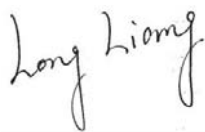


FCC SAR TEST REPORT

FCC ID : 2ABZ2-EE007
Equipment : Smart Phone
Brand Name : ONEPLUS
Model Name : IN2025
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)
ANSI/IEEE C95.1-1992
IEEE 1528-2013

The product was received on Nov. 20, 2019 and testing was started from Jan. 22, 2020 and completed on Mar. 14, 2020. 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.



Reviewed by: Long Liang / Supervisor



Approved by: Johnny Chen / Manager



Sporton International (ShenZhen) Inc.

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



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Report No.	Version	Description	Issued Date
FA9N2009-01	01	Initial issue of report	Mar. 24, 2020



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for OnePlus Technology (Shenzhen) Co., Ltd, Smart Phone, IN2025, are as follows.

Equipment Class	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)	
Licensed	GSM850	0.64	0.52	0.63		1.59
	GSM1900	0.69	0.45	0.76		
	WCDMA V	0.35	0.54	0.67		
	WCDMA IV	0.69	0.89	0.93	2.61	
	WCDMA II	0.70	0.84	0.95	2.43	
	CDMA2000 BC0	0.79	0.56	0.71		
	CDMA2000 BC10	0.47	0.50	0.62		
	CDMA2000 BC1	0.87	0.89	0.92	1.71	
	LTE Band 71	0.25	0.39	0.58		
	LTE Band 12 / 17	0.61	0.38	0.38		
	LTE Band 13	0.75	0.47	0.62		
	LTE Band 5	0.73	0.52	0.65		
	LTE Band 26	0.77	0.53	0.68		
	LTE Band 66 / 4	0.79	0.55	0.85	1.89	
	LTE Band 25 / 2	0.65	0.75	0.90	2.50	
	LTE Band 30	0.91	0.86	0.89	2.31	
	LTE Band 7	0.93	0.81	0.92	2.31	
	LTE Band 41 / 38	0.91	0.78	0.93	2.50	
	LTE Band 48	0.80	0.40	0.38	2.03	
	N2	0.71	0.66	0.42	0.53	
	N5	0.52	0.43	0.29		
	N41	0.54	0.76	0.75	2.02	
	N66	0.34	0.54	0.69	1.04	
	N71	0.57	0.27	0.25		
DTS	2.4GHz WLAN	0.97	0.85	0.99	2.69	1.51
NII	5GHz WLAN	0.81	1.07	0.99	1.29	1.59
DSS	Bluetooth	0.19	<0.10	0.15		1.59
Date of Testing:		2019/1/22 ~ 2020/3/14				

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	IN2025
FCC ID	2ABZ2-EE007
IMEI Code	IMEI 1: 865422040025595 IMEI 2: 865422040025587
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 n41 : 2506 MHz ~ 2680 MHz 5G NR n66 : 1712.5 MHz ~ 1777.5 MHz 5G NR n71 : 665.5 MHz ~ 695.5 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz WPC(QI): 100 kHz ~ 205 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 HT20 WLAN 2.4GHz : 802.11ax HE20/HE40 WLAN 5GHz : 802.11a/n/ac/ax HT20/HT40/VHT20/VHT40/VHT80/HE20/HE40/HE80 Bluetooth BR/EDR/LE NFC:ASK WPC: ASK
HW Version	15
SW Version	Oxygen OS 10.5.IN11AA

GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype
Remark: 1. 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/EGRPS mode up to multi-slot class 33. 3. This device supports HPUE for LTE band 41 with class 2 level, so HPUE SAR has been performed. 4. This device has WWAN UAT and LAT transmitter antennas which can refer to antenna location chapter. 5. The 2.4GHz/5GHz WLAN can transmit in MIMO antenna mode only and it has no SISO antenna mode. 6. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications. 7. For WWAN UAT antenna, when the audio is actively routed through the earpiece receiver, and the LCD display is off, and the proximity sensor is triggered which indicating the next-to-head condition then power reduction will be implemented immediately. Reduced power level 1-While the device WWAN is transmitting at the WWAN Top antenna. Reduced power level 2-While the device WLAN 2.4GHz/Bluetooth is transmitting simultaneously with the WWAN Top antenna Reduced power level 3-While the device WLAN 5GHz is transmitting simultaneously with the WWAN Top antenna Reduced power level 4-While the device WLAN 2.4GHz/Bluetooth and WLAN 5GHz is transmitting simultaneously with the WWAN Top antenna 8. For WWAN UAT antenna, hotspot mode is enabled, power reduction will be activated to limit the maximum power. 9. For WWAN LAT antenna, hotspot mode is enabled, power reduction will be activated to limit the maximum power. 10. For WWAN LAT antenna, when the p-sensor is detect handheld state, power reduction will be activated to limit the maximum power. 11. For WLAN when transmit standalone or transmit simultaneous with WWAN LAT or UAT, power reduction will be activated to limit the different maximum power level for head / hotspot / body-worn / extremity. Reduced power level 1- While the device WLAN is transmitting standalone. Reduced power level 2- While the device WLAN2.4GHz/5GHz is transmitting simultaneously with the WWAN antenna. Reduced power level 3-While the device WLAN 2.4GHz is transmitting simultaneously with the WLAN 5GHz Reduced power level 4-While the device WLAN 2.4GHz and WLAN 5GHz is transmitting simultaneously with the WWAN Top antenna 12. For Bluetooth antenna, when the audio is actively routed through the earpiece receiver, and the LCD display is off, and the proximity sensor is triggered which indicating the next-to-head condition then power reduction will be implemented immediately.	

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05									
FCC ID		2ABZ2-EE007							
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 02:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 04:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 05:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 07: 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 MPR permanently built-in by design		Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3							
		Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})					MPR (dB)	
			1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz		20 MHz
		QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
		16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
		16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
		64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
		64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
		256 QAM	≥ 1					≤ 5	
LTE A-MPR		In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)							
Spectrum plots for RB configuration		A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.							
Power reduction applied to satisfy SAR compliance		Yes, receiver detected /hotspot /proximity sensor will trigger reduced power for some LTE bands, the detail please referred to section 13.							
LTE Carrier Aggregation Combinations		Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section 13.							
LTE Carrier Aggregation Additional Information		1. This device supports LTE Carrier Aggregation (CA) in the uplink for LTE B41/B48/B66 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 5 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.							

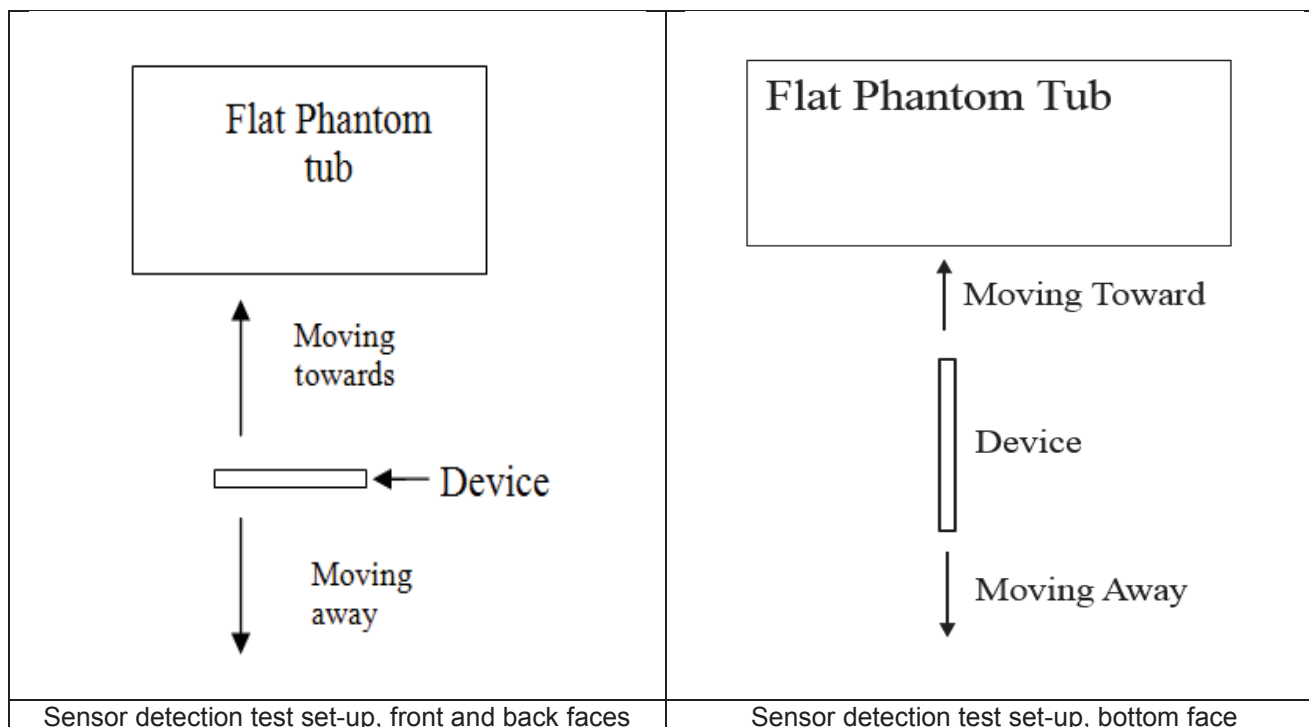
Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	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)				
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	38000	2595	38000	2595				
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610				
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506				
L	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
H	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680				
LTE Band 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)				
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560				
L	55810	3607	55815	3607.5	55820	3608	55830	3609				
M	56170	3643	56165	3642.5	56160	3642	56150	3641				
H	56715	3697.5	56690	3695	56665	3692.5	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)				
L	133147	665.5	133172	668	133197	670.5	133222	673				
M	133297	680.5	133297	680.5	133297	680.5	133297	680.5				
H	133447	695.5	133422	693	133397	690.5	133372	688				

5. Proximity Sensor Triggering Test

<Proximity Sensor 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 sensors 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. When the sensor is active, the device will reduce maximum output powers on the GSM1900, WCDMA B2/B4, CDMA BC1 and LTE B2 / B4 / B7 / B25 / B30 / B66 / B38 / B41 transmitter.



Proximity Sensor Trigger Distance (mm)						
Position	Front		Back		Bottom Side	
Position	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	4	4	9	10	9	10

6. RF Exposure Limits

6.1 Uncontrolled Environment

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

6.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

7. Specific Absorption Rate (SAR)

7.1 Introduction

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

7.2 SAR Definition

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

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

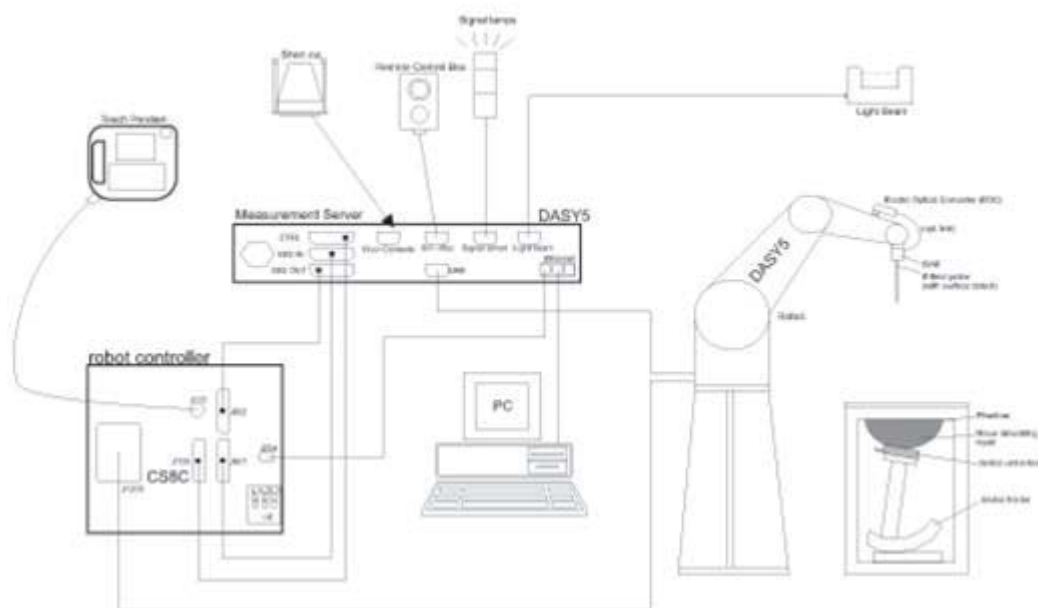
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

8. System Description and Setup

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



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

8.1 E-Field Probe

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

<ES3DV3 Probe>

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

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – >6 GHz Linearity: ± 0.2 dB (30 MHz – 6 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g – >100 mW/g Linearity: ± 0.2 dB (noise: typically <1 μ W/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

8.2 Data Acquisition Electronics (DAE)

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

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

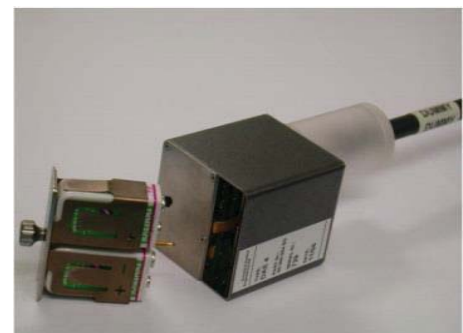


Fig 5.1 Photo of DAE

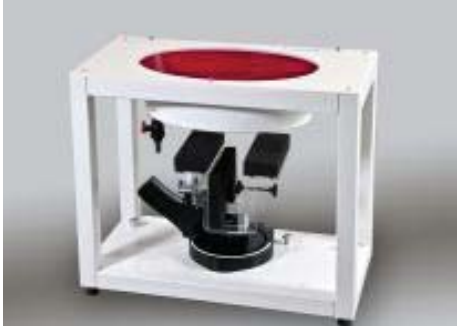
8.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

8.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

9. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

9.1 Spatial Peak SAR Evaluation

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

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

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

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

9.2 Power Reference Measurement

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

9.3 Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB0) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

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

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ 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: Δx_{Area} , Δy_{Area}	≤ 2 GHz: ≤ 15 mm $2 - 3$ GHz: ≤ 12 mm	$3 - 4$ GHz: ≤ 12 mm $4 - 6$ GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

9.4 Zoom Scan

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

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

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

9.5 Volume Scan Procedures

The volume scan is used 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.

9.6 Power Drift Monitoring

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

10. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1099	Dec. 06, 2018	Dec. 05, 2021
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 05, 2018	Dec. 04, 2021
SPEAG	1750MHz System Validation Kit	D1750V2	1137	Jul. 30, 2018	Jul. 29, 2021
SPEAG	1750MHz System Validation Kit	D1750V2	1112	Mar. 07, 2019	Mar. 06, 2022
SPEAG	1900MHz System Validation Kit	D1900V2	5d182	Dec. 07, 2018	Dec. 06, 2021
SPEAG	1900MHz System Validation Kit	D1900V2	5d041	Sep. 11, 2018	Sep. 09, 2021
SPEAG	2300MHz System Validation Kit	D2300V2	1056	Nov. 01, 2018	Oct. 31, 2021
SPEAG	2450MHz System Validation Kit	D2450V2	924	Apr. 15, 2019	Apr. 14, 2020
SPEAG	2600MHz System Validation Kit	D2600V2	1070	Dec. 07, 2018	Dec. 06, 2021
SPEAG	2600MHz System Validation Kit	D2600V2	1008	Aug. 31, 2018	Aug. 29, 2021
SPEAG	3500MHz System Validation Kit	D3500V2	1076	Apr. 29, 2019	Apr. 28, 2020
SPEAG	3700MHz System Validation Kit	D3700V2	1037	Apr. 29, 2019	Apr. 28, 2020
SPEAG	5000MHz System Validation Kit	D5GHzV2	1167	Aug. 03, 2018	Aug. 02, 2021
SPEAG	Data Acquisition Electronics	DAE4	1437	Nov. 19, 2019	Nov. 18, 2020
SPEAG	Data Acquisition Electronics	DAE4	376	Dec. 06, 2019	Dec. 05, 2020
SPEAG	Data Acquisition Electronics	DAE3	577	Sep. 17, 2019	Sep. 16, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	3819	Mar. 01, 2019	Feb. 29, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	3975	Apr. 30, 2019	Apr. 29, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Sep. 26, 2019	Sep. 25, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	7306	Jul. 22, 2019	Jul. 21, 2020
SPEAG	SAM Twin Phantom	QD000P40CC	TP-1500	NCR	NCR
SPEAG	SAM Twin Phantom	QD000P40CC	TP-1446	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio communication analyzer	MT8820C	6201300653	Jul. 22, 2019	Jul. 21, 2020
Anritsu	Radio communication analyzer	MT8821C	6201588572	Dec. 26, 2019	Dec. 25, 2020
Agilent	Wireless Communication Test Set	E5515C	MY50267224	Jul. 22, 2019	Jul. 21, 2020
Agilent	Network Analyzer	E5071C	MY46523671	Oct. 17, 2019	Oct. 16, 2020
Speag	Dielectric Assessment KIT	DAK-3.5	1071	Oct. 28, 2019	Oct. 27, 2020
Agilent	Signal Generator	N5181A	MY50145381	Dec. 26, 2019	Dec. 25, 2020
Anritsu	Power Sensor	MA2411B	1306099	Jul. 22, 2019	Jul. 21, 2020
Anritsu	Power Meter	ML2495A	1349001	Jul. 22, 2019	Jul. 21, 2020
Anritsu	Power Sensor	MA2411B	1207253	Dec. 26, 2019	Dec. 25, 2020
Anritsu	Power Meter	ML2495A	1218010	Dec. 26, 2019	Dec. 25, 2020
R&S	CBT BLUETOOTH TESTER	CBT	100963	Dec. 26, 2019	Dec. 25, 2020
R&S	Spectrum Analyzer	FSP7	100818	Jul. 22, 2019	Jul. 21, 2020
LKM electronic	Hygrometer	DTM3000	3241	Jul. 25, 2019	Jul. 24, 2020
Anymetre	Thermo-Hygrometer	JR593	2015030904	Apr. 22, 2019	Apr. 21, 2020
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	Attenuation1	BW-S10W5	N/A	Note 1	
Weinschel	Attenuation2	3M-20	N/A	Note 1	
Zhongjilianhe	Attenuation3	MVE2214-03	N/A	Note 1	

General Note:

- Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.
- Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged, or repaired during the interval.
- The justification data of dipole D750V3, SN: 1099, D835V2, SN: 4d162, D1750V2, SN:1137, D1750V2, SN:1112, D1900V2, 5d182, D1900V2, 5d041, D2300V2, SN: 1056, D2600V2, SN: 1070, D2600V2, SN: 1008, D5GHzV2, SN: 1167 can be found in appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.

11. System Verification

11.1 Tissue Simulating Liquids

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 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 10.1Photo of Liquid Height for Head SAR



Fig 10.2 Photo of Liquid Height for Body SAR

11.2 Tissue Verification

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

Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity (σ)	Permittivity (ϵ_r)
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
900	40.3	57.9	0.2	1.4	0.2	0	0.97	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)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
750	22.8	0.886	41.532	0.89	41.90	-0.45	-0.88	±5	2020/2/13
750	22.5	0.887	41.534	0.89	41.90	-0.34	-0.87	±5	2020/3/1
750	22.2	0.894	41.019	0.89	41.90	0.45	-2.10	±5	2020/3/13
835	22.5	0.913	40.859	0.90	41.50	1.44	-1.54	±5	2020/2/11
835	22.5	0.897	40.781	0.90	41.50	-0.33	-1.73	±5	2020/2/25
835	22.6	0.904	41.212	0.90	41.50	0.44	-0.69	±5	2020/3/14
1750	22.7	1.355	38.395	1.37	40.10	-1.09	-4.25	±5	2020/1/22
1750	22.5	1.373	39.952	1.37	40.10	0.22	-0.37	±5	2020/3/3
1750	22.4	1.378	41.340	1.37	40.10	0.58	3.09	±5	2020/3/9
1900	22.4	1.385	39.053	1.40	40.00	-1.07	-2.37	±5	2020/1/23
1900	22.7	1.419	40.346	1.40	40.00	1.36	0.86	±5	2020/3/4
1900	22.8	1.404	39.038	1.40	40.00	0.29	-2.41	±5	2020/3/7
2300	22.4	1.604	40.037	1.67	39.50	-3.95	1.36	±5	2020/1/24
2300	22.3	1.678	38.250	1.67	39.50	0.48	-3.16	±5	2020/3/10
2450	22.5	1.878	40.464	1.80	39.20	4.33	3.22	±5	2020/2/15
2450	22.5	1.770	39.386	1.80	39.20	-1.67	0.47	±5	2020/2/28
2600	22.6	1.935	38.814	1.96	39.00	-1.28	-0.48	±5	2020/1/25
2600	22.2	1.992	40.445	1.96	39.00	1.63	3.71	±5	2020/3/7
3500	22.7	2.909	38.635	2.91	37.90	-0.03	1.94	±5	2020/2/10
3500	22.4	2.933	39.225	2.91	37.90	0.79	3.50	±5	2020/2/28
3700	22.7	3.063	39.332	3.12	37.70	-1.83	4.33	±5	2020/2/10
3700	22.4	2.935	39.300	3.05	37.78	-3.77	4.02	±5	2020/2/28
5250	22.6	4.597	36.241	4.71	35.95	-2.40	0.81	±5	2020/2/22
5250	22.2	4.593	36.239	4.71	35.95	-2.48	0.80	±5	2020/3/5
5250	22.3	4.628	36.705	4.71	35.95	-1.74	2.10	±5	2020/3/8
5600	22.5	4.954	35.793	5.07	35.50	-2.29	0.83	±5	2020/2/21
5600	22.5	4.956	35.795	5.07	35.50	-2.25	0.83	±5	2020/3/11
5600	22.7	5.004	36.093	5.07	35.50	-1.30	1.67	±5	2020/3/12
5750	22.6	5.119	35.497	5.22	35.35	-1.93	0.42	±5	2020/2/23
5750	22.4	5.385	35.954	5.22	35.35	3.16	1.71	±5	2020/3/6
5750	22.6	5.173	35.826	5.22	35.35	-0.90	1.35	±5	2020/3/13
1750	22.4	1.357	40.774	1.37	40.10	-0.95	1.68	±5	2020/3/3
1750	22.2	1.377	39.646	1.37	40.10	0.51	-1.13	±5	2020/3/10
1900	22.4	1.403	40.614	1.40	40.00	0.21	1.53	±5	2020/3/3
1900	22.2	1.448	39.048	1.40	40.00	3.43	-2.38	±5	2020/3/10
2600	22.4	1.982	39.221	1.96	39.00	1.12	0.57	±5	2020/3/3

2600	22.2	2.001	40.002	1.96	39.00	2.09	2.57	±5	2020/3/10
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11.3 System Performance Check Results

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

<1g SAR>

Date	Frequency (MHz)	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 (%)
2020/2/13	750	250	1099	3975	1437	2.11	8.52	8.44	-0.94
2020/3/1	750	250	1099	3975	1437	1.97	8.52	7.88	-7.51
2020/3/13	750	250	1099	3975	1437	2.21	8.52	8.84	3.76
2020/2/11	835	250	4d162	3975	1437	2.55	9.61	10.2	6.14
2020/2/25	835	250	4d162	3975	1437	2.21	9.61	8.84	-8.01
2020/3/14	835	250	4d162	3975	1437	2.51	9.61	10.04	4.47
2020/1/22	1750	250	1137	3975	1437	8.54	36.50	34.16	-6.41
2020/3/3	1750	250	1137	3975	1437	8.51	36.50	34.04	-6.74
2020/3/9	1750	250	1137	3975	1437	9.18	36.50	36.72	0.60
2020/1/23	1900	250	5d182	3975	1437	9.45	39.60	37.8	-4.55
2020/3/4	1900	250	5d182	3975	1437	9.11	39.60	36.44	-7.98
2020/3/7	1900	250	5d182	3975	1437	10.00	39.60	40	1.01
2020/1/24	2300	250	1056	3975	1437	12.00	49.90	48	-3.81
2020/3/10	2300	250	1056	3975	1437	13.20	49.90	52.8	5.81
2020/2/15	2450	250	924	3975	1437	13.20	52.10	52.8	1.34
2020/2/28	2450	250	924	3975	1437	12.00	52.10	48	-7.87
2020/1/25	2600	250	1070	3975	1437	13.60	58.10	54.4	-6.37
2020/3/7	2600	250	1070	3975	1437	13.50	58.10	54	-7.06
2020/2/10	3500	100	1076	3819	1437	6.68	67.90	66.8	-1.62
2020/2/28	3500	100	1076	3819	1437	6.89	67.90	68.9	1.47
2020/2/10	3700	100	1037	3819	1437	6.87	68.50	68.7	0.29
2020/2/28	3700	100	1037	3819	1437	6.44	68.50	64.4	-5.99
2020/2/22	5250	100	1167	3975	1437	7.52	77.00	75.2	-2.34
2020/3/5	5250	100	1167	3975	1437	7.12	77.00	71.2	-7.53
2020/3/8	5250	100	1167	3975	1437	7.70	77.00	77	0.00
2020/2/21	5600	100	1167	3975	1437	7.55	80.80	75.5	-6.56
2020/3/11	5600	100	1167	3975	1437	7.54	80.80	75.4	-6.68
2020/3/12	5600	100	1167	3975	1437	8.11	80.80	81.1	0.37
2020/2/23	5750	100	1167	3975	1437	7.23	76.90	72.3	-5.98
2020/3/6	5750	100	1167	3975	1437	7.14	76.90	71.4	-7.15
2020/3/13	5750	100	1167	3975	1437	8.14	76.90	81.4	5.85
2020/3/3	1750	250	1112	3931	376	9.41	36.70	37.64	2.56
2020/3/10	1750	250	1112	7306	577	9.04	36.70	36.16	-1.47
2020/3/3	1900	250	5d041	3931	376	9.50	40.20	38	-5.47
2020/3/10	1900	250	5d041	7306	577	10.60	40.20	42.4	5.47
2020/3/3	2600	250	1008	3931	376	14.50	56.40	58	2.84
2020/3/10	2600	250	1008	7306	577	15.10	56.40	60.4	7.09

<10g SAR>

Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2020/1/22	1750	250	1137	3975	1437	4.65	19.50	18.6	-4.62
2020/1/23	1900	250	5d182	3975	1437	4.82	20.70	19.28	-6.86
2020/1/24	2300	250	1056	3975	1437	5.58	23.80	22.32	-6.22
2020/2/15	2450	250	924	3975	1437	6.34	23.90	25.36	6.11
2020/1/25	2600	250	1070	3975	1437	6.85	26.10	27.4	4.98
2020/2/10	3700	100	1037	3975	1437	2.49	24.80	24.9	0.40
2020/2/22	5250	100	1167	3975	1437	2.04	22.00	20.4	-7.27
2020/2/21	5600	100	1167	3975	1437	2.41	23.20	24.1	3.88
2020/2/23	5750	100	1167	3975	1437	1.98	21.60	19.8	-8.33
2020/3/3	1750	250	1112	3931	376	5.01	19.40	20.04	3.30
2020/3/10	1750	250	1112	7306	577	4.65	19.40	18.6	-4.12
2020/3/3	1900	250	5d041	3931	376	4.95	21.20	19.8	-6.60
2020/3/10	1900	250	5d041	7306	577	5.40	21.20	21.6	1.89
2020/3/3	2600	250	1008	3931	376	6.34	25.30	25.36	0.24
2020/3/10	2600	250	1008	7306	577	6.58	25.30	26.32	4.03

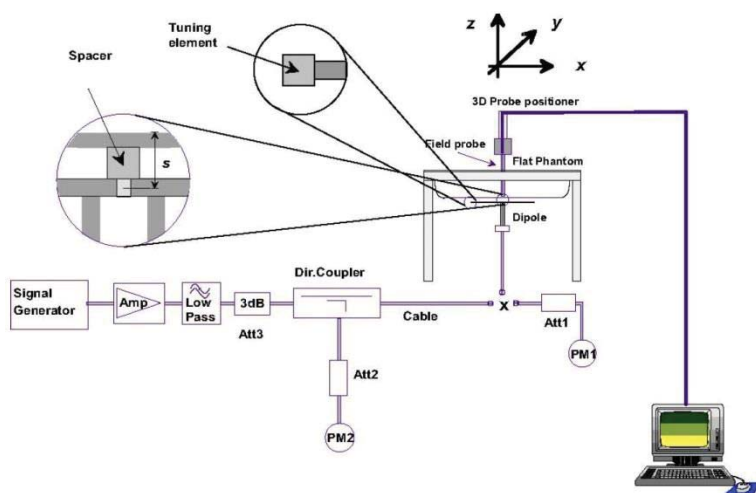

Fig 8.3.1 System Performance Check Setup

Fig 8.3.2 Setup Photo

12. RF Exposure Positions

12.1 Ear and handset reference point

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

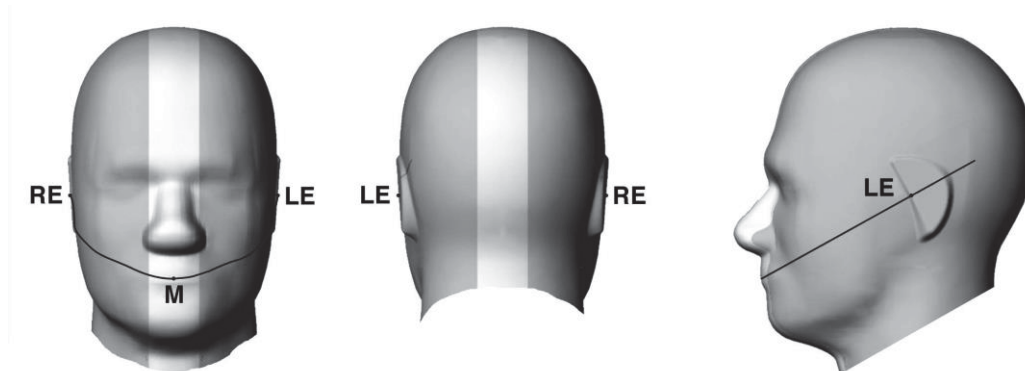


Fig 9.1.1 Front, back, and side views of SAM twin phantom

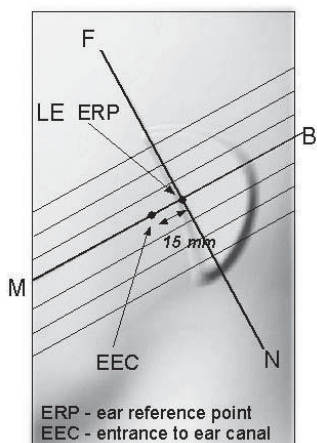


Fig 9.1.2 Close-up side view of phantom showing the ear region.

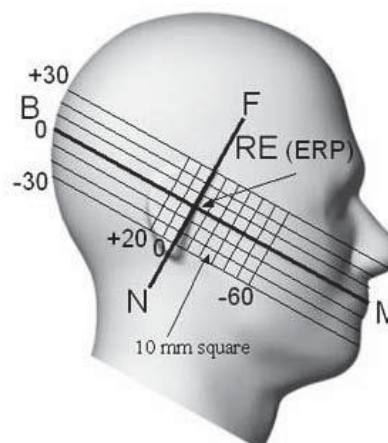


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

12.2 Definition of the cheek position

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

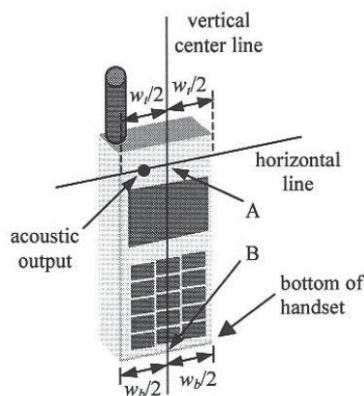


Fig 9.2.1 Handset vertical and horizontal reference lines—"fixed case"

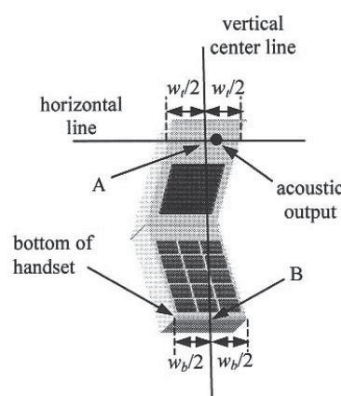


Fig 9.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

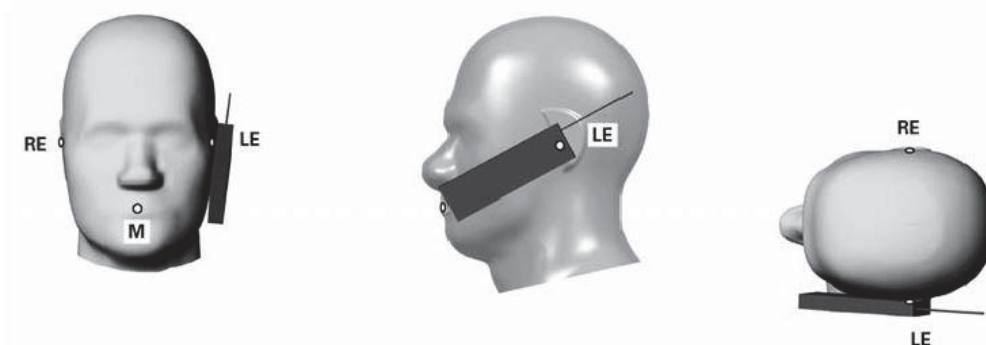


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

12.3 Definition of the tilt position

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

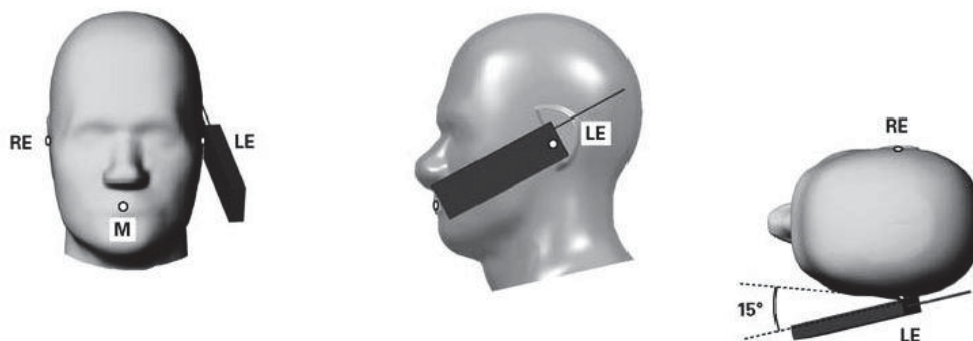


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

12.4 Body Worn Accessory

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

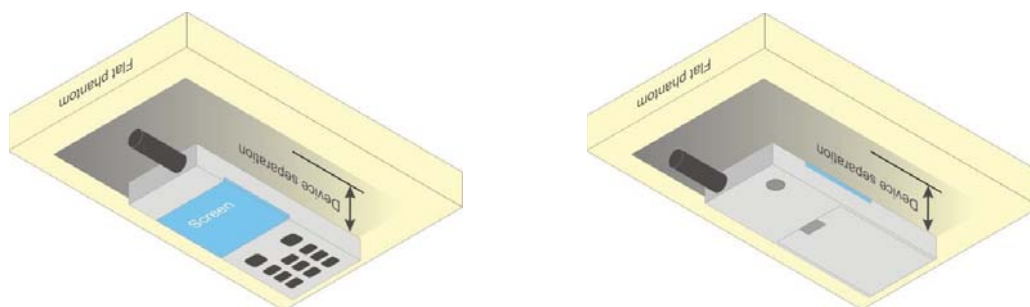


Fig 9.4 Body Worn Position

12.5 Product Specific Exposure

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

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

12.6 Wireless Router

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

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

13. 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 (3Tx slots) for GSM850/GSM1900 is considered as the primary mode.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode, SAR measurement is not required for the secondary mode

<WCDMA Conducted Power>

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

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

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

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

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5
Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$. Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{HS} = 24/15 * \beta_c$. Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases. Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.							

Setup Configuration

HSUPA Setup Configuration:

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

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

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

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

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

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

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

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

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

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

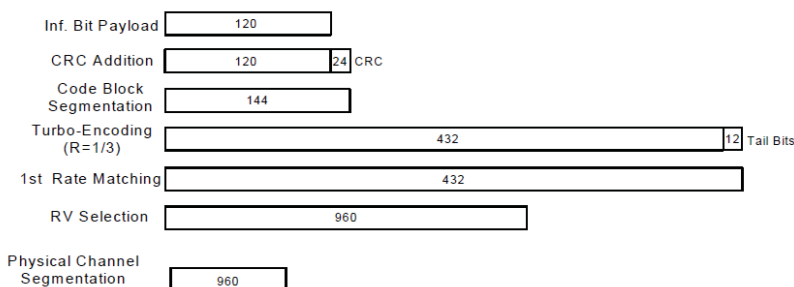


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

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

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

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

Sub-test	β_c (Note 3)	β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105
Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0). Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default. Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value. Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signaled to use the extrapolation algorithm.											

Setup Configuration

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

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

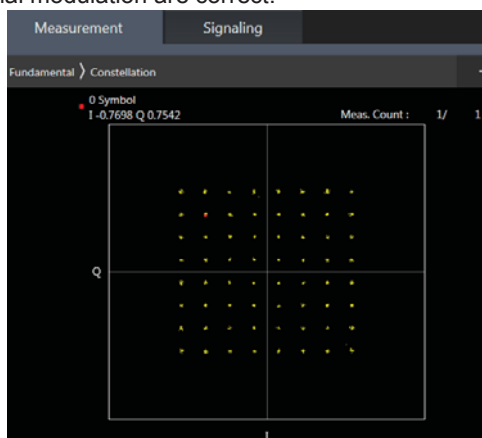
<CDMA2000 Conducted Power>**General Note:**

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 ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 / 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.

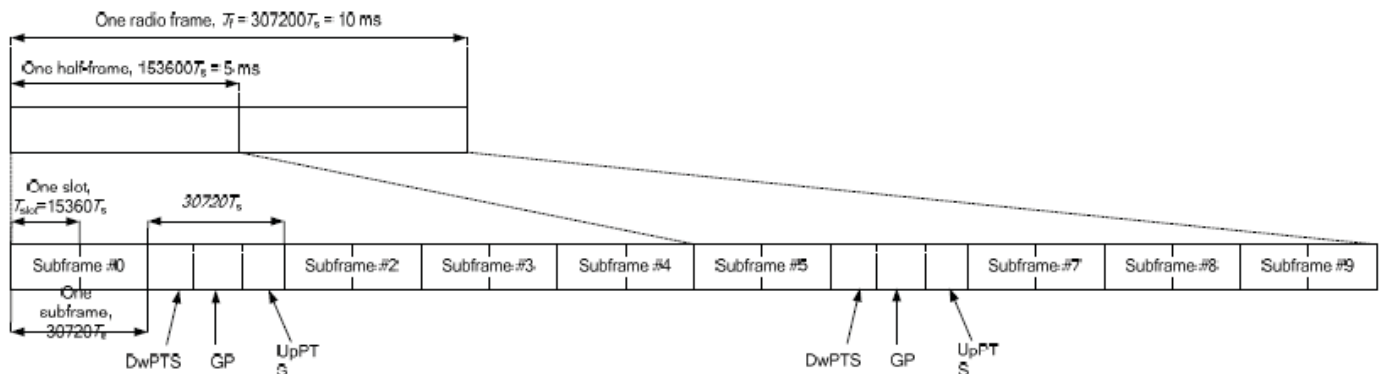


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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	$26336 \cdot T_s$			$7680 \cdot T_s$		
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

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

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

The highest duty factor is resulted from:

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

**<LTE Carrier Aggregation combinations>****General Note:**

1. This device supports Carrier Aggregation on downlink for inter and intra band 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. Only LTE Band 29A 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-4A	2A,4A,2A-4A		3CC-7	1	CA_2A-2A-12A	2A, 2A-2A		4CC-6
2	CA_2A-5A	2A		3CC-14	2	CA_2A-2A-13A	2A,2A-2A		4CC-7
3	CA_2A-7A	2A,7A		3CC-26	3	CA_2A-2A-4A	2A,4A,2A-2A,2A-4A,2A-2A-4A		4CC-12
4	CA_2A-12A	2A		3CC-17	4	CA_2A-2A-5A	2A,2A-2A		4CC-9
5	CA_2A-13A	2A		3CC-18	5	CA_2A-2A-66A	2A,66A, 2A-2A,2A-66A,2A-2A-66A		4CC-10
6	CA_2A-29A	2A	B29 SCC Only	3CC-19	6	CA_2A-2A-71A	2A, 2A-2A		4CC-12
7	CA_2A-30A	2A		3CC-14	7	CA_2A-4A-12A	2A,4A,2A-4A		4CC-25
8	CA_2A-46A	2A	B46 SCC Only	3CC-21	8	CA_2A-4A-13A	2A,4A,2A-4A		
9	CA_2A-48A	2A		3CC-22	9	CA_2A-4A-29A	2A,4A,2A-4A		
10	CA_2A-66A	2A,66A,2A-66A		3CC-24	10	CA_2A-4A-4A	2A,4A,2A-4A,4A-4A,2A-4A-4A		
11	CA_2A-71A	2A		3CC-25	11	CA_2A-4A-5A	2A,4A,2A-4A		
12	CA_4A-5A	4A		3CC-37	12	CA_2A-4A-71A	2A,4A,2A-4A		4CC-12
13	CA_4A-7A	4A,7A		3CC-38	13	CA_2A-4A-7A	2A,4A,7A		
14	CA_4A-12A	4A		3CC-40	14	CA_2A-5A-30A	2A		
15	CA_4A-13A	4A		3CC-33	15	CA_2A-5A-66A	2A,66A,2A-66A		4CC-20
16	CA_4A-29A	4A	B29 SCC Only	3CC-41	16	CA_2A-12A-30A	2A		
17	CA_4A-30A	4A		3CC-41	17	CA_2A-12A-66A	2A,66A,2A-66A		4CC-6
18	CA_4A-46A	4A	B46 SCC Only	3CC-42	18	CA_2A-13A-66A	2A,66A,2A-66A		4CC-5
19	CA_4A-71A	4A		3CC-35	19	CA_2A-29A-30A	2A	B29 SCC Only	
20	CA_5A-7A				20	CA_2A-46A-46A	2A	B46 SCC Only	4CC-15
21	CA_5A-30A			3CC-44	21	CA_2A-46A-66A	2A,66A,2A-66A		4CC-16
22	CA_5A-48A	48A			22	CA_2A-48A-48A	2A,48A,2A-48A,48A-48A,2A-48A-48A		
23	CA_5A-66A	66A		3CC-45	23	CA_2A-48A-66A	2A,48A,66A,2A-48A,2A-66A,48A-66A,2A-48A-66A		
24	CA_7A-12A	7A		3CC-38	24	CA_2A-66A-66A	2A,66A,2A-66A,66A-66A,2A-66A-66A		4CC-21
25	CA_7A-46A	7A	B46 SCC Only	3CC-47	25	CA_2A-66A-71A	2A,66A,2A-66A		4CC-21
26	CA_12A-30A			3CC-48	26	CA_2A-7A-7A	2A,7A		
27	CA_12A-66A	66A		3CC-49	27	CA_2A-46A-48A	2A, 48A, 2A-48A		4CC-26
28	CA_13A-66A	66A		3CC-51	28	CA_2A-46C	2A		4CC-26
29	CA_25A-26A	25A		3CC-52	29	CA_2A-48C	2A,48C,2A-48C		
30	CA_25A-41A	25A,41A,25A-41A		3CC-53	30	CA_2A-66C	2A,66C,2A-66C		4CC-2
31	CA_25A-46A	25A	B46 SCC Only	3CC-54	31	CA_2C-66A	2C,66A,2C-66A		4CC-24
32	CA_26A-41A	41A			32	CA_4A-4A-12A	4A,4A-4A		
33	CA_29A-30A		B29 SCC Only	3CC-41	33	CA_4A-4A-13A	4A,4A-4A		
34	CA_30A-66A	66A		3CC-44	34	CA_4A-4A-5A	4A,4A-4A		
35	CA_46A-66A	66A	B46 SCC Only	3CC-55	35	CA_4A-4A-71A	4A,4A-4A		
36	CA_48A-66A	66A,48A,48A-66A		3CC-56	36	CA_4A-4A-7A	4A,7A		
37	CA_66A-71A	66A		3CC-60	37	CA_4A-5A-30A	4A		
38	CA_2C	2C,2A			38	CA_4A-7A-12A	4A,7A		
39	CA_5B				39	CA_4A-7A-7A	4A,7A		
40	CA_5C				40	CA_4A-12A-30A	4A		
41	CA_7C	7C			41	CA_4A-29A-30A	4A		
42	CA_38C				42	CA_4A-46A-46A	4A		4CC-27
43	CA_41C	41C,41A		3CC-63	43	CA_4A-46C	4A		4CC-28
44	CA_48C	48C,48A		3CC-64	44	CA_5A-30A-66A	66A		



FCC SAR TEST REPORT

Report No. : FA9N2009-01

45	CA_66B	66B			45	CA_5A-66A-66A	66A,66A-66A		4CC-18
46	CA_66C	66C,66A			46	CA_5A-66C	66C		4CC-20
47	CA_2A-2A	2A,2A-2A			47	CA_7A-46C	7A		
48	CA_4A-4A	4A,4A-4A			48	CA_12A-30A-66A	66A		
49	CA_5A-5A				49	CA_12A-66A-66A	66A,66A-66A		4CC-1
50	CA_7A-7A	7A,7A-7A			50	CA_12A-66C	66C,66A		4CC-2
51	CA_25A-25A	25A,25A-25A			51	CA_13A-66A-66A	66A,66A-66A		4CC-3
52	CA_41A-41A	41A,41A-41A		3CC-65	52	CA_25A-25A-26A	25A,25A-25A		
53	CA_48A-48A	48A,48A-48A		3CC-66	53	CA_25A-41C	25A,41C,25A-41C		4CC-29
54	CA_66A-66A	66A,66A-66A		3CC-67	54	CA_25A-46C	25A		4CC-30
					55	CA_46C-66A	66A		4CC-36
					56	CA_48A-48A-66A	48A, 66A, 48A-66A, 48A-48A-66A		
					57	CA_48C-66A	B48C,B66A,B48C-66A,48A,48A-66A		
					58	CA_13A-66C	66C,66A		4CC-5
					59	CA_66A-46A-46A	66A		4CC-31
					60	CA_66A-66A-71A	66A,66A-66A		4CC-21
					61	CA_66C-71A	66C		4CC-22
					62	CA_46A-48A-66A	48A, 66A, 48A-66A		4CC-34
					63	CA_41D	41D,41A,41C		4CC-37
					64	CA_48D	48D		4CC-38
					65	CA_41A-41C	41A,41C,41A-41C		4CC-39
					66	CA_48C-48A	48A,48C,48C-48A		
					67	CA_66A-66C	66A,66C,66A-66C,66A-66A		

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-12A-66A-66A	2A,66A,2A-66A,66A-66A,2A-66A-66A			1	CA_2A-2A-46D	2A,2A-2A		
2	CA_2A-12A-66C	2A,66C,2A-66C			2	CA_2A-46A-46C-66A	2A,66A,2A-66A		
3	CA_2A-13A-66A-66A	2A,66A,2A-66A,66A-66A,2A-66A-66A			3	CA_2A-46A-46D	2A		
4	CA_2A-13A-66B	2A,66B,2A-66B			4	CA_2A-46D-66A	2A,66A,2A-66A		
5	CA_2A-13A-66C	2A,66C,2A-66C			5	CA_2A-46E	2A		
6	CA_2A-2A-12A-66A	2A,66A,2A-2A,2A-66A,66A-66A			6	CA_46A-46D-66A	66A		
7	CA_2A-2A-13A-66A	2A,66A,2A-2A,2A-66A,2A-2A-66A			7	CA_46E-66A	66A		
8	CA_2A-2A-46C	2A,2A-2A		5CC-1	8	CA_48E-66A	48E,66A,48E-66A		
9	CA_2A-2A-5A-66A	2A,66A,2A-2A,2A-66A,2A-2A-66A			9	CA_4A-46A-46D	4A		
10	CA_2A-2A-66A-66A	2A,66A,2A-2A,2A-66A,2A-2A-66A,2A-66A-66A			10	CA_41C-41D	41C,41D,41C-41D		
11	CA_2A-2A-66A-71A	2A,66A,2A-2A,2A-66A,2A-2A-66A							
12	CA_2A-2A-4A-71A	2A, 4A, 2A-2A, 2A-4A, 2A-2A-4A							
13	CA_2A-2A-66C	2A, 66C, 2A-2A, 2A-66C, 2A-2A-66C							
14	CA_2A-46A-46A-66A	2A,66A,2A-66A		5CC-2					
15	CA_2A-46A-46C	2A		5CC-2					
16	CA_2A-46C-66A	2A,66A,2A-66A		5CC-4					
17	CA_2A-46D	2A		5CC-4					
18	CA_2A-5A-66A-66A	2A,66A,2A-66A,66A-66A,2A-66A-66A							
19	CA_2A-5A-66B	2A,66B,2A-66B							
20	CA_2A-5A-66C	2A,66C,2A-66C							
21	CA_2A-66A-66A-71A	2A,66A,2A-66A,66A-66A,2A-66A-66A							
22	CA_2A-66C-71A	2A,66C,2A-66C							
23	CA_2A-46A-48C	2A, 48A, 2A-48A							
24	CA_2C-66A-66A	2C,66A,2C-66A,2C-66A-66A							
25	CA_2A-2A-4A-12A	2A, 4A, 2A-2A, 2A-4A,2A-2A-4A							
26	CA_2A-46C-48A	2A, 48C, 2A-48C							
27	CA_4A-46A-46C	4A		5CC-9					
28	CA_4A-46D	4A							
29	CA_25A-41D	25A							



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30	CA_25A-46D	25A							
31	CA_46A-46C-66A	66A							
32	CA_46D-66A	66A							
33	CA_46C-48A-66A	48A, 66A, 48A-66A							
34	CA_46A-48C-66A	48C, 66A, 48C-66A							
35	CA_46D-48A	48A							
36	CA_48D-66A	66A, 48D-66A							
37	CA_41E	41E							
38	CA_48E	48E							
39	CA_41A-41D	41A,41A-41D		5CC-10					
40	CA_41C-41C	41C,41C-41C		5CC-10					

<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 two carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
- iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.
- v. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.
- vi. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

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

<LTE Uplink carrier aggregation>

2CC Uplink Carrier Aggregation				
Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset
1	41C	41C,41A		
2	48C	48C,48A		
3	66C	66C,66A		

<Intra-band>
General Note:

- The device supports intra-band uplink carrier aggregation for LTE B66/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. For 48C, the measured power is extremity low compared to standalone LTE power, so 48C SAR verified is not required.
- Additional SAR measurement for LTE UL CA whit other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.

<Inter-band uplink carrier aggregation consideration>

2CC Uplink Carrier Aggregation				
Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset
1	2A-12A	2A		
2	2A-13A	2A		
3	4A-12A	4A		
4	4A-13A	4A		
5	12A-66A	66A		
6	13A-66A	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 on the single uplink 1g SAR values is greater than 0.8W/kg, instead of algebraically summing the 1g SAR values, sum up the SAR distributions, similar to the enlarged zoom scan (volume scan) procedures found in FCC KDB publication 865664 D01 SAR measurement 100MHz to 6GHz V01r04
 - 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 performed 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

14. 5G NR Output Power (Unit: dBm)

General Note:

1. NR implementation of n71, n5, n66, n2, and n41 is limited to EN-DC operations only (NSA), with LTE Bands 2/5/12/13/25/26/66/41 acting as anchor bands, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.
2. Following 5G NR n2/n5/n66/n71 support SCS 15KHz DFT/CP-OFDM, PI/2 BPSK/QPSK/16QAM/64QAM/256QAM, Bandwidth 5M/10M/15M/20M.
3. Following 5G NR n41 support SCS 30KHz DFT/CP-OFDM, PI/2 BPSK/QPSK/16QAM/64QAM/256QAM, Bandwidth 20M/40M/50M/60M/80M/90M/100M.
4. 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 $\frac{1}{2}$ 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 $\frac{1}{2}$ 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 $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - g. Smaller bandwidth output power for each RB allocation configuration for this device will not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
5. 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 ²
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM		≤ 2.5	
CP-OFDM	256 QAM		≤ 4.5	
	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM		≤ 3.5	
	256 QAM		≤ 6.5	

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

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

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

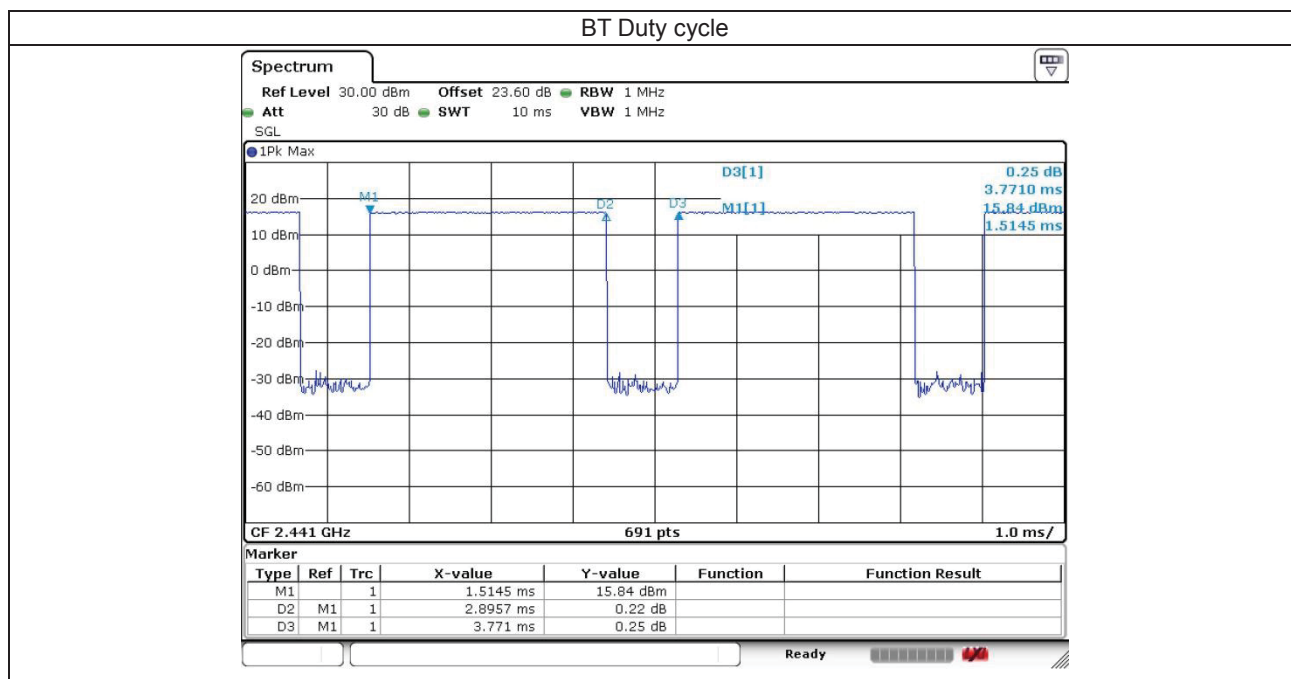
Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5		≤ 2.5
	256 QAM		≤ 4.5	
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM		≤ 3.5	
	256 QAM		≤ 6.5	

15. WiFi/Bluetooth Output Power (Unit: dBm)

General Note:

1. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
2. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
3. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
4. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures. 18 The initial test position procedure is described in the following:
 - a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
 - b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closest/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
 - c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. 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)
6. In applying the test guidance, the IEEE 802.11 mode with the maximum output power (out of all modes) should be considered for testing
7. 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
8. When SAR testing for 802.11ax is required
 - a. If the maximum output power is highest for OFDMA scenarios, choose the tone size with the maximum number of tones and the highest maximum output power
 - b. Otherwise, consider the fully allocated channel for SAR testing
 - c. When SAR testing is required on RU sizes less than the fully allocated channel, use the RU number closest to the middle of the channel, choosing the higher RU number when two RUs are equidistant to the middle of the channel

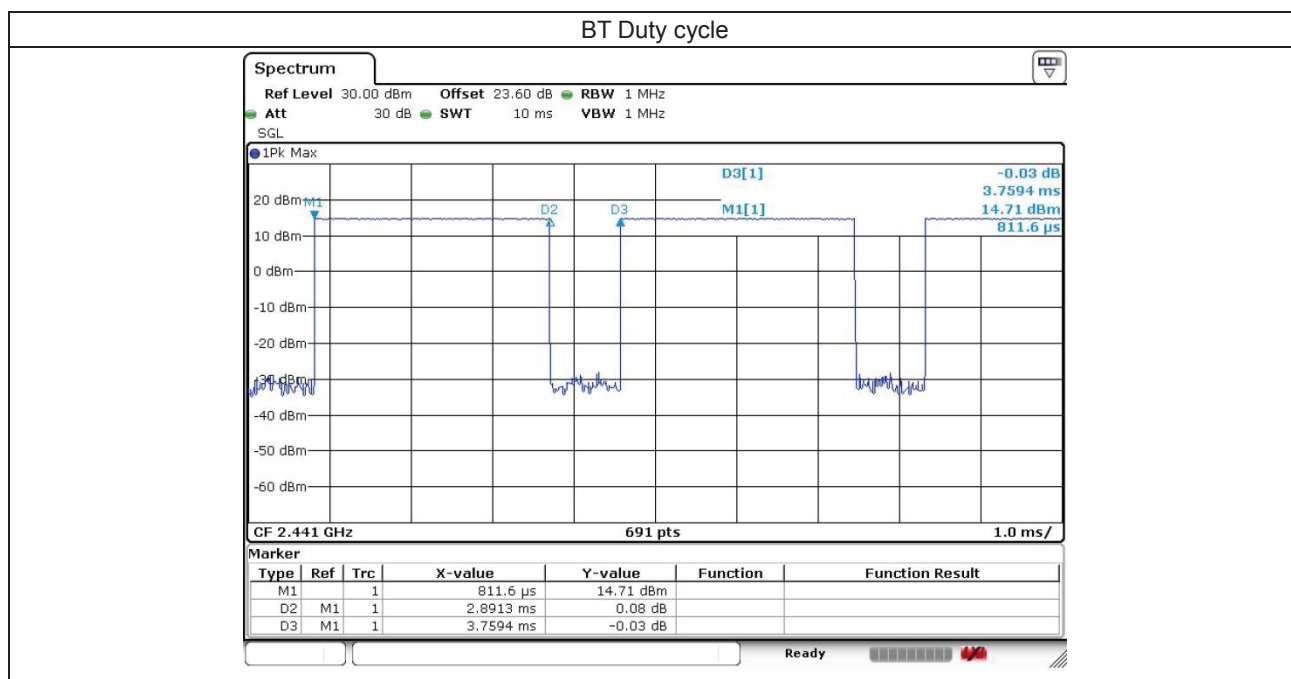
ANT1



General Note:

For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 76.79% considered in SAR testing.

ANT2

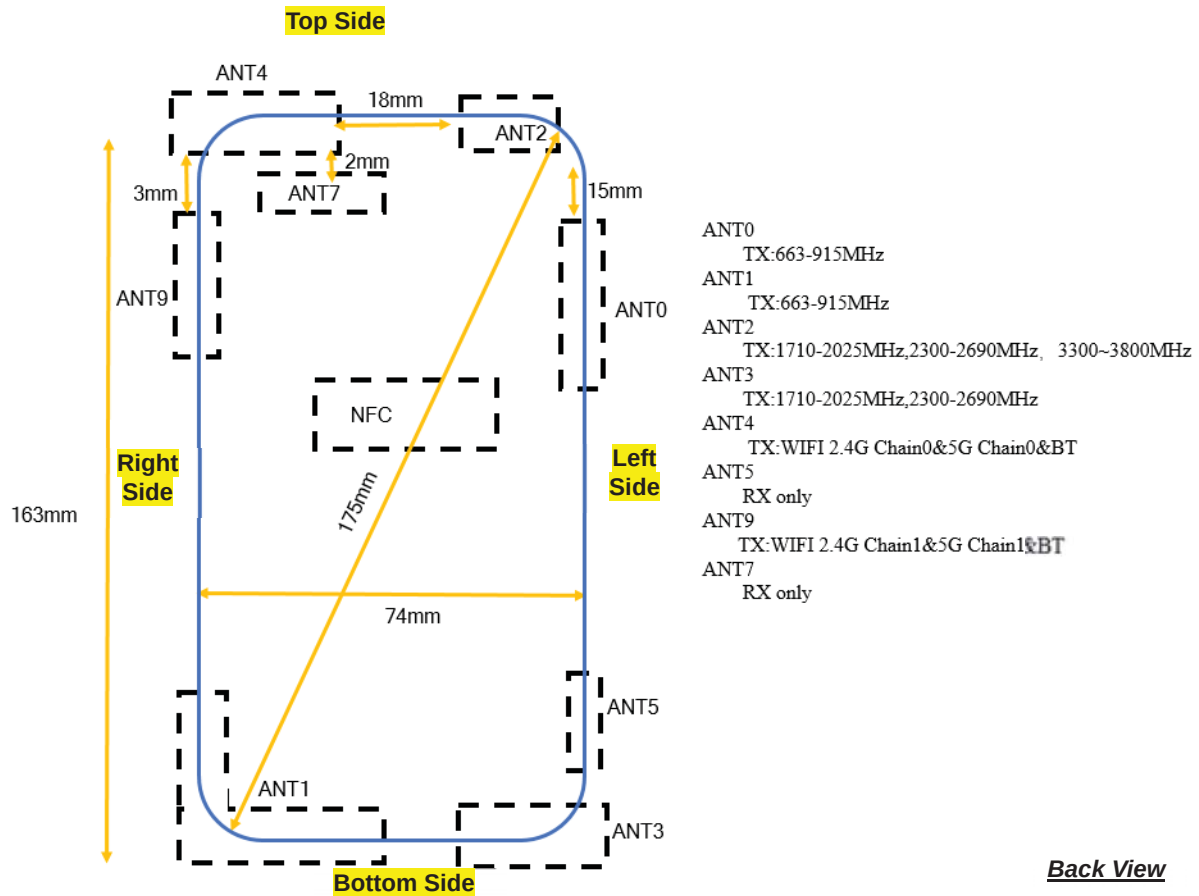


General Note:

For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 76.91% considered in SAR testing.

16. Antenna Location

<Mobile Phone>



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

Distance of the Antenna to the EUT surface/edge						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN UAT	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
WWAN LAT	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
BT&WLAN	≤ 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	Yes	Yes	Yes	No	Yes	Yes
WWAN LAT	Yes	Yes	No	Yes	Yes	Yes
BT&WLAN	Yes	Yes	Yes	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

17. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For WWAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. For WWAN UAT antenna, when the audio is actively routed through the earpiece receiver, and the LCD display is off, and the proximity sensor is triggered which indicating the next-to-head condition then power reduction will be implemented immediately.
 - Reduced power level 1-While the device WWAN is transmitting at the WWAN Top antenna.
 - Reduced power level 2-While the device WLAN 2.4GHz/Bluetooth is transmitting simultaneously with the WWAN Top antenna
 - Reduced power level 3-While the device WLAN 5GHz is transmitting simultaneously with the WWAN Top antenna
 - Reduced power level 4-While the device WLAN 2.4GHz/Bluetooth and WLAN 5GHz is transmitting simultaneously with the WWAN Top antenna
5. For WWAN UAT antenna, hotspot mode is enabled, power reduction will be activated to limit the maximum power.
6. For WWAN LAT antenna, hotspot mode is enabled, power reduction will be activated to limit the maximum power.
7. For WWAN LAT antenna, when the p-sensor is detect handheld state, power reduction will be activated to limit the maximum power.
8. For WLAN when transmit standalone or transmit simultaneous with WWAN LAT or UAT, power reduction will be activated to limit the different maximum power level for head / hotspot / body-worn / extremity.
 - Reduced power level 1- While the device WLAN is transmitting standalone.
 - Reduced power level 2- While the device WLAN 2.4GHz/5GHz is transmitting simultaneously with the WWAN antenna.
 - Reduced power level 3-While the device WLAN 2.4GHz is transmitting simultaneously with the WLAN 5GHz
 - Reduced power level 4-While the device WLAN 2.4GHz and WLAN 5GHz is transmitting simultaneously with the WWAN Top antenna
9. For Bluetooth antenna, when the audio is actively routed through the earpiece receiver, and the LCD display is off, and the proximity sensor is triggered which indicating the next-to-head condition then power reduction will be implemented immediately
10. 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.
11. 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 B2 / B4 / B7 / B25 / B30 / B66 / B38 / B41 / B48 and WLAN 2.4/5.2/5.8GHz is required to be tested
12. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
13. 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.

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 (3Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

UMTS Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA / HSPA+ is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA / HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+, and according to the following RF output power, the output power results of the secondary modes (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 ≤ 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 $> \frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is $> \frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 / B26 / B38 / 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 QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
3. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
4. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
5. 16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, 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 ≤ 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 ≤ 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 ≤ 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 ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.



