

FCC SAR Test Report

APPLICANT : Sun Cupid Technology (HK) Ltd.
EQUIPMENT : 5G Smartphone
BRAND NAME : NUU
MODEL NAME : S6707X
MARKETING NAME : NUU X10 5G, X10 5G
FCC ID : 2ADINS6707X
STANDARD : FCC 47 CFR Part 2 (2.1093)

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

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



Approved by: Si Zhang

Sporton International Inc. (Shenzhen)

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People's Republic of China**



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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA471902	Rev. 01	Initial issue of report.	Sep. 19, 2024

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Sun Cupid Technology (HK) Ltd., 5G Smartphone, S6707X**, are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 10mm)	Body-worn (Separation 15mm)	Highest Simultaneous Transmission
			1g SAR (W/kg)			1g SAR (W/kg)
Licensed	GSM	GSM850	0.59	0.75	0.55	1.49
		GSM1900	0.86	0.82	0.38	
	WCDMA	WCDMA II	0.83	0.85	0.49	
		WCDMA IV	0.87	0.92	0.61	
		WCDMA V	0.43	0.61	0.49	
	LTE	LTE Band 7	0.87	0.86	0.67	
		LTE Band 12/17	0.29	0.48	0.46	
		LTE Band 13	0.35	0.52	0.57	
		LTE Band 25/2	0.82	0.84	0.32	
		LTE Band 26/5	0.41	0.47	0.42	
		LTE Band 30	0.85	0.83	0.81	
		LTE Band 66/4	0.82	0.88	0.47	
		LTE Band 71	0.31	0.43	0.42	
		LTE Band 48	0.82	0.88	0.43	
		5G NR	FR1 n5	0.31	0.42	
	FR1 n7		0.88	0.82	0.65	
	FR1 n25/2		0.87	0.90	0.43	
	FR1 n30		0.78	0.85	0.72	
	FR1 n66		0.81	0.81	0.35	
	FR1 n71		0.26	0.41	0.41	
	FR1 n41/38		0.84	0.82	0.66	
	FR1 n48		0.86	0.93	0.37	
	FR1 n77/78	0.82	0.92	0.42		
DTS	WLAN	2.4GHz WLAN	0.38	0.35	0.32	1.49
NII		5GHz WLAN	0.40	0.43	0.58	1.49
DSS	Bluetooth	2.4GHz Bluetooth	0.20	<0.10	<0.10	1.49
Highest 10g SAR Summary						
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)			Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	GSM	GSM1900	1.98			3.35
	WCDMA	WCDMA II	2.21			
		WCDMA IV	2.03			
	LTE	LTE Band 7	2.37			
		LTE Band 25/2	2.12			
		LTE Band 30	2.29			
		LTE Band 66/4	1.90			
		LTE Band 48	2.15			
	5G NR	FR1 n7	1.93			
		FR1 n25/2	2.04			
		FR1 n30	2.05			
		FR1 n66	2.01			
		FR1 n41/38	2.17			
FR1 n48		2.07				
FR1 n77/78		2.10				
NII	WLAN	5GHz WLAN	1.14			3.35
Date of Testing:			2024/8/22~ 2024/9/7			

Remark:

1. This device supports LTE B2 / B4 / B5 / B17 and B25 / B66 / B26 / B12. Since the supported frequency span for LTE B2 / B4 / B5 / B38 / B43 falls completely within the supports frequency span for LTE B25 / B66 / B26 / B41 / B48, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B41 / B48.
2. This device supports 5GNR n2/n38/n78 and n25/n41/n77. Since the supported frequency span for 5GNR n2/n38/n78 falls completely within the supports frequency span for n25/n41/n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for n25/n41/n77.

Declaration of Conformity:

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

Comments and Explanations:

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

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

2. Administration Data

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

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

Applicant	
Company Name	Sun Cupid Technology (HK) Ltd.
Address	16/F, CEO Tower, 77 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong.

Manufacturer	
Company Name	Suncupid (ShenZhen) Electronic Ltd.
Address	Baolong Industrial City, Longgang District, ShenZhen Hi-Tech Road, Building 1, A7, China.

3. Guidance Applied

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

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 616217 D04 SAR for laptop and tablets v01r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01



4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	5G Smartphone
Brand Name	NUU
Model Name	S6707X
Marketing Name	NUU X10 5G, X10 5G
FCC ID	2ADINS6707X
IMEI Code	350915160001371
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850MHz ~ 1910MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3450 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3800 MHz WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink is supported) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	V01



SW Version	S6707X-AM-U-MV12804-01.f
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	Engineering samples

Remark:

1. This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
3. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
4. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12.
5. The device implements Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). The device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to appendix E. power table.
6. 5GNR n41/n77/n78 supports class 2 level only and it has no class 3 level.
7. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
8. For 5GNR EN-DC mode, standalone SAR performed for 5GNR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
9. This device supports 5GNR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20, 25
	n25	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
	n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20, 25
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50
	n25	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n30	FDD	15	5, 10
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
	n71	FDD	15	5, 10, 15, 20, 25, 30
	n38	TDD	30	10, 15, 20, 25, 30, 35, 40
	n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
	n48	TDD	30	10, 15, 20, 30, 40
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																							
FCC ID	2ADINS6707X																																																																						
Equipment Name	5G Smartphone																																																																						
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																																						
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																																						
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																																						
LTE Voice / Data requirements	Voice and Data																																																																						
LTE Release Version	R16																																																																						
CA Support	Supported, Uplink and Downlink																																																																						
LTE MPR permanently built-in by design	<table><tr><th colspan="8">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</th></tr><tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th><th rowspan="2">MPR (dB)</th></tr><tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr><tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 3</td></tr><tr><td>256 QAM</td><td colspan="6">≥ 1</td><td>≤ 5</td></tr></table>	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
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256 QAM	≥ 1						≤ 5																																																																
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																																						
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																						
Power reduction applied to satisfy SAR compliance	Yes, when operating in Proximity sensors/receiver/hotspot detect mechanism; head/body-worn/hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 13.																																																																						
LTE Carrier Aggregation Combinations	Inter-Band possible combinations and the detail power verification please referred to section 13.																																																																						
LTE Carrier Aggregation Additional Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 2 carriers in the downlink and 2 carriers in the uplink.																																																																						

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900

LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745

LTE Band 5								
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844

LTE Band 7								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510
M	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560

LTE Band 12								
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	711

LTE Band 13				
	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Freq.(MHz)	Channel #	Freq.(MHz)
L	23205	779.5	23230	782
M	23230	782		
H	23255	784.5		

LTE Band 17				
	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Freq.(MHz)	Channel #	Freq. (MHz)
L	23755	706.5	23780	709
M	23790	710	23790	710
H	23825	713.5	23800	711

LTE Band 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 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770

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

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
LM	55810	3607	55815	3607.5	55820	3608	55830	3609
MH	56170	3643	56165	3642.5	56160	3642	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690

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

Band	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
LTE Band 2	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 25	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 5	Yes	Yes	Yes	Yes		
LTE Band 26	Yes	Yes	Yes	Yes	Yes	
LTE Band 12	Yes	Yes	Yes	Yes		
LTE Band 17			Yes	Yes		

2) LTE Bands tune up:

Band	Ant	Full	Sensor on	Receiver on	Hotspot on
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit
LTE Band 2	Ant.3	25	21	17.5	20.5
LTE Band 25	Ant.3	25	21	17.5	20.5
LTE Band 4	Ant.3	25	20.5	16.5	20.5
LTE Band 66	Ant.3	25	20.5	16.5	20.5
LTE Band 5	Ant.0	25	25	25	25
LTE Band 26	Ant.0	25	25	25	25
LTE Band 12	Ant.0	25	25	25	25
LTE Band 17	Ant.0	25	25	25	25

3) LTE Inter-CA Tune up

Band	Ant	Full	Sensor on	Receiver on	Hotspot on
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit
LTE Band 4	Ant.3	25	17.5	13.5	17.5
LTE Band 66	Ant.3	25	17.5	13.5	17.5

4.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77 : 3450 MHz ~ 3980 MHz 5G NR n78 : 3450 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5G NR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B2/5/12/13/30/66
LTE Anchor Bands for n5	LTE B2/30/66
LTE Anchor Bands for n25	LTE B66
LTE Anchor Bands for n66	LTE B2/5/12/13/30/66
LTE Anchor Bands for n41	LTE B2/66
LTE Anchor Bands for n77	LTE B2/5/12/13/30/66
LTE Anchor Bands for n71	LTE B2/66

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band																
NR Band 2 SCS15KHz																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870
M	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378500	1892.5	378000	1890

NR Band 5										
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834		
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839		

NR Band 7 SCS15KHz																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	504000	2520	505000	2525
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510000	2550	509000	2545

NR Band 25 SCS15KHz																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895



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

NR Band 66																		
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	345500	1727.5	346000	1730	346500	1732.5
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352500	1762.5	352000	1760	351500	1757.5

NR Band 71 SCS15KHz													
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	133100	665.5	133600	668	134100	670.5	134600	673	135100	675.5	135600	678	
M	136100	680.5	136100	680.5	136100	680.5	136100	680.5	136100	680.5	136100	680.5	
H	139100	695.5	138600	693	138100	690.5	137600	688	137100	685.5	136600	683	

NR Band 38														
	Bandwidth10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	515004	2575.02	515502	2577.51	516000	2580	516504	2582.52	517002	2585.01	517500	2587.5	518004	2590.02
M	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595
H	522996	2614.98	522498	2612.49	522000	2610	521496	2607.48	520998	2604.99	520500	2602.5	519996	2599.98

NR Band 41																											
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 500202	2501.01	500700	2503.5	501204	2506.02	501702	2508.51	502200	2511	502704	2513.52	503202	2516.01	503700	2518.5	505200	2526	505200	2526	506202	2531.01	507204	2536.02	508200	2541	509202	2546.01
M 518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H 537000	2685	536496	2682.48	535998	2679.99	535500	2677.5	534996	2674.98	534498	2672.49	534000	2670	533496	2667.48	531996	2659.98	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640

NR Band 48 SCS30Hz											
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	637000	3555	637168	3557.52	637334	3560.01	637668	3565.02	638000	3570	
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	
H	646332	3694.98	646166	3692.49	646000	3690	645666	3684.99	645332	3679.98	

NR Band 77 SCS30KHz																					
Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
656000	3840	656000	3840	656000	3840.00	656000	3840.00	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
664832	3972.48	664666	3969.99	664500	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930

NR Band 78 SCS30KHz																									
Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz					
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02						
650000	3750	650000	3750	650000	3750.00	650000	3750.00	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750		
652832	3792.48	652666	3789.99	652500	3787.5	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98						



For <3450 MHz ~ 3550 MHz >

NR Band 77 SCS30KHz																							
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M 633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H 636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

NR Band 78 SCS30KHz																							
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M 633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H 636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

For Part96

NR Band 77																							
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 637000	3555	637168	3557.52	637334	3560.01	637500	3562.5	637668	3565.02	638000	3570	638334	3575.01	638668	3580.02	639000	3585	639334	3590.01	639668	3595.02	640000	3600
M 641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H 646332	3694.98	646166	3692.49	646000	3690	645832	3687.48	645666	3684.99	645332	3624.99	645000	3675	644666	3669.99	644332	3664.98	644000	3660	643666	3654.99	643332	3649.98

NR Band 78																							
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 637000	3555	637168	3557.52	637334	3560.01	637500	3562.5	637668	3565.02	638000	3570	638334	3575.01	638668	3580.02	639000	3585	639334	3590.01	639668	3595.02	640000	3600
M 641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H 646332	3694.98	646166	3692.49	646000	3690	645832	3687.48	645666	3684.99	645332	3624.99	645000	3675	644666	3669.99	644332	3664.98	644000	3660	643666	3654.99	643332	3649.98

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

Band	Duplex	SCS(KHz)	Bandwidths(BW)
FR1 n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
FR1 n25	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
FR1 n38	TDD	30	10, 15, 20, 25, 30, 35, 40
FR1 n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
FR1 n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
FR1 n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

2) NR SA Bands Tune up:

Band	Ant	Full	Sensor on	Receiver on	Hotspot on
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit
FR1 n2	Ant 3	25	21	16.5	22
FR1 n25	Ant 3	25	21	16.5	22
FR1 n38	Ant 3	24	23	19	21.5
FR1 n41	Ant 3	27	23	19	21.5
FR1 n77_Part 27Q&27O	Ant 4	27	20.5	16	21.5
FR1 n78_Part 27Q&27O	Ant 4	27	20.5	16	21.5
FR1 n77_Part 96	Ant 4	25.00	20.50	16.00	21.50
FR1 n78_Part 96	Ant 4	25.00	20.50	16.00	21.50

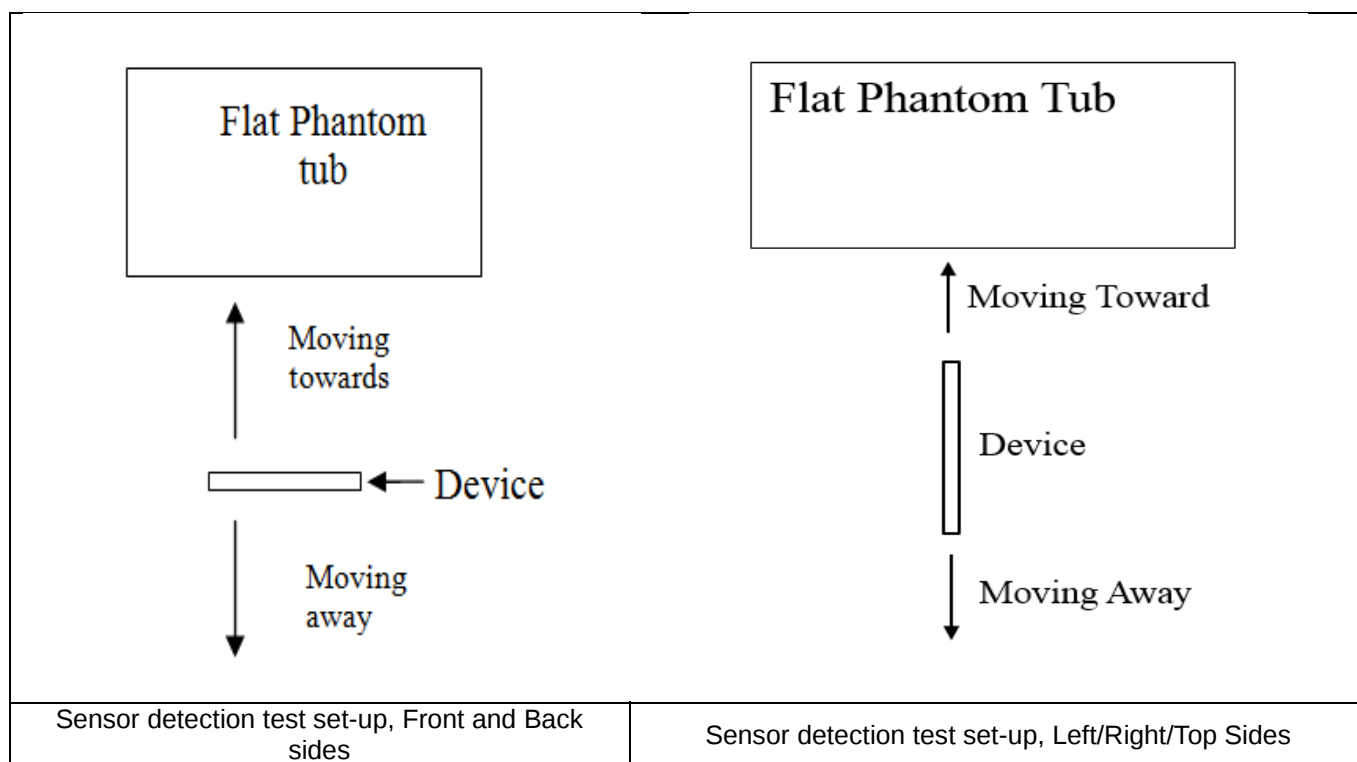
3) NR NSA Bands Tune up:

Band	Ant	Full	Sensor on	Receiver on	Hotspot on
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit
FR1 n2	Ant 3	25	18	13.5	19
FR1 n25	Ant 3	25	18	13.5	19

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 (5850MHz) 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 body or finger or hand at the front or back or bottom or left or top side of the device. There is no need to do sensor coverage testing for the proximity sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the proximity sensor entirely covers the antenna.
3. The sensors can use to detect the proximity of the user's body or handheld states at the front or back or right or left or top side of the device use a detection threshold distance. When front/back/left/right/top sides of body or handheld condition is detected reduced power will be active. The trigger distance shown in the sections below.
4. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed:



<P-Sensor>

<Sensor for Ant3/4/5>

Proximity Sensor Triggering Distance (mm)										
Position	Front		Back		Left Side		Right Side		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving towards	Moving towards	Moving towards	Moving towards	Moving away
Minimum	19	22	24	28	17	21	14	18	24	28

6. RF Exposure Limits

6.1 Uncontrolled Environment

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

6.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

7. Specific Absorption Rate (SAR)

7.1 Introduction

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

7.2 SAR Definition

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

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

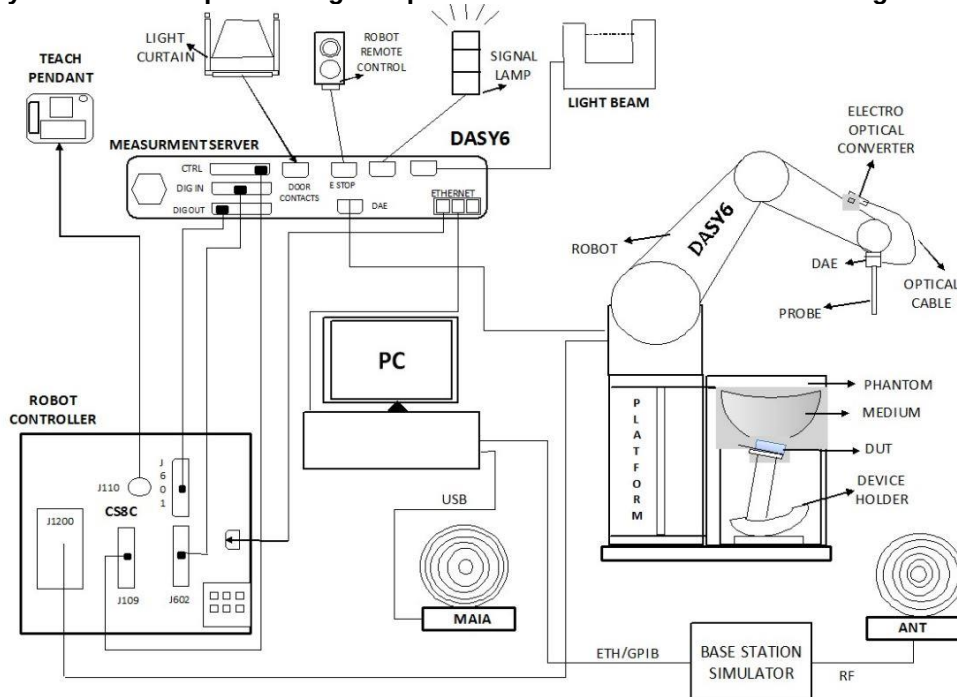
SAR is expressed in units of Watts per kilogram (W/kg)

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

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 DASY5 system used for performing compliance tests consists of the following items:



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

8.1 E-Field Probe

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

<EX3DV4 Probe>

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

8.2 Data Acquisition Electronics (DAE)

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

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



Photo of DAE

8.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices or for evaluating transmitters operating at low frequencies. ELI 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 dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

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

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

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. 15, 2021	Dec. 13, 2024
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 17, 2021	Dec. 15, 2024
SPEAG	1750MHz System Validation Kit	D1750V2	1137	Oct. 19, 2021	Oct. 17, 2024
SPEAG	1900MHz System Validation Kit	D1900V2	5d182	Dec. 20, 2021	Dec. 18, 2024
SPEAG	2300MHz System Validation Kit	D2300V2	1056	Oct. 20, 2021	Oct. 18, 2024
SPEAG	2450MHz System Validation Kit	D2450V2	924	Nov. 03, 2023	Nov. 02, 2024
SPEAG	2600MHz System Validation Kit	D2600V2	1070	Dec. 20, 2021	Dec. 18, 2024
SPEAG	3500MHz System Validation Kit	D3500V2	1037	Nov. 20, 2023	Nov. 19, 2024
SPEAG	3700MHz System Validation Kit	D3700V2	1008	Nov. 20, 2023	Nov. 19, 2024
SPEAG	3900MHz System Validation Kit	D3900V2	1048	Mar. 09, 2023	Mar. 08, 2026
SPEAG	5000MHz System Validation Kit	D5GHzV2	1341	Dec. 13, 2021	Dec. 11, 2024
SPEAG	Data Acquisition Electronics	DAE4	715	Jan. 25, 2024	Jan. 24, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7641	Jun. 03, 2024	Jun. 02, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7577	Dec. 13, 2023	Dec. 12, 2024
SPEAG	SAM Twin Phantom	QD 000 P41 AA	2033	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio communication analyzer	MT8820C	6201563813	Dec. 28, 2023	Dec. 27, 2024
Anritsu	Radio communication analyzer	MT8821C	6272416863	Apr. 08, 2024	Apr. 07, 2025
Agilent	Wireless Communication Test Set	E5515C	MY50267224	Jul. 03, 2024	Jul. 02, 2025
Keysight	Network Analyzer	E5071C	MY46523671	Oct. 16, 2023	Oct. 15, 2024
Speag	Dielectric Assessment KIT	DAK-3.5	1071	Feb. 19, 2024	Feb. 18, 2025
Speag	Dielectric Assessment KIT	DAK-12	1170	Oct. 25, 2023	Oct. 24, 2024
Agilent	Signal Generator	N5181A	MY50145381	Dec. 28, 2023	Dec. 27, 2024
Anritsu	Power Sensor	MA2411B	1306099	Oct. 16, 2023	Oct. 15, 2024
Anritsu	Power Meter	ML2495A	1349001	Oct. 16, 2023	Oct. 15, 2024
Anritsu	Power Sensor	MA2411B	1542004	Dec. 28, 2023	Dec. 27, 2024
Anritsu	Power Meter	ML2495A	1339473	Dec. 28, 2023	Dec. 27, 2024
R&S	CBT BLUETOOTH TESTER	CBT	100963	Dec. 28, 2023	Dec. 27, 2024
R&S	Spectrum Analyzer	FSP7	100818	Jul. 04, 2024	Jul. 03, 2025
TES	Hygrometer	1310	200505600	Jul. 08, 2024	Jul. 07, 2025
Anymetre	Thermo-Hygrometer	JR593	2020062101	Jul. 09, 2024	Jul. 08, 2025
SPEAG	Device Holder	N/A	N/A	N/A	N/A
AR	Amplifier	5S1G4	0333096	Note 1	
Mini-Circuits	Amplifier	ZVE-3W-83+	599201528	Note 1	
ARRA	Power Divider	A3200-2	N/A	Note 1	
ET Industries	Dual Directional Coupler	C-058-10	N/A	Note 1	
Jinkexinhua	Attenuator	10db-8G	N/A	Note 1	

Note:

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

11. System Verification

11.1 Tissue Simulating Liquids

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

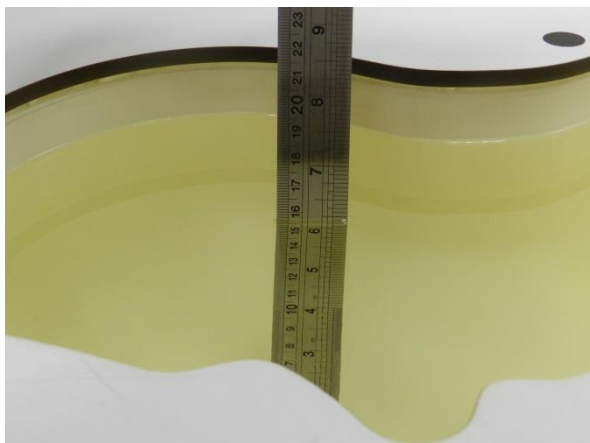


Fig 11.1 Photo of Liquid Height for Head SAR



Fig 11.2 Photo of Liquid Height for Body SAR

11.2 Tissue Verification

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

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

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
750	Head	22.5	0.920	43.600	0.89	41.90	3.37	4.06	±5	2024/8/25
750	Head	22.3	0.900	42.793	0.89	41.90	1.12	2.13	±5	2024/9/4
835	Head	22.7	0.934	41.450	0.90	41.50	3.78	-0.12	±5	2024/8/27
835	Head	22.6	0.942	41.846	0.90	41.50	4.67	0.83	±5	2024/9/5
1750	Head	22.4	1.376	40.534	1.37	40.10	0.44	1.08	±5	2024/8/26
1750	Head	22.3	1.363	38.967	1.37	40.10	-0.51	-2.83	±5	2024/9/1
1900	Head	22.5	1.437	40.992	1.40	40.00	2.64	2.48	±5	2024/8/28
1900	Head	22.8	1.426	39.524	1.40	40.00	1.86	-1.19	±5	2024/9/6
2300	Head	22.6	1.706	39.466	1.67	39.50	2.16	-0.09	±5	2024/8/24
2300	Head	22.4	1.730	40.578	1.67	39.50	3.59	2.73	±5	2024/8/31
2450	Head	22.3	1.810	39.280	1.80	39.20	0.56	0.20	±5	2024/8/23
2450	Head	22.5	1.854	39.607	1.80	39.20	3.00	1.04	±5	2024/9/2
2600	Head	22.6	1.908	38.730	1.96	39.00	-2.65	-0.69	±5	2024/8/23
2600	Head	22.3	1.935	38.536	1.96	39.00	-1.28	-1.19	±5	2024/8/29
3500	Head	22.6	2.851	37.182	2.91	37.90	-2.03	-1.89	±5	2024/8/22
3500	Head	22.4	2.882	37.476	2.91	37.90	-0.96	-1.12	±5	2024/8/30
3700	Head	22.5	3.006	36.933	3.12	37.70	-3.65	-2.03	±5	2024/8/24
3700	Head	22.3	3.033	37.239	3.12	37.70	-2.79	-1.22	±5	2024/9/3
3900	Head	22.8	3.210	36.705	3.33	37.51	-3.60	-2.15	±5	2024/9/1
3900	Head	22.6	3.196	37.021	3.33	37.51	-4.02	-1.30	±5	2024/9/3
5250	Head	22.5	4.527	35.458	4.71	35.95	-3.89	-1.37	±5	2024/8/27
5250	Head	22.9	4.590	35.763	4.71	35.95	-2.55	-0.52	±5	2024/9/3
5600	Head	22.4	4.874	34.973	5.07	35.50	-3.87	-1.48	±5	2024/8/24
5600	Head	22.5	4.953	35.269	5.07	35.50	-2.31	-0.65	±5	2024/9/5
5750	Head	22.8	5.024	34.783	5.22	35.35	-3.75	-1.60	±5	2024/8/29
5750	Head	22.3	5.112	35.065	5.22	35.35	-2.07	-0.81	±5	2024/9/7

11.3 System Performance Check Results

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

<1g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2024/8/25	750	Head	250	1099	7641	715	2.210	8.540	8.84	3.51
2024/9/4	750	Head	250	1099	7577	715	2.150	8.540	8.6	0.70
2024/8/27	835	Head	250	4d162	7641	715	2.510	9.640	10.04	4.15
2024/9/5	835	Head	250	4d162	7577	715	2.460	9.640	9.84	2.07
2024/8/26	1750	Head	250	1137	7641	715	9.520	36.500	38.08	4.33
2024/9/1	1750	Head	250	1137	7577	715	9.100	36.500	36.4	-0.27
2024/8/28	1900	Head	250	5d182	7641	715	10.100	39.600	40.4	2.02
2024/9/6	1900	Head	250	5d182	7577	715	9.750	39.600	39	-1.52
2024/8/24	2300	Head	250	1056	7641	715	12.800	48.800	51.2	4.92
2024/8/31	2300	Head	250	1056	7641	715	13.100	48.800	52.4	7.38
2024/8/23	2450	Head	250	924	7641	715	12.700	52.300	50.8	-2.87
2024/9/2	2450	Head	250	924	7577	715	12.200	52.300	48.8	-6.69
2024/8/23	2600	Head	250	1070	7641	715	14.100	56.200	56.4	0.36
2024/8/29	2600	Head	250	1070	7577	715	13.850	56.200	55.4	-1.42
2024/8/22	3500	Head	100	1037	7641	715	6.980	65.400	69.8	6.73
2024/8/30	3500	Head	100	1037	7577	715	6.740	65.400	67.4	3.06
2024/8/24	3700	Head	100	1008	7641	715	7.110	67.200	71.1	5.80
2024/9/3	3700	Head	100	1008	7577	715	6.950	67.200	69.5	3.42
2024/9/1	3900	Head	100	1048	7641	715	6.550	69.100	65.5	-5.21
2024/9/3	3900	Head	100	1048	7577	715	6.690	69.100	66.9	-3.18
2024/8/27	5250	Head	100	1341	7641	715	8.520	80.700	85.2	5.58
2024/9/3	5250	Head	100	1341	7577	715	8.210	80.700	82.1	1.73
2024/8/24	5600	Head	100	1341	7641	715	8.680	84.500	86.8	2.72
2024/9/5	5600	Head	100	1341	7577	715	8.850	84.500	88.5	4.73
2024/8/29	5750	Head	100	1341	7641	715	8.250	80.600	82.5	2.36
2024/9/7	5750	Head	100	1341	7577	715	7.990	80.600	79.9	-0.87

<10g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2024/8/25	750	Head	250	1099	7641	715	1.450	5.650	5.8	2.65
2024/9/4	750	Head	250	1099	7577	715	1.380	5.650	5.52	-2.30
2024/8/27	835	Head	250	4d162	7641	715	1.610	6.260	6.44	2.88
2024/9/5	835	Head	250	4d162	7577	715	1.560	6.260	6.24	-0.32
2024/8/26	1750	Head	250	1137	7641	715	4.910	19.200	19.64	2.29
2024/9/1	1750	Head	250	1137	7577	715	4.690	19.200	18.76	-2.29
2024/8/28	1900	Head	250	5d182	7641	715	5.110	20.200	20.44	1.19
2024/9/6	1900	Head	250	5d182	7577	715	4.850	20.200	19.4	-3.96
2024/8/24	2300	Head	250	1056	7641	715	5.950	22.800	23.8	4.39
2024/8/31	2300	Head	250	1056	7641	715	6.130	22.800	24.52	7.54
2024/8/23	2450	Head	250	924	7641	715	5.850	24.500	23.4	-4.49
2024/9/2	2450	Head	250	924	7577	715	5.950	24.500	23.8	-2.86
2024/8/23	2600	Head	250	1070	7641	715	6.320	24.600	25.28	2.76
2024/8/29	2600	Head	250	1070	7577	715	6.250	24.600	25	1.63
2024/8/22	3500	Head	100	1037	7641	715	2.580	24.700	25.8	4.45
2024/8/30	3500	Head	100	1037	7577	715	2.490	24.700	24.9	0.81
2024/8/24	3700	Head	100	1008	7641	715	2.610	24.400	26.1	6.97
2024/9/3	3700	Head	100	1008	7577	715	2.530	24.400	25.3	3.69
2024/9/1	3900	Head	100	1048	7641	715	2.390	24.100	23.9	-0.83
2024/9/3	3900	Head	100	1048	7577	715	2.350	24.100	23.5	-2.49
2024/8/27	5250	Head	100	1341	7641	715	2.390	23.100	23.9	3.46
2024/9/3	5250	Head	100	1341	7577	715	2.280	23.100	22.8	-1.30
2024/8/24	5600	Head	100	1341	7641	715	2.410	24.000	24.1	0.42
2024/9/5	5600	Head	100	1341	7577	715	2.530	24.000	25.3	5.42
2024/8/29	5750	Head	100	1341	7641	715	2.310	22.700	23.1	1.76
2024/9/7	5750	Head	100	1341	7577	715	2.240	22.700	22.4	-1.32

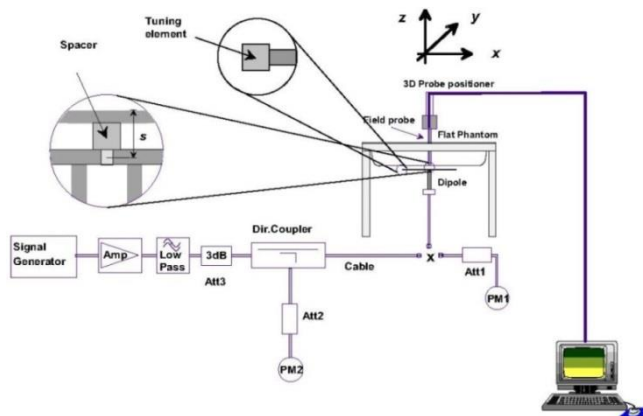


Fig 11.3.1 System Performance Check Setup



Fig 11.3.2 Setup Photo

12. RF Exposure Positions

12.1 Ear and handset reference point

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

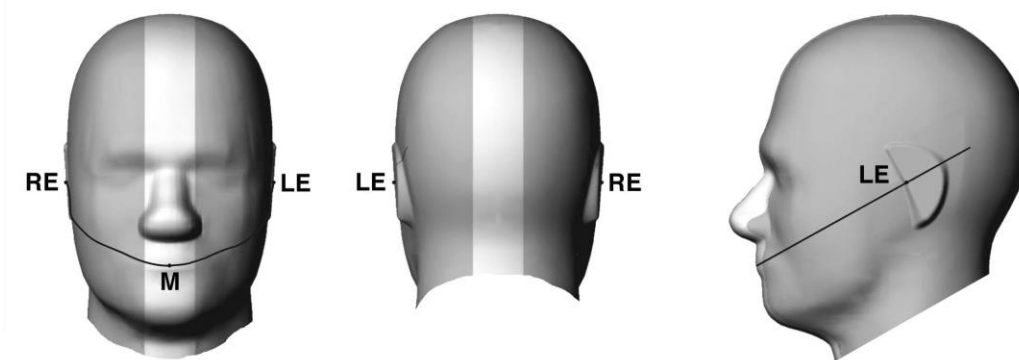


Fig 12.1.1 Front, back, and side views of SAM twin phantom

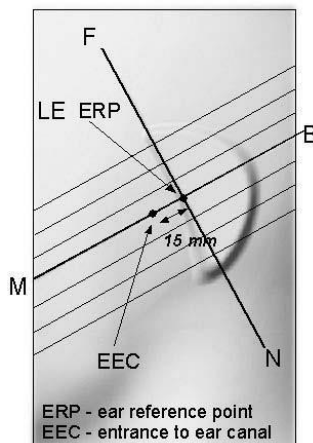


Fig 12.1.2 Close-up side view of phantom showing the ear region.

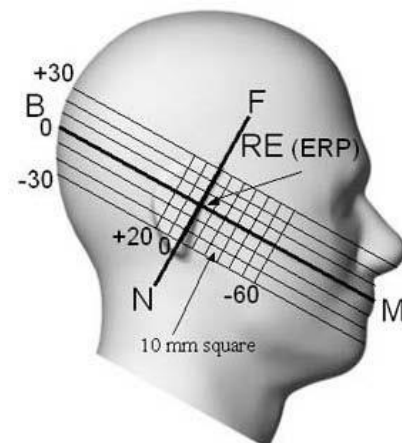


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

12.2 Definition of the cheek position

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

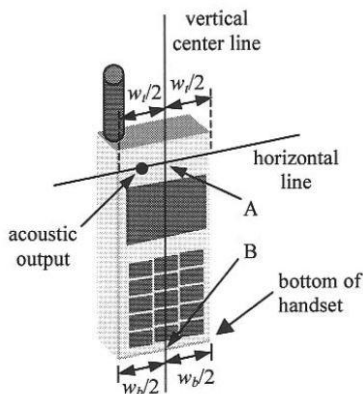


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

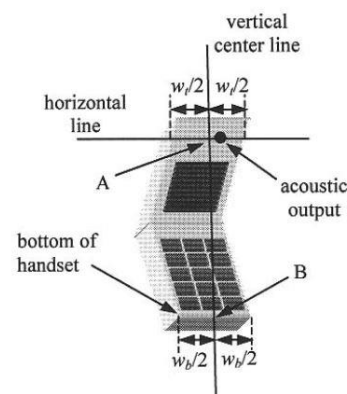


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

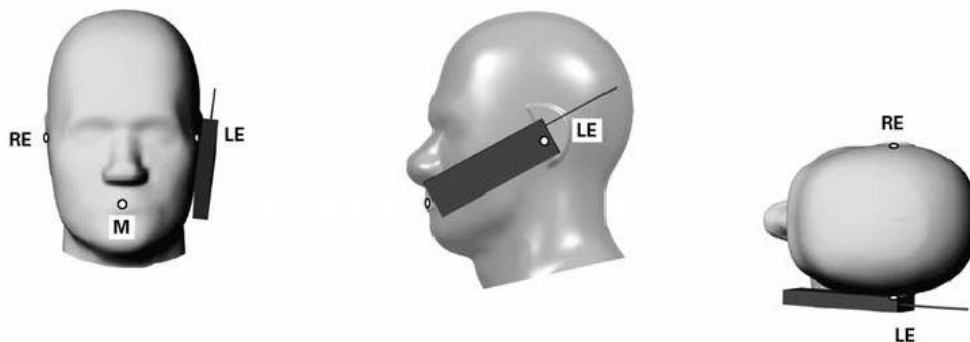


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

12.3 Definition of the tilt position

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

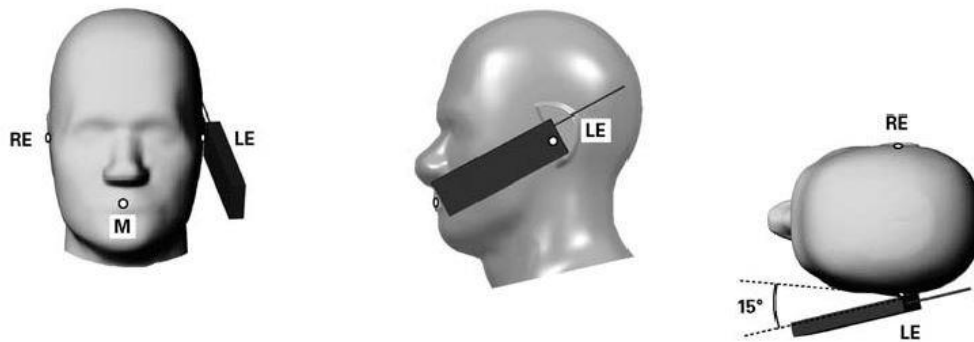


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

12.4 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 11.4). Per KDB648474 D04v01r03, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is $> 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

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

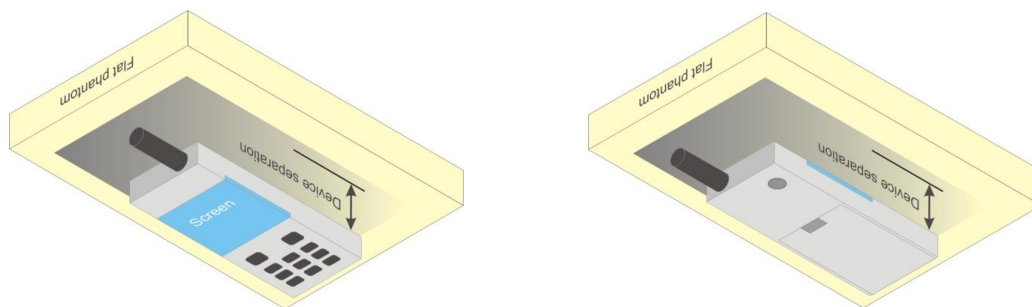


Fig 12.4 Body Worn Position

12.5 Product Specific 10g SAR Exposure

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

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

12.6 Wireless Router

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

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

13. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
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_o/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 $\beta_o/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. 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_o/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 referred to the Setup Configuration below
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set RMC 12.2Kbps + HSDPA mode.
 - ii. Set Cell Power = -25 dBm
 - iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
 - iv. Select HSDPA Uplink Parameters
 - v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - a). Subtest 1: $\beta_c/\beta_d=2/15$
 - b). Subtest 2: $\beta_c/\beta_d=12/15$
 - c). Subtest 3: $\beta_c/\beta_d=15/8$
 - d). Subtest 4: $\beta_c/\beta_d=15/4$
 - vi. Set Delta ACK, Delta NACK and Delta CQI = 8
 - vii. Set Ack-Nack Repetition Factor to 3
 - viii. Set CQI Feedback Cycle (k) to 4 ms
 - ix. Set CQI Repetition Factor to 2
 - x. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

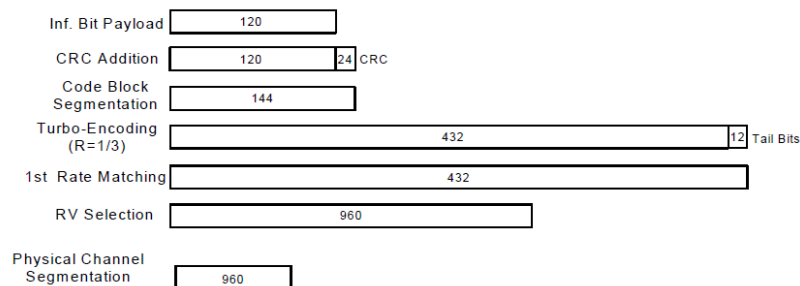


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK) Setup Configuration

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

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

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

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105

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

Setup Configuration

<WCDMA Conducted Power>

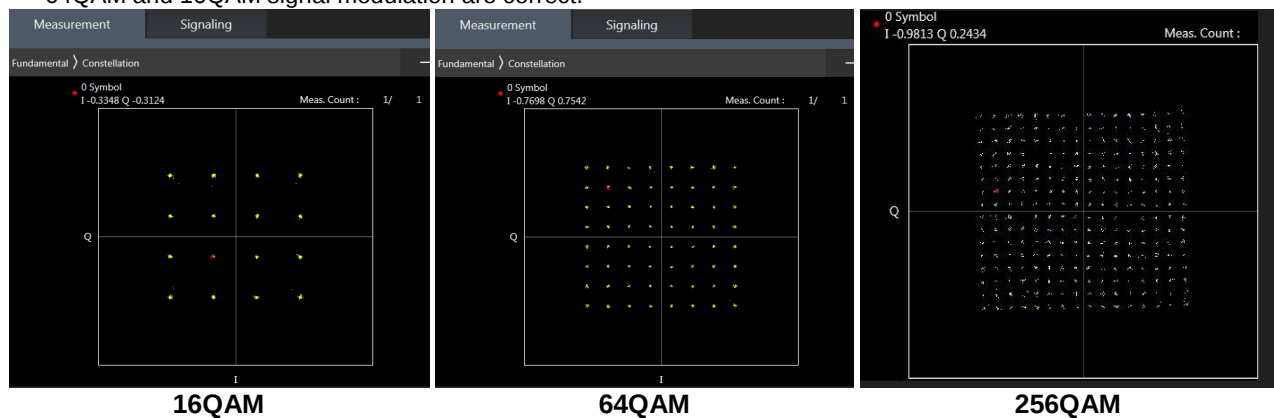
General Note:

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

<LTE Conducted Power>

General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / 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 B2 / B4 / B5 / B17 SAR test was covered by B25 / B66 / B26 / B12; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

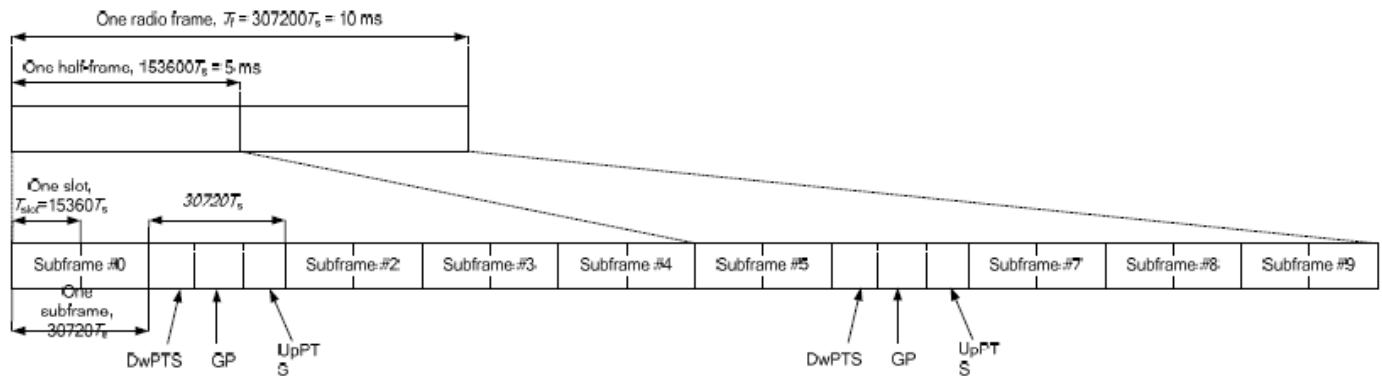


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

Special subframe (30720·T _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:

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

<LTE Carrier Aggregation>

The detailed LTE Carrier Aggregation conducted power table can refer to Appendix F.

