_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	26340	1880	21.21	22.00	1.199	0.04	0.232	0.278
	LTE Band 25_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	26340	1880	21.21	22.00	1.199	0.19	0.106	0.127
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	26340	1880	21.21	22.00	1.199	0.18	0.776	0.931
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	26140	1860	21.00	22.00	1.259	0.04	0.716	0.901
47	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	26590	1905	20.98	22.00	1.265	-0.01	0.788	0.997
	LTE Band 25_LAT	20M	QPSK	100	0	Bottom Side	10mm	Reduced	26340	1880	21.13	22.00	1.222	-0.06	0.691	0.844
	LTE Band 30_UAT	10M	QPSK	1	25	Front	10mm	Full	27710	2310	21.67	22.60	1.239	-0.06	0.164	0.203
	LTE Band 30_UAT	10M	QPSK	1	25	Back	10mm	Full	27710	2310	21.67	22.60	1.239	-0.09	0.256	0.317
	LTE Band 30_UAT	10M	QPSK	1	25	Left Side	10mm	Full	27710	2310	21.67	22.60	1.239	-0.01	0.482	0.597
	LTE Band 30_UAT	10M	QPSK	1	25	Right Side	10mm	Full	27710	2310	21.67	22.60	1.239	0.15	0.003	0.003
	LTE Band 30_UAT	10M	QPSK	1	25	Top Side	10mm	Full	27710	2310	21.67	22.60	1.239	0.08	0.058	0.071
	LTE Band 30_UAT	10M	QPSK	25	25	Front	10mm	Full	27710	2310	20.85	21.60	1.189	0.05	0.123	0.146
	LTE Band 30_UAT	10M	QPSK	25	25	Back	10mm	Full	27710	2310	20.85	21.60	1.189	-0.04	0.211	0.251
	LTE Band 30_UAT	10M	QPSK	25	25	Left Side	10mm	Full	27710	2310	20.85	21.60	1.189	0.05	0.399	0.474
	LTE Band 30_UAT	10M	QPSK	25	25	Right Side	10mm	Full	27710	2310	20.85	21.60	1.189	0.06	0.001	0.001
	LTE Band 30_UAT	10M	QPSK	25	25	Top Side	10mm	Full	27710	2310	20.85	21.60	1.189	0.14	0.045	0.054
	LTE Band 30_LAT	10M	QPSK	1	0	Front	10mm	Reduced	27710	2310	20.17	21.00	1.211	0.13	0.467	0.565
	LTE Band 30_LAT	10M	QPSK	1	0	Back	10mm	Reduced	27710	2310	20.17	21.00	1.211	0.08	0.479	0.580
	LTE Band 30_LAT	10M	QPSK	1	0	Left Side	10mm	Reduced	27710	2310	20.17	21.00	1.211	-0.18	0.233	0.282
	LTE Band 30_LAT	10M	QPSK	1	0	Right Side	10mm	Reduced	27710	2310	20.17	21.00	1.211	-0.12	0.107	0.130
	LTE Band 30_LAT	10M	QPSK	1	0	Bottom Side	10mm	Reduced	27710	2310	20.17	21.00	1.211	0.04	0.620	0.751
	LTE Band 30_LAT	10M	QPSK	25	25	Front	10mm	Reduced	27710	2310	20.05	21.00	1.245	0.19	0.473	0.589
	LTE Band 30_LAT	10M	QPSK	25	25	Back	10mm	Reduced	27710	2310	20.05	21.00	1.245	0.18	0.475	0.591
	LTE Band 30_LAT	10M	QPSK	25	25	Left Side	10mm	Reduced	27710	2310	20.05	21.00	1.245	0.04	0.230	0.286
	LTE Band 30_LAT	10M	QPSK	25	25	Right Side	10mm	Reduced	27710	2310	20.05	21.00	1.245	0.06	0.113	0.141
48	LTE Band 30_LAT	10M	QPSK	25	25	Bottom Side	10mm	Reduced	27710	2310	20.05	21.00	1.245	0.16	0.625	0.778





# FCC SAR TEST REPORT

Report No. : FA002703-02

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_UAT	20M	QPSK	1	99	Front	10mm	Full	21100	2535	21.48	23.10	1.452	0.06	0.164	0.238
	LTE Band 7_UAT	20M	QPSK	1	99	Back	10mm	Full	21100	2535	21.48	23.10	1.452	-0.06	0.331	0.481
	LTE Band 7_UAT	20M	QPSK	1	99	Left Side	10mm	Full	21100	2535	21.48	23.10	1.452	-0.09	0.540	0.784
	LTE Band 7_UAT	20M	QPSK	1	99	Right Side	10mm	Full	21100	2535	21.48	23.10	1.452	-0.01	0.014	0.021
	LTE Band 7_UAT	20M	QPSK	1	99	Top Side	10mm	Full	21100	2535	21.48	23.10	1.452	0.15	0.057	0.083
	LTE Band 7_UAT	20M	QPSK	1	99	Left Side	10mm	Full	20850	2510	21.13	23.10	1.574	0.08	0.524	0.825
	LTE Band 7_UAT	20M	QPSK	1	99	Left Side	10mm	Full	21350	2560	21.30	23.10	1.514	-0.15	0.473	0.716
	LTE Band 7_UAT	20M	QPSK	50	50	Front	10mm	Full	21100	2535	20.59	22.10	1.416	-0.04	0.139	0.197
	LTE Band 7_UAT	20M	QPSK	50	50	Back	10mm	Full	21100	2535	20.59	22.10	1.416	0.06	0.268	0.379
	LTE Band 7_UAT	20M	QPSK	50	50	Left Side	10mm	Full	21100	2535	20.59	22.10	1.416	-0.01	0.456	0.646
	LTE Band 7_UAT	20M	QPSK	50	50	Right Side	10mm	Full	21100	2535	20.59	22.10	1.416	0.06	0.009	0.013
	LTE Band 7_UAT	20M	QPSK	50	50	Top Side	10mm	Full	21100	2535	20.59	22.10	1.416	-0.13	0.042	0.059
	LTE Band 7_UAT	20M	QPSK	100	0	Left Side	10mm	Full	21100	2535	20.54	22.10	1.432	-0.01	0.481	0.689
	LTE Band 7_LAT	20M	QPSK	1	99	Front	10mm	Reduced	21100	2535	21.44	21.80	1.086	-0.18	0.398	0.432
	LTE Band 7_LAT	20M	QPSK	1	99	Back	10mm	Reduced	21100	2535	21.44	21.80	1.086	0.12	0.452	0.491
	LTE Band 7_LAT	20M	QPSK	1	99	Left Side	10mm	Reduced	21100	2535	21.44	21.80	1.086	-0.01	0.141	0.153
	LTE Band 7_LAT	20M	QPSK	1	99	Right Side	10mm	Reduced	21100	2535	21.44	21.80	1.086	0.15	0.082	0.089
	LTE Band 7_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	21100	2535	21.44	21.80	1.086	-0.04	0.815	0.885
	LTE Band 7_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	20850	2510	21.36	21.80	1.107	-0.04	0.763	0.844
	LTE Band 7_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	21350	2560	21.34	21.80	1.112	0.05	0.787	0.875
	LTE Band 7_LAT	20M	QPSK	50	50	Front	10mm	Reduced	21100	2535	21.34	21.80	1.112	0.08	0.403	0.448
	LTE Band 7_LAT	20M	QPSK	50	50	Back	10mm	Reduced	21100	2535	21.34	21.80	1.112	0.04	0.464	0.516
	LTE Band 7_LAT	20M	QPSK	50	50	Left Side	10mm	Reduced	21100	2535	21.34	21.80	1.112	0.19	0.148	0.165
	LTE Band 7_LAT	20M	QPSK	50	50	Right Side	10mm	Reduced	21100	2535	21.34	21.80	1.112	0.18	0.083	0.092
	LTE Band 7_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	21100	2535	21.34	21.80	1.112	-0.05	0.830	0.923
49	LTE Band 7_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	20850	2510	21.29	21.80	1.125	0.04	0.858	0.965
	LTE Band 7_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	21350	2560	21.27	21.80	1.130	0.01	0.827	0.934
	LTE Band 7_LAT	20M	QPSK	100	0	Bottom Side	10mm	Reduced	21100	2535	21.33	21.80	1.114	0.11	0.822	0.916
5G NR EN-DC																
	LTE Band 7_Ant 1	20M	QPSK	1	99	Front	10mm	Full	21100	2535	20.52	21.50	1.253	0.05	0.255	0.320
	LTE Band 7_Ant 1	20M	QPSK	1	99	Back	10mm	Full	21100	2535	20.52	21.50	1.253	0.06	0.298	0.373
	LTE Band 7_Ant 1	20M	QPSK	1	99	Left Side	10mm	Full	21100	2535	20.52	21.50	1.253	0.14	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	1	99	Right Side	10mm	Full	21100	2535	20.52	21.50	1.253	0.19	0.546	0.684
	LTE Band 7_Ant 1	20M	QPSK	1	99	Bottom Side	10mm	Full	21100	2535	20.52	21.50	1.253	-0.04	0.491	0.615
	LTE Band 7_Ant 1	20M	QPSK	1	99	Right Side	10mm	Full	20850	2510	20.35	21.50	1.303	0.17	0.600	0.782
	LTE Band 7_Ant 1	20M	QPSK	1	99	Right Side	10mm	Full	21350	2560	20.38	21.50	1.294	0.12	0.507	0.656
	LTE Band 7_Ant 1	20M	QPSK	50	50	Front	10mm	Full	21100	2535	19.57	20.50	1.239	-0.11	0.205	0.254
	LTE Band 7_Ant 1	20M	QPSK	50	50	Back	10mm	Full	21100	2535	19.57	20.50	1.239	0.15	0.242	0.300
	LTE Band 7_Ant 1	20M	QPSK	50	50	Left Side	10mm	Full	21100	2535	19.57	20.50	1.239	0.08	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	50	50	Right Side	10mm	Full	21100	2535	19.57	20.50	1.239	-0.18	0.449	0.556
	LTE Band 7_Ant 1	20M	QPSK	50	50	Bottom Side	10mm	Full	21100	2535	19.57	20.50	1.239	0.05	0.403	0.499
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	Reduced	21100	2535	18.78	19.60	1.208	0.11	0.191	0.231
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	Reduced	21100	2535	18.78	19.60	1.208	0.08	0.278	0.336
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Side	10mm	Reduced	21100	2535	18.78	19.60	1.208	0.04	0.201	0.243
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Side	10mm	Reduced	21100	2535	18.78	19.60	1.208	0.19	0.046	0.056
	LTE Band 7_Ant 0	20M	QPSK	1	99	Top Side	10mm	Reduced	21100	2535	18.78	19.60	1.208	0.18	0.492	0.594
	LTE Band 7_Ant 0	20M	QPSK	1	99	Top Side	10mm	Reduced	20850	2510	18.76	19.60	1.213	0.1	0.582	0.706
	LTE Band 7_Ant 0	20M	QPSK	1	99	Top Side	10mm	Reduced	21350	2560	18.75	19.60	1.216	-0.14	0.435	0.529
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	Reduced	21100	2535	18.75	19.60	1.216	-0.06	0.185	0.225
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	Reduced	21100	2535	18.75	19.60	1.216	-0.09	0.273	0.332
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Side	10mm	Reduced	21100	2535	18.75	19.60	1.216	-0.01	0.181	0.220
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Side	10mm	Reduced	21100	2535	18.75	19.60	1.216	0.15	0.044	0.054
	LTE Band 7_Ant 0	20M	QPSK	50	50	Top Side	10mm	Reduced	21100	2535	18.75	19.60	1.216	0.08	0.488	0.593



# FCC SAR TEST REPORT

Report No. : FA002703-02

## <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_UAT	20M	QPSK	1	49	Front	10mm	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	0.08	0.093	0.123
	LTE Band 41_UAT	20M	QPSK	1	49	Back	10mm	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	0.11	0.181	0.241
	LTE Band 41_UAT	20M	QPSK	1	49	Left Side	10mm	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	0.13	0.315	0.419
	LTE Band 41_UAT	20M	QPSK	1	49	Right Side	10mm	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	0.08	0.007	0.009
	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	10mm	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	0.09	0.040	0.053
	LTE Band 41_UAT	20M	QPSK	1	49	Left Side	10mm	Full	39750	2506	20.38	21.80	1.387	62.9	1.006	0.11	0.277	0.386
	LTE Band 41_UAT	20M	QPSK	1	49	Left Side	10mm	Full	40620	2593	20.27	21.80	1.422	62.9	1.006	0.1	0.201	0.288
	LTE Band 41_UAT	20M	QPSK	1	49	Left Side	10mm	Full	41055	2636.5	20.25	21.80	1.429	62.9	1.006	0.08	0.166	0.239
	LTE Band 41_UAT	20M	QPSK	1	49	Left Side	10mm	Full	41490	2680	20.26	21.80	1.426	62.9	1.006	0.09	0.121	0.174
	LTE Band 41C_UAT	20M	QPSK	1	49	Left Side	10mm	Full	40185(PCC)+40383(SCC)	2549.5(PCC)+2569.3(SCC)	20.61	21.80	1.315	62.9	1.006	0.13	0.214	0.283
	LTE Band 41C_UAT	20M	QPSK	1	49	Left Side	10mm	Full	39750(PCC)+39948(SCC)	2506(PCC)+2525.8(SCC)	20.41	21.80	1.377	62.9	1.006	0.04	0.191	0.265
	LTE Band 41C_UAT	20M	QPSK	1	49	Left Side	10mm	Full	40620(PCC)+40422(SCC)	2593(PCC)+2573.2(SCC)	20.47	21.80	1.358	62.9	1.006	-0.02	0.274	0.374
	LTE Band 41C_UAT	20M	QPSK	1	49	Left Side	10mm	Full	41055(PCC)+40857(SCC)	2636.5(PCC)+2616.7(SCC)	20.56	21.80	1.330	62.9	1.006	0.09	0.205	0.274
	LTE Band 41C_UAT	20M	QPSK	1	49	Left Side	10mm	Full	41490(PCC)+41292(SCC)	2680(PCC)+2660.2(SCC)	20.54	21.80	1.337	62.9	1.006	0.01	0.199	0.268
	LTE Band 41_UAT	20M	QPSK	50	50	Front	10mm	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	0.09	0.088	0.112
	LTE Band 41_UAT	20M	QPSK	50	50	Back	10mm	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	0.04	0.152	0.195
	LTE Band 41_UAT	20M	QPSK	50	50	Left Side	10mm	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	0.06	0.192	0.246
	LTE Band 41_UAT	20M	QPSK	50	50	Right Side	10mm	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	-0.11	0.006	0.008
	LTE Band 41_UAT	20M	QPSK	50	50	Top Side	10mm	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	-0.1	0.031	0.040
	LTE Band 41_LAT	20M	QPSK	1	49	Front	10mm	Reduced	40185	2549.5	22.85	23.60	1.189	62.9	1.006	0.16	0.331	0.396
	LTE Band 41_LAT	20M	QPSK	1	49	Back	10mm	Reduced	40185	2549.5	22.85	23.60	1.189	62.9	1.006	0.04	0.407	0.487
	LTE Band 41_LAT	20M	QPSK	1	49	Left Side	10mm	Reduced	40185	2549.5	22.85	23.60	1.189	62.9	1.006	0.11	0.142	0.170
	LTE Band 41_LAT	20M	QPSK	1	49	Right Side	10mm	Reduced	40185	2549.5	22.85	23.60	1.189	62.9	1.006	-0.05	0.084	0.100
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	40185	2549.5	22.85	23.60	1.189	62.9	1.006	0.06	0.721	0.862
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	39750	2506	22.48	23.60	1.294	62.9	1.006	0.03	0.721	0.939
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	40620	2593	22.55	23.60	1.274	62.9	1.006	0.11	0.763	0.978
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	41055	2636.5	22.67	23.60	1.239	62.9	1.006	-0.08	0.797	0.993
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	41490	2680	22.79	23.60	1.205	62.9	1.006	-0.03	0.767	0.930
	LTE Band 41_LAT	20M	QPSK	50	50	Front	10mm	Reduced	40185	2549.5	22.82	23.60	1.197	62.9	1.006	0.05	0.337	0.406
	LTE Band 41_LAT	20M	QPSK	50	50	Back	10mm	Reduced	40185	2549.5	22.82	23.60	1.197	62.9	1.006	-0.04	0.416	0.501
	LTE Band 41_LAT	20M	QPSK	50	50	Left Side	10mm	Reduced	40185	2549.5	22.82	23.60	1.197	62.9	1.006	-0.09	0.142	0.171
	LTE Band 41_LAT	20M	QPSK	50	50	Right Side	10mm	Reduced	40185	2549.5	22.82	23.60	1.197	62.9	1.006	-0.02	0.085	0.102
	LTE Band 41_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	40185	2549.5	22.82	23.60	1.197	62.9	1.006	0.06	0.741	0.892
	LTE Band 41_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	39750	2506	22.44	23.60	1.306	62.9	1.006	0.18	0.714	0.938
	LTE Band 41_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	40620	2593	22.52	23.60	1.282	62.9	1.006	0.05	0.771	0.995
50	LTE Band 41_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	41055	2636.5	22.64	23.60	1.247	62.9	1.006	-0.06	0.909	1.141
	LTE Band 41_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	41490	2680	22.78	23.60	1.208	62.9	1.006	0.13	0.781	0.949
	LTE Band 41C_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	40185(PCC)+40383(SCC)	2549.5(PCC)+2569.3(SCC)	19.69	20.80	1.291	62.9	1.006	0.11	0.416	0.540
	LTE Band 41C_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	39750(PCC)+39948(SCC)	2506(PCC)+2525.8(SCC)	19.77	20.80	1.268	62.9	1.006	-0.05	0.405	0.516
	LTE Band 41C_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	40620(PCC)+40422(SCC)	2593(PCC)+2573.2(SCC)	19.90	20.80	1.230	62.9	1.006	0.08	0.296	0.366
	LTE Band 41C_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	41055(PCC)+40857(SCC)	2636.5(PCC)+2616.7(SCC)	19.87	20.80	1.239	62.9	1.006	-0.04	0.320	0.399
	LTE Band 41C_LAT	20M	QPSK	50	50	Bottom Side	10mm	Reduced	41490(PCC)+41292(SCC)	2680(PCC)+2660.2(SCC)	19.74	20.80	1.276	62.9	1.006	0.03	0.319	0.410
	LTE Band 41_LAT	20M	QPSK	100	0	Bottom Side	10mm	Reduced	40185	2549.5	22.75	23.60	1.216	62.9	1.006	-0.12	0.441	0.540
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Front	10mm	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	0.09	0.087	0.115
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Back	10mm	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	0.11	0.164	0.217
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	0.18	0.324	0.429
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Right Side	10mm	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	0.1	0.011	0.014
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Top Side	10mm	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	0.08	0.045	0.060
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	39750	2506	22.41	23.80	1.377	42.9	1.009	0.09	0.312	0.434
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	40620	2593	22.40	23.80	1.380	42.9	1.009	0.09	0.227	0.316
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	41055	2636.5	22.45	23.80	1.365	42.9	1.009	0.04	0.186	0.256





# FCC SAR TEST REPORT

Report No. : FA002703-02

LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	41490	2680	22.37	23.80	1.390	42.9	1.009	0.06	0.142	0.199
LTE Band 41C_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	21.73	22.80	1.279	42.9	1.009	0.08	0.220	0.284
LTE Band 41C_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	21.41	22.80	1.377	42.9	1.009	-0.01	0.164	0.228
LTE Band 4C1_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	21.80	22.80	1.259	42.9	1.009	0.04	0.150	0.191
LTE Band 41C_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	21.79	22.80	1.262	42.9	1.009	-0.11	0.136	0.173
LTE Band 41C_HPUE_UAT	20M	QPSK	1	99	Left Side	10mm	Full	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	21.72	22.80	1.282	42.9	1.009	0.07	0.132	0.171
LTE Band 41_HPUE_UAT	20M	QPSK	50	0	Front	10mm	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	-0.1	0.077	0.096
LTE Band 41_HPUE_UAT	20M	QPSK	50	0	Back	10mm	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	0.08	0.142	0.177
LTE Band 41_HPUE_UAT	20M	QPSK	50	0	Left Side	10mm	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	0.16	0.289	0.360
LTE Band 41_HPUE_UAT	20M	QPSK	50	0	Right Side	10mm	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	0.04	0.008	0.010
LTE Band 41_HPUE_UAT	20M	QPSK	50	0	Top Side	10mm	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	0.11	0.038	0.047
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Front	10mm	Reduced	40185	2549.5	24.69	25.20	1.125	42.9	1.009	0.06	0.434	0.492
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	10mm	Reduced	40185	2549.5	24.69	25.20	1.125	42.9	1.009	0.03	0.536	0.608
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Left Side	10mm	Reduced	40185	2549.5	24.69	25.20	1.125	42.9	1.009	-0.12	0.173	0.196
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Right Side	10mm	Reduced	40185	2549.5	24.69	25.20	1.125	42.9	1.009	0.1	0.113	0.128
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	40185	2549.5	24.69	25.20	1.125	42.9	1.009	0.09	0.877	0.995
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	10mm	Reduced	39750	2506	24.27	25.20	1.239	42.9	1.009	0.04	0.485	0.606
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	10mm	Reduced	40620	2593	24.50	25.20	1.175	42.9	1.009	-0.03	0.505	0.599
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	10mm	Reduced	41055	2636.5	24.59	25.20	1.151	42.9	1.009	0.09	0.518	0.601
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	10mm	Reduced	41490	2680	24.64	25.20	1.138	42.9	1.009	0.04	0.495	0.568
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	39750	2506	24.27	25.20	1.239	42.9	1.009	0.13	0.832	1.040
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	40620	2593	24.50	25.20	1.175	42.9	1.009	0.16	0.921	1.092
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	41055	2636.5	24.59	25.20	1.151	42.9	1.009	-0.01	0.980	1.138
LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	41490	2680	24.64	25.20	1.138	42.9	1.009	0.09	0.912	1.047
LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	21.57	22.80	1.327	42.9	1.009	0.1	0.412	0.552
LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	21.56	22.80	1.330	42.9	1.009	0.03	0.326	0.438
LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	21.81	22.80	1.256	42.9	1.009	0.07	0.255	0.323
LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	21.85	22.80	1.245	42.9	1.009	-0.09	0.267	0.335
LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	10mm	Reduced	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	21.80	22.80	1.259	42.9	1.009	0.04	0.333	0.423
LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Front	10mm	Reduced	40185	2549.5	24.67	25.20	1.130	42.9	1.009	-0.09	0.380	0.433
LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Back	10mm	Reduced	40185	2549.5	24.67	25.20	1.130	42.9	1.009	-0.02	0.469	0.535
LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	40185	2549.5	24.67	25.20	1.130	42.9	1.009	0.06	0.156	0.178
LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	40185	2549.5	24.67	25.20	1.130	42.9	1.009	0.18	0.096	0.109
LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	40185	2549.5	24.67	25.20	1.130	42.9	1.009	0.11	0.778	0.887
LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	39750	2506	24.33	25.20	1.222	42.9	1.009	0.05	0.729	0.899
LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	40620	2593	24.47	25.20	1.183	42.9	1.009	0.18	0.817	0.975
LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	41055	2636.5	24.57	25.20	1.156	42.9	1.009	0.1	0.863	1.007
LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	41490	2680	24.58	25.20	1.153	42.9	1.009	0.09	0.842	0.980
LTE Band 41_HPUE_LAT	20M	QPSK	100	0	Bottom Side	10mm	Reduced	40185	2549.5	24.66	25.20	1.132	42.9	1.009	0.13	0.507	0.579



# FCC SAR TEST REPORT

Report No. : FA002703-02

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 48_UAT	20M	QPSK	1	0	Front	10mm	Reduced	55830	3609	22.32	23.10	1.197	62.9	1.006	0.08	0.199	0.240
	LTE Band 48_UAT	20M	QPSK	1	0	Back	10mm	Reduced	55830	3609	22.32	23.10	1.197	62.9	1.006	0.09	0.367	0.442
51	LTE Band 48_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	55830	3609	22.32	23.10	1.197	62.9	1.006	-0.15	0.864	1.040
	LTE Band 48_UAT	20M	QPSK	1	0	Right Side	10mm	Reduced	55830	3609	22.32	23.10	1.197	62.9	1.006	0.18	0.001	0.001
	LTE Band 48_UAT	20M	QPSK	1	0	Top Side	10mm	Reduced	55830	3609	22.32	23.10	1.197	62.9	1.006	0.1	0.071	0.085
	LTE Band 48_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	55340	3560	22.22	23.10	1.225	62.9	1.006	0.08	0.715	0.881
	LTE Band 48_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	56150	3641	22.10	23.10	1.259	62.9	1.006	0.05	0.618	0.783
	LTE Band 48_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	56640	3690	22.02	23.10	1.282	62.9	1.006	0.09	0.645	0.832
	LTE Band 48C_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	55830(PCC)+55632(SCC)	3609(PCC)+3589.2(SCC)	19.68	20.80	1.294	62.9	1.006	0.08	0.295	0.384
	LTE Band 48C_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	55340(PCC)+55538(SCC)	3560(PCC)+3579.8(SCC)	19.48	20.80	1.355	62.9	1.006	-0.04	0.303	0.413
	LTE Band 48C_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	56150(PCC)+55952(SCC)	3641(PCC)+3621.2(SCC)	19.51	20.80	1.346	62.9	1.006	0.02	0.258	0.349
	LTE Band 48C_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	56640(PCC)+56442(SCC)	3690(PCC)+3670.2(SCC)	19.47	20.80	1.358	62.9	1.006	0.01	0.338	0.462
	LTE Band 48_UAT	20M	QPSK	50	0	Front	10mm	Reduced	55830	3609	22.20	23.10	1.230	62.9	1.006	-0.11	0.168	0.208
	LTE Band 48_UAT	20M	QPSK	50	0	Back	10mm	Reduced	55830	3609	22.20	23.10	1.230	62.9	1.006	-0.1	0.297	0.368
	LTE Band 48_UAT	20M	QPSK	50	0	Left Side	10mm	Reduced	55830	3609	22.20	23.10	1.230	62.9	1.006	0.08	0.760	0.941
	LTE Band 48_UAT	20M	QPSK	50	0	Right Side	10mm	Reduced	55830	3609	22.20	23.10	1.230	62.9	1.006	0.16	0.001	0.001
	LTE Band 48_UAT	20M	QPSK	50	0	Top Side	10mm	Reduced	55830	3609	22.20	23.10	1.230	62.9	1.006	0.04	0.049	0.061
	LTE Band 48_UAT	20M	QPSK	50	0	Left Side	10mm	Reduced	55340	3560	22.15	23.10	1.245	62.9	1.006	0.08	0.708	0.886
	LTE Band 48_UAT	20M	QPSK	50	0	Left Side	10mm	Reduced	56150	3641	22.08	23.10	1.265	62.9	1.006	0.01	0.600	0.763
	LTE Band 48_UAT	20M	QPSK	50	0	Left Side	10mm	Reduced	56640	3690	22.00	23.10	1.288	62.9	1.006	-0.09	0.624	0.809
	LTE Band 48_UAT	20M	QPSK	100	0	Left Side	10mm	Reduced	55830	3609	22.18	23.10	1.236	62.9	1.006	-0.05	0.535	0.665

## <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)
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Front	10mm	Full	136100	680.5	22.52	23.50	1.253	0.13	0.202	0.253
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Back	10mm	Full	136100	680.5	22.52	23.50	1.253	-0.06	0.281	0.352
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Left Side	10mm	Full	136100	680.5	22.52	23.50	1.253	0.04	0.100	0.125
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Right Side	10mm	Full	136100	680.5	22.52	23.50	1.253	0.09	0.032	0.040
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	136100	680.5	22.52	23.50	1.253	0.04	0.006	0.007
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Top Side	10mm	Full	136100	680.5	22.52	23.50	1.253	0.06	0.228	0.286
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Front	10mm	Full	136100	680.5	22.40	23.50	1.288	-0.01	0.208	0.268
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Back	10mm	Full	136100	680.5	22.40	23.50	1.288	0.15	0.294	0.379
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	136100	680.5	22.40	23.50	1.288	-0.04	0.102	0.131
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Right Side	10mm	Full	136100	680.5	22.40	23.50	1.288	-0.04	0.033	0.043
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	136100	680.5	22.40	23.50	1.288	0.05	0.005	0.007
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Top Side	10mm	Full	136100	680.5	22.40	23.50	1.288	-0.02	0.198	0.255
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Front	10mm	Full	136100	680.5	24.13	24.80	1.167	0.13	0.154	0.180
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Back	10mm	Full	136100	680.5	24.13	24.80	1.167	0.08	0.173	0.202
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Left Side	10mm	Full	136100	680.5	24.13	24.80	1.167	0.09	0.088	0.103
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Right Side	10mm	Full	136100	680.5	24.13	24.80	1.167	0.11	0.343	0.400
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	136100	680.5	24.13	24.80	1.167	0.18	0.132	0.154
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Top Side	10mm	Full	136100	680.5	24.13	24.80	1.167	0.1	0.007	0.008
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Front	10mm	Full	136100	680.5	24.07	24.80	1.183	0.09	0.145	0.172
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Back	10mm	Full	136100	680.5	24.07	24.80	1.183	0.04	0.178	0.211
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	136100	680.5	24.07	24.80	1.183	0.06	0.094	0.111
52	N71_Ant 1	20M	BPSK	50	28	DFT-15	Right Side	10mm	Full	136100	680.5	24.07	24.80	1.183	-0.16	0.369	0.437
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	136100	680.5	24.07	24.80	1.183	0.06	0.127	0.150
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Top Side	10mm	Full	136100	680.5	24.07	24.80	1.183	0.18	0.007	0.008



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
53	N5_Ant 0	20M	BPSK	1	1	DFT-15	Front	10mm	Full	167300	836.5	22.40	23.50	1.288	0.01	0.360	0.464
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Back	10mm	Full	167300	836.5	22.40	23.50	1.288	-0.08	0.497	0.640
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Left Side	10mm	Full	167300	836.5	22.40	23.50	1.288	-0.04	0.146	0.188
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Right Side	10mm	Full	167300	836.5	22.40	23.50	1.288	-0.09	0.037	0.047
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	167300	836.5	22.40	23.50	1.288	-0.02	0.078	0.101
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Top Side	10mm	Full	167300	836.5	22.40	23.50	1.288	0.06	0.351	0.452
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Front	10mm	Full	167300	836.5	22.19	23.50	1.352	-0.1	0.288	0.389
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Back	10mm	Full	167300	836.5	22.19	23.50	1.352	0.08	0.445	0.602
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	167300	836.5	22.19	23.50	1.352	0.16	0.105	0.142
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Right Side	10mm	Full	167300	836.5	22.19	23.50	1.352	0.04	0.030	0.040
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	167300	836.5	22.19	23.50	1.352	0.11	0.006	0.008
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Top Side	10mm	Full	167300	836.5	22.19	23.50	1.352	0.03	0.273	0.369
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Front	10mm	Full	167300	836.5	24.06	24.80	1.186	0.03	0.204	0.242
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Back	10mm	Full	167300	836.5	24.06	24.80	1.186	-0.12	0.247	0.293
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Side	10mm	Full	167300	836.5	24.06	24.80	1.186	0.1	0.098	0.116
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Right Side	10mm	Full	167300	836.5	24.06	24.80	1.186	0.09	0.406	0.481
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	167300	836.5	24.06	24.80	1.186	0.13	0.152	0.180
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Top Side	10mm	Full	167300	836.5	24.06	24.80	1.186	0.08	0.015	0.018
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Front	10mm	Full	167300	836.5	23.93	24.80	1.222	-0.01	0.207	0.253
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Back	10mm	Full	167300	836.5	23.93	24.80	1.222	0.08	0.252	0.308
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	167300	836.5	23.93	24.80	1.222	0.09	0.095	0.115
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Right Side	10mm	Full	167300	836.5	23.93	24.80	1.222	-0.02	0.393	0.480
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	167300	836.5	23.93	24.80	1.222	0.06	0.159	0.194
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Top Side	10mm	Full	167300	836.5	23.93	24.80	1.222	0.18	0.016	0.020



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Front	10mm	Full	344000	1720	21.29	21.80	1.125	0.05	0.215	0.242
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Back	10mm	Full	344000	1720	21.29	21.80	1.125	0.08	0.275	0.309
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Left Side	10mm	Full	344000	1720	21.29	21.80	1.125	0.18	0.505	0.568
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Right Side	10mm	Full	344000	1720	21.29	21.80	1.125	-0.06	0.001	0.001
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Top Side	10mm	Full	344000	1720	21.29	21.80	1.125	0.03	0.136	0.153
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Front	10mm	Full	344000	1720	21.18	21.80	1.153	0.04	0.218	0.251
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Back	10mm	Full	344000	1720	21.18	21.80	1.153	-0.17	0.263	0.303
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	344000	1720	21.18	21.80	1.153	0.11	0.508	0.586
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Right Side	10mm	Full	344000	1720	21.18	21.80	1.153	0.08	0.001	0.001
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Top Side	10mm	Full	344000	1720	21.18	21.80	1.153	0.09	0.126	0.145
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	349000	1745	20.75	21.80	1.274	0.13	0.612	0.779
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	354000	1770	20.98	21.80	1.208	0.09	0.440	0.531
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Front	10mm	Reduced	344000	1720	19.76	20.30	1.132	0.06	0.232	0.263
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Back	10mm	Reduced	344000	1720	19.76	20.30	1.132	0.08	0.321	0.364
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Left Side	10mm	Reduced	344000	1720	19.76	20.30	1.132	0.11	0.001	0.001
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Right Side	10mm	Reduced	344000	1720	19.76	20.30	1.132	-0.05	0.001	0.001
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Top Side	10mm	Reduced	344000	1720	19.76	20.30	1.132	0.09	0.457	0.518
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Front	10mm	Reduced	344000	1720	19.49	20.30	1.205	0.18	0.226	0.272
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Back	10mm	Reduced	344000	1720	19.49	20.30	1.205	0.1	0.298	0.359
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Left Side	10mm	Reduced	344000	1720	19.49	20.30	1.205	0.08	0.001	0.002
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Right Side	10mm	Reduced	344000	1720	19.49	20.30	1.205	0.09	0.001	0.001
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Top Side	10mm	Reduced	344000	1720	19.49	20.30	1.205	-0.11	0.460	0.554
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Top Side	10mm	Reduced	349000	1745	19.39	20.30	1.233	0.17	0.546	0.673
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Top Side	10mm	Reduced	354000	1770	19.35	20.30	1.245	0.12	0.444	0.553
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Front	10mm	Full	349000	1745	21.16	21.80	1.159	0.06	0.160	0.185
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Back	10mm	Full	349000	1745	21.16	21.80	1.159	0.18	0.178	0.206
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Left Side	10mm	Full	349000	1745	21.16	21.80	1.159	0.11	0.001	0.001
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Right Side	10mm	Full	349000	1745	21.16	21.80	1.159	0.05	0.293	0.340
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	349000	1745	21.16	21.80	1.159	0.08	0.230	0.267
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Right Side	10mm	Full	344000	1720	21.03	21.80	1.194	-0.16	0.128	0.153
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Right Side	10mm	Full	354000	1770	20.79	21.80	1.262	0.18	0.115	0.145
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Front	10mm	Full	349000	1745	21.01	21.80	1.199	0.1	0.153	0.184
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Back	10mm	Full	349000	1745	21.01	21.80	1.199	0.08	0.171	0.205
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	349000	1745	21.01	21.80	1.199	0.09	0.001	0.002
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Right Side	10mm	Full	349000	1745	21.01	21.80	1.199	0.13	0.252	0.302
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	349000	1745	21.01	21.80	1.199	0.09	0.227	0.272
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Front	10mm	Reduced	344000	1720	22.65	23.30	1.161	0.06	0.459	0.533
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Back	10mm	Reduced	344000	1720	22.65	23.30	1.161	0.03	0.461	0.535
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Left Side	10mm	Reduced	344000	1720	22.65	23.30	1.161	0.11	0.180	0.209
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Right Side	10mm	Reduced	344000	1720	22.65	23.30	1.161	0.1	0.097	0.113
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	344000	1720	22.65	23.30	1.161	0.02	0.730	0.848
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	349000	1745	22.52	23.30	1.197	-0.05	0.778	0.931
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	354000	1770	22.48	23.30	1.208	-0.1	0.778	0.940
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Front	10mm	Reduced	344000	1720	22.41	23.30	1.227	0.16	0.442	0.543
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Back	10mm	Reduced	344000	1720	22.41	23.30	1.227	0.04	0.459	0.563
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Left Side	10mm	Reduced	344000	1720	22.41	23.30	1.227	-0.16	0.175	0.215
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Right Side	10mm	Reduced	344000	1720	22.41	23.30	1.227	-0.05	0.089	0.109
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	344000	1720	22.41	23.30	1.227	-0.06	0.755	0.927
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	349000	1745	22.33	23.30	1.250	0.03	0.670	0.838
54	N66_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	354000	1770	22.30	23.30	1.259	-0.13	0.761	0.958
	N66_Ant 3	20M	BPSK	100	0	DFT-15	Bottom Side	10mm	Reduced	344000	1720	22.35	23.30	1.245	-0.08	0.768	0.956



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Front	10mm	Full	376000	1880	21.32	21.80	1.117	0.12	0.229	0.256
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Back	10mm	Full	376000	1880	21.32	21.80	1.117	0.18	0.292	0.326
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Left Side	10mm	Full	376000	1880	21.32	21.80	1.117	0.11	0.482	0.538
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Right Side	10mm	Full	376000	1880	21.32	21.80	1.117	0.08	0.045	0.050
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Top Side	10mm	Full	376000	1880	21.32	21.80	1.117	0.04	0.121	0.135
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Front	10mm	Full	376000	1880	21.22	21.80	1.143	-0.04	0.230	0.263
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Back	10mm	Full	376000	1880	21.22	21.80	1.143	0.01	0.291	0.333
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	376000	1880	21.22	21.80	1.143	0.06	0.491	0.561
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Right Side	10mm	Full	376000	1880	21.22	21.80	1.143	0.09	0.043	0.049
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Top Side	10mm	Full	376000	1880	21.22	21.80	1.143	0.19	0.120	0.137
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	372000	1860	21.20	21.80	1.148	-0.09	0.645	0.741
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	380000	1900	21.17	21.80	1.156	0.05	0.433	0.501
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Front	10mm	Reduced	372000	1860	21.85	22.80	1.245	-0.05	0.507	0.631
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Back	10mm	Reduced	372000	1860	21.85	22.80	1.245	-0.14	0.519	0.646
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Left Side	10mm	Reduced	372000	1860	21.85	22.80	1.245	-0.06	0.247	0.307
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Right Side	10mm	Reduced	372000	1860	21.85	22.80	1.245	0.11	0.101	0.126
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	372000	1860	21.85	22.80	1.245	-0.03	0.774	0.963
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	376000	1880	21.71	22.80	1.285	-0.12	0.811	1.042
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	380000	1900	21.80	22.80	1.259	0.05	0.788	0.992
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Front	10mm	Reduced	372000	1860	21.75	22.80	1.274	0.06	0.556	0.708
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Back	10mm	Reduced	372000	1860	21.75	22.80	1.274	-0.12	0.562	0.716
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Left Side	10mm	Reduced	372000	1860	21.75	22.80	1.274	0.05	0.252	0.321
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Right Side	10mm	Reduced	372000	1860	21.75	22.80	1.274	0.09	0.120	0.153
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	372000	1860	21.75	22.80	1.274	0.01	0.766	0.976
55	N2_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	376000	1880	21.57	22.80	1.327	-0.02	0.786	1.043
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	380000	1900	21.58	22.80	1.324	0.15	0.729	0.965
	N2_Ant 3	20M	BPSK	100	0	DFT-15	Bottom Side	10mm	Reduced	372000	1860	21.72	22.80	1.282	0.04	0.690	0.885
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Front	10mm	Full	381000	1905	21.21	21.80	1.146	0.13	0.219	0.251
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Back	10mm	Full	381000	1905	21.21	21.80	1.146	-0.11	0.252	0.289
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Left Side	10mm	Full	381000	1905	21.21	21.80	1.146	0.15	0.524	0.600
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Right Side	10mm	Full	381000	1905	21.21	21.80	1.146	0.08	0.000	0.000
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Top Side	10mm	Full	381000	1905	21.21	21.80	1.146	-0.18	0.102	0.117
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Left Side	10mm	Full	372000	1860	21.06	21.80	1.186	0.05	0.499	0.592
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Left Side	10mm	Full	376500	1882.5	20.93	21.80	1.222	0.12	0.653	0.798
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Front	10mm	Full	381000	1905	21.06	21.80	1.186	0.11	0.207	0.245
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Back	10mm	Full	381000	1905	21.06	21.80	1.186	0.08	0.262	0.311
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	381000	1905	21.06	21.80	1.186	0.04	0.502	0.595
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Right Side	10mm	Full	381000	1905	21.06	21.80	1.186	0.19	0.001	0.001
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Top Side	10mm	Full	381000	1905	21.06	21.80	1.186	0.18	0.092	0.109
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Front	10mm	Reduced	376500	1882.5	22.00	22.80	1.202	-0.01	0.485	0.583
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Back	10mm	Reduced	376500	1882.5	22.00	22.80	1.202	0.19	0.528	0.635
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Left Side	10mm	Reduced	376500	1882.5	22.00	22.80	1.202	0.18	0.249	0.299
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Right Side	10mm	Reduced	376500	1882.5	22.00	22.80	1.202	0.07	0.120	0.144
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	376500	1882.5	22.00	22.80	1.202	0.15	0.810	0.974
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	372000	1860	21.95	22.80	1.216	-0.13	0.748	0.910
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	381000	1905	21.88	22.80	1.236	0.11	0.841	1.039
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Front	10mm	Reduced	376500	1882.5	21.94	22.80	1.219	-0.09	0.605	0.737
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Back	10mm	Reduced	376500	1882.5	21.94	22.80	1.219	-0.01	0.612	0.746
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Left Side	10mm	Reduced	376500	1882.5	21.94	22.80	1.219	0.15	0.282	0.344
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Right Side	10mm	Reduced	376500	1882.5	21.94	22.80	1.219	0.08	0.117	0.143
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	376500	1882.5	21.94	22.80	1.219	-0.15	0.786	0.958
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	372000	1860	21.79	22.80	1.262	0.13	0.760	0.959
56	N25_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	381000	1905	21.77	22.80	1.268	0.11	0.849	1.076
	N25_Ant 3	20M	BPSK	100	0	DFT-15	Bottom Side	10mm	Reduced	376500	1882.5	21.90	22.80	1.230	-0.15	0.703	0.865



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)
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Front	10mm	Full	502000	2510	20.87	21.80	1.239	0.13	0.153	0.190
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Back	10mm	Full	502000	2510	20.87	21.80	1.239	0.08	0.215	0.266
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Left Side	10mm	Full	502000	2510	20.87	21.80	1.239	0.09	0.632	0.783
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Right Side	10mm	Full	502000	2510	20.87	21.80	1.239	0.11	0.001	0.001
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Top Side	10mm	Full	502000	2510	20.87	21.80	1.239	0.18	0.001	0.001
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Front	10mm	Full	502000	2510	20.69	21.80	1.291	0.08	0.156	0.201
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Back	10mm	Full	502000	2510	20.69	21.80	1.291	0.09	0.220	0.284
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	502000	2510	20.69	21.80	1.291	-0.15	0.639	0.825
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Right Side	10mm	Full	502000	2510	20.69	21.80	1.291	-0.09	0.001	0.002
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Top Side	10mm	Full	502000	2510	20.69	21.80	1.291	-0.01	0.001	0.002
57	N7_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	507000	2535	20.64	21.80	1.306	0.15	0.761	0.994
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Left Side	10mm	Full	512000	2560	20.60	21.80	1.318	0.08	0.592	0.780
	N7_Ant 2	20M	BPSK	100	0	DFT-15	Left Side	10mm	Full	502000	2510	20.37	21.80	1.390	0.05	0.539	0.749
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Front	10mm	Reduced	507000	2535	20.97	21.80	1.211	0.07	0.465	0.563
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Back	10mm	Reduced	507000	2535	20.97	21.80	1.211	0.04	0.495	0.599
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Left Side	10mm	Reduced	507000	2535	20.97	21.80	1.211	-0.12	0.289	0.350
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Right Side	10mm	Reduced	507000	2535	20.97	21.80	1.211	0.05	0.239	0.289
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	507000	2535	20.97	21.80	1.211	-0.08	0.718	0.869
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	502000	2510	20.90	21.80	1.230	0.07	0.726	0.893
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	512000	2560	20.88	21.80	1.236	0.11	0.739	0.913
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Front	10mm	Reduced	507000	2535	20.86	21.80	1.242	0.01	0.461	0.572
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Back	10mm	Reduced	507000	2535	20.86	21.80	1.242	-0.13	0.479	0.595
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Left Side	10mm	Reduced	507000	2535	20.86	21.80	1.242	0.15	0.282	0.350
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Right Side	10mm	Reduced	507000	2535	20.86	21.80	1.242	0.08	0.231	0.287
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	507000	2535	20.86	21.80	1.242	0.1	0.704	0.874
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	502000	2510	20.75	21.80	1.274	0.17	0.713	0.908
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	512000	2560	20.68	21.80	1.294	-0.14	0.696	0.901
	N7_Ant 3	20M	BPSK	100	0	DFT-15	Bottom Side	10mm	Reduced	507000	2535	20.82	21.80	1.253	0.09	0.698	0.875





# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	10mm	Reduced	518598	2592.99	19.17	19.80	1.156	0.01	0.176	0.203
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	10mm	Reduced	518598	2592.99	19.17	19.80	1.156	-0.05	0.446	0.516
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Side	10mm	Reduced	518598	2592.99	19.17	19.80	1.156	-0.11	0.188	0.217
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Side	10mm	Reduced	518598	2592.99	19.17	19.80	1.156	0.01	0.055	0.064
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Top Side	10mm	Reduced	518598	2592.99	19.17	19.80	1.156	0.16	0.611	0.706
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Top Side	10mm	Reduced	509202	2546.01	19.10	19.80	1.175	0.04	0.421	0.495
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Top Side	10mm	Reduced	528000	2640	18.93	19.80	1.222	0.11	0.414	0.506
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Front	10mm	Reduced	518598	2592.99	19.07	19.80	1.183	0.08	0.205	0.243
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Back	10mm	Reduced	518598	2592.99	19.07	19.80	1.183	-0.15	0.327	0.387
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Left Side	10mm	Reduced	518598	2592.99	19.07	19.80	1.183	-0.13	0.157	0.186
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Right Side	10mm	Reduced	518598	2592.99	19.07	19.80	1.183	-0.09	0.060	0.071
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	10mm	Reduced	518598	2592.99	19.07	19.80	1.183	0.05	0.396	0.468
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Top Side	10mm	Reduced	518598	2592.99	18.98	19.80	1.208	0.09	0.402	0.486
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Front	10mm	Reduced	518598	2592.99	19.45	19.80	1.084	0.01	0.203	0.220
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Back	10mm	Reduced	518598	2592.99	19.45	19.80	1.084	-0.05	0.561	0.608
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Left Side	10mm	Reduced	518598	2592.99	19.45	19.80	1.084	-0.11	0.206	0.223
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Right Side	10mm	Reduced	518598	2592.99	19.45	19.80	1.084	0.01	0.054	0.059
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Top Side	10mm	Reduced	518598	2592.99	19.45	19.80	1.084	0.16	0.650	0.704
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Top Side	10mm	Reduced	509202	2546.01	19.44	19.80	1.086	-0.02	0.648	0.704
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Top Side	10mm	Reduced	528000	2640	19.24	19.80	1.138	0.09	0.459	0.522
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Back	10mm	Reduced	509202	2546.01	19.44	19.80	1.086	-0.06	0.511	0.555
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Back	10mm	Reduced	528000	2640	19.24	19.80	1.138	0.03	0.546	0.621
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Front	10mm	Reduced	518598	2592.99	19.23	19.80	1.140	0.06	0.239	0.273
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Back	10mm	Reduced	518598	2592.99	19.23	19.80	1.140	-0.05	0.563	0.642
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Left Side	10mm	Reduced	518598	2592.99	19.23	19.80	1.140	0.17	0.179	0.204
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Right Side	10mm	Reduced	518598	2592.99	19.23	19.80	1.140	-0.12	0.068	0.078
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	10mm	Reduced	518598	2592.99	19.23	19.80	1.140	0.11	0.566	0.645
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	10mm	Reduced	509202	2546.01	19.22	19.80	1.143	0.08	0.614	0.702
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	10mm	Reduced	528000	2640	19.11	19.80	1.172	-0.03	0.541	0.634
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Back	10mm	Reduced	509202	2546.01	19.22	19.80	1.143	0.01	0.474	0.542
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Back	10mm	Reduced	528000	2640	19.11	19.80	1.172	-0.05	0.536	0.628
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Back	10mm	Reduced	518598	2592.99	19.13	19.80	1.167	0.01	0.526	0.614
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Top Side	10mm	Reduced	518598	2592.99	19.13	19.80	1.167	0.16	0.600	0.700
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Front	10mm	Full	518598	2592.99	20.92	21.80	1.225	0.11	0.107	0.131
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Back	10mm	Full	518598	2592.99	20.92	21.80	1.225	0.08	0.178	0.218
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	518598	2592.99	20.92	21.80	1.225	-0.03	0.348	0.426
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Right Side	10mm	Full	518598	2592.99	20.92	21.80	1.225	0.04	0.001	0.001
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Top Side	10mm	Full	518598	2592.99	20.92	21.80	1.225	-0.11	0.001	0.001
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	509202	2546.01	20.83	21.80	1.250	0.19	0.447	0.559
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	528000	2640	20.41	21.80	1.377	0.11	0.240	0.331
	N41_Ant 2	100M	BPSK	135	69	DFT-30	Front	10mm	Full	518598	2592.99	20.74	21.80	1.276	0.13	0.056	0.071
	N41_Ant 2	100M	BPSK	135	69	DFT-30	Back	10mm	Full	518598	2592.99	20.74	21.80	1.276	-0.12	0.117	0.149
	N41_Ant 2	100M	BPSK	135	69	DFT-30	Left Side	10mm	Full	518598	2592.99	20.74	21.80	1.276	0.06	0.303	0.387
	N41_Ant 2	100M	BPSK	135	69	DFT-30	Right Side	10mm	Full	518598	2592.99	20.74	21.80	1.276	0.05	0.001	0.001
	N41_Ant 2	100M	BPSK	135	69	DFT-30	Top Side	10mm	Full	518598	2592.99	20.74	21.80	1.276	0.08	0.001	0.001
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Front	10mm	Full	518598	2592.99	22.83	23.80	1.250	0.01	0.173	0.216
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Back	10mm	Full	518598	2592.99	22.83	23.80	1.250	-0.09	0.268	0.335
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	518598	2592.99	22.83	23.80	1.250	0.05	0.548	0.685
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Right Side	10mm	Full	518598	2592.99	22.83	23.80	1.250	0.01	0.001	0.002
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	518598	2592.99	22.83	23.80	1.250	0.1	0.001	0.001
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	509202	2546.01	22.73	23.80	1.279	-0.15	0.652	0.834
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	528000	2640	22.41	23.80	1.377	-0.08	0.399	0.550
	N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Front	10mm	Full	518598	2592.99	22.70	23.80	1.288	0.16	0.095	0.122
	N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Back	10mm	Full	518598	2592.99	22.70	23.80	1.288	0.14	0.187	0.241



# FCC SAR TEST REPORT

Report No. : FA002703-02

	N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Left Side	10mm	Full	518598	2592.99	22.70	23.80	1.288	0.19	0.468	0.603
	N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Right Side	10mm	Full	518598	2592.99	22.70	23.80	1.288	0.04	0.001	0.001
	N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Full	518598	2592.99	22.70	23.80	1.288	0.05	0.001	0.002
	N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Left Side	10mm	Full	509202	2546.01	22.68	23.80	1.294	-0.06	0.564	0.730
	N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Left Side	10mm	Full	528000	2640	22.20	23.80	1.445	-0.08	0.359	0.519
	N41(HPUE)_Ant 2	100M	BPSK	270	0	DFT-30	Left Side	10mm	Full	518598	2592.99	22.14	23.80	1.466	0.05	0.491	0.720
	N41_Ant 1	100M	BPSK	1	1	DFT-30	Front	10mm	Full	518598	2592.99	19.60	20.30	1.175	-0.15	0.211	0.248
	N41_Ant 1	100M	BPSK	1	1	DFT-30	Back	10mm	Full	518598	2592.99	19.60	20.30	1.175	0.01	0.241	0.283
	N41_Ant 1	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	518598	2592.99	19.60	20.30	1.175	0.13	0.054	0.063
	N41_Ant 1	100M	BPSK	1	1	DFT-30	Right Side	10mm	Full	518598	2592.99	19.60	20.30	1.175	-0.12	0.335	0.394
	N41_Ant 1	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	518598	2592.99	19.60	20.30	1.175	0.04	0.332	0.390
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Front	10mm	Full	518598	2592.99	19.33	20.30	1.250	-0.12	0.206	0.258
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Back	10mm	Full	518598	2592.99	19.33	20.30	1.250	0.11	0.223	0.279
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Left Side	10mm	Full	518598	2592.99	19.33	20.30	1.250	0.08	0.001	0.001
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Right Side	10mm	Full	518598	2592.99	19.33	20.30	1.250	-0.15	0.382	0.478
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Full	518598	2592.99	19.33	20.30	1.250	0.11	0.329	0.411
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Right Side	10mm	Full	509202	2546.01	19.13	20.30	1.309	0.08	0.303	0.397
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Right Side	10mm	Full	528000	2640	19.07	20.30	1.327	0.12	0.193	0.256
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Front	10mm	Full	518598	2592.99	22.54	23.30	1.191	0.01	0.351	0.418
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Back	10mm	Full	518598	2592.99	22.54	23.30	1.191	0.12	0.390	0.465
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	518598	2592.99	22.54	23.30	1.191	-0.13	0.001	0.002
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Right Side	10mm	Full	518598	2592.99	22.54	23.30	1.191	-0.01	0.572	0.681
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	518598	2592.99	22.54	23.30	1.191	0.01	0.582	0.693
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Right Side	10mm	Full	509202	2546.01	22.43	23.30	1.222	0.02	0.467	0.571
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Right Side	10mm	Full	528000	2640	22.27	23.30	1.268	-0.09	0.504	0.639
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	509202	2546.01	22.43	23.30	1.222	0.13	0.474	0.579
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	528000	2640	22.27	23.30	1.268	-0.12	0.521	0.660
	N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Front	10mm	Full	518598	2592.99	22.41	23.30	1.227	0.11	0.366	0.449
	N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Back	10mm	Full	518598	2592.99	22.41	23.30	1.227	0.08	0.406	0.498
	N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Left Side	10mm	Full	518598	2592.99	22.41	23.30	1.227	-0.01	0.001	0.001
	N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Right Side	10mm	Full	518598	2592.99	22.41	23.30	1.227	0.11	0.459	0.563
	N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Full	518598	2592.99	22.41	23.30	1.227	-0.15	0.594	0.729
	N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Full	509202	2546.01	22.32	23.30	1.253	0.04	0.660	0.827
	N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Full	528000	2640	22.00	23.30	1.349	0.13	0.485	0.654
	N41(HPUE)_Ant 1	100M	BPSK	270	0	DFT-30	Right Side	10mm	Full	518598	2592.99	22.31	23.30	1.256	0.03	0.601	0.755
	N41(HPUE)_Ant 1	100M	BPSK	270	0	DFT-30	Bottom Side	10mm	Full	518598	2592.99	22.31	23.30	1.256	0.05	0.612	0.769
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Front	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	0.12	0.513	0.594
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	-0.01	0.536	0.621
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Left Side	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	0.15	0.323	0.374
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Right Side	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	-0.04	0.276	0.320
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	-0.04	0.751	0.870
	N41_Ant3	100M	BPSK	1	1	DFT-30	Back	10mm	Reduced	509202	2546.01	21.08	21.80	1.180	0.05	0.501	0.591
	N41_Ant3	100M	BPSK	1	1	DFT-30	Back	10mm	Reduced	528000	2640	20.95	21.80	1.216	0.08	0.571	0.694
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Reduced	509202	2546.01	21.08	21.80	1.180	0.19	0.634	0.748
58	N41_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Reduced	528000	2640	20.95	21.80	1.216	0.03	0.827	1.006
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Front	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.04	0.474	0.556
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Back	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.11	0.497	0.583
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Left Side	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	-0.05	0.314	0.368
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Right Side	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.06	0.271	0.318
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.03	0.710	0.832
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Reduced	509202	2546.01	21.06	21.80	1.186	-0.12	0.631	0.748
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Reduced	528000	2640	20.78	21.80	1.265	0.11	0.670	0.847
	N41_Ant 3	100M	BPSK	270	0	DFT-30	Back	10mm	Reduced	518598	2592.99	20.89	21.80	1.233	-0.06	0.504	0.621
	N41_Ant 3	100M	BPSK	270	0	DFT-30	Bottom Side	10mm	Reduced	518598	2592.99	20.89	21.80	1.233	-0.03	0.720	0.888
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Front	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	0.12	0.513	0.594
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Back	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	-0.01	0.536	0.621



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N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Left Side	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	0.15	0.323	0.374
N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Right Side	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	-0.04	0.276	0.320
N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Reduced	518598	2592.99	21.16	21.80	1.159	-0.04	0.751	0.870
N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Back	10mm	Reduced	509202	2546.01	21.08	21.80	1.180	0.05	0.501	0.591
N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Back	10mm	Reduced	528000	2640	20.95	21.80	1.216	0.08	0.558	0.679
N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Reduced	509202	2546.01	21.08	21.80	1.180	0.19	0.634	0.748
N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Reduced	528000	2640	20.95	21.80	1.216	0.03	0.827	1.006
N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Front	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.04	0.474	0.556
N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Back	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.11	0.497	0.583
N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Left Side	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	-0.05	0.314	0.368
N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Right Side	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.06	0.271	0.318
N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.03	0.710	0.832
N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Reduced	509202	2546.01	21.06	21.80	1.186	-0.12	0.631	0.748
N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Bottom Side	10mm	Reduced	528000	2640	20.78	21.80	1.265	0.11	0.670	0.847
N41_HPUE_Ant 3	100M	BPSK	270	0	DFT-30	Back	10mm	Reduced	518598	2592.99	20.89	21.80	1.233	-0.06	0.504	0.621
N41_HPUE_Ant 3	100M	BPSK	270	0	DFT-30	Bottom Side	10mm	Reduced	518598	2592.99	20.89	21.80	1.233	-0.03	0.720	0.888

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)
	N77_Ant9	100M	BPSK	1	1	DFT-30	Front	10mm	Full	656000	3840	23.58	24.80	1.324	-0.09	0.168	0.222
	N77_Ant9	100M	BPSK	1	1	DFT-30	Back	10mm	Full	656000	3840	23.58	24.80	1.324	-0.01	0.345	0.457
	N77_Ant9	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	656000	3840	23.58	24.80	1.324	0.1	0.488	0.646
	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Side	10mm	Full	656000	3840	23.58	24.80	1.324	0.08	0.006	0.008
	N77_Ant9	100M	BPSK	1	1	DFT-30	Top Side	10mm	Full	656000	3840	23.58	24.80	1.324	0.1	0.023	0.031
59	N77_Ant9	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	650000	3750	23.50	24.80	1.349	0.02	0.691	0.932
	N77_Ant9	100M	BPSK	1	1	DFT-30	Left Side	10mm	Full	662000	3930	23.46	24.80	1.361	0.07	0.455	0.619
	N77_Ant9	100M	BPSK	135	69	DFT-30	Front	10mm	Full	656000	3840	23.55	24.80	1.334	0.14	0.153	0.204
	N77_Ant9	100M	BPSK	135	69	DFT-30	Back	10mm	Full	656000	3840	23.55	24.80	1.334	0.14	0.281	0.375
	N77_Ant9	100M	BPSK	135	69	DFT-30	Left Side	10mm	Full	656000	3840	23.55	24.80	1.334	-0.01	0.422	0.563
	N77_Ant9	100M	BPSK	135	69	DFT-30	Right Side	10mm	Full	656000	3840	23.55	24.80	1.334	0.07	0.004	0.005
	N77_Ant9	100M	BPSK	135	69	DFT-30	Top Side	10mm	Full	656000	3840	23.55	24.80	1.334	-0.1	0.021	0.028
	N77_Ant9	100M	BPSK	270	0	DFT-30	Left Side	10mm	Full	656000	3840	23.43	24.30	1.222	0.07	0.403	0.492



## &lt;WLAN2.4G SAR&gt;

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 1+2	Reduced Power Level 1	1	2412	20.44	21.50	1.276	98.35	1.017	0.09	0.212	0.275
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced Power Level 1	1	2412	20.44	21.50	1.276	98.35	1.017	-0.12	0.267	0.347
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 1+2	Reduced Power Level 1	1	2412	20.44	21.50	1.276	98.35	1.017	0.11	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 1+2	Reduced Power Level 1	1	2412	20.44	21.50	1.276	98.35	1.017	-0.08	0.297	0.386
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced Power Level 1	1	2412	20.44	21.50	1.276	98.35	1.017	-0.1	0.543	0.705
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced Power Level 1	6	2437	20.37	21.50	1.297	98.35	1.017	0.08	0.631	0.832
60	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced Power Level 1	11	2462	20.04	21.50	1.400	98.35	1.017	0.12	0.758	1.079
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 2	Reduced Power Level 5	1	2412	17.90	18.50	1.148	97.93	1.021	-0.02	0.139	0.163
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 2	Reduced Power Level 5	1	2412	17.90	18.50	1.148	97.93	1.021	0.06	0.160	0.188
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 2	Reduced Power Level 5	1	2412	17.90	18.50	1.148	97.93	1.021	0.18	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 2	Reduced Power Level 5	1	2412	17.90	18.50	1.148	97.93	1.021	0.11	0.339	0.397
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 2	Reduced Power Level 5	1	2412	17.90	18.50	1.148	97.93	1.021	0.05	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 2	Reduced Power Level 5	6	2437	17.60	18.50	1.230	97.93	1.021	0.08	0.353	0.443
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 2	Reduced Power Level 5	11	2462	17.50	18.50	1.259	97.93	1.021	0.18	0.481	0.618
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 1+2	Reduced Power Level 2/3	1	2412	18.34	19.50	1.306	98.35	1.017	0.08	0.132	0.175
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced Power Level 2/3	1	2412	18.34	19.50	1.306	98.35	1.017	0.09	0.165	0.219
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 1+2	Reduced Power Level 2/3	1	2412	18.34	19.50	1.306	98.35	1.017	0.13	0.002	0.003
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 1+2	Reduced Power Level 2/3	1	2412	18.34	19.50	1.306	98.35	1.017	0.09	0.190	0.252
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced Power Level 2/3	1	2412	18.34	19.50	1.306	98.35	1.017	0.04	0.335	0.445
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced Power Level 2/3	6	2437	18.27	19.50	1.327	98.35	1.017	0.06	0.381	0.514
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced Power Level 2/3	11	2462	17.94	19.50	1.432	98.35	1.017	0.08	0.469	0.683
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 1+2	Reduced Power Level 4	1	2412	14.24	15.50	1.337	98.35	1.017	0.08	0.054	0.073
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced Power Level 4	1	2412	14.24	15.50	1.337	98.35	1.017	0.09	0.062	0.084
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 1+2	Reduced Power Level 4	1	2412	14.24	15.50	1.337	98.35	1.017	0.11	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 1+2	Reduced Power Level 4	1	2412	14.24	15.50	1.337	98.35	1.017	0.18	0.079	0.107
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced Power Level 4	1	2412	14.24	15.50	1.337	98.35	1.017	0.1	0.131	0.178
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced Power Level 4	6	2437	14.17	15.50	1.358	98.35	1.017	0.08	0.155	0.214
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced Power Level 4	11	2462	13.84	15.50	1.466	98.35	1.017	0.09	0.186	0.277
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 2	Reduced Power Level 6	1	2412	11.70	12.50	1.202	97.93	1.021	0.09	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 2	Reduced Power Level 6	1	2412	11.70	12.50	1.202	97.93	1.021	0.04	0.038	0.047
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 2	Reduced Power Level 6	1	2412	11.70	12.50	1.202	97.93	1.021	0.06	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 2	Reduced Power Level 6	1	2412	11.70	12.50	1.202	97.93	1.021	-0.11	0.086	0.106
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 2	Reduced Power Level 6	1	2412	11.70	12.50	1.202	97.93	1.021	-0.1	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 2	Reduced Power Level 6	6	2437	11.40	12.50	1.288	97.93	1.021	0.06	0.089	0.117
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 2	Reduced Power Level 6	11	2462	11.30	12.50	1.318	97.93	1.021	0.16	0.113	0.152



# FCC SAR TEST REPORT

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## <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	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced Power Level 1/5	46	5230	21.15	22.00	1.216	100	1.000	0.11	0.086	0.104
61	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 1/5	46	5230	21.15	22.00	1.216	100	1.000	0.12	0.785	0.955
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 1+2	Reduced Power Level 1/5	46	5230	21.15	22.00	1.216	100	1.000	0.06	0.001	0.001
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced Power Level 1/5	46	5230	21.15	22.00	1.216	100	1.000	0.03	0.357	0.434
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced Power Level 1/5	46	5230	21.15	22.00	1.216	100	1.000	-0.12	0.237	0.288
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 1/5	38	5190	20.26	22.00	1.493	100	1.000	0.11	0.435	0.649
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced Power Level 2/3	46	5230	19.15	20.00	1.216	100	1.000	0.11	0.056	0.068
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 2/3	46	5230	19.15	20.00	1.216	100	1.000	0.18	0.452	0.550
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 1+2	Reduced Power Level 2/3	46	5230	19.15	20.00	1.216	100	1.000	0.1	0.001	0.001
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced Power Level 2/3	46	5230	19.15	20.00	1.216	100	1.000	0.08	0.233	0.283
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced Power Level 2/3	46	5230	19.15	20.00	1.216	100	1.000	0.09	0.174	0.212
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 2/3	38	5190	18.21	20.00	1.510	100	1.000	0.05	0.303	0.458
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced Power Level 4/6	46	5230	16.35	17.00	1.161	100	1.000	0.04	0.028	0.033
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 4/6	46	5230	16.35	17.00	1.161	100	1.000	0.06	0.233	0.271
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 1+2	Reduced Power Level 4/6	46	5230	16.35	17.00	1.161	100	1.000	-0.11	0.001	0.001
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced Power Level 4/6	46	5230	16.35	17.00	1.161	100	1.000	0.12	0.115	0.134
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced Power Level 4/6	46	5230	16.35	17.00	1.161	100	1.000	0.06	0.087	0.101
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 4/6	38	5190	15.41	17.00	1.442	100	1.000	0.03	0.156	0.225
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced Power Level 1/5	159	5795	18.84	20.00	1.307	100	1.000	0.02	0.080	0.104
62	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 1/5	159	5795	18.84	20.00	1.307	100	1.000	-0.05	0.835	1.092
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 1+2	Reduced Power Level 1/5	159	5795	18.84	20.00	1.307	100	1.000	-0.1	0.012	0.015
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced Power Level 1/5	159	5795	18.84	20.00	1.307	100	1.000	0.08	0.332	0.434
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced Power Level 1/5	159	5795	18.84	20.00	1.307	100	1.000	0.16	0.220	0.288
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 1/5	151	5755	18.74	20.00	1.336	100	1.000	0.04	0.544	0.727
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced Power Level 2/3	159	5795	16.94	18.00	1.276	100	1.000	-0.05	0.053	0.068
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 2/3	159	5795	16.94	18.00	1.276	100	1.000	-0.06	0.355	0.453
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 1+2	Reduced Power Level 2/3	159	5795	16.94	18.00	1.276	100	1.000	0.03	0.001	0.001
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced Power Level 2/3	159	5795	16.94	18.00	1.276	100	1.000	-0.12	0.222	0.283
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced Power Level 2/3	159	5795	16.94	18.00	1.276	100	1.000	0.11	0.166	0.212
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 2/3	151	5755	16.84	18.00	1.307	100	1.000	-0.08	0.492	0.643
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced Power Level 4/6	159	5795	13.84	15.00	1.306	100	1.000	0.06	0.025	0.033
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 4/6	159	5795	13.84	15.00	1.306	100	1.000	0.11	0.234	0.306
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 1+2	Reduced Power Level 4/6	159	5795	13.84	15.00	1.306	100	1.000	0.08	0.001	0.001
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced Power Level 4/6	159	5795	13.84	15.00	1.306	100	1.000	0.09	0.113	0.148
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced Power Level 4/6	159	5795	13.84	15.00	1.306	100	1.000	0.11	0.077	0.101
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced Power Level 4/6	151	5755	13.74	15.00	1.337	100	1.000	0.18	0.190	0.254

## <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)
	Bluetooth	DH5 1Mbps	Front	10mm	Ant 1	Full	39	2441	14.00	16.00	1.585	76.69	1.304	0.02	0.065	0.134
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 1	Full	39	2441	14.00	16.00	1.585	76.69	1.304	-0.05	0.083	0.171
	Bluetooth	DH5 1Mbps	Left Side	10mm	Ant 1	Full	39	2441	14.00	16.00	1.585	76.69	1.304	-0.1	0.006	0.011
	Bluetooth	DH5 1Mbps	Right Side	10mm	Ant 1	Full	39	2441	14.00	16.00	1.585	76.69	1.304	0.08	0.009	0.018
63	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 1	Full	39	2441	14.00	16.00	1.585	76.69	1.304	0.12	0.170	0.351
	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 1	Full	0	2402	12.70	14.70	1.585	76.69	1.304	0.04	0.096	0.199
	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 1	Full	78	2480	12.10	14.10	1.585	76.69	1.304	0.11	0.152	0.314





### **19.3 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_UAT	GPRS(4 Tx slots)	Front	15mm	Full	189	836.4	26.36	28.00	1.459	0.03	0.206	0.301
	GSM850_UAT	GPRS(4 Tx slots)	Back	15mm	Full	189	836.4	26.36	28.00	1.459	-0.12	0.255	0.372
	GSM850_UAT	GPRS(4 Tx slots)	Back	15mm	Full	128	824.2	26.27	28.00	1.489	0.11	0.247	0.368
64	GSM850_UAT	GPRS(4 Tx slots)	Back	15mm	Full	251	848.8	26.11	28.00	1.545	-0.14	0.254	<b>0.392</b>
	GSM850_LAT	GPRS(4 Tx slots)	Front	15mm	Full	128	824.2	27.43	29.30	1.538	-0.02	0.167	0.257
	GSM850_LAT	GPRS(4 Tx slots)	Back	15mm	Full	128	824.2	27.43	29.30	1.538	-0.18	0.223	0.343
	GSM850_LAT	GPRS(4 Tx slots)	Back	15mm	Full	189	836.4	27.34	29.30	1.570	0.09	0.160	0.251
	GSM850_LAT	GPRS(4 Tx slots)	Back	15mm	Full	251	848.8	27.42	29.30	1.542	0.11	0.169	0.261
	GSM1900_UAT	GPRS(2 Tx slots)	Front	15mm	Full	661	1880	25.24	26.80	1.432	-0.1	0.049	0.069
	GSM1900_UAT	GPRS(2 Tx slots)	Back	15mm	Full	661	1880	25.24	26.80	1.432	0.08	0.073	0.104
	GSM1900_UAT	GPRS(2 Tx slots)	Back	15mm	Full	512	1850.2	24.83	26.80	1.574	0.16	0.071	0.112
	GSM1900_UAT	GPRS(2 Tx slots)	Back	15mm	Full	810	1909.8	24.85	26.80	1.567	-0.04	0.078	0.121
	GSM1900_LAT	GPRS(2 Tx slots)	Front	15mm	Full	661	1880	27.15	28.80	1.462	0.17	0.220	0.322
65	GSM1900_LAT	GPRS(2 Tx slots)	Back	15mm	Full	661	1880	27.15	28.80	1.462	0.06	0.361	<b>0.528</b>
	GSM1900_LAT	GPRS(2 Tx slots)	Back	15mm	Full	512	1850.2	27.00	28.80	1.514	-0.02	0.188	0.285
	GSM1900_LAT	GPRS(2 Tx slots)	Back	15mm	Full	810	1909.8	27.11	28.80	1.476	0.03	0.304	0.449





**<CDMA 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)
	CDMA2000 BC0_UAT	RC3 SO32 (F+SCH)	Front	15mm	Full	384	836.52	22.78	23.80	1.265	-0.04	0.202	0.255
66	CDMA2000 BC0_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	384	836.52	22.78	23.80	1.265	-0.18	0.219	<b>0.277</b>
	CDMA2000 BC0_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	1013	824.7	22.71	23.80	1.285	0.06	0.187	0.240
	CDMA2000 BC0_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	777	848.31	22.72	23.80	1.282	0.18	0.181	0.232
	CDMA2000 BC0_LAT	RC3 SO32 (F+SCH)	Front	15mm	Full	384	836.52	23.80	24.80	1.259	0.05	0.150	0.189
	CDMA2000 BC0_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	384	836.52	23.80	24.80	1.259	-0.11	0.180	0.227
	CDMA2000 BC0_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	1013	824.7	23.78	24.80	1.265	-0.05	0.159	0.201
	CDMA2000 BC0_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	777	848.31	23.77	24.80	1.268	-0.1	0.169	0.214
	CDMA2000 BC1_UAT	RC3 SO32 (F+SCH)	Front	15mm	Full	600	1880	21.23	22.80	1.435	0.16	0.115	0.165
	CDMA2000 BC1_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	600	1880	21.23	22.80	1.435	0.04	0.153	0.220
	CDMA2000 BC1_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	25	1851.25	21.22	22.80	1.439	-0.05	0.145	0.209
	CDMA2000 BC1_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	1175	1908.75	21.17	22.80	1.455	-0.06	0.267	0.389
	CDMA2000 BC1_LAT	RC3 SO32 (F+SCH)	Front	15mm	Full	600	1880	23.76	24.80	1.271	-0.18	0.469	0.596
	CDMA2000 BC1_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	600	1880	23.76	24.80	1.271	0.09	0.538	0.684
	CDMA2000 BC1_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	25	1851.25	23.64	24.80	1.306	-0.11	0.526	0.687
67	CDMA2000 BC1_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	1175	1908.75	23.68	24.80	1.294	-0.09	0.580	<b>0.751</b>
	CDMA2000 BC10_UAT	RC3 SO32 (F+SCH)	Front	15mm	Full	684	823.1	22.74	23.80	1.276	0.02	0.166	0.212
	CDMA2000 BC10_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	684	823.1	22.74	23.80	1.276	-0.14	0.210	0.268
	CDMA2000 BC10_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	476	817.9	22.70	23.80	1.288	0.04	0.180	0.232
	CDMA2000 BC10_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	580	820.5	22.71	23.80	1.285	-0.05	0.196	0.252
	CDMA2000 BC10_LAT	RC3 SO32 (F+SCH)	Front	15mm	Full	476	817.9	23.51	24.80	1.346	0.02	0.152	0.205
	CDMA2000 BC10_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	476	817.9	23.51	24.80	1.346	0.03	0.193	0.260
	CDMA2000 BC10_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	580	820.5	23.49	24.80	1.352	0.04	0.196	0.265
68	CDMA2000 BC10_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	684	823.1	23.46	24.80	1.361	-0.18	0.198	<b>0.270</b>

**<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 V_UAT	RMC 12.2Kbps	Front	15mm	Full	4233	846.6	22.83	24.30	1.403	0.15	0.214	0.300
	WCDMA V_UAT	RMC 12.2Kbps	Back	15mm	Full	4233	846.6	22.83	24.30	1.403	0.08	0.249	0.349
	WCDMA V_UAT	RMC 12.2Kbps	Back	15mm	Full	4132	826.4	22.81	24.30	1.409	-0.14	0.201	0.283
69	WCDMA V_UAT	RMC 12.2Kbps	Back	15mm	Full	4182	836.4	22.78	24.30	1.419	-0.11	0.249	<b>0.353</b>
	WCDMA V_LAT	RMC 12.2Kbps	Front	15mm	Full	4233	846.6	24.05	24.80	1.189	0.06	0.142	0.169
	WCDMA V_LAT	RMC 12.2Kbps	Back	15mm	Full	4233	846.6	24.05	24.80	1.189	-0.13	0.177	0.210
	WCDMA V_LAT	RMC 12.2Kbps	Back	15mm	Full	4132	826.4	24.01	24.80	1.199	0.05	0.202	0.242
	WCDMA V_LAT	RMC 12.2Kbps	Back	15mm	Full	4182	836.4	24.04	24.80	1.191	-0.05	0.204	0.243
	WCDMA IV_UAT	RMC 12.2Kbps	Front	15mm	Full	1413	1732.6	22.23	23.30	1.279	0.02	0.146	0.187
	WCDMA IV_UAT	RMC 12.2Kbps	Back	15mm	Full	1413	1732.6	22.23	23.30	1.279	-0.05	0.192	0.246
	WCDMA IV_UAT	RMC 12.2Kbps	Back	15mm	Full	1312	1712.4	22.04	23.30	1.337	-0.1	0.293	0.392
	WCDMA IV_UAT	RMC 12.2Kbps	Back	15mm	Full	1513	1752.6	22.09	23.30	1.321	0.08	0.169	0.223
	WCDMA IV_LAT	RMC 12.2Kbps	Front	15mm	Full	1413	1732.6	23.91	24.80	1.227	0.04	0.443	0.544
	WCDMA IV_LAT	RMC 12.2Kbps	Back	15mm	Full	1413	1732.6	23.91	24.80	1.227	0.11	0.426	0.523
70	WCDMA IV_LAT	RMC 12.2Kbps	Front	15mm	Full	1312	1712.4	23.69	24.80	1.291	-0.09	0.530	<b>0.684</b>
	WCDMA IV_LAT	RMC 12.2Kbps	Front	15mm	Full	1513	1752.6	23.76	24.80	1.271	-0.16	0.423	0.537
	WCDMA II_UAT	RMC 12.2Kbps	Front	15mm	Full	9400	1880	22.12	23.30	1.312	0.03	0.161	0.211
	WCDMA II_UAT	RMC 12.2Kbps	Back	15mm	Full	9400	1880	22.12	23.30	1.312	0.04	0.215	0.282
	WCDMA II_UAT	RMC 12.2Kbps	Back	15mm	Full	9262	1852.4	22.08	23.30	1.324	-0.18	0.205	0.271
	WCDMA II_UAT	RMC 12.2Kbps	Back	15mm	Full	9538	1907.6	21.92	23.30	1.374	-0.08	0.269	0.370
	WCDMA II_LAT	RMC 12.2Kbps	Front	15mm	Full	9400	1880	23.92	24.80	1.225	-0.14	0.442	0.541
	WCDMA II_LAT	RMC 12.2Kbps	Back	15mm	Full	9400	1880	23.92	24.80	1.225	0.04	0.480	0.588
	WCDMA II_LAT	RMC 12.2Kbps	Back	15mm	Full	9262	1852.4	23.78	24.80	1.265	-0.05	0.401	0.507
71	WCDMA II_LAT	RMC 12.2Kbps	Back	15mm	Full	9538	1907.6	23.77	24.80	1.268	-0.06	0.544	<b>0.690</b>



# FCC SAR TEST REPORT

Report No. : FA002703-02

## <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 71_UAT	20M	QPSK	1	0	Front	15mm	Full	133322	683	22.93	24.30	1.371	0.01	0.114	0.156
72	LTE Band 71_UAT	20M	QPSK	1	0	Back	15mm	Full	133322	683	22.93	24.30	1.371	-0.09	0.164	0.225
	LTE Band 71_UAT	20M	QPSK	50	0	Front	15mm	Full	133322	683	22.03	23.30	1.340	0.11	0.101	0.135
	LTE Band 71_UAT	20M	QPSK	50	0	Back	15mm	Full	133322	683	22.03	23.30	1.340	0.18	0.133	0.178
	LTE Band 71_LAT	20M	QPSK	1	0	Front	15mm	Full	133322	683	23.75	24.80	1.274	0.1	0.151	0.192
	LTE Band 71_LAT	20M	QPSK	1	0	Back	15mm	Full	133322	683	23.75	24.80	1.274	0.09	0.174	0.222
	LTE Band 71_LAT	20M	QPSK	50	0	Front	15mm	Full	133322	683	22.78	23.80	1.265	0.09	0.127	0.161
	LTE Band 71_LAT	20M	QPSK	50	0	Back	15mm	Full	133322	683	22.78	23.80	1.265	-0.12	0.140	0.177
	LTE Band 12_UAT	10M	QPSK	1	0	Front	15mm	Full	23095	707.5	22.67	24.30	1.455	-0.08	0.144	0.210
73	LTE Band 12_UAT	10M	QPSK	1	0	Back	15mm	Full	23095	707.5	22.67	24.30	1.455	-0.13	0.206	0.300
	LTE Band 12_UAT	10M	QPSK	25	25	Front	15mm	Full	23095	707.5	21.93	23.40	1.403	0.12	0.140	0.196
	LTE Band 12_UAT	10M	QPSK	25	25	Back	15mm	Full	23095	707.5	21.93	23.40	1.403	-0.14	0.162	0.227
	LTE Band 12_LAT	10M	QPSK	1	0	Front	15mm	Full	23095	707.5	24.02	24.80	1.197	0.06	0.147	0.176
	LTE Band 12_LAT	10M	QPSK	1	0	Back	15mm	Full	23095	707.5	24.02	24.80	1.197	0.08	0.206	0.247
	LTE Band 12_LAT	10M	QPSK	25	25	Front	15mm	Full	23095	707.5	23.07	23.80	1.183	0.05	0.125	0.148
	LTE Band 12_LAT	10M	QPSK	25	25	Back	15mm	Full	23095	707.5	23.07	23.80	1.183	0.08	0.134	0.159
	LTE Band 13_UAT	10M	QPSK	1	25	Front	15mm	Full	23230	782	22.71	24.30	1.442	0.02	0.177	0.255
74	LTE Band 13_UAT	10M	QPSK	1	25	Back	15mm	Full	23230	782	22.71	24.30	1.442	-0.04	0.209	0.301
	LTE Band 13_UAT	10M	QPSK	25	25	Front	15mm	Full	23230	782	21.64	23.30	1.466	0.11	0.082	0.120
	LTE Band 13_UAT	10M	QPSK	25	25	Back	15mm	Full	23230	782	21.64	23.30	1.466	0.18	0.105	0.154
	LTE Band 13_LAT	10M	QPSK	1	25	Front	15mm	Full	23230	782	23.97	24.80	1.211	0.1	0.245	0.297
	LTE Band 13_LAT	10M	QPSK	1	25	Back	15mm	Full	23230	782	23.97	24.80	1.211	-0.05	0.227	0.275
	LTE Band 13_LAT	10M	QPSK	25	12	Front	15mm	Full	23230	782	22.98	23.80	1.208	-0.13	0.195	0.236
	LTE Band 13_LAT	10M	QPSK	25	12	Back	15mm	Full	23230	782	22.98	23.80	1.208	0.09	0.181	0.219
	LTE Band 5_UAT	10M	QPSK	1	49	Front	15mm	Full	20525	836.5	22.67	24.30	1.455	0.12	0.199	0.290
75	LTE Band 5_UAT	10M	QPSK	1	49	Back	15mm	Full	20525	836.5	22.67	24.30	1.455	-0.11	0.230	0.335
	LTE Band 5_UAT	10M	QPSK	25	25	Front	15mm	Full	20525	836.5	21.93	23.30	1.371	-0.14	0.154	0.211
	LTE Band 5_UAT	10M	QPSK	25	25	Back	15mm	Full	20525	836.5	21.93	23.30	1.371	0.04	0.172	0.236
	LTE Band 5_LAT	10M	QPSK	1	0	Front	15mm	Full	20525	836.5	23.76	24.80	1.271	0.15	0.142	0.180
	LTE Band 5_LAT	10M	QPSK	1	0	Back	15mm	Full	20525	836.5	23.76	24.80	1.271	-0.13	0.158	0.201
	LTE Band 5_LAT	10M	QPSK	25	12	Front	15mm	Full	20525	836.5	22.90	23.80	1.230	0.02	0.127	0.156
	LTE Band 5_LAT	10M	QPSK	25	12	Back	15mm	Full	20525	836.5	22.90	23.80	1.230	-0.04	0.151	0.186
	LTE Band 26_UAT	15M	QPSK	1	0	Front	15mm	Full	26865	831.5	22.64	24.30	1.466	0.06	0.155	0.227
76	LTE Band 26_UAT	15M	QPSK	1	0	Back	15mm	Full	26865	831.5	22.64	24.30	1.466	-0.07	0.220	0.322
	LTE Band 26_UAT	15M	QPSK	1	0	Back	15mm	Full	26765	821.5	22.62	24.30	1.472	0.03	0.140	0.206
	LTE Band 26_UAT	15M	QPSK	1	0	Back	15mm	Full	26965	841.5	22.46	24.30	1.528	-0.05	0.182	0.278
	LTE Band 26_UAT	15M	QPSK	36	39	Front	15mm	Full	26865	831.5	21.75	23.30	1.429	0.11	0.143	0.204
	LTE Band 26_UAT	15M	QPSK	36	39	Back	15mm	Full	26865	831.5	21.75	23.30	1.429	-0.16	0.187	0.267
	LTE Band 26_LAT	15M	QPSK	1	0	Front	15mm	Full	26865	831.5	24.01	24.80	1.199	0.15	0.137	0.164
	LTE Band 26_LAT	15M	QPSK	1	0	Back	15mm	Full	26865	831.5	24.01	24.80	1.199	0.08	0.187	0.224
	LTE Band 26_LAT	15M	QPSK	1	0	Back	15mm	Full	26765	821.5	23.85	24.80	1.245	0.17	0.165	0.205
	LTE Band 26_LAT	15M	QPSK	1	0	Back	15mm	Full	26965	841.5	23.75	24.80	1.274	-0.12	0.120	0.153
	LTE Band 26_LAT	15M	QPSK	36	20	Front	15mm	Full	26865	831.5	23.00	23.80	1.202	-0.05	0.119	0.143
	LTE Band 26_LAT	15M	QPSK	36	20	Back	15mm	Full	26865	831.5	23.00	23.80	1.202	0.11	0.163	0.196



# FCC SAR TEST REPORT

Report No. : FA002703-02

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 66_UAT	20M	QPSK	1	0	Front	15mm	Full	132322	1745	22.18	23.30	1.294	0.06	0.088	0.114
	LTE Band 66_UAT	20M	QPSK	1	0	Back	15mm	Full	132322	1745	22.18	23.30	1.294	0.08	0.124	0.160
	LTE Band 66_UAT	20M	QPSK	1	0	Back	15mm	Full	132072	1720	22.01	23.30	1.346	-0.09	0.172	0.231
	LTE Band 66_UAT	20M	QPSK	1	0	Back	15mm	Full	132572	1770	22.00	23.30	1.349	0.05	0.192	0.259
	LTE Band 66_UAT	20M	QPSK	50	24	Front	15mm	Full	132322	1745	21.06	22.30	1.330	0.11	0.071	0.094
	LTE Band 66_UAT	20M	QPSK	50	24	Back	15mm	Full	132322	1745	21.06	22.30	1.330	0.02	0.094	0.125
	LTE Band 66_LAT	20M	QPSK	1	0	Front	15mm	Full	132322	1745	23.51	24.80	1.346	0.15	0.410	0.552
	LTE Band 66_LAT	20M	QPSK	1	0	Back	15mm	Full	132322	1745	23.51	24.80	1.346	0.11	0.396	0.533
77	LTE Band 66_LAT	20M	QPSK	1	0	Front	15mm	Full	132072	1720	23.43	24.80	1.371	-0.12	0.504	0.691
	LTE Band 66_LAT	20M	QPSK	1	0	Front	15mm	Full	132572	1770	23.41	24.80	1.377	0.15	0.359	0.494
	LTE Band 66_LAT	20M	QPSK	50	24	Front	15mm	Full	132322	1745	22.50	23.80	1.349	0.12	0.321	0.433
	LTE Band 66_LAT	20M	QPSK	50	24	Back	15mm	Full	132322	1745	22.50	23.80	1.349	0.18	0.306	0.413
5G NR EN-DC																
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	15mm	Full	132322	1745	20.91	22.00	1.285	0.15	0.116	0.149
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	15mm	Full	132322	1745	20.91	22.00	1.285	0.08	0.102	0.131
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	15mm	Full	132072	1720	20.68	22.00	1.355	-0.15	0.129	0.175
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	15mm	Full	132572	1770	20.59	22.00	1.384	0.05	0.109	0.151
	LTE Band 66_Ant 1	20M	QPSK	50	24	Front	15mm	Full	132322	1745	19.92	21.00	1.282	0.11	0.091	0.117
	LTE Band 66_Ant 1	20M	QPSK	50	24	Back	15mm	Full	132322	1745	19.92	21.00	1.282	0.08	0.082	0.105
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	15mm	Full	132322	1745	23.71	24.50	1.199	0.1	0.117	0.140
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	15mm	Full	132322	1745	23.71	24.50	1.199	0.15	0.125	0.150
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	15mm	Full	132072	1720	23.64	24.50	1.219	-0.08	0.091	0.111
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	15mm	Full	132572	1770	23.53	24.50	1.250	-0.13	0.211	0.264
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	15mm	Full	132322	1745	22.81	23.50	1.172	0.16	0.095	0.111
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	15mm	Full	132322	1745	22.81	23.50	1.172	0.11	0.123	0.144
	LTE Band 25_UAT	20M	QPSK	1	0	Front	15mm	Full	26340	1880	21.89	23.30	1.384	0.13	0.152	0.210
	LTE Band 25_UAT	20M	QPSK	1	0	Back	15mm	Full	26340	1880	21.89	23.30	1.384	-0.11	0.178	0.246
	LTE Band 25_UAT	20M	QPSK	1	0	Back	15mm	Full	26140	1860	21.78	23.30	1.419	0.15	0.177	0.251
	LTE Band 25_UAT	20M	QPSK	1	0	Back	15mm	Full	26590	1905	21.76	23.30	1.426	0.08	0.176	0.251
	LTE Band 25_UAT	20M	QPSK	50	0	Front	15mm	Full	26340	1880	20.87	22.30	1.390	-0.18	0.120	0.167
	LTE Band 25_UAT	20M	QPSK	50	0	Back	15mm	Full	26340	1880	20.87	22.30	1.390	0.12	0.158	0.220
	LTE Band 25_LAT	20M	QPSK	1	0	Front	15mm	Full	26340	1880	23.65	24.80	1.303	0.11	0.444	0.579
	LTE Band 25_LAT	20M	QPSK	1	0	Back	15mm	Full	26340	1880	23.65	24.80	1.303	0.08	0.453	0.590
	LTE Band 25_LAT	20M	QPSK	1	0	Back	15mm	Full	26140	1860	23.55	24.80	1.334	0.04	0.430	0.573
78	LTE Band 25_LAT	20M	QPSK	1	0	Back	15mm	Full	26590	1905	23.52	24.80	1.343	0.13	0.450	0.604
	LTE Band 25_LAT	20M	QPSK	50	24	Front	15mm	Full	26340	1880	22.75	23.80	1.274	0.16	0.320	0.408
	LTE Band 25_LAT	20M	QPSK	50	24	Back	15mm	Full	26340	1880	22.75	23.80	1.274	-0.09	0.350	0.446
	LTE Band 30_UAT	10M	QPSK	1	25	Front	15mm	Full	27710	2310	21.67	22.60	1.239	0.11	0.082	0.101
	LTE Band 30_UAT	10M	QPSK	1	25	Back	15mm	Full	27710	2310	21.67	22.60	1.239	-0.12	0.118	0.146
	LTE Band 30_UAT	10M	QPSK	25	25	Front	15mm	Full	27710	2310	20.85	21.60	1.189	-0.01	0.067	0.079
	LTE Band 30_UAT	10M	QPSK	25	25	Back	15mm	Full	27710	2310	20.85	21.60	1.189	-0.05	0.087	0.104
	LTE Band 30_LAT	10M	QPSK	1	0	Front	15mm	Full	27710	2310	23.52	24.80	1.343	0.01	0.376	0.505
79	LTE Band 30_LAT	10M	QPSK	1	0	Back	15mm	Full	27710	2310	23.52	24.80	1.343	-0.18	0.429	0.576
	LTE Band 30_LAT	10M	QPSK	25	25	Front	15mm	Full	27710	2310	22.61	23.80	1.315	0.13	0.302	0.397
	LTE Band 30_LAT	10M	QPSK	25	25	Back	15mm	Full	27710	2310	22.61	23.80	1.315	0.08	0.332	0.437