17.1 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(3 Tx slot)	Right Cheek	Reduced power level 1	189	836.4	27.53	28.30	1.194	0.15	0.367	0.438
	GSM850_UAT	GPRS(3 Tx slot)	Right Tilted	Reduced power level 1	189	836.4	27.53	28.30	1.194	-0.13	0.060	0.072
	GSM850_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 1	189	836.4	27.53	28.30	1.194	0.1	0.481	0.574
	GSM850_UAT	GPRS(3 Tx slot)	Left Tilted	Reduced power level 1	189	836.4	27.53	28.30	1.194	0.05	0.073	0.087
01	GSM850_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 1	128	824.2	27.33	28.30	1.250	-0.04	0.514	0.643
	GSM850_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 1	251	848.8	27.32	28.30	1.253	0.17	0.490	0.614
	GSM850_UAT	GPRS(3 Tx slot)	Right Cheek	Reduced power level 3	189	836.4	26.51	27.30	1.199	0.02	0.250	0.300
	GSM850_UAT	GPRS(3 Tx slot)	Right Tilted	Reduced power level 3	189	836.4	26.51	27.30	1.199	0.16	0.043	0.052
	GSM850_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 3	189	836.4	26.51	27.30	1.199	0.05	0.377	0.452
	GSM850_UAT	GPRS(3 Tx slot)	Left Tilted	Reduced power level 3	189	836.4	26.51	27.30	1.199	0.09	0.050	0.060
	GSM850_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 3	128	824.2	26.34	27.30	1.247	-0.11	0.443	0.553
	GSM850_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 3	251	848.8	26.50	27.30	1.202	0.04	0.389	0.468
	GSM850_UAT	GPRS(3 Tx slot)	Right Cheek	Reduced power level 2/4	189	836.4	25.01	25.80	1.199	0.04	0.162	0.194
	GSM850_UAT	GPRS(3 Tx slot)	Right Tilted	Reduced power level 2/4	189	836.4	25.01	25.80	1.199	0.08	0.032	0.038
	GSM850_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 2/4	189	836.4	25.01	25.80	1.199	-0.06	0.283	0.339
	GSM850_UAT	GPRS(3 Tx slot)	Left Tilted	Reduced power level 2/4	189	836.4	25.01	25.80	1.199	0.01	0.009	0.011
	GSM850_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 2/4	128	824.2	24.94	25.80	1.219	0.02	0.321	0.391
	GSM850_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 2/4	251	848.8	25.00	25.80	1.202	0.05	0.313	0.376
	GSM850_LAT	GPRS(3 Tx slot)	Right Cheek	Full	189	836.4	28.84	29.80	1.247	0.02	0.117	0.146
	GSM850_LAT	GPRS(3 Tx slot)	Right Tilted	Full	189	836.4	28.84	29.80	1.247	-0.09	0.075	0.094
	GSM850_LAT	GPRS(3 Tx slot)	Left Cheek	Full	189	836.4	28.84	29.80	1.247	0.02	0.212	0.264
	GSM850_LAT	GPRS(3 Tx slot)	Left Tilted	Full	189	836.4	28.84	29.80	1.247	0.01	0.069	0.086
	GSM850_LAT	GPRS(3 Tx slot)	Left Cheek	Full	128	824.2	28.66	29.80	1.300	0.08	0.181	0.235
	GSM850_LAT	GPRS(3 Tx slot)	Left Cheek	Full	251	848.8	28.74	29.80	1.276	0.09	0.162	0.207
	GSM1900_UAT	GPRS(3 Tx slot)	Right Cheek	Reduced power level 1/3	661	1880	18.90	19.50	1.148	0.04	0.499	0.573
	GSM1900_UAT	GPRS(3 Tx slot)	Right Tilted	Reduced power level 1/3	661	1880	18.90	19.50	1.148	0.1	0.515	0.591
	GSM1900_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 1/3	661	1880	18.90	19.50	1.148	0.08	0.347	0.398
	GSM1900_UAT	GPRS(3 Tx slot)	Left Tilted	Reduced power level 1/3	661	1880	18.90	19.50	1.148	0.12	0.369	0.424
02	GSM1900_UAT	GPRS(3 Tx slot)	Right Tilted	Reduced power level 1/3	512	1850.2	18.64	19.50	1.219	0.07	0.563	0.686
	GSM1900_UAT	GPRS(3 Tx slot)	Right Tilted	Reduced power level 1/3	810	1909.8	18.75	19.50	1.189	0.05	0.506	0.601
	GSM1900_UAT	GPRS(3 Tx slot)	Right Cheek	Reduced power level 2/4	661	1880	17.23	18.00	1.194	-0.06	0.331	0.395
	GSM1900_UAT	GPRS(3 Tx slot)	Right Tilted	Reduced power level 2/4	661	1880	17.23	18.00	1.194	0.03	0.353	0.421
	GSM1900_UAT	GPRS(3 Tx slot)	Left Cheek	Reduced power level 2/4	661	1880	17.23	18.00	1.194	0.08	0.223	0.266
	GSM1900_UAT	GPRS(3 Tx slot)	Left Tilted	Reduced power level 2/4	661	1880	17.23	18.00	1.194	0.01	0.232	0.277
	GSM1900_UAT	GPRS(3 Tx slot)	Right Tilted	Reduced power level 2/4	512	1850.2	16.93	18.00	1.279	0.08	0.367	0.470
	GSM1900_UAT	GPRS(3 Tx slot)	Right Tilted	Reduced power level 2/4	810	1909.8	16.91	18.00	1.285	0.01	0.346	0.445
	GSM1900_LAT	GPRS(3 Tx slot)	Right Cheek	Full	661	1880	24.91	26.50	1.442	0.02	0.144	0.208
	GSM1900_LAT	GPRS(3 Tx slot)	Right Tilted	Full	661	1880	24.91	26.50	1.442	0.03	0.110	0.159
	GSM1900_LAT	GPRS(3 Tx slot)	Left Cheek	Full	661	1880	24.91	26.50	1.442	0.06	0.128	0.185
	GSM1900_LAT	GPRS(3 Tx slot)	Left Tilted	Full	661	1880	24.91	26.50	1.442	0.17	0.090	0.130
	GSM1900_LAT	GPRS(3 Tx slot)	Right Cheek	Full	512	1850.2	24.60	26.50	1.549	-0.19	0.180	0.279
	GSM1900_LAT	GPRS(3 Tx slot)	Right Cheek	Full	810	1909.8	24.74	26.50	1.500	0.15	0.113	0.169

<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)
03	WCDMA V_UAT	RMC 12.2Kbps	Right Cheek	Reduced power level 1/3	4132	826.4	20.61	21.30	1.172	0.03	0.118	0.138
	WCDMA V_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 1/3	4132	826.4	20.61	21.30	1.172	0.16	0.046	0.054
	WCDMA V_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 1/3	4132	826.4	20.61	21.30	1.172	-0.18	0.299	0.350
	WCDMA V_UAT	RMC 12.2Kbps	Left Tilted	Reduced power level 1/3	4132	826.4	20.61	21.30	1.172	-0.07	0.054	0.063
	WCDMA V_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 1/3	4182	836.4	20.57	21.30	1.183	0.16	0.280	0.331
	WCDMA V_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 1/3	4233	846.6	20.55	21.30	1.189	0.02	0.289	0.343
	WCDMA V_UAT	RMC 12.2Kbps	Right Cheek	Reduced power level 2/4	4132	826.4	19.77	20.30	1.130	0.12	0.093	0.105
	WCDMA V_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 2/4	4132	826.4	19.77	20.30	1.130	-0.05	0.032	0.036
	WCDMA V_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 2/4	4132	826.4	19.77	20.30	1.130	-0.09	0.237	0.268
	WCDMA V_UAT	RMC 12.2Kbps	Left Tilted	Reduced power level 2/4	4132	826.4	19.77	20.30	1.130	-0.04	0.041	0.046
	WCDMA V_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 2/4	4182	836.4	19.73	20.30	1.140	0.19	0.220	0.251
	WCDMA V_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 2/4	4233	846.6	19.71	20.30	1.146	0.17	0.221	0.253
04	WCDMA V_LAT	RMC 12.2Kbps	Right Cheek	Full	4132	826.4	24.09	24.80	1.178	0.08	0.097	0.114
	WCDMA V_LAT	RMC 12.2Kbps	Right Tilted	Full	4132	826.4	24.09	24.80	1.178	0.14	0.072	0.085
	WCDMA V_LAT	RMC 12.2Kbps	Left Cheek	Full	4132	826.4	24.09	24.80	1.178	0.03	0.124	0.146
	WCDMA V_LAT	RMC 12.2Kbps	Left Tilted	Full	4132	826.4	24.09	24.80	1.178	-0.02	0.073	0.086
	WCDMA V_LAT	RMC 12.2Kbps	Left Cheek	Full	4182	836.4	24.06	24.80	1.186	0.12	0.208	0.247
	WCDMA V_LAT	RMC 12.2Kbps	Left Cheek	Full	4233	846.6	24.05	24.80	1.189	0.11	0.181	0.215
	WCDMA IV_UAT	RMC 12.2Kbps	Right Cheek	Reduced power level 1/3	1513	1752.6	13.61	14.80	1.315	0.17	0.485	0.638
	WCDMA IV_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 1/3	1513	1752.6	13.61	14.80	1.315	0.09	0.523	0.688
	WCDMA IV_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 1/3	1513	1752.6	13.61	14.80	1.315	0.06	0.262	0.345
	WCDMA IV_UAT	RMC 12.2Kbps	Left Tilted	Reduced power level 1/3	1513	1752.6	13.61	14.80	1.315	0.12	0.421	0.554
	WCDMA IV_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 1/3	1312	1712.4	13.46	14.80	1.361	0.15	0.501	0.682
	WCDMA IV_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 1/3	1413	1732.6	13.53	14.80	1.340	0.17	0.480	0.643
	WCDMA IV_UAT	RMC 12.2Kbps	Right Cheek	Reduced power level 2/4	1513	1752.6	12.85	13.80	1.245	0.12	0.325	0.404
	WCDMA IV_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 2/4	1513	1752.6	12.85	13.80	1.245	0.02	0.391	0.487
	WCDMA IV_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 2/4	1513	1752.6	12.85	13.80	1.245	0.05	0.292	0.363
	WCDMA IV_UAT	RMC 12.2Kbps	Left Tilted	Reduced power level 2/4	1513	1752.6	12.85	13.80	1.245	0.04	0.301	0.375
	WCDMA IV_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 2/4	1312	1712.4	12.70	13.80	1.288	-0.09	0.381	0.491
	WCDMA IV_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 2/4	1413	1732.6	12.77	13.80	1.268	0.17	0.424	0.537
	WCDMA IV_LAT	RMC 12.2Kbps	Right Cheek	Full	1413	1732.6	23.73	24.80	1.279	0.18	0.294	0.376
	WCDMA IV_LAT	RMC 12.2Kbps	Right Tilted	Full	1413	1732.6	23.73	24.80	1.279	0.02	0.140	0.179
	WCDMA IV_LAT	RMC 12.2Kbps	Left Cheek	Full	1413	1732.6	23.73	24.80	1.279	-0.09	0.189	0.242
	WCDMA IV_LAT	RMC 12.2Kbps	Left Tilted	Full	1413	1732.6	23.73	24.80	1.279	0.01	0.105	0.134
	WCDMA IV_LAT	RMC 12.2Kbps	Right Cheek	Full	1312	1712.4	23.64	24.80	1.306	0.15	0.211	0.276
	WCDMA IV_LAT	RMC 12.2Kbps	Right Cheek	Full	1513	1752.6	23.72	24.80	1.282	0.07	0.198	0.254

Plot No.	Band	Mode	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_UAT	RMC 12.2Kbps	Right Cheek	Reduced power level 1/3	9262	1852.4	13.06	14.30	1.330	0.03	0.475	0.632
	WCDMA II_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 1/3	9262	1852.4	13.06	14.30	1.330	0.02	0.508	0.676
	WCDMA II_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 1/3	9262	1852.4	13.06	14.30	1.330	-0.05	0.285	0.379
	WCDMA II_UAT	RMC 12.2Kbps	Left Tilted	Reduced power level 1/3	9262	1852.4	13.06	14.30	1.330	0.02	0.407	0.541
	WCDMA II_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 1/3	9400	1880	12.86	14.30	1.393	0.13	0.493	0.687
05	WCDMA II_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 1/3	9538	1907.6	12.94	14.30	1.368	-0.05	0.509	0.696
	WCDMA II_UAT	RMC 12.2Kbps	Right Cheek	Reduced power level 2/4	9262	1852.4	12.24	13.30	1.276	0.02	0.302	0.385
	WCDMA II_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 2/4	9262	1852.4	12.24	13.30	1.276	0.16	0.328	0.419
	WCDMA II_UAT	RMC 12.2Kbps	Left Cheek	Reduced power level 2/4	9262	1852.4	12.24	13.30	1.276	0.05	0.181	0.231
	WCDMA II_UAT	RMC 12.2Kbps	Left Tilted	Reduced power level 2/4	9262	1852.4	12.24	13.30	1.276	0.07	0.301	0.384
	WCDMA II_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 2/4	9400	1880	12.04	13.30	1.337	-0.17	0.367	0.491
	WCDMA II_UAT	RMC 12.2Kbps	Right Tilted	Reduced power level 2/4	9538	1907.6	12.12	13.30	1.312	0.01	0.356	0.467
	WCDMA II_LAT	RMC 12.2Kbps	Right Cheek	Full	9400	1880	23.69	24.80	1.291	0.05	0.326	0.421
	WCDMA II_LAT	RMC 12.2Kbps	Right Tilted	Full	9400	1880	23.69	24.80	1.291	0.12	0.205	0.265
	WCDMA II_LAT	RMC 12.2Kbps	Left Cheek	Full	9400	1880	23.69	24.80	1.291	-0.09	0.220	0.284
	WCDMA II_LAT	RMC 12.2Kbps	Left Tilted	Full	9400	1880	23.69	24.80	1.291	0.08	0.155	0.200
	WCDMA II_LAT	RMC 12.2Kbps	Right Cheek	Full	9262	1852.4	23.60	24.80	1.318	0.03	0.254	0.335
	WCDMA II_LAT	RMC 12.2Kbps	Right Cheek	Full	9538	1907.6	23.66	24.80	1.300	0.11	0.241	0.313

<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	22.04	22.80	1.191	0.02	0.345	0.411
	CDMA2000 BC0_UAT	RC3+SO55	Right Tilted	Reduced power level 1	384	836.52	22.04	22.80	1.191	0.13	0.062	0.074
	CDMA2000 BC0_UAT	RC3+SO55	Left Cheek	Reduced power level 1	384	836.52	22.04	22.80	1.191	-0.11	0.562	0.669
	CDMA2000 BC0_UAT	RC3+SO55	Left Tilted	Reduced power level 1	384	836.52	22.04	22.80	1.191	-0.07	0.075	0.089
06	CDMA2000 BC0_UAT	RC3+SO55	Left Cheek	Reduced power level 1	1013	824.7	22.02	22.80	1.197	-0.14	0.658	0.787
	CDMA2000 BC0_UAT	RC3+SO55	Left Cheek	Reduced power level 1	777	848.31	21.99	22.80	1.205	0.13	0.526	0.634
	CDMA2000 BC0_UAT	RC3+SO55	Right Cheek	Reduced power level 3	384	836.52	20.54	21.30	1.191	0.02	0.254	0.303
	CDMA2000 BC0_UAT	RC3+SO55	Right Tilted	Reduced power level 3	384	836.52	20.54	21.30	1.191	0.06	0.045	0.054
	CDMA2000 BC0_UAT	RC3+SO55	Left Cheek	Reduced power level 3	384	836.52	20.54	21.30	1.191	-0.09	0.355	0.423
	CDMA2000 BC0_UAT	RC3+SO55	Left Tilted	Reduced power level 3	384	836.52	20.54	21.30	1.191	-0.14	0.053	0.063
	CDMA2000 BC0_UAT	RC3+SO55	Left Cheek	Reduced power level 3	1013	824.7	20.52	21.30	1.197	0.02	0.463	0.554
	CDMA2000 BC0_UAT	RC3+SO55	Left Cheek	Reduced power level 3	777	848.31	20.49	21.30	1.205	0.12	0.359	0.433
	CDMA2000 BC0_UAT	RC3+SO55	Right Cheek	Reduced power level 2/4	384	836.52	19.54	20.30	1.191	0.02	0.181	0.216
	CDMA2000 BC0_UAT	RC3+SO55	Right Tilted	Reduced power level 2/4	384	836.52	19.54	20.30	1.191	0.08	0.030	0.036
	CDMA2000 BC0_UAT	RC3+SO55	Left Cheek	Reduced power level 2/4	384	836.52	19.54	20.30	1.191	0.16	0.284	0.338
	CDMA2000 BC0_UAT	RC3+SO55	Left Tilted	Reduced power level 2/4	384	836.52	19.54	20.30	1.191	0.03	0.041	0.049
	CDMA2000 BC0_UAT	RC3+SO55	Left Cheek	Reduced power level 2/4	1013	824.7	19.52	20.30	1.197	0.04	0.291	0.348
	CDMA2000 BC0_UAT	RC3+SO55	Left Cheek	Reduced power level 2/4	777	848.31	19.49	20.30	1.205	0.17	0.279	0.336
	CDMA2000 BC0_LAT	RC3+SO55	Right Cheek	Full	384	836.52	23.80	24.80	1.259	0.08	0.109	0.137
	CDMA2000 BC0_LAT	RC3+SO55	Right Tilted	Full	384	836.52	23.80	24.80	1.259	0.14	0.071	0.089
	CDMA2000 BC0_LAT	RC3+SO55	Left Cheek	Full	384	836.52	23.80	24.80	1.259	0.11	0.218	0.274
	CDMA2000 BC0_LAT	RC3+SO55	Left Tilted	Full	384	836.52	23.80	24.80	1.259	0.02	0.069	0.087
	CDMA2000 BC0_LAT	RC3+SO55	Left Cheek	Full	1013	824.7	23.79	24.80	1.262	-0.07	0.182	0.230
	CDMA2000 BC0_LAT	RC3+SO55	Left Cheek	Full	777	848.31	23.78	24.80	1.265	-0.04	0.185	0.234



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 BC10_UAT	RC3+SO55	Right Cheek	Reduced power level 1/3	580	820.5	21.25	21.80	1.135	0.01	0.285	0.323
	CDMA2000 BC10_UAT	RC3+SO55	Right Tilted	Reduced power level 1/3	580	820.5	21.25	21.80	1.135	0.04	0.051	0.058
	CDMA2000 BC10_UAT	RC3+SO55	Left Cheek	Reduced power level 1/3	580	820.5	21.25	21.80	1.135	0.15	0.396	0.449
	CDMA2000 BC10_UAT	RC3+SO55	Left Tilted	Reduced power level 1/3	580	820.5	21.25	21.80	1.135	0.09	0.072	0.082
	CDMA2000 BC10_UAT	RC3+SO55	Left Cheek	Reduced power level 1/3	476	817.9	21.23	21.80	1.140	0.16	0.398	0.454
07	CDMA2000 BC10_UAT	RC3+SO55	Left Cheek	Reduced power level 1/3	684	823.1	21.12	21.80	1.169	-0.03	0.404	0.472
	CDMA2000 BC10_UAT	RC3+SO55	Right Cheek	Reduced power level 2/4	580	820.5	20.25	20.80	1.135	0.1	0.201	0.228
	CDMA2000 BC10_UAT	RC3+SO55	Right Tilted	Reduced power level 2/4	580	820.5	20.25	20.80	1.135	0.15	0.040	0.045
	CDMA2000 BC10_UAT	RC3+SO55	Left Cheek	Reduced power level 2/4	580	820.5	20.25	20.80	1.135	-0.11	0.295	0.335
	CDMA2000 BC10_UAT	RC3+SO55	Left Tilted	Reduced power level 2/4	580	820.5	20.25	20.80	1.135	0.06	0.067	0.076
	CDMA2000 BC10_UAT	RC3+SO55	Left Cheek	Reduced power level 2/4	476	817.9	20.23	20.80	1.140	-0.17	0.293	0.334
	CDMA2000 BC10_UAT	RC3+SO55	Left Cheek	Reduced power level 2/4	684	823.1	20.12	20.80	1.169	0.03	0.294	0.344
	CDMA2000 BC10_LAT	RC3+SO55	Right Cheek	Full	580	820.5	23.98	24.80	1.208	0.01	0.110	0.133
	CDMA2000 BC10_LAT	RC3+SO55	Right Tilted	Full	580	820.5	23.98	24.80	1.208	0.07	0.073	0.088
	CDMA2000 BC10_LAT	RC3+SO55	Left Cheek	Full	580	820.5	23.98	24.80	1.208	0.12	0.214	0.258
	CDMA2000 BC10_LAT	RC3+SO55	Left Tilted	Full	580	820.5	23.98	24.80	1.208	0.09	0.072	0.087
	CDMA2000 BC10_LAT	RC3+SO55	Left Cheek	Full	476	817.9	23.94	24.80	1.219	-0.03	0.165	0.201
	CDMA2000 BC10_LAT	RC3+SO55	Left Cheek	Full	684	823.1	23.94	24.80	1.219	0.06	0.164	0.200
	CDMA2000 BC1_UAT	RC3+SO55	Right Cheek	Reduced power level 1/3	1175	1908.75	13.71	14.80	1.285	0.02	0.589	0.757
	CDMA2000 BC1_UAT	RC3+SO55	Right Tilted	Reduced power level 1/3	1175	1908.75	13.71	14.80	1.285	0.13	0.638	0.820
	CDMA2000 BC1_UAT	RC3+SO55	Left Cheek	Reduced power level 1/3	1175	1908.75	13.71	14.80	1.285	0.09	0.444	0.571
	CDMA2000 BC1_UAT	RC3+SO55	Left Tilted	Reduced power level 1/3	1175	1908.75	13.71	14.80	1.285	-0.06	0.517	0.664
	CDMA2000 BC1_UAT	RC3+SO55	Right Tilted	Reduced power level 1/3	25	1851.25	13.59	14.80	1.321	0.11	0.626	0.827
08	CDMA2000 BC1_UAT	RC3+SO55	Right Tilted	Reduced power level 1/3	600	1880	13.61	14.80	1.315	0.02	0.660	0.868
	CDMA2000 BC1_UAT	RC3+SO55	Right Cheek	Reduced power level 2/4	1175	1908.75	12.21	13.30	1.285	0.12	0.399	0.513
	CDMA2000 BC1_UAT	RC3+SO55	Right Tilted	Reduced power level 2/4	1175	1908.75	12.21	13.30	1.285	0.04	0.468	0.602
	CDMA2000 BC1_UAT	RC3+SO55	Left Cheek	Reduced power level 2/4	1175	1908.75	12.21	13.30	1.285	-0.18	0.312	0.401
	CDMA2000 BC1_UAT	RC3+SO55	Left Tilted	Reduced power level 2/4	1175	1908.75	12.21	13.30	1.285	0.04	0.348	0.447
	CDMA2000 BC1_UAT	RC3+SO55	Right Tilted	Reduced power level 2/4	25	1851.25	12.09	13.30	1.321	0.09	0.476	0.629
	CDMA2000 BC1_UAT	RC3+SO55	Right Tilted	Reduced power level 2/4	600	1880	12.11	13.30	1.315	0.11	0.479	0.630
	CDMA2000 BC1_LAT	RC3+SO55	Right Cheek	Full	1175	1908.75	22.71	24.80	1.618	0.02	0.194	0.314
	CDMA2000 BC1_LAT	RC3+SO55	Right Tilted	Full	1175	1908.75	22.71	24.80	1.618	0.09	0.078	0.126
	CDMA2000 BC1_LAT	RC3+SO55	Left Cheek	Full	1175	1908.75	22.71	24.80	1.618	-0.03	0.101	0.163
	CDMA2000 BC1_LAT	RC3+SO55	Left Tilted	Full	1175	1908.75	22.71	24.80	1.618	0.02	0.067	0.108
	CDMA2000 BC1_LAT	RC3+SO55	Right Cheek	Full	25	1851.25	22.46	24.80	1.714	-0.17	0.237	0.406
	CDMA2000 BC1_LAT	RC3+SO55	Right Cheek	Full	600	1880	22.67	24.80	1.633	0.07	0.210	0.343



<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)
09	LTE Band 71_UAT	20M	QPSK	1	99	Right Cheek	Reduced power level 1/2/3/4	133322	683	18.41	18.80	1.094	0.12	0.151	0.165
	LTE Band 71_UAT	20M	QPSK	1	99	Right Tilted	Reduced power level 1/2/3/4	133322	683	18.41	18.80	1.094	0.1	0.021	0.023
	LTE Band 71_UAT	20M	QPSK	1	99	Left Cheek	Reduced power level 1/2/3/4	133322	683	18.41	18.80	1.094	-0.11	0.224	0.245
	LTE Band 71_UAT	20M	QPSK	1	99	Left Tilted	Reduced power level 1/2/3/4	133322	683	18.41	18.80	1.094	0.07	0.026	0.028
	LTE Band 71_UAT	20M	QPSK	50	0	Right Cheek	Reduced power level 1/2/3/4	133322	683	18.33	18.80	1.114	0.03	0.132	0.147
	LTE Band 71_UAT	20M	QPSK	50	0	Right Tilted	Reduced power level 1/2/3/4	133322	683	18.33	18.80	1.114	0.02	0.019	0.021
	LTE Band 71_UAT	20M	QPSK	50	0	Left Cheek	Reduced power level 1/2/3/4	133322	683	18.33	18.80	1.114	0.11	0.201	0.224
	LTE Band 71_UAT	20M	QPSK	50	0	Left Tilted	Reduced power level 1/2/3/4	133322	683	18.33	18.80	1.114	-0.03	0.021	0.023
	LTE Band 71_LAT	20M	QPSK	1	99	Right Cheek	Full	133322	683	22.57	23.80	1.327	0.01	0.054	0.072
	LTE Band 71_LAT	20M	QPSK	1	99	Right Tilted	Full	133322	683	22.57	23.80	1.327	0.04	0.026	0.035
10	LTE Band 71_LAT	20M	QPSK	1	99	Left Cheek	Full	133322	683	22.57	23.80	1.327	0.17	0.131	0.174
	LTE Band 71_LAT	20M	QPSK	1	99	Left Tilted	Full	133322	683	22.57	23.80	1.327	0.02	0.013	0.017
	LTE Band 71_LAT	20M	QPSK	50	0	Right Cheek	Full	133322	683	21.69	22.80	1.291	-0.16	0.049	0.063
	LTE Band 71_LAT	20M	QPSK	50	0	Right Tilted	Full	133322	683	21.69	22.80	1.291	-0.11	0.019	0.025
	LTE Band 71_LAT	20M	QPSK	50	0	Left Cheek	Full	133322	683	21.69	22.80	1.291	0.02	0.080	0.103
	LTE Band 71_LAT	20M	QPSK	50	0	Left Tilted	Full	133322	683	21.69	22.80	1.291	0.09	0.009	0.012
	LTE Band 12_UAT	10M	QPSK	1	49	Right Cheek	Reduced power level 1	23095	707.5	22.57	22.80	1.054	0.06	0.360	0.380
	LTE Band 12_UAT	10M	QPSK	1	49	Right Tilted	Reduced power level 1	23095	707.5	22.57	22.80	1.054	0.01	0.077	0.081
	LTE Band 12_UAT	10M	QPSK	1	49	Left Cheek	Reduced power level 1	23095	707.5	22.57	22.80	1.054	0.05	0.561	0.592
	LTE Band 12_UAT	10M	QPSK	1	49	Left Tilted	Reduced power level 1	23095	707.5	22.57	22.80	1.054	0.02	0.091	0.096
	LTE Band 12_UAT	10M	QPSK	25	12	Right Cheek	Reduced power level 1	23095	707.5	22.53	22.80	1.064	0.17	0.376	0.400
	LTE Band 12_UAT	10M	QPSK	25	12	Right Tilted	Reduced power level 1	23095	707.5	22.53	22.80	1.064	-0.06	0.078	0.083
	LTE Band 12_UAT	10M	QPSK	25	12	Left Cheek	Reduced power level 1	23095	707.5	22.53	22.80	1.064	0.14	0.577	0.614
	LTE Band 12_UAT	10M	QPSK	25	12	Left Tilted	Reduced power level 1	23095	707.5	22.53	22.80	1.064	0.13	0.093	0.099
	LTE Band 12_UAT	10M	QPSK	1	49	Right Cheek	Reduced power level 2/3/4	23095	707.5	20.57	20.80	1.054	0.11	0.275	0.290
	LTE Band 12_UAT	10M	QPSK	1	49	Right Tilted	Reduced power level 2/3/4	23095	707.5	20.57	20.80	1.054	0.02	0.048	0.051
	LTE Band 12_UAT	10M	QPSK	1	49	Left Cheek	Reduced power level 2/3/4	23095	707.5	20.57	20.80	1.054	0.05	0.362	0.382
	LTE Band 12_UAT	10M	QPSK	1	49	Left Tilted	Reduced power level 2/3/4	23095	707.5	20.57	20.80	1.054	-0.09	0.063	0.066
	LTE Band 12_UAT	10M	QPSK	25	12	Right Cheek	Reduced power level 2/3/4	23095	707.5	20.53	20.80	1.064	-0.03	0.269	0.286
	LTE Band 12_UAT	10M	QPSK	25	12	Right Tilted	Reduced power level 2/3/4	23095	707.5	20.53	20.80	1.064	0.14	0.046	0.049
	LTE Band 12_UAT	10M	QPSK	25	12	Left Cheek	Reduced power level 2/3/4	23095	707.5	20.53	20.80	1.064	0.07	0.351	0.374
	LTE Band 12_UAT	10M	QPSK	25	12	Left Tilted	Reduced power level 2/3/4	23095	707.5	20.53	20.80	1.064	0.14	0.062	0.066
	LTE Band 12_LAT	10M	QPSK	1	49	Right Cheek	Full	23095	707.5	23.20	23.80	1.148	0.19	0.062	0.071
	LTE Band 12_LAT	10M	QPSK	1	49	Right Tilted	Full	23095	707.5	23.20	23.80	1.148	0.14	0.021	0.024
	LTE Band 12_LAT	10M	QPSK	1	49	Left Cheek	Full	23095	707.5	23.20	23.80	1.148	0.12	0.120	0.138
	LTE Band 12_LAT	10M	QPSK	1	49	Left Tilted	Full	23095	707.5	23.20	23.80	1.148	-0.02	0.054	0.062
	LTE Band 12_LAT	10M	QPSK	25	12	Right Cheek	Full	23095	707.5	22.19	22.80	1.151	0.12	0.046	0.053
	LTE Band 12_LAT	10M	QPSK	25	12	Right Tilted	Full	23095	707.5	22.19	22.80	1.151	0.06	0.016	0.018
	LTE Band 12_LAT	10M	QPSK	25	12	Left Cheek	Full	23095	707.5	22.19	22.80	1.151	0.04	0.083	0.096
	LTE Band 12_LAT	10M	QPSK	25	12	Left Tilted	Full	23095	707.5	22.19	22.80	1.151	0.08	0.041	0.047



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 13_UAT	10M	QPSK	1	25	Right Cheek	Reduced power level 1	23230	782	21.75	22.30	1.135	-0.15	0.347	0.394
	LTE Band 13_UAT	10M	QPSK	1	25	Right Tilted	Reduced power level 1	23230	782	21.75	22.30	1.135	0.05	0.068	0.077
	LTE Band 13_UAT	10M	QPSK	1	25	Left Cheek	Reduced power level 1	23230	782	21.75	22.30	1.135	0.1	0.592	0.672
	LTE Band 13_UAT	10M	QPSK	1	25	Left Tilted	Reduced power level 1	23230	782	21.75	22.30	1.135	0.16	0.088	0.100
	LTE Band 13_UAT	10M	QPSK	25	25	Right Cheek	Reduced power level 1	23230	782	21.27	22.30	1.268	0.02	0.346	0.439
	LTE Band 13_UAT	10M	QPSK	25	25	Right Tilted	Reduced power level 1	23230	782	21.27	22.30	1.268	0.12	0.067	0.085
11	LTE Band 13_UAT	10M	QPSK	25	25	Left Cheek	Reduced power level 1	23230	782	21.27	22.30	1.268	0.19	0.591	0.749
	LTE Band 13_UAT	10M	QPSK	25	25	Left Tilted	Reduced power level 1	23230	782	21.27	22.30	1.268	0.14	0.087	0.110
	LTE Band 13_UAT	10M	QPSK	1	25	Right Cheek	Reduced power level 2/3/4	23230	782	19.25	19.80	1.135	0.02	0.227	0.258
	LTE Band 13_UAT	10M	QPSK	1	25	Right Tilted	Reduced power level 2/3/4	23230	782	19.25	19.80	1.135	0.14	0.039	0.044
	LTE Band 13_UAT	10M	QPSK	1	25	Left Cheek	Reduced power level 2/3/4	23230	782	19.25	19.80	1.135	0.09	0.321	0.364
	LTE Band 13_UAT	10M	QPSK	1	25	Left Tilted	Reduced power level 2/3/4	23230	782	19.25	19.80	1.135	0.07	0.048	0.054
	LTE Band 13_UAT	10M	QPSK	25	25	Right Cheek	Reduced power level 2/3/4	23230	782	18.97	19.80	1.211	0.13	0.232	0.281
	LTE Band 13_UAT	10M	QPSK	25	25	Right Tilted	Reduced power level 2/3/4	23230	782	18.97	19.80	1.211	0.05	0.042	0.051
	LTE Band 13_UAT	10M	QPSK	25	25	Left Cheek	Reduced power level 2/3/4	23230	782	18.97	19.80	1.211	0.01	0.328	0.397
	LTE Band 13_UAT	10M	QPSK	25	25	Left Tilted	Reduced power level 2/3/4	23230	782	18.97	19.80	1.211	0.07	0.051	0.062
	LTE Band 13_LAT	10M	QPSK	1	25	Right Cheek	Full	23230	782	22.98	23.80	1.208	0.12	0.087	0.105
	LTE Band 13_LAT	10M	QPSK	1	25	Right Tilted	Full	23230	782	22.98	23.80	1.208	0.09	0.059	0.071
	LTE Band 13_LAT	10M	QPSK	1	25	Left Cheek	Full	23230	782	22.98	23.80	1.208	0.05	0.187	0.226
	LTE Band 13_LAT	10M	QPSK	1	25	Left Tilted	Full	23230	782	22.98	23.80	1.208	0.02	0.068	0.082
	LTE Band 13_LAT	10M	QPSK	25	25	Right Cheek	Full	23230	782	21.93	22.80	1.222	-0.11	0.067	0.082
	LTE Band 13_LAT	10M	QPSK	25	25	Right Tilted	Full	23230	782	21.93	22.80	1.222	-0.13	0.048	0.059
	LTE Band 13_LAT	10M	QPSK	25	25	Left Cheek	Full	23230	782	21.93	22.80	1.222	0.08	0.122	0.149
	LTE Band 13_LAT	10M	QPSK	25	25	Left Tilted	Full	23230	782	21.93	22.80	1.222	0.14	0.051	0.062
	LTE Band 5_UAT	10M	QPSK	1	0	Right Cheek	Reduced power level 1	20525	836.5	22.32	22.80	1.117	0.05	0.432	0.482
	LTE Band 5_UAT	10M	QPSK	1	0	Right Tilted	Reduced power level 1	20525	836.5	22.32	22.80	1.117	-0.15	0.073	0.082
12	LTE Band 5_UAT	10M	QPSK	1	0	Left Cheek	Reduced power level 1	20525	836.5	22.32	22.80	1.117	0.05	0.654	0.730
	LTE Band 5_UAT	10M	QPSK	1	0	Left Tilted	Reduced power level 1	20525	836.5	22.32	22.80	1.117	0.07	0.105	0.117
	LTE Band 5_UAT	10M	QPSK	25	0	Right Cheek	Reduced power level 1	20525	836.5	22.31	22.80	1.119	-0.11	0.431	0.482
	LTE Band 5_UAT	10M	QPSK	25	0	Right Tilted	Reduced power level 1	20525	836.5	22.31	22.80	1.119	0.16	0.072	0.081
	LTE Band 5_UAT	10M	QPSK	25	0	Left Cheek	Reduced power level 1	20525	836.5	22.31	22.80	1.119	0.14	0.648	0.725
	LTE Band 5_UAT	10M	QPSK	25	0	Left Tilted	Reduced power level 1	20525	836.5	22.31	22.80	1.119	0.02	0.102	0.114
	LTE Band 5_UAT	10M	QPSK	1	0	Right Cheek	Reduced power level 2/3/4	20525	836.5	19.32	19.80	1.117	0.11	0.203	0.227
	LTE Band 5_UAT	10M	QPSK	1	0	Right Tilted	Reduced power level 2/3/4	20525	836.5	19.32	19.80	1.117	0.14	0.037	0.041
	LTE Band 5_UAT	10M	QPSK	1	0	Left Cheek	Reduced power level 2/3/4	20525	836.5	19.32	19.80	1.117	0.17	0.293	0.327
	LTE Band 5_UAT	10M	QPSK	1	0	Left Tilted	Reduced power level 2/3/4	20525	836.5	19.32	19.80	1.117	0.02	0.046	0.051
	LTE Band 5_UAT	10M	QPSK	25	0	Right Cheek	Reduced power level 2/3/4	20525	836.5	19.31	19.80	1.119	0.11	0.202	0.226
	LTE Band 5_UAT	10M	QPSK	25	0	Right Tilted	Reduced power level 2/3/4	20525	836.5	19.31	19.80	1.119	0.13	0.035	0.039
	LTE Band 5_UAT	10M	QPSK	25	0	Left Cheek	Reduced power level 2/3/4	20525	836.5	19.31	19.80	1.119	0.05	0.295	0.330
	LTE Band 5_UAT	10M	QPSK	25	0	Left Tilted	Reduced power level 2/3/4	20525	836.5	19.31	19.80	1.119	0.09	0.045	0.050
	LTE Band 5_LAT	10M	QPSK	1	0	Right Cheek	Full	20525	836.5	22.83	23.80	1.250	0.04	0.103	0.129
	LTE Band 5_LAT	10M	QPSK	1	0	Right Tilted	Full	20525	836.5	22.83	23.80	1.250	0.05	0.069	0.086
	LTE Band 5_LAT	10M	QPSK	1	0	Left Cheek	Full	20525	836.5	22.83	23.80	1.250	0.15	0.189	0.236
	LTE Band 5_LAT	10M	QPSK	1	0	Left Tilted	Full	20525	836.5	22.83	23.80	1.250	0.18	0.062	0.078
	LTE Band 5_LAT	10M	QPSK	25	12	Right Cheek	Full	20525	836.5	21.86	22.80	1.242	0.02	0.084	0.104
	LTE Band 5_LAT	10M	QPSK	25	12	Right Tilted	Full	20525	836.5	21.86	22.80	1.242	0.03	0.054	0.067
	LTE Band 5_LAT	10M	QPSK	25	12	Left Cheek	Full	20525	836.5	21.86	22.80	1.242	0.17	0.121	0.150
	LTE Band 5_LAT	10M	QPSK	25	12	Left Tilted	Full	20525	836.5	21.86	22.80	1.242	-0.02	0.053	0.066



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)
13	LTE Band 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced power level 1	26865	831.5	21.52	22.30	1.197	0.11	0.397	0.475
	LTE Band 26_UAT	15M	QPSK	1	0	Right Tilted	Reduced power level 1	26865	831.5	21.52	22.30	1.197	-0.03	0.071	0.085
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced power level 1	26865	831.5	21.52	22.30	1.197	-0.09	0.647	0.774
	LTE Band 26_UAT	15M	QPSK	1	0	Left Tilted	Reduced power level 1	26865	831.5	21.52	22.30	1.197	0.17	0.083	0.099
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced power level 1	26765	821.5	21.48	22.30	1.208	0.08	0.512	0.618
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced power level 1	26965	841.5	21.43	22.30	1.222	0.16	0.561	0.685
	LTE Band 26_UAT	15M	QPSK	36	20	Right Cheek	Reduced power level 1	26865	831.5	21.32	22.30	1.253	0.03	0.389	0.487
	LTE Band 26_UAT	15M	QPSK	36	20	Right Tilted	Reduced power level 1	26865	831.5	21.32	22.30	1.253	0.16	0.066	0.083
	LTE Band 26_UAT	15M	QPSK	36	20	Left Cheek	Reduced power level 1	26865	831.5	21.32	22.30	1.253	-0.13	0.610	0.764
	LTE Band 26_UAT	15M	QPSK	36	20	Left Tilted	Reduced power level 1	26865	831.5	21.32	22.30	1.253	0.09	0.081	0.102
	LTE Band 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced power level 3	26865	831.5	20.02	20.80	1.197	0.04	0.275	0.329
	LTE Band 26_UAT	15M	QPSK	1	0	Right Tilted	Reduced power level 3	26865	831.5	20.02	20.80	1.197	0.08	0.048	0.057
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced power level 3	26865	831.5	20.02	20.80	1.197	-0.09	0.422	0.505
	LTE Band 26_UAT	15M	QPSK	1	0	Left Tilted	Reduced power level 3	26865	831.5	20.02	20.80	1.197	-0.11	0.063	0.075
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced power level 3	26765	821.5	19.98	20.80	1.208	-0.09	0.391	0.472
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced power level 3	26965	841.5	19.93	20.80	1.222	0.07	0.384	0.469
	LTE Band 26_UAT	15M	QPSK	36	20	Right Cheek	Reduced power level 3	26865	831.5	19.82	20.80	1.253	0.14	0.262	0.328
	LTE Band 26_UAT	15M	QPSK	36	20	Right Tilted	Reduced power level 3	26865	831.5	19.82	20.80	1.253	-0.09	0.046	0.058
	LTE Band 26_UAT	15M	QPSK	36	20	Left Cheek	Reduced power level 3	26865	831.5	19.82	20.80	1.253	-0.07	0.365	0.457
	LTE Band 26_UAT	15M	QPSK	36	20	Left Tilted	Reduced power level 3	26865	831.5	19.82	20.80	1.253	0.02	0.061	0.076
	LTE Band 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced power level 2/4	26865	831.5	18.72	19.30	1.143	-0.07	0.190	0.217
	LTE Band 26_UAT	15M	QPSK	1	0	Right Tilted	Reduced power level 2/4	26865	831.5	18.72	19.30	1.143	0.11	0.103	0.118
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced power level 2/4	26865	831.5	18.72	19.30	1.143	0.02	0.302	0.345
	LTE Band 26_UAT	15M	QPSK	1	0	Left Tilted	Reduced power level 2/4	26865	831.5	18.72	19.30	1.143	0.09	0.046	0.053
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced power level 2/4	26765	821.5	18.68	19.30	1.153	0.07	0.285	0.329
	LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced power level 2/4	26965	841.5	18.63	19.30	1.167	0.08	0.280	0.327
	LTE Band 26_UAT	15M	QPSK	36	20	Right Cheek	Reduced power level 2/4	26865	831.5	18.52	19.30	1.197	0.17	0.182	0.218
	LTE Band 26_UAT	15M	QPSK	36	20	Right Tilted	Reduced power level 2/4	26865	831.5	18.52	19.30	1.197	0.05	0.071	0.085
	LTE Band 26_UAT	15M	QPSK	36	20	Left Cheek	Reduced power level 2/4	26865	831.5	18.52	19.30	1.197	0.09	0.283	0.339
	LTE Band 26_UAT	15M	QPSK	36	20	Left Tilted	Reduced power level 2/4	26865	831.5	18.52	19.30	1.197	0.12	0.042	0.050
	LTE Band 26_LAT	15M	QPSK	1	0	Right Cheek	Full	26865	831.5	23.12	23.80	1.169	0.07	0.104	0.122
	LTE Band 26_LAT	15M	QPSK	1	0	Right Tilted	Full	26865	831.5	23.12	23.80	1.169	0.01	0.067	0.078
	LTE Band 26_LAT	15M	QPSK	1	0	Left Cheek	Full	26865	831.5	23.12	23.80	1.169	0.08	0.124	0.145
	LTE Band 26_LAT	15M	QPSK	1	0	Left Tilted	Full	26865	831.5	23.12	23.80	1.169	0.03	0.066	0.077
	LTE Band 26_LAT	15M	QPSK	1	0	Left Cheek	Full	26765	821.5	22.98	23.80	1.208	0.16	0.114	0.138
	LTE Band 26_LAT	15M	QPSK	1	0	Left Cheek	Full	26965	841.5	23.08	23.80	1.180	0.07	0.111	0.131
	LTE Band 26_LAT	15M	QPSK	36	20	Right Cheek	Full	26865	831.5	22.25	22.80	1.135	-0.08	0.085	0.096
	LTE Band 26_LAT	15M	QPSK	36	20	Right Tilted	Full	26865	831.5	22.25	22.80	1.135	-0.07	0.056	0.064
	LTE Band 26_LAT	15M	QPSK	36	20	Left Cheek	Full	26865	831.5	22.25	22.80	1.135	0.17	0.108	0.123
	LTE Band 26_LAT	15M	QPSK	36	20	Left Tilted	Full	26865	831.5	22.25	22.80	1.135	0.09	0.057	0.065



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 1/3	132322	1745	12.93	13.80	1.222	0.02	0.458	0.560
	LTE Band 66_UAT	20M	QPSK	1	0	Right Tilted	Reduced power level 1/3	132322	1745	12.93	13.80	1.222	0.03	0.498	0.608
	LTE Band 66_UAT	20M	QPSK	1	0	Left Cheek	Reduced power level 1/3	132322	1745	12.93	13.80	1.222	-0.03	0.291	0.356
	LTE Band 66_UAT	20M	QPSK	1	0	Left Tilted	Reduced power level 1/3	132322	1745	12.93	13.80	1.222	0.18	0.361	0.441
	LTE Band 66_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/3	132322	1745	12.82	13.80	1.253	-0.16	0.497	0.623
	LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	132322	1745	12.82	13.80	1.253	0.09	0.567	0.711
	LTE Band 66_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 1/3	132322	1745	12.82	13.80	1.253	0.16	0.316	0.396
	LTE Band 66_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 1/3	132322	1745	12.82	13.80	1.253	0.01	0.414	0.519
	LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	132072	1720	12.80	13.80	1.259	0.18	0.587	0.739
14	LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	132572	1770	12.81	13.80	1.256	0.12	0.632	0.794
	LTE Band 66C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	132322	1745	12.78	13.80	1.265	0.01	0.605	0.765
	LTE Band 66C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	132072	1720	12.62	13.80	1.312	0.05	0.484	0.635
	LTE Band 66C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	132572	1770	12.71	13.80	1.285	0.01	0.547	0.703
	LTE Band 66_UAT	20M	QPSK	1	0	Right Cheek	Reduced power level 2/4	132322	1745	11.93	12.80	1.222	0.17	0.354	0.433
	LTE Band 66_UAT	20M	QPSK	1	0	Right Tilted	Reduced power level 2/4	132322	1745	11.93	12.80	1.222	0.09	0.415	0.507
	LTE Band 66_UAT	20M	QPSK	1	0	Left Cheek	Reduced power level 2/4	132322	1745	11.93	12.80	1.222	0.08	0.277	0.338
	LTE Band 66_UAT	20M	QPSK	1	0	Left Tilted	Reduced power level 2/4	132322	1745	11.93	12.80	1.222	-0.14	0.326	0.398
	LTE Band 66_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 2/4	132322	1745	11.82	12.80	1.253	-0.04	0.390	0.489
	LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	132322	1745	11.82	12.80	1.253	-0.13	0.441	0.553
	LTE Band 66_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 2/4	132322	1745	11.82	12.80	1.253	0.02	0.315	0.395
	LTE Band 66_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 2/4	132322	1745	11.82	12.80	1.253	0.04	0.389	0.487
	LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	132072	1720	11.80	12.80	1.259	0.09	0.428	0.539
	LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	132572	1770	11.81	12.80	1.256	-0.17	0.533	0.669
	LTE Band 66C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	132322	1745	11.78	12.80	1.265	-0.08	0.504	0.637
	LTE Band 66C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	132072	1720	11.64	12.80	1.306	0.02	0.406	0.530
	LTE Band 66C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	132572	1770	11.71	12.80	1.285	0.01	0.447	0.575
	LTE Band 66_LAT	20M	QPSK	1	0	Right Cheek	Full	132322	1745	23.18	23.80	1.153	0.14	0.284	0.328
	LTE Band 66_LAT	20M	QPSK	1	0	Right Tilted	Full	132322	1745	23.18	23.80	1.153	0.09	0.126	0.145
	LTE Band 66_LAT	20M	QPSK	1	0	Left Cheek	Full	132322	1745	23.18	23.80	1.153	-0.09	0.272	0.314
	LTE Band 66_LAT	20M	QPSK	1	0	Left Tilted	Full	132322	1745	23.18	23.80	1.153	0.07	0.119	0.137
	LTE Band 66_LAT	20M	QPSK	1	0	Right Cheek	Full	132072	1720	22.79	23.80	1.262	0.04	0.287	0.362
	LTE Band 66_LAT	20M	QPSK	1	0	Right Cheek	Full	132572	1770	22.88	23.80	1.236	0.18	0.307	0.379
	LTE Band 66C_LAT	20M	QPSK	1	0	Right Cheek	Full	132322	1745	21.49	22.80	1.352	0.03	0.170	0.230
	LTE Band 66C_LAT	20M	QPSK	1	0	Right Cheek	Full	132072	1720	21.16	22.80	1.459	-0.08	0.146	0.213
	LTE Band 66C_LAT	20M	QPSK	1	0	Right Cheek	Full	132572	1770	21.29	22.80	1.416	0.04	0.164	0.232
	LTE Band 66_LAT	20M	QPSK	50	24	Right Cheek	Full	132322	1745	22.29	22.80	1.125	0.17	0.221	0.249
	LTE Band 66_LAT	20M	QPSK	50	24	Right Tilted	Full	132322	1745	22.29	22.80	1.125	0.02	0.110	0.124
	LTE Band 66_LAT	20M	QPSK	50	24	Left Cheek	Full	132322	1745	22.29	22.80	1.125	-0.09	0.188	0.211
	LTE Band 66_LAT	20M	QPSK	50	24	Left Tilted	Full	132322	1745	22.29	22.80	1.125	0.11	0.095	0.107



FCC SAR TEST REPORT

Report No. : FA9N2009-01

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	49	Right Cheek	Reduced power level 1/3	26340	1880	12.60	13.30	1.175	0.02	0.437	0.513
	LTE Band 25_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1/3	26340	1880	12.60	13.30	1.175	0.14	0.523	0.614
	LTE Band 25_UAT	20M	QPSK	1	49	Left Cheek	Reduced power level 1/3	26340	1880	12.60	13.30	1.175	-0.16	0.348	0.409
	LTE Band 25_UAT	20M	QPSK	1	49	Left Tilted	Reduced power level 1/3	26340	1880	12.60	13.30	1.175	0.12	0.411	0.483
	LTE Band 25_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/3	26340	1880	12.34	13.30	1.247	-0.11	0.433	0.540
15	LTE Band 25_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	26340	1880	12.34	13.30	1.247	0.11	0.517	0.645
	LTE Band 25_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 1/3	26340	1880	12.34	13.30	1.247	0.03	0.320	0.399
	LTE Band 25_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 1/3	26340	1880	12.34	13.30	1.247	0.06	0.411	0.513
	LTE Band 25_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	26140	1860	12.26	13.30	1.271	0.08	0.504	0.640
	LTE Band 25_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	26590	1905	12.32	13.30	1.253	0.03	0.505	0.633
	LTE Band 25_UAT	20M	QPSK	1	49	Right Cheek	Reduced power level 2/4	26340	1880	11.37	12.30	1.239	0.11	0.307	0.380
	LTE Band 25_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 2/4	26340	1880	11.37	12.30	1.239	0.07	0.361	0.447
	LTE Band 25_UAT	20M	QPSK	1	49	Left Cheek	Reduced power level 2/4	26340	1880	11.37	12.30	1.239	-0.02	0.171	0.212
	LTE Band 25_UAT	20M	QPSK	1	49	Left Tilted	Reduced power level 2/4	26340	1880	11.37	12.30	1.239	0.13	0.235	0.291
	LTE Band 25_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 2/4	26340	1880	11.25	12.30	1.274	-0.07	0.327	0.416
	LTE Band 25_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	26340	1880	11.25	12.30	1.274	0.09	0.404	0.514
	LTE Band 25_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 2/4	26340	1880	11.25	12.30	1.274	0.02	0.201	0.256
	LTE Band 25_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 2/4	26340	1880	11.25	12.30	1.274	0.13	0.255	0.325
	LTE Band 25_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	26140	1860	11.11	12.30	1.315	0.19	0.328	0.431
	LTE Band 25_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	26590	1905	11.20	12.30	1.288	-0.07	0.369	0.475
	LTE Band 25_LAT	20M	QPSK	1	0	Right Cheek	Full	26340	1880	23.19	23.80	1.151	-0.08	0.286	0.329
	LTE Band 25_LAT	20M	QPSK	1	0	Right Tilted	Full	26340	1880	23.19	23.80	1.151	0.04	0.169	0.194
	LTE Band 25_LAT	20M	QPSK	1	0	Left Cheek	Full	26340	1880	23.19	23.80	1.151	0.17	0.176	0.203
	LTE Band 25_LAT	20M	QPSK	1	0	Left Tilted	Full	26340	1880	23.19	23.80	1.151	0.02	0.132	0.152
	LTE Band 25_LAT	20M	QPSK	1	0	Right Cheek	Full	26140	1860	23.09	23.80	1.178	0.05	0.359	0.423
	LTE Band 25_LAT	20M	QPSK	1	0	Right Cheek	Full	26590	1905	23.12	23.80	1.169	0.13	0.316	0.370
	LTE Band 25_LAT	20M	QPSK	50	24	Right Cheek	Full	26340	1880	22.25	22.80	1.135	0.03	0.224	0.254
	LTE Band 25_LAT	20M	QPSK	50	24	Right Tilted	Full	26340	1880	22.25	22.80	1.135	0.09	0.130	0.148
	LTE Band 25_LAT	20M	QPSK	50	24	Left Cheek	Full	26340	1880	22.25	22.80	1.135	-0.18	0.138	0.157
	LTE Band 25_LAT	20M	QPSK	50	24	Left Tilted	Full	26340	1880	22.25	22.80	1.135	0.11	0.094	0.107
	LTE Band 30_UAT	10M	QPSK	1	0	Right Cheek	Reduced power level 1/3	27710	2310	12.18	13.60	1.387	-0.09	0.434	0.602
	LTE Band 30_UAT	10M	QPSK	1	0	Right Tilted	Reduced power level 1/3	27710	2310	12.18	13.60	1.387	0.15	0.613	0.850
	LTE Band 30_UAT	10M	QPSK	1	0	Left Cheek	Reduced power level 1/3	27710	2310	12.18	13.60	1.387	0.06	0.324	0.449
	LTE Band 30_UAT	10M	QPSK	1	0	Left Tilted	Reduced power level 1/3	27710	2310	12.18	13.60	1.387	0.02	0.399	0.553
	LTE Band 30_UAT	10M	QPSK	25	12	Right Cheek	Reduced power level 1/3	27710	2310	12.06	13.60	1.426	-0.14	0.445	0.634
16	LTE Band 30_UAT	10M	QPSK	25	12	Right Tilted	Reduced power level 1/3	27710	2310	12.06	13.60	1.426	0.15	0.635	0.905
	LTE Band 30_UAT	10M	QPSK	25	12	Left Cheek	Reduced power level 1/3	27710	2310	12.06	13.60	1.426	0.08	0.321	0.458
	LTE Band 30_UAT	10M	QPSK	25	12	Left Tilted	Reduced power level 1/3	27710	2310	12.06	13.60	1.426	0.13	0.385	0.549
	LTE Band 30_UAT	10M	QPSK	50	0	Right Tilted	Reduced power level 1/3	27710	2310	11.99	13.60	1.449	0.05	0.603	0.874
	LTE Band 30_UAT	10M	QPSK	1	0	Right Cheek	Reduced power level 2/4	27710	2310	10.68	12.10	1.387	0.13	0.392	0.544
	LTE Band 30_UAT	10M	QPSK	1	0	Right Tilted	Reduced power level 2/4	27710	2310	10.68	12.10	1.387	0.05	0.405	0.562
	LTE Band 30_UAT	10M	QPSK	1	0	Left Cheek	Reduced power level 2/4	27710	2310	10.68	12.10	1.387	-0.09	0.312	0.433
	LTE Band 30_UAT	10M	QPSK	1	0	Left Tilted	Reduced power level 2/4	27710	2310	10.68	12.10	1.387	0.11	0.358	0.496
	LTE Band 30_UAT	10M	QPSK	25	12	Right Cheek	Reduced power level 2/4	27710	2310	10.56	12.10	1.426	0.13	0.396	0.565
	LTE Band 30_UAT	10M	QPSK	25	12	Right Tilted	Reduced power level 2/4	27710	2310	10.56	12.10	1.426	0.02	0.462	0.659
	LTE Band 30_UAT	10M	QPSK	25	12	Left Cheek	Reduced power level 2/4	27710	2310	10.56	12.10	1.426	0.04	0.336	0.479
	LTE Band 30_UAT	10M	QPSK	25	12	Left Tilted	Reduced power level 2/4	27710	2310	10.56	12.10	1.426	0.1	0.382	0.545
	LTE Band 30_LAT	10M	QPSK	1	0	Right Cheek	Full	27710	2310	22.12	23.80	1.472	-0.11	0.151	0.222
	LTE Band 30_LAT	10M	QPSK	1	0	Right Tilted	Full	27710	2310	22.12	23.80	1.472	-0.08	0.110	0.162
	LTE Band 30_LAT	10M	QPSK	1	0	Left Cheek	Full	27710	2310	22.12	23.80	1.472	0.13	0.243	0.358
	LTE Band 30_LAT	10M	QPSK	1	0	Left Tilted	Full	27710	2310	22.12	23.80	1.472	0.06	0.111	0.163
	LTE Band 30_LAT	10M	QPSK	25	12	Right Cheek	Full	27710	2310	21.08	22.80	1.486	0.07	0.123	0.183
	LTE Band 30_LAT	10M	QPSK	25	12	Right Tilted	Full	27710	2310	21.08	22.80	1.486	-0.19	0.091	0.135
	LTE Band 30_LAT	10M	QPSK	25	12	Left Cheek	Full	27710	2310	21.08	22.80	1.486	0.16	0.152	0.226
	LTE Band 30_LAT	10M	QPSK	25	12	Left Tilted	Full	27710	2310	21.08	22.80	1.486	0.11	0.081	0.120



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	49	Right Cheek	Reduced power level 1/3	20850	2510	13.43	14.10	1.167	0.11	0.702	0.819
	LTE Band 7_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1/3	20850	2510	13.43	14.10	1.167	0.05	0.724	0.845
	LTE Band 7_UAT	20M	QPSK	1	49	Left Cheek	Reduced power level 1/3	20850	2510	13.43	14.10	1.167	0.09	0.397	0.463
	LTE Band 7_UAT	20M	QPSK	1	49	Left Tilted	Reduced power level 1/3	20850	2510	13.43	14.10	1.167	-0.06	0.448	0.523
	LTE Band 7_UAT	20M	QPSK	1	49	Right Cheek	Reduced power level 1/3	21100	2535	13.33	14.10	1.194	-0.03	0.683	0.815
	LTE Band 7_UAT	20M	QPSK	1	49	Right Cheek	Reduced power level 1/3	21350	2560	13.31	14.10	1.199	0.07	0.645	0.774
	LTE Band 7_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1/3	21100	2535	13.33	14.10	1.194	0.02	0.685	0.818
	LTE Band 7_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1/3	21350	2560	13.31	14.10	1.199	0.01	0.676	0.811
	LTE Band 7_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/3	20850	2510	13.22	14.10	1.225	0.13	0.712	0.872
17	LTE Band 7_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	20850	2510	13.22	14.10	1.225	0.08	0.759	0.929
	LTE Band 7_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 1/3	20850	2510	13.22	14.10	1.225	-0.15	0.412	0.505
	LTE Band 7_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 1/3	20850	2510	13.22	14.10	1.225	0.02	0.471	0.577
	LTE Band 7_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/3	21100	2535	13.10	14.10	1.259	0.06	0.681	0.857
	LTE Band 7_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/3	21350	2560	13.01	14.10	1.285	-0.03	0.633	0.814
	LTE Band 7_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	21100	2535	13.10	14.10	1.259	0.14	0.678	0.854
	LTE Band 7_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/3	21350	2560	13.01	14.10	1.285	0.07	0.721	0.927
	LTE Band 7_UAT	20M	QPSK	100	0	Right Cheek	Reduced power level 1/3	20850	2510	13.11	14.10	1.256	0.05	0.650	0.816
	LTE Band 7_UAT	20M	QPSK	100	0	Right Tilted	Reduced power level 1/3	20850	2510	13.11	14.10	1.256	0.16	0.712	0.894
	LTE Band 7_UAT	20M	QPSK	1	49	Right Cheek	Reduced power level 2/4	20850	2510	11.73	12.60	1.222	0.11	0.467	0.571
	LTE Band 7_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 2/4	20850	2510	11.73	12.60	1.222	0.07	0.504	0.616
	LTE Band 7_UAT	20M	QPSK	1	49	Left Cheek	Reduced power level 2/4	20850	2510	11.73	12.60	1.222	0.03	0.292	0.357
	LTE Band 7_UAT	20M	QPSK	1	49	Left Tilted	Reduced power level 2/4	20850	2510	11.73	12.60	1.222	0.05	0.340	0.415
	LTE Band 7_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 2/4	20850	2510	11.52	12.60	1.282	0.01	0.510	0.654
	LTE Band 7_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	20850	2510	11.52	12.60	1.282	0.01	0.534	0.685
	LTE Band 7_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 2/4	20850	2510	11.52	12.60	1.282	0.19	0.310	0.398
	LTE Band 7_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 2/4	20850	2510	11.52	12.60	1.282	0.05	0.366	0.469
	LTE Band 7_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	21100	2535	11.40	12.60	1.318	0.02	0.490	0.646
	LTE Band 7_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/4	21350	2560	11.31	12.60	1.346	0.04	0.470	0.633
	LTE Band 7_LAT	20M	QPSK	1	49	Right Cheek	Full	20850	2510	22.30	23.80	1.413	-0.05	0.131	0.185
	LTE Band 7_LAT	20M	QPSK	1	49	Right Tilted	Full	20850	2510	22.30	23.80	1.413	0.03	0.072	0.102
	LTE Band 7_LAT	20M	QPSK	1	49	Left Cheek	Full	20850	2510	22.30	23.80	1.413	0.05	0.162	0.229
	LTE Band 7_LAT	20M	QPSK	1	49	Left Tilted	Full	20850	2510	22.30	23.80	1.413	0.08	0.079	0.112
	LTE Band 7_LAT	20M	QPSK	1	49	Left Cheek	Full	21100	2535	22.12	23.80	1.472	0.02	0.151	0.222
	LTE Band 7_LAT	20M	QPSK	1	49	Left Cheek	Full	21350	2560	22.10	23.80	1.479	0.01	0.135	0.200
	LTE Band 7_LAT	20M	QPSK	50	24	Right Cheek	Full	20850	2510	21.35	22.80	1.396	0.06	0.105	0.147
	LTE Band 7_LAT	20M	QPSK	50	24	Right Tilted	Full	20850	2510	21.35	22.80	1.396	0.02	0.059	0.082
	LTE Band 7_LAT	20M	QPSK	50	24	Left Cheek	Full	20850	2510	21.35	22.80	1.396	-0.09	0.131	0.183
	LTE Band 7_LAT	20M	QPSK	50	24	Left Tilted	Full	20850	2510	21.35	22.80	1.396	0.02	0.064	0.089



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_UAT	20M	QPSK	1	49	Right Cheek	Reduced power level 1	40620	2593	15.42	16.10	1.169	62.9	1.006	0.02	0.505	0.594
	LTE Band 41_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1	40620	2593	15.42	16.10	1.169	62.9	1.006	0.16	0.518	0.609
	LTE Band 41_UAT	20M	QPSK	1	49	Left Cheek	Reduced power level 1	40620	2593	15.42	16.10	1.169	62.9	1.006	-0.11	0.245	0.288
	LTE Band 41_UAT	20M	QPSK	1	49	Left Tilted	Reduced power level 1	40620	2593	15.42	16.10	1.169	62.9	1.006	-0.09	0.275	0.324
	LTE Band 41_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1	39750	2506	15.10	16.10	1.259	62.9	1.006	0.05	0.603	0.764
	LTE Band 41_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1	40185	2549.5	15.17	16.10	1.239	62.9	1.006	0.06	0.501	0.624
	LTE Band 41_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1	41055	2636.5	15.29	16.10	1.205	62.9	1.006	0.03	0.519	0.629
	LTE Band 41_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1	41490	2680	15.34	16.10	1.191	62.9	1.006	0.02	0.562	0.673
	LTE Band 41_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1	40620	2593	15.36	16.10	1.186	62.9	1.006	0.18	0.510	0.608
	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	40620	2593	15.36	16.10	1.186	62.9	1.006	-0.06	0.523	0.624
	LTE Band 41_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 1	40620	2593	15.36	16.10	1.186	62.9	1.006	0.14	0.250	0.298
	LTE Band 41_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 1	40620	2593	15.36	16.10	1.186	62.9	1.006	-0.02	0.282	0.336
	LTE Band 41_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1	39750	2506	15.00	16.10	1.288	62.9	1.006	0.19	0.572	0.741
	LTE Band 41_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1	40185	2549.5	15.24	16.10	1.219	62.9	1.006	0.11	0.584	0.716
	LTE Band 41_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1	41055	2636.5	15.32	16.10	1.197	62.9	1.006	0.02	0.495	0.596
	LTE Band 41_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1	41490	2680	15.33	16.10	1.194	62.9	1.006	0.040	0.601	0.722
	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	39750	2506	15.00	16.10	1.288	62.9	1.006	0.16	0.639	0.828
	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	40185	2549.5	15.24	16.10	1.219	62.9	1.006	0.16	0.631	0.774
	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	41055	2636.5	15.32	16.10	1.197	62.9	1.006	0.04	0.572	0.689
18	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	41490	2680	15.33	16.10	1.194	62.9	1.006	0.02	0.755	0.907
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	40620	2593	15.32	16.10	1.197	62.9	1.006	-0.05	0.469	0.565
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	39750	2506	15.08	16.10	1.265	62.9	1.006	0.06	0.488	0.621
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	40185	2549.5	15.12	16.10	1.253	62.9	1.006	0.07	0.489	0.616
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	41055	2636.5	15.23	16.10	1.222	62.9	1.006	0.02	0.524	0.644
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1	41490	2680	15.29	16.10	1.205	62.9	1.006	0.05	0.668	0.810
	LTE Band 41_UAT	20M	QPSK	100	0	Right Cheek	Reduced power level 1	40620	2593	15.35	16.10	1.189	62.9	1.006	0.18	0.505	0.604
	LTE Band 41_UAT	20M	QPSK	100	0	Right Tilted	Reduced power level 1	40620	2593	15.35	16.10	1.189	62.9	1.006	0.11	0.550	0.658
	LTE Band 41_UAT	20M	QPSK	1	49	Right Cheek	Reduced power level 2/3/4	40620	2593	14.42	15.10	1.169	62.9	1.006	0.14	0.402	0.473
	LTE Band 41_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 2/3/4	40620	2593	14.42	15.10	1.169	62.9	1.006	0.05	0.408	0.480
	LTE Band 41_UAT	20M	QPSK	1	49	Left Cheek	Reduced power level 2/3/4	40620	2593	14.42	15.10	1.169	62.9	1.006	-0.13	0.230	0.271
	LTE Band 41_UAT	20M	QPSK	1	49	Left Tilted	Reduced power level 2/3/4	40620	2593	14.42	15.10	1.169	62.9	1.006	0.08	0.267	0.314
	LTE Band 41_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 2/3/4	40620	2593	14.36	15.10	1.186	62.9	1.006	0.17	0.412	0.491
	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	40620	2593	14.36	15.10	1.186	62.9	1.006	-0.08	0.469	0.559
	LTE Band 41_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 2/3/4	40620	2593	14.36	15.10	1.186	62.9	1.006	0.05	0.238	0.284
	LTE Band 41_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 2/3/4	40620	2593	14.36	15.10	1.186	62.9	1.006	0.03	0.263	0.314
	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	39750	2506	14.00	15.10	1.288	62.9	1.006	0.05	0.563	0.730
	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	40185	2549.5	14.24	15.10	1.219	62.9	1.006	0.08	0.534	0.655
	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	41055	2636.5	14.32	15.10	1.197	62.9	1.006	0.17	0.513	0.618
	LTE Band 41_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	41490	2680	14.33	15.10	1.194	62.9	1.006	0.17	0.622	0.747
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	40620	2593	14.38	15.10	1.180	62.9	1.006	-0.02	0.454	0.539
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	39750	2506	14.11	15.10	1.256	62.9	1.006	0.03	0.478	0.604
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	40185	2549.5	14.12	15.10	1.253	62.9	1.006	0.03	0.476	0.600
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	41055	2636.5	14.25	15.10	1.216	62.9	1.006	-0.15	0.512	0.626
	LTE Band 41C_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 2/3/4	41490	2680	14.32	15.10	1.197	62.9	1.006	0.11	0.562	0.677
	LTE Band 41_UAT	20M	QPSK	100	0	Right Tilted	Reduced power level 2/3/4	40620	2593	14.35	15.10	1.189	62.9	1.006	0.12	0.473	0.566
	LTE Band 41_LAT	20M	QPSK	1	49	Right Cheek	Full	40620	2593	22.19	23.80	1.449	62.9	1.006	0.02	0.077	0.112
	LTE Band 41_LAT	20M	QPSK	1	49	Right Tilted	Full	40620	2593	22.19	23.80	1.449	62.9	1.006	0.08	0.047	0.069
	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	40620	2593	22.19	23.80	1.449	62.9	1.006	-0.11	0.102	0.149
	LTE Band 41_LAT	20M	QPSK	1	49	Left Tilted	Full	40620	2593	22.19	23.80	1.449	62.9	1.006	-0.13	0.048	0.070
	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	39750	2506	22.11	23.80	1.476	62.9	1.006	0.09	0.120	0.178
	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	40185	2549.5	22.02	23.80	1.507	62.9	1.006	-0.14	0.125	0.189



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	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	41055	2636.5	22.08	23.80	1.486	62.9	1.006	0.07	0.070	0.105
	LTE Band 41_LAT	20M	QPSK	1	49	Left Cheek	Full	41490	2680	22.18	23.80	1.452	62.9	1.006	0.15	0.082	0.120
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	40620	2593	22.08	23.80	1.486	62.9	1.006	-0.08	0.095	0.142
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	39750	2506	21.96	23.80	1.528	62.9	1.006	0.11	0.065	0.100
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	40185	2549.5	21.98	23.80	1.521	62.9	1.006	0.06	0.079	0.121
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	41055	2636.5	22.02	23.80	1.507	62.9	1.006	0.09	0.064	0.097
	LTE Band 41C_LAT	20M	QPSK	1	49	Left Cheek	Full	41490	2680	22.06	23.80	1.493	62.9	1.006	0.08	0.063	0.095
	LTE Band 41_LAT	20M	QPSK	50	24	Right Cheek	Full	40620	2593	21.29	22.80	1.416	62.9	1.006	0.05	0.061	0.087
	LTE Band 41_LAT	20M	QPSK	50	24	Right Tilted	Full	40620	2593	21.29	22.80	1.416	62.9	1.006	0.09	0.025	0.036
	LTE Band 41_LAT	20M	QPSK	50	24	Left Cheek	Full	40620	2593	21.29	22.80	1.416	62.9	1.006	-0.04	0.085	0.121
	LTE Band 41_LAT	20M	QPSK	50	24	Left Tilted	Full	40620	2593	21.29	22.80	1.416	62.9	1.006	0.02	0.039	0.056
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	99	Right Cheek	Reduced power level 1/2/3/4	40620	2593	18.07	18.60	1.130	42.9	1.009	0.16	0.522	0.595
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	99	Right Tilted	Reduced power level 1/2/3/4	40620	2593	18.07	18.60	1.130	42.9	1.009	-0.06	0.548	0.625
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	99	Left Cheek	Reduced power level 1/2/3/4	40620	2593	18.07	18.60	1.130	42.9	1.009	0.08	0.259	0.295
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	99	Left Tilted	Reduced power level 1/2/3/4	40620	2593	18.07	18.60	1.130	42.9	1.009	0.13	0.289	0.329
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	99	Right Tilted	Reduced power level 1/2/3/4	39750	2506	17.92	18.60	1.169	42.9	1.009	0.11	0.617	0.728
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	99	Right Tilted	Reduced power level 1/2/3/4	40185	2549.5	17.87	18.60	1.183	42.9	1.009	0.02	0.632	0.754
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	99	Right Tilted	Reduced power level 1/2/3/4	41055	2636.5	17.83	18.60	1.194	42.9	1.009	-0.08	0.588	0.708
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	99	Right Tilted	Reduced power level 1/2/3/4	41490	2680	18.06	18.60	1.132	42.9	1.009	0.19	0.672	0.768
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/2/3/4	40620	2593	18.02	18.60	1.143	42.9	1.009	-0.06	0.589	0.679
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	40620	2593	18.02	18.60	1.143	42.9	1.009	0.08	0.593	0.684
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 1/2/3/4	40620	2593	18.02	18.60	1.143	42.9	1.009	0.15	0.289	0.333
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 1/2/3/4	40620	2593	18.02	18.60	1.143	42.9	1.009	0.11	0.334	0.385
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/2/3/4	39750	2506	17.68	18.60	1.236	42.9	1.009	-0.05	0.612	0.763
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/2/3/4	40185	2549.5	17.71	18.60	1.227	42.9	1.009	0.07	0.619	0.767
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/2/3/4	41055	2636.5	17.81	18.60	1.199	42.9	1.009	0.01	0.529	0.640
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/2/3/4	41490	2680	17.78	18.60	1.208	42.9	1.009	0.06	0.699	0.852
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	39750	2506	17.68	18.60	1.236	42.9	1.009	0.03	0.617	0.769
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	40185	2549.5	17.71	18.60	1.227	42.9	1.009	-0.02	0.625	0.774
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	41055	2636.5	17.81	18.60	1.199	42.9	1.009	0.16	0.596	0.721
19	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	41490	2680	17.78	18.60	1.208	42.9	1.009	-0.02	0.725	0.884
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	40620	2593	18.01	18.60	1.146	42.9	1.009	-0.06	0.537	0.621
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	39750	2506	17.85	18.60	1.189	42.9	1.009	-0.05	0.614	0.736
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	40185	2549.5	17.75	18.60	1.216	42.9	1.009	0.08	0.541	0.664
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	41055	2636.5	17.81	18.60	1.199	42.9	1.009	0.05	0.469	0.568
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	41490	2680	17.95	18.60	1.161	42.9	1.009	0.01	0.586	0.687
	LTE Band 41(HPUE)_UAT	20M	QPSK	100	0	Right Cheek	Reduced power level 1/2/3/4	40620	2593	17.92	18.60	1.169	42.9	1.009	0.06	0.565	0.667
	LTE Band 41(HPUE)_UAT	20M	QPSK	100	0	Right Tilted	Reduced power level 1/2/3/4	40620	2593	17.92	18.60	1.169	42.9	1.009	-0.17	0.588	0.694
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Right Cheek	Full	40620	2593	25.40	26.30	1.230	42.9	1.009	0.06	0.078	0.097
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Right Tilted	Full	40620	2593	25.40	26.30	1.230	42.9	1.009	-0.02	0.048	0.060
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	40620	2593	25.40	26.30	1.230	42.9	1.009	0.05	0.102	0.127
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Left Tilted	Full	40620	2593	25.40	26.30	1.230	42.9	1.009	-0.07	0.053	0.066
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	39750	2506	25.14	26.30	1.306	42.9	1.009	0.05	0.122	0.161
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	40185	2549.5	24.99	26.30	1.352	42.9	1.009	0.01	0.125	0.171
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	41055	2636.5	25.10	26.30	1.318	42.9	1.009	0.09	0.076	0.101
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	41490	2680	25.10	26.30	1.318	42.9	1.009	0.02	0.093	0.124
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	40620	2593	25.29	26.30	1.262	42.9	1.009	-0.08	0.086	0.109
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	39750	2506	25.19	26.30	1.291	42.9	1.009	0.09	0.084	0.109
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	40185	2549.5	24.95	26.30	1.365	42.9	1.009	0.11	0.095	0.131
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	41055	2636.5	25.06	26.30	1.330	42.9	1.009	0.08	0.076	0.102
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Left Cheek	Full	41490	2680	25.09	26.30	1.321	42.9	1.009	0.02	0.069	0.092
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Right Cheek	Full	40620	2593	24.60	25.30	1.175	42.9	1.009	0.08	0.070	0.083
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Right Tilted	Full	40620	2593	24.60	25.30	1.175	42.9	1.009	0.11	0.041	0.049
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Left Cheek	Full	40620	2593	24.60	25.30	1.175	42.9	1.009	0.03	0.090	0.107
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Left Tilted	Full	40620	2593	24.60	25.30	1.175	42.9	1.009	0.04	0.046	0.055
	LTE Band 48_UAT	20M	QPSK	1	49	Right Cheek	Reduced power level 1/2/3/4	55830	3609	14.41	14.80	1.094	62.9	1.006	0.12	0.502	0.552