General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need combination, and for this device that all the configurations were choose to power measurement.
3. All permutations exist. No restrictions on Pcell & Scell combinations, but only LTE Band 29A is limited to Scell.

2CC Downlink Carrier Aggregation	
Number	Combination
1	CA_2A-5A
2	CA_2A-4A
3	CA_2A-66A
4	CA_2A-12A
5	CA_2A-2A
6	CA_2A-71A
7	CA_2A-29A
8	CA_2A-30A
9	CA_4A-5A
10	CA_4A-12A
11	CA_4A-13A
12	CA_4A-4A
13	CA_4A-71A
14	CA_4A-29A
15	CA_4A-30A
16	CA_5A-66A
17	CA_5A-30A
18	CA_12A-66A
19	CA_12A-30A
20	CA_13A-66A
21	CA_13A-2A
22	CA_29A-30A
23	CA_29A-66A
24	CA_30A-66A
25	CA_66A-66A
26	CA_66A-71A
27	CA_2C
28	CA_66B
29	CA_66C

LTE Carrier Aggregation Conducted Power (Downlink)

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

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

<Inter-band uplink carrier aggregation consideration>

LTE Inter CA	LTE TX0	TX0 Ant	LTE TX1	TX1 Ant
CA_2A-4A	B2	ANT2	B4	ANT3
CA_2A-5A	B2	ANT3	B5	ANT0
CA_2A-12A	B2	ANT3	B12	ANT0
CA_2A-66A	B2	ANT2	B66	ANT3
CA_4A-5A	B4	ANT3	B5	ANT0
CA_4A-12A	B4	ANT3	B12	ANT0
CA_4A-13A	B4	ANT3	B13	ANT0
CA_5A-30A	B5	ANT0	B30	ANT3
CA_5A-66A	B5	ANT0	B66	ANT3
CA_12A-30A	B12	ANT0	B30	ANT3
CA_12A-66A	B12	ANT0	B66	ANT3
CA_13A-2A	B13	ANT0	B2	ANT3
CA_13A-66A	B13	ANT0	B66	ANT3

General Note:

1. The single carrier of inter band CA uplink power level is the same as Non-CA standalone LTE power level.
2. For Inter band CA co-located SAR analysis is performed using standalone SAR summed together and they are more conservatively for inter band CA.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n25/n30/n66/n71/n38/n41/n48/n77/n78 is SA mode.
2. 5G NR n2/n5/n25/n66/n41/n77/n71 is NSA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
 - b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
 - c. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
 - d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
 - f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
5. For 5G NR, the simultaneous transmission analysis is used standalone SAR at total power level to show compliance.
6. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
7. 5G NR NSA mode, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time.
8. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
9. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
10. 5G NR n41/n77/n78 supports class 2 level only and it has no class 3 level.
11. For 5G NR EN-DC mode, standalone SAR performed for 5G NR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5G NR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.

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

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

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

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

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

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

<EN-DC combination>

ENDC	NR TX	NR Ant	LTE TX	LTE Ant
DC_2A_n2A	n2	ANT3	LTE B2	ANT2
DC_5A_n2A	n2	ANT3	LTE B5	ANT0
DC_12A_n2A	n2	ANT3	LTE B12	ANT0
DC_13A_n2A	n2	ANT3	LTE B13	ANT0
DC_30A_n2A	n2	ANT3	LTE B30	ANT2
DC_66A_n2A	n2	ANT2	LTE B66	ANT3
DC_2A_n5A	n5	ANT0	LTE B2	ANT3
DC_30A_n5A	n5	ANT0	LTE B30	ANT3
DC_66A_n5A	n5	ANT0	LTE B66	ANT3
DC_66A_n25A	n25	ANT3	LTE B66	ANT2
DC_2A_n66A	n66	ANT3	LTE B2	ANT2
DC_5A_n66A	n66	ANT3	LTE B5	ANT0
DC_12A_n66A	n66	ANT3	LTE B12	ANT0
DC_13A_n66A	n66	ANT3	LTE B13	ANT0
DC_30A_n66A	n66	ANT2	LTE B30	ANT3
DC_66A_n66A	n66	ANT3	LTE B66	ANT2
DC_2A_n71A	n71	ANT0	LTE B2	ANT3
DC_66A_n71A	n71	ANT0	LTE B66	ANT3
DC_2A_n41A	n41	ANT3	LTE B2	ANT2
DC_66A_n41A	n41	ANT3	LTE B66	ANT2
DC_2A_n77A	n77	ANT4	LTE B2	ANT2
DC_5A_n77A	n77	ANT4	LTE B5	ANT0
DC_12A_n77A	n77	ANT4	LTE B12	ANT0
DC_13A_n77A	n77	ANT4	LTE B13	ANT0
DC_30A_n77A	n77	ANT4	LTE B30	ANT2
DC_66A_n77A	n77	ANT4	LTE B66	ANT2

<WLAN Conducted Power>

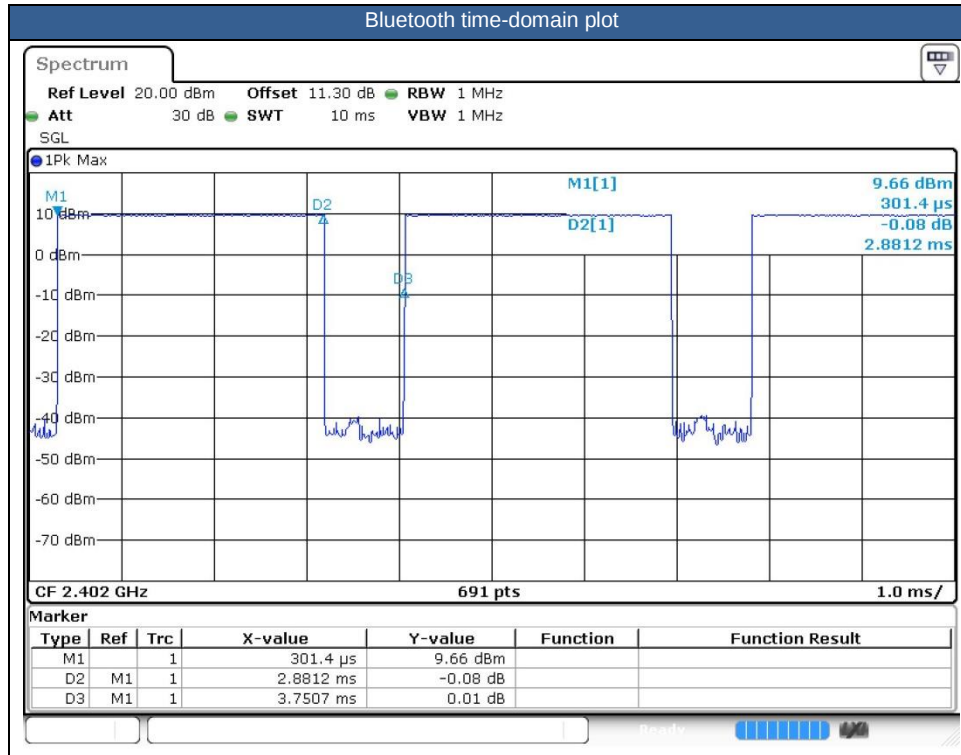
General Note:

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

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 76.82% as following figure, according to Oct. 2016 TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.





14. Antenna Location

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

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN/Bluetooth signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. For TDD LTE SAR measurement of power class 3, 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 (W/kg) = Measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). The device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to appendix E. power table.
5. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
6. For 5G NR EN-DC mode, standalone SAR performed for 5G NR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5G NR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
7. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power (for handheld on state, the maximum full power means reduced power), including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. For this device SAR for WWAN/WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of GSM1900, WCDMA Band II/IV, LTE Band 2/4/7/25/30/66/48, 5G NR n2/n7/n25/n30/n66/n38/n41/n48/n77/n78 and WLAN 2.4GHz /WLAN 5.2/5.8GHz therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.8GHz tested the product specific 10g SAR since it has no hotspot mode.
 - c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
8. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot SAR.
9. For Phablet devices, when hotspot mode is not supported, Product specific 10-g SAR is required for all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.

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.
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.

WCDMA Note:

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

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 / B26 / 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 B2 / B4 / B5 / B17 SAR test was covered by B25 / B66 / B26 / B12; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
 - b. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - c. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - d. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - e. Smaller bandwidth output power for each RB allocation configuration for this device will not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - f. For 5G FR1 n2/n7/n25/n66/n71/n38/n41/n77/n78 the maximum bandwidth does not support three non-overlapping channels, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

WLAN/Bluetooth Note:

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



15.1 Head SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																				
01	LTE Band 71	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	133297	680.5	23.92	25.00	1.282	-	-	-0.03	0.238	0.305
	LTE Band 71	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	133297	680.5	23.92	25.00	1.282	-	-	0.05	0.096	0.123
	LTE Band 71	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	133297	680.5	23.92	25.00	1.282	-	-	-0.1	0.121	0.155
	LTE Band 71	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	133297	680.5	23.92	25.00	1.282	-	-	-0.19	0.066	0.085
	LTE Band 71	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	Receiver on	133297	680.5	22.92	24.00	1.282	-	-	-0.03	0.168	0.215
	LTE Band 71	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	Receiver on	133297	680.5	22.92	24.00	1.282	-	-	-0.01	0.081	0.104
	LTE Band 71	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	Receiver on	133297	680.5	22.92	24.00	1.282	-	-	0	0.117	0.150
	LTE Band 71	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	Receiver on	133297	680.5	22.92	24.00	1.282	-	-	0.04	0.056	0.072
02	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	23095	707.5	23.83	25.00	1.309	-	-	0.04	0.221	0.289
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	23095	707.5	23.83	25.00	1.309	-	-	0.14	0.095	0.124
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	23095	707.5	23.83	25.00	1.309	-	-	0.13	0.132	0.173
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	23095	707.5	23.83	25.00	1.309	-	-	0.03	0.074	0.097
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	Receiver on	23095	707.5	22.71	24.00	1.346	-	-	-0.14	0.167	0.225
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	Receiver on	23095	707.5	22.71	24.00	1.346	-	-	-0.18	0.061	0.082
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	Receiver on	23095	707.5	22.71	24.00	1.346	-	-	0	0.104	0.140
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	Receiver on	23095	707.5	22.71	24.00	1.346	-	-	0.04	0.058	0.078
03	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	23230	782	24.05	25.00	1.245	-	-	0.13	0.277	0.345
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	23230	782	24.05	25.00	1.245	-	-	0.08	0.153	0.190
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	23230	782	24.05	25.00	1.245	-	-	-0.13	0.224	0.279
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	23230	782	24.05	25.00	1.245	-	-	-0.08	0.140	0.174
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	Receiver on	23230	782	22.91	24.00	1.285	-	-	-0.1	0.221	0.284
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	Receiver on	23230	782	22.91	24.00	1.285	-	-	0	0.124	0.159
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	Receiver on	23230	782	22.91	24.00	1.285	-	-	-0.1	0.178	0.229
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	Receiver on	23230	782	22.91	24.00	1.285	-	-	0.16	0.113	0.145
04	FR1 n71	30M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	136100	680.5	23.29	25.00	1.483	-	-	-0.05	0.176	0.261
	FR1 n71	30M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	136100	680.5	23.29	25.00	1.483	-	-	0.12	0.076	0.113
	FR1 n71	30M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	136100	680.5	23.29	25.00	1.483	-	-	-0.05	0.169	0.251
	FR1 n71	30M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	136100	680.5	23.29	25.00	1.483	-	-	0.07	0.093	0.138
	FR1 n71	30M	QPSK	80	40	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	136100	680.5	23.22	25.00	1.507	-	-	0.11	0.169	0.255
	FR1 n71	30M	QPSK	80	40	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	136100	680.5	23.22	25.00	1.507	-	-	0.04	0.083	0.125
	FR1 n71	30M	QPSK	80	40	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	136100	680.5	23.22	25.00	1.507	-	-	0.06	0.162	0.244
	FR1 n71	30M	QPSK	80	40	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	136100	680.5	23.22	25.00	1.507	-	-	-0.01	0.093	0.140
835MHz																				
	GSM850	-	-	-	-	GPRS 2TX Slot	Right Cheek	0mm	Ant 0	Receiver on	189	836.4	32.27	33.00	1.183	-	-	-0.18	0.411	0.486
	GSM850	-	-	-	-	GPRS 2TX Slot	Right Tilted	0mm	Ant 0	Receiver on	189	836.4	32.27	33.00	1.183	-	-	-0.02	0.143	0.169
	GSM850	-	-	-	-	GPRS 2TX Slot	Left Cheek	0mm	Ant 0	Receiver on	189	836.4	32.27	33.00	1.183	-	-	-0.01	0.372	0.440
	GSM850	-	-	-	-	GPRS 2TX Slot	Left Tilted	0mm	Ant 0	Receiver on	189	836.4	32.27	33.00	1.183	-	-	-0.09	0.205	0.243
	GSM850	-	-	-	-	GPRS 2TX Slot	Right Cheek	0mm	Ant 0	Receiver on	128	824.2	32.00	33.00	1.259	-	-	-0.03	0.312	0.393
05	GSM850	-	-	-	-	GPRS 2TX Slot	Right Cheek	0mm	Ant 0	Receiver on	251	848.8	32.11	33.00	1.227	-	-	0.06	0.483	0.593
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	Receiver on	4182	836.4	23.58	24.50	1.236	-	-	-0.15	0.336	0.415
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	Receiver on	4182	836.4	23.58	24.50	1.236	-	-	-0.1	0.183	0.226
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	Receiver on	4182	836.4	23.58	24.50	1.236	-	-	0.01	0.331	0.409
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	Receiver on	4182	836.4	23.58	24.50	1.236	-	-	0.02	0.182	0.225
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	Receiver on	4132	826.4	23.51	24.50	1.256	-	-	-0.05	0.305	0.383
06	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	Receiver on	4233	846.6	23.49	24.50	1.262	-	-	0.09	0.340	0.429
07	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	26865	831.5	24.06	25.00	1.242	-	-	-0.06	0.331	0.411
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	26865	831.5	24.06	25.00	1.242	-	-	-0.01	0.184	0.228
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	26865	831.5	24.06	25.00	1.242	-	-	0.15	0.277	0.344
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	26865	831.5	24.06	25.00	1.242	-	-	-0.06	0.154	0.191
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	Receiver on	26865	831.5	22.97	24.00	1.268	-	-	0.01	0.268	0.340



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	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	Receiver on	26865	831.5	22.97	24.00	1.268	-	-	0.15	0.124	0.157
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	Receiver on	26865	831.5	22.97	24.00	1.268	-	-	0.01	0.226	0.286
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	Receiver on	26865	831.5	22.97	24.00	1.268	-	-	-0.01	0.115	0.146
	FR1 n5	25M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	167300	836.5	23.82	25.00	1.312	-	-	-0.01	0.216	0.283
	FR1 n5	25M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	167300	836.5	23.82	25.00	1.312	-	-	-0.08	0.099	0.130
	FR1 n5	25M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	167300	836.5	23.82	25.00	1.312	-	-	-0.11	0.187	0.245
	FR1 n5	25M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	167300	836.5	23.82	25.00	1.312	-	-	0.07	0.126	0.165
08	FR1 n5	25M	QPSK	64	32	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	167300	836.5	23.78	25.00	1.324	-	-	0.07	0.235	0.311
	FR1 n5	25M	QPSK	64	32	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	167300	836.5	23.78	25.00	1.324	-	-	-0.02	0.113	0.150
	FR1 n5	25M	QPSK	64	32	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	167300	836.5	23.78	25.00	1.324	-	-	0.11	0.219	0.290
	FR1 n5	25M	QPSK	64	32	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	167300	836.5	23.78	25.00	1.324	-	-	-0.14	0.139	0.184
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	Receiver on	1413	1732.6	13.95	15.50	1.429	-	-	0.07	0.521	0.744
09	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	Receiver on	1413	1732.6	13.95	15.50	1.429	-	-	0.04	0.610	0.872
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 3	Receiver on	1413	1732.6	13.95	15.50	1.429	-	-	0.13	0.346	0.494
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 3	Receiver on	1413	1732.6	13.95	15.50	1.429	-	-	0	0.379	0.542
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	Receiver on	1312	1712.4	13.80	15.50	1.479	-	-	0.09	0.546	0.808
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	Receiver on	1513	1752.6	13.91	15.50	1.442	-	-	0.18	0.561	0.809
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	132322	1745	15.05	16.50	1.396	-	-	0.04	0.478	0.667
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	Receiver on	132322	1745	15.05	16.50	1.396	-	-	-0.15	0.579	0.808
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	Receiver on	132322	1745	15.05	16.50	1.396	-	-	0.13	0.341	0.476
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	Receiver on	132322	1745	15.05	16.50	1.396	-	-	-0.13	0.369	0.515
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	Receiver on	132072	1720	14.96	16.50	1.426	-	-	0.09	0.430	0.613
10	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	Receiver on	132572	1770	14.99	16.50	1.416	-	-	-0.08	0.581	0.823
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	Receiver on	132322	1745	15.03	16.50	1.403	-	-	0.03	0.454	0.637
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	Receiver on	132322	1745	15.03	16.50	1.403	-	-	-0.09	0.570	0.800
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	Receiver on	132322	1745	15.03	16.50	1.403	-	-	0.13	0.324	0.455
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	Receiver on	132322	1745	15.03	16.50	1.403	-	-	-0.05	0.351	0.492
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	Receiver on	132072	1720	14.90	16.50	1.445	-	-	-0.05	0.419	0.606
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	Receiver on	132572	1770	14.97	16.50	1.422	-	-	0.07	0.568	0.808
	LTE Band 66	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 3	Receiver on	132322	1745	15.02	16.50	1.406	-	-	-0.02	0.566	0.796
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	349000	1745	18.29	18.50	1.050	-	-	0.14	0.625	0.656
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	349000	1745	18.29	18.50	1.050	-	-	0.12	0.744	0.781
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	349000	1745	18.29	18.50	1.050	-	-	-0.13	0.400	0.420
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	349000	1745	18.29	18.50	1.050	-	-	-0.17	0.431	0.452
	FR1 n66	45M	QPSK	120	60	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	349000	1745	18.26	18.50	1.057	-	-	0.16	0.641	0.677
11	FR1 n66	45M	QPSK	120	60	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	349000	1745	18.26	18.50	1.057	-	-	0.08	0.763	0.806
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	349000	1745	18.26	18.50	1.057	-	-	0.03	0.410	0.433
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	349000	1745	18.26	18.50	1.057	-	-	0.13	0.442	0.467
	FR1 n66	45M	QPSK	243	0	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	349000	1745	18.23	18.50	1.064	-	-	0.05	0.757	0.806
1900MHz																				
	GSM1900	-	-	-	-	GPRS 2TX Slot	Right Cheek	0mm	Ant 3	Receiver on	661	1880	19.71	20.50	1.199	-	-	-0.14	0.516	0.619
	GSM1900	-	-	-	-	GPRS 2TX Slot	Right Tilted	0mm	Ant 3	Receiver on	661	1880	19.71	20.50	1.199	-	-	-0.11	0.681	0.817
	GSM1900	-	-	-	-	GPRS 2TX Slot	Left Cheek	0mm	Ant 3	Receiver on	661	1880	19.71	20.50	1.199	-	-	0.08	0.287	0.344
	GSM1900	-	-	-	-	GPRS 2TX Slot	Left Tilted	0mm	Ant 3	Receiver on	661	1880	19.71	20.50	1.199	-	-	-0.13	0.343	0.411
	GSM1900	-	-	-	-	GPRS 2TX Slot	Right Tilted	0mm	Ant 3	Receiver on	512	1850.2	19.25	20.50	1.334	-	-	0.11	0.636	0.848
12	GSM1900	-	-	-	-	GPRS 2TX Slot	Right Tilted	0mm	Ant 3	Receiver on	810	1909.8	19.17	20.50	1.358	-	-	0.16	0.635	0.863
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	Receiver on	9400	1880	15.37	16.50	1.297	-	-	-0.01	0.583	0.756
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	Receiver on	9400	1880	15.37	16.50	1.297	-	-	0.01	0.623	0.808
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 3	Receiver on	9400	1880	15.37	16.50	1.297	-	-	0.19	0.276	0.358
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 3	Receiver on	9400	1880	15.37	16.50	1.297	-	-	-0.17	0.320	0.415
13	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	Receiver on	9262	1852.4	15.33	16.50	1.309	-	-	-0.13	0.637	0.834
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	Receiver on	9538	1907.6	15.24	16.50	1.337	-	-	-0.17	0.592	0.791
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	26340	1880	16.74	17.50	1.191	-	-	0.02	0.672	0.801
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	Receiver on	26340	1880	16.74	17.50	1.191	-	-	-0.15	0.653	0.778
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	Receiver on	26340	1880	16.74	17.50	1.191	-	-	-0.16	0.342	0.407



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	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	Receiver on	26340	1880	16.74	17.50	1.191	-	-	0.02	0.383	0.456
14	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	26140	1860	16.53	17.50	1.250	-	-	0.06	0.659	0.824
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	26590	1905	16.30	17.50	1.318	-	-	0.1	0.593	0.782
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	Receiver on	26340	1880	16.68	17.50	1.208	-	-	0.1	0.665	0.803
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	Receiver on	26340	1880	16.68	17.50	1.208	-	-	-0.07	0.621	0.750
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	Receiver on	26340	1880	16.68	17.50	1.208	-	-	-0.04	0.326	0.394
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	Receiver on	26340	1880	16.68	17.50	1.208	-	-	-0.13	0.364	0.440
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	Receiver on	26140	1860	16.50	17.50	1.259	-	-	0	0.643	0.809
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	Receiver on	26590	1905	16.28	17.50	1.324	-	-	0.19	0.565	0.748
	LTE Band 25	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 3	Receiver on	26340	1880	16.65	17.50	1.216	-	-	0.02	0.639	0.777
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	376500	1882.5	15.07	16.50	1.390	-	-	-0.04	0.490	0.681
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	376500	1882.5	15.07	16.50	1.390	-	-	-0.16	0.602	0.837
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	376500	1882.5	15.07	16.50	1.390	-	-	0.07	0.276	0.384
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	376500	1882.5	15.07	16.50	1.390	-	-	-0.07	0.313	0.435
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	376500	1882.5	15.00	16.50	1.413	-	-	0.19	0.552	0.780
15	FR1 n25	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	376500	1882.5	15.00	16.50	1.413	-	-	0.03	0.617	0.872
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	376500	1882.5	15.00	16.50	1.413	-	-	0.09	0.283	0.400
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	376500	1882.5	15.00	16.50	1.413	-	-	0.05	0.321	0.453
	FR1 n25	40M	QPSK	216	0	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	376500	1882.5	14.97	16.50	1.422	-	-	0.19	0.598	0.851
2300Mhz																				
	LTE Band 30	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	27710	2310	13.47	14.50	1.268	-	-	-0.08	0.562	0.712
16	LTE Band 30	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	Receiver on	27710	2310	13.47	14.50	1.268	-	-	0.09	0.669	0.848
	LTE Band 30	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	Receiver on	27710	2310	13.47	14.50	1.268	-	-	-0.08	0.241	0.306
	LTE Band 30	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	Receiver on	27710	2310	13.47	14.50	1.268	-	-	0.05	0.301	0.382
	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 3	Receiver on	27710	2310	13.45	14.50	1.274	-	-	-0.11	0.548	0.698
	LTE Band 30	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 3	Receiver on	27710	2310	13.45	14.50	1.274	-	-	-0.08	0.652	0.830
	LTE Band 30	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 3	Receiver on	27710	2310	13.45	14.50	1.274	-	-	-0.02	0.235	0.299
	LTE Band 30	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 3	Receiver on	27710	2310	13.45	14.50	1.274	-	-	0.04	0.293	0.373
	LTE Band 30	10M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	Receiver on	27710	2310	13.43	14.50	1.279	-	-	-0.14	0.639	0.818
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	462000	2310	15.76	16.00	1.057	-	-	-0.16	0.703	0.743
	FR1 n30	10M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	462000	2310	15.76	16.00	1.057	-	-	0.03	0.719	0.760
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	462000	2310	15.76	16.00	1.057	-	-	-0.04	0.290	0.306
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	462000	2310	15.76	16.00	1.057	-	-	-0.19	0.365	0.386
	FR1 n30	10M	QPSK	25	14	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	462000	2310	15.74	16.00	1.062	-	-	0.03	0.715	0.759
17	FR1 n30	10M	QPSK	25	14	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	462000	2310	15.74	16.00	1.062	-	-	0.04	0.735	0.780
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	462000	2310	15.74	16.00	1.062	-	-	-0.17	0.296	0.314
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	462000	2310	15.74	16.00	1.062	-	-	-0.12	0.373	0.396
2600Mhz																				
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	21100	2535	16.94	18.00	1.276	-	-	-0.1	0.637	0.813
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	Receiver on	21100	2535	16.94	18.00	1.276	-	-	0.19	0.499	0.637
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	Receiver on	21100	2535	16.94	18.00	1.276	-	-	0.01	0.235	0.300
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	Receiver on	21100	2535	16.94	18.00	1.276	-	-	-0.04	0.257	0.328
18	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	20850	2510	16.67	18.00	1.358	-	-	-0.04	0.643	0.873
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	21350	2560	16.93	18.00	1.279	-	-	-0.11	0.601	0.769
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	Receiver on	21100	2535	16.91	18.00	1.285	-	-	0.19	0.625	0.803
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	Receiver on	21100	2535	16.91	18.00	1.285	-	-	-0.03	0.487	0.626
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	Receiver on	21100	2535	16.91	18.00	1.285	-	-	0.04	0.229	0.294
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	Receiver on	21100	2535	16.91	18.00	1.285	-	-	-0.18	0.251	0.323
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	Receiver on	20850	2510	16.57	18.00	1.390	-	-	0.14	0.627	0.872
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	Receiver on	21350	2560	16.90	18.00	1.288	-	-	-0.02	0.586	0.755
	LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 3	Receiver on	21100	2535	16.85	18.00	1.303	-	-	-0.07	0.608	0.792
19	FR1 n7	50M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	507000	2535	16.52	18.00	1.406	-	-	-0.03	0.626	0.880
	FR1 n7	50M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	507000	2535	16.52	18.00	1.406	-	-	0.02	0.478	0.672
	FR1 n7	50M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	507000	2535	16.52	18.00	1.406	-	-	-0.04	0.202	0.284
	FR1 n7	50M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	507000	2535	16.52	18.00	1.406	-	-	-0.06	0.237	0.333
	FR1 n7	50M	QPSK	135	68	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	507000	2535	16.48	18.00	1.419	-	-	-0.14	0.607	0.861



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	FR1 n7	50M	QPSK	135	68	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	507000	2535	16.48	18.00	1.419	-	-	0.19	0.464	0.658
	FR1 n7	50M	QPSK	135	68	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	507000	2535	16.48	18.00	1.419	-	-	-0.1	0.196	0.278
	FR1 n7	50M	QPSK	135	68	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	507000	2535	16.48	18.00	1.419	-	-	-0.03	0.230	0.326
	FR1 n7	50M	QPSK	270	0	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	507000	2535	16.43	18.00	1.435	-	-	0.17	0.604	0.867
20	FR1 n41	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 3	Receiver on	518598	2592.99	17.80	19.00	1.318	-	-	0.07	0.638	0.841
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 3	Receiver on	518598	2592.99	17.80	19.00	1.318	-	-	0.09	0.486	0.641
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 3	Receiver on	518598	2592.99	17.80	19.00	1.318	-	-	-0.07	0.201	0.265
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 3	Receiver on	518598	2592.99	17.80	19.00	1.318	-	-	-0.19	0.210	0.277
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 3	Receiver on	518598	2592.99	17.79	19.00	1.321	-	-	-0.19	0.622	0.822
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 3	Receiver on	518598	2592.99	17.79	19.00	1.321	-	-	-0.01	0.474	0.626
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 3	Receiver on	518598	2592.99	17.79	19.00	1.321	-	-	-0.03	0.196	0.259
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 3	Receiver on	518598	2592.99	17.79	19.00	1.321	-	-	0.03	0.205	0.271
	FR1 n41	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 3	Receiver on	518598	2592.99	17.73	19.00	1.340	-	-	-0.1	0.589	0.789
	FR1 n41	100M	QPSK	270	0	DFT-30	Right Tilted	0mm	Ant 3	Receiver on	518598	2592.99	17.73	19.00	1.340	-	-	-0.01	0.464	0.622
3000Mhz-4000Mhz																				
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	Receiver on	56150	3641	17.99	18.50	1.125	62.9	1.006	-0.13	0.383	0.433
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	Receiver on	56150	3641	17.99	18.50	1.125	62.9	1.006	0.02	0.352	0.398
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	Receiver on	56150	3641	17.99	18.50	1.125	62.9	1.006	-0.05	0.700	0.792
21	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	Receiver on	56150	3641	17.99	18.50	1.125	62.9	1.006	-0.02	0.725	0.820
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	Receiver on	55340	3560	17.34	18.50	1.306	62.9	1.006	0.1	0.589	0.774
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	Receiver on	55830	3609	17.57	18.50	1.239	62.9	1.006	-0.1	0.632	0.788
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	Receiver on	56640	3690	17.97	18.50	1.130	62.9	1.006	0.07	0.679	0.772
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	Receiver on	55340	3560	17.34	18.50	1.306	62.9	1.006	0.13	0.568	0.746
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	Receiver on	55830	3609	17.57	18.50	1.239	62.9	1.006	0.15	0.611	0.761
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	Receiver on	56640	3690	17.97	18.50	1.130	62.9	1.006	-0.14	0.657	0.747
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	Receiver on	56150	3641	17.92	18.50	1.143	62.9	1.006	0.17	0.389	0.447
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	Receiver on	56150	3641	17.92	18.50	1.143	62.9	1.006	-0.02	0.357	0.410
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	Receiver on	56150	3641	17.92	18.50	1.143	62.9	1.006	-0.13	0.711	0.817
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	Receiver on	56150	3641	17.92	18.50	1.143	62.9	1.006	0.02	0.705	0.811
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	Receiver on	55340	3560	17.32	18.50	1.312	62.9	1.006	-0.11	0.598	0.789
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	Receiver on	55830	3609	17.50	18.50	1.259	62.9	1.006	0.07	0.641	0.812
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	Receiver on	56640	3690	17.90	18.50	1.148	62.9	1.006	0.06	0.689	0.796
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	Receiver on	55340	3560	17.32	18.50	1.312	62.9	1.006	0.11	0.577	0.762
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	Receiver on	55830	3609	17.50	18.50	1.259	62.9	1.006	-0.1	0.620	0.785
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	Receiver on	56640	3690	17.90	18.50	1.148	62.9	1.006	0.05	0.667	0.770
	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 4	Receiver on	56150	3641	17.91	18.50	1.146	62.9	1.006	0.14	0.672	0.774
	LTE Band 48	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 4	Receiver on	56150	3641	17.91	18.50	1.146	62.9	1.006	0.16	0.696	0.802
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	641666	3624.99	15.36	17.00	1.459	-	-	-0.03	0.314	0.458
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	641666	3624.99	15.36	17.00	1.459	-	-	0.12	0.265	0.387
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	641666	3624.99	15.36	17.00	1.459	-	-	-0.03	0.505	0.737
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	641666	3624.99	15.36	17.00	1.459	-	-	-0.01	0.514	0.750
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	638000	3570	15.22	17.00	1.507	-	-	-0.1	0.464	0.699
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	645332	3679.98	15.21	17.00	1.510	-	-	-0.07	0.552	0.834
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	638000	3570	15.22	17.00	1.507	-	-	0.11	0.485	0.731
22	FR1 n48	40M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	645332	3679.98	15.21	17.00	1.510	-	-	-0.01	0.572	0.864
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	641666	3624.99	15.21	17.00	1.510	-	-	0.06	0.308	0.465
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	641666	3624.99	15.21	17.00	1.510	-	-	-0.06	0.260	0.393
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	641666	3624.99	15.21	17.00	1.510	-	-	0.04	0.495	0.747
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	641666	3624.99	15.21	17.00	1.510	-	-	-0.08	0.504	0.761
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	638000	3570	15.09	17.00	1.552	-	-	-0.15	0.455	0.706
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	645332	3679.98	15.09	17.00	1.552	-	-	0.11	0.541	0.840
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	638000	3570	15.09	17.00	1.552	-	-	-0.18	0.475	0.737
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	645332	3679.98	15.09	17.00	1.552	-	-	-0.09	0.551	0.855
	FR1 n48	40M	QPSK	100	0	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	641666	3624.99	15.19	17.00	1.517	-	-	-0.1	0.491	0.745
	FR1 n48	40M	QPSK	100	0	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	641666	3624.99	15.19	17.00	1.517	-	-	0.16	0.443	0.672
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	641666	3624.99	14.79	16.00	1.321	-	-	0.16	0.388	0.513



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	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	641666	3624.99	14.79	16.00	1.321	-	-	0.09	0.349	0.461
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	641666	3624.99	14.79	16.00	1.321	-	-	-0.05	0.549	0.725
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	641666	3624.99	14.79	16.00	1.321	-	-	0.09	0.606	0.801
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	641666	3624.99	14.76	16.00	1.330	-	-	0.11	0.396	0.527
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	641666	3624.99	14.76	16.00	1.330	-	-	-0.17	0.356	0.474
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	641666	3624.99	14.76	16.00	1.330	-	-	0.16	0.560	0.745
23	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	641666	3624.99	14.76	16.00	1.330	-	-	0.06	0.618	0.822
	FR1 n77	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	641666	3624.99	14.75	16.00	1.334	-	-	-0.19	0.540	0.720
	FR1 n77	100M	QPSK	270	0	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	641666	3624.99	14.75	16.00	1.334	-	-	0.16	0.596	0.795
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	633332	3499.98	14.84	16.00	1.306	-	-	0.18	0.279	0.364
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	633332	3499.98	14.84	16.00	1.306	-	-	0.13	0.245	0.320
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	633332	3499.98	14.84	16.00	1.306	-	-	0.11	0.371	0.485
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	633332	3499.98	14.84	16.00	1.306	-	-	-0.03	0.392	0.512
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	633332	3499.98	14.75	16.00	1.334	-	-	0	0.274	0.365
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	633332	3499.98	14.75	16.00	1.334	-	-	-0.1	0.246	0.328
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	633332	3499.98	14.75	16.00	1.334	-	-	0.07	0.385	0.513
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	633332	3499.98	14.75	16.00	1.334	-	-	-0.13	0.403	0.537
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	656000	3840	15.01	16.00	1.256	-	-	0.08	0.272	0.342
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	656000	3840	15.01	16.00	1.256	-	-	0.07	0.266	0.334
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	656000	3840	15.01	16.00	1.256	-	-	0.02	0.440	0.553
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	656000	3840	15.01	16.00	1.256	-	-	-0.18	0.485	0.609
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	656000	3840	14.91	16.00	1.285	-	-	-0.19	0.251	0.323
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	656000	3840	14.91	16.00	1.285	-	-	0.18	0.230	0.296
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	656000	3840	14.91	16.00	1.285	-	-	-0.18	0.418	0.537
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	656000	3840	14.91	16.00	1.285	-	-	0.13	0.469	0.603
	FR1 n77	100M	QPSK	270	0	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	656000	3840	14.85	16.00	1.303	-	-	-0.09	0.590	0.769

For END C

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																				
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	23095	707.5	23.83	25.00	1.309	-	-	0.18	0.221	0.289
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	23095	707.5	23.83	25.00	1.309	-	-	0.15	0.095	0.124
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	23095	707.5	23.83	25.00	1.309	-	-	-0.15	0.132	0.173
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	23095	707.5	23.83	25.00	1.309	-	-	-0.07	0.074	0.097
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	Receiver on	23095	707.5	22.71	24.00	1.346	-	-	0.04	0.167	0.225
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	Receiver on	23095	707.5	22.71	24.00	1.346	-	-	-0.02	0.061	0.082
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	Receiver on	23095	707.5	22.71	24.00	1.346	-	-	-0.15	0.104	0.140
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	Receiver on	23095	707.5	22.71	24.00	1.346	-	-	0.07	0.058	0.078
	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	23230	782	24.05	25.00	1.245	-	-	-0.16	0.277	0.345
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	23230	782	24.05	25.00	1.245	-	-	-0.19	0.153	0.190
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	23230	782	24.05	25.00	1.245	-	-	-0.07	0.224	0.279
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	23230	782	24.05	25.00	1.245	-	-	-0.11	0.140	0.174
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	Receiver on	23230	782	22.91	24.00	1.285	-	-	0.14	0.221	0.284
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	Receiver on	23230	782	22.91	24.00	1.285	-	-	-0.07	0.124	0.159
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	Receiver on	23230	782	22.91	24.00	1.285	-	-	0.17	0.178	0.229
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	Receiver on	23230	782	22.91	24.00	1.285	-	-	0.19	0.113	0.145
	FR1 n71	30M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	136100	680.5	23.29	25.00	1.483	-	-	-0.05	0.176	0.261
	FR1 n71	30M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	136100	680.5	23.29	25.00	1.483	-	-	0.12	0.076	0.113
	FR1 n71	30M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	136100	680.5	23.29	25.00	1.483	-	-	-0.05	0.169	0.251
	FR1 n71	30M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	136100	680.5	23.29	25.00	1.483	-	-	0.07	0.093	0.138
	FR1 n71	30M	QPSK	80	40	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	136100	680.5	23.22	25.00	1.507	-	-	0.11	0.169	0.255
	FR1 n71	30M	QPSK	80	40	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	136100	680.5	23.22	25.00	1.507	-	-	0.04	0.083	0.125
	FR1 n71	30M	QPSK	80	40	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	136100	680.5	23.22	25.00	1.507	-	-	0.06	0.162	0.244
	FR1 n71	30M	QPSK	80	40	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	136100	680.5	23.22	25.00	1.507	-	-	-0.01	0.093	0.140



835MHz																				
24	LTE Band 5	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	Receiver on	20525	836.5	24.03	25.00	1.250	-		0.13	0.312	0.390
	LTE Band 5	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	Receiver on	20525	836.5	24.03	25.00	1.250	-	-	-0.14	0.176	0.220
	LTE Band 5	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	Receiver on	20525	836.5	24.03	25.00	1.250	-	-	0.03	0.251	0.314
	LTE Band 5	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	Receiver on	20525	836.5	24.03	25.00	1.250	-	-	-0.08	0.125	0.156
	LTE Band 5	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	Receiver on	20525	836.5	22.89	24.00	1.291	-	-	0.18	0.251	0.324
	LTE Band 5	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	Receiver on	20525	836.5	22.89	24.00	1.291	-	-	0.01	0.111	0.143
	LTE Band 5	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	Receiver on	20525	836.5	22.89	24.00	1.291	-	-	-0.04	0.201	0.260
	LTE Band 5	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	Receiver on	20525	836.5	22.89	24.00	1.291	-	-	-0.13	0.103	0.133
	FR1 n5	25M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	167300	836.5	23.82	25.00	1.312	-	-	-0.16	0.216	0.283
	FR1 n5	25M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	167300	836.5	23.82	25.00	1.312	-	-	-0.05	0.099	0.130
	FR1 n5	25M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	167300	836.5	23.82	25.00	1.312	-	-	0.01	0.187	0.245
	FR1 n5	25M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	167300	836.5	23.82	25.00	1.312	-	-	0.19	0.126	0.165
	FR1 n5	25M	QPSK	64	32	DFT-15	Right Cheek	0mm	Ant 0	Receiver on	167300	836.5	23.78	25.00	1.324	-	-	0.07	0.235	0.311
	FR1 n5	25M	QPSK	64	32	DFT-15	Right Tilted	0mm	Ant 0	Receiver on	167300	836.5	23.78	25.00	1.324	-	-	-0.15	0.113	0.150
	FR1 n5	25M	QPSK	64	32	DFT-15	Left Cheek	0mm	Ant 0	Receiver on	167300	836.5	23.78	25.00	1.324	-	-	-0.14	0.219	0.290
	FR1 n5	25M	QPSK	64	32	DFT-15	Left Tilted	0mm	Ant 0	Receiver on	167300	836.5	23.78	25.00	1.324	-	-	0.17	0.139	0.184
1750MHz																				
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	132322	1745	12.23	13.50	1.340	-	-	-0.08	0.237	0.318
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	Receiver on	132322	1745	12.23	13.50	1.340	-	-	0.19	0.283	0.379
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	Receiver on	132322	1745	12.23	13.50	1.340	-	-	-0.16	0.167	0.224
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	Receiver on	132322	1745	12.23	13.50	1.340	-	-	-0.1	0.184	0.247
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	Receiver on	132322	1745	12.17	13.50	1.358	-	-	0.02	0.225	0.306
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	Receiver on	132322	1745	12.17	13.50	1.358	-	-	-0.03	0.273	0.371
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	Receiver on	132322	1745	12.17	13.50	1.358	-	-	-0.19	0.162	0.220
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	Receiver on	132322	1745	12.17	13.50	1.358	-	-	0.08	0.172	0.234
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	Receiver on	132322	1745	22.71	24.00	1.346	-	-	-0.08	0.237	0.319
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	Receiver on	132322	1745	22.71	24.00	1.346	-	-	-0.04	0.086	0.116
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	Receiver on	132322	1745	22.71	24.00	1.346	-	-	-0.06	0.141	0.190
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	Receiver on	132322	1745	22.71	24.00	1.346	-	-	-0.16	0.074	0.100
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	Receiver on	132322	1745	21.66	23.00	1.361	-	-	-0.09	0.195	0.265
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	Receiver on	132322	1745	21.66	23.00	1.361	-	-	0.1	0.062	0.084
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	Receiver on	132322	1745	21.66	23.00	1.361	-	-	0.16	0.104	0.142
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	Receiver on	132322	1745	21.66	23.00	1.361	-	-	0.15	0.051	0.069
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	349000	1745	15.43	15.50	1.016	-	-	-0.1	0.305	0.310
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	349000	1745	15.43	15.50	1.016	-	-	0.02	0.372	0.378
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	349000	1745	15.43	15.50	1.016	-	-	0.05	0.197	0.200
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	349000	1745	15.43	15.50	1.016	-	-	0.1	0.215	0.218
	FR1 n66	45M	QPSK	120	60	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	349000	1745	15.40	15.50	1.023	-	-	0.16	0.310	0.317
	FR1 n66	45M	QPSK	120	60	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	349000	1745	15.40	15.50	1.023	-	-	0.05	0.379	0.388
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	349000	1745	15.40	15.50	1.023	-	-	0	0.201	0.206
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	349000	1745	15.40	15.50	1.023	-	-	-0.08	0.217	0.222
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 2	Receiver on	349000	1745	22.49	24.00	1.416	-	-	0.01	0.245	0.347
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 2	Receiver on	349000	1745	22.49	24.00	1.416	-	-	-0.18	0.092	0.130
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 2	Receiver on	349000	1745	22.49	24.00	1.416	-	-	0.13	0.144	0.204
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 2	Receiver on	349000	1745	22.49	24.00	1.416	-	-	0.16	0.062	0.088
	FR1 n66	45M	QPSK	120	60	DFT-15	Right Cheek	0mm	Ant 2	Receiver on	349000	1745	22.48	24.00	1.419	-	-	0.05	0.261	0.370
	FR1 n66	45M	QPSK	120	60	DFT-15	Right Tilted	0mm	Ant 2	Receiver on	349000	1745	22.48	24.00	1.419	-	-	-0.02	0.095	0.135
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Cheek	0mm	Ant 2	Receiver on	349000	1745	22.48	24.00	1.419	-	-	0.04	0.148	0.210
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Tilted	0mm	Ant 2	Receiver on	349000	1745	22.48	24.00	1.419	-	-	0.08	0.063	0.089
1900Mhz																				
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	18900	1880	13.72	14.50	1.197	-	-	-0.06	0.325	0.389
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	Receiver on	18900	1880	13.72	14.50	1.197	-	-	-0.19	0.327	0.391
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	Receiver on	18900	1880	13.72	14.50	1.197	-	-	0.02	0.168	0.201
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	Receiver on	18900	1880	13.72	14.50	1.197	-	-	0.03	0.186	0.223
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	Receiver on	18900	1880	13.66	14.50	1.213	-	-	-0.11	0.319	0.387