# FCC SAR TEST REPORT

Report No. : FA002703-02

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_UAT	20M	QPSK	1	99	Front	15mm	Full	21100	2535	21.48	23.10	1.452	-0.12	0.070	0.102
	LTE Band 7_UAT	20M	QPSK	1	99	Back	15mm	Full	21100	2535	21.48	23.10	1.452	0.04	0.139	0.202
	LTE Band 7_UAT	20M	QPSK	1	99	Back	15mm	Full	20850	2510	21.13	23.10	1.574	0.06	0.109	0.172
	LTE Band 7_UAT	20M	QPSK	1	99	Back	15mm	Full	21350	2560	21.30	23.10	1.514	0.19	0.107	0.162
	LTE Band 7_UAT	20M	QPSK	50	50	Front	15mm	Full	21100	2535	20.59	22.10	1.416	0.04	0.063	0.089
	LTE Band 7_UAT	20M	QPSK	50	50	Back	15mm	Full	21100	2535	20.59	22.10	1.416	0.06	0.092	0.130
	LTE Band 7_LAT	20M	QPSK	1	99	Front	15mm	Full	21100	2535	23.77	24.80	1.268	-0.06	0.272	0.345
	LTE Band 7_LAT	20M	QPSK	1	99	Back	15mm	Full	21100	2535	23.77	24.80	1.268	-0.04	0.295	0.374
80	LTE Band 7_LAT	20M	QPSK	1	99	Back	15mm	Full	20850	2510	23.33	24.80	1.403	-0.16	0.386	0.541
	LTE Band 7_LAT	20M	QPSK	1	99	Back	15mm	Full	21350	2560	23.62	24.80	1.312	-0.01	0.295	0.387
	LTE Band 7_LAT	20M	QPSK	50	50	Front	15mm	Full	21100	2535	22.89	23.80	1.233	0.05	0.236	0.291
	LTE Band 7_LAT	20M	QPSK	50	50	Back	15mm	Full	21100	2535	22.89	23.80	1.233	0.12	0.242	0.298
5G NR EN-DC																
	LTE Band 7_Ant 1	20M	QPSK	1	99	Front	15mm	Full	21100	2535	20.52	21.50	1.253	0.05	0.113	0.142
	LTE Band 7_Ant 1	20M	QPSK	1	99	Back	15mm	Full	21100	2535	20.52	21.50	1.253	0.06	0.132	0.165
	LTE Band 7_Ant 1	20M	QPSK	1	99	Back	15mm	Full	20850	2510	20.35	21.50	1.303	0.14	0.120	0.156
	LTE Band 7_Ant 1	20M	QPSK	1	99	Back	15mm	Full	21350	2560	20.38	21.50	1.294	0.19	0.145	0.188
	LTE Band 7_Ant 1	20M	QPSK	50	50	Front	15mm	Full	21100	2535	19.57	20.50	1.239	0.15	0.089	0.110
	LTE Band 7_Ant 1	20M	QPSK	50	50	Back	15mm	Full	21100	2535	19.57	20.50	1.239	0.08	0.104	0.129
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	15mm	Full	21100	2535	24.18	25.00	1.208	0.16	0.128	0.155
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	15mm	Full	21100	2535	24.18	25.00	1.208	0.17	0.173	0.209
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	15mm	Full	20850	2510	23.90	25.00	1.288	-0.02	0.164	0.211
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	15mm	Full	21350	2560	24.11	25.00	1.227	0.01	0.310	0.381
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	15mm	Full	21100	2535	23.24	24.00	1.191	0.13	0.099	0.118
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	15mm	Full	21100	2535	23.24	24.00	1.191	0.01	0.138	0.164





# FCC SAR TEST REPORT

Report No. : FA002703-02

## <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_UAT	20M	QPSK	1	49	Front	15mm	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	0.15	0.034	0.045
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	20.59	21.80	1.321	62.9	1.006	0.06	0.058	0.077
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	20.38	21.80	1.387	62.9	1.006	0.08	0.072	0.100
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	20.27	21.80	1.422	62.9	1.006	0.06	0.052	0.075
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	20.25	21.80	1.429	62.9	1.006	-0.08	0.042	0.061
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	20.26	21.80	1.426	62.9	1.006	0.04	0.043	0.062
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	20.61	21.80	1.315	62.9	1.006	0.07	0.020	0.026
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	20.41	21.80	1.377	62.9	1.006	0.02	0.040	0.055
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	20.47	21.80	1.358	62.9	1.006	0.03	0.019	0.026
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	20.56	21.80	1.330	62.9	1.006	0.07	0.021	0.029
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	20.54	21.80	1.337	62.9	1.006	-0.02	0.011	0.015
	LTE Band 41_UAT	20M	QPSK	50	50	Front	15mm	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	0.01	0.027	0.035
	LTE Band 41_UAT	20M	QPSK	50	50	Back	15mm	Full	40185	2549.5	19.75	20.80	1.274	62.9	1.006	0.1	0.047	0.060
	LTE Band 41_LAT	20M	QPSK	1	49	Front	15mm	Full	40185	2549.5	23.91	24.80	1.227	62.9	1.006	-0.16	0.287	0.354
	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	23.91	24.80	1.227	62.9	1.006	-0.01	0.297	0.367
	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	23.40	24.80	1.380	62.9	1.006	0.15	0.277	0.385
	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	23.54	24.80	1.337	62.9	1.006	0.08	0.297	0.399
81	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	23.60	24.80	1.318	62.9	1.006	-0.04	0.350	0.464
	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	23.67	24.80	1.297	62.9	1.006	-0.08	0.334	0.436
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	23.49	24.80	1.352	62.9	1.006	0.08	0.196	0.267
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	23.43	24.80	1.371	62.9	1.006	-0.02	0.190	0.262
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	23.69	24.80	1.291	62.9	1.006	0.04	0.203	0.264
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	23.66	24.80	1.300	62.9	1.006	-0.07	0.247	0.323
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	23.78	24.80	1.265	62.9	1.006	0.04	0.193	0.246
	LTE Band 41_LAT	20M	QPSK	50	50	Front	15mm	Full	40185	2549.5	22.96	23.80	1.213	62.9	1.006	0.06	0.235	0.287
	LTE Band 41_LAT	20M	QPSK	50	50	Back	15mm	Full	40185	2549.5	22.96	23.80	1.213	62.9	1.006	0.08	0.240	0.293
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Front	15mm	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	-0.04	0.038	0.050
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	40185	2549.5	22.62	23.80	1.312	42.9	1.009	-0.16	0.066	0.088
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	40620	2593	22.40	23.80	1.380	42.9	1.009	0.12	0.067	0.093
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	41055	2636.5	22.45	23.80	1.365	42.9	1.009	0.06	0.044	0.061
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	41490	2680	22.37	23.80	1.390	42.9	1.009	-0.08	0.044	0.062
	LTE Band 41_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	39750	2506	22.41	23.80	1.377	42.9	1.009	0.02	0.078	0.108
	LTE Band 41C_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	21.73	22.80	1.279	42.9	1.009	0.06	0.022	0.028
	LTE Band 41C_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	21.41	22.80	1.377	42.9	1.009	-0.04	0.022	0.030
	LTE Band 41C_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	21.80	22.80	1.259	42.9	1.009	0.01	0.014	0.018
	LTE Band 41C_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	21.79	22.80	1.262	42.9	1.009	0.09	0.013	0.016
	LTE Band 41C_HPUE_UAT	20M	QPSK	1	99	Back	15mm	Full	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	21.72	22.80	1.282	42.9	1.009	0.02	0.011	0.014
	LTE Band 41_HPUE_LAT	20M	QPSK	50	0	Front	15mm	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	0.15	0.036	0.044
	LTE Band 41_HPUE_LAT	20M	QPSK	50	0	Back	15mm	Full	40185	2549.5	21.88	22.80	1.236	42.9	1.009	0.06	0.055	0.068
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Front	15mm	Full	40185	2549.5	25.77	26.80	1.268	42.9	1.009	-0.16	0.255	0.326
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	40185	2549.5	25.77	26.80	1.268	42.9	1.009	-0.01	0.282	0.361
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	39750	2506	25.40	26.80	1.380	42.9	1.009	0.15	0.279	0.389
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	40620	2593	25.56	26.80	1.330	42.9	1.009	0.06	0.295	0.396
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	41055	2636.5	25.55	26.80	1.334	42.9	1.009	-0.08	0.311	0.418
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	41490	2680	25.45	26.80	1.365	42.9	1.009	-0.01	0.315	0.434
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	40185(PCC)+ 40383(SCC)	2549.5(PCC)+ 2569.3(SCC)	24.76	25.80	1.271	42.9	1.009	0.06	0.144	0.185
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	39750(PCC)+ 39948(SCC)	2506(PCC)+ 2525.8(SCC)	24.60	25.80	1.318	42.9	1.009	0.08	0.164	0.218
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	40620(PCC)+ 40422(SCC)	2593(PCC)+ 2573.2(SCC)	24.98	25.80	1.208	42.9	1.009	0.04	0.131	0.160
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	41055(PCC)+ 40857(SCC)	2636.5(PCC)+ 2616.7(SCC)	24.80	25.80	1.259	42.9	1.009	0.09	0.129	0.164
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Back	15mm	Full	41490(PCC)+ 41292(SCC)	2680(PCC)+ 2660.2(SCC)	24.82	25.80	1.253	42.9	1.009	0.02	0.126	0.159
	LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Front	15mm	Full	40185	2549.5	24.91	25.80	1.227	42.9	1.009	-0.01	0.235	0.291
	LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Back	15mm	Full	40185	2549.5	24.91	25.80	1.227	42.9	1.009	0.15	0.252	0.312





# FCC SAR TEST REPORT

Report No. : FA002703-02

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 48_UAT	20M	QPSK	1	0	Front	15mm	Full	55830	3609	23.36	24.80	1.393	62.9	1.006	0.15	0.121	0.170
	LTE Band 48_UAT	20M	QPSK	1	0	Back	15mm	Full	55830	3609	23.36	24.80	1.393	62.9	1.006	0.06	0.242	0.339
82	LTE Band 48_UAT	20M	QPSK	1	0	Back	15mm	Full	55340	3560	23.20	24.80	1.445	62.9	1.006	-0.03	0.290	0.422
	LTE Band 48_UAT	20M	QPSK	1	0	Back	15mm	Full	56150	3641	23.09	24.80	1.483	62.9	1.006	-0.08	0.265	0.395
	LTE Band 48_UAT	20M	QPSK	1	0	Back	15mm	Full	56640	3690	23.08	24.80	1.486	62.9	1.006	-0.16	0.247	0.369
	LTE Band 48C_UAT	20M	QPSK	1	0	Back	15mm	Full	55830(PCC)+ 55632(SCC)	3609(PCC)+ 3589.2(SCC)	22.33	23.80	1.403	62.9	1.006	0.06	0.050	0.071
	LTE Band 48C_UAT	20M	QPSK	1	0	Back	15mm	Full	55340(PCC)+ 55538(SCC)	3560(PCC)+ 3579.8(SCC)	22.46	23.80	1.361	62.9	1.006	0.08	0.084	0.115
	LTE Band 48C_UAT	20M	QPSK	1	0	Back	15mm	Full	56150(PCC)+ 55952(SCC)	3641(PCC)+ 3621.2(SCC)	22.38	23.80	1.387	62.9	1.006	-0.05	0.102	0.142
	LTE Band 48C_UAT	20M	QPSK	1	0	Back	15mm	Full	56640(PCC)+ 56442(SCC)	3690(PCC)+ 3670.2(SCC)	22.20	23.80	1.445	62.9	1.006	0.02	0.141	0.205
	LTE Band 48_UAT	20M	QPSK	50	0	Front	15mm	Full	55830	3609	22.45	23.80	1.365	62.9	1.006	-0.01	0.101	0.139
	LTE Band 48_UAT	20M	QPSK	50	0	Back	15mm	Full	55830	3609	22.45	23.80	1.365	62.9	1.006	0.15	0.212	0.291



## &lt;5G NR SAR&gt;

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)
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Front	15mm	Full	136100	680.5	22.52	23.50	1.253	0.06	0.109	0.137
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Back	15mm	Full	136100	680.5	22.52	23.50	1.253	-0.11	0.136	0.170
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Front	15mm	Full	136100	680.5	22.40	23.50	1.288	0.13	0.107	0.138
83	N71_Ant 0	20M	BPSK	50	28	DFT-15	Back	15mm	Full	136100	680.5	22.40	23.50	1.288	-0.05	0.141	0.182
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Front	15mm	Full	136100	680.5	24.13	24.80	1.167	0.15	0.119	0.139
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Back	15mm	Full	136100	680.5	24.13	24.80	1.167	-0.03	0.122	0.142
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Front	15mm	Full	136100	680.5	24.07	24.80	1.183	0.01	0.132	0.156
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Back	15mm	Full	136100	680.5	24.07	24.80	1.183	0.12	0.140	0.166
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Front	15mm	Full	167300	836.5	22.40	23.50	1.288	-0.18	0.200	0.258
84	N5_Ant 0	20M	BPSK	1	1	DFT-15	Back	15mm	Full	167300	836.5	22.40	23.50	1.288	-0.08	0.226	0.291
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Front	15mm	Full	167300	836.5	22.19	23.50	1.352	0.17	0.163	0.220
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Back	15mm	Full	167300	836.5	22.19	23.50	1.352	0.03	0.194	0.262
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Front	15mm	Full	167300	836.5	24.06	24.80	1.186	0.06	0.114	0.135
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Back	15mm	Full	167300	836.5	24.06	24.80	1.186	0.04	0.160	0.190
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Front	15mm	Full	167300	836.5	23.93	24.80	1.222	-0.08	0.106	0.130
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Back	15mm	Full	167300	836.5	23.93	24.80	1.222	-0.09	0.166	0.203
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Front	15mm	Full	344000	1720	21.29	21.80	1.125	0.13	0.108	0.121
	N66_Ant 2	20M	BPSK	1	1	DFT-15	Back	15mm	Full	344000	1720	21.29	21.80	1.125	0.08	0.169	0.190
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Front	15mm	Full	344000	1720	21.18	21.80	1.153	0.14	0.109	0.126
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Back	15mm	Full	344000	1720	21.18	21.80	1.153	-0.08	0.169	0.195
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Back	15mm	Full	349000	1745	20.75	21.80	1.274	0.05	0.143	0.182
	N66_Ant 2	20M	BPSK	50	28	DFT-15	Back	15mm	Full	354000	1770	20.98	21.80	1.208	0.08	0.117	0.141
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Front	15mm	Full	344000	1720	23.83	24.80	1.250	0.08	0.210	0.263
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Back	15mm	Full	344000	1720	23.83	24.80	1.250	0.14	0.296	0.370
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Front	15mm	Full	344000	1720	23.74	24.80	1.276	0.04	0.207	0.264
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Back	15mm	Full	344000	1720	23.74	24.80	1.276	-0.01	0.344	0.439
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Back	15mm	Full	349000	1745	23.67	24.80	1.297	0.18	0.221	0.287
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Back	15mm	Full	354000	1770	23.60	24.80	1.318	-0.03	0.277	0.365
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Front	15mm	Full	349000	1745	21.16	21.80	1.159	-0.11	0.082	0.095
	N66_Ant 1	20M	BPSK	1	1	DFT-15	Back	15mm	Full	349000	1745	21.16	21.80	1.159	0.06	0.094	0.109
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Front	15mm	Full	349000	1745	21.01	21.80	1.199	-0.15	0.082	0.098
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Back	15mm	Full	349000	1745	21.01	21.80	1.199	-0.01	0.092	0.110
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Back	15mm	Full	344000	1720	20.89	21.80	1.233	-0.09	0.108	0.133
	N66_Ant 1	20M	BPSK	50	28	DFT-15	Back	15mm	Full	354000	1770	20.82	21.80	1.253	0.06	0.099	0.124
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Front	15mm	Full	344000	1720	24.14	24.80	1.164	0.06	0.363	0.423
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Back	15mm	Full	344000	1720	24.14	24.80	1.164	-0.14	0.376	0.438
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Front	15mm	Full	344000	1720	23.70	24.80	1.288	0.16	0.350	0.451
85	N66_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	344000	1720	23.70	24.80	1.288	-0.14	0.360	0.464
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	349000	1745	23.66	24.80	1.300	-0.05	0.354	0.460
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	354000	1770	23.68	24.80	1.294	0.04	0.351	0.454



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Front	15mm	Full	376000	1880	21.32	21.80	1.117	-0.11	0.110	0.123
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Back	15mm	Full	376000	1880	21.32	21.80	1.117	0.15	0.157	0.175
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Back	15mm	Full	372000	1860	21.23	21.80	1.140	0.08	0.159	0.181
	N2_Ant 2	20M	BPSK	1	53	DFT-15	Back	15mm	Full	380000	1900	21.11	21.80	1.172	-0.18	0.134	0.157
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Front	15mm	Full	376000	1880	21.22	21.80	1.143	0.06	0.100	0.114
	N2_Ant 2	20M	BPSK	50	28	DFT-15	Back	15mm	Full	376000	1880	21.22	21.80	1.143	-0.05	0.147	0.168
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Front	15mm	Full	372000	1860	23.91	24.80	1.227	-0.17	0.372	0.457
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Back	15mm	Full	372000	1860	23.91	24.80	1.227	0.18	0.395	0.485
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Front	15mm	Full	372000	1860	23.81	24.80	1.256	0.08	0.373	0.468
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	372000	1860	23.81	24.80	1.256	-0.04	0.402	0.505
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	376000	1880	23.70	24.80	1.288	0.12	0.429	0.553
86	N2_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	380000	1900	23.77	24.80	1.268	0.07	0.437	0.554
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Front	15mm	Full	381000	1905	21.21	21.80	1.146	0.15	0.098	0.112
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Back	15mm	Full	381000	1905	21.21	21.80	1.146	0.08	0.135	0.155
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Back	15mm	Full	372000	1860	21.06	21.80	1.186	-0.18	0.140	0.166
	N25_Ant 2	20M	BPSK	1	1	DFT-15	Back	15mm	Full	376500	1882.5	20.93	21.80	1.222	0.01	0.157	0.192
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Front	15mm	Full	381000	1905	21.06	21.80	1.186	-0.01	0.094	0.111
	N25_Ant 2	20M	BPSK	50	28	DFT-15	Back	15mm	Full	381000	1905	21.06	21.80	1.186	-0.04	0.129	0.153
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Front	15mm	Full	376500	1882.5	23.88	24.80	1.236	-0.04	0.369	0.456
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Back	15mm	Full	376500	1882.5	23.88	24.80	1.236	0.05	0.417	0.515
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Front	15mm	Full	376500	1882.5	23.67	24.80	1.297	0.14	0.355	0.460
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	376500	1882.5	23.67	24.80	1.297	0.08	0.410	0.532
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	372000	1860	23.65	24.80	1.303	-0.06	0.391	0.510
87	N25_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	381000	1905	23.60	24.80	1.318	0.01	0.442	0.583
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Front	15mm	Full	502000	2510	20.87	21.80	1.239	0.05	0.064	0.079
	N7_Ant 2	20M	BPSK	1	53	DFT-15	Back	15mm	Full	502000	2510	20.87	21.80	1.239	0.15	0.090	0.111
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Front	15mm	Full	502000	2510	20.69	21.80	1.291	-0.18	0.064	0.083
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Back	15mm	Full	502000	2510	20.69	21.80	1.291	0.15	0.091	0.118
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Back	15mm	Full	507000	2535	20.64	21.80	1.306	-0.12	0.102	0.133
	N7_Ant 2	20M	BPSK	50	28	DFT-15	Back	15mm	Full	512000	2560	20.60	21.80	1.318	-0.09	0.169	0.223
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Front	15mm	Full	507000	2535	23.91	24.80	1.227	0.15	0.290	0.356
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Back	15mm	Full	507000	2535	23.91	24.80	1.227	0.06	0.438	0.538
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Back	15mm	Full	502000	2510	23.74	24.80	1.276	-0.08	0.288	0.368
88	N7_Ant 3	20M	BPSK	1	1	DFT-15	Back	15mm	Full	512000	2560	23.58	24.80	1.324	-0.02	0.408	0.540
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Front	15mm	Full	507000	2535	23.85	24.80	1.245	0.08	0.255	0.317
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Back	15mm	Full	507000	2535	23.85	24.80	1.245	-0.18	0.431	0.536



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	15mm	Full	518598	2592.99	22.88	23.80	1.236	-0.01	0.110	0.136
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	15mm	Full	518598	2592.99	22.88	23.80	1.236	-0.04	0.172	0.213
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Front	15mm	Full	518598	2592.99	22.61	23.80	1.315	0.11	0.131	0.172
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Back	15mm	Full	518598	2592.99	22.61	23.80	1.315	0.06	0.188	0.247
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Back	15mm	Full	509202	2546.01	22.54	23.80	1.337	-0.09	0.165	0.221
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Back	15mm	Full	528000	2640	22.44	23.80	1.368	-0.01	0.280	0.383
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Front	15mm	Full	518598	2592.99	26.40	26.80	1.096	0.11	0.147	0.161
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Back	15mm	Full	518598	2592.99	26.40	26.80	1.096	0.05	0.207	0.227
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Front	15mm	Full	518598	2592.99	26.25	26.80	1.135	-0.09	0.142	0.161
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Back	15mm	Full	518598	2592.99	26.25	26.80	1.135	-0.01	0.205	0.233
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Back	15mm	Full	509202	2546.01	26.15	26.80	1.161	0.15	0.114	0.132
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Back	15mm	Full	528000	2640	26.11	26.80	1.172	0.08	0.331	0.388
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Front	15mm	Full	518598	2592.99	20.92	21.80	1.225	-0.17	0.048	0.059
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Back	15mm	Full	518598	2592.99	20.92	21.80	1.225	-0.01	0.070	0.086
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Back	15mm	Full	509202	2546.01	20.83	21.80	1.250	0.15	0.111	0.139
	N41_Ant 2	100M	BPSK	1	1	DFT-30	Back	15mm	Full	528000	2640	20.41	21.80	1.377	0.12	0.067	0.092
	N41_Ant 2	100M	BPSK	135	69	DFT-30	Front	15mm	Full	518598	2592.99	20.74	21.80	1.276	0.05	0.043	0.055
	N41_Ant 2	100M	BPSK	135	69	DFT-30	Back	15mm	Full	518598	2592.99	20.74	21.80	1.276	-0.12	0.048	0.061
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Front	15mm	Full	518598	2592.99	22.83	23.80	1.250	0.06	0.065	0.081
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Back	15mm	Full	518598	2592.99	22.83	23.80	1.250	-0.09	0.102	0.128
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Back	15mm	Full	509202	2546.01	22.73	23.80	1.279	-0.12	0.195	0.249
	N41(HPUE)_Ant 2	100M	BPSK	1	1	DFT-30	Back	15mm	Full	528000	2640	22.41	23.80	1.377	-0.06	0.103	0.142
	N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Front	15mm	Full	518598	2592.99	22.70	23.80	1.288	0.06	0.001	0.001
	N41(HPUE)_Ant 2	100M	BPSK	135	69	DFT-30	Back	15mm	Full	518598	2592.99	22.70	23.80	1.288	-0.05	0.073	0.094
	N41_Ant 1	100M	BPSK	1	1	DFT-30	Front	15mm	Full	518598	2592.99	19.60	20.30	1.175	-0.12	0.085	0.100
	N41_Ant 1	100M	BPSK	1	1	DFT-30	Back	15mm	Full	518598	2592.99	19.60	20.30	1.175	0.04	0.096	0.113
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Front	15mm	Full	518598	2592.99	19.33	20.30	1.250	0.05	0.085	0.106
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Back	15mm	Full	518598	2592.99	19.33	20.30	1.250	-0.04	0.095	0.119
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Back	15mm	Full	509202	2546.01	19.13	20.30	1.309	0.05	0.124	0.162
	N41_Ant 1	100M	BPSK	135	69	DFT-30	Back	15mm	Full	528000	2640	19.07	20.30	1.327	-0.04	0.072	0.096
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Front	15mm	Full	518598	2592.99	22.54	23.30	1.191	-0.07	0.190	0.226
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Back	15mm	Full	518598	2592.99	22.54	23.30	1.191	-0.18	0.222	0.264
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Back	15mm	Full	509202	2546.01	22.43	23.30	1.222	0.04	0.179	0.219
	N41(HPUE)_Ant 1	100M	BPSK	1	1	DFT-30	Back	15mm	Full	528000	2640	22.27	23.30	1.268	0.05	0.208	0.264
	N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Front	15mm	Full	518598	2592.99	22.41	23.30	1.227	-0.15	0.183	0.225
	N41(HPUE)_Ant 1	100M	BPSK	135	69	DFT-30	Back	15mm	Full	518598	2592.99	22.41	23.30	1.227	-0.09	0.201	0.247
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Front	15mm	Full	518598	2592.99	23.87	24.80	1.239	-0.12	0.314	0.389
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	15mm	Full	518598	2592.99	23.87	24.80	1.239	0.11	0.476	0.590
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	15mm	Full	509202	2546.01	23.77	24.80	1.268	0.03	0.589	0.747
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	15mm	Full	528000	2640	23.71	24.80	1.285	-0.01	0.430	0.553
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Front	15mm	Full	518598	2592.99	23.81	24.80	1.256	0.13	0.267	0.335
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Back	15mm	Full	518598	2592.99	23.81	24.80	1.256	-0.04	0.268	0.337
	N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Front	15mm	Full	518598	2592.99	25.96	26.80	1.213	0.11	0.344	0.417
	N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Back	15mm	Full	518598	2592.99	25.96	26.80	1.213	0.08	0.509	0.618
89	N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Back	15mm	Full	509202	2546.01	25.82	26.80	1.253	-0.04	0.598	0.749
	N41(HPUE)_Ant 3	100M	BPSK	1	1	DFT-30	Back	15mm	Full	528000	2640	25.76	26.80	1.271	0.19	0.456	0.579
	N41(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Front	15mm	Full	518598	2592.99	25.63	26.80	1.309	0.12	0.297	0.389
	N41(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Back	15mm	Full	518598	2592.99	25.63	26.80	1.309	-0.01	0.303	0.397



# FCC SAR TEST REPORT

Report No. : FA002703-02

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)
	N77_Ant9	100M	BPSK	1	1	DFT-30	Front	15mm	Full	656000	3840	23.58	24.80	1.324	0.11	0.131	0.173
	N77_Ant9	100M	BPSK	1	1	DFT-30	Back	15mm	Full	656000	3840	23.58	24.80	1.324	-0.02	0.194	0.257
90	N77_Ant9	100M	BPSK	1	1	DFT-30	Back	15mm	Full	650000	3750	23.50	24.80	1.349	0.04	0.240	0.324
	N77_Ant9	100M	BPSK	1	1	DFT-30	Back	15mm	Full	662000	3930	23.46	24.80	1.361	-0.09	0.121	0.165
	N77_Ant9	100M	BPSK	135	69	DFT-30	Front	15mm	Full	656000	3840	23.55	24.80	1.334	0.05	0.124	0.165
	N77_Ant9	100M	BPSK	135	69	DFT-30	Back	15mm	Full	656000	3840	23.55	24.80	1.334	-0.09	0.166	0.221

## <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	15mm	Ant 1+2	Reduced Power Level 1	1	2412	22.44	23.50	1.276	98.35	1.017	0.06	0.108	0.140
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced Power Level 1	1	2412	22.44	23.50	1.276	98.35	1.017	0.12	0.140	0.182
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced Power Level 1	6	2437	22.37	23.50	1.297	98.35	1.017	0.06	0.152	0.201
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced Power Level 1	11	2462	22.04	23.50	1.400	98.35	1.017	-0.04	0.177	0.252
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 1+2	Reduced Power Level 2/3/4	1	2412	20.44	21.50	1.276	98.35	1.017	0.08	0.108	0.140
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4	1	2412	20.44	21.50	1.276	98.35	1.017	-0.04	0.140	0.182
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4	6	2437	20.37	21.50	1.297	98.35	1.017	-0.08	0.152	0.201
91	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4	11	2462	20.04	21.50	1.400	98.35	1.017	-0.14	0.177	0.252
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 2	Reduced Power Level 6	1	2412	17.90	18.50	1.148	97.93	1.021	0.15	0.061	0.072
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 2	Reduced Power Level 6	1	2412	17.90	18.50	1.148	97.93	1.021	0.06	0.074	0.087
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 2	Reduced Power Level 6	6	2437	17.60	18.50	1.230	97.93	1.021	0.08	0.085	0.106
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 2	Reduced Power Level 6	11	2462	17.50	18.50	1.259	97.93	1.021	-0.04	0.069	0.089



## &lt;WLAN5G SAR&gt;

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)
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.18	0.066	0.083
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.15	0.615	0.765
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	54	5270	20.93	22.00	1.279	100	1.000	-0.09	0.495	0.633
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.06	0.066	0.083
92	WLAN5.3GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	-0.08	0.615	0.765
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	54	5270	20.93	22.00	1.279	100	1.000	-0.01	0.495	0.633
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	62	5310	18.05	19.00	1.245	100	1.000	-0.01	0.001	0.001
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	62	5310	18.05	19.00	1.245	100	1.000	-0.04	0.297	0.370
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	54	5270	17.93	19.00	1.279	100	1.000	-0.06	0.229	0.293
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	-0.04	0.071	0.085
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	-0.08	0.719	0.858
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	102	5510	20.98	22.00	1.266	100	1.000	-0.16	0.580	0.734
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	126	5630	21.11	22.00	1.227	100	1.000	0.05	0.817	1.003
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	134	5670	20.97	22.00	1.269	100	1.000	-0.05	0.886	1.124
93	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	142	5710	20.92	22.00	1.281	100	1.000	-0.12	0.897	1.149
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	110	5550	17.33	18.00	1.167	100	1.000	-0.05	0.001	0.001
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	110	5550	17.33	18.00	1.167	100	1.000	-0.15	0.203	0.237
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	102	5510	17.08	18.00	1.237	100	1.000	0.05	0.194	0.240
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	126	5630	17.21	18.00	1.199	100	1.000	-0.04	0.233	0.279
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	134	5670	17.07	18.00	1.240	100	1.000	0.05	0.259	0.321
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	142	5710	17.02	18.00	1.252	100	1.000	-0.01	0.301	0.377
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	110	5550	17.33	18.00	1.167	100	1.000	-0.05	0.001	0.001
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	110	5550	17.33	18.00	1.167	100	1.000	-0.15	0.203	0.237
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	102	5510	17.08	18.00	1.237	100	1.000	0.05	0.194	0.240
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	126	5630	17.21	18.00	1.199	100	1.000	-0.04	0.233	0.279
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	134	5670	17.07	18.00	1.240	100	1.000	0.05	0.259	0.321
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	142	5710	17.02	18.00	1.252	100	1.000	-0.01	0.301	0.377
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced Power Level 1/5	159	5795	20.84	22.00	1.307	100	1.000	0.06	0.074	0.097
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	159	5795	20.84	22.00	1.307	100	1.000	0.11	0.635	0.830
94	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 1/5	151	5755	20.74	22.00	1.336	100	1.000	0.16	0.775	1.035
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	159	5795	16.94	18.00	1.276	100	1.000	-0.04	0.035	0.045
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	159	5795	16.94	18.00	1.276	100	1.000	-0.08	0.237	0.303
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	151	5755	16.84	18.00	1.306	100	1.000	-0.16	0.280	0.366
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	159	5795	16.94	18.00	1.276	100	1.000	-0.04	0.035	0.045
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	159	5795	16.94	18.00	1.276	100	1.000	-0.08	0.237	0.303
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced Power Level 2/3/4/6	151	5755	16.84	18.00	1.306	100	1.000	-0.16	0.280	0.366

## &lt;Bluetooth SAR&gt;

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)
	Bluetooth	DH5 1Mbps	Front	15mm	Ant 1	Full	39	2441	14.00	16.00	1.585	76.69	1.304	0.06	0.032	0.066
95	Bluetooth	DH5 1Mbps	Back	15mm	Ant 1	Full	39	2441	14.00	16.00	1.585	76.69	1.304	0.03	0.068	0.140
	Bluetooth	DH5 1Mbps	Back	15mm	Ant 1	Full	0	2402	12.70	14.70	1.585	76.69	1.304	-0.09	0.023	0.047
	Bluetooth	DH5 1Mbps	Back	15mm	Ant 1	Full	78	2480	12.10	14.10	1.585	76.69	1.304	-0.01	0.030	0.062



**19.4 Product Specific SAR****<CDMA 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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	0mm	Reduced	600	1880	21.83	22.70	1.222	0.11	1.970	2.407
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	0mm	Reduced	25	1851.25	21.72	22.70	1.253	0.05	1.830	2.293
96	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	0mm	Reduced	1175	1908.75	21.69	22.70	1.262	0.01	2.050	2.587
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Full	1175	1908.75	23.65	24.80	1.303	0.04	0.778	1.014
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Full	600	1880	23.74	24.80	1.276	0.09	0.650	0.830
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Full	25	1851.25	23.62	24.80	1.312	-0.04	0.584	0.766

**<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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	0mm	Reduced	1413	1732.6	21.90	22.60	1.175	-0.09	1.510	1.774
97	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	0mm	Reduced	1312	1712.4	21.81	22.60	1.199	-0.1	1.750	2.099
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	0mm	Reduced	1513	1752.6	21.71	22.60	1.227	0.11	1.380	1.694
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	10mm	Full	1312	1712.4	23.69	24.80	1.291	-0.06	0.713	0.921
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	10mm	Full	1413	1732.6	23.91	24.80	1.227	0.02	0.654	0.803
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	10mm	Full	1513	1752.6	23.76	24.80	1.271	0.09	0.604	0.767
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	0mm	Reduced	9400	1880	21.50	22.20	1.175	-0.01	1.750	2.056
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	0mm	Reduced	9262	1852.4	21.35	22.20	1.216	-0.04	1.540	1.873
98	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	0mm	Reduced	9538	1907.6	21.37	22.20	1.211	-0.05	1.890	2.288
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	10mm	Full	9538	1907.6	23.77	24.80	1.268	0.01	0.964	1.222
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	10mm	Full	9262	1852.4	23.78	24.80	1.265	0.11	0.714	0.903
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	10mm	Full	9400	1880	23.92	24.80	1.225	0.04	0.762	0.933

**<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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	0mm	Reduced	132322	1745	21.36	21.80	1.107	-0.09	1.330	1.472
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Full	132572	1770	23.41	24.80	1.377	0.09	0.644	0.887
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Full	132072	1720	23.43	24.80	1.371	0.01	0.633	0.868
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Full	132322	1745	23.51	24.80	1.346	-0.06	0.619	0.833
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132322	1745	21.20	21.80	1.148	-0.09	1.410	1.619
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132072	1720	21.16	21.80	1.159	0.05	1.440	1.669
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132572	1770	21.01	21.80	1.199	-0.16	1.610	1.931
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Full	132572	1770	22.38	23.80	1.387	-0.02	0.524	0.727
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Full	132072	1720	22.41	23.80	1.377	-0.02	0.491	0.676
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Full	132322	1745	22.50	23.80	1.349	-0.02	0.506	0.683
5G NR EN-DC																
	LTE Band 66_Ant 0	20M	QPSK	1	0	Top Side	0mm	Full	132322	1745	23.71	24.50	1.199	0.11	1.580	1.895
99	LTE Band 66_Ant 0	20M	QPSK	1	0	Top Side	0mm	Full	132072	1720	23.64	24.50	1.219	-0.02	1.660	2.024
	LTE Band 66_Ant 0	20M	QPSK	1	0	Top Side	0mm	Full	132572	1770	23.53	24.50	1.250	0.05	1.500	1.875
	LTE Band 66_Ant 0	20M	QPSK	50	24	Top Side	0mm	Full	132322	1745	22.81	23.50	1.172	-0.05	1.120	1.313
	LTE Band 66_Ant 0	20M	QPSK	100	0	Top Side	0mm	Full	132322	1745	22.65	23.50	1.216	0.02	1.150	1.399



# FCC SAR TEST REPORT

Report No. : FA002703-02

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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	0mm	Reduced	26340	1880	21.25	22.00	1.189	0.14	1.700	2.020
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	0mm	Reduced	26140	1860	21.04	22.00	1.247	0.19	1.680	2.096
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	0mm	Reduced	26590	1905	21.01	22.00	1.256	0.18	1.730	2.173
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Full	26590	1905	23.52	24.80	1.343	0.18	0.710	0.953
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Full	26140	1860	23.55	24.80	1.334	0.02	0.660	0.880
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Full	26340	1880	23.65	24.80	1.303	0.09	0.710	0.925
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	26340	1880	21.21	22.00	1.199	0.11	1.900	2.279
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	26140	1860	21.00	22.00	1.259	0.08	1.790	2.253
100	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	26590	1905	20.98	22.00	1.265	-0.08	1.830	2.314
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Full	26590	1905	22.66	23.80	1.300	-0.17	0.564	0.733
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Full	26140	1860	22.65	23.80	1.303	0.09	0.556	0.725
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Full	26340	1880	22.75	23.80	1.274	-0.04	0.583	0.742
	LTE Band 25_LAT	20M	QPSK	100	0	Bottom Side	0mm	Reduced	26340	1880	21.13	22.00	1.222	-0.05	1.750	2.138
	LTE Band 30_LAT	10M	QPSK	1	0	Front	0mm	Reduced	27710	2310	20.17	21.00	1.211	-0.01	1.310	1.586
	LTE Band 30_LAT	10M	QPSK	1	0	Back	0mm	Reduced	27710	2310	20.17	21.00	1.211	0.15	1.890	2.288
	LTE Band 30_LAT	10M	QPSK	1	0	Bottom Side	0mm	Reduced	27710	2310	20.17	21.00	1.211	0.05	1.270	1.537
	LTE Band 30_LAT	10M	QPSK	1	0	Front	9mm	Full	27710	2310	23.52	24.80	1.343	0.08	0.549	0.737
	LTE Band 30_LAT	10M	QPSK	1	0	Back	10mm	Full	27710	2310	23.52	24.80	1.343	0.11	0.467	0.627
	LTE Band 30_LAT	10M	QPSK	1	0	Bottom Side	10mm	Full	27710	2310	23.52	24.80	1.343	0.04	0.602	0.808
	LTE Band 30_LAT	10M	QPSK	25	25	Front	0mm	Reduced	27710	2310	20.05	21.00	1.245	0.02	1.320	1.643
101	LTE Band 30_LAT	10M	QPSK	25	25	Back	0mm	Reduced	27710	2310	20.05	21.00	1.245	-0.15	1.910	2.377
	LTE Band 30_LAT	10M	QPSK	25	25	Bottom Side	0mm	Reduced	27710	2310	20.05	21.00	1.245	0.08	1.290	1.605
	LTE Band 30_LAT	10M	QPSK	25	25	Front	9mm	Full	27710	2310	22.61	23.80	1.315	0.09	0.409	0.538
	LTE Band 30_LAT	10M	QPSK	25	25	Back	10mm	Full	27710	2310	22.61	23.80	1.315	0.04	0.348	0.458
	LTE Band 30_LAT	10M	QPSK	25	25	Bottom Side	10mm	Full	27710	2310	22.61	23.80	1.315	0.05	0.448	0.589
	LTE Band 30_LAT	10M	QPSK	50	0	Back	0mm	Reduced	27710	2310	20.10	21.00	1.230	-0.04	1.720	2.116
	LTE Band 7_LAT	20M	QPSK	1	99	Bottom Side	0mm	Reduced	21100	2535	21.44	21.80	1.086	-0.01	1.650	1.793
	LTE Band 7_LAT	20M	QPSK	1	99	Bottom Side	10mm	Full	20850	2510	23.33	24.80	1.403	0.06	0.493	0.692
	LTE Band 7_LAT	20M	QPSK	1	99	Bottom Side	10mm	Full	21100	2535	23.77	24.80	1.268	-0.03	0.531	0.673
	LTE Band 7_LAT	20M	QPSK	1	99	Bottom Side	10mm	Full	21350	2560	23.62	24.80	1.312	0.01	0.489	0.642
	LTE Band 7_LAT	20M	QPSK	50	50	Bottom Side	0mm	Reduced	21100	2535	21.34	21.80	1.112	0.08	1.740	1.934
102	LTE Band 7_LAT	20M	QPSK	50	50	Bottom Side	0mm	Reduced	20850	2510	21.29	21.80	1.125	0.07	1.890	2.126
	LTE Band 7_LAT	20M	QPSK	50	50	Bottom Side	0mm	Reduced	21350	2560	21.27	21.80	1.130	0.19	1.570	1.774
	LTE Band 7_LAT	20M	QPSK	50	50	Bottom Side	10mm	Full	20850	2510	22.56	23.80	1.330	0.03	0.487	0.648
	LTE Band 7_LAT	20M	QPSK	50	50	Bottom Side	10mm	Full	21100	2535	22.89	23.80	1.233	0.08	0.410	0.506
	LTE Band 7_LAT	20M	QPSK	50	50	Bottom Side	10mm	Full	21350	2560	22.82	23.80	1.253	-0.04	0.392	0.491
	LTE Band 7_LAT	20M	QPSK	100	0	Bottom Side	0mm	Reduced	21100	2535	21.33	21.80	1.114	0.02	1.640	1.827
5G NR EN-DC																
	LTE Band 7_Ant 0	20M	QPSK	1	99	Top Side	0mm	Full	21100	2535	24.18	25.00	1.208	-0.02	1.490	1.800
	LTE Band 7_Ant 0	20M	QPSK	1	99	Top Side	0mm	Full	20850	2510	23.90	25.00	1.288	0.01	1.550	1.997
	LTE Band 7_Ant 0	20M	QPSK	1	99	Top Side	0mm	Full	21350	2560	24.11	25.00	1.227	-0.08	1.710	2.099
	LTE Band 7_Ant0	20M	QPSK	50	50	Top Side	0mm	Full	21100	2535	23.24	24.00	1.191	0.06	1.060	1.263
	LTE Band 7_Ant0	20M	QPSK	100	0	Top Side	0mm	Full	21100	2535	23.13	24.00	1.222	0.09	1.030	1.258