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	LTE Band 48_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1/2/3/4	55830	3609	14.41	14.80	1.094	62.9	1.006	-0.11	0.672	0.740
	LTE Band 48_UAT	20M	QPSK	1	49	Left Cheek	Reduced power level 1/2/3/4	55830	3609	14.41	14.80	1.094	62.9	1.006	0.13	0.286	0.315
	LTE Band 48_UAT	20M	QPSK	1	49	Left Tilted	Reduced power level 1/2/3/4	55830	3609	14.41	14.80	1.094	62.9	1.006	-0.09	0.329	0.362
20	LTE Band 48_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1/2/3/4	55340	3560	14.22	14.80	1.143	62.9	1.006	-0.06	0.693	0.797
	LTE Band 48_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1/2/3/4	56150	3641	14.23	14.80	1.140	62.9	1.006	0.14	0.685	0.786
	LTE Band 48_UAT	20M	QPSK	1	49	Right Tilted	Reduced power level 1/2/3/4	56640	3690	14.30	14.80	1.122	62.9	1.006	0.18	0.669	0.755
	LTE Band 48C_UAT	20M	QPSK	100	0	Right Tilted	Reduced power level 1/2/3/4	55830	3609	14.25	14.80	1.135	62.9	1.006	0.03	0.621	0.709
	LTE Band 48C_UAT	20M	QPSK	100	0	Right Tilted	Reduced power level 1/2/3/4	55340	3560	14.07	14.80	1.183	62.9	1.006	-0.04	0.633	0.753
	LTE Band 48C_UAT	20M	QPSK	100	0	Right Tilted	Reduced power level 1/2/3/4	56150	3641	14.22	14.80	1.143	62.9	1.006	0.01	0.627	0.721
	LTE Band 48C_UAT	20M	QPSK	100	0	Right Tilted	Reduced power level 1/2/3/4	56640	3690	14.21	14.80	1.146	62.9	1.006	-0.11	0.615	0.709
	LTE Band 48_UAT	20M	QPSK	50	24	Right Cheek	Reduced power level 1/2/3/4	55830	3609	14.39	14.80	1.099	62.9	1.006	-0.19	0.491	0.543
	LTE Band 48_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	55830	3609	14.39	14.80	1.099	62.9	1.006	0.08	0.559	0.618
	LTE Band 48_UAT	20M	QPSK	50	24	Left Cheek	Reduced power level 1/2/3/4	55830	3609	14.39	14.80	1.099	62.9	1.006	0.02	0.263	0.291
	LTE Band 48_UAT	20M	QPSK	50	24	Left Tilted	Reduced power level 1/2/3/4	55830	3609	14.39	14.80	1.099	62.9	1.006	0.14	0.294	0.325
	LTE Band 48_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	55340	3560	14.21	14.80	1.146	62.9	1.006	0.16	0.656	0.756
	LTE Band 48_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	56150	3641	14.28	14.80	1.127	62.9	1.006	0.17	0.660	0.748
	LTE Band 48_UAT	20M	QPSK	50	24	Right Tilted	Reduced power level 1/2/3/4	56640	3690	14.29	14.80	1.125	62.9	1.006	0.08	0.662	0.749
	LTE Band 48_UAT	20M	QPSK	100	0	Right Tilted	Reduced power level 1/2/3/4	55830	3609	14.30	14.80	1.122	62.9	1.006	0.06	0.488	0.551



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	N2_UAT	20M	QPSK	1	1	DFT-15	Right Cheek	Reduced power level 1	380000	1900	15.59	16.50	1.233	-0.03	0.550	0.678
21	N2_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 1	380000	1900	15.59	16.50	1.233	-0.18	0.575	0.709
	N2_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 1	372000	1860	15.12	16.50	1.374	0.02	0.474	0.651
	N2_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 1	376000	1880	15.26	16.50	1.330	0.01	0.512	0.681
	N2_UAT	20M	QPSK	1	1	DFT-15	Left Cheek	Reduced power level 1	380000	1900	15.59	16.50	1.233	0.06	0.375	0.462
	N2_UAT	20M	QPSK	1	1	DFT-15	Left Tilted	Reduced power level 1	380000	1900	15.59	16.50	1.233	0.07	0.445	0.549
	N2_UAT	20M	QPSK	50	28	DFT-15	Right Cheek	Reduced power level 1	380000	1900	15.55	16.50	1.245	0.06	0.526	0.655
	N2_UAT	20M	QPSK	50	28	DFT-15	Right Tilted	Reduced power level 1	380000	1900	15.55	16.50	1.245	0.03	0.550	0.684
	N2_UAT	20M	QPSK	50	28	DFT-15	Left Cheek	Reduced power level 1	380000	1900	15.55	16.50	1.245	0.01	0.352	0.438
	N2_UAT	20M	QPSK	50	28	DFT-15	Left Tilted	Reduced power level 1	380000	1900	15.55	16.50	1.245	0.01	0.412	0.513
	N2_UAT	20M	QPSK	1	1	DFT-15	Right Cheek	Reduced power level 2/3	380000	1900	14.28	15.00	1.180	-0.09	0.402	0.474
	N2_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 2/3	380000	1900	14.28	15.00	1.180	-0.06	0.435	0.513
	N2_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 2/3	372000	1860	13.81	15.00	1.315	0.02	0.364	0.479
	N2_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 2/3	376000	1880	13.95	15.00	1.274	-0.03	0.383	0.488
	N2_UAT	20M	QPSK	1	1	DFT-15	Left Cheek	Reduced power level 2/3	380000	1900	14.28	15.00	1.180	0.05	0.293	0.346
	N2_UAT	20M	QPSK	1	1	DFT-15	Left Tilted	Reduced power level 2/3	380000	1900	14.28	15.00	1.180	0.01	0.329	0.388
	N2_UAT	20M	QPSK	50	28	DFT-15	Right Cheek	Reduced power level 2/3	380000	1900	14.24	15.00	1.191	-0.05	0.390	0.465
	N2_UAT	20M	QPSK	50	28	DFT-15	Right Tilted	Reduced power level 2/3	380000	1900	14.24	15.00	1.191	0.08	0.402	0.479
	N2_UAT	20M	QPSK	50	28	DFT-15	Left Cheek	Reduced power level 2/3	380000	1900	14.24	15.00	1.191	0.01	0.282	0.336
	N2_UAT	20M	QPSK	50	28	DFT-15	Left Tilted	Reduced power level 2/3	380000	1900	14.24	15.00	1.191	0.08	0.312	0.372
	N2_LAT	20M	QPSK	1	1	DFT-15	Right Cheek	Full	380000	1900	23.03	24.30	1.340	-0.04	0.113	0.151
	N2_LAT	20M	QPSK	1	1	DFT-15	Right Cheek	Full	372000	1860	22.55	24.30	1.496	0.01	0.116	0.174
	N2_LAT	20M	QPSK	1	1	DFT-15	Right Cheek	Full	376000	1880	22.78	24.30	1.419	0.06	0.113	0.160
	N2_LAT	20M	QPSK	1	1	DFT-15	Right Tilted	Full	380000	1900	23.03	24.30	1.340	0.01	0.096	0.129
	N2_LAT	20M	QPSK	1	1	DFT-15	Left Cheek	Full	380000	1900	23.03	24.30	1.340	0.03	0.102	0.137
	N2_LAT	20M	QPSK	1	1	DFT-15	Left Tilted	Full	380000	1900	23.03	24.30	1.340	0.03	0.078	0.104
	N2_LAT	20M	QPSK	50	28	DFT-15	Right Cheek	Full	380000	1900	22.82	24.30	1.406	0.11	0.111	0.156
	N2_LAT	20M	QPSK	50	28	DFT-15	Right Tilted	Full	380000	1900	22.82	24.30	1.406	0.03	0.090	0.127
	N2_LAT	20M	QPSK	50	28	DFT-15	Left Cheek	Full	380000	1900	22.82	24.30	1.406	0.15	0.100	0.141
	N2_LAT	20M	QPSK	50	28	DFT-15	Left Tilted	Full	380000	1900	22.82	24.30	1.406	0.02	0.072	0.101
	N5_UAT	20M	QPSK	1	1	DFT-15	Right Cheek	Reduced power level 1	167300	836.5	21.36	22.30	1.242	0.07	0.263	0.327
	N5_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 1	167300	836.5	21.36	22.30	1.242	0.06	0.052	0.065
22	N5_UAT	20M	QPSK	1	1	DFT-15	Left Cheek	Reduced power level 1	167300	836.5	21.36	22.30	1.242	-0.09	0.416	0.517
	N5_UAT	20M	QPSK	1	1	DFT-15	Left Tilted	Reduced power level 1	167300	836.5	21.36	22.30	1.242	0.03	0.056	0.070
	N5_UAT	20M	QPSK	50	28	DFT-15	Right Cheek	Reduced power level 1	167300	836.5	21.23	22.30	1.279	-0.06	0.261	0.334
	N5_UAT	20M	QPSK	50	28	DFT-15	Right Tilted	Reduced power level 1	167300	836.5	21.23	22.30	1.279	0.02	0.044	0.056
	N5_UAT	20M	QPSK	50	28	DFT-15	Left Cheek	Reduced power level 1	167300	836.5	21.23	22.30	1.279	0.07	0.364	0.466
	N5_UAT	20M	QPSK	50	28	DFT-15	Left Tilted	Reduced power level 1	167300	836.5	21.23	22.30	1.279	0.09	0.054	0.069
	N5_UAT	20M	QPSK	1	1	DFT-15	Right Cheek	Reduced power level 2/3	167300	836.5	17.48	18.30	1.208	0.11	0.048	0.058
	N5_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 2/3	167300	836.5	17.48	18.30	1.208	0.06	0.001	0.001
	N5_UAT	20M	QPSK	1	1	DFT-15	Left Cheek	Reduced power level 2/3	167300	836.5	17.48	18.30	1.208	0.15	0.100	0.121
	N5_UAT	20M	QPSK	1	1	DFT-15	Left Tilted	Reduced power level 2/3	167300	836.5	17.48	18.30	1.208	0.05	0.010	0.012
	N5_UAT	20M	QPSK	50	28	DFT-15	Right Cheek	Reduced power level 2/3	167300	836.5	17.38	18.30	1.236	0.06	0.044	0.054
	N5_UAT	20M	QPSK	50	28	DFT-15	Right Tilted	Reduced power level 2/3	167300	836.5	17.38	18.30	1.236	0.02	0.001	0.001
	N5_UAT	20M	QPSK	50	28	DFT-15	Left Cheek	Reduced power level 2/3	167300	836.5	17.38	18.30	1.236	-0.1	0.109	0.135
	N5_UAT	20M	QPSK	50	28	DFT-15	Left Tilted	Reduced power level 2/3	167300	836.5	17.38	18.30	1.236	0.04	0.010	0.012
	N5_LAT	20M	QPSK	1	1	DFT-15	Right Cheek	Full	167300	836.5	23.31	24.30	1.256	0.04	0.079	0.099
	N5_LAT	20M	QPSK	1	1	DFT-15	Right Tilted	Full	167300	836.5	23.31	24.30	1.256	0.06	0.051	0.064
	N5_LAT	20M	QPSK	1	1	DFT-15	Left Cheek	Full	167300	836.5	23.31	24.30	1.256	0.02	0.148	0.186
	N5_LAT	20M	QPSK	1	1	DFT-15	Left Tilted	Full	167300	836.5	23.31	24.30	1.256	0.07	0.055	0.069
	N5_LAT	20M	QPSK	50	28	DFT-15	Right Cheek	Full	167300	836.5	23.01	24.30	1.346	-0.06	0.085	0.114
	N5_LAT	20M	QPSK	50	28	DFT-15	Right Tilted	Full	167300	836.5	23.01	24.30	1.346	0.02	0.053	0.071
	N5_LAT	20M	QPSK	50	28	DFT-15	Left Cheek	Full	167300	836.5	23.01	24.30	1.346	0.01	0.135	0.182
	N5_LAT	20M	QPSK	50	28	DFT-15	Left Tilted	Full	167300	836.5	23.01	24.30	1.346	0.03	0.058	0.078



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_UAT	20M	QPSK	1	1	DFT-15	Right Cheek	Reduced power level 2	349000	1745	13.59	14.50	1.233	-0.09	0.193	0.238
	N66_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 2	349000	1745	13.59	14.50	1.233	0.02	0.223	0.275
	N66_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 2	344000	1720	13.52	14.50	1.253	0.03	0.201	0.252
	N66_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 2	354000	1770	13.53	14.50	1.250	0	0.239	0.299
	N66_UAT	20M	QPSK	1	1	DFT-15	Left Cheek	Reduced power level 2	349000	1745	13.59	14.50	1.233	0.04	0.149	0.184
	N66_UAT	20M	QPSK	1	1	DFT-15	Left Tilted	Reduced power level 2	349000	1745	13.59	14.50	1.233	0.01	0.179	0.221
	N66_UAT	20M	QPSK	50	28	DFT-15	Right Cheek	Reduced power level 2	349000	1745	13.48	14.50	1.265	-0.06	0.185	0.234
	N66_UAT	20M	QPSK	50	28	DFT-15	Right Tilted	Reduced power level 2	349000	1745	13.48	14.50	1.265	0.01	0.211	0.267
	N66_UAT	20M	QPSK	50	28	DFT-15	Left Cheek	Reduced power level 2	349000	1745	13.48	14.50	1.265	0.09	0.144	0.182
	N66_UAT	20M	QPSK	50	28	DFT-15	Left Tilted	Reduced power level 2	349000	1745	13.48	14.50	1.265	0.01	0.171	0.216
	N66_UAT	20M	QPSK	1	1	DFT-15	Right Cheek	Reduced power level 1/3	349000	1745	14.08	15.00	1.236	0.15	0.211	0.261
	N66_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 1/3	349000	1745	14.08	15.00	1.236	0.01	0.237	0.293
	N66_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 1/3	344000	1720	14.03	15.00	1.250	0.09	0.213	0.266
23	N66_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 1/3	354000	1770	14.07	15.00	1.239	-0.06	0.271	0.336
	N66_UAT	20M	QPSK	1	1	DFT-15	Left Cheek	Reduced power level 1/3	349000	1745	14.08	15.00	1.236	0.02	0.162	0.200
	N66_UAT	20M	QPSK	1	1	DFT-15	Left Tilted	Reduced power level 1/3	349000	1745	14.08	15.00	1.236	-0.05	0.167	0.206
	N66_UAT	20M	QPSK	50	28	DFT-15	Right Cheek	Reduced power level 1/3	349000	1745	13.92	15.00	1.282	-0.06	0.209	0.268
	N66_UAT	20M	QPSK	50	28	DFT-15	Right Tilted	Reduced power level 1/3	349000	1745	13.92	15.00	1.282	0.03	0.234	0.300
	N66_UAT	20M	QPSK	50	28	DFT-15	Left Cheek	Reduced power level 1/3	349000	1745	13.92	15.00	1.282	0.03	0.159	0.204
	N66_UAT	20M	QPSK	50	28	DFT-15	Left Tilted	Reduced power level 1/3	349000	1745	13.92	15.00	1.282	0.04	0.189	0.242
	N66_LAT	20M	QPSK	1	1	DFT-15	Right Cheek	Full	349000	1745	23.01	24.30	1.346	0.01	0.157	0.211
	N66_LAT	20M	QPSK	1	1	DFT-15	Right Cheek	Full	344000	1720	22.98	24.30	1.355	0.08	0.148	0.201
	N66_LAT	20M	QPSK	1	1	DFT-15	Right Cheek	Full	354000	1770	22.84	24.30	1.400	0.11	0.162	0.227
	N66_LAT	20M	QPSK	1	1	DFT-15	Right Tilted	Full	349000	1745	23.01	24.30	1.346	0.06	0.103	0.139
	N66_LAT	20M	QPSK	1	1	DFT-15	Left Cheek	Full	349000	1745	23.01	24.30	1.346	0.02	0.132	0.178
	N66_LAT	20M	QPSK	1	1	DFT-15	Left Tilted	Full	349000	1745	23.01	24.30	1.346	0.01	0.086	0.116
	N66_LAT	20M	QPSK	50	28	DFT-15	Right Cheek	Full	349000	1745	22.83	24.30	1.403	0.06	0.165	0.231
	N66_LAT	20M	QPSK	50	28	DFT-15	Right Cheek	Full	344000	1720	22.81	24.30	1.409	0.01	0.144	0.203
	N66_LAT	20M	QPSK	50	28	DFT-15	Right Cheek	Full	354000	1770	22.69	24.30	1.449	0.01	0.212	0.307
	N66_LAT	20M	QPSK	50	28	DFT-15	Right Tilted	Full	349000	1745	22.83	24.30	1.403	0.06	0.106	0.149
	N66_LAT	20M	QPSK	50	28	DFT-15	Left Cheek	Full	349000	1745	22.83	24.30	1.403	0.01	0.128	0.180
	N66_LAT	20M	QPSK	50	28	DFT-15	Left Tilted	Full	349000	1745	22.83	24.30	1.403	0.02	0.083	0.116
	N71_UAT	20M	QPSK	1	1	DFT-15	Right Cheek	Full	136100	680.5	23.19	24.30	1.291	-0.09	0.230	0.297
	N71_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Full	136100	680.5	23.19	24.30	1.291	0.04	0.049	0.063
	N71_UAT	20M	QPSK	1	1	DFT-15	Left Cheek	Full	136100	680.5	23.19	24.30	1.291	0.03	0.315	0.407
	N71_UAT	20M	QPSK	1	1	DFT-15	Left Tilted	Full	136100	680.5	23.19	24.30	1.291	0.01	0.053	0.068
	N71_UAT	20M	QPSK	50	28	DFT-15	Right Cheek	Full	136100	680.5	23.00	24.30	1.349	-0.06	0.296	0.399
	N71_UAT	20M	QPSK	50	28	DFT-15	Right Tilted	Full	136100	680.5	23.00	24.30	1.349	0.02	0.052	0.070
24	N71_UAT	20M	QPSK	50	28	DFT-15	Left Cheek	Full	136100	680.5	23.00	24.30	1.349	-0.17	0.420	0.567
	N71_UAT	20M	QPSK	50	28	DFT-15	Left Tilted	Full	136100	680.5	23.00	24.30	1.349	0.01	0.066	0.089
	N71_UAT	20M	QPSK	1	1	DFT-15	Right Cheek	Reduced power level 2/3	136100	680.5	18.38	19.30	1.236	0.02	0.068	0.084
	N71_UAT	20M	QPSK	1	1	DFT-15	Right Tilted	Reduced power level 2/3	136100	680.5	18.38	19.30	1.236	0.03	0.015	0.019
	N71_UAT	20M	QPSK	1	1	DFT-15	Left Cheek	Reduced power level 2/3	136100	680.5	18.38	19.30	1.236	0.01	0.123	0.152
	N71_UAT	20M	QPSK	1	1	DFT-15	Left Tilted	Reduced power level 2/3	136100	680.5	18.38	19.30	1.236	0.06	0.016	0.020
	N71_UAT	20M	QPSK	50	28	DFT-15	Right Cheek	Reduced power level 2/3	136100	680.5	18.26	19.30	1.271	-0.06	0.087	0.111
	N71_UAT	20M	QPSK	50	28	DFT-15	Right Tilted	Reduced power level 2/3	136100	680.5	18.26	19.30	1.271	0.04	0.016	0.020
	N71_UAT	20M	QPSK	50	28	DFT-15	Left Cheek	Reduced power level 2/3	136100	680.5	18.26	19.30	1.271	-0.05	0.137	0.174
	N71_UAT	20M	QPSK	50	28	DFT-15	Left Tilted	Reduced power level 2/3	136100	680.5	18.26	19.30	1.271	-0.11	0.019	0.024
	N71_LAT	20M	QPSK	1	1	DFT-15	Right Cheek	Full	136100	680.5	23.05	24.30	1.334	0.05	0.042	0.056
	N71_LAT	20M	QPSK	1	1	DFT-15	Right Tilted	Full	136100	680.5	23.05	24.30	1.334	0.01	0.001	0.001
	N71_LAT	20M	QPSK	1	1	DFT-15	Left Cheek	Full	136100	680.5	23.05	24.30	1.334	0.02	0.092	0.123
	N71_LAT	20M	QPSK	1	1	DFT-15	Left Tilted	Full	136100	680.5	23.05	24.30	1.334	0.06	0.001	0.001
	N71_LAT	20M	QPSK	50	28	DFT-15	Right Cheek	Full	136100	680.5	22.89	24.30	1.384	0.08	0.048	0.066
	N71_LAT	20M	QPSK	50	28	DFT-15	Right Tilted	Full	136100	680.5	22.89	24.30	1.384	0.01	0.001	0.001
	N71_LAT	20M	QPSK	50	28	DFT-15	Left Cheek	Full	136100	680.5	22.89	24.30	1.384	0.14	0.099	0.137
	N71_LAT	20M	QPSK	50	28	DFT-15	Left Tilted	Full	136100	680.5	22.89	24.30	1.384	0.06	0.001	0.001



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_UAT_NC	100M	QPSK	1	1	DFT-30	Right Cheek	Reduced power level 1/3	518600	2593	18.83	19.80	1.250	-0.09	0.252	0.315
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Right Cheek	Reduced power level 1/3	509200	2546	18.62	19.80	1.312	0.02	0.173	0.227
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Right Cheek	Reduced power level 1/3	528000	2640	18.71	19.80	1.285	-0.01	0.342	0.440
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Right Tilted	Reduced power level 1/3	518600	2593	18.83	19.80	1.250	0.01	0.234	0.293
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Left Cheek	Reduced power level 1/3	518600	2593	18.83	19.80	1.250	0.01	0.152	0.190
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Left Tilted	Reduced power level 1/3	518600	2593	18.83	19.80	1.250	0.06	0.160	0.200
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Right Cheek	Reduced power level 1/3	518600	2593	18.71	19.80	1.285	-0.09	0.207	0.266
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Right Tilted	Reduced power level 1/3	518600	2593	18.71	19.80	1.285	0.04	0.190	0.244
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Left Cheek	Reduced power level 1/3	518600	2593	18.71	19.80	1.285	0.01	0.120	0.154
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Left Tilted	Reduced power level 1/3	518600	2593	18.71	19.80	1.285	0.05	0.129	0.166
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Right Cheek	Reduced power level 2	518600	2593	17.88	18.80	1.236	-0.06	0.221	0.273
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Right Cheek	Reduced power level 2	509200	2546	17.66	18.80	1.300	0.08	0.151	0.196
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Right Cheek	Reduced power level 2	528000	2640	17.78	18.80	1.265	-0.03	0.300	0.379
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Right Tilted	Reduced power level 2	518600	2593	17.88	18.80	1.236	0.02	0.205	0.253
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Left Cheek	Reduced power level 2	518600	2593	17.88	18.80	1.236	0.04	0.134	0.166
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Left Tilted	Reduced power level 2	518600	2593	17.88	18.80	1.236	0.02	0.140	0.173
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Right Cheek	Reduced power level 2	518600	2593	18.76	18.80	1.009	-0.05	0.182	0.184
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Right Tilted	Reduced power level 2	518600	2593	18.76	18.80	1.009	0.06	0.167	0.169
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Left Cheek	Reduced power level 2	518600	2593	18.76	18.80	1.009	0.05	0.106	0.107
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Left Tilted	Reduced power level 2	518600	2593	18.76	18.80	1.009	-0.01	0.114	0.115
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Right Cheek	Reduced power level 1/3	518600	2593	20.20	20.90	1.175	0.15	0.363	0.426
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Right Tilted	Reduced power level 1/3	518600	2593	20.20	20.90	1.175	0.09	0.331	0.389
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Left Cheek	Reduced power level 1/3	518600	2593	20.20	20.90	1.175	0.01	0.231	0.271
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Left Tilted	Reduced power level 1/3	518600	2593	20.20	20.90	1.175	0.07	0.251	0.295
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Right Cheek	Reduced power level 1/3	518600	2593	20.16	20.90	1.186	0.03	0.288	0.342
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Right Cheek	Reduced power level 1/3	509200	2546	19.98	20.90	1.236	0.02	0.356	0.440
25	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Right Cheek	Reduced power level 1/3	528000	2640	19.99	20.90	1.233	-0.1	0.440	0.543
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Right Tilted	Reduced power level 1/3	518600	2593	20.16	20.90	1.186	0.05	0.269	0.319
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Left Cheek	Reduced power level 1/3	518600	2593	20.16	20.90	1.186	0.15	0.174	0.206
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Left Tilted	Reduced power level 1/3	518600	2593	20.16	20.90	1.186	0.01	0.194	0.230
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Right Cheek	Reduced power level 2	518600	2593	19.45	19.90	1.109	0.01	0.239	0.265
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Right Tilted	Reduced power level 2	518600	2593	19.45	19.90	1.109	0.15	0.217	0.241
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Left Cheek	Reduced power level 2	518600	2593	19.45	19.90	1.109	0.01	0.152	0.169
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Left Tilted	Reduced power level 2	518600	2593	19.45	19.90	1.109	0.06	0.165	0.183
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Right Cheek	Reduced power level 2	518600	2593	19.33	19.90	1.140	0.02	0.190	0.217
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Right Cheek	Reduced power level 2	509200	2546	19.26	19.90	1.159	0.04	0.235	0.272
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Right Cheek	Reduced power level 2	528000	2640	19.31	19.90	1.146	0	0.262	0.300
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Right Tilted	Reduced power level 2	518600	2593	19.33	19.90	1.140	0.01	0.177	0.202
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Left Cheek	Reduced power level 2	518600	2593	19.33	19.90	1.140	0.09	0.115	0.131
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Left Tilted	Reduced power level 2	518600	2593	19.33	19.90	1.140	0.07	0.127	0.145
	N41_LAT	100M	QPSK	1	1	DFT-30	Right Cheek	Full	518600	2593	24.19	24.40	1.050	0.03	0.109	0.114
	N41_LAT	100M	QPSK	1	1	DFT-30	Right Tilted	Full	518600	2593	24.19	24.40	1.050	0.02	0.068	0.071
	N41_LAT	100M	QPSK	1	1	DFT-30	Left Cheek	Full	518600	2593	24.19	24.40	1.050	0.05	0.158	0.166
	N41_LAT	100M	QPSK	1	1	DFT-30	Left Cheek	Full	509200	2546	23.77	24.40	1.156	0.03	0.160	0.185
	N41_LAT	100M	QPSK	1	1	DFT-30	Left Cheek	Full	528000	2640	23.91	24.40	1.119	-0.09	0.170	0.190
	N41_LAT	100M	QPSK	1	1	DFT-30	Left Tilted	Full	518600	2593	24.19	24.40	1.050	0.01	0.065	0.068
	N41_LAT	100M	QPSK	135	69	DFT-30	Right Cheek	Full	518600	2593	24.16	24.40	1.057	-0.02	0.113	0.119
	N41_LAT	100M	QPSK	135	69	DFT-30	Right Tilted	Full	518600	2593	24.16	24.40	1.057	0.03	0.081	0.086
	N41_LAT	100M	QPSK	135	69	DFT-30	Left Cheek	Full	518600	2593	24.16	24.40	1.057	-0.11	0.146	0.154
	N41_LAT	100M	QPSK	135	69	DFT-30	Left Cheek	Full	509200	2546	23.65	24.40	1.189	0.06	0.146	0.174
	N41_LAT	100M	QPSK	135	69	DFT-30	Left Cheek	Full	528000	2640	23.93	24.40	1.114	0.01	0.107	0.119
	N41_LAT	100M	QPSK	135	69	DFT-30	Left Tilted	Full	518600	2593	24.16	24.40	1.057	0.02	0.069	0.073



<EN-DC SAR>

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	49	Right Cheek	Full	23095	707.5	19.95	20.30	1.084	0.06	0.239	0.259
LTE Band 12_UAT	10M	QPSK	1	49	Right Tilted	Full	23095	707.5	19.95	20.30	1.084	0.02	0.044	0.048
LTE Band 12_UAT	10M	QPSK	1	49	Left Cheek	Full	23095	707.5	19.95	20.30	1.084	-0.06	0.372	0.403
LTE Band 12_UAT	10M	QPSK	1	49	Left Tilted	Full	23095	707.5	19.95	20.30	1.084	0.01	0.056	0.061
LTE Band 12_UAT	10M	QPSK	25	12	Right Cheek	Full	23095	707.5	19.91	20.30	1.094	0.04	0.245	0.268
LTE Band 12_UAT	10M	QPSK	25	12	Right Tilted	Full	23095	707.5	19.91	20.30	1.094	0.06	0.043	0.047
LTE Band 12_UAT	10M	QPSK	25	12	Left Cheek	Full	23095	707.5	19.91	20.30	1.094	0.08	0.314	0.344
LTE Band 12_UAT	10M	QPSK	25	12	Left Tilted	Full	23095	707.5	19.91	20.30	1.094	0.11	0.055	0.060
LTE Band 12_UAT	10M	QPSK	1	49	Right Cheek	Reduced	23095	707.5	15.45	15.80	1.084	-0.05	0.080	0.087
LTE Band 12_UAT	10M	QPSK	1	49	Right Tilted	Reduced	23095	707.5	15.45	15.80	1.084	0.02	0.013	0.014
LTE Band 12_UAT	10M	QPSK	1	49	Left Cheek	Reduced	23095	707.5	15.45	15.80	1.084	0.07	0.132	0.143
LTE Band 12_UAT	10M	QPSK	1	49	Left Tilted	Reduced	23095	707.5	15.45	15.80	1.084	0.03	0.018	0.020
LTE Band 12_UAT	10M	QPSK	25	12	Right Cheek	Reduced	23095	707.5	15.41	15.80	1.094	-0.15	0.079	0.086
LTE Band 12_UAT	10M	QPSK	25	12	Right Tilted	Reduced	23095	707.5	15.41	15.80	1.094	0.02	0.012	0.013
LTE Band 12_UAT	10M	QPSK	25	12	Left Cheek	Reduced	23095	707.5	15.41	15.80	1.094	0.04	0.110	0.120
LTE Band 12_UAT	10M	QPSK	25	12	Left Tilted	Reduced	23095	707.5	15.41	15.80	1.094	0.06	0.016	0.018
LTE Band 13_UAT	10M	QPSK	1	25	Right Cheek	Full	23230	782	20.75	21.30	1.135	-0.05	0.299	0.339
LTE Band 13_UAT	10M	QPSK	1	25	Right Tilted	Full	23230	782	20.75	21.30	1.135	0.02	0.054	0.061
LTE Band 13_UAT	10M	QPSK	1	25	Left Cheek	Full	23230	782	20.75	21.30	1.135	0.01	0.463	0.526
LTE Band 13_UAT	10M	QPSK	1	25	Left Tilted	Full	23230	782	20.75	21.30	1.135	0.03	0.075	0.085
LTE Band 13_UAT	10M	QPSK	25	25	Right Cheek	Full	23230	782	20.67	21.30	1.156	-0.05	0.302	0.349
LTE Band 13_UAT	10M	QPSK	25	25	Right Tilted	Full	23230	782	20.67	21.30	1.156	0.03	0.057	0.066
LTE Band 13_UAT	10M	QPSK	25	25	Left Cheek	Full	23230	782	20.67	21.30	1.156	0.07	0.465	0.538
LTE Band 13_UAT	10M	QPSK	25	25	Left Tilted	Full	23230	782	20.67	21.30	1.156	0.07	0.076	0.088
LTE Band 13_UAT	10M	QPSK	1	25	Right Cheek	Reduced	23230	782	15.25	15.80	1.135	-0.08	0.084	0.095
LTE Band 13_UAT	10M	QPSK	1	25	Right Tilted	Reduced	23230	782	15.25	15.80	1.135	0.02	0.013	0.015
LTE Band 13_UAT	10M	QPSK	1	25	Left Cheek	Reduced	23230	782	15.25	15.80	1.135	0.05	0.125	0.142
LTE Band 13_UAT	10M	QPSK	1	25	Left Tilted	Reduced	23230	782	15.25	15.80	1.135	0.01	0.017	0.019
LTE Band 13_UAT	10M	QPSK	25	25	Right Cheek	Reduced	23230	782	14.77	15.80	1.268	0.03	0.087	0.110
LTE Band 13_UAT	10M	QPSK	25	25	Right Tilted	Reduced	23230	782	14.77	15.80	1.268	0.04	0.014	0.018
LTE Band 13_UAT	10M	QPSK	25	25	Left Cheek	Reduced	23230	782	14.77	15.80	1.268	0.04	0.137	0.174
LTE Band 13_UAT	10M	QPSK	25	25	Left Tilted	Reduced	23230	782	14.77	15.80	1.268	-0.02	0.019	0.024
LTE Band 5_UAT	10M	QPSK	1	0	Right Cheek	Full	20525	836.5	19.72	20.30	1.143	-0.05	0.211	0.241
LTE Band 5_UAT	10M	QPSK	1	0	Right Tilted	Full	20525	836.5	19.72	20.30	1.143	0.03	0.038	0.043
LTE Band 5_UAT	10M	QPSK	1	0	Left Cheek	Full	20525	836.5	19.72	20.30	1.143	0.03	0.396	0.453
LTE Band 5_UAT	10M	QPSK	1	0	Left Tilted	Full	20525	836.5	19.72	20.30	1.143	-0.08	0.050	0.057
LTE Band 5_UAT	10M	QPSK	25	0	Right Cheek	Full	20525	836.5	19.71	20.30	1.146	0.02	0.204	0.234
LTE Band 5_UAT	10M	QPSK	25	0	Right Tilted	Full	20525	836.5	19.71	20.30	1.146	0.04	0.036	0.041
LTE Band 5_UAT	10M	QPSK	25	0	Left Cheek	Full	20525	836.5	19.71	20.30	1.146	0.01	0.323	0.370
LTE Band 5_UAT	10M	QPSK	25	0	Left Tilted	Full	20525	836.5	19.71	20.30	1.146	0.06	0.050	0.057
LTE Band 5_UAT	10M	QPSK	1	0	Right Cheek	Reduced	20525	836.5	14.72	15.30	1.143	0.06	0.075	0.086
LTE Band 5_UAT	10M	QPSK	1	0	Right Tilted	Reduced	20525	836.5	14.72	15.30	1.143	0.02	0.012	0.014
LTE Band 5_UAT	10M	QPSK	1	0	Left Cheek	Reduced	20525	836.5	14.72	15.30	1.143	0.04	0.122	0.139
LTE Band 5_UAT	10M	QPSK	1	0	Left Tilted	Reduced	20525	836.5	14.72	15.30	1.143	0.01	0.018	0.021
LTE Band 5_UAT	10M	QPSK	25	0	Right Cheek	Reduced	20525	836.5	14.71	15.30	1.146	-0.06	0.074	0.085
LTE Band 5_UAT	10M	QPSK	25	0	Right Tilted	Reduced	20525	836.5	14.71	15.30	1.146	0.04	0.011	0.013
LTE Band 5_UAT	10M	QPSK	25	0	Left Cheek	Reduced	20525	836.5	14.71	15.30	1.146	-0.02	0.119	0.136
LTE Band 5_UAT	10M	QPSK	25	0	Left Tilted	Reduced	20525	836.5	14.71	15.30	1.146	0.01	0.017	0.019



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	Full	26865	831.5	20.02	20.80	1.197	0.04	0.275	0.329
LTE Band 26_UAT	15M	QPSK	1	0	Right Tilted	Full	26865	831.5	20.02	20.80	1.197	0.08	0.048	0.057
LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Full	26865	831.5	20.02	20.80	1.197	-0.09	0.422	0.505
LTE Band 26_UAT	15M	QPSK	1	0	Left Tilted	Full	26865	831.5	20.02	20.80	1.197	-0.11	0.063	0.075
LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Full	26765	821.5	19.98	20.80	1.208	-0.09	0.391	0.472
LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Full	26965	841.5	19.93	20.80	1.222	0.07	0.384	0.469
LTE Band 26_UAT	15M	QPSK	36	20	Right Cheek	Full	26865	831.5	19.82	20.80	1.253	0.14	0.262	0.328
LTE Band 26_UAT	15M	QPSK	36	20	Right Tilted	Full	26865	831.5	19.82	20.80	1.253	-0.09	0.046	0.058
LTE Band 26_UAT	15M	QPSK	36	20	Left Cheek	Full	26865	831.5	19.82	20.80	1.253	-0.07	0.365	0.457
LTE Band 26_UAT	15M	QPSK	36	20	Left Tilted	Full	26865	831.5	19.82	20.80	1.253	0.02	0.061	0.076
LTE Band 26_UAT	15M	QPSK	1	0	Right Cheek	Reduced	26865	831.5	17.02	17.80	1.197	-0.06	0.119	0.142
LTE Band 26_UAT	15M	QPSK	1	0	Right Tilted	Reduced	26865	831.5	17.02	17.80	1.197	0.02	0.039	0.047
LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced	26865	831.5	17.02	17.80	1.197	0.07	0.186	0.223
LTE Band 26_UAT	15M	QPSK	1	0	Left Tilted	Reduced	26865	831.5	17.02	17.80	1.197	0.09	0.029	0.035
LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced	26765	821.5	16.98	17.80	1.208	0.01	0.185	0.223
LTE Band 26_UAT	15M	QPSK	1	0	Left Cheek	Reduced	26965	841.5	16.93	17.80	1.222	0.05	0.174	0.213
LTE Band 26_UAT	15M	QPSK	36	20	Right Cheek	Reduced	26865	831.5	16.82	17.80	1.253	0.02	0.115	0.144
LTE Band 26_UAT	15M	QPSK	36	20	Right Tilted	Reduced	26865	831.5	16.82	17.80	1.253	0.05	0.037	0.046
LTE Band 26_UAT	15M	QPSK	36	20	Left Cheek	Reduced	26865	831.5	16.82	17.80	1.253	0.08	0.172	0.216
LTE Band 26_UAT	15M	QPSK	36	20	Left Tilted	Reduced	26865	831.5	16.82	17.80	1.253	-0.01	0.024	0.030
LTE Band 66_UAT	20M	QPSK	1	0	Right Cheek	Full	132322	1745	10.93	11.80	1.222	-0.05	0.169	0.206
LTE Band 66_UAT	20M	QPSK	1	0	Right Tilted	Full	132322	1745	10.93	11.80	1.222	0.03	0.202	0.247
LTE Band 66_UAT	20M	QPSK	1	0	Left Cheek	Full	132322	1745	10.93	11.80	1.222	-0.07	0.093	0.114
LTE Band 66_UAT	20M	QPSK	1	0	Left Tilted	Full	132322	1745	10.93	11.80	1.222	0.07	0.129	0.158
LTE Band 66_UAT	20M	QPSK	50	24	Right Cheek	Full	132322	1745	10.82	11.80	1.253	0.04	0.184	0.231
LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Full	132322	1745	10.82	11.80	1.253	0.02	0.225	0.282
LTE Band 66_UAT	20M	QPSK	50	24	Left Cheek	Full	132322	1745	10.82	11.80	1.253	0.12	0.104	0.130
LTE Band 66_UAT	20M	QPSK	50	24	Left Tilted	Full	132322	1745	10.82	11.80	1.253	0.06	0.143	0.179
LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Full	132072	1720	10.80	11.80	1.259	-0.15	0.323	0.407
LTE Band 66_UAT	20M	QPSK	50	24	Right Tilted	Full	132572	1770	10.81	11.80	1.256	0.02	0.235	0.295
LTE Band 2_UAT	20M	QPSK	1	0	Right Cheek	Full	19100	1900	10.64	11.30	1.164	-0.05	0.358	0.417
LTE Band 2_UAT	20M	QPSK	1	0	Right Tilted	Full	19100	1900	10.64	11.30	1.164	0.06	0.389	0.453
LTE Band 2_UAT	20M	QPSK	1	0	Left Cheek	Full	19100	1900	10.64	11.30	1.164	0.07	0.251	0.292
LTE Band 2_UAT	20M	QPSK	1	0	Left Tilted	Full	19100	1900	10.64	11.30	1.164	0.01	0.294	0.342
LTE Band 2_UAT	20M	QPSK	50	50	Right Cheek	Full	19100	1900	10.38	11.30	1.236	0.02	0.367	0.454
LTE Band 2_UAT	20M	QPSK	50	50	Right Tilted	Full	19100	1900	10.38	11.30	1.236	0.05	0.380	0.470
LTE Band 2_UAT	20M	QPSK	50	50	Left Cheek	Full	19100	1900	10.38	11.30	1.236	0.06	0.255	0.315
LTE Band 2_UAT	20M	QPSK	50	50	Left Tilted	Full	19100	1900	10.38	11.30	1.236	0.04	0.297	0.367
LTE Band 2_UAT	20M	QPSK	50	50	Right Tilted	Full	18700	1860	10.36	11.30	1.242	0.02	0.373	0.463
LTE Band 2_UAT	20M	QPSK	50	50	Right Tilted	Full	18900	1880	10.33	11.30	1.250	0.01	0.372	0.465
LTE Band 2_UAT	20M	QPSK	1	0	Right Cheek	Reduced	19100	1900	10.14	10.80	1.164	0.06	0.260	0.303
LTE Band 2_UAT	20M	QPSK	1	0	Right Tilted	Reduced	19100	1900	10.14	10.80	1.164	-0.08	0.313	0.364
LTE Band 2_UAT	20M	QPSK	1	0	Left Cheek	Reduced	19100	1900	10.14	10.80	1.164	0.03	0.184	0.214
LTE Band 2_UAT	20M	QPSK	1	0	Left Tilted	Reduced	19100	1900	10.14	10.80	1.164	0.05	0.218	0.254
LTE Band 2_UAT	20M	QPSK	50	50	Right Cheek	Reduced	19100	1900	9.88	10.80	1.236	0.02	0.264	0.326
LTE Band 2_UAT	20M	QPSK	50	50	Right Tilted	Reduced	19100	1900	9.88	10.80	1.236	0.04	0.316	0.391
LTE Band 2_UAT	20M	QPSK	50	50	Left Cheek	Reduced	19100	1900	9.88	10.80	1.236	0.01	0.191	0.236
LTE Band 2_UAT	20M	QPSK	50	50	Left Tilted	Reduced	19100	1900	9.88	10.80	1.236	0.06	0.226	0.279
LTE Band 2_UAT	20M	QPSK	50	50	Right Tilted	Reduced	18700	1860	9.86	10.80	1.242	0.01	0.309	0.384
LTE Band 2_UAT	20M	QPSK	50	50	Right Tilted	Reduced	18900	1880	9.83	10.80	1.250	0.07	0.314	0.393

<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	5.80	7.80	1.585	76.79	1.085	-0.08	0.043	0.074
	Bluetooth	DH5 1Mbps	Right Tilted	Ant 1	Reduced	39	2441	5.80	7.80	1.585	76.79	1.085	0.14	0.034	0.058
26	Bluetooth	DH5 1Mbps	Left Cheek	Ant 1	Reduced	39	2441	5.80	7.80	1.585	76.79	1.085	-0.13	0.110	0.189
	Bluetooth	DH5 1Mbps	Left Tilted	Ant 1	Reduced	39	2441	5.80	7.80	1.585	76.79	1.085	0.01	0.071	0.122
	Bluetooth	DH5 1Mbps	Left Cheek	Ant 1	Reduced	0	2402	5.20	7.20	1.585	76.79	1.085	0.05	0.046	0.079
	Bluetooth	DH5 1Mbps	Left Cheek	Ant 1	Reduced	78	2480	5.50	7.50	1.585	76.79	1.085	-0.14	0.090	0.155
	Bluetooth	DH5 1Mbps	Right Cheek	Ant 2	Full	78	2480	4.90	6.90	1.585	76.91	1.083	0.01	0.001	0.002
	Bluetooth	DH5 1Mbps	Right Tilted	Ant 2	Full	78	2480	4.90	6.90	1.585	76.91	1.083	0.04	0.001	0.002
	Bluetooth	DH5 1Mbps	Left Cheek	Ant 2	Full	78	2480	4.90	6.90	1.585	76.91	1.083	0.04	0.004	0.006
	Bluetooth	DH5 1Mbps	Left Tilted	Ant 2	Full	78	2480	4.90	6.90	1.585	76.91	1.083	-0.06	0.001	0.002
	Bluetooth	DH5 1Mbps	Left Cheek	Ant 2	Full	0	2402	4.50	6.50	1.585	76.91	1.083	0.06	0.002	0.003
	Bluetooth	DH5 1Mbps	Left Cheek	Ant 2	Full	39	2441	4.70	6.70	1.585	76.91	1.083	-0.01	0.003	0.005

<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	1	2412	17.96	19.96	1.585	98.35	1.017	0.03	0.161	0.260
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced power level 1	1	2412	17.96	19.96	1.585	98.35	1.017	0.15	0.155	0.250
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced power level 1	1	2412	17.96	19.96	1.585	98.35	1.017	-0.04	0.529	0.853
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 1+2	Reduced power level 1	1	2412	17.96	19.96	1.585	98.35	1.017	0.18	0.361	0.582
27	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced power level 1	6	2437	17.66	19.66	1.585	98.35	1.017	-0.09	0.599	0.965
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced power level 1	11	2462	17.81	19.81	1.585	98.35	1.017	0.17	0.528	0.851
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 1+2	Reduced power level 2/3	1	2412	16.96	18.96	1.585	98.35	1.017	0.05	0.133	0.214
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced power level 2/3	1	2412	16.96	18.96	1.585	98.35	1.017	0.02	0.115	0.185
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced power level 2/3	1	2412	16.96	18.96	1.585	98.35	1.017	-0.09	0.351	0.566
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 1+2	Reduced power level 2/3	1	2412	16.96	18.96	1.585	98.35	1.017	0.03	0.290	0.467
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced power level 2/3	6	2437	16.86	18.86	1.585	98.35	1.017	0.07	0.418	0.674
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced power level 2/3	11	2462	16.71	18.71	1.585	98.35	1.017	0.01	0.362	0.583
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 1+2	Reduced power level 4	1	2412	15.06	17.06	1.585	98.35	1.017	0.09	0.081	0.131
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 1+2	Reduced power level 4	1	2412	15.06	17.06	1.585	98.35	1.017	0.02	0.074	0.119
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced power level 4	1	2412	15.06	17.06	1.585	98.35	1.017	0.08	0.215	0.347
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 1+2	Reduced power level 4	1	2412	15.06	17.06	1.585	98.35	1.017	0.04	0.177	0.285
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced power level 4	6	2437	14.66	16.66	1.585	98.35	1.017	0.07	0.283	0.456
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 1+2	Reduced power level 4	11	2462	14.81	16.81	1.585	98.35	1.017	0.01	0.232	0.374



<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	0.12	0.026	0.042
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	0.13	0.012	0.019
28	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	0.09	0.506	0.812
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	0.04	0.242	0.388
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	52	5260	17.65	19.65	1.585	98.77	1.012	0.16	0.459	0.736
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	56	5280	17.47	19.47	1.585	98.77	1.012	0.18	0.453	0.727
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	60	5300	17.69	19.69	1.585	98.77	1.012	0.19	0.439	0.704
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	-0.11	0.018	0.029
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	0.14	0.009	0.014
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	0.02	0.308	0.494
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	-0.04	0.153	0.245
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	52	5260	15.73	17.73	1.585	98.77	1.012	0.17	0.284	0.456
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	56	5280	15.60	17.60	1.585	98.77	1.012	0.08	0.291	0.467
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	60	5300	15.83	17.83	1.585	98.77	1.012	-0.03	0.270	0.433
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 1+2	Reduced power level 3	64	5320	14.95	16.95	1.585	98.77	1.012	-0.08	0.014	0.022
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant 1+2	Reduced power level 3	64	5320	14.95	16.95	1.585	98.77	1.012	0.01	0.006	0.010
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	64	5320	14.95	16.95	1.585	98.77	1.012	0.07	0.226	0.362
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant 1+2	Reduced power level 3	64	5320	14.95	16.95	1.585	98.77	1.012	-0.05	0.173	0.277
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	52	5260	14.94	16.94	1.585	98.77	1.012	0.07	0.213	0.342
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	56	5280	14.55	16.55	1.585	98.77	1.012	0.04	0.205	0.329
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	60	5300	14.65	16.65	1.585	98.77	1.012	0.04	0.233	0.374
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 1+2	Reduced power level 4	64	5320	13.99	15.99	1.585	98.77	1.012	0.12	0.011	0.018
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant 1+2	Reduced power level 4	64	5320	13.99	15.99	1.585	98.77	1.012	0.05	0.005	0.008
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	64	5320	13.99	15.99	1.585	98.77	1.012	0.02	0.201	0.322
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant 1+2	Reduced power level 4	64	5320	13.99	15.99	1.585	98.77	1.012	0.09	0.100	0.160
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	52	5260	13.95	15.95	1.585	98.77	1.012	0.18	0.197	0.316
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	56	5280	13.50	15.50	1.585	98.77	1.012	0.14	0.192	0.308
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	60	5300	13.93	15.93	1.585	98.77	1.012	0.05	0.193	0.310



FCC SAR TEST REPORT

Report No. : FA9N2009-01

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)
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.06	0.013	0.021
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.07	0.006	0.010
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.03	0.199	0.319
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.02	0.102	0.164
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	116	5580	16.25	18.25	1.585	98.77	1.012	0.01	0.180	0.289
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	124	5620	16.00	18.00	1.585	98.77	1.012	0.11	0.186	0.298
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	132	5660	16.01	18.01	1.585	98.77	1.012	0.06	0.191	0.306
29	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	140	5700	16.10	18.10	1.585	98.77	1.012	0.12	0.204	0.327
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Full	144	5720	16.02	18.02	1.585	98.77	1.012	0.07	0.200	0.321
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 1+2	Reduced power level 2	100	5500	15.71	17.71	1.585	98.77	1.012	-0.06	0.010	0.016
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant 1+2	Reduced power level 2	100	5500	15.71	17.71	1.585	98.77	1.012	0.08	0.004	0.006
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	100	5500	15.71	17.71	1.585	98.77	1.012	0.03	0.141	0.226
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant 1+2	Reduced power level 2	100	5500	15.71	17.71	1.585	98.77	1.012	0.04	0.089	0.143
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	116	5580	15.49	17.49	1.585	98.77	1.012	0.07	0.132	0.212
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	124	5620	14.95	16.95	1.585	98.77	1.012	0.01	0.140	0.225
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	132	5660	15.21	17.21	1.585	98.77	1.012	0.05	0.146	0.234
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	140	5700	15.30	17.30	1.585	98.77	1.012	-0.11	0.157	0.252
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 2	144	5720	15.11	17.11	1.585	98.77	1.012	0.15	0.151	0.242
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 1+2	Reduced power level 3	100	5500	14.81	16.81	1.585	98.77	1.012	0.16	0.008	0.013
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant 1+2	Reduced power level 3	100	5500	14.81	16.81	1.585	98.77	1.012	0.05	0.003	0.005
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	100	5500	14.81	16.81	1.585	98.77	1.012	0.12	0.110	0.176
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant 1+2	Reduced power level 3	100	5500	14.81	16.81	1.585	98.77	1.012	0.03	0.052	0.083
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	116	5580	14.39	16.39	1.585	98.77	1.012	0.06	0.105	0.168
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	124	5620	14.01	16.01	1.585	98.77	1.012	-0.08	0.107	0.172
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	132	5660	14.07	16.07	1.585	98.77	1.012	0.04	0.104	0.167
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	140	5700	14.34	16.34	1.585	98.77	1.012	-0.11	0.108	0.173
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 3	144	5720	14.23	16.23	1.585	98.77	1.012	0.08	0.102	0.164
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 1+2	Reduced power level 4	100	5500	13.87	15.87	1.585	98.77	1.012	-0.09	0.008	0.013
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant 1+2	Reduced power level 4	100	5500	13.87	15.87	1.585	98.77	1.012	0.15	0.003	0.005
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	100	5500	13.87	15.87	1.585	98.77	1.012	0.11	0.078	0.125
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant 1+2	Reduced power level 4	100	5500	13.87	15.87	1.585	98.77	1.012	0.18	0.011	0.018
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	116	5580	13.32	15.32	1.585	98.77	1.012	0.17	0.080	0.128
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	124	5620	13.20	15.20	1.585	98.77	1.012	0.06	0.082	0.132
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	132	5660	13.07	15.07	1.585	98.77	1.012	-0.09	0.090	0.144
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	140	5700	13.16	15.16	1.585	98.77	1.012	-0.15	0.094	0.151
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 1+2	Reduced power level 4	144	5720	13.12	15.12	1.585	98.77	1.012	0.12	0.091	0.146
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	0.12	0.016	0.025
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	0.02	0.009	0.014
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	0.09	0.198	0.314
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	0.03	0.226	0.358
30	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Full	159	5795	16.38	18.38	1.585	100	1.000	0.07	0.285	0.452
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced power level 2	151	5755	15.62	17.62	1.585	100	1.000	0.06	0.013	0.021
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced power level 2	151	5755	15.62	17.62	1.585	100	1.000	0.04	0.007	0.011
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced power level 2	151	5755	15.62	17.62	1.585	100	1.000	0.07	0.150	0.238
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced power level 2	151	5755	15.62	17.62	1.585	100	1.000	0.01	0.192	0.304
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced power level 2	159	5795	15.46	17.46	1.585	100	1.000	0.15	0.235	0.372
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced power level 3	151	5755	14.62	16.62	1.585	100	1.000	0.09	0.010	0.016
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced power level 3	151	5755	14.62	16.62	1.585	100	1.000	0.04	0.005	0.008
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced power level 3	151	5755	14.62	16.62	1.585	100	1.000	0.03	0.130	0.206
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced power level 3	151	5755	14.62	16.62	1.585	100	1.000	0.07	0.173	0.274
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced power level 3	159	5795	14.46	16.46	1.585	100	1.000	0.06	0.199	0.315
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	Ant 1+2	Reduced power level 4	151	5755	13.58	15.58	1.585	100	1.000	-0.09	0.008	0.013
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	Ant 1+2	Reduced power level 4	151	5755	13.58	15.58	1.585	100	1.000	0.01	0.002	0.003
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	Ant 1+2	Reduced power level 4	151	5755	13.58	15.58	1.585	100	1.000	0.05	0.093	0.147
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced power level 4	151	5755	13.58	15.58	1.585	100	1.000	0.03	0.120	0.190
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	Ant 1+2	Reduced power level 4	159	5795	13.49	15.49	1.585	100	1.000	0.01	0.145	0.230



17.2 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(3 Tx slot)	Front	10mm	Reduced	189	836.4	25.04	25.80	1.191	0.16	0.128	0.152
	GSM850_UAT	GPRS(3 Tx slot)	Back	10mm	Reduced	189	836.4	25.04	25.80	1.191	0.08	0.192	0.229
	GSM850_UAT	GPRS(3 Tx slot)	Left Side	10mm	Reduced	189	836.4	25.04	25.80	1.191	-0.04	0.290	0.345
	GSM850_UAT	GPRS(3 Tx slot)	Right Side	10mm	Reduced	189	836.4	25.04	25.80	1.191	0.12	0.007	0.008
	GSM850_UAT	GPRS(3 Tx slot)	Top Side	10mm	Reduced	189	836.4	25.04	25.80	1.191	0.01	0.047	0.056
	GSM850_UAT	GPRS(3 Tx slot)	Left Side	10mm	Reduced	128	824.2	24.87	25.80	1.239	-0.07	0.249	0.308
	GSM850_UAT	GPRS(3 Tx slot)	Left Side	10mm	Reduced	251	848.8	25.03	25.80	1.194	0.02	0.263	0.314
	GSM850_LAT	GPRS(3 Tx slot)	Front	10mm	Full	189	836.4	28.84	29.80	1.247	-0.12	0.352	0.439
31	GSM850_LAT	GPRS(3 Tx slot)	Back	10mm	Full	189	836.4	28.84	29.80	1.247	0.12	0.506	0.631
	GSM850_LAT	GPRS(3 Tx slot)	Left Side	10mm	Full	189	836.4	28.84	29.80	1.247	0.13	0.121	0.151
	GSM850_LAT	GPRS(3 Tx slot)	Right Side	10mm	Full	189	836.4	28.84	29.80	1.247	0.05	0.426	0.531
	GSM850_LAT	GPRS(3 Tx slot)	Bottom Side	10mm	Full	189	836.4	28.84	29.80	1.247	0.14	0.296	0.369
	GSM850_LAT	GPRS(3 Tx slot)	Back	10mm	Full	128	824.2	28.66	29.80	1.300	-0.03	0.479	0.623
	GSM850_LAT	GPRS(3 Tx slot)	Back	10mm	Full	251	848.8	28.74	29.80	1.276	0.11	0.472	0.602
	GSM1900_UAT	GPRS(3 Tx slot)	Front	10mm	Reduced	661	1880	19.56	20.50	1.242	0.05	0.181	0.225
	GSM1900_UAT	GPRS(3 Tx slot)	Back	10mm	Reduced	661	1880	19.56	20.50	1.242	-0.16	0.174	0.216
	GSM1900_UAT	GPRS(3 Tx slot)	Left Side	10mm	Reduced	661	1880	19.56	20.50	1.242	-0.1	0.044	0.055
	GSM1900_UAT	GPRS(3 Tx slot)	Right Side	10mm	Reduced	661	1880	19.56	20.50	1.242	0.06	0.029	0.037
	GSM1900_UAT	GPRS(3 Tx slot)	Top Side	10mm	Reduced	661	1880	19.56	20.50	1.242	0.11	0.290	0.360
	GSM1900_UAT	GPRS(3 Tx slot)	Top Side	10mm	Reduced	512	1850.2	19.36	20.50	1.300	0.17	0.262	0.341
	GSM1900_UAT	GPRS(3 Tx slot)	Top Side	10mm	Reduced	810	1909.8	19.34	20.50	1.306	0.08	0.260	0.340
	GSM1900_LAT	GPRS(3 Tx slot)	Front	10mm	Reduced	661	1880	24.07	25.50	1.390	0.09	0.398	0.553
	GSM1900_LAT	GPRS(3 Tx slot)	Back	10mm	Reduced	661	1880	24.07	25.50	1.390	0.11	0.428	0.595
	GSM1900_LAT	GPRS(3 Tx slot)	Left Side	10mm	Reduced	661	1880	24.07	25.50	1.390	0.03	0.109	0.152
	GSM1900_LAT	GPRS(3 Tx slot)	Right Side	10mm	Reduced	661	1880	24.07	25.50	1.390	-0.08	0.098	0.136
	GSM1900_LAT	GPRS(3 Tx slot)	Bottom Side	10mm	Reduced	661	1880	24.07	25.50	1.390	0.02	0.452	0.628
32	GSM1900_LAT	GPRS(3 Tx slot)	Bottom Side	10mm	Reduced	512	1850.2	23.76	25.50	1.493	0.07	0.508	0.758
	GSM1900_LAT	GPRS(3 Tx slot)	Bottom Side	10mm	Reduced	810	1909.8	23.90	25.50	1.445	0.06	0.376	0.543

<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	Reduced	4132	826.4	17.31	17.80	1.119	0.06	0.038	0.043
	WCDMA V_UAT	RMC 12.2Kbps	Back	10mm	Reduced	4132	826.4	17.31	17.80	1.119	0.12	0.142	0.159
	WCDMA V_UAT	RMC 12.2Kbps	Left Side	10mm	Reduced	4132	826.4	17.31	17.80	1.119	0.13	0.158	0.177
	WCDMA V_UAT	RMC 12.2Kbps	Right Side	10mm	Reduced	4132	826.4	17.31	17.80	1.119	0.07	0.001	0.001
	WCDMA V_UAT	RMC 12.2Kbps	Top Side	10mm	Reduced	4132	826.4	17.31	17.80	1.119	0.08	0.012	0.013
	WCDMA V_UAT	RMC 12.2Kbps	Left Side	10mm	Reduced	4182	836.4	17.28	17.80	1.127	-0.05	0.149	0.168
	WCDMA V_UAT	RMC 12.2Kbps	Left Side	10mm	Reduced	4233	846.6	17.24	17.80	1.138	0.17	0.151	0.172
	WCDMA V_LAT	RMC 12.2Kbps	Front	10mm	Reduced	4132	826.4	23.16	23.80	1.159	0.03	0.305	0.353
	WCDMA V_LAT	RMC 12.2Kbps	Back	10mm	Reduced	4132	826.4	23.16	23.80	1.159	0.15	0.518	0.600
	WCDMA V_LAT	RMC 12.2Kbps	Left Side	10mm	Reduced	4132	826.4	23.16	23.80	1.159	-0.04	0.121	0.140
	WCDMA V_LAT	RMC 12.2Kbps	Right Side	10mm	Reduced	4132	826.4	23.16	23.80	1.159	0.15	0.341	0.395
	WCDMA V_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	4132	826.4	23.16	23.80	1.159	0.09	0.278	0.322
	WCDMA V_LAT	RMC 12.2Kbps	Back	10mm	Reduced	4182	836.4	23.13	23.80	1.167	0.17	0.529	0.617
33	WCDMA V_LAT	RMC 12.2Kbps	Back	10mm	Reduced	4233	846.6	23.12	23.80	1.169	-0.04	0.569	0.665
	WCDMA IV_UAT	RMC 12.2Kbps	Front	10mm	Reduced	1513	1752.6	14.95	16.30	1.365	0.02	0.216	0.295
	WCDMA IV_UAT	RMC 12.2Kbps	Back	10mm	Reduced	1513	1752.6	14.95	16.30	1.365	0.13	0.219	0.299
	WCDMA IV_UAT	RMC 12.2Kbps	Left Side	10mm	Reduced	1513	1752.6	14.95	16.30	1.365	-0.09	0.058	0.079
	WCDMA IV_UAT	RMC 12.2Kbps	Right Side	10mm	Reduced	1513	1752.6	14.95	16.30	1.365	0.11	0.027	0.036
	WCDMA IV_UAT	RMC 12.2Kbps	Top Side	10mm	Reduced	1513	1752.6	14.95	16.30	1.365	0.04	0.371	0.506
	WCDMA IV_UAT	RMC 12.2Kbps	Top Side	10mm	Reduced	1312	1712.4	14.82	16.30	1.406	0.11	0.297	0.418
	WCDMA IV_UAT	RMC 12.2Kbps	Top Side	10mm	Reduced	1413	1732.6	14.91	16.30	1.377	0.02	0.335	0.461
	WCDMA IV_LAT	RMC 12.2Kbps	Front	10mm	Reduced	1413	1732.6	21.01	21.80	1.199	0.04	0.469	0.563
	WCDMA IV_LAT	RMC 12.2Kbps	Back	10mm	Reduced	1413	1732.6	21.01	21.80	1.199	-0.11	0.538	0.645
	WCDMA IV_LAT	RMC 12.2Kbps	Left Side	10mm	Reduced	1413	1732.6	21.01	21.80	1.199	-0.15	0.156	0.187
	WCDMA IV_LAT	RMC 12.2Kbps	Right Side	10mm	Reduced	1413	1732.6	21.01	21.80	1.199	0.06	0.079	0.095
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	1413	1732.6	21.01	21.80	1.199	0.14	0.696	0.835
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	1312	1712.4	20.85	21.80	1.245	0.02	0.650	0.809
34	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	1513	1752.6	20.94	21.80	1.219	-0.15	0.761	0.928
	WCDMA II_UAT	RMC 12.2Kbps	Front	10mm	Reduced	9400	1880	13.61	14.80	1.315	0.05	0.206	0.271
	WCDMA II_UAT	RMC 12.2Kbps	Back	10mm	Reduced	9400	1880	13.61	14.80	1.315	0.14	0.209	0.275
	WCDMA II_UAT	RMC 12.2Kbps	Left Side	10mm	Reduced	9400	1880	13.61	14.80	1.315	0.13	0.045	0.059
	WCDMA II_UAT	RMC 12.2Kbps	Right Side	10mm	Reduced	9400	1880	13.61	14.80	1.315	0.11	0.037	0.049
	WCDMA II_UAT	RMC 12.2Kbps	Top Side	10mm	Reduced	9400	1880	13.61	14.80	1.315	0.12	0.384	0.505
	WCDMA II_UAT	RMC 12.2Kbps	Top Side	10mm	Reduced	9262	1852.4	13.40	14.80	1.380	0.03	0.339	0.468
	WCDMA II_UAT	RMC 12.2Kbps	Top Side	10mm	Reduced	9538	1907.6	13.51	14.80	1.346	0.1	0.355	0.478
	WCDMA II_LAT	RMC 12.2Kbps	Front	10mm	Reduced	9400	1880	20.88	21.80	1.236	-0.05	0.522	0.645
	WCDMA II_LAT	RMC 12.2Kbps	Back	10mm	Reduced	9400	1880	20.88	21.80	1.236	0.18	0.581	0.718
	WCDMA II_LAT	RMC 12.2Kbps	Left Side	10mm	Reduced	9400	1880	20.88	21.80	1.236	0.11	0.157	0.194
	WCDMA II_LAT	RMC 12.2Kbps	Right Side	10mm	Reduced	9400	1880	20.88	21.80	1.236	-0.06	0.137	0.169
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	9400	1880	20.88	21.80	1.236	-0.13	0.668	0.826
35	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	9262	1852.4	20.77	21.80	1.268	-0.07	0.749	0.949
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	10mm	Reduced	9538	1907.6	20.78	21.80	1.265	0.08	0.615	0.778



<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	Reduced	384	836.52	18.47	19.30	1.211	0.02	0.106	0.128
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Back	10mm	Reduced	384	836.52	18.47	19.30	1.211	0.15	0.165	0.200
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	384	836.52	18.47	19.30	1.211	-0.07	0.226	0.274
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Right Side	10mm	Reduced	384	836.52	18.47	19.30	1.211	0.14	0.004	0.005
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Top Side	10mm	Reduced	384	836.52	18.47	19.30	1.211	-0.11	0.014	0.017
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	1013	824.7	18.43	19.30	1.222	0.08	0.226	0.276
	CDMA2000 BC0_UAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	777	848.31	18.45	19.30	1.216	0.11	0.247	0.300
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Front	10mm	Reduced	384	836.52	22.78	23.80	1.265	0.12	0.302	0.382
36	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Back	10mm	Reduced	384	836.52	22.78	23.80	1.265	-0.06	0.562	0.711
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	384	836.52	22.78	23.80	1.265	0.08	0.112	0.142
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Right Side	10mm	Reduced	384	836.52	22.78	23.80	1.265	0.04	0.360	0.455
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Reduced	384	836.52	22.78	23.80	1.265	-0.15	0.205	0.259
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Back	10mm	Reduced	1013	824.7	22.76	23.80	1.271	-0.03	0.522	0.663
	CDMA2000 BC0_LAT	RTAP 153.6Kbps	Back	10mm	Reduced	777	848.31	22.68	23.80	1.294	0.11	0.501	0.648
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Front	10mm	Reduced	580	820.5	17.75	18.80	1.274	0.02	0.104	0.132
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Back	10mm	Reduced	580	820.5	17.75	18.80	1.274	0.13	0.159	0.202
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	580	820.5	17.75	18.80	1.274	-0.08	0.216	0.275
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Right Side	10mm	Reduced	580	820.5	17.75	18.80	1.274	0.17	0.006	0.008
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Top Side	10mm	Reduced	580	820.5	17.75	18.80	1.274	0.19	0.014	0.018
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	476	817.9	17.72	18.80	1.282	0.11	0.197	0.253
	CDMA2000 BC10_UAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	684	823.1	17.73	18.80	1.279	0.13	0.230	0.294
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Front	10mm	Reduced	580	820.5	23.03	23.80	1.194	0.11	0.312	0.373
37	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Back	10mm	Reduced	580	820.5	23.03	23.80	1.194	0.08	0.522	0.623
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	580	820.5	23.03	23.80	1.194	0.09	0.103	0.123
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Right Side	10mm	Reduced	580	820.5	23.03	23.80	1.194	0.14	0.320	0.382
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Reduced	580	820.5	23.03	23.80	1.194	-0.08	0.203	0.242
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Back	10mm	Reduced	476	817.9	22.98	23.80	1.208	-0.01	0.503	0.608
	CDMA2000 BC10_LAT	RTAP 153.6Kbps	Back	10mm	Reduced	684	823.1	22.98	23.80	1.208	0.07	0.481	0.581
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Front	10mm	Reduced	1175	1908.75	14.36	15.80	1.393	-0.18	0.190	0.265
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Back	10mm	Reduced	1175	1908.75	14.36	15.80	1.393	0.07	0.182	0.254
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	1175	1908.75	14.36	15.80	1.393	0.05	0.045	0.063
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Right Side	10mm	Reduced	1175	1908.75	14.36	15.80	1.393	0.16	0.033	0.046
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Top Side	10mm	Reduced	1175	1908.75	14.36	15.80	1.393	0.03	0.289	0.403
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Top Side	10mm	Reduced	25	1851.25	14.25	15.80	1.429	0.01	0.287	0.410
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Top Side	10mm	Reduced	600	1880	14.27	15.80	1.422	0.14	0.331	0.471
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Front	10mm	Reduced	1175	1908.75	21.17	22.30	1.297	0.11	0.378	0.490
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Back	10mm	Reduced	1175	1908.75	21.17	22.30	1.297	-0.08	0.386	0.501
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Left Side	10mm	Reduced	1175	1908.75	21.17	22.30	1.297	0.17	0.089	0.115
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Right Side	10mm	Reduced	1175	1908.75	21.17	22.30	1.297	0.15	0.108	0.140
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Reduced	1175	1908.75	21.17	22.30	1.297	0.02	0.680	0.882
38	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Reduced	25	1851.25	21.06	22.30	1.330	0.06	0.694	0.923
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	10mm	Reduced	600	1880	21.07	22.30	1.327	0.06	0.626	0.831