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	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	Receiver on	18900	1880	13.66	14.50	1.213	-	-	-0.17	0.305	0.370
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	Receiver on	18900	1880	13.66	14.50	1.213	-	-	-0.13	0.161	0.195
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	Receiver on	18900	1880	13.66	14.50	1.213	-	-	0.17	0.181	0.220
25	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	Receiver on	18900	1880	14.79	16.00	1.321	-	-	0.16	0.301	0.398
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	Receiver on	18900	1880	14.79	16.00	1.321	-	-	-0.07	0.080	0.106
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	Receiver on	18900	1880	14.79	16.00	1.321	-	-	0.14	0.109	0.144
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	Receiver on	18900	1880	14.79	16.00	1.321	-	-	0.08	0.048	0.063
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	Receiver on	18900	1880	14.76	16.00	1.330	-	-	0.12	0.283	0.377
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	Receiver on	18900	1880	14.76	16.00	1.330	-	-	0	0.075	0.100
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	Receiver on	18900	1880	14.76	16.00	1.330	-	-	-0.13	0.102	0.136
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	Receiver on	18900	1880	14.76	16.00	1.330	-	-	-0.14	0.044	0.059
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	376500	1882.5	12.25	13.50	1.334	-	-	0.02	0.245	0.327
	FR1 n25	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	376500	1882.5	12.25	13.50	1.334	-	-	0.05	0.297	0.396
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	376500	1882.5	12.25	13.50	1.334	-	-	-0.17	0.138	0.184
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	376500	1882.5	12.25	13.50	1.334	-	-	-0.13	0.157	0.209
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 3	Receiver on	376500	1882.5	12.24	13.50	1.337	-	-	0.12	0.277	0.370
	FR1 n25	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 3	Receiver on	376500	1882.5	12.24	13.50	1.337	-	-	-0.03	0.302	0.404
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 3	Receiver on	376500	1882.5	12.24	13.50	1.337	-	-	0.07	0.142	0.190
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 3	Receiver on	376500	1882.5	12.24	13.50	1.337	-	-	0.12	0.160	0.214
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Cheek	0mm	Ant 2	Receiver on	376000	1880	13.52	15.00	1.406	-	-	0.05	0.296	0.416
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Tilted	0mm	Ant 2	Receiver on	376000	1880	13.52	15.00	1.406	-	-	0.11	0.247	0.347
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Cheek	0mm	Ant 2	Receiver on	376000	1880	13.52	15.00	1.406	-	-	-0.01	0.133	0.187
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Tilted	0mm	Ant 2	Receiver on	376000	1880	13.52	15.00	1.406	-	-	-0.02	0.138	0.194
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 2	Receiver on	376000	1880	13.48	15.00	1.419	-	-	0.04	0.284	0.403
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 2	Receiver on	376000	1880	13.48	15.00	1.419	-	-	0.14	0.238	0.338
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 2	Receiver on	376000	1880	13.48	15.00	1.419	-	-	-0.01	0.128	0.182
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 2	Receiver on	376000	1880	13.48	15.00	1.419	-	-	0.11	0.133	0.189
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	Receiver on	27710	2310	10.53	11.50	1.250	-	-	0.09	0.275	0.344
	LTE Band 30	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	Receiver on	27710	2310	10.53	11.50	1.250	-	-	0.13	0.328	0.410
	LTE Band 30	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	Receiver on	27710	2310	10.53	11.50	1.250	-	-	0.12	0.119	0.149
	LTE Band 30	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	Receiver on	27710	2310	10.53	11.50	1.250	-	-	-0.05	0.151	0.189
	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 3	Receiver on	27710	2310	10.48	11.50	1.265	-	-	-0.17	0.275	0.348
	LTE Band 30	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 3	Receiver on	27710	2310	10.48	11.50	1.265	-	-	-0.08	0.317	0.401
	LTE Band 30	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 3	Receiver on	27710	2310	10.48	11.50	1.265	-	-	-0.04	0.118	0.149
	LTE Band 30	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 3	Receiver on	27710	2310	10.48	11.50	1.265	-	-	0.05	0.144	0.182
	LTE Band 30	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	Receiver on	27710	2310	15.36	16.50	1.300	-	-	-0.16	0.317	0.412
	LTE Band 30	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	Receiver on	27710	2310	15.36	16.50	1.300	-	-	-0.16	0.279	0.363
	LTE Band 30	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	Receiver on	27710	2310	15.36	16.50	1.300	-	-	-0.12	0.154	0.200
	LTE Band 30	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	Receiver on	27710	2310	15.36	16.50	1.300	-	-	0.19	0.112	0.146
	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 2	Receiver on	27710	2310	15.34	16.50	1.306	-	-	0.06	0.314	0.410
	LTE Band 30	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 2	Receiver on	27710	2310	15.34	16.50	1.306	-	-	0.03	0.276	0.361
	LTE Band 30	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 2	Receiver on	27710	2310	15.34	16.50	1.306	-	-	0.13	0.149	0.195
	LTE Band 30	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 2	Receiver on	27710	2310	15.34	16.50	1.306	-	-	-0.17	0.108	0.141
2600Mhz																				
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 3	Receiver on	518598	2592.99	14.92	16.00	1.282	-	-	0.11	0.310	0.398
	FR1 n41	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 3	Receiver on	518598	2592.99	14.92	16.00	1.282	-	-	-0.03	0.242	0.310
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 3	Receiver on	518598	2592.99	14.92	16.00	1.282	-	-	0.06	0.098	0.126
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 3	Receiver on	518598	2592.99	14.92	16.00	1.282	-	-	0.19	0.103	0.132
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 3	Receiver on	518598	2592.99	14.88	16.00	1.294	-	-	-0.02	0.310	0.401
	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 3	Receiver on	518598	2592.99	14.88	16.00	1.294	-	-	0.19	0.236	0.305
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 3	Receiver on	518598	2592.99	14.88	16.00	1.294	-	-	0.1	0.097	0.126
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 3	Receiver on	518598	2592.99	14.88	16.00	1.294	-	-	0.01	0.100	0.129
3000Mhz-4000Mhz																				
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	641666	3624.99	11.89	13.00	1.291	-	-	0.19	0.192	0.248
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	641666	3624.99	11.89	13.00	1.291	-	-	-0.02	0.174	0.225



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	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	641666	3624.99	11.89	13.00	1.291	-	-	-0.16	0.275	0.355
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	641666	3624.99	11.89	13.00	1.291	-	-	-0.09	0.302	0.390
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	641666	3624.99	11.82	13.00	1.312	-	-	0.13	0.195	0.256
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	641666	3624.99	11.82	13.00	1.312	-	-	0.04	0.175	0.230
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	641666	3624.99	11.82	13.00	1.312	-	-	-0.09	0.277	0.363
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	641666	3624.99	11.82	13.00	1.312	-	-	-0.17	0.304	0.399
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	633332	3499.98	11.93	13.00	1.279	-	-	0.15	0.135	0.173
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	633332	3499.98	11.93	13.00	1.279	-	-	0.02	0.121	0.155
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	633332	3499.98	11.93	13.00	1.279	-	-	0.02	0.185	0.237
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	633332	3499.98	11.93	13.00	1.279	-	-	0.14	0.195	0.249
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	633332	3499.98	11.84	13.00	1.306	-	-	-0.18	0.135	0.176
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	633332	3499.98	11.84	13.00	1.306	-	-	-0.11	0.123	0.161
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	633332	3499.98	11.84	13.00	1.306	-	-	0.05	0.187	0.244
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	633332	3499.98	11.84	13.00	1.306	-	-	-0.04	0.202	0.264
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	656000	3840	11.98	13.00	1.265	-	-	-0.03	0.132	0.167
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	656000	3840	11.98	13.00	1.265	-	-	0.12	0.132	0.167
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	656000	3840	11.98	13.00	1.265	-	-	-0.16	0.220	0.278
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	656000	3840	11.98	13.00	1.265	-	-	0.1	0.240	0.304
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 4	Receiver on	656000	3840	11.88	13.00	1.294	-	-	0.04	0.124	0.160
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 4	Receiver on	656000	3840	11.88	13.00	1.294	-	-	0	0.114	0.148
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 4	Receiver on	656000	3840	11.88	13.00	1.294	-	-	0.12	0.207	0.268
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 4	Receiver on	656000	3840	11.88	13.00	1.294	-	-	-0.11	0.228	0.295

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN & BT																
	Bluetooth	DH5 1Mbps	Right Cheek	0mm	Ant 5	full power	0	2402	8.50	10.00	1.413	76.82	1.302	-0.16	0.034	0.063
	Bluetooth	DH5 1Mbps	Right Tilted	0mm	Ant 5	full power	0	2402	8.50	10.00	1.413	76.82	1.302	-0.16	0.036	0.066
26	Bluetooth	DH5 1Mbps	Left Cheek	0mm	Ant 5	full power	0	2402	8.50	10.00	1.413	76.82	1.302	0.03	0.107	0.197
	Bluetooth	DH5 1Mbps	Left Tilted	0mm	Ant 5	full power	0	2402	8.50	10.00	1.413	76.82	1.302	-0.19	0.082	0.151
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 5	Receiver on	1	2412	11.85	12.50	1.161	99.71	1.003	-0.04	0.145	0.169
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 5	Receiver on	1	2412	11.85	12.50	1.161	99.71	1.003	-0.07	0.150	0.175
27	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 5	Receiver on	1	2412	11.85	12.50	1.161	99.71	1.003	0.02	0.325	0.379
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 5	Receiver on	1	2412	11.85	12.50	1.161	99.71	1.003	0.12	0.237	0.276
	WLAN 5.3GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 5	Receiver on	58	5290	10.44	10.50	1.014	90.36	1.107	-0.09	0.161	0.181
	WLAN 5.3GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 5	Receiver on	58	5290	10.44	10.50	1.014	90.36	1.107	-0.12	0.156	0.175
28	WLAN 5.3GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5	Receiver on	58	5290	10.44	10.50	1.014	90.36	1.107	0.01	0.337	0.378
	WLAN 5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5	Receiver on	58	5290	10.44	10.50	1.014	90.36	1.107	-0.15	0.280	0.314
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 5	Receiver on	106	5530	8.82	9.00	1.042	90.36	1.107	-0.09	0.188	0.217
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 5	Receiver on	106	5530	8.82	9.00	1.042	90.36	1.107	0.14	0.184	0.212
29	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5	Receiver on	106	5530	8.82	9.00	1.042	90.36	1.107	0.05	0.335	0.387
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5	Receiver on	106	5530	8.82	9.00	1.042	90.36	1.107	0.08	0.320	0.369
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 5	Receiver on	155	5775	10.40	11.50	1.288	90.36	1.107	-0.12	0.142	0.202
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 5	Receiver on	155	5775	10.40	11.50	1.288	90.36	1.107	0.04	0.143	0.204
30	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5	Receiver on	155	5775	10.40	11.50	1.288	90.36	1.107	-0.03	0.283	0.404
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5	Receiver on	155	5775	10.40	11.50	1.288	90.36	1.107	0.19	0.245	0.349



15.2 Hotspot SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																				
31	LTE Band 71	20M	QPSK	1	0	-	Front	10mm	Ant 0	Hotspot on	133297	680.5	23.92	25.00	1.282	-	-	0.1	0.228	0.292
	LTE Band 71	20M	QPSK	1	0	-	Back	10mm	Ant 0	Hotspot on	133297	680.5	23.92	25.00	1.282	-	-	0.09	0.338	0.433
	LTE Band 71	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	Hotspot on	133297	680.5	23.92	25.00	1.282	-	-	0	0.211	0.271
	LTE Band 71	20M	QPSK	1	0	-	Right Side	10mm	Ant 0	Hotspot on	133297	680.5	23.92	25.00	1.282	-	-	-0.16	0.327	0.419
	LTE Band 71	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Hotspot on	133297	680.5	23.92	25.00	1.282	-	-	-0.11	0.128	0.164
	LTE Band 71	20M	QPSK	50	0	-	Front	10mm	Ant 0	Hotspot on	133297	680.5	22.92	24.00	1.282	-	-	0.17	0.197	0.253
	LTE Band 71	20M	QPSK	50	0	-	Back	10mm	Ant 0	Hotspot on	133297	680.5	22.92	24.00	1.282	-	-	0.15	0.257	0.330
	LTE Band 71	20M	QPSK	50	0	-	Left Side	10mm	Ant 0	Hotspot on	133297	680.5	22.92	24.00	1.282	-	-	0.18	0.219	0.281
	LTE Band 71	20M	QPSK	50	0	-	Right Side	10mm	Ant 0	Hotspot on	133297	680.5	22.92	24.00	1.282	-	-	0.06	0.289	0.371
	LTE Band 71	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 0	Hotspot on	133297	680.5	22.92	24.00	1.282	-	-	0.03	0.105	0.135
32	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 0	Hotspot on	23095	707.5	23.83	25.00	1.309	-	-	0.07	0.276	0.361
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	Hotspot on	23095	707.5	23.83	25.00	1.309	-	-	-0.03	0.364	0.477
	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Hotspot on	23095	707.5	23.83	25.00	1.309	-	-	0	0.228	0.298
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Hotspot on	23095	707.5	23.83	25.00	1.309	-	-	-0.18	0.312	0.408
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Hotspot on	23095	707.5	23.83	25.00	1.309	-	-	0.13	0.126	0.165
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 0	Hotspot on	23095	707.5	22.71	24.00	1.346	-	-	0.17	0.241	0.324
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 0	Hotspot on	23095	707.5	22.71	24.00	1.346	-	-	0.17	0.352	0.474
	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Hotspot on	23095	707.5	22.71	24.00	1.346	-	-	-0.18	0.199	0.268
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Hotspot on	23095	707.5	22.71	24.00	1.346	-	-	-0.01	0.272	0.366
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Hotspot on	23095	707.5	22.71	24.00	1.346	-	-	-0.07	0.110	0.148
33	LTE Band 13	10M	QPSK	1	0	-	Front	10mm	Ant 0	Hotspot on	23230	782	24.05	25.00	1.245	-	-	-0.07	0.343	0.427
	LTE Band 13	10M	QPSK	1	0	-	Back	10mm	Ant 0	Hotspot on	23230	782	24.05	25.00	1.245	-	-	0.11	0.419	0.521
	LTE Band 13	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Hotspot on	23230	782	24.05	25.00	1.245	-	-	0.06	0.288	0.358
	LTE Band 13	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Hotspot on	23230	782	24.05	25.00	1.245	-	-	-0.04	0.356	0.443
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Hotspot on	23230	782	24.05	25.00	1.245	-	-	0.19	0.173	0.215
	LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 0	Hotspot on	23230	782	22.91	24.00	1.285	-	-	0.02	0.271	0.348
	LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 0	Hotspot on	23230	782	22.91	24.00	1.285	-	-	-0.01	0.384	0.494
	LTE Band 13	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Hotspot on	23230	782	22.91	24.00	1.285	-	-	-0.03	0.227	0.292
	LTE Band 13	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Hotspot on	23230	782	22.91	24.00	1.285	-	-	0.08	0.307	0.395
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Hotspot on	23230	782	22.91	24.00	1.285	-	-	0	0.170	0.218
34	FR1 n71	30M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	0.15	0.186	0.276
	FR1 n71	30M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	-0.09	0.251	0.372
	FR1 n71	30M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	-0.17	0.119	0.176
	FR1 n71	30M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	-0.1	0.202	0.299
	FR1 n71	30M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	-0.01	0.072	0.107
	FR1 n71	30M	QPSK	80	40	DFT-15	Front	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	-0.08	0.191	0.288
	FR1 n71	30M	QPSK	80	40	DFT-15	Back	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	0.09	0.272	0.410
	FR1 n71	30M	QPSK	80	40	DFT-15	Left Side	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	-0.1	0.131	0.197
	FR1 n71	30M	QPSK	80	40	DFT-15	Right Side	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	-0.11	0.211	0.318
	FR1 n71	30M	QPSK	80	40	DFT-15	Bottom Side	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	0.11	0.075	0.113
835MHz																				
35	GSM850	-	-	-	-	GPRS 2TX Slot	Front	10mm	Ant 0	Hotspot on	189	836.4	32.27	33.00	1.183	-	-	-0.14	0.384	0.454
	GSM850	-	-	-	-	GPRS 2TX Slot	Back	10mm	Ant 0	Hotspot on	189	836.4	32.27	33.00	1.183	-	-	-0.11	0.633	0.749
	GSM850	-	-	-	-	GPRS 2TX Slot	Left Side	10mm	Ant 0	Hotspot on	189	836.4	32.27	33.00	1.183	-	-	0.06	0.185	0.219
	GSM850	-	-	-	-	GPRS 2TX Slot	Right Side	10mm	Ant 0	Hotspot on	189	836.4	32.27	33.00	1.183	-	-	-0.18	0.215	0.254
	GSM850	-	-	-	-	GPRS 2TX Slot	Bottom Side	10mm	Ant 0	Hotspot on	189	836.4	32.27	33.00	1.183	-	-	-0.01	0.190	0.225
36	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	Hotspot on	4182	836.4	23.58	24.50	1.236	-	-	-0.14	0.299	0.370
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	Hotspot on	4182	836.4	23.58	24.50	1.236	-	-	0.06	0.497	0.614
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 0	Hotspot on	4182	836.4	23.58	24.50	1.236	-	-	0.15	0.192	0.237
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	Hotspot on	4182	836.4	23.58	24.50	1.236	-	-	-0.03	0.226	0.279



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	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	Hotspot on	4182	836.4	23.58	24.50	1.236	-	-	-0.06	0.223	0.276
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 0	Hotspot on	26865	831.5	24.06	25.00	1.242	-	-	0.12	0.254	0.315
37	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 0	Hotspot on	26865	831.5	24.06	25.00	1.242	-	-	0.02	0.377	0.468
	LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 0	Hotspot on	26865	831.5	24.06	25.00	1.242	-	-	0.16	0.147	0.183
	LTE Band 26	15M	QPSK	1	0	-	Right Side	10mm	Ant 0	Hotspot on	26865	831.5	24.06	25.00	1.242	-	-	-0.01	0.160	0.199
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Hotspot on	26865	831.5	24.06	25.00	1.242	-	-	-0.11	0.123	0.153
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 0	Hotspot on	26865	831.5	22.97	24.00	1.268	-	-	0.03	0.202	0.256
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 0	Hotspot on	26865	831.5	22.97	24.00	1.268	-	-	-0.03	0.299	0.379
	LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 0	Hotspot on	26865	831.5	22.97	24.00	1.268	-	-	-0.15	0.116	0.147
	LTE Band 26	15M	QPSK	36	0	-	Right Side	10mm	Ant 0	Hotspot on	26865	831.5	22.97	24.00	1.268	-	-	0.12	0.127	0.161
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	10mm	Ant 0	Hotspot on	26865	831.5	22.97	24.00	1.268	-	-	0.02	0.098	0.124
	FR1 n5	25M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	0.16	0.179	0.235
	FR1 n5	25M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	-0.08	0.287	0.377
	FR1 n5	25M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	-0.19	0.131	0.172
	FR1 n5	25M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	-0.17	0.151	0.198
	FR1 n5	25M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	0.15	0.099	0.130
	FR1 n5	25M	QPSK	64	32	DFT-15	Front	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	-0.03	0.187	0.248
38	FR1 n5	25M	QPSK	64	32	DFT-15	Back	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	-0.01	0.316	0.418
	FR1 n5	25M	QPSK	64	32	DFT-15	Left Side	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	-0.06	0.145	0.192
	FR1 n5	25M	QPSK	64	32	DFT-15	Right Side	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	-0.06	0.166	0.220
	FR1 n5	25M	QPSK	64	32	DFT-15	Bottom Side	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	0.01	0.109	0.144
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 3	Hotspot on	1413	1732.6	17.87	19.50	1.455	-	-	-0.11	0.418	0.608
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 3	Hotspot on	1413	1732.6	17.87	19.50	1.455	-	-	0.08	0.367	0.534
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 3	Hotspot on	1413	1732.6	17.87	19.50	1.455	-	-	-0.15	0.135	0.196
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 3	Hotspot on	1413	1732.6	17.87	19.50	1.455	-	-	-0.19	0.599	0.872
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 3	Hotspot on	1312	1712.4	17.83	19.50	1.469	-	-	-0.19	0.512	0.752
39	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 3	Hotspot on	1513	1752.6	17.84	19.50	1.466	-	-	0.05	0.625	0.916
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 3	Hotspot on	132322	1745	19.21	20.50	1.346	-	-	0.07	0.366	0.493
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 3	Hotspot on	132322	1745	19.21	20.50	1.346	-	-	0.08	0.305	0.410
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	Hotspot on	132322	1745	19.21	20.50	1.346	-	-	-0.08	0.121	0.163
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	132322	1745	19.21	20.50	1.346	-	-	-0.17	0.605	0.814
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	132072	1720	19.11	20.50	1.377	-	-	-0.11	0.451	0.621
40	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	132572	1770	19.02	20.50	1.406	-	-	-0.04	0.627	0.882
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 3	Hotspot on	132322	1745	19.11	20.50	1.377	-	-	0.13	0.357	0.492
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 3	Hotspot on	132322	1745	19.11	20.50	1.377	-	-	-0.1	0.297	0.409
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	Hotspot on	132322	1745	19.11	20.50	1.377	-	-	0.09	0.118	0.163
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	132322	1745	19.11	20.50	1.377	-	-	-0.14	0.591	0.814
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	132072	1720	19.01	20.50	1.409	-	-	-0.11	0.440	0.620
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	132572	1770	18.94	20.50	1.432	-	-	0.08	0.611	0.875
	LTE Band 66	20M	QPSK	100	0	-	Top Side	10mm	Ant 3	Hotspot on	132572	1770	19.10	20.50	1.380	-	-	0.14	0.549	0.758
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	10mm	Ant 3	Hotspot on	349000	1745	23.41	23.50	1.021	-	-	0.14	0.462	0.472
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	10mm	Ant 3	Hotspot on	349000	1745	23.41	23.50	1.021	-	-	-0.09	0.477	0.487
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 3	Hotspot on	349000	1745	23.41	23.50	1.021	-	-	-0.06	0.148	0.151
	FR1 n66	45M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 3	Hotspot on	349000	1745	23.41	23.50	1.021	-	-	-0.08	0.769	0.785
	FR1 n66	45M	QPSK	120	60	DFT-15	Front	10mm	Ant 3	Hotspot on	349000	1745	23.34	23.50	1.038	-	-	-0.1	0.471	0.489
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	10mm	Ant 3	Hotspot on	349000	1745	23.34	23.50	1.038	-	-	0.02	0.487	0.505
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Side	10mm	Ant 3	Hotspot on	349000	1745	23.34	23.50	1.038	-	-	-0.04	0.151	0.157
41	FR1 n66	45M	QPSK	120	60	DFT-15	Top Side	10mm	Ant 3	Hotspot on	349000	1745	23.34	23.50	1.038	-	-	0.09	0.785	0.814
	FR1 n66	45M	QPSK	243	0	DFT-15	Top Side	10mm	Ant 3	Hotspot on	349000	1745	23.28	23.50	1.052	-	-	-0.13	0.770	0.810
1900Mhz																				
	GSM1900	-	-	-	-	GPRS 2TX Slot	Front	10mm	Ant 3	Hotspot on	661	1880	22.60	23.50	1.230	-	-	-0.07	0.266	0.327
	GSM1900	-	-	-	-	GPRS 2TX Slot	Back	10mm	Ant 3	Hotspot on	661	1880	22.60	23.50	1.230	-	-	0.17	0.290	0.357
	GSM1900	-	-	-	-	GPRS 2TX Slot	Left Side	10mm	Ant 3	Hotspot on	661	1880	22.60	23.50	1.230	-	-	0	0.070	0.086
	GSM1900	-	-	-	-	GPRS 2TX Slot	Top Side	10mm	Ant 3	Hotspot on	661	1880	22.60	23.50	1.230	-	-	0.15	0.664	0.817
	GSM1900	-	-	-	-	GPRS 2TX Slot	Top Side	10mm	Ant 3	Hotspot on	512	1850.2	22.30	23.50	1.318	-	-	-0.02	0.593	0.782



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42	GSM1900	-	-	-	-	GPRS 2TX Slot	Top Side	10mm	Ant 3	Hotspot on	810	1909.8	22.08	23.50	1.387	-	-	0.03	0.591	0.820
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 3	Hotspot on	9400	1880	18.43	19.50	1.279	-	-	-0.01	0.303	0.388
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 3	Hotspot on	9400	1880	18.43	19.50	1.279	-	-	-0.11	0.391	0.500
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 3	Hotspot on	9400	1880	18.43	19.50	1.279	-	-	0.12	0.085	0.109
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 3	Hotspot on	9400	1880	18.43	19.50	1.279	-	-	-0.13	0.633	0.810
43	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 3	Hotspot on	9262	1852.4	18.29	19.50	1.321	-	-	0.08	0.641	0.847
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 3	Hotspot on	9538	1907.6	18.34	19.50	1.306	-	-	0.08	0.607	0.793
	LTE Band 25	20M	QPSK	1	0	-	Front	10mm	Ant 3	Hotspot on	26340	1880	19.66	20.50	1.213	-	-	-0.02	0.306	0.371
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 3	Hotspot on	26340	1880	19.66	20.50	1.213	-	-	-0.03	0.350	0.425
	LTE Band 25	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	Hotspot on	26340	1880	19.66	20.50	1.213	-	-	-0.08	0.163	0.198
	LTE Band 25	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	26340	1880	19.66	20.50	1.213	-	-	0.1	0.683	0.829
	LTE Band 25	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	26140	1860	19.46	20.50	1.271	-	-	-0.06	0.640	0.813
44	LTE Band 25	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	26590	1905	19.24	20.50	1.337	-	-	0.06	0.626	0.837
	LTE Band 25	20M	QPSK	50	0	-	Front	10mm	Ant 3	Hotspot on	26340	1880	19.65	20.50	1.216	-	-	-0.18	0.303	0.369
	LTE Band 25	20M	QPSK	50	0	-	Back	10mm	Ant 3	Hotspot on	26340	1880	19.65	20.50	1.216	-	-	0.05	0.347	0.422
	LTE Band 25	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	Hotspot on	26340	1880	19.65	20.50	1.216	-	-	0.04	0.161	0.196
	LTE Band 25	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	26340	1880	19.65	20.50	1.216	-	-	0.14	0.661	0.804
	LTE Band 25	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	26140	1860	19.43	20.50	1.279	-	-	-0.16	0.634	0.811
	LTE Band 25	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	26590	1905	19.19	20.50	1.352	-	-	0.03	0.615	0.832
	LTE Band 25	20M	QPSK	100	0	-	Top Side	10mm	Ant 3	Hotspot on	26340	1880	19.61	20.50	1.227	-	-	0.12	0.639	0.784
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 3	Hotspot on	376500	1882.5	20.62	22.00	1.374	-	-	0.02	0.316	0.434
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 3	Hotspot on	376500	1882.5	20.62	22.00	1.374	-	-	-0.05	0.349	0.480
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 3	Hotspot on	376500	1882.5	20.62	22.00	1.374	-	-	0.14	0.155	0.213
	FR1 n25	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 3	Hotspot on	376500	1882.5	20.62	22.00	1.374	-	-	-0.07	0.586	0.805
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 3	Hotspot on	376500	1882.5	20.54	22.00	1.400	-	-	-0.17	0.331	0.463
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 3	Hotspot on	376500	1882.5	20.54	22.00	1.400	-	-	0.17	0.335	0.469
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 3	Hotspot on	376500	1882.5	20.54	22.00	1.400	-	-	0.15	0.092	0.129
45	FR1 n25	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 3	Hotspot on	376500	1882.5	20.54	22.00	1.400	-	-	-0.05	0.642	0.899
	FR1 n25	40M	QPSK	216	0	DFT-15	Top Side	10mm	Ant 3	Hotspot on	376500	1882.5	20.51	22.00	1.409	-	-	0.08	0.633	0.892
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Front	10mm	Ant 3	Hotspot on	27710	2310	14.98	16.00	1.265	-	-	0.18	0.186	0.235
	LTE Band 30	10M	QPSK	1	0	-	Back	10mm	Ant 3	Hotspot on	27710	2310	14.98	16.00	1.265	-	-	0.16	0.515	0.651
	LTE Band 30	10M	QPSK	1	0	-	Left Side	10mm	Ant 3	Hotspot on	27710	2310	14.98	16.00	1.265	-	-	-0.06	0.097	0.123
46	LTE Band 30	10M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	27710	2310	14.98	16.00	1.265	-	-	0.07	0.652	0.825
	LTE Band 30	10M	QPSK	25	0	-	Front	10mm	Ant 3	Hotspot on	27710	2310	14.88	16.00	1.294	-	-	-0.16	0.176	0.228
	LTE Band 30	10M	QPSK	25	0	-	Back	10mm	Ant 3	Hotspot on	27710	2310	14.88	16.00	1.294	-	-	-0.13	0.487	0.630
	LTE Band 30	10M	QPSK	25	0	-	Left Side	10mm	Ant 3	Hotspot on	27710	2310	14.88	16.00	1.294	-	-	0.16	0.092	0.119
	LTE Band 30	10M	QPSK	25	0	-	Top Side	10mm	Ant 3	Hotspot on	27710	2310	14.88	16.00	1.294	-	-	0.18	0.616	0.797
	LTE Band 30	10M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	27710	2310	14.80	16.00	1.318	-	-	0.07	0.613	0.808
	FR1 n30	10M	QPSK	1	1	DFT-15	Front	10mm	Ant 3	Hotspot on	462000	2310	18.78	19.00	1.052	-	-	0.17	0.273	0.287
	FR1 n30	10M	QPSK	1	1	DFT-15	Back	10mm	Ant 3	Hotspot on	462000	2310	18.78	19.00	1.052	-	-	-0.11	0.752	0.791
	FR1 n30	10M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 3	Hotspot on	462000	2310	18.78	19.00	1.052	-	-	0.18	0.142	0.149
47	FR1 n30	10M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 3	Hotspot on	462000	2310	18.78	19.00	1.052	-	-	-0.06	0.805	0.847
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	10mm	Ant 3	Hotspot on	462000	2310	18.73	19.00	1.064	-	-	0.14	0.268	0.285
	FR1 n30	10M	QPSK	25	14	DFT-15	Back	10mm	Ant 3	Hotspot on	462000	2310	18.73	19.00	1.064	-	-	0.01	0.745	0.793
	FR1 n30	10M	QPSK	25	14	DFT-15	Left Side	10mm	Ant 3	Hotspot on	462000	2310	18.73	19.00	1.064	-	-	0.17	0.140	0.149
	FR1 n30	10M	QPSK	25	14	DFT-15	Top Side	10mm	Ant 3	Hotspot on	462000	2310	18.73	19.00	1.064	-	-	-0.03	0.792	0.843
	FR1 n30	10M	QPSK	50	0	DFT-15	Back	10mm	Ant 3	Hotspot on	462000	2310	18.69	19.00	1.074	-	-	-0.19	0.746	0.801
	FR1 n30	10M	QPSK	50	0	DFT-15	Top Side	10mm	Ant 3	Hotspot on	462000	2310	18.69	19.00	1.074	-	-	0.09	0.783	0.841
2600Mhz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 3	Hotspot on	21100	2535	18.38	19.50	1.294	-	-	-0.12	0.214	0.277
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 3	Hotspot on	21100	2535	18.38	19.50	1.294	-	-	0.09	0.630	0.815
	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	Hotspot on	21100	2535	18.38	19.50	1.294	-	-	-0.15	0.264	0.342
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	21100	2535	18.38	19.50	1.294	-	-	0.16	0.419	0.542
48	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 3	Hotspot on	20850	2510	18.12	19.50	1.374	-	-	-0.18	0.623	0.856
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 3	Hotspot on	21350	2560	18.36	19.50	1.300	-	-	0.09	0.494	0.642



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	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 3	Hotspot on	21100	2535	18.33	19.50	1.309	-	-	0.11	0.212	0.278
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 3	Hotspot on	21100	2535	18.33	19.50	1.309	-	-	0.16	0.611	0.800
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	Hotspot on	21100	2535	18.33	19.50	1.309	-	-	0.11	0.261	0.342
	LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	21100	2535	18.33	19.50	1.309	-	-	-0.15	0.415	0.543
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 3	Hotspot on	20850	2510	18.04	19.50	1.400	-	-	0.15	0.610	0.854
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 3	Hotspot on	21350	2560	18.32	19.50	1.312	-	-	0.01	0.489	0.642
	LTE Band 7	20M	QPSK	100	0	-	Back	10mm	Ant 3	Hotspot on	21100	2535	18.32	19.50	1.312	-	-	0.08	0.540	0.709
	FR1 n7	50M	QPSK	1	1	DFT-15	Front	10mm	Ant 3	Hotspot on	507000	2535	18.52	20.00	1.406	-	-	-0.05	0.211	0.297
49	FR1 n7	50M	QPSK	1	1	DFT-15	Back	10mm	Ant 3	Hotspot on	507000	2535	18.52	20.00	1.406	-	-	-0.09	0.580	0.816
	FR1 n7	50M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 3	Hotspot on	507000	2535	18.52	20.00	1.406	-	-	0.01	0.313	0.440
	FR1 n7	50M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 3	Hotspot on	507000	2535	18.52	20.00	1.406	-	-	0.11	0.423	0.595
	FR1 n7	50M	QPSK	135	68	DFT-15	Front	10mm	Ant 3	Hotspot on	507000	2535	18.45	20.00	1.429	-	-	0.17	0.206	0.294
	FR1 n7	50M	QPSK	135	68	DFT-15	Back	10mm	Ant 3	Hotspot on	507000	2535	18.45	20.00	1.429	-	-	0.17	0.560	0.800
	FR1 n7	50M	QPSK	135	68	DFT-15	Left Side	10mm	Ant 3	Hotspot on	507000	2535	18.45	20.00	1.429	-	-	-0.16	0.312	0.446
	FR1 n7	50M	QPSK	135	68	DFT-15	Top Side	10mm	Ant 3	Hotspot on	507000	2535	18.45	20.00	1.429	-	-	-0.08	0.393	0.562
	FR1 n7	50M	QPSK	270	0	DFT-15	Back	10mm	Ant 3	Hotspot on	507000	2535	18.36	20.00	1.459	-	-	-0.1	0.557	0.813
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 3	Hotspot on	518598	2592.99	20.41	21.50	1.285	-	-	-0.02	0.264	0.339
50	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 3	Hotspot on	518598	2592.99	20.41	21.50	1.285	-	-	-0.06	0.637	0.819
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 3	Hotspot on	518598	2592.99	20.41	21.50	1.285	-	-	0.04	0.357	0.459
	FR1 n41	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 3	Hotspot on	518598	2592.99	20.41	21.50	1.285	-	-	0.12	0.467	0.600
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 3	Hotspot on	518598	2592.99	20.37	21.50	1.297	-	-	0.18	0.259	0.336
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 3	Hotspot on	518598	2592.99	20.37	21.50	1.297	-	-	-0.18	0.624	0.809
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 3	Hotspot on	518598	2592.99	20.37	21.50	1.297	-	-	-0.12	0.350	0.454
	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 3	Hotspot on	518598	2592.99	20.37	21.50	1.297	-	-	0.09	0.458	0.594
	FR1 n41	100M	QPSK	270	0	DFT-30	Back	10mm	Ant 3	Hotspot on	518598	2592.99	20.31	21.50	1.315	-	-	-0.05	0.520	0.684
	FR1 n41	100M	QPSK	270	0	DFT-30	Top Side	10mm	Ant 3	Hotspot on	518598	2592.99	20.31	21.50	1.315	-	-	-0.17	0.366	0.481
3000Mhz-4000Mhz																				
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 4	Hotspot on	56150	3641	22.47	23.00	1.130	62.9	1.006	0.16	0.433	0.492
51	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 4	Hotspot on	56150	3641	22.47	23.00	1.130	62.9	1.006	-0.07	0.778	0.884
	LTE Band 48	20M	QPSK	1	0	-	Right Side	10mm	Ant 4	Hotspot on	56150	3641	22.47	23.00	1.130	62.9	1.006	0.03	0.325	0.369
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	Hotspot on	56150	3641	22.47	23.00	1.130	62.9	1.006	0.08	0.760	0.864
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 4	Hotspot on	55340	3560	21.88	23.00	1.294	62.9	1.006	0.06	0.617	0.803
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 4	Hotspot on	55830	3609	22.03	23.00	1.250	62.9	1.006	0.13	0.669	0.841
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 4	Hotspot on	56640	3690	22.38	23.00	1.153	62.9	1.006	0.05	0.727	0.844
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	Hotspot on	55340	3560	21.88	23.00	1.294	62.9	1.006	-0.12	0.641	0.835
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	Hotspot on	55830	3609	22.03	23.00	1.250	62.9	1.006	-0.11	0.696	0.875
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	Hotspot on	56640	3690	22.38	23.00	1.153	62.9	1.006	0.17	0.747	0.867
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 4	Hotspot on	56150	3641	22.37	23.00	1.156	62.9	1.006	-0.19	0.424	0.493
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 4	Hotspot on	56150	3641	22.37	23.00	1.156	62.9	1.006	0.08	0.752	0.875
	LTE Band 48	20M	QPSK	50	0	-	Right Side	10mm	Ant 4	Hotspot on	56150	3641	22.37	23.00	1.156	62.9	1.006	0.12	0.273	0.318
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	Hotspot on	56150	3641	22.37	23.00	1.156	62.9	1.006	0.08	0.745	0.866
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 4	Hotspot on	55340	3560	21.79	23.00	1.321	62.9	1.006	0.12	0.605	0.804
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 4	Hotspot on	55830	3609	22.00	23.00	1.259	62.9	1.006	0.02	0.656	0.831
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 4	Hotspot on	56640	3690	22.36	23.00	1.159	62.9	1.006	-0.06	0.712	0.830
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	Hotspot on	55340	3560	21.79	23.00	1.321	62.9	1.006	-0.07	0.628	0.835
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	Hotspot on	55830	3609	22.00	23.00	1.259	62.9	1.006	-0.15	0.682	0.864
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	Hotspot on	56640	3690	22.36	23.00	1.159	62.9	1.006	0.08	0.732	0.853
	LTE Band 48	20M	QPSK	100	0	-	Back	10mm	Ant 4	Hotspot on	56150	3641	22.33	23.00	1.167	62.9	1.006	-0.13	0.739	0.867
	LTE Band 48	20M	QPSK	100	0	-	Top Side	10mm	Ant 4	Hotspot on	56150	3641	22.33	23.00	1.167	62.9	1.006	-0.01	0.722	0.847
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	Hotspot on	641666	3624.99	19.76	21.50	1.493	-	-	-0.04	0.322	0.481
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	Hotspot on	641666	3624.99	19.76	21.50	1.493	-	-	0.01	0.581	0.867
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 4	Hotspot on	641666	3624.99	19.76	21.50	1.493	-	-	0.14	0.184	0.275
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	Hotspot on	641666	3624.99	19.76	21.50	1.493	-	-	0.13	0.484	0.723
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	Hotspot on	638000	3570	19.72	21.50	1.507	-	-	0.1	0.543	0.818
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	Hotspot on	645332	3679.98	19.72	21.50	1.507	-	-	0.19	0.593	0.893
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	Hotspot on	638000	3570	19.72	21.50	1.507	-	-	0.13	0.454	0.684