## <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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	40185	2549.5	23.91	24.80	1.227	62.9	1.006	0.06	1.330	1.642
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	39750	2506	23.40	24.80	1.380	62.9	1.006	0.03	1.310	1.819
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	40620	2593	23.54	24.80	1.337	62.9	1.006	0.11	1.440	1.936
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	41055	2636.5	23.60	24.80	1.318	62.9	1.006	0.11	1.450	1.923
103	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	41490	2680	23.67	24.80	1.297	62.9	1.006	-0.04	1.890	2.466
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	40185(PCC)+40383(SCC)	2549.5(PCC)+2569.3(SCC)	23.49	24.80	1.352	62.9	1.006	0.08	1.370	1.863
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	39750(PCC)+39948(SCC)	2506(PCC)+2525.8(SCC)	23.43	24.80	1.371	62.9	1.006	-0.05	1.376	1.898
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	40620(PCC)+40422(SCC)	2593(PCC)+2573.2(SCC)	23.69	24.80	1.291	62.9	1.006	0.09	1.379	1.791
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	41055(PCC)+40857(SCC)	2636.5(PCC)+2616.7(SCC)	23.66	24.80	1.300	62.9	1.006	-0.07	1.281	1.676
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	0mm	Full	41490(PCC)+41292(SCC)	2680(PCC)+2660.2(SCC)	23.78	24.80	1.265	62.9	1.006	0.04	1.301	1.655
	LTE Band 41_LAT	20M	QPSK	50	50	Bottom Side	0mm	Full	40185	2549.5	22.96	23.80	1.213	62.9	1.006	-0.04	1.080	1.318
	LTE Band 41_LAT	20M	QPSK	100	0	Bottom Side	0mm	Full	40185	2549.5	22.95	23.80	1.216	62.9	1.006	0.14	1.130	1.383
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	40185	2549.5	25.77	26.80	1.268	42.9	1.009	0.18	1.530	1.957
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	39750	2506	25.40	26.80	1.380	42.9	1.009	0.11	1.590	2.215
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	40620	2593	25.56	26.80	1.330	42.9	1.009	0.08	1.560	2.094
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	41055	2636.5	25.55	26.80	1.334	42.9	1.009	-0.11	1.570	2.112
	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	41490	2680	25.45	26.80	1.365	42.9	1.009	-0.18	1.610	2.217
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	40185(PCC)+40383(SCC)	2549.5(PCC)+2569.3(SCC)	24.76	25.80	1.271	42.9	1.009	-0.11	1.039	1.332
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	39750(PCC)+39948(SCC)	2506(PCC)+2525.8(SCC)	24.60	25.80	1.318	42.9	1.009	0.09	1.060	1.410
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	40620(PCC)+40422(SCC)	2593(PCC)+2573.2(SCC)	24.98	25.80	1.208	42.9	1.009	0.08	0.830	1.012
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	41055(PCC)+40857(SCC)	2636.5(PCC)+2616.7(SCC)	24.80	25.80	1.259	42.9	1.009	0.02	0.770	0.978
	LTE Band 41C_HPUE_LAT	20M	QPSK	1	99	Bottom Side	0mm	Full	41490(PCC)+41292(SCC)	2680(PCC)+2660.2(SCC)	24.82	25.80	1.253	42.9	1.009	0.11	0.744	0.941
	LTE Band 41_HPUE_LAT	20M	QPSK	50	24	Bottom Side	0mm	Full	40185	2549.5	24.91	25.80	1.227	42.9	1.009	0.03	1.290	1.598
	LTE Band 48_UAT	20M	QPSK	1	0	Left Side	0mm	Full	55830	3609	23.36	24.80	1.393	62.9	1.006	0.03	1.420	1.990
104	LTE Band 48_UAT	20M	QPSK	1	0	Left Side	0mm	Full	55340	3560	23.20	24.80	1.445	62.9	1.006	-0.12	1.610	2.341
	LTE Band 48_UAT	20M	QPSK	1	0	Left Side	0mm	Full	56150	3641	23.09	24.80	1.483	62.9	1.006	-0.08	1.430	2.133
	LTE Band 48_UAT	20M	QPSK	1	0	Left Side	0mm	Full	56640	3690	23.08	24.80	1.486	62.9	1.006	-0.03	1.450	2.168
	LTE Band 48_UAT	20M	QPSK	50	0	Left Side	0mm	Full	55830	3609	22.45	23.80	1.365	62.9	1.006	0.08	1.280	1.757
	LTE Band 48_UAT	20M	QPSK	100	0	Left Side	0mm	Full	55830	3609	22.41	23.80	1.377	62.9	1.006	0.09	1.160	1.607



## &lt;5G NR SAR&gt;

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)
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Top Side	0mm	Full	344000	1720	23.83	24.80	1.250	0.05	1.530	1.913
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Top Side	0mm	Full	349000	1745	23.80	24.80	1.259	0.07	1.600	2.014
	N66_Ant 0	20M	BPSK	1	1	DFT-15	Top Side	0mm	Full	354000	1770	23.75	24.80	1.274	-0.02	1.160	1.477
	N66_Ant 0	20M	BPSK	50	28	DFT-15	Top Side	0mm	Full	344000	1720	23.74	24.80	1.276	0.11	1.460	1.864
	N66_Ant 0	20M	BPSK	100	0	DFT-15	Top Side	0mm	Full	344000	1720	23.24	24.80	1.432	0.08	1.470	2.105
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Full	344000	1720	24.14	24.80	1.164	0.11	2.070	2.410
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Full	349000	1745	24.00	24.80	1.202	0.08	2.040	2.453
	N66_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Full	354000	1770	23.87	24.80	1.239	0.09	1.770	2.193
105	N66_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Full	344000	1720	23.70	24.80	1.288	0.09	1.990	2.564
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Full	349000	1745	23.66	24.80	1.300	-0.11	1.880	2.444
	N66_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Full	354000	1770	23.68	24.80	1.294	0.12	1.980	2.563
	N66_Ant 3	20M	BPSK	100	0	DFT-15	Bottom Side	0mm	Full	344000	1720	23.50	24.80	1.349	0.05	1.780	2.401
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Reduced	372000	1860	21.85	22.80	1.245	-0.01	1.350	1.680
	N2_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	372000	1860	23.91	24.80	1.227	0.05	0.613	0.752
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	372000	1860	21.75	22.80	1.274	-0.09	1.360	1.732
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	376000	1880	21.57	22.80	1.327	0.05	1.410	1.872
106	N2_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	380000	1900	21.58	22.80	1.324	-0.05	1.610	2.132
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	372000	1860	23.81	24.80	1.256	0.09	0.611	0.767
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	376000	1880	23.70	24.80	1.288	0.07	0.600	0.773
	N2_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	380000	1900	23.77	24.80	1.268	0.01	0.766	0.971
	N2_Ant 3	20M	BPSK	100	0	DFT-15	Bottom Side	0mm	Reduced	372000	1860	21.72	22.80	1.282	-0.11	1.280	1.641
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Reduced	376500	1882.5	22.00	22.80	1.202	-0.01	1.510	1.815
	N25_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	376500	1882.5	23.88	24.80	1.236	0.06	0.617	0.763
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	376500	1882.5	21.94	22.80	1.219	0.06	1.530	1.865
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	372000	1860	21.79	22.80	1.262	-0.13	1.470	1.855
107	N25_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	381000	1905	21.77	22.80	1.268	0.05	1.560	1.978
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	376500	1882.5	23.67	24.80	1.297	0.08	0.620	0.804
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	372000	1860	23.65	24.80	1.303	-0.1	0.611	0.796
	N25_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	10mm	Full	381000	1905	23.60	24.80	1.318	0.07	0.745	0.982
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Reduced	507000	2535	20.97	21.80	1.211	0.11	1.210	1.465
108	N7_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Reduced	502000	2510	20.90	21.80	1.230	0.04	1.490	1.833
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Reduced	512000	2560	20.88	21.80	1.236	-0.15	0.840	1.038
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	507000	2535	23.91	24.80	1.227	0.01	0.602	0.739
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	502000	2510	23.74	24.80	1.276	0.05	0.601	0.767
	N7_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	10mm	Full	512000	2560	23.58	24.80	1.324	0.06	0.673	0.891
	N7_Ant 3	20M	BPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	507000	2535	20.86	21.80	1.242	-0.04	1.170	1.453



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	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	0mm	Full	518598	2592.99	22.88	23.80	1.236	-0.15	1.400	1.730
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Top Side	0mm	Full	518598	2592.99	22.88	23.80	1.236	0.04	1.450	1.792
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Back	0mm	Full	518598	2592.99	22.61	23.80	1.315	-0.11	1.320	1.736
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	0mm	Full	518598	2592.99	22.61	23.80	1.315	-0.13	1.530	2.010
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	0mm	Full	509202	2546.01	22.54	23.80	1.337	0.12	1.390	1.858
	N41_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	0mm	Full	528000	2640	22.44	23.80	1.368	0.09	1.366	1.868
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Top Side	0mm	Full	518598	2592.99	22.09	23.30	1.321	0.06	1.460	1.929
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Front	0mm	Full	518598	2592.99	26.40	26.80	1.096	0.14	1.500	1.645
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Back	0mm	Full	518598	2592.99	26.40	26.80	1.096	0.05	1.520	1.667
	N41(HPUE)_Ant 0	100M	BPSK	1	137	DFT-30	Top Side	0mm	Full	518598	2592.99	26.40	26.80	1.096	0.12	1.530	1.678
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Front	0mm	Full	518598	2592.99	26.25	26.80	1.135	-0.06	1.550	1.759
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Back	0mm	Full	518598	2592.99	26.25	26.80	1.135	0.11	1.570	1.782
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	0mm	Full	518598	2592.99	26.25	26.80	1.135	-0.03	1.680	1.916
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	0mm	Full	509202	2546.01	26.15	26.80	1.161	0.04	1.650	1.916
	N41(HPUE)_Ant 0	100M	BPSK	135	69	DFT-30	Top Side	0mm	Full	528000	2640	26.11	26.80	1.172	0.07	1.080	1.266
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	0mm	Reduced	518598	2592.99	21.16	21.80	1.159	0.08	1.870	2.167
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	0mm	Reduced	509202	2546.01	21.08	21.80	1.180	-0.02	2.150	2.538
109	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	0mm	Reduced	528000	2640	20.95	21.80	1.216	0.06	2.230	2.712
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	Reduced	518598	2592.99	21.16	21.80	1.159	0.08	1.400	1.622
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	10mm	Full	518598	2592.99	23.87	24.80	1.239	0.01	0.330	0.409
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	518598	2592.99	23.87	24.80	1.239	0.04	0.543	0.673
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	509202	2546.01	23.77	24.80	1.268	0.11	0.552	0.700
	N41_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	528000	2640	23.71	24.80	1.285	0.05	0.420	0.540
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Back	0mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.04	1.530	1.793
	N41_Ant 3	100M	BPSK	135	69	DFT-30	Bottom Side	0mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.05	1.180	1.383
	N41_Ant 3	100M	BPSK	270	0	DFT-30	Back	0mm	Reduced	518598	2592.99	21.05	21.80	1.189	0.04	2.180	2.591
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Front	0mm	Reduced	518598	2592.99	21.16	21.80	1.159	0.08	1.640	1.900
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Back	0mm	Reduced	518598	2592.99	21.16	21.80	1.159	0.08	1.870	2.167
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Back	0mm	Reduced	509202	2546.01	21.08	21.80	1.180	-0.02	2.150	2.538
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Back	0mm	Reduced	528000	2640	20.95	21.80	1.216	0.06	2.230	2.712
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	Reduced	518598	2592.99	21.16	21.80	1.159	0.08	1.400	1.622
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Front	9mm	Full	518598	2592.99	25.96	26.80	1.213	0.11	0.531	0.644
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Back	10mm	Full	518598	2592.99	25.96	26.80	1.213	0.08	0.537	0.652
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	518598	2592.99	25.96	26.80	1.213	-0.02	0.869	1.054
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	509202	2546.01	25.82	26.80	1.253	0.03	0.958	1.201
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	528000	2640	25.76	26.80	1.271	-0.04	0.844	1.072
	N41_HPUE_Ant 3	100M	BPSK	1	1	DFT-30	Bottom Side	10mm	Full	510000	2550	25.70	26.80	1.288	0.07	0.932	1.201
	N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Front	0mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.05	1.480	1.735
	N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Back	0mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.04	1.530	1.793
	N41_HPUE_Ant 3	100M	BPSK	135	69	DFT-30	Bottom Side	0mm	Reduced	518598	2592.99	21.11	21.80	1.172	0.05	1.180	1.383
	N41_HPUE_Ant 3	100M	BPSK	270	0	DFT-30	Back	0mm	Reduced	518598	2592.99	21.05	21.80	1.189	0.04	2.180	2.591





## &lt;WLAN2.4G SAR&gt;

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)
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 1+2	Reduced Power Level 1	1	2412	22.44	23.50	1.276	98.35	1.017	0.03	0.541	0.702
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 1+2	Reduced Power Level 1	6	2437	22.37	23.50	1.297	98.35	1.017	-0.04	0.608	0.802
111	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 1+2	Reduced Power Level 1	11	2462	22.04	23.50	1.400	98.35	1.017	-0.17	0.673	0.958

## &lt;WLAN5G SAR&gt;

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	802.11n-HT40 MCS0	Front	0mm	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	-0.11	0.230	0.286
112	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.17	1.400	1.742
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.12	0.029	0.036
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.06	0.872	1.085
	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 1+2	Reduced Power Level 1/5	62	5310	21.05	22.00	1.245	100	1.000	0.03	0.311	0.387
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	54	5270	20.93	22.00	1.279	100	1.000	0.05	1.010	1.292
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	62	5310	18.05	19.00	1.245	100	1.000	-0.02	0.142	0.177
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	62	5310	18.05	19.00	1.245	100	1.000	0.18	0.799	0.994
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	62	5310	18.05	19.00	1.245	100	1.000	0.11	0.000	0.000
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	62	5310	18.05	19.00	1.245	100	1.000	0.05	0.444	0.553
	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	62	5310	18.05	19.00	1.245	100	1.000	0.09	0.144	0.179
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	54	5270	17.93	19.00	1.279	100	1.000	0.04	0.505	0.646
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	0.08	0.241	0.288
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	-0.02	1.050	1.254
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	0.06	0.035	0.042
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	0.18	0.914	1.091
	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 1+2	Reduced Power Level 1/5	110	5550	21.23	22.00	1.194	100	1.000	0.11	0.177	0.211
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	102	5510	20.98	22.00	1.266	100	1.000	0.05	0.929	1.176
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	126	5630	21.11	22.00	1.227	100	1.000	0.08	1.270	1.559
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	134	5670	20.97	22.00	1.269	100	1.000	-0.16	1.370	1.738
113	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	142	5710	20.92	22.00	1.281	100	1.000	0.18	1.630	2.088
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	110	5550	17.33	18.00	1.167	100	1.000	0.18	0.094	0.110
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	110	5550	17.33	18.00	1.167	100	1.000	0.1	0.505	0.589
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	110	5550	17.33	18.00	1.167	100	1.000	0.08	0.001	0.001
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	110	5550	17.33	18.00	1.167	100	1.000	0.09	0.390	0.455
	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	110	5550	17.33	18.00	1.167	100	1.000	0.13	0.086	0.100
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	102	5510	17.08	18.00	1.237	100	1.000	0.09	0.431	0.533
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	126	5630	17.21	18.00	1.199	100	1.000	0.12	0.502	0.602
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	134	5670	17.07	18.00	1.240	100	1.000	0.06	0.610	0.756
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 2/3/4/6	142	5710	17.02	18.00	1.252	100	1.000	0.11	0.714	0.894
114	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	159	5795	20.84	22.00	1.307	100	1.000	0.07	1.590	2.079
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	151	5755	20.74	22.00	1.336	100	1.000	-0.04	1.290	1.724
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	159	5795	16.94	18.00	1.276	100	1.000	-0.07	0.654	0.835
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced Power Level 1/5	151	5755	16.84	18.00	1.306	100	1.000	0.02	0.453	0.592



**19.5 Repeated SAR Measurement****<1g>**

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	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	CDMA2000 BC0_UAT					RC3 SO55	Right Cheek	0mm	Reduced Power Level 1	777	848.31	21.36	22.20	1.213		1.000	-0.04	0.972	1	1.179
2nd	CDMA2000 BC0_UAT					RC3 SO55	Right Cheek	0mm	Reduced Power Level 1	777	848.31	21.36	22.20	1.213		1.000	0.02	0.963	1.009	1.168
1st	WCDMA II_UAT					RMC 12.2Kbps	Right Cheek	0mm	Reduced Power Level 1	9538	1907.6	19.48	20.00	1.127		1.000	0.04	1.050	1	1.184
2nd	WCDMA II_UAT					RMC 12.2Kbps	Right Cheek	0mm	Reduced Power Level 1	9538	1907.6	19.48	20.00	1.127		1.000	-0.02	1.030	1.019	1.161
1st	WCDMA IV_UAT					RMC 12.2Kbps	Left Side	10mm	Full	1413	1732.6	22.23	23.30	1.279		1.000	-0.07	0.921	1	1.178
2nd	WCDMA IV_UAT					RMC 12.2Kbps	Left Side	10mm	Full	1413	1732.6	22.23	23.30	1.279		1.000	-0.18	0.903	1.020	1.155
1st	LTE Band 71_UAT	20M	QPSK	50	0	-	Right Cheek	0mm	Reduced Power Level 1	133322	683	22.00	22.90	1.230		1.000	-0.09	0.967	1	1.190
2nd	LTE Band 71_UAT	20M	QPSK	50	0	-	Right Cheek	0mm	Reduced Power Level 1	133322	683	22.00	22.90	1.230		1.000	0.05	0.921	1.050	1.133
1st	LTE Band 48_UAT	20M	QPSK	1	0	-	Right Cheek	0mm	Reduced Power Level 1	55340	3560	20.75	21.50	1.189	62.9	1.006	-0.15	0.960	1	1.148
2nd	LTE Band 48_UAT	20M	QPSK	1	0	-	Right Cheek	0mm	Reduced Power Level 1	55340	3560	20.75	21.50	1.189	62.9	1.006	0.05	0.941	1.020	1.125
1st	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	-	Bottom Side	10mm	Reduced	41055	2636.5	24.59	25.20	1.151	42.9	1.009	-0.01	0.980	1	1.138
2nd	LTE Band 41_HPUE_LAT	20M	QPSK	1	99	-	Bottom Side	10mm	Reduced	41055	2636.5	24.59	25.20	1.151	42.9	1.009	0.08	0.972	1.008	1.129
1st	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Cheek	0mm	Reduced Power Level 1	650000	3750	19.61	20.80	1.315		1.000	-0.04	0.856	1	1.126
2nd	N77_Ant9	100M	BPSK	1	1	DFT-30	Right Cheek	0mm	Reduced Power Level 1	650000	3750	19.61	20.80	1.315		1.000	-0.09	0.838	1.021	1.102
1st	WLAN5.5GHz_Ant 1+2					802.11n-HT40 MCS0	Back	15mm	Reduced Power Level 1/5	142	5710	20.92	22.00	1.281	100	1.000	-0.12	0.897	1	1.149
2nd	WLAN5.5GHz_Ant 1+2					802.11n-HT40 MCS0	Back	15mm	Reduced Power Level 1/5	142	5710	20.92	22.00	1.281	100	1.000	-0.07	0.853	1.052	1.093

**<10g>**

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)	Ratio	Reported 10g SAR (W/kg)
1st	N66_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Full	344000	1720	24.14	24.80	1.164	0.11	2.070	1	2.410
2nd	N66_Ant 3	20M	BPSK	1	1	DFT-15	Bottom Side	0mm	Full	344000	1720	24.14	24.80	1.164	0.08	1.800	1.15	2.095
1st	CDMA2000 BC1_LAT					RTAP 153.6Kbps	Bottom Side	0mm	Reduced	1175	1908.75	21.69	22.70	1.262	0.01	2.050	1	2.587
2nd	CDMA2000 BC1_LAT					RTAP 153.6Kbps	Bottom Side	0mm	Reduced	1175	1908.75	21.69	22.70	1.262	0.07	1.920	1.018	2.423
1st	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	0mm	Reduced	528000	2640	20.95	21.80	1.216	0.06	2.230	1	2.712
2nd	N41_Ant 3	100M	BPSK	1	1	DFT-30	Back	0mm	Reduced	528000	2640	20.95	21.80	1.216	0.01	2.190	1.018	2.663

**General Note:**

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8$ W/kg.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is  $\leq 1.2$  and the measured SAR  $< 1.45$ W/kg, only one repeated measurement is required.
3. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The ratio is the difference in percentage between original and repeated *measured SAR*.
5. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

## 20. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product Specific
1.	GSM Voice + 2.4GHz WLAN MIMO	Yes	Yes		Yes
2.	GPRS/EDGE + 2.4GHz WLAN MIMO	Yes	Yes	Yes	Yes
3.	WCDMA + 2.4GHz WLAN MIMO	Yes	Yes	Yes	Yes
4.	LTE + 2.4GHz WLAN MIMO	Yes	Yes	Yes	Yes
5.	GSM Voice + WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
6.	GPRS/EDGE + WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
7.	WCDMA + WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
8.	LTE + WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
9.	GSM Voice + WLAN5.2/5.8GHz MIMO	Yes	Yes		Yes
10.	GPRS/EDGE + WLAN5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes
11.	WCDMA + WLAN5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes
12.	LTE + WLAN5.2/5.8GHz MIMO	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.	WLAN5.3/5.5GHz MIMO + Bluetooth	Yes	Yes	Yes	Yes
18.	WLAN5.2/5.8GHz MIMO + Bluetooth	Yes	Yes	Yes	Yes
19.	GSM Voice + WLAN5.3/5.5GHz MIMO + Bluetooth	Yes	Yes		Yes
20.	GPRS/EDGE + WLAN5.3/5.5GHz MIMO + Bluetooth	Yes	Yes		Yes
21.	WCDMA + WLAN5.3/5.5GHz MIMO + Bluetooth	Yes	Yes		Yes
22.	LTE + WLAN5.3/5.5GHz MIMO + Bluetooth	Yes	Yes		Yes
23.	GSM Voice + WLAN5.2/5.8GHz MIMO + Bluetooth	Yes	Yes		Yes
24.	GPRS/EDGE + WLAN5.2/5.8GHz MIMO + Bluetooth	Yes	Yes	Yes	Yes
25.	WCDMA + WLAN5.2/5.8GHz MIMO + Bluetooth	Yes	Yes	Yes	Yes
26.	LTE + WLAN5.2/5.8GHz MIMO + Bluetooth	Yes	Yes	Yes	Yes
27.	WLAN5.3/5.5GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes		Yes
28.	WLAN5.2/5.8GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes	Yes	Yes
29.	GSM Voice + WLAN5.3/5.5GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes		Yes
30.	GPRS/EDGE + WLAN5.3/5.5GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes		Yes
31.	WCDMA + WLAN5.3/5.5GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes		Yes
32.	LTE + WLAN5.3/5.5GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes		Yes
33.	GSM Voice + WLAN5.2/5.8GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes		Yes
34.	GPRS/EDGE + WLAN5.2/5.8GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes	Yes	Yes
35.	WCDMA + WLAN5.2/5.8GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes	Yes	Yes
36.	LTE + WLAN5.2/5.8GHz MIMO + 2.4GHz WLAN MIMO	Yes	Yes	Yes	Yes
37.	5G NR + 2.4GHz WLAN MIMO	Yes	Yes	Yes	Yes
38.	LTE + 5G NR + 2.4GHz WLAN MIMO	Yes	Yes	Yes	Yes
39.	5G NR + WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
40.	5G NR + WLAN5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes
41.	LTE + 5G NR + WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
42.	LTE + 5G NR + WLAN5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes
43.	5G NR + Bluetooth	Yes	Yes	Yes	Yes
44.	LTE + 5G NR + Bluetooth	Yes	Yes	Yes	Yes
45.	5G NR + WLAN5.3/5.5GHz MIMO + Bluetooth	Yes	Yes		Yes
46.	5G NR + WLAN5.2/5.8GHz MIMO + Bluetooth	Yes	Yes	Yes	Yes
47.	LTE + 5G NR + WLAN5.3/5.5GHz MIMO + Bluetooth	Yes	Yes		Yes
48.	LTE + 5G NR + WLAN5.2/5.8GHz MIMO + Bluetooth	Yes	Yes	Yes	Yes
49.	2.4GHz WLAN Chain1+ Bluetooth	Yes	Yes	Yes	Yes
50.	GSM Voice + 2.4GHz WLAN Chain1+ Bluetooth	Yes	Yes		Yes
51.	GPRS/EDGE + 2.4GHz WLAN Chain1+ Bluetooth	Yes	Yes	Yes	Yes



52.	WCDMA + 2.4GHz WLAN Chain1+ Bluetooth	Yes	Yes	Yes	Yes
53.	LTE + 2.4GHz WLAN Chain1+ Bluetooth	Yes	Yes	Yes	Yes
54.	5G NR + 2.4GHz WLAN Chain1+ Bluetooth	Yes	Yes		Yes
55.	2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
56.	GSM Voice + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
57.	GPRS/EDGE + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
58.	WCDMA + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
59.	LTE + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
60.	5G NR + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.3/5.5GHz MIMO	Yes	Yes		Yes
61.	2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes
62.	GSM Voice + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.2/5.8GHz MIMO	Yes	Yes		Yes
63.	GPRS/EDGE + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes
64.	WCDMA + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes
65.	LTE + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes
66.	5G NR + 2.4GHz WLAN Chain1+ Bluetooth+ WLAN5.2/5.8GHz MIMO	Yes	Yes	Yes	Yes

**General Note:**

1. This device supports VoIP in GPRS, EGPRS, WCDMA, CDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. EUT will choose each GSM, WCDMA, CDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
3. 5GNR supports SA and NSA mode.
4. The 2.4GHz/5GHz WLAN can transmit in MIMO antenna mode. 2.4G WLAN ANT2 SISO antenna mode can only be enabled when transmitting simultaneously with Bluetooth.
5. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
6. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
7. 2.4GHz WLAN Chain0 and Bluetooth share the same antenna, and cannot transmit simultaneously.
8. All licensed modes share the same antenna part and cannot transmit simultaneously.
9. According to the EUT character, WLAN 2.4GHz Chain1 and Bluetooth can transmit simultaneously.
10. According to the EUT character, WLAN 5GHz and Bluetooth can transmit simultaneously.
11. According to the EUT character, WLAN 5GHz and 2.4GHz WLAN can transmit simultaneously.
12. 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.
13. Chose the worst zoom scan SAR of WLAN correspondingly for co-located with WWAN analysis.
14. The reported SAR summation is calculated based on the same configuration and test position.
15. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
  - ii)  $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$ , and the peak separation distance is determined from the square root of  $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$ , where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
  - iii) If  $SPLSR \leq 0.04$  for 1g SAR and  $SPLSR \leq 0.10$  for 10g SAR, simultaneously transmission SAR measurement is not necessary.
  - iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.

**20.1 5G NR + LTE + WLAN + BT Sim-Tx analysis**

In 5G NR + LTE + WLAN + BT simultaneous transmission, 5G NR and LTE transmission are managed and controlled by Qualcomm® Smart Transmit, while the RF exposure from WLAN and BT radios is managed using legacy approach, i.e., through a fixed power back-off if needed.

Since WLAN and BT do not employ time-averaging, 1gSAR and 10gSAR measurement for WLAN and BT need to be conducted at their corresponding rated power following current FCC test procedures to determine reported SAR values.

Smart Transmit current implementation assumes hotspots from 5G NR and LTE are collocated. Therefore, for a total of 100% exposure margin, if LTE uses x%, then the exposure margin left for 5G NR is capped to (100-x)%. Thus, the compliance equation for LTE + 5G NR is

$$x\% * A + (100-x)\% * B \leq 1.0,$$

Where, A is normalized reported time-averaged SAR exposure ratio from LTE, and  $A \leq 1.0$ ; B is normalized reported time-averaged exposure ratio from 5G NR (i.e., PD exposure for 5G FR2 or SAR exposure for 5G FR1), and  $B \leq 1.0$ .

Let C = normalized reported SAR exposure ratio from WLAN+BT, then for compliance,

$$x\% * A + (100-x)\% * B + C \leq 1.0 \quad (1)$$

$$x\% * A + (100-x)\% * B \leq x\% * \max(A, B) + (100-x)\% * \max(A, B) \leq \max(A, B)$$

$$x\% * A + (100-x)\% * B + C \leq \max(A, B) + C \leq 1.0 \quad (2)$$

if  $A + C \leq 1.0$  and  $B + C \leq 1.0$  can be proven, then " $x\% * A + (100-x)\% * B + C \leq 1.0$ ". Therefore simultaneous transmission analysis for 5G NR + LTE + WLAN + BT can be performed in two steps

Step 1: Prove total exposure ratio (TER) of LTE + WLAN + BT < 1

Step 2: Prove total exposure ratio (TER) of 5G NR + WLAN + BT < 1

Above analysis is also apply to LTE inter band uplink, LTE + LTE + WLAN + BT simultaneous transmission, So inter band CA uplink no need to do additional simultaneously analysis again. Only required comply with total exposure ratio (TER) of LTE + WLAN + BT < 1.



**20.2 Head Exposure Conditions**

Exposure Position	2	4	2+4
	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
Right Cheek	0.781	0.401	1.18
Right Tilted	0.976	0.337	1.31
Left Cheek	0.848	0.546	1.39
Left Tilted	0.967	0.399	1.37

WWAN Band	Exposure Position	1	3	4	6	1+6	3+6	4+6
		WWAN	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
GSM850	Right Cheek	0.832	0.130	0.556	0.128	0.96	0.26	0.68
	Right Tilted	0.676	0.076	0.428	0.133	0.81	0.21	0.56
	Left Cheek	0.657	0.867	0.921	0.137	0.79	1.00	1.06
	Left Tilted	0.587	0.181	0.601	0.130	0.72	0.31	0.73
GSM1900	Right Cheek	0.883	0.130	0.556	0.128	1.01	0.26	0.68
	Right Tilted	0.258	0.076	0.428	0.133	0.39	0.21	0.56
	Left Cheek	0.221	0.867	0.921	0.137	0.36	1.00	1.06
	Left Tilted	0.179	0.181	0.601	0.130	0.31	0.31	0.73
WCDMA II	Right Cheek	1.184	0.130	0.556	0.128	1.31	0.26	0.68
	Right Tilted	0.452	0.076	0.428	0.133	0.59	0.21	0.56
	Left Cheek	0.311	0.867	0.921	0.137	0.45	1.00	1.06
	Left Tilted	0.231	0.181	0.601	0.130	0.36	0.31	0.73
WCDMA IV	Right Cheek	1.045	0.130	0.556	0.128	1.17	0.26	0.68
	Right Tilted	0.418	0.076	0.428	0.133	0.55	0.21	0.56
	Left Cheek	0.326	0.867	0.921	0.137	0.46	1.00	1.06
	Left Tilted	0.268	0.181	0.601	0.130	0.40	0.31	0.73
WCDMA V	Right Cheek	1.102	0.130	0.556	0.128	1.23	0.26	0.68
	Right Tilted	0.794	0.076	0.428	0.133	0.93	0.21	0.56
	Left Cheek	0.775	0.867	0.921	0.137	0.91	1.00	1.06
	Left Tilted	0.645	0.181	0.601	0.130	0.78	0.31	0.73
CDMA2000 BC0	Right Cheek	1.179	0.130	0.556	0.128	1.31	0.26	0.68
	Right Tilted	0.923	0.076	0.428	0.133	1.06	0.21	0.56
	Left Cheek	0.791	0.867	0.921	0.137	0.93	1.00	1.06
	Left Tilted	0.674	0.181	0.601	0.130	0.80	0.31	0.73
CDMA2000 BC1	Right Cheek	1.185	0.130	0.556	0.128	1.31	0.26	0.68
	Right Tilted	0.433	0.076	0.428	0.133	0.57	0.21	0.56
	Left Cheek	0.324	0.867	0.921	0.137	0.46	1.00	1.06
	Left Tilted	0.226	0.181	0.601	0.130	0.36	0.31	0.73
CDMA2000 BC10	Right Cheek	1.152	0.130	0.556	0.128	1.28	0.26	0.68
	Right Tilted	0.844	0.076	0.428	0.133	0.98	0.21	0.56
	Left Cheek	0.973	0.867	0.921	0.137	1.11	1.00	1.06
	Left Tilted	0.777	0.181	0.601	0.130	0.91	0.31	0.73
LTE Band 71	Right Cheek	1.190	0.130	0.556	0.128	1.32	0.26	0.68
	Right Tilted	1.107	0.076	0.428	0.133	1.24	0.21	0.56
	Left Cheek	0.870	0.867	0.921	0.137	1.01	1.00	1.06
	Left Tilted	0.736	0.181	0.601	0.130	0.87	0.31	0.73
LTE Band 12	Right Cheek	1.133	0.130	0.556	0.128	1.26	0.26	0.68
	Right Tilted	1.019	0.076	0.428	0.133	1.15	0.21	0.56
	Left Cheek	1.027	0.867	0.921	0.137	1.16	1.00	1.06



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	Left Tilted	0.734	0.181	0.601	0.130	0.86	0.31	0.73
LTE Band 13	Right Cheek	1.143	0.130	0.556	0.128	1.27	0.26	0.68
	Right Tilted	1.010	0.076	0.428	0.133	1.14	0.21	0.56
	Left Cheek	1.104	0.867	0.921	0.137	1.24	1.00	1.06
	Left Tilted	0.676	0.181	0.601	0.130	0.81	0.31	0.73
LTE Band 5	Right Cheek	1.104	0.130	0.556	0.128	1.23	0.26	0.68
	Right Tilted	0.886	0.076	0.428	0.133	1.02	0.21	0.56
	Left Cheek	1.099	0.867	0.921	0.137	1.24	1.00	1.06
	Left Tilted	0.848	0.181	0.601	0.130	0.98	0.31	0.73
LTE Band 26	Right Cheek	0.931	0.130	0.556	0.128	1.06	0.26	0.68
	Right Tilted	0.771	0.076	0.428	0.133	0.90	0.21	0.56
	Left Cheek	0.686	0.867	0.921	0.137	0.82	1.00	1.06
	Left Tilted	0.639	0.181	0.601	0.130	0.77	0.31	0.73
LTE Band 66	Right Cheek	1.090	0.130	0.556	0.128	1.22	0.26	0.68
	Right Tilted	0.454	0.076	0.428	0.133	0.59	0.21	0.56
	Left Cheek	0.306	0.867	0.921	0.137	0.44	1.00	1.06
	Left Tilted	0.164	0.181	0.601	0.130	0.29	0.31	0.73
LTE Band 25	Right Cheek	1.092	0.130	0.556	0.128	1.22	0.26	0.68
	Right Tilted	0.388	0.076	0.428	0.133	0.52	0.21	0.56
	Left Cheek	0.246	0.867	0.921	0.137	0.38	1.00	1.06
	Left Tilted	0.171	0.181	0.601	0.130	0.30	0.31	0.73
LTE Band 30	Right Cheek	0.907	0.130	0.556	0.128	1.04	0.26	0.68
	Right Tilted	0.263	0.076	0.428	0.133	0.40	0.21	0.56
	Left Cheek	0.263	0.867	0.921	0.137	0.40	1.00	1.06
	Left Tilted	0.161	0.181	0.601	0.130	0.29	0.31	0.73
LTE Band 7	Right Cheek	1.013	0.130	0.556	0.128	1.14	0.26	0.68
	Right Tilted	0.325	0.076	0.428	0.133	0.46	0.21	0.56
	Left Cheek	0.212	0.867	0.921	0.137	0.35	1.00	1.06
	Left Tilted	0.120	0.181	0.601	0.130	0.25	0.31	0.73
LTE Band 41	Right Cheek	0.856	0.130	0.556	0.128	0.98	0.26	0.68
	Right Tilted	0.197	0.076	0.428	0.133	0.33	0.21	0.56
	Left Cheek	0.142	0.867	0.921	0.137	0.28	1.00	1.06
	Left Tilted	0.082	0.181	0.601	0.130	0.21	0.31	0.73
LTE Band 41-HPUE	Right Cheek	0.816	0.130	0.556	0.128	0.94	0.26	0.68
	Right Tilted	0.180	0.076	0.428	0.133	0.31	0.21	0.56
	Left Cheek	0.142	0.867	0.921	0.137	0.28	1.00	1.06
	Left Tilted	0.083	0.181	0.601	0.130	0.21	0.31	0.73
LTE Band 48	Right Cheek	1.149	0.130	0.556	0.128	1.28	0.26	0.68
	Right Tilted	0.133	0.076	0.428	0.133	0.27	0.21	0.56
	Left Cheek	0.596	0.867	0.921	0.137	0.73	1.00	1.06
	Left Tilted	0.001	0.181	0.601	0.130	0.13	0.31	0.73





WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850	Right Cheek	0.684	0.424	0.401	1.11	1.09
	Right Tilted	0.573	0.571	0.337	1.14	0.91
	Left Cheek	0.552	0.409	0.546	0.96	1.10
	Left Tilted	0.633	0.498	0.399	1.13	1.03
GSM1900	Right Cheek	0.770	0.424	0.401	1.19	1.17
	Right Tilted	0.221	0.571	0.337	0.79	0.56
	Left Cheek	0.190	0.409	0.546	0.60	0.74
	Left Tilted	0.131	0.498	0.399	0.63	0.53
WCDMA II	Right Cheek	0.957	0.424	0.401	1.38	1.36
	Right Tilted	0.333	0.571	0.337	0.90	0.67
	Left Cheek	0.250	0.409	0.546	0.66	0.80
	Left Tilted	0.184	0.498	0.399	0.68	0.58
WCDMA IV	Right Cheek	0.737	0.424	0.401	1.16	1.14
	Right Tilted	0.281	0.571	0.337	0.85	0.62
	Left Cheek	0.215	0.409	0.546	0.62	0.76
	Left Tilted	0.194	0.498	0.399	0.69	0.59
WCDMA V	Right Cheek	0.616	0.424	0.401	1.04	1.02
	Right Tilted	0.477	0.571	0.337	1.05	0.81
	Left Cheek	0.479	0.409	0.546	0.89	1.03
	Left Tilted	0.423	0.498	0.399	0.92	0.82
CDMA2000 BC0	Right Cheek	0.747	0.424	0.401	1.17	1.15
	Right Tilted	0.475	0.571	0.337	1.05	0.81
	Left Cheek	0.496	0.409	0.546	0.91	1.04
	Left Tilted	0.400	0.498	0.399	0.90	0.80
CDMA2000 BC1	Right Cheek	0.946	0.424	0.401	1.37	1.35
	Right Tilted	0.307	0.571	0.337	0.88	0.64
	Left Cheek	0.228	0.409	0.546	0.64	0.77
	Left Tilted	0.151	0.498	0.399	0.65	0.55
CDMA2000 BC10	Right Cheek	0.533	0.424	0.401	0.96	0.93
	Right Tilted	0.460	0.571	0.337	1.03	0.80
	Left Cheek	0.459	0.409	0.546	0.87	1.01
	Left Tilted	0.363	0.498	0.399	0.86	0.76
LTE Band 71	Right Cheek	0.785	0.424	0.401	1.21	1.19
	Right Tilted	0.541	0.571	0.337	1.11	0.88
	Left Cheek	0.526	0.409	0.546	0.94	1.07
	Left Tilted	0.450	0.498	0.399	0.95	0.85
LTE Band 12	Right Cheek	0.716	0.424	0.401	1.14	1.12
	Right Tilted	0.678	0.571	0.337	1.25	1.02
	Left Cheek	0.582	0.409	0.546	0.99	1.13
	Left Tilted	0.461	0.498	0.399	0.96	0.86
LTE Band 13	Right Cheek	0.879	0.424	0.401	1.30	1.28
	Right Tilted	0.605	0.571	0.337	1.18	0.94
	Left Cheek	0.539	0.409	0.546	0.95	1.09
	Left Tilted	0.488	0.498	0.399	0.99	0.89
LTE Band 5	Right Cheek	0.548	0.424	0.401	0.97	0.95
	Right Tilted	0.476	0.571	0.337	1.05	0.81
	Left Cheek	0.452	0.409	0.546	0.86	1.00
	Left Tilted	0.366	0.498	0.399	0.86	0.77
LTE Band 26	Right Cheek	0.675	0.424	0.401	1.10	1.08
	Right Tilted	0.641	0.571	0.337	1.21	0.98
	Left Cheek	0.551	0.409	0.546	0.96	1.10



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	Left Tilted	0.337	0.498	0.399	0.84	0.74
LTE Band 66	Right Cheek	0.744	0.424	0.401	1.17	1.15
	Right Tilted	0.292	0.571	0.337	0.86	0.63
	Left Cheek	0.219	0.409	0.546	0.63	0.77
	Left Tilted	0.108	0.498	0.399	0.61	0.51
LTE Band 25	Right Cheek	0.790	0.424	0.401	1.21	1.19
	Right Tilted	0.260	0.571	0.337	0.83	0.60
	Left Cheek	0.186	0.409	0.546	0.60	0.73
	Left Tilted	0.120	0.498	0.399	0.62	0.52
LTE Band 30	Right Cheek	0.907	0.424	0.401	1.33	1.31
	Right Tilted	0.263	0.571	0.337	0.83	0.60
	Left Cheek	0.263	0.409	0.546	0.67	0.81
	Left Tilted	0.161	0.498	0.399	0.66	0.56
LTE Band 7	Right Cheek	0.674	0.424	0.401	1.10	1.08
	Right Tilted	0.224	0.571	0.337	0.80	0.56
	Left Cheek	0.151	0.409	0.546	0.56	0.70
	Left Tilted	0.076	0.498	0.399	0.57	0.48
LTE Band 41	Right Cheek	0.856	0.424	0.401	1.28	1.26
	Right Tilted	0.197	0.571	0.337	0.77	0.53
	Left Cheek	0.142	0.409	0.546	0.55	0.69
	Left Tilted	0.082	0.498	0.399	0.58	0.48
LTE Band 41-HPUE	Right Cheek	0.816	0.424	0.401	1.24	1.22
	Right Tilted	0.180	0.571	0.337	0.75	0.52
	Left Cheek	0.142	0.409	0.546	0.55	0.69
	Left Tilted	0.083	0.498	0.399	0.58	0.48
LTE Band 48	Right Cheek	0.861	0.424	0.401	1.29	1.26
	Right Tilted	0.095	0.571	0.337	0.67	0.43
	Left Cheek	0.365	0.409	0.546	0.77	0.91
	Left Tilted	0.001	0.498	0.399	0.50	0.40



WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
GSM850	Right Cheek	0.684	0.243	0.061	0.173	0.128	1.10	0.87	0.99	1.05
	Right Tilted	0.573	0.349	0.037	0.169	0.133	1.09	0.74	0.88	0.91
	Left Cheek	0.552	0.246	0.253	0.348	0.137	1.15	0.94	1.04	1.29
	Left Tilted	0.633	0.280	0.070	0.210	0.130	1.12	0.83	0.97	1.04
GSM1900	Right Cheek	0.770	0.243	0.061	0.173	0.128	1.19	0.96	1.07	1.13
	Right Tilted	0.221	0.349	0.037	0.169	0.133	0.74	0.39	0.52	0.56
	Left Cheek	0.190	0.246	0.253	0.348	0.137	0.78	0.58	0.68	0.93
	Left Tilted	0.131	0.280	0.070	0.210	0.130	0.62	0.33	0.47	0.54
WCDMA II	Right Cheek	0.957	0.243	0.061	0.173	0.128	1.37	1.15	1.26	1.32
	Right Tilted	0.333	0.349	0.037	0.169	0.133	0.85	0.50	0.64	0.67
	Left Cheek	0.250	0.246	0.253	0.348	0.137	0.84	0.64	0.74	0.99
	Left Tilted	0.184	0.280	0.070	0.210	0.130	0.67	0.38	0.52	0.59
WCDMA IV	Right Cheek	0.737	0.243	0.061	0.173	0.128	1.15	0.93	1.04	1.10
	Right Tilted	0.281	0.349	0.037	0.169	0.133	0.80	0.45	0.58	0.62
	Left Cheek	0.215	0.246	0.253	0.348	0.137	0.81	0.61	0.70	0.95
	Left Tilted	0.194	0.280	0.070	0.210	0.130	0.68	0.39	0.53	0.60
WCDMA V	Right Cheek	0.616	0.243	0.061	0.173	0.128	1.03	0.81	0.92	0.98
	Right Tilted	0.477	0.349	0.037	0.169	0.133	1.00	0.65	0.78	0.82
	Left Cheek	0.479	0.246	0.253	0.348	0.137	1.07	0.87	0.96	1.22
	Left Tilted	0.423	0.280	0.070	0.210	0.130	0.91	0.62	0.76	0.83
CDMA2000 BC0	Right Cheek	0.747	0.243	0.061	0.173	0.128	1.16	0.94	1.05	1.11
	Right Tilted	0.475	0.349	0.037	0.169	0.133	0.99	0.65	0.78	0.81
	Left Cheek	0.496	0.246	0.253	0.348	0.137	1.09	0.89	0.98	1.23
	Left Tilted	0.400	0.280	0.070	0.210	0.130	0.89	0.60	0.74	0.81
CDMA2000 BC1	Right Cheek	0.946	0.243	0.061	0.173	0.128	1.36	1.14	1.25	1.31
	Right Tilted	0.307	0.349	0.037	0.169	0.133	0.83	0.48	0.61	0.65
	Left Cheek	0.228	0.246	0.253	0.348	0.137	0.82	0.62	0.71	0.97
	Left Tilted	0.151	0.280	0.070	0.210	0.130	0.64	0.35	0.49	0.56
CDMA2000 BC10	Right Cheek	0.533	0.243	0.061	0.173	0.128	0.95	0.72	0.83	0.90
	Right Tilted	0.460	0.349	0.037	0.169	0.133	0.98	0.63	0.76	0.80
	Left Cheek	0.459	0.246	0.253	0.348	0.137	1.05	0.85	0.94	1.20
	Left Tilted	0.363	0.280	0.070	0.210	0.130	0.85	0.56	0.70	0.77
LTE Band 71	Right Cheek	0.785	0.243	0.061	0.173	0.128	1.20	0.97	1.09	1.15
	Right Tilted	0.541	0.349	0.037	0.169	0.133	1.06	0.71	0.84	0.88
	Left Cheek	0.526	0.246	0.253	0.348	0.137	1.12	0.92	1.01	1.26
	Left Tilted	0.450	0.280	0.070	0.210	0.130	0.94	0.65	0.79	0.86
LTE Band 12	Right Cheek	0.716	0.243	0.061	0.173	0.128	1.13	0.91	1.02	1.08
	Right Tilted	0.678	0.349	0.037	0.169	0.133	1.20	0.85	0.98	1.02
	Left Cheek	0.582	0.246	0.253	0.348	0.137	1.18	0.97	1.07	1.32
	Left Tilted	0.461	0.280	0.070	0.210	0.130	0.95	0.66	0.80	0.87
LTE Band 13	Right Cheek	0.879	0.243	0.061	0.173	0.128	1.30	1.07	1.18	1.24
	Right Tilted	0.605	0.349	0.037	0.169	0.133	1.12	0.78	0.91	0.94
	Left Cheek	0.539	0.246	0.253	0.348	0.137	1.13	0.93	1.02	1.28
	Left Tilted	0.488	0.280	0.070	0.210	0.130	0.98	0.69	0.83	0.90
LTE Band 5	Right Cheek	0.548	0.243	0.061	0.173	0.128	0.96	0.74	0.85	0.91
	Right Tilted	0.476	0.349	0.037	0.169	0.133	0.99	0.65	0.78	0.82
	Left Cheek	0.452	0.246	0.253	0.348	0.137	1.05	0.84	0.94	1.19
	Left Tilted	0.366	0.280	0.070	0.210	0.130	0.86	0.57	0.71	0.78
LTE Band 26	Right Cheek	0.675	0.243	0.061	0.173	0.128	1.09	0.86	0.98	1.04
	Right Tilted	0.641	0.349	0.037	0.169	0.133	1.16	0.81	0.94	0.98