<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	99	Front	10mm	Reduced	133322	683	19.78	20.30	1.127	0.02	0.142	0.160
	LTE Band 71_UAT	20M	QPSK	1	99	Back	10mm	Reduced	133322	683	19.78	20.30	1.127	-0.09	0.223	0.251
	LTE Band 71_UAT	20M	QPSK	1	99	Left Side	10mm	Reduced	133322	683	19.78	20.30	1.127	-0.07	0.398	0.449
	LTE Band 71_UAT	20M	QPSK	1	99	Right Side	10mm	Reduced	133322	683	19.78	20.30	1.127	0.12	0.020	0.022
	LTE Band 71_UAT	20M	QPSK	1	99	Top Side	10mm	Reduced	133322	683	19.78	20.30	1.127	0.06	0.011	0.013
	LTE Band 71_UAT	20M	QPSK	50	0	Front	10mm	Reduced	133322	683	19.70	20.30	1.148	-0.13	0.098	0.113
	LTE Band 71_UAT	20M	QPSK	50	0	Back	10mm	Reduced	133322	683	19.70	20.30	1.148	0.02	0.153	0.176
	LTE Band 71_UAT	20M	QPSK	50	0	Left Side	10mm	Reduced	133322	683	19.70	20.30	1.148	0.15	0.263	0.302
	LTE Band 71_UAT	20M	QPSK	50	0	Right Side	10mm	Reduced	133322	683	19.70	20.30	1.148	0.08	0.016	0.018
	LTE Band 71_UAT	20M	QPSK	50	0	Top Side	10mm	Reduced	133322	683	19.70	20.30	1.148	0.07	0.010	0.011
	LTE Band 71_LAT	20M	QPSK	1	99	Front	10mm	Full	133322	683	22.57	23.80	1.327	-0.06	0.298	0.396
39	LTE Band 71_LAT	20M	QPSK	1	99	Back	10mm	Full	133322	683	22.57	23.80	1.327	-0.06	0.434	0.576
	LTE Band 71_LAT	20M	QPSK	1	99	Left Side	10mm	Full	133322	683	22.57	23.80	1.327	0.05	0.168	0.223
	LTE Band 71_LAT	20M	QPSK	1	99	Right Side	10mm	Full	133322	683	22.57	23.80	1.327	0.08	0.275	0.365
	LTE Band 71_LAT	20M	QPSK	1	99	Bottom Side	10mm	Full	133322	683	22.57	23.80	1.327	0.17	0.160	0.212
	LTE Band 71_LAT	20M	QPSK	50	0	Front	10mm	Full	133322	683	21.69	22.80	1.291	0.12	0.245	0.316
	LTE Band 71_LAT	20M	QPSK	50	0	Back	10mm	Full	133322	683	21.69	22.80	1.291	0.16	0.367	0.474
	LTE Band 71_LAT	20M	QPSK	50	0	Left Side	10mm	Full	133322	683	21.69	22.80	1.291	-0.06	0.140	0.181
	LTE Band 71_LAT	20M	QPSK	50	0	Right Side	10mm	Full	133322	683	21.69	22.80	1.291	0.15	0.226	0.292
	LTE Band 71_LAT	20M	QPSK	50	0	Bottom Side	10mm	Full	133322	683	21.69	22.80	1.291	0.03	0.127	0.164
	LTE Band 12_UAT	10M	QPSK	1	49	Front	10mm	Reduced	23095	707.5	18.80	19.30	1.122	0.11	0.130	0.146
	LTE Band 12_UAT	10M	QPSK	1	49	Back	10mm	Reduced	23095	707.5	18.80	19.30	1.122	0.02	0.205	0.230
40	LTE Band 12_UAT	10M	QPSK	1	49	Left Side	10mm	Reduced	23095	707.5	18.80	19.30	1.122	0.15	0.342	0.384
	LTE Band 12_UAT	10M	QPSK	1	49	Right Side	10mm	Reduced	23095	707.5	18.80	19.30	1.122	0.17	0.060	0.067
	LTE Band 12_UAT	10M	QPSK	1	49	Top Side	10mm	Reduced	23095	707.5	18.80	19.30	1.122	-0.13	0.018	0.020
	LTE Band 12_UAT	10M	QPSK	25	12	Front	10mm	Reduced	23095	707.5	18.76	19.30	1.132	-0.06	0.133	0.151
	LTE Band 12_UAT	10M	QPSK	25	12	Back	10mm	Reduced	23095	707.5	18.76	19.30	1.132	0.14	0.205	0.232
	LTE Band 12_UAT	10M	QPSK	25	12	Left Side	10mm	Reduced	23095	707.5	18.76	19.30	1.132	0.05	0.276	0.313
	LTE Band 12_UAT	10M	QPSK	25	12	Right Side	10mm	Reduced	23095	707.5	18.76	19.30	1.132	0.08	0.005	0.006
	LTE Band 12_UAT	10M	QPSK	25	12	Top Side	10mm	Reduced	23095	707.5	18.76	19.30	1.132	0.09	0.011	0.013
	LTE Band 12_LAT	10M	QPSK	1	49	Front	10mm	Full	23095	707.5	23.20	23.80	1.148	0.04	0.252	0.289
	LTE Band 12_LAT	10M	QPSK	1	49	Back	10mm	Full	23095	707.5	23.20	23.80	1.148	0.09	0.292	0.335
	LTE Band 12_LAT	10M	QPSK	1	49	Left Side	10mm	Full	23095	707.5	23.20	23.80	1.148	-0.03	0.148	0.170
	LTE Band 12_LAT	10M	QPSK	1	49	Right Side	10mm	Full	23095	707.5	23.20	23.80	1.148	0.05	0.208	0.239
	LTE Band 12_LAT	10M	QPSK	1	49	Bottom Side	10mm	Full	23095	707.5	23.20	23.80	1.148	0.09	0.186	0.214
	LTE Band 12_LAT	10M	QPSK	25	12	Front	10mm	Full	23095	707.5	22.19	22.80	1.151	0.17	0.201	0.231
	LTE Band 12_LAT	10M	QPSK	25	12	Back	10mm	Full	23095	707.5	22.19	22.80	1.151	0.08	0.220	0.253
	LTE Band 12_LAT	10M	QPSK	25	12	Left Side	10mm	Full	23095	707.5	22.19	22.80	1.151	-0.05	0.104	0.120
	LTE Band 12_LAT	10M	QPSK	25	12	Right Side	10mm	Full	23095	707.5	22.19	22.80	1.151	0.02	0.163	0.188
	LTE Band 12_LAT	10M	QPSK	25	12	Bottom Side	10mm	Full	23095	707.5	22.19	22.80	1.151	0.01	0.121	0.139



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 13_UAT	10M	QPSK	1	25	Front	10mm	Reduced	23230	782	18.72	19.30	1.143	0.16	0.151	0.173
	LTE Band 13_UAT	10M	QPSK	1	25	Back	10mm	Reduced	23230	782	18.72	19.30	1.143	0.13	0.227	0.259
	LTE Band 13_UAT	10M	QPSK	1	25	Left Side	10mm	Reduced	23230	782	18.72	19.30	1.143	0.17	0.370	0.423
	LTE Band 13_UAT	10M	QPSK	1	25	Right Side	10mm	Reduced	23230	782	18.72	19.30	1.143	0.17	0.009	0.010
	LTE Band 13_UAT	10M	QPSK	1	25	Top Side	10mm	Reduced	23230	782	18.72	19.30	1.143	0.04	0.015	0.017
	LTE Band 13_UAT	10M	QPSK	25	25	Front	10mm	Reduced	23230	782	18.39	19.30	1.233	0.02	0.145	0.179
	LTE Band 13_UAT	10M	QPSK	25	25	Back	10mm	Reduced	23230	782	18.39	19.30	1.233	0.05	0.212	0.261
	LTE Band 13_UAT	10M	QPSK	25	25	Left Side	10mm	Reduced	23230	782	18.39	19.30	1.233	0.09	0.342	0.422
	LTE Band 13_UAT	10M	QPSK	25	25	Right Side	10mm	Reduced	23230	782	18.39	19.30	1.233	-0.18	0.007	0.009
	LTE Band 13_UAT	10M	QPSK	25	25	Top Side	10mm	Reduced	23230	782	18.39	19.30	1.233	0.07	0.013	0.016
	LTE Band 13_LAT	10M	QPSK	1	25	Front	10mm	Full	23230	782	22.98	23.80	1.208	0.05	0.401	0.484
41	LTE Band 13_LAT	10M	QPSK	1	25	Back	10mm	Full	23230	782	22.98	23.80	1.208	0.13	0.516	0.623
	LTE Band 13_LAT	10M	QPSK	1	25	Left Side	10mm	Full	23230	782	22.98	23.80	1.208	0.16	0.202	0.244
	LTE Band 13_LAT	10M	QPSK	1	25	Right Side	10mm	Full	23230	782	22.98	23.80	1.208	-0.09	0.416	0.502
	LTE Band 13_LAT	10M	QPSK	1	25	Bottom Side	10mm	Full	23230	782	22.98	23.80	1.208	0.12	0.263	0.318
	LTE Band 13_LAT	10M	QPSK	25	25	Front	10mm	Full	23230	782	21.93	22.80	1.222	0.02	0.312	0.381
	LTE Band 13_LAT	10M	QPSK	25	25	Back	10mm	Full	23230	782	21.93	22.80	1.222	0.16	0.435	0.531
	LTE Band 13_LAT	10M	QPSK	25	25	Left Side	10mm	Full	23230	782	21.93	22.80	1.222	0.04	0.152	0.186
	LTE Band 13_LAT	10M	QPSK	25	25	Right Side	10mm	Full	23230	782	21.93	22.80	1.222	0.11	0.326	0.398
	LTE Band 13_LAT	10M	QPSK	25	25	Bottom Side	10mm	Full	23230	782	21.93	22.80	1.222	-0.1	0.186	0.227
	LTE Band 5_UAT	10M	QPSK	1	0	Front	10mm	Reduced	20525	836.5	18.16	18.80	1.159	-0.06	0.103	0.119
	LTE Band 5_UAT	10M	QPSK	1	0	Back	10mm	Reduced	20525	836.5	18.16	18.80	1.159	0.13	0.132	0.153
	LTE Band 5_UAT	10M	QPSK	1	0	Left Side	10mm	Reduced	20525	836.5	18.16	18.80	1.159	0.03	0.282	0.327
	LTE Band 5_UAT	10M	QPSK	1	0	Right Side	10mm	Reduced	20525	836.5	18.16	18.80	1.159	0.15	0.004	0.005
	LTE Band 5_UAT	10M	QPSK	1	0	Top Side	10mm	Reduced	20525	836.5	18.16	18.80	1.159	0.08	0.012	0.014
	LTE Band 5_UAT	10M	QPSK	25	0	Front	10mm	Reduced	20525	836.5	18.15	18.80	1.161	0.04	0.104	0.121
	LTE Band 5_UAT	10M	QPSK	25	0	Back	10mm	Reduced	20525	836.5	18.15	18.80	1.161	0.15	0.131	0.152
	LTE Band 5_UAT	10M	QPSK	25	0	Left Side	10mm	Reduced	20525	836.5	18.15	18.80	1.161	0.09	0.283	0.329
	LTE Band 5_UAT	10M	QPSK	25	0	Right Side	10mm	Reduced	20525	836.5	18.15	18.80	1.161	-0.07	0.005	0.006
	LTE Band 5_UAT	10M	QPSK	25	0	Top Side	10mm	Reduced	20525	836.5	18.15	18.80	1.161	0.15	0.013	0.015
	LTE Band 5_LAT	10M	QPSK	1	0	Front	10mm	Reduced	20525	836.5	21.96	22.80	1.213	0.14	0.317	0.385
42	LTE Band 5_LAT	10M	QPSK	1	0	Back	10mm	Reduced	20525	836.5	21.96	22.80	1.213	0.04	0.538	0.653
	LTE Band 5_LAT	10M	QPSK	1	0	Left Side	10mm	Reduced	20525	836.5	21.96	22.80	1.213	-0.16	0.121	0.147
	LTE Band 5_LAT	10M	QPSK	1	0	Right Side	10mm	Reduced	20525	836.5	21.96	22.80	1.213	0.02	0.415	0.504
	LTE Band 5_LAT	10M	QPSK	1	0	Bottom Side	10mm	Reduced	20525	836.5	21.96	22.80	1.213	0.16	0.271	0.329
	LTE Band 5_LAT	10M	QPSK	25	12	Front	10mm	Reduced	20525	836.5	21.94	22.80	1.219	-0.14	0.271	0.330
	LTE Band 5_LAT	10M	QPSK	25	12	Back	10mm	Reduced	20525	836.5	21.94	22.80	1.219	0.04	0.521	0.635
	LTE Band 5_LAT	10M	QPSK	25	12	Left Side	10mm	Reduced	20525	836.5	21.94	22.80	1.219	-0.16	0.093	0.113
	LTE Band 5_LAT	10M	QPSK	25	12	Right Side	10mm	Reduced	20525	836.5	21.94	22.80	1.219	0.02	0.326	0.397
	LTE Band 5_LAT	10M	QPSK	25	12	Bottom Side	10mm	Reduced	20525	836.5	21.94	22.80	1.219	0.13	0.223	0.272



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 26_UAT	15M	QPSK	1	0	Front	10mm	Reduced	26865	831.5	19.71	20.30	1.146	0.05	0.061	0.070
	LTE Band 26_UAT	15M	QPSK	1	0	Back	10mm	Reduced	26865	831.5	19.71	20.30	1.146	0.09	0.253	0.290
	LTE Band 26_UAT	15M	QPSK	1	0	Left Side	10mm	Reduced	26865	831.5	19.71	20.30	1.146	0.18	0.385	0.441
	LTE Band 26_UAT	15M	QPSK	1	0	Right Side	10mm	Reduced	26865	831.5	19.71	20.30	1.146	0.13	0.011	0.013
	LTE Band 26_UAT	15M	QPSK	1	0	Top Side	10mm	Reduced	26865	831.5	19.71	20.30	1.146	0.02	0.016	0.018
	LTE Band 26_UAT	15M	QPSK	1	0	Left Side	10mm	Reduced	26765	821.5	19.67	20.30	1.156	0.16	0.328	0.379
	LTE Band 26_UAT	15M	QPSK	1	0	Left Side	10mm	Reduced	26965	841.5	19.62	20.30	1.169	0.1	0.331	0.387
	LTE Band 26_UAT	15M	QPSK	36	20	Front	10mm	Reduced	26865	831.5	19.51	20.30	1.199	-0.06	0.060	0.072
	LTE Band 26_UAT	15M	QPSK	36	20	Back	10mm	Reduced	26865	831.5	19.51	20.30	1.199	-0.14	0.246	0.295
	LTE Band 26_UAT	15M	QPSK	36	20	Left Side	10mm	Reduced	26865	831.5	19.51	20.30	1.199	0.16	0.347	0.416
	LTE Band 26_UAT	15M	QPSK	36	20	Right Side	10mm	Reduced	26865	831.5	19.51	20.30	1.199	0.03	0.009	0.011
	LTE Band 26_UAT	15M	QPSK	36	20	Top Side	10mm	Reduced	26865	831.5	19.51	20.30	1.199	0.07	0.014	0.017
	LTE Band 26_LAT	15M	QPSK	1	0	Front	10mm	Full	26865	831.5	23.12	23.80	1.169	-0.06	0.300	0.351
	LTE Band 26_LAT	15M	QPSK	1	0	Back	10mm	Full	26865	831.5	23.12	23.80	1.169	0.12	0.572	0.669
	LTE Band 26_LAT	15M	QPSK	1	0	Left Side	10mm	Full	26865	831.5	23.12	23.80	1.169	0.04	0.127	0.149
	LTE Band 26_LAT	15M	QPSK	1	0	Right Side	10mm	Full	26865	831.5	23.12	23.80	1.169	0.15	0.313	0.366
	LTE Band 26_LAT	15M	QPSK	1	0	Bottom Side	10mm	Full	26865	831.5	23.12	23.80	1.169	0.07	0.302	0.353
	LTE Band 26_LAT	15M	QPSK	1	0	Back	10mm	Full	26765	821.5	22.98	23.80	1.208	0.14	0.554	0.669
43	LTE Band 26_LAT	15M	QPSK	1	0	Back	10mm	Full	26965	841.5	23.08	23.80	1.180	0.11	0.573	0.676
	LTE Band 26_LAT	15M	QPSK	36	20	Front	10mm	Full	26865	831.5	22.25	22.80	1.135	0.11	0.243	0.276
	LTE Band 26_LAT	15M	QPSK	36	20	Back	10mm	Full	26865	831.5	22.25	22.80	1.135	-0.18	0.462	0.524
	LTE Band 26_LAT	15M	QPSK	36	20	Left Side	10mm	Full	26865	831.5	22.25	22.80	1.135	0.09	0.101	0.115
	LTE Band 26_LAT	15M	QPSK	36	20	Right Side	10mm	Full	26865	831.5	22.25	22.80	1.135	0.13	0.295	0.335
	LTE Band 26_LAT	15M	QPSK	36	20	Bottom Side	10mm	Full	26865	831.5	22.25	22.80	1.135	0.04	0.235	0.267
	LTE Band 66_UAT	20M	QPSK	1	0	Front	10mm	Reduced	132322	1745	15.57	16.30	1.183	0.02	0.192	0.227
	LTE Band 66_UAT	20M	QPSK	1	0	Back	10mm	Reduced	132322	1745	15.57	16.30	1.183	0.14	0.202	0.239
	LTE Band 66_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	132322	1745	15.57	16.30	1.183	0.13	0.064	0.076
	LTE Band 66_UAT	20M	QPSK	1	0	Right Side	10mm	Reduced	132322	1745	15.57	16.30	1.183	0.03	0.026	0.031
	LTE Band 66_UAT	20M	QPSK	1	0	Top Side	10mm	Reduced	132322	1745	15.57	16.30	1.183	0.05	0.384	0.454
	LTE Band 66_UAT	20M	QPSK	1	0	Top Side	10mm	Reduced	132072	1720	15.33	16.30	1.250	0.18	0.360	0.450
	LTE Band 66_UAT	20M	QPSK	1	0	Top Side	10mm	Reduced	132572	1770	15.40	16.30	1.230	-0.12	0.438	0.539
	LTE Band 66C_UAT	20M	QPSK	1	0	Top Side	10mm	Reduced	132322	1745	15.39	16.30	1.233	-0.05	0.310	0.382
	LTE Band 66C_UAT	20M	QPSK	1	0	Top Side	10mm	Reduced	132072	1720	15.22	16.30	1.282	0.06	0.316	0.405
	LTE Band 66C_UAT	20M	QPSK	1	0	Top Side	10mm	Reduced	132572	1770	15.28	16.30	1.265	0.07	0.401	0.507
	LTE Band 66_UAT	20M	QPSK	50	24	Front	10mm	Reduced	132322	1745	15.50	16.30	1.202	0.1	0.191	0.230
	LTE Band 66_UAT	20M	QPSK	50	24	Back	10mm	Reduced	132322	1745	15.50	16.30	1.202	-0.09	0.201	0.242
	LTE Band 66_UAT	20M	QPSK	50	24	Left Side	10mm	Reduced	132322	1745	15.50	16.30	1.202	-0.11	0.060	0.072
	LTE Band 66_UAT	20M	QPSK	50	24	Right Side	10mm	Reduced	132322	1745	15.50	16.30	1.202	0.06	0.025	0.030
	LTE Band 66_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	132322	1745	15.50	16.30	1.202	0.14	0.364	0.438
	LTE Band 66_LAT	20M	QPSK	1	0	Front	10mm	Reduced	132322	1745	20.33	20.80	1.114	-0.14	0.389	0.433
	LTE Band 66_LAT	20M	QPSK	1	0	Back	10mm	Reduced	132322	1745	20.33	20.80	1.114	0.16	0.461	0.514
	LTE Band 66_LAT	20M	QPSK	1	0	Left Side	10mm	Reduced	132322	1745	20.33	20.80	1.114	0.03	0.151	0.168
	LTE Band 66_LAT	20M	QPSK	1	0	Right Side	10mm	Reduced	132322	1745	20.33	20.80	1.114	0.05	0.100	0.111
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	132322	1745	20.33	20.80	1.114	0.09	0.678	0.755
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	132072	1720	20.24	20.80	1.138	0.16	0.632	0.719
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	132572	1770	20.23	20.80	1.140	0.04	0.685	0.781
	LTE Band 66_LAT	20M	QPSK	50	24	Front	10mm	Reduced	132322	1745	20.29	20.80	1.125	-0.14	0.413	0.464
	LTE Band 66_LAT	20M	QPSK	50	24	Back	10mm	Reduced	132322	1745	20.29	20.80	1.125	-0.08	0.516	0.580
	LTE Band 66_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	132322	1745	20.29	20.80	1.125	0.13	0.171	0.192
	LTE Band 66_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	132322	1745	20.29	20.80	1.125	0.06	0.117	0.132
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132322	1745	20.29	20.80	1.125	0.05	0.696	0.783
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132072	1720	20.26	20.80	1.132	0.02	0.665	0.753
44	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132572	1770	20.22	20.80	1.143	0.06	0.741	0.847



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	LTE Band 66C_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132322	1745	20.02	20.80	1.197	-0.08	0.638	0.764
	LTE Band 66C_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132072	1720	19.82	20.80	1.253	0.06	0.630	0.789
	LTE Band 66C_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132572	1770	20.01	20.80	1.199	0.01	0.667	0.800
	LTE Band 66_LAT	20M	QPSK	100	0	Bottom Side	10mm	Reduced	132322	1745	20.27	20.80	1.130	0.12	0.663	0.749

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	49	Front	10mm	Reduced	26340	1880	12.60	13.30	1.175	-0.08	0.145	0.170
	LTE Band 25_UAT	20M	QPSK	1	49	Back	10mm	Reduced	26340	1880	12.60	13.30	1.175	-0.05	0.160	0.188
	LTE Band 25_UAT	20M	QPSK	1	49	Left Side	10mm	Reduced	26340	1880	12.60	13.30	1.175	0.02	0.031	0.036
	LTE Band 25_UAT	20M	QPSK	1	49	Right Side	10mm	Reduced	26340	1880	12.60	13.30	1.175	0.04	0.021	0.025
	LTE Band 25_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	26340	1880	12.60	13.30	1.175	0.05	0.271	0.318
	LTE Band 25_UAT	20M	QPSK	50	24	Front	10mm	Reduced	26340	1880	12.34	13.30	1.247	-0.04	0.150	0.187
	LTE Band 25_UAT	20M	QPSK	50	24	Back	10mm	Reduced	26340	1880	12.34	13.30	1.247	-0.09	0.164	0.205
	LTE Band 25_UAT	20M	QPSK	50	24	Left Side	10mm	Reduced	26340	1880	12.34	13.30	1.247	0.02	0.023	0.029
	LTE Band 25_UAT	20M	QPSK	50	24	Right Side	10mm	Reduced	26340	1880	12.34	13.30	1.247	0.07	0.014	0.017
	LTE Band 25_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	26340	1880	12.34	13.30	1.247	0.03	0.275	0.343
	LTE Band 25_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	26140	1860	12.26	13.30	1.271	-0.07	0.265	0.337
	LTE Band 25_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	26590	1905	12.32	13.30	1.253	0.14	0.279	0.350
	LTE Band 25_LAT	20M	QPSK	1	0	Front	10mm	Reduced	26340	1880	19.86	20.30	1.107	-0.11	0.550	0.609
	LTE Band 25_LAT	20M	QPSK	1	0	Back	10mm	Reduced	26340	1880	19.86	20.30	1.107	0.07	0.589	0.652
	LTE Band 25_LAT	20M	QPSK	1	0	Left Side	10mm	Reduced	26340	1880	19.86	20.30	1.107	0.12	0.124	0.137
	LTE Band 25_LAT	20M	QPSK	1	0	Right Side	10mm	Reduced	26340	1880	19.86	20.30	1.107	0.02	0.150	0.166
45	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	26340	1880	19.86	20.30	1.107	0.04	0.812	0.899
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	26140	1860	19.83	20.30	1.114	-0.09	0.802	0.894
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	26590	1905	19.85	20.30	1.109	-0.18	0.756	0.839
	LTE Band 25_LAT	20M	QPSK	50	24	Front	10mm	Reduced	26340	1880	19.82	20.30	1.117	0.13	0.562	0.628
	LTE Band 25_LAT	20M	QPSK	50	24	Back	10mm	Reduced	26340	1880	19.82	20.30	1.117	0.11	0.593	0.662
	LTE Band 25_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	26340	1880	19.82	20.30	1.117	0.05	0.119	0.133
	LTE Band 25_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	26340	1880	19.82	20.30	1.117	-0.06	0.163	0.182
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	26340	1880	19.82	20.30	1.117	-0.14	0.803	0.897
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	26140	1860	19.72	20.30	1.143	0.11	0.781	0.893
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	26590	1905	19.70	20.30	1.148	0.02	0.601	0.690
	LTE Band 25_LAT	20M	QPSK	100	0	Bottom Side	10mm	Reduced	26340	1880	19.79	20.30	1.125	0.05	0.769	0.865



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 30_UAT	10M	QPSK	1	0	Front	10mm	Reduced	27710	2310	14.34	15.60	1.337	0.11	0.211	0.282
	LTE Band 30_UAT	10M	QPSK	1	0	Back	10mm	Reduced	27710	2310	14.34	15.60	1.337	0.05	0.227	0.303
	LTE Band 30_UAT	10M	QPSK	1	0	Left Side	10mm	Reduced	27710	2310	14.34	15.60	1.337	0.07	0.062	0.083
	LTE Band 30_UAT	10M	QPSK	1	0	Right Side	10mm	Reduced	27710	2310	14.34	15.60	1.337	-0.16	0.022	0.030
	LTE Band 30_UAT	10M	QPSK	1	0	Top Side	10mm	Reduced	27710	2310	14.34	15.60	1.337	0.12	0.581	0.777
	LTE Band 30_UAT	10M	QPSK	25	12	Front	10mm	Reduced	27710	2310	14.27	15.60	1.358	-0.11	0.201	0.273
	LTE Band 30_UAT	10M	QPSK	25	12	Back	10mm	Reduced	27710	2310	14.27	15.60	1.358	-0.17	0.234	0.318
	LTE Band 30_UAT	10M	QPSK	25	12	Left Side	10mm	Reduced	27710	2310	14.27	15.60	1.358	0.06	0.063	0.086
	LTE Band 30_UAT	10M	QPSK	25	12	Right Side	10mm	Reduced	27710	2310	14.27	15.60	1.358	0.18	0.023	0.031
	LTE Band 30_UAT	10M	QPSK	25	12	Top Side	10mm	Reduced	27710	2310	14.27	15.60	1.358	0.17	0.640	0.869
	LTE Band 30_UAT	10M	QPSK	50	0	Top Side	10mm	Reduced	27710	2310	14.20	15.60	1.380	0.04	0.625	0.863
	LTE Band 30_LAT	10M	QPSK	1	0	Front	10mm	Reduced	27710	2310	17.89	19.30	1.384	0.05	0.343	0.475
	LTE Band 30_LAT	10M	QPSK	1	0	Back	10mm	Reduced	27710	2310	17.89	19.30	1.384	-0.08	0.354	0.490
	LTE Band 30_LAT	10M	QPSK	1	0	Left Side	10mm	Reduced	27710	2310	17.89	19.30	1.384	0.17	0.117	0.162
	LTE Band 30_LAT	10M	QPSK	1	0	Right Side	10mm	Reduced	27710	2310	17.89	19.30	1.384	0.05	0.072	0.100
	LTE Band 30_LAT	10M	QPSK	1	0	Bottom Side	10mm	Reduced	27710	2310	17.89	19.30	1.384	0.06	0.585	0.809
	LTE Band 30_LAT	10M	QPSK	25	12	Front	10mm	Reduced	27710	2310	17.86	19.30	1.393	-0.07	0.348	0.485
	LTE Band 30_LAT	10M	QPSK	25	12	Back	10mm	Reduced	27710	2310	17.86	19.30	1.393	0.14	0.354	0.493
	LTE Band 30_LAT	10M	QPSK	25	12	Left Side	10mm	Reduced	27710	2310	17.86	19.30	1.393	0.12	0.123	0.171
	LTE Band 30_LAT	10M	QPSK	25	12	Right Side	10mm	Reduced	27710	2310	17.86	19.30	1.393	0.18	0.081	0.113
46	LTE Band 30_LAT	10M	QPSK	25	12	Bottom Side	10mm	Reduced	27710	2310	17.86	19.30	1.393	0.09	0.641	0.893
	LTE Band 30_LAT	10M	QPSK	50	0	Bottom Side	10mm	Reduced	27710	2310	17.78	19.30	1.419	0.05	0.568	0.806
	LTE Band 7_UAT	20M	QPSK	1	49	Front	10mm	Reduced	20850	2510	14.40	15.10	1.175	-0.04	0.250	0.294
	LTE Band 7_UAT	20M	QPSK	1	49	Back	10mm	Reduced	20850	2510	14.40	15.10	1.175	0.18	0.272	0.320
	LTE Band 7_UAT	20M	QPSK	1	49	Left Side	10mm	Reduced	20850	2510	14.40	15.10	1.175	0.01	0.045	0.053
	LTE Band 7_UAT	20M	QPSK	1	49	Right Side	10mm	Reduced	20850	2510	14.40	15.10	1.175	0.06	0.022	0.026
	LTE Band 7_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	20850	2510	14.40	15.10	1.175	0.14	0.695	0.817
	LTE Band 7_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	21100	2535	14.26	15.10	1.213	0.08	0.667	0.809
	LTE Band 7_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	21350	2560	14.23	15.10	1.222	0.17	0.686	0.838
	LTE Band 7_UAT	20M	QPSK	50	24	Front	10mm	Reduced	20850	2510	14.36	15.10	1.186	-0.16	0.252	0.299
	LTE Band 7_UAT	20M	QPSK	50	24	Back	10mm	Reduced	20850	2510	14.36	15.10	1.186	-0.11	0.276	0.327
	LTE Band 7_UAT	20M	QPSK	50	24	Left Side	10mm	Reduced	20850	2510	14.36	15.10	1.186	0.08	0.047	0.055
	LTE Band 7_UAT	20M	QPSK	50	24	Right Side	10mm	Reduced	20850	2510	14.36	15.10	1.186	0.16	0.024	0.028
47	LTE Band 7_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	20850	2510	14.36	15.10	1.186	0.14	0.774	0.918
	LTE Band 7_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	21100	2535	14.24	15.10	1.219	0.02	0.691	0.842
	LTE Band 7_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	21350	2560	14.15	15.10	1.245	0.14	0.709	0.882
	LTE Band 7_UAT	20M	QPSK	100	0	Top Side	10mm	Reduced	20850	2510	14.35	15.10	1.189	0.07	0.769	0.914
	LTE Band 7_LAT	20M	QPSK	1	49	Front	10mm	Reduced	20850	2510	18.20	19.30	1.288	0.19	0.311	0.401
	LTE Band 7_LAT	20M	QPSK	1	49	Back	10mm	Reduced	20850	2510	18.20	19.30	1.288	0.12	0.382	0.492
	LTE Band 7_LAT	20M	QPSK	1	49	Left Side	10mm	Reduced	20850	2510	18.20	19.30	1.288	-0.02	0.077	0.099
	LTE Band 7_LAT	20M	QPSK	1	49	Right Side	10mm	Reduced	20850	2510	18.20	19.30	1.288	0.07	0.052	0.067
	LTE Band 7_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	20850	2510	18.20	19.30	1.288	0.04	0.625	0.805
	LTE Band 7_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	21100	2535	18.13	19.30	1.309	0.15	0.603	0.789
	LTE Band 7_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	21350	2560	18.16	19.30	1.300	0.16	0.652	0.848
	LTE Band 7_LAT	20M	QPSK	50	24	Front	10mm	Reduced	20850	2510	18.19	19.30	1.291	-0.16	0.303	0.391
	LTE Band 7_LAT	20M	QPSK	50	24	Back	10mm	Reduced	20850	2510	18.19	19.30	1.291	0.08	0.370	0.478
	LTE Band 7_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	20850	2510	18.19	19.30	1.291	0.02	0.070	0.090
	LTE Band 7_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	20850	2510	18.19	19.30	1.291	-0.11	0.051	0.066
	LTE Band 7_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	20850	2510	18.19	19.30	1.291	0.07	0.606	0.782
	LTE Band 7_LAT	20M	QPSK	100	0	Bottom Side	10mm	Reduced	20850	2510	18.11	19.30	1.315	0.05	0.478	0.629



<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	Reduced	40620	2593	17.35	18.10	1.189	62.9	1.006	-0.17	0.146	0.175
	LTE Band 41_UAT	20M	QPSK	1	49	Back	10mm	Reduced	40620	2593	17.35	18.10	1.189	62.9	1.006	-0.02	0.185	0.221
	LTE Band 41_UAT	20M	QPSK	1	49	Left Side	10mm	Reduced	40620	2593	17.35	18.10	1.189	62.9	1.006	0.03	0.031	0.037
	LTE Band 41_UAT	20M	QPSK	1	49	Right Side	10mm	Reduced	40620	2593	17.35	18.10	1.189	62.9	1.006	0.08	0.027	0.032
	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	40620	2593	17.35	18.10	1.189	62.9	1.006	0.02	0.507	0.606
	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	39750	2506	17.24	18.10	1.219	62.9	1.006	-0.05	0.700	0.858
	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	40185	2549.5	17.26	18.10	1.213	62.9	1.006	-0.01	0.592	0.723
	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	41055	2636.5	17.18	18.10	1.236	62.9	1.006	0.05	0.450	0.560
	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	41490	2680	17.33	18.10	1.194	62.9	1.006	0.16	0.500	0.601
	LTE Band 41_UAT	20M	QPSK	50	24	Front	10mm	Reduced	40620	2593	17.29	18.10	1.205	62.9	1.006	0.17	0.147	0.178
	LTE Band 41_UAT	20M	QPSK	50	24	Back	10mm	Reduced	40620	2593	17.29	18.10	1.205	62.9	1.006	0.05	0.181	0.219
	LTE Band 41_UAT	20M	QPSK	50	24	Left Side	10mm	Reduced	40620	2593	17.29	18.10	1.205	62.9	1.006	0.19	0.037	0.045
	LTE Band 41_UAT	20M	QPSK	50	24	Right Side	10mm	Reduced	40620	2593	17.29	18.10	1.205	62.9	1.006	0.13	0.027	0.032
	LTE Band 41_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	40620	2593	17.29	18.10	1.205	62.9	1.006	0.05	0.536	0.650
48	LTE Band 41_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	39750	2506	17.25	18.10	1.216	62.9	1.006	0.18	0.728	0.891
	LTE Band 41_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	40185	2549.5	17.28	18.10	1.208	62.9	1.006	0.04	0.620	0.753
	LTE Band 41_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	41055	2636.5	17.21	18.10	1.227	62.9	1.006	0.13	0.452	0.558
	LTE Band 41_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	41490	2680	17.27	18.10	1.211	62.9	1.006	0.06	0.509	0.620
	LTE Band 41C_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	40620	2593	17.27	18.10	1.211	62.9	1.006	-0.06	0.429	0.522
	LTE Band 41C_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	39750	2506	17.21	18.10	1.227	62.9	1.006	-0.04	0.652	0.805
	LTE Band 41C_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	40185	2549.5	17.25	18.10	1.216	62.9	1.006	0.18	0.561	0.686
	LTE Band 41C_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	41055	2636.5	17.13	18.10	1.250	62.9	1.006	0.04	0.405	0.509
	LTE Band 41C_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	41490	2680	17.19	18.10	1.233	62.9	1.006	0.09	0.412	0.511
	LTE Band 41_UAT	20M	QPSK	100	0	Top Side	10mm	Reduced	40620	2593	17.25	18.10	1.216	62.9	1.006	-0.16	0.510	0.624
	LTE Band 41_LAT	20M	QPSK	1	49	Front	10mm	Reduced	40620	2593	17.83	18.80	1.250	62.9	1.006	-0.18	0.146	0.184
	LTE Band 41_LAT	20M	QPSK	1	49	Back	10mm	Reduced	40620	2593	17.83	18.80	1.250	62.9	1.006	0.02	0.227	0.286
	LTE Band 41_LAT	20M	QPSK	1	49	Left Side	10mm	Reduced	40620	2593	17.83	18.80	1.250	62.9	1.006	-0.05	0.040	0.050
	LTE Band 41_LAT	20M	QPSK	1	49	Right Side	10mm	Reduced	40620	2593	17.83	18.80	1.250	62.9	1.006	0.14	0.032	0.040
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	40620	2593	17.83	18.80	1.250	62.9	1.006	0.17	0.544	0.684
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	39750	2506	17.70	18.80	1.288	62.9	1.006	-0.09	0.484	0.627
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	40185	2549.5	17.80	18.80	1.259	62.9	1.006	0.05	0.504	0.638
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	41055	2636.5	17.65	18.80	1.303	62.9	1.006	0.08	0.505	0.662
	LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	41490	2680	17.68	18.80	1.294	62.9	1.006	0.16	0.501	0.652
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	40620	2593	17.84	18.80	1.247	62.9	1.006	-0.05	0.346	0.434
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	39750	2506	17.86	18.80	1.242	62.9	1.006	0.02	0.325	0.406
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	40185	2549.5	17.53	18.80	1.340	62.9	1.006	0.06	0.379	0.511
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	41055	2636.5	17.79	18.80	1.262	62.9	1.006	-0.11	0.441	0.560
	LTE Band 41C_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	41490	2680	17.83	18.80	1.250	62.9	1.006	0.03	0.464	0.584
	LTE Band 41_LAT	20M	QPSK	50	24	Front	10mm	Reduced	40620	2593	17.82	18.80	1.253	62.9	1.006	-0.03	0.139	0.175
	LTE Band 41_LAT	20M	QPSK	50	24	Back	10mm	Reduced	40620	2593	17.82	18.80	1.253	62.9	1.006	0.02	0.212	0.267
	LTE Band 41_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	40620	2593	17.82	18.80	1.253	62.9	1.006	0.15	0.048	0.060
	LTE Band 41_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	40620	2593	17.82	18.80	1.253	62.9	1.006	0.08	0.035	0.045
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	40620	2593	17.82	18.80	1.253	62.9	1.006	-0.09	0.467	0.589
	LTE Band 41_LAT	20M	QPSK	100	0	Bottom Side	10mm	Reduced	40620	2593	17.74	18.80	1.276	62.9	1.006	0.05	0.460	0.591



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(HPUE)_UAT	20M	QPSK	1	49	Front	10mm	Reduced	40620	2593	19.54	20.10	1.138	42.9	1.009	0.02	0.149	0.171
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Back	10mm	Reduced	40620	2593	19.54	20.10	1.138	42.9	1.009	0.05	0.189	0.217
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Left Side	10mm	Reduced	40620	2593	19.54	20.10	1.138	42.9	1.009	0.13	0.037	0.042
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Right Side	10mm	Reduced	40620	2593	19.54	20.10	1.138	42.9	1.009	0.04	0.026	0.030
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	40620	2593	19.54	20.10	1.138	42.9	1.009	-0.06	0.602	0.691
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	39750	2506	19.52	20.10	1.143	42.9	1.009	0.14	0.760	0.876
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	40185	2549.5	19.39	20.10	1.178	42.9	1.009	-0.16	0.664	0.789
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	41055	2636.5	19.27	20.10	1.211	42.9	1.009	-0.05	0.541	0.661
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	41490	2680	19.26	20.10	1.213	42.9	1.009	0.02	0.532	0.651
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Front	10mm	Reduced	40620	2593	19.39	20.10	1.178	42.9	1.009	0.12	0.146	0.173
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Back	10mm	Reduced	40620	2593	19.39	20.10	1.178	42.9	1.009	0.03	0.180	0.214
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Left Side	10mm	Reduced	40620	2593	19.39	20.10	1.178	42.9	1.009	0.05	0.033	0.039
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Right Side	10mm	Reduced	40620	2593	19.39	20.10	1.178	42.9	1.009	-0.09	0.026	0.031
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	40620	2593	19.39	20.10	1.178	42.9	1.009	-0.07	0.617	0.733
49	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	39750	2506	19.36	20.10	1.186	42.9	1.009	0.09	0.777	0.930
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	40185	2549.5	19.25	20.10	1.216	42.9	1.009	0.16	0.646	0.793
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	41055	2636.5	19.24	20.10	1.219	42.9	1.009	0.02	0.522	0.642
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	41490	2680	19.21	20.10	1.227	42.9	1.009	0.06	0.550	0.681
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	40620	2593	19.37	20.10	1.183	42.9	1.009	-0.09	0.396	0.473
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	39750	2506	19.35	20.10	1.189	42.9	1.009	0.07	0.547	0.656
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	40185	2549.5	19.16	20.10	1.242	42.9	1.009	0.15	0.473	0.593
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	41055	2636.5	19.13	20.10	1.250	42.9	1.009	0.08	0.491	0.619
	LTE Band 41C(HPUE)_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	41490	2680	19.15	20.10	1.245	42.9	1.009	0.01	0.454	0.570
	LTE Band 41(HPUE)_LAT	20M	QPSK	100	0	Top Side	10mm	Reduced	40620	2593	19.35	20.10	1.189	42.9	1.009	0.17	0.586	0.703
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Front	10mm	Reduced	40620	2593	20.51	21.30	1.199	42.9	1.009	0.01	0.156	0.189
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Back	10mm	Reduced	40620	2593	20.51	21.30	1.199	42.9	1.009	0.02	0.242	0.293
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Left Side	10mm	Reduced	40620	2593	20.51	21.30	1.199	42.9	1.009	0.08	0.044	0.053
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Right Side	10mm	Reduced	40620	2593	20.51	21.30	1.199	42.9	1.009	-0.09	0.045	0.054
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	40620	2593	20.51	21.30	1.199	42.9	1.009	0.16	0.529	0.640
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	39750	2506	20.48	21.30	1.208	42.9	1.009	-0.13	0.473	0.576
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	40185	2549.5	20.46	21.30	1.213	42.9	1.009	-0.02	0.510	0.624
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	41055	2636.5	20.48	21.30	1.208	42.9	1.009	-0.11	0.569	0.693
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	41490	2680	20.47	21.30	1.211	42.9	1.009	-0.1	0.628	0.767
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Front	10mm	Reduced	40620	2593	20.46	21.30	1.213	42.9	1.009	-0.18	0.174	0.213
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Back	10mm	Reduced	40620	2593	20.46	21.30	1.213	42.9	1.009	-0.06	0.245	0.300
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	40620	2593	20.46	21.30	1.213	42.9	1.009	0.13	0.045	0.055
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	40620	2593	20.46	21.30	1.213	42.9	1.009	0.15	0.047	0.058
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	40620	2593	20.46	21.30	1.213	42.9	1.009	0.04	0.509	0.623
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	39750	2506	20.40	21.30	1.230	42.9	1.009	0.05	0.476	0.591
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	40185	2549.5	20.42	21.30	1.225	42.9	1.009	0.02	0.526	0.650
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	41055	2636.5	20.40	21.30	1.230	42.9	1.009	0.13	0.613	0.761
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	41490	2680	20.44	21.30	1.219	42.9	1.009	0.02	0.643	0.791
	LTE Band 41C(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	40620	2593	20.48	21.30	1.208	42.9	1.009	-0.09	0.435	0.530
	LTE Band 41C(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	39750	2506	20.87	21.30	1.104	42.9	1.009	-0.15	0.377	0.420
	LTE Band 41C(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	40185	2549.5	21.06	21.30	1.057	42.9	1.009	0.02	0.369	0.393
	LTE Band 41C(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	41055	2636.5	20.35	21.30	1.245	42.9	1.009	0.12	0.414	0.520
	LTE Band 41C(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	41490	2680	20.59	21.30	1.178	42.9	1.009	0.07	0.499	0.593
	LTE Band 41(HPUE)_LAT	20M	QPSK	100	0	Bottom Side	10mm	Reduced	40620	2593	20.41	21.30	1.227	42.9	1.009	-0.06	0.396	0.490



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	49	Front	10mm	Reduced	55830	3609	16.97	17.30	1.079	62.9	1.006	0.13	0.138	0.150
	LTE Band 48_UAT	20M	QPSK	1	49	Back	10mm	Reduced	55830	3609	16.97	17.30	1.079	62.9	1.006	0.06	0.254	0.276
	LTE Band 48_UAT	20M	QPSK	1	49	Left Side	10mm	Reduced	55830	3609	16.97	17.30	1.079	62.9	1.006	-0.08	0.015	0.016
	LTE Band 48_UAT	20M	QPSK	1	49	Right Side	10mm	Reduced	55830	3609	16.97	17.30	1.079	62.9	1.006	-0.14	0.013	0.014
50	LTE Band 48_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	55830	3609	16.97	17.30	1.079	62.9	1.006	-0.09	0.348	0.378
	LTE Band 48_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	55340	3560	16.75	17.30	1.135	62.9	1.006	0.01	0.328	0.375
	LTE Band 48_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	56150	3641	16.86	17.30	1.107	62.9	1.006	0.05	0.320	0.356
	LTE Band 48_UAT	20M	QPSK	1	49	Top Side	10mm	Reduced	56640	3690	16.93	17.30	1.089	62.9	1.006	0.07	0.330	0.362
	LTE Band 48C_UAT	20M	QPSK	100	0	Top Side	10mm	Reduced	55830	3609	16.88	17.30	1.102	62.9	1.006	0.02	0.287	0.318
	LTE Band 48C_UAT	20M	QPSK	100	0	Top Side	10mm	Reduced	55340	3560	16.70	17.30	1.148	62.9	1.006	-0.01	0.280	0.323
	LTE Band 48C_UAT	20M	QPSK	100	0	Top Side	10mm	Reduced	56150	3641	16.72	17.30	1.143	62.9	1.006	0.03	0.269	0.309
	LTE Band 48C_UAT	20M	QPSK	100	0	Top Side	10mm	Reduced	56640	3690	16.68	17.30	1.153	62.9	1.006	0.05	0.271	0.314
	LTE Band 48_UAT	20M	QPSK	50	24	Front	10mm	Reduced	55830	3609	16.93	17.30	1.089	62.9	1.006	0.04	0.146	0.160
	LTE Band 48_UAT	20M	QPSK	50	24	Back	10mm	Reduced	55830	3609	16.93	17.30	1.089	62.9	1.006	-0.06	0.259	0.284
	LTE Band 48_UAT	20M	QPSK	50	24	Left Side	10mm	Reduced	55830	3609	16.93	17.30	1.089	62.9	1.006	0.12	0.013	0.014
	LTE Band 48_UAT	20M	QPSK	50	24	Right Side	10mm	Reduced	55830	3609	16.93	17.30	1.089	62.9	1.006	0.03	0.011	0.012
	LTE Band 48_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	55830	3609	16.93	17.30	1.089	62.9	1.006	0.06	0.295	0.323



<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)
	N2_UAT	20M	QPSK	1	1	DFT-15	Front	10mm	Reduced	380000	1900	15.59	16.50	1.233	-0.06	0.164	0.203
	N2_UAT	20M	QPSK	1	1	DFT-15	Back	10mm	Reduced	380000	1900	15.59	16.50	1.233	0.04	0.160	0.197
	N2_UAT	20M	QPSK	1	1	DFT-15	Left Side	10mm	Reduced	380000	1900	15.59	16.50	1.233	0.04	0.039	0.048
	N2_UAT	20M	QPSK	1	1	DFT-15	Right Side	10mm	Reduced	380000	1900	15.59	16.50	1.233	0.1	0.008	0.010
	N2_UAT	20M	QPSK	1	1	DFT-15	Top Side	10mm	Reduced	380000	1900	15.59	16.50	1.233	0.12	0.275	0.339
	N2_UAT	20M	QPSK	50	28	DFT-15	Front	10mm	Reduced	380000	1900	15.55	16.50	1.245	-0.09	0.163	0.203
	N2_UAT	20M	QPSK	50	28	DFT-15	Back	10mm	Reduced	380000	1900	15.55	16.50	1.245	0.03	0.155	0.193
	N2_UAT	20M	QPSK	50	28	DFT-15	Left Side	10mm	Reduced	380000	1900	15.55	16.50	1.245	0.02	0.037	0.046
	N2_UAT	20M	QPSK	50	28	DFT-15	Right Side	10mm	Reduced	380000	1900	15.55	16.50	1.245	0.01	0.009	0.011
	N2_UAT	20M	QPSK	50	28	DFT-15	Top Side	10mm	Reduced	380000	1900	15.55	16.50	1.245	-0.13	0.327	0.407
	N2_UAT	20M	QPSK	50	28	DFT-15	Top Side	10mm	Reduced	372000	1860	15.10	16.50	1.380	-0.04	0.230	0.317
	N2_UAT	20M	QPSK	50	28	DFT-15	Top Side	10mm	Reduced	376000	1880	15.47	16.50	1.268	0.03	0.262	0.332
	N2_LAT	20M	QPSK	1	1	DFT-15	Front	10mm	Reduced	380000	1900	19.24	20.30	1.276	-0.06	0.256	0.327
	N2_LAT	20M	QPSK	1	1	DFT-15	Back	10mm	Reduced	380000	1900	19.24	20.30	1.276	0.02	0.297	0.379
	N2_LAT	20M	QPSK	1	1	DFT-15	Left Side	10mm	Reduced	380000	1900	19.24	20.30	1.276	0.04	0.106	0.135
	N2_LAT	20M	QPSK	1	1	DFT-15	Right Side	10mm	Reduced	380000	1900	19.24	20.30	1.276	0.01	0.050	0.064
	N2_LAT	20M	QPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	380000	1900	19.24	20.30	1.276	0.04	0.289	0.369
	N2_LAT	20M	QPSK	50	28	DFT-15	Front	10mm	Reduced	380000	1900	19.21	20.30	1.285	0.05	0.244	0.314
	N2_LAT	20M	QPSK	50	28	DFT-15	Back	10mm	Reduced	380000	1900	19.21	20.30	1.285	0.06	0.277	0.356
	N2_LAT	20M	QPSK	50	28	DFT-15	Left Side	10mm	Reduced	380000	1900	19.21	20.30	1.285	0.01	0.060	0.077
	N2_LAT	20M	QPSK	50	28	DFT-15	Right Side	10mm	Reduced	380000	1900	19.21	20.30	1.285	0.08	0.051	0.066
	N2_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	380000	1900	19.21	20.30	1.285	0.01	0.306	0.393
51	N2_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	372000	1860	19.12	20.30	1.312	-0.11	0.319	0.419
	N2_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	376000	1880	19.00	20.30	1.349	-0.02	0.288	0.389
	N5_UAT	20M	QPSK	1	1	DFT-15	Front	10mm	Reduced	167300	836.5	17.42	18.30	1.225	-0.06	0.055	0.067
	N5_UAT	20M	QPSK	1	1	DFT-15	Back	10mm	Reduced	167300	836.5	17.42	18.30	1.225	0.01	0.072	0.088
	N5_UAT	20M	QPSK	1	1	DFT-15	Left Side	10mm	Reduced	167300	836.5	17.42	18.30	1.225	0.03	0.121	0.148
	N5_UAT	20M	QPSK	1	1	DFT-15	Right Side	10mm	Reduced	167300	836.5	17.42	18.30	1.225	0.07	0.001	0.001
	N5_UAT	20M	QPSK	1	1	DFT-15	Top Side	10mm	Reduced	167300	836.5	17.42	18.30	1.225	0.06	0.001	0.001
	N5_UAT	20M	QPSK	50	28	DFT-15	Front	10mm	Reduced	167300	836.5	17.29	18.30	1.262	-0.06	0.048	0.061
	N5_UAT	20M	QPSK	50	28	DFT-15	Back	10mm	Reduced	167300	836.5	17.29	18.30	1.262	0.05	0.061	0.077
	N5_UAT	20M	QPSK	50	28	DFT-15	Left Side	10mm	Reduced	167300	836.5	17.29	18.30	1.262	0.15	0.112	0.141
	N5_UAT	20M	QPSK	50	28	DFT-15	Right Side	10mm	Reduced	167300	836.5	17.29	18.30	1.262	0.01	0.001	0.001
	N5_UAT	20M	QPSK	50	28	DFT-15	Top Side	10mm	Reduced	167300	836.5	17.29	18.30	1.262	0.03	0.001	0.001
	N5_LAT	20M	QPSK	1	1	DFT-15	Front	10mm	Reduced	167300	836.5	20.21	21.30	1.285	0.04	0.142	0.183
	N5_LAT	20M	QPSK	1	1	DFT-15	Back	10mm	Reduced	167300	836.5	20.21	21.30	1.285	0.01	0.194	0.249
	N5_LAT	20M	QPSK	1	1	DFT-15	Left Side	10mm	Reduced	167300	836.5	20.21	21.30	1.285	0.02	0.031	0.040
	N5_LAT	20M	QPSK	1	1	DFT-15	Right Side	10mm	Reduced	167300	836.5	20.21	21.30	1.285	0.04	0.158	0.203
	N5_LAT	20M	QPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	167300	836.5	20.21	21.30	1.285	0.06	0.132	0.170
	N5_LAT	20M	QPSK	50	28	DFT-15	Front	10mm	Reduced	167300	836.5	20.14	21.30	1.306	-0.06	0.143	0.187
52	N5_LAT	20M	QPSK	50	28	DFT-15	Back	10mm	Reduced	167300	836.5	20.14	21.30	1.306	0.08	0.220	0.287
	N5_LAT	20M	QPSK	50	28	DFT-15	Left Side	10mm	Reduced	167300	836.5	20.14	21.30	1.306	0.01	0.033	0.043
	N5_LAT	20M	QPSK	50	28	DFT-15	Right Side	10mm	Reduced	167300	836.5	20.14	21.30	1.306	0.03	0.162	0.212
	N5_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	167300	836.5	20.14	21.30	1.306	0.07	0.128	0.167



FCC SAR TEST REPORT

Report No. : FA9N2009-01

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_UAT	20M	QPSK	1	1	DFT-15	Front	10mm	Reduced	349000	1745	16.05	17.00	1.245	0.06	0.131	0.163
	N66_UAT	20M	QPSK	1	1	DFT-15	Back	10mm	Reduced	349000	1745	16.05	17.00	1.245	0.02	0.153	0.190
	N66_UAT	20M	QPSK	1	1	DFT-15	Left Side	10mm	Reduced	349000	1745	16.05	17.00	1.245	0.07	0.037	0.046
	N66_UAT	20M	QPSK	1	1	DFT-15	Right Side	10mm	Reduced	349000	1745	16.05	17.00	1.245	0.09	0.012	0.015
	N66_UAT	20M	QPSK	1	1	DFT-15	Top Side	10mm	Reduced	349000	1745	16.05	17.00	1.245	0.01	0.188	0.234
	N66_UAT	20M	QPSK	50	28	DFT-15	Front	10mm	Reduced	349000	1745	15.85	17.00	1.303	0.01	0.131	0.171
	N66_UAT	20M	QPSK	50	28	DFT-15	Back	10mm	Reduced	349000	1745	15.85	17.00	1.303	0.05	0.157	0.205
	N66_UAT	20M	QPSK	50	28	DFT-15	Left Side	10mm	Reduced	349000	1745	15.85	17.00	1.303	0.08	0.042	0.055
	N66_UAT	20M	QPSK	50	28	DFT-15	Right Side	10mm	Reduced	349000	1745	15.85	17.00	1.303	0	0.014	0.018
	N66_UAT	20M	QPSK	50	28	DFT-15	Top Side	10mm	Reduced	349000	1745	15.85	17.00	1.303	0.06	0.192	0.250
	N66_UAT	20M	QPSK	50	28	DFT-15	Top Side	10mm	Reduced	344000	1720	15.80	17.00	1.318	0.03	0.162	0.214
	N66_UAT	20M	QPSK	50	28	DFT-15	Top Side	10mm	Reduced	354000	1770	15.84	17.00	1.306	-0.19	0.241	0.315
	N66_LAT	20M	QPSK	1	1	DFT-15	Front	10mm	Reduced	349000	1745	19.64	20.80	1.306	0.12	0.250	0.327
	N66_LAT	20M	QPSK	1	1	DFT-15	Back	10mm	Reduced	349000	1745	19.64	20.80	1.306	0.05	0.293	0.383
	N66_LAT	20M	QPSK	1	1	DFT-15	Left Side	10mm	Reduced	349000	1745	19.64	20.80	1.306	0.04	0.109	0.142
	N66_LAT	20M	QPSK	1	1	DFT-15	Right Side	10mm	Reduced	349000	1745	19.64	20.80	1.306	0.11	0.067	0.088
	N66_LAT	20M	QPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	349000	1745	19.64	20.80	1.306	0.06	0.392	0.512
	N66_LAT	20M	QPSK	50	28	DFT-15	Front	10mm	Reduced	349000	1745	19.58	20.80	1.324	-0.06	0.265	0.351
	N66_LAT	20M	QPSK	50	28	DFT-15	Back	10mm	Reduced	349000	1745	19.58	20.80	1.324	0.07	0.301	0.399
	N66_LAT	20M	QPSK	50	28	DFT-15	Left Side	10mm	Reduced	349000	1745	19.58	20.80	1.324	0.02	0.128	0.170
	N66_LAT	20M	QPSK	50	28	DFT-15	Right Side	10mm	Reduced	349000	1745	19.58	20.80	1.324	0.06	0.078	0.103
	N66_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	349000	1745	19.58	20.80	1.324	-0.02	0.442	0.585
	N66_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	344000	1720	19.52	20.80	1.343	0.04	0.415	0.557
53	N66_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	354000	1770	19.50	20.80	1.349	0.01	0.510	0.688
	N71_UAT	20M	QPSK	1	1	DFT-15	Front	10mm	Reduced	136100	680.5	18.38	19.30	1.236	0.06	0.048	0.059
	N71_UAT	20M	QPSK	1	1	DFT-15	Back	10mm	Reduced	136100	680.5	18.38	19.30	1.236	0.01	0.062	0.077
	N71_UAT	20M	QPSK	1	1	DFT-15	Left Side	10mm	Reduced	136100	680.5	18.38	19.30	1.236	0.04	0.130	0.161
	N71_UAT	20M	QPSK	1	1	DFT-15	Right Side	10mm	Reduced	136100	680.5	18.38	19.30	1.236	0.01	0.001	0.001
	N71_UAT	20M	QPSK	1	1	DFT-15	Top Side	10mm	Reduced	136100	680.5	18.38	19.30	1.236	0.01	0.001	0.001
	N71_UAT	20M	QPSK	50	28	DFT-15	Front	10mm	Reduced	136100	680.5	18.26	19.30	1.271	0.03	0.063	0.080
	N71_UAT	20M	QPSK	50	28	DFT-15	Back	10mm	Reduced	136100	680.5	18.26	19.30	1.271	0.02	0.081	0.103
	N71_UAT	20M	QPSK	50	28	DFT-15	Left Side	10mm	Reduced	136100	680.5	18.26	19.30	1.271	0.1	0.149	0.189
	N71_UAT	20M	QPSK	50	28	DFT-15	Right Side	10mm	Reduced	136100	680.5	18.26	19.30	1.271	0.15	0.001	0.001
	N71_UAT	20M	QPSK	50	28	DFT-15	Top Side	10mm	Reduced	136100	680.5	18.26	19.30	1.271	0.01	0.001	0.001
	N71_LAT	20M	QPSK	1	1	DFT-15	Front	10mm	Reduced	136100	680.5	21.19	22.30	1.291	0.03	0.116	0.150
	N71_LAT	20M	QPSK	1	1	DFT-15	Back	10mm	Reduced	136100	680.5	21.19	22.30	1.291	0.04	0.181	0.234
	N71_LAT	20M	QPSK	1	1	DFT-15	Left Side	10mm	Reduced	136100	680.5	21.19	22.30	1.291	-0.04	0.056	0.072
	N71_LAT	20M	QPSK	1	1	DFT-15	Right Side	10mm	Reduced	136100	680.5	21.19	22.30	1.291	0.04	0.183	0.236
	N71_LAT	20M	QPSK	1	1	DFT-15	Bottom Side	10mm	Reduced	136100	680.5	21.19	22.30	1.291	-0.06	0.106	0.137
	N71_LAT	20M	QPSK	50	28	DFT-15	Front	10mm	Reduced	136100	680.5	21.00	22.30	1.349	-0.05	0.136	0.183
54	N71_LAT	20M	QPSK	50	28	DFT-15	Back	10mm	Reduced	136100	680.5	21.00	22.30	1.349	-0.1	0.186	0.251
	N71_LAT	20M	QPSK	50	28	DFT-15	Left Side	10mm	Reduced	136100	680.5	21.00	22.30	1.349	0.01	0.001	0.001
	N71_LAT	20M	QPSK	50	28	DFT-15	Right Side	10mm	Reduced	136100	680.5	21.00	22.30	1.349	0.13	0.120	0.162
	N71_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Reduced	136100	680.5	21.00	22.30	1.349	0.01	0.118	0.159



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_UAT_NC	100M	QPSK	1	1	DFT-30	Front	10mm	Reduced	518600	2593	17.88	18.80	1.236	-0.06	0.077	0.095
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Back	10mm	Reduced	518600	2593	17.88	18.80	1.236	0.05	0.088	0.109
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Left Side	10mm	Reduced	518600	2593	17.88	18.80	1.236	0	0.001	0.001
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Right Side	10mm	Reduced	518600	2593	17.88	18.80	1.236	0.05	0.001	0.001
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Top Side	10mm	Reduced	518600	2593	17.88	18.80	1.236	-0.14	0.244	0.302
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Top Side	10mm	Reduced	509200	2546	17.66	18.80	1.300	-0.06	0.106	0.138
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Top Side	10mm	Reduced	528000	2640	17.78	18.80	1.265	0.02	0.168	0.212
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Front	10mm	Reduced	518600	2593	17.76	18.80	1.271	0.01	0.063	0.080
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Back	10mm	Reduced	518600	2593	17.76	18.80	1.271	0.08	0.077	0.098
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Left Side	10mm	Reduced	518600	2593	17.76	18.80	1.271	0.03	0.001	0.001
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Right Side	10mm	Reduced	518600	2593	17.76	18.80	1.271	0.01	0.001	0.001
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Top Side	10mm	Reduced	518600	2593	17.76	18.80	1.271	0.01	0.201	0.255
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Front	10mm	Reduced	518600	2593	19.45	19.90	1.109	0.11	0.011	0.012
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Back	10mm	Reduced	518600	2593	19.45	19.90	1.109	0.06	0.142	0.158
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Left Side	10mm	Reduced	518600	2593	19.45	19.90	1.109	0.09	0.001	0.001
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Right Side	10mm	Reduced	518600	2593	19.45	19.90	1.109	0.01	0.001	0.001
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Top Side	10mm	Reduced	518600	2593	19.45	19.90	1.109	0.03	0.335	0.372
55	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Top Side	10mm	Reduced	509200	2546	19.42	19.90	1.117	-0.16	0.671	0.749
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Top Side	10mm	Reduced	528000	2640	19.44	19.90	1.112	-0.11	0.405	0.450
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Front	10mm	Reduced	518600	2593	19.33	19.90	1.140	-0.06	0.009	0.010
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Back	10mm	Reduced	518600	2593	19.33	19.90	1.140	0.01	0.123	0.140
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Left Side	10mm	Reduced	518600	2593	19.33	19.90	1.140	0.09	0.001	0.001
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Right Side	10mm	Reduced	518600	2593	19.33	19.90	1.140	0.01	0.001	0.001
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Top Side	10mm	Reduced	518600	2593	19.33	19.90	1.140	0.05	0.253	0.288
	N41_LAT	100M	QPSK	1	1	DFT-30	Front	10mm	Reduced	518600	2593	17.72	18.40	1.169	-0.08	0.192	0.225
	N41_LAT	100M	QPSK	1	1	DFT-30	Back	10mm	Reduced	518600	2593	17.72	18.40	1.169	0.04	0.255	0.298
	N41_LAT	100M	QPSK	1	1	DFT-30	Left Side	10mm	Reduced	518600	2593	17.72	18.40	1.169	0.01	0.059	0.069
	N41_LAT	100M	QPSK	1	1	DFT-30	Right Side	10mm	Reduced	518600	2593	17.72	18.40	1.169	0.09	0.039	0.046
	N41_LAT	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Reduced	518600	2593	17.72	18.40	1.169	0.02	0.404	0.472
	N41_LAT	100M	QPSK	135	69	DFT-30	Front	10mm	Reduced	518600	2593	17.63	18.40	1.194	0.05	0.192	0.229
	N41_LAT	100M	QPSK	135	69	DFT-30	Back	10mm	Reduced	518600	2593	17.63	18.40	1.194	0.01	0.315	0.376
	N41_LAT	100M	QPSK	135	69	DFT-30	Left Side	10mm	Reduced	518600	2593	17.63	18.40	1.194	0.09	0.057	0.068
	N41_LAT	100M	QPSK	135	69	DFT-30	Right Side	10mm	Reduced	518600	2593	17.63	18.40	1.194	0.01	0.037	0.044
	N41_LAT	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Reduced	518600	2593	17.63	18.40	1.194	-0.12	0.465	0.555
	N41_LAT	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Reduced	509200	2546	17.55	18.40	1.216	0.03	0.446	0.542
	N41_LAT	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Reduced	528000	2640	17.50	18.40	1.230	-0.02	0.520	0.640



<EN-DC SAR>

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	49	Front	10mm	Reduced	23095	707.5	14.95	15.30	1.084	-0.05	0.057	0.062
LTE Band 12_UAT	10M	QPSK	1	49	Back	10mm	Reduced	23095	707.5	14.95	15.30	1.084	0.02	0.090	0.098
LTE Band 12_UAT	10M	QPSK	1	49	Left Side	10mm	Reduced	23095	707.5	14.95	15.30	1.084	0.01	0.129	0.140
LTE Band 12_UAT	10M	QPSK	1	49	Right Side	10mm	Reduced	23095	707.5	14.95	15.30	1.084	0.07	0.023	0.025
LTE Band 12_UAT	10M	QPSK	1	49	Top Side	10mm	Reduced	23095	707.5	14.95	15.30	1.084	0.03	0.006	0.007
LTE Band 12_UAT	10M	QPSK	25	12	Front	10mm	Reduced	23095	707.5	14.91	15.30	1.094	-0.06	0.055	0.060
LTE Band 12_UAT	10M	QPSK	25	12	Back	10mm	Reduced	23095	707.5	14.91	15.30	1.094	0.02	0.085	0.093
LTE Band 12_UAT	10M	QPSK	25	12	Left Side	10mm	Reduced	23095	707.5	14.91	15.30	1.094	0.01	0.131	0.143
LTE Band 12_UAT	10M	QPSK	25	12	Right Side	10mm	Reduced	23095	707.5	14.91	15.30	1.094	0.06	0.021	0.023
LTE Band 12_UAT	10M	QPSK	25	12	Top Side	10mm	Reduced	23095	707.5	14.91	15.30	1.094	0.05	0.005	0.005
LTE Band 12_LAT	10M	QPSK	1	49	Front	10mm	Reduced	23095	707.5	21.20	21.80	1.148	-0.06	0.163	0.187
LTE Band 12_LAT	10M	QPSK	1	49	Back	10mm	Reduced	23095	707.5	21.20	21.80	1.148	0.04	0.263	0.302
LTE Band 12_LAT	10M	QPSK	1	49	Left Side	10mm	Reduced	23095	707.5	21.20	21.80	1.148	0.07	0.097	0.111
LTE Band 12_LAT	10M	QPSK	1	49	Right Side	10mm	Reduced	23095	707.5	21.20	21.80	1.148	0.06	0.134	0.154
LTE Band 12_LAT	10M	QPSK	1	49	Bottom Side	10mm	Reduced	23095	707.5	21.20	21.80	1.148	0.07	0.124	0.142
LTE Band 12_LAT	10M	QPSK	25	12	Front	10mm	Reduced	23095	707.5	21.19	21.80	1.151	-0.06	0.153	0.176
LTE Band 12_LAT	10M	QPSK	25	12	Back	10mm	Reduced	23095	707.5	21.19	21.80	1.151	0.02	0.249	0.287
LTE Band 12_LAT	10M	QPSK	25	12	Left Side	10mm	Reduced	23095	707.5	21.19	21.80	1.151	0.04	0.095	0.109
LTE Band 12_LAT	10M	QPSK	25	12	Right Side	10mm	Reduced	23095	707.5	21.19	21.80	1.151	0.08	0.131	0.151
LTE Band 12_LAT	10M	QPSK	25	12	Bottom Side	10mm	Reduced	23095	707.5	21.19	21.80	1.151	0.01	0.121	0.139
LTE Band 13_UAT	10M	QPSK	1	25	Front	10mm	Reduced	23230	782	15.25	15.80	1.135	-0.02	0.058	0.066
LTE Band 13_UAT	10M	QPSK	1	25	Back	10mm	Reduced	23230	782	15.25	15.80	1.135	0.06	0.096	0.109
LTE Band 13_UAT	10M	QPSK	1	25	Left Side	10mm	Reduced	23230	782	15.25	15.80	1.135	0.01	0.136	0.154
LTE Band 13_UAT	10M	QPSK	1	25	Right Side	10mm	Reduced	23230	782	15.25	15.80	1.135	0.06	0.003	0.003
LTE Band 13_UAT	10M	QPSK	1	25	Top Side	10mm	Reduced	23230	782	15.25	15.80	1.135	0.03	0.005	0.006
LTE Band 13_UAT	10M	QPSK	25	25	Front	10mm	Reduced	23230	782	14.77	15.80	1.268	-0.08	0.062	0.079
LTE Band 13_UAT	10M	QPSK	25	25	Back	10mm	Reduced	23230	782	14.77	15.80	1.268	0.01	0.099	0.125
LTE Band 13_UAT	10M	QPSK	25	25	Left Side	10mm	Reduced	23230	782	14.77	15.80	1.268	0.11	0.140	0.177
LTE Band 13_UAT	10M	QPSK	25	25	Right Side	10mm	Reduced	23230	782	14.77	15.80	1.268	0.06	0.003	0.004
LTE Band 13_UAT	10M	QPSK	25	25	Top Side	10mm	Reduced	23230	782	14.77	15.80	1.268	0.01	0.006	0.008
LTE Band 13_LAT	10M	QPSK	1	25	Front	10mm	Reduced	23230	782	18.98	19.80	1.208	-0.09	0.135	0.163
LTE Band 13_LAT	10M	QPSK	1	25	Back	10mm	Reduced	23230	782	18.98	19.80	1.208	0.02	0.219	0.265
LTE Band 13_LAT	10M	QPSK	1	25	Left Side	10mm	Reduced	23230	782	18.98	19.80	1.208	0.04	0.077	0.093
LTE Band 13_LAT	10M	QPSK	1	25	Right Side	10mm	Reduced	23230	782	18.98	19.80	1.208	0.06	0.141	0.170
LTE Band 13_LAT	10M	QPSK	1	25	Bottom Side	10mm	Reduced	23230	782	18.98	19.80	1.208	0.01	0.093	0.112
LTE Band 13_LAT	10M	QPSK	25	25	Front	10mm	Reduced	23230	782	18.93	19.80	1.222	-0.08	0.136	0.166
LTE Band 13_LAT	10M	QPSK	25	25	Back	10mm	Reduced	23230	782	18.93	19.80	1.222	0.02	0.226	0.276
LTE Band 13_LAT	10M	QPSK	25	25	Left Side	10mm	Reduced	23230	782	18.93	19.80	1.222	0.06	0.078	0.095
LTE Band 13_LAT	10M	QPSK	25	25	Right Side	10mm	Reduced	23230	782	18.93	19.80	1.222	0.07	0.146	0.178
LTE Band 13_LAT	10M	QPSK	25	25	Bottom Side	10mm	Reduced	23230	782	18.93	19.80	1.222	0.06	0.094	0.115