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	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	Hotspot on	645332	3679.98	19.72	21.50	1.507	-	-	0.15	0.531	0.800
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 4	Hotspot on	641666	3624.99	19.69	21.50	1.517	-	-	-0.17	0.329	0.499
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 4	Hotspot on	641666	3624.99	19.69	21.50	1.517	-	-	-0.06	0.593	0.900
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Side	10mm	Ant 4	Hotspot on	641666	3624.99	19.69	21.50	1.517	-	-	0.05	0.203	0.308
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 4	Hotspot on	641666	3624.99	19.69	21.50	1.517	-	-	0.18	0.494	0.749
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 4	Hotspot on	638000	3570	19.68	21.50	1.521	-	-	0.11	0.554	0.842
52	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 4	Hotspot on	645332	3679.98	19.63	21.50	1.538	-	-	0.03	0.605	0.931
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 4	Hotspot on	638000	3570	19.68	21.50	1.521	-	-	0.11	0.463	0.704
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 4	Hotspot on	645332	3679.98	19.63	21.50	1.538	-	-	0.02	0.542	0.834
	FR1 n48	40M	QPSK	100	0	DFT-30	Back	10mm	Ant 4	Hotspot on	641666	3624.99	19.60	21.50	1.549	-	-	-0.05	0.569	0.881
	FR1 n48	40M	QPSK	100	0	DFT-30	Top Side	10mm	Ant 4	Hotspot on	641666	3624.99	19.60	21.50	1.549	-	-	-0.02	0.474	0.734
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	Hotspot on	641666	3624.99	20.29	21.50	1.321	-	-	-0.01	0.374	0.494
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	Hotspot on	641666	3624.99	20.29	21.50	1.321	-	-	0.02	0.579	0.765
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 4	Hotspot on	641666	3624.99	20.29	21.50	1.321	-	-	0.03	0.168	0.222
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	Hotspot on	641666	3624.99	20.29	21.50	1.321	-	-	0.08	0.625	0.826
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	Hotspot on	641666	3624.99	20.24	21.50	1.337	-	-	-0.1	0.364	0.487
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	Hotspot on	641666	3624.99	20.24	21.50	1.337	-	-	-0.09	0.631	0.843
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 4	Hotspot on	641666	3624.99	20.24	21.50	1.337	-	-	-0.14	0.199	0.266
53	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	Hotspot on	641666	3624.99	20.24	21.50	1.337	-	-	0.01	0.687	0.918
	FR1 n77	100M	QPSK	270	0	DFT-30	Back	10mm	Ant 4	Hotspot on	641666	3624.99	20.23	21.50	1.340	-	-	0.03	0.618	0.828
	FR1 n77	100M	QPSK	270	0	DFT-30	Top Side	10mm	Ant 4	Hotspot on	641666	3624.99	20.23	21.50	1.340	-	-	-0.17	0.643	0.861
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	Hotspot on	633332	3499.98	20.41	21.50	1.285	-	-	0.13	0.357	0.459
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	Hotspot on	633332	3499.98	20.41	21.50	1.285	-	-	-0.19	0.561	0.721
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 4	Hotspot on	633332	3499.98	20.41	21.50	1.285	-	-	0.03	0.173	0.222
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	Hotspot on	633332	3499.98	20.41	21.50	1.285	-	-	-0.02	0.570	0.733
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	Hotspot on	633332	3499.98	20.31	21.50	1.315	-	-	-0.16	0.356	0.468
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	Hotspot on	633332	3499.98	20.31	21.50	1.315	-	-	-0.07	0.602	0.792
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 4	Hotspot on	633332	3499.98	20.31	21.50	1.315	-	-	0.01	0.167	0.220
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	Hotspot on	633332	3499.98	20.31	21.50	1.315	-	-	0.09	0.593	0.780
	FR1 n77	100M	QPSK	270	0	DFT-30	Back	10mm	Ant 4	Hotspot on	633332	3499.98	20.22	21.50	1.343	-	-	-0.09	0.589	0.791
	FR1 n77	100M	QPSK	270	0	DFT-30	Top Side	10mm	Ant 4	Hotspot on	633332	3499.98	20.22	21.50	1.343	-	-	0.18	0.572	0.768
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	Hotspot on	656000	3840	20.53	21.50	1.250	-	-	0.01	0.345	0.431
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	Hotspot on	656000	3840	20.53	21.50	1.250	-	-	-0.01	0.480	0.600
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 4	Hotspot on	656000	3840	20.53	21.50	1.250	-	-	0.01	0.221	0.276
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	Hotspot on	656000	3840	20.53	21.50	1.250	-	-	0.05	0.582	0.728
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	Hotspot on	656000	3840	20.46	21.50	1.271	-	-	-0.14	0.330	0.419
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	Hotspot on	656000	3840	20.46	21.50	1.271	-	-	-0.05	0.418	0.531
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 4	Hotspot on	656000	3840	20.46	21.50	1.271	-	-	0.12	0.217	0.276
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	Hotspot on	656000	3840	20.46	21.50	1.271	-	-	0.16	0.542	0.689
	FR1 n77	100M	QPSK	270	0	DFT-30	Top Side	10mm	Ant 4	Hotspot on	656000	3840	20.45	21.50	1.274	-	-	-0.04	0.551	0.702



For ENDC

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																				
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 0	Hotspot on	23095	707.5	22.96	24.00	1.271	-	-	0.1	0.217	0.276
	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 0	Hotspot on	23095	707.5	22.96	24.00	1.271	-	-	-0.08	0.288	0.366
	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Hotspot on	23095	707.5	22.96	24.00	1.271	-	-	0.19	0.179	0.227
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Hotspot on	23095	707.5	22.96	24.00	1.271	-	-	-0.13	0.243	0.309
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Hotspot on	23095	707.5	22.96	24.00	1.271	-	-	0.1	0.098	0.125
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 0	Hotspot on	23095	707.5	22.92	24.00	1.282	-	-	0.08	0.191	0.245
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 0	Hotspot on	23095	707.5	22.92	24.00	1.282	-	-	0	0.271	0.348
	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Hotspot on	23095	707.5	22.92	24.00	1.282	-	-	0	0.153	0.196
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Hotspot on	23095	707.5	22.92	24.00	1.282	-	-	-0.14	0.214	0.274
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Hotspot on	23095	707.5	22.92	24.00	1.282	-	-	0.19	0.087	0.112
	LTE Band 13	10M	QPSK	1	0	-	Front	10mm	Ant 0	Hotspot on	23230	782	23.12	24.00	1.225	-	-	0.01	0.263	0.322
	LTE Band 13	10M	QPSK	1	0	-	Back	10mm	Ant 0	Hotspot on	23230	782	23.12	24.00	1.225	-	-	-0.13	0.326	0.399
	LTE Band 13	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Hotspot on	23230	782	23.12	24.00	1.225	-	-	0.05	0.228	0.279
	LTE Band 13	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Hotspot on	23230	782	23.12	24.00	1.225	-	-	-0.17	0.283	0.347
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Hotspot on	23230	782	23.12	24.00	1.225	-	-	-0.18	0.135	0.165
	LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 0	Hotspot on	23230	782	23.06	24.00	1.242	-	-	0.14	0.210	0.261
	LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 0	Hotspot on	23230	782	23.06	24.00	1.242	-	-	0.15	0.302	0.375
	LTE Band 13	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Hotspot on	23230	782	23.06	24.00	1.242	-	-	0.11	0.179	0.222
	LTE Band 13	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Hotspot on	23230	782	23.06	24.00	1.242	-	-	0.18	0.241	0.299
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Hotspot on	23230	782	23.06	24.00	1.242	-	-	-0.08	0.133	0.165
	FR1 n71	30M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	0.15	0.186	0.276
	FR1 n71	30M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	-0.09	0.251	0.372
	FR1 n71	30M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	-0.17	0.119	0.176
	FR1 n71	30M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	-0.1	0.202	0.299
	FR1 n71	30M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Hotspot on	136100	680.5	23.29	25.00	1.483	-	-	-0.01	0.072	0.107
	FR1 n71	30M	QPSK	80	40	DFT-15	Front	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	-0.08	0.191	0.288
	FR1 n71	30M	QPSK	80	40	DFT-15	Back	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	0.09	0.272	0.410
	FR1 n71	30M	QPSK	80	40	DFT-15	Left Side	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	-0.1	0.131	0.197
	FR1 n71	30M	QPSK	80	40	DFT-15	Right Side	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	-0.11	0.211	0.318
	FR1 n71	30M	QPSK	80	40	DFT-15	Bottom Side	10mm	Ant 0	Hotspot on	136100	680.5	23.22	25.00	1.507	-	-	0.11	0.075	0.113
835MHz																				
	LTE Band 5	10M	QPSK	1	0	-	Front	10mm	Ant 0	Hotspot on	20525	836.5	24.03	25.00	1.250	-	-	-0.03	0.197	0.246
54	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 0	Hotspot on	20525	836.5	24.03	25.00	1.250	-	-	0.03	0.289	0.361
	LTE Band 5	10M	QPSK	1	0	-	Left Side	10mm	Ant 0	Hotspot on	20525	836.5	24.03	25.00	1.250	-	-	-0.11	0.116	0.145
	LTE Band 5	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	Hotspot on	20525	836.5	24.03	25.00	1.250	-	-	-0.11	0.124	0.155
	LTE Band 5	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	Hotspot on	20525	836.5	24.03	25.00	1.250	-	-	0.15	0.096	0.120
	LTE Band 5	10M	QPSK	25	0	-	Front	10mm	Ant 0	Hotspot on	20525	836.5	22.89	24.00	1.291	-	-	-0.19	0.156	0.201
	LTE Band 5	10M	QPSK	25	0	-	Back	10mm	Ant 0	Hotspot on	20525	836.5	22.89	24.00	1.291	-	-	0.17	0.235	0.303
	LTE Band 5	10M	QPSK	25	0	-	Left Side	10mm	Ant 0	Hotspot on	20525	836.5	22.89	24.00	1.291	-	-	-0.05	0.089	0.115
	LTE Band 5	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	Hotspot on	20525	836.5	22.89	24.00	1.291	-	-	0.05	0.099	0.128
	LTE Band 5	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	Hotspot on	20525	836.5	22.89	24.00	1.291	-	-	-0.12	0.076	0.098
	FR1 n5	25M	QPSK	1	1	DFT-15	Front	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	0.18	0.179	0.235
	FR1 n5	25M	QPSK	1	1	DFT-15	Back	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	-0.04	0.287	0.377
	FR1 n5	25M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	-0.13	0.131	0.172
	FR1 n5	25M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	0.13	0.151	0.198
	FR1 n5	25M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 0	Hotspot on	167300	836.5	23.82	25.00	1.312	-	-	0.19	0.099	0.130
	FR1 n5	25M	QPSK	64	32	DFT-15	Front	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	-0.18	0.187	0.248
	FR1 n5	25M	QPSK	64	32	DFT-15	Back	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	0.05	0.316	0.418
	FR1 n5	25M	QPSK	64	32	DFT-15	Left Side	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	-0.05	0.145	0.192
	FR1 n5	25M	QPSK	64	32	DFT-15	Right Side	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	0.1	0.166	0.220



FCC SAR Test Report

Report No. : FA471902

	FR1 n5	25M	QPSK	64	32	DFT-15	Bottom Side	10mm	Ant 0	Hotspot on	167300	836.5	23.78	25.00	1.324	-	-	0.13	0.109	0.144
1750MHz																				
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 3	Hotspot on	132322	1745	16.25	17.50	1.334	-	-	-0.14	0.178	0.237
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 3	Hotspot on	132322	1745	16.25	17.50	1.334	-	-	0.02	0.150	0.200
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	Hotspot on	132322	1745	16.25	17.50	1.334	-	-	0.07	0.059	0.079
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	132322	1745	16.25	17.50	1.334	-	-	-0.12	0.286	0.381
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 3	Hotspot on	132322	1745	16.17	17.50	1.358	-	-	0.13	0.175	0.238
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 3	Hotspot on	132322	1745	16.17	17.50	1.358	-	-	-0.05	0.144	0.196
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	Hotspot on	132322	1745	16.17	17.50	1.358	-	-	-0.07	0.059	0.080
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	132322	1745	16.17	17.50	1.358	-	-	0	0.279	0.379
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 2	Hotspot on	132322	1745	22.71	24.00	1.346	-	-	0.01	0.075	0.101
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 2	Hotspot on	132322	1745	22.71	24.00	1.346	-	-	0.09	0.230	0.310
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 2	Hotspot on	132322	1745	22.71	24.00	1.346	-	-	0.17	0.160	0.215
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 2	Hotspot on	132322	1745	21.66	23.00	1.361	-	-	0.03	0.070	0.095
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 2	Hotspot on	132322	1745	21.66	23.00	1.361	-	-	-0.12	0.176	0.240
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 2	Hotspot on	132322	1745	21.66	23.00	1.361	-	-	0.17	0.141	0.192
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	10mm	Ant 3	Hotspot on	349000	1745	20.45	20.50	1.012	-	-	-0.15	0.225	0.228
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	10mm	Ant 3	Hotspot on	349000	1745	20.45	20.50	1.012	-	-	-0.09	0.236	0.239
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 3	Hotspot on	349000	1745	20.45	20.50	1.012	-	-	0.13	0.072	0.073
	FR1 n66	45M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 3	Hotspot on	349000	1745	20.45	20.50	1.012	-	-	0.07	0.372	0.376
	FR1 n66	45M	QPSK	120	60	DFT-15	Front	10mm	Ant 3	Hotspot on	349000	1745	20.42	20.50	1.019	-	-	0.09	0.229	0.233
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	10mm	Ant 3	Hotspot on	349000	1745	20.42	20.50	1.019	-	-	-0.16	0.243	0.248
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Side	10mm	Ant 3	Hotspot on	349000	1745	20.42	20.50	1.019	-	-	-0.06	0.076	0.077
	FR1 n66	45M	QPSK	120	60	DFT-15	Top Side	10mm	Ant 3	Hotspot on	349000	1745	20.42	20.50	1.019	-	-	0.02	0.390	0.397
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	10mm	Ant 2	Hotspot on	349000	1745	22.49	24.00	1.416	-	-	-0.17	0.073	0.103
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	10mm	Ant 2	Hotspot on	349000	1745	22.49	24.00	1.416	-	-	0.08	0.231	0.327
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 2	Hotspot on	349000	1745	22.49	24.00	1.416	-	-	0.16	0.187	0.265
	FR1 n66	45M	QPSK	120	60	DFT-15	Front	10mm	Ant 2	Hotspot on	349000	1745	22.48	24.00	1.419	-	-	0.15	0.064	0.091
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	10mm	Ant 2	Hotspot on	349000	1745	22.48	24.00	1.419	-	-	-0.14	0.206	0.292
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Side	10mm	Ant 2	Hotspot on	349000	1745	22.48	24.00	1.419	-	-	0.19	0.163	0.231
1900MHz																				
	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 3	Hotspot on	18900	1880	16.72	17.50	1.197	-	-	0.15	0.153	0.183
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 3	Hotspot on	18900	1880	16.72	17.50	1.197	-	-	0.16	0.172	0.206
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	Hotspot on	18900	1880	16.72	17.50	1.197	-	-	0.09	0.082	0.098
	LTE Band 2	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Hotspot on	18900	1880	16.72	17.50	1.197	-	-	0.16	0.321	0.384
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 3	Hotspot on	18900	1880	16.71	17.50	1.199	-	-	-0.16	0.151	0.181
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 3	Hotspot on	18900	1880	16.71	17.50	1.199	-	-	0.01	0.170	0.204
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	Hotspot on	18900	1880	16.71	17.50	1.199	-	-	0.02	0.080	0.096
	LTE Band 2	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Hotspot on	18900	1880	16.71	17.50	1.199	-	-	-0.09	0.314	0.377
	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 2	Hotspot on	18900	1880	13.71	15.00	1.346	-	-	-0.13	0.099	0.133
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 2	Hotspot on	18900	1880	13.71	15.00	1.346	-	-	-0.12	0.220	0.296
55	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 2	Hotspot on	18900	1880	13.71	15.00	1.346	-	-	-0.03	0.289	0.389
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 2	Hotspot on	18900	1880	13.70	15.00	1.349	-	-	-0.08	0.100	0.135
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 2	Hotspot on	18900	1880	13.70	15.00	1.349	-	-	0.13	0.209	0.282
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 2	Hotspot on	18900	1880	13.70	15.00	1.349	-	-	-0.03	0.267	0.360
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 3	Hotspot on	376500	1882.5	17.71	19.00	1.346	-	-	-0.19	0.154	0.207
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 3	Hotspot on	376500	1882.5	17.71	19.00	1.346	-	-	0.07	0.172	0.231
	FR1 n25	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 3	Hotspot on	376500	1882.5	17.71	19.00	1.346	-	-	-0.02	0.077	0.104
	FR1 n25	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 3	Hotspot on	376500	1882.5	17.71	19.00	1.346	-	-	0.06	0.290	0.390
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 3	Hotspot on	376500	1882.5	17.68	19.00	1.355	-	-	0.18	0.162	0.220
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 3	Hotspot on	376500	1882.5	17.68	19.00	1.355	-	-	-0.12	0.168	0.228
	FR1 n25	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 3	Hotspot on	376500	1882.5	17.68	19.00	1.355	-	-	-0.12	0.045	0.061
	FR1 n25	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 3	Hotspot on	376500	1882.5	17.68	19.00	1.355	-	-	-0.03	0.317	0.430
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 2	Hotspot on	376000	1880	14.02	15.50	1.406	-	-	0.09	0.095	0.134
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 2	Hotspot on	376000	1880	14.02	15.50	1.406	-	-	0.11	0.230	0.323
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 2	Hotspot on	376000	1880	14.02	15.50	1.406	-	-	0.06	0.283	0.398



FCC SAR Test Report

Report No. : FA471902

	FR1 n2	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 2	Hotspot on	376000	1880	13.95	15.50	1.429	-	-	-0.13	0.099	0.141
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 2	Hotspot on	376000	1880	13.95	15.50	1.429	-	-	0.18	0.239	0.342
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 2	Hotspot on	376000	1880	13.95	15.50	1.429	-	-	0.01	0.304	0.434
2300MHz																				
	LTE Band 30	10M	QPSK	1	0		Front	10mm	Ant 3	Hotspot on	27710	2310	12.03	13.00	1.250	-	-	0.13	0.092	0.115
	LTE Band 30	10M	QPSK	1	0		Back	10mm	Ant 3	Hotspot on	27710	2310	12.03	13.00	1.250	-	-	0.02	0.255	0.319
	LTE Band 30	10M	QPSK	1	0		Left Side	10mm	Ant 3	Hotspot on	27710	2310	12.03	13.00	1.250	-	-	0.11	0.048	0.060
	LTE Band 30	10M	QPSK	1	0		Top Side	10mm	Ant 3	Hotspot on	27710	2310	12.03	13.00	1.250	-	-	0.04	0.319	0.399
	LTE Band 30	10M	QPSK	25	0		Front	10mm	Ant 3	Hotspot on	27710	2310	12.00	13.00	1.259	-	-	-0.08	0.087	0.110
	LTE Band 30	10M	QPSK	25	0		Back	10mm	Ant 3	Hotspot on	27710	2310	12.00	13.00	1.259	-	-	0.11	0.241	0.303
	LTE Band 30	10M	QPSK	25	0		Left Side	10mm	Ant 3	Hotspot on	27710	2310	12.00	13.00	1.259	-	-	-0.13	0.045	0.057
	LTE Band 30	10M	QPSK	25	0		Top Side	10mm	Ant 3	Hotspot on	27710	2310	12.00	13.00	1.259	-	-	-0.16	0.301	0.379
	LTE Band 30	10M	QPSK	1	0		Front	10mm	Ant 2	Hotspot on	27710	2310	14.88	16.00	1.294	-	-	0.08	0.071	0.092
	LTE Band 30	10M	QPSK	1	0		Back	10mm	Ant 2	Hotspot on	27710	2310	14.88	16.00	1.294	-	-	-0.08	0.306	0.396
	LTE Band 30	10M	QPSK	1	0		Left Side	10mm	Ant 2	Hotspot on	27710	2310	14.88	16.00	1.294	-	-	0.07	0.316	0.409
	LTE Band 30	10M	QPSK	1	0		Top Side	10mm	Ant 2	Hotspot on	27710	2310	14.88	16.00	1.294	-	-	0.04	0.045	0.058
	LTE Band 30	10M	QPSK	25	0		Front	10mm	Ant 2	Hotspot on	27710	2310	14.80	16.00	1.318	-	-	0.07	0.070	0.092
	LTE Band 30	10M	QPSK	25	0		Back	10mm	Ant 2	Hotspot on	27710	2310	14.80	16.00	1.318	-	-	-0.11	0.303	0.399
	LTE Band 30	10M	QPSK	25	0		Left Side	10mm	Ant 2	Hotspot on	27710	2310	14.80	16.00	1.318	-	-	0.05	0.307	0.405
	LTE Band 30	10M	QPSK	25	0		Top Side	10mm	Ant 2	Hotspot on	27710	2310	14.80	16.00	1.318	-	-	0.12	0.043	0.057
2600MHz																				
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 3	Hotspot on	518598	2592.99	17.43	18.50	1.279	-	-	-0.08	0.130	0.166
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 3	Hotspot on	518598	2592.99	17.43	18.50	1.279	-	-	-0.09	0.312	0.399
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 3	Hotspot on	518598	2592.99	17.43	18.50	1.279	-	-	0.17	0.176	0.225
	FR1 n41	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 3	Hotspot on	518598	2592.99	17.43	18.50	1.279	-	-	0.18	0.228	0.292
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 3	Hotspot on	518598	2592.99	17.41	18.50	1.285	-	-	0.07	0.129	0.166
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 3	Hotspot on	518598	2592.99	17.41	18.50	1.285	-	-	0.08	0.305	0.392
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 3	Hotspot on	518598	2592.99	17.41	18.50	1.285	-	-	-0.09	0.175	0.225
	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 3	Hotspot on	518598	2592.99	17.41	18.50	1.285	-	-	-0.07	0.224	0.288
3000Mhz-4000Mhz																				
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	Hotspot on	641666	3624.99	17.35	18.50	1.303	-	-	0.01	0.184	0.240
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	Hotspot on	641666	3624.99	17.35	18.50	1.303	-	-	0.06	0.286	0.373
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 4	Hotspot on	641666	3624.99	17.35	18.50	1.303	-	-	0.05	0.095	0.124
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	Hotspot on	641666	3624.99	17.35	18.50	1.303	-	-	0.11	0.313	0.408
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	Hotspot on	641666	3624.99	17.26	18.50	1.330	-	-	-0.17	0.176	0.234
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	Hotspot on	641666	3624.99	17.26	18.50	1.330	-	-	0.09	0.310	0.412
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 4	Hotspot on	641666	3624.99	17.26	18.50	1.330	-	-	0.12	0.110	0.146
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	Hotspot on	641666	3624.99	17.26	18.50	1.330	-	-	0.03	0.336	0.447
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	Hotspot on	633332	3499.98	17.42	18.50	1.282	-	-	-0.12	0.173	0.222
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	Hotspot on	633332	3499.98	17.42	18.50	1.282	-	-	0.17	0.277	0.355
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 4	Hotspot on	633332	3499.98	17.42	18.50	1.282	-	-	0.13	0.086	0.110
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	Hotspot on	633332	3499.98	17.42	18.50	1.282	-	-	-0.15	0.280	0.359
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	Hotspot on	633332	3499.98	17.38	18.50	1.294	-	-	-0.08	0.175	0.226
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	Hotspot on	633332	3499.98	17.38	18.50	1.294	-	-	0.18	0.291	0.377
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 4	Hotspot on	633332	3499.98	17.38	18.50	1.294	-	-	0.01	0.087	0.113
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	Hotspot on	633332	3499.98	17.38	18.50	1.294	-	-	-0.11	0.292	0.378
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 4	Hotspot on	656000	3840	17.48	18.50	1.265	-	-	-0.01	0.171	0.216
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 4	Hotspot on	656000	3840	17.48	18.50	1.265	-	-	-0.08	0.234	0.296
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 4	Hotspot on	656000	3840	17.48	18.50	1.265	-	-	0.05	0.131	0.166
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 4	Hotspot on	656000	3840	17.48	18.50	1.265	-	-	0.05	0.284	0.359
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 4	Hotspot on	656000	3840	17.40	18.50	1.288	-	-	0.1	0.161	0.207
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 4	Hotspot on	656000	3840	17.40	18.50	1.288	-	-	0.18	0.203	0.262
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 4	Hotspot on	656000	3840	17.40	18.50	1.288	-	-	0.16	0.108	0.139
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 4	Hotspot on	656000	3840	17.40	18.50	1.288	-	-	-0.17	0.270	0.348



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN & BT																
	Bluetooth	DH5 1Mbps	Front	10mm	Ant 5	Hotspot on	0	2402	8.50	10.00	1.413	76.82	1.302	-0.13	0.016	0.029
56	Bluetooth	DH5 1Mbps	Back	10mm	Ant 5	Hotspot on	0	2402	8.50	10.00	1.413	76.82	1.302	0.06	0.037	0.068
	Bluetooth	DH5 1Mbps	Right Side	10mm	Ant 5	Hotspot on	0	2402	8.50	10.00	1.413	76.82	1.302	-0.11	0.011	0.020
	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 5	Hotspot on	0	2402	8.50	10.00	1.413	76.82	1.302	-0.1	0.017	0.031
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 5	Hotspot on	1	2412	16.45	17.00	1.135	99.71	1.003	-0.17	0.219	0.249
57	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 5	Hotspot on	1	2412	16.45	17.00	1.135	99.71	1.003	0.13	0.311	0.354
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 5	Hotspot on	1	2412	16.45	17.00	1.135	99.71	1.003	0.03	0.266	0.303
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 5	Hotspot on	1	2412	16.45	17.00	1.135	99.71	1.003	0.09	0.199	0.227
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	10mm	Ant 5	Hotspot on	46	5230	15.89	16.00	1.027	94.08	1.063	-0.12	0.189	0.206
58	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 5	Hotspot on	46	5230	15.89	16.00	1.027	94.08	1.063	-0.06	0.328	0.358
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 5	Hotspot on	46	5230	15.89	16.00	1.027	94.08	1.063	-0.12	0.149	0.163
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 5	Hotspot on	46	5230	15.89	16.00	1.027	94.08	1.063	-0.13	0.175	0.191
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 5	Hotspot on	155	5775	13.80	15.00	1.318	90.36	1.107	-0.18	0.133	0.194
59	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 5	Hotspot on	155	5775	13.80	15.00	1.318	90.36	1.107	0.04	0.293	0.428
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 5	Hotspot on	155	5775	13.80	15.00	1.318	90.36	1.107	-0.08	0.184	0.269
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 5	Hotspot on	155	5775	13.80	15.00	1.318	90.36	1.107	0.05	0.202	0.295



15.3 Body Worn Accessory SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																				
60	LTE Band 71	20M	QPSK	1	0	-	Front	15mm	Ant 0	Full	133297	680.5	23.92	25.00	1.282	-	-	-0.04	0.158	0.203
	LTE Band 71	20M	QPSK	1	0	-	Back	15mm	Ant 0	Full	133297	680.5	23.92	25.00	1.282	-	-	0.08	0.331	0.424
	LTE Band 71	20M	QPSK	50	0	-	Front	15mm	Ant 0	Full	133297	680.5	22.92	24.00	1.282	-	-	0.09	0.130	0.167
	LTE Band 71	20M	QPSK	50	0	-	Back	15mm	Ant 0	Full	133297	680.5	22.92	24.00	1.282	-	-	0.12	0.200	0.256
61	LTE Band 12	10M	QPSK	1	0	-	Front	15mm	Ant 0	Full	23095	707.5	23.83	25.00	1.309	-	-	0	0.195	0.255
	LTE Band 12	10M	QPSK	1	0	-	Back	15mm	Ant 0	Full	23095	707.5	23.83	25.00	1.309	-	-	-0.02	0.354	0.463
	LTE Band 12	10M	QPSK	25	0	-	Front	15mm	Ant 0	Full	23095	707.5	22.71	24.00	1.346	-	-	-0.16	0.159	0.214
	LTE Band 12	10M	QPSK	25	0	-	Back	15mm	Ant 0	Full	23095	707.5	22.71	24.00	1.346	-	-	-0.19	0.245	0.330
62	LTE Band 13	10M	QPSK	1	0	-	Front	15mm	Ant 0	Full	23230	782	24.05	25.00	1.245	-	-	0.07	0.254	0.316
	LTE Band 13	10M	QPSK	1	0	-	Back	15mm	Ant 0	Full	23230	782	24.05	25.00	1.245	-	-	0.01	0.457	0.569
	LTE Band 13	10M	QPSK	25	0	-	Front	15mm	Ant 0	Full	23230	782	22.91	24.00	1.285	-	-	-0.02	0.200	0.257
	LTE Band 13	10M	QPSK	25	0	-	Back	15mm	Ant 0	Full	23230	782	22.91	24.00	1.285	-	-	0.03	0.266	0.342
63	FR1 n71	30M	QPSK	1	1	DFT-15	Front	15mm	Ant 0	Full	136100	680.5	23.29	25.00	1.483	-	-	-0.19	0.165	0.245
	FR1 n71	30M	QPSK	1	1	DFT-15	Back	15mm	Ant 0	Full	136100	680.5	23.29	25.00	1.483	-	-	0.01	0.191	0.283
	FR1 n71	30M	QPSK	80	40	DFT-15	Front	15mm	Ant 0	Full	136100	680.5	23.22	25.00	1.507	-	-	0.08	0.168	0.253
	FR1 n71	30M	QPSK	80	40	DFT-15	Back	15mm	Ant 0	Full	136100	680.5	23.22	25.00	1.507	-	-	-0.02	0.269	0.405
835MHz																				
64	GSM850	-	-	-	-	GPRS 2TX Slot	Front	15mm	Ant 0	Full	189	836.4	32.27	33.00	1.183	-	-	0.11	0.363	0.429
	GSM850	-	-	-	-	GPRS 2TX Slot	Back	15mm	Ant 0	Full	189	836.4	32.27	33.00	1.183	-	-	-0.09	0.461	0.545
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 0	Full	4182	836.4	23.58	24.50	1.236	-	-	-0.11	0.241	0.298
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 0	Full	4182	836.4	23.58	24.50	1.236	-	-	-0.05	0.397	0.491
66	LTE Band 26	15M	QPSK	1	0	-	Front	15mm	Ant 0	Full	26865	831.5	24.06	25.00	1.242	-	-	-0.01	0.220	0.273
	LTE Band 26	15M	QPSK	1	0	-	Back	15mm	Ant 0	Full	26865	831.5	24.06	25.00	1.242	-	-	-0.02	0.335	0.416
	LTE Band 26	15M	QPSK	36	0	-	Front	15mm	Ant 0	Full	26865	831.5	22.97	24.00	1.268	-	-	0.18	0.180	0.228
	LTE Band 26	15M	QPSK	36	0	-	Back	15mm	Ant 0	Full	26865	831.5	22.97	24.00	1.268	-	-	0.11	0.265	0.336
67	FR1 n5	25M	QPSK	1	1	DFT-15	Front	15mm	Ant 0	Full	167300	836.5	23.82	25.00	1.312	-	-	0.15	0.144	0.189
	FR1 n5	25M	QPSK	1	1	DFT-15	Back	15mm	Ant 0	Full	167300	836.5	23.82	25.00	1.312	-	-	0.17	0.214	0.281
	FR1 n5	25M	QPSK	64	32	DFT-15	Front	15mm	Ant 0	Full	167300	836.5	23.78	25.00	1.324	-	-	-0.18	0.145	0.192
	FR1 n5	25M	QPSK	64	32	DFT-15	Back	15mm	Ant 0	Full	167300	836.5	23.78	25.00	1.324	-	-	-0.03	0.261	0.346
1750MHz																				
68	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 3	Sensor on	1413	1732.6	17.85	19.50	1.462	-	-	0.17	0.148	0.216
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 3	Sensor on	1413	1732.6	17.85	19.50	1.462	-	-	0.02	0.174	0.254
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	18mm	Ant 3	Full	1413	1732.6	22.96	24.50	1.426	-	-	0.16	0.427	0.609
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	23mm	Ant 3	Full	1413	1732.6	22.96	24.50	1.426	-	-	0.07	0.209	0.298
69	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 3	Sensor on	132322	1745	18.96	20.50	1.426	-	-	0.08	0.158	0.225
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 3	Sensor on	132322	1745	18.96	20.50	1.426	-	-	-0.16	0.196	0.279
	LTE Band 66	20M	QPSK	1	0	-	Front	18mm	Ant 3	Full	132322	1745	23.62	25.00	1.374	-	-	0.19	0.341	0.469
	LTE Band 66	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	132322	1745	23.62	25.00	1.374	-	-	-0.14	0.207	0.284
70	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 3	Sensor on	132322	1745	18.90	20.50	1.445	-	-	0.08	0.155	0.224
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 3	Sensor on	132322	1745	18.90	20.50	1.445	-	-	0.11	0.170	0.246
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	15mm	Ant 3	Sensor on	349000	1745	23.36	23.50	1.033	-	-	0	0.232	0.240
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	15mm	Ant 3	Sensor on	349000	1745	23.36	23.50	1.033	-	-	-0.03	0.276	0.285
71	FR1 n66	45M	QPSK	120	60	DFT-15	Front	15mm	Ant 3	Sensor on	349000	1745	23.34	23.50	1.038	-	-	-0.05	0.237	0.246
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	15mm	Ant 3	Sensor on	349000	1745	23.34	23.50	1.038	-	-	-0.04	0.282	0.293
	FR1 n66	45M	QPSK	120	60	DFT-15	Front	18mm	Ant 3	Full	349000	1745	24.81	25.00	1.045	-	-	0.09	0.338	0.353
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	23mm	Ant 3	Full	349000	1745	24.81	25.00	1.045	-	-	0.04	0.309	0.323
1900Mhz																				
71	GSM1900	-	-	-	-	GPRS 2TX Slot	Front	15mm	Ant 3	Sensor on	661	1880	24.15	25.00	1.216	-	-	0.17	0.270	0.328
	GSM1900	-	-	-	-	GPRS 2TX Slot	Back	15mm	Ant 3	Sensor on	661	1880	24.15	25.00	1.216	-	-	-0.13	0.316	0.384



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	GSM1900	-	-	-	-	GPRS 2TX Slot	Front	18mm	Ant 3	Full	661	1880	29.26	30.00	1.186	-	-	0.1	0.310	0.368
	GSM1900	-	-	-	-	GPRS 2TX Slot	Back	23mm	Ant 3	Full	661	1880	29.26	30.00	1.186	-	-	-0.07	0.188	0.223
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 3	Sensor on	9400	1880	18.96	20.00	1.271	-	-	0.13	0.183	0.233
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 3	Sensor on	9400	1880	18.96	20.00	1.271	-	-	-0.12	0.212	0.269
72	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	18mm	Ant 3	Full	9400	1880	23.46	24.50	1.271	-	-	0.04	0.387	0.492
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	23mm	Ant 3	Full	9400	1880	23.46	24.50	1.271	-	-	-0.14	0.216	0.274
	LTE Band 25	20M	QPSK	1	0	-	Front	15mm	Ant 3	Sensor on	26340	1880	20.09	21.00	1.233	-	-	-0.07	0.191	0.236
	LTE Band 25	20M	QPSK	1	0	-	Back	15mm	Ant 3	Sensor on	26340	1880	20.09	21.00	1.233	-	-	-0.09	0.220	0.271
73	LTE Band 25	20M	QPSK	1	0	-	Front	18mm	Ant 3	Full	26340	1880	24.24	25.00	1.191	-	-	-0.16	0.270	0.322
	LTE Band 25	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	26340	1880	24.24	25.00	1.191	-	-	0.19	0.233	0.278
	LTE Band 25	20M	QPSK	50	0	-	Front	15mm	Ant 3	Sensor on	26340	1880	19.99	21.00	1.262	-	-	0.1	0.187	0.236
	LTE Band 25	20M	QPSK	50	0	-	Back	15mm	Ant 3	Sensor on	26340	1880	19.99	21.00	1.262	-	-	0.1	0.206	0.260
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	15mm	Ant 3	Sensor on	376500	1882.5	19.62	21.00	1.374	-	-	-0.14	0.156	0.214
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	15mm	Ant 3	Sensor on	376500	1882.5	19.62	21.00	1.374	-	-	0.17	0.187	0.257
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 3	Sensor on	376500	1882.5	19.60	21.00	1.380	-	-	-0.11	0.159	0.219
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 3	Sensor on	376500	1882.5	19.60	21.00	1.380	-	-	-0.02	0.191	0.264
74	FR1 n25	40M	QPSK	108	54	DFT-15	Front	18mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	-0.18	0.305	0.424
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	23mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	-0.1	0.274	0.381
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Front	15mm	Ant 3	Sensor on	27710	2310	18.96	20.00	1.271	-	-	-0.17	0.285	0.362
75	LTE Band 30	10M	QPSK	1	0	-	Back	15mm	Ant 3	Sensor on	27710	2310	18.96	20.00	1.271	-	-	0.05	0.636	0.808
	LTE Band 30	10M	QPSK	1	0	-	Front	18mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	-0.03	0.458	0.579
	LTE Band 30	10M	QPSK	1	0	-	Back	23mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	0.13	0.463	0.586
	LTE Band 30	10M	QPSK	25	0	-	Front	15mm	Ant 3	Sensor on	27710	2310	18.88	20.00	1.294	-	-	0.04	0.279	0.361
	LTE Band 30	10M	QPSK	25	0	-	Back	15mm	Ant 3	Sensor on	27710	2310	18.88	20.00	1.294	-	-	0.18	0.603	0.780
	LTE Band 30	10M	QPSK	50	0	-	Back	15mm	Ant 3	Sensor on	27710	2310	18.80	20.00	1.318	-	-	0.05	0.588	0.775
	FR1 n30	10M	QPSK	1	1	DFT-15	Front	15mm	Ant 3	Sensor on	462000	2310	21.18	21.50	1.076	-	-	0.1	0.286	0.308
	FR1 n30	10M	QPSK	1	1	DFT-15	Back	15mm	Ant 3	Sensor on	462000	2310	21.18	21.50	1.076	-	-	-0.15	0.649	0.699
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	15mm	Ant 3	Sensor on	462000	2310	21.15	21.50	1.084	-	-	-0.12	0.292	0.317
76	FR1 n30	10M	QPSK	25	14	DFT-15	Back	15mm	Ant 3	Sensor on	462000	2310	21.15	21.50	1.084	-	-	0.08	0.662	0.718
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	18mm	Ant 3	Full	462000	2310	23.54	24.00	1.112	-	-	0.15	0.174	0.193
	FR1 n30	10M	QPSK	25	14	DFT-15	Back	23mm	Ant 3	Full	462000	2310	23.54	24.00	1.112	-	-	-0.02	0.218	0.242
2600Mhz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	15mm	Ant 3	Sensor on	21100	2535	20.33	21.50	1.309	-	-	-0.05	0.215	0.281
77	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 3	Sensor on	21100	2535	20.33	21.50	1.309	-	-	-0.01	0.514	0.673
	LTE Band 7	20M	QPSK	1	0	-	Front	18mm	Ant 3	Full	21100	2535	20.33	21.50	1.309	-	-	0.1	0.296	0.388
	LTE Band 7	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	21100	2535	20.33	21.50	1.309	-	-	0	0.366	0.479
	LTE Band 7	20M	QPSK	50	0	-	Front	15mm	Ant 3	Sensor on	21100	2535	20.21	21.50	1.346	-	-	-0.18	0.211	0.284
	LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 3	Sensor on	21100	2535	20.21	21.50	1.346	-	-	0.06	0.449	0.604
	FR1 n7	50M	QPSK	1	1	DFT-15	Front	15mm	Ant 3	Sensor on	507000	2535	20.52	22.00	1.406	-	-	-0.17	0.213	0.299
78	FR1 n7	50M	QPSK	1	1	DFT-15	Back	15mm	Ant 3	Sensor on	507000	2535	20.52	22.00	1.406	-	-	0.01	0.465	0.654
	FR1 n7	50M	QPSK	1	1	DFT-15	Front	18mm	Ant 3	Full	507000	2535	22.52	24.00	1.406	-	-	0.11	0.232	0.326
	FR1 n7	50M	QPSK	1	1	DFT-15	Back	23mm	Ant 3	Full	507000	2535	22.52	24.00	1.406	-	-	0.08	0.308	0.433
	FR1 n7	50M	QPSK	135	68	DFT-15	Front	15mm	Ant 3	Sensor on	507000	2535	20.48	22.00	1.419	-	-	-0.18	0.209	0.297
	FR1 n7	50M	QPSK	135	68	DFT-15	Back	15mm	Ant 3	Sensor on	507000	2535	20.48	22.00	1.419	-	-	-0.01	0.446	0.633
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 3	Sensor on	518598	2592.99	21.80	23.00	1.318	-	-	0.02	0.258	0.340
79	FR1 n41	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 3	Sensor on	518598	2592.99	21.80	23.00	1.318	-	-	-0.09	0.503	0.663
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	18mm	Ant 3	Full	518598	2592.99	25.80	27.00	1.318	-	-	0.18	0.393	0.518
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	23mm	Ant 3	Full	518598	2592.99	25.80	27.00	1.318	-	-	-0.12	0.429	0.566
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 3	Sensor on	518598	2592.99	21.74	23.00	1.337	-	-	-0.17	0.253	0.338
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 3	Sensor on	518598	2592.99	21.74	23.00	1.337	-	-	0.08	0.493	0.659
3000Mhz-4000Mhz																				
	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 4	Sensor on	56150	3641	17.99	18.50	1.125	62.9	1.006	0.07	0.237	0.268
80	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 4	Sensor on	56150	3641	17.99	18.50	1.125	62.9	1.006	-0.07	0.378	0.428
	LTE Band 48	20M	QPSK	1	0	-	Front	18mm	Ant 4	Full	56150	3641	22.98	23.50	1.127	62.9	1.006	-0.13	0.196	0.222
	LTE Band 48	20M	QPSK	1	0	-	Back	23mm	Ant 4	Full	56150	3641	22.98	23.50	1.127	62.9	1.006	-0.1	0.199	0.226



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	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 4	Sensor on	56150	3641	17.92	18.50	1.143	62.9	1.006	0.17	0.232	0.267
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 4	Sensor on	56150	3641	17.92	18.50	1.143	62.9	1.006	-0.14	0.370	0.425
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	15mm	Ant 4	Sensor on	641666	3624.99	19.26	21.00	1.493	-	-	-0.06	0.143	0.213
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	15mm	Ant 4	Sensor on	641666	3624.99	19.26	21.00	1.493	-	-	0.07	0.224	0.334
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	15mm	Ant 4	Sensor on	641666	3624.99	19.20	21.00	1.514	-	-	0.11	0.146	0.221
81	FR1 n48	40M	QPSK	50	28	DFT-30	Back	15mm	Ant 4	Sensor on	641666	3624.99	19.20	21.00	1.514	-	-	-0.04	0.243	0.368
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	18mm	Ant 4	Full	641666	3624.99	22.20	24.00	1.514	-	-	0.14	0.232	0.351
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	23mm	Ant 4	Full	641666	3624.99	22.20	24.00	1.514	-	-	-0.05	0.238	0.360
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 4	Sensor on	641666	3624.99	19.29	20.50	1.321	-	-	0.19	0.070	0.092
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 4	Sensor on	641666	3624.99	19.29	20.50	1.321	-	-	-0.14	0.140	0.185
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 4	Sensor on	641666	3624.99	19.26	20.50	1.330	-	-	-0.06	0.094	0.125
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 4	Sensor on	641666	3624.99	19.26	20.50	1.330	-	-	0.02	0.152	0.202
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 4	Full	641666	3624.99	23.65	25.00	1.365	-	-	-0.01	0.223	0.304
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 4	Full	641666	3624.99	23.65	25.00	1.365	-	-	0.1	0.249	0.340
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 4	Sensor on	633332	3499.98	19.34	20.50	1.306	-	-	-0.03	0.112	0.146
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 4	Sensor on	633332	3499.98	19.34	20.50	1.306	-	-	0.17	0.149	0.195
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 4	Sensor on	633332	3499.98	19.31	20.50	1.315	-	-	-0.05	0.110	0.145
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 4	Sensor on	633332	3499.98	19.31	20.50	1.315	-	-	0.12	0.152	0.200
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 4	Full	633332	3499.98	25.82	27.00	1.312	-	-	-0.03	0.315	0.413
82	FR1 n77	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 4	Full	633332	3499.98	25.82	27.00	1.312	-	-	-0.03	0.322	0.423
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 4	Sensor on	656000	3840	19.42	20.50	1.282	-	-	0.07	0.099	0.127
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 4	Sensor on	656000	3840	19.42	20.50	1.282	-	-	-0.09	0.183	0.235
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 4	Sensor on	656000	3840	19.39	20.50	1.291	-	-	0.08	0.101	0.130
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 4	Sensor on	656000	3840	19.39	20.50	1.291	-	-	-0.06	0.187	0.241
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 4	Full	656000	3840	25.85	27.00	1.303	-	-	0.15	0.305	0.397
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 4	Full	656000	3840	25.85	27.00	1.303	-	-	0.11	0.260	0.339