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	Left Cheek	0.551	0.246	0.253	0.348	0.137	1.15	0.94	1.04	1.29
	Left Tilted	0.337	0.280	0.070	0.210	0.130	0.83	0.54	0.68	0.75
LTE Band 66	Right Cheek	0.744	0.243	0.061	0.173	0.128	1.16	0.93	1.05	1.11
	Right Tilted	0.292	0.349	0.037	0.169	0.133	0.81	0.46	0.59	0.63
	Left Cheek	0.219	0.246	0.253	0.348	0.137	0.81	0.61	0.70	0.96
	Left Tilted	0.108	0.280	0.070	0.210	0.130	0.60	0.31	0.45	0.52
LTE Band 25	Right Cheek	0.790	0.243	0.061	0.173	0.128	1.21	0.98	1.09	1.15
	Right Tilted	0.260	0.349	0.037	0.169	0.133	0.78	0.43	0.56	0.60
	Left Cheek	0.186	0.246	0.253	0.348	0.137	0.78	0.58	0.67	0.92
	Left Tilted	0.120	0.280	0.070	0.210	0.130	0.61	0.32	0.46	0.53
LTE Band 30	Right Cheek	0.907	0.243	0.061	0.173	0.128	1.32	1.10	1.21	1.27
	Right Tilted	0.263	0.349	0.037	0.169	0.133	0.78	0.43	0.57	0.60
	Left Cheek	0.263	0.246	0.253	0.348	0.137	0.86	0.65	0.75	1.00
	Left Tilted	0.161	0.280	0.070	0.210	0.130	0.65	0.36	0.50	0.57
LTE Band 7	Right Cheek	0.674	0.243	0.061	0.173	0.128	1.09	0.86	0.98	1.04
	Right Tilted	0.224	0.349	0.037	0.169	0.133	0.74	0.39	0.53	0.56
	Left Cheek	0.151	0.246	0.253	0.348	0.137	0.75	0.54	0.64	0.89
	Left Tilted	0.076	0.280	0.070	0.210	0.130	0.57	0.28	0.42	0.49
LTE Band 41	Right Cheek	0.856	0.243	0.061	0.173	0.128	1.27	1.05	1.16	1.22
	Right Tilted	0.197	0.349	0.037	0.169	0.133	0.72	0.37	0.50	0.54
	Left Cheek	0.142	0.246	0.253	0.348	0.137	0.74	0.53	0.63	0.88
	Left Tilted	0.082	0.280	0.070	0.210	0.130	0.57	0.28	0.42	0.49
LTE Band 41-HPUE	Right Cheek	0.816	0.243	0.061	0.173	0.128	1.23	1.01	1.12	1.18
	Right Tilted	0.180	0.349	0.037	0.169	0.133	0.70	0.35	0.48	0.52
	Left Cheek	0.142	0.246	0.253	0.348	0.137	0.74	0.53	0.63	0.88
	Left Tilted	0.083	0.280	0.070	0.210	0.130	0.57	0.28	0.42	0.49
LTE Band 48	Right Cheek	0.861	0.243	0.061	0.173	0.128	1.28	1.05	1.16	1.22
	Right Tilted	0.095	0.349	0.037	0.169	0.133	0.61	0.27	0.40	0.43
	Left Cheek	0.365	0.246	0.253	0.348	0.137	0.96	0.76	0.85	1.10
	Left Tilted	0.001	0.280	0.070	0.210	0.130	0.49	0.20	0.34	0.41



WWAN Band	Exposure Position	1	3	4	6	1+6	3+6	4+6
		WWAN	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
GSM850_LAT	Right Cheek	0.266	0.130	0.556	0.128	0.39	0.26	0.68
	Right Tilted	0.138	0.076	0.428	0.133	0.27	0.21	0.56
	Left Cheek	0.238	0.867	0.921	0.137	0.38	1.00	1.06
	Left Tilted	0.123	0.181	0.601	0.130	0.25	0.31	0.73
GSM1900_LAT	Right Cheek	0.239	0.130	0.556	0.128	0.37	0.26	0.68
	Right Tilted	0.135	0.076	0.428	0.133	0.27	0.21	0.56
	Left Cheek	0.205	0.867	0.921	0.137	0.34	1.00	1.06
	Left Tilted	0.190	0.181	0.601	0.130	0.32	0.31	0.73
WCDMA II_LAT	Right Cheek	0.417	0.130	0.556	0.128	0.55	0.26	0.68
	Right Tilted	0.267	0.076	0.428	0.133	0.40	0.21	0.56
	Left Cheek	0.262	0.867	0.921	0.137	0.40	1.00	1.06
	Left Tilted	0.261	0.181	0.601	0.130	0.39	0.31	0.73
WCDMA IV_LAT	Right Cheek	0.268	0.130	0.556	0.128	0.40	0.26	0.68
	Right Tilted	0.184	0.076	0.428	0.133	0.32	0.21	0.56
	Left Cheek	0.353	0.867	0.921	0.137	0.49	1.00	1.06
	Left Tilted	0.076	0.181	0.601	0.130	0.21	0.31	0.73
WCDMA V_LAT	Right Cheek	0.222	0.130	0.556	0.128	0.35	0.26	0.68
	Right Tilted	0.107	0.076	0.428	0.133	0.24	0.21	0.56
	Left Cheek	0.181	0.867	0.921	0.137	0.32	1.00	1.06
	Left Tilted	0.130	0.181	0.601	0.130	0.26	0.31	0.73
CDMA2000 BC0_LAT	Right Cheek	0.222	0.130	0.556	0.128	0.35	0.26	0.68
	Right Tilted	0.102	0.076	0.428	0.133	0.24	0.21	0.56
	Left Cheek	0.172	0.867	0.921	0.137	0.31	1.00	1.06
	Left Tilted	0.090	0.181	0.601	0.130	0.22	0.31	0.73
CDMA2000 BC1_LAT	Right Cheek	0.444	0.130	0.556	0.128	0.57	0.26	0.68
	Right Tilted	0.268	0.076	0.428	0.133	0.40	0.21	0.56
	Left Cheek	0.355	0.867	0.921	0.137	0.49	1.00	1.06
	Left Tilted	0.273	0.181	0.601	0.130	0.40	0.31	0.73
CDMA2000 BC10_LAT	Right Cheek	0.240	0.130	0.556	0.128	0.37	0.26	0.68
	Right Tilted	0.110	0.076	0.428	0.133	0.24	0.21	0.56
	Left Cheek	0.194	0.867	0.921	0.137	0.33	1.00	1.06
	Left Tilted	0.098	0.181	0.601	0.130	0.23	0.31	0.73
LTE Band 71_LAT	Right Cheek	0.213	0.130	0.556	0.128	0.34	0.26	0.68
	Right Tilted	0.096	0.076	0.428	0.133	0.23	0.21	0.56
	Left Cheek	0.158	0.867	0.921	0.137	0.30	1.00	1.06
	Left Tilted	0.089	0.181	0.601	0.130	0.22	0.31	0.73
LTE Band 12_LAT	Right Cheek	0.251	0.130	0.556	0.128	0.38	0.26	0.68
	Right Tilted	0.128	0.076	0.428	0.133	0.26	0.21	0.56
	Left Cheek	0.182	0.867	0.921	0.137	0.32	1.00	1.06
	Left Tilted	0.093	0.181	0.601	0.130	0.22	0.31	0.73
LTE Band 13_LAT	Right Cheek	0.284	0.130	0.556	0.128	0.41	0.26	0.68
	Right Tilted	0.121	0.076	0.428	0.133	0.25	0.21	0.56
	Left Cheek	0.219	0.867	0.921	0.137	0.36	1.00	1.06
	Left Tilted	0.103	0.181	0.601	0.130	0.23	0.31	0.73
LTE Band 5_LAT	Right Cheek	0.213	0.130	0.556	0.128	0.34	0.26	0.68
	Right Tilted	0.051	0.076	0.428	0.133	0.18	0.21	0.56
	Left Cheek	0.159	0.867	0.921	0.137	0.30	1.00	1.06
	Left Tilted	0.044	0.181	0.601	0.130	0.17	0.31	0.73
LTE Band 26_LAT	Right Cheek	0.201	0.130	0.556	0.128	0.33	0.26	0.68
	Right Tilted	0.082	0.076	0.428	0.133	0.22	0.21	0.56



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	Left Cheek	0.138	0.867	0.921	0.137	0.28	1.00	1.06
	Left Tilted	0.067	0.181	0.601	0.130	0.20	0.31	0.73
LTE Band 66_LAT	Right Cheek	0.272	0.130	0.556	0.128	0.40	0.26	0.68
	Right Tilted	0.219	0.076	0.428	0.133	0.35	0.21	0.56
	Left Cheek	0.359	0.867	0.921	0.137	0.50	1.00	1.06
	Left Tilted	0.187	0.181	0.601	0.130	0.32	0.31	0.73
LTE Band 25_LAT	Right Cheek	0.253	0.130	0.556	0.128	0.38	0.26	0.68
	Right Tilted	0.142	0.076	0.428	0.133	0.28	0.21	0.56
	Left Cheek	0.367	0.867	0.921	0.137	0.50	1.00	1.06
	Left Tilted	0.225	0.181	0.601	0.130	0.36	0.31	0.73
LTE Band 30_LAT	Right Cheek	0.325	0.130	0.556	0.128	0.45	0.26	0.68
	Right Tilted	0.176	0.076	0.428	0.133	0.31	0.21	0.56
	Left Cheek	0.442	0.867	0.921	0.137	0.58	1.00	1.06
	Left Tilted	0.201	0.181	0.601	0.130	0.33	0.31	0.73
LTE Band 7_LAT	Right Cheek	0.294	0.130	0.556	0.128	0.42	0.26	0.68
	Right Tilted	0.227	0.076	0.428	0.133	0.36	0.21	0.56
	Left Cheek	0.504	0.867	0.921	0.137	0.64	1.00	1.06
	Left Tilted	0.184	0.181	0.601	0.130	0.31	0.31	0.73
LTE Band 41_LAT	Right Cheek	0.159	0.130	0.556	0.128	0.29	0.26	0.68
	Right Tilted	0.133	0.076	0.428	0.133	0.27	0.21	0.56
	Left Cheek	0.294	0.867	0.921	0.137	0.43	1.00	1.06
	Left Tilted	0.084	0.181	0.601	0.130	0.21	0.31	0.73
LTE Band 41-HPUE_LAT	Right Cheek	0.165	0.130	0.556	0.128	0.29	0.26	0.68
	Right Tilted	0.141	0.076	0.428	0.133	0.27	0.21	0.56
	Left Cheek	0.309	0.867	0.921	0.137	0.45	1.00	1.06
	Left Tilted	0.091	0.181	0.601	0.130	0.22	0.31	0.73





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Report No. : FA002703-02

WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850_LAT	Right Cheek	0.266	0.424	0.401	0.69	0.67
	Right Tilted	0.138	0.571	0.337	0.71	0.48
	Left Cheek	0.238	0.409	0.546	0.65	0.78
	Left Tilted	0.123	0.498	0.399	0.62	0.52
GSM1900_LAT	Right Cheek	0.239	0.424	0.401	0.66	0.64
	Right Tilted	0.135	0.571	0.337	0.71	0.47
	Left Cheek	0.205	0.409	0.546	0.61	0.75
	Left Tilted	0.190	0.498	0.399	0.69	0.59
WCDMA II_LAT	Right Cheek	0.417	0.424	0.401	0.84	0.82
	Right Tilted	0.267	0.571	0.337	0.84	0.60
	Left Cheek	0.262	0.409	0.546	0.67	0.81
	Left Tilted	0.261	0.498	0.399	0.76	0.66
WCDMA IV_LAT	Right Cheek	0.268	0.424	0.401	0.69	0.67
	Right Tilted	0.184	0.571	0.337	0.76	0.52
	Left Cheek	0.353	0.409	0.546	0.76	0.90
	Left Tilted	0.076	0.498	0.399	0.57	0.48
WCDMA V_LAT	Right Cheek	0.222	0.424	0.401	0.65	0.62
	Right Tilted	0.107	0.571	0.337	0.68	0.44
	Left Cheek	0.181	0.409	0.546	0.59	0.73
	Left Tilted	0.130	0.498	0.399	0.63	0.53
CDMA2000 BC0_LAT	Right Cheek	0.222	0.424	0.401	0.65	0.62
	Right Tilted	0.102	0.571	0.337	0.67	0.44
	Left Cheek	0.172	0.409	0.546	0.58	0.72
	Left Tilted	0.090	0.498	0.399	0.59	0.49
CDMA2000 BC1_LAT	Right Cheek	0.444	0.424	0.401	0.87	0.85
	Right Tilted	0.268	0.571	0.337	0.84	0.61
	Left Cheek	0.355	0.409	0.546	0.76	0.90
	Left Tilted	0.273	0.498	0.399	0.77	0.67
CDMA2000 BC10_LAT	Right Cheek	0.240	0.424	0.401	0.66	0.64
	Right Tilted	0.110	0.571	0.337	0.68	0.45
	Left Cheek	0.194	0.409	0.546	0.60	0.74
	Left Tilted	0.098	0.498	0.399	0.60	0.50
LTE Band 71_LAT	Right Cheek	0.213	0.424	0.401	0.64	0.61
	Right Tilted	0.096	0.571	0.337	0.67	0.43
	Left Cheek	0.158	0.409	0.546	0.57	0.70
	Left Tilted	0.089	0.498	0.399	0.59	0.49
LTE Band 12_LAT	Right Cheek	0.251	0.424	0.401	0.68	0.65
	Right Tilted	0.128	0.571	0.337	0.70	0.47
	Left Cheek	0.182	0.409	0.546	0.59	0.73
	Left Tilted	0.093	0.498	0.399	0.59	0.49
LTE Band 13_LAT	Right Cheek	0.284	0.424	0.401	0.71	0.69
	Right Tilted	0.121	0.571	0.337	0.69	0.46
	Left Cheek	0.219	0.409	0.546	0.63	0.77
	Left Tilted	0.103	0.498	0.399	0.60	0.50
LTE Band 5_LAT	Right Cheek	0.213	0.424	0.401	0.64	0.61
	Right Tilted	0.051	0.571	0.337	0.62	0.39
	Left Cheek	0.159	0.409	0.546	0.57	0.71
	Left Tilted	0.044	0.498	0.399	0.54	0.44
LTE Band 26_LAT	Right Cheek	0.201	0.424	0.401	0.63	0.60
	Right Tilted	0.082	0.571	0.337	0.65	0.42
	Left Cheek	0.138	0.409	0.546	0.55	0.68
	Left Tilted	0.067	0.498	0.399	0.57	0.47



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LTE Band 66_LAT	Right Cheek	0.272	0.424	0.401	0.70	0.67
	Right Tilted	0.219	0.571	0.337	0.79	0.56
	Left Cheek	0.359	0.409	0.546	0.77	0.91
	Left Tilted	0.187	0.498	0.399	0.69	0.59
LTE Band 25_LAT	Right Cheek	0.253	0.424	0.401	0.68	0.65
	Right Tilted	0.142	0.571	0.337	0.71	0.48
	Left Cheek	0.367	0.409	0.546	0.78	0.91
	Left Tilted	0.225	0.498	0.399	0.72	0.62
LTE Band 30_LAT	Right Cheek	0.325	0.424	0.401	0.75	0.73
	Right Tilted	0.176	0.571	0.337	0.75	0.51
	Left Cheek	0.442	0.409	0.546	0.85	0.99
	Left Tilted	0.201	0.498	0.399	0.70	0.60
LTE Band 7_LAT	Right Cheek	0.294	0.424	0.401	0.72	0.70
	Right Tilted	0.227	0.571	0.337	0.80	0.56
	Left Cheek	0.504	0.409	0.546	0.91	1.05
	Left Tilted	0.184	0.498	0.399	0.68	0.58
LTE Band 41_LAT	Right Cheek	0.159	0.424	0.401	0.58	0.56
	Right Tilted	0.133	0.571	0.337	0.70	0.47
	Left Cheek	0.294	0.409	0.546	0.70	0.84
	Left Tilted	0.084	0.498	0.399	0.58	0.48
LTE Band 41-HPUE_LAT	Right Cheek	0.165	0.424	0.401	0.59	0.57
	Right Tilted	0.141	0.571	0.337	0.71	0.48
	Left Cheek	0.309	0.409	0.546	0.72	0.86
	Left Tilted	0.091	0.498	0.399	0.59	0.49



WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
GSM850_LAT	Right Cheek	0.266	0.243	0.061	0.173	0.128	0.68	0.46	0.57	0.63
	Right Tilted	0.138	0.349	0.037	0.169	0.133	0.66	0.31	0.44	0.48
	Left Cheek	0.238	0.246	0.253	0.348	0.137	0.83	0.63	0.72	0.98
	Left Tilted	0.123	0.280	0.070	0.210	0.130	0.61	0.32	0.46	0.53
GSM1900_LAT	Right Cheek	0.850	0.243	0.061	0.173	0.128	1.27	1.04	1.15	1.21
	Right Tilted	0.135	0.349	0.037	0.169	0.133	0.65	0.31	0.44	0.47
	Left Cheek	0.205	0.246	0.253	0.348	0.137	0.80	0.60	0.69	0.94
	Left Tilted	0.190	0.280	0.070	0.210	0.130	0.68	0.39	0.53	0.60
WCDMA II_LAT	Right Cheek	0.417	0.243	0.061	0.173	0.128	0.83	0.61	0.72	0.78
	Right Tilted	0.267	0.349	0.037	0.169	0.133	0.79	0.44	0.57	0.61
	Left Cheek	0.262	0.246	0.253	0.348	0.137	0.86	0.65	0.75	1.00
	Left Tilted	0.261	0.280	0.070	0.210	0.130	0.75	0.46	0.60	0.67
WCDMA IV_LAT	Right Cheek	0.268	0.243	0.061	0.173	0.128	0.68	0.46	0.57	0.63
	Right Tilted	0.184	0.349	0.037	0.169	0.133	0.70	0.35	0.49	0.52
	Left Cheek	0.353	0.246	0.253	0.348	0.137	0.95	0.74	0.84	1.09
	Left Tilted	0.076	0.280	0.070	0.210	0.130	0.57	0.28	0.42	0.49
WCDMA V_LAT	Right Cheek	0.222	0.243	0.061	0.173	0.128	0.64	0.41	0.52	0.58
	Right Tilted	0.107	0.349	0.037	0.169	0.133	0.63	0.28	0.41	0.45
	Left Cheek	0.181	0.246	0.253	0.348	0.137	0.78	0.57	0.67	0.92
	Left Tilted	0.130	0.280	0.070	0.210	0.130	0.62	0.33	0.47	0.54
CDMA2000 BC0_LAT	Right Cheek	0.222	0.243	0.061	0.173	0.128	0.64	0.41	0.52	0.58
	Right Tilted	0.102	0.349	0.037	0.169	0.133	0.62	0.27	0.40	0.44
	Left Cheek	0.172	0.246	0.253	0.348	0.137	0.77	0.56	0.66	0.91
	Left Tilted	0.090	0.280	0.070	0.210	0.130	0.58	0.29	0.43	0.50
CDMA2000 BC1_LAT	Right Cheek	0.444	0.243	0.061	0.173	0.128	0.86	0.63	0.75	0.81
	Right Tilted	0.268	0.349	0.037	0.169	0.133	0.79	0.44	0.57	0.61
	Left Cheek	0.355	0.246	0.253	0.348	0.137	0.95	0.75	0.84	1.09
	Left Tilted	0.273	0.280	0.070	0.210	0.130	0.76	0.47	0.61	0.68
CDMA2000 BC10_LAT	Right Cheek	0.240	0.243	0.061	0.173	0.128	0.66	0.43	0.54	0.60
	Right Tilted	0.110	0.349	0.037	0.169	0.133	0.63	0.28	0.41	0.45
	Left Cheek	0.194	0.246	0.253	0.348	0.137	0.79	0.58	0.68	0.93
	Left Tilted	0.098	0.280	0.070	0.210	0.130	0.59	0.30	0.44	0.51
LTE Band 71_LAT	Right Cheek	0.213	0.243	0.061	0.173	0.128	0.63	0.40	0.51	0.58
	Right Tilted	0.096	0.349	0.037	0.169	0.133	0.61	0.27	0.40	0.44
	Left Cheek	0.158	0.246	0.253	0.348	0.137	0.75	0.55	0.64	0.90
	Left Tilted	0.089	0.280	0.070	0.210	0.130	0.58	0.29	0.43	0.50
LTE Band 12_LAT	Right Cheek	0.251	0.243	0.061	0.173	0.128	0.67	0.44	0.55	0.61
	Right Tilted	0.128	0.349	0.037	0.169	0.133	0.65	0.30	0.43	0.47
	Left Cheek	0.182	0.246	0.253	0.348	0.137	0.78	0.57	0.67	0.92
	Left Tilted	0.093	0.280	0.070	0.210	0.130	0.58	0.29	0.43	0.50
LTE Band 13_LAT	Right Cheek	0.284	0.243	0.061	0.173	0.128	0.70	0.47	0.59	0.65
	Right Tilted	0.121	0.349	0.037	0.169	0.133	0.64	0.29	0.42	0.46
	Left Cheek	0.219	0.246	0.253	0.348	0.137	0.81	0.61	0.70	0.96
	Left Tilted	0.103	0.280	0.070	0.210	0.130	0.59	0.30	0.44	0.51
LTE Band 5_LAT	Right Cheek	0.213	0.243	0.061	0.173	0.128	0.63	0.40	0.51	0.58
	Right Tilted	0.051	0.349	0.037	0.169	0.133	0.57	0.22	0.35	0.39
	Left Cheek	0.159	0.246	0.253	0.348	0.137	0.75	0.55	0.64	0.90
	Left Tilted	0.044	0.280	0.070	0.210	0.130	0.53	0.24	0.38	0.45
LTE Band 26_LAT	Right Cheek	0.201	0.243	0.061	0.173	0.128	0.62	0.39	0.50	0.56
	Right Tilted	0.082	0.349	0.037	0.169	0.133	0.60	0.25	0.38	0.42
	Left Cheek	0.138	0.246	0.253	0.348	0.137	0.73	0.53	0.62	0.88



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	Left Tilted	0.067	0.280	0.070	0.210	0.130	0.56	0.27	0.41	0.48
LTE Band 66_LAT	Right Cheek	0.272	0.243	0.061	0.173	0.128	0.69	0.46	0.57	0.63
	Right Tilted	0.219	0.349	0.037	0.169	0.133	0.74	0.39	0.52	0.56
	Left Cheek	0.359	0.246	0.253	0.348	0.137	0.95	0.75	0.84	1.10
	Left Tilted	0.187	0.280	0.070	0.210	0.130	0.68	0.39	0.53	0.60
LTE Band 25_LAT	Right Cheek	0.253	0.243	0.061	0.173	0.128	0.67	0.44	0.55	0.62
	Right Tilted	0.142	0.349	0.037	0.169	0.133	0.66	0.31	0.44	0.48
	Left Cheek	0.367	0.246	0.253	0.348	0.137	0.96	0.76	0.85	1.11
	Left Tilted	0.225	0.280	0.070	0.210	0.130	0.72	0.43	0.57	0.64
LTE Band 30_LAT	Right Cheek	0.325	0.243	0.061	0.173	0.128	0.74	0.51	0.63	0.69
	Right Tilted	0.176	0.349	0.037	0.169	0.133	0.69	0.35	0.48	0.52
	Left Cheek	0.442	0.246	0.253	0.348	0.137	1.04	0.83	0.93	1.18
	Left Tilted	0.201	0.280	0.070	0.210	0.130	0.69	0.40	0.54	0.61
LTE Band 7_LAT	Right Cheek	0.294	0.243	0.061	0.173	0.128	0.71	0.48	0.60	0.66
	Right Tilted	0.227	0.349	0.037	0.169	0.133	0.75	0.40	0.53	0.57
	Left Cheek	0.504	0.246	0.253	0.348	0.137	1.10	0.89	0.99	1.24
	Left Tilted	0.184	0.280	0.070	0.210	0.130	0.67	0.38	0.52	0.59
LTE Band 41_LAT	Right Cheek	0.159	0.243	0.061	0.173	0.128	0.58	0.35	0.46	0.52
	Right Tilted	0.133	0.349	0.037	0.169	0.133	0.65	0.30	0.44	0.47
	Left Cheek	0.294	0.246	0.253	0.348	0.137	0.89	0.68	0.78	1.03
	Left Tilted	0.084	0.280	0.070	0.210	0.130	0.57	0.28	0.42	0.49
LTE Band 41-HPUE_LAT	Right Cheek	0.165	0.243	0.061	0.173	0.128	0.58	0.35	0.47	0.53
	Right Tilted	0.141	0.349	0.037	0.169	0.133	0.66	0.31	0.44	0.48
	Left Cheek	0.309	0.246	0.253	0.348	0.137	0.90	0.70	0.79	1.05
	Left Tilted	0.091	0.280	0.070	0.210	0.130	0.58	0.29	0.43	0.50



## <5G NR Mode>

WWAN Band	Exposure Position	1	2	3	4	6	1+6	3+6	4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
N71_Ant 0	Right Cheek	1.175	0.781	0.130	0.556	0.128	1.30	0.26	0.68
	Right Tilted	1.037	0.976	0.076	0.428	0.133	1.17	0.21	0.56
	Left Cheek	0.997	0.848	0.867	0.921	0.137	1.13	1.00	1.06
	Left Tilted	0.928	0.967	0.181	0.601	0.130	1.06	0.31	0.73
N5_Ant 0	Right Cheek	0.831	0.781	0.130	0.556	0.128	0.96	0.26	0.68
	Right Tilted	0.741	0.976	0.076	0.428	0.133	0.87	0.21	0.56
	Left Cheek	0.784	0.848	0.867	0.921	0.137	0.92	1.00	1.06
	Left Tilted	0.643	0.967	0.181	0.601	0.130	0.77	0.31	0.73
N66_Ant 2	Right Cheek	0.922	0.781	0.130	0.556	0.128	1.05	0.26	0.68
	Right Tilted	0.386	0.976	0.076	0.428	0.133	0.52	0.21	0.56
	Left Cheek	0.294	0.848	0.867	0.921	0.137	0.43	1.00	1.06
	Left Tilted	0.236	0.967	0.181	0.601	0.130	0.37	0.31	0.73
N66_Ant 0	Right Cheek	0.557	0.781	0.130	0.556	0.128	0.69	0.26	0.68
	Right Tilted	0.838	0.976	0.076	0.428	0.133	0.97	0.21	0.56
	Left Cheek	0.405	0.848	0.867	0.921	0.137	0.54	1.00	1.06
	Left Tilted	0.535	0.967	0.181	0.601	0.130	0.67	0.31	0.73
N2_Ant 2	Right Cheek	1.169	0.781	0.130	0.556	0.128	1.30	0.26	0.68
	Right Tilted	0.292	0.976	0.076	0.428	0.133	0.43	0.21	0.56
	Left Cheek	0.268	0.848	0.867	0.921	0.137	0.41	1.00	1.06
	Left Tilted	0.171	0.967	0.181	0.601	0.130	0.30	0.31	0.73
N25_Ant 2	Right Cheek	1.189	0.781	0.130	0.556	0.128	1.32	0.26	0.68
	Right Tilted	0.337	0.976	0.076	0.428	0.133	0.47	0.21	0.56
	Left Cheek	0.261	0.848	0.867	0.921	0.137	0.40	1.00	1.06
	Left Tilted	0.191	0.967	0.181	0.601	0.130	0.32	0.31	0.73
N7_Ant 2	Right Cheek	0.987	0.781	0.130	0.556	0.128	1.12	0.26	0.68
	Right Tilted	0.291	0.976	0.076	0.428	0.133	0.42	0.21	0.56
	Left Cheek	0.313	0.848	0.867	0.921	0.137	0.45	1.00	1.06
	Left Tilted	0.126	0.967	0.181	0.601	0.130	0.26	0.31	0.73
N41_Ant 0	Right Cheek	1.052	0.781	0.130	0.556	0.128	1.18	0.26	0.68
	Right Tilted	1.121	0.976	0.076	0.428	0.133	1.25	0.21	0.56
	Left Cheek	0.593	0.848	0.867	0.921	0.137	0.73	1.00	1.06
	Left Tilted	0.703	0.967	0.181	0.601	0.130	0.83	0.31	0.73
N41(HPUE)_Ant 0	Right Cheek	0.987	0.781	0.130	0.556	0.128	1.12	0.26	0.68
	Right Tilted	1.095	0.976	0.076	0.428	0.133	1.23	0.21	0.56
	Left Cheek	0.540	0.848	0.867	0.921	0.137	0.68	1.00	1.06
	Left Tilted	0.598	0.967	0.181	0.601	0.130	0.73	0.31	0.73
N41(HPUE)_Ant 2	Right Cheek	1.098	0.781	0.130	0.556	0.128	1.23	0.26	0.68
	Right Tilted	0.300	0.976	0.076	0.428	0.133	0.43	0.21	0.56
	Left Cheek	0.297	0.848	0.867	0.921	0.137	0.43	1.00	1.06
	Left Tilted	0.131	0.967	0.181	0.601	0.130	0.26	0.31	0.73
N77_Ant9	Right Cheek	1.126	0.781	0.130	0.556	0.128	1.25	0.26	0.68
	Right Tilted	0.150	0.976	0.076	0.428	0.133	0.28	0.21	0.56
	Left Cheek	0.536	0.848	0.867	0.921	0.137	0.67	1.00	1.06
	Left Tilted	0.067	0.967	0.181	0.601	0.130	0.20	0.31	0.73
LTE Band 66_Ant 0	Right Cheek	0.759	0.781	0.130	0.556	0.128	0.89	0.26	0.68
	Right Tilted	1.002	0.976	0.076	0.428	0.133	1.14	0.21	0.56
	Left Cheek	0.577	0.848	0.867	0.921	0.137	0.71	1.00	1.06
	Left Tilted	0.753	0.967	0.181	0.601	0.130	0.88	0.31	0.73
LTE Band 7_Ant 0	Right Cheek	1.083	0.781	0.130	0.556	0.128	1.21	0.26	0.68
	Right Tilted	1.164	0.976	0.076	0.428	0.133	1.30	0.21	0.56
	Left Cheek	0.594	0.848	0.867	0.921	0.137	0.73	1.00	1.06
	Left Tilted	0.719	0.967	0.181	0.601	0.130	0.85	0.31	0.73



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WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
N71_Ant 0	Right Cheek	0.665	0.424	0.401	1.09	1.07
	Right Tilted	0.567	0.571	0.337	1.14	0.90
	Left Cheek	0.521	0.409	0.546	0.93	1.07
	Left Tilted	0.450	0.498	0.399	0.95	0.85
N5_Ant 0	Right Cheek	0.642	0.424	0.401	1.07	1.04
	Right Tilted	0.583	0.571	0.337	1.15	0.92
	Left Cheek	0.625	0.409	0.546	1.03	1.17
	Left Tilted	0.506	0.498	0.399	1.00	0.91
N66_Ant 2	Right Cheek	0.722	0.424	0.401	1.15	1.12
	Right Tilted	0.198	0.571	0.337	0.77	0.54
	Left Cheek	0.222	0.409	0.546	0.63	0.77
	Left Tilted	0.186	0.498	0.399	0.68	0.59
N66_Ant 0	Right Cheek	0.455	0.424	0.401	0.88	0.86
	Right Tilted	0.616	0.571	0.337	1.19	0.95
	Left Cheek	0.300	0.409	0.546	0.71	0.85
	Left Tilted	0.421	0.498	0.399	0.92	0.82
N2_Ant 2	Right Cheek	0.936	0.424	0.401	1.36	1.34
	Right Tilted	0.346	0.571	0.337	0.92	0.68
	Left Cheek	0.205	0.409	0.546	0.61	0.75
	Left Tilted	0.139	0.498	0.399	0.64	0.54
N25_Ant 2	Right Cheek	0.912	0.424	0.401	1.34	1.31
	Right Tilted	0.281	0.571	0.337	0.85	0.62
	Left Cheek	0.201	0.409	0.546	0.61	0.75
	Left Tilted	0.154	0.498	0.399	0.65	0.55
N7_Ant 2	Right Cheek	0.846	0.424	0.401	1.27	1.25
	Right Tilted	0.221	0.571	0.337	0.79	0.56
	Left Cheek	0.251	0.409	0.546	0.66	0.80
	Left Tilted	0.098	0.498	0.399	0.60	0.50
N41_Ant 0	Right Cheek	0.762	0.424	0.401	1.19	1.16
	Right Tilted	0.820	0.571	0.337	1.39	1.16
	Left Cheek	0.439	0.409	0.546	0.85	0.99
	Left Tilted	0.484	0.498	0.399	0.98	0.88
N41(HPUE)_Ant 0	Right Cheek	0.793	0.424	0.401	1.22	1.19
	Right Tilted	0.823	0.571	0.337	1.39	1.16
	Left Cheek	0.433	0.409	0.546	0.84	0.98
	Left Tilted	0.486	0.498	0.399	0.98	0.89
N41(HPUE)_Ant 2	Right Cheek	0.875	0.424	0.401	1.30	1.28
	Right Tilted	0.236	0.571	0.337	0.81	0.57
	Left Cheek	0.234	0.409	0.546	0.64	0.78
	Left Tilted	0.102	0.498	0.399	0.60	0.50
N77_Ant9	Right Cheek	0.793	0.424	0.401	1.22	1.19
	Right Tilted	0.121	0.571	0.337	0.69	0.46
	Left Cheek	0.407	0.409	0.546	0.82	0.95
	Left Tilted	0.043	0.498	0.399	0.54	0.44
LTE Band 66_Ant 0	Right Cheek	0.531	0.424	0.401	0.96	0.93
	Right Tilted	0.804	0.571	0.337	1.38	1.14
	Left Cheek	0.413	0.409	0.546	0.82	0.96
	Left Tilted	0.559	0.498	0.399	1.06	0.96
LTE Band 7_Ant 0	Right Cheek	0.709	0.424	0.401	1.13	1.11
	Right Tilted	0.820	0.571	0.337	1.39	1.16
	Left Cheek	0.428	0.409	0.546	0.84	0.97
	Left Tilted	0.479	0.498	0.399	0.98	0.88





WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
N71_Ant 0	Right Cheek	0.665	0.243	0.061	0.173	0.128	1.08	0.85	0.97	1.03
	Right Tilted	0.567	0.349	0.037	0.169	0.133	1.09	0.74	0.87	0.91
	Left Cheek	0.521	0.246	0.253	0.348	0.137	1.12	0.91	1.01	1.26
	Left Tilted	0.450	0.280	0.070	0.210	0.130	0.94	0.65	0.79	0.86
N5_Ant 0	Right Cheek	0.642	0.243	0.061	0.173	0.128	1.06	0.83	0.94	1.00
	Right Tilted	0.583	0.349	0.037	0.169	0.133	1.10	0.75	0.89	0.92
	Left Cheek	0.625	0.246	0.253	0.348	0.137	1.22	1.02	1.11	1.36
	Left Tilted	0.506	0.280	0.070	0.210	0.130	1.00	0.71	0.85	0.92
N66_Ant 2	Right Cheek	0.722	0.243	0.061	0.173	0.128	1.14	0.91	1.02	1.08
	Right Tilted	0.198	0.349	0.037	0.169	0.133	0.72	0.37	0.50	0.54
	Left Cheek	0.222	0.246	0.253	0.348	0.137	0.82	0.61	0.71	0.96
	Left Tilted	0.186	0.280	0.070	0.210	0.130	0.68	0.39	0.53	0.60
N66_Ant 0	Right Cheek	0.455	0.243	0.061	0.173	0.128	0.87	0.64	0.76	0.82
	Right Tilted	0.616	0.349	0.037	0.169	0.133	1.13	0.79	0.92	0.96
	Left Cheek	0.300	0.246	0.253	0.348	0.137	0.89	0.69	0.79	1.04
	Left Tilted	0.421	0.280	0.070	0.210	0.130	0.91	0.62	0.76	0.83
N2_Ant 2	Right Cheek	0.936	0.243	0.061	0.173	0.128	1.35	1.13	1.24	1.30
	Right Tilted	0.346	0.349	0.037	0.169	0.133	0.86	0.52	0.65	0.69
	Left Cheek	0.205	0.246	0.253	0.348	0.137	0.80	0.60	0.69	0.94
	Left Tilted	0.139	0.280	0.070	0.210	0.130	0.63	0.34	0.48	0.55
N25_Ant 2	Right Cheek	0.912	0.243	0.061	0.173	0.128	1.33	1.10	1.21	1.27
	Right Tilted	0.281	0.349	0.037	0.169	0.133	0.80	0.45	0.58	0.62
	Left Cheek	0.201	0.246	0.253	0.348	0.137	0.80	0.59	0.69	0.94
	Left Tilted	0.154	0.280	0.070	0.210	0.130	0.64	0.35	0.49	0.56
N7_Ant 2	Right Cheek	0.846	0.243	0.061	0.173	0.128	1.26	1.04	1.15	1.21
	Right Tilted	0.221	0.349	0.037	0.169	0.133	0.74	0.39	0.52	0.56
	Left Cheek	0.251	0.246	0.253	0.348	0.137	0.85	0.64	0.74	0.99
	Left Tilted	0.098	0.280	0.070	0.210	0.130	0.59	0.30	0.44	0.51
N41_Ant 0	Right Cheek	0.762	0.243	0.061	0.173	0.128	1.18	0.95	1.06	1.12
	Right Tilted	0.820	0.349	0.037	0.169	0.133	1.34	0.99	1.12	1.16
	Left Cheek	0.439	0.246	0.253	0.348	0.137	1.03	0.83	0.92	1.18
	Left Tilted	0.484	0.280	0.070	0.210	0.130	0.97	0.68	0.82	0.89
N41(HPUE)_Ant 0	Right Cheek	0.793	0.243	0.061	0.173	0.128	1.21	0.98	1.09	1.16
	Right Tilted	0.823	0.349	0.037	0.169	0.133	1.34	0.99	1.13	1.16
	Left Cheek	0.433	0.246	0.253	0.348	0.137	1.03	0.82	0.92	1.17
	Left Tilted	0.486	0.280	0.070	0.210	0.130	0.98	0.69	0.83	0.90
N41(HPUE)_Ant 2	Right Cheek	0.875	0.243	0.061	0.173	0.128	1.29	1.06	1.18	1.24
	Right Tilted	0.236	0.349	0.037	0.169	0.133	0.75	0.41	0.54	0.58
	Left Cheek	0.234	0.246	0.253	0.348	0.137	0.83	0.62	0.72	0.97
	Left Tilted	0.102	0.280	0.070	0.210	0.130	0.59	0.30	0.44	0.51
N77_Ant9	Right Cheek	0.793	0.243	0.061	0.173	0.128	1.21	0.98	1.09	1.16
	Right Tilted	0.121	0.349	0.037	0.169	0.133	0.64	0.29	0.42	0.46
	Left Cheek	0.407	0.246	0.253	0.348	0.137	1.00	0.80	0.89	1.15
	Left Tilted	0.043	0.280	0.070	0.210	0.130	0.53	0.24	0.38	0.45
LTE Band 66_Ant 0	Right Cheek	0.531	0.243	0.061	0.173	0.128	0.95	0.72	0.83	0.89
	Right Tilted	0.804	0.349	0.037	0.169	0.133	1.32	0.97	1.11	1.14
	Left Cheek	0.413	0.246	0.253	0.348	0.137	1.01	0.80	0.90	1.15
	Left Tilted	0.559	0.280	0.070	0.210	0.130	1.05	0.76	0.90	0.97
LTE Band 7_Ant 0	Right Cheek	0.709	0.243	0.061	0.173	0.128	1.13	0.90	1.01	1.07
	Right Tilted	0.820	0.349	0.037	0.169	0.133	1.34	0.99	1.12	1.16
	Left Cheek	0.428	0.246	0.253	0.348	0.137	1.02	0.82	0.91	1.17
	Left Tilted	0.479	0.280	0.070	0.210	0.130	0.97	0.68	0.82	0.89



# FCC SAR TEST REPORT

Report No. : FA002703-02

WWAN Band	Exposure Position	1	2	3	4	6	1+6	3+6	4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
N71_Ant 1	Right Cheek	0.166	0.781	0.130	0.556	0.128	0.29	0.26	0.68
	Right Tilted	0.001	0.976	0.076	0.428	0.133	0.13	0.21	0.56
	Left Cheek	0.078	0.848	0.867	0.921	0.137	0.22	1.00	1.06
	Left Tilted	0.001	0.967	0.181	0.601	0.130	0.13	0.31	0.73
N5_Ant 1	Right Cheek	0.178	0.781	0.130	0.556	0.128	0.31	0.26	0.68
	Right Tilted	0.078	0.976	0.076	0.428	0.133	0.21	0.21	0.56
	Left Cheek	0.139	0.848	0.867	0.921	0.137	0.28	1.00	1.06
	Left Tilted	0.075	0.967	0.181	0.601	0.130	0.21	0.31	0.73
N66_Ant 1	Right Cheek	0.144	0.781	0.130	0.556	0.128	0.27	0.26	0.68
	Right Tilted	0.051	0.976	0.076	0.428	0.133	0.18	0.21	0.56
	Left Cheek	0.054	0.848	0.867	0.921	0.137	0.19	1.00	1.06
	Left Tilted	0.050	0.967	0.181	0.601	0.130	0.18	0.31	0.73
N66_Ant 3	Right Cheek	0.231	0.781	0.130	0.556	0.128	0.36	0.26	0.68
	Right Tilted	0.135	0.976	0.076	0.428	0.133	0.27	0.21	0.56
	Left Cheek	0.200	0.848	0.867	0.921	0.137	0.34	1.00	1.06
	Left Tilted	0.124	0.967	0.181	0.601	0.130	0.25	0.31	0.73
N2_Ant 3	Right Cheek	0.338	0.781	0.130	0.556	0.128	0.47	0.26	0.68
	Right Tilted	0.215	0.976	0.076	0.428	0.133	0.35	0.21	0.56
	Left Cheek	0.198	0.848	0.867	0.921	0.137	0.34	1.00	1.06
	Left Tilted	0.168	0.967	0.181	0.601	0.130	0.30	0.31	0.73
N25_Ant 3	Right Cheek	0.320	0.781	0.130	0.556	0.128	0.45	0.26	0.68
	Right Tilted	0.230	0.976	0.076	0.428	0.133	0.36	0.21	0.56
	Left Cheek	0.208	0.848	0.867	0.921	0.137	0.35	1.00	1.06
	Left Tilted	0.182	0.967	0.181	0.601	0.130	0.31	0.31	0.73
N7_Ant 3	Right Cheek	0.189	0.781	0.130	0.556	0.128	0.32	0.26	0.68
	Right Tilted	0.152	0.976	0.076	0.428	0.133	0.29	0.21	0.56
	Left Cheek	0.332	0.848	0.867	0.921	0.137	0.47	1.00	1.06
	Left Tilted	0.136	0.967	0.181	0.601	0.130	0.27	0.31	0.73
N41_Ant 1	Right Cheek	0.094	0.781	0.130	0.556	0.128	0.22	0.26	0.68
	Right Tilted	0.029	0.976	0.076	0.428	0.133	0.16	0.21	0.56
	Left Cheek	0.045	0.848	0.867	0.921	0.137	0.18	1.00	1.06
	Left Tilted	0.031	0.967	0.181	0.601	0.130	0.16	0.31	0.73
N41(HPUE)_Ant 1	Right Cheek	0.181	0.781	0.130	0.556	0.128	0.31	0.26	0.68
	Right Tilted	0.060	0.976	0.076	0.428	0.133	0.19	0.21	0.56
	Left Cheek	0.094	0.848	0.867	0.921	0.137	0.23	1.00	1.06
	Left Tilted	0.062	0.967	0.181	0.601	0.130	0.19	0.31	0.73
N41_Ant 3	Right Cheek	0.232	0.781	0.130	0.556	0.128	0.36	0.26	0.68
	Right Tilted	0.203	0.976	0.076	0.428	0.133	0.34	0.21	0.56
	Left Cheek	0.407	0.848	0.867	0.921	0.137	0.54	1.00	1.06
	Left Tilted	0.154	0.967	0.181	0.601	0.130	0.28	0.31	0.73
N41(HPUE)_Ant 3	Right Cheek	0.270	0.781	0.130	0.556	0.128	0.40	0.26	0.68
	Right Tilted	0.232	0.976	0.076	0.428	0.133	0.37	0.21	0.56
	Left Cheek	0.445	0.848	0.867	0.921	0.137	0.58	1.00	1.06
	Left Tilted	0.169	0.967	0.181	0.601	0.130	0.30	0.31	0.73
LTE Band 66_Ant 1	Right Cheek	0.142	0.781	0.130	0.556	0.128	0.27	0.26	0.68
	Right Tilted	0.058	0.976	0.076	0.428	0.133	0.19	0.21	0.56
	Left Cheek	0.062	0.848	0.867	0.921	0.137	0.20	1.00	1.06
	Left Tilted	0.062	0.967	0.181	0.601	0.130	0.19	0.31	0.73
LTE Band 7_Ant 1	Right Cheek	0.158	0.781	0.130	0.556	0.128	0.29	0.26	0.68
	Right Tilted	0.002	0.976	0.076	0.428	0.133	0.14	0.21	0.56
	Left Cheek	0.080	0.848	0.867	0.921	0.137	0.22	1.00	1.06
	Left Tilted	0.002	0.967	0.181	0.601	0.130	0.13	0.31	0.73



WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
N71_Ant 1	Right Cheek	0.166	0.424	0.401	0.59	0.57
	Right Tilted	0.001	0.571	0.337	0.57	0.34
	Left Cheek	0.078	0.409	0.546	0.49	0.62
	Left Tilted	0.001	0.498	0.399	0.50	0.40
N5_Ant 1	Right Cheek	0.178	0.424	0.401	0.60	0.58
	Right Tilted	0.078	0.571	0.337	0.65	0.42
	Left Cheek	0.139	0.409	0.546	0.55	0.69
	Left Tilted	0.075	0.498	0.399	0.57	0.47
N66_Ant 1	Right Cheek	0.144	0.424	0.401	0.57	0.55
	Right Tilted	0.051	0.571	0.337	0.62	0.39
	Left Cheek	0.054	0.409	0.546	0.46	0.60
	Left Tilted	0.050	0.498	0.399	0.55	0.45
N66_Ant 3	Right Cheek	0.231	0.424	0.401	0.66	0.63
	Right Tilted	0.135	0.571	0.337	0.71	0.47
	Left Cheek	0.200	0.409	0.546	0.61	0.75
	Left Tilted	0.124	0.498	0.399	0.62	0.52
N2_Ant 3	Right Cheek	0.338	0.424	0.401	0.76	0.74
	Right Tilted	0.215	0.571	0.337	0.79	0.55
	Left Cheek	0.198	0.409	0.546	0.61	0.74
	Left Tilted	0.168	0.498	0.399	0.67	0.57
N25_Ant 3	Right Cheek	0.320	0.424	0.401	0.74	0.72
	Right Tilted	0.230	0.571	0.337	0.80	0.57
	Left Cheek	0.208	0.409	0.546	0.62	0.75
	Left Tilted	0.182	0.498	0.399	0.68	0.58
N7_Ant 3	Right Cheek	0.189	0.424	0.401	0.61	0.59
	Right Tilted	0.152	0.571	0.337	0.72	0.49
	Left Cheek	0.332	0.409	0.546	0.74	0.88
	Left Tilted	0.136	0.498	0.399	0.63	0.54
N41_Ant 1	Right Cheek	0.094	0.424	0.401	0.52	0.50
	Right Tilted	0.029	0.571	0.337	0.60	0.37
	Left Cheek	0.045	0.409	0.546	0.45	0.59
	Left Tilted	0.031	0.498	0.399	0.53	0.43
N41(HPUE)_Ant 1	Right Cheek	0.181	0.424	0.401	0.61	0.58
	Right Tilted	0.060	0.571	0.337	0.63	0.40
	Left Cheek	0.094	0.409	0.546	0.50	0.64
	Left Tilted	0.062	0.498	0.399	0.56	0.46
N41_Ant 3	Right Cheek	0.232	0.424	0.401	0.66	0.63
	Right Tilted	0.203	0.571	0.337	0.77	0.54
	Left Cheek	0.407	0.409	0.546	0.82	0.95
	Left Tilted	0.154	0.498	0.399	0.65	0.55
N41(HPUE)_Ant 3	Right Cheek	0.270	0.424	0.401	0.69	0.67
	Right Tilted	0.232	0.571	0.337	0.80	0.57
	Left Cheek	0.445	0.409	0.546	0.85	0.99
	Left Tilted	0.169	0.498	0.399	0.67	0.57
LTE Band 66_Ant 1	Right Cheek	0.142	0.424	0.401	0.57	0.54
	Right Tilted	0.058	0.571	0.337	0.63	0.40
	Left Cheek	0.062	0.409	0.546	0.47	0.61
	Left Tilted	0.062	0.498	0.399	0.56	0.46
LTE Band 7_Ant 1	Right Cheek	0.158	0.424	0.401	0.58	0.56
	Right Tilted	0.002	0.571	0.337	0.57	0.34
	Left Cheek	0.080	0.409	0.546	0.49	0.63
	Left Tilted	0.002	0.498	0.399	0.50	0.40



# FCC SAR TEST REPORT

Report No. : FA002703-02

WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
N71_Ant 1	Right Cheek	0.166	0.243	0.061	0.173	0.128	0.58	0.36	0.47	0.53
	Right Tilted	0.001	0.349	0.037	0.169	0.133	0.52	0.17	0.30	0.34
	Left Cheek	0.078	0.246	0.253	0.348	0.137	0.67	0.47	0.56	0.82
	Left Tilted	0.001	0.280	0.070	0.210	0.130	0.49	0.20	0.34	0.41
N5_Ant 1	Right Cheek	0.850	0.243	0.061	0.173	0.128	1.27	1.04	1.15	1.21
	Right Tilted	0.078	0.349	0.037	0.169	0.133	0.60	0.25	0.38	0.42
	Left Cheek	0.139	0.246	0.253	0.348	0.137	0.73	0.53	0.62	0.88
	Left Tilted	0.075	0.280	0.070	0.210	0.130	0.57	0.28	0.42	0.49
N66_Ant 1	Right Cheek	0.144	0.243	0.061	0.173	0.128	0.56	0.33	0.45	0.51
	Right Tilted	0.051	0.349	0.037	0.169	0.133	0.57	0.22	0.35	0.39
	Left Cheek	0.054	0.246	0.253	0.348	0.137	0.65	0.44	0.54	0.79
	Left Tilted	0.050	0.280	0.070	0.210	0.130	0.54	0.25	0.39	0.46
N66_Ant 3	Right Cheek	0.231	0.243	0.061	0.173	0.128	0.65	0.42	0.53	0.59
	Right Tilted	0.135	0.349	0.037	0.169	0.133	0.65	0.31	0.44	0.47
	Left Cheek	0.200	0.246	0.253	0.348	0.137	0.79	0.59	0.69	0.94
	Left Tilted	0.124	0.280	0.070	0.210	0.130	0.61	0.32	0.46	0.53
N2_Ant 3	Right Cheek	0.338	0.243	0.061	0.173	0.128	0.75	0.53	0.64	0.70
	Right Tilted	0.215	0.349	0.037	0.169	0.133	0.73	0.39	0.52	0.55
	Left Cheek	0.198	0.246	0.253	0.348	0.137	0.79	0.59	0.68	0.94
	Left Tilted	0.168	0.280	0.070	0.210	0.130	0.66	0.37	0.51	0.58
N25_Ant 3	Right Cheek	0.320	0.243	0.061	0.173	0.128	0.74	0.51	0.62	0.68
	Right Tilted	0.230	0.349	0.037	0.169	0.133	0.75	0.40	0.53	0.57
	Left Cheek	0.208	0.246	0.253	0.348	0.137	0.80	0.60	0.69	0.95
	Left Tilted	0.182	0.280	0.070	0.210	0.130	0.67	0.38	0.52	0.59
N7_Ant 3	Right Cheek	0.189	0.243	0.061	0.173	0.128	0.61	0.38	0.49	0.55
	Right Tilted	0.152	0.349	0.037	0.169	0.133	0.67	0.32	0.45	0.49
	Left Cheek	0.332	0.246	0.253	0.348	0.137	0.93	0.72	0.82	1.07
	Left Tilted	0.136	0.280	0.070	0.210	0.130	0.63	0.34	0.48	0.55
N41_Ant 1	Right Cheek	0.094	0.243	0.061	0.173	0.128	0.51	0.28	0.40	0.46
	Right Tilted	0.029	0.349	0.037	0.169	0.133	0.55	0.20	0.33	0.37
	Left Cheek	0.045	0.246	0.253	0.348	0.137	0.64	0.44	0.53	0.78
	Left Tilted	0.031	0.280	0.070	0.210	0.130	0.52	0.23	0.37	0.44
N41(HPUE)_Ant 1	Right Cheek	0.181	0.243	0.061	0.173	0.128	0.60	0.37	0.48	0.54
	Right Tilted	0.060	0.349	0.037	0.169	0.133	0.58	0.23	0.36	0.40
	Left Cheek	0.094	0.246	0.253	0.348	0.137	0.69	0.48	0.58	0.83
	Left Tilted	0.062	0.280	0.070	0.210	0.130	0.55	0.26	0.40	0.47
N41_Ant 3	Right Cheek	0.232	0.243	0.061	0.173	0.128	0.65	0.42	0.53	0.59
	Right Tilted	0.203	0.349	0.037	0.169	0.133	0.72	0.37	0.51	0.54
	Left Cheek	0.407	0.246	0.253	0.348	0.137	1.00	0.80	0.89	1.15
	Left Tilted	0.154	0.280	0.070	0.210	0.130	0.64	0.35	0.49	0.56
N41(HPUE)_Ant 3	Right Cheek	0.270	0.243	0.061	0.173	0.128	0.69	0.46	0.57	0.63
	Right Tilted	0.232	0.349	0.037	0.169	0.133	0.75	0.40	0.53	0.57
	Left Cheek	0.445	0.246	0.253	0.348	0.137	1.04	0.84	0.93	1.18
	Left Tilted	0.169	0.280	0.070	0.210	0.130	0.66	0.37	0.51	0.58
LTE Band 66_Ant 1	Right Cheek	0.142	0.243	0.061	0.173	0.128	0.56	0.33	0.44	0.50
	Right Tilted	0.058	0.349	0.037	0.169	0.133	0.58	0.23	0.36	0.40
	Left Cheek	0.062	0.246	0.253	0.348	0.137	0.66	0.45	0.55	0.80
	Left Tilted	0.062	0.280	0.070	0.210	0.130	0.55	0.26	0.40	0.47
LTE Band 7_Ant 1	Right Cheek	0.158	0.243	0.061	0.173	0.128	0.57	0.35	0.46	0.52
	Right Tilted	0.002	0.349	0.037	0.169	0.133	0.52	0.17	0.30	0.34
	Left Cheek	0.080	0.246	0.253	0.348	0.137	0.67	0.47	0.57	0.82
	Left Tilted	0.002	0.280	0.070	0.210	0.130	0.49	0.20	0.34	0.41

### 20.3 Hotspot Exposure Conditions

Exposure Position	2	4	2+4
	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
Front	0.175	0.068	0.24
Back	0.219	0.643	0.86
Left side	0.003	0.001	0.00
Right side	0.252	0.283	0.54
Top side	0.683	0.212	0.90

WWAN Band	Exposure Position	1	3	4	6	1+6 Summed 1g SAR (W/kg)	3+6 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_UAT	Front	0.232	0.163	0.104	0.134	0.37	0.30	0.24
	Back	0.340	0.188	1.092	0.171	0.51	0.36	1.26
	Left side	0.098	0.001	0.015	0.011	0.11	0.01	0.03
	Right side	0.001	0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.188	0.001	0.288	0.351	0.54	0.35	0.64
GSM1900_UAT	Front	0.141	0.163	0.104	0.134	0.28	0.30	0.24
	Back	0.221	0.188	1.092	0.171	0.39	0.36	1.26
	Left side	0.499	0.001	0.015	0.011	0.51	0.01	0.03
	Right side	0.027	0.618	0.434	0.018	0.05	0.64	0.45
	Top side	0.017	0.001	0.288	0.351	0.37	0.35	0.64
WCDMA II_UAT	Front	0.342	0.163	0.104	0.134	0.48	0.30	0.24
	Back	0.428	0.188	1.092	0.171	0.60	0.36	1.26
	Left side	1.189	0.001	0.015	0.011	1.20	0.01	0.03
	Right side	0.076	0.618	0.434	0.018	0.09	0.64	0.45
	Top side	0.196	0.001	0.288	0.351	0.55	0.35	0.64
WCDMA IV_UAT	Front	0.366	0.163	0.104	0.134	0.50	0.30	0.24
	Back	0.427	0.188	1.092	0.171	0.60	0.36	1.26
	Left side	1.178	0.001	0.015	0.011	1.19	0.01	0.03
	Right side	0.210	0.618	0.434	0.018	0.23	0.64	0.45
	Top side	0.210	0.001	0.288	0.351	0.56	0.35	0.64
WCDMA V_UAT	Front	0.484	0.163	0.104	0.134	0.62	0.30	0.24
	Back	0.671	0.188	1.092	0.171	0.84	0.36	1.26
	Left side	0.178	0.001	0.015	0.011	0.19	0.01	0.03
	Right side	0.051	0.618	0.434	0.018	0.07	0.64	0.45
	Top side	0.557	0.001	0.288	0.351	0.91	0.35	0.64
CDMA2000 BC0_UAT	Front	0.470	0.163	0.104	0.134	0.60	0.30	0.24
	Back	0.579	0.188	1.092	0.171	0.75	0.36	1.26
	Left side	0.101	0.001	0.015	0.011	0.11	0.01	0.03
	Right side	0.036	0.618	0.434	0.018	0.05	0.64	0.45
	Top side	0.418	0.001	0.288	0.351	0.77	0.35	0.64
CDMA2000 BC1_UAT	Front	0.317	0.163	0.104	0.134	0.45	0.30	0.24
	Back	0.407	0.188	1.092	0.171	0.58	0.36	1.26
	Left side	0.922	0.001	0.015	0.011	0.93	0.01	0.03
	Right side		0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.162	0.001	0.288	0.351	0.51	0.35	0.64
CDMA2000 BC10_UAT	Front	0.444	0.163	0.104	0.134	0.58	0.30	0.24
	Back	0.577	0.188	1.092	0.171	0.75	0.36	1.26
	Left side	0.140	0.001	0.015	0.011	0.15	0.01	0.03
	Right side	0.050	0.618	0.434	0.018	0.07	0.64	0.45
	Top side	0.436	0.001	0.288	0.351	0.79	0.35	0.64
LTE Band 71_UAT	Front	0.330	0.163	0.104	0.134	0.46	0.30	0.24
	Back	0.404	0.188	1.092	0.171	0.58	0.36	1.26



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	Left side	0.173	0.001	0.015	0.011	0.18	0.01	0.03
	Right side	0.064	0.618	0.434	0.018	0.08	0.64	0.45
	Top side	0.337	0.001	0.288	0.351	0.69	0.35	0.64
LTE Band 12_UAT	Front	0.410	0.163	0.104	0.134	0.54	0.30	0.24
	Back	0.579	0.188	1.092	0.171	0.75	0.36	1.26
	Left side	0.252	0.001	0.015	0.011	0.26	0.01	0.03
	Right side	0.057	0.618	0.434	0.018	0.08	0.64	0.45
	Top side	0.422	0.001	0.288	0.351	0.77	0.35	0.64
LTE Band 13_UAT	Front	0.521	0.163	0.104	0.134	0.66	0.30	0.24
	Back	0.658	0.188	1.092	0.171	0.83	0.36	1.26
	Left side	0.231	0.001	0.015	0.011	0.24	0.01	0.03
	Right side	0.062	0.618	0.434	0.018	0.08	0.64	0.45
	Top side	0.600	0.001	0.288	0.351	0.95	0.35	0.64
LTE Band 5_UAT	Front	0.349	0.163	0.104	0.134	0.48	0.30	0.24
	Back	0.460	0.188	1.092	0.171	0.63	0.36	1.26
	Left side	0.176	0.001	0.015	0.011	0.19	0.01	0.03
	Right side	0.068	0.618	0.434	0.018	0.09	0.64	0.45
	Top side	0.357	0.001	0.288	0.351	0.71	0.35	0.64
LTE Band 26_UAT	Front	0.498	0.163	0.104	0.134	0.63	0.30	0.24
	Back	0.361	0.188	1.092	0.171	0.53	0.36	1.26
	Left side	0.118	0.001	0.015	0.011	0.13	0.01	0.03
	Right side	0.045	0.618	0.434	0.018	0.06	0.64	0.45
	Top side	0.358	0.001	0.288	0.351	0.71	0.35	0.64
LTE Band 66_UAT	Front	0.338	0.163	0.104	0.134	0.47	0.30	0.24
	Back	0.393	0.188	1.092	0.171	0.56	0.36	1.26
	Left side	1.183	0.001	0.015	0.011	1.19	0.01	0.03
	Right side	0.065	0.618	0.434	0.018	0.08	0.64	0.45
	Top side	0.203	0.001	0.288	0.351	0.55	0.35	0.64
LTE Band 25_UAT	Front	0.327	0.163	0.104	0.134	0.46	0.30	0.24
	Back	0.413	0.188	1.092	0.171	0.58	0.36	1.26
	Left side	0.920	0.001	0.015	0.011	0.93	0.01	0.03
	Right side	0.029	0.618	0.434	0.018	0.05	0.64	0.45
	Top side	0.119	0.001	0.288	0.351	0.47	0.35	0.64
LTE Band 30_UAT	Front	0.203	0.163	0.104	0.134	0.34	0.30	0.24
	Back	0.317	0.188	1.092	0.171	0.49	0.36	1.26
	Left side	0.597	0.001	0.015	0.011	0.61	0.01	0.03
	Right side	0.003	0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.071	0.001	0.288	0.351	0.42	0.35	0.64
LTE Band 7_UAT	Front	0.238	0.163	0.104	0.134	0.37	0.30	0.24
	Back	0.481	0.188	1.092	0.171	0.65	0.36	1.26
	Left side	0.825	0.001	0.015	0.011	0.84	0.01	0.03
	Right side	0.021	0.618	0.434	0.018	0.04	0.64	0.45
	Top side	0.083	0.001	0.288	0.351	0.43	0.35	0.64
LTE Band 41_UAT	Front	0.123	0.163	0.104	0.134	0.26	0.30	0.24
	Back	0.241	0.188	1.092	0.171	0.41	0.36	1.26
	Left side	0.419	0.001	0.015	0.011	0.43	0.01	0.03
	Right side	0.009	0.618	0.434	0.018	0.03	0.64	0.45
	Top side	0.053	0.001	0.288	0.351	0.40	0.35	0.64
LTE Band 41_HPUE_UAT	Front	0.115	0.163	0.104	0.134	0.25	0.30	0.24
	Back	0.217	0.188	1.092	0.171	0.39	0.36	1.26
	Left side	0.434	0.001	0.015	0.011	0.45	0.01	0.03
	Right side	0.014	0.618	0.434	0.018	0.03	0.64	0.45
	Top side	0.060	0.001	0.288	0.351	0.41	0.35	0.64
LTE Band 48	Front	0.240	0.163	0.104	0.134	0.37	0.30	0.24
	Back	0.442	0.188	1.092	0.171	0.61	0.36	1.26
	Left side	1.040	0.001	0.015	0.011	1.05	0.01	0.03
	Right side	0.001	0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.085	0.001	0.288	0.351	0.44	0.35	0.64





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WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850_UAT	Front	0.232	0.175	0.068	0.41	0.30
	Back	0.340	0.219	0.643	0.56	0.98
	Left side	0.098	0.003	0.001	0.10	0.10
	Right side	0.001	0.252	0.283	0.25	0.28
	Top side	0.188	0.683	0.212	0.87	0.40
GSM1900_UAT	Front	0.141	0.175	0.068	0.32	0.21
	Back	0.221	0.219	0.643	0.44	0.86
	Left side	0.499	0.003	0.001	0.50	0.50
	Right side	0.027	0.252	0.283	0.28	0.31
	Top side	0.017	0.683	0.212	0.70	0.23
WCDMA II_UAT	Front	0.342	0.175	0.068	0.52	0.41
	Back	0.428	0.219	0.643	0.65	1.07
	Left side	1.189	0.003	0.001	1.19	1.19
	Right side	0.076	0.252	0.283	0.33	0.36
	Top side	0.196	0.683	0.212	0.88	0.41
WCDMA IV_UAT	Front	0.366	0.175	0.068	0.54	0.43
	Back	0.427	0.219	0.643	0.65	1.07
	Left side	1.178	0.003	0.001	1.18	1.18
	Right side	0.210	0.252	0.283	0.46	0.49
	Top side	0.210	0.683	0.212	0.89	0.42
WCDMA V_UAT	Front	0.484	0.175	0.068	0.66	0.55
	Back	0.671	0.219	0.643	0.89	1.31
	Left side	0.178	0.003	0.001	0.18	0.18
	Right side	0.051	0.252	0.283	0.30	0.33
	Top side	0.557	0.683	0.212	1.24	0.77
CDMA2000 BC0_UAT	Front	0.470	0.175	0.068	0.65	0.54
	Back	0.579	0.219	0.643	0.80	1.22
	Left side	0.101	0.003	0.001	0.10	0.10
	Right side	0.036	0.252	0.283	0.29	0.32
	Top side	0.418	0.683	0.212	1.10	0.63
CDMA2000 BC1_UAT	Front	0.317	0.175	0.068	0.49	0.39
	Back	0.407	0.219	0.643	0.63	1.05
	Left side	0.922	0.003	0.001	0.93	0.92
	Right side		0.252	0.283	0.25	0.28
	Top side	0.162	0.683	0.212	0.85	0.37
CDMA2000 BC10_UAT	Front	0.444	0.175	0.068	0.62	0.51
	Back	0.577	0.219	0.643	0.80	1.22
	Left side	0.140	0.003	0.001	0.14	0.14
	Right side	0.050	0.252	0.283	0.30	0.33
	Top side	0.436	0.683	0.212	1.12	0.65
LTE Band 71_UAT	Front	0.330	0.175	0.068	0.51	0.40
	Back	0.404	0.219	0.643	0.62	1.05
	Left side	0.173	0.003	0.001	0.18	0.17
	Right side	0.064	0.252	0.283	0.32	0.35
	Top side	0.337	0.683	0.212	1.02	0.55
LTE Band 12_UAT	Front	0.410	0.175	0.068	0.59	0.48
	Back	0.579	0.219	0.643	0.80	1.22
	Left side	0.252	0.003	0.001	0.26	0.25
	Right side	0.057	0.252	0.283	0.31	0.34
	Top side	0.422	0.683	0.212	1.11	0.63
LTE Band 13_UAT	Front	0.521	0.175	0.068	0.70	0.59
	Back	0.658	0.219	0.643	0.88	1.30
	Left side	0.231	0.003	0.001	0.23	0.23
	Right side	0.062	0.252	0.283	0.31	0.35
	Top side	0.600	0.683	0.212	1.28	0.81



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LTE Band 5_UAT	Front	0.349	0.175	0.068	0.52	0.42
	Back	0.460	0.219	0.643	0.68	1.10
	Left side	0.176	0.003	0.001	0.18	0.18
	Right side	0.068	0.252	0.283	0.32	0.35
	Top side	0.357	0.683	0.212	1.04	0.57
LTE Band 26_UAT	Front	0.498	0.175	0.068	0.67	0.57
	Back	0.361	0.219	0.643	0.58	1.00
	Left side	0.118	0.003	0.001	0.12	0.12
	Right side	0.045	0.252	0.283	0.30	0.33
	Top side	0.358	0.683	0.212	1.04	0.57
LTE Band 66_UAT	Front	0.338	0.175	0.068	0.51	0.41
	Back	0.393	0.219	0.643	0.61	1.04
	Left side	1.183	0.003	0.001	1.19	1.18
	Right side	0.065	0.252	0.283	0.32	0.35
	Top side	0.203	0.683	0.212	0.89	0.42
LTE Band 25_UAT	Front	0.327	0.175	0.068	0.50	0.40
	Back	0.413	0.219	0.643	0.63	1.06
	Left side	0.920	0.003	0.001	0.92	0.92
	Right side	0.029	0.252	0.283	0.28	0.31
	Top side	0.119	0.683	0.212	0.80	0.33
LTE Band 30_UAT	Front	0.203	0.175	0.068	0.38	0.27
	Back	0.317	0.219	0.643	0.54	0.96
	Left side	0.597	0.003	0.001	0.60	0.60
	Right side	0.003	0.252	0.283	0.26	0.29
	Top side	0.071	0.683	0.212	0.75	0.28
LTE Band 7_UAT	Front	0.238	0.175	0.068	0.41	0.31
	Back	0.481	0.219	0.643	0.70	1.12
	Left side	0.825	0.003	0.001	0.83	0.83
	Right side	0.021	0.252	0.283	0.27	0.30
	Top side	0.083	0.683	0.212	0.77	0.30
LTE Band 41_UAT	Front	0.123	0.175	0.068	0.30	0.19
	Back	0.241	0.219	0.643	0.46	0.88
	Left side	0.419	0.003	0.001	0.42	0.42
	Right side	0.009	0.252	0.283	0.26	0.29
	Top side	0.053	0.683	0.212	0.74	0.27
LTE Band 41_HPUE_UAT	Front	0.115	0.175	0.068	0.29	0.18
	Back	0.217	0.219	0.643	0.44	0.86
	Left side	0.434	0.003	0.001	0.44	0.44
	Right side	0.014	0.252	0.283	0.27	0.30
	Top side	0.060	0.683	0.212	0.74	0.27
LTE Band 48	Front	0.240	0.175	0.068	0.42	0.31
	Back	0.442	0.219	0.643	0.66	1.09
	Left side	1.040	0.003	0.001	1.04	1.04
	Right side	0.001	0.252	0.283	0.25	0.28
	Top side	0.085	0.683	0.212	0.77	0.30



WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
GSM850_UAT	Front	0.232	0.073	0.001	0.033	0.134	0.34	0.37	0.40	0.40
	Back	0.340	0.084	0.047	0.306	0.171	0.73	0.56	0.82	0.86
	Left side	0.098	0.001	0.001	0.001	0.011	0.10	0.11	0.11	0.11
	Right side	0.001	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.188	0.277	0.001	0.101	0.351	0.57	0.54	0.64	0.64
GSM1900_UAT	Front	0.141	0.073	0.001	0.033	0.134	0.25	0.28	0.31	0.31
	Back	0.221	0.084	0.047	0.306	0.171	0.61	0.44	0.70	0.75
	Left side	0.499	0.001	0.001	0.001	0.011	0.50	0.51	0.51	0.51
	Right side	0.027	0.107	0.152	0.148	0.018	0.28	0.20	0.19	0.35
	Top side	0.017	0.277	0.001	0.101	0.351	0.40	0.37	0.47	0.47
WCDMA II_UAT	Front	0.342	0.073	0.001	0.033	0.134	0.45	0.48	0.51	0.51
	Back	0.428	0.084	0.047	0.306	0.171	0.82	0.65	0.91	0.95
	Left side	1.189	0.001	0.001	0.001	0.011	1.19	1.20	1.20	1.20
	Right side	0.076	0.107	0.152	0.148	0.018	0.33	0.25	0.24	0.39
	Top side	0.196	0.277	0.001	0.101	0.351	0.57	0.55	0.65	0.65
WCDMA IV_UAT	Front	0.366	0.073	0.001	0.033	0.134	0.47	0.50	0.53	0.53
	Back	0.427	0.084	0.047	0.306	0.171	0.82	0.65	0.90	0.95
	Left side	1.178	0.001	0.001	0.001	0.011	1.18	1.19	1.19	1.19
	Right side	0.210	0.107	0.152	0.148	0.018	0.47	0.38	0.38	0.53
	Top side	0.210	0.277	0.001	0.101	0.351	0.59	0.56	0.66	0.66
WCDMA V_UAT	Front	0.484	0.073	0.001	0.033	0.134	0.59	0.62	0.65	0.65
	Back	0.671	0.084	0.047	0.306	0.171	1.06	0.89	1.15	1.20
	Left side	0.178	0.001	0.001	0.001	0.011	0.18	0.19	0.19	0.19
	Right side	0.051	0.107	0.152	0.148	0.018	0.31	0.22	0.22	0.37
	Top side	0.557	0.277	0.001	0.101	0.351	0.94	0.91	1.01	1.01
CDMA2000 BC0_UAT	Front	0.470	0.073	0.001	0.033	0.134	0.58	0.61	0.64	0.64
	Back	0.579	0.084	0.047	0.306	0.171	0.97	0.80	1.06	1.10
	Left side	0.101	0.001	0.001	0.001	0.011	0.10	0.11	0.11	0.11
	Right side	0.036	0.107	0.152	0.148	0.018	0.29	0.21	0.20	0.35
	Top side	0.418	0.277	0.001	0.101	0.351	0.80	0.77	0.87	0.87
CDMA2000 BC1_UAT	Front	0.317	0.073	0.001	0.033	0.134	0.42	0.45	0.48	0.49
	Back	0.407	0.084	0.047	0.306	0.171	0.80	0.63	0.88	0.93
	Left side	0.922	0.001	0.001	0.001	0.011	0.92	0.93	0.93	0.94
	Right side	0.107	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.162	0.277	0.001	0.101	0.351	0.54	0.51	0.61	0.62
CDMA2000 BC10_UAT	Front	0.444	0.073	0.001	0.033	0.134	0.55	0.58	0.61	0.61
	Back	0.577	0.084	0.047	0.306	0.171	0.97	0.80	1.05	1.10
	Left side	0.140	0.001	0.001	0.001	0.011	0.14	0.15	0.15	0.15
	Right side	0.050	0.107	0.152	0.148	0.018	0.31	0.22	0.22	0.37
	Top side	0.436	0.277	0.001	0.101	0.351	0.81	0.79	0.89	0.89
LTE Band 71_UAT	Front	0.330	0.073	0.001	0.033	0.134	0.44	0.47	0.50	0.50
	Back	0.404	0.084	0.047	0.306	0.171	0.79	0.62	0.88	0.93
	Left side	0.173	0.001	0.001	0.001	0.011	0.18	0.19	0.19	0.19
	Right side	0.064	0.107	0.152	0.148	0.018	0.32	0.23	0.23	0.38
	Top side	0.337	0.277	0.001	0.101	0.351	0.72	0.69	0.79	0.79
LTE Band 12_UAT	Front	0.410	0.073	0.001	0.033	0.134	0.52	0.55	0.58	0.58
	Back	0.579	0.084	0.047	0.306	0.171	0.97	0.80	1.06	1.10
	Left side	0.252	0.001	0.001	0.001	0.011	0.25	0.26	0.26	0.27
	Right side	0.057	0.107	0.152	0.148	0.018	0.31	0.23	0.22	0.38
	Top side	0.422	0.277	0.001	0.101	0.351	0.80	0.77	0.87	0.88
LTE Band 13_UAT	Front	0.521	0.073	0.001	0.033	0.134	0.63	0.66	0.69	0.69
	Back	0.658	0.084	0.047	0.306	0.171	1.05	0.88	1.14	1.18
	Left side	0.231	0.001	0.001	0.001	0.011	0.23	0.24	0.24	0.24



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	Right side	0.062	0.107	0.152	0.148	0.018	0.32	0.23	0.23	0.38
	Top side	0.600	0.277	0.001	0.101	0.351	0.98	0.95	1.05	1.05
LTE Band 5_UAT	Front	0.349	0.073	0.001	0.033	0.134	0.46	0.48	0.52	0.52
	Back	0.460	0.084	0.047	0.306	0.171	0.85	0.68	0.94	0.98
	Left side	0.176	0.001	0.001	0.001	0.011	0.18	0.19	0.19	0.19
	Right side	0.068	0.107	0.152	0.148	0.018	0.32	0.24	0.23	0.39
	Top side	0.357	0.277	0.001	0.101	0.351	0.74	0.71	0.81	0.81
	Bottom	0.349	0.073	0.001	0.033	0.134	0.46	0.48	0.52	0.52
LTE Band 26_UAT	Front	0.498	0.073	0.001	0.033	0.134	0.60	0.63	0.67	0.67
	Back	0.361	0.084	0.047	0.306	0.171	0.75	0.58	0.84	0.89
	Left side	0.118	0.001	0.001	0.001	0.011	0.12	0.13	0.13	0.13
	Right side	0.045	0.107	0.152	0.148	0.018	0.30	0.22	0.21	0.36
	Top side	0.358	0.277	0.001	0.101	0.351	0.74	0.71	0.81	0.81
	Bottom	0.498	0.073	0.001	0.033	0.134	0.60	0.63	0.67	0.67
LTE Band 66_UAT	Front	0.338	0.073	0.001	0.033	0.134	0.44	0.47	0.51	0.51
	Back	0.393	0.084	0.047	0.306	0.171	0.78	0.61	0.87	0.92
	Left side	1.183	0.001	0.001	0.001	0.011	1.19	1.20	1.20	1.20
	Right side	0.065	0.107	0.152	0.148	0.018	0.32	0.24	0.23	0.38
	Top side	0.203	0.277	0.001	0.101	0.351	0.58	0.56	0.66	0.66
	Bottom	0.338	0.073	0.001	0.033	0.134	0.44	0.47	0.51	0.51
LTE Band 25_UAT	Front	0.327	0.073	0.001	0.033	0.134	0.43	0.46	0.49	0.50
	Back	0.413	0.084	0.047	0.306	0.171	0.80	0.63	0.89	0.94
	Left side	0.920	0.001	0.001	0.001	0.011	0.92	0.93	0.93	0.93
	Right side	0.029	0.107	0.152	0.148	0.018	0.28	0.20	0.20	0.35
	Top side	0.119	0.277	0.001	0.101	0.351	0.50	0.47	0.57	0.57
	Bottom	0.327	0.073	0.001	0.033	0.134	0.43	0.46	0.49	0.50
LTE Band 30_UAT	Front	0.203	0.073	0.001	0.033	0.134	0.31	0.34	0.37	0.37
	Back	0.317	0.084	0.047	0.306	0.171	0.71	0.54	0.79	0.84
	Left side	0.597	0.001	0.001	0.001	0.011	0.60	0.61	0.61	0.61
	Right side	0.003	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.071	0.277	0.001	0.101	0.351	0.45	0.42	0.52	0.52
	Bottom	0.203	0.073	0.001	0.033	0.134	0.31	0.34	0.37	0.37
LTE Band 7_UAT	Front	0.238	0.073	0.001	0.033	0.134	0.34	0.37	0.41	0.41
	Back	0.481	0.084	0.047	0.306	0.171	0.87	0.70	0.96	1.01
	Left side	0.825	0.001	0.001	0.001	0.011	0.83	0.84	0.84	0.84
	Right side	0.021	0.107	0.152	0.148	0.018	0.28	0.19	0.19	0.34
	Top side	0.083	0.277	0.001	0.101	0.351	0.46	0.44	0.54	0.54
	Bottom	0.238	0.073	0.001	0.033	0.134	0.34	0.37	0.41	0.41
LTE Band 41_UAT	Front	0.123	0.073	0.001	0.033	0.134	0.23	0.26	0.29	0.29
	Back	0.241	0.084	0.047	0.306	0.171	0.63	0.46	0.72	0.77
	Left side	0.419	0.001	0.001	0.001	0.011	0.42	0.43	0.43	0.43
	Right side	0.009	0.107	0.152	0.148	0.018	0.26	0.18	0.18	0.33
	Top side	0.053	0.277	0.001	0.101	0.351	0.43	0.41	0.51	0.51
	Bottom	0.123	0.073	0.001	0.033	0.134	0.23	0.26	0.29	0.29
LTE Band 41_HPUE_UAT	Front	0.115	0.073	0.001	0.033	0.134	0.22	0.25	0.28	0.28
	Back	0.217	0.084	0.047	0.306	0.171	0.61	0.44	0.69	0.74
	Left side	0.434	0.001	0.001	0.001	0.011	0.44	0.45	0.45	0.45
	Right side	0.014	0.107	0.152	0.148	0.018	0.27	0.18	0.18	0.33
	Top side	0.060	0.277	0.001	0.101	0.351	0.44	0.41	0.51	0.51
	Bottom	0.115	0.073	0.001	0.033	0.134	0.22	0.25	0.28	0.28
LTE Band 48	Front	0.240	0.073	0.001	0.033	0.134	0.35	0.38	0.41	0.41
	Back	0.442	0.084	0.047	0.306	0.171	0.83	0.66	0.92	0.97
	Left side	1.040	0.001	0.001	0.001	0.011	1.04	1.05	1.05	1.05
	Right side	0.001	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.085	0.277	0.001	0.101	0.351	0.46	0.44	0.54	0.54
	Bottom	0.240	0.073	0.001	0.033	0.134	0.35	0.38	0.41	0.41



WWAN Band	Exposure Position	1	3	4	6	1+6 Summed 1g SAR (W/kg)	3+6 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_LAT	Front	0.323	0.163	0.104	0.134	0.46	0.30	0.24
	Back	0.457	0.188	1.092	0.171	0.63	0.36	1.26
	Left side	0.111	0.001	0.015	0.011	0.12	0.01	0.03
	Right side	0.771	0.618	0.434	0.018	0.79	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.291				0.29	0.00	0.00
GSM1900_LAT	Front	0.661	0.163	0.104	0.134	0.80	0.30	0.24
	Back	0.776	0.188	1.092	0.171	0.95	0.36	1.26
	Left side	0.304	0.001	0.015	0.011	0.32	0.01	0.03
	Right side	0.168	0.618	0.434	0.018	0.19	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.872				0.87	0.00	0.00
WCDMA II_LAT	Front	0.499	0.163	0.104	0.134	0.63	0.30	0.24
	Back	0.590	0.188	1.092	0.171	0.76	0.36	1.26
	Left side	0.251	0.001	0.015	0.011	0.26	0.01	0.03
	Right side	0.156	0.618	0.434	0.018	0.17	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.950				0.95	0.00	0.00
WCDMA IV_LAT	Front	0.546	0.163	0.104	0.134	0.68	0.30	0.24
	Back	0.578	0.188	1.092	0.171	0.75	0.36	1.26
	Left side	0.227	0.001	0.015	0.011	0.24	0.01	0.03
	Right side	0.102	0.618	0.434	0.018	0.12	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.907				0.91	0.00	0.00
WCDMA V_LAT	Front	0.159	0.163	0.104	0.134	0.29	0.30	0.24
	Back	0.201	0.188	1.092	0.171	0.37	0.36	1.26
	Left side	0.085	0.001	0.015	0.011	0.10	0.01	0.03
	Right side	0.481	0.618	0.434	0.018	0.50	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.247				0.25	0.00	0.00
CDMA2000 BC0_LAT	Front	0.292	0.163	0.104	0.134	0.43	0.30	0.24
	Back	0.371	0.188	1.092	0.171	0.54	0.36	1.26
	Left side	0.097	0.001	0.015	0.011	0.11	0.01	0.03
	Right side	0.555	0.618	0.434	0.018	0.57	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.209				0.21	0.00	0.00
CDMA2000 BC1_LAT	Front	0.619	0.163	0.104	0.134	0.75	0.30	0.24
	Back	0.698	0.188	1.092	0.171	0.87	0.36	1.26
	Left side	0.326	0.001	0.015	0.011	0.34	0.01	0.03
	Right side	0.130	0.618	0.434	0.018	0.15	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	1.148				1.15	0.00	0.00
CDMA2000 BC10_LAT	Front	0.260	0.163	0.104	0.134	0.39	0.30	0.24
	Back	0.372	0.188	1.092	0.171	0.54	0.36	1.26
	Left side	0.097	0.001	0.015	0.011	0.11	0.01	0.03
	Right side	0.553	0.618	0.434	0.018	0.57	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.183				0.18	0.00	0.00
LTE Band 71_LAT	Front	0.213	0.163	0.104	0.134	0.35	0.30	0.24
	Back	0.311	0.188	1.092	0.171	0.48	0.36	1.26



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	Left side	0.172	0.001	0.015	0.011	0.18	0.01	0.03
	Right side	0.651	0.618	0.434	0.018	0.67	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.227				0.23	0.00	0.00
LTE Band 12_LAT	Front	0.158	0.163	0.104	0.134	0.29	0.30	0.24
	Back	0.238	0.188	1.092	0.171	0.41	0.36	1.26
	Left side	0.170	0.001	0.015	0.011	0.18	0.01	0.03
	Right side	0.574	0.618	0.434	0.018	0.59	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.154				0.15	0.00	0.00
LTE Band 13_LAT	Front	0.228	0.163	0.104	0.134	0.36	0.30	0.24
	Back	0.232	0.188	1.092	0.171	0.40	0.36	1.26
	Left side	0.127	0.001	0.015	0.011	0.14	0.01	0.03
	Right side	0.623	0.618	0.434	0.018	0.64	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.248				0.25	0.00	0.00
LTE Band 5_LAT	Front	0.291	0.163	0.104	0.134	0.43	0.30	0.24
	Back	0.360	0.188	1.092	0.171	0.53	0.36	1.26
	Left side	0.084	0.001	0.015	0.011	0.10	0.01	0.03
	Right side	0.508	0.618	0.434	0.018	0.53	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.234				0.23	0.00	0.00
LTE Band 26_LAT	Front	0.300	0.163	0.104	0.134	0.43	0.30	0.24
	Back	0.393	0.188	1.092	0.171	0.56	0.36	1.26
	Left side	0.058	0.001	0.015	0.011	0.07	0.01	0.03
	Right side	0.491	0.618	0.434	0.018	0.51	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.223				0.22	0.00	0.00
LTE Band 66_LAT	Front	0.457	0.163	0.104	0.134	0.59	0.30	0.24
	Back	0.439	0.188	1.092	0.171	0.61	0.36	1.26
	Left side	0.181	0.001	0.015	0.011	0.19	0.01	0.03
	Right side	0.084	0.618	0.434	0.018	0.10	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.685				0.69	0.00	0.00
LTE Band 25_LAT	Front	0.469	0.163	0.104	0.134	0.60	0.30	0.24
	Back	0.558	0.188	1.092	0.171	0.73	0.36	1.26
	Left side	0.278	0.001	0.015	0.011	0.29	0.01	0.03
	Right side	0.128	0.618	0.434	0.018	0.15	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.997				1.00	0.00	0.00
LTE Band 30_LAT	Front	0.589	0.163	0.104	0.134	0.72	0.30	0.24
	Back	0.591	0.188	1.092	0.171	0.76	0.36	1.26
	Left side	0.286	0.001	0.015	0.011	0.30	0.01	0.03
	Right side	0.141	0.618	0.434	0.018	0.16	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.778				0.78	0.00	0.00
LTE Band 7_LAT	Front	0.448	0.163	0.104	0.134	0.58	0.30	0.24
	Back	0.516	0.188	1.092	0.171	0.69	0.36	1.26
	Left side	0.165	0.001	0.015	0.011	0.18	0.01	0.03
	Right side	0.092	0.618	0.434	0.018	0.11	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.965				0.97	0.00	0.00
LTE Band 41_LAT	Front	0.406	0.163	0.104	0.134	0.54	0.30	0.24
	Back	0.501	0.188	1.092	0.171	0.67	0.36	1.26
	Left side	0.171	0.001	0.015	0.011	0.18	0.01	0.03
	Right side	0.102	0.618	0.434	0.018	0.12	0.64	0.45





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	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	1.141				1.14	0.00	0.00
LTE Band 41_HPUE_LAT	Front	0.492	0.163	0.104	0.134	0.63	0.30	0.24
	Back	0.608	0.188	1.092	0.171	0.78	0.36	1.26
	Left side	0.196	0.001	0.015	0.011	0.21	0.01	0.03
	Right side	0.128	0.618	0.434	0.018	0.15	0.64	0.45
	Top side		0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	1.138				1.14	0.00	0.00