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	0	Front	10mm	Reduced	20525	836.5	14.82	15.80	1.253	-0.08	0.051	0.064
LTE Band 5_UAT	10M	QPSK	1	0	Back	10mm	Reduced	20525	836.5	14.82	15.80	1.253	0.05	0.071	0.089
LTE Band 5_UAT	10M	QPSK	1	0	Left Side	10mm	Reduced	20525	836.5	14.82	15.80	1.253	0.02	0.096	0.120
LTE Band 5_UAT	10M	QPSK	1	0	Right Side	10mm	Reduced	20525	836.5	14.82	15.80	1.253	0.02	0.001	0.001
LTE Band 5_UAT	10M	QPSK	1	0	Top Side	10mm	Reduced	20525	836.5	14.82	15.80	1.253	0.07	0.006	0.008
LTE Band 5_UAT	10M	QPSK	25	0	Front	10mm	Reduced	20525	836.5	14.81	15.80	1.256	0.09	0.050	0.063
LTE Band 5_UAT	10M	QPSK	25	0	Back	10mm	Reduced	20525	836.5	14.81	15.80	1.256	0.01	0.070	0.088
LTE Band 5_UAT	10M	QPSK	25	0	Left Side	10mm	Reduced	20525	836.5	14.81	15.80	1.256	0.06	0.095	0.119
LTE Band 5_UAT	10M	QPSK	25	0	Right Side	10mm	Reduced	20525	836.5	14.81	15.80	1.256	0.15	0.001	0.001
LTE Band 5_UAT	10M	QPSK	25	0	Top Side	10mm	Reduced	20525	836.5	14.81	15.80	1.256	0.05	0.005	0.006
LTE Band 5_LAT	10M	QPSK	1	0	Front	10mm	Reduced	20525	836.5	17.96	18.80	1.213	-0.11	0.109	0.132
LTE Band 5_LAT	10M	QPSK	1	0	Back	10mm	Reduced	20525	836.5	17.96	18.80	1.213	0.03	0.178	0.216
LTE Band 5_LAT	10M	QPSK	1	0	Left Side	10mm	Reduced	20525	836.5	17.96	18.80	1.213	0.06	0.001	0.001
LTE Band 5_LAT	10M	QPSK	1	0	Right Side	10mm	Reduced	20525	836.5	17.96	18.80	1.213	0.04	0.132	0.160
LTE Band 5_LAT	10M	QPSK	1	0	Bottom Side	10mm	Reduced	20525	836.5	17.96	18.80	1.213	0.01	0.096	0.116
LTE Band 5_LAT	10M	QPSK	25	12	Front	10mm	Reduced	20525	836.5	17.94	18.80	1.219	0.05	0.117	0.143
LTE Band 5_LAT	10M	QPSK	25	12	Back	10mm	Reduced	20525	836.5	17.94	18.80	1.219	-0.06	0.189	0.230
LTE Band 5_LAT	10M	QPSK	25	12	Left Side	10mm	Reduced	20525	836.5	17.94	18.80	1.219	0.09	0.001	0.001
LTE Band 5_LAT	10M	QPSK	25	12	Right Side	10mm	Reduced	20525	836.5	17.94	18.80	1.219	-0.01	0.137	0.167
LTE Band 5_LAT	10M	QPSK	25	12	Bottom Side	10mm	Reduced	20525	836.5	17.94	18.80	1.219	0.03	0.093	0.113
LTE Band 26_UAT	15M	QPSK	1	0	Front	10mm	Reduced	26865	831.5	17.02	23.00	3.963	-0.11	0.050	0.198
LTE Band 26_UAT	15M	QPSK	1	0	Back	10mm	Reduced	26865	831.5	17.02	17.80	1.197	0.04	0.141	0.169
LTE Band 26_UAT	15M	QPSK	1	0	Left Side	10mm	Reduced	26865	831.5	17.02	17.80	1.197	0.02	0.192	0.230
LTE Band 26_UAT	15M	QPSK	1	0	Right Side	10mm	Reduced	26865	831.5	17.02	17.80	1.197	0.04	0.006	0.007
LTE Band 26_UAT	15M	QPSK	1	0	Top Side	10mm	Reduced	26865	831.5	17.02	17.80	1.197	0.05	0.008	0.010
LTE Band 26_UAT	15M	QPSK	1	0	Left Side	10mm	Reduced	26765	821.5	16.98	17.80	1.208	0.01	0.181	0.219
LTE Band 26_UAT	15M	QPSK	1	0	Left Side	10mm	Reduced	26965	841.5	16.93	17.80	1.222	0.01	0.156	0.191
LTE Band 26_UAT	15M	QPSK	36	20	Front	10mm	Reduced	26865	831.5	16.82	17.80	1.253	-0.05	0.040	0.050
LTE Band 26_UAT	15M	QPSK	36	20	Back	10mm	Reduced	26865	831.5	16.82	17.80	1.253	0.02	0.131	0.164
LTE Band 26_UAT	15M	QPSK	36	20	Left Side	10mm	Reduced	26865	831.5	16.82	17.80	1.253	-0.04	0.181	0.227
LTE Band 26_UAT	15M	QPSK	36	20	Right Side	10mm	Reduced	26865	831.5	16.82	17.80	1.253	0.01	0.005	0.006
LTE Band 26_UAT	15M	QPSK	36	20	Top Side	10mm	Reduced	26865	831.5	16.82	17.80	1.253	0.03	0.007	0.009
LTE Band 26_LAT	15M	QPSK	1	0	Front	10mm	Reduced	26865	831.5	18.49	19.30	1.205	-0.01	0.126	0.152
LTE Band 26_LAT	15M	QPSK	1	0	Back	10mm	Reduced	26865	831.5	18.49	19.30	1.205	0.11	0.182	0.219
LTE Band 26_LAT	15M	QPSK	1	0	Left Side	10mm	Reduced	26865	831.5	18.49	19.30	1.205	0.08	0.042	0.051
LTE Band 26_LAT	15M	QPSK	1	0	Right Side	10mm	Reduced	26865	831.5	18.49	19.30	1.205	-0.11	0.150	0.181
LTE Band 26_LAT	15M	QPSK	1	0	Bottom Side	10mm	Reduced	26865	831.5	18.49	19.30	1.205	0.01	0.110	0.133
LTE Band 26_LAT	15M	QPSK	1	0	Back	10mm	Reduced	26765	821.5	18.35	19.30	1.245	0.12	0.217	0.270
LTE Band 26_LAT	15M	QPSK	1	0	Back	10mm	Reduced	26965	841.5	18.45	19.30	1.216	0.05	0.225	0.274
LTE Band 26_LAT	15M	QPSK	36	20	Front	10mm	Reduced	26865	831.5	18.42	19.30	1.225	-0.06	0.121	0.148
LTE Band 26_LAT	15M	QPSK	36	20	Back	10mm	Reduced	26865	831.5	18.42	19.30	1.225	0.02	0.177	0.217
LTE Band 26_LAT	15M	QPSK	36	20	Left Side	10mm	Reduced	26865	831.5	18.42	19.30	1.225	0.04	0.040	0.049
LTE Band 26_LAT	15M	QPSK	36	20	Right Side	10mm	Reduced	26865	831.5	18.42	19.30	1.225	0.08	0.145	0.178
LTE Band 26_LAT	15M	QPSK	36	20	Bottom Side	10mm	Reduced	26865	831.5	18.42	19.30	1.225	-0.05	0.107	0.131



FCC SAR TEST REPORT

Report No. : FA9N2009-01

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	Reduced	132322	1745	11.43	12.30	1.222	-0.06	0.078	0.095
LTE Band 66_UAT	20M	QPSK	1	0	Back	10mm	Reduced	132322	1745	11.43	12.30	1.222	0.02	0.082	0.100
LTE Band 66_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	132322	1745	11.43	12.30	1.222	0.01	0.024	0.029
LTE Band 66_UAT	20M	QPSK	1	0	Right Side	10mm	Reduced	132322	1745	11.43	12.30	1.222	0.06	0.008	0.010
LTE Band 66_UAT	20M	QPSK	1	0	Top Side	10mm	Reduced	132322	1745	11.43	12.30	1.222	0.07	0.128	0.156
LTE Band 66_UAT	20M	QPSK	50	24	Front	10mm	Reduced	132322	1745	11.32	12.30	1.253	0.03	0.079	0.099
LTE Band 66_UAT	20M	QPSK	50	24	Back	10mm	Reduced	132322	1745	11.32	12.30	1.253	0.05	0.089	0.112
LTE Band 66_UAT	20M	QPSK	50	24	Left Side	10mm	Reduced	132322	1745	11.32	12.30	1.253	0.01	0.025	0.031
LTE Band 66_UAT	20M	QPSK	50	24	Right Side	10mm	Reduced	132322	1745	11.32	12.30	1.253	0.04	0.009	0.011
LTE Band 66_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	132322	1745	11.32	12.30	1.253	0.02	0.146	0.183
LTE Band 66_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	132072	1720	11.30	12.30	1.259	0.06	0.128	0.161
LTE Band 66_UAT	20M	QPSK	50	24	Top Side	10mm	Reduced	132572	1770	11.31	12.30	1.256	0.06	0.136	0.171
LTE Band 66_LAT	20M	QPSK	1	0	Front	10mm	Reduced	132322	1745	17.33	17.80	1.114	-0.06	0.212	0.236
LTE Band 66_LAT	20M	QPSK	1	0	Back	10mm	Reduced	132322	1745	17.33	17.80	1.114	0.01	0.241	0.269
LTE Band 66_LAT	20M	QPSK	1	0	Left Side	10mm	Reduced	132322	1745	17.33	17.80	1.114	0.01	0.075	0.084
LTE Band 66_LAT	20M	QPSK	1	0	Right Side	10mm	Reduced	132322	1745	17.33	17.80	1.114	0.08	0.044	0.049
LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	132322	1745	17.33	17.80	1.114	0.03	0.301	0.335
LTE Band 66_LAT	20M	QPSK	50	24	Front	10mm	Reduced	132322	1745	17.29	17.80	1.125	0.04	0.222	0.250
LTE Band 66_LAT	20M	QPSK	50	24	Back	10mm	Reduced	132322	1745	17.29	17.80	1.125	0.02	0.263	0.296
LTE Band 66_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	132322	1745	17.29	17.80	1.125	0.04	0.088	0.099
LTE Band 66_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	132322	1745	17.29	17.80	1.125	0.06	0.048	0.054
LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132322	1745	17.29	17.80	1.125	0.04	0.339	0.381
LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132072	1720	17.26	17.80	1.132	0.06	0.294	0.333
LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	132572	1770	17.22	17.80	1.143	0.02	0.343	0.392
LTE Band 2_UAT	20M	QPSK	1	0	Front	10mm	Reduced	19100	1900	11.64	12.30	1.164	-0.02	0.116	0.135
LTE Band 2_UAT	20M	QPSK	1	0	Back	10mm	Reduced	19100	1900	11.64	12.30	1.164	0.05	0.121	0.141
LTE Band 2_UAT	20M	QPSK	1	0	Left Side	10mm	Reduced	19100	1900	11.64	12.30	1.164	0.05	0.025	0.029
LTE Band 2_UAT	20M	QPSK	1	0	Right Side	10mm	Reduced	19100	1900	11.64	12.30	1.164	-0.01	0.009	0.010
LTE Band 2_UAT	20M	QPSK	1	0	Top Side	10mm	Reduced	19100	1900	11.64	12.30	1.164	0.03	0.228	0.265
LTE Band 2_UAT	20M	QPSK	50	50	Front	10mm	Reduced	19100	1900	11.38	12.30	1.236	0.01	0.126	0.156
LTE Band 2_UAT	20M	QPSK	50	50	Back	10mm	Reduced	19100	1900	11.38	12.30	1.236	0.06	0.135	0.167
LTE Band 2_UAT	20M	QPSK	50	50	Left Side	10mm	Reduced	19100	1900	11.38	12.30	1.236	0.07	0.026	0.032
LTE Band 2_UAT	20M	QPSK	50	50	Right Side	10mm	Reduced	19100	1900	11.38	12.30	1.236	0.03	0.010	0.012
LTE Band 2_UAT	20M	QPSK	50	50	Top Side	10mm	Reduced	19100	1900	11.38	12.30	1.236	0.01	0.225	0.278
LTE Band 2_UAT	20M	QPSK	50	50	Top Side	10mm	Reduced	18700	1860	11.36	12.30	1.242	0.01	0.210	0.261
LTE Band 2_UAT	20M	QPSK	50	50	Top Side	10mm	Reduced	18900	1880	11.33	12.30	1.250	0.06	0.213	0.266
LTE Band 2_LAT	20M	QPSK	1	0	Front	10mm	Reduced	19100	1900	18.08	18.80	1.180	-0.09	0.221	0.261
LTE Band 2_LAT	20M	QPSK	1	0	Back	10mm	Reduced	19100	1900	18.08	18.80	1.180	0.05	0.228	0.269
LTE Band 2_LAT	20M	QPSK	1	0	Left Side	10mm	Reduced	19100	1900	18.08	18.80	1.180	0.04	0.086	0.102
LTE Band 2_LAT	20M	QPSK	1	0	Right Side	10mm	Reduced	19100	1900	18.08	18.80	1.180	0.03	0.079	0.093
LTE Band 2_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	19100	1900	18.08	18.80	1.180	0.07	0.343	0.405
LTE Band 2_LAT	20M	QPSK	50	24	Front	10mm	Reduced	19100	1900	18.07	18.80	1.183	0.01	0.229	0.271
LTE Band 2_LAT	20M	QPSK	50	24	Back	10mm	Reduced	19100	1900	18.07	18.80	1.183	0.05	0.234	0.277
LTE Band 2_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	19100	1900	18.07	18.80	1.183	0.07	0.090	0.106
LTE Band 2_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	19100	1900	18.07	18.80	1.183	0.06	0.082	0.097
LTE Band 2_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	19100	1900	18.07	18.80	1.183	0.02	0.364	0.431
LTE Band 2_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	18700	1860	17.88	18.80	1.236	0.04	0.440	0.544
LTE Band 2_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	18900	1880	17.81	18.80	1.256	0.01	0.411	0.516
LTE Band 2_LAT	20M	QPSK	1	0	Front	10mm	Reduced	19100	1900	17.08	17.80	1.180	0.01	0.168	0.198
LTE Band 2_LAT	20M	QPSK	1	0	Back	10mm	Reduced	19100	1900	17.08	17.80	1.180	0.03	0.172	0.203
LTE Band 2_LAT	20M	QPSK	1	0	Left Side	10mm	Reduced	19100	1900	17.08	17.80	1.180	0.04	0.072	0.085
LTE Band 2_LAT	20M	QPSK	1	0	Right Side	10mm	Reduced	19100	1900	17.08	17.80	1.180	0.07	0.063	0.074
LTE Band 2_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	19100	1900	17.08	17.80	1.180	0.02	0.235	0.277
LTE Band 2_LAT	20M	QPSK	50	24	Front	10mm	Reduced	19100	1900	17.07	17.80	1.183	0.05	0.170	0.201
LTE Band 2_LAT	20M	QPSK	50	24	Back	10mm	Reduced	19100	1900	17.07	17.80	1.183	-0.03	0.174	0.206
LTE Band 2_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	19100	1900	17.07	17.80	1.183	0.11	0.073	0.086
LTE Band 2_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	19100	1900	17.07	17.80	1.183	0.09	0.061	0.072
LTE Band 2_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	19100	1900	17.07	17.80	1.183	0.01	0.235	0.278
LTE Band 2_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	18700	1860	16.88	17.80	1.236	0.05	0.331	0.409
LTE Band 2_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	18900	1880	16.81	17.80	1.256	0.04	0.312	0.392



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_LAT	20M	QPSK	1	0	Front	10mm	Reduced	26340	1880	18.36	18.80	1.107	-0.06	0.284	0.314
LTE Band 25_LAT	20M	QPSK	1	0	Back	10mm	Reduced	26340	1880	18.36	18.80	1.107	0.02	0.298	0.330
LTE Band 25_LAT	20M	QPSK	1	0	Left Side	10mm	Reduced	26340	1880	18.36	18.80	1.107	0.07	0.077	0.085
LTE Band 25_LAT	20M	QPSK	1	0	Right Side	10mm	Reduced	26340	1880	18.36	18.80	1.107	0.01	0.079	0.087
LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	10mm	Reduced	26340	1880	18.36	18.80	1.107	0.08	0.408	0.452
LTE Band 25_LAT	20M	QPSK	50	24	Front	10mm	Reduced	26340	1880	18.32	18.80	1.117	-0.06	0.288	0.322
LTE Band 25_LAT	20M	QPSK	50	24	Back	10mm	Reduced	26340	1880	18.32	18.80	1.117	0.07	0.300	0.335
LTE Band 25_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	26340	1880	18.32	18.80	1.117	0.01	0.075	0.084
LTE Band 25_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	26340	1880	18.32	18.80	1.117	0.05	0.083	0.093
LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	26340	1880	18.32	18.80	1.117	0.03	0.410	0.458
LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	26140	1860	18.22	18.80	1.143	-0.11	0.456	0.521
LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	26590	1905	18.20	18.80	1.148	0.01	0.389	0.447

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_LAT	20M	QPSK	1	49	Front	10mm	Reduced	40620	2593	15.83	16.80	1.250	62.9	1.006	-0.06	0.105	0.132
LTE Band 41_LAT	20M	QPSK	1	49	Back	10mm	Reduced	40620	2593	15.83	16.80	1.250	62.9	1.006	0.07	0.135	0.170
LTE Band 41_LAT	20M	QPSK	1	49	Left Side	10mm	Reduced	40620	2593	15.83	16.80	1.250	62.9	1.006	0.03	0.023	0.029
LTE Band 41_LAT	20M	QPSK	1	49	Right Side	10mm	Reduced	40620	2593	15.83	16.80	1.250	62.9	1.006	0.01	0.018	0.023
LTE Band 41_LAT	20M	QPSK	1	49	Bottom Side	10mm	Reduced	40620	2593	15.83	16.80	1.250	62.9	1.006	0.04	0.249	0.313
LTE Band 41_LAT	20M	QPSK	50	24	Front	10mm	Reduced	40620	2593	15.82	16.80	1.253	62.9	1.006	-0.08	0.109	0.137
LTE Band 41_LAT	20M	QPSK	50	24	Back	10mm	Reduced	40620	2593	15.82	16.80	1.253	62.9	1.006	0.05	0.154	0.194
LTE Band 41_LAT	20M	QPSK	50	24	Left Side	10mm	Reduced	40620	2593	15.82	16.80	1.253	62.9	1.006	-0.01	0.024	0.030
LTE Band 41_LAT	20M	QPSK	50	24	Right Side	10mm	Reduced	40620	2593	15.82	16.80	1.253	62.9	1.006	0.06	0.020	0.025
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	40620	2593	15.82	16.80	1.253	62.9	1.006	0.01	0.255	0.321
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	39750	2506	15.74	16.80	1.276	62.9	1.006	0.07	0.228	0.293
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	40185	2549.5	15.76	16.80	1.271	62.9	1.006	0.05	0.242	0.309
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	41055	2636.5	15.67	16.80	1.297	62.9	1.006	-0.01	0.282	0.368
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	10mm	Reduced	41490	2680	15.74	16.80	1.276	62.9	1.006	0.01	0.306	0.393



<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	78	2480	10.90	12.90	1.585	76.79	1.085	0.05	0.062	0.107
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 1	Full	78	2480	10.90	12.90	1.585	76.79	1.085	-0.12	0.041	0.071
	Bluetooth	DH5 1Mbps	Right Side	10mm	Ant 1	Full	78	2480	10.90	12.90	1.585	76.79	1.085	0.09	0.004	0.007
	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 1	Full	78	2480	10.90	12.90	1.585	76.79	1.085	0.01	0.077	0.132
	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 1	Full	0	2402	9.90	11.90	1.585	76.79	1.085	-0.08	0.051	0.088
56	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 1	Full	39	2441	10.90	12.90	1.585	76.79	1.085	0.05	0.087	0.150
	Bluetooth	DH5 1Mbps	Front	10mm	Ant 2	Full	39	2441	4.90	6.90	1.585	76.91	1.083	0.02	0.001	0.002
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 2	Full	39	2441	4.90	6.90	1.585	76.91	1.083	0.11	0.071	0.122
	Bluetooth	DH5 1Mbps	Right Side	10mm	Ant 2	Full	39	2441	4.90	6.90	1.585	76.91	1.083	0.06	0.001	0.002
	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 2	Full	39	2441	4.90	6.90	1.585	76.91	1.083	0.01	0.001	0.002
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 2	Full	0	2402	4.50	6.50	1.585	76.91	1.083	-0.08	0.067	0.114
	Bluetooth	DH5 1Mbps	Back	10mm	Ant 2	Full	78	2480	4.70	6.70	1.585	76.91	1.083	0.14	0.045	0.078

<WLAN2.4G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 1+2	Reduced power level 1	1	2412	19.96	21.96	1.585	98.35	1.017	0.06	0.096	0.155
57	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 1	1	2412	19.96	21.96	1.585	98.35	1.017	0.11	0.613	0.988
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 1+2	Reduced power level 1	1	2412	19.96	21.96	1.585	98.35	1.017	-0.17	0.158	0.255
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced power level 1	1	2412	19.96	21.96	1.585	98.35	1.017	0.04	0.206	0.332
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 1	6	2437	18.66	20.66	1.585	98.35	1.017	0.08	0.534	0.861
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 1	11	2462	18.81	20.81	1.585	98.35	1.017	-0.15	0.528	0.851
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	-0.05	0.082	0.132
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	-0.12	0.492	0.793
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	0.02	0.141	0.227
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	0.09	0.118	0.190
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 2	6	2437	17.66	19.66	1.585	98.35	1.017	0.01	0.379	0.611
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 2	11	2462	17.81	19.81	1.585	98.35	1.017	0.01	0.325	0.524
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 1+2	Reduced power level 3	1	2412	15.06	17.06	1.585	98.35	1.017	-0.11	0.037	0.060
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 3	1	2412	15.06	17.06	1.585	98.35	1.017	0.02	0.301	0.485
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 1+2	Reduced power level 3	1	2412	15.06	17.06	1.585	98.35	1.017	0.06	0.071	0.114
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced power level 3	1	2412	15.06	17.06	1.585	98.35	1.017	0.19	0.063	0.102
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 3	6	2437	14.66	16.66	1.585	98.35	1.017	0.17	0.229	0.369
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 3	11	2462	14.81	16.81	1.585	98.35	1.017	0.04	0.241	0.388
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	0.02	0.029	0.047
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	0.03	0.207	0.334
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	-0.09	0.057	0.092
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	0.14	0.050	0.081
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 4	6	2437	13.66	15.66	1.585	98.35	1.017	0.08	0.179	0.289
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 1+2	Reduced power level 4	11	2462	13.61	15.61	1.585	98.35	1.017	0.09	0.184	0.297



<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna Vendor / Tuner	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 1+2	Full	44	5220	17.63	19.63	1.585	98.77	1.012	0.11	0.024	0.038
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Full	44	5220	17.63	19.63	1.585	98.77	1.012	0.02	0.537	0.861
	WLAN5.2GHz	802.11a 6Mbps	Right Side	10mm	Ant 1+2	Full	44	5220	17.63	19.63	1.585	98.77	1.012	0.05	0.192	0.308
	WLAN5.2GHz	802.11a 6Mbps	Top Side	10mm	Ant 1+2	Full	44	5220	17.63	19.63	1.585	98.77	1.012	-0.02	0.064	0.103
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Full	36	5180	17.43	19.43	1.585	98.77	1.012	0.04	0.456	0.731
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Full	40	5200	17.50	19.50	1.585	98.77	1.012	0.17	0.489	0.784
58	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Full	48	5240	17.55	19.55	1.585	98.77	1.012	0.01	0.620	0.994
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 1+2	Reduced power level 2	44	5220	15.65	17.65	1.585	98.77	1.012	0.15	0.016	0.025
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Reduced power level 2	44	5220	15.65	17.65	1.585	98.77	1.012	-0.09	0.264	0.423
	WLAN5.2GHz	802.11a 6Mbps	Right Side	10mm	Ant 1+2	Reduced power level 2	44	5220	15.65	17.65	1.585	98.77	1.012	0.06	0.119	0.191
	WLAN5.2GHz	802.11a 6Mbps	Top Side	10mm	Ant 1+2	Reduced power level 2	44	5220	15.65	17.65	1.585	98.77	1.012	0.11	0.060	0.096
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Reduced power level 2	36	5180	15.39	17.39	1.585	98.77	1.012	0.02	0.260	0.417
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Reduced power level 2	40	5200	15.39	17.39	1.585	98.77	1.012	0.03	0.285	0.457
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Reduced power level 2	48	5240	15.49	17.49	1.585	98.77	1.012	0.08	0.357	0.573
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 1+2	Reduced power level 3/4	44	5220	13.71	15.71	1.585	98.77	1.012	-0.07	0.011	0.018
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Reduced power level 3/4	44	5220	13.71	15.71	1.585	98.77	1.012	0.15	0.188	0.302
	WLAN5.2GHz	802.11a 6Mbps	Right Side	10mm	Ant 1+2	Reduced power level 3/4	44	5220	13.71	15.71	1.585	98.77	1.012	0.08	0.073	0.117
	WLAN5.2GHz	802.11a 6Mbps	Top Side	10mm	Ant 1+2	Reduced power level 3/4	44	5220	13.71	15.71	1.585	98.77	1.012	-0.13	0.038	0.061
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Reduced power level 3/4	36	5180	13.56	15.56	1.585	98.77	1.012	0.05	0.152	0.244
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Reduced power level 3/4	40	5200	13.57	15.57	1.585	98.77	1.012	0.06	0.163	0.261
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 1+2	Reduced power level 3/4	48	5240	13.63	15.63	1.585	98.77	1.012	-0.17	0.204	0.327
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced power level 1	151	5755	15.62	17.62	1.585	100	1.000	0.11	0.049	0.078
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced power level 1	151	5755	15.62	17.62	1.585	100	1.000	0.04	0.574	0.910
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced power level 1	151	5755	15.62	17.62	1.585	100	1.000	0.14	0.288	0.456
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced power level 1	151	5755	15.62	17.62	1.585	100	1.000	0.07	0.174	0.276
59	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced power level 1	159	5795	15.46	17.46	1.585	100	1.000	0.08	0.596	0.945
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	0.02	0.038	0.060
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	0.06	0.451	0.715
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	-0.14	0.215	0.341
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	0.07	0.123	0.195
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced power level 2	159	5795	14.46	16.46	1.585	100	1.000	0.13	0.455	0.721
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	0.02	0.023	0.036
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	0.05	0.298	0.472
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	-0.07	0.139	0.220
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	0.04	0.091	0.144
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced power level 3	159	5795	12.49	14.49	1.585	100	1.000	-0.07	0.340	0.539
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	10mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	-0.14	0.018	0.029
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	0.08	0.207	0.328
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	-0.16	0.112	0.178
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	-0.07	0.069	0.109
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	10mm	Ant 1+2	Reduced power level 4	159	5795	11.61	13.61	1.585	100	1.000	0.17	0.227	0.360

17.3 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(3 Tx slots)	Front	15mm	Full	189	836.4	29.01	29.80	1.199	0.16	0.162	0.194
	GSM850_UAT	GPRS(3 Tx slots)	Back	15mm	Full	189	836.4	29.01	29.80	1.199	0.02	0.258	0.309
	GSM850_UAT	GPRS(3 Tx slots)	Back	15mm	Full	128	824.2	28.84	29.80	1.247	-0.19	0.263	0.328
	GSM850_UAT	GPRS(3 Tx slots)	Back	15mm	Full	251	848.8	29.00	29.80	1.202	0.14	0.223	0.268
	GSM850_LAT	GPRS(3 Tx slots)	Front	15mm	Full	189	836.4	28.84	29.80	1.247	0.15	0.269	0.336
60	GSM850_LAT	GPRS(3 Tx slots)	Back	15mm	Full	189	836.4	28.84	29.80	1.247	-0.07	0.418	0.521
	GSM850_LAT	GPRS(3 Tx slots)	Back	15mm	Full	128	824.2	28.66	29.80	1.300	0.13	0.376	0.489
	GSM850_LAT	GPRS(3 Tx slots)	Back	15mm	Full	251	848.8	28.74	29.80	1.276	0.03	0.349	0.445
	GSM1900_UAT	GPRS(3 Tx slots)	Front	15mm	Full	661	1880	24.01	25.00	1.256	0.11	0.260	0.327
	GSM1900_UAT	GPRS(3 Tx slots)	Back	15mm	Full	661	1880	24.01	25.00	1.256	0.09	0.305	0.383
	GSM1900_UAT	GPRS(3 Tx slots)	Back	15mm	Full	512	1850.2	23.71	25.00	1.346	0.02	0.271	0.365
	GSM1900_UAT	GPRS(3 Tx slots)	Back	15mm	Full	810	1909.8	23.59	25.00	1.384	0.16	0.258	0.357
	GSM1900_LAT	GPRS(3 Tx slots)	Front	15mm	Full	661	1880	24.91	26.50	1.442	0.13	0.197	0.284
61	GSM1900_LAT	GPRS(3 Tx slots)	Back	15mm	Full	661	1880	24.91	26.50	1.442	-0.12	0.313	0.451
	GSM1900_LAT	GPRS(3 Tx slots)	Back	15mm	Full	512	1850.2	24.60	26.50	1.549	0.03	0.285	0.441
	GSM1900_LAT	GPRS(3 Tx slots)	Back	15mm	Full	810	1909.8	24.74	26.50	1.500	0.17	0.281	0.421

<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	4132	826.4	24.27	24.80	1.130	0.09	0.202	0.228
	WCDMA V_UAT	RMC 12.2Kbps	Back	15mm	Full	4132	826.4	24.27	24.80	1.130	0.18	0.400	0.452
	WCDMA V_UAT	RMC 12.2Kbps	Back	15mm	Full	4182	836.4	24.25	24.80	1.135	-0.11	0.374	0.424
	WCDMA V_UAT	RMC 12.2Kbps	Back	15mm	Full	4233	846.6	24.21	24.80	1.146	0.03	0.346	0.396
	WCDMA V_LAT	RMC 12.2Kbps	Front	15mm	Full	4132	826.4	24.09	24.80	1.178	0.02	0.276	0.325
	WCDMA V_LAT	RMC 12.2Kbps	Back	15mm	Full	4132	826.4	24.09	24.80	1.178	0.03	0.405	0.477
62	WCDMA V_LAT	RMC 12.2Kbps	Back	15mm	Full	4182	836.4	24.06	24.80	1.186	0.13	0.454	0.538
	WCDMA V_LAT	RMC 12.2Kbps	Back	15mm	Full	4233	846.6	24.05	24.80	1.189	-0.17	0.396	0.471
	WCDMA IV_UAT	RMC 12.2Kbps	Front	15mm	Full	1513	1752.6	21.95	23.30	1.365	-0.02	0.221	0.302
	WCDMA IV_UAT	RMC 12.2Kbps	Back	15mm	Full	1513	1752.6	21.95	23.30	1.365	-0.14	0.333	0.454
	WCDMA IV_UAT	RMC 12.2Kbps	Back	15mm	Full	1312	1712.4	21.80	23.30	1.413	0.06	0.194	0.274
	WCDMA IV_UAT	RMC 12.2Kbps	Back	15mm	Full	1413	1732.6	21.93	23.30	1.371	0.05	0.220	0.302
	WCDMA IV_LAT	RMC 12.2Kbps	Front	15mm	Full	1413	1732.6	23.73	24.80	1.279	-0.08	0.580	0.742
63	WCDMA IV_LAT	RMC 12.2Kbps	Back	15mm	Full	1413	1732.6	23.73	24.80	1.279	0.03	0.699	0.894
	WCDMA IV_LAT	RMC 12.2Kbps	Back	15mm	Full	1312	1712.4	23.64	24.80	1.306	0.08	0.628	0.820
	WCDMA IV_LAT	RMC 12.2Kbps	Back	15mm	Full	1513	1752.6	23.72	24.80	1.282	0.14	0.600	0.769
	WCDMA II_UAT	RMC 12.2Kbps	Front	15mm	Full	9400	1880	22.30	23.30	1.259	0.15	0.252	0.317
	WCDMA II_UAT	RMC 12.2Kbps	Back	15mm	Full	9400	1880	22.30	23.30	1.259	0.02	0.302	0.380
	WCDMA II_UAT	RMC 12.2Kbps	Back	15mm	Full	9262	1852.4	22.18	23.30	1.294	-0.06	0.295	0.382
	WCDMA II_UAT	RMC 12.2Kbps	Back	15mm	Full	9538	1907.6	22.28	23.30	1.265	0.07	0.289	0.366
	WCDMA II_LAT	RMC 12.2Kbps	Front	15mm	Full	9400	1880	23.69	24.80	1.291	-0.19	0.600	0.775
64	WCDMA II_LAT	RMC 12.2Kbps	Back	15mm	Full	9400	1880	23.69	24.80	1.291	-0.09	0.650	0.839
	WCDMA II_LAT	RMC 12.2Kbps	Back	15mm	Full	9262	1852.4	23.60	24.80	1.318	0.15	0.574	0.757
	WCDMA II_LAT	RMC 12.2Kbps	Back	15mm	Full	9538	1907.6	23.66	24.80	1.300	-0.13	0.558	0.725

<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	24.01	24.80	1.199	0.04	0.203	0.243
	CDMA2000 BC0_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	384	836.52	24.01	24.80	1.199	0.08	0.263	0.315
	CDMA2000 BC0_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	1013	824.7	23.97	24.80	1.211	-0.12	0.330	0.399
	CDMA2000 BC0_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	777	848.31	23.95	24.80	1.216	0.13	0.241	0.293
	CDMA2000 BC0_LAT	RC3 SO32 (F+SCH)	Front	15mm	Full	384	836.52	23.79	24.80	1.262	0.15	0.254	0.321
	CDMA2000 BC0_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	384	836.52	23.79	24.80	1.262	0.05	0.369	0.466
65	CDMA2000 BC0_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	1013	824.7	23.78	24.80	1.265	-0.17	0.439	0.555
	CDMA2000 BC0_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	777	848.31	23.73	24.80	1.279	0.03	0.320	0.409
	CDMA2000 BC10_UAT	RC3 SO32 (F+SCH)	Front	15mm	Full	580	820.5	24.16	24.80	1.159	0.06	0.235	0.272
	CDMA2000 BC10_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	580	820.5	24.16	24.80	1.159	0.02	0.346	0.401
	CDMA2000 BC10_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	476	817.9	24.13	24.80	1.167	0.04	0.322	0.376
	CDMA2000 BC10_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	684	823.1	24.12	24.80	1.169	0.02	0.324	0.379
	CDMA2000 BC10_LAT	RC3 SO32 (F+SCH)	Front	15mm	Full	580	820.5	23.98	24.80	1.208	0.02	0.248	0.300
	CDMA2000 BC10_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	580	820.5	23.98	24.80	1.208	-0.04	0.354	0.428
	CDMA2000 BC10_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	476	817.9	23.94	24.80	1.219	0.15	0.358	0.436
66	CDMA2000 BC10_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	684	823.1	23.94	24.80	1.219	-0.02	0.413	0.503
	CDMA2000 BC1_UAT	RC3 SO32 (F+SCH)	Front	15mm	Full	1175	1908.75	21.87	23.30	1.390	0.15	0.197	0.274
	CDMA2000 BC1_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	1175	1908.75	21.87	23.30	1.390	-0.09	0.222	0.309
	CDMA2000 BC1_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	25	1851.25	21.77	23.30	1.422	-0.07	0.219	0.311
	CDMA2000 BC1_UAT	RC3 SO32 (F+SCH)	Back	15mm	Full	600	1880	21.79	23.30	1.416	0.05	0.234	0.331
	CDMA2000 BC1_LAT	RC3 SO32 (F+SCH)	Front	15mm	Full	1175	1908.75	22.69	24.30	1.449	0.03	0.474	0.687
	CDMA2000 BC1_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	1175	1908.75	22.69	24.30	1.449	0.06	0.479	0.694
	CDMA2000 BC1_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	25	1851.25	22.48	24.30	1.521	-0.14	0.505	0.768
67	CDMA2000 BC1_LAT	RC3 SO32 (F+SCH)	Back	15mm	Full	600	1880	22.67	24.30	1.455	-0.05	0.612	0.891



<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	99	Front	15mm	Full	133322	683	23.59	23.80	1.050	0.04	0.275	0.289
	LTE Band 71_UAT	20M	QPSK	1	99	Back	15mm	Full	133322	683	23.59	23.80	1.050	0.02	0.282	0.296
	LTE Band 71_UAT	20M	QPSK	50	0	Front	15mm	Full	133322	683	22.66	22.80	1.033	-0.03	0.185	0.191
	LTE Band 71_UAT	20M	QPSK	50	0	Back	15mm	Full	133322	683	22.66	22.80	1.033	0.12	0.210	0.217
	LTE Band 71_LAT	20M	QPSK	1	99	Front	15mm	Full	133322	683	22.57	23.80	1.327	0.08	0.251	0.333
68	LTE Band 71_LAT	20M	QPSK	1	99	Back	15mm	Full	133322	683	22.57	23.80	1.327	0.03	0.293	0.389
	LTE Band 71_LAT	20M	QPSK	50	0	Front	15mm	Full	133322	683	21.69	22.80	1.291	-0.18	0.185	0.239
	LTE Band 71_LAT	20M	QPSK	50	0	Back	15mm	Full	133322	683	21.69	22.80	1.291	-0.02	0.202	0.261
	LTE Band 12_UAT	10M	QPSK	1	49	Front	15mm	Full	23095	707.5	23.57	23.80	1.054	0.12	0.308	0.325
69	LTE Band 12_UAT	10M	QPSK	1	49	Back	15mm	Full	23095	707.5	23.57	23.80	1.054	-0.04	0.356	0.375
	LTE Band 12_UAT	10M	QPSK	25	12	Front	15mm	Full	23095	707.5	22.55	22.80	1.059	0.02	0.209	0.221
	LTE Band 12_UAT	10M	QPSK	25	12	Back	15mm	Full	23095	707.5	22.55	22.80	1.059	0.04	0.282	0.299
	LTE Band 12_LAT	10M	QPSK	1	49	Front	15mm	Full	23095	707.5	23.20	23.80	1.148	0.07	0.153	0.176
	LTE Band 12_LAT	10M	QPSK	1	49	Back	15mm	Full	23095	707.5	23.20	23.80	1.148	-0.08	0.251	0.288
	LTE Band 12_LAT	10M	QPSK	25	12	Front	15mm	Full	23095	707.5	22.19	22.80	1.151	0.17	0.091	0.105
	LTE Band 12_LAT	10M	QPSK	25	12	Back	15mm	Full	23095	707.5	22.19	22.80	1.151	0.11	0.196	0.226
	LTE Band 13_UAT	10M	QPSK	1	25	Front	15mm	Full	23230	782	23.45	23.80	1.084	0.16	0.168	0.182
	LTE Band 13_UAT	10M	QPSK	1	25	Back	15mm	Full	23230	782	23.45	23.80	1.084	0.02	0.377	0.409
	LTE Band 13_UAT	10M	QPSK	25	25	Front	15mm	Full	23230	782	22.47	22.80	1.079	0.08	0.173	0.187
	LTE Band 13_UAT	10M	QPSK	25	25	Back	15mm	Full	23230	782	22.47	22.80	1.079	-0.06	0.254	0.274
	LTE Band 13_LAT	10M	QPSK	1	25	Front	15mm	Full	23230	782	22.98	23.80	1.208	0.02	0.274	0.331
70	LTE Band 13_LAT	10M	QPSK	1	25	Back	15mm	Full	23230	782	22.98	23.80	1.208	-0.03	0.391	0.472
	LTE Band 13_LAT	10M	QPSK	25	25	Front	15mm	Full	23230	782	21.93	22.80	1.222	0.05	0.221	0.270
	LTE Band 13_LAT	10M	QPSK	25	25	Back	15mm	Full	23230	782	21.93	22.80	1.222	0.14	0.331	0.404
	LTE Band 5_UAT	10M	QPSK	1	0	Front	15mm	Full	20525	836.5	23.35	23.80	1.109	-0.09	0.182	0.202
	LTE Band 5_UAT	10M	QPSK	1	0	Back	15mm	Full	20525	836.5	23.35	23.80	1.109	0.06	0.357	0.396
	LTE Band 5_UAT	10M	QPSK	25	0	Front	15mm	Full	20525	836.5	22.37	22.80	1.104	-0.11	0.139	0.153
	LTE Band 5_UAT	10M	QPSK	25	0	Back	15mm	Full	20525	836.5	22.37	22.80	1.104	0.05	0.200	0.221
	LTE Band 5_LAT	10M	QPSK	1	0	Front	15mm	Full	20525	836.5	22.83	23.80	1.250	0.07	0.240	0.300
71	LTE Band 5_LAT	10M	QPSK	1	0	Back	15mm	Full	20525	836.5	22.83	23.80	1.250	-0.01	0.419	0.524
	LTE Band 5_LAT	10M	QPSK	25	12	Front	15mm	Full	20525	836.5	21.86	22.80	1.242	0.02	0.200	0.248
	LTE Band 5_LAT	10M	QPSK	25	12	Back	15mm	Full	20525	836.5	21.86	22.80	1.242	0.14	0.296	0.368
	LTE Band 26_UAT	15M	QPSK	1	0	Front	15mm	Full	26865	831.5	23.58	23.80	1.052	0.14	0.209	0.220
	LTE Band 26_UAT	15M	QPSK	1	0	Back	15mm	Full	26865	831.5	23.58	23.80	1.052	0.05	0.403	0.424
	LTE Band 26_UAT	15M	QPSK	1	0	Back	15mm	Full	26765	821.5	23.54	23.80	1.062	0.08	0.374	0.397
	LTE Band 26_UAT	15M	QPSK	1	0	Back	15mm	Full	26965	841.5	23.49	23.80	1.074	0.13	0.316	0.339
	LTE Band 26_UAT	15M	QPSK	36	20	Front	15mm	Full	26865	831.5	22.72	22.80	1.019	0.11	0.157	0.160
	LTE Band 26_UAT	15M	QPSK	36	20	Back	15mm	Full	26865	831.5	22.72	22.80	1.019	0.02	0.226	0.230
	LTE Band 26_LAT	15M	QPSK	1	0	Front	15mm	Full	26865	831.5	23.12	23.80	1.169	0.09	0.250	0.292
72	LTE Band 26_LAT	15M	QPSK	1	0	Back	15mm	Full	26865	831.5	23.12	23.80	1.169	0.01	0.449	0.525
	LTE Band 26_LAT	15M	QPSK	1	0	Back	15mm	Full	26765	821.5	22.98	23.80	1.208	0.17	0.432	0.522
	LTE Band 26_LAT	15M	QPSK	1	0	Back	15mm	Full	26965	841.5	23.08	23.80	1.180	-0.05	0.372	0.439
	LTE Band 26_LAT	15M	QPSK	36	20	Front	15mm	Full	26865	831.5	22.25	22.80	1.135	0.02	0.209	0.237
	LTE Band 26_LAT	15M	QPSK	36	20	Back	15mm	Full	26865	831.5	22.25	22.80	1.135	0.13	0.307	0.348



FCC SAR TEST REPORT

Report No. : FA9N2009-01

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	21.34	22.30	1.247	0.18	0.241	0.301
	LTE Band 66_UAT	20M	QPSK	1	0	Back	15mm	Full	132322	1745	21.34	22.30	1.247	-0.09	0.258	0.322
	LTE Band 66_UAT	20M	QPSK	1	0	Back	15mm	Full	132072	1720	21.15	22.30	1.303	0.06	0.216	0.281
	LTE Band 66_UAT	20M	QPSK	1	0	Back	15mm	Full	132572	1770	21.22	22.30	1.282	-0.17	0.299	0.383
	LTE Band 66C_UAT	20M	QPSK	1	0	Back	15mm	Full	132322	1745	20.32	21.30	1.253	-0.05	0.098	0.123
	LTE Band 66C_UAT	20M	QPSK	1	0	Back	15mm	Full	132072	1720	20.09	21.30	1.321	0.09	0.091	0.120
	LTE Band 66C_UAT	20M	QPSK	1	0	Back	15mm	Full	132572	1770	20.31	21.30	1.256	0.07	0.160	0.201
	LTE Band 66_UAT	20M	QPSK	50	24	Front	15mm	Full	132322	1745	20.49	21.30	1.205	0.07	0.214	0.258
	LTE Band 66_UAT	20M	QPSK	50	24	Back	15mm	Full	132322	1745	20.49	21.30	1.205	0.05	0.229	0.276
	LTE Band 66_LAT	20M	QPSK	1	0	Front	15mm	Full	132322	1745	23.18	23.80	1.153	-0.11	0.389	0.449
	LTE Band 66_LAT	20M	QPSK	1	0	Back	15mm	Full	132322	1745	23.18	23.80	1.153	0.02	0.437	0.504
	LTE Band 66_LAT	20M	QPSK	1	0	Back	15mm	Full	132072	1720	22.79	23.80	1.262	-0.06	0.419	0.529
73	LTE Band 66_LAT	20M	QPSK	1	0	Back	15mm	Full	132572	1770	22.88	23.80	1.236	-0.01	0.443	0.548
	LTE Band 66C_LAT	20M	QPSK	1	0	Back	15mm	Full	132322	1745	21.49	22.80	1.352	-0.05	0.327	0.442
	LTE Band 66C_LAT	20M	QPSK	1	0	Back	15mm	Full	132072	1720	21.16	22.80	1.459	0.01	0.312	0.455
	LTE Band 66C_LAT	20M	QPSK	1	0	Back	15mm	Full	132572	1770	21.29	22.80	1.416	0.08	0.306	0.433
	LTE Band 66_LAT	20M	QPSK	50	24	Front	15mm	Full	132322	1745	22.29	22.80	1.125	0.02	0.287	0.323
	LTE Band 66_LAT	20M	QPSK	50	24	Back	15mm	Full	132322	1745	22.29	22.80	1.125	0.01	0.370	0.416
	LTE Band 25_UAT	20M	QPSK	1	0	Front	15mm	Full	26340	1880	21.35	22.30	1.245	0.14	0.305	0.380
	LTE Band 25_UAT	20M	QPSK	1	0	Back	15mm	Full	26340	1880	21.35	22.30	1.245	0.07	0.410	0.510
	LTE Band 25_UAT	20M	QPSK	1	0	Back	15mm	Full	26140	1860	21.31	22.30	1.256	0.08	0.324	0.407
	LTE Band 25_UAT	20M	QPSK	1	0	Back	15mm	Full	26590	1905	21.33	22.30	1.250	0.11	0.323	0.404
	LTE Band 25_UAT	20M	QPSK	50	24	Front	15mm	Full	26340	1880	20.45	21.30	1.216	0.06	0.243	0.296
	LTE Band 25_UAT	20M	QPSK	50	24	Back	15mm	Full	26340	1880	20.45	21.30	1.216	-0.03	0.270	0.328
	LTE Band 25_LAT	20M	QPSK	1	0	Front	15mm	Full	26340	1880	23.19	23.80	1.151	0.13	0.575	0.662
74	LTE Band 25_LAT	20M	QPSK	1	0	Back	15mm	Full	26340	1880	23.19	23.80	1.151	0.1	0.651	0.749
	LTE Band 25_LAT	20M	QPSK	1	0	Back	15mm	Full	26140	1860	23.09	23.80	1.178	0.06	0.564	0.664
	LTE Band 25_LAT	20M	QPSK	1	0	Back	15mm	Full	26590	1905	23.12	23.80	1.169	0.07	0.566	0.662
	LTE Band 25_LAT	20M	QPSK	50	24	Front	15mm	Full	26340	1880	22.25	22.80	1.135	0.01	0.471	0.535
	LTE Band 25_LAT	20M	QPSK	50	24	Back	15mm	Full	26340	1880	22.25	22.80	1.135	0.12	0.522	0.592
	LTE Band 30_UAT	10M	QPSK	1	0	Front	15mm	Full	27710	2310	20.51	22.10	1.442	0.15	0.155	0.224
	LTE Band 30_UAT	10M	QPSK	1	0	Back	15mm	Full	27710	2310	20.51	22.10	1.442	0.08	0.298	0.430
	LTE Band 30_UAT	10M	QPSK	25	12	Front	15mm	Full	27710	2310	19.51	21.10	1.442	-0.09	0.127	0.183
	LTE Band 30_UAT	10M	QPSK	25	12	Back	15mm	Full	27710	2310	19.51	21.10	1.442	0.07	0.153	0.221
	LTE Band 30_LAT	10M	QPSK	1	0	Front	15mm	Full	27710	2310	22.12	23.80	1.472	-0.17	0.573	0.844
75	LTE Band 30_LAT	10M	QPSK	1	0	Back	15mm	Full	27710	2310	22.12	23.80	1.472	-0.07	0.581	0.855
	LTE Band 30_LAT	10M	QPSK	25	12	Front	15mm	Full	27710	2310	21.08	22.80	1.486	0.08	0.474	0.704
	LTE Band 30_LAT	10M	QPSK	25	12	Back	15mm	Full	27710	2310	21.08	22.80	1.486	-0.06	0.485	0.721
	LTE Band 30_LAT	10M	QPSK	50	0	Front	15mm	Full	27710	2310	21.03	22.80	1.503	0.06	0.462	0.694
	LTE Band 30_LAT	10M	QPSK	50	0	Back	15mm	Full	27710	2310	21.03	22.80	1.503	0.01	0.477	0.717
	LTE Band 7_UAT	20M	QPSK	1	49	Front	15mm	Full	20850	2510	20.91	22.10	1.315	-0.03	0.357	0.470
	LTE Band 7_UAT	20M	QPSK	1	49	Back	15mm	Full	20850	2510	20.91	22.10	1.315	0.16	0.424	0.558
	LTE Band 7_UAT	20M	QPSK	1	49	Back	15mm	Full	21100	2535	20.80	22.10	1.349	0.17	0.367	0.495
	LTE Band 7_UAT	20M	QPSK	1	49	Back	15mm	Full	21350	2560	20.75	22.10	1.365	0.05	0.351	0.479
	LTE Band 7_UAT	20M	QPSK	50	24	Front	15mm	Full	20850	2510	20.04	21.10	1.276	-0.08	0.204	0.260
	LTE Band 7_UAT	20M	QPSK	50	24	Back	15mm	Full	20850	2510	20.04	21.10	1.276	0.17	0.286	0.365
	LTE Band 7_LAT	20M	QPSK	1	49	Front	15mm	Full	20850	2510	22.30	23.80	1.413	-0.08	0.421	0.595
	LTE Band 7_LAT	20M	QPSK	1	49	Back	15mm	Full	20850	2510	22.30	23.80	1.413	0.12	0.513	0.725
	LTE Band 7_LAT	20M	QPSK	1	49	Back	15mm	Full	21100	2535	22.12	23.80	1.472	0.08	0.501	0.738
76	LTE Band 7_LAT	20M	QPSK	1	49	Back	15mm	Full	21350	2560	22.10	23.80	1.479	-0.03	0.548	0.811
	LTE Band 7_LAT	20M	QPSK	50	24	Front	15mm	Full	20850	2510	21.35	22.80	1.396	0.11	0.409	0.571
	LTE Band 7_LAT	20M	QPSK	50	24	Back	15mm	Full	20850	2510	21.35	22.80	1.396	0.05	0.437	0.610
	LTE Band 7_LAT	20M	QPSK	100	0	Back	15mm	Full	20850	2510	21.26	22.80	1.426	0.06	0.411	0.586



<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	40620	2593	21.32	22.10	1.197	62.9	1.006	-0.06	0.183	0.220
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	21.32	22.10	1.197	62.9	1.006	-0.08	0.264	0.318
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	21.01	22.10	1.285	62.9	1.006	0.02	0.316	0.409
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	21.03	22.10	1.279	62.9	1.006	-0.07	0.283	0.364
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	21.21	22.10	1.227	62.9	1.006	-0.13	0.208	0.257
	LTE Band 41_UAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	21.27	22.10	1.211	62.9	1.006	0.03	0.225	0.274
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	21.28	22.10	1.208	62.9	1.006	-0.06	0.196	0.238
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	21.16	22.10	1.242	62.9	1.006	0.09	0.195	0.244
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	21.21	22.10	1.227	62.9	1.006	0.05	0.193	0.238
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	21.22	22.10	1.225	62.9	1.006	0.08	0.170	0.209
	LTE Band 41C_UAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	21.25	22.10	1.216	62.9	1.006	0.01	0.152	0.186
	LTE Band 41_UAT	20M	QPSK	50	24	Front	15mm	Full	40620	2593	20.38	21.10	1.180	62.9	1.006	0.16	0.156	0.185
	LTE Band 41_UAT	20M	QPSK	50	24	Back	15mm	Full	40620	2593	20.38	21.10	1.180	62.9	1.006	0.09	0.215	0.255
	LTE Band 41_LAT	20M	QPSK	1	49	Front	15mm	Full	40620	2593	22.19	23.80	1.449	62.9	1.006	0.01	0.353	0.514
	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	22.19	23.80	1.449	62.9	1.006	0.13	0.458	0.668
	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	22.11	23.80	1.476	62.9	1.006	0.17	0.420	0.624
	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	22.02	23.80	1.507	62.9	1.006	-0.09	0.455	0.690
	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	22.08	23.80	1.486	62.9	1.006	0.05	0.424	0.634
77	LTE Band 41_LAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	22.18	23.80	1.452	62.9	1.006	-0.05	0.520	0.760
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	22.08	23.80	1.486	62.9	1.006	-0.05	0.386	0.577
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	21.96	23.80	1.528	62.9	1.006	0.01	0.347	0.533
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	21.98	23.80	1.521	62.9	1.006	0.02	0.346	0.529
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	22.02	23.80	1.507	62.9	1.006	0.09	0.401	0.608
	LTE Band 41C_LAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	22.06	23.80	1.493	62.9	1.006	0.15	0.488	0.733
	LTE Band 41_LAT	20M	QPSK	50	24	Front	15mm	Full	40620	2593	21.29	22.80	1.416	62.9	1.006	-0.06	0.322	0.459
	LTE Band 41_LAT	20M	QPSK	50	24	Back	15mm	Full	40620	2593	21.29	22.80	1.416	62.9	1.006	-0.14	0.407	0.580
	LTE Band 41_LAT	20M	QPSK	100	0	Back	15mm	Full	40620	2593	21.34	22.80	1.400	62.9	1.006	0.06	0.385	0.542



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(HPUE)_UAT	20M	QPSK	1	49	Front	15mm	Full	40620	2593	23.79	24.60	1.205	42.9	1.009	0.04	0.192	0.233
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	23.79	24.60	1.205	42.9	1.009	0.13	0.254	0.309
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	23.49	24.60	1.291	42.9	1.009	-0.05	0.332	0.433
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	23.54	24.60	1.276	42.9	1.009	0.06	0.269	0.346
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	23.72	24.60	1.225	42.9	1.009	0.15	0.203	0.251
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	23.71	24.60	1.227	42.9	1.009	0.08	0.248	0.307
	LTE Band 41C(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	23.71	24.60	1.227	42.9	1.009	-0.08	0.191	0.237
	LTE Band 41C(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	23.43	24.60	1.309	42.9	1.009	0.07	0.266	0.351
	LTE Band 41C(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	23.27	24.60	1.358	42.9	1.009	0.11	0.184	0.252
	LTE Band 41C(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	23.56	24.60	1.271	42.9	1.009	0.06	0.166	0.213
	LTE Band 41C(HPUE)_UAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	23.59	24.60	1.262	42.9	1.009	0.12	0.175	0.223
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Front	15mm	Full	40620	2593	22.93	23.60	1.167	42.9	1.009	0.04	0.159	0.187
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Back	15mm	Full	40620	2593	22.93	23.60	1.167	42.9	1.009	0.17	0.204	0.240
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Front	15mm	Full	40620	2593	25.40	26.30	1.230	42.9	1.009	0.09	0.316	0.392
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	25.40	26.30	1.230	42.9	1.009	-0.06	0.384	0.477
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	25.14	26.30	1.306	42.9	1.009	0.1	0.334	0.440
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	24.99	26.30	1.352	42.9	1.009	0.02	0.367	0.501
78	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	25.10	26.30	1.318	42.9	1.009	0.06	0.587	0.781
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	25.10	26.30	1.318	42.9	1.009	0.14	0.413	0.549
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	40620	2593	25.29	26.30	1.262	42.9	1.009	-0.06	0.326	0.415
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	39750	2506	25.19	26.30	1.291	42.9	1.009	0.11	0.290	0.378
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	40185	2549.5	24.95	26.30	1.365	42.9	1.009	0.06	0.282	0.388
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	41055	2636.5	25.06	26.30	1.330	42.9	1.009	0.04	0.438	0.588
	LTE Band 41C(HPUE)_LAT	20M	QPSK	1	49	Back	15mm	Full	41490	2680	25.09	26.30	1.321	42.9	1.009	0.03	0.302	0.403
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Front	15mm	Full	40620	2593	24.60	25.30	1.175	42.9	1.009	0.08	0.251	0.298
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Back	15mm	Full	40620	2593	24.60	25.30	1.175	42.9	1.009	-0.16	0.305	0.362
	LTE Band 41(HPUE)_LAT	20M	QPSK	100	0	Back	15mm	Full	40620	2593	24.51	26.30	1.510	42.9	1.009	-0.05	0.245	0.373
	LTE Band 48_UAT	20M	QPSK	1	49	Front	15mm	Full	55830	3609	23.46	23.80	1.081	62.9	1.006	0.17	0.146	0.159
79	LTE Band 48_UAT	20M	QPSK	1	49	Back	15mm	Full	55830	3609	23.46	23.80	1.081	62.9	1.006	0.08	0.370	0.403
	LTE Band 48_UAT	20M	QPSK	1	49	Back	15mm	Full	55340	3560	23.24	23.80	1.138	62.9	1.006	-0.08	0.284	0.325
	LTE Band 48_UAT	20M	QPSK	1	49	Back	15mm	Full	56150	3641	23.35	23.80	1.109	62.9	1.006	-0.14	0.312	0.348
	LTE Band 48_UAT	20M	QPSK	1	49	Back	15mm	Full	56640	3690	23.42	23.80	1.091	62.9	1.006	0.03	0.309	0.339
	LTE Band 48C_UAT	20M	QPSK	100	0	Back	15mm	Full	55830	3609	20.94	21.80	1.219	62.9	1.006	0.09	0.268	0.329
	LTE Band 48C_UAT	20M	QPSK	100	0	Back	15mm	Full	55340	3560	20.97	21.80	1.211	62.9	1.006	-0.02	0.231	0.281
	LTE Band 48C_UAT	20M	QPSK	100	0	Back	15mm	Full	56150	3641	21.07	21.80	1.183	62.9	1.006	0.05	0.235	0.280
	LTE Band 48C_UAT	20M	QPSK	100	0	Back	15mm	Full	56640	3690	21.11	21.80	1.172	62.9	1.006	-0.01	0.240	0.283
	LTE Band 48_UAT	20M	QPSK	50	24	Front	15mm	Full	55830	3609	22.61	22.80	1.045	62.9	1.006	0.13	0.133	0.140
	LTE Band 48_UAT	20M	QPSK	50	24	Back	15mm	Full	55830	3609	22.61	22.80	1.045	62.9	1.006	0.02	0.253	0.266



<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)
	N2_UAT	20M	QPSK	1	1	DFT-15	Front	15mm	Full	380000	1900	21.50	22.50	1.259	-0.03	0.281	0.354
	N2_UAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	380000	1900	21.50	22.50	1.259	0.01	0.292	0.368
	N2_UAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	372000	1860	21.01	22.50	1.409	0.06	0.246	0.347
	N2_UAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	376000	1880	21.20	22.50	1.349	-0.05	0.288	0.389
	N2_UAT	20M	QPSK	50	28	DFT-15	Front	15mm	Full	380000	1900	21.39	22.50	1.291	0.05	0.261	0.337
	N2_UAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	380000	1900	21.39	22.50	1.291	-0.05	0.277	0.358
	N2_LAT	20M	QPSK	1	1	DFT-15	Front	15mm	Full	380000	1900	23.03	24.30	1.340	0.01	0.407	0.545
	N2_LAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	380000	1900	23.03	24.30	1.340	0.06	0.425	0.569
	N2_LAT	20M	QPSK	50	28	DFT-15	Front	15mm	Full	380000	1900	22.82	24.30	1.406	0.06	0.390	0.548
	N2_LAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	380000	1900	22.82	24.30	1.406	0.01	0.395	0.555
	N2_LAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	372000	1860	22.45	24.30	1.531	0.01	0.386	0.591
80	N2_LAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	376000	1880	22.74	24.30	1.432	-0.06	0.457	0.655
	N5_UAT	20M	QPSK	1	1	DFT-15	Front	15mm	Full	167300	836.5	23.30	24.30	1.259	0.01	0.118	0.149
	N5_UAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	167300	836.5	23.30	24.30	1.259	-0.11	0.279	0.351
	N5_UAT	20M	QPSK	50	28	DFT-15	Front	15mm	Full	167300	836.5	23.10	24.30	1.318	0.05	0.106	0.140
	N5_UAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	167300	836.5	23.10	24.30	1.318	0.01	0.158	0.208
	N5_LAT	20M	QPSK	1	1	DFT-15	Front	15mm	Full	167300	836.5	23.31	24.30	1.256	0.06	0.181	0.227
	N5_LAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	167300	836.5	23.31	24.30	1.256	0.01	0.270	0.339
	N5_LAT	20M	QPSK	50	28	DFT-15	Front	15mm	Full	167300	836.5	23.01	24.30	1.346	0.06	0.194	0.261
81	N5_LAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	167300	836.5	23.01	24.30	1.346	0.02	0.320	0.431
	N66_UAT	20M	QPSK	1	1	DFT-15	Front	15mm	Full	349000	1745	21.07	22.50	1.390	0.05	0.081	0.113
	N66_UAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	349000	1745	21.07	22.50	1.390	-0.1	0.082	0.114
	N66_UAT	20M	QPSK	50	28	DFT-15	Front	15mm	Full	349000	1745	20.91	22.50	1.442	0.01	0.089	0.128
	N66_UAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	349000	1745	20.91	22.50	1.442	-0.03	0.091	0.131
	N66_UAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	344000	1720	20.86	22.50	1.459	0.16	0.077	0.112
	N66_UAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	354000	1770	20.90	22.50	1.445	-0.06	0.121	0.175
	N66_LAT	20M	QPSK	1	1	DFT-15	Front	15mm	Full	349000	1745	23.01	24.30	1.346	0.02	0.341	0.459
	N66_LAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	349000	1745	23.01	24.30	1.346	0.09	0.372	0.501
	N66_LAT	20M	QPSK	50	28	DFT-15	Front	15mm	Full	349000	1745	22.83	24.30	1.403	-0.11	0.343	0.481
	N66_LAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	349000	1745	22.83	24.30	1.403	0.02	0.375	0.526
82	N66_LAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	344000	1720	22.81	24.30	1.409	-0.04	0.381	0.537
	N66_LAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	354000	1770	22.69	24.30	1.449	0.01	0.357	0.517
	N71_UAT	20M	QPSK	1	1	DFT-15	Front	15mm	Full	136100	680.5	23.19	24.30	1.291	0.08	0.090	0.116
	N71_UAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	136100	680.5	23.19	24.30	1.291	0.01	0.137	0.177
	N71_UAT	20M	QPSK	50	28	DFT-15	Front	15mm	Full	136100	680.5	23.00	24.30	1.349	0.03	0.118	0.159
83	N71_UAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	136100	680.5	23.00	24.30	1.349	-0.06	0.198	0.267
	N71_LAT	20M	QPSK	1	1	DFT-15	Front	15mm	Full	136100	680.5	23.05	24.30	1.334	0.01	0.142	0.189
	N71_LAT	20M	QPSK	1	1	DFT-15	Back	15mm	Full	136100	680.5	23.05	24.30	1.334	-0.07	0.184	0.245
	N71_LAT	20M	QPSK	50	28	DFT-15	Front	15mm	Full	136100	680.5	22.89	24.30	1.384	-0.05	0.166	0.230
	N71_LAT	20M	QPSK	50	28	DFT-15	Back	15mm	Full	136100	680.5	22.89	24.30	1.384	-0.05	0.191	0.264
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Front	15mm	Full	518600	2593	22.05	23.30	1.334	-0.02	0.076	0.101
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Back	15mm	Full	518600	2593	22.05	23.30	1.334	0.06	0.092	0.123
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Back	15mm	Full	509200	2546	21.65	23.30	1.462	-0.07	0.222	0.325
	N41_UAT_NC	100M	QPSK	1	1	DFT-30	Back	15mm	Full	528000	2640	21.91	23.30	1.377	-0.05	0.117	0.161
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Front	15mm	Full	518600	2593	21.83	23.30	1.403	-0.08	0.062	0.087
	N41_UAT_NC	100M	QPSK	135	69	DFT-30	Back	15mm	Full	518600	2593	21.83	23.30	1.403	0.06	0.078	0.109
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Front	15mm	Full	518600	2593	23.81	24.4	1.146	0.01	0.124	0.142
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Back	15mm	Full	518600	2593	23.81	24.4	1.146	0.01	0.147	0.168
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Back	15mm	Full	509200	2546	23.71	24.4	1.172	-0.01	0.291	0.341
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Back	15mm	Full	528000	2640	23.80	24.4	1.148	0.09	0.202	0.232
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Front	15mm	Full	518600	2593	23.57	24.4	1.211	0.01	0.097	0.117
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Back	15mm	Full	518600	2593	23.57	24.4	1.211	0.02	0.127	0.154
	N41_LAT	100M	QPSK	1	1	DFT-30	Front	15mm	Full	518600	2593	24.19	24.4	1.050	0.01	0.532	0.558
	N41_LAT	100M	QPSK	1	1	DFT-30	Back	15mm	Full	518600	2593	24.19	24.4	1.050	0.06	0.667	0.700
	N41_LAT	100M	QPSK	1	1	DFT-30	Back	15mm	Full	509200	2546	23.77	24.4	1.156	0.04	0.641	0.741
84	N41_LAT	100M	QPSK	1	1	DFT-30	Back	15mm	Full	528000	2640	23.91	24.4	1.119	-0.05	0.680	0.761
	N41_LAT	100M	QPSK	135	69	DFT-30	Front	15mm	Full	518600	2593	24.16	24.4	1.057	-0.06	0.513	0.542
	N41_LAT	100M	QPSK	135	69	DFT-30	Back	15mm	Full	518600	2593	24.16	24.4	1.057	0.02	0.614	0.649

<EN-DC SAR>

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_LAT	10M	QPSK	1	49	Front	15mm	Full	23095	707.5	23.20	23.80	1.148	-0.03	0.135	0.155
LTE Band 12_LAT	10M	QPSK	1	49	Back	15mm	Full	23095	707.5	23.20	23.80	1.148	0.01	0.195	0.224
LTE Band 12_LAT	10M	QPSK	25	12	Front	15mm	Full	23095	707.5	22.19	22.80	1.151	0.09	0.100	0.115
LTE Band 12_LAT	10M	QPSK	25	12	Back	15mm	Full	23095	707.5	22.19	22.80	1.151	0.02	0.149	0.171
LTE Band 13_LAT	10M	QPSK	1	25	Front	15mm	Full	23230	782	22.98	23.80	1.208	0.04	0.180	0.217
LTE Band 13_LAT	10M	QPSK	1	25	Back	15mm	Full	23230	782	22.98	23.80	1.208	-0.05	0.269	0.325
LTE Band 13_LAT	10M	QPSK	25	25	Front	15mm	Full	23230	782	21.93	22.80	1.222	0.02	0.147	0.180
LTE Band 13_LAT	10M	QPSK	25	25	Back	15mm	Full	23230	782	21.93	22.80	1.222	-0.06	0.213	0.260
LTE Band 5_LAT	10M	QPSK	1	0	Front	15mm	Full	20525	836.5	22.83	23.80	1.250	0.07	0.167	0.209
LTE Band 5_LAT	10M	QPSK	1	0	Back	15mm	Full	20525	836.5	22.83	23.80	1.250	0.01	0.260	0.325
LTE Band 5_LAT	10M	QPSK	25	12	Front	15mm	Full	20525	836.5	21.86	22.80	1.242	0.11	0.134	0.166
LTE Band 5_LAT	10M	QPSK	25	12	Back	15mm	Full	20525	836.5	21.86	22.80	1.242	0.06	0.211	0.262
LTE Band 26_LAT	15M	QPSK	1	0	Front	15mm	Full	26865	831.5	23.12	23.80	1.169	0.05	0.158	0.185
LTE Band 26_LAT	15M	QPSK	1	0	Back	15mm	Full	26865	831.5	23.12	23.80	1.169	0.07	0.233	0.272
LTE Band 26_LAT	15M	QPSK	1	0	Back	15mm	Full	26765	821.5	22.98	23.80	1.208	0.03	0.232	0.280
LTE Band 26_LAT	15M	QPSK	1	0	Back	15mm	Full	26965	841.5	23.08	23.80	1.180	0.01	0.245	0.289
LTE Band 26_LAT	15M	QPSK	36	20	Front	15mm	Full	26865	831.5	22.25	22.80	1.135	0.08	0.129	0.146
LTE Band 26_LAT	15M	QPSK	36	20	Back	15mm	Full	26865	831.5	22.25	22.80	1.135	-0.05	0.195	0.221
LTE Band 2_UAT	20M	QPSK	1	0	Front	15mm	Full	19100	1900	21.57	22.30	1.183	-0.06	0.198	0.234
LTE Band 2_UAT	20M	QPSK	1	0	Back	15mm	Full	19100	1900	21.57	22.30	1.183	0.02	0.218	0.258
LTE Band 2_UAT	20M	QPSK	1	0	Back	15mm	Full	18700	1860	21.53	22.30	1.194	0.04	0.208	0.248
LTE Band 2_UAT	20M	QPSK	1	0	Back	15mm	Full	18900	1880	21.56	22.30	1.186	0.07	0.219	0.260
LTE Band 2_UAT	20M	QPSK	50	50	Front	15mm	Full	19100	1900	20.65	21.30	1.161	0.03	0.166	0.193
LTE Band 2_UAT	20M	QPSK	50	50	Back	15mm	Full	19100	1900	20.65	21.30	1.161	0.05	0.179	0.208

<WLAN EN-DC SAR>

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	802.11a 6Mbps	Front	15mm	Ant 1+2	Reduced	64	5320	14.93	16.93	1.585	98.77	1.012	-0.05	0.041	0.066
WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced	64	5320	14.93	16.93	1.585	98.77	1.012	0.02	0.282	0.452
WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced	52	5260	14.73	16.73	1.585	98.77	1.012	0.09	0.280	0.449
WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced	56	5280	14.60	16.60	1.585	98.77	1.012	0.01	0.248	0.398
WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced	60	5300	14.83	16.83	1.585	98.77	1.012	-0.11	0.260	0.417
WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced	151	5755	13.62	15.62	1.585	100	1.000	-0.05	0.013	0.021
WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced	151	5755	13.62	15.62	1.585	100	1.000	0.02	0.263	0.417
WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced	159	5795	13.46	15.46	1.585	100	1.000	0.01	0.312	0.494

<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	15mm	Ant 1	Full	78	2480	10.90	12.90	1.585	76.79	1.085	0.12	0.029	0.050
	Bluetooth	DH5 1Mbps	Back	15mm	Ant 1	Full	78	2480	10.90	12.90	1.585	76.79	1.085	0.05	0.026	0.045
	Bluetooth	DH5 1Mbps	Front	15mm	Ant 1	Full	0	2402	9.90	11.90	1.585	76.79	1.085	0.13	0.010	0.018
85	Bluetooth	DH5 1Mbps	Front	15mm	Ant 1	Full	39	2441	10.90	12.90	1.585	76.79	1.085	0.06	0.030	0.052
	Bluetooth	DH5 1Mbps	Front	15mm	Ant 2	Full	39	2441	4.90	6.90	1.585	76.91	1.083	0.02	0.001	0.002
	Bluetooth	DH5 1Mbps	Back	15mm	Ant 2	Full	39	2441	4.90	6.90	1.585	76.91	1.083	0.05	0.027	0.046
	Bluetooth	DH5 1Mbps	Back	15mm	Ant 2	Full	0	2402	4.50	6.50	1.585	76.91	1.083	-0.04	0.026	0.044
	Bluetooth	DH5 1Mbps	Back	15mm	Ant 2	Full	78	2480	4.70	6.70	1.585	76.91	1.083	0.16	0.018	0.030

<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	Full	1	2412	21.96	23.96	1.585	98.35	1.017	-0.09	0.088	0.142
86	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Full	1	2412	21.96	23.96	1.585	98.35	1.017	0.11	0.527	0.849
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Full	6	2437	21.76	23.76	1.585	98.35	1.017	0.17	0.337	0.543
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Full	11	2462	21.61	23.61	1.585	98.35	1.017	-0.02	0.270	0.435
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	0.12	0.039	0.063
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	0.1	0.212	0.342
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced power level 2	6	2437	17.66	19.66	1.585	98.35	1.017	0.09	0.141	0.227
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced power level 2	11	2462	17.81	19.81	1.585	98.35	1.017	0.07	0.112	0.181
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 1+2	Reduced power level 3	1	2412	16.96	18.96	1.585	98.35	1.017	0.05	0.029	0.047
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced power level 3	1	2412	16.96	18.96	1.585	98.35	1.017	0.02	0.185	0.298
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced power level 3	6	2437	16.86	18.86	1.585	98.35	1.017	0.02	0.110	0.177
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced power level 3	11	2462	16.71	18.71	1.585	98.35	1.017	-0.04	0.086	0.139
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	0.17	0.015	0.024
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	-0.09	0.087	0.140
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced power level 4	6	2437	13.66	15.66	1.585	98.35	1.017	0.18	0.082	0.132
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 1+2	Reduced power level 4	11	2462	13.61	15.61	1.585	98.35	1.017	0.16	0.044	0.071