For ENDC

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																				
	LTE Band 12	10M	QPSK	1	0	-	Front	15mm	Ant 0	Sensor on	23095	707.5	22.96	24.00	1.271	-	-	0	0.195	0.248
	LTE Band 12	10M	QPSK	1	0	-	Back	15mm	Ant 0	Sensor on	23095	707.5	22.96	24.00	1.271	-	-	-0.02	0.354	0.450
	LTE Band 12	10M	QPSK	1	0	-	Front	18mm	Ant 0	Full	23095	707.5	22.96	24.00	1.271	-	-	0.12	0.181	0.230
	LTE Band 12	10M	QPSK	1	0	-	Back	23mm	Ant 0	Full	23095	707.5	22.96	24.00	1.271	-	-	0.17	0.253	0.321
	LTE Band 12	10M	QPSK	25	0	-	Front	15mm	Ant 0	Sensor on	23095	707.5	22.92	24.00	1.282	-	-	-0.16	0.159	0.204
	LTE Band 12	10M	QPSK	25	0	-	Back	15mm	Ant 0	Sensor on	23095	707.5	22.92	24.00	1.282	-	-	-0.19	0.245	0.314
	LTE Band 13	10M	QPSK	1	0	-	Front	15mm	Ant 0	Sensor on	23230	782	23.12	24.00	1.225	-	-	0.07	0.254	0.311
	LTE Band 13	10M	QPSK	1	0	-	Back	15mm	Ant 0	Sensor on	23230	782	23.12	24.00	1.225	-	-	0.01	0.457	0.560
	LTE Band 13	10M	QPSK	1	0	-	Front	18mm	Ant 0	Full	23230	782	23.12	24.00	1.225	-	-	-0.02	0.215	0.263
	LTE Band 13	10M	QPSK	1	0	-	Back	23mm	Ant 0	Full	23230	782	23.12	24.00	1.225	-	-	0.14	0.288	0.353
	LTE Band 13	10M	QPSK	25	0	-	Front	15mm	Ant 0	Sensor on	23230	782	23.06	24.00	1.242	-	-	-0.02	0.200	0.248
	LTE Band 13	10M	QPSK	25	0	-	Back	15mm	Ant 0	Sensor on	23230	782	23.06	24.00	1.242	-	-	0.03	0.266	0.330
	FR1 n71	30M	QPSK	1	1	DFT-15	Front	15mm	Ant 0	Full	136100	680.5	23.29	25.00	1.483	-	-	-0.19	0.165	0.245
	FR1 n71	30M	QPSK	1	1	DFT-15	Back	15mm	Ant 0	Full	136100	680.5	23.29	25.00	1.483	-	-	0.01	0.191	0.283
	FR1 n71	30M	QPSK	1	1	DFT-15	Front	18mm	Ant 0	Full	136100	680.5	23.29	25.00	1.483	-	-	0.19	0.059	0.087
	FR1 n71	30M	QPSK	1	1	DFT-15	Back	23mm	Ant 0	Full	136100	680.5	23.29	25.00	1.483	-	-	0.1	0.089	0.132
	FR1 n71	30M	QPSK	80	40	DFT-15	Front	15mm	Ant 0	Full	136100	680.5	23.22	25.00	1.507	-	-	0.08	0.168	0.253
	FR1 n71	30M	QPSK	80	40	DFT-15	Back	15mm	Ant 0	Full	136100	680.5	23.22	25.00	1.507	-	-	-0.02	0.269	0.405
835MHz																				
	LTE Band 5	10M	QPSK	1	0	-	Front	15mm	Ant 0	Sensor on	20525	836.5	24.03	25.00	1.250	-	-	0.05	0.212	0.265
83	LTE Band 5	10M	QPSK	1	0	-	Back	15mm	Ant 0	Sensor on	20525	836.5	24.03	25.00	1.250	-	-	0.12	0.315	0.394
	LTE Band 5	10M	QPSK	1	0	-	Front	18mm	Ant 0	Full	20525	836.5	24.03	25.00	1.250	-	-	-0.02	0.198	0.248
	LTE Band 5	10M	QPSK	1	0	-	Back	23mm	Ant 0	Full	20525	836.5	24.03	25.00	1.250	-	-	0.1	0.227	0.284
	LTE Band 5	10M	QPSK	25	0	-	Front	15mm	Ant 0	Sensor on	20525	836.5	22.89	24.00	1.291	-	-	-0.05	0.171	0.221
	LTE Band 5	10M	QPSK	25	0	-	Back	15mm	Ant 0	Sensor on	20525	836.5	22.89	24.00	1.291	-	-	0.03	0.251	0.324
	FR1 n5	25M	QPSK	1	1	DFT-15	Front	15mm	Ant 0	Sensor on	167300	836.5	23.82	25.00	1.312	-	-	0.15	0.144	0.189
	FR1 n5	25M	QPSK	1	1	DFT-15	Back	15mm	Ant 0	Sensor on	167300	836.5	23.82	25.00	1.312	-	-	0.17	0.214	0.281
	FR1 n5	25M	QPSK	64	32	DFT-15	Front	15mm	Ant 0	Sensor on	167300	836.5	23.78	25.00	1.324	-	-	-0.18	0.145	0.192
	FR1 n5	25M	QPSK	64	32	DFT-15	Back	15mm	Ant 0	Sensor on	167300	836.5	23.78	25.00	1.324	-	-	-0.03	0.261	0.346
	FR1 n5	25M	QPSK	64	32	DFT-15	Front	18mm	Ant 0	Full	167300	836.5	23.78	25.00	1.324	-	-	0.16	0.072	0.095
	FR1 n5	25M	QPSK	64	32	DFT-15	Back	23mm	Ant 0	Full	167300	836.5	23.78	25.00	1.324	-	-	0.15	0.089	0.118
1750MHz																				
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 3	Sensor on	132322	1745	16.25	17.50	1.334	-	-	0.08	0.158	0.211
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 3	Sensor on	132322	1745	16.25	17.50	1.334	-	-	-0.16	0.196	0.261
	LTE Band 66	20M	QPSK	1	0	-	Front	18mm	Ant 3	Full	132322	1745	23.62	25.00	1.374	-	-	0.19	0.370	0.508
	LTE Band 66	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	132322	1745	23.62	25.00	1.374	-	-	-0.14	0.207	0.284
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 3	Sensor on	132322	1745	16.17	17.50	1.358	-	-	0.08	0.155	0.211
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 3	Sensor on	132322	1745	16.17	17.50	1.358	-	-	0.11	0.170	0.231
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 2	Sensor on	132322	1745	22.71	24.00	1.346	-	-	0.05	0.047	0.063
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 2	Sensor on	132322	1745	22.71	24.00	1.346	-	-	0.14	0.091	0.122
	LTE Band 66	20M	QPSK	1	0	-	Front	18mm	Ant 2	Full	132322	1745	22.71	24.00	1.346	-	-	-0.12	0.038	0.051
	LTE Band 66	20M	QPSK	1	0	-	Back	23mm	Ant 2	Full	132322	1745	22.71	24.00	1.346	-	-	0.04	0.053	0.071
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 2	Sensor on	132322	1745	21.66	23.00	1.361	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 2	Sensor on	132322	1745	21.66	23.00	1.361	-	-	-0.04	0.076	0.103
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	15mm	Ant 3	Sensor on	349000	1745	20.41	20.50	1.021	-	-	0	0.232	0.237
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	15mm	Ant 3	Sensor on	349000	1745	20.41	20.50	1.021	-	-	-0.03	0.276	0.282
	FR1 n66	45M	QPSK	120	60	DFT-15	Front	15mm	Ant 3	Sensor on	349000	1745	20.35	20.50	1.035	-	-	-0.05	0.237	0.245
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	15mm	Ant 3	Sensor on	349000	1745	20.35	20.50	1.035	-	-	-0.04	0.282	0.292
	FR1 n66	45M	QPSK	120	60	DFT-15	Front	18mm	Ant 3	Full	349000	1745	24.81	25.00	1.045	-	-	-0.1	0.332	0.347
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	23mm	Ant 3	Full	349000	1745	24.81	25.00	1.045	-	-	0.18	0.274	0.286



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	FR1 n66	45M	QPSK	1	1	DFT-15	Front	15mm	Ant 2	Sensor on	349000	1745	22.49	24.00	1.416	-	-	-0.08	0.048	0.068
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	15mm	Ant 2	Sensor on	349000	1745	22.49	24.00	1.416	-	-	0.11	0.099	0.140
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	18mm	Ant 2	Full	349000	1745	22.49	24.00	1.416	-	-	-0.04	0.035	0.050
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	23mm	Ant 2	Full	349000	1745	22.49	24.00	1.416	-	-	-0.12	0.050	0.071
	FR1 n66	45M	QPSK	120	60	DFT-15	Front	15mm	Ant 2	Sensor on	349000	1745	22.48	24.00	1.419	-	-	-	n/a	n/a
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	15mm	Ant 2	Sensor on	349000	1745	22.48	24.00	1.419	-	-	0.06	0.082	0.116
1900Mhz																				
	LTE Band 2	20M	QPSK	1	0	-	Front	15mm	Ant 3	Sensor on	18900	1880	17.26	18.00	1.186	-	-	0.03	0.188	0.223
	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 3	Sensor on	18900	1880	17.26	18.00	1.186	-	-	0.11	0.211	0.250
	LTE Band 2	20M	QPSK	1	0	-	Front	18mm	Ant 3	Full	18900	1880	24.24	25.00	1.191	-	-	-0.14	0.292	0.348
	LTE Band 2	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	18900	1880	24.24	25.00	1.191	-	-	0.19	0.233	0.278
	LTE Band 2	20M	QPSK	50	0	-	Front	15mm	Ant 3	Sensor on	18900	1880	17.18	18.00	1.208	-	-	0.05	0.179	0.216
	LTE Band 2	20M	QPSK	50	0	-	Back	15mm	Ant 3	Sensor on	18900	1880	17.18	18.00	1.208	-	-	0.02	0.195	0.236
	LTE Band 2	20M	QPSK	1	0	-	Front	15mm	Ant 2	Sensor on	18900	1880	15.31	16.50	1.315	-	-	0.02	0.142	0.187
84	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 2	Sensor on	18900	1880	15.31	16.50	1.315	-	-	-0.01	0.318	0.418
	LTE Band 2	20M	QPSK	1	0	-	Front	18mm	Ant 2	Full	18900	1880	15.31	16.50	1.315	-	-	0.03	0.231	0.304
	LTE Band 2	20M	QPSK	1	0	-	Back	23mm	Ant 2	Full	18900	1880	15.31	16.50	1.315	-	-	0.14	0.255	0.335
	LTE Band 2	20M	QPSK	50	0	-	Front	15mm	Ant 2	Sensor on	18900	1880	15.28	16.50	1.324	-	-	-0.19	0.139	0.184
	LTE Band 2	20M	QPSK	50	0	-	Back	15mm	Ant 2	Sensor on	18900	1880	15.28	16.50	1.324	-	-	-0.01	0.312	0.413
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	15mm	Ant 3	Sensor on	376500	1882.5	16.77	18.00	1.327	-	-	-0.14	0.156	0.207
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	15mm	Ant 3	Sensor on	376500	1882.5	16.77	18.00	1.327	-	-	0.17	0.187	0.248
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 3	Sensor on	376500	1882.5	16.71	18.00	1.346	-	-	-0.11	0.159	0.214
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 3	Sensor on	376500	1882.5	16.71	18.00	1.346	-	-	-0.02	0.191	0.257
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	18mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	-0.1	0.332	0.461
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	23mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	0.18	0.274	0.381
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	15mm	Ant 2	Sensor on	376000	1880	14.91	16.50	1.442	-	-	0.02	0.064	0.092
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	15mm	Ant 2	Sensor on	376000	1880	14.91	16.50	1.442	-	-	-0.02	0.156	0.225
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 2	Sensor on	376000	1880	14.88	16.50	1.452	-	-	-0.07	0.065	0.094
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 2	Sensor on	376000	1880	14.88	16.50	1.452	-	-	-0.13	0.159	0.231
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	18mm	Ant 2	Full	376000	1880	14.91	16.50	1.442	-	-	-0.02	0.257	0.371
110	FR1 n2	40M	QPSK	108	54	DFT-15	Back	23mm	Ant 2	Full	376000	1880	14.91	16.50	1.442	-	-	0.13	0.298	0.430
2300Mhz																				
	LTE Band 30	10M	QPSK	1	0	-	Front	15mm	Ant 3	Sensor on	27710	2310	16.11	17.00	1.227	-	-	-0.17	0.142	0.174
	LTE Band 30	10M	QPSK	1	0	-	Back	15mm	Ant 3	Sensor on	27710	2310	16.11	17.00	1.227	-	-	0.05	0.316	0.388
	LTE Band 30	10M	QPSK	1	0	-	Front	18mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	-0.03	0.458	0.579
	LTE Band 30	10M	QPSK	1	0	-	Back	23mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	0.13	0.463	0.586
	LTE Band 30	10M	QPSK	25	0	-	Front	15mm	Ant 3	Sensor on	27710	2310	16.08	17.00	1.236	-	-	0.04	0.136	0.168
	LTE Band 30	10M	QPSK	25	0	-	Back	15mm	Ant 3	Sensor on	27710	2310	16.08	17.00	1.236	-	-	0.18	0.293	0.362
	LTE Band 30	10M	QPSK	1	0	-	Front	15mm	Ant 2	Sensor on	27710	2310	14.88	16.00	1.294	-	-	0.04	0.073	0.094
	LTE Band 30	10M	QPSK	1	0	-	Back	15mm	Ant 2	Sensor on	27710	2310	14.88	16.00	1.294	-	-	-0.02	0.258	0.334
	LTE Band 30	10M	QPSK	25	0	-	Front	15mm	Ant 2	Sensor on	27710	2310	14.80	16.00	1.318	-	-	0	0.072	0.095
	LTE Band 30	10M	QPSK	25	0	-	Back	15mm	Ant 2	Sensor on	27710	2310	14.80	16.00	1.318	-	-	-0.08	0.253	0.334
	LTE Band 30	10M	QPSK	1	0	-	Front	18mm	Ant 2	Full	27710	2310	14.88	16.00	1.294	-	-	0.05	0.139	0.180
	LTE Band 30	10M	QPSK	1	0	-	Back	23mm	Ant 2	Full	27710	2310	14.88	16.00	1.294	-	-	-0.18	0.272	0.352
2600Mhz																				
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 3	Sensor on	518598	2592.99	18.89	20.00	1.291	-	-	0.02	0.129	0.167
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 3	Sensor on	518598	2592.99	18.89	20.00	1.291	-	-	-0.09	0.247	0.319
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	18mm	Ant 3	Full	518598	2592.99	25.80	27.00	1.318	-	-	0.18	0.393	0.518
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	23mm	Ant 3	Full	518598	2592.99	25.80	27.00	1.318	-	-	-0.12	0.429	0.566
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 3	Sensor on	518598	2592.99	18.86	20.00	1.300	-	-	-0.17	0.124	0.161
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 3	Sensor on	518598	2592.99	18.86	20.00	1.300	-	-	0.08	0.242	0.315
3000Mhz-4000Mhz																				
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 4	Sensor on	641666	3624.99	16.36	17.50	1.300	-	-	0.19	0.070	0.091
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 4	Sensor on	641666	3624.99	16.36	17.50	1.300	-	-	-0.14	0.140	0.182
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 4	Sensor on	641666	3624.99	16.27	17.50	1.327	-	-	-0.06	0.094	0.125
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 4	Sensor on	641666	3624.99	16.27	17.50	1.327	-	-	0.02	0.152	0.202



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	FR1 n77	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 4	Full	641666	3624.99	23.65	25.00	1.365	-	-	-0.01	0.223	0.304
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 4	Full	641666	3624.99	23.65	25.00	1.365	-	-	0.1	0.249	0.340
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 4	Sensor on	633332	3499.98	16.45	17.50	1.274	-	-	-0.03	0.112	0.143
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 4	Sensor on	633332	3499.98	16.45	17.50	1.274	-	-	0.17	0.149	0.190
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 4	Sensor on	633332	3499.98	16.40	17.50	1.288	-	-	-0.05	0.110	0.142
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 4	Sensor on	633332	3499.98	16.40	17.50	1.288	-	-	0.12	0.152	0.196
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 4	Full	633332	3499.98	25.82	27.00	1.312	-	-	-0.03	0.315	0.413
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 4	Full	633332	3499.98	25.82	27.00	1.312	-	-	-0.03	0.322	0.423
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	15mm	Ant 4	Sensor on	656000	3840	16.49	17.50	1.262	-	-	0.07	0.099	0.125
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	15mm	Ant 4	Sensor on	656000	3840	16.49	17.50	1.262	-	-	-0.09	0.183	0.231
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 4	Sensor on	656000	3840	16.38	17.50	1.294	-	-	0.08	0.101	0.131
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 4	Sensor on	656000	3840	16.38	17.50	1.294	-	-	-0.06	0.185	0.239
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 4	Full	656000	3840	25.85	27.00	1.303	-	-	0.15	0.305	0.397
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 4	Full	656000	3840	25.85	27.00	1.303	-	-	0.11	0.260	0.339

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN & BT																
	Bluetooth	DH5 1Mbps	Front	15mm	Ant 5	Full Power	0	2402	8.50	10.00	1.413	76.82	1.302	-0.15	0.009	0.017
85	Bluetooth	DH5 1Mbps	Back	15mm	Ant 5	Full Power	0	2402	8.50	10.00	1.413	76.82	1.302	0.07	0.017	0.031
	Bluetooth	DH5 1Mbps	Front	18mm	Ant 5	Full	0	2402	8.50	10.00	1.413	76.82	1.302	-	n/a	n/a
	Bluetooth	DH5 1Mbps	Back	23mm	Ant 5	Full	0	2402	8.50	10.00	1.413	76.82	1.302	-	n/a	n/a
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 5	Sensor on	1	2412	20.40	21.00	1.148	99.71	1.003	-0.03	0.224	0.258
86	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 5	Sensor on	1	2412	20.40	21.00	1.148	99.71	1.003	0.05	0.279	0.321
	WLAN2.4GHz	802.11b 1Mbps	Front	18mm	Ant 5	Full	1	2412	20.40	21.00	1.148	99.71	1.003	0.03	0.140	0.161
	WLAN2.4GHz	802.11b 1Mbps	Back	23mm	Ant 5	Full	1	2412	20.40	21.00	1.148	99.71	1.003	0.12	0.113	0.130
	WLAN 5.3GHz	802.11n-HT40 MCS0	Front	15mm	Ant 5	Sensor on	54	5270	16.90	17.00	1.024	94.08	1.063	-0.14	0.150	0.163
	WLAN 5.3GHz	802.11n-HT40 MCS0	Back	15mm	Ant 5	Sensor on	54	5270	16.90	17.00	1.024	94.08	1.063	-0.05	0.225	0.245
	WLAN 5.3GHz	802.11a 6Mbps	Front	18mm	Ant 5	Full	56	5280	20.30	21.00	1.175	97.46	1.026	0.07	0.297	0.358
87	WLAN 5.3GHz	802.11a 6Mbps	Back	23mm	Ant 5	Full	56	5280	20.30	21.00	1.175	97.46	1.026	0.11	0.442	0.533
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Front	15mm	Ant 5	Sensor on	106	5530	15.63	16.00	1.089	90.36	1.107	0.12	0.129	0.155
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 5	Sensor on	106	5530	15.63	16.00	1.089	90.36	1.107	0.04	0.279	0.336
	WLAN 5.5GHz	802.11a 6Mbps	Front	18mm	Ant 5	Full	100	5500	20.49	21.00	1.124	97.46	1.026	0.14	0.408	0.471
88	WLAN 5.5GHz	802.11a 6Mbps	Back	23mm	Ant 5	Full	100	5500	20.49	21.00	1.124	97.46	1.026	0.08	0.491	0.566
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Front	15mm	Ant 5	Sensor on	155	5775	15.31	16.50	1.315	90.36	1.107	0.19	0.120	0.175
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 5	Sensor on	155	5775	15.31	16.50	1.315	90.36	1.107	0.11	0.286	0.416
	WLAN 5.8GHz	802.11a 6Mbps	Front	18mm	Ant 5	Full	149	5745	19.59	21.00	1.383	97.46	1.026	-0.1	0.314	0.446
89	WLAN 5.8GHz	802.11a 6Mbps	Back	23mm	Ant 5	Full	149	5745	19.59	21.00	1.383	97.46	1.026	0.19	0.407	0.578



15.4 Product specific 10g SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 3	Sensor on	1413	1732.6	17.85	19.50	1.462	-	-	0.04	0.963	1.408
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 3	Sensor on	1413	1732.6	17.85	19.50	1.462	-	-	-0.03	1.190	1.740
90	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 3	Sensor on	1413	1732.6	17.85	19.50	1.462	-	-	0.07	1.390	2.032
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 3	Sensor on	1312	1712.4	17.81	19.50	1.476	-	-	0.07	1.190	1.756
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 3	Sensor on	1513	1752.6	17.74	19.50	1.500	-	-	-0.19	1.330	1.995
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	18mm	Ant 3	Full	1413	1732.6	22.96	24.50	1.426	-	-	0.04	0.194	0.277
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	23mm	Ant 3	Full	1413	1732.6	22.96	24.50	1.426	-	-	0.18	0.127	0.181
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	23mm	Ant 3	Full	1413	1732.6	22.96	24.50	1.426	-	-	0.02	0.181	0.258
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 3	Sensor on	132322	1745	18.96	20.50	1.426	-	-	-0.14	0.927	1.322
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 3	Sensor on	132322	1745	18.96	20.50	1.426	-	-	0.15	1.150	1.639
91	LTE Band 66	20M	QPSK	1	0	-	Top Side	0mm	Ant 3	Sensor on	132322	1745	18.96	20.50	1.426	-	-	0.14	1.330	1.896
	LTE Band 66	20M	QPSK	1	0	-	Front	18mm	Ant 3	Full	132322	1745	23.62	25.00	1.374	-	-	-0.17	0.232	0.319
	LTE Band 66	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	132072	1720	23.53	25.00	1.403	-	-	0.16	0.106	0.149
	LTE Band 66	20M	QPSK	1	0	-	Top Side	23mm	Ant 3	Full	132572	1770	23.51	25.00	1.409	-	-	-0.1	0.339	0.478
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 3	Sensor on	132322	1745	18.90	20.50	1.445	-	-	0.12	0.908	1.312
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 3	Sensor on	132322	1745	18.90	20.50	1.445	-	-	0.18	1.130	1.633
	LTE Band 66	20M	QPSK	50	0	-	Top Side	0mm	Ant 3	Sensor on	132322	1745	18.90	20.50	1.445	-	-	-0.17	1.290	1.865
	FR1 n66	45M	QPSK	1	1	DFT-15	Top Side	0mm	Ant 3	Sensor on	349000	1745	23.36	23.50	1.033	-	-	0.02	1.920	1.983
92	FR1 n66	45M	QPSK	120	60	DFT-15	Top Side	0mm	Ant 3	Sensor on	349000	1745	23.34	23.50	1.038	-	-	0.08	1.940	2.013
	FR1 n66	45M	QPSK	120	60	DFT-15	Top Side	23mm	Ant 3	Full	349000	1745	24.81	25.00	1.045	-	-	-0.06	0.234	0.244
	FR1 n66	45M	QPSK	243	0	DFT-15	Top Side	0mm	Ant 3	Sensor on	349000	1745	23.32	23.50	1.042	-	-	-0.08	1.900	1.980
1900MHz																				
	GSM1900	-	-	-	-	GPRS 2TX Slot	Front	0mm	Ant 3	Sensor on	661	1880	24.15	25.00	1.216	-	-	-0.09	1.290	1.569
	GSM1900	-	-	-	-	GPRS 2TX Slot	Back	0mm	Ant 3	Sensor on	661	1880	24.15	25.00	1.216	-	-	0.11	1.110	1.350
93	GSM1900	-	-	-	-	GPRS 2TX Slot	Top Side	0mm	Ant 3	Sensor on	661	1880	24.15	25.00	1.216	-	-	-0.03	1.630	1.982
	GSM1900	-	-	-	-	GPRS 2TX Slot	Front	18mm	Ant 3	Full	661	1880	29.26	30.00	1.186	-	-	0.06	0.140	0.166
	GSM1900	-	-	-	-	GPRS 2TX Slot	Back	23mm	Ant 3	Full	661	1880	29.26	30.00	1.186	-	-	-0.05	0.119	0.141
	GSM1900	-	-	-	-	GPRS 2TX Slot	Top Side	23mm	Ant 3	Full	661	1880	29.26	30.00	1.186	-	-	0.07	0.213	0.253
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 3	Sensor on	9400	1880	18.96	20.00	1.271	-	-	0.01	0.823	1.046
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 3	Sensor on	9400	1880	18.96	20.00	1.271	-	-	-0.09	1.060	1.347
94	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 3	Sensor on	9400	1880	18.96	20.00	1.271	-	-	-0.08	1.740	2.211
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 3	Sensor on	9262	1852.4	18.93	20.00	1.279	-	-	-0.13	1.570	2.009
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 3	Sensor on	9538	1907.6	18.86	20.00	1.300	-	-	-0.1	1.580	2.054
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	18mm	Ant 3	Full	9400	1880	23.46	24.50	1.271	-	-	0	0.189	0.240
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	23mm	Ant 3	Full	9400	1880	23.46	24.50	1.271	-	-	-0.19	0.141	0.179
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	23mm	Ant 3	Full	9400	1880	23.46	24.50	1.271	-	-	-0.1	0.265	0.337
	LTE Band 25	20M	QPSK	1	0	-	Front	0mm	Ant 3	Sensor on	26340	1880	20.09	21.00	1.233	-	-	-0.14	1.110	1.369
	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 3	Sensor on	26340	1880	20.09	21.00	1.233	-	-	-0.07	0.952	1.174
95	LTE Band 25	20M	QPSK	1	0	-	Top Side	0mm	Ant 3	Sensor on	26340	1880	20.09	21.00	1.233	-	-	-0.09	1.720	2.121
	LTE Band 25	20M	QPSK	1	0	-	Top Side	0mm	Ant 3	Sensor on	26140	1860	19.92	21.00	1.282	-	-	0.07	1.630	2.090
	LTE Band 25	20M	QPSK	1	0	-	Top Side	0mm	Ant 3	Sensor on	26590	1905	19.70	21.00	1.349	-	-	-0.08	1.530	2.064
	LTE Band 25	20M	QPSK	1	0	-	Front	18mm	Ant 3	Full	26340	1880	24.24	25.00	1.191	-	-	0.01	0.166	0.198
	LTE Band 25	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	26340	1880	24.24	25.00	1.191	-	-	0.09	0.139	0.166
	LTE Band 25	20M	QPSK	1	0	-	Top Side	23mm	Ant 3	Full	26340	1880	24.24	25.00	1.191	-	-	-0.18	0.203	0.242
	LTE Band 25	20M	QPSK	50	0	-	Front	0mm	Ant 3	Sensor on	26340	1880	19.99	21.00	1.262	-	-	-0.01	1.090	1.375
	LTE Band 25	20M	QPSK	50	0	-	Back	0mm	Ant 3	Sensor on	26340	1880	19.99	21.00	1.262	-	-	0.13	0.933	1.177
	LTE Band 25	20M	QPSK	50	0	-	Top Side	0mm	Ant 3	Sensor on	26340	1880	19.99	21.00	1.262	-	-	0.07	1.590	2.006
	LTE Band 25	20M	QPSK	50	0	-	Top Side	0mm	Ant 3	Sensor on	26140	1860	19.86	21.00	1.300	-	-	0.03	1.500	1.950
	LTE Band 25	20M	QPSK	50	0	-	Top Side	0mm	Ant 3	Sensor on	26590	1905	19.64	21.00	1.368	-	-	-0.12	1.470	2.011
	LTE Band 25	20M	QPSK	100	0	-	Top Side	0mm	Ant 3	Sensor on	26340	1880	19.93	21.00	1.279	-	-	0.03	1.620	2.073



FCC SAR Test Report

Report No. : FA471902

	FR1 n25	40M	QPSK	1	1	DFT-15	Front	0mm	Ant 3	Sensor on	376500	1882.5	19.62	21.00	1.374	-	-	0.1	1.080	1.484
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	0mm	Ant 3	Sensor on	376500	1882.5	19.62	21.00	1.374	-	-	-0.14	0.900	1.237
	FR1 n25	40M	QPSK	1	1	DFT-15	Top Side	0mm	Ant 3	Sensor on	376500	1882.5	19.62	21.00	1.374	-	-	-0.05	1.420	1.951
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	0mm	Ant 3	Sensor on	376500	1882.5	19.60	21.00	1.380	-	-	0.08	1.060	1.463
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	0mm	Ant 3	Sensor on	376500	1882.5	19.60	21.00	1.380	-	-	-0.04	0.896	1.237
96	FR1 n25	40M	QPSK	108	54	DFT-15	Top Side	0mm	Ant 3	Sensor on	376500	1882.5	19.60	21.00	1.380	-	-	0.04	1.480	2.043
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	18mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	0.16	0.125	0.174
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	23mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	0.06	0.102	0.142
	FR1 n25	40M	QPSK	108	54	DFT-15	Top Side	23mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	0.08	0.259	0.360
	FR1 n25	40M	QPSK	216	0	DFT-15	Top Side	0mm	Ant 3	Sensor on	376500	1882.5	19.55	21.00	1.396	-	-	-0.05	1.440	2.011
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Front	0mm	Ant 3	Sensor on	27710	2310	18.96	20.00	1.271	-	-	0.14	1.380	1.753
97	LTE Band 30	10M	QPSK	1	0	-	Back	0mm	Ant 3	Sensor on	27710	2310	18.96	20.00	1.271	-	-	-0.04	1.800	2.287
	LTE Band 30	10M	QPSK	1	0	-	Top Side	0mm	Ant 3	Sensor on	27710	2310	18.96	20.00	1.271	-	-	-0.03	1.740	2.211
	LTE Band 30	10M	QPSK	1	0	-	Front	18mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	-0.07	0.181	0.229
	LTE Band 30	10M	QPSK	1	0	-	Back	23mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	-0.08	0.277	0.350
	LTE Band 30	10M	QPSK	1	0	-	Top Side	23mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	0.12	0.311	0.393
	LTE Band 30	10M	QPSK	25	0	-	Front	0mm	Ant 3	Sensor on	27710	2310	18.88	20.00	1.294	-	-	-0.12	1.320	1.708
	LTE Band 30	10M	QPSK	25	0	-	Back	0mm	Ant 3	Sensor on	27710	2310	18.88	20.00	1.294	-	-	-0.08	1.730	2.239
	LTE Band 30	10M	QPSK	25	0	-	Top Side	0mm	Ant 3	Sensor on	27710	2310	18.88	20.00	1.294	-	-	0.01	1.670	2.161
	LTE Band 30	10M	QPSK	50	0	-	Back	0mm	Ant 3	Sensor on	27710	2310	18.80	20.00	1.318	-	-	-0.11	1.690	2.228
	LTE Band 30	10M	QPSK	50	0	-	Top Side	0mm	Ant 3	Sensor on	27710	2310	18.80	20.00	1.318	-	-	0.05	1.640	2.162
	FR1 n30	10M	QPSK	1	1	DFT-15	Front	0mm	Ant 3	Sensor on	462000	2310	21.18	21.50	1.076	-	-	-0.13	1.620	1.744
	FR1 n30	10M	QPSK	1	1	DFT-15	Back	0mm	Ant 3	Sensor on	462000	2310	21.18	21.50	1.076	-	-	-0.08	1.850	1.991
	FR1 n30	10M	QPSK	1	1	DFT-15	Top Side	0mm	Ant 3	Sensor on	462000	2310	21.18	21.50	1.076	-	-	0	1.760	1.895
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	0mm	Ant 3	Sensor on	462000	2310	21.15	21.50	1.084	-	-	0.08	1.650	1.788
98	FR1 n30	10M	QPSK	25	14	DFT-15	Back	0mm	Ant 3	Sensor on	462000	2310	21.15	21.50	1.084	-	-	0.14	1.890	2.049
	FR1 n30	10M	QPSK	25	14	DFT-15	Top Side	0mm	Ant 3	Sensor on	462000	2310	21.15	21.50	1.084	-	-	0.06	1.800	1.951
	FR1 n30	10M	QPSK	25	14	DFT-15	Front	18mm	Ant 3	Full	462000	2310	23.54	24.00	1.112	-	-	-0.03	0.172	0.191
	FR1 n30	10M	QPSK	25	14	DFT-15	Back	23mm	Ant 3	Full	462000	2310	23.54	24.00	1.112	-	-	-0.1	0.240	0.267
	FR1 n30	10M	QPSK	25	14	DFT-15	Top Side	23mm	Ant 3	Full	462000	2310	23.54	24.00	1.112	-	-	-0.11	0.146	0.162
	FR1 n30	10M	QPSK	50	0	DFT-15	Back	0mm	Ant 3	Sensor on	462000	2310	21.07	21.50	1.104	-	-	-0.14	1.810	1.998
	FR1 n30	10M	QPSK	50	0	DFT-15	Top Side	0mm	Ant 3	Sensor on	462000	2310	21.07	21.50	1.104	-	-	0.09	1.730	1.910
2600Mhz																				
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 3	Sensor on	21100	2535	20.33	21.50	1.309	-	-	-0.1	1.630	2.134
99	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 3	Sensor on	20850	2510	20.16	21.50	1.361	-	-	0.06	1.740	2.369
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 3	Sensor on	21350	2560	20.30	21.50	1.318	-	-	0.08	1.670	2.201
	LTE Band 7	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	Sensor on	21100	2535	20.33	21.50	1.309	-	-	-0.02	1.160	1.519
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 3	Sensor on	21100	2535	20.33	21.50	1.309	-	-	0.04	0.881	1.153
	LTE Band 7	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	20850	2510	22.67	24.00	1.358	-	-	0.05	0.185	0.251
	LTE Band 7	20M	QPSK	1	0	-	Left Side	16mm	Ant 3	Full	21100	2535	22.94	24.00	1.276	-	-	-0.19	0.221	0.282
	LTE Band 7	20M	QPSK	1	0	-	Top Side	23mm	Ant 3	Full	21100	2535	22.94	24.00	1.276	-	-	0	0.168	0.214
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 3	Sensor on	21100	2535	20.21	21.50	1.346	-	-	0.1	1.580	2.126
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 3	Sensor on	20850	2510	20.07	21.50	1.390	-	-	0.16	1.690	2.349
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 3	Sensor on	21350	2560	20.16	21.50	1.361	-	-	0.03	1.620	2.206
	LTE Band 7	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	Sensor on	21100	2535	20.21	21.50	1.346	-	-	-0.01	1.130	1.521
	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 3	Sensor on	21100	2535	20.21	21.50	1.346	-	-	0.19	0.855	1.151
	LTE Band 7	20M	QPSK	100	0	-	Back	0mm	Ant 3	Sensor on	21100	2535	20.18	21.50	1.355	-	-	-0.02	1.670	2.263
	FR1 n7	50M	QPSK	1	1	DFT-15	Back	0mm	Ant 3	Sensor on	507000	2535	20.52	22.00	1.406	-	-	0.11	1.330	1.870
100	FR1 n7	50M	QPSK	135	68	DFT-15	Back	0mm	Ant 3	Sensor on	507000	2535	20.48	22.00	1.419	-	-	0.06	1.360	1.930
	FR1 n7	50M	QPSK	135	68	DFT-15	Back	23mm	Ant 3	Full	507000	2535	22.39	24.00	1.449	-	-	-0.14	0.146	0.212
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	0mm	Ant 3	Sensor on	518598	2592.99	21.80	23.00	1.318	-	-	-0.16	0.933	1.230
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	0mm	Ant 3	Sensor on	518598	2592.99	21.80	23.00	1.318	-	-	0.05	1.520	2.004
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Side	0mm	Ant 3	Sensor on	518598	2592.99	21.80	23.00	1.318	-	-	0.03	1.110	1.463
	FR1 n41	100M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 3	Sensor on	518598	2592.99	21.80	23.00	1.318	-	-	0.09	0.761	1.003
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	0mm	Ant 3	Sensor on	518598	2592.99	21.74	23.00	1.337	-	-	-0.17	0.923	1.234



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101	FR1 n41	100M	QPSK	135	69	DFT-30	Back	0mm	Ant 3	Sensor on	518598	2592.99	21.74	23.00	1.337	-	-	0.09	1.620	2.165
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	0mm	Ant 3	Sensor on	518598	2592.99	21.74	23.00	1.337	-	-	0.19	1.330	1.778
	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	0mm	Ant 3	Sensor on	518598	2592.99	21.74	23.00	1.337	-	-	0	0.770	1.029
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 3	Full	518598	2592.99	25.75	27.00	1.334	-	-	0.01	0.222	0.296
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 3	Full	518598	2592.99	25.75	27.00	1.334	-	-	-0.01	0.188	0.251
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	16mm	Ant 3	Full	518598	2592.99	25.75	27.00	1.334	-	-	0.09	0.229	0.305
	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	23mm	Ant 3	Full	518598	2592.99	25.75	27.00	1.334	-	-	-0.15	0.159	0.212
3000Mhz-4000Mhz																				
	LTE Band 48	20M	QPSK	1	0	-	Back	0mm	Ant 4	Sensor on	56150	3641	22.98	23.50	1.127	62.9	1.006	0.19	1.750	1.984
	LTE Band 48	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	Sensor on	56150	3641	22.98	23.50	1.127	62.9	1.006	0	1.830	2.075
102	LTE Band 48	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	Sensor on	55340	3560	22.35	23.50	1.303	62.9	1.006	-0.04	1.640	2.150
	LTE Band 48	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	Sensor on	55830	3609	22.53	23.50	1.250	62.9	1.006	-0.02	1.630	2.050
	LTE Band 48	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	Sensor on	56640	3690	22.90	23.50	1.148	62.9	1.006	-0.01	1.670	1.929
	LTE Band 48	20M	QPSK	1	0	-	Back	23mm	Ant 4	Full	56150	3641	23.50	24.00	1.122	62.9	1.006	0.07	0.097	0.109
	LTE Band 48	20M	QPSK	1	0	-	Top Side	23mm	Ant 4	Full	55340	3560	22.89	24.00	1.291	62.9	1.006	0	0.110	0.143
	LTE Band 48	20M	QPSK	50	0	-	Back	0mm	Ant 4	Sensor on	56150	3641	22.41	23.00	1.146	62.9	1.006	-0.09	1.720	1.982
	LTE Band 48	20M	QPSK	50	0	-	Top Side	0mm	Ant 4	Sensor on	56150	3641	22.41	23.00	1.146	62.9	1.006	0.1	1.800	2.074
	LTE Band 48	20M	QPSK	50	0	-	Top Side	0mm	Ant 4	Sensor on	55340	3560	21.81	23.00	1.315	62.9	1.006	0.16	1.570	2.077
	LTE Band 48	20M	QPSK	50	0	-	Top Side	0mm	Ant 4	Sensor on	55830	3609	21.94	23.00	1.276	62.9	1.006	0.04	1.560	2.003
	LTE Band 48	20M	QPSK	50	0	-	Top Side	0mm	Ant 4	Sensor on	56640	3690	22.31	23.00	1.172	62.9	1.006	-0.1	1.600	1.887
	LTE Band 48	20M	QPSK	100	0	-	Top Side	0mm	Ant 4	Sensor on	56150	3641	22.37	23.00	1.156	62.9	1.006	-0.1	1.760	2.047
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	0mm	Ant 4	Sensor on	641666	3624.99	19.26	21.00	1.493	-	-	0.17	1.250	1.866
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 4	Sensor on	641666	3624.99	19.26	21.00	1.493	-	-	0.02	1.350	2.015
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 4	Sensor on	638000	3570	19.16	21.00	1.528	-	-	0.13	1.340	2.047
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 4	Sensor on	645332	3679.98	19.24	21.00	1.500	-	-	-0.09	1.240	1.860
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	0mm	Ant 4	Sensor on	641666	3624.99	19.20	21.00	1.514	-	-	0.01	1.260	1.907
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	0mm	Ant 4	Sensor on	641666	3624.99	19.20	21.00	1.514	-	-	-0.1	1.330	2.013
103	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	0mm	Ant 4	Sensor on	638000	3570	19.14	21.00	1.535	-	-	-0.13	1.350	2.072
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	0mm	Ant 4	Sensor on	645332	3679.98	19.17	21.00	1.524	-	-	0.12	1.250	1.905
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	23mm	Ant 4	Full	641666	3624.99	22.20	24.00	1.514	-	-	-0.14	0.164	0.248
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	23mm	Ant 4	Full	638000	3570	22.18	24.00	1.521	-	-	0.11	0.116	0.176
	FR1 n48	40M	QPSK	100	0	DFT-30	Top Side	0mm	Ant 4	Sensor on	645332	3679.98	19.14	21.00	1.535	-	-	0.1	1.300	1.995
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	0mm	Ant 4	Sensor on	641666	3624.99	19.29	20.50	1.321	-	-	-0.11	0.959	1.267
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	0mm	Ant 4	Sensor on	641666	3624.99	19.29	20.50	1.321	-	-	-0.03	1.100	1.453
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 4	Sensor on	641666	3624.99	19.29	20.50	1.321	-	-	-0.04	1.510	1.995
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	0mm	Ant 4	Sensor on	641666	3624.99	19.26	20.50	1.330	-	-	0.03	0.979	1.303
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	0mm	Ant 4	Sensor on	641666	3624.99	19.26	20.50	1.330	-	-	0.04	1.120	1.490
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	0mm	Ant 4	Sensor on	641666	3624.99	19.26	20.50	1.330	-	-	-0.01	1.540	2.049
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 4	Full	641666	3624.99	25.65	27.00	1.365	-	-	-0.15	0.292	0.398
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 4	Full	641666	3624.99	25.65	27.00	1.365	-	-	-0.12	0.327	0.446
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	23mm	Ant 4	Full	641666	3624.99	25.65	27.00	1.365	-	-	0.01	0.399	0.544
	FR1 n77	100M	QPSK	270	0	DFT-30	Top Side	0mm	Ant 4	Sensor on	641666	3624.99	19.22	20.50	1.343	-	-	0.19	1.480	1.987
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	0mm	Ant 4	Sensor on	633332	3499.98	19.34	20.50	1.306	-	-	0.09	0.983	1.284
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	0mm	Ant 4	Sensor on	633332	3499.98	19.34	20.50	1.306	-	-	0.17	1.090	1.424
104	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 4	Sensor on	633332	3499.98	19.34	20.50	1.306	-	-	-0.05	1.610	2.103
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	18mm	Ant 4	Full	633332	3499.98	25.84	27.00	1.306	-	-	-0.04	0.271	0.354
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	23mm	Ant 4	Full	633332	3499.98	25.84	27.00	1.306	-	-	-0.08	0.273	0.357
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	23mm	Ant 4	Full	633332	3499.98	25.84	27.00	1.306	-	-	-0.13	0.395	0.516
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	0mm	Ant 4	Sensor on	633332	3499.98	19.31	20.50	1.315	-	-	-0.01	0.963	1.267
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	0mm	Ant 4	Sensor on	633332	3499.98	19.31	20.50	1.315	-	-	-0.03	1.070	1.407
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	0mm	Ant 4	Sensor on	633332	3499.98	19.31	20.50	1.315	-	-	0.19	1.580	2.078
	FR1 n77	100M	QPSK	270	0	DFT-30	Top Side	0mm	Ant 4	Sensor on	633332	3499.98	19.23	20.50	1.340	-	-	0.06	1.560	2.090
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	0mm	Ant 4	Sensor on	656000	3840	19.42	20.50	1.282	-	-	0.19	0.857	1.099
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	0mm	Ant 4	Sensor on	656000	3840	19.42	20.50	1.282	-	-	0.07	1.040	1.334
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 4	Sensor on	656000	3840	19.42	20.50	1.282	-	-	0.15	1.060	1.359
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	18mm	Ant 4	Full	656000	3840	25.92	27.00	1.282	-	-	0.05	0.209	0.268