WWAN Band	Exposure Position	1	2	4	1+2 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM850_LAT	Front	0.323	0.175	0.068	0.50	0.39
	Back	0.457	0.219	0.643	0.68	1.10
	Left side	0.111	0.003	0.001	0.11	0.11
	Right side	0.771	0.252	0.283	1.02	1.05
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.291			0.29	0.29
GSM1900_LAT	Front	0.661	0.175	0.068	0.84	0.73
	Back	0.776	0.219	0.643	1.00	1.42
	Left side	0.304	0.003	0.001	0.31	0.31
	Right side	0.168	0.252	0.283	0.42	0.45
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.872			0.87	0.87
WCDMA II_LAT	Front	0.499	0.175	0.068	0.67	0.57
	Back	0.590	0.219	0.643	0.81	1.23
	Left side	0.251	0.003	0.001	0.25	0.25
	Right side	0.156	0.252	0.283	0.41	0.44
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.950			0.95	0.95
WCDMA IV_LAT	Front	0.546	0.175	0.068	0.72	0.61
	Back	0.578	0.219	0.643	0.80	1.22
	Left side	0.227	0.003	0.001	0.23	0.23
	Right side	0.102	0.252	0.283	0.35	0.39
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.907			0.91	0.91
WCDMA V_LAT	Front	0.159	0.175	0.068	0.33	0.23
	Back	0.201	0.219	0.643	0.42	0.84
	Left side	0.085	0.003	0.001	0.09	0.09
	Right side	0.481	0.252	0.283	0.73	0.76
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.247			0.25	0.25
CDMA2000 BC0_LAT	Front	0.292	0.175	0.068	0.47	0.36
	Back	0.371	0.219	0.643	0.59	1.01
	Left side	0.097	0.003	0.001	0.10	0.10
	Right side	0.555	0.252	0.283	0.81	0.84
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.209			0.21	0.21
CDMA2000 BC1_LAT	Front	0.619	0.175	0.068	0.79	0.69
	Back	0.698	0.219	0.643	0.92	1.34
	Left side	0.326	0.003	0.001	0.33	0.33
	Right side	0.130	0.252	0.283	0.38	0.41
	Top side		0.683	0.212	0.68	0.21
	Bottom side	1.148			1.15	1.15
CDMA2000 BC10_LAT	Front	0.260	0.175	0.068	0.44	0.33



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	Back	0.372	0.219	0.643	0.59	1.02
	Left side	0.097	0.003	0.001	0.10	0.10
	Right side	0.553	0.252	0.283	0.81	0.84
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.183			0.18	0.18
LTE Band 71_LAT	Front	0.213	0.175	0.068	0.39	0.28
	Back	0.311	0.219	0.643	0.53	0.95
	Left side	0.172	0.003	0.001	0.18	0.17
	Right side	0.651	0.252	0.283	0.90	0.93
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.227			0.23	0.23
LTE Band 12_LAT	Front	0.158	0.175	0.068	0.33	0.23
	Back	0.238	0.219	0.643	0.46	0.88
	Left side	0.170	0.003	0.001	0.17	0.17
	Right side	0.574	0.252	0.283	0.83	0.86
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.154			0.15	0.15
LTE Band 13_LAT	Front	0.228	0.175	0.068	0.40	0.30
	Back	0.232	0.219	0.643	0.45	0.88
	Left side	0.127	0.003	0.001	0.13	0.13
	Right side	0.623	0.252	0.283	0.88	0.91
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.248			0.25	0.25
LTE Band 5_LAT	Front	0.291	0.175	0.068	0.47	0.36
	Back	0.360	0.219	0.643	0.58	1.00
	Left side	0.084	0.003	0.001	0.09	0.09
	Right side	0.508	0.252	0.283	0.76	0.79
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.234			0.23	0.23
LTE Band 26_LAT	Front	0.300	0.175	0.068	0.48	0.37
	Back	0.393	0.219	0.643	0.61	1.04
	Left side	0.058	0.003	0.001	0.06	0.06
	Right side	0.491	0.252	0.283	0.74	0.77
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.223			0.22	0.22
LTE Band 66_LAT	Front	0.457	0.175	0.068	0.63	0.53
	Back	0.439	0.219	0.643	0.66	1.08
	Left side	0.181	0.003	0.001	0.18	0.18
	Right side	0.084	0.252	0.283	0.34	0.37
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.685			0.69	0.69
LTE Band 25_LAT	Front	0.469	0.175	0.068	0.64	0.54
	Back	0.558	0.219	0.643	0.78	1.20
	Left side	0.278	0.003	0.001	0.28	0.28
	Right side	0.128	0.252	0.283	0.38	0.41
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.997			1.00	1.00
LTE Band 30_LAT	Front	0.589	0.175	0.068	0.76	0.66
	Back	0.591	0.219	0.643	0.81	1.23
	Left side	0.286	0.003	0.001	0.29	0.29
	Right side	0.141	0.252	0.283	0.39	0.42
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.778			0.78	0.78
LTE Band 7_LAT	Front	0.448	0.175	0.068	0.62	0.52
	Back	0.516	0.219	0.643	0.74	1.16
	Left side	0.165	0.003	0.001	0.17	0.17

	Right side	0.092	0.252	0.283	0.34	0.38
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.965			0.97	0.97
LTE Band 41_LAT	Front	0.406	0.175	0.068	0.58	0.47
	Back	0.501	0.219	0.643	0.72	1.14
	Left side	0.171	0.003	0.001	0.17	0.17
	Right side	0.102	0.252	0.283	0.35	0.39
	Top side		0.683	0.212	0.68	0.21
	Bottom side	1.141			1.14	1.14
LTE Band 41_HPUE_LAT	Front	0.492	0.175	0.068	0.67	0.56
	Back	0.608	0.219	0.643	0.83	1.25
	Left side	0.196	0.003	0.001	0.20	0.20
	Right side	0.128	0.252	0.283	0.38	0.41
	Top side		0.683	0.212	0.68	0.21
	Bottom side	1.138			1.14	1.14

WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
GSM850_LAT	Front	0.323	0.073	0.001	0.033	0.134	0.43	0.46	0.49	0.49
	Back	0.457	0.084	0.047	0.306	0.171	0.85	0.68	0.93	0.98
	Left side	0.111	0.001	0.001	0.001	0.011	0.11	0.12	0.12	0.12
	Right side	0.771	0.107	0.152	0.148	0.018	1.03	0.94	0.94	1.09
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.291					0.29	0.29	0.29	0.29
GSM1900_LAT	Front	0.661	0.073	0.001	0.033	0.134	0.77	0.80	0.83	0.83
	Back	0.776	0.084	0.047	0.306	0.171	1.17	0.99	1.25	1.30
	Left side	0.304	0.001	0.001	0.001	0.011	0.31	0.32	0.32	0.32
	Right side	0.168	0.107	0.152	0.148	0.018	0.42	0.34	0.33	0.49
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.872					0.87	0.87	0.87	0.87
WCDMA II_LAT	Front	0.499	0.073	0.001	0.033	0.134	0.61	0.63	0.67	0.67
	Back	0.590	0.084	0.047	0.306	0.171	0.98	0.81	1.07	1.11
	Left side	0.251	0.001	0.001	0.001	0.011	0.25	0.26	0.26	0.26
	Right side	0.156	0.107	0.152	0.148	0.018	0.41	0.33	0.32	0.47
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.950					0.95	0.95	0.95	0.95
WCDMA IV_LAT	Front	0.546	0.073	0.001	0.033	0.134	0.65	0.68	0.71	0.71
	Back	0.578	0.084	0.047	0.306	0.171	0.97	0.80	1.06	1.10
	Left side	0.227	0.001	0.001	0.001	0.011	0.23	0.24	0.24	0.24
	Right side	0.102	0.107	0.152	0.148	0.018	0.36	0.27	0.27	0.42
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.907					0.91	0.91	0.91	0.91
WCDMA V_LAT	Front	0.159	0.073	0.001	0.033	0.134	0.27	0.29	0.33	0.33
	Back	0.201	0.084	0.047	0.306	0.171	0.59	0.42	0.68	0.73
	Left side	0.085	0.001	0.001	0.001	0.011	0.09	0.10	0.10	0.10
	Right side	0.481	0.107	0.152	0.148	0.018	0.74	0.65	0.65	0.80
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.247					0.25	0.25	0.25	0.25
CDMA2000 BC0_LAT	Front	0.292	0.073	0.001	0.033	0.134	0.40	0.43	0.46	0.46
	Back	0.371	0.084	0.047	0.306	0.171	0.76	0.59	0.85	0.90
	Left side	0.097	0.001	0.001	0.001	0.011	0.10	0.11	0.11	0.11
	Right side	0.555	0.107	0.152	0.148	0.018	0.81	0.73	0.72	0.87
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45



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	Bottom side	0.209					0.21	0.21	0.21	0.21
CDMA2000 BC1_LAT	Front	0.619	0.073	0.001	0.033	0.134	0.73	0.75	0.79	0.79
	Back	0.698	0.084	0.047	0.306	0.171	1.09	0.92	1.18	1.22
	Left side	0.326	0.001	0.001	0.001	0.011	0.33	0.34	0.34	0.34
	Right side	0.130	0.107	0.152	0.148	0.018	0.39	0.30	0.30	0.45
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	1.148					1.15	1.15	1.15	1.15
CDMA2000 BC10_LAT	Front	0.260	0.073	0.001	0.033	0.134	0.37	0.40	0.43	0.43
	Back	0.372	0.084	0.047	0.306	0.171	0.76	0.59	0.85	0.90
	Left side	0.097	0.001	0.001	0.001	0.011	0.10	0.11	0.11	0.11
	Right side	0.553	0.107	0.152	0.148	0.018	0.81	0.72	0.72	0.87
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.183					0.18	0.18	0.18	0.18
LTE Band 71_LAT	Front	0.213	0.073	0.001	0.033	0.134	0.32	0.35	0.38	0.38
	Back	0.311	0.084	0.047	0.306	0.171	0.70	0.53	0.79	0.84
	Left side	0.172	0.001	0.001	0.001	0.011	0.17	0.18	0.18	0.19
	Right side	0.651	0.107	0.152	0.148	0.018	0.91	0.82	0.82	0.97
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.227					0.23	0.23	0.23	0.23
LTE Band 12_LAT	Front	0.158	0.073	0.001	0.033	0.134	0.26	0.29	0.33	0.33
	Back	0.238	0.084	0.047	0.306	0.171	0.63	0.46	0.72	0.76
	Left side	0.170	0.001	0.001	0.001	0.011	0.17	0.18	0.18	0.18
	Right side	0.574	0.107	0.152	0.148	0.018	0.83	0.74	0.74	0.89
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.154					0.15	0.15	0.15	0.15
LTE Band 13_LAT	Front	0.228	0.073	0.001	0.033	0.134	0.33	0.36	0.40	0.40
	Back	0.232	0.084	0.047	0.306	0.171	0.62	0.45	0.71	0.76
	Left side	0.127	0.001	0.001	0.001	0.011	0.13	0.14	0.14	0.14
	Right side	0.623	0.107	0.152	0.148	0.018	0.88	0.79	0.79	0.94
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.248					0.25	0.25	0.25	0.25
LTE Band 5_LAT	Front	0.291	0.073	0.001	0.033	0.134	0.40	0.43	0.46	0.46
	Back	0.360	0.084	0.047	0.306	0.171	0.75	0.58	0.84	0.88
	Left side	0.084	0.001	0.001	0.001	0.011	0.09	0.10	0.10	0.10
	Right side	0.508	0.107	0.152	0.148	0.018	0.76	0.68	0.67	0.83
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.234					0.23	0.23	0.23	0.23
LTE Band 26_LAT	Front	0.300	0.073	0.001	0.033	0.134	0.41	0.44	0.47	0.47
	Back	0.393	0.084	0.047	0.306	0.171	0.78	0.61	0.87	0.92
	Left side	0.058	0.001	0.001	0.001	0.011	0.06	0.07	0.07	0.07
	Right side	0.491	0.107	0.152	0.148	0.018	0.75	0.66	0.66	0.81
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.223					0.22	0.22	0.22	0.22
LTE Band 66_LAT	Front	0.457	0.073	0.001	0.033	0.134	0.56	0.59	0.62	0.63
	Back	0.439	0.084	0.047	0.306	0.171	0.83	0.66	0.92	0.96
	Left side	0.181	0.001	0.001	0.001	0.011	0.18	0.19	0.19	0.19
	Right side	0.084	0.107	0.152	0.148	0.018	0.34	0.25	0.25	0.40
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.685					0.69	0.69	0.69	0.69
LTE Band 25_LAT	Front	0.469	0.073	0.001	0.033	0.134	0.58	0.60	0.64	0.64
	Back	0.558	0.084	0.047	0.306	0.171	0.95	0.78	1.04	1.08
	Left side	0.278	0.001	0.001	0.001	0.011	0.28	0.29	0.29	0.29
	Right side	0.128	0.107	0.152	0.148	0.018	0.38	0.30	0.29	0.45
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.997					1.00	1.00	1.00	1.00
LTE Band	Front	0.589	0.073	0.001	0.033	0.134	0.70	0.72	0.76	0.76



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30_LAT	Back	0.591	0.084	0.047	0.306	0.171	0.98	0.81	1.07	1.12
	Left side	0.286	0.001	0.001	0.001	0.011	0.29	0.30	0.30	0.30
	Right side	0.141	0.107	0.152	0.148	0.018	0.40	0.31	0.31	0.46
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.778					0.78	0.78	0.78	0.78
LTE Band 7_LAT	Front	0.448	0.073	0.001	0.033	0.134	0.55	0.58	0.62	0.62
	Back	0.516	0.084	0.047	0.306	0.171	0.91	0.73	0.99	1.04
	Left side	0.165	0.001	0.001	0.001	0.011	0.17	0.18	0.18	0.18
	Right side	0.092	0.107	0.152	0.148	0.018	0.35	0.26	0.26	0.41
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	0.965					0.97	0.97	0.97	0.97
LTE Band 41_LAT	Front	0.406	0.073	0.001	0.033	0.134	0.51	0.54	0.57	0.57
	Back	0.501	0.084	0.047	0.306	0.171	0.89	0.72	0.98	1.03
	Left side	0.171	0.001	0.001	0.001	0.011	0.17	0.18	0.18	0.18
	Right side	0.102	0.107	0.152	0.148	0.018	0.36	0.27	0.27	0.42
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	1.141					1.14	1.14	1.14	1.14
LTE Band 41_HPUE_LAT	Front	0.492	0.073	0.001	0.033	0.134	0.60	0.63	0.66	0.66
	Back	0.608	0.084	0.047	0.306	0.171	1.00	0.83	1.09	1.13
	Left side	0.196	0.001	0.001	0.001	0.011	0.20	0.21	0.21	0.21
	Right side	0.128	0.107	0.152	0.148	0.018	0.38	0.30	0.29	0.45
	Top side		0.277	0.001	0.101	0.351	0.38	0.35	0.45	0.45
	Bottom side	1.138					1.14	1.14	1.14	1.14



## &lt;5G NR Mode&gt;

WWAN Band	Exposure Position	1	2	3	4	6	1+6 Summed 1g SAR (W/kg)	3+6 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
N71_Ant 0	Front	0.268	0.275	0.163	0.104	0.134	0.40	0.30	0.24
	Back	0.379	0.347	0.188	1.092	0.171	0.55	0.36	1.26
	Left side	0.131	0.001	0.001	0.015	0.011	0.14	0.01	0.03
	Right side	0.043	0.386	0.618	0.434	0.018	0.06	0.64	0.45
	Top side	0.286	1.079	0.001	0.288	0.351	0.64	0.35	0.64
N5_Ant 0	Front	0.464	0.275	0.163	0.104	0.134	0.60	0.30	0.24
	Back	0.640	0.347	0.188	1.092	0.171	0.81	0.36	1.26
	Left side	0.188	0.001	0.001	0.015	0.011	0.20	0.01	0.03
	Right side	0.047	0.386	0.618	0.434	0.018	0.07	0.64	0.45
	Top side	0.452	1.079	0.001	0.288	0.351	0.80	0.35	0.64
N66_Ant 2	Front	0.251	0.275	0.163	0.104	0.134	0.39	0.30	0.24
	Back	0.309	0.347	0.188	1.092	0.171	0.48	0.36	1.26
	Left side	0.779	0.001	0.001	0.015	0.011	0.79	0.01	0.03
	Right side	0.001	0.386	0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.153	1.079	0.001	0.288	0.351	0.50	0.35	0.64
N66_Ant 0	Front	0.272	0.275	0.163	0.104	0.134	0.41	0.30	0.24
	Back	0.364	0.347	0.188	1.092	0.171	0.54	0.36	1.26
	Left side	0.002	0.001	0.001	0.015	0.011	0.01	0.01	0.03
	Right side	0.001	0.386	0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.673	1.079	0.001	0.288	0.351	1.02	0.35	0.64
N2_Ant 2	Front	0.263	0.275	0.163	0.104	0.134	0.40	0.30	0.24
	Back	0.333	0.347	0.188	1.092	0.171	0.50	0.36	1.26
	Left side	0.741	0.001	0.001	0.015	0.011	0.75	0.01	0.03
	Right side	0.050	0.386	0.618	0.434	0.018	0.07	0.64	0.45
	Top side	0.137	1.079	0.001	0.288	0.351	0.49	0.35	0.64
N25_Ant 2	Front	0.251	0.275	0.163	0.104	0.134	0.39	0.30	0.24
	Back	0.311	0.347	0.188	1.092	0.171	0.48	0.36	1.26
	Left side	0.798	0.001	0.001	0.015	0.011	0.81	0.01	0.03
	Right side	0.001	0.386	0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.117	1.079	0.001	0.288	0.351	0.47	0.35	0.64
N7_Ant 2	Front	0.201	0.275	0.163	0.104	0.134	0.34	0.30	0.24
	Back	0.284	0.347	0.188	1.092	0.171	0.46	0.36	1.26
	Left side	0.994	0.001	0.001	0.015	0.011	1.01	0.01	0.03
	Right side	0.002	0.386	0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.002	1.079	0.001	0.288	0.351	0.35	0.35	0.64
N41_Ant 0	Front	0.243	0.275	0.163	0.104	0.134	0.38	0.30	0.24
	Back	0.516	0.347	0.188	1.092	0.171	0.69	0.36	1.26
	Left side	0.217	0.001	0.001	0.015	0.011	0.23	0.01	0.03
	Right side	0.071	0.386	0.618	0.434	0.018	0.09	0.64	0.45
	Top side	0.706	1.079	0.001	0.288	0.351	1.06	0.35	0.64
N41(HPUE)_Ant 0	Front	0.273	0.275	0.163	0.104	0.134	0.41	0.30	0.24
	Back	0.642	0.347	0.188	1.092	0.171	0.81	0.36	1.26
	Left side	0.223	0.001	0.001	0.015	0.011	0.23	0.01	0.03
	Right side	0.078	0.386	0.618	0.434	0.018	0.10	0.64	0.45
	Top side	0.704	1.079	0.001	0.288	0.351	1.06	0.35	0.64
N41_Ant 2	Front	0.131	0.275	0.163	0.104	0.134	0.27	0.30	0.24
	Back	0.218	0.347	0.188	1.092	0.171	0.39	0.36	1.26
	Left side	0.559	0.001	0.001	0.015	0.011	0.57	0.01	0.03
	Right side	0.001	0.386	0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.001	1.079	0.001	0.288	0.351	0.35	0.35	0.64





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N41(HPUE)_Ant 2	Front	0.216	0.275	0.163	0.104	0.134	0.35	0.30	0.24
	Back	0.335	0.347	0.188	1.092	0.171	0.51	0.36	1.26
	Left side	0.834	0.001	0.001	0.015	0.011	0.85	0.01	0.03
	Right side	0.002	0.386	0.618	0.434	0.018	0.02	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
N77_Ant9	Front	0.222	0.275	0.163	0.104	0.134	0.36	0.30	0.24
	Back	0.457	0.347	0.188	1.092	0.171	0.63	0.36	1.26
	Left side	0.932	0.001	0.001	0.015	0.011	0.94	0.01	0.03
	Right side	0.008	0.386	0.618	0.434	0.018	0.03	0.64	0.45
	Top side	0.031	1.079	0.001	0.288	0.351	0.38	0.35	0.64
LTE Band 66_Ant 0	Front	0.264	0.275	0.163	0.104	0.134	0.40	0.30	0.24
	Back	0.374	0.347	0.188	1.092	0.171	0.55	0.36	1.26
	Left side	0.080	0.001	0.001	0.015	0.011	0.09	0.01	0.03
	Right side	0.001	0.386	0.618	0.434	0.018	0.02	0.64	0.45
	Top side	0.684	1.079	0.001	0.288	0.351	1.04	0.35	0.64
LTE Band 7_Ant 0	Front	0.231	0.275	0.163	0.104	0.134	0.37	0.30	0.24
	Back	0.336	0.347	0.188	1.092	0.171	0.51	0.36	1.26
	Left side	0.243	0.001	0.001	0.015	0.011	0.25	0.01	0.03
	Right side	0.056	0.386	0.618	0.434	0.018	0.07	0.64	0.45
	Top side	0.706	1.079	0.001	0.288	0.351	1.06	0.35	0.64



WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
N71_Ant 0	Front	0.268	0.175	0.068	0.44	0.34
	Back	0.379	0.219	0.643	0.60	1.02
	Left side	0.131	0.003	0.001	0.13	0.13
	Right side	0.043	0.252	0.283	0.30	0.33
	Top side	0.286	0.683	0.212	0.97	0.50
N5_Ant 0	Front	0.464	0.175	0.068	0.64	0.53
	Back	0.640	0.219	0.643	0.86	1.28
	Left side	0.188	0.003	0.001	0.19	0.19
	Right side	0.047	0.252	0.283	0.30	0.33
	Top side	0.452	0.683	0.212	1.14	0.66
N66_Ant 2	Front	0.251	0.175	0.068	0.43	0.32
	Back	0.309	0.219	0.643	0.53	0.95
	Left side	0.779	0.003	0.001	0.78	0.78
	Right side	0.001	0.252	0.283	0.25	0.28
	Top side	0.153	0.683	0.212	0.84	0.37
N66_Ant 0	Front	0.272	0.175	0.068	0.45	0.34
	Back	0.364	0.219	0.643	0.58	1.01
	Left side	0.002	0.003	0.001	0.01	0.00
	Right side	0.001	0.252	0.283	0.25	0.28
	Top side	0.673	0.683	0.212	1.36	0.89
N2_Ant 2	Front	0.263	0.175	0.068	0.44	0.33
	Back	0.333	0.219	0.643	0.55	0.98
	Left side	0.741	0.003	0.001	0.74	0.74
	Right side	0.050	0.252	0.283	0.30	0.33
	Top side	0.137	0.683	0.212	0.82	0.35
N25_Ant 2	Front	0.251	0.175	0.068	0.43	0.32
	Back	0.311	0.219	0.643	0.53	0.95
	Left side	0.798	0.003	0.001	0.80	0.80
	Right side	0.001	0.252	0.283	0.25	0.28
	Top side	0.117	0.683	0.212	0.80	0.33
N7_Ant 2	Front	0.201	0.175	0.068	0.38	0.27
	Back	0.284	0.219	0.643	0.50	0.93
	Left side	0.994	0.003	0.001	1.00	1.00
	Right side	0.002	0.252	0.283	0.25	0.29
	Top side	0.002	0.683	0.212	0.69	0.21
N41_Ant 0	Front	0.243	0.175	0.068	0.42	0.31
	Back	0.516	0.219	0.643	0.74	1.16
	Left side	0.217	0.003	0.001	0.22	0.22
	Right side	0.071	0.252	0.283	0.32	0.35
	Top side	0.706	0.683	0.212	1.39	0.92
N41(HPUE)_Ant 0	Front	0.273	0.175	0.068	0.45	0.34
	Back	0.642	0.219	0.643	0.86	1.29
	Left side	0.223	0.003	0.001	0.23	0.22
	Right side	0.078	0.252	0.283	0.33	0.36
	Top side	0.704	0.683	0.212	1.39	0.92
N41_Ant 2	Front	0.131	0.175	0.068	0.31	0.20
	Back	0.218	0.219	0.643	0.44	0.86
	Left side	0.559	0.003	0.001	0.56	0.56
	Right side	0.001	0.252	0.283	0.25	0.28
	Top side	0.001	0.683	0.212	0.68	0.21
N41(HPUE)_Ant 2	Front	0.216	0.175	0.068	0.39	0.28



	Back	0.335	0.219	0.643	0.55	0.98
	Left side	0.834	0.003	0.001	0.84	0.84
	Right side	0.002	0.252	0.283	0.25	0.29
	Top side		0.683	0.212	0.68	0.21
N77_Ant9	Front	0.222	0.175	0.068	0.40	0.29
	Back	0.457	0.219	0.643	0.68	1.10
	Left side	0.932	0.003	0.001	0.94	0.93
	Right side	0.008	0.252	0.283	0.26	0.29
	Top side	0.031	0.683	0.212	0.71	0.24
LTE Band 66_Ant 0	Front	0.264	0.175	0.068	0.44	0.33
	Back	0.374	0.219	0.643	0.59	1.02
	Left side	0.080	0.003	0.001	0.08	0.08
	Right side	0.001	0.252	0.283	0.25	0.28
	Top side	0.684	0.683	0.212	1.37	0.90
LTE Band 7_Ant 0	Front	0.231	0.175	0.068	0.41	0.30
	Back	0.336	0.219	0.643	0.56	0.98
	Left side	0.243	0.003	0.001	0.25	0.24
	Right side	0.056	0.252	0.283	0.31	0.34
	Top side	0.706	0.683	0.212	1.39	0.92



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WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
N71_Ant 0	Front	0.268	0.073	0.001	0.033	0.134	0.37	0.40	0.44	0.44
	Back	0.379	0.084	0.047	0.306	0.171	0.77	0.60	0.86	0.90
	Left side	0.131	0.001	0.001	0.001	0.011	0.13	0.14	0.14	0.14
	Right side	0.043	0.107	0.152	0.148	0.018	0.30	0.21	0.21	0.36
	Top side	0.286	0.220	0.001	0.101	0.351	0.61	0.64	0.74	0.74
N5_Ant 0	Front	0.464	0.073	0.001	0.033	0.134	0.57	0.60	0.63	0.63
	Back	0.640	0.084	0.047	0.306	0.171	1.03	0.86	1.12	1.16
	Left side	0.188	0.001	0.001	0.001	0.011	0.19	0.20	0.20	0.20
	Right side	0.047	0.107	0.152	0.148	0.018	0.30	0.22	0.21	0.37
	Top side	0.452	0.220	0.001	0.101	0.351	0.77	0.80	0.90	0.91
N66_Ant 2	Front	0.251	0.073	0.001	0.033	0.134	0.36	0.39	0.42	0.42
	Back	0.309	0.084	0.047	0.306	0.171	0.70	0.53	0.79	0.83
	Left side	0.779	0.001	0.001	0.001	0.011	0.78	0.79	0.79	0.79
	Right side	0.001	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.153	0.220	0.001	0.101	0.351	0.47	0.51	0.61	0.61
N66_Ant 0	Front	0.272	0.073	0.001	0.033	0.134	0.38	0.41	0.44	0.44
	Back	0.364	0.084	0.047	0.306	0.171	0.75	0.58	0.84	0.89
	Left side	0.002	0.001	0.001	0.001	0.011	0.00	0.01	0.01	0.02
	Right side	0.001	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.673	0.220	0.001	0.101	0.351	0.99	1.03	1.13	1.13
N2_Ant 2	Front	0.263	0.073	0.001	0.033	0.134	0.37	0.40	0.43	0.43
	Back	0.333	0.084	0.047	0.306	0.171	0.72	0.55	0.81	0.86
	Left side	0.741	0.001	0.001	0.001	0.011	0.74	0.75	0.75	0.75
	Right side	0.050	0.107	0.152	0.148	0.018	0.31	0.22	0.22	0.37
	Top side	0.137	0.220	0.001	0.101	0.351	0.46	0.49	0.59	0.59
N25_Ant 2	Front	0.251	0.073	0.001	0.033	0.134	0.36	0.39	0.42	0.42
	Back	0.311	0.084	0.047	0.306	0.171	0.70	0.53	0.79	0.84
	Left side	0.798	0.001	0.001	0.001	0.011	0.80	0.81	0.81	0.81
	Right side	0.001	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.117	0.220	0.001	0.101	0.351	0.44	0.47	0.57	0.57
N7_Ant 2	Front	0.201	0.073	0.001	0.033	0.134	0.31	0.34	0.37	0.37
	Back	0.284	0.084	0.047	0.306	0.171	0.67	0.50	0.76	0.81
	Left side	0.994	0.001	0.001	0.001	0.011	1.00	1.01	1.01	1.01
	Right side	0.002	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.002	0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.46
N41_Ant 0	Front	0.243	0.073	0.001	0.033	0.134	0.35	0.38	0.41	0.41
	Back	0.516	0.084	0.047	0.306	0.171	0.91	0.73	0.99	1.04
	Left side	0.217	0.001	0.001	0.001	0.011	0.22	0.23	0.23	0.23
	Right side	0.071	0.107	0.152	0.148	0.018	0.33	0.24	0.24	0.39
	Top side	0.706	0.220	0.001	0.101	0.351	1.03	1.06	1.16	1.16
N41(HPUE)_Ant 0	Front	0.273	0.073	0.001	0.033	0.134	0.38	0.41	0.44	0.44
	Back	0.642	0.084	0.047	0.306	0.171	1.03	0.86	1.12	1.17
	Left side	0.223	0.001	0.001	0.001	0.011	0.23	0.24	0.24	0.24
	Right side	0.078	0.107	0.152	0.148	0.018	0.33	0.25	0.24	0.40
	Top side	0.704	0.220	0.001	0.101	0.351	1.03	1.06	1.16	1.16
N41_Ant 2	Front	0.131	0.073	0.001	0.033	0.134	0.24	0.27	0.30	0.30
	Back	0.218	0.084	0.047	0.306	0.171	0.61	0.44	0.70	0.74
	Left side	0.559	0.001	0.001	0.001	0.011	0.56	0.57	0.57	0.57
	Right side	0.001	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.001	0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
N41(HPUE)_Ant 2	Front	0.216	0.073	0.001	0.033	0.134	0.32	0.35	0.38	0.38
	Back	0.335	0.084	0.047	0.306	0.171	0.73	0.55	0.81	0.86



	Left side	0.834	0.001	0.001	0.001	0.011	0.84	0.85	0.85	0.85
	Right side	0.002	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
N77_Ant9	Front	0.222	0.073	0.001	0.033	0.134	0.33	0.36	0.39	0.39
	Back	0.457	0.084	0.047	0.306	0.171	0.85	0.68	0.93	0.98
	Left side	0.932	0.001	0.001	0.001	0.011	0.93	0.94	0.94	0.95
	Right side	0.008	0.107	0.152	0.148	0.018	0.26	0.18	0.17	0.33
	Top side	0.031	0.220	0.001	0.101	0.351	0.35	0.38	0.48	0.48
LTE Band 66_Ant0	Front	0.264	0.073	0.001	0.033	0.134	0.37	0.40	0.43	0.43
	Back	0.374	0.084	0.047	0.306	0.171	0.76	0.59	0.85	0.90
	Left side	0.080	0.001	0.001	0.001	0.011	0.08	0.09	0.09	0.09
	Right side	0.001	0.107	0.152	0.148	0.018	0.26	0.17	0.17	0.32
	Top side	0.684	0.220	0.001	0.101	0.351	1.01	1.04	1.14	1.14
LTE Band 7_Ant0	Front	0.231	0.073	0.001	0.033	0.134	0.34	0.37	0.40	0.40
	Back	0.336	0.084	0.047	0.306	0.171	0.73	0.55	0.81	0.86
	Left side	0.243	0.001	0.001	0.001	0.011	0.25	0.26	0.26	0.26
	Right side	0.056	0.107	0.152	0.148	0.018	0.31	0.23	0.22	0.37
	Top side	0.706	0.220	0.001	0.101	0.351	1.03	1.06	1.16	1.16



WWAN Band	Exposure Position	1	2	3	4	6	1+6 Summed 1g SAR (W/kg)	3+6 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 1+2 1g SAR (W/kg)	2.4GHz WLAN Ant 2 1g SAR (W/kg)	5GHz WLAN Ant 1+2 1g SAR (W/kg)	Bluetooth Ant 1 1g SAR (W/kg)			
N71_Ant 1	Front	0.180	0.275	0.163	0.104	0.134	0.31	0.30	0.24
	Back	0.211	0.347	0.188	1.092	0.171	0.38	0.36	1.26
	Left side	0.111	0.001	0.001	0.015	0.011	0.12	0.01	0.03
	Right side	0.437	0.386	0.618	0.434	0.018	0.46	0.64	0.45
	Top side	0.008	1.079	0.001	0.288	0.351	0.36	0.35	0.64
	Bottom side	0.154					0.15	0.00	0.00
N5_Ant 1	Front	0.253	0.275	0.163	0.104	0.134	0.39	0.30	0.24
	Back	0.308	0.347	0.188	1.092	0.171	0.48	0.36	1.26
	Left side	0.116	0.001	0.001	0.015	0.011	0.13	0.01	0.03
	Right side	0.481	0.386	0.618	0.434	0.018	0.50	0.64	0.45
	Top side	0.020	1.079	0.001	0.288	0.351	0.37	0.35	0.64
	Bottom side	0.194					0.19	0.00	0.00
N66_Ant 1	Front	0.185	0.275	0.163	0.104	0.134	0.32	0.30	0.24
	Back	0.206	0.347	0.188	1.092	0.171	0.38	0.36	1.26
	Left side	0.002	0.001	0.001	0.015	0.011	0.01	0.01	0.03
	Right side	0.340	0.386	0.618	0.434	0.018	0.36	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.272					0.27	0.00	0.00
N66_Ant 3	Front	0.543	0.275	0.163	0.104	0.134	0.68	0.30	0.24
	Back	0.563	0.347	0.188	1.092	0.171	0.73	0.36	1.26
	Left side	0.215	0.001	0.001	0.015	0.011	0.23	0.01	0.03
	Right side	0.113	0.386	0.618	0.434	0.018	0.13	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.958					0.96	0.00	0.00
N2_Ant 3	Front	0.708	0.275	0.163	0.104	0.134	0.84	0.30	0.24
	Back	0.716	0.347	0.188	1.092	0.171	0.89	0.36	1.26
	Left side	0.321	0.001	0.001	0.015	0.011	0.33	0.01	0.03
	Right side	0.153	0.386	0.618	0.434	0.018	0.17	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	1.043					1.04	0.00	0.00
N25_Ant 3	Front	0.737	0.275	0.163	0.104	0.134	0.87	0.30	0.24
	Back	0.746	0.347	0.188	1.092	0.171	0.92	0.36	1.26
	Left side	0.344	0.001	0.001	0.015	0.011	0.36	0.01	0.03
	Right side	0.144	0.386	0.618	0.434	0.018	0.16	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	1.076					1.08	0.00	0.00
N7_Ant 3	Front	0.572	0.275	0.163	0.104	0.134	0.71	0.30	0.24
	Back	0.599	0.347	0.188	1.092	0.171	0.77	0.36	1.26
	Left side	0.350	0.001	0.001	0.015	0.011	0.36	0.01	0.03
	Right side	0.289	0.386	0.618	0.434	0.018	0.31	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.913					0.91	0.00	0.00
N41_Ant 1	Front	0.258	0.275	0.163	0.104	0.134	0.39	0.30	0.24
	Back	0.283	0.347	0.188	1.092	0.171	0.45	0.36	1.26
	Left side	0.063	0.001	0.001	0.015	0.011	0.07	0.01	0.03
	Right side	0.478	0.386	0.618	0.434	0.018	0.50	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.411					0.41	0.00	0.00
N41(HPUE)_Ant 1	Front	0.449	0.275	0.163	0.104	0.134	0.58	0.30	0.24
	Back	0.498	0.347	0.188	1.092	0.171	0.67	0.36	1.26
	Left side	0.002	0.001	0.001	0.015	0.011	0.01	0.01	0.03



	Right side	0.755	0.386	0.618	0.434	0.018	0.77	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.827					0.83	0.00	0.00
N41_Ant 3	Front	0.594	0.275	0.163	0.104	0.134	0.73	0.30	0.24
	Back	0.621	0.347	0.188	1.092	0.171	0.79	0.36	1.26
	Left side	0.374	0.001	0.001	0.015	0.011	0.39	0.01	0.03
	Right side	0.320	0.386	0.618	0.434	0.018	0.34	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	1.006					1.01	0.00	0.00
N41_HPUE_Ant 3	Front	0.594	0.275	0.163	0.104	0.134	0.73	0.30	0.24
	Back	0.621	0.347	0.188	1.092	0.171	0.79	0.36	1.26
	Left side	0.374	0.001	0.001	0.015	0.011	0.39	0.01	0.03
	Right side	0.320	0.386	0.618	0.434	0.018	0.34	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	1.006					1.01	0.00	0.00
LTE Band 66_Ant 1	Front	0.492	0.275	0.163	0.104	0.134	0.63	0.30	0.24
	Back	0.206	0.347	0.188	1.092	0.171	0.38	0.36	1.26
	Left side	0.001	0.001	0.001	0.015	0.011	0.01	0.01	0.03
	Right side	0.203	0.386	0.618	0.434	0.018	0.22	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.230					0.23	0.00	0.00
LTE Band 7_Ant 1	Front	0.320	0.275	0.163	0.104	0.134	0.45	0.30	0.24
	Back	0.373	0.347	0.188	1.092	0.171	0.54	0.36	1.26
	Left side	0.001	0.001	0.001	0.015	0.011	0.01	0.01	0.03
	Right side	0.782	0.386	0.618	0.434	0.018	0.80	0.64	0.45
	Top side		1.079	0.001	0.288	0.351	0.35	0.35	0.64
	Bottom side	0.615					0.62	0.00	0.00



WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
N71_Ant 1	Front	0.180	0.175	0.068	0.36	0.25
	Back	0.211	0.219	0.643	0.43	0.85
	Left side	0.111	0.003	0.001	0.11	0.11
	Right side	0.437	0.252	0.283	0.69	0.72
	Top side	0.008	0.683	0.212	0.69	0.22
	Bottom side	0.154			0.15	0.15
N5_Ant 1	Front	0.253	0.175	0.068	0.43	0.32
	Back	0.308	0.219	0.643	0.53	0.95
	Left side	0.116	0.003	0.001	0.12	0.12
	Right side	0.481	0.252	0.283	0.73	0.76
	Top side	0.020	0.683	0.212	0.70	0.23
	Bottom side	0.194			0.19	0.19
N66_Ant 1	Front	0.185	0.175	0.068	0.36	0.25
	Back	0.206	0.219	0.643	0.43	0.85
	Left side	0.002	0.003	0.001	0.01	0.00
	Right side	0.340	0.252	0.283	0.59	0.62
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.272			0.27	0.27
N66_Ant 3	Front	0.543	0.175	0.068	0.72	0.61
	Back	0.563	0.219	0.643	0.78	1.21
	Left side	0.215	0.003	0.001	0.22	0.22
	Right side	0.113	0.252	0.283	0.37	0.40
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.958			0.96	0.96
N2_Ant 3	Front	0.708	0.175	0.068	0.88	0.78
	Back	0.716	0.219	0.643	0.94	1.36
	Left side	0.321	0.003	0.001	0.32	0.32
	Right side	0.153	0.252	0.283	0.41	0.44
	Top side		0.683	0.212	0.68	0.21
	Bottom side	1.043			1.04	1.04
N25_Ant 3	Front	0.737	0.175	0.068	0.91	0.81
	Back	0.746	0.219	0.643	0.97	1.39
	Left side	0.344	0.003	0.001	0.35	0.35
	Right side	0.144	0.252	0.283	0.40	0.43
	Top side		0.683	0.212	0.68	0.21
	Bottom side	1.076			1.08	1.08
N7_Ant 3	Front	0.572	0.175	0.068	0.75	0.64
	Back	0.599	0.219	0.643	0.82	1.24
	Left side	0.350	0.003	0.001	0.35	0.35
	Right side	0.289	0.252	0.283	0.54	0.57
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.913			0.91	0.91
N41_Ant 1	Front	0.258	0.175	0.068	0.43	0.33
	Back	0.283	0.219	0.643	0.50	0.93
	Left side	0.063	0.003	0.001	0.07	0.06
	Right side	0.478	0.252	0.283	0.73	0.76
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.411			0.41	0.41
N41(HPUE)_Ant 1	Front	0.449	0.175	0.068	0.62	0.52
	Back	0.498	0.219	0.643	0.72	1.14
	Left side	0.002	0.003	0.001	0.01	0.00

	Right side	0.755	0.252	0.283	1.01	1.04
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.827			0.83	0.83
N41_Ant 3	Front	0.594	0.175	0.068	0.77	0.66
	Back	0.621	0.219	0.643	0.84	1.26
	Left side	0.374	0.003	0.001	0.38	0.38
	Right side	0.320	0.252	0.283	0.57	0.60
	Top side		0.683	0.212	0.68	0.21
	Bottom side	1.006			1.01	1.01
N41_HPUE_Ant 3	Front	0.594	0.175	0.068	0.77	0.66
	Back	0.621	0.219	0.643	0.84	1.26
	Left side	0.374	0.003	0.001	0.38	0.38
	Right side	0.320	0.252	0.283	0.57	0.60
	Top side		0.683	0.212	0.68	0.21
	Bottom side	1.006			1.01	1.01
LTE Band 66_Ant 1	Front	0.492	0.175	0.068	0.67	0.56
	Back	0.206	0.219	0.643	0.43	0.85
	Left side	0.001	0.003	0.001	0.00	0.00
	Right side	0.203	0.252	0.283	0.46	0.49
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.230			0.23	0.23
LTE Band 7_Ant 1	Front	0.320	0.175	0.068	0.50	0.39
	Back	0.373	0.219	0.643	0.59	1.02
	Left side	0.001	0.003	0.001	0.00	0.00
	Right side	0.782	0.252	0.283	1.03	1.07
	Top side		0.683	0.212	0.68	0.21
	Bottom side	0.615			0.62	0.62



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WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
N71_Ant 1	Front	0.180	0.073	0.001	0.033	0.134	0.29	0.32	0.35	0.35
	Back	0.211	0.084	0.047	0.306	0.171	0.60	0.43	0.69	0.74
	Left side	0.111	0.001	0.001	0.001	0.011	0.11	0.12	0.12	0.12
	Right side	0.437	0.107	0.152	0.148	0.018	0.69	0.61	0.60	0.76
	Top side	0.008	0.220	0.001	0.101	0.351	0.33	0.36	0.46	0.46
	Bottom side	0.154					0.15	0.15	0.15	0.15
N5_Ant 1	Front	0.253	0.073	0.001	0.033	0.134	0.36	0.39	0.42	0.42
	Back	0.308	0.084	0.047	0.306	0.171	0.70	0.53	0.79	0.83
	Left side	0.116	0.001	0.001	0.001	0.011	0.12	0.13	0.13	0.13
	Right side	0.481	0.107	0.152	0.148	0.018	0.74	0.65	0.65	0.80
	Top side	0.020	0.220	0.001	0.101	0.351	0.34	0.37	0.47	0.47
	Bottom side	0.194					0.19	0.19	0.19	0.19
N66_Ant 1	Front	0.185	0.073	0.001	0.033	0.134	0.29	0.32	0.35	0.35
	Back	0.206	0.084	0.047	0.306	0.171	0.60	0.42	0.68	0.73
	Left side	0.002	0.001	0.001	0.001	0.011	0.00	0.01	0.01	0.02
	Right side	0.340	0.107	0.152	0.148	0.018	0.60	0.51	0.51	0.66
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	0.272					0.27	0.27	0.27	0.27
N66_Ant 3	Front	0.543	0.073	0.001	0.033	0.134	0.65	0.68	0.71	0.71
	Back	0.563	0.084	0.047	0.306	0.171	0.95	0.78	1.04	1.09
	Left side	0.215	0.001	0.001	0.001	0.011	0.22	0.23	0.23	0.23
	Right side	0.113	0.107	0.152	0.148	0.018	0.37	0.28	0.28	0.43
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	0.958					0.96	0.96	0.96	0.96
N2_Ant 3	Front	0.708	0.073	0.001	0.033	0.134	0.81	0.84	0.88	0.88
	Back	0.716	0.084	0.047	0.306	0.171	1.11	0.93	1.19	1.24
	Left side	0.321	0.001	0.001	0.001	0.011	0.32	0.33	0.33	0.33
	Right side	0.153	0.107	0.152	0.148	0.018	0.41	0.32	0.32	0.47
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	1.043					1.04	1.04	1.04	1.04
N25_Ant 3	Front	0.737	0.073	0.001	0.033	0.134	0.84	0.87	0.90	0.91
	Back	0.746	0.084	0.047	0.306	0.171	1.14	0.96	1.22	1.27
	Left side	0.344	0.001	0.001	0.001	0.011	0.35	0.36	0.36	0.36
	Right side	0.144	0.107	0.152	0.148	0.018	0.40	0.31	0.31	0.46
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	1.076					1.08	1.08	1.08	1.08
N7_Ant 3	Front	0.572	0.073	0.001	0.033	0.134	0.68	0.71	0.74	0.74
	Back	0.599	0.084	0.047	0.306	0.171	0.99	0.82	1.08	1.12
	Left side	0.350	0.001	0.001	0.001	0.011	0.35	0.36	0.36	0.36
	Right side	0.289	0.107	0.152	0.148	0.018	0.54	0.46	0.46	0.61
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	0.913					0.91	0.91	0.91	0.91
N41_Ant 1	Front	0.258	0.073	0.001	0.033	0.134	0.36	0.39	0.43	0.43
	Back	0.283	0.084	0.047	0.306	0.171	0.67	0.50	0.76	0.81
	Left side	0.063	0.001	0.001	0.001	0.011	0.07	0.08	0.08	0.08
	Right side	0.478	0.107	0.152	0.148	0.018	0.73	0.65	0.64	0.80
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	0.411					0.41	0.41	0.41	0.41
N41(HPUE)_Ant 1	Front	0.449	0.073	0.001	0.033	0.134	0.56	0.58	0.62	0.62
	Back	0.498	0.084	0.047	0.306	0.171	0.89	0.72	0.98	1.02
	Left side	0.002	0.001	0.001	0.001	0.011	0.00	0.01	0.01	0.02
	Right side	0.755	0.107	0.152	0.148	0.018	1.01	0.93	0.92	1.07