<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)
87	WLAN5.3GHz	802.11a 6Mbps	Front	15mm	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	0.14	0.087	0.140
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	0.05	0.668	1.071
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	52	5260	17.65	19.65	1.585	98.77	1.012	-0.11	0.624	1.001
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	56	5280	17.47	19.47	1.585	98.77	1.012	0.12	0.614	0.985
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	60	5300	17.69	19.69	1.585	98.77	1.012	0.07	0.650	1.043
	WLAN5.3GHz	802.11a 6Mbps	Front	15mm	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	0.13	0.052	0.083
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	-0.09	0.359	0.576
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	52	5260	15.73	17.73	1.585	98.77	1.012	0.16	0.352	0.565
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	56	5280	15.60	17.60	1.585	98.77	1.012	0.04	0.310	0.497
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	60	5300	15.83	17.83	1.585	98.77	1.012	0.11	0.325	0.521
	WLAN5.3GHz	802.11a 6Mbps	Front	15mm	Ant 1+2	Reduced power level 3/4	64	5320	13.99	15.99	1.585	98.77	1.012	0.08	0.031	0.050
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	64	5320	13.99	15.99	1.585	98.77	1.012	-0.09	0.258	0.414
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	52	5260	13.95	15.95	1.585	98.77	1.012	0.04	0.236	0.379
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	56	5280	13.50	15.50	1.585	98.77	1.012	0.07	0.229	0.367
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	60	5300	13.93	15.93	1.585	98.77	1.012	0.15	0.210	0.337
88	WLAN5.5GHz	802.11a 6Mbps	Front	15mm	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.03	0.057	0.091
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.14	0.546	0.876
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	116	5580	16.25	18.25	1.585	98.77	1.012	0.08	0.522	0.837
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	124	5620	16.00	18.00	1.585	98.77	1.012	-0.14	0.545	0.874
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	132	5660	16.01	18.01	1.585	98.77	1.012	0.08	0.516	0.828
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	140	5700	16.10	18.10	1.585	98.77	1.012	-0.16	0.521	0.836
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Full	144	5720	16.02	18.02	1.585	98.77	1.012	0.07	0.204	0.327
	WLAN5.5GHz	802.11a 6Mbps	Front	15mm	Ant 1+2	Reduced power level 2	100	5500	14.78	16.78	1.585	98.77	1.012	0.05	0.035	0.056
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	100	5500	14.78	16.78	1.585	98.77	1.012	-0.06	0.247	0.396
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	116	5580	14.42	16.42	1.585	98.77	1.012	0.01	0.235	0.377
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	124	5620	14.09	16.09	1.585	98.77	1.012	0.06	0.231	0.371
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	132	5660	14.14	16.14	1.585	98.77	1.012	0.04	0.245	0.393
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	140	5700	14.15	16.15	1.585	98.77	1.012	0.04	0.228	0.366
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 2	144	5720	14.10	16.10	1.585	98.77	1.012	-0.11	0.230	0.369
	WLAN5.5GHz	802.11a 6Mbps	Front	15mm	Ant 1+2	Reduced power level 3/4	100	5500	12.87	14.87	1.585	98.77	1.012	0.17	0.017	0.027
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	100	5500	12.87	14.87	1.585	98.77	1.012	-0.16	0.186	0.298
89	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	116	5580	12.32	14.32	1.585	98.77	1.012	-0.05	0.152	0.244
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	124	5620	12.20	14.20	1.585	98.77	1.012	0.04	0.155	0.249
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	132	5660	12.07	14.07	1.585	98.77	1.012	0.17	0.159	0.255
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	140	5700	12.16	14.16	1.585	98.77	1.012	0.05	0.175	0.281
	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 1+2	Reduced power level 3/4	144	5720	12.12	14.12	1.585	98.77	1.012	0.09	0.162	0.260
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	0.17	0.032	0.051
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	-0.06	0.598	0.948
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Full	159	5795	16.38	18.38	1.585	100	1.000	0.07	0.627	0.994
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	0.08	0.019	0.030
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	-0.09	0.329	0.521
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced power level 2	159	5795	14.46	16.46	1.585	100	1.000	0.13	0.393	0.623
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	-0.17	0.013	0.021
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	0.05	0.204	0.323
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced power level 3	159	5795	12.49	14.49	1.585	100	1.000	0.06	0.279	0.442
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	-0.17	0.000	0.000
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	0.01	0.113	0.179
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 1+2	Reduced power level 4	159	5795	11.61	13.61	1.585	100	1.000	0.05	0.131	0.208

17.4 Product Specific SAR

<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_UAT	RMC 12.2Kbps	Front	0mm	Full	1513	1752.6	21.95	23.30	1.365	0.19	1.390	1.897
	WCDMA IV_UAT	RMC 12.2Kbps	Back	0mm	Full	1513	1752.6	21.95	23.30	1.365	0.08	0.788	1.075
90	WCDMA IV_UAT	RMC 12.2Kbps	Top Side	0mm	Full	1513	1752.6	21.95	23.30	1.365	0.03	1.910	2.606
	WCDMA IV_UAT	RMC 12.2Kbps	Top Side	0mm	Full	1312	1712.4	21.80	23.30	1.413	0.05	1.660	2.345
	WCDMA IV_UAT	RMC 12.2Kbps	Top Side	0mm	Full	1413	1732.6	21.93	23.30	1.371	0.04	1.750	2.399
	WCDMA IV_LAT	RMC 12.2Kbps	Back	0mm	Reduced	1413	1732.6	20.01	20.80	1.199	0.05	1.470	1.763
	WCDMA IV_LAT	RMC 12.2Kbps	Bottom Side	0mm	Reduced	1413	1732.6	20.01	20.80	1.199	0.17	1.380	1.655
	WCDMA IV_LAT	RMC 12.2Kbps	Back	0mm	Reduced	1312	1712.4	19.85	20.80	1.245	0.14	1.460	1.817
	WCDMA IV_LAT	RMC 12.2Kbps	Back	0mm	Reduced	1513	1752.6	19.94	20.80	1.219	0.09	1.540	1.877
	WCDMA II_UAT	RMC 12.2Kbps	Front	0mm	Full	9400	1880	22.30	23.30	1.259	0.02	1.590	2.002
	WCDMA II_UAT	RMC 12.2Kbps	Back	0mm	Full	9400	1880	22.30	23.30	1.259	0.19	0.816	1.027
	WCDMA II_UAT	RMC 12.2Kbps	Top Side	0mm	Full	9400	1880	22.30	23.30	1.259	0.03	1.750	2.203
	WCDMA II_UAT	RMC 12.2Kbps	Front	0mm	Full	9262	1852.4	22.18	23.30	1.294	-0.06	1.560	2.019
	WCDMA II_UAT	RMC 12.2Kbps	Front	0mm	Full	9538	1907.6	22.28	23.30	1.265	0.08	1.730	2.188
91	WCDMA II_UAT	RMC 12.2Kbps	Top Side	0mm	Full	9262	1852.4	22.18	23.30	1.294	0.15	1.880	2.433
	WCDMA II_UAT	RMC 12.2Kbps	Top Side	0mm	Full	9538	1907.6	22.28	23.30	1.265	0.01	1.710	2.163
	WCDMA II_LAT	RMC 12.2Kbps	Front	0mm	Reduced	9400	1880	19.88	20.80	1.236	0.11	1.710	2.113
	WCDMA II_LAT	RMC 12.2Kbps	Back	0mm	Reduced	9400	1880	19.88	20.80	1.236	-0.03	1.690	2.089
	WCDMA II_LAT	RMC 12.2Kbps	Bottom Side	0mm	Reduced	9400	1880	19.88	20.80	1.236	0.05	1.210	1.495
	WCDMA II_LAT	RMC 12.2Kbps	Front	0mm	Reduced	9262	1852.4	19.77	20.80	1.268	0.03	1.760	2.231
	WCDMA II_LAT	RMC 12.2Kbps	Front	0mm	Reduced	9538	1907.6	19.78	20.80	1.265	0.09	1.660	2.099
	WCDMA II_LAT	RMC 12.2Kbps	Back	0mm	Reduced	9262	1852.4	19.77	20.80	1.268	-0.14	1.670	2.117
	WCDMA II_LAT	RMC 12.2Kbps	Back	0mm	Reduced	9538	1907.6	19.78	20.80	1.265	0.02	1.650	2.087

<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_UAT	RTAP 153.6Kbps	Front	0mm	Full	1175	1908.75	21.85	23.30	1.396	0.06	1.160	1.620
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Back	0mm	Full	1175	1908.75	21.85	23.30	1.396	0.19	0.644	0.899
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Top Side	0mm	Full	1175	1908.75	21.85	23.30	1.396	-0.04	0.891	1.244
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Front	0mm	Full	25	1851.25	21.68	23.30	1.452	0.03	1.150	1.670
92	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Front	0mm	Full	600	1880	21.77	23.30	1.422	0.11	1.200	1.707
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	0mm	Reduced	1175	1908.75	19.32	20.30	1.253	0.03	0.848	1.063
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	0mm	Reduced	25	1851.25	19.21	20.30	1.285	0.13	1.110	1.427
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Bottom Side	0mm	Reduced	600	1880	19.22	20.30	1.282	0.05	1.040	1.334



<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_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132322	1745	21.34	22.30	1.247	0.16	1.320	1.647
	LTE Band 66_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132072	1720	21.15	22.30	1.303	0.09	1.290	1.681
	LTE Band 66_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132572	1770	21.22	22.30	1.282	-0.15	1.460	1.872
	LTE Band 66_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132322	1745	20.32	21.30	1.253	-0.05	1.410	1.767
	LTE Band 66_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132072	1720	20.09	21.30	1.321	0.06	1.210	1.599
	LTE Band 66_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132572	1770	20.31	21.30	1.256	0.03	1.440	1.809
	LTE Band 66_UAT	20M	QPSK	50	24	Top Side	0mm	Full	132322	1745	20.49	21.30	1.205	0.02	1.210	1.458
	LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	0mm	Reduced	132322	1745	19.88	20.30	1.102	-0.08	1.530	1.685
93	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132322	1745	19.84	20.30	1.112	0.11	1.700	1.890
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132072	1720	19.87	20.30	1.104	-0.03	1.520	1.678
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132572	1770	19.77	20.30	1.130	0.02	1.600	1.808
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132322	1745	19.29	20.30	1.262	-0.09	1.130	1.426
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132072	1720	19.35	20.30	1.245	0.05	1.200	1.493
	LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132572	1770	19.61	20.30	1.172	0.05	1.570	1.840
	LTE Band 25_UAT	20M	QPSK	1	0	Front	0mm	Full	26340	1880	21.35	22.30	1.245	0.12	1.500	1.867
	LTE Band 25_UAT	20M	QPSK	1	0	Back	0mm	Full	26340	1880	21.35	22.30	1.245	0.16	0.873	1.086
	LTE Band 25_UAT	20M	QPSK	1	0	Top Side	0mm	Full	26340	1880	21.35	22.30	1.245	0.16	1.970	2.452
	LTE Band 25_UAT	20M	QPSK	1	0	Top Side	0mm	Full	26140	1860	21.31	22.30	1.256	-0.06	1.920	2.412
94	LTE Band 25_UAT	20M	QPSK	1	0	Top Side	0mm	Full	26590	1905	21.33	22.30	1.250	0.08	2.000	2.501
	LTE Band 25_UAT	20M	QPSK	50	24	Front	0mm	Full	26340	1880	20.45	21.30	1.216	-0.16	1.300	1.581
	LTE Band 25_UAT	20M	QPSK	50	24	Back	0mm	Full	26340	1880	20.45	21.30	1.216	0.05	0.750	0.912
	LTE Band 25_UAT	20M	QPSK	50	24	Top Side	0mm	Full	26340	1880	20.45	21.30	1.216	0.09	1.620	1.970
	LTE Band 25_UAT	20M	QPSK	100	0	Top Side	0mm	Full	26340	1880	20.36	21.30	1.242	-0.08	1.590	1.974
	LTE Band 25_LAT	20M	QPSK	1	0	Front	0mm	Reduced	26340	1880	19.86	20.30	1.107	0.14	1.860	2.058
	LTE Band 25_LAT	20M	QPSK	1	0	Back	0mm	Reduced	26340	1880	19.86	20.30	1.107	0.08	1.840	2.036
	LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	0mm	Reduced	26340	1880	19.86	20.30	1.107	-0.07	1.340	1.483
	LTE Band 25_LAT	20M	QPSK	1	0	Front	0mm	Reduced	26140	1860	19.83	20.30	1.114	0.13	1.840	2.050
	LTE Band 25_LAT	20M	QPSK	1	0	Front	0mm	Reduced	26590	1905	19.85	20.30	1.109	0.06	1.900	2.107
	LTE Band 25_LAT	20M	QPSK	1	0	Back	0mm	Reduced	26140	1860	19.83	20.30	1.114	0.02	1.810	2.017
	LTE Band 25_LAT	20M	QPSK	1	0	Back	0mm	Reduced	26590	1905	19.85	20.30	1.109	0.07	1.790	1.985
	LTE Band 25_LAT	20M	QPSK	50	24	Front	0mm	Reduced	26340	1880	19.82	20.30	1.117	-0.09	1.850	2.066
	LTE Band 25_LAT	20M	QPSK	50	24	Back	0mm	Reduced	26340	1880	19.82	20.30	1.117	0.02	1.750	1.955
	LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	26340	1880	19.82	20.30	1.117	0.15	1.350	1.508
	LTE Band 25_LAT	20M	QPSK	50	24	Front	0mm	Reduced	26140	1860	19.72	20.30	1.143	0.16	1.900	2.171
	LTE Band 25_LAT	20M	QPSK	50	24	Front	0mm	Reduced	26590	1905	19.70	20.30	1.148	0.17	1.970	2.262
	LTE Band 25_LAT	20M	QPSK	100	0	Front	0mm	Reduced	26340	1880	19.79	20.30	1.125	-0.08	1.730	1.946
	LTE Band 25_LAT	20M	QPSK	100	0	Back	0mm	Reduced	26340	1880	19.79	20.30	1.125	0.06	1.650	1.856
	LTE Band 30_UAT	10M	QPSK	1	0	Front	0mm	Full	27710	2310	20.51	22.10	1.442	-0.13	1.330	1.918
	LTE Band 30_UAT	10M	QPSK	1	0	Back	0mm	Full	27710	2310	20.51	22.10	1.442	-0.03	0.767	1.106
95	LTE Band 30_UAT	10M	QPSK	1	0	Top Side	0mm	Full	27710	2310	20.51	22.10	1.442	0.13	1.600	2.307
	LTE Band 30_UAT	10M	QPSK	25	12	Top Side	0mm	Full	27710	2310	19.51	21.10	1.442	0.13	1.270	1.831
	LTE Band 30_UAT	10M	QPSK	50	0	Top Side	0mm	Full	27710	2310	19.44	21.10	1.466	0.09	1.250	1.832
	LTE Band 30_LAT	10M	QPSK	1	0	Front	0mm	Reduced	27710	2310	16.59	17.80	1.321	-0.16	1.110	1.467
	LTE Band 30_LAT	10M	QPSK	1	0	Back	0mm	Reduced	27710	2310	16.59	17.80	1.321	0.04	1.540	2.035
	LTE Band 30_LAT	10M	QPSK	1	0	Bottom Side	0mm	Reduced	27710	2310	16.59	17.80	1.321	0.12	0.998	1.319
	LTE Band 30_LAT	10M	QPSK	25	12	Front	0mm	Reduced	27710	2310	16.56	17.80	1.330	0.02	1.100	1.463
	LTE Band 30_LAT	10M	QPSK	25	12	Back	0mm	Reduced	27710	2310	16.56	17.80	1.330	-0.05	1.560	2.076
	LTE Band 30_LAT	10M	QPSK	25	12	Bottom Side	0mm	Reduced	27710	2310	16.56	17.80	1.330	0.13	0.997	1.326
	LTE Band 30_LAT	10M	QPSK	50	0	Back	0mm	Reduced	27710	2310	16.48	17.80	1.355	-0.03	1.550	2.101

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 7_UAT	20M	QPSK	1	49	Front	0mm	Full	20850	2510	20.91	22.10	1.315	0.08	1.420	1.868
	LTE Band 7_UAT	20M	QPSK	1	49	Back	0mm	Full	20850	2510	20.91	22.10	1.315	0.01	0.815	1.072
	LTE Band 7_UAT	20M	QPSK	1	49	Top Side	0mm	Full	20850	2510	20.91	22.10	1.315	0.17	1.620	2.131
	LTE Band 7_UAT	20M	QPSK	1	49	Top Side	0mm	Full	21100	2535	20.80	22.10	1.349	-0.06	1.650	2.226
96	LTE Band 7_UAT	20M	QPSK	1	49	Top Side	0mm	Full	21350	2560	20.75	22.10	1.365	0.03	1.690	2.306
	LTE Band 7_UAT	20M	QPSK	50	24	Front	0mm	Full	20850	2510	20.04	21.10	1.276	0.07	1.180	1.506
	LTE Band 7_UAT	20M	QPSK	50	24	Back	0mm	Full	20850	2510	20.04	21.10	1.276	0.07	0.593	0.757
	LTE Band 7_UAT	20M	QPSK	50	24	Top Side	0mm	Full	20850	2510	20.04	21.10	1.276	-0.05	1.270	1.621
	LTE Band 7_UAT	20M	QPSK	100	0	Top Side	0mm	Full	20850	2510	19.93	21.10	1.309	0.07	1.260	1.650
	LTE Band 7_LAT	20M	QPSK	1	49	Back	0mm	Reduced	20850	2510	16.19	17.30	1.291	-0.08	1.620	2.092
	LTE Band 7_LAT	20M	QPSK	1	49	Bottom Side	0mm	Reduced	20850	2510	16.19	17.30	1.291	0.13	1.360	1.756
	LTE Band 7_LAT	20M	QPSK	1	49	Back	0mm	Reduced	21100	2535	15.96	17.30	1.361	-0.05	1.600	2.178
	LTE Band 7_LAT	20M	QPSK	1	49	Back	0mm	Reduced	21350	2560	15.99	17.30	1.352	0.02	1.450	1.961
	LTE Band 7_LAT	20M	QPSK	50	24	Back	0mm	Reduced	20850	2510	16.16	17.30	1.300	0.07	1.590	2.067
	LTE Band 7_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	20850	2510	16.16	17.30	1.300	0.02	1.400	1.820
	LTE Band 7_LAT	20M	QPSK	50	24	Back	0mm	Reduced	21100	2535	16.15	17.30	1.303	-0.06	1.580	2.059
	LTE Band 7_LAT	20M	QPSK	50	24	Back	0mm	Reduced	21350	2560	16.13	17.30	1.309	-0.07	1.450	1.898
	LTE Band 7_LAT	20M	QPSK	100	0	Back	0mm	Reduced	20850	2510	16.07	17.30	1.327	0.05	1.710	2.270



<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_UAT	20M	QPSK	1	49	Top Side	0mm	Full	40620	2593	21.32	22.10	1.197	62.9	1.006	0.14	1.720	2.071
	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	0mm	Full	39750	2506	21.01	22.10	1.285	62.9	1.006	0.02	1.380	1.784
	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	0mm	Full	40185	2549.5	21.03	22.10	1.279	62.9	1.006	0.15	1.510	1.943
97	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	0mm	Full	41055	2636.5	21.21	22.10	1.227	62.9	1.006	0.09	1.950	2.408
	LTE Band 41_UAT	20M	QPSK	1	49	Top Side	0mm	Full	41490	2680	21.27	22.10	1.211	62.9	1.006	0.08	1.880	2.290
	LTE Band 41_UAT	20M	QPSK	50	24	Top Side	0mm	Full	40620	2593	20.38	21.10	1.180	62.9	1.006	-0.07	1.450	1.722
	LTE Band 41_UAT	20M	QPSK	100	0	Top Side	0mm	Full	40620	2593	20.29	21.10	1.205	62.9	1.006	0.03	1.420	1.721
	LTE Band 41_LAT	20M	QPSK	1	99	Bottom Side	0mm	Reduced	40620	2593	19.09	19.80	1.178	62.9	1.006	0.13	0.877	1.039
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40620	2593	19.06	19.80	1.186	62.9	1.006	-0.11	0.897	1.070
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	39750	2506	19.00	19.80	1.202	62.9	1.006	0.08	0.929	1.124
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40185	2549.5	19.02	19.80	1.197	62.9	1.006	0.07	0.930	1.120
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41055	2636.5	18.93	19.80	1.222	62.9	1.006	0.12	0.941	1.157
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41490	2680	19.00	19.80	1.202	62.9	1.006	0.03	0.879	1.063
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40620	2593	19.01	19.80	1.199	62.9	1.006	0.05	0.918	1.108
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	39750	2506	18.79	19.80	1.262	62.9	1.006	0.03	0.746	0.947
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40185	2549.5	18.63	19.80	1.309	62.9	1.006	0.07	0.870	1.146
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41055	2636.5	18.86	19.80	1.242	62.9	1.006	0.01	0.806	1.007
	LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41490	2680	18.99	19.80	1.205	62.9	1.006	0.06	0.930	1.127
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	40620	2593	23.79	24.60	1.205	42.9	1.009	-0.05	1.780	2.164
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	39750	2506	23.49	24.60	1.291	42.9	1.009	0.15	1.390	1.811
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	40185	2549.5	23.54	24.60	1.276	42.9	1.009	0.16	1.540	1.983
98	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	41055	2636.5	23.72	24.60	1.225	42.9	1.009	0.14	2.020	2.496
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	41490	2680	23.71	24.60	1.227	42.9	1.009	-0.09	1.940	2.403
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	40620	2593	23.73	24.60	1.222	42.9	1.009	0.06	1.840	2.268
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	39750	2506	23.43	24.60	1.309	42.9	1.009	0.09	1.430	1.889
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	40185	2549.5	23.27	24.60	1.358	42.9	1.009	0.06	1.280	1.754
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	41055	2636.5	23.56	24.60	1.271	42.9	1.009	-0.07	1.210	1.551
	LTE Band 41(HPUE)_UAT	20M	QPSK	1	49	Top Side	0mm	Full	41490	2680	23.59	24.60	1.262	42.9	1.009	0.06	1.720	2.190
	LTE Band 41(HPUE)_UAT	20M	QPSK	50	24	Top Side	0mm	Full	40620	2593	22.93	23.60	1.167	42.9	1.009	0.02	1.500	1.766
	LTE Band 41(HPUE)_UAT	20M	QPSK	100	0	Top Side	0mm	Full	40620	2593	22.89	23.60	1.178	42.9	1.009	0.06	1.350	1.604
	LTE Band 41(HPUE)_LAT	20M	QPSK	1	49	Bottom Side	0mm	Reduced	40620	2593	21.59	22.30	1.178	42.9	1.009	0.11	1.110	1.319
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40620	2593	21.54	22.30	1.191	42.9	1.009	-0.12	1.180	1.418
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	39750	2506	21.48	22.30	1.208	42.9	1.009	-0.15	1.161	1.415
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40185	2549.5	21.50	22.30	1.202	42.9	1.009	0.02	1.159	1.406
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41055	2636.5	21.48	22.30	1.208	42.9	1.009	0.02	1.250	1.523
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41490	2680	21.52	22.30	1.197	42.9	1.009	0.05	1.120	1.352
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40620	2593	21.51	22.30	1.199	42.9	1.009	-0.02	1.090	1.319
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	39750	2506	21.47	22.30	1.211	42.9	1.009	0.01	0.885	1.081
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40185	2549.5	21.49	22.30	1.205	42.9	1.009	0.18	0.784	0.953
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41055	2636.5	21.37	22.30	1.239	42.9	1.009	0.09	1.040	1.300
	LTE Band 41(HPUE)_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41490	2680	21.41	22.30	1.227	42.9	1.009	0.03	1.010	1.251
	LTE Band 48_UAT	20M	QPSK	1	49	Back	0mm	Full	55830	3609	23.46	23.80	1.081	62.9	1.006	-0.12	0.821	0.893
	LTE Band 48_UAT	20M	QPSK	1	49	Top Side	0mm	Full	55830	3609	23.46	23.80	1.081	62.9	1.006	0.02	1.800	1.958
99	LTE Band 48_UAT	20M	QPSK	1	49	Top Side	0mm	Full	55340	3560	23.24	23.80	1.138	62.9	1.006	0.13	1.770	2.026
	LTE Band 48_UAT	20M	QPSK	1	49	Top Side	0mm	Full	56150	3641	23.35	23.80	1.109	62.9	1.006	0.08	1.600	1.785
	LTE Band 48_UAT	20M	QPSK	1	49	Top Side	0mm	Full	56640	3690	23.42	23.80	1.091	62.9	1.006	0.07	1.590	1.746
	LTE Band 48C_UAT	20M	QPSK	100	0	Top Side	0mm	Full	55830	3609	20.94	21.80	1.219	62.9	1.006	-0.11	1.190	1.459
	LTE Band 48C_UAT	20M	QPSK	100	0	Top Side	0mm	Full	55340	3560	20.97	21.80	1.211	62.9	1.006	0.08	1.130	1.376
	LTE Band 48C_UAT	20M	QPSK	100	0	Top Side	0mm	Full	56150	3641	21.07	21.80	1.183	62.9	1.006	-0.08	1.220	1.452
	LTE Band 48C_UAT	20M	QPSK	100	0	Top Side	0mm	Full	56640	3690	21.11	21.80	1.172	62.9	1.006	-0.03	1.250	1.474
	LTE Band 48_UAT	20M	QPSK	50	24	Back	0mm	Full	55830	3609	22.61	22.80	1.045	62.9	1.006	0.13	0.713	0.749



FCC SAR TEST REPORT

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	LTE Band 48_UAT	20M	QPSK	50	24	Top Side	0mm	Full	55830	3609	22.61	22.80	1.045	62.9	1.006	-0.16	1.600	1.682
	LTE Band 48_UAT	20M	QPSK	100	0	Back	0mm	Full	55830	3609	22.52	22.80	1.067	62.9	1.006	0.05	1.580	1.695

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	N2_UAT	20M	QPSK	1	1	DFT-15	Top Side	0mm	Full	380000	1900	21.50	22.50	1.259	0.03	0.344	0.433
100	N2_UAT	20M	QPSK	50	28	DFT-15	Top Side	0mm	Full	380000	1900	21.39	22.50	1.291	-0.07	0.409	0.528
	N2_UAT	20M	QPSK	50	28	DFT-15	Top Side	0mm	Full	376000	1880	20.98	22.50	1.419	-0.06	0.313	0.444
	N2_UAT	20M	QPSK	50	28	DFT-15	Top Side	0mm	Full	376000	1880	21.35	22.50	1.303	0.09	0.342	0.446
	N66_LAT	20M	QPSK	1	1	DFT-15	Bottom Side	0mm	Reduced	349000	1745	19.20	20.30	1.288	-0.06	0.658	0.848
	N66_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	349000	1745	19.04	20.30	1.337	-0.06	0.664	0.887
	N66_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	344000	1720	18.98	20.30	1.355	0.02	0.721	0.977
101	N66_LAT	20M	QPSK	50	28	DFT-15	Bottom Side	0mm	Reduced	354000	1770	18.86	20.30	1.393	-0.11	0.746	1.039
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Top Side	0mm	Full	518600	2593	23.81	24.4	1.146	-0.02	1.060	1.214
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Top Side	0mm	Full	509200	2546	23.71	24.4	1.172	-0.02	1.170	1.371
	N41_UAT_FC	100M	QPSK	1	1	DFT-30	Top Side	0mm	Full	528000	2640	23.80	24.4	1.148	0.01	1.001	1.149
	N41_UAT_FC	100M	QPSK	135	69	DFT-30	Top Side	0mm	Full	518600	2593	23.57	24.4	1.211	0.06	0.846	1.024
	N41_LAT	100M	QPSK	1	1	DFT-30	Back	0mm	Reduced	518600	2593	17.72	18.40	1.169	-0.06	1.669	1.952
102	N41_LAT	100M	QPSK	1	1	DFT-30	Back	0mm	Reduced	509200	2546	17.62	18.40	1.197	-0.02	1.690	2.022
	N41_LAT	100M	QPSK	1	1	DFT-30	Back	0mm	Reduced	528000	2640	17.71	18.40	1.172	0.04	1.497	1.755
	N41_LAT	100M	QPSK	1	1	DFT-30	Bottom Side	0mm	Reduced	518600	2593	17.72	18.40	1.169	0.02	0.906	1.060
	N41_LAT	100M	QPSK	1	1	DFT-30	Bottom Side	0mm	Reduced	509200	2546	17.62	18.40	1.197	0.04	1.012	1.211
	N41_LAT	100M	QPSK	1	1	DFT-30	Bottom Side	0mm	Reduced	528000	2640	17.71	18.40	1.172	0.03	1.193	1.398
	N41_LAT	100M	QPSK	135	69	DFT-30	Back	0mm	Reduced	518600	2593	17.63	18.40	1.194	-0.04	1.575	1.881
	N41_LAT	100M	QPSK	135	69	DFT-30	Back	0mm	Reduced	509200	2546	17.55	18.40	1.216	0.02	1.604	1.951
	N41_LAT	100M	QPSK	135	69	DFT-30	Back	0mm	Reduced	528000	2640	17.50	18.40	1.230	0.02	1.408	1.732
	N41_LAT	100M	QPSK	135	69	DFT-30	Bottom Side	0mm	Reduced	518600	2593	17.63	18.40	1.194	0.09	0.863	1.030
	N41_LAT	100M	QPSK	270	0	DFT-30	Back	0mm	Reduced	518600	2593	17.44	18.40	1.247	-0.08	1.520	1.896



<EN-DC SAR>

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_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132322	1745	21.34	22.30	1.247	0.16	1.320	1.647
LTE Band 66_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132072	1720	21.15	22.30	1.303	0.09	1.290	1.681
LTE Band 66_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132572	1770	21.22	22.30	1.282	-0.15	1.460	1.872
LTE Band 66C_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132322	1745	20.32	21.30	1.253	-0.05	1.410	1.767
LTE Band 66C_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132072	1720	20.09	21.30	1.321	0.06	1.210	1.599
LTE Band 66C_UAT	20M	QPSK	1	0	Top Side	0mm	Full	132572	1770	20.31	21.30	1.256	0.03	1.440	1.809
LTE Band 66_UAT	20M	QPSK	50	24	Top Side	0mm	Full	132322	1745	20.49	21.30	1.205	0.02	1.210	1.458
LTE Band 66_LAT	20M	QPSK	1	0	Bottom Side	0mm	Reduced	132322	1745	17.33	17.80	1.114	0.04	0.723	0.806
LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132322	1745	17.29	17.80	1.125	-0.07	0.803	0.903
LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132072	1720	17.26	17.80	1.132	0.01	0.761	0.862
LTE Band 66_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	132572	1770	17.22	17.80	1.143	0.01	0.762	0.871
LTE Band 25_UAT	20M	QPSK	1	0	Front	0mm	Full	26340	1880	21.35	22.30	1.245	0.12	1.500	1.867
LTE Band 25_UAT	20M	QPSK	1	0	Back	0mm	Full	26340	1880	21.35	22.30	1.245	0.16	0.873	1.086
LTE Band 25_UAT	20M	QPSK	1	0	Top Side	0mm	Full	26340	1880	21.35	22.30	1.245	0.16	1.970	2.452
LTE Band 25_UAT	20M	QPSK	1	0	Top Side	0mm	Full	26140	1860	21.31	22.30	1.256	-0.06	1.920	2.412
LTE Band 25_UAT	20M	QPSK	1	0	Top Side	0mm	Full	26590	1905	21.33	22.30	1.250	0.08	2.000	2.501
LTE Band 25_UAT	20M	QPSK	50	24	Front	0mm	Full	26340	1880	20.45	21.30	1.216	-0.16	1.300	1.581
LTE Band 25_UAT	20M	QPSK	50	24	Back	0mm	Full	26340	1880	20.45	21.30	1.216	0.05	0.750	0.912
LTE Band 25_UAT	20M	QPSK	50	24	Top Side	0mm	Full	26340	1880	20.45	21.30	1.216	0.09	1.620	1.970
LTE Band 25_UAT	20M	QPSK	100	0	Top Side	0mm	Full	26340	1880	20.36	21.30	1.242	-0.08	1.590	1.974
LTE Band 2_LAT	20M	QPSK	1	0	Bottom Side	0mm	Reduced	18700	1860	16.58	17.30	1.180	0.09	0.519	0.613
LTE Band 2_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	19100	1900	16.57	17.30	1.183	0.06	0.543	0.642
LTE Band 2_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	18700	1860	16.38	17.30	1.236	-0.11	0.540	0.667
LTE Band 2_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	18900	1880	16.31	17.30	1.256	0.03	0.584	0.734
LTE Band 25_LAT	20M	QPSK	1	0	Bottom Side	0mm	Reduced	26340	1880	16.86	17.30	1.107	0.01	0.645	0.714
LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	26340	1880	16.82	17.30	1.117	0.02	0.646	0.721
LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	26140	1860	16.72	17.30	1.143	0.01	0.720	0.823
LTE Band 25_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	26590	1905	16.70	17.30	1.148	0.05	0.698	0.801

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	Reduced	40620	2593	15.83	16.80	1.250	62.9	1.006	-0.01	0.657	0.826
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40620	2593	15.82	16.80	1.253	62.9	1.006	0.09	0.674	0.850
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	39750	2506	15.74	16.80	1.276	62.9	1.006	0.02	0.717	0.921
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	40185	2549.5	15.76	16.80	1.271	62.9	1.006	0.07	0.796	1.017
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41055	2636.5	15.67	16.80	1.297	62.9	1.006	0.05	0.632	0.825
LTE Band 41_LAT	20M	QPSK	50	24	Bottom Side	0mm	Reduced	41490	2680	15.74	16.80	1.276	62.9	1.006	0.01	0.612	0.786

<WALN EN-DC SAR>

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)
WLAN5.2GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Reduced	44	5220	14.65	16.65	1.585	98.77	1.012	-0.06	0.145	0.233
WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced	44	5220	14.65	16.65	1.585	98.77	1.012	0.08	0.226	0.362
WLAN5.2GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Reduced	44	5220	14.65	16.65	1.585	98.77	1.012	-0.11	0.140	0.225
WLAN5.2GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Reduced	44	5220	14.65	16.65	1.585	98.77	1.012	0.01	0.083	0.133
WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced	36	5180	14.39	16.39	1.585	98.77	1.012	0.07	0.204	0.327
WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced	40	5200	14.39	16.39	1.585	98.77	1.012	0.04	0.219	0.351
WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced	48	5240	14.49	16.49	1.585	98.77	1.012	-0.02	0.229	0.367
WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Reduced	64	5320	14.93	16.93	1.585	98.77	1.012	0.01	0.212	0.340
WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced	64	5320	14.93	16.93	1.585	98.77	1.012	-0.02	0.356	0.571
WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Reduced	64	5320	14.93	16.93	1.585	98.77	1.012	0.06	0.164	0.263
WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Reduced	64	5320	14.93	16.93	1.585	98.77	1.012	0.01	0.129	0.207
WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced	52	5260	14.73	16.73	1.585	98.77	1.012	0.05	0.336	0.539
WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced	56	5280	14.60	16.60	1.585	98.77	1.012	-0.03	0.334	0.536
WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced	60	5300	14.83	16.83	1.585	98.77	1.012	0.06	0.342	0.549
WLAN5.8GHz	802.11n-HT40 MCS0	Front	0mm	Ant 1+2	Reduced	151	5755	13.62	15.62	1.585	100	1.000	0.02	0.088	0.139
WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced	151	5755	13.62	15.62	1.585	100	1.000	-0.01	0.322	0.510
WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 1+2	Reduced	151	5755	13.62	15.62	1.585	100	1.000	0.08	0.251	0.398
WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 1+2	Reduced	151	5755	13.62	15.62	1.585	100	1.000	0.04	0.155	0.246
WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced	159	5795	13.46	15.46	1.585	100	1.000	0.13	0.406	0.643

**<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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
103	WLAN2.4GHz	802.11b 1Mbps	Front	0mm	Ant 1+2	Full	1	2412	21.96	23.96	1.585	98.35	1.017	-0.08	0.601	0.969
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Full	1	2412	21.96	23.96	1.585	98.35	1.017	0.13	1.670	2.692
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 1+2	Full	1	2412	21.96	23.96	1.585	98.35	1.017	0.16	0.908	1.464
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 1+2	Full	1	2412	21.96	23.96	1.585	98.35	1.017	0.13	0.315	0.508
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Full	6	2437	21.76	23.76	1.585	98.35	1.017	0.02	1.380	2.224
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Full	11	2462	21.61	23.61	1.585	98.35	1.017	0.18	1.280	2.063
	WLAN2.4GHz	802.11b 1Mbps	Front	0mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	0.03	0.245	0.395
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	0.08	0.601	0.969
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	-0.02	0.347	0.559
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 1+2	Reduced power level 2	1	2412	17.96	19.96	1.585	98.35	1.017	0.02	0.151	0.243
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Reduced power level 2	6	2437	17.66	19.66	1.585	98.35	1.017	0.06	0.569	0.917
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Reduced power level 2	11	2462	17.81	19.81	1.585	98.35	1.017	0.09	0.573	0.924
	WLAN2.4GHz	802.11b 1Mbps	Front	0mm	Ant 1+2	Reduced power level 3	1	2412	16.96	18.96	1.585	98.35	1.017	-0.03	0.175	0.282
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Reduced power level 3	1	2412	16.96	18.96	1.585	98.35	1.017	0.01	0.563	0.907
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 1+2	Reduced power level 3	1	2412	16.96	18.96	1.585	98.35	1.017	0.02	0.273	0.440
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 1+2	Reduced power level 3	1	2412	16.96	18.96	1.585	98.35	1.017	0.02	0.136	0.219
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Reduced power level 3	6	2437	16.86	18.86	1.585	98.35	1.017	0.03	0.509	0.820
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Reduced power level 3	11	2462	16.71	18.71	1.585	98.35	1.017	0.09	0.491	0.791
	WLAN2.4GHz	802.11b 1Mbps	Front	0mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	0.01	0.094	0.152
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	-0.05	0.257	0.414
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	0.03	0.134	0.216
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 1+2	Reduced power level 4	1	2412	13.86	15.86	1.585	98.35	1.017	0.04	0.057	0.092
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Reduced power level 4	6	2437	13.66	15.66	1.585	98.35	1.017	0.04	0.214	0.345
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 1+2	Reduced power level 4	11	2462	13.61	15.61	1.585	98.35	1.017	0.09	0.208	0.335



<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5.2GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Full	44	5220	17.63	19.63	1.585	98.77	1.012	0.13	0.391	0.627
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	44	5220	17.63	19.63	1.585	98.77	1.012	-0.06	0.526	0.844
	WLAN5.2GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Full	44	5220	17.63	19.63	1.585	98.77	1.012	0.01	0.458	0.735
	WLAN5.2GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Full	44	5220	17.63	19.63	1.585	98.77	1.012	0.07	0.164	0.263
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	36	5180	17.43	19.43	1.585	98.77	1.012	-0.08	0.485	0.778
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	40	5200	17.50	19.50	1.585	98.77	1.012	-0.16	0.518	0.831
104	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	48	5240	17.55	19.55	1.585	98.77	1.012	0.17	0.547	0.877
	WLAN5.2GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Reduced power level 2	44	5220	15.65	17.65	1.585	98.77	1.012	0.02	0.208	0.334
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	44	5220	15.65	17.65	1.585	98.77	1.012	0.09	0.292	0.468
	WLAN5.2GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Reduced power level 2	44	5220	15.65	17.65	1.585	98.77	1.012	-0.01	0.190	0.305
	WLAN5.2GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Reduced power level 2	44	5220	15.65	17.65	1.585	98.77	1.012	-0.16	0.105	0.168
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	36	5180	15.39	17.39	1.585	98.77	1.012	-0.11	0.269	0.431
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	40	5200	15.39	17.39	1.585	98.77	1.012	0.02	0.279	0.447
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	48	5240	15.49	17.49	1.585	98.77	1.012	0.14	0.302	0.484
	WLAN5.2GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Reduced power level 3/4	44	5220	13.71	15.71	1.585	98.77	1.012	0.13	0.124	0.199
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	44	5220	13.71	15.71	1.585	98.77	1.012	0.06	0.150	0.241
	WLAN5.2GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Reduced power level 3/4	44	5220	13.71	15.71	1.585	98.77	1.012	-0.09	0.100	0.160
	WLAN5.2GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Reduced power level 3/4	44	5220	13.71	15.71	1.585	98.77	1.012	0.19	0.050	0.080
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	36	5180	13.66	15.66	1.585	98.77	1.012	0.04	0.189	0.303
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	40	5200	13.57	15.57	1.585	98.77	1.012	0.17	0.186	0.298
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	48	5240	13.63	15.63	1.585	98.77	1.012	0.05	0.212	0.340
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	0.17	0.425	0.682
105	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	0.06	0.804	1.290
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	0.05	0.450	0.722
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Full	64	5320	17.72	19.72	1.585	98.77	1.012	-0.08	0.365	0.585
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	52	5260	17.65	19.65	1.585	98.77	1.012	-0.17	0.729	1.169
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	56	5280	17.47	19.47	1.585	98.77	1.012	0.08	0.739	1.185
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	60	5300	17.69	19.69	1.585	98.77	1.012	0.09	0.762	1.222
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	-0.18	0.263	0.422
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	-0.09	0.445	0.714
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	0.03	0.225	0.361
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Reduced power level 2	64	5320	15.93	17.93	1.585	98.77	1.012	0.14	0.182	0.292
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	52	5260	15.73	17.73	1.585	98.77	1.012	0.08	0.424	0.680
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	56	5280	15.60	17.60	1.585	98.77	1.012	0.07	0.425	0.682
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	60	5300	15.83	17.83	1.585	98.77	1.012	0.12	0.438	0.703
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Reduced power level 3/4	64	5320	13.99	15.99	1.585	98.77	1.012	0.13	0.148	0.237
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	64	5320	13.99	15.99	1.585	98.77	1.012	0.16	0.319	0.512
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Reduced power level 3/4	64	5320	13.99	15.99	1.585	98.77	1.012	0.09	0.112	0.180
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Reduced power level 3/4	64	5320	13.99	15.99	1.585	98.77	1.012	0.08	0.089	0.143
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	52	5260	13.95	15.95	1.585	98.77	1.012	-0.01	0.268	0.430
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	56	5280	13.50	15.50	1.585	98.77	1.012	0.17	0.265	0.425
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	60	5300	13.93	15.93	1.585	98.77	1.012	-0.015	0.269	0.431



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)
106	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.05	0.324	0.520
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.14	0.799	1.282
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.13	0.428	0.686
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Full	100	5500	16.55	18.55	1.585	98.77	1.012	0.08	0.334	0.536
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	116	5580	16.25	18.25	1.585	98.77	1.012	0.09	0.725	1.163
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	124	5620	16.00	18.00	1.585	98.77	1.012	0.17	0.711	1.140
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	132	5660	16.01	18.01	1.585	98.77	1.012	0.14	0.698	1.120
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	140	5700	16.10	18.10	1.585	98.77	1.012	-0.08	0.705	1.131
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Full	144	5720	16.02	18.02	1.585	98.77	1.012	0.18	0.711	1.140
	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Reduced power level 2	100	5500	14.78	16.78	1.585	98.77	1.012	-0.05	0.140	0.225
107	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	100	5500	14.78	16.78	1.585	98.77	1.012	0.05	0.350	0.561
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Reduced power level 2	100	5500	14.78	16.78	1.585	98.77	1.012	0.04	0.221	0.354
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Reduced power level 2	100	5500	14.78	16.78	1.585	98.77	1.012	0.02	0.178	0.285
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	116	5580	14.42	16.42	1.585	98.77	1.012	0.09	0.371	0.595
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	124	5620	14.09	16.09	1.585	98.77	1.012	0.02	0.337	0.541
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	132	5660	14.14	16.14	1.585	98.77	1.012	-0.01	0.328	0.526
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	140	5700	14.15	16.15	1.585	98.77	1.012	0.01	0.307	0.492
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 2	144	5720	14.10	16.10	1.585	98.77	1.012	-0.07	0.252	0.404
	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 1+2	Reduced power level 3/4	100	5500	12.87	14.87	1.585	98.77	1.012	0.03	0.124	0.199
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	100	5500	12.87	14.87	1.585	98.77	1.012	0.13	0.318	0.510
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 1+2	Reduced power level 3/4	100	5500	12.87	14.87	1.585	98.77	1.012	0.06	0.192	0.308
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 1+2	Reduced power level 3/4	100	5500	12.87	14.87	1.585	98.77	1.012	0.14	0.101	0.162
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	116	5580	12.32	14.32	1.585	98.77	1.012	0.08	0.230	0.369
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	124	5620	12.20	14.20	1.585	98.77	1.012	0.08	0.269	0.431
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	132	5660	12.07	14.07	1.585	98.77	1.012	-0.06	0.310	0.497
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	140	5700	12.16	14.16	1.585	98.77	1.012	-0.08	0.288	0.462
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 1+2	Reduced power level 3/4	144	5720	12.12	14.12	1.585	98.77	1.012	-0.01	0.311	0.499
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	0mm	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	0.03	0.198	0.314
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	0.06	0.688	1.090
108	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	-0.08	0.509	0.807
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 1+2	Full	151	5755	16.44	18.44	1.585	100	1.000	0.14	0.322	0.510
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Full	159	5795	16.38	18.38	1.585	100	1.000	0.11	0.703	1.114
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	0mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	-0.05	0.109	0.173
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	0.02	0.407	0.645
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	0.06	0.315	0.499
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 1+2	Reduced power level 2	151	5755	14.62	16.62	1.585	100	1.000	0.01	0.206	0.326
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced power level 2	159	5795	14.46	16.46	1.585	100	1.000	0.06	0.513	0.813
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	0mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	-0.08	0.080	0.127
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	0.01	0.250	0.396
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	0.11	0.181	0.287
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 1+2	Reduced power level 3	151	5755	12.58	14.58	1.585	100	1.000	0.03	0.114	0.181
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced power level 3	159	5795	12.49	14.49	1.585	100	1.000	0.04	0.271	0.430
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	0mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	0.08	0.061	0.097
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	-0.04	0.162	0.257
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	0.04	0.122	0.193
	WLAN5.8GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 1+2	Reduced power level 4	151	5755	11.62	13.62	1.585	100	1.000	0.02	0.095	0.151
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	0mm	Ant 1+2	Reduced power level 4	159	5795	11.61	13.61	1.585	100	1.000	0.03	0.178	0.282

17.5 Repeated SAR Measurement

<1g>

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)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 25 LAT	20M	QPSK	1	0	Bottom Side	10	Reduced	26340	1880	19.86	20.30	1.107	0.04	0.812	1	0.899
2nd	LTE Band 25 LAT	20M	QPSK	1	0	Bottom Side	10	Reduced	26340	1880	19.86	20.30	1.107	0.07	0.801	1.014	0.886

<10g>

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)	Ratio	Reported 10g SAR (W/kg)
1st	LTE Band 25 UAT	20M	QPSK	1	0	Top Side	0	Full	26590	1905	21.33	22.30	1.250	-	-	0.08	2.000	1	2.501
2nd	LTE Band 25 UAT	20M	QPSK	1	0	Top Side	0	Full	26590	1905	21.33	22.30	1.250	-	-	-0.05	1.920	1.042	2.400
1st	LTE Band 41(HPUE) UAT	20M	QPSK	1	49	Top Side	0	Full	41055	2636.5	23.72	24.60	1.225	42.9	1.009	0.14	2.020	1	2.496
2nd	LTE Band 41(HPUE) UAT	20M	QPSK	1	49	Top Side	0	Full	41055	2636.5	23.72	24.60	1.225	42.9	1.009	0.14	1.980	1.020	2.447

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR < 1.45 W/kg, only one repeated measurement is required.
3. 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.

17.6 TDD B41 Linearity Data Analysis

General Note:

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

UAT Head (Reduced power level 1)	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	16.10	18.60
Reported 1g SAR (W/kg)	0.907	0.884
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	25.79	31.37
Linearity SAR(W/kg)	1.103	
% deviation from expected linearity		-19.88%

UAT Head (Reduced power level 2/3/4)	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	15.10	18.60
Reported 1g SAR (W/kg)	0.747	0.884
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	20.48	31.37
Linearity SAR(W/kg)	1.144	
% deviation from expected linearity		-22.72%

LAT Head	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	23.80	26.30
Reported 1g SAR (W/kg)	0.189	0.171
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	151.85	184.71
Linearity SAR(W/kg)	0.230	
% deviation from expected linearity		-25.62%

UAT Hotspot	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	18.10	20.10
Reported 1g SAR (W/kg)	0.891	0.930
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	40.87	44.31
Linearity SAR(W/kg)	0.966	
% deviation from expected linearity		-3.72%

LAT Hotspot	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	18.80	21.30
Reported 1g SAR (W/kg)	0.684	0.791
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	48.02	58.41
Linearity SAR(W/kg)	0.832	
% deviation from expected linearity		-4.93%

UAT Body	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	22.10	24.60
Reported 1g SAR (W/kg)	0.409	0.433
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	102.66	124.88
Linearity SAR(W/kg)	0.498	
% deviation from expected linearity		-12.97%

LAT Body	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	23.80	26.30
Reported 1g SAR (W/kg)	0.760	0.781
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	151.85	184.71
Linearity SAR(W/kg)	0.924	
% deviation from expected linearity		-15.52%

UAT Extremity	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	22.10	24.60
Reported 1g SAR (W/kg)	2.408	2.496
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	102.66	124.88
Linearity SAR(W/kg)	2.929	
% deviation from expected linearity		-14.79%

LAT Extremity	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	19.80	22.30
Reported 1g SAR (W/kg)	1.157	1.523
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	60.45	73.53
Linearity SAR(W/kg)	1.407	
% deviation from expected linearity		8.21%

18. 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

General Note:

1. This device 2.4GHz WLAN/ 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).
2. 2.4GHz WLAN and Bluetooth share the same antenna, and cannot transmit simultaneously.
3. All licensed modes share the same antenna part and cannot transmit simultaneously.
4. According to the EUT character, WLAN 5GHz and Bluetooth can transmit simultaneously.
5. According to the EUT character, WLAN 5GHz and 2.4GHz WLAN can transmit simultaneously.
6. 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.
7. The Scaled SAR summation is calculated based on the same configuration and test position.
8. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) Scalar SAR summation < 1.6W/kg.
 - ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - iii) If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
 - iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

18.1 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	0.214	0.022	0.236
Right Tilted	0.185	0.010	0.195
Left Cheek	0.674	0.374	1.048
Left Tilted	0.467	0.315	0.782

WWAN Band		Exposure Position	1	2	4	1+2+4
			WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_UAT	Right Cheek	0.194	0.131	0.018	0.343
		Right Tilted	0.038	0.119	0.008	0.165
		Left Cheek	0.391	0.456	0.322	1.169
		Left Tilted	0.011	0.285	0.230	0.526
	GSM1900_UAT	Right Cheek	0.395	0.131	0.018	0.544
		Right Tilted	0.470	0.119	0.008	0.597
		Left Cheek	0.266	0.456	0.322	1.044
		Left Tilted	0.277	0.285	0.230	0.792
WCDMA	WCDMA V_UAT	Right Cheek	0.105	0.131	0.018	0.254
		Right Tilted	0.036	0.119	0.008	0.163
		Left Cheek	0.268	0.456	0.322	1.046
		Left Tilted	0.046	0.285	0.230	0.561
	WCDMA IV_UAT	Right Cheek	0.404	0.131	0.018	0.553
		Right Tilted	0.537	0.119	0.008	0.664
		Left Cheek	0.363	0.456	0.322	1.141
		Left Tilted	0.375	0.285	0.230	0.890
	WCDMA II_UAT	Right Cheek	0.385	0.131	0.018	0.534
		Right Tilted	0.491	0.119	0.008	0.618
		Left Cheek	0.231	0.456	0.322	1.009
		Left Tilted	0.384	0.285	0.230	0.899
CDMA	CDMA2000 BC0_UAT	Right Cheek	0.216	0.131	0.018	0.365
		Right Tilted	0.036	0.119	0.008	0.163
		Left Cheek	0.348	0.456	0.322	1.126
		Left Tilted	0.049	0.285	0.230	0.564
	CDMA2000 BC10_UAT	Right Cheek	0.228	0.131	0.018	0.377
		Right Tilted	0.045	0.119	0.008	0.172
		Left Cheek	0.344	0.456	0.322	1.122
		Left Tilted	0.076	0.285	0.230	0.591
	CDMA2000 BC1_UAT	Right Cheek	0.513	0.131	0.018	0.662
		Right Tilted	0.630	0.119	0.008	0.757
		Left Cheek	0.401	0.456	0.322	1.179
		Left Tilted	0.447	0.285	0.230	0.962
LTE	LTE Band 71_UAT	Right Cheek	0.165	0.131	0.018	0.314
		Right Tilted	0.023	0.119	0.008	0.150
		Left Cheek	0.245	0.456	0.322	1.023
		Left Tilted	0.028	0.285	0.230	0.543
	LTE Band 12_UAT	Right Cheek	0.290	0.131	0.018	0.439
		Right Tilted	0.051	0.119	0.008	0.178
		Left Cheek	0.382	0.456	0.322	1.160

	LTE Band 13_UAT	Left Tilted	0.066	0.285	0.230	0.581
		Right Cheek	0.281	0.131	0.018	0.430
		Right Tilted	0.051	0.119	0.008	0.178
		Left Cheek	0.397	0.456	0.322	1.175
		Left Tilted	0.062	0.285	0.230	0.577
	LTE Band 5_UAT	Right Cheek	0.227	0.131	0.018	0.376
		Right Tilted	0.041	0.119	0.008	0.168
		Left Cheek	0.330	0.456	0.322	1.108
		Left Tilted	0.051	0.285	0.230	0.566
	LTE Band 26_UAT	Right Cheek	0.218	0.131	0.018	0.367
		Right Tilted	0.118	0.119	0.008	0.245
		Left Cheek	0.347	0.456	0.322	1.125
		Left Tilted	0.053	0.285	0.230	0.568
	LTE Band 66_UAT	Right Cheek	0.489	0.131	0.018	0.638
		Right Tilted	0.669	0.119	0.008	0.796
		Left Cheek	0.395	0.456	0.322	1.173
		Left Tilted	0.487	0.285	0.230	1.002
	LTE Band 25_UAT	Right Cheek	0.416	0.131	0.018	0.565
		Right Tilted	0.514	0.119	0.008	0.641
		Left Cheek	0.256	0.456	0.322	1.034
		Left Tilted	0.325	0.285	0.230	0.840
	LTE Band 30_UAT	Right Cheek	0.565	0.131	0.018	0.714
		Right Tilted	0.659	0.119	0.008	0.786
		Left Cheek	0.479	0.456	0.322	1.257
		Left Tilted	0.545	0.285	0.230	1.060
	LTE Band 7_UAT	Right Cheek	0.654	0.131	0.018	0.803
		Right Tilted	0.685	0.119	0.008	0.812
		Left Cheek	0.398	0.456	0.322	1.176
		Left Tilted	0.469	0.285	0.230	0.984
	LTE Band 41_UAT	Right Cheek	0.491	0.131	0.018	0.640
		Right Tilted	0.747	0.119	0.008	0.874
		Left Cheek	0.284	0.456	0.322	1.062
		Left Tilted	0.314	0.285	0.230	0.829
	LTE Band 41(HPUE)_UAT	Right Cheek	0.852	0.131	0.018	1.001
		Right Tilted	0.884	0.119	0.008	1.011
		Left Cheek	0.333	0.456	0.322	1.111
		Left Tilted	0.385	0.285	0.230	0.900
	LTE Band 48	Right Cheek	0.552	0.131	0.018	0.701
		Right Tilted	0.797	0.119	0.008	0.924
		Left Cheek	0.315	0.456	0.322	1.093
		Left Tilted	0.362	0.285	0.230	0.877



WWAN Band		Exposure Position	1	4	6	7	1+4	1+4+6	1+4+7
			WWAN	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2	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)
GSM	GSM850_UAT	Right Cheek	0.300	0.029	0.074	0.002	0.329	0.403	0.331
		Right Tilted	0.052	0.014	0.058	0.002	0.066	0.124	0.068
		Left Cheek	0.553	0.494	0.189	0.006	1.047	1.236	1.053
		Left Tilted	0.060	0.372	0.122	0.002	0.432	0.554	0.434
	GSM1900_UAT	Right Cheek	0.573	0.029	0.074	0.002	0.602	0.676	0.604
		Right Tilted	0.686	0.014	0.058	0.002	0.700	0.758	0.702
		Left Cheek	0.398	0.494	0.189	0.006	0.892	1.081	0.898
		Left Tilted	0.424	0.372	0.122	0.002	0.796	0.918	0.798
WCDMA	WCDMA V_UAT	Right Cheek	0.138	0.029	0.074	0.002	0.167	0.241	0.169
		Right Tilted	0.054	0.014	0.058	0.002	0.068	0.126	0.070
		Left Cheek	0.350	0.494	0.189	0.006	0.844	1.033	0.850
		Left Tilted	0.063	0.372	0.122	0.002	0.435	0.557	0.437
	WCDMA IV_UAT	Right Cheek	0.638	0.029	0.074	0.002	0.667	0.741	0.669
		Right Tilted	0.688	0.014	0.058	0.002	0.702	0.760	0.704
		Left Cheek	0.345	0.494	0.189	0.006	0.839	1.028	0.845
		Left Tilted	0.554	0.372	0.122	0.002	0.926	1.048	0.928
	WCDMA II_UAT	Right Cheek	0.632	0.029	0.074	0.002	0.661	0.735	0.663
		Right Tilted	0.696	0.014	0.058	0.002	0.710	0.768	0.712
		Left Cheek	0.379	0.494	0.189	0.006	0.873	1.062	0.879
		Left Tilted	0.541	0.372	0.122	0.002	0.913	1.035	0.915
CDMA	CDMA2000 BC0_UAT	Right Cheek	0.303	0.029	0.074	0.002	0.332	0.406	0.334
		Right Tilted	0.054	0.014	0.058	0.002	0.068	0.126	0.070
		Left Cheek	0.554	0.494	0.189	0.006	1.048	1.237	1.054
		Left Tilted	0.063	0.372	0.122	0.002	0.435	0.557	0.437
	CDMA2000 BC10_UAT	Right Cheek	0.323	0.029	0.074	0.002	0.352	0.426	0.354
		Right Tilted	0.058	0.014	0.058	0.002	0.072	0.130	0.074
		Left Cheek	0.472	0.494	0.189	0.006	0.966	1.155	0.972
		Left Tilted	0.082	0.372	0.122	0.002	0.454	0.576	0.456
	CDMA2000 BC1_UAT	Right Cheek	0.757	0.029	0.074	0.002	0.786	0.860	0.788
		Right Tilted	0.868	0.014	0.058	0.002	0.882	0.940	0.884
		Left Cheek	0.571	0.494	0.189	0.006	1.065	1.254	1.071
		Left Tilted	0.664	0.372	0.122	0.002	1.036	1.158	1.038
LTE	LTE Band 71_UAT	Right Cheek	0.165	0.029	0.074	0.002	0.194	0.268	0.196
		Right Tilted	0.023	0.014	0.058	0.002	0.037	0.095	0.039
		Left Cheek	0.245	0.494	0.189	0.006	0.739	0.928	0.745
		Left Tilted	0.028	0.372	0.122	0.002	0.400	0.522	0.402
	LTE Band 12_UAT	Right Cheek	0.290	0.029	0.074	0.002	0.319	0.393	0.321
		Right Tilted	0.051	0.014	0.058	0.002	0.065	0.123	0.067
		Left Cheek	0.382	0.494	0.189	0.006	0.876	1.065	0.882



	LTE Band 13_UAT	Left Tilted	0.066	0.372	0.122	0.002	0.438	0.560	0.440
		Right Cheek	0.281	0.029	0.074	0.002	0.310	0.384	0.312
		Right Tilted	0.051	0.014	0.058	0.002	0.065	0.123	0.067
		Left Cheek	0.397	0.494	0.189	0.006	0.891	1.080	0.897
		Left Tilted	0.062	0.372	0.122	0.002	0.434	0.556	0.436
	LTE Band 5_UAT	Right Cheek	0.227	0.029	0.074	0.002	0.256	0.330	0.258
		Right Tilted	0.041	0.014	0.058	0.002	0.055	0.113	0.057
		Left Cheek	0.330	0.494	0.189	0.006	0.824	1.013	0.830
		Left Tilted	0.051	0.372	0.122	0.002	0.423	0.545	0.425
	LTE Band 26_UAT	Right Cheek	0.329	0.029	0.074	0.002	0.358	0.432	0.360
		Right Tilted	0.058	0.014	0.058	0.002	0.072	0.130	0.074
		Left Cheek	0.505	0.494	0.189	0.006	0.999	1.188	1.005
		Left Tilted	0.076	0.372	0.122	0.002	0.448	0.570	0.450
	LTE Band 66_UAT	Right Cheek	0.623	0.029	0.074	0.002	0.652	0.726	0.654
		Right Tilted	0.794	0.014	0.058	0.002	0.808	0.866	0.810
		Left Cheek	0.396	0.494	0.189	0.006	0.890	1.079	0.896
		Left Tilted	0.519	0.372	0.122	0.002	0.891	1.013	0.893
	LTE Band 25_UAT	Right Cheek	0.540	0.029	0.074	0.002	0.569	0.643	0.571
		Right Tilted	0.645	0.014	0.058	0.002	0.659	0.717	0.661
		Left Cheek	0.409	0.494	0.189	0.006	0.903	1.092	0.909
		Left Tilted	0.513	0.372	0.122	0.002	0.885	1.007	0.887
	LTE Band 30_UAT	Right Cheek	0.634	0.029	0.074	0.002	0.663	0.737	0.665
		Right Tilted	0.905	0.014	0.058	0.002	0.919	0.977	0.921
		Left Cheek	0.458	0.494	0.189	0.006	0.952	1.141	0.958
		Left Tilted	0.553	0.372	0.122	0.002	0.925	1.047	0.927
	LTE Band 7_UAT	Right Cheek	0.872	0.029	0.074	0.002	0.901	0.975	0.903
		Right Tilted	0.929	0.014	0.058	0.002	0.943	1.001	0.945
		Left Cheek	0.505	0.494	0.189	0.006	0.999	1.188	1.005
		Left Tilted	0.577	0.372	0.122	0.002	0.949	1.071	0.951
	LTE Band 41_UAT	Right Cheek	0.491	0.029	0.074	0.002	0.520	0.594	0.522
		Right Tilted	0.747	0.014	0.058	0.002	0.761	0.819	0.763
		Left Cheek	0.284	0.494	0.189	0.006	0.778	0.967	0.784
		Left Tilted	0.314	0.372	0.122	0.002	0.686	0.808	0.688
	LTE Band 41(HPUE)_UAT	Right Cheek	0.852	0.029	0.074	0.002	0.881	0.955	0.883
		Right Tilted	0.884	0.014	0.058	0.002	0.898	0.956	0.900
		Left Cheek	0.333	0.494	0.189	0.006	0.827	1.016	0.833
		Left Tilted	0.385	0.372	0.122	0.002	0.757	0.879	0.759
	LTE Band 48	Right Cheek	0.552	0.029	0.074	0.002	0.581	0.655	0.583
		Right Tilted	0.797	0.014	0.058	0.002	0.811	0.869	0.813
		Left Cheek	0.315	0.494	0.189	0.006	0.809	0.998	0.815
		Left Tilted	0.362	0.372	0.122	0.002	0.734	0.856	0.736



WWAN Band		Exposure Position	1	2	1+2
			WWAN	2.4GHz WLAN Ant 1+2	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_UAT	Right Cheek	0.194	0.214	0.408
		Right Tilted	0.038	0.185	0.223
		Left Cheek	0.391	0.674	1.065
		Left Tilted	0.011	0.467	0.478
	GSM1900_UAT	Right Cheek	0.395	0.214	0.609
		Right Tilted	0.470	0.185	0.655
		Left Cheek	0.266	0.674	0.940
		Left Tilted	0.277	0.467	0.744
WCDMA	WCDMA V_UAT	Right Cheek	0.105	0.214	0.319
		Right Tilted	0.036	0.185	0.221
		Left Cheek	0.268	0.674	0.942
		Left Tilted	0.046	0.467	0.513
	WCDMA IV_UAT	Right Cheek	0.404	0.214	0.618
		Right Tilted	0.537	0.185	0.722
		Left Cheek	0.363	0.674	1.037
		Left Tilted	0.375	0.467	0.842
	WCDMA II_UAT	Right Cheek	0.385	0.214	0.599
		Right Tilted	0.491	0.185	0.676
		Left Cheek	0.231	0.674	0.905
		Left Tilted	0.384	0.467	0.851
CDMA	CDMA2000 BC0_UAT	Right Cheek	0.216	0.214	0.430
		Right Tilted	0.036	0.185	0.221
		Left Cheek	0.348	0.674	1.022
		Left Tilted	0.049	0.467	0.516
	CDMA2000 BC10_UAT	Right Cheek	0.228	0.214	0.442
		Right Tilted	0.045	0.185	0.230
		Left Cheek	0.344	0.674	1.018
		Left Tilted	0.076	0.467	0.543
	CDMA2000 BC1_UAT	Right Cheek	0.513	0.214	0.727
		Right Tilted	0.630	0.185	0.815
		Left Cheek	0.401	0.674	1.075
		Left Tilted	0.447	0.467	0.914
LTE	LTE Band 71_UAT	Right Cheek	0.165	0.214	0.379
		Right Tilted	0.023	0.185	0.208
		Left Cheek	0.245	0.674	0.919
		Left Tilted	0.028	0.467	0.495
	LTE Band 12_UAT	Right Cheek	0.290	0.214	0.504
		Right Tilted	0.051	0.185	0.236
		Left Cheek	0.382	0.674	1.056

	LTE Band 13_UAT	Left Tilted	0.066	0.467	0.533
		Right Cheek	0.281	0.214	0.495
		Right Tilted	0.051	0.185	0.236
		Left Cheek	0.397	0.674	1.071
		Left Tilted	0.062	0.467	0.529
	LTE Band 5_UAT	Right Cheek	0.227	0.214	0.441
		Right Tilted	0.041	0.185	0.226
		Left Cheek	0.330	0.674	1.004
		Left Tilted	0.051	0.467	0.518
	LTE Band 26_UAT	Right Cheek	0.218	0.214	0.432
		Right Tilted	0.118	0.185	0.303
		Left Cheek	0.347	0.674	1.021
		Left Tilted	0.053	0.467	0.520
	LTE Band 66_UAT	Right Cheek	0.489	0.214	0.703
		Right Tilted	0.669	0.185	0.854
		Left Cheek	0.395	0.674	1.069
		Left Tilted	0.487	0.467	0.954
	LTE Band 25_UAT	Right Cheek	0.416	0.214	0.630
		Right Tilted	0.514	0.185	0.699
		Left Cheek	0.256	0.674	0.930
		Left Tilted	0.325	0.467	0.792
	LTE Band 30_UAT	Right Cheek	0.565	0.214	0.779
		Right Tilted	0.659	0.185	0.844
		Left Cheek	0.479	0.674	1.153
		Left Tilted	0.545	0.467	1.012
	LTE Band 7_UAT	Right Cheek	0.654	0.214	0.868
		Right Tilted	0.685	0.185	0.870
		Left Cheek	0.398	0.674	1.072
		Left Tilted	0.469	0.467	0.936
	LTE Band 41_UAT	Right Cheek	0.491	0.214	0.705
		Right Tilted	0.747	0.185	0.932
		Left Cheek	0.284	0.674	0.958
		Left Tilted	0.314	0.467	0.781
	LTE Band 41(HPUE)_UAT	Right Cheek	0.852	0.214	1.066
		Right Tilted	0.884	0.185	1.069
		Left Cheek	0.333	0.674	1.007
		Left Tilted	0.385	0.467	0.852
	LTE Band 48	Right Cheek	0.552	0.214	0.766
		Right Tilted	0.797	0.185	0.982
		Left Cheek	0.315	0.674	0.989
		Left Tilted	0.362	0.467	0.829



FCC SAR TEST REPORT

Report No. : FA9N2009-01

WWAN Band		Exposure Position	1	2	4	6	7	1+6	1+7	4+6	4+7
			WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2	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)
GSM	GSM850_UAT	Right Cheek	0.438	0.260	0.042	0.074	0.002	0.512	0.440	0.116	0.044
		Right Tilted	0.072	0.250	0.019	0.058	0.002	0.130	0.074	0.077	0.021
		Left Cheek	0.643	0.965	0.812	0.189	0.006	0.832	0.649	1.001	0.818
		Left Tilted	0.087	0.582	0.452	0.122	0.002	0.209	0.089	0.574	0.454
	GSM1900_UAT	Right Cheek	0.573	0.260	0.042	0.074	0.002	0.647	0.575	0.116	0.044
		Right Tilted	0.686	0.250	0.019	0.058	0.002	0.744	0.688	0.077	0.021
		Left Cheek	0.398	0.965	0.812	0.189	0.006	0.587	0.404	1.001	0.818
		Left Tilted	0.424	0.582	0.452	0.122	0.002	0.546	0.426	0.574	0.454
WCDMA	WCDMA V_UAT	Right Cheek	0.138	0.260	0.042	0.074	0.002	0.212	0.140	0.116	0.044
		Right Tilted	0.054	0.250	0.019	0.058	0.002	0.112	0.056	0.077	0.021
		Left Cheek	0.350	0.965	0.812	0.189	0.006	0.539	0.356	1.001	0.818
		Left Tilted	0.063	0.582	0.452	0.122	0.002	0.185	0.065	0.574	0.454
	WCDMA IV_UAT	Right Cheek	0.638	0.260	0.042	0.074	0.002	0.712	0.640	0.116	0.044
		Right Tilted	0.688	0.250	0.019	0.058	0.002	0.746	0.690	0.077	0.021
		Left Cheek	0.345	0.965	0.812	0.189	0.006	0.534	0.351	1.001	0.818
		Left Tilted	0.554	0.582	0.452	0.122	0.002	0.676	0.556	0.574	0.454
	WCDMA II_UAT	Right Cheek	0.632	0.260	0.042	0.074	0.002	0.706	0.634	0.116	0.044
		Right Tilted	0.696	0.250	0.019	0.058	0.002	0.754	0.698	0.077	0.021
		Left Cheek	0.379	0.965	0.812	0.189	0.006	0.568	0.385	1.001	0.818
		Left Tilted	0.541	0.582	0.452	0.122	0.002	0.663	0.543	0.574	0.454
CDMA	CDMA2000 BC0_UAT	Right Cheek	0.411	0.260	0.042	0.074	0.002	0.485	0.413	0.116	0.044
		Right Tilted	0.074	0.250	0.019	0.058	0.002	0.132	0.076	0.077	0.021
		Left Cheek	0.787	0.965	0.812	0.189	0.006	0.976	0.793	1.001	0.818
		Left Tilted	0.089	0.582	0.452	0.122	0.002	0.211	0.091	0.574	0.454
	CDMA2000 BC10_UAT	Right Cheek	0.323	0.260	0.042	0.074	0.002	0.397	0.325	0.116	0.044
		Right Tilted	0.058	0.250	0.019	0.058	0.002	0.116	0.060	0.077	0.021
		Left Cheek	0.472	0.965	0.812	0.189	0.006	0.661	0.478	1.001	0.818
		Left Tilted	0.082	0.582	0.452	0.122	0.002	0.204	0.084	0.574	0.454
	CDMA2000 BC1_UAT	Right Cheek	0.757	0.260	0.042	0.074	0.002	0.831	0.759	0.116	0.044
		Right Tilted	0.868	0.250	0.019	0.058	0.002	0.926	0.870	0.077	0.021
		Left Cheek	0.571	0.965	0.812	0.189	0.006	0.760	0.577	1.001	0.818
		Left Tilted	0.664	0.582	0.452	0.122	0.002	0.786	0.666	0.574	0.454
LTE	LTE Band 71_UAT	Right Cheek	0.165	0.260	0.042	0.074	0.002	0.239	0.167	0.116	0.044
		Right Tilted	0.023	0.250	0.019	0.058	0.002	0.081	0.025	0.077	0.021
		Left Cheek	0.245	0.965	0.812	0.189	0.006	0.434	0.251	1.001	0.818
		Left Tilted	0.028	0.582	0.452	0.122	0.002	0.150	0.030	0.574	0.454
	LTE Band 12_UAT	Right Cheek	0.400	0.260	0.042	0.074	0.002	0.474	0.402	0.116	0.044
		Right Tilted	0.083	0.250	0.019	0.058	0.002	0.141	0.085	0.077	0.021
		Left Cheek	0.614	0.965	0.812	0.189	0.006	0.803	0.620	1.001	0.818