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	FR1 n77	100M	QPSK	1	1	DFT-30	Back	23mm	Ant 4	Full	656000	3840	25.92	27.00	1.282	-	-	0.04	0.218	0.280
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	23mm	Ant 4	Full	656000	3840	25.92	27.00	1.282	-	-	0.03	0.284	0.364
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	0mm	Ant 4	Sensor on	656000	3840	19.39	20.50	1.291	-	-	-0.01	0.827	1.068
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	0mm	Ant 4	Sensor on	656000	3840	19.39	20.50	1.291	-	-	0.18	0.950	1.227
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	0mm	Ant 4	Sensor on	656000	3840	19.39	20.50	1.291	-	-	-0.09	0.981	1.267

For ENDC

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
1750MHz																				
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 3	Sensor on	132322	1745	16.25	17.50	1.000	-	-	-0.09	0.465	0.465
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 3	Sensor on	132322	1745	16.25	17.50	1.334	-	-	-0.06	0.557	0.743
	LTE Band 66	20M	QPSK	1	0	-	Top Side	0mm	Ant 3	Sensor on	132322	1745	16.25	17.50	1.334	-	-	-0.17	0.647	0.863
	LTE Band 66	20M	QPSK	1	0	-	Front	18mm	Ant 3	Full	132322	1745	23.62	25.00	1.374	-	-	-0.17	0.232	0.319
	LTE Band 66	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	132072	1720	23.53	25.00	1.403	-	-	0.16	0.106	0.149
	LTE Band 66	20M	QPSK	1	0	-	Top Side	23mm	Ant 3	Full	132572	1770	23.51	25.00	1.409	-	-	-0.1	0.339	0.478
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 3	Sensor on	132322	1745	16.17	17.50	1.358	-	-	-0.14	0.454	0.617
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 3	Sensor on	132322	1745	16.17	17.50	1.358	-	-	0.18	0.561	0.762
	LTE Band 66	20M	QPSK	50	0	-	Top Side	0mm	Ant 3	Sensor on	132322	1745	16.17	17.50	1.358	-	-	0.06	0.633	0.860
	FR1 n66	45M	QPSK	1	1	DFT-15	Top Side	0mm	Ant 3	Sensor on	349000	1745	20.45	20.50	1.012	-	-	0.02	0.947	0.958
	FR1 n66	45M	QPSK	120	60	DFT-15	Top Side	0mm	Ant 3	Sensor on	349000	1745	20.42	20.50	1.019	-	-	0.18	0.955	0.973
	FR1 n66	45M	QPSK	120	60	DFT-15	Top Side	23mm	Ant 3	Full	349000	1745	24.81	25.00	1.045	-	-	-0.06	0.234	0.244
1900Mhz																				
	LTE Band 2	20M	QPSK	1	0	-	Front	0mm	Ant 3	Sensor on	18900	1880	17.26	18.00	1.186	-	-	-0.17	0.552	0.655
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 3	Sensor on	18900	1880	17.26	18.00	1.186	-	-	-0.06	0.472	0.560
	LTE Band 2	20M	QPSK	1	0	-	Top Side	0mm	Ant 3	Sensor on	18900	1880	17.26	18.00	1.186	-	-	-0.06	0.860	1.020
	LTE Band 2	20M	QPSK	1	0	-	Front	18mm	Ant 3	Full	18900	1880	24.15	25.00	1.216	-	-	-0.14	0.244	0.297
	LTE Band 2	20M	QPSK	1	0	-	Back	23mm	Ant 3	Full	18900	1880	24.15	25.00	1.216	-	-	0.05	0.208	0.253
	LTE Band 2	20M	QPSK	1	0	-	Top Side	23mm	Ant 3	Full	18900	1880	24.15	25.00	1.216	-	-	0.16	0.333	0.405
	LTE Band 2	20M	QPSK	50	0	-	Front	0mm	Ant 3	Sensor on	18900	1880	17.18	18.00	1.208	-	-	0.05	0.534	0.645
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 3	Sensor on	18900	1880	17.18	18.00	1.208	-	-	-0.05	0.468	0.565
	LTE Band 2	20M	QPSK	50	0	-	Top Side	0mm	Ant 3	Sensor on	18900	1880	17.18	18.00	1.208	-	-	-0.04	0.770	0.930
	LTE Band 2	20M	QPSK	1	0	-	Front	0mm	Ant 2	Sensor on	18900	1880	15.31	16.50	1.315	-	-	0.12	0.196	0.258
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 2	Sensor on	18900	1880	15.31	16.50	1.315	-	-	-0.11	0.758	0.997
105	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 2	Sensor on	18900	1880	15.31	16.50	1.315	-	-	0.1	0.786	1.034
	LTE Band 2	20M	QPSK	1	0	-	Front	18mm	Ant 2	Full	18900	1880	22.62	24.00	1.374	-	-	-0.14	0.035	0.048
	LTE Band 2	20M	QPSK	1	0	-	Back	23mm	Ant 2	Full	18900	1880	22.62	24.00	1.374	-	-	0.08	0.134	0.184
	LTE Band 2	20M	QPSK	1	0	-	Left Side	16mm	Ant 2	Full	18900	1880	22.62	24.00	1.374	-	-	-0.12	0.139	0.191
	LTE Band 2	20M	QPSK	50	0	-	Front	0mm	Ant 2	Sensor on	18900	1880	15.28	16.50	1.324	-	-	0.19	0.195	0.258
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 2	Sensor on	18900	1880	15.28	16.50	1.324	-	-	-0.02	0.748	0.991
	LTE Band 2	20M	QPSK	50	0	-	Left Side	0mm	Ant 2	Sensor on	18900	1880	15.28	16.50	1.324	-	-	0.14	0.755	1.000
	FR1 n25	40M	QPSK	1	1	DFT-15	Front	0mm	Ant 3	Sensor on	376500	1882.5	16.77	18.00	1.327	-	-	0.12	0.539	0.715
	FR1 n25	40M	QPSK	1	1	DFT-15	Back	0mm	Ant 3	Sensor on	376500	1882.5	16.77	18.00	1.327	-	-	-0.17	0.448	0.595
	FR1 n25	40M	QPSK	1	1	DFT-15	Top Side	0mm	Ant 3	Sensor on	376500	1882.5	16.77	18.00	1.327	-	-	-0.05	0.712	0.945
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	0mm	Ant 3	Sensor on	376500	1882.5	16.71	18.00	1.346	-	-	-0.07	0.524	0.705
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	0mm	Ant 3	Sensor on	376500	1882.5	16.71	18.00	1.346	-	-	0.03	0.448	0.603
	FR1 n25	40M	QPSK	108	54	DFT-15	Top Side	0mm	Ant 3	Sensor on	376500	1882.5	16.71	18.00	1.346	-	-	-0.14	0.720	0.969
	FR1 n25	40M	QPSK	108	54	DFT-15	Front	18mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	0.16	0.125	0.174
	FR1 n25	40M	QPSK	108	54	DFT-15	Back	23mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	0.06	0.102	0.142
	FR1 n25	40M	QPSK	108	54	DFT-15	Top Side	23mm	Ant 3	Full	376500	1882.5	23.57	25.00	1.390	-	-	0.08	0.259	0.360
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	0mm	Ant 2	Sensor on	376000	1880	14.91	16.50	1.442	-	-	-0.12	0.342	0.493
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	0mm	Ant 2	Sensor on	376000	1880	14.91	16.50	1.442	-	-	0.16	0.723	1.043
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	0mm	Ant 2	Sensor on	376000	1880	14.91	16.50	1.442	-	-	0.19	0.737	1.063



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	FR1 n2	40M	QPSK	108	54	DFT-15	Front	0mm	Ant 2	Sensor on	376000	1880	14.88	16.50	1.452	-	-	0.17	0.345	0.501
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	0mm	Ant 2	Sensor on	376000	1880	14.88	16.50	1.452	-	-	-0.07	0.755	1.096
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Side	0mm	Ant 2	Sensor on	376000	1880	14.88	16.50	1.452	-	-	0.16	0.781	1.134
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	18mm	Ant 2	Full	376000	1880	22.43	24.00	1.435	-	-	-0.04	0.061	0.088
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	23mm	Ant 2	Full	376000	1880	22.43	24.00	1.435	-	-	0.02	0.134	0.192
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Side	16mm	Ant 2	Full	376000	1880	22.43	24.00	1.435	-	-	-0.18	0.138	0.198
2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Front	0mm	Ant 3	Sensor on	27710	2310	16.11	17.00	1.227	-	-	0.15	0.684	0.840
	LTE Band 30	10M	QPSK	1	0	-	Back	0mm	Ant 3	Sensor on	27710	2310	16.11	17.00	1.227	-	-	-0.14	0.900	1.105
	LTE Band 30	10M	QPSK	1	0	-	Top Side	0mm	Ant 3	Sensor on	27710	2310	16.11	17.00	1.227	-	-	-0.18	0.866	1.063
	LTE Band 30	10M	QPSK	1	0	-	Front	18mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	-0.07	0.181	0.229
	LTE Band 30	10M	QPSK	1	0	-	Back	23mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	-0.08	0.277	0.350
	LTE Band 30	10M	QPSK	1	0	-	Top Side	23mm	Ant 3	Full	27710	2310	22.98	24.00	1.265	-	-	0.12	0.311	0.393
	LTE Band 30	10M	QPSK	25	0	-	Front	0mm	Ant 3	Sensor on	27710	2310	16.08	17.00	1.236	-	-	0.02	0.659	0.814
	LTE Band 30	10M	QPSK	25	0	-	Back	0mm	Ant 3	Sensor on	27710	2310	16.08	17.00	1.236	-	-	0.11	0.857	1.059
	LTE Band 30	10M	QPSK	25	0	-	Top Side	0mm	Ant 3	Sensor on	27710	2310	16.08	17.00	1.236	-	-	0.1	0.809	1.000
	LTE Band 30	10M	QPSK	1	0	-	Back	0mm	Ant 2	Sensor on	27710	2310	14.88	16.00	1.294	-	-	-0.05	0.785	1.016
	LTE Band 30	10M	QPSK	1	0	-	Left Side	0mm	Ant 2	Sensor on	27710	2310	14.88	16.00	1.294	-	-	0.09	0.550	0.712
	LTE Band 30	10M	QPSK	25	0	-	Back	0mm	Ant 2	Sensor on	27710	2310	14.80	16.00	1.318	-	-	0.19	0.780	1.028
	LTE Band 30	10M	QPSK	25	0	-	Left Side	0mm	Ant 2	Sensor on	27710	2310	14.80	16.00	1.318	-	-	-0.05	0.575	0.758
	LTE Band 30	10M	QPSK	25	0	-	Back	23mm	Ant 2	Full	27710	2310	20.76	22.00	1.330	-	-	0.05	0.138	0.184
	LTE Band 30	10M	QPSK	25	0	-	Left Side	16mm	Ant 2	Full	27710	2310	20.76	22.00	1.330	-	-	0.03	0.308	0.410
2600MHz																				
	FR1 n41	100M	QPSK	1	1	DFT-30	Front	0mm	Ant 3	Sensor on	518598	2592.99	18.89	20.00	1.291	-	-	0.02	0.468	0.604
	FR1 n41	100M	QPSK	1	1	DFT-30	Back	0mm	Ant 3	Sensor on	518598	2592.99	18.89	20.00	1.291	-	-	-0.12	0.760	0.981
	FR1 n41	100M	QPSK	1	1	DFT-30	Left Side	0mm	Ant 3	Sensor on	518598	2592.99	18.89	20.00	1.291	-	-	-0.03	0.541	0.699
	FR1 n41	100M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 3	Sensor on	518598	2592.99	18.89	20.00	1.291	-	-	-0.12	0.381	0.492
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	0mm	Ant 3	Sensor on	518598	2592.99	18.86	20.00	1.300	-	-	-0.07	0.463	0.602
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	0mm	Ant 3	Sensor on	518598	2592.99	18.86	20.00	1.300	-	-	-0.11	0.793	1.031
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	0mm	Ant 3	Sensor on	518598	2592.99	18.86	20.00	1.300	-	-	-0.13	0.644	0.837
	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	0mm	Ant 3	Sensor on	518598	2592.99	18.86	20.00	1.300	-	-	-0.1	0.381	0.495
	FR1 n41	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 3	Full	518598	2592.99	25.75	27.00	1.334	-	-	0.01	0.222	0.296
	FR1 n41	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 3	Full	518598	2592.99	25.75	27.00	1.334	-	-	-0.01	0.188	0.251
	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	16mm	Ant 3	Full	518598	2592.99	25.75	27.00	1.334	-	-	0.09	0.229	0.305
	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	23mm	Ant 3	Full	518598	2592.99	25.75	27.00	1.334	-	-	-0.15	0.159	0.212
3000MHz-4000MHz																				
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	0mm	Ant 4	Sensor on	641666	3624.99	16.36	17.50	1.300	-	-	-0.08	0.469	0.610
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	0mm	Ant 4	Sensor on	641666	3624.99	16.36	17.50	1.300	-	-	0.12	0.536	0.697
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 4	Sensor on	641666	3624.99	16.36	17.50	1.300	-	-	-0.1	0.752	0.978
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	0mm	Ant 4	Sensor on	641666	3624.99	16.27	17.50	1.327	-	-	-0.12	0.490	0.650
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	0mm	Ant 4	Sensor on	641666	3624.99	16.27	17.50	1.327	-	-	0.14	0.550	0.730
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	0mm	Ant 4	Sensor on	641666	3624.99	16.27	17.50	1.327	-	-	0.01	0.753	1.000
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	18mm	Ant 4	Full	641666	3624.99	25.65	27.00	1.365	-	-	-0.15	0.292	0.398
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	23mm	Ant 4	Full	641666	3624.99	25.65	27.00	1.365	-	-	-0.12	0.327	0.446
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	23mm	Ant 4	Full	641666	3624.99	25.65	27.00	1.365	-	-	0.01	0.399	0.544
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	0mm	Ant 4	Sensor on	633332	3499.98	16.45	17.50	1.274	-	-	0.02	0.487	0.620
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	0mm	Ant 4	Sensor on	633332	3499.98	16.45	17.50	1.274	-	-	0.03	0.529	0.674
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 4	Sensor on	633332	3499.98	16.45	17.50	1.274	-	-	0.12	0.801	1.020
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	18mm	Ant 4	Full	633332	3499.98	25.84	27.00	1.306	-	-	-0.04	0.271	0.354
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	23mm	Ant 4	Full	633332	3499.98	25.84	27.00	1.306	-	-	-0.08	0.273	0.357
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	23mm	Ant 4	Full	633332	3499.98	25.84	27.00	1.306	-	-	-0.13	0.395	0.516
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	0mm	Ant 4	Sensor on	633332	3499.98	16.40	17.50	1.288	-	-	-0.11	0.477	0.614
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	0mm	Ant 4	Sensor on	633332	3499.98	16.40	17.50	1.288	-	-	-0.02	0.534	0.688
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	0mm	Ant 4	Sensor on	633332	3499.98	16.40	17.50	1.288	-	-	0.15	0.772	0.995
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	0mm	Ant 4	Sensor on	656000	3840	16.49	17.50	1.262	-	-	-0.15	0.428	0.540
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	0mm	Ant 4	Sensor on	656000	3840	16.49	17.50	1.262	-	-	-0.14	0.518	0.654



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	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	0mm	Ant 4	Sensor on	656000	3840	16.49	17.50	1.262	-	-	-0.1	0.518	0.654
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	18mm	Ant 4	Full	656000	3840	25.92	27.00	1.282	-	-	0.05	0.209	0.268
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	23mm	Ant 4	Full	656000	3840	25.92	27.00	1.282	-	-	0.04	0.218	0.280
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	23mm	Ant 4	Full	656000	3840	25.92	27.00	1.282	-	-	0.03	0.284	0.364
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	0mm	Ant 4	Sensor on	656000	3840	16.38	17.50	1.294	-	-	-0.07	0.410	0.531
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	0mm	Ant 4	Sensor on	656000	3840	16.38	17.50	1.294	-	-	-0.15	0.469	0.607
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	0mm	Ant 4	Sensor on	656000	3840	16.38	17.50	1.294	-	-	0.02	0.488	0.632

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
WLAN & BT																
106	WLAN 5.2GHz	802.11n-HT40 MCS0	Back	0mm	Ant 5	Sensor on	46	5230	16.88	17.00	1.028	94.08	1.063	-0.17	0.847	0.926
	WLAN 5.2GHz	802.11a 6Mbps	Back	23mm	Ant 5	Full	40	5200	20.31	21.00	1.172	97.46	1.026	-0.06	0.230	0.277
	WLAN 5.3GHz	802.11n-HT40 MCS0	Front	0mm	Ant 5	Sensor on	54	5270	16.90	17.00	1.024	94.08	1.063	-0.14	1.020	1.111
	WLAN 5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 5	Sensor on	54	5270	16.90	17.00	1.024	94.08	1.063	0.15	0.774	0.843
	WLAN 5.3GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 5	Sensor on	54	5270	16.90	17.00	1.024	94.08	1.063	0.07	0.606	0.660
107	WLAN 5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 5	Sensor on	54	5270	16.90	17.00	1.024	94.08	1.063	-0.04	1.050	1.143
	WLAN 5.3GHz	802.11a 6Mbps	Front	18mm	Ant 5	Full	56	5280	20.30	21.00	1.175	97.46	1.026	-0.09	0.231	0.278
	WLAN 5.3GHz	802.11a 6Mbps	Back	23mm	Ant 5	Full	56	5280	20.30	21.00	1.175	97.46	1.026	-0.02	0.199	0.240
	WLAN 5.3GHz	802.11a 6Mbps	Right Side	13mm	Ant 5	Full	56	5280	20.30	21.00	1.175	97.46	1.026	-0.06	0.178	0.215
	WLAN 5.3GHz	802.11a 6Mbps	Top Side	23mm	Ant 5	Full	56	5280	20.30	21.00	1.175	97.46	1.026	0.02	0.089	0.107
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 5	Sensor on	106	5530	15.63	16.00	1.089	90.36	1.107	0.04	0.836	1.008
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 5	Sensor on	106	5530	15.63	16.00	1.089	90.36	1.107	-0.1	0.503	0.606
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 5	Sensor on	106	5530	15.63	16.00	1.089	90.36	1.107	-0.19	0.527	0.635
108	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5	Sensor on	106	5530	15.63	16.00	1.089	90.36	1.107	-0.03	0.894	1.078
	WLAN 5.5GHz	802.11a 6Mbps	Front	18mm	Ant 5	Full	100	5500	20.49	21.00	1.124	97.46	1.026	-0.02	0.273	0.315
	WLAN 5.5GHz	802.11a 6Mbps	Back	23mm	Ant 5	Full	100	5500	20.49	21.00	1.124	97.46	1.026	0	0.299	0.345
	WLAN 5.5GHz	802.11a 6Mbps	Right Side	13mm	Ant 5	Full	100	5500	20.49	21.00	1.124	97.46	1.026	-0.07	0.316	0.364
	WLAN 5.5GHz	802.11a 6Mbps	Top Side	23mm	Ant 5	Full	100	5500	20.49	21.00	1.124	97.46	1.026	0.07	0.171	0.197
109	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 5	Sensor on	155	5775	15.31	16.50	1.315	90.36	1.107	0.06	0.277	0.403
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 5	Sensor on	155	5775	15.31	16.50	1.315	90.36	1.107	-0.19	0.174	0.253
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5	Sensor on	155	5775	15.31	16.50	1.315	90.36	1.107	0.19	0.191	0.278
	WLAN 5.8GHz	802.11a 6Mbps	Back	23mm	Ant 5	Full	149	5745	19.59	21.00	1.383	97.46	1.026	-0.18	0.261	0.370
	WLAN 5.8GHz	802.11a 6Mbps	Right Side	13mm	Ant 5	Full	149	5745	19.59	21.00	1.383	97.46	1.026	0.12	0.250	0.355
	WLAN 5.8GHz	802.11a 6Mbps	Top Side	23mm	Ant 5	Full	149	5745	19.59	21.00	1.383	97.46	1.026	-0.1	0.140	0.199



15.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	FR1 n30	10M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 3	Hotspot on	462000	2310	18.78	19.00	1.052	-	-	-0.06	0.805	1	0.847
2nd	FR1 n30	10M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 3	Hotspot on	462000	2310	18.78	19.00	1.052	-	-	0.07	0.799	1.008	0.841

General Note:

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

16. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN 2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN 5GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	WWAN + WLAN 5GHz + Bluetooth	Yes	Yes	Yes	Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
- According to the EUT characteristic, WLAN5GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN2.4GHz and Bluetooth share the same antenna so can't transmit simultaneously.
- According to the EUT characteristic, WLAN2.4GHz and WLAN5GHz cannot transmit simultaneously.
- For 5GNR EN-DC mode, standalone SAR performed for 5GNR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
- For extremity exposure conditions, distance SAR and non-distance SAR always chose higher SAR to do co-located analysis.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- All licensed modes share the same antenna part and cannot transmit simultaneously.
- The maximum SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.



16.1 Head Exposure Conditions

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4	1+5
		WWAN	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850 Ant 0	Right Cheek	0.593	0.169	0.217	0.063	0.76	0.81	0.66
	Right Tilted	0.169	0.175	0.212	0.066	0.34	0.38	0.24
	Left Cheek	0.440	0.379	0.404	0.197	0.82	0.84	0.64
	Left Tilted	0.243	0.276	0.369	0.151	0.52	0.61	0.39
GSM1900 Ant 3	Right Cheek	0.619	0.169	0.217	0.063	0.79	0.84	0.68
	Right Tilted	0.863	0.175	0.212	0.066	1.04	1.08	0.93
	Left Cheek	0.344	0.379	0.404	0.197	0.72	0.75	0.54
	Left Tilted	0.411	0.276	0.369	0.151	0.69	0.78	0.56
WCDMA II Ant 3	Right Cheek	0.756	0.169	0.217	0.063	0.93	0.97	0.82
	Right Tilted	0.834	0.175	0.212	0.066	1.01	1.05	0.90
	Left Cheek	0.358	0.379	0.404	0.197	0.74	0.76	0.56
	Left Tilted	0.415	0.276	0.369	0.151	0.69	0.78	0.57
WCDMA IV Ant 3	Right Cheek	0.744	0.169	0.217	0.063	0.91	0.96	0.81
	Right Tilted	0.872	0.175	0.212	0.066	1.05	1.08	0.94
	Left Cheek	0.494	0.379	0.404	0.197	0.87	0.90	0.69
	Left Tilted	0.542	0.276	0.369	0.151	0.82	0.91	0.69
WCDMA V Ant 0	Right Cheek	0.429	0.169	0.217	0.063	0.60	0.65	0.49
	Right Tilted	0.226	0.175	0.212	0.066	0.40	0.44	0.29
	Left Cheek	0.409	0.379	0.404	0.197	0.79	0.81	0.61
	Left Tilted	0.225	0.276	0.369	0.151	0.50	0.59	0.38
LTE Band 7 Ant 3	Right Cheek	0.873	0.169	0.217	0.063	1.04	1.09	0.94
	Right Tilted	0.637	0.175	0.212	0.066	0.81	0.85	0.70
	Left Cheek	0.300	0.379	0.404	0.197	0.68	0.70	0.50
	Left Tilted	0.328	0.276	0.369	0.151	0.60	0.70	0.48
LTE Band 12 Ant 0	Right Cheek	0.289	0.169	0.217	0.063	0.46	0.51	0.35
	Right Tilted	0.124	0.175	0.212	0.066	0.30	0.34	0.19
	Left Cheek	0.173	0.379	0.404	0.197	0.55	0.58	0.37
	Left Tilted	0.097	0.276	0.369	0.151	0.37	0.47	0.25
LTE Band 13 Ant 0	Right Cheek	0.345	0.169	0.217	0.063	0.51	0.56	0.41
	Right Tilted	0.190	0.175	0.212	0.066	0.37	0.40	0.26
	Left Cheek	0.279	0.379	0.404	0.197	0.66	0.68	0.48
	Left Tilted	0.174	0.276	0.369	0.151	0.45	0.54	0.33
LTE Band 25 Ant 3	Right Cheek	0.824	0.169	0.217	0.063	0.99	1.04	0.89
	Right Tilted	0.778	0.175	0.212	0.066	0.95	0.99	0.84
	Left Cheek	0.407	0.379	0.404	0.197	0.79	0.81	0.60
	Left Tilted	0.456	0.276	0.369	0.151	0.73	0.83	0.61
LTE Band 26 Ant 0	Right Cheek	0.411	0.169	0.217	0.063	0.58	0.63	0.47
	Right Tilted	0.228	0.175	0.212	0.066	0.40	0.44	0.29
	Left Cheek	0.344	0.379	0.404	0.197	0.72	0.75	0.54
	Left Tilted	0.191	0.276	0.369	0.151	0.47	0.56	0.34
LTE Band 30 Ant 3	Right Cheek	0.712	0.169	0.217	0.063	0.88	0.93	0.78
	Right Tilted	0.848	0.175	0.212	0.066	1.02	1.06	0.91
	Left Cheek	0.306	0.379	0.404	0.197	0.69	0.71	0.50
	Left Tilted	0.382	0.276	0.369	0.151	0.66	0.75	0.53
LTE Band 66 Ant 3	Right Cheek	0.667	0.169	0.217	0.063	0.84	0.88	0.73
	Right Tilted	0.823	0.175	0.212	0.066	1.00	1.04	0.89
	Left Cheek	0.476	0.379	0.404	0.197	0.86	0.88	0.67
	Left Tilted	0.515	0.276	0.369	0.151	0.79	0.88	0.67
LTE Band 71 Ant 0	Right Cheek	0.305	0.169	0.217	0.063	0.47	0.52	0.37
	Right Tilted	0.123	0.175	0.212	0.066	0.30	0.34	0.19



	Left Cheek	0.155	0.379	0.404	0.197	0.53	0.56	0.35
	Left Tilted	0.085	0.276	0.369	0.151	0.36	0.45	0.24
LTE Band 48 Ant 4	Right Cheek	0.447	0.169	0.217	0.063	0.62	0.66	0.51
	Right Tilted	0.410	0.175	0.212	0.066	0.59	0.62	0.48
	Left Cheek	0.817	0.379	0.404	0.197	1.20	1.22	1.01
	Left Tilted	0.820	0.276	0.369	0.151	1.10	1.19	0.97
FR1 n7 Ant 3	Right Cheek	0.880	0.169	0.217	0.063	1.05	1.10	0.94
	Right Tilted	0.672	0.175	0.212	0.066	0.85	0.88	0.74
	Left Cheek	0.284	0.379	0.404	0.197	0.66	0.69	0.48
	Left Tilted	0.333	0.276	0.369	0.151	0.61	0.70	0.48
FR1 n25 Ant 3	Right Cheek	0.780	0.169	0.217	0.063	0.95	1.00	0.84
	Right Tilted	0.872	0.175	0.212	0.066	1.05	1.08	0.94
	Left Cheek	0.400	0.379	0.404	0.197	0.78	0.80	0.60
	Left Tilted	0.453	0.276	0.369	0.151	0.73	0.82	0.60
FR1 n30 Ant 3	Right Cheek	0.759	0.169	0.217	0.063	0.93	0.98	0.82
	Right Tilted	0.780	0.175	0.212	0.066	0.96	0.99	0.85
	Left Cheek	0.314	0.379	0.404	0.197	0.69	0.72	0.51
	Left Tilted	0.396	0.276	0.369	0.151	0.67	0.77	0.55
FR1 n66 Ant 3	Right Cheek	0.677	0.169	0.217	0.063	0.85	0.89	0.74
	Right Tilted	0.806	0.175	0.212	0.066	0.98	1.02	0.87
	Left Cheek	0.433	0.379	0.404	0.197	0.81	0.84	0.63
	Left Tilted	0.806	0.276	0.369	0.151	1.08	1.18	0.96
FR1 n71 Ant 0	Right Cheek	0.261	0.169	0.217	0.063	0.43	0.48	0.32
	Right Tilted	0.125	0.175	0.212	0.066	0.30	0.34	0.19
	Left Cheek	0.251	0.379	0.404	0.197	0.63	0.66	0.45
	Left Tilted	0.140	0.276	0.369	0.151	0.42	0.51	0.29
FR1 n41 Ant 3	Right Cheek	0.841	0.169	0.217	0.063	1.01	1.06	0.90
	Right Tilted	0.641	0.175	0.212	0.066	0.82	0.85	0.71
	Left Cheek	0.265	0.379	0.404	0.197	0.64	0.67	0.46
	Left Tilted	0.277	0.276	0.369	0.151	0.55	0.65	0.43
FR1 n48 Ant 4	Right Cheek	0.465	0.169	0.217	0.063	0.63	0.68	0.53
	Right Tilted	0.393	0.175	0.212	0.066	0.57	0.61	0.46
	Left Cheek	0.840	0.379	0.404	0.197	1.22	1.24	1.04
	Left Tilted	0.871	0.276	0.369	0.151	1.15	1.24	1.02
FR1 n77 Ant 4	Right Cheek	0.527	0.169	0.217	0.063	0.70	0.74	0.59
	Right Tilted	0.474	0.175	0.212	0.066	0.65	0.69	0.54
	Left Cheek	0.745	0.379	0.404	0.197	1.12	1.15	0.94
	Left Tilted	0.822	0.276	0.369	0.151	1.10	1.19	0.97

WWAN Band	Exposure Position	1	3	4	5	1+4+5 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850 Ant 0	Right Cheek	0.593	0.169	0.217	0.063	0.87
	Right Tilted	0.169	0.175	0.212	0.066	0.45
	Left Cheek	0.440	0.379	0.404	0.197	1.04
	Left Tilted	0.243	0.276	0.369	0.151	0.76
GSM1900 Ant 3	Right Cheek	0.619	0.169	0.217	0.063	0.90
	Right Tilted	0.863	0.175	0.212	0.066	1.14
	Left Cheek	0.344	0.379	0.404	0.197	0.95
	Left Tilted	0.411	0.276	0.369	0.151	0.93
WCDMA II Ant 3	Right Cheek	0.756	0.169	0.217	0.063	1.04
	Right Tilted	0.834	0.175	0.212	0.066	1.11
	Left Cheek	0.358	0.379	0.404	0.197	0.96
	Left Tilted	0.415	0.276	0.369	0.151	0.94



WCDMA IV Ant 3	Right Cheek	0.744	0.169	0.217	0.063	1.02
	Right Tilted	0.872	0.175	0.212	0.066	1.15
	Left Cheek	0.494	0.379	0.404	0.197	1.10
	Left Tilted	0.542	0.276	0.369	0.151	1.06
WCDMA V Ant 0	Right Cheek	0.429	0.169	0.217	0.063	0.71
	Right Tilted	0.226	0.175	0.212	0.066	0.50
	Left Cheek	0.409	0.379	0.404	0.197	1.01
	Left Tilted	0.225	0.276	0.369	0.151	0.75
LTE Band 7 Ant 3	Right Cheek	0.873	0.169	0.217	0.063	1.15
	Right Tilted	0.637	0.175	0.212	0.066	0.92
	Left Cheek	0.300	0.379	0.404	0.197	0.90
	Left Tilted	0.328	0.276	0.369	0.151	0.85
LTE Band 12 Ant 0	Right Cheek	0.289	0.169	0.217	0.063	0.57
	Right Tilted	0.124	0.175	0.212	0.066	0.40
	Left Cheek	0.173	0.379	0.404	0.197	0.77
	Left Tilted	0.097	0.276	0.369	0.151	0.62
LTE Band 13 Ant 0	Right Cheek	0.345	0.169	0.217	0.063	0.63
	Right Tilted	0.190	0.175	0.212	0.066	0.47
	Left Cheek	0.279	0.379	0.404	0.197	0.88
	Left Tilted	0.174	0.276	0.369	0.151	0.69
LTE Band 25 Ant 3	Right Cheek	0.824	0.169	0.217	0.063	1.10
	Right Tilted	0.778	0.175	0.212	0.066	1.06
	Left Cheek	0.407	0.379	0.404	0.197	1.01
	Left Tilted	0.456	0.276	0.369	0.151	0.98
LTE Band 26 Ant 0	Right Cheek	0.411	0.169	0.217	0.063	0.69
	Right Tilted	0.228	0.175	0.212	0.066	0.51
	Left Cheek	0.344	0.379	0.404	0.197	0.95
	Left Tilted	0.191	0.276	0.369	0.151	0.71
LTE Band 30 Ant 3	Right Cheek	0.712	0.169	0.217	0.063	0.99
	Right Tilted	0.848	0.175	0.212	0.066	1.13
	Left Cheek	0.306	0.379	0.404	0.197	0.91
	Left Tilted	0.382	0.276	0.369	0.151	0.90
LTE Band 66 Ant 3	Right Cheek	0.667	0.169	0.217	0.063	0.95
	Right Tilted	0.823	0.175	0.212	0.066	1.10
	Left Cheek	0.476	0.379	0.404	0.197	1.08
	Left Tilted	0.515	0.276	0.369	0.151	1.04
LTE Band 71 Ant 0	Right Cheek	0.305	0.169	0.217	0.063	0.59
	Right Tilted	0.123	0.175	0.212	0.066	0.40
	Left Cheek	0.155	0.379	0.404	0.197	0.76
	Left Tilted	0.085	0.276	0.369	0.151	0.61
LTE Band 48 Ant 4	Right Cheek	0.447	0.169	0.217	0.063	0.73
	Right Tilted	0.410	0.175	0.212	0.066	0.69
	Left Cheek	0.817	0.379	0.404	0.197	1.42
	Left Tilted	0.820	0.276	0.369	0.151	1.34
FR1 n7 Ant 3	Right Cheek	0.880	0.169	0.217	0.063	1.16
	Right Tilted	0.672	0.175	0.212	0.066	0.95
	Left Cheek	0.284	0.379	0.404	0.197	0.89
	Left Tilted	0.333	0.276	0.369	0.151	0.85
FR1 n25 Ant 3	Right Cheek	0.780	0.169	0.217	0.063	1.06
	Right Tilted	0.872	0.175	0.212	0.066	1.15
	Left Cheek	0.400	0.379	0.404	0.197	1.00
	Left Tilted	0.453	0.276	0.369	0.151	0.97
FR1 n30 Ant 3	Right Cheek	0.759	0.169	0.217	0.063	1.04
	Right Tilted	0.780	0.175	0.212	0.066	1.06
	Left Cheek	0.314	0.379	0.404	0.197	0.92
	Left Tilted	0.396	0.276	0.369	0.151	0.92



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FR1 n66 Ant 3	Right Cheek	0.677	0.169	0.217	0.063	0.96
	Right Tilted	0.806	0.175	0.212	0.066	1.08
	Left Cheek	0.433	0.379	0.404	0.197	1.03
	Left Tilted	0.806	0.276	0.369	0.151	1.33
FR1 n71 Ant 0	Right Cheek	0.261	0.169	0.217	0.063	0.54
	Right Tilted	0.125	0.175	0.212	0.066	0.40
	Left Cheek	0.251	0.379	0.404	0.197	0.85
	Left Tilted	0.140	0.276	0.369	0.151	0.66
FR1 n41 Ant 3	Right Cheek	0.841	0.169	0.217	0.063	1.12
	Right Tilted	0.641	0.175	0.212	0.066	0.92
	Left Cheek	0.265	0.379	0.404	0.197	0.87
	Left Tilted	0.277	0.276	0.369	0.151	0.80
FR1 n48 Ant 4	Right Cheek	0.465	0.169	0.217	0.063	0.75
	Right Tilted	0.393	0.175	0.212	0.066	0.67
	Left Cheek	0.840	0.379	0.404	0.197	1.44
	Left Tilted	0.871	0.276	0.369	0.151	1.39
FR1 n77 Ant 4	Right Cheek	0.527	0.169	0.217	0.063	0.81
	Right Tilted	0.474	0.175	0.212	0.066	0.75
	Left Cheek	0.745	0.379	0.404	0.197	1.35
	Left Tilted	0.822	0.276	0.369	0.151	1.34

For END C

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	FR1 n25 Ant 3	FR1 n2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 2	Right Cheek	0.398	0.370	0.416	0.169	0.217	0.063	0.94	0.99	0.83			
	Right Tilted	0.106	0.404	0.347	0.175	0.212	0.066	0.69	0.72	0.58			
	Left Cheek	0.144	0.190	0.187	0.379	0.404	0.197	0.71	0.74	0.53			
	Left Tilted	0.063	0.214	0.194	0.276	0.369	0.151	0.55	0.65	0.43			
LTE Band 12 Ant 0	Right Cheek	0.289	0.370	0.416	0.169	0.217	0.063	0.83	0.88	0.72			
	Right Tilted	0.124	0.404	0.347	0.175	0.212	0.066	0.70	0.74	0.59			
	Left Cheek	0.173	0.190	0.187	0.379	0.404	0.197	0.74	0.77	0.56			
	Left Tilted	0.097	0.214	0.194	0.276	0.369	0.151	0.59	0.68	0.46			
LTE Band 13 Ant 0	Right Cheek	0.345	0.370	0.416	0.169	0.217	0.063	0.88	0.93	0.78			
	Right Tilted	0.190	0.404	0.347	0.175	0.212	0.066	0.77	0.81	0.66			
	Left Cheek	0.279	0.190	0.187	0.379	0.404	0.197	0.85	0.87	0.67			
	Left Tilted	0.174	0.214	0.194	0.276	0.369	0.151	0.66	0.76	0.54			
LTE Band 5 Ant 0	Right Cheek	0.390	0.370	0.416	0.169	0.217	0.063	0.93	0.98	0.82			
	Right Tilted	0.220	0.404	0.347	0.175	0.212	0.066	0.80	0.84	0.69			
	Left Cheek	0.314	0.190	0.187	0.379	0.404	0.197	0.88	0.91	0.70			
	Left Tilted	0.156	0.214	0.194	0.276	0.369	0.151	0.65	0.74	0.52			
LTE Band 30 Ant 2	Right Cheek	0.412	0.370	0.416	0.169	0.217	0.063	0.95	1.00	0.85			
	Right Tilted	0.363	0.404	0.347	0.175	0.212	0.066	0.94	0.98	0.83			
	Left Cheek	0.200	0.190	0.187	0.379	0.404	0.197	0.77	0.79	0.59			
	Left Tilted	0.146	0.214	0.194	0.276	0.369	0.151	0.64	0.73	0.51			
LTE Band 66 Ant 3	Right Cheek	0.318	0.370	0.416	0.169	0.217	0.063				0.90	0.95	0.80
	Right Tilted	0.379	0.404	0.347	0.175	0.212	0.066				0.90	0.94	0.79
	Left Cheek	0.224	0.190	0.187	0.379	0.404	0.197				0.79	0.82	0.61
	Left Tilted	0.247	0.214	0.194	0.276	0.369	0.151				0.72	0.81	0.59



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WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	FR1 n25 Ant 3	FR1 n2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Right Cheek	0.398	0.370	0.416	0.169	0.217	0.063	1.05	
	Right Tilted	0.106	0.404	0.347	0.175	0.212	0.066	0.79	
	Left Cheek	0.144	0.190	0.187	0.379	0.404	0.197	0.94	
	Left Tilted	0.063	0.214	0.194	0.276	0.369	0.151	0.80	
LTE Band 12 Ant 0	Right Cheek	0.289	0.370	0.416	0.169	0.217	0.063	0.94	
	Right Tilted	0.124	0.404	0.347	0.175	0.212	0.066	0.81	
	Left Cheek	0.173	0.190	0.187	0.379	0.404	0.197	0.96	
	Left Tilted	0.097	0.214	0.194	0.276	0.369	0.151	0.83	
LTE Band 13 Ant 0	Right Cheek	0.345	0.370	0.416	0.169	0.217	0.063	1.00	
	Right Tilted	0.190	0.404	0.347	0.175	0.212	0.066	0.87	
	Left Cheek	0.279	0.190	0.187	0.379	0.404	0.197	1.07	
	Left Tilted	0.174	0.214	0.194	0.276	0.369	0.151	0.91	
LTE Band 5 Ant 0	Right Cheek	0.390	0.370	0.416	0.169	0.217	0.063	1.04	
	Right Tilted	0.220	0.404	0.347	0.175	0.212	0.066	0.90	
	Left Cheek	0.314	0.190	0.187	0.379	0.404	0.197	1.11	
	Left Tilted	0.156	0.214	0.194	0.276	0.369	0.151	0.89	
LTE Band 30 Ant 2	Right Cheek	0.412	0.370	0.416	0.169	0.217	0.063	1.06	
	Right Tilted	0.363	0.404	0.347	0.175	0.212	0.066	1.05	
	Left Cheek	0.200	0.190	0.187	0.379	0.404	0.197	0.99	
	Left Tilted	0.146	0.214	0.194	0.276	0.369	0.151	0.88	
LTE Band 66 Ant 3	Right Cheek	0.318	0.370	0.416	0.169	0.217	0.063		1.01
	Right Tilted	0.379	0.404	0.347	0.175	0.212	0.066		1.00
	Left Cheek	0.224	0.190	0.187	0.379	0.404	0.197		1.01
	Left Tilted	0.247	0.214	0.194	0.276	0.369	0.151		0.96