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	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	0.827					0.83	0.83	0.83	0.83
N41_Ant 3	Front	0.594	0.073	0.001	0.033	0.134	0.70	0.73	0.76	0.76
	Back	0.621	0.084	0.047	0.306	0.171	1.01	0.84	1.10	1.15
	Left side	0.374	0.001	0.001	0.001	0.011	0.38	0.39	0.39	0.39
	Right side	0.320	0.107	0.152	0.148	0.018	0.58	0.49	0.49	0.64
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	1.006					1.01	1.01	1.01	1.01
N41_HPUE_Ant 3	Front	0.594	0.073	0.001	0.033	0.134	0.70	0.73	0.76	0.76
	Back	0.621	0.084	0.047	0.306	0.171	1.01	0.84	1.10	1.15
	Left side	0.374	0.001	0.001	0.001	0.011	0.38	0.39	0.39	0.39
	Right side	0.320	0.107	0.152	0.148	0.018	0.58	0.49	0.49	0.64
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	1.006					1.01	1.01	1.01	1.01
LTE Band 66_Ant 1	Front	0.492	0.073	0.001	0.033	0.134	0.60	0.63	0.66	0.66
	Back	0.206	0.084	0.047	0.306	0.171	0.60	0.42	0.68	0.73
	Left side	0.001	0.001	0.001	0.001	0.011	0.00	0.01	0.01	0.01
	Right side	0.203	0.107	0.152	0.148	0.018	0.46	0.37	0.37	0.52
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	0.230					0.23	0.23	0.23	0.23
LTE Band 7_Ant 1	Front	0.320	0.073	0.001	0.033	0.134	0.43	0.46	0.49	0.49
	Back	0.373	0.084	0.047	0.306	0.171	0.76	0.59	0.85	0.90
	Left side	0.001	0.001	0.001	0.001	0.011	0.00	0.01	0.01	0.01
	Right side	0.782	0.107	0.152	0.148	0.018	1.04	0.95	0.95	1.10
	Top side		0.220	0.001	0.101	0.351	0.32	0.35	0.45	0.45
	Bottom side	0.615					0.62	0.62	0.62	0.62

**20.4 Body-Worn Accessory Exposure Conditions**

Exposure Position	2	4	2+4
	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
Front	0.140	0.083	0.22
Back	0.252	0.765	1.02

WWAN Band	Exposure Position	1	3	4	6	1+6 Summed 1g SAR (W/kg)	3+6 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_UAT	Front	0.301	0.072	0.097	0.066	0.37	0.14	0.16
	Back	0.392	0.106	1.149	0.140	0.53	0.25	1.29
GSM1900_UAT	Front	0.069	0.072	0.097	0.066	0.14	0.14	0.16
	Back	0.121	0.106	1.149	0.140	0.26	0.25	1.29
WCDMA II_UAT	Front	0.211	0.072	0.097	0.066	0.28	0.14	0.16
	Back	0.370	0.106	1.149	0.140	0.51	0.25	1.29
WCDMA IV_UAT	Front	0.187	0.072	0.097	0.066	0.25	0.14	0.16
	Back	0.392	0.106	1.149	0.140	0.53	0.25	1.29
WCDMA V_UAT	Front	0.300	0.072	0.097	0.066	0.37	0.14	0.16
	Back	0.353	0.106	1.149	0.140	0.49	0.25	1.29
CDMA2000 BC0_UAT	Front	0.255	0.072	0.097	0.066	0.32	0.14	0.16
	Back	0.277	0.106	1.149	0.140	0.42	0.25	1.29
CDMA2000 BC1_UAT	Front	0.165	0.072	0.097	0.066	0.23	0.14	0.16
	Back	0.389	0.106	1.149	0.140	0.53	0.25	1.29
CDMA2000 BC10_UAT	Front	0.212	0.072	0.097	0.066	0.28	0.14	0.16
	Back	0.268	0.106	1.149	0.140	0.41	0.25	1.29
LTE Band 71_UAT	Front	0.156	0.072	0.097	0.066	0.22	0.14	0.16
	Back	0.225	0.106	1.149	0.140	0.37	0.25	1.29
LTE Band 12_UAT	Front	0.210	0.072	0.097	0.066	0.28	0.14	0.16
	Back	0.300	0.106	1.149	0.140	0.44	0.25	1.29
LTE Band 13_UAT	Front	0.255	0.072	0.097	0.066	0.32	0.14	0.16
	Back	0.301	0.106	1.149	0.140	0.44	0.25	1.29
LTE Band 5_UAT	Front	0.290	0.072	0.097	0.066	0.36	0.14	0.16
	Back	0.335	0.106	1.149	0.140	0.48	0.25	1.29
LTE Band 26_UAT	Front	0.227	0.072	0.097	0.066	0.29	0.14	0.16
	Back	0.322	0.106	1.149	0.140	0.46	0.25	1.29
LTE Band 66_UAT	Front	0.114	0.072	0.097	0.066	0.18	0.14	0.16
	Back	0.259	0.106	1.149	0.140	0.40	0.25	1.29
LTE Band 25_UAT	Front	0.210	0.072	0.097	0.066	0.28	0.14	0.16
	Back	0.251	0.106	1.149	0.140	0.39	0.25	1.29
LTE Band 30_UAT	Front	0.101	0.072	0.097	0.066	0.17	0.14	0.16
	Back	0.146	0.106	1.149	0.140	0.29	0.25	1.29
LTE Band 7_UAT	Front	0.102	0.072	0.097	0.066	0.17	0.14	0.16
	Back	0.202	0.106	1.149	0.140	0.34	0.25	1.29
LTE Band 41_UAT	Front	0.045	0.072	0.097	0.066	0.11	0.14	0.16
	Back	0.100	0.106	1.149	0.140	0.24	0.25	1.29
LTE Band 41_HPUE_UAT	Front	0.050	0.072	0.097	0.066	0.12	0.14	0.16
	Back	0.108	0.106	1.149	0.140	0.25	0.25	1.29
LTE Band 48	Front	0.170	0.072	0.097	0.066	0.24	0.14	0.16
	Back	0.422	0.106	1.149	0.140	0.56	0.25	1.29





# FCC SAR TEST REPORT

Report No. : FA002703-02

WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850_UAT	Front	0.301	0.140	0.083	0.44	0.38
	Back	0.392	0.252	0.765	0.64	1.16
GSM1900_UAT	Front	0.069	0.140	0.083	0.21	0.15
	Back	0.121	0.252	0.765	0.37	0.89
WCDMA II_UAT	Front	0.211	0.140	0.083	0.35	0.29
	Back	0.370	0.252	0.765	0.62	1.14
WCDMA IV_UAT	Front	0.187	0.140	0.083	0.33	0.27
	Back	0.392	0.252	0.765	0.64	1.16
WCDMA V_UAT	Front	0.300	0.140	0.083	0.44	0.38
	Back	0.353	0.252	0.765	0.61	1.12
CDMA2000 BC0_UAT	Front	0.255	0.140	0.083	0.40	0.34
	Back	0.277	0.252	0.765	0.53	1.04
CDMA2000 BC1_UAT	Front	0.165	0.140	0.083	0.31	0.25
	Back	0.389	0.252	0.765	0.64	1.15
CDMA2000 BC10_UAT	Front	0.212	0.140	0.083	0.35	0.30
	Back	0.268	0.252	0.765	0.52	1.03
LTE Band 71_UAT	Front	0.156	0.140	0.083	0.30	0.24
	Back	0.225	0.252	0.765	0.48	0.99
LTE Band 12_UAT	Front	0.210	0.140	0.083	0.35	0.29
	Back	0.300	0.252	0.765	0.55	1.07
LTE Band 13_UAT	Front	0.255	0.140	0.083	0.40	0.34
	Back	0.301	0.252	0.765	0.55	1.07
LTE Band 5_UAT	Front	0.290	0.140	0.083	0.43	0.37
	Back	0.335	0.252	0.765	0.59	1.10
LTE Band 26_UAT	Front	0.227	0.140	0.083	0.37	0.31
	Back	0.322	0.252	0.765	0.57	1.09
LTE Band 66_UAT	Front	0.114	0.140	0.083	0.25	0.20
	Back	0.259	0.252	0.765	0.51	1.02
LTE Band 25_UAT	Front	0.210	0.140	0.083	0.35	0.29
	Back	0.251	0.252	0.765	0.50	1.02
LTE Band 30_UAT	Front	0.101	0.140	0.083	0.24	0.18
	Back	0.146	0.252	0.765	0.40	0.91
LTE Band 7_UAT	Front	0.102	0.140	0.083	0.24	0.19
	Back	0.202	0.252	0.765	0.45	0.97
LTE Band 41_UAT	Front	0.045	0.140	0.083	0.19	0.13
	Back	0.100	0.252	0.765	0.35	0.87
LTE Band 41_HPUE_UAT	Front	0.050	0.140	0.083	0.19	0.13
	Back	0.108	0.252	0.765	0.36	0.87
LTE Band 48	Front	0.170	0.140	0.083	0.31	0.25
	Back	0.422	0.252	0.765	0.67	1.19



# FCC SAR TEST REPORT

Report No. : FA002703-02

WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
GSM850_UAT	Front	0.301	0.140	0.072	0.045	0.066	0.49	0.44	0.41	0.48
	Back	0.392	0.252	0.106	0.377	0.140	1.02	0.64	0.91	1.02
GSM1900_UAT	Front	0.069	0.140	0.072	0.045	0.066	0.25	0.21	0.18	0.25
	Back	0.121	0.252	0.106	0.377	0.140	0.75	0.37	0.64	0.74
WCDMA II_UAT	Front	0.211	0.140	0.072	0.045	0.066	0.40	0.35	0.32	0.39
	Back	0.370	0.252	0.106	0.377	0.140	1.00	0.62	0.89	0.99
WCDMA IV_UAT	Front	0.187	0.140	0.072	0.045	0.066	0.37	0.33	0.30	0.37
	Back	0.392	0.252	0.106	0.377	0.140	1.02	0.64	0.91	1.02
WCDMA V_UAT	Front	0.300	0.140	0.072	0.045	0.066	0.49	0.44	0.41	0.48
	Back	0.353	0.252	0.106	0.377	0.140	0.98	0.60	0.87	0.98
CDMA2000 BC0_UAT	Front	0.255	0.140	0.072	0.045	0.066	0.44	0.39	0.37	0.44
	Back	0.277	0.252	0.106	0.377	0.140	0.91	0.52	0.79	0.90
CDMA2000 BC1_UAT	Front	0.165	0.140	0.072	0.045	0.066	0.35	0.30	0.28	0.35
	Back	0.389	0.252	0.106	0.377	0.140	1.02	0.64	0.91	1.01
CDMA2000 BC10_UAT	Front	0.212	0.140	0.072	0.045	0.066	0.40	0.35	0.32	0.40
	Back	0.268	0.252	0.106	0.377	0.140	0.90	0.51	0.79	0.89
LTE Band 71_UAT	Front	0.156	0.140	0.072	0.045	0.066	0.34	0.29	0.27	0.34
	Back	0.225	0.252	0.106	0.377	0.140	0.85	0.47	0.74	0.85
LTE Band 12_UAT	Front	0.210	0.140	0.072	0.045	0.066	0.40	0.35	0.32	0.39
	Back	0.300	0.252	0.106	0.377	0.140	0.93	0.55	0.82	0.92
LTE Band 13_UAT	Front	0.255	0.140	0.072	0.045	0.066	0.44	0.39	0.37	0.44
	Back	0.301	0.252	0.106	0.377	0.140	0.93	0.55	0.82	0.92
LTE Band 5_UAT	Front	0.290	0.140	0.072	0.045	0.066	0.48	0.43	0.40	0.47
	Back	0.335	0.252	0.106	0.377	0.140	0.96	0.58	0.85	0.96
LTE Band 26_UAT	Front	0.227	0.140	0.072	0.045	0.066	0.41	0.37	0.34	0.41
	Back	0.322	0.252	0.106	0.377	0.140	0.95	0.57	0.84	0.95
LTE Band 66_UAT	Front	0.114	0.140	0.072	0.045	0.066	0.30	0.25	0.23	0.30
	Back	0.259	0.252	0.106	0.377	0.140	0.89	0.51	0.78	0.88
LTE Band 25_UAT	Front	0.210	0.140	0.072	0.045	0.066	0.40	0.35	0.32	0.39
	Back	0.251	0.252	0.106	0.377	0.140	0.88	0.50	0.77	0.87
LTE Band 30_UAT	Front	0.101	0.140	0.072	0.045	0.066	0.29	0.24	0.21	0.28
	Back	0.146	0.252	0.106	0.377	0.140	0.78	0.39	0.66	0.77
LTE Band 7_UAT	Front	0.102	0.140	0.072	0.045	0.066	0.29	0.24	0.21	0.29
	Back	0.202	0.252	0.106	0.377	0.140	0.83	0.45	0.72	0.83
LTE Band 41_UAT	Front	0.045	0.140	0.072	0.045	0.066	0.23	0.18	0.16	0.23
	Back	0.100	0.252	0.106	0.377	0.140	0.73	0.35	0.62	0.72
LTE Band 41_HPUF_UAT	Front	0.050	0.140	0.072	0.045	0.066	0.24	0.19	0.16	0.23
	Back	0.108	0.252	0.106	0.377	0.140	0.74	0.35	0.63	0.73
LTE Band 48	Front	0.170	0.140	0.072	0.045	0.066	0.36	0.31	0.28	0.35
	Back	0.422	0.252	0.106	0.377	0.140	1.05	0.67	0.94	1.05



WWAN Band	Exposure Position	1	3	4	6	1+6 Summed 1g SAR (W/kg)	3+6 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_LAT	Front	0.257	0.072	0.097	0.066	0.32	0.14	0.16
	Back	0.343	0.106	1.149	0.140	0.48	0.25	1.29
GSM1900_LAT	Front	0.322	0.072	0.097	0.066	0.39	0.14	0.16
	Back	0.528	0.106	1.149	0.140	0.67	0.25	1.29
WCDMA II_LAT	Front	0.541	0.072	0.097	0.066	0.61	0.14	0.16
	Back	0.690	0.106	1.149	0.140	0.83	0.25	1.29
WCDMA IV_LAT	Front	0.684	0.072	0.097	0.066	0.75	0.14	0.16
	Back	0.523	0.106	1.149	0.140	0.66	0.25	1.29
WCDMA V_LAT	Front	0.169	0.072	0.097	0.066	0.24	0.14	0.16
	Back	0.243	0.106	1.149	0.140	0.38	0.25	1.29
CDMA2000 BC0_LAT	Front	0.189	0.072	0.097	0.066	0.26	0.14	0.16
	Back	0.227	0.106	1.149	0.140	0.37	0.25	1.29
CDMA2000 BC1_LAT	Front	0.596	0.072	0.097	0.066	0.66	0.14	0.16
	Back	0.751	0.106	1.149	0.140	0.89	0.25	1.29
CDMA2000 BC10_LAT	Front	0.205	0.072	0.097	0.066	0.27	0.14	0.16
	Back	0.270	0.106	1.149	0.140	0.41	0.25	1.29
LTE Band 71_LAT	Front	0.192	0.072	0.097	0.066	0.26	0.14	0.16
	Back	0.222	0.106	1.149	0.140	0.36	0.25	1.29
LTE Band 12_LAT	Front	0.176	0.072	0.097	0.066	0.24	0.14	0.16
	Back	0.247	0.106	1.149	0.140	0.39	0.25	1.29
LTE Band 13_LAT	Front	0.297	0.072	0.097	0.066	0.36	0.14	0.16
	Back	0.275	0.106	1.149	0.140	0.42	0.25	1.29
LTE Band 5_LAT	Front	0.180	0.072	0.097	0.066	0.25	0.14	0.16
	Back	0.201	0.106	1.149	0.140	0.34	0.25	1.29
LTE Band 26_LAT	Front	0.164	0.072	0.097	0.066	0.23	0.14	0.16
	Back	0.224	0.106	1.149	0.140	0.36	0.25	1.29
LTE Band 66_LAT	Front	0.691	0.072	0.097	0.066	0.76	0.14	0.16
	Back	0.533	0.106	1.149	0.140	0.67	0.25	1.29
LTE Band 25_LAT	Front	0.579	0.072	0.097	0.066	0.65	0.14	0.16
	Back	0.604	0.106	1.149	0.140	0.74	0.25	1.29
LTE Band 30_LAT	Front	0.505	0.072	0.097	0.066	0.57	0.14	0.16
	Back	0.576	0.106	1.149	0.140	0.72	0.25	1.29
LTE Band 7_LAT	Front	0.345	0.072	0.097	0.066	0.41	0.14	0.16
	Back	0.541	0.106	1.149	0.140	0.68	0.25	1.29
LTE Band 41_LAT	Front	0.354	0.072	0.097	0.066	0.42	0.14	0.16
	Back	0.464	0.106	1.149	0.140	0.60	0.25	1.29
LTE Band 41_HPUE_LAT	Front	0.326	0.072	0.097	0.066	0.39	0.14	0.16
	Back	0.434	0.106	1.149	0.140	0.57	0.25	1.29



WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850_LAT	Front	0.257	0.140	0.083	0.40	0.34
	Back	0.343	0.252	0.765	0.60	1.11
GSM1900_LAT	Front	0.322	0.140	0.083	0.46	0.41
	Back	0.528	0.252	0.765	0.78	1.29
WCDMA II_LAT	Front	0.541	0.140	0.083	0.68	0.62
	Back	0.690	0.252	0.765	0.94	1.46
WCDMA IV_LAT	Front	0.684	0.140	0.083	0.82	0.77
	Back	0.523	0.252	0.765	0.78	1.29
WCDMA V_LAT	Front	0.169	0.140	0.083	0.31	0.25
	Back	0.243	0.252	0.765	0.50	1.01
CDMA2000 BC0_LAT	Front	0.189	0.140	0.083	0.33	0.27
	Back	0.227	0.252	0.765	0.48	0.99
CDMA2000 BC1_LAT	Front	0.596	0.140	0.083	0.74	0.68
	Back	0.751	0.252	0.765	1.00	1.52
CDMA2000 BC10_LAT	Front	0.205	0.140	0.083	0.35	0.29
	Back	0.270	0.252	0.765	0.52	1.04
LTE Band 71_LAT	Front	0.192	0.140	0.083	0.33	0.28
	Back	0.222	0.252	0.765	0.47	0.99
LTE Band 12_LAT	Front	0.176	0.140	0.083	0.32	0.26
	Back	0.247	0.252	0.765	0.50	1.01
LTE Band 13_LAT	Front	0.297	0.140	0.083	0.44	0.38
	Back	0.275	0.252	0.765	0.53	1.04
LTE Band 5_LAT	Front	0.180	0.140	0.083	0.32	0.26
	Back	0.201	0.252	0.765	0.45	0.97
LTE Band 26_LAT	Front	0.164	0.140	0.083	0.30	0.25
	Back	0.224	0.252	0.765	0.48	0.99
LTE Band 66_LAT	Front	0.691	0.140	0.083	0.83	0.77
	Back	0.533	0.252	0.765	0.79	1.30
LTE Band 25_LAT	Front	0.579	0.140	0.083	0.72	0.66
	Back	0.604	0.252	0.765	0.86	1.37
LTE Band 30_LAT	Front	0.505	0.140	0.083	0.65	0.59
	Back	0.576	0.252	0.765	0.83	1.34
LTE Band 7_LAT	Front	0.345	0.140	0.083	0.49	0.43
	Back	0.541	0.252	0.765	0.79	1.31
LTE Band 41_LAT	Front	0.354	0.140	0.083	0.49	0.44
	Back	0.464	0.252	0.765	0.72	1.23
LTE Band 41_HPUE_LAT	Front	0.326	0.140	0.083	0.47	0.41
	Back	0.434	0.252	0.765	0.69	1.20

WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
GSM850_LAT	Front	0.257	0.140	0.072	0.045	0.066	0.44	0.40	0.37	0.44
	Back	0.343	0.252	0.106	0.377	0.140	0.97	0.59	0.86	0.97
GSM1900_LAT	Front	0.322	0.140	0.072	0.045	0.066	0.51	0.46	0.43	0.51
	Back	0.528	0.252	0.106	0.377	0.140	1.16	0.77	1.05	1.15
WCDMA II_LAT	Front	0.541	0.140	0.072	0.045	0.066	0.73	0.68	0.65	0.72
	Back	0.690	0.252	0.106	0.377	0.140	1.32	0.94	1.21	1.31
WCDMA IV_LAT	Front	0.684	0.140	0.072	0.045	0.066	0.87	0.82	0.80	0.87
	Back	0.523	0.252	0.106	0.377	0.140	1.15	0.77	1.04	1.15
WCDMA V_LAT	Front	0.169	0.140	0.072	0.045	0.066	0.35	0.31	0.28	0.35
	Back	0.243	0.252	0.106	0.377	0.140	0.87	0.49	0.76	0.87
CDMA2000 BC0_LAT	Front	0.189	0.140	0.072	0.045	0.066	0.37	0.33	0.30	0.37
	Back	0.227	0.252	0.106	0.377	0.140	0.86	0.47	0.74	0.85
CDMA2000 BC1_LAT	Front	0.596	0.140	0.072	0.045	0.066	0.78	0.73	0.71	0.78
	Back	0.751	0.252	0.106	0.377	0.140	1.38	1.00	1.27	1.37
CDMA2000 BC10_LAT	Front	0.205	0.140	0.072	0.045	0.066	0.39	0.34	0.32	0.39
	Back	0.270	0.252	0.106	0.377	0.140	0.90	0.52	0.79	0.89
LTE Band 71_LAT	Front	0.192	0.140	0.072	0.045	0.066	0.38	0.33	0.30	0.38
	Back	0.222	0.252	0.106	0.377	0.140	0.85	0.47	0.74	0.85
LTE Band 12_LAT	Front	0.176	0.140	0.072	0.045	0.066	0.36	0.31	0.29	0.36
	Back	0.247	0.252	0.106	0.377	0.140	0.88	0.49	0.76	0.87
LTE Band 13_LAT	Front	0.297	0.140	0.072	0.045	0.066	0.48	0.44	0.41	0.48
	Back	0.275	0.252	0.106	0.377	0.140	0.90	0.52	0.79	0.90
LTE Band 5_LAT	Front	0.180	0.140	0.072	0.045	0.066	0.37	0.32	0.29	0.36
	Back	0.201	0.252	0.106	0.377	0.140	0.83	0.45	0.72	0.82
LTE Band 26_LAT	Front	0.164	0.140	0.072	0.045	0.066	0.35	0.30	0.28	0.35
	Back	0.224	0.252	0.106	0.377	0.140	0.85	0.47	0.74	0.85
LTE Band 66_LAT	Front	0.691	0.140	0.072	0.045	0.066	0.88	0.83	0.80	0.87
	Back	0.533	0.252	0.106	0.377	0.140	1.16	0.78	1.05	1.16
LTE Band 25_LAT	Front	0.579	0.140	0.072	0.045	0.066	0.76	0.72	0.69	0.76
	Back	0.604	0.252	0.106	0.377	0.140	1.23	0.85	1.12	1.23
LTE Band 30_LAT	Front	0.505	0.140	0.072	0.045	0.066	0.69	0.64	0.62	0.69
	Back	0.576	0.252	0.106	0.377	0.140	1.21	0.82	1.09	1.20
LTE Band 7_LAT	Front	0.345	0.140	0.072	0.045	0.066	0.53	0.48	0.46	0.53
	Back	0.541	0.252	0.106	0.377	0.140	1.17	0.79	1.06	1.16
LTE Band 41_LAT	Front	0.354	0.140	0.072	0.045	0.066	0.54	0.49	0.47	0.54
	Back	0.464	0.252	0.106	0.377	0.140	1.09	0.71	0.98	1.09
LTE Band 41_HPUE_LAT	Front	0.326	0.140	0.072	0.045	0.066	0.51	0.46	0.44	0.51
	Back	0.434	0.252	0.106	0.377	0.140	1.06	0.68	0.95	1.06



**<5G NR Mode>**

WWAN Band	Exposure Position	1	2	3	4	6	1+6 Summed SAR (W/kg)	3+6 Summed SAR (W/kg)	4+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
N71_Ant 0	Front	0.138	0.140	0.072	0.097	0.066	0.20	0.14	0.16
	Back	0.182	0.252	0.106	1.149	0.074	0.26	0.18	1.22
N5_Ant 0	Front	0.258	0.140	0.072	0.097	0.066	0.32	0.14	0.16
	Back	0.291	0.252	0.106	1.149	0.074	0.37	0.18	1.22
N66_Ant 2	Front	0.126	0.140	0.072	0.097	0.066	0.19	0.14	0.16
	Back	0.195	0.252	0.106	1.149	0.074	0.27	0.18	1.22
N66_Ant 0	Front	0.264	0.140	0.072	0.097	0.066	0.33	0.14	0.16
	Back	0.439	0.252	0.106	1.149	0.074	0.51	0.18	1.22
N2_Ant 2	Front	0.123	0.140	0.072	0.097	0.066	0.19	0.14	0.16
	Back	0.181	0.252	0.106	1.149	0.074	0.26	0.18	1.22
N25_Ant 2	Front	0.112	0.140	0.072	0.097	0.066	0.18	0.14	0.16
	Back	0.192	0.252	0.106	1.149	0.074	0.27	0.18	1.22
N7_Ant 2	Front	0.083	0.140	0.072	0.097	0.066	0.15	0.14	0.16
	Back	0.223	0.252	0.106	1.149	0.074	0.30	0.18	1.22
N41_Ant 0	Front	0.172	0.140	0.072	0.097	0.066	0.24	0.14	0.16
	Back	0.383	0.252	0.106	1.149	0.074	0.46	0.18	1.22
N41(HPUE)_Ant 0	Front	0.161	0.140	0.072	0.097	0.066	0.23	0.14	0.16
	Back	0.388	0.252	0.106	1.149	0.074	0.46	0.18	1.22
N41_Ant 2	Front	0.059	0.140	0.072	0.097	0.066	0.13	0.14	0.16
	Back	0.139	0.252	0.106	1.149	0.074	0.21	0.18	1.22
N41(HPUE)_Ant 2	Front	0.081	0.140	0.072	0.097	0.066	0.15	0.14	0.16
	Back	0.249	0.252	0.106	1.149	0.074	0.32	0.18	1.22
N77_Ant9	Front	0.173	0.140	0.072	0.097	0.066	0.24	0.14	0.16
	Back	0.324	0.252	0.106	1.149	0.074	0.40	0.18	1.22
LTE Band 66_Ant 0	Front	0.140	0.140	0.072	0.097	0.066	0.21	0.14	0.16
	Back	0.264	0.252	0.106	1.149	0.074	0.34	0.18	1.22
LTE Band 7_Ant 0	Front	0.155	0.140	0.072	0.097	0.066	0.22	0.14	0.16
	Back	0.381	0.252	0.106	1.149	0.074	0.46	0.18	1.22





WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
N71_Ant 0	Front	0.138	0.140	0.083	0.28	0.22
	Back	0.182	0.252	0.765	0.43	0.95
N5_Ant 0	Front	0.258	0.140	0.083	0.40	0.34
	Back	0.291	0.252	0.765	0.54	1.06
N66_Ant 2	Front	0.126	0.140	0.083	0.27	0.21
	Back	0.195	0.252	0.765	0.45	0.96
N66_Ant 0	Front	0.264	0.140	0.083	0.40	0.35
	Back	0.439	0.252	0.765	0.69	1.20
N2_Ant 2	Front	0.123	0.140	0.083	0.26	0.21
	Back	0.181	0.252	0.765	0.43	0.95
N25_Ant 2	Front	0.112	0.140	0.083	0.25	0.20
	Back	0.192	0.252	0.765	0.44	0.96
N7_Ant 2	Front	0.083	0.140	0.083	0.22	0.17
	Back	0.223	0.252	0.765	0.48	0.99
N41_Ant 0	Front	0.172	0.140	0.083	0.31	0.26
	Back	0.383	0.252	0.765	0.64	1.15
N41(HPUE)_Ant 0	Front	0.161	0.140	0.083	0.30	0.24
	Back	0.388	0.252	0.765	0.64	1.15
N41_Ant 2	Front	0.059	0.140	0.083	0.20	0.14
	Back	0.139	0.252	0.765	0.39	0.90
N41(HPUE)_Ant 2	Front	0.081	0.140	0.083	0.22	0.16
	Back	0.249	0.252	0.765	0.50	1.01
N77_Ant9	Front	0.173	0.140	0.083	0.31	0.26
	Back	0.324	0.252	0.765	0.58	1.09
LTE Band 66_Ant 0	Front	0.140	0.140	0.083	0.28	0.22
	Back	0.264	0.252	0.765	0.52	1.03
LTE Band 7_Ant 0	Front	0.155	0.140	0.083	0.30	0.24
	Back	0.381	0.252	0.765	0.63	1.15

WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
N71_Ant 0	Front	0.138	0.140	0.072	0.045	0.066	0.32	0.28	0.25	0.32
	Back	0.182	0.252	0.106	0.377	0.074	0.81	0.36	0.63	0.74
N5_Ant 0	Front	0.258	0.140	0.072	0.045	0.066	0.44	0.40	0.37	0.44
	Back	0.291	0.252	0.106	0.377	0.074	0.92	0.47	0.74	0.85
N66_Ant 2	Front	0.126	0.140	0.072	0.045	0.066	0.31	0.26	0.24	0.31
	Back	0.195	0.252	0.106	0.377	0.074	0.82	0.38	0.65	0.75
N66_Ant 0	Front	0.264	0.140	0.072	0.045	0.066	0.45	0.40	0.38	0.45
	Back	0.439	0.252	0.106	0.377	0.074	1.07	0.62	0.89	1.00
N2_Ant 2	Front	0.123	0.140	0.072	0.045	0.066	0.31	0.26	0.23	0.31
	Back	0.181	0.252	0.106	0.377	0.074	0.81	0.36	0.63	0.74
N25_Ant 2	Front	0.112	0.140	0.072	0.045	0.066	0.30	0.25	0.22	0.30
	Back	0.192	0.252	0.106	0.377	0.074	0.82	0.37	0.64	0.75
N7_Ant 2	Front	0.083	0.140	0.072	0.045	0.066	0.27	0.22	0.19	0.27
	Back	0.223	0.252	0.106	0.377	0.074	0.85	0.40	0.67	0.78
N41_Ant 0	Front	0.172	0.140	0.072	0.045	0.066	0.36	0.31	0.28	0.36
	Back	0.383	0.252	0.106	0.377	0.074	1.01	0.56	0.83	0.94
N41(HPUE)_Ant 0	Front	0.161	0.140	0.072	0.045	0.066	0.35	0.30	0.27	0.34
	Back	0.388	0.252	0.106	0.377	0.074	1.02	0.57	0.84	0.95
N41_Ant 2	Front	0.059	0.140	0.072	0.045	0.066	0.24	0.20	0.17	0.24
	Back	0.139	0.252	0.106	0.377	0.074	0.77	0.32	0.59	0.70
N41(HPUE)_Ant 2	Front	0.081	0.140	0.072	0.045	0.066	0.27	0.22	0.19	0.26
	Back	0.249	0.252	0.106	0.377	0.074	0.88	0.43	0.70	0.81
N77_Ant9	Front	0.173	0.140	0.072	0.045	0.066	0.36	0.31	0.28	0.36
	Back	0.324	0.252	0.106	0.377	0.074	0.95	0.50	0.78	0.88
LTE Band 66_Ant 0	Front	0.140	0.140	0.072	0.045	0.066	0.33	0.28	0.25	0.32
	Back	0.264	0.252	0.106	0.377	0.074	0.89	0.44	0.72	0.82
LTE Band 7_Ant 0	Front	0.155	0.140	0.072	0.045	0.066	0.34	0.29	0.27	0.34
	Back	0.381	0.252	0.106	0.377	0.074	1.01	0.56	0.83	0.94

WWAN Band	Exposure Position	1	2	3	4	6	1+6 Summed 1g SAR (W/kg)	3+6 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
N71_Ant 1	Front	0.156	0.140	0.072	0.097	0.066	0.22	0.14	0.16
	Back	0.166	0.252	0.106	1.149	0.074	0.24	0.18	1.22
N5_Ant 1	Front	0.135	0.140	0.072	0.097	0.066	0.20	0.14	0.16
	Back	0.203	0.252	0.106	1.149	0.074	0.28	0.18	1.22
N66_Ant 1	Front	0.098	0.140	0.072	0.097	0.066	0.16	0.14	0.16
	Back	0.133	0.252	0.106	1.149	0.074	0.21	0.18	1.22
N66_Ant 3	Front	0.451	0.140	0.072	0.097	0.066	0.52	0.14	0.16
	Back	0.464	0.252	0.106	1.149	0.074	0.54	0.18	1.22
N2_Ant 3	Front	0.468	0.140	0.072	0.097	0.066	0.53	0.14	0.16
	Back	0.554	0.252	0.106	1.149	0.074	0.63	0.18	1.22
N25_Ant 3	Front	0.460	0.140	0.072	0.097	0.066	0.53	0.14	0.16
	Back	0.583	0.252	0.106	1.149	0.074	0.66	0.18	1.22
N7_Ant 3	Front	0.356	0.140	0.072	0.097	0.066	0.42	0.14	0.16
	Back	0.540	0.252	0.106	1.149	0.074	0.61	0.18	1.22
N41_Ant 1	Front	0.106	0.140	0.072	0.097	0.066	0.17	0.14	0.16
	Back	0.162	0.252	0.106	1.149	0.074	0.24	0.18	1.22
N41(HPUE)_Ant 1	Front	0.226	0.140	0.072	0.097	0.066	0.29	0.14	0.16
	Back	0.264	0.252	0.106	1.149	0.074	0.34	0.18	1.22
N41_Ant 3	Front	0.389	0.140	0.072	0.097	0.066	0.46	0.14	0.16
	Back	0.747	0.252	0.106	1.149	0.074	0.82	0.18	1.22
N41(HPUE)_Ant 3	Front	0.417	0.140	0.072	0.097	0.066	0.48	0.14	0.16
	Back	0.749	0.252	0.106	1.149	0.074	0.82	0.18	1.22
LTE Band 66_Ant 1	Front	0.175	0.140	0.072	0.097	0.066	0.24	0.14	0.16
	Back	0.131	0.252	0.106	1.149	0.074	0.21	0.18	1.22
LTE Band 7_Ant 1	Front	0.142	0.140	0.072	0.097	0.066	0.21	0.14	0.16
	Back	0.188	0.252	0.106	1.149	0.074	0.26	0.18	1.22



WWAN Band	Exposure Position	1	2	4	1+2	1+4
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
N71_Ant 1	Front	0.156	0.140	0.083	0.30	0.24
	Back	0.166	0.252	0.765	0.42	0.93
N5_Ant 1	Front	0.135	0.140	0.083	0.28	0.22
	Back	0.203	0.252	0.765	0.46	0.97
N66_Ant 1	Front	0.098	0.140	0.083	0.24	0.18
	Back	0.133	0.252	0.765	0.39	0.90
N66_Ant 3	Front	0.451	0.140	0.083	0.59	0.53
	Back	0.464	0.252	0.765	0.72	1.23
N2_Ant 3	Front	0.468	0.140	0.083	0.61	0.55
	Back	0.554	0.252	0.765	0.81	1.32
N25_Ant 3	Front	0.460	0.140	0.083	0.60	0.54
	Back	0.583	0.252	0.765	0.84	1.35
N7_Ant 3	Front	0.356	0.140	0.083	0.50	0.44
	Back	0.540	0.252	0.765	0.79	1.31
N41_Ant 1	Front	0.106	0.140	0.083	0.25	0.19
	Back	0.162	0.252	0.765	0.41	0.93
N41(HPUE)_Ant 1	Front	0.226	0.140	0.083	0.37	0.31
	Back	0.264	0.252	0.765	0.52	1.03
N41_Ant 3	Front	0.389	0.140	0.083	0.53	0.47
	Back	0.747	0.252	0.765	1.00	1.51
N41(HPUE)_Ant 3	Front	0.417	0.140	0.083	0.56	0.50
	Back	0.749	0.252	0.765	1.00	1.51
LTE Band 66_Ant 1	Front	0.175	0.140	0.083	0.32	0.26
	Back	0.131	0.252	0.765	0.38	0.90
LTE Band 7_Ant 1	Front	0.142	0.140	0.083	0.28	0.23
	Back	0.188	0.252	0.765	0.44	0.95



WWAN Band	Exposure Position	1	2	3	4	6	1+2+4	1+3+6	1+4+6	1+3+4+6
		WWAN	2.4GHz WLAN Ant 1+2	2.4GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	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)
N71_Ant 1	Front	0.156	0.140	0.072	0.045	0.066	0.34	0.29	0.27	0.34
	Back	0.166	0.252	0.106	0.377	0.074	0.80	0.35	0.62	0.72
N5_Ant 1	Front	0.135	0.140	0.072	0.045	0.066	0.32	0.27	0.25	0.32
	Back	0.203	0.252	0.106	0.377	0.074	0.83	0.38	0.65	0.76
N66_Ant 1	Front	0.098	0.140	0.072	0.045	0.066	0.28	0.24	0.21	0.28
	Back	0.133	0.252	0.106	0.377	0.074	0.76	0.31	0.58	0.69
N66_Ant 3	Front	0.451	0.140	0.072	0.045	0.066	0.64	0.59	0.56	0.63
	Back	0.464	0.252	0.106	0.377	0.074	1.09	0.64	0.92	1.02
N2_Ant 3	Front	0.468	0.140	0.072	0.045	0.066	0.65	0.61	0.58	0.65
	Back	0.554	0.252	0.106	0.377	0.074	1.18	0.73	1.01	1.11
N25_Ant 3	Front	0.460	0.140	0.072	0.045	0.066	0.65	0.60	0.57	0.64
	Back	0.583	0.252	0.106	0.377	0.074	1.21	0.76	1.03	1.14
N7_Ant 3	Front	0.356	0.140	0.072	0.045	0.066	0.54	0.49	0.47	0.54
	Back	0.540	0.252	0.106	0.377	0.074	1.17	0.72	0.99	1.10
N41_Ant 1	Front	0.106	0.140	0.072	0.045	0.066	0.29	0.24	0.22	0.29
	Back	0.162	0.252	0.106	0.377	0.074	0.79	0.34	0.61	0.72
N41(HPUE)_Ant 1	Front	0.226	0.140	0.072	0.045	0.066	0.41	0.36	0.34	0.41
	Back	0.264	0.252	0.106	0.377	0.074	0.89	0.44	0.72	0.82
N41_Ant 3	Front	0.389	0.140	0.072	0.045	0.066	0.57	0.53	0.50	0.57
	Back	0.747	0.252	0.106	0.377	0.074	1.38	0.93	1.20	1.30
N41(HPUE)_Ant 3	Front	0.417	0.140	0.072	0.045	0.066	0.60	0.56	0.53	0.60
	Back	0.749	0.252	0.106	0.377	0.074	1.38	0.93	1.20	1.31
LTE Band 66_Ant 1	Front	0.175	0.140	0.072	0.045	0.066	0.36	0.31	0.29	0.36
	Back	0.131	0.252	0.106	0.377	0.074	0.76	0.31	0.58	0.69
LTE Band 7_Ant 1	Front	0.142	0.140	0.072	0.045	0.066	0.33	0.28	0.25	0.33
	Back	0.188	0.252	0.106	0.377	0.074	0.82	0.37	0.64	0.75



**20.5 Product Specific Exposure Conditions**

WWAN Band	Exposure Position	1	2	4	1+2 Summed 10g SAR (W/kg)	1+4 Summed 10g SAR (W/kg)	2+4 Summed 10g SAR (W/kg)	1+2+4 Summed 10g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2				
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)				
WCDMA II_LAT	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	2.288			2.29	2.29	0.00	2.29
WCDMA IV_LAT	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	2.099			2.10	2.10	0.00	2.10
CDMA2000 BC1_LAT	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	2.587			2.59	2.59	0.00	2.59
LTE Band 5_LAT	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side	2.070	0.958	0.179	3.03	2.25	1.14	3.21
	Bottom side				0.00	0.00	0.00	0.00
LTE Band 66_LAT	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	1.931			1.93	1.93	0.00	1.93
LTE Band 25_LAT	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	2.314			2.31	2.31	0.00	2.31
LTE Band 30_LAT	Front	1.643		0.177	1.64	1.82	0.18	1.82
	Back	2.377		0.994	2.38	3.37	0.99	3.37
	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	1.605			1.61	1.61	0.00	1.61
LTE Band 7_LAT	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	2.126			2.13	2.13	0.00	2.13
LTE Band 41_LAT	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99



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	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	2.466			2.47	2.47	0.00	2.47
LTE Band 41_HPUE_LAT	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side			0.001	0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	2.219			2.22	2.22	0.00	2.22
LTE Band 48	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side	2.341		0.001	2.34	2.34	0.00	2.34
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side				0.00	0.00	0.00	0.00





**<5G NR Mode>**

WWAN Band	Exposure Position	1	2	4	1+2 Summed 10g SAR (W/kg)	1+4 Summed 10g SAR (W/kg)	2+4 Summed 10g SAR (W/kg)	1+2+4 Summed 10g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2				
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)				
N66_Ant 3	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	2.564			2.56	2.56	0.00	2.56
N2_Ant 3	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	2.132			2.13	2.13	0.00	2.13
N25_Ant 3	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	1.978			1.98	1.98	0.00	1.98
N7_Ant 3	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	1.833			1.83	1.83	0.00	1.83
N41_Ant 3	Front			0.177	0.00	0.18	0.18	0.18
	Back	2.712		0.994	2.71	3.71	0.99	3.71
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	1.622			1.62	1.62	0.00	1.62
N41_HPUE_Ant 3	Front	1.900		0.177	1.90	2.08	0.18	2.08
	Back	2.712		0.994	2.71	3.71	0.99	3.71
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side		0.958	0.179	0.96	0.18	1.14	1.14
	Bottom side	1.622			1.62	1.62	0.00	1.62



WWAN Band	Exposure Position	1	2	4	1+2 Summed 10g SAR (W/kg)	1+4 Summed 10g SAR (W/kg)	2+4 Summed 10g SAR (W/kg)	1+2+4 Summed 10g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2				
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)				
N66_Ant 0	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side	2.105	0.958	0.179	3.06	2.28	1.14	3.24
	Bottom side				0.00	0.00	0.00	0.00
N41_Ant 0	Front			0.177	0.00	0.18	0.18	0.18
	Back	1.736		0.994	1.74	2.73	0.99	2.73
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side	2.010	0.958	0.179	2.97	2.19	1.14	3.15
	Bottom side				0.00	0.00	0.00	0.00
N41(HPUE)_Ant 0	Front	1.759		0.177	1.76	1.94	0.18	1.94
	Back	1.782		0.994	1.78	2.78	0.99	2.78
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side	1.916	0.958	0.179	2.87	2.10	1.14	3.05
	Bottom side				0.00	0.00	0.00	0.00
LTE Band 66_Ant 0	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side	2.024	0.958	0.179	2.98	2.20	1.14	3.16
	Bottom side				0.00	0.00	0.00	0.00
LTE Band 7_Ant 0	Front			0.177	0.00	0.18	0.18	0.18
	Back			0.994	0.00	0.99	0.99	0.99
	Left side				0.00	0.00	0.00	0.00
	Right side			0.553	0.00	0.55	0.55	0.55
	Top side	2.099	0.958	0.179	3.06	2.28	1.14	3.24
	Bottom side				0.00	0.00	0.00	0.00

## **21. Supplemental tuner tests results**

### **General Note:**

1. This device implements aperture tuner (10 status) + impedance tuner (132 status for ant 0, 144 status for ant 1) antenna tuning techniques in the WCDMA V, CDMA2000 BC0/10, LTE Band 71/12/17/13/5/26/66/4/7, FR1 n71/n5/n66/n41/n41 HPUE for ANT0/1.
2. This device implements impedance tuner (144 status) antenna tuning techniques in the WCDMA IV/II, CDMA2000 BC1, LTE Band 66/4/25/2/30/7/38/41/41 HPUE, FR1 n66/n2/n25/n7/n41/n41 HPUE for ANT2/3.
3. SAR test proposal was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing and this design will provide the highest power at different user scenarios and would not influence to the antenna characteristics other than impedance matching.
4. 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.
5. To evaluate all of the tuner states, the 144 tuner states are divided evenly among band, 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.
6. According to TCBC 201904 workshop, total number tuner states divided evenly among each supported band / air interface and exposure condition combination.
7. The tuner state was established remotely through Wi-Fi so that the device is not moved for the entire series of single point SAR for the tuner states in each combination (band, mode, exposure conditions).

### **21.1 Supplemental Tuner Head & Body SAR Results**

Please refer to Appendix F.

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## **22. Uncertainty Assessment**

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

## **23. References**

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [6] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [7] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [9] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [10] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [11] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [12] FCC KDB 941225 D07 v01r02, " SAR Evaluation Procedures for UMPC Mini-Tablet Devices", Oct 2015.
- [13] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [14] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.