	LTE Band 13_UAT	Left Tilted	0.099	0.582	0.452	0.122	0.002	0.221	0.101	0.574	0.454
		Right Cheek	0.439	0.260	0.042	0.074	0.002	0.513	0.441	0.116	0.044
		Right Tilted	0.085	0.250	0.019	0.058	0.002	0.143	0.087	0.077	0.021
		Left Cheek	0.749	0.965	0.812	0.189	0.006	0.938	0.755	1.001	0.818
		Left Tilted	0.110	0.582	0.452	0.122	0.002	0.232	0.112	0.574	0.454
	LTE Band 5_UAT	Right Cheek	0.482	0.260	0.042	0.074	0.002	0.556	0.484	0.116	0.044
		Right Tilted	0.082	0.250	0.019	0.058	0.002	0.140	0.084	0.077	0.021
		Left Cheek	0.730	0.965	0.812	0.189	0.006	0.919	0.736	1.001	0.818
		Left Tilted	0.117	0.582	0.452	0.122	0.002	0.239	0.119	0.574	0.454
	LTE Band 26_UAT	Right Cheek	0.487	0.260	0.042	0.074	0.002	0.561	0.489	0.116	0.044
		Right Tilted	0.085	0.250	0.019	0.058	0.002	0.143	0.087	0.077	0.021
		Left Cheek	0.774	0.965	0.812	0.189	0.006	0.963	0.780	1.001	0.818
		Left Tilted	0.102	0.582	0.452	0.122	0.002	0.224	0.104	0.574	0.454
	LTE Band 66_UAT	Right Cheek	0.623	0.260	0.042	0.074	0.002	0.697	0.625	0.116	0.044
		Right Tilted	0.794	0.250	0.019	0.058	0.002	0.852	0.796	0.077	0.021
		Left Cheek	0.396	0.965	0.812	0.189	0.006	0.585	0.402	1.001	0.818
		Left Tilted	0.519	0.582	0.452	0.122	0.002	0.641	0.521	0.574	0.454
	LTE Band 25_UAT	Right Cheek	0.540	0.260	0.042	0.074	0.002	0.614	0.542	0.116	0.044
		Right Tilted	0.645	0.250	0.019	0.058	0.002	0.703	0.647	0.077	0.021
		Left Cheek	0.409	0.965	0.812	0.189	0.006	0.598	0.415	1.001	0.818
		Left Tilted	0.513	0.582	0.452	0.122	0.002	0.635	0.515	0.574	0.454
	LTE Band 30_UAT	Right Cheek	0.634	0.260	0.042	0.074	0.002	0.708	0.636	0.116	0.044
		Right Tilted	0.905	0.250	0.019	0.058	0.002	0.963	0.907	0.077	0.021
		Left Cheek	0.458	0.965	0.812	0.189	0.006	0.647	0.464	1.001	0.818
		Left Tilted	0.553	0.582	0.452	0.122	0.002	0.675	0.555	0.574	0.454
	LTE Band 7_UAT	Right Cheek	0.872	0.260	0.042	0.074	0.002	0.946	0.874	0.116	0.044
		Right Tilted	0.929	0.250	0.019	0.058	0.002	0.987	0.931	0.077	0.021
		Left Cheek	0.505	0.965	0.812	0.189	0.006	0.694	0.511	1.001	0.818
		Left Tilted	0.577	0.582	0.452	0.122	0.002	0.699	0.579	0.574	0.454
	LTE Band 41_UAT	Right Cheek	0.741	0.260	0.042	0.074	0.002	0.815	0.743	0.116	0.044
		Right Tilted	0.907	0.250	0.019	0.058	0.002	0.965	0.909	0.077	0.021
		Left Cheek	0.298	0.965	0.812	0.189	0.006	0.487	0.304	1.001	0.818
		Left Tilted	0.336	0.582	0.452	0.122	0.002	0.458	0.338	0.574	0.454
	LTE Band 41(HPUE)_UAT	Right Cheek	0.852	0.260	0.042	0.074	0.002	0.926	0.854	0.116	0.044
		Right Tilted	0.884	0.250	0.019	0.058	0.002	0.942	0.886	0.077	0.021
		Left Cheek	0.333	0.965	0.812	0.189	0.006	0.522	0.339	1.001	0.818
		Left Tilted	0.385	0.582	0.452	0.122	0.002	0.507	0.387	0.574	0.454
	LTE Band 48	Right Cheek	0.552	0.260	0.042	0.074	0.002	0.626	0.554	0.116	0.044
		Right Tilted	0.797	0.250	0.019	0.058	0.002	0.855	0.799	0.077	0.021
		Left Cheek	0.315	0.965	0.812	0.189	0.006	0.504	0.321	1.001	0.818
		Left Tilted	0.362	0.582	0.452	0.122	0.002	0.484	0.364	0.574	0.454

WWAN Band		Exposure Position	1	2	4	1+2+4
			WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_LAT	Right Cheek	0.146	0.131	0.018	0.295
		Right Tilted	0.094	0.119	0.008	0.221
		Left Cheek	0.264	0.456	0.322	1.042
		Left Tilted	0.086	0.285	0.230	0.601
	GSM1900_LAT	Right Cheek	0.279	0.131	0.018	0.428
		Right Tilted	0.159	0.119	0.008	0.286
		Left Cheek	0.185	0.456	0.322	0.963
		Left Tilted	0.130	0.285	0.230	0.645
WCDMA	WCDMA V_LAT	Right Cheek	0.114	0.131	0.018	0.263
		Right Tilted	0.085	0.119	0.008	0.212
		Left Cheek	0.247	0.456	0.322	1.025
		Left Tilted	0.086	0.285	0.230	0.601
	WCDMA IV_LAT	Right Cheek	0.376	0.131	0.018	0.525
		Right Tilted	0.179	0.119	0.008	0.306
		Left Cheek	0.242	0.456	0.322	1.020
		Left Tilted	0.134	0.285	0.230	0.649
	WCDMA II_LAT	Right Cheek	0.421	0.131	0.018	0.570
		Right Tilted	0.265	0.119	0.008	0.392
		Left Cheek	0.284	0.456	0.322	1.062
		Left Tilted	0.200	0.285	0.230	0.715
CDMA	CDMA2000 BC0_LAT	Right Cheek	0.137	0.131	0.018	0.286
		Right Tilted	0.089	0.119	0.008	0.216
		Left Cheek	0.274	0.456	0.322	1.052
		Left Tilted	0.087	0.285	0.230	0.602
	CDMA2000 BC10_LAT	Right Cheek	0.133	0.131	0.018	0.282
		Right Tilted	0.088	0.119	0.008	0.215
		Left Cheek	0.258	0.456	0.322	1.036
		Left Tilted	0.087	0.285	0.230	0.602
	CDMA2000 BC1_LAT	Right Cheek	0.406	0.131	0.018	0.555
		Right Tilted	0.126	0.119	0.008	0.253
		Left Cheek	0.163	0.456	0.322	0.941
		Left Tilted	0.108	0.285	0.230	0.623
LTE	LTE Band 71_LAT	Right Cheek	0.072	0.131	0.018	0.221
		Right Tilted	0.035	0.119	0.008	0.162
		Left Cheek	0.174	0.456	0.322	0.952
		Left Tilted	0.017	0.285	0.230	0.532
	LTE Band 12_LAT	Right Cheek	0.071	0.131	0.018	0.220
		Right Tilted	0.024	0.119	0.008	0.151
		Left Cheek	0.138	0.456	0.322	0.916

	LTE Band 13_LAT	Left Tilted	0.062	0.285	0.230	0.577
		Right Cheek	0.105	0.131	0.018	0.254
		Right Tilted	0.071	0.119	0.008	0.198
		Left Cheek	0.226	0.456	0.322	1.004
		Left Tilted	0.082	0.285	0.230	0.597
	LTE Band 5_LAT	Right Cheek	0.129	0.131	0.018	0.278
		Right Tilted	0.086	0.119	0.008	0.213
		Left Cheek	0.236	0.456	0.322	1.014
		Left Tilted	0.078	0.285	0.230	0.593
	LTE Band 26_LAT	Right Cheek	0.122	0.131	0.018	0.271
		Right Tilted	0.078	0.119	0.008	0.205
		Left Cheek	0.145	0.456	0.322	0.923
		Left Tilted	0.077	0.285	0.230	0.592
	LTE Band 66_LAT	Right Cheek	0.379	0.131	0.018	0.528
		Right Tilted	0.145	0.119	0.008	0.272
		Left Cheek	0.314	0.456	0.322	1.092
		Left Tilted	0.137	0.285	0.230	0.652
	LTE Band 25_LAT	Right Cheek	0.423	0.131	0.018	0.572
		Right Tilted	0.194	0.119	0.008	0.321
		Left Cheek	0.203	0.456	0.322	0.981
		Left Tilted	0.152	0.285	0.230	0.667
	LTE Band 30_LAT	Right Cheek	0.222	0.131	0.018	0.371
		Right Tilted	0.162	0.119	0.008	0.289
		Left Cheek	0.358	0.456	0.322	1.136
		Left Tilted	0.163	0.285	0.230	0.678
	LTE Band 7_LAT	Right Cheek	0.185	0.131	0.018	0.334
		Right Tilted	0.102	0.119	0.008	0.229
		Left Cheek	0.229	0.456	0.322	1.007
		Left Tilted	0.112	0.285	0.230	0.627
	LTE Band 41_LAT	Right Cheek	0.112	0.131	0.018	0.261
		Right Tilted	0.069	0.119	0.008	0.196
		Left Cheek	0.189	0.456	0.322	0.967
		Left Tilted	0.070	0.285	0.230	0.585
	LTE Band 41(HPUE)_LAT	Right Cheek	0.097	0.131	0.018	0.246
		Right Tilted	0.060	0.119	0.008	0.187
		Left Cheek	0.171	0.456	0.322	0.949
		Left Tilted	0.066	0.285	0.230	0.581



WWAN Band		Exposure Position	1	2	1+2
			WWAN	2.4GHz WLAN Ant 1+2	Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM	GSM850_LAT	Right Cheek	0.146	0.214	0.360
		Right Tilted	0.094	0.185	0.279
		Left Cheek	0.264	0.674	0.938
		Left Tilted	0.086	0.467	0.553
	GSM1900_LAT	Right Cheek	0.279	0.214	0.493
		Right Tilted	0.159	0.185	0.344
		Left Cheek	0.185	0.674	0.859
		Left Tilted	0.130	0.467	0.597
WCDMA	WCDMA V_LAT	Right Cheek	0.114	0.214	0.328
		Right Tilted	0.085	0.185	0.270
		Left Cheek	0.247	0.674	0.921
		Left Tilted	0.086	0.467	0.553
	WCDMA IV_LAT	Right Cheek	0.376	0.214	0.590
		Right Tilted	0.179	0.185	0.364
		Left Cheek	0.242	0.674	0.916
		Left Tilted	0.134	0.467	0.601
	WCDMA II_LAT	Right Cheek	0.421	0.214	0.635
		Right Tilted	0.265	0.185	0.450
		Left Cheek	0.284	0.674	0.958
		Left Tilted	0.200	0.467	0.667
CDMA	CDMA2000 BC0_LAT	Right Cheek	0.137	0.214	0.351
		Right Tilted	0.089	0.185	0.274
		Left Cheek	0.274	0.674	0.948
		Left Tilted	0.087	0.467	0.554
	CDMA2000 BC10_LAT	Right Cheek	0.133	0.214	0.347
		Right Tilted	0.088	0.185	0.273
		Left Cheek	0.258	0.674	0.932
		Left Tilted	0.087	0.467	0.554
	CDMA2000 BC1_LAT	Right Cheek	0.406	0.214	0.620
		Right Tilted	0.126	0.185	0.311
		Left Cheek	0.163	0.674	0.837
		Left Tilted	0.108	0.467	0.575
LTE	LTE Band 71_LAT	Right Cheek	0.072	0.214	0.286
		Right Tilted	0.035	0.185	0.220
		Left Cheek	0.174	0.674	0.848
		Left Tilted	0.017	0.467	0.484
	LTE Band 12_LAT	Right Cheek	0.071	0.214	0.285
		Right Tilted	0.024	0.185	0.209
		Left Cheek	0.138	0.674	0.812

	LTE Band 13_LAT	Left Tilted	0.062	0.467	0.529
		Right Cheek	0.105	0.214	0.319
		Right Tilted	0.071	0.185	0.256
		Left Cheek	0.226	0.674	0.900
		Left Tilted	0.082	0.467	0.549
	LTE Band 5_LAT	Right Cheek	0.129	0.214	0.343
		Right Tilted	0.086	0.185	0.271
		Left Cheek	0.236	0.674	0.910
		Left Tilted	0.078	0.467	0.545
	LTE Band 26_LAT	Right Cheek	0.122	0.214	0.336
		Right Tilted	0.078	0.185	0.263
		Left Cheek	0.145	0.674	0.819
		Left Tilted	0.077	0.467	0.544
	LTE Band 66_LAT	Right Cheek	0.379	0.214	0.593
		Right Tilted	0.145	0.185	0.330
		Left Cheek	0.314	0.674	0.988
		Left Tilted	0.137	0.467	0.604
	LTE Band 25_LAT	Right Cheek	0.423	0.214	0.637
		Right Tilted	0.194	0.185	0.379
		Left Cheek	0.203	0.674	0.877
		Left Tilted	0.152	0.467	0.619
	LTE Band 30_LAT	Right Cheek	0.222	0.214	0.436
		Right Tilted	0.162	0.185	0.347
		Left Cheek	0.358	0.674	1.032
		Left Tilted	0.163	0.467	0.630
	LTE Band 7_LAT	Right Cheek	0.185	0.214	0.399
		Right Tilted	0.102	0.185	0.287
		Left Cheek	0.229	0.674	0.903
		Left Tilted	0.112	0.467	0.579
	LTE Band 41_LAT	Right Cheek	0.112	0.214	0.326
		Right Tilted	0.069	0.185	0.254
		Left Cheek	0.189	0.674	0.863
		Left Tilted	0.070	0.467	0.537
	LTE Band 41(HPUE)_LAT	Right Cheek	0.097	0.214	0.311
		Right Tilted	0.060	0.185	0.245
		Left Cheek	0.171	0.674	0.845
		Left Tilted	0.066	0.467	0.533
	LTE Band 48	Right Cheek	0.552	0.214	0.766
		Right Tilted	0.797	0.185	0.982
		Left Cheek	0.315	0.674	0.989
		Left Tilted	0.362	0.467	0.829



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WWAN Band		Exposure Position	1	4	6	7	1+4	1+4+6	1+4+7
			WWAN	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2	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)
GSM	GSM850_LAT	Right Cheek	0.146	0.029	0.074	0.002	0.175	0.249	0.177
		Right Tilted	0.094	0.014	0.058	0.002	0.108	0.166	0.110
		Left Cheek	0.264	0.494	0.189	0.006	0.758	0.947	0.764
		Left Tilted	0.086	0.372	0.122	0.002	0.458	0.580	0.460
	GSM1900_LAT	Right Cheek	0.279	0.029	0.074	0.002	0.308	0.382	0.310
		Right Tilted	0.159	0.014	0.058	0.002	0.173	0.231	0.175
		Left Cheek	0.185	0.494	0.189	0.006	0.679	0.868	0.685
		Left Tilted	0.130	0.372	0.122	0.002	0.502	0.624	0.504
WCDMA	WCDMA V_LAT	Right Cheek	0.114	0.029	0.074	0.002	0.143	0.217	0.145
		Right Tilted	0.085	0.014	0.058	0.002	0.099	0.157	0.101
		Left Cheek	0.247	0.494	0.189	0.006	0.741	0.930	0.747
		Left Tilted	0.086	0.372	0.122	0.002	0.458	0.580	0.460
	WCDMA IV_LAT	Right Cheek	0.376	0.029	0.074	0.002	0.405	0.479	0.407
		Right Tilted	0.179	0.014	0.058	0.002	0.193	0.251	0.195
		Left Cheek	0.242	0.494	0.189	0.006	0.736	0.925	0.742
		Left Tilted	0.134	0.372	0.122	0.002	0.506	0.628	0.508
	WCDMA II_LAT	Right Cheek	0.421	0.029	0.074	0.002	0.450	0.524	0.452
		Right Tilted	0.265	0.014	0.058	0.002	0.279	0.337	0.281
		Left Cheek	0.284	0.494	0.189	0.006	0.778	0.967	0.784
		Left Tilted	0.200	0.372	0.122	0.002	0.572	0.694	0.574
CDMA	CDMA2000 BC0_LAT	Right Cheek	0.137	0.029	0.074	0.002	0.166	0.240	0.168
		Right Tilted	0.089	0.014	0.058	0.002	0.103	0.161	0.105
		Left Cheek	0.274	0.494	0.189	0.006	0.768	0.957	0.774
		Left Tilted	0.087	0.372	0.122	0.002	0.459	0.581	0.461
	CDMA2000 BC10_LAT	Right Cheek	0.133	0.029	0.074	0.002	0.162	0.236	0.164
		Right Tilted	0.088	0.014	0.058	0.002	0.102	0.160	0.104
		Left Cheek	0.258	0.494	0.189	0.006	0.752	0.941	0.758
		Left Tilted	0.087	0.372	0.122	0.002	0.459	0.581	0.461
	CDMA2000 BC1_LAT	Right Cheek	0.406	0.029	0.074	0.002	0.435	0.509	0.437
		Right Tilted	0.126	0.014	0.058	0.002	0.140	0.198	0.142
		Left Cheek	0.163	0.494	0.189	0.006	0.657	0.846	0.663
		Left Tilted	0.108	0.372	0.122	0.002	0.480	0.602	0.482
LTE	LTE Band 71_LAT	Right Cheek	0.072	0.029	0.074	0.002	0.101	0.175	0.103
		Right Tilted	0.035	0.014	0.058	0.002	0.049	0.107	0.051
		Left Cheek	0.174	0.494	0.189	0.006	0.668	0.857	0.674
		Left Tilted	0.017	0.372	0.122	0.002	0.389	0.511	0.391
	LTE Band 12_LAT	Right Cheek	0.071	0.029	0.074	0.002	0.100	0.174	0.102
		Right Tilted	0.024	0.014	0.058	0.002	0.038	0.096	0.040
		Left Cheek	0.138	0.494	0.189	0.006	0.632	0.821	0.638
		Left Tilted							



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	LTE Band 13_LAT	Left Tilted	0.062	0.372	0.122	0.002	0.434	0.556	0.436
		Right Cheek	0.105	0.029	0.074	0.002	0.134	0.208	0.136
		Right Tilted	0.071	0.014	0.058	0.002	0.085	0.143	0.087
		Left Cheek	0.226	0.494	0.189	0.006	0.720	0.909	0.726
		Left Tilted	0.082	0.372	0.122	0.002	0.454	0.576	0.456
	LTE Band 5_LAT	Right Cheek	0.129	0.029	0.074	0.002	0.158	0.232	0.160
		Right Tilted	0.086	0.014	0.058	0.002	0.100	0.158	0.102
		Left Cheek	0.236	0.494	0.189	0.006	0.730	0.919	0.736
		Left Tilted	0.078	0.372	0.122	0.002	0.450	0.572	0.452
	LTE Band 26_LAT	Right Cheek	0.122	0.029	0.074	0.002	0.151	0.225	0.153
		Right Tilted	0.078	0.014	0.058	0.002	0.092	0.150	0.094
		Left Cheek	0.145	0.494	0.189	0.006	0.639	0.828	0.645
		Left Tilted	0.077	0.372	0.122	0.002	0.449	0.571	0.451
	LTE Band 66_LAT	Right Cheek	0.379	0.029	0.074	0.002	0.408	0.482	0.410
		Right Tilted	0.145	0.014	0.058	0.002	0.159	0.217	0.161
		Left Cheek	0.314	0.494	0.189	0.006	0.808	0.997	0.814
		Left Tilted	0.137	0.372	0.122	0.002	0.509	0.631	0.511
	LTE Band 25_LAT	Right Cheek	0.423	0.029	0.074	0.002	0.452	0.526	0.454
		Right Tilted	0.194	0.014	0.058	0.002	0.208	0.266	0.210
		Left Cheek	0.203	0.494	0.189	0.006	0.697	0.886	0.703
		Left Tilted	0.152	0.372	0.122	0.002	0.524	0.646	0.526
	LTE Band 30_LAT	Right Cheek	0.222	0.029	0.074	0.002	0.251	0.325	0.253
		Right Tilted	0.162	0.014	0.058	0.002	0.176	0.234	0.178
		Left Cheek	0.358	0.494	0.189	0.006	0.852	1.041	0.858
		Left Tilted	0.163	0.372	0.122	0.002	0.535	0.657	0.537
	LTE Band 7_LAT	Right Cheek	0.185	0.029	0.074	0.002	0.214	0.288	0.216
		Right Tilted	0.102	0.014	0.058	0.002	0.116	0.174	0.118
		Left Cheek	0.229	0.494	0.189	0.006	0.723	0.912	0.729
		Left Tilted	0.112	0.372	0.122	0.002	0.484	0.606	0.486
	LTE Band 41_LAT	Right Cheek	0.112	0.029	0.074	0.002	0.141	0.215	0.143
		Right Tilted	0.069	0.014	0.058	0.002	0.083	0.141	0.085
		Left Cheek	0.189	0.494	0.189	0.006	0.683	0.872	0.689
		Left Tilted	0.070	0.372	0.122	0.002	0.442	0.564	0.444
	LTE Band 41(HPUE)_LAT	Right Cheek	0.097	0.029	0.074	0.002	0.126	0.200	0.128
		Right Tilted	0.060	0.014	0.058	0.002	0.074	0.132	0.076
		Left Cheek	0.171	0.494	0.189	0.006	0.665	0.854	0.671
		Left Tilted	0.066	0.372	0.122	0.002	0.438	0.560	0.440
	LTE Band 48	Right Cheek	0.552	0.029	0.074	0.002	0.581	0.655	0.583
		Right Tilted	0.797	0.014	0.058	0.002	0.811	0.869	0.813
		Left Cheek	0.315	0.494	0.189	0.006	0.809	0.998	0.815
		Left Tilted	0.362	0.372	0.122	0.002	0.734	0.856	0.736

WWAN Band		Exposure Position	1	6	7	1+6	1+7	4+6	4+7
			WWAN	Bluetooth Ant 1	Bluetooth Ant 2	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)
GSM	GSM850_LAT	Right Cheek	0.146	0.074	0.002	0.220	0.148	0.116	0.044
		Right Tilted	0.094	0.058	0.002	0.152	0.096	0.077	0.021
		Left Cheek	0.264	0.189	0.006	0.453	0.270	1.001	0.818
		Left Tilted	0.086	0.122	0.002	0.208	0.088	0.574	0.454
	GSM1900_LAT	Right Cheek	0.279	0.074	0.002	0.353	0.281	0.116	0.044
		Right Tilted	0.159	0.058	0.002	0.217	0.161	0.077	0.021
		Left Cheek	0.185	0.189	0.006	0.374	0.191	1.001	0.818
		Left Tilted	0.130	0.122	0.002	0.252	0.132	0.574	0.454
WCDMA	WCDMA V_LAT	Right Cheek	0.114	0.074	0.002	0.188	0.116	0.116	0.044
		Right Tilted	0.085	0.058	0.002	0.143	0.087	0.077	0.021
		Left Cheek	0.247	0.189	0.006	0.436	0.253	1.001	0.818
		Left Tilted	0.086	0.122	0.002	0.208	0.088	0.574	0.454
	WCDMA IV_LAT	Right Cheek	0.376	0.074	0.002	0.450	0.378	0.116	0.044
		Right Tilted	0.179	0.058	0.002	0.237	0.181	0.077	0.021
		Left Cheek	0.242	0.189	0.006	0.431	0.248	1.001	0.818
		Left Tilted	0.134	0.122	0.002	0.256	0.136	0.574	0.454
	WCDMA II_LAT	Right Cheek	0.421	0.074	0.002	0.495	0.423	0.116	0.044
		Right Tilted	0.265	0.058	0.002	0.323	0.267	0.077	0.021
		Left Cheek	0.284	0.189	0.006	0.473	0.290	1.001	0.818
		Left Tilted	0.200	0.122	0.002	0.322	0.202	0.574	0.454
CDMA	CDMA2000 BC0_LAT	Right Cheek	0.137	0.074	0.002	0.211	0.139	0.116	0.044
		Right Tilted	0.089	0.058	0.002	0.147	0.091	0.077	0.021
		Left Cheek	0.274	0.189	0.006	0.463	0.280	1.001	0.818
		Left Tilted	0.087	0.122	0.002	0.209	0.089	0.574	0.454
	CDMA2000 BC10_LAT	Right Cheek	0.133	0.074	0.002	0.207	0.135	0.116	0.044
		Right Tilted	0.088	0.058	0.002	0.146	0.090	0.077	0.021
		Left Cheek	0.258	0.189	0.006	0.447	0.264	1.001	0.818
		Left Tilted	0.087	0.122	0.002	0.209	0.089	0.574	0.454
	CDMA2000 BC1_LAT	Right Cheek	0.406	0.074	0.002	0.480	0.408	0.116	0.044
		Right Tilted	0.126	0.058	0.002	0.184	0.128	0.077	0.021
		Left Cheek	0.163	0.189	0.006	0.352	0.169	1.001	0.818
		Left Tilted	0.108	0.122	0.002	0.230	0.110	0.574	0.454
LTE	LTE Band 71_LAT	Right Cheek	0.072	0.074	0.002	0.146	0.074	0.116	0.044
		Right Tilted	0.035	0.058	0.002	0.093	0.037	0.077	0.021
		Left Cheek	0.174	0.189	0.006	0.363	0.180	1.001	0.818
		Left Tilted	0.017	0.122	0.002	0.139	0.019	0.574	0.454
	LTE Band 12_LAT	Right Cheek	0.071	0.074	0.002	0.145	0.073	0.116	0.044
		Right Tilted	0.024	0.058	0.002	0.082	0.026	0.077	0.021
		Left Cheek	0.138	0.189	0.006	0.327	0.144	1.001	0.818



	LTE Band 13_LAT	Left Tilted	0.062	0.122	0.002	0.184	0.064	0.574	0.454
		Right Cheek	0.105	0.074	0.002	0.179	0.107	0.116	0.044
		Right Tilted	0.071	0.058	0.002	0.129	0.073	0.077	0.021
		Left Cheek	0.226	0.189	0.006	0.415	0.232	1.001	0.818
		Left Tilted	0.082	0.122	0.002	0.204	0.084	0.574	0.454
	LTE Band 5_LAT	Right Cheek	0.129	0.074	0.002	0.203	0.131	0.116	0.044
		Right Tilted	0.086	0.058	0.002	0.144	0.088	0.077	0.021
		Left Cheek	0.236	0.189	0.006	0.425	0.242	1.001	0.818
		Left Tilted	0.078	0.122	0.002	0.200	0.080	0.574	0.454
	LTE Band 26_LAT	Right Cheek	0.122	0.074	0.002	0.196	0.124	0.116	0.044
		Right Tilted	0.078	0.058	0.002	0.136	0.080	0.077	0.021
		Left Cheek	0.145	0.189	0.006	0.334	0.151	1.001	0.818
		Left Tilted	0.077	0.122	0.002	0.199	0.079	0.574	0.454
	LTE Band 66_LAT	Right Cheek	0.379	0.074	0.002	0.453	0.381	0.116	0.044
		Right Tilted	0.145	0.058	0.002	0.203	0.147	0.077	0.021
		Left Cheek	0.314	0.189	0.006	0.503	0.320	1.001	0.818
		Left Tilted	0.137	0.122	0.002	0.259	0.139	0.574	0.454
	LTE Band 25_LAT	Right Cheek	0.423	0.074	0.002	0.497	0.425	0.116	0.044
		Right Tilted	0.194	0.058	0.002	0.252	0.196	0.077	0.021
		Left Cheek	0.203	0.189	0.006	0.392	0.209	1.001	0.818
		Left Tilted	0.152	0.122	0.002	0.274	0.154	0.574	0.454
	LTE Band 30_LAT	Right Cheek	0.222	0.074	0.002	0.296	0.224	0.116	0.044
		Right Tilted	0.162	0.058	0.002	0.220	0.164	0.077	0.021
		Left Cheek	0.358	0.189	0.006	0.547	0.364	1.001	0.818
		Left Tilted	0.163	0.122	0.002	0.285	0.165	0.574	0.454
	LTE Band 7_LAT	Right Cheek	0.185	0.074	0.002	0.259	0.187	0.116	0.044
		Right Tilted	0.102	0.058	0.002	0.160	0.104	0.077	0.021
		Left Cheek	0.229	0.189	0.006	0.418	0.235	1.001	0.818
		Left Tilted	0.112	0.122	0.002	0.234	0.114	0.574	0.454
	LTE Band 41_LAT	Right Cheek	0.112	0.074	0.002	0.186	0.114	0.116	0.044
		Right Tilted	0.069	0.058	0.002	0.127	0.071	0.077	0.021
		Left Cheek	0.189	0.189	0.006	0.378	0.195	1.001	0.818
		Left Tilted	0.070	0.122	0.002	0.192	0.072	0.574	0.454
	LTE Band 41(HPUE)_LAT	Right Cheek	0.097	0.074	0.002	0.171	0.099	0.116	0.044
		Right Tilted	0.060	0.058	0.002	0.118	0.062	0.077	0.021
		Left Cheek	0.171	0.189	0.006	0.360	0.177	1.001	0.818
		Left Tilted	0.066	0.122	0.002	0.188	0.068	0.574	0.454
	LTE Band 48	Right Cheek	0.552	0.074	0.002	0.626	0.554	0.116	0.044
		Right Tilted	0.797	0.058	0.002	0.855	0.799	0.077	0.021
		Left Cheek	0.315	0.189	0.006	0.504	0.321	1.001	0.818
		Left Tilted	0.362	0.122	0.002	0.484	0.364	0.574	0.454

18.2 Hotspot Exposure Conditions

Exposure Position	2	4	2+4 Summed 1g SAR (W/kg)
	2.4GHz WLAN Ant 1	5GHz WLAN Ant 1	
	1g SAR (W/kg)	1g SAR (W/kg)	
Front	0.060	0.036	0.096
Back	0.485	0.539	1.024
Right side	0.114	0.220	0.334
Top side	0.102	0.144	0.246



WWAN Band		Exposure Position	1	2	4	1+2+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)	
GSM	GSM850_UAT	Front	0.152	0.047	0.029	0.228
		Back	0.229	0.334	0.360	0.923
		Left side	0.345			0.345
		Right side	0.008	0.092	0.178	0.278
		Top side	0.056	0.081	0.109	0.246
		Bottom side				0.000
	GSM1900_UAT	Front	0.225	0.047	0.029	0.301
		Back	0.216	0.334	0.360	0.910
		Left side	0.055			0.055
		Right side	0.037	0.092	0.178	0.307
		Top side	0.360	0.081	0.109	0.550
		Bottom side				0.000
WCDMA	WCDMA V_UAT	Front	0.043	0.047	0.029	0.119
		Back	0.159	0.334	0.360	0.853
		Left side	0.177			0.177
		Right side	0.001	0.092	0.178	0.271
		Top side	0.013	0.081	0.109	0.203
		Bottom side				0.000
	WCDMA IV_UAT	Front	0.295	0.047	0.029	0.371
		Back	0.299	0.334	0.360	0.993
		Left side	0.079			0.079
		Right side	0.036	0.092	0.178	0.306
		Top side	0.506	0.081	0.109	0.696
		Bottom side				0.000
	WCDMA II_UAT	Front	0.271	0.047	0.029	0.347
		Back	0.275	0.334	0.360	0.969
		Left side	0.059			0.059
		Right side	0.049	0.092	0.178	0.319
		Top side	0.505	0.081	0.109	0.695
		Bottom side				0.000
CDMA	CDMA2000 BC0_UAT	Front	0.128	0.047	0.029	0.204
		Back	0.200	0.334	0.360	0.894
		Left side	0.300			0.300
		Right side	0.005	0.092	0.178	0.275
		Top side	0.017	0.081	0.109	0.207
		Bottom side				0.000
	CDMA2000 BC10_UAT	Front	0.132	0.047	0.029	0.208
		Back	0.202	0.334	0.360	0.896
		Left side	0.294			0.294

		Right side	0.008	0.092	0.178	0.278
		Top side	0.018	0.081	0.109	0.208
		Bottom side				0.000
	CDMA2000 BC1_UAT	Front	0.265	0.047	0.029	0.341
		Back	0.254	0.334	0.360	0.948
		Left side	0.063			0.063
		Right side	0.046	0.092	0.178	0.316
		Top side	0.471	0.081	0.109	0.661
		Bottom side				0.000
LTE	LTE Band 71_UAT	Front	0.160	0.047	0.029	0.236
		Back	0.251	0.334	0.360	0.945
		Left side	0.449			0.449
		Right side	0.022	0.092	0.178	0.292
		Top side	0.013	0.081	0.109	0.203
		Bottom side				0.000
	LTE Band 12_UAT	Front	0.151	0.047	0.029	0.227
		Back	0.232	0.334	0.360	0.926
		Left side	0.384			0.384
		Right side	0.067	0.092	0.178	0.337
		Top side	0.020	0.081	0.109	0.210
		Bottom side				0.000
	LTE Band 13_UAT	Front	0.179	0.047	0.029	0.255
		Back	0.261	0.334	0.360	0.955
		Left side	0.423			0.423
		Right side	0.010	0.092	0.178	0.280
		Top side	0.017	0.081	0.109	0.207
		Bottom side				0.000
	LTE Band 5_UAT	Front	0.121	0.047	0.029	0.197
		Back	0.153	0.334	0.360	0.847
		Left side	0.329			0.329
		Right side	0.006	0.092	0.178	0.276
		Top side	0.015	0.081	0.109	0.205
		Bottom side				0.000
	LTE Band 26_UAT	Front	0.072	0.047	0.029	0.148
		Back	0.295	0.334	0.360	0.989
		Left side	0.441			0.441
		Right side	0.013	0.092	0.178	0.283
		Top side	0.018	0.081	0.109	0.208
		Bottom side				0.000
	LTE Band 66_UAT	Front	0.230	0.047	0.029	0.306
		Back	0.242	0.334	0.360	0.936
		Left side	0.076			0.076
		Right side	0.031	0.092	0.178	0.301



		Top side	0.539	0.081	0.109	0.729
		Bottom side				0.000
	LTE Band 25_UAT	Front	0.187	0.047	0.029	0.263
		Back	0.205	0.334	0.360	0.899
		Left side	0.036			0.036
		Right side	0.025	0.092	0.178	0.295
		Top side	0.350	0.081	0.109	0.540
		Bottom side				0.000
	LTE Band 30_UAT	Front	0.282	0.047	0.029	0.358
		Back	0.318	0.334	0.360	1.012
		Left side	0.086			0.086
		Right side	0.031	0.092	0.178	0.301
		Top side	0.869	0.081	0.109	1.059
		Bottom side				0.000
	LTE Band 7_UAT	Front	0.299	0.047	0.029	0.375
		Back	0.327	0.334	0.360	1.021
		Left side	0.055			0.055
		Right side	0.028	0.092	0.178	0.298
		Top side	0.918	0.081	0.109	1.108
		Bottom side				0.000
	LTE Band 41_UAT	Front	0.178	0.047	0.029	0.254
		Back	0.221	0.334	0.360	0.915
		Left side	0.045			0.045
		Right side	0.032	0.092	0.178	0.302
		Top side	0.892	0.081	0.109	1.082
		Bottom side				0.000
	LTE Band 41(HPUE)_UAT	Front	0.173	0.047	0.029	0.249
		Back	0.217	0.334	0.360	0.911
		Left side	0.042			0.042
		Right side	0.031	0.092	0.178	0.301
		Top side	0.930	0.081	0.109	1.120
		Bottom side				0.000
	LTE Band 48	Front	0.160	0.047	0.029	0.236
		Back	0.284	0.334	0.360	0.978
		Left side	0.016			0.016
		Right side	0.014	0.092	0.178	0.284
		Top side	0.378	0.081	0.109	0.568
		Bottom side				0.000



WWAN Band		Exposure Position	1	4	6	7	1+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)
			WWAN	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2			
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM	GSM850_UAT	Front	0.152	0.060	0.107	0.002	0.212	0.319	0.214
		Back	0.229	0.721	0.071	0.122	0.950	1.021	1.072
		Left side	0.345				0.345	0.345	0.345
		Right side	0.008	0.341	0.007	0.002	0.349	0.356	0.351
		Top side	0.056	0.195	0.150	0.002	0.251	0.401	0.253
		Bottom side					0.000	0.000	0.000
	GSM1900_UAT	Front	0.225	0.060	0.107	0.002	0.285	0.392	0.287
		Back	0.216	0.721	0.071	0.122	0.937	1.008	1.059
		Left side	0.055				0.055	0.055	0.055
		Right side	0.037	0.341	0.007	0.002	0.378	0.385	0.380
		Top side	0.360	0.195	0.150	0.002	0.555	0.705	0.557
		Bottom side					0.000	0.000	0.000
WCDMA	WCDMA V_UAT	Front	0.043	0.060	0.107	0.002	0.103	0.210	0.105
		Back	0.159	0.721	0.071	0.122	0.880	0.951	1.002
		Left side	0.177				0.177	0.177	0.177
		Right side	0.001	0.341	0.007	0.002	0.342	0.349	0.344
		Top side	0.013	0.195	0.150	0.002	0.208	0.358	0.210
		Bottom side					0.000	0.000	0.000
	WCDMA IV_UAT	Front	0.295	0.060	0.107	0.002	0.355	0.462	0.357
		Back	0.299	0.721	0.071	0.122	1.020	1.091	1.142
		Left side	0.079				0.079	0.079	0.079
		Right side	0.036	0.341	0.007	0.002	0.377	0.384	0.379
		Top side	0.506	0.195	0.150	0.002	0.701	0.851	0.703
		Bottom side					0.000	0.000	0.000
	WCDMA II_UAT	Front	0.271	0.060	0.107	0.002	0.331	0.438	0.333
		Back	0.275	0.721	0.071	0.122	0.996	1.067	1.118
		Left side	0.059				0.059	0.059	0.059
		Right side	0.049	0.341	0.007	0.002	0.390	0.397	0.392
		Top side	0.505	0.195	0.150	0.002	0.700	0.850	0.702
		Bottom side					0.000	0.000	0.000
CDMA	CDMA2000 BC0_UAT	Front	0.128	0.060	0.107	0.002	0.188	0.295	0.190
		Back	0.200	0.721	0.071	0.122	0.921	0.992	1.043
		Left side	0.300				0.300	0.300	0.300
		Right side	0.005	0.341	0.007	0.002	0.346	0.353	0.348
		Top side	0.017	0.195	0.150	0.002	0.212	0.362	0.214
		Bottom side					0.000	0.000	0.000
	CDMA2000 BC10_UAT	Front	0.132	0.060	0.107	0.002	0.192	0.299	0.194
		Back	0.202	0.721	0.071	0.122	0.923	0.994	1.045
		Left side	0.294				0.294	0.294	0.294



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		Right side	0.008	0.341	0.007	0.002	0.349	0.356	0.351
		Top side	0.018	0.195	0.150	0.002	0.213	0.363	0.215
		Bottom side					0.000	0.000	0.000
	CDMA2000 BC1_UAT	Front	0.265	0.060	0.107	0.002	0.325	0.432	0.327
		Back	0.254	0.721	0.071	0.122	0.975	1.046	1.097
		Left side	0.063				0.063	0.063	0.063
		Right side	0.046	0.341	0.007	0.002	0.387	0.394	0.389
		Top side	0.471	0.195	0.150	0.002	0.666	0.816	0.668
		Bottom side					0.000	0.000	0.000
LTE	LTE Band 71_UAT	Front	0.160	0.060	0.107	0.002	0.220	0.327	0.222
		Back	0.251	0.721	0.071	0.122	0.972	1.043	1.094
		Left side	0.449				0.449	0.449	0.449
		Right side	0.022	0.341	0.007	0.002	0.363	0.370	0.365
		Top side	0.013	0.195	0.150	0.002	0.208	0.358	0.210
		Bottom side					0.000	0.000	0.000
	LTE Band 12_UAT	Front	0.151	0.060	0.107	0.002	0.211	0.318	0.213
		Back	0.232	0.721	0.071	0.122	0.953	1.024	1.075
		Left side	0.384				0.384	0.384	0.384
		Right side	0.067	0.341	0.007	0.002	0.408	0.415	0.410
		Top side	0.020	0.195	0.150	0.002	0.215	0.365	0.217
		Bottom side					0.000	0.000	0.000
	LTE Band 13_UAT	Front	0.179	0.060	0.107	0.002	0.239	0.346	0.241
		Back	0.261	0.721	0.071	0.122	0.982	1.053	1.104
		Left side	0.423				0.423	0.423	0.423
		Right side	0.010	0.341	0.007	0.002	0.351	0.358	0.353
		Top side	0.017	0.195	0.150	0.002	0.212	0.362	0.214
		Bottom side					0.000	0.000	0.000
	LTE Band 5_UAT	Front	0.121	0.060	0.107	0.002	0.181	0.288	0.183
		Back	0.153	0.721	0.071	0.122	0.874	0.945	0.996
		Left side	0.329				0.329	0.329	0.329
		Right side	0.006	0.341	0.007	0.002	0.347	0.354	0.349
		Top side	0.015	0.195	0.150	0.002	0.210	0.360	0.212
		Bottom side					0.000	0.000	0.000
	LTE Band 26_UAT	Front	0.072	0.060	0.107	0.002	0.132	0.239	0.134
		Back	0.295	0.721	0.071	0.122	1.016	1.087	1.138
		Left side	0.441				0.441	0.441	0.441
		Right side	0.013	0.341	0.007	0.002	0.354	0.361	0.356
		Top side	0.018	0.195	0.150	0.002	0.213	0.363	0.215
		Bottom side					0.000	0.000	0.000
	LTE Band 66_UAT	Front	0.230	0.060	0.107	0.002	0.290	0.397	0.292
		Back	0.242	0.721	0.071	0.122	0.963	1.034	1.085
		Left side	0.076				0.076	0.076	0.076
		Right side	0.031	0.341	0.007	0.002	0.372	0.379	0.374

		Top side	0.539	0.195	0.150	0.002	0.734	0.884	0.736
		Bottom side					0.000	0.000	0.000
	LTE Band 25_UAT	Front	0.187	0.060	0.107	0.002	0.247	0.354	0.249
		Back	0.205	0.721	0.071	0.122	0.926	0.997	1.048
		Left side	0.036				0.036	0.036	0.036
		Right side	0.025	0.341	0.007	0.002	0.366	0.373	0.368
		Top side	0.350	0.195	0.150	0.002	0.545	0.695	0.547
		Bottom side					0.000	0.000	0.000
	LTE Band 30_UAT	Front	0.282	0.060	0.107	0.002	0.342	0.449	0.344
		Back	0.318	0.721	0.071	0.122	1.039	1.110	1.161
		Left side	0.086				0.086	0.086	0.086
		Right side	0.031	0.341	0.007	0.002	0.372	0.379	0.374
		Top side	0.869	0.195	0.150	0.002	1.064	1.214	1.066
		Bottom side					0.000	0.000	0.000
	LTE Band 7_UAT	Front	0.299	0.060	0.107	0.002	0.359	0.466	0.361
		Back	0.327	0.721	0.071	0.122	1.048	1.119	1.170
		Left side	0.055				0.055	0.055	0.055
		Right side	0.028	0.341	0.007	0.002	0.369	0.376	0.371
		Top side	0.918	0.195	0.150	0.002	1.113	1.263	1.115
		Bottom side					0.000	0.000	0.000
	LTE Band 41_UAT	Front	0.178	0.060	0.107	0.002	0.238	0.345	0.240
		Back	0.221	0.721	0.071	0.122	0.942	1.013	1.064
		Left side	0.045				0.045	0.045	0.045
		Right side	0.032	0.341	0.007	0.002	0.373	0.380	0.375
		Top side	0.892	0.195	0.150	0.002	1.087	1.237	1.089
		Bottom side					0.000	0.000	0.000
	LTE Band 41(HPUE)_UAT	Front	0.173	0.060	0.107	0.002	0.233	0.340	0.235
		Back	0.217	0.721	0.071	0.122	0.938	1.009	1.060
		Left side	0.042				0.042	0.042	0.042
		Right side	0.031	0.341	0.007	0.002	0.372	0.379	0.374
		Top side	0.930	0.195	0.150	0.002	1.125	1.275	1.127
		Bottom side					0.000	0.000	0.000
	LTE Band 48	Front	0.160	0.060	0.107	0.002	0.220	0.327	0.222
		Back	0.284	0.721	0.071	0.122	1.005	1.076	1.127
		Left side	0.016				0.016	0.016	0.016
		Right side	0.014	0.341	0.007	0.002	0.355	0.362	0.357
		Top side	0.378	0.195	0.150	0.002	0.573	0.723	0.575
		Bottom side					0.000	0.000	0.000

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant 1+2	
			1g SAR (W/kg)	1g SAR (W/kg)	
GSM	GSM850_UAT	Front	0.152	0.132	0.284
		Back	0.229	0.793	1.022
		Left side	0.345		0.345
		Right side	0.008	0.227	0.235
		Top side	0.056	0.190	0.246
		Bottom side			0.000
	GSM1900_UAT	Front	0.225	0.132	0.357
		Back	0.216	0.793	1.009
		Left side	0.055		0.055
		Right side	0.037	0.227	0.264
		Top side	0.360	0.190	0.550
		Bottom side			0.000
WCDMA	WCDMA V_UAT	Front	0.043	0.132	0.175
		Back	0.159	0.793	0.952
		Left side	0.177		0.177
		Right side	0.001	0.227	0.228
		Top side	0.013	0.190	0.203
		Bottom side			0.000
	WCDMA IV_UAT	Front	0.295	0.132	0.427
		Back	0.299	0.793	1.092
		Left side	0.079		0.079
		Right side	0.036	0.227	0.263
		Top side	0.506	0.190	0.696
		Bottom side			0.000
	WCDMA II_UAT	Front	0.271	0.132	0.403
		Back	0.275	0.793	1.068
		Left side	0.059		0.059
		Right side	0.049	0.227	0.276
		Top side	0.505	0.190	0.695
		Bottom side			0.000
CDMA	CDMA2000 BC0_UAT	Front	0.128	0.132	0.260
		Back	0.200	0.793	0.993
		Left side	0.300		0.300
		Right side	0.005	0.227	0.232
		Top side	0.017	0.190	0.207
		Bottom side			0.000
	CDMA2000 BC10_UAT	Front	0.132	0.132	0.264
		Back	0.202	0.793	0.995
		Left side	0.294		0.294

		Right side	0.008	0.227	0.235
		Top side	0.018	0.190	0.208
		Bottom side			0.000
	CDMA2000 BC1_UAT	Front	0.265	0.132	0.397
		Back	0.254	0.793	1.047
		Left side	0.063		0.063
		Right side	0.046	0.227	0.273
		Top side	0.471	0.190	0.661
		Bottom side			0.000
LTE	LTE Band 71_UAT	Front	0.160	0.132	0.292
		Back	0.251	0.793	1.044
		Left side	0.449		0.449
		Right side	0.022	0.227	0.249
		Top side	0.013	0.190	0.203
		Bottom side			0.000
	LTE Band 12_UAT	Front	0.151	0.132	0.283
		Back	0.232	0.793	1.025
		Left side	0.384		0.384
		Right side	0.067	0.227	0.294
		Top side	0.020	0.190	0.210
		Bottom side			0.000
	LTE Band 13_UAT	Front	0.179	0.132	0.311
		Back	0.261	0.793	1.054
		Left side	0.423		0.423
		Right side	0.010	0.227	0.237
		Top side	0.017	0.190	0.207
		Bottom side			0.000
	LTE Band 5_UAT	Front	0.121	0.132	0.253
		Back	0.153	0.793	0.946
		Left side	0.329		0.329
		Right side	0.006	0.227	0.233
		Top side	0.015	0.190	0.205
		Bottom side			0.000
	LTE Band 26_UAT	Front	0.072	0.132	0.204
		Back	0.295	0.793	1.088
		Left side	0.441		0.441
		Right side	0.013	0.227	0.240
		Top side	0.018	0.190	0.208
		Bottom side			0.000
	LTE Band 66_UAT	Front	0.230	0.132	0.362
		Back	0.242	0.793	1.035
		Left side	0.076		0.076
		Right side	0.031	0.227	0.258

		Top side	0.539	0.190	0.729
		Bottom side			0.000
	LTE Band 25_UAT	Front	0.187	0.132	0.319
		Back	0.205	0.793	0.998
		Left side	0.036		0.036
		Right side	0.025	0.227	0.252
		Top side	0.350	0.190	0.540
		Bottom side			0.000
	LTE Band 30_UAT	Front	0.282	0.132	0.414
		Back	0.318	0.793	1.111
		Left side	0.086		0.086
		Right side	0.031	0.227	0.258
		Top side	0.869	0.190	1.059
		Bottom side			0.000
	LTE Band 7_UAT	Front	0.299	0.132	0.431
		Back	0.327	0.793	1.120
		Left side	0.055		0.055
		Right side	0.028	0.227	0.255
		Top side	0.918	0.190	1.108
		Bottom side			0.000
	LTE Band 41_UAT	Front	0.178	0.132	0.310
		Back	0.221	0.793	1.014
		Left side	0.045		0.045
		Right side	0.032	0.227	0.259
		Top side	0.892	0.190	1.082
		Bottom side			0.000
	LTE Band 41(HPUE)_UAT	Front	0.173	0.132	0.305
		Back	0.217	0.793	1.010
		Left side	0.042		0.042
		Right side	0.031	0.227	0.258
		Top side	0.930	0.190	1.120
		Bottom side			0.000
	LTE Band 48	Front	0.160	0.132	0.292
		Back	0.284	0.793	1.077
		Left side	0.016		0.016
		Right side	0.014	0.227	0.241
		Top side	0.378	0.190	0.568
		Bottom side			0.000

WWAN Band		Exposure Position	1	2	4	6	7	1+6	1+7	4+6	4+7
			WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	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)				
GSM	GSM850_UAT	Front	0.152	0.155	0.078	0.107	0.002	0.259	0.154	0.185	0.080
		Back	0.229	0.988	0.994	0.071	0.122	0.300	0.351	1.065	1.116
		Left side	0.345					0.345	0.345	0.000	0.000
		Right side	0.008	0.255	0.456	0.007	0.002	0.015	0.010	0.463	0.458
		Top side	0.056	0.332	0.276	0.150	0.002	0.206	0.058	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	GSM1900_UAT	Front	0.225	0.155	0.078	0.107	0.002	0.332	0.227	0.185	0.080
		Back	0.216	0.988	0.994	0.071	0.122	0.287	0.338	1.065	1.116
		Left side	0.055					0.055	0.055	0.000	0.000
		Right side	0.037	0.255	0.456	0.007	0.002	0.044	0.039	0.463	0.458
		Top side	0.360	0.332	0.276	0.150	0.002	0.510	0.362	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
WCDMA	WCDMA V_UAT	Front	0.043	0.155	0.078	0.107	0.002	0.150	0.045	0.185	0.080
		Back	0.159	0.988	0.994	0.071	0.122	0.230	0.281	1.065	1.116
		Left side	0.177					0.177	0.177	0.000	0.000
		Right side	0.001	0.255	0.456	0.007	0.002	0.008	0.003	0.463	0.458
		Top side	0.013	0.332	0.276	0.150	0.002	0.163	0.015	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	WCDMA IV_UAT	Front	0.295	0.155	0.078	0.107	0.002	0.402	0.297	0.185	0.080
		Back	0.299	0.988	0.994	0.071	0.122	0.370	0.421	1.065	1.116
		Left side	0.079					0.079	0.079	0.000	0.000
		Right side	0.036	0.255	0.456	0.007	0.002	0.043	0.038	0.463	0.458
		Top side	0.506	0.332	0.276	0.150	0.002	0.656	0.508	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	WCDMA II_UAT	Front	0.271	0.155	0.078	0.107	0.002	0.378	0.273	0.185	0.080
		Back	0.275	0.988	0.994	0.071	0.122	0.346	0.397	1.065	1.116
		Left side	0.059					0.059	0.059	0.000	0.000
		Right side	0.049	0.255	0.456	0.007	0.002	0.056	0.051	0.463	0.458
		Top side	0.505	0.332	0.276	0.150	0.002	0.655	0.507	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
CDMA	CDMA2000 BC0_UAT	Front	0.128	0.155	0.078	0.107	0.002	0.235	0.130	0.185	0.080
		Back	0.200	0.988	0.994	0.071	0.122	0.271	0.322	1.065	1.116
		Left side	0.300					0.300	0.300	0.000	0.000
		Right side	0.005	0.255	0.456	0.007	0.002	0.012	0.007	0.463	0.458
		Top side	0.017	0.332	0.276	0.150	0.002	0.167	0.019	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	CDMA2000 BC10_UAT	Front	0.132	0.155	0.078	0.107	0.002	0.239	0.134	0.185	0.080
		Back	0.202	0.988	0.994	0.071	0.122	0.273	0.324	1.065	1.116
		Left side	0.294					0.294	0.294	0.000	0.000

LTE	CDMA2000 BC1_UAT	Right side	0.008	0.255	0.456	0.007	0.002	0.015	0.010	0.463	0.458
		Top side	0.018	0.332	0.276	0.150	0.002	0.168	0.020	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
		Front	0.265	0.155	0.078	0.107	0.002	0.372	0.267	0.185	0.080
		Back	0.254	0.988	0.994	0.071	0.122	0.325	0.376	1.065	1.116
		Left side	0.063					0.063	0.063	0.000	0.000
		Right side	0.046	0.255	0.456	0.007	0.002	0.053	0.048	0.463	0.458
		Top side	0.471	0.332	0.276	0.150	0.002	0.621	0.473	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 71_UAT	Front	0.160	0.155	0.078	0.107	0.002	0.267	0.162	0.185	0.080
		Back	0.251	0.988	0.994	0.071	0.122	0.322	0.373	1.065	1.116
		Left side	0.449					0.449	0.449	0.000	0.000
		Right side	0.022	0.255	0.456	0.007	0.002	0.029	0.024	0.463	0.458
		Top side	0.013	0.332	0.276	0.150	0.002	0.163	0.015	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 12_UAT	Front	0.151	0.155	0.078	0.107	0.002	0.258	0.153	0.185	0.080
		Back	0.232	0.988	0.994	0.071	0.122	0.303	0.354	1.065	1.116
		Left side	0.384					0.384	0.384	0.000	0.000
		Right side	0.067	0.255	0.456	0.007	0.002	0.074	0.069	0.463	0.458
		Top side	0.020	0.332	0.276	0.150	0.002	0.170	0.022	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 13_UAT	Front	0.179	0.155	0.078	0.107	0.002	0.286	0.181	0.185	0.080
		Back	0.261	0.988	0.994	0.071	0.122	0.332	0.383	1.065	1.116
		Left side	0.423					0.423	0.423	0.000	0.000
		Right side	0.010	0.255	0.456	0.007	0.002	0.017	0.012	0.463	0.458
		Top side	0.017	0.332	0.276	0.150	0.002	0.167	0.019	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 5_UAT	Front	0.121	0.155	0.078	0.107	0.002	0.228	0.123	0.185	0.080
		Back	0.153	0.988	0.994	0.071	0.122	0.224	0.275	1.065	1.116
		Left side	0.329					0.329	0.329	0.000	0.000
		Right side	0.006	0.255	0.456	0.007	0.002	0.013	0.008	0.463	0.458
		Top side	0.015	0.332	0.276	0.150	0.002	0.165	0.017	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 26_UAT	Front	0.072	0.155	0.078	0.107	0.002	0.179	0.074	0.185	0.080
		Back	0.295	0.988	0.994	0.071	0.122	0.366	0.417	1.065	1.116
		Left side	0.441					0.441	0.441	0.000	0.000
		Right side	0.013	0.255	0.456	0.007	0.002	0.020	0.015	0.463	0.458
		Top side	0.018	0.332	0.276	0.150	0.002	0.168	0.020	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 66_UAT	Front	0.230	0.155	0.078	0.107	0.002	0.337	0.232	0.185	0.080
		Back	0.242	0.988	0.994	0.071	0.122	0.313	0.364	1.065	1.116
		Left side	0.076					0.076	0.076	0.000	0.000
		Right side	0.031	0.255	0.456	0.007	0.002	0.038	0.033	0.463	0.458

		Top side	0.539	0.332	0.276	0.150	0.002	0.689	0.541	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 25_UAT	Front	0.187	0.155	0.078	0.107	0.002	0.294	0.189	0.185	0.080
		Back	0.205	0.988	0.994	0.071	0.122	0.276	0.327	1.065	1.116
		Left side	0.036					0.036	0.036	0.000	0.000
		Right side	0.025	0.255	0.456	0.007	0.002	0.032	0.027	0.463	0.458
		Top side	0.350	0.332	0.276	0.150	0.002	0.500	0.352	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 30_UAT	Front	0.282	0.155	0.078	0.107	0.002	0.389	0.284	0.185	0.080
		Back	0.318	0.988	0.994	0.071	0.122	0.389	0.440	1.065	1.116
		Left side	0.086					0.086	0.086	0.000	0.000
		Right side	0.031	0.255	0.456	0.007	0.002	0.038	0.033	0.463	0.458
		Top side	0.869	0.332	0.276	0.150	0.002	1.019	0.871	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 7_UAT	Front	0.299	0.155	0.078	0.107	0.002	0.406	0.301	0.185	0.080
		Back	0.327	0.988	0.994	0.071	0.122	0.398	0.449	1.065	1.116
		Left side	0.055					0.055	0.055	0.000	0.000
		Right side	0.028	0.255	0.456	0.007	0.002	0.035	0.030	0.463	0.458
		Top side	0.918	0.332	0.276	0.150	0.002	1.068	0.920	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 41_UAT	Front	0.178	0.155	0.078	0.107	0.002	0.285	0.180	0.185	0.080
		Back	0.221	0.988	0.994	0.071	0.122	0.292	0.343	1.065	1.116
		Left side	0.045					0.045	0.045	0.000	0.000
		Right side	0.032	0.255	0.456	0.007	0.002	0.039	0.034	0.463	0.458
		Top side	0.892	0.332	0.276	0.150	0.002	1.042	0.894	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 41(HPUE)_UAT	Front	0.173	0.155	0.078	0.107	0.002	0.280	0.175	0.185	0.080
		Back	0.217	0.988	0.994	0.071	0.122	0.288	0.339	1.065	1.116
		Left side	0.042					0.042	0.042	0.000	0.000
		Right side	0.031	0.255	0.456	0.007	0.002	0.038	0.033	0.463	0.458
		Top side	0.930	0.332	0.276	0.150	0.002	1.080	0.932	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000
	LTE Band 48	Front	0.160	0.155	0.078	0.107	0.002	0.267	0.162	0.185	0.080
		Back	0.284	0.988	0.994	0.071	0.122	0.355	0.406	1.065	1.116
		Left side	0.016					0.016	0.016	0.000	0.000
		Right side	0.014	0.255	0.456	0.007	0.002	0.021	0.016	0.463	0.458
		Top side	0.378	0.332	0.276	0.150	0.002	0.528	0.380	0.426	0.278
		Bottom side						0.000	0.000	0.000	0.000

WWAN Band		Exposure Position	1	2	4	1+2+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)	
GSM	GSM850_LAT	Front	0.439	0.047	0.029	0.515
		Back	0.631	0.334	0.360	1.325
		Left side	0.151			0.151
		Right side	0.531	0.092	0.178	0.801
		Top side		0.081	0.109	0.190
		Bottom side	0.369			0.369
	GSM1900_LAT	Front	0.553	0.047	0.029	0.629
		Back	0.595	0.334	0.360	1.289
		Left side	0.152			0.152
		Right side	0.136	0.092	0.178	0.406
		Top side		0.081	0.109	0.190
		Bottom side	0.758			0.758
WCDMA	WCDMA V_LAT	Front	0.353	0.047	0.029	0.429
		Back	0.665	0.334	0.360	1.359
		Left side	0.140			0.140
		Right side	0.395	0.092	0.178	0.665
		Top side		0.081	0.109	0.190
		Bottom side	0.322			0.322
	WCDMA IV_LAT	Front	0.563	0.047	0.029	0.639
		Back	0.645	0.334	0.360	1.339
		Left side	0.187			0.187
		Right side	0.095	0.092	0.178	0.365
		Top side		0.081	0.109	0.190
		Bottom side	0.928			0.928
	WCDMA II_LAT	Front	0.645	0.047	0.029	0.721
		Back	0.718	0.334	0.360	1.412
		Left side	0.194			0.194
		Right side	0.169	0.092	0.178	0.439
		Top side		0.081	0.109	0.190
		Bottom side	0.949			0.949
CDMA	CDMA2000 BC0_LAT	Front	0.382	0.047	0.029	0.458
		Back	0.711	0.334	0.360	1.405
		Left side	0.142			0.142
		Right side	0.455	0.092	0.178	0.725
		Top side		0.081	0.109	0.190
		Bottom side	0.259			0.259
	CDMA2000 BC10_LAT	Front	0.373	0.047	0.029	0.449
		Back	0.623	0.334	0.360	1.317
		Left side	0.123			0.123



		Right side	0.382	0.092	0.178	0.652
		Top side		0.081	0.109	0.190
		Bottom side	0.242			0.242
	CDMA2000 BC1_LAT	Front	0.490	0.047	0.029	0.566
		Back	0.501	0.334	0.360	1.195
		Left side	0.115			0.115
		Right side	0.140	0.092	0.178	0.410
		Top side		0.081	0.109	0.190
		Bottom side	0.923			0.923
	LTE Band 71_LAT	Front	0.396	0.047	0.029	0.472
		Back	0.576	0.334	0.360	1.270
		Left side	0.223			0.223
		Right side	0.365	0.092	0.178	0.635
		Top side		0.081	0.109	0.190
		Bottom side	0.212			0.212
LTE	LTE Band 12_LAT	Front	0.289	0.047	0.029	0.365
		Back	0.335	0.334	0.360	1.029
		Left side	0.170			0.170
		Right side	0.239	0.092	0.178	0.509
		Top side		0.081	0.109	0.190
		Bottom side	0.214			0.214
	LTE Band 13_LAT	Front	0.484	0.047	0.029	0.560
		Back	0.623	0.334	0.360	1.317
		Left side	0.244			0.244
		Right side	0.502	0.092	0.178	0.772
		Top side		0.081	0.109	0.190
		Bottom side	0.318			0.318
	LTE Band 5_LAT	Front	0.385	0.047	0.029	0.461
		Back	0.653	0.334	0.360	1.347
		Left side	0.147			0.147
		Right side	0.504	0.092	0.178	0.774
		Top side		0.081	0.109	0.190
		Bottom side	0.329			0.329
	LTE Band 26_LAT	Front	0.351	0.047	0.029	0.427
		Back	0.714	0.334	0.360	1.408
		Left side	0.149			0.149
		Right side	0.366	0.092	0.178	0.636
		Top side		0.081	0.109	0.190
		Bottom side	0.353			0.353
	LTE Band 66_LAT	Front	0.464	0.047	0.029	0.540
		Back	0.580	0.334	0.360	1.274
		Left side	0.192			0.192
		Right side	0.132	0.092	0.178	0.402

		Top side		0.081	0.109	0.190
		Bottom side	0.847			0.847
	LTE Band 25_LAT	Front	0.628	0.047	0.029	0.704
		Back	0.662	0.334	0.360	1.356
		Left side	0.137			0.137
		Right side	0.182	0.092	0.178	0.452
		Top side		0.081	0.109	0.190
		Bottom side	0.899			0.899
	LTE Band 30_LAT	Front	0.485	0.047	0.029	0.561
		Back	0.493	0.334	0.360	1.187
		Left side	0.171			0.171
		Right side	0.113	0.092	0.178	0.383
		Top side		0.081	0.109	0.190
		Bottom side	0.893			0.893
	LTE Band 7_LAT	Front	0.401	0.047	0.029	0.477
		Back	0.492	0.334	0.360	1.186
		Left side	0.099			0.099
		Right side	0.067	0.092	0.178	0.337
		Top side		0.081	0.109	0.190
		Bottom side	0.848			0.848
	LTE Band 41_LAT	Front	0.184	0.047	0.029	0.260
		Back	0.286	0.334	0.360	0.980
		Left side	0.060			0.060
		Right side	0.045	0.092	0.178	0.315
		Top side		0.081	0.109	0.190
		Bottom side	0.684			0.684
	LTE Band 41(HPUE)_LAT	Front	0.213	0.047	0.029	0.289
		Back	0.300	0.334	0.360	0.994
		Left side	0.055			0.055
		Right side	0.058	0.092	0.178	0.328
		Top side		0.081	0.109	0.190
		Bottom side	0.791			0.791
	LTE Band 48	Front	0.160	0.047	0.029	0.236
		Back	0.284	0.334	0.360	0.978
		Left side	0.016			0.016
		Right side	0.014	0.092	0.178	0.284
		Top side	0.378	0.081	0.109	0.568
		Bottom side				0.000

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant 1+2	
			1g SAR (W/kg)	1g SAR (W/kg)	
GSM	GSM850_LAT	Front	0.439	0.132	0.571
		Back	0.631	0.793	1.424
		Left side	0.151		0.151
		Right side	0.531	0.227	0.758
		Top side		0.190	0.190
		Bottom side	0.369		0.369
	GSM1900_LAT	Front	0.553	0.132	0.685
		Back	0.595	0.793	1.388
		Left side	0.152		0.152
		Right side	0.136	0.227	0.363
		Top side		0.190	0.190
		Bottom side	0.758		0.758
WCDMA	WCDMA V_LAT	Front	0.353	0.132	0.485
		Back	0.665	0.793	1.458
		Left side	0.140		0.140
		Right side	0.395	0.227	0.622
		Top side		0.190	0.190
		Bottom side	0.322		0.322
	WCDMA IV_LAT	Front	0.563	0.132	0.695
		Back	0.645	0.793	1.438
		Left side	0.187		0.187
		Right side	0.095	0.227	0.322
		Top side		0.190	0.190
		Bottom side	0.928		0.928
	WCDMA II_LAT	Front	0.645	0.132	0.777
		Back	0.718	0.793	1.511
		Left side	0.194		0.194
		Right side	0.169	0.227	0.396
		Top side		0.190	0.190
		Bottom side	0.949		0.949
CDMA	CDMA2000 BC0_LAT	Front	0.382	0.132	0.514
		Back	0.711	0.793	1.504
		Left side	0.142		0.142
		Right side	0.455	0.227	0.682
		Top side		0.190	0.190
		Bottom side	0.259		0.259
	CDMA2000 BC10_LAT	Front	0.373	0.132	0.505
		Back	0.623	0.793	1.416
		Left side	0.123		0.123

		Right side	0.382	0.227	0.609
		Top side		0.190	0.190
		Bottom side	0.242		0.242
	CDMA2000 BC1_LAT	Front	0.490	0.132	0.622
		Back	0.501	0.793	1.294
		Left side	0.115		0.115
		Right side	0.140	0.227	0.367
		Top side		0.190	0.190
		Bottom side	0.923		0.923
	LTE Band 71_LAT	Front	0.396	0.132	0.528
		Back	0.576	0.793	1.369
		Left side	0.223		0.223
		Right side	0.365	0.227	0.592
		Top side		0.190	0.190
		Bottom side	0.212		0.212
LTE	LTE Band 12_LAT	Front	0.289	0.132	0.421
		Back	0.335	0.793	1.128
		Left side	0.170		0.170
		Right side	0.239	0.227	0.466
		Top side		0.190	0.190
		Bottom side	0.214		0.214
	LTE Band 13_LAT	Front	0.484	0.132	0.616
		Back	0.623	0.793	1.416
		Left side	0.244		0.244
		Right side	0.502	0.227	0.729
		Top side		0.190	0.190
		Bottom side	0.318		0.318
	LTE Band 5_LAT	Front	0.385	0.132	0.517
		Back	0.653	0.793	1.446
		Left side	0.147		0.147
		Right side	0.504	0.227	0.731
		Top side		0.190	0.190
		Bottom side	0.329		0.329
	LTE Band 26_LAT	Front	0.351	0.132	0.483
		Back	0.714	0.793	1.507
		Left side	0.149		0.149
		Right side	0.366	0.227	0.593
		Top side		0.190	0.190
		Bottom side	0.353		0.353
	LTE Band 66_LAT	Front	0.464	0.132	0.596
		Back	0.580	0.793	1.373
		Left side	0.192		0.192
		Right side	0.132	0.227	0.359

		Top side		0.190	0.190
		Bottom side	0.847		0.847
	LTE Band 25_LAT	Front	0.628	0.132	0.760
		Back	0.662	0.793	1.455
		Left side	0.137		0.137
		Right side	0.182	0.227	0.409
		Top side		0.190	0.190
		Bottom side	0.899		0.899
	LTE Band 30_LAT	Front	0.485	0.132	0.617
		Back	0.493	0.793	1.286
		Left side	0.171		0.171
		Right side	0.113	0.227	0.340
		Top side		0.190	0.190
		Bottom side	0.893		0.893
	LTE Band 7_LAT	Front	0.401	0.132	0.533
		Back	0.492	0.793	1.285
		Left side	0.099		0.099
		Right side	0.067	0.227	0.294
		Top side		0.190	0.190
		Bottom side	0.848		0.848
	LTE Band 41_LAT	Front	0.184	0.132	0.316
		Back	0.286	0.793	1.079
		Left side	0.060		0.060
		Right side	0.045	0.227	0.272
		Top side		0.190	0.190
		Bottom side	0.684		0.684
	LTE Band 41(HPUE)_LAT	Front	0.213	0.132	0.345
		Back	0.300	0.793	1.093
		Left side	0.055		0.055
		Right side	0.058	0.227	0.285
		Top side		0.190	0.190
		Bottom side	0.791		0.791
	LTE Band 48	Front	0.160	0.132	0.292
		Back	0.284	0.793	1.077
		Left side	0.016		0.016
		Right side	0.014	0.227	0.241
		Top side	0.378	0.190	0.568
		Bottom side			0.000

WWAN Band		Exposure Position	1	4	6	7	1+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)
			WWAN	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2			
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM	GSM850_LAT	Front	0.439	0.060	0.107	0.002	0.499	0.606	0.501
		Back	0.631	0.721	0.071	0.122	1.352	1.423	1.474
		Left side	0.151				0.151	0.151	0.151
		Right side	0.531	0.341	0.007	0.002	0.872	0.879	0.874
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.369				0.369	0.369	0.369
	GSM1900_LAT	Front	0.553	0.060	0.107	0.002	0.613	0.720	0.615
		Back	0.595	0.721	0.071	0.122	1.316	1.387	1.438
		Left side	0.152				0.152	0.152	0.152
		Right side	0.136	0.341	0.007	0.002	0.477	0.484	0.479
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.758				0.758	0.758	0.758
WCDMA	WCDMA V_LAT	Front	0.353	0.060	0.107	0.002	0.413	0.520	0.415
		Back	0.665	0.721	0.071	0.122	1.386	1.457	1.508
		Left side	0.140				0.140	0.140	0.140
		Right side	0.395	0.341	0.007	0.002	0.736	0.743	0.738
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.322				0.322	0.322	0.322
	WCDMA IV_LAT	Front	0.563	0.060	0.107	0.002	0.623	0.730	0.625
		Back	0.645	0.721	0.071	0.122	1.366	1.437	1.488
		Left side	0.187				0.187	0.187	0.187
		Right side	0.095	0.341	0.007	0.002	0.436	0.443	0.438
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.928				0.928	0.928	0.928
	WCDMA II_LAT	Front	0.645	0.060	0.107	0.002	0.705	0.812	0.707
		Back	0.718	0.721	0.071	0.122	1.439	1.510	1.561
		Left side	0.194				0.194	0.194	0.194
		Right side	0.169	0.341	0.007	0.002	0.510	0.517	0.512
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.949				0.949	0.949	0.949
CDMA	CDMA2000 BC0_LAT	Front	0.382	0.060	0.107	0.002	0.442	0.549	0.444
		Back	0.711	0.721	0.071	0.122	1.432	1.503	1.554
		Left side	0.142				0.142	0.142	0.142
		Right side	0.455	0.341	0.007	0.002	0.796	0.803	0.798
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.259				0.259	0.259	0.259
	CDMA2000 BC10_LAT	Front	0.373	0.060	0.107	0.002	0.433	0.540	0.435
		Back	0.623	0.721	0.071	0.122	1.344	1.415	1.466

		Left side	0.123				0.123	0.123	0.123
		Right side	0.382	0.341	0.007	0.002	0.723	0.730	0.725
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.242				0.242	0.242	0.242
	CDMA2000 BC1_LAT	Front	0.490	0.060	0.107	0.002	0.550	0.657	0.552
		Back	0.501	0.721	0.071	0.122	1.222	1.293	1.344
		Left side	0.115				0.115	0.115	0.115
		Right side	0.140	0.341	0.007	0.002	0.481	0.488	0.483
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.923				0.923	0.923	0.923
LTE	LTE Band 71_LAT	Front	0.396	0.060	0.107	0.002	0.456	0.563	0.458
		Back	0.576	0.721	0.071	0.122	1.297	1.368	1.419
		Left side	0.223				0.223	0.223	0.223
		Right side	0.365	0.341	0.007	0.002	0.706	0.713	0.708
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.212				0.212	0.212	0.212
	LTE Band 12_LAT	Front	0.289	0.060	0.107	0.002	0.349	0.456	0.351
		Back	0.335	0.721	0.071	0.122	1.056	1.127	1.178
		Left side	0.170				0.170	0.170	0.170
		Right side	0.239	0.341	0.007	0.002	0.580	0.587	0.582
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.214				0.214	0.214	0.214
	LTE Band 13_LAT	Front	0.484	0.060	0.107	0.002	0.544	0.651	0.546
		Back	0.623	0.721	0.071	0.122	1.344	1.415	1.466
		Left side	0.244				0.244	0.244	0.244
		Right side	0.502	0.341	0.007	0.002	0.843	0.850	0.845
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.318				0.318	0.318	0.318
	LTE Band 5_LAT	Front	0.385	0.060	0.107	0.002	0.445	0.552	0.447
		Back	0.653	0.721	0.071	0.122	1.374	1.445	1.496
		Left side	0.147				0.147	0.147	0.147
		Right side	0.504	0.341	0.007	0.002	0.845	0.852	0.847
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.329				0.329	0.329	0.329
	LTE Band 26_LAT	Front	0.351	0.060	0.107	0.002	0.411	0.518	0.413
		Back	0.714	0.721	0.071	0.122	1.435	1.506	1.557
		Left side	0.149				0.149	0.149	0.149
		Right side	0.366	0.341	0.007	0.002	0.707	0.714	0.709
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.353				0.353	0.353	0.353
	LTE Band 66_LAT	Front	0.464	0.060	0.107	0.002	0.524	0.631	0.526
		Back	0.580	0.721	0.071	0.122	1.301	1.372	1.423
		Left side	0.192				0.192	0.192	0.192

		Right side	0.132	0.341	0.007	0.002	0.473	0.480	0.475
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.847				0.847	0.847	0.847
	LTE Band 25_LAT	Front	0.628	0.060	0.107	0.002	0.688	0.795	0.690
		Back	0.662	0.721	0.071	0.122	1.383	1.454	1.505
		Left side	0.137				0.137	0.137	0.137
		Right side	0.182	0.341	0.007	0.002	0.523	0.530	0.525
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.899				0.899	0.899	0.899
	LTE Band 30_LAT	Front	0.485	0.060	0.107	0.002	0.545	0.652	0.547
		Back	0.493	0.721	0.071	0.122	1.214	1.285	1.336
		Left side	0.171				0.171	0.171	0.171
		Right side	0.113	0.341	0.007	0.002	0.454	0.461	0.456
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.893				0.893	0.893	0.893
	LTE Band 7_LAT	Front	0.401	0.060	0.107	0.002	0.461	0.568	0.463
		Back	0.492	0.721	0.071	0.122	1.213	1.284	1.335
		Left side	0.099				0.099	0.099	0.099
		Right side	0.067	0.341	0.007	0.002	0.408	0.415	0.410
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.848				0.848	0.848	0.848
	LTE Band 41_LAT	Front	0.184	0.060	0.107	0.002	0.244	0.351	0.246
		Back	0.286	0.721	0.071	0.122	1.007	1.078	1.129
		Left side	0.060				0.060	0.060	0.060
		Right side	0.045	0.341	0.007	0.002	0.386	0.393	0.388
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.684				0.684	0.684	0.684
	LTE Band 41(HPUE)_LAT	Front	0.213	0.060	0.107	0.002	0.273	0.380	0.275
		Back	0.300	0.721	0.071	0.122	1.021	1.092	1.143
		Left side	0.055				0.055	0.055	0.055
		Right side	0.058	0.341	0.007	0.002	0.399	0.406	0.401
		Top side		0.195	0.150	0.002	0.195	0.345	0.197
		Bottom side	0.791				0.791	0.791	0.791
	LTE Band 48	Front	0.160	0.060	0.107	0.002	0.220	0.327	0.222
		Back	0.284	0.721	0.071	0.122	1.005	1.076	1.127
		Left side	0.016				0.016	0.016	0.016
		Right side	0.014	0.341	0.007	0.002	0.355	0.362	0.357
		Top side	0.378	0.195	0.150	0.002	0.573	0.723	0.575
		Bottom side					0.000	0.000	0.000



WWAN Band		Exposure Position	1	6	7	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)	4+7 Summed 1g SAR (W/kg)
			WWAN 1g SAR (W/kg)	Bluetooth Ant 1 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)				
GSM	GSM850_LAT	Front	0.439	0.107	0.002	0.546	0.441	0.185	0.080
		Back	0.631	0.071	0.122	0.702	0.753	1.065	1.116
		Left side	0.151			0.151	0.151	0.000	0.000
		Right side	0.531	0.007	0.002	0.538	0.533	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.369			0.369	0.369	0.000	0.000
	GSM1900_LAT	Front	0.553	0.107	0.002	0.660	0.555	0.185	0.080
		Back	0.595	0.071	0.122	0.666	0.717	1.065	1.116
		Left side	0.152			0.152	0.152	0.000	0.000
		Right side	0.136	0.007	0.002	0.143	0.138	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.758			0.758	0.758	0.000	0.000
WCDMA	WCDMA V_LAT	Front	0.353	0.107	0.002	0.460	0.355	0.185	0.080
		Back	0.665	0.071	0.122	0.736	0.787	1.065	1.116
		Left side	0.140			0.140	0.140	0.000	0.000
		Right side	0.395	0.007	0.002	0.402	0.397	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.322			0.322	0.322	0.000	0.000
	WCDMA IV_LAT	Front	0.563	0.107	0.002	0.670	0.565	0.185	0.080
		Back	0.645	0.071	0.122	0.716	0.767	1.065	1.116
		Left side	0.187			0.187	0.187	0.000	0.000
		Right side	0.095	0.007	0.002	0.102	0.097	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.928			0.928	0.928	0.000	0.000
	WCDMA II_LAT	Front	0.645	0.107	0.002	0.752	0.647	0.185	0.080
		Back	0.718	0.071	0.122	0.789	0.840	1.065	1.116
		Left side	0.194			0.194	0.194	0.000	0.000
		Right side	0.169	0.007	0.002	0.176	0.171	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.949			0.949	0.949	0.000	0.000
CDMA	CDMA2000 BC0_LAT	Front	0.382	0.107	0.002	0.489	0.384	0.185	0.080
		Back	0.711	0.071	0.122	0.782	0.833	1.065	1.116
		Left side	0.142			0.142	0.142	0.000	0.000
		Right side	0.455	0.007	0.002	0.462	0.457	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.259			0.259	0.259	0.000	0.000
	CDMA2000 BC10_LAT	Front	0.373	0.107	0.002	0.480	0.375	0.185	0.080
		Back	0.623	0.071	0.122	0.694	0.745	1.065	1.116
		Left side	0.123			0.123	0.123	0.000	0.000

		Right side	0.382	0.007	0.002	0.389	0.384	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.242			0.242	0.242	0.000	0.000
	CDMA2000 BC1_LAT	Front	0.490	0.107	0.002	0.597	0.492	0.185	0.080
		Back	0.501	0.071	0.122	0.572	0.623	1.065	1.116
		Left side	0.115			0.115	0.115	0.000	0.000
		Right side	0.140	0.007	0.002	0.147	0.142	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.923			0.923	0.923	0.000	0.000
LTE	LTE Band 71_LAT	Front	0.396	0.107	0.002	0.503	0.398	0.185	0.080
		Back	0.576	0.071	0.122	0.647	0.698	1.065	1.116
		Left side	0.223			0.223	0.223	0.000	0.000
		Right side	0.365	0.007	0.002	0.372	0.367	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.212			0.212	0.212	0.000	0.000
	LTE Band 12_LAT	Front	0.289	0.107	0.002	0.396	0.291	0.185	0.080
		Back	0.335	0.071	0.122	0.406	0.457	1.065	1.116
		Left side	0.170			0.170	0.170	0.000	0.000
		Right side	0.239	0.007	0.002	0.246	0.241	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.214			0.214	0.214	0.000	0.000
	LTE Band 13_LAT	Front	0.484	0.107	0.002	0.591	0.486	0.185	0.080
		Back	0.623	0.071	0.122	0.694	0.745	1.065	1.116
		Left side	0.244			0.244	0.244	0.000	0.000
		Right side	0.502	0.007	0.002	0.509	0.504	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.318			0.318	0.318	0.000	0.000
	LTE Band 5_LAT	Front	0.385	0.107	0.002	0.492	0.387	0.185	0.080
		Back	0.653	0.071	0.122	0.724	0.775	1.065	1.116
		Left side	0.147			0.147	0.147	0.000	0.000
		Right side	0.504	0.007	0.002	0.511	0.506	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.329			0.329	0.329	0.000	0.000
	LTE Band 26_LAT	Front	0.351	0.107	0.002	0.458	0.353	0.185	0.080
		Back	0.714	0.071	0.122	0.785	0.836	1.065	1.116
		Left side	0.149			0.149	0.149	0.000	0.000
		Right side	0.366	0.007	0.002	0.373	0.368	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.353			0.353	0.353	0.000	0.000
	LTE Band 66_LAT	Front	0.464	0.107	0.002	0.571	0.466	0.185	0.080
		Back	0.580	0.071	0.122	0.651	0.702	1.065	1.116
		Left side	0.192			0.192	0.192	0.000	0.000
		Right side	0.132	0.007	0.002	0.139	0.134	0.463	0.458

		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.847			0.847	0.847	0.000	0.000
	LTE Band 25_LAT	Front	0.628	0.107	0.002	0.735	0.630	0.185	0.080
		Back	0.662	0.071	0.122	0.733	0.784	1.065	1.116
		Left side	0.137			0.137	0.137	0.000	0.000
		Right side	0.182	0.007	0.002	0.189	0.184	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.899			0.899	0.899	0.000	0.000
	LTE Band 30_LAT	Front	0.485	0.107	0.002	0.592	0.487	0.185	0.080
		Back	0.493	0.071	0.122	0.564	0.615	1.065	1.116
		Left side	0.171			0.171	0.171	0.000	0.000
		Right side	0.113	0.007	0.002	0.120	0.115	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.893			0.893	0.893	0.000	0.000
	LTE Band 7_LAT	Front	0.401	0.107	0.002	0.508	0.403	0.185	0.080
		Back	0.492	0.071	0.122	0.563	0.614	1.065	1.116
		Left side	0.099			0.099	0.099	0.000	0.000
		Right side	0.067	0.007	0.002	0.074	0.069	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.848			0.848	0.848	0.000	0.000
	LTE Band 41_LAT	Front	0.184	0.107	0.002	0.291	0.186	0.185	0.080
		Back	0.286	0.071	0.122	0.357	0.408	1.065	1.116
		Left side	0.060			0.060	0.060	0.000	0.000
		Right side	0.045	0.007	0.002	0.052	0.047	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.684			0.684	0.684	0.000	0.000
	LTE Band 41(HPUE)_LAT	Front	0.213	0.107	0.002	0.320	0.215	0.185	0.080
		Back	0.300	0.071	0.122	0.371	0.422	1.065	1.116
		Left side	0.055			0.055	0.055	0.000	0.000
		Right side	0.058	0.007	0.002	0.065	0.060	0.463	0.458
		Top side		0.150	0.002	0.150	0.002	0.426	0.278
		Bottom side	0.791			0.791	0.791	0.000	0.000
	LTE Band 48	Front	0.160	0.107	0.002	0.267	0.162	0.185	0.080
		Back	0.284	0.071	0.122	0.355	0.406	1.065	1.116
		Left side	0.016			0.016	0.016	0.000	0.000
		Right side	0.014	0.007	0.002	0.021	0.016	0.463	0.458
		Top side	0.378	0.150	0.002	0.528	0.380	0.426	0.278
		Bottom side				0.000	0.000	0.000	0.000

18.3 Body-Worn Accessory Exposure Conditions

Exposure Position	2	4	2+4 Summed 1g SAR (W/kg)
	2.4GHz WLAN Ant 1	5GHz WLAN Ant 1	
	1g SAR (W/kg)	1g SAR (W/kg)	
Front	0.047	0.021	0.068
Back	0.298	0.442	0.740

WWAN Band		Exposure Position	1	2	4	1+2+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)	
GSM	GSM850_UAT	Front	0.194	0.024	0.050	0.268
		Back	0.328	0.140	0.414	0.882
	GSM1900_UAT	Front	0.327	0.024	0.050	0.401
		Back	0.383	0.140	0.414	0.937
WCDMA	WCDMA V_UAT	Front	0.228	0.024	0.050	0.302
		Back	0.452	0.140	0.414	1.006
	WCDMA IV_UAT	Front	0.302	0.024	0.050	0.376
		Back	0.454	0.140	0.414	1.008
	WCDMA II_UAT	Front	0.317	0.024	0.050	0.391
		Back	0.382	0.140	0.414	0.936
CDMA	CDMA2000 BC0_UAT	Front	0.243	0.024	0.050	0.317
		Back	0.399	0.140	0.414	0.953
	CDMA2000 BC10_UAT	Front	0.272	0.024	0.050	0.346
		Back	0.401	0.140	0.414	0.955
	CDMA2000 BC1_UAT	Front	0.274	0.024	0.050	0.348
		Back	0.331	0.140	0.414	0.885
LTE	LTE Band 71_UAT	Front	0.289	0.024	0.050	0.363
		Back	0.296	0.140	0.414	0.850
	LTE Band 12_UAT	Front	0.325	0.024	0.050	0.399
		Back	0.375	0.140	0.414	0.929
	LTE Band 13_UAT	Front	0.187	0.024	0.050	0.261
		Back	0.409	0.140	0.414	0.963
	LTE Band 5_UAT	Front	0.202	0.024	0.050	0.276
		Back	0.396	0.140	0.414	0.950
	LTE Band 26_UAT	Front	0.220	0.024	0.050	0.294
		Back	0.424	0.140	0.414	0.978
	LTE Band 66_UAT	Front	0.301	0.024	0.050	0.375
		Back	0.322	0.140	0.414	0.876
	LTE Band 25_UAT	Front	0.380	0.024	0.050	0.454
		Back	0.510	0.140	0.414	1.064
	LTE Band 30_UAT	Front	0.224	0.024	0.050	0.298
		Back	0.430	0.140	0.414	0.984
	LTE Band 7_UAT	Front	0.470	0.024	0.050	0.544
		Back	0.558	0.140	0.414	1.112
	LTE Band 41_UAT	Front	0.220	0.024	0.050	0.294
		Back	0.409	0.140	0.414	0.963
	LTE Band 41(HPUE)_UAT	Front	0.233	0.024	0.050	0.307
		Back	0.433	0.140	0.414	0.987
	LTE Band 48	Front	0.159	0.024	0.050	0.233
		Back	0.403	0.140	0.414	0.957

WWAN Band		Exposure Position	1	4	6	7	1+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)
			WWAN	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2			
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM	GSM850_UAT	Front	0.194	0.083	0.052	0.002	0.277	0.329	0.279
		Back	0.328	0.623	0.045	0.046	0.951	0.996	0.997
	GSM1900_UAT	Front	0.327	0.083	0.052	0.002	0.410	0.462	0.412
		Back	0.383	0.623	0.045	0.046	1.006	1.051	1.052
WCDMA	WCDMA V_UAT	Front	0.228	0.083	0.052	0.002	0.311	0.363	0.313
		Back	0.452	0.623	0.045	0.046	1.075	1.120	1.121
	WCDMA IV_UAT	Front	0.302	0.083	0.052	0.002	0.385	0.437	0.387
		Back	0.454	0.623	0.045	0.046	1.077	1.122	1.123
	WCDMA II_UAT	Front	0.317	0.083	0.052	0.002	0.400	0.452	0.402
		Back	0.382	0.623	0.045	0.046	1.005	1.050	1.051
CDMA	CDMA2000 BC0_UAT	Front	0.243	0.083	0.052	0.002	0.326	0.378	0.328
		Back	0.399	0.623	0.045	0.046	1.022	1.067	1.068
	CDMA2000 BC10_UAT	Front	0.272	0.083	0.052	0.002	0.355	0.407	0.357
		Back	0.401	0.623	0.045	0.046	1.024	1.069	1.070
	CDMA2000 BC1_UAT	Front	0.274	0.083	0.052	0.002	0.357	0.409	0.359
		Back	0.331	0.623	0.045	0.046	0.954	0.999	1.000
LTE	LTE Band 71_UAT	Front	0.289	0.083	0.052	0.002	0.372	0.424	0.374
		Back	0.296	0.623	0.045	0.046	0.919	0.964	0.965
	LTE Band 12_UAT	Front	0.325	0.083	0.052	0.002	0.408	0.460	0.410
		Back	0.375	0.623	0.045	0.046	0.998	1.043	1.044
	LTE Band 13_UAT	Front	0.187	0.083	0.052	0.002	0.270	0.322	0.272
		Back	0.409	0.623	0.045	0.046	1.032	1.077	1.078
	LTE Band 5_UAT	Front	0.202	0.083	0.052	0.002	0.285	0.337	0.287
		Back	0.396	0.623	0.045	0.046	1.019	1.064	1.065
	LTE Band 26_UAT	Front	0.220	0.083	0.052	0.002	0.303	0.355	0.305
		Back	0.424	0.623	0.045	0.046	1.047	1.092	1.093
	LTE Band 66_UAT	Front	0.301	0.083	0.052	0.002	0.384	0.436	0.386
		Back	0.322	0.623	0.045	0.046	0.945	0.990	0.991
	LTE Band 25_UAT	Front	0.380	0.083	0.052	0.002	0.463	0.515	0.465
		Back	0.510	0.623	0.045	0.046	1.133	1.178	1.179
	LTE Band 30_UAT	Front	0.224	0.083	0.052	0.002	0.307	0.359	0.309
		Back	0.430	0.623	0.045	0.046	1.053	1.098	1.099
	LTE Band 7_UAT	Front	0.470	0.083	0.052	0.002	0.553	0.605	0.555
		Back	0.558	0.623	0.045	0.046	1.181	1.226	1.227
	LTE Band 41_UAT	Front	0.220	0.083	0.052	0.002	0.303	0.355	0.305
		Back	0.409	0.623	0.045	0.046	1.032	1.077	1.078
	LTE Band 41(HPUE)_UAT	Front	0.233	0.083	0.052	0.002	0.316	0.368	0.318
		Back	0.433	0.623	0.045	0.046	1.056	1.101	1.102
	LTE Band 48	Front	0.159	0.083	0.052	0.002	0.242	0.294	0.244
		Back	0.403	0.623	0.045	0.046	1.026	1.071	1.072

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant 1+2	
			1g SAR (W/kg)	1g SAR (W/kg)	
GSM	GSM850_UAT	Front	0.194	0.063	0.257
		Back	0.328	0.342	0.670
	GSM1900_UAT	Front	0.327	0.063	0.390
		Back	0.383	0.342	0.725
WCDMA	WCDMA V_UAT	Front	0.228	0.063	0.291
		Back	0.452	0.342	0.794
	WCDMA IV_UAT	Front	0.302	0.063	0.365
		Back	0.454	0.342	0.796
	WCDMA II_UAT	Front	0.317	0.063	0.380
		Back	0.382	0.342	0.724
CDMA	CDMA2000 BC0_UAT	Front	0.243	0.063	0.306
		Back	0.399	0.342	0.741
	CDMA2000 BC10_UAT	Front	0.272	0.063	0.335
		Back	0.401	0.342	0.743
	CDMA2000 BC1_UAT	Front	0.274	0.063	0.337
		Back	0.331	0.342	0.673
LTE	LTE Band 71_UAT	Front	0.289	0.063	0.352
		Back	0.296	0.342	0.638
	LTE Band 12_UAT	Front	0.325	0.063	0.388
		Back	0.375	0.342	0.717
	LTE Band 13_UAT	Front	0.187	0.063	0.250
		Back	0.409	0.342	0.751
	LTE Band 5_UAT	Front	0.202	0.063	0.265
		Back	0.396	0.342	0.738
	LTE Band 26_UAT	Front	0.220	0.063	0.283
		Back	0.424	0.342	0.766
	LTE Band 66_UAT	Front	0.301	0.063	0.364
		Back	0.322	0.342	0.664
	LTE Band 25_UAT	Front	0.380	0.063	0.443
		Back	0.510	0.342	0.852
	LTE Band 30_UAT	Front	0.224	0.063	0.287
		Back	0.430	0.342	0.772
	LTE Band 7_UAT	Front	0.470	0.063	0.533
		Back	0.558	0.342	0.900
	LTE Band 41_UAT	Front	0.220	0.063	0.283
		Back	0.409	0.342	0.751
	LTE Band 41(HPUE)_UAT	Front	0.233	0.063	0.296
		Back	0.433	0.342	0.775
	LTE Band 48	Front	0.159	0.063	0.222
		Back	0.403	0.342	0.745

WWAN Band		Exposure Position	1	2	4	6	7	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)	4+7 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2				
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
GSM	GSM850_UAT	Front	0.194	0.142	0.140	0.052	0.002	0.246	0.196	0.192	0.142
		Back	0.328	0.849	1.071	0.045	0.046	0.373	0.374	1.116	1.117
	GSM1900_UAT	Front	0.327	0.142	0.140	0.052	0.002	0.379	0.329	0.192	0.142
		Back	0.383	0.849	1.071	0.045	0.046	0.428	0.429	1.116	1.117
WCDMA	WCDMA V_UAT	Front	0.228	0.142	0.140	0.052	0.002	0.280	0.230	0.192	0.142
		Back	0.452	0.849	1.071	0.045	0.046	0.497	0.498	1.116	1.117
	WCDMA IV_UAT	Front	0.302	0.142	0.140	0.052	0.002	0.354	0.304	0.192	0.142
		Back	0.454	0.849	1.071	0.045	0.046	0.499	0.500	1.116	1.117
	WCDMA II_UAT	Front	0.317	0.142	0.140	0.052	0.002	0.369	0.319	0.192	0.142
		Back	0.382	0.849	1.071	0.045	0.046	0.427	0.428	1.116	1.117
CDMA	CDMA2000 BC0_UAT	Front	0.243	0.142	0.140	0.052	0.002	0.295	0.245	0.192	0.142
		Back	0.399	0.849	1.071	0.045	0.046	0.444	0.445	1.116	1.117
	CDMA2000 BC10_UAT	Front	0.272	0.142	0.140	0.052	0.002	0.324	0.274	0.192	0.142
		Back	0.401	0.849	1.071	0.045	0.046	0.446	0.447	1.116	1.117
	CDMA2000 BC1_UAT	Front	0.274	0.142	0.140	0.052	0.002	0.326	0.276	0.192	0.142
		Back	0.331	0.849	1.071	0.045	0.046	0.376	0.377	1.116	1.117
LTE	LTE Band 71_UAT	Front	0.289	0.142	0.140	0.052	0.002	0.341	0.291	0.192	0.142
		Back	0.296	0.849	1.071	0.045	0.046	0.341	0.342	1.116	1.117
	LTE Band 12_UAT	Front	0.325	0.142	0.140	0.052	0.002	0.377	0.327	0.192	0.142
		Back	0.375	0.849	1.071	0.045	0.046	0.420	0.421	1.116	1.117
	LTE Band 13_UAT	Front	0.187	0.142	0.140	0.052	0.002	0.239	0.189	0.192	0.142
		Back	0.409	0.849	1.071	0.045	0.046	0.454	0.455	1.116	1.117
	LTE Band 5_UAT	Front	0.202	0.142	0.140	0.052	0.002	0.254	0.204	0.192	0.142
		Back	0.396	0.849	1.071	0.045	0.046	0.441	0.442	1.116	1.117
	LTE Band 26_UAT	Front	0.220	0.142	0.140	0.052	0.002	0.272	0.222	0.192	0.142
		Back	0.424	0.849	1.071	0.045	0.046	0.469	0.470	1.116	1.117
	LTE Band 66_UAT	Front	0.301	0.142	0.140	0.052	0.002	0.353	0.303	0.192	0.142
		Back	0.322	0.849	1.071	0.045	0.046	0.367	0.368	1.116	1.117
	LTE Band 25_UAT	Front	0.380	0.142	0.140	0.052	0.002	0.432	0.382	0.192	0.142
		Back	0.510	0.849	1.071	0.045	0.046	0.555	0.556	1.116	1.117
	LTE Band 30_UAT	Front	0.224	0.142	0.140	0.052	0.002	0.276	0.226	0.192	0.142
		Back	0.430	0.849	1.071	0.045	0.046	0.475	0.476	1.116	1.117
	LTE Band 7_UAT	Front	0.470	0.142	0.140	0.052	0.002	0.522	0.472	0.192	0.142
		Back	0.558	0.849	1.071	0.045	0.046	0.603	0.604	1.116	1.117
	LTE Band 41_UAT	Front	0.220	0.142	0.140	0.052	0.002	0.272	0.222	0.192	0.142
		Back	0.409	0.849	1.071	0.045	0.046	0.454	0.455	1.116	1.117
	LTE Band 41(HPUE)_UAT	Front	0.233	0.142	0.140	0.052	0.002	0.285	0.235	0.192	0.142
		Back	0.433	0.849	1.071	0.045	0.046	0.478	0.479	1.116	1.117
	LTE Band 48	Front	0.159	0.142	0.140	0.052	0.002	0.211	0.161	0.192	0.142
		Back	0.403	0.849	1.071	0.045	0.046	0.448	0.449	1.116	1.117

WWAN Band		Exposure Position	1	2	4	1+2+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)	
GSM	GSM850_LAT	Front	0.336	0.024	0.050	0.410
		Back	0.521	0.140	0.414	1.075
	GSM1900_LAT	Front	0.284	0.024	0.050	0.358
		Back	0.451	0.140	0.414	1.005
WCDMA	WCDMA V_LAT	Front	0.325	0.024	0.050	0.399
		Back	0.538	0.140	0.414	1.092
	WCDMA IV_LAT	Front	0.742	0.024	0.050	0.816
		Back	0.894	0.140	0.414	1.448
	WCDMA II_LAT	Front	0.775	0.024	0.050	0.849
		Back	0.839	0.140	0.414	1.393
CDMA	CDMA2000 BC0_LAT	Front	0.321	0.024	0.050	0.395
		Back	0.555	0.140	0.414	1.109
	CDMA2000 BC10_LAT	Front	0.300	0.024	0.050	0.374
		Back	0.503	0.140	0.414	1.057
	CDMA2000 BC1_LAT	Front	0.687	0.024	0.050	0.761
		Back	0.891	0.140	0.414	1.445
LTE	LTE Band 71_LAT	Front	0.333	0.024	0.050	0.407
		Back	0.389	0.140	0.414	0.943
	LTE Band 12_LAT	Front	0.176	0.024	0.050	0.250
		Back	0.288	0.140	0.414	0.842
	LTE Band 13_LAT	Front	0.331	0.024	0.050	0.405
		Back	0.472	0.140	0.414	1.026
	LTE Band 5_LAT	Front	0.300	0.024	0.050	0.374
		Back	0.524	0.140	0.414	1.078
	LTE Band 26_LAT	Front	0.292	0.024	0.050	0.366
		Back	0.525	0.140	0.414	1.079
	LTE Band 66_LAT	Front	0.449	0.024	0.050	0.523
		Back	0.548	0.140	0.414	1.102
	LTE Band 25_LAT	Front	0.662	0.024	0.050	0.736
		Back	0.749	0.140	0.414	1.303
	LTE Band 30_LAT	Front	0.844	0.024	0.050	0.918
		Back	0.855	0.140	0.414	1.409
	LTE Band 7_LAT	Front	0.595	0.024	0.050	0.669
		Back	0.811	0.140	0.414	1.365
	LTE Band 41_LAT	Front	0.514	0.024	0.050	0.588
		Back	0.760	0.140	0.414	1.314
	LTE Band 41(HPUE)_LAT	Front	0.392	0.024	0.050	0.466
		Back	0.781	0.140	0.414	1.335
	LTE Band 48	Front	0.159	0.024	0.050	0.233
		Back	0.403	0.140	0.414	0.957

WWAN Band		Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN Ant 1+2	
			1g SAR (W/kg)	1g SAR (W/kg)	
GSM	GSM850_LAT	Front	0.336	0.063	0.399
		Back	0.521	0.342	0.863
	GSM1900_LAT	Front	0.284	0.063	0.347
		Back	0.451	0.342	0.793
WCDMA	WCDMA V_LAT	Front	0.325	0.063	0.388
		Back	0.538	0.342	0.880
	WCDMA IV_LAT	Front	0.742	0.063	0.805
		Back	0.894	0.342	1.236
	WCDMA II_LAT	Front	0.775	0.063	0.838
		Back	0.839	0.342	1.181
CDMA	CDMA2000 BC0_LAT	Front	0.321	0.063	0.384
		Back	0.555	0.342	0.897
	CDMA2000 BC10_LAT	Front	0.300	0.063	0.363
		Back	0.503	0.342	0.845
	CDMA2000 BC1_LAT	Front	0.687	0.063	0.750
		Back	0.891	0.342	1.233
LTE	LTE Band 71_LAT	Front	0.333	0.063	0.396
		Back	0.389	0.342	0.731
	LTE Band 12_LAT	Front	0.176	0.063	0.239
		Back	0.288	0.342	0.630
	LTE Band 13_LAT	Front	0.331	0.063	0.394
		Back	0.472	0.342	0.814
	LTE Band 5_LAT	Front	0.300	0.063	0.363
		Back	0.524	0.342	0.866
	LTE Band 26_LAT	Front	0.292	0.063	0.355
		Back	0.525	0.342	0.867
	LTE Band 66_LAT	Front	0.449	0.063	0.512
		Back	0.548	0.342	0.890
	LTE Band 25_LAT	Front	0.662	0.063	0.725
		Back	0.749	0.342	1.091
	LTE Band 30_LAT	Front	0.844	0.063	0.907
		Back	0.855	0.342	1.197
	LTE Band 7_LAT	Front	0.595	0.063	0.658
		Back	0.811	0.342	1.153
	LTE Band 41_LAT	Front	0.514	0.063	0.577
		Back	0.760	0.342	1.102
	LTE Band 41(HPUE)_LAT	Front	0.392	0.063	0.455
		Back	0.781	0.342	1.123
	LTE Band 48	Front	0.159	0.063	0.222
		Back	0.403	0.342	0.745

WWAN Band		Exposure Position	1	4	6	7	1+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+4+7 Summed 1g SAR (W/kg)
			WWAN	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2			
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM	GSM850_LAT	Front	0.336	0.083	0.052	0.002	0.419	0.471	0.421
		Back	0.521	0.623	0.045	0.046	1.144	1.189	1.190
	GSM1900_LAT	Front	0.284	0.083	0.052	0.002	0.367	0.419	0.369
		Back	0.451	0.623	0.045	0.046	1.074	1.119	1.120
WCDMA	WCDMA V_LAT	Front	0.325	0.083	0.052	0.002	0.408	0.460	0.410
		Back	0.538	0.623	0.045	0.046	1.161	1.206	1.207
	WCDMA IV_LAT	Front	0.742	0.083	0.052	0.002	0.825	0.877	0.827
		Back	0.894	0.623	0.045	0.046	1.517	1.562	1.563
	WCDMA II_LAT	Front	0.775	0.083	0.052	0.002	0.858	0.910	0.860
		Back	0.839	0.623	0.045	0.046	1.462	1.507	1.508
CDMA	CDMA2000 BC0_LAT	Front	0.321	0.083	0.052	0.002	0.404	0.456	0.406
		Back	0.555	0.623	0.045	0.046	1.178	1.223	1.224
	CDMA2000 BC10_LAT	Front	0.300	0.083	0.052	0.002	0.383	0.435	0.385
		Back	0.503	0.623	0.045	0.046	1.126	1.171	1.172
	CDMA2000 BC1_LAT	Front	0.687	0.083	0.052	0.002	0.770	0.822	0.772
		Back	0.891	0.623	0.045	0.046	1.514	1.559	1.560
LTE	LTE Band 71_LAT	Front	0.333	0.083	0.052	0.002	0.416	0.468	0.418
		Back	0.389	0.623	0.045	0.046	1.012	1.057	1.058
	LTE Band 12_LAT	Front	0.176	0.083	0.052	0.002	0.259	0.311	0.261
		Back	0.288	0.623	0.045	0.046	0.911	0.956	0.957
	LTE Band 13_LAT	Front	0.331	0.083	0.052	0.002	0.414	0.466	0.416
		Back	0.472	0.623	0.045	0.046	1.095	1.140	1.141
	LTE Band 5_LAT	Front	0.300	0.083	0.052	0.002	0.383	0.435	0.385
		Back	0.524	0.623	0.045	0.046	1.147	1.192	1.193
	LTE Band 26_LAT	Front	0.292	0.083	0.052	0.002	0.375	0.427	0.377
		Back	0.525	0.623	0.045	0.046	1.148	1.193	1.194
	LTE Band 66_LAT	Front	0.449	0.083	0.052	0.002	0.532	0.584	0.534
		Back	0.548	0.623	0.045	0.046	1.171	1.216	1.217
	LTE Band 25_LAT	Front	0.662	0.083	0.052	0.002	0.745	0.797	0.747
		Back	0.749	0.623	0.045	0.046	1.372	1.417	1.418
	LTE Band 30_LAT	Front	0.844	0.083	0.052	0.002	0.927	0.979	0.929
		Back	0.855	0.623	0.045	0.046	1.478	1.523	1.524
	LTE Band 7_LAT	Front	0.595	0.083	0.052	0.002	0.678	0.730	0.680
		Back	0.811	0.623	0.045	0.046	1.434	1.479	1.480
	LTE Band 41_LAT	Front	0.514	0.083	0.052	0.002	0.597	0.649	0.599
		Back	0.760	0.623	0.045	0.046	1.383	1.428	1.429
	LTE Band 41(HPUE)_LAT	Front	0.392	0.083	0.052	0.002	0.475	0.527	0.477
		Back	0.781	0.623	0.045	0.046	1.404	1.449	1.450
	LTE Band 48	Front	0.159	0.083	0.052	0.002	0.242	0.294	0.244
		Back	0.403	0.623	0.045	0.046	1.026	1.071	1.072

WWAN Band		Exposure Position	1	6	7	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)	4+7 Summed 1g SAR (W/kg)
			WWAN	Bluetooth Ant 1	Bluetooth Ant 2				
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
GSM	GSM850_LAT	Front	0.336	0.052	0.002	0.388	0.338	0.192	0.142
		Back	0.521	0.045	0.046	0.566	0.567	1.116	1.117
	GSM1900_LAT	Front	0.284	0.052	0.002	0.336	0.286	0.192	0.142
		Back	0.451	0.045	0.046	0.496	0.497	1.116	1.117
WCDMA	WCDMA V_LAT	Front	0.325	0.052	0.002	0.377	0.327	0.192	0.142
		Back	0.538	0.045	0.046	0.583	0.584	1.116	1.117
	WCDMA IV_LAT	Front	0.742	0.052	0.002	0.794	0.744	0.192	0.142
		Back	0.894	0.045	0.046	0.939	0.940	1.116	1.117
	WCDMA II_LAT	Front	0.775	0.052	0.002	0.827	0.777	0.192	0.142
		Back	0.839	0.045	0.046	0.884	0.885	1.116	1.117
CDMA	CDMA2000 BC0_LAT	Front	0.321	0.052	0.002	0.373	0.323	0.192	0.142
		Back	0.555	0.045	0.046	0.600	0.601	1.116	1.117
	CDMA2000 BC10_LAT	Front	0.300	0.052	0.002	0.352	0.302	0.192	0.142
		Back	0.503	0.045	0.046	0.548	0.549	1.116	1.117
	CDMA2000 BC1_LAT	Front	0.687	0.052	0.002	0.739	0.689	0.192	0.142
		Back	0.891	0.045	0.046	0.936	0.937	1.116	1.117
LTE	LTE Band 71_LAT	Front	0.333	0.052	0.002	0.385	0.335	0.192	0.142
		Back	0.389	0.045	0.046	0.434	0.435	1.116	1.117
	LTE Band 12_LAT	Front	0.176	0.052	0.002	0.228	0.178	0.192	0.142
		Back	0.288	0.045	0.046	0.333	0.334	1.116	1.117
	LTE Band 13_LAT	Front	0.331	0.052	0.002	0.383	0.333	0.192	0.142
		Back	0.472	0.045	0.046	0.517	0.518	1.116	1.117
	LTE Band 5_LAT	Front	0.300	0.052	0.002	0.352	0.302	0.192	0.142
		Back	0.524	0.045	0.046	0.569	0.570	1.116	1.117
	LTE Band 26_LAT	Front	0.292	0.052	0.002	0.344	0.294	0.192	0.142
		Back	0.525	0.045	0.046	0.570	0.571	1.116	1.117
	LTE Band 66_LAT	Front	0.449	0.052	0.002	0.501	0.451	0.192	0.142
		Back	0.548	0.045	0.046	0.593	0.594	1.116	1.117
	LTE Band 25_LAT	Front	0.662	0.052	0.002	0.714	0.664	0.192	0.142
		Back	0.749	0.045	0.046	0.794	0.795	1.116	1.117
	LTE Band 30_LAT	Front	0.844	0.052	0.002	0.896	0.846	0.192	0.142
		Back	0.855	0.045	0.046	0.900	0.901	1.116	1.117
	LTE Band 7_LAT	Front	0.595	0.052	0.002	0.647	0.597	0.192	0.142
		Back	0.811	0.045	0.046	0.856	0.857	1.116	1.117
	LTE Band 41_LAT	Front	0.514	0.052	0.002	0.566	0.516	0.192	0.142
		Back	0.760	0.045	0.046	0.805	0.806	1.116	1.117
	LTE Band 41(HPUE)_LAT	Front	0.392	0.052	0.002	0.444	0.394	0.192	0.142
		Back	0.781	0.045	0.046	0.826	0.827	1.116	1.117
	LTE Band 48	Front	0.159	0.052	0.002	0.211	0.161	0.192	0.142
		Back	0.403	0.045	0.046	0.448	0.449	1.116	1.117

18.4 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)
			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	WCDMA IV_UAT	Front	1.897	0.395	0.422	2.292	2.319
		Back	1.075	0.969	0.813	2.044	1.888
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	2.606	0.243	0.326	2.849	2.932
		Bottom side				0.000	0.000
	WCDMA II_UAT	Front	2.188	0.395	0.422	2.583	2.610
		Back	1.027	0.969	0.813	1.996	1.840
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	2.433	0.243	0.326	2.676	2.759
		Bottom side				0.000	0.000
CDMA	CDMA2000 BC1_UAT	Front	1.707	0.395	0.422	2.102	2.129
		Back	0.899	0.969	0.813	1.868	1.712
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	1.244	0.243	0.326	1.487	1.570
		Bottom side				0.000	0.000
LTE	LTE Band 66_UAT	Front		0.395	0.422	0.395	0.422
		Back		0.969	0.813	0.969	0.813
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	1.872	0.243	0.326	2.115	2.198
		Bottom side				0.000	0.000
	LTE Band 25_UAT	Front	1.867	0.395	0.422	2.262	2.289
		Back	1.086	0.969	0.813	2.055	1.899
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	2.501	0.243	0.326	2.744	2.827
		Bottom side				0.000	0.000
	LTE Band 30_UAT	Front	1.918	0.395	0.422	2.313	2.340
		Back	1.106	0.969	0.813	2.075	1.919
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	2.307	0.243	0.326	2.550	2.633
		Bottom side				0.000	0.000

	LTE Band 7_UAT	Front	1.868	0.395	0.422	2.263	2.290
		Back	1.072	0.969	0.813	2.041	1.885
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	2.306	0.243	0.326	2.549	2.632
		Bottom side				0.000	0.000
	LTE Band 41_UAT	Front		0.395	0.422	0.395	0.422
		Back		0.969	0.813	0.969	0.813
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	2.408	0.243	0.326	2.651	2.734
		Bottom side				0.000	0.000
	LTE Band 41(HPUE)_UAT	Front		0.395	0.422	0.395	0.422
		Back		0.969	0.813	0.969	0.813
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	2.496	0.243	0.326	2.739	2.822
		Bottom side				0.000	0.000
	LTE Band 48	Front		0.395	0.422	0.395	0.422
		Back	1.695	0.969	0.813	2.664	2.508
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side	2.026	0.243	0.326	2.269	2.352
		Bottom side				0.000	0.000

WWAN Band		Exposure Position	1	2	4	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	WCDMA IV_UAT	Front	1.897	0.152	0.237	2.286
		Back	1.075	0.414	0.512	2.001
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side	2.606	0.092	0.162	2.860
		Bottom side				0.000
	WCDMA II_UAT	Front	2.188	0.152	0.237	2.577
		Back	1.027	0.414	0.512	1.953
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side	2.433	0.092	0.162	2.687
		Bottom side				0.000
CDMA	CDMA2000 BC1_UAT	Front	1.707	0.152	0.237	2.096
		Back	0.899	0.414	0.512	1.825
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side	1.244	0.092	0.162	1.498
		Bottom side				0.000
LTE	LTE Band 66_UAT	Front		0.152	0.237	0.389
		Back		0.414	0.512	0.926
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side	1.872	0.092	0.162	2.126
		Bottom side				0.000
	LTE Band 25_UAT	Front	1.867	0.152	0.237	2.256
		Back	1.086	0.414	0.512	2.012
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side	2.501	0.092	0.162	2.755
		Bottom side				0.000
	LTE Band 30_UAT	Front	1.918	0.152	0.237	2.307
		Back	1.106	0.414	0.512	2.032
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side	2.307	0.092	0.162	2.561
		Bottom side				0.000
	LTE Band 7_UAT	Front	1.868	0.152	0.237	2.257
		Back	1.072	0.414	0.512	1.998
		Left side				0.000

		Right side		0.216	0.308	0.524
		Top side	2.306	0.092	0.162	2.560
		Bottom side				0.000
	LTE Band 41_UAT	Front		0.152	0.237	0.389
		Back		0.414	0.512	0.926
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side	2.408	0.092	0.162	2.662
		Bottom side				0.000
	LTE Band 41(HPUE)_UAT	Front		0.152	0.237	0.389
		Back		0.414	0.512	0.926
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side	2.496	0.092	0.162	2.750
		Bottom side				0.000
	LTE Band 48	Front		0.152	0.237	0.389
		Back	1.695	0.414	0.512	2.621
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side	2.026	0.092	0.162	2.280
		Bottom side				0.000

Exposure Position	2	4	2+4 Summed 10g SAR (W/kg)
	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	
	10g SAR (W/kg)	10g SAR (W/kg)	
Front	0.282	0.237	0.519
Back	0.907	0.512	1.419
Right side	0.440	0.308	0.748
Top side	0.219	0.181	0.400

WWAN Band		Exposure Position	1	2	4	1+2 Summed 10g SAR (W/kg)	1+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	WCDMA IV_LAT	Front		0.395	0.422	0.395	0.422
		Back	1.877	0.969	0.813	2.846	2.690
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side		0.243	0.326	0.243	0.326
		Bottom side	1.655			1.655	1.655
	WCDMA II_LAT	Front	2.231	0.395	0.422	2.626	2.653
		Back	2.117	0.969	0.813	3.086	2.930
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side		0.243	0.326	0.243	0.326
		Bottom side	1.495			1.495	1.495
CDMA	CDMA2000 BC1_LAT	Front		0.395	0.422	0.395	0.422
		Back		0.969	0.813	0.969	0.813
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side		0.243	0.326	0.243	0.326
		Bottom side	1.427			1.427	1.427
LTE	LTE Band 66_LAT	Front		0.395	0.422	0.395	0.422
		Back		0.969	0.813	0.969	0.813
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side		0.243	0.326	0.243	0.326
		Bottom side	1.890			1.890	1.890
	LTE Band 25_LAT	Front	2.262	0.395	0.422	2.657	2.684
		Back	2.036	0.969	0.813	3.005	2.849
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side		0.243	0.326	0.243	0.326
		Bottom side	1.508			1.508	1.508
	LTE Band 30_LAT	Front	1.467	0.395	0.422	1.862	1.889
		Back	2.101	0.969	0.813	3.070	2.914
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side		0.243	0.326	0.243	0.326
		Bottom side	1.326			1.326	1.326
	LTE Band 7_LAT	Front		0.395	0.422	0.395	0.422
		Back	2.270	0.969	0.813	3.239	3.083
		Left side				0.000	0.000

		Right side		0.559	0.499	0.559	0.499
		Top side		0.243	0.326	0.243	0.326
		Bottom side	1.820			1.820	1.820
	LTE Band 41_LAT	Front		0.395	0.422	0.395	0.422
		Back		0.969	0.813	0.969	0.813
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side		0.243	0.326	0.243	0.326
		Bottom side	1.157			1.157	1.157
	LTE Band 41(HPUE)_LAT	Front		0.395	0.422	0.395	0.422
		Back		0.969	0.813	0.969	0.813
		Left side				0.000	0.000
		Right side		0.559	0.499	0.559	0.499
		Top side		0.243	0.326	0.243	0.326
		Bottom side	1.523			1.523	1.523



WWAN Band		Exposure Position	1	2	4	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	WCDMA IV_LAT	Front		0.152	0.237	0.389
		Back	1.877	0.414	0.512	2.803
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side		0.092	0.162	0.254
		Bottom side	1.655			1.655
	WCDMA II_LAT	Front	2.231	0.152	0.237	2.620
		Back	2.117	0.414	0.512	3.043
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side		0.092	0.162	0.254
		Bottom side	1.495			1.495
CDMA	CDMA2000 BC1_LAT	Front		0.152	0.237	0.389
		Back		0.414	0.512	0.926
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side		0.092	0.162	0.254
		Bottom side	1.427			1.427
LTE	LTE Band 66_LAT	Front		0.152	0.237	0.389
		Back		0.414	0.512	0.926
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side		0.092	0.162	0.254
		Bottom side	1.890			1.890
	LTE Band 25_LAT	Front	2.262	0.152	0.237	2.651
		Back	2.036	0.414	0.512	2.962
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side		0.092	0.162	0.254
		Bottom side	1.508			1.508
	LTE Band 30_LAT	Front	1.467	0.152	0.237	1.856
		Back	2.101	0.414	0.512	3.027
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side		0.092	0.162	0.254
		Bottom side	1.326			1.326
	LTE Band 7_LAT	Front		0.152	0.237	0.389
		Back	2.270	0.414	0.512	3.196
		Left side				0.000

		Right side		0.216	0.308	0.524
		Top side		0.092	0.162	0.254
		Bottom side	1.820			1.820
	LTE Band 41_LAT	Front		0.152	0.237	0.389
		Back		0.414	0.512	0.926
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side		0.092	0.162	0.254
		Bottom side	1.157			1.157
	LTE Band 41(HPUE)_LAT	Front		0.152	0.237	0.389
		Back		0.414	0.512	0.926
		Left side				0.000
		Right side		0.216	0.308	0.524
		Top side		0.092	0.162	0.254
		Bottom side	1.523			1.523



5G NR mode

WWAN Band		Exposure Position		1		2		3	4	5	6			
			LTE Standalone Maxmun Power (dBm)	LTE Standalone 10g SAR (W/kg)	NR Standalone Maxmun Power (dBm)	NR Standalone 10g SAR (W/kg)	EN-DC Active LTE Standalone Maxmun Power (dBm)	EN-DC Active LTE	NR	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	1+2 Summed 10g SAR (W/kg)	3+4+5 Summed 10g SAR (W/kg)	3+4+6 Summed 10g SAR (W/kg)
								10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)			
N71_UAT	LTE Band 2_UAT	Front	22.30	1.867	24.30		22.30	1.867		0.395	0.340	1.867	2.262	2.207
		Back	22.30	1.086	24.30		22.30	1.086		0.969	0.643	1.086	2.055	1.729
		Left side	22.30		24.30		22.30					0.000	0.000	0.000
		Right side	22.30		24.30		22.30			0.559	0.263	0.000	0.559	0.263
		Top side	22.30	2.501	24.30		22.30	2.501		0.243	0.207	2.501	2.744	2.708
		Bottom side	22.30		24.30		22.30					0.000	0.000	0.000
	LTE Band 66_UAT	Front	22.30		24.30		22.30			0.395	0.340	0.000	0.395	0.340
		Back	22.30		24.30		22.30			0.969	0.643	0.000	0.969	0.643
		Left side	22.30		24.30		22.30					0.000	0.000	0.000
		Right side	22.30		24.30		22.30			0.559	0.263	0.000	0.559	0.263
		Top side	22.30	1.872	24.30		22.30	1.872		0.243	0.207	1.872	2.115	2.079
		Bottom side	22.30		24.30		22.30					0.000	0.000	0.000
N2_UAT	LTE Band 5_UAT	Front	23.80		22.50		23.80			0.395	0.340	0.000	0.395	0.340
		Back	23.80		22.50		23.80			0.969	0.643	0.000	0.969	0.643
		Left side	23.80		22.50		23.80					0.000	0.000	0.000
		Right side	23.80		22.50		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		22.50	0.528	23.80		0.528	0.243	0.207	0.528	0.771	0.735
		Bottom side	23.80		22.50		23.80					0.000	0.000	0.000
	LTE Band 12_UAT	Front	23.80		22.50		23.80			0.395	0.340	0.000	0.395	0.340
		Back	23.80		22.50		23.80			0.969	0.643	0.000	0.969	0.643
		Left side	23.80		22.50		23.80					0.000	0.000	0.000
		Right side	23.80		22.50		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		22.50	0.528	23.80		0.528	0.243	0.207	0.528	0.771	0.735
		Bottom side	23.80		22.50		23.80					0.000	0.000	0.000
N5_UAT	LTE Band 2_UAT	Front	22.30	1.867	24.30		22.30	1.867		0.395	0.340	1.867	2.262	2.207
		Back	22.30	1.086	24.30		22.30	1.086		0.969	0.643	1.086	2.055	1.729
		Left side	22.30		24.30		22.30					0.000	0.000	0.000
		Right side	22.30		24.30		22.30			0.559	0.263	0.000	0.559	0.263
		Top side	22.30	2.501	24.30		22.30	2.501		0.243	0.207	2.501	2.744	2.708
		Bottom side	22.30		24.30		22.30					0.000	0.000	0.000
	LTE Band 66_UAT	Front	22.30		24.30		22.30			0.395	0.340	0.000	0.395	0.340
		Back	22.30		24.30		22.30			0.969	0.643	0.000	0.969	0.643
		Left side	22.30		24.30		22.30					0.000	0.000	0.000
		Right side	22.30		24.30		22.30			0.559	0.263	0.000	0.559	0.263
		Top side	22.30	1.872	24.30		22.30	1.872		0.243	0.207	1.872	2.115	2.079
		Bottom side	22.30		24.30		22.30					0.000	0.000	0.000



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		Bottom side	22.30		24.30		22.30					0.000	0.000	0.000
N66_UAT	LTE Band 5_UAT	Front	23.80		22.50		23.80			0.395	0.340	0.000	0.395	0.340
		Back	23.80		22.50		23.80			0.969	0.643	0.000	0.969	0.643
		Left side	23.80		22.50		23.80					0.000	0.000	0.000
		Right side	23.80		22.50		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		22.50		23.80			0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		22.50		23.80					0.000	0.000	0.000
	LTE Band 12_UAT	Front	23.80		22.50		23.80			0.395	0.340	0.000	0.395	0.340
		Back	23.80		22.50		23.80			0.969	0.643	0.000	0.969	0.643
		Left side	23.80		22.50		23.80					0.000	0.000	0.000
		Right side	23.80		22.50		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		22.50		23.80			0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		22.50		23.80					0.000	0.000	0.000
	LTE Band 13_UAT	Front	23.80		22.50		23.80			0.395	0.340	0.000	0.395	0.340
		Back	23.80		22.50		23.80			0.969	0.643	0.000	0.969	0.643
		Left side	23.80		22.50		23.80					0.000	0.000	0.000
		Right side	23.80		22.50		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		22.50		23.80			0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		22.50		23.80					0.000	0.000	0.000
N41_UAT_NC	LTE Band 26_UAT	Front	23.80		23.30		23.80			0.395	0.340	0.000	0.395	0.340
		Back	23.80		23.30		23.80			0.969	0.643	0.000	0.969	0.643
		Left side	23.80		23.30		23.80					0.000	0.000	0.000
		Right side	23.80		23.30		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		23.30		23.80			0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		23.30		23.80					0.000	0.000	0.000
N41_UAT_FC	LTE Band 2_LAT	Front	17.30		24.40		17.30			0.395	0.340	0.000	0.395	0.340
		Back	17.30		24.40		17.30			0.969	0.643	0.000	0.969	0.643
		Left side	17.30		24.40		17.30					0.000	0.000	0.000
		Right side	17.30		24.40		17.30			0.559	0.263	0.000	0.559	0.263
		Top side	17.30		24.40	1.371	17.30		1.371	0.243	0.207	1.371	1.614	1.578
		Bottom side	17.30	0.734	24.40		17.30	0.734				0.734	0.734	0.734
	LTE Band 25_LAT	Front	17.30		24.40		17.30			0.395	0.340	0.000	0.395	0.340
		Back	17.30		24.40		17.30			0.969	0.643	0.000	0.969	0.643
		Left side	17.30		24.40		17.30					0.000	0.000	0.000
		Right side	17.30		24.40		17.30			0.559	0.263	0.000	0.559	0.263
		Top side	17.30		24.40	1.371	17.30		1.371	0.243	0.207	1.371	1.614	1.578
		Bottom side	17.30	0.823	24.40		17.30	0.823				0.823	0.823	0.823
	LTE Band 66_LAT	Front	17.80		24.40		17.80			0.395	0.340	0.000	0.395	0.340
		Back	17.80		24.40		17.80			0.969	0.643	0.000	0.969	0.643
		Left side	17.80		24.40		17.80					0.000	0.000	0.000
		Right side	17.80		24.40		17.80			0.559	0.263	0.000	0.559	0.263
		Top side	17.80		24.40	1.371	17.80		1.371	0.243	0.207	1.371	1.614	1.578
		Bottom side	17.80	0.903	24.40		17.80	0.903				0.903	0.903	0.903



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	LTE Band 41_LAT	Front	16.80		24.40		16.80		0.395	0.340	0.000	0.395	0.340
		Back	16.80		24.40		16.80		0.969	0.643	0.000	0.969	0.643
		Left side	16.80		24.40		16.80				0.000	0.000	0.000
		Right side	16.80		24.40		16.80		0.559	0.263	0.000	0.559	0.263
		Top side	16.80		24.40	1.371	16.80	1.371	0.243	0.207	1.371	1.614	1.578
		Bottom side	16.80	1.017	24.40		16.80	1.017			1.017	1.017	1.017
N71_LAT	LTE Band 2_LAT	Front	17.30		24.30		17.30		0.395	0.340	0.000	0.395	0.340
		Back	17.30		24.30		17.30		0.969	0.643	0.000	0.969	0.643
		Left side	17.30		24.30		17.30				0.000	0.000	0.000
		Right side	17.30		24.30		17.30		0.559	0.263	0.000	0.559	0.263
		Top side	17.30		24.30		17.30		0.243	0.207	0.000	0.243	0.207
		Bottom side	17.30	0.734	24.30		17.30	0.734			0.734	0.734	0.734
	LTE Band 66_LAT	Front	17.80		24.30		17.80		0.395	0.340	0.000	0.395	0.340
		Back	17.80		24.30		17.80		0.969	0.643	0.000	0.969	0.643
		Left side	17.80		24.30		17.80				0.000	0.000	0.000
		Right side	17.80		24.30		17.80		0.559	0.263	0.000	0.559	0.263
		Top side	17.80		24.30		17.80		0.243	0.207	0.000	0.243	0.207
		Bottom side	17.80	0.903	24.30		17.80	0.903			0.903	0.903	0.903
N2_LAT	LTE Band 5_LAT	Front	23.80		24.30		23.80		0.395	0.340	0.000	0.395	0.340
		Back	23.80		24.30		23.80		0.969	0.643	0.000	0.969	0.643
		Left side	23.80		24.30		23.80				0.000	0.000	0.000
		Right side	23.80		24.30		23.80		0.559	0.263	0.000	0.559	0.263
		Top side	23.80		24.30		23.80		0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		24.30		23.80				0.000	0.000	0.000
	LTE Band 12_LAT	Front	23.80		24.30		23.80		0.395	0.340	0.000	0.395	0.340
		Back	23.80		24.30		23.80		0.969	0.643	0.000	0.969	0.643
		Left side	23.80		24.30		23.80				0.000	0.000	0.000
		Right side	23.80		24.30		23.80		0.559	0.263	0.000	0.559	0.263
		Top side	23.80		24.30		23.80		0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		24.30		23.80				0.000	0.000	0.000
N5_LAT	LTE Band 2_LAT	Front	17.30		24.30		17.30		0.395	0.340	0.000	0.395	0.340
		Back	17.30		24.30		17.30		0.969	0.643	0.000	0.969	0.643
		Left side	17.30		24.30		17.30				0.000	0.000	0.000
		Right side	17.30		24.30		17.30		0.559	0.263	0.000	0.559	0.263
		Top side	17.30		24.30		17.30		0.243	0.207	0.000	0.243	0.207
		Bottom side	17.30	0.734	24.30		17.30	0.734			0.734	0.734	0.734
	LTE Band 66_LAT	Front	17.80		24.30		17.80		0.395	0.340	0.000	0.395	0.340
		Back	17.80		24.30		17.80		0.969	0.643	0.000	0.969	0.643
		Left side	17.80		24.30		17.80				0.000	0.000	0.000
		Right side	17.80		24.30		17.80		0.559	0.263	0.000	0.559	0.263
		Top side	17.80		24.30		17.80		0.243	0.207	0.000	0.243	0.207
		Bottom side	17.80	0.903	24.30		17.80	0.903			0.903	0.903	0.903
N66_LAT	LTE Band 5_LAT	Front	23.80		20.30		23.80		0.395	0.340	0.000	0.395	0.340



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		Back	23.80		20.30		23.80			0.969	0.643	0.000	0.969	0.643
		Left side	23.80		20.30		23.80					0.000	0.000	0.000
		Right side	23.80		20.30		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		20.30		23.80			0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		20.30	1.039	23.80		1.039			1.039	1.039	1.039
	LTE Band 12_LAT	Front	23.80		20.30		23.80			0.395	0.340	0.000	0.395	0.340
		Back	23.80		20.30		23.80			0.969	0.643	0.000	0.969	0.643
		Left side	23.80		20.30		23.80					0.000	0.000	0.000
		Right side	23.80		20.30		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		20.30		23.80			0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		20.30	1.039	23.80		1.039			1.039	1.039	1.039
	LTE Band 13_LAT	Front	23.80		20.30		23.80			0.395	0.340	0.000	0.395	0.340
		Back	23.80		20.30		23.80			0.969	0.643	0.000	0.969	0.643
		Left side	23.80		20.30		23.80					0.000	0.000	0.000
		Right side	23.80		20.30		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		20.30		23.80			0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		20.30	1.039	23.80		1.039			1.039	1.039	1.039
N41_LAT_FC	LTE Band 26_LAT	Front	23.80		18.40		23.80			0.395	0.340	0.000	0.395	0.340
		Back	23.80		18.40	2.022	23.80		2.022	0.969	0.643	2.022	2.991	2.665
		Left side	23.80		18.40		23.80					0.000	0.000	0.000
		Right side	23.80		18.40		23.80			0.559	0.263	0.000	0.559	0.263
		Top side	23.80		18.40		23.80			0.243	0.207	0.000	0.243	0.207
		Bottom side	23.80		18.40	1.398	23.80		1.398			1.398	1.398	1.398

18.5 Inter-Band uplink CA consideration

<Inter-band uplink CA combination>

2CC Uplink Carrier Aggregation				
Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset
1	2A-12A	2A		
2	2A-13A	2A		
3	4A-12A	4A		
4	4A-13A	4A		
5	12A-66A	66A		
6	13A-66A	66A		

General Note:

4. According to October 2018 TCB workshop, uplink CA SAR test guidance as follows:
 - e. Provide the single uplink SAR values you have obtained for the relevant SAR configuration and frequency bands that employ inter-band uplink carrier aggregation.
 - f. 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.
 - g. If one on the single uplink 1g SAR values is greater than 0.8W/kg, instead of algebraically summing the 1g SAR values, sum up the SAR distributions, similar to the enlarged zoom scan (volume scan) procedures found in FCC KDB publication 865664 D01 SAR measurement 100MHz to 6GHz V01r04
 - h. 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.
5. 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 performed sim-Tx analysis with WiFi and Bluetooth.
6. 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

<Inter-band uplink CA Sim-Tx analysis>

<Head exposure condition>

Head		Standalone				UL CA active				WLAN				Inter-band UL CA summation			
WWAN Band	Exposure Position	CC1	CC2	CC1	CC2	CC1	CC2	1	8	2	4	6	7	1+8+6 Summed 1g SAR (W/kg)	1+8+7 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)	4+7 Summed 1g SAR (W/kg)
		Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN 1g SAR (W/kg)	LTE B12 1g SAR (W/kg)	Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN 1g SAR (W/kg)	LTE B12 1g SAR (W/kg)	2.4GHz WLAN Ant 1+2 1g SAR (W/kg)	5GHz WLAN Ant 1+2 1g SAR (W/kg)	Bluetooth Ant 1 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)				
LTE Band 2_UAT	Right Cheek	13.30	22.80	0.540	0.400	10.30	19.80	0.271	0.201	0.260	0.042	0.074	0.002	0.546	0.474	0.116	0.044
	Right Tilted	13.30	22.80	0.645	0.083	10.30	19.80	0.323	0.042	0.250	0.019	0.058	0.002	0.423	0.367	0.077	0.021
	Left Cheek	13.30	22.80	0.409	0.614	10.30	19.80	0.205	0.308	0.965	0.812	0.189	0.006	0.702	0.519	1.001	0.818
	Left Tilted	13.30	22.80	0.513	0.099	10.30	19.80	0.257	0.050	0.582	0.452	0.122	0.002	0.429	0.309	0.574	0.454
LTE Band 4_UAT	Right Cheek	13.80	22.80	0.623	0.400	10.80	19.80	0.312	0.201	0.260	0.042	0.074	0.002	0.587	0.515	0.116	0.044
	Right Tilted	13.80	22.80	0.794	0.083	10.80	19.80	0.398	0.042	0.250	0.019	0.058	0.002	0.498	0.442	0.077	0.021
	Left Cheek	13.80	22.80	0.396	0.614	10.80	19.80	0.198	0.308	0.965	0.812	0.189	0.006	0.695	0.512	1.001	0.818
	Left Tilted	13.80	22.80	0.519	0.099	10.80	19.80	0.260	0.050	0.582	0.452	0.122	0.002	0.432	0.312	0.574	0.454



Head		Standalone				UL CA active				WLAN				Inter-band UL CA summation			
WWAN Band	Exposure Position	CC1	CC2	CC1	CC2	CC1	CC2	1	8	2	4	6	7	1+8+6 Summed 1g SAR (W/kg)	1+8+7 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)	4+7 Summed 1g SAR (W/kg)
		Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B13	Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B13	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2				
				1g SAR (W/kg)	1g SAR (W/kg)			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
LTE Band 2_UAT	Right Cheek	13.30	22.30	0.540	0.439	10.30	19.30	0.271	0.220	0.260	0.042	0.074	0.002	0.565	0.493	0.116	0.044
	Right Tilted	13.30	22.30	0.645	0.085	10.30	19.30	0.323	0.043	0.250	0.019	0.058	0.002	0.424	0.368	0.077	0.021
	Left Cheek	13.30	22.30	0.409	0.749	10.30	19.30	0.205	0.375	0.965	0.812	0.189	0.006	0.769	0.586	1.001	0.818
	Left Tilted	13.30	22.30	0.513	0.110	10.30	19.30	0.257	0.055	0.582	0.452	0.122	0.002	0.434	0.314	0.574	0.454
LTE Band 4_UAT	Right Cheek	13.80	22.30	0.623	0.439	10.80	19.30	0.312	0.220	0.260	0.042	0.074	0.002	0.606	0.534	0.116	0.044
	Right Tilted	13.80	22.30	0.794	0.085	10.80	19.30	0.398	0.043	0.250	0.019	0.058	0.002	0.499	0.443	0.077	0.021
	Left Cheek	13.80	22.30	0.396	0.749	10.80	19.30	0.198	0.375	0.965	0.812	0.189	0.006	0.762	0.579	1.001	0.818
	Left Tilted	13.80	22.30	0.519	0.110	10.80	19.30	0.260	0.055	0.582	0.452	0.122	0.002	0.437	0.317	0.574	0.454
Head		Standalone				UL CA active				WLAN				Inter-band UL CA summation			
WWAN Band	Exposure Position	CC1	CC2	CC1	CC2	CC1	CC2	1	8	2	4	6	7	1+8+6 Summed 1g SAR (W/kg)	1+8+7 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)	4+7 Summed 1g SAR (W/kg)
		Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B66	Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B66	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	Bluetooth Ant 2				
				1g SAR (W/kg)	1g SAR (W/kg)			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
LTE Band 12_UAT	Right Cheek	22.80	13.80	0.400	0.623	19.80	10.80	0.201	0.312	0.260	0.042	0.074	0.002	0.587	0.515	0.116	0.044
	Right Tilted	22.80	13.80	0.083	0.794	19.80	10.80	0.042	0.398	0.250	0.019	0.058	0.002	0.498	0.442	0.077	0.021
	Left Cheek	22.80	13.80	0.614	0.396	19.80	10.80	0.308	0.198	0.965	0.812	0.189	0.006	0.695	0.512	1.001	0.818
	Left Tilted	22.80	13.80	0.099	0.519	19.80	10.80	0.050	0.260	0.582	0.452	0.122	0.002	0.432	0.312	0.574	0.454
LTE Band 13_UAT	Right Cheek	22.30	13.80	0.439	0.623	19.30	10.80	0.220	0.312	0.260	0.042	0.074	0.002	0.606	0.534	0.116	0.044
	Right Tilted	22.30	13.80	0.085	0.794	19.30	10.80	0.043	0.398	0.250	0.019	0.058	0.002	0.499	0.443	0.077	0.021
	Left Cheek	22.30	13.80	0.749	0.396	19.30	10.80	0.375	0.198	0.965	0.812	0.189	0.006	0.762	0.579	1.001	0.818
	Left Tilted	22.30	13.80	0.110	0.519	19.30	10.80	0.055	0.260	0.582	0.452	0.122	0.002	0.437	0.317	0.574	0.454

Head		Standalone				UL CA active				WLAN	Inter-band UL CA summation
WWAN Band	Exposure Position	CC1	CC2	CC1	CC2	CC1	CC2	1	8	2	1+8+2 Summed 1g SAR (W/kg)
		Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B12	Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B12	2.4GHz WLAN Ant 1+2	
				1g SAR (W/kg)	1g SAR (W/kg)			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 2_UAT	Right Cheek	12.30	20.80	0.416	0.29	9.30	17.80	0.209	0.145	0.214	0.568
	Right Tilted	12.30	20.80	0.514	0.05	9.30	17.80	0.258	0.025	0.185	0.468
	Left Cheek	12.30	20.80	0.256	0.38	9.30	17.80	0.128	0.191	0.674	0.993
	Left Tilted	12.30	20.80	0.325	0.07	9.30	17.80	0.163	0.033	0.467	0.663
LTE Band 4_UAT	Right Cheek	12.80	20.80	0.489	0.29	9.80	17.80	0.245	0.145	0.214	0.604
	Right Tilted	12.80	20.80	0.669	0.05	9.80	17.80	0.336	0.025	0.185	0.546
	Left Cheek	12.80	20.80	0.395	0.38	9.80	17.80	0.198	0.191	0.674	1.063
	Left Tilted	12.80	20.80	0.487	0.07	9.80	17.80	0.244	0.033	0.467	0.744
Head		Standalone				UL CA active				WLAN	Inter-band UL CA summation
WWAN Band	Exposure Position	CC1	CC2	CC1	CC2	CC1	CC2	1	8	2	1+8+2 Summed 1g SAR (W/kg)
		Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B13	Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B13	2.4GHz WLAN Ant 1+2	
				1g SAR (W/kg)	1g SAR (W/kg)			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 2_UAT	Right Cheek	12.30	19.80	0.416	0.281	9.30	16.80	0.209	0.141	0.214	0.564
	Right Tilted	12.30	19.80	0.514	0.051	9.30	16.80	0.258	0.025	0.185	0.468
	Left Cheek	12.30	19.80	0.256	0.397	9.30	16.80	0.128	0.199	0.674	1.001
	Left Tilted	12.30	19.80	0.325	0.062	9.30	16.80	0.163	0.031	0.467	0.661
LTE Band 4_UAT	Right Cheek	12.80	19.80	0.489	0.281	9.80	16.80	0.245	0.141	0.214	0.600
	Right Tilted	12.80	19.80	0.669	0.051	9.80	16.80	0.336	0.025	0.185	0.546
	Left Cheek	12.80	19.80	0.395	0.397	9.80	16.80	0.198	0.199	0.674	1.071
	Left Tilted	12.80	19.80	0.487	0.062	9.80	16.80	0.244	0.031	0.467	0.742
Head		Standalone				UL CA active				WLAN	Inter-band UL CA summation
WWAN Band	Exposure Position	CC1	CC2	CC1	CC2	CC1	CC2	1	8	2	1+8+2 Summed 1g SAR (W/kg)
		Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B66	Tune-up Limit (dbm)	Tune-up Limit (dbm)	WWAN	LTE B66	2.4GHz WLAN Ant 1+2	
				1g SAR (W/kg)	1g SAR (W/kg)			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 12_UAT	Right Cheek	20.80	12.80	0.29	0.489	17.80	9.80	0.209	0.245	0.214	0.668
	Right Tilted	20.80	12.80	0.05	0.669	17.80	9.80	0.258	0.336	0.185	0.779
	Left Cheek	20.80	12.80	0.38	0.395	17.80	9.80	0.128	0.198	0.674	1.000
	Left Tilted	20.80	12.80	0.07	0.487	17.80	9.80	0.163	0.244	0.467	0.874
LTE Band 13_UAT	Right Cheek	19.80	12.80	0.281	0.489	16.80	9.80	0.141	0.245	0.214	0.600
	Right Tilted	19.80	12.80	0.051	0.669	16.80	9.80	0.025	0.336	0.185	0.546
	Left Cheek	19.80	12.80	0.397	0.395	16.80	9.80	0.199	0.198	0.674	1.071
	Left Tilted	19.80	12.80	0.062	0.487	16.80	9.80	0.031	0.244	0.467	0.742