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Right Cheek	0.389	0.311	0.169	0.217	0.063	0.87	0.92	0.76
	Right Tilted	0.391	0.150	0.175	0.212	0.066	0.72	0.75	0.61
	Left Cheek	0.201	0.290	0.379	0.404	0.197	0.87	0.90	0.69
	Left Tilted	0.223	0.184	0.276	0.369	0.151	0.68	0.78	0.56
LTE Band 30 Ant 3	Right Cheek	0.348	0.311	0.169	0.217	0.063	0.83	0.88	0.72
	Right Tilted	0.410	0.150	0.175	0.212	0.066	0.74	0.77	0.63
	Left Cheek	0.149	0.290	0.379	0.404	0.197	0.82	0.84	0.64
	Left Tilted	0.189	0.184	0.276	0.369	0.151	0.65	0.74	0.52
LTE Band 66 Ant 3	Right Cheek	0.318	0.311	0.169	0.217	0.063	0.80	0.85	0.69
	Right Tilted	0.379	0.150	0.175	0.212	0.066	0.70	0.74	0.60
	Left Cheek	0.224	0.290	0.379	0.404	0.197	0.89	0.92	0.71
	Left Tilted	0.247	0.184	0.276	0.369	0.151	0.71	0.80	0.58

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Right Cheek	0.389	0.311	0.169	0.217	0.063	0.98
	Right Tilted	0.391	0.150	0.175	0.212	0.066	0.82
	Left Cheek	0.201	0.290	0.379	0.404	0.197	1.09
	Left Tilted	0.223	0.184	0.276	0.369	0.151	0.93
LTE Band 30 Ant 3	Right Cheek	0.348	0.311	0.169	0.217	0.063	0.94
	Right Tilted	0.410	0.150	0.175	0.212	0.066	0.84
	Left Cheek	0.149	0.290	0.379	0.404	0.197	1.04



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LTE Band 66 Ant 3	Left Tilted	0.189	0.184	0.276	0.369	0.151	0.89
	Right Cheek	0.318	0.311	0.169	0.217	0.063	0.91
	Right Tilted	0.379	0.150	0.175	0.212	0.066	0.81
	Left Cheek	0.224	0.290	0.379	0.404	0.197	1.12
	Left Tilted	0.247	0.184	0.276	0.369	0.151	0.95

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n25 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 66 Ant 2	Right Cheek	0.319	0.370	0.169	0.217	0.063	0.86	0.91	0.75
	Right Tilted	0.116	0.404	0.175	0.212	0.066	0.70	0.73	0.59
	Left Cheek	0.190	0.190	0.379	0.404	0.197	0.76	0.78	0.58
	Left Tilted	0.100	0.214	0.276	0.369	0.151	0.59	0.68	0.47

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n25 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 66 Ant 2	Right Cheek	0.319	0.370	0.169	0.217	0.063	0.97
	Right Tilted	0.116	0.404	0.175	0.212	0.066	0.80
	Left Cheek	0.190	0.190	0.379	0.404	0.197	0.98
	Left Tilted	0.100	0.214	0.276	0.369	0.151	0.83

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	FR1 n66 Ant 3	FR1 n66 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 2	Right Cheek	0.398	0.317	0.370	0.169	0.217	0.063	0.88	0.93	0.78			
	Right Tilted	0.106	0.388	0.135	0.175	0.212	0.066	0.67	0.71	0.56			
	Left Cheek	0.144	0.206	0.210	0.379	0.404	0.197	0.73	0.75	0.55			
	Left Tilted	0.063	0.222	0.089	0.276	0.369	0.151	0.56	0.65	0.44			
LTE Band 12 Ant 0	Right Cheek	0.289	0.317	0.370	0.169	0.217	0.063	0.78	0.82	0.67			
	Right Tilted	0.124	0.388	0.135	0.175	0.212	0.066	0.69	0.72	0.58			
	Left Cheek	0.173	0.206	0.210	0.379	0.404	0.197	0.76	0.78	0.58			
	Left Tilted	0.097	0.222	0.089	0.276	0.369	0.151	0.60	0.69	0.47			
LTE Band 13 Ant 0	Right Cheek	0.345	0.317	0.370	0.169	0.217	0.063	0.83	0.88	0.73			
	Right Tilted	0.190	0.388	0.135	0.175	0.212	0.066	0.75	0.79	0.64			
	Left Cheek	0.279	0.206	0.210	0.379	0.404	0.197	0.86	0.89	0.68			
	Left Tilted	0.174	0.222	0.089	0.276	0.369	0.151	0.67	0.77	0.55			
LTE Band 5 Ant 0	Right Cheek	0.390	0.317	0.370	0.169	0.217	0.063	0.88	0.92	0.77			
	Right Tilted	0.220	0.388	0.135	0.175	0.212	0.066	0.78	0.82	0.67			
	Left Cheek	0.314	0.206	0.210	0.379	0.404	0.197	0.90	0.92	0.72			
	Left Tilted	0.156	0.222	0.089	0.276	0.369	0.151	0.65	0.75	0.53			
LTE Band 30 Ant 3	Right Cheek	0.348	0.317	0.370	0.169	0.217	0.063				0.89	0.94	0.78
	Right Tilted	0.410	0.388	0.135	0.175	0.212	0.066				0.72	0.76	0.61
	Left Cheek	0.149	0.206	0.210	0.379	0.404	0.197				0.74	0.76	0.56
	Left Tilted	0.189	0.222	0.089	0.276	0.369	0.151				0.55	0.65	0.43
LTE Band 66 Ant 2	Right Cheek	0.319	0.317	0.370	0.169	0.217	0.063	0.81	0.85	0.70			
	Right Tilted	0.116	0.388	0.135	0.175	0.212	0.066	0.68	0.72	0.57			
	Left Cheek	0.190	0.206	0.210	0.379	0.404	0.197	0.78	0.80	0.59			
	Left Tilted	0.100	0.222	0.089	0.276	0.369	0.151	0.60	0.69	0.47			



FCC SAR Test Report

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WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	FR1 n66 Ant 3	FR1 n66 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Right Cheek	0.398	0.317	0.370	0.169	0.217	0.063	1.00	
	Right Tilted	0.106	0.388	0.135	0.175	0.212	0.066	0.77	
	Left Cheek	0.144	0.206	0.210	0.379	0.404	0.197	0.95	
	Left Tilted	0.063	0.222	0.089	0.276	0.369	0.151	0.81	
LTE Band 12 Ant 0	Right Cheek	0.289	0.317	0.370	0.169	0.217	0.063	0.89	
	Right Tilted	0.124	0.388	0.135	0.175	0.212	0.066	0.79	
	Left Cheek	0.173	0.206	0.210	0.379	0.404	0.197	0.98	
	Left Tilted	0.097	0.222	0.089	0.276	0.369	0.151	0.84	
LTE Band 13 Ant 0	Right Cheek	0.345	0.317	0.370	0.169	0.217	0.063	0.94	
	Right Tilted	0.190	0.388	0.135	0.175	0.212	0.066	0.86	
	Left Cheek	0.279	0.206	0.210	0.379	0.404	0.197	1.09	
	Left Tilted	0.174	0.222	0.089	0.276	0.369	0.151	0.92	
LTE Band 5 Ant 0	Right Cheek	0.390	0.317	0.370	0.169	0.217	0.063	0.99	
	Right Tilted	0.220	0.388	0.135	0.175	0.212	0.066	0.89	
	Left Cheek	0.314	0.206	0.210	0.379	0.404	0.197	1.12	
	Left Tilted	0.156	0.222	0.089	0.276	0.369	0.151	0.90	
LTE Band 30 Ant 3	Right Cheek	0.348	0.317	0.370	0.169	0.217	0.063		1.00
	Right Tilted	0.410	0.388	0.135	0.175	0.212	0.066		0.82
	Left Cheek	0.149	0.206	0.210	0.379	0.404	0.197		0.96
	Left Tilted	0.189	0.222	0.089	0.276	0.369	0.151		0.80
LTE Band 66 Ant 2	Right Cheek	0.319	0.317	0.370	0.169	0.217	0.063	0.92	
	Right Tilted	0.116	0.388	0.135	0.175	0.212	0.066	0.78	
	Left Cheek	0.190	0.206	0.210	0.379	0.404	0.197	1.00	
	Left Tilted	0.100	0.222	0.089	0.276	0.369	0.151	0.84	

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n71 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Right Cheek	0.389	0.261	0.169	0.217	0.063	0.82	0.87	0.71
	Right Tilted	0.391	0.125	0.175	0.212	0.066	0.69	0.73	0.58
	Left Cheek	0.201	0.251	0.379	0.404	0.197	0.83	0.86	0.65
	Left Tilted	0.223	0.140	0.276	0.369	0.151	0.64	0.73	0.51
LTE Band 66 Ant 3	Right Cheek	0.318	0.261	0.169	0.217	0.063	0.75	0.80	0.64
	Right Tilted	0.379	0.125	0.175	0.212	0.066	0.68	0.72	0.57
	Left Cheek	0.224	0.251	0.379	0.404	0.197	0.85	0.88	0.67
	Left Tilted	0.247	0.140	0.276	0.369	0.151	0.66	0.76	0.54

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n71 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Right Cheek	0.389	0.261	0.169	0.217	0.063	0.93
	Right Tilted	0.391	0.125	0.175	0.212	0.066	0.79
	Left Cheek	0.201	0.251	0.379	0.404	0.197	1.05
	Left Tilted	0.223	0.140	0.276	0.369	0.151	0.88
LTE Band 66 Ant 3	Right Cheek	0.318	0.261	0.169	0.217	0.063	0.86
	Right Tilted	0.379	0.125	0.175	0.212	0.066	0.78
	Left Cheek	0.224	0.251	0.379	0.404	0.197	1.08
	Left Tilted	0.247	0.140	0.276	0.369	0.151	0.91



WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n41 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Right Cheek	0.398	0.401	0.169	0.217	0.063	0.97	1.02	0.86
	Right Tilted	0.106	0.310	0.175	0.212	0.066	0.59	0.63	0.48
	Left Cheek	0.144	0.126	0.379	0.404	0.197	0.65	0.67	0.47
	Left Tilted	0.063	0.132	0.276	0.369	0.151	0.47	0.56	0.35
LTE Band 66 Ant 2	Right Cheek	0.319	0.401	0.169	0.217	0.063	0.89	0.94	0.78
	Right Tilted	0.116	0.310	0.175	0.212	0.066	0.60	0.64	0.49
	Left Cheek	0.190	0.126	0.379	0.404	0.197	0.70	0.72	0.51
	Left Tilted	0.100	0.132	0.276	0.369	0.151	0.51	0.60	0.38

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n41 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Right Cheek	0.398	0.401	0.169	0.217	0.063	1.08
	Right Tilted	0.106	0.310	0.175	0.212	0.066	0.69
	Left Cheek	0.144	0.126	0.379	0.404	0.197	0.87
	Left Tilted	0.063	0.132	0.276	0.369	0.151	0.72
LTE Band 66 Ant 2	Right Cheek	0.319	0.401	0.169	0.217	0.063	1.00
	Right Tilted	0.116	0.310	0.175	0.212	0.066	0.70
	Left Cheek	0.190	0.126	0.379	0.404	0.197	0.92
	Left Tilted	0.100	0.132	0.276	0.369	0.151	0.75

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n77 Ant 4	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Right Cheek	0.398	0.256	0.169	0.217	0.063	0.82	0.87	0.72
	Right Tilted	0.106	0.230	0.175	0.212	0.066	0.51	0.55	0.40
	Left Cheek	0.144	0.363	0.379	0.404	0.197	0.89	0.91	0.70
	Left Tilted	0.063	0.399	0.276	0.369	0.151	0.74	0.83	0.61
LTE Band 12 Ant 0	Right Cheek	0.289	0.256	0.169	0.217	0.063	0.71	0.76	0.61
	Right Tilted	0.124	0.230	0.175	0.212	0.066	0.53	0.57	0.42
	Left Cheek	0.173	0.363	0.379	0.404	0.197	0.92	0.94	0.73
	Left Tilted	0.097	0.399	0.276	0.369	0.151	0.77	0.87	0.65
LTE Band 13 Ant 0	Right Cheek	0.345	0.256	0.169	0.217	0.063	0.77	0.82	0.66
	Right Tilted	0.190	0.230	0.175	0.212	0.066	0.60	0.63	0.49
	Left Cheek	0.279	0.363	0.379	0.404	0.197	1.02	1.05	0.84
	Left Tilted	0.174	0.399	0.276	0.369	0.151	0.85	0.94	0.72
LTE Band 5 Ant 0	Right Cheek	0.390	0.256	0.169	0.217	0.063	0.82	0.86	0.71
	Right Tilted	0.220	0.230	0.175	0.212	0.066	0.63	0.66	0.52
	Left Cheek	0.314	0.363	0.379	0.404	0.197	1.06	1.08	0.87
	Left Tilted	0.156	0.399	0.276	0.369	0.151	0.83	0.92	0.71
LTE Band 30 Ant 2	Right Cheek	0.412	0.256	0.169	0.217	0.063	0.84	0.89	0.73
	Right Tilted	0.363	0.230	0.175	0.212	0.066	0.77	0.81	0.66
	Left Cheek	0.200	0.363	0.379	0.404	0.197	0.94	0.97	0.76
	Left Tilted	0.146	0.399	0.276	0.369	0.151	0.82	0.91	0.70
LTE Band 66 Ant 2	Right Cheek	0.319	0.256	0.169	0.217	0.063	0.74	0.79	0.64
	Right Tilted	0.116	0.230	0.175	0.212	0.066	0.52	0.56	0.41
	Left Cheek	0.190	0.363	0.379	0.404	0.197	0.93	0.96	0.75
	Left Tilted	0.100	0.399	0.276	0.369	0.151	0.78	0.87	0.65



WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7 Summed 1g SAR (W/kg)
		WWAN	FR1 n77 Ant 4	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 2 Ant 2	Right Cheek	0.398	0.256	0.169	0.217	0.063	0.93
	Right Tilted	0.106	0.230	0.175	0.212	0.066	0.61
	Left Cheek	0.144	0.363	0.379	0.404	0.197	1.11
	Left Tilted	0.063	0.399	0.276	0.369	0.151	0.98
LTE Band 12 Ant 0	Right Cheek	0.289	0.256	0.169	0.217	0.063	0.83
	Right Tilted	0.124	0.230	0.175	0.212	0.066	0.63
	Left Cheek	0.173	0.363	0.379	0.404	0.197	1.14
	Left Tilted	0.097	0.399	0.276	0.369	0.151	1.02
LTE Band 13 Ant 0	Right Cheek	0.345	0.256	0.169	0.217	0.063	0.88
	Right Tilted	0.190	0.230	0.175	0.212	0.066	0.70
	Left Cheek	0.279	0.363	0.379	0.404	0.197	1.24
	Left Tilted	0.174	0.399	0.276	0.369	0.151	1.09
LTE Band 5 Ant 0	Right Cheek	0.390	0.256	0.169	0.217	0.063	0.93
	Right Tilted	0.220	0.230	0.175	0.212	0.066	0.73
	Left Cheek	0.314	0.363	0.379	0.404	0.197	1.28
	Left Tilted	0.156	0.399	0.276	0.369	0.151	1.08
LTE Band 30 Ant 2	Right Cheek	0.412	0.256	0.169	0.217	0.063	0.95
	Right Tilted	0.363	0.230	0.175	0.212	0.066	0.87
	Left Cheek	0.200	0.363	0.379	0.404	0.197	1.16
	Left Tilted	0.146	0.399	0.276	0.369	0.151	1.07
LTE Band 66 Ant 2	Right Cheek	0.319	0.256	0.169	0.217	0.063	0.86
	Right Tilted	0.116	0.230	0.175	0.212	0.066	0.62
	Left Cheek	0.190	0.363	0.379	0.404	0.197	1.15
	Left Tilted	0.100	0.399	0.276	0.369	0.151	1.02

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	LTE Band 2 Ant 3	LTE Band 2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 12 Ant 0	Right Cheek	0.289	0.389	0.398	0.169	0.217	0.063	0.85	0.90	0.74			
	Right Tilted	0.124	0.391	0.106	0.175	0.212	0.066	0.69	0.73	0.58			
	Left Cheek	0.173	0.201	0.144	0.379	0.404	0.197	0.75	0.78	0.57			
	Left Tilted	0.097	0.223	0.063	0.276	0.369	0.151	0.60	0.69	0.47			
LTE Band 5 Ant 0	Right Cheek	0.390	0.389	0.398	0.169	0.217	0.063	0.95	1.00	0.84			
	Right Tilted	0.220	0.391	0.106	0.175	0.212	0.066	0.79	0.82	0.68			
	Left Cheek	0.314	0.201	0.144	0.379	0.404	0.197	0.89	0.92	0.71			
	Left Tilted	0.156	0.223	0.063	0.276	0.369	0.151	0.66	0.75	0.53			
LTE Band 66 Ant 3	Right Cheek	0.318	0.389	0.398	0.169	0.217	0.063				0.89	0.93	0.78
	Right Tilted	0.379	0.391	0.106	0.175	0.212	0.066				0.66	0.70	0.55
	Left Cheek	0.224	0.201	0.144	0.379	0.404	0.197				0.75	0.77	0.57
	Left Tilted	0.247	0.223	0.063	0.276	0.369	0.151				0.59	0.68	0.46



WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	LTE Band 2 Ant 3	LTE Band 2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Right Cheek	0.289	0.389	0.398	0.169	0.217	0.063	0.96	
	Right Tilted	0.124	0.391	0.106	0.175	0.212	0.066	0.79	
	Left Cheek	0.173	0.201	0.144	0.379	0.404	0.197	0.98	
	Left Tilted	0.097	0.223	0.063	0.276	0.369	0.151	0.84	
LTE Band 5 Ant 0	Right Cheek	0.390	0.389	0.398	0.169	0.217	0.063	1.06	
	Right Tilted	0.220	0.391	0.106	0.175	0.212	0.066	0.89	
	Left Cheek	0.314	0.201	0.144	0.379	0.404	0.197	1.12	
	Left Tilted	0.156	0.223	0.063	0.276	0.369	0.151	0.90	
LTE Band 66 Ant 3	Right Cheek	0.318	0.389	0.398	0.169	0.217	0.063		1.00
	Right Tilted	0.379	0.391	0.106	0.175	0.212	0.066		0.76
	Left Cheek	0.224	0.201	0.144	0.379	0.404	0.197		0.97
	Left Tilted	0.247	0.223	0.063	0.276	0.369	0.151		0.83

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 66 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Right Cheek	0.289	0.318	0.169	0.217	0.063	0.78	0.82	0.67
	Right Tilted	0.124	0.379	0.175	0.212	0.066	0.68	0.72	0.57
	Left Cheek	0.173	0.224	0.379	0.404	0.197	0.78	0.80	0.59
	Left Tilted	0.097	0.247	0.276	0.369	0.151	0.62	0.71	0.50
LTE Band 13 Ant 0	Right Cheek	0.345	0.318	0.169	0.217	0.063	0.83	0.88	0.73
	Right Tilted	0.190	0.379	0.175	0.212	0.066	0.74	0.78	0.64
	Left Cheek	0.279	0.224	0.379	0.404	0.197	0.88	0.91	0.70
	Left Tilted	0.174	0.247	0.276	0.369	0.151	0.70	0.79	0.57
LTE Band 5 Ant 0	Right Cheek	0.390	0.318	0.169	0.217	0.063	0.88	0.93	0.77
	Right Tilted	0.220	0.379	0.175	0.212	0.066	0.77	0.81	0.67
	Left Cheek	0.314	0.224	0.379	0.404	0.197	0.92	0.94	0.74
	Left Tilted	0.156	0.247	0.276	0.369	0.151	0.68	0.77	0.55

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 66 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Right Cheek	0.289	0.318	0.169	0.217	0.063	0.89
	Right Tilted	0.124	0.379	0.175	0.212	0.066	0.78
	Left Cheek	0.173	0.224	0.379	0.404	0.197	1.00
	Left Tilted	0.097	0.247	0.276	0.369	0.151	0.86
LTE Band 13 Ant 0	Right Cheek	0.345	0.318	0.169	0.217	0.063	0.94
	Right Tilted	0.190	0.379	0.175	0.212	0.066	0.85
	Left Cheek	0.279	0.224	0.379	0.404	0.197	1.10
	Left Tilted	0.174	0.247	0.276	0.369	0.151	0.94
LTE Band 5 Ant 0	Right Cheek	0.390	0.318	0.169	0.217	0.063	0.99
	Right Tilted	0.220	0.379	0.175	0.212	0.066	0.88
	Left Cheek	0.314	0.224	0.379	0.404	0.197	1.14
	Left Tilted	0.156	0.247	0.276	0.369	0.151	0.92



WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Right Cheek	0.348	0.390	0.169	0.217	0.063	0.91	0.96	0.80
	Right Tilted	0.410	0.220	0.175	0.212	0.066	0.81	0.84	0.70
	Left Cheek	0.149	0.314	0.379	0.404	0.197	0.84	0.87	0.66
	Left Tilted	0.189	0.156	0.276	0.369	0.151	0.62	0.71	0.50
LTE Band 66 Ant 3	Right Cheek	0.318	0.390	0.169	0.217	0.063	0.88	0.93	0.77
	Right Tilted	0.379	0.220	0.175	0.212	0.066	0.77	0.81	0.67
	Left Cheek	0.224	0.314	0.379	0.404	0.197	0.92	0.94	0.74
	Left Tilted	0.247	0.156	0.276	0.369	0.151	0.68	0.77	0.55

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Right Cheek	0.348	0.390	0.169	0.217	0.063	1.02
	Right Tilted	0.410	0.220	0.175	0.212	0.066	0.91
	Left Cheek	0.149	0.314	0.379	0.404	0.197	1.06
	Left Tilted	0.189	0.156	0.276	0.369	0.151	0.87
LTE Band 66 Ant 3	Right Cheek	0.318	0.390	0.169	0.217	0.063	0.99
	Right Tilted	0.379	0.220	0.175	0.212	0.066	0.88
	Left Cheek	0.224	0.314	0.379	0.404	0.197	1.14
	Left Tilted	0.247	0.156	0.276	0.369	0.151	0.92

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 12 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Right Cheek	0.348	0.289	0.169	0.217	0.063	0.81	0.85	0.70
	Right Tilted	0.410	0.124	0.175	0.212	0.066	0.71	0.75	0.60
	Left Cheek	0.149	0.173	0.379	0.404	0.197	0.70	0.73	0.52
	Left Tilted	0.189	0.097	0.276	0.369	0.151	0.56	0.66	0.44
LTE Band 66 Ant 3	Right Cheek	0.318	0.289	0.169	0.217	0.063	0.78	0.82	0.67
	Right Tilted	0.379	0.124	0.175	0.212	0.066	0.68	0.72	0.57
	Left Cheek	0.224	0.173	0.379	0.404	0.197	0.78	0.80	0.59
	Left Tilted	0.247	0.097	0.276	0.369	0.151	0.62	0.71	0.50

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 12 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Right Cheek	0.348	0.289	0.169	0.217	0.063	0.92
	Right Tilted	0.410	0.124	0.175	0.212	0.066	0.81
	Left Cheek	0.149	0.173	0.379	0.404	0.197	0.92
	Left Tilted	0.189	0.097	0.276	0.369	0.151	0.81
LTE Band 66 Ant 3	Right Cheek	0.318	0.289	0.169	0.217	0.063	0.89
	Right Tilted	0.379	0.124	0.175	0.212	0.066	0.78
	Left Cheek	0.224	0.173	0.379	0.404	0.197	1.00
	Left Tilted	0.247	0.097	0.276	0.369	0.151	0.86



WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 13 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Right Cheek	0.389	0.345	0.169	0.217	0.063	0.90	0.95	0.80
	Right Tilted	0.391	0.190	0.175	0.212	0.066	0.76	0.79	0.65
	Left Cheek	0.201	0.279	0.379	0.404	0.197	0.86	0.88	0.68
	Left Tilted	0.223	0.174	0.276	0.369	0.151	0.67	0.77	0.55
LTE Band 66 Ant 3	Right Cheek	0.318	0.345	0.169	0.217	0.063	0.83	0.88	0.73
	Right Tilted	0.379	0.190	0.175	0.212	0.066	0.74	0.78	0.64
	Left Cheek	0.224	0.279	0.379	0.404	0.197	0.88	0.91	0.70
	Left Tilted	0.247	0.174	0.276	0.369	0.151	0.70	0.79	0.57

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 13 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Right Cheek	0.389	0.345	0.169	0.217	0.063	1.01
	Right Tilted	0.391	0.190	0.175	0.212	0.066	0.86
	Left Cheek	0.201	0.279	0.379	0.404	0.197	1.08
	Left Tilted	0.223	0.174	0.276	0.369	0.151	0.92
LTE Band 66 Ant 3	Right Cheek	0.318	0.345	0.169	0.217	0.063	0.94
	Right Tilted	0.379	0.190	0.175	0.212	0.066	0.85
	Left Cheek	0.224	0.279	0.379	0.404	0.197	1.10
	Left Tilted	0.247	0.174	0.276	0.369	0.151	0.94



16.2 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4	1+5
		WWAN	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850 Ant 0	Front	0.454	0.249	0.206	0.029	0.70	0.66	0.48
	Back	0.749	0.354	0.428	0.068	1.10	1.18	0.82
	Left side	0.219				0.22	0.22	0.22
	Right side	0.254	0.303	0.269	0.020	0.56	0.52	0.27
	Top side		0.227	0.295	0.031	0.23	0.30	0.03
	Bottom side	0.225				0.23	0.23	0.23
GSM1900 Ant 3	Front	0.327	0.249	0.206	0.029	0.58	0.53	0.36
	Back	0.357	0.354	0.428	0.068	0.71	0.79	0.43
	Left side	0.086				0.09	0.09	0.09
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.820	0.227	0.295	0.031	1.05	1.12	0.85
	Bottom side					0.00	0.00	0.00
WCDMA II Ant 3	Front	0.388	0.249	0.206	0.029	0.64	0.59	0.42
	Back	0.500	0.354	0.428	0.068	0.85	0.93	0.57
	Left side	0.109				0.11	0.11	0.11
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.847	0.227	0.295	0.031	1.07	1.14	0.88
	Bottom side					0.00	0.00	0.00
WCDMA IV Ant 3	Front	0.608	0.249	0.206	0.029	0.86	0.81	0.64
	Back	0.534	0.354	0.428	0.068	0.89	0.96	0.60
	Left side	0.196				0.20	0.20	0.20
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.916	0.227	0.295	0.031	1.14	1.21	0.95
	Bottom side					0.00	0.00	0.00
WCDMA V Ant 0	Front	0.370	0.249	0.206	0.029	0.62	0.58	0.40
	Back	0.614	0.354	0.428	0.068	0.97	1.04	0.68
	Left side	0.237				0.24	0.24	0.24
	Right side	0.279	0.303	0.269	0.020	0.58	0.55	0.30
	Top side		0.227	0.295	0.031	0.23	0.30	0.03
	Bottom side	0.276				0.28	0.28	0.28
LTE Band 7 Ant 3	Front	0.278	0.249	0.206	0.029	0.53	0.48	0.31
	Back	0.856	0.354	0.428	0.068	1.21	1.28	0.92
	Left side	0.342				0.34	0.34	0.34
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.543	0.227	0.295	0.031	0.77	0.84	0.57
	Bottom side					0.00	0.00	0.00
LTE Band 12 Ant 0	Front	0.361	0.249	0.206	0.029	0.61	0.57	0.39
	Back	0.477	0.354	0.428	0.068	0.83	0.91	0.55
	Left side	0.298				0.30	0.30	0.30
	Right side	0.408	0.303	0.269	0.020	0.71	0.68	0.43
	Top side		0.227	0.295	0.031	0.23	0.30	0.03
	Bottom side	0.165				0.17	0.17	0.17
LTE Band 13 Ant 0	Front	0.427	0.249	0.206	0.029	0.68	0.63	0.46
	Back	0.521	0.354	0.428	0.068	0.88	0.95	0.59
	Left side	0.358				0.36	0.36	0.36
	Right side	0.443	0.303	0.269	0.020	0.75	0.71	0.46
	Top side		0.227	0.295	0.031	0.23	0.30	0.03
	Bottom side	0.218				0.22	0.22	0.22
LTE Band 25 Ant 3	Front	0.371	0.249	0.206	0.029	0.62	0.58	0.40
	Back	0.425	0.354	0.428	0.068	0.78	0.85	0.49



	Left side	0.198				0.20	0.20	0.20
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.837	0.227	0.295	0.031	1.06	1.13	0.87
	Bottom side					0.00	0.00	0.00
LTE Band 26 Ant 0	Front	0.315	0.249	0.206	0.029	0.56	0.52	0.34
	Back	0.468	0.354	0.428	0.068	0.82	0.90	0.54
	Left side	0.183				0.18	0.18	0.18
	Right side	0.199	0.303	0.269	0.020	0.50	0.47	0.22
	Top side		0.227	0.295	0.031	0.23	0.30	0.03
	Bottom side	0.153				0.15	0.15	0.15
LTE Band 30 Ant 3	Front	0.235	0.249	0.206	0.029	0.48	0.44	0.26
	Back	0.651	0.354	0.428	0.068	1.01	1.08	0.72
	Left side	0.123				0.12	0.12	0.12
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.825	0.227	0.295	0.031	1.05	1.12	0.86
	Bottom side					0.00	0.00	0.00
LTE Band 66 Ant 3	Front	0.493	0.249	0.206	0.029	0.74	0.70	0.52
	Back	0.410	0.354	0.428	0.068	0.76	0.84	0.48
	Left side	0.163				0.16	0.16	0.16
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.882	0.227	0.295	0.031	1.11	1.18	0.91
	Bottom side					0.00	0.00	0.00
LTE Band 71 Ant 0	Front	0.292	0.249	0.206	0.029	0.54	0.50	0.32
	Back	0.433	0.354	0.428	0.068	0.79	0.86	0.50
	Left side	0.281				0.28	0.28	0.28
	Right side	0.419	0.303	0.269	0.020	0.72	0.69	0.44
	Top side		0.227	0.295	0.031	0.23	0.30	0.03
	Bottom side	0.164				0.16	0.16	0.16
LTE Band 48 Ant 4	Front	0.493	0.249	0.206	0.029	0.74	0.70	0.52
	Back	0.884	0.354	0.428	0.068	1.24	1.31	0.95
	Left side					0.00	0.00	0.00
	Right side	0.369	0.303	0.269	0.020	0.67	0.64	0.39
	Top side	0.875	0.227	0.295	0.031	1.10	1.17	0.91
	Bottom side					0.00	0.00	0.00
FR1 n7 Ant 3	Front	0.297	0.249	0.206	0.029	0.55	0.50	0.33
	Back	0.816	0.354	0.428	0.068	1.17	1.24	0.88
	Left side	0.446				0.45	0.45	0.45
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.595	0.227	0.295	0.031	0.82	0.89	0.63
	Bottom side					0.00	0.00	0.00
FR1 n25 Ant 3	Front	0.463	0.249	0.206	0.029	0.71	0.67	0.49
	Back	0.480	0.354	0.428	0.068	0.83	0.91	0.55
	Left side	0.213				0.21	0.21	0.21
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.899	0.227	0.295	0.031	1.13	1.19	0.93
	Bottom side					0.00	0.00	0.00
FR1 n30 Ant 3	Front	0.287	0.249	0.206	0.029	0.54	0.49	0.32
	Back	0.801	0.354	0.428	0.068	1.16	1.23	0.87
	Left side	0.149				0.15	0.15	0.15
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.847	0.227	0.295	0.031	1.07	1.14	0.88
	Bottom side					0.00	0.00	0.00
FR1 n66 Ant 3	Front	0.489	0.249	0.206	0.029	0.74	0.70	0.52
	Back	0.505	0.354	0.428	0.068	0.86	0.93	0.57
	Left side	0.157				0.16	0.16	0.16
	Right side		0.303	0.269	0.020	0.30	0.27	0.02



	Top side	0.830	0.227	0.295	0.031	1.06	1.13	0.86
	Bottom side					0.00	0.00	0.00
FR1 n71 Ant 0	Front	0.288	0.249	0.206	0.029	0.54	0.49	0.32
	Back	0.410	0.354	0.428	0.068	0.76	0.84	0.48
	Left side	0.197				0.20	0.20	0.20
	Right side	0.318	0.303	0.269	0.020	0.62	0.59	0.34
	Top side		0.227	0.295	0.031	0.23	0.30	0.03
	Bottom side	0.113				0.11	0.11	0.11
FR1 n41 Ant 3	Front	0.339	0.249	0.206	0.029	0.59	0.55	0.37
	Back	0.819	0.354	0.428	0.068	1.17	1.25	0.89
	Left side	0.459				0.46	0.46	0.46
	Right side		0.303	0.269	0.020	0.30	0.27	0.02
	Top side	0.600	0.227	0.295	0.031	0.83	0.90	0.63
	Bottom side					0.00	0.00	0.00
FR1 n48 Ant 4	Front	0.499	0.249	0.206	0.029	0.75	0.71	0.53
	Back	0.931	0.354	0.428	0.068	1.29	1.36	1.00
	Left side					0.00	0.00	0.00
	Right side	0.308	0.303	0.269	0.020	0.61	0.58	0.33
	Top side	0.834	0.227	0.295	0.031	1.06	1.13	0.87
	Bottom side					0.00	0.00	0.00
FR1 n77 Ant 4	Front	0.494	0.249	0.206	0.029	0.74	0.70	0.52
	Back	0.843	0.354	0.428	0.068	1.20	1.27	0.91
	Left side					0.00	0.00	0.00
	Right side	0.276	0.303	0.269	0.020	0.58	0.55	0.30
	Top side	0.918	0.227	0.295	0.031	1.15	1.21	0.95
	Bottom side					0.00	0.00	0.00

WWAN Band	Exposure Position	1	3	4	5	1+4+5 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850 Ant 0	Front	0.454	0.249	0.206	0.029	0.69
	Back	0.749	0.354	0.428	0.068	1.25
	Left side	0.219				0.22
	Right side	0.254	0.303	0.269	0.020	0.54
	Top side		0.227	0.295	0.031	0.33
	Bottom side	0.225				0.23
GSM1900 Ant 3	Front	0.327	0.249	0.206	0.029	0.56
	Back	0.357	0.354	0.428	0.068	0.85
	Left side	0.086				0.09
	Right side		0.303	0.269	0.020	0.29
	Top side	0.820	0.227	0.295	0.031	1.15
	Bottom side					0.00
WCDMA II Ant 3	Front	0.388	0.249	0.206	0.029	0.62
	Back	0.500	0.354	0.428	0.068	1.00
	Left side	0.109				0.11
	Right side		0.303	0.269	0.020	0.29
	Top side	0.847	0.227	0.295	0.031	1.17
	Bottom side					0.00
WCDMA IV Ant 3	Front	0.608	0.249	0.206	0.029	0.84
	Back	0.534	0.354	0.428	0.068	1.03
	Left side	0.196				0.20
	Right side		0.303	0.269	0.020	0.29
	Top side	0.916	0.227	0.295	0.031	1.24
	Bottom side					0.00



WCDMA V Ant 0	Front	0.370	0.249	0.206	0.029	0.61
	Back	0.614	0.354	0.428	0.068	1.11
	Left side	0.237				0.24
	Right side	0.279	0.303	0.269	0.020	0.57
	Top side		0.227	0.295	0.031	0.33
	Bottom side	0.276				0.28
LTE Band 7 Ant 3	Front	0.278	0.249	0.206	0.029	0.51
	Back	0.856	0.354	0.428	0.068	1.35
	Left side	0.342				0.34
	Right side		0.303	0.269	0.020	0.29
	Top side	0.543	0.227	0.295	0.031	0.87
	Bottom side					0.00
LTE Band 12 Ant 0	Front	0.361	0.249	0.206	0.029	0.60
	Back	0.477	0.354	0.428	0.068	0.97
	Left side	0.298				0.30
	Right side	0.408	0.303	0.269	0.020	0.70
	Top side		0.227	0.295	0.031	0.33
	Bottom side	0.165				0.17
LTE Band 13 Ant 0	Front	0.427	0.249	0.206	0.029	0.66
	Back	0.521	0.354	0.428	0.068	1.02
	Left side	0.358				0.36
	Right side	0.443	0.303	0.269	0.020	0.73
	Top side		0.227	0.295	0.031	0.33
	Bottom side	0.218				0.22
LTE Band 25 Ant 3	Front	0.371	0.249	0.206	0.029	0.61
	Back	0.425	0.354	0.428	0.068	0.92
	Left side	0.198				0.20
	Right side		0.303	0.269	0.020	0.29
	Top side	0.837	0.227	0.295	0.031	1.16
	Bottom side					0.00
LTE Band 26 Ant 0	Front	0.315	0.249	0.206	0.029	0.55
	Back	0.468	0.354	0.428	0.068	0.96
	Left side	0.183				0.18
	Right side	0.199	0.303	0.269	0.020	0.49
	Top side		0.227	0.295	0.031	0.33
	Bottom side	0.153				0.15
LTE Band 30 Ant 3	Front	0.235	0.249	0.206	0.029	0.47
	Back	0.651	0.354	0.428	0.068	1.15
	Left side	0.123				0.12
	Right side		0.303	0.269	0.020	0.29
	Top side	0.825	0.227	0.295	0.031	1.15
	Bottom side					0.00
LTE Band 66 Ant 3	Front	0.493	0.249	0.206	0.029	0.73
	Back	0.410	0.354	0.428	0.068	0.91
	Left side	0.163				0.16
	Right side		0.303	0.269	0.020	0.29
	Top side	0.882	0.227	0.295	0.031	1.21
	Bottom side					0.00
LTE Band 71 Ant 0	Front	0.292	0.249	0.206	0.029	0.53
	Back	0.433	0.354	0.428	0.068	0.93
	Left side	0.281				0.28
	Right side	0.419	0.303	0.269	0.020	0.71
	Top side		0.227	0.295	0.031	0.33
	Bottom side	0.164				0.16
LTE Band 48 Ant 4	Front	0.493	0.249	0.206	0.029	0.73
	Back	0.884	0.354	0.428	0.068	1.38



	Left side					0.00
	Right side	0.369	0.303	0.269	0.020	0.66
	Top side	0.875	0.227	0.295	0.031	1.20
	Bottom side					0.00
FR1 n7 Ant 3	Front	0.297	0.249	0.206	0.029	0.53
	Back	0.816	0.354	0.428	0.068	1.31
	Left side	0.446				0.45
	Right side		0.303	0.269	0.020	0.29
	Top side	0.595	0.227	0.295	0.031	0.92
	Bottom side					0.00
FR1 n25 Ant 3	Front	0.463	0.249	0.206	0.029	0.70
	Back	0.480	0.354	0.428	0.068	0.98
	Left side	0.213				0.21
	Right side		0.303	0.269	0.020	0.29
	Top side	0.899	0.227	0.295	0.031	1.23
	Bottom side					0.00
FR1 n30 Ant 3	Front	0.287	0.249	0.206	0.029	0.52
	Back	0.801	0.354	0.428	0.068	1.30
	Left side	0.149				0.15
	Right side		0.303	0.269	0.020	0.29
	Top side	0.847	0.227	0.295	0.031	1.17
	Bottom side					0.00
FR1 n66 Ant 3	Front	0.489	0.249	0.206	0.029	0.72
	Back	0.505	0.354	0.428	0.068	1.00
	Left side	0.157				0.16
	Right side		0.303	0.269	0.020	0.29
	Top side	0.830	0.227	0.295	0.031	1.16
	Bottom side					0.00
FR1 n71 Ant 0	Front	0.288	0.249	0.206	0.029	0.52
	Back	0.410	0.354	0.428	0.068	0.91
	Left side	0.197				0.20
	Right side	0.318	0.303	0.269	0.020	0.61
	Top side		0.227	0.295	0.031	0.33
	Bottom side	0.113				0.11
FR1 n41 Ant 3	Front	0.339	0.249	0.206	0.029	0.57
	Back	0.819	0.354	0.428	0.068	1.32
	Left side	0.459				0.46
	Right side		0.303	0.269	0.020	0.29
	Top side	0.600	0.227	0.295	0.031	0.93
	Bottom side					0.00
FR1 n48 Ant 4	Front	0.499	0.249	0.206	0.029	0.73
	Back	0.931	0.354	0.428	0.068	1.43
	Left side					0.00
	Right side	0.308	0.303	0.269	0.020	0.60
	Top side	0.834	0.227	0.295	0.031	1.16
	Bottom side					0.00
FR1 n77 Ant 4	Front	0.494	0.249	0.206	0.029	0.73
	Back	0.843	0.354	0.428	0.068	1.34
	Left side					0.00
	Right side	0.276	0.303	0.269	0.020	0.57
	Top side	0.918	0.227	0.295	0.031	1.24
	Bottom side					0.00



For ENDC

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	FR1 n25 Ant 3	FR1 n2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 2	Front	0.135	0.220	0.141	0.249	0.206	0.029	0.60	0.56	0.38			
	Back	0.296	0.231	0.342	0.354	0.428	0.068	0.88	0.96	0.60			
	Left side	0.389	0.104	0.434				0.49	0.49	0.49			
	Right side				0.303	0.269	0.020	0.30	0.27	0.02			
	Top side		0.430		0.227	0.191	0.031	0.66	0.62	0.46			
	Bottom side							0.00	0.00	0.00			
LTE Band 12 Ant 0	Front	0.276	0.220	0.141	0.249	0.206	0.029	0.75	0.70	0.53			
	Back	0.366	0.231	0.342	0.354	0.428	0.068	0.95	1.03	0.67			
	Left side	0.227	0.104	0.434				0.33	0.33	0.33			
	Right side	0.309			0.303	0.269	0.020	0.61	0.58	0.33			
	Top side		0.430		0.227	0.191	0.031	0.66	0.62	0.46			
	Bottom side	0.125						0.13	0.13	0.13			
LTE Band 13 Ant 0	Front	0.322	0.220	0.141	0.249	0.206	0.029	0.79	0.75	0.57			
	Back	0.399	0.231	0.342	0.354	0.428	0.068	0.98	1.06	0.70			
	Left side	0.279	0.104	0.434				0.38	0.38	0.38			
	Right side	0.347			0.303	0.269	0.020	0.65	0.62	0.37			
	Top side		0.430		0.227	0.191	0.031	0.66	0.62	0.46			
	Bottom side	0.165						0.17	0.17	0.17			
LTE Band 5 Ant 0	Front	0.246	0.220	0.141	0.249	0.206	0.029	0.72	0.67	0.50			
	Back	0.361	0.231	0.342	0.354	0.428	0.068	0.95	1.02	0.66			
	Left side	0.145	0.104	0.434				0.25	0.25	0.25			
	Right side	0.155			0.303	0.269	0.020	0.46	0.42	0.18			
	Top side		0.430		0.227	0.191	0.031	0.66	0.62	0.46			
	Bottom side	0.120						0.12	0.12	0.12			
LTE Band 30 Ant 2	Front	0.092	0.220	0.141	0.249	0.206	0.029	0.56	0.52	0.34			
	Back	0.399	0.231	0.342	0.354	0.428	0.068	0.98	1.06	0.70			
	Left side	0.409	0.104	0.434				0.51	0.51	0.51			
	Right side				0.303	0.269	0.020	0.30	0.27	0.02			
	Top side	0.058	0.430		0.227	0.191	0.031	0.72	0.68	0.52			
	Bottom side							0.00	0.00	0.00			
LTE Band 66 Ant 3	Front	0.238	0.220	0.141	0.249	0.206	0.029				0.63	0.59	0.41
	Back	0.200	0.231	0.342	0.354	0.428	0.068				0.90	0.97	0.61
	Left side	0.080	0.104	0.434							0.51	0.51	0.51
	Right side				0.303	0.269	0.020				0.30	0.27	0.02
	Top side	0.381	0.430		0.227	0.191	0.031				0.61	0.57	0.41
	Bottom side										0.00	0.00	0.00



WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	FR1 n25 Ant 3	FR1 n2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.135	0.220	0.141	0.249	0.206	0.029	0.59	
	Back	0.296	0.231	0.342	0.354	0.428	0.068	1.02	
	Left side	0.389	0.104	0.434				0.49	
	Right side				0.303	0.269	0.020	0.29	
	Top side		0.430		0.227	0.191	0.031	0.65	
	Bottom side							0.00	
LTE Band 12 Ant 0	Front	0.276	0.220	0.141	0.249	0.206	0.029	0.73	
	Back	0.366	0.231	0.342	0.354	0.428	0.068	1.09	
	Left side	0.227	0.104	0.434				0.33	
	Right side	0.309			0.303	0.269	0.020	0.60	
	Top side		0.430		0.227	0.191	0.031	0.65	
	Bottom side	0.125						0.13	
LTE Band 13 Ant 0	Front	0.322	0.220	0.141	0.249	0.206	0.029	0.78	
	Back	0.399	0.231	0.342	0.354	0.428	0.068	1.13	
	Left side	0.279	0.104	0.434				0.38	
	Right side	0.347			0.303	0.269	0.020	0.64	
	Top side		0.430		0.227	0.191	0.031	0.65	
	Bottom side	0.165						0.17	
LTE Band 5 Ant 0	Front	0.246	0.220	0.141	0.249	0.206	0.029	0.70	
	Back	0.361	0.231	0.342	0.354	0.428	0.068	1.09	
	Left side	0.145	0.104	0.434				0.25	
	Right side	0.155			0.303	0.269	0.020	0.44	
	Top side		0.430		0.227	0.191	0.031	0.65	
	Bottom side	0.120						0.12	
LTE Band 30 Ant 2	Front	0.092	0.220	0.141	0.249	0.206	0.029	0.55	
	Back	0.399	0.231	0.342	0.354	0.428	0.068	1.13	
	Left side	0.409	0.104	0.434				0.51	
	Right side				0.303	0.269	0.020	0.29	
	Top side	0.058	0.430		0.227	0.191	0.031	0.71	
	Bottom side							0.00	
LTE Band 66 Ant 3	Front	0.238	0.220	0.141	0.249	0.206	0.029		0.61
	Back	0.200	0.231	0.342	0.354	0.428	0.068		1.04
	Left side	0.080	0.104	0.434					0.51
	Right side				0.303	0.269	0.020		0.29
	Top side	0.381	0.430		0.227	0.191	0.031		0.60
	Bottom side								0.00



WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.183	0.248	0.249	0.206	0.029	0.68	0.64	0.46
	Back	0.206	0.418	0.354	0.428	0.068	0.98	1.05	0.69
	Left side	0.098	0.192				0.29	0.29	0.29
	Right side		0.220	0.303	0.269	0.020	0.52	0.49	0.24
	Top side	0.384		0.227	0.191	0.031	0.61	0.58	0.42
	Bottom side		0.144				0.14	0.14	0.14
LTE Band 30 Ant 3	Front	0.115	0.248	0.249	0.206	0.029	0.61	0.57	0.39
	Back	0.319	0.418	0.354	0.428	0.068	1.09	1.17	0.81
	Left side	0.060	0.192				0.25	0.25	0.25
	Right side		0.220	0.303	0.269	0.020	0.52	0.49	0.24
	Top side	0.399		0.227	0.191	0.031	0.63	0.59	0.43
	Bottom side		0.144				0.14	0.14	0.14
LTE Band 66 Ant 3	Front	0.238	0.248	0.249	0.206	0.029	0.74	0.69	0.52
	Back	0.200	0.418	0.354	0.428	0.068	0.97	1.05	0.69
	Left side	0.080	0.192				0.27	0.27	0.27
	Right side		0.220	0.303	0.269	0.020	0.52	0.49	0.24
	Top side	0.381		0.227	0.191	0.031	0.61	0.57	0.41
	Bottom side		0.144				0.14	0.14	0.14

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.183	0.248	0.249	0.206	0.029	0.67
	Back	0.206	0.418	0.354	0.428	0.068	1.12
	Left side	0.098	0.192				0.29
	Right side		0.220	0.303	0.269	0.020	0.51
	Top side	0.384		0.227	0.191	0.031	0.61
	Bottom side		0.144				0.14
LTE Band 30 Ant 3	Front	0.115	0.248	0.249	0.206	0.029	0.60
	Back	0.319	0.418	0.354	0.428	0.068	1.23
	Left side	0.060	0.192				0.25
	Right side		0.220	0.303	0.269	0.020	0.51
	Top side	0.399		0.227	0.191	0.031	0.62
	Bottom side		0.144				0.14
LTE Band 66 Ant 3	Front	0.238	0.248	0.249	0.206	0.029	0.72
	Back	0.200	0.418	0.354	0.428	0.068	1.11
	Left side	0.080	0.192				0.27
	Right side		0.220	0.303	0.269	0.020	0.51
	Top side	0.381		0.227	0.191	0.031	0.60
	Bottom side		0.144				0.14

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n25 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 66 Ant 2	Front	0.101	0.220	0.249	0.206	0.029	0.57	0.53	0.35
	Back	0.310	0.231	0.354	0.428	0.068	0.90	0.97	0.61
	Left side	0.215	0.104				0.32	0.32	0.32
	Right side			0.303	0.269	0.020	0.30	0.27	0.02
	Top side		0.430	0.227	0.191	0.031	0.66	0.62	0.46
	Bottom side						0.00	0.00	0.00



FCC SAR Test Report

Report No. : FA471902

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7 Summed 1g SAR (W/kg)
		WWAN	FR1 n25 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 66 Ant 2	Front	0.101	0.220	0.249	0.206	0.029	0.56
	Back	0.310	0.231	0.354	0.428	0.068	1.04
	Left side	0.215	0.104				0.32
	Right side			0.303	0.269	0.020	0.29
	Top side		0.430	0.227	0.191	0.031	0.65
	Bottom side						0.00

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	FR1 n66 Ant 3	FR1 n66 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 2	Front	0.135	0.233	0.103	0.249	0.206	0.029	0.62	0.57	0.40			
	Back	0.296	0.248	0.327	0.354	0.428	0.068	0.90	0.97	0.61			
	Left side	0.389	0.077	0.265				0.47	0.47	0.47			
	Right side				0.303	0.269	0.020	0.30	0.27	0.02			
	Top side		0.397		0.227	0.191	0.031	0.62	0.59	0.43			
	Bottom side							0.00	0.00	0.00			
LTE Band 12 Ant 0	Front	0.276	0.233	0.103	0.249	0.206	0.029	0.76	0.72	0.54			
	Back	0.366	0.248	0.327	0.354	0.428	0.068	0.97	1.04	0.68			
	Left side	0.227	0.077	0.265				0.30	0.30	0.30			
	Right side	0.309			0.303	0.269	0.020	0.61	0.58	0.33			
	Top side		0.397		0.227	0.191	0.031	0.62	0.59	0.43			
	Bottom side	0.125						0.13	0.13	0.13			
LTE Band 13 Ant 0	Front	0.322	0.233	0.103	0.249	0.206	0.029	0.80	0.76	0.58			
	Back	0.399	0.248	0.327	0.354	0.428	0.068	1.00	1.08	0.72			
	Left side	0.279	0.077	0.265				0.36	0.36	0.36			
	Right side	0.347			0.303	0.269	0.020	0.65	0.62	0.37			
	Top side		0.397		0.227	0.191	0.031	0.62	0.59	0.43			
	Bottom side	0.165						0.17	0.17	0.17			
LTE Band 5 Ant 0	Front	0.246	0.233	0.103	0.249	0.206	0.029	0.73	0.69	0.51			
	Back	0.361	0.248	0.327	0.354	0.428	0.068	0.96	1.04	0.68			
	Left side	0.145	0.077	0.265				0.22	0.22	0.22			
	Right side	0.155			0.303	0.269	0.020	0.46	0.42	0.18			
	Top side		0.397		0.227	0.191	0.031	0.62	0.59	0.43			
	Bottom side	0.120						0.12	0.12	0.12			
LTE Band 30 Ant 3	Front	0.115	0.233	0.103	0.249	0.206	0.029				0.47	0.42	0.25
	Back	0.319	0.248	0.327	0.354	0.428	0.068				1.00	1.07	0.71
	Left side	0.060	0.077	0.265							0.33	0.33	0.33
	Right side				0.303	0.269	0.020				0.30	0.27	0.02
	Top side	0.399	0.397		0.227	0.191	0.031				0.63	0.59	0.43
	Bottom side										0.00	0.00	0.00
LTE Band 66 Ant 2	Front	0.101	0.233	0.103	0.249	0.206	0.029	0.58	0.54	0.36			
	Back	0.310	0.248	0.327	0.354	0.428	0.068	0.91	0.99	0.63			
	Left side	0.215	0.077	0.265				0.29	0.29	0.29			
	Right side				0.303	0.269	0.020	0.30	0.27	0.02			
	Top side		0.397		0.227	0.191	0.031	0.62	0.59	0.43			
	Bottom side							0.00	0.00	0.00			



FCC SAR Test Report

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WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	FR1 n66 Ant 3	FR1 n66 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.135	0.233	0.103	0.249	0.206	0.029	0.60	
	Back	0.296	0.248	0.327	0.354	0.428	0.068	1.04	
	Left side	0.389	0.077	0.265				0.47	
	Right side				0.303	0.269	0.020	0.29	
	Top side		0.397		0.227	0.191	0.031	0.62	
	Bottom side							0.00	
LTE Band 12 Ant 0	Front	0.276	0.233	0.103	0.249	0.206	0.029	0.74	
	Back	0.366	0.248	0.327	0.354	0.428	0.068	1.11	
	Left side	0.227	0.077	0.265				0.30	
	Right side	0.309			0.303	0.269	0.020	0.60	
	Top side		0.397		0.227	0.191	0.031	0.62	
	Bottom side	0.125						0.13	
LTE Band 13 Ant 0	Front	0.322	0.233	0.103	0.249	0.206	0.029	0.79	
	Back	0.399	0.248	0.327	0.354	0.428	0.068	1.14	
	Left side	0.279	0.077	0.265				0.36	
	Right side	0.347			0.303	0.269	0.020	0.64	
	Top side		0.397		0.227	0.191	0.031	0.62	
	Bottom side	0.165						0.17	
LTE Band 5 Ant 0	Front	0.246	0.233	0.103	0.249	0.206	0.029	0.71	
	Back	0.361	0.248	0.327	0.354	0.428	0.068	1.11	
	Left side	0.145	0.077	0.265				0.22	
	Right side	0.155			0.303	0.269	0.020	0.44	
	Top side		0.397		0.227	0.191	0.031	0.62	
	Bottom side	0.120						0.12	
LTE Band 30 Ant 3	Front	0.115	0.233	0.103	0.249	0.206	0.029		0.45
	Back	0.319	0.248	0.327	0.354	0.428	0.068		1.14
	Left side	0.060	0.077	0.265					0.33
	Right side				0.303	0.269	0.020		0.29
	Top side	0.399	0.397		0.227	0.191	0.031		0.62
	Bottom side								0.00
LTE Band 66 Ant 2	Front	0.101	0.233	0.103	0.249	0.206	0.029	0.57	
	Back	0.310	0.248	0.327	0.354	0.428	0.068	1.05	
	Left side	0.215	0.077	0.265				0.29	
	Right side				0.303	0.269	0.020	0.29	
	Top side		0.397		0.227	0.191	0.031	0.62	
	Bottom side							0.00	

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n71 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.183	0.288	0.249	0.206	0.029	0.72	0.68	0.50
	Back	0.206	0.410	0.354	0.428	0.068	0.97	1.04	0.68
	Left side	0.098	0.197				0.30	0.30	0.30
	Right side		0.318	0.303	0.269	0.020	0.62	0.59	0.34
	Top side	0.384		0.227	0.191	0.031	0.61	0.58	0.42
	Bottom side		0.113				0.11	0.11	0.11
LTE Band 66 Ant 3	Front	0.238	0.288	0.249	0.206	0.029	0.78	0.73	0.56
	Back	0.200	0.410	0.354	0.428	0.068	0.96	1.04	0.68
	Left side	0.080	0.197				0.28	0.28	0.28
	Right side		0.318	0.303	0.269	0.020	0.62	0.59	0.34
	Top side	0.381		0.227	0.191	0.031	0.61	0.57	0.41
	Bottom side		0.113				0.11	0.11	0.11

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n71 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.183	0.288	0.249	0.206	0.029	0.71
	Back	0.206	0.410	0.354	0.428	0.068	1.11
	Left side	0.098	0.197				0.30
	Right side		0.318	0.303	0.269	0.020	0.61
	Top side	0.384		0.227	0.191	0.031	0.61
	Bottom side		0.113				0.11
LTE Band 66 Ant 3	Front	0.238	0.288	0.249	0.206	0.029	0.76
	Back	0.200	0.410	0.354	0.428	0.068	1.11
	Left side	0.080	0.197				0.28
	Right side		0.318	0.303	0.269	0.020	0.61
	Top side	0.381		0.227	0.191	0.031	0.60
	Bottom side		0.113				0.11

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n41 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.135	0.166	0.249	0.206	0.029	0.55	0.51	0.33
	Back	0.296	0.399	0.354	0.428	0.068	1.05	1.12	0.76
	Left side	0.389	0.225				0.61	0.61	0.61
	Right side			0.303	0.269	0.020	0.30	0.27	0.02
	Top side		0.292	0.227	0.191	0.031	0.52	0.48	0.32
	Bottom side						0.00	0.00	0.00
LTE Band 66 Ant 2	Front	0.101	0.166	0.249	0.206	0.029	0.52	0.47	0.30
	Back	0.310	0.399	0.354	0.428	0.068	1.06	1.14	0.78
	Left side	0.215	0.225				0.44	0.44	0.44
	Right side			0.303	0.269	0.020	0.30	0.27	0.02
	Top side		0.292	0.227	0.191	0.031	0.52	0.48	0.32
	Bottom side						0.00	0.00	0.00



WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7 Summed 1g SAR (W/kg)
		WWAN	FR1 n41 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 2 Ant 2	Front	0.135	0.166	0.249	0.206	0.029	0.54
	Back	0.296	0.399	0.354	0.428	0.068	1.19
	Left side	0.389	0.225				0.61
	Right side			0.303	0.269	0.020	0.29
	Top side		0.292	0.227	0.191	0.031	0.51
	Bottom side						0.00
LTE Band 66 Ant 2	Front	0.101	0.166	0.249	0.206	0.029	0.50
	Back	0.310	0.399	0.354	0.428	0.068	1.21
	Left side	0.215	0.225				0.44
	Right side			0.303	0.269	0.020	0.29
	Top side		0.292	0.227	0.191	0.031	0.51
	Bottom side						0.00

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n77 Ant 4	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.135	0.240	0.249	0.206	0.029	0.62	0.58	0.40
	Back	0.296	0.412	0.354	0.428	0.068	1.06	1.14	0.78
	Left side	0.389					0.39	0.39	0.39
	Right side		0.166	0.303	0.269	0.020	0.47	0.44	0.19
	Top side		0.447	0.227	0.191	0.031	0.67	0.64	0.48
	Bottom side						0.00	0.00	0.00
LTE Band 12 Ant 0	Front	0.276	0.240	0.249	0.206	0.029	0.77	0.72	0.55
	Back	0.366	0.412	0.354	0.428	0.068	1.13	1.21	0.85
	Left side	0.227					0.23	0.23	0.23
	Right side	0.309	0.166	0.303	0.269	0.020	0.78	0.74	0.50
	Top side		0.447	0.227	0.191	0.031	0.67	0.64	0.48
	Bottom side	0.125					0.13	0.13	0.13
LTE Band 13 Ant 0	Front	0.322	0.240	0.249	0.206	0.029	0.81	0.77	0.59
	Back	0.399	0.412	0.354	0.428	0.068	1.17	1.24	0.88
	Left side	0.279					0.28	0.28	0.28
	Right side	0.347	0.166	0.303	0.269	0.020	0.82	0.78	0.53
	Top side		0.447	0.227	0.191	0.031	0.67	0.64	0.48
	Bottom side	0.165					0.17	0.17	0.17
LTE Band 5 Ant 0	Front	0.246	0.240	0.249	0.206	0.029	0.74	0.69	0.52
	Back	0.361	0.412	0.354	0.428	0.068	1.13	1.20	0.84
	Left side	0.145					0.15	0.15	0.15
	Right side	0.155	0.166	0.303	0.269	0.020	0.62	0.59	0.34
	Top side		0.447	0.227	0.191	0.031	0.67	0.64	0.48
	Bottom side	0.120					0.12	0.12	0.12
LTE Band 30 Ant 2	Front	0.092	0.240	0.249	0.206	0.029	0.58	0.54	0.36
	Back	0.399	0.412	0.354	0.428	0.068	1.17	1.24	0.88
	Left side	0.409					0.41	0.41	0.41
	Right side		0.166	0.303	0.269	0.020	0.47	0.44	0.19
	Top side	0.058	0.447	0.227	0.191	0.031	0.73	0.70	0.54
	Bottom side						0.00	0.00	0.00
LTE Band 66 Ant 2	Front	0.101	0.240	0.249	0.206	0.029	0.59	0.55	0.37
	Back	0.310	0.412	0.354	0.428	0.068	1.08	1.15	0.79
	Left side	0.215					0.22	0.22	0.22
	Right side		0.166	0.303	0.269	0.020	0.47	0.44	0.19
	Top side		0.447	0.227	0.191	0.031	0.67	0.64	0.48
	Bottom side						0.00	0.00	0.00



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WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7 Summed 1g SAR (W/kg)
		WWAN	FR1 n77 Ant 4	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 2 Ant 2	Front	0.135	0.240	0.249	0.206	0.029	0.61
	Back	0.296	0.412	0.354	0.428	0.068	1.20
	Left side	0.389					0.39
	Right side		0.166	0.303	0.269	0.020	0.46
	Top side		0.447	0.227	0.191	0.031	0.67
	Bottom side						0.00
LTE Band 12 Ant 0	Front	0.276	0.240	0.249	0.206	0.029	0.75
	Back	0.366	0.412	0.354	0.428	0.068	1.27
	Left side	0.227					0.23
	Right side	0.309	0.166	0.303	0.269	0.020	0.76
	Top side		0.447	0.227	0.191	0.031	0.67
	Bottom side	0.125					0.13
LTE Band 13 Ant 0	Front	0.322	0.240	0.249	0.206	0.029	0.80
	Back	0.399	0.412	0.354	0.428	0.068	1.31
	Left side	0.279					0.28
	Right side	0.347	0.166	0.303	0.269	0.020	0.80
	Top side		0.447	0.227	0.191	0.031	0.67
	Bottom side	0.165					0.17
LTE Band 5 Ant 0	Front	0.246	0.240	0.249	0.206	0.029	0.72
	Back	0.361	0.412	0.354	0.428	0.068	1.27
	Left side	0.145					0.15
	Right side	0.155	0.166	0.303	0.269	0.020	0.61
	Top side		0.447	0.227	0.191	0.031	0.67
	Bottom side	0.120					0.12
LTE Band 30 Ant 2	Front	0.092	0.240	0.249	0.206	0.029	0.57
	Back	0.399	0.412	0.354	0.428	0.068	1.31
	Left side	0.409					0.41
	Right side		0.166	0.303	0.269	0.020	0.46
	Top side	0.058	0.447	0.227	0.191	0.031	0.73
	Bottom side						0.00
LTE Band 66 Ant 2	Front	0.101	0.240	0.249	0.206	0.029	0.58
	Back	0.310	0.412	0.354	0.428	0.068	1.22
	Left side	0.215					0.22
	Right side		0.166	0.303	0.269	0.020	0.46
	Top side		0.447	0.227	0.191	0.031	0.67
	Bottom side						0.00

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	LTE Band 2 Ant 3	LTE Band 2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 12 Ant 0	Front	0.276	0.183	0.135	0.249	0.206	0.029	0.71	0.67	0.49			
	Back	0.366	0.206	0.296	0.354	0.428	0.068	0.93	1.00	0.64			
	Left side	0.227	0.098	0.389				0.33	0.33	0.33			
	Right side	0.309			0.303	0.269	0.020	0.61	0.58	0.33			
	Top side		0.384		0.227	0.191	0.031	0.61	0.58	0.42			
	Bottom side	0.125						0.13	0.13	0.13			
LTE Band 5 Ant 0	Front	0.246	0.183	0.135	0.249	0.206	0.029	0.68	0.64	0.46			
	Back	0.361	0.206	0.296	0.354	0.428	0.068	0.92	1.00	0.64			
	Left side	0.145	0.098	0.389				0.24	0.24	0.24			
	Right side	0.155			0.303	0.269	0.020	0.46	0.42	0.18			



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LTE Band 66 Ant 3	Top side		0.384		0.227	0.191	0.031	0.61	0.58	0.42			
	Bottom side	0.120						0.12	0.12	0.12			
	Front	0.238	0.183	0.135	0.249	0.206	0.029				0.62	0.58	0.40
	Back	0.200	0.206	0.296	0.354	0.428	0.068				0.85	0.92	0.56
	Left side	0.080	0.098	0.389							0.47	0.47	0.47
	Right side				0.303	0.269	0.020				0.30	0.27	0.02
	Top side	0.381	0.384		0.227	0.191	0.031				0.61	0.57	0.41
	Bottom side										0.00	0.00	0.00

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	LTE Band 2 Ant 3	LTE Band 2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Front	0.276	0.183	0.135	0.249	0.206	0.029	0.69	
	Back	0.366	0.206	0.296	0.354	0.428	0.068	1.07	
	Left side	0.227	0.098	0.389				0.33	
	Right side	0.309			0.303	0.269	0.020	0.60	
	Top side		0.384		0.227	0.191	0.031	0.61	
	Bottom side	0.125						0.13	
LTE Band 5 Ant 0	Front	0.246	0.183	0.135	0.249	0.206	0.029	0.66	
	Back	0.361	0.206	0.296	0.354	0.428	0.068	1.06	
	Left side	0.145	0.098	0.389				0.24	
	Right side	0.155			0.303	0.269	0.020	0.44	
	Top side		0.384		0.227	0.191	0.031	0.61	
	Bottom side	0.120						0.12	
LTE Band 66 Ant 3	Front	0.238	0.183	0.135	0.249	0.206	0.029		0.61
	Back	0.200	0.206	0.296	0.354	0.428	0.068		0.99
	Left side	0.080	0.098	0.389					0.47
	Right side				0.303	0.269	0.020		0.29
	Top side	0.381	0.384		0.227	0.191	0.031		0.60
	Bottom side								0.00

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 66 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Front	0.276	0.238	0.249	0.206	0.029	0.76	0.72	0.54
	Back	0.366	0.200	0.354	0.428	0.068	0.92	0.99	0.63
	Left side	0.227	0.080				0.31	0.31	0.31
	Right side	0.309		0.303	0.269	0.020	0.61	0.58	0.33
	Top side		0.381	0.227	0.191	0.031	0.61	0.57	0.41
	Bottom side	0.125					0.13	0.13	0.13
LTE Band 13 Ant 0	Front	0.322	0.238	0.249	0.206	0.029	0.81	0.77	0.59
	Back	0.399	0.200	0.354	0.428	0.068	0.95	1.03	0.67
	Left side	0.279	0.080				0.36	0.36	0.36
	Right side	0.347		0.303	0.269	0.020	0.65	0.62	0.37
	Top side		0.381	0.227	0.191	0.031	0.61	0.57	0.41
	Bottom side	0.165					0.17	0.17	0.17
LTE Band 5 Ant 0	Front	0.246	0.238	0.249	0.206	0.029	0.73	0.69	0.51
	Back	0.361	0.200	0.354	0.428	0.068	0.92	0.99	0.63
	Left side	0.145	0.080				0.23	0.23	0.23
	Right side	0.155		0.303	0.269	0.020	0.46	0.42	0.18
	Top side		0.381	0.227	0.191	0.031	0.61	0.57	0.41
	Bottom side	0.120					0.12	0.12	0.12



WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7 Summed 1g SAR (W/kg)
		WWAN	LTE Band 66 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 12 Ant 0	Front	0.276	0.238	0.249	0.206	0.029	0.75
	Back	0.366	0.200	0.354	0.428	0.068	1.06
	Left side	0.227	0.080				0.31
	Right side	0.309		0.303	0.269	0.020	0.60
	Top side		0.381	0.227	0.191	0.031	0.60
	Bottom side	0.125					0.13
LTE Band 13 Ant 0	Front	0.322	0.238	0.249	0.206	0.029	0.80
	Back	0.399	0.200	0.354	0.428	0.068	1.10
	Left side	0.279	0.080				0.36
	Right side	0.347		0.303	0.269	0.020	0.64
	Top side		0.381	0.227	0.191	0.031	0.60
	Bottom side	0.165					0.17
LTE Band 5 Ant 0	Front	0.246	0.238	0.249	0.206	0.029	0.72
	Back	0.361	0.200	0.354	0.428	0.068	1.06
	Left side	0.145	0.080				0.23
	Right side	0.155		0.303	0.269	0.020	0.44
	Top side		0.381	0.227	0.191	0.031	0.60
	Bottom side	0.120					0.12

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.115	0.246	0.249	0.206	0.029	0.61	0.57	0.39
	Back	0.319	0.361	0.354	0.428	0.068	1.03	1.11	0.75
	Left side	0.060	0.145				0.21	0.21	0.21
	Right side		0.155	0.303	0.269	0.020	0.46	0.42	0.18
	Top side	0.399		0.227	0.191	0.031	0.63	0.59	0.43
	Bottom side		0.120				0.12	0.12	0.12
LTE Band 66 Ant 3	Front	0.238	0.246	0.249	0.206	0.029	0.73	0.69	0.51
	Back	0.200	0.361	0.354	0.428	0.068	0.92	0.99	0.63
	Left side	0.080	0.145				0.23	0.23	0.23
	Right side		0.155	0.303	0.269	0.020	0.46	0.42	0.18
	Top side	0.381		0.227	0.191	0.031	0.61	0.57	0.41
	Bottom side		0.120						

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7 Summed 1g SAR (W/kg)
		WWAN	LTE Band 5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 30 Ant 3	Front	0.115	0.246	0.249	0.206	0.029	0.60
	Back	0.319	0.361	0.354	0.428	0.068	1.18
	Left side	0.060	0.145				0.21
	Right side		0.155	0.303	0.269	0.020	0.44
	Top side	0.399		0.227	0.191	0.031	0.62
	Bottom side		0.120				0.12
LTE Band 66 Ant 3	Front	0.238	0.246	0.249	0.206	0.029	0.72
	Back	0.200	0.361	0.354	0.428	0.068	1.06
	Left side	0.080	0.145				0.23
	Right side		0.155	0.303	0.269	0.020	0.44
	Top side	0.381		0.227	0.191	0.031	0.60



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	Bottom side		0.120				0.12
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WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 12 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.115	0.276	0.249	0.206	0.029	0.64	0.60	0.42
	Back	0.319	0.366	0.354	0.428	0.068	1.04	1.11	0.75
	Left side	0.060	0.227				0.29	0.29	0.29
	Right side		0.309	0.303	0.269	0.020	0.61	0.58	0.33
	Top side	0.399		0.227	0.191	0.031	0.63	0.59	0.43
	Bottom side		0.125				0.13	0.13	0.13
LTE Band 66 Ant 3	Front	0.238	0.276	0.249	0.206	0.029	0.76	0.72	0.54
	Back	0.200	0.366	0.354	0.428	0.068	0.92	0.99	0.63
	Left side	0.080	0.227				0.31	0.31	0.31
	Right side		0.309	0.303	0.269	0.020	0.61	0.58	0.33
	Top side	0.381		0.227	0.191	0.031	0.61	0.57	0.41
	Bottom side		0.125						

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 12 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.115	0.276	0.249	0.206	0.029	0.63
	Back	0.319	0.366	0.354	0.428	0.068	1.18
	Left side	0.060	0.227				0.29
	Right side		0.309	0.303	0.269	0.020	0.60
	Top side	0.399		0.227	0.191	0.031	0.62
	Bottom side		0.125				0.13
LTE Band 66 Ant 3	Front	0.238	0.276	0.249	0.206	0.029	0.75
	Back	0.200	0.366	0.354	0.428	0.068	1.06
	Left side	0.080	0.227				0.31
	Right side		0.309	0.303	0.269	0.020	0.60
	Top side	0.381		0.227	0.191	0.031	0.60
	Bottom side		0.125				0.13

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 13 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.183	0.322	0.249	0.206	0.029	0.75	0.71	0.53
	Back	0.206	0.399	0.354	0.428	0.068	0.96	1.03	0.67
	Left side	0.098	0.279				0.38	0.38	0.38
	Right side		0.347	0.303	0.269	0.020	0.65	0.62	0.37
	Top side	0.384		0.227	0.191	0.031	0.61	0.58	0.42
	Bottom side		0.165				0.17	0.17	0.17
LTE Band 66 Ant 3	Front	0.238	0.322	0.249	0.206	0.029	0.81	0.77	0.59
	Back	0.200	0.399	0.354	0.428	0.068	0.95	1.03	0.67
	Left side	0.080	0.279				0.36	0.36	0.36
	Right side		0.347	0.303	0.269	0.020	0.65	0.62	0.37
	Top side	0.381		0.227	0.191	0.031	0.61	0.57	0.41
	Bottom side		0.165						

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7 Summed 1g SAR (W/kg)
		WWAN	LTE Band 13 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 2 Ant 3	Front	0.183	0.322	0.249	0.206	0.029	0.74
	Back	0.206	0.399	0.354	0.428	0.068	1.10
	Left side	0.098	0.279				0.38
	Right side		0.347	0.303	0.269	0.020	0.64
	Top side	0.384		0.227	0.191	0.031	0.61
	Bottom side		0.165				0.17
LTE Band 66 Ant 3	Front	0.238	0.322	0.249	0.206	0.029	0.80
	Back	0.200	0.399	0.354	0.428	0.068	1.10
	Left side	0.080	0.279				0.36
	Right side		0.347	0.303	0.269	0.020	0.64
	Top side	0.381		0.227	0.191	0.031	0.60
	Bottom side		0.165				0.17

**16.3 Body-Worn Accessory Exposure Conditions**

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4	1+5
		WWAN	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850 Ant 0	Front	0.429	0.258	0.175	0.017	0.69	0.60	0.45
	Back	0.545	0.321	0.416	0.031	0.87	0.96	0.58
GSM1900 Ant 3	Front	0.328	0.258	0.175	0.017	0.59	0.50	0.35
	Back	0.384	0.321	0.416	0.031	0.71	0.80	0.42
WCDMA II Ant 3	Front	0.233	0.258	0.175	0.017	0.49	0.41	0.25
	Back	0.269	0.321	0.416	0.031	0.59	0.69	0.30
WCDMA IV Ant 3	Front	0.216	0.258	0.175	0.017	0.47	0.39	0.23
	Back	0.254	0.321	0.416	0.031	0.58	0.67	0.29
WCDMA V Ant 0	Front	0.298	0.258	0.175	0.017	0.56	0.47	0.32
	Back	0.491	0.321	0.416	0.031	0.81	0.91	0.52
LTE Band 7 Ant 3	Front	0.284	0.258	0.175	0.017	0.54	0.46	0.30
	Back	0.673	0.321	0.416	0.031	0.99	1.09	0.70
LTE Band 12 Ant 0	Front	0.255	0.258	0.175	0.017	0.51	0.43	0.27
	Back	0.463	0.321	0.416	0.031	0.78	0.88	0.49
LTE Band 13 Ant 0	Front	0.316	0.258	0.175	0.017	0.57	0.49	0.33
	Back	0.569	0.321	0.416	0.031	0.89	0.99	0.60
LTE Band 25 Ant 3	Front	0.236	0.258	0.175	0.017	0.49	0.41	0.25
	Back	0.271	0.321	0.416	0.031	0.59	0.69	0.30
LTE Band 26 Ant 0	Front	0.273	0.258	0.175	0.017	0.53	0.45	0.29
	Back	0.416	0.321	0.416	0.031	0.74	0.83	0.45
LTE Band 30 Ant 3	Front	0.362	0.258	0.175	0.017	0.62	0.54	0.38
	Back	0.808	0.321	0.416	0.031	1.13	1.22	0.84
LTE Band 66 Ant 3	Front	0.225	0.258	0.175	0.017	0.48	0.40	0.24
	Back	0.279	0.321	0.416	0.031	0.60	0.70	0.31
LTE Band 71 Ant 0	Front	0.203	0.258	0.175	0.017	0.46	0.38	0.22
	Back	0.424	0.321	0.416	0.031	0.75	0.84	0.46
LTE Band 48 Ant 4	Front	0.269	0.258	0.175	0.017	0.53	0.44	0.29
	Back	0.429	0.321	0.416	0.031	0.75	0.85	0.46
FR1 n7 Ant 3	Front	0.299	0.258	0.175	0.017	0.56	0.47	0.32
	Back	0.654	0.321	0.416	0.031	0.98	1.07	0.69
FR1 n25 Ant 3	Front	0.219	0.258	0.175	0.017	0.48	0.39	0.24
	Back	0.264	0.321	0.416	0.031	0.59	0.68	0.30
FR1 n30 Ant 3	Front	0.317	0.258	0.175	0.017	0.58	0.49	0.33
	Back	0.718	0.321	0.416	0.031	1.04	1.13	0.75
FR1 n66 Ant 3	Front	0.246	0.258	0.175	0.017	0.50	0.42	0.26
	Back	0.293	0.321	0.416	0.031	0.61	0.71	0.32
FR1 n71 Ant 0	Front	0.253	0.258	0.175	0.017	0.51	0.43	0.27
	Back	0.405	0.321	0.416	0.031	0.73	0.82	0.44
FR1 n41 Ant 3	Front	0.340	0.258	0.175	0.017	0.60	0.52	0.36
	Back	0.663	0.321	0.416	0.031	0.98	1.08	0.69
FR1 n48 Ant 4	Front	0.221	0.258	0.175	0.017	0.48	0.40	0.24
	Back	0.368	0.321	0.416	0.031	0.69	0.78	0.40
FR1 n77 Ant 4	Front	0.146	0.258	0.175	0.017	0.40	0.32	0.16
	Back	0.241	0.321	0.416	0.031	0.56	0.66	0.27



WWAN Band	Exposure Position	1	3	4	5	1+4+5 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850 Ant 0	Front	0.429	0.258	0.175	0.017	0.62
	Back	0.545	0.321	0.416	0.031	0.99
GSM1900 Ant 3	Front	0.328	0.258	0.175	0.017	0.52
	Back	0.384	0.321	0.416	0.031	0.83
WCDMA II Ant 3	Front	0.233	0.258	0.175	0.017	0.43
	Back	0.269	0.321	0.416	0.031	0.72
WCDMA IV Ant 3	Front	0.216	0.258	0.175	0.017	0.41
	Back	0.254	0.321	0.416	0.031	0.70
WCDMA V Ant 0	Front	0.298	0.258	0.175	0.017	0.49
	Back	0.491	0.321	0.416	0.031	0.94
LTE Band 7 Ant 3	Front	0.284	0.258	0.175	0.017	0.48
	Back	0.673	0.321	0.416	0.031	1.12
LTE Band 12 Ant 0	Front	0.255	0.258	0.175	0.017	0.45
	Back	0.463	0.321	0.416	0.031	0.91
LTE Band 13 Ant 0	Front	0.316	0.258	0.175	0.017	0.51
	Back	0.569	0.321	0.416	0.031	1.02
LTE Band 25 Ant 3	Front	0.236	0.258	0.175	0.017	0.43
	Back	0.271	0.321	0.416	0.031	0.72
LTE Band 26 Ant 0	Front	0.273	0.258	0.175	0.017	0.47
	Back	0.416	0.321	0.416	0.031	0.86
LTE Band 30 Ant 3	Front	0.362	0.258	0.175	0.017	0.55
	Back	0.808	0.321	0.416	0.031	1.26
LTE Band 66 Ant 3	Front	0.225	0.258	0.175	0.017	0.42
	Back	0.279	0.321	0.416	0.031	0.73
LTE Band 71 Ant 0	Front	0.203	0.258	0.175	0.017	0.40
	Back	0.424	0.321	0.416	0.031	0.87
LTE Band 48 Ant 4	Front	0.269	0.258	0.175	0.017	0.46
	Back	0.429	0.321	0.416	0.031	0.88
FR1 n7 Ant 3	Front	0.299	0.258	0.175	0.017	0.49
	Back	0.654	0.321	0.416	0.031	1.10
FR1 n25 Ant 3	Front	0.219	0.258	0.175	0.017	0.41
	Back	0.264	0.321	0.416	0.031	0.71
FR1 n30 Ant 3	Front	0.317	0.258	0.175	0.017	0.51
	Back	0.718	0.321	0.416	0.031	1.17
FR1 n66 Ant 3	Front	0.246	0.258	0.175	0.017	0.44
	Back	0.293	0.321	0.416	0.031	0.74
FR1 n71 Ant 0	Front	0.253	0.258	0.175	0.017	0.45
	Back	0.405	0.321	0.416	0.031	0.85
FR1 n41 Ant 3	Front	0.340	0.258	0.175	0.017	0.53
	Back	0.663	0.321	0.416	0.031	1.11
FR1 n48 Ant 4	Front	0.221	0.258	0.175	0.017	0.41
	Back	0.368	0.321	0.416	0.031	0.82
FR1 n77 Ant 4	Front	0.146	0.258	0.175	0.017	0.34
	Back	0.241	0.321	0.416	0.031	0.69



Sensor off

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4	1+5	1+3+18
		WWAN	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
All Band Ant 0	Front	0.429	0.258	0.471	0.017	0.69	0.90	0.90	0.92
	Back	0.569	0.321	0.578	0.031	0.89	1.15	1.15	1.18
All Band Ant 3	Front	0.609	0.258	0.471	0.017	0.87	1.08	1.08	1.10
	Back	0.808	0.321	0.578	0.031	1.13	1.39	1.39	1.42
All Band Ant 4	Front	0.413	0.258	0.471	0.017	0.67	0.88	0.88	0.90
	Back	0.428	0.321	0.578	0.031	0.75	1.01	1.01	1.04

For END C

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	FR1 n25 Ant 3	FR1 n2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 2	Front	0.187	0.214	0.094	0.258	0.175	0.017	0.66	0.58	0.42			
	Back	0.418	0.257	0.231	0.321	0.416	0.031	1.00	1.09	0.71			
LTE Band 12 Ant 0	Front	0.248	0.214	0.094	0.258	0.175	0.017	0.72	0.64	0.48			
	Back	0.450	0.257	0.231	0.321	0.416	0.031	1.03	1.12	0.74			
LTE Band 13 Ant 0	Front	0.311	0.214	0.094	0.258	0.175	0.017	0.78	0.70	0.54			
	Back	0.560	0.257	0.231	0.321	0.416	0.031	1.14	1.23	0.85			
LTE Band 5 Ant 0	Front	0.265	0.214	0.094	0.258	0.175	0.017	0.74	0.65	0.50			
	Back	0.394	0.257	0.231	0.321	0.416	0.031	0.97	1.07	0.68			
LTE Band 30 Ant 2	Front	0.095	0.214	0.094	0.258	0.175	0.017	0.57	0.48	0.33			
	Back	0.334	0.257	0.231	0.321	0.416	0.031	0.91	1.01	0.62			
LTE Band 66 Ant 3	Front	0.211	0.214	0.094	0.258	0.175	0.017				0.56	0.48	0.32
	Back	0.261	0.257	0.231	0.321	0.416	0.031				0.81	0.91	0.52

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	FR1 n25 Ant 3	FR1 n2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.187	0.214	0.094	0.258	0.175	0.017	0.59	
	Back	0.418	0.257	0.231	0.321	0.416	0.031	1.12	
LTE Band 12 Ant 0	Front	0.248	0.214	0.094	0.258	0.175	0.017	0.65	
	Back	0.450	0.257	0.231	0.321	0.416	0.031	1.15	
LTE Band 13 Ant 0	Front	0.311	0.214	0.094	0.258	0.175	0.017	0.72	
	Back	0.560	0.257	0.231	0.321	0.416	0.031	1.26	
LTE Band 5 Ant 0	Front	0.265	0.214	0.094	0.258	0.175	0.017	0.67	
	Back	0.394	0.257	0.231	0.321	0.416	0.031	1.10	
LTE Band 30 Ant 2	Front	0.095	0.214	0.094	0.258	0.175	0.017	0.50	
	Back	0.334	0.257	0.231	0.321	0.416	0.031	1.04	
LTE Band 66 Ant 3	Front	0.211	0.214	0.094	0.258	0.175	0.017		0.50
	Back	0.261	0.257	0.231	0.321	0.416	0.031		0.94



WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.187	0.192	0.258	0.175	0.017	0.64	0.55	0.40
	Back	0.418	0.346	0.321	0.416	0.031	1.09	1.18	0.80
LTE Band 12 Ant 0	Front	0.248	0.192	0.258	0.175	0.017	0.70	0.62	0.46
	Back	0.450	0.346	0.321	0.416	0.031	1.12	1.21	0.83
LTE Band 13 Ant 0	Front	0.311	0.192	0.258	0.175	0.017	0.76	0.68	0.52
	Back	0.560	0.346	0.321	0.416	0.031	1.23	1.32	0.94
LTE Band 5 Ant 0	Front	0.265	0.192	0.258	0.175	0.017	0.72	0.63	0.47
	Back	0.394	0.346	0.321	0.416	0.031	1.06	1.16	0.77
LTE Band 30 Ant 2	Front	0.095	0.192	0.258	0.175	0.017	0.55	0.46	0.30
	Back	0.334	0.346	0.321	0.416	0.031	1.00	1.10	0.71
LTE Band 66 Ant 3	Front	0.211	0.192	0.258	0.175	0.017	0.66	0.58	0.42
	Back	0.261	0.346	0.321	0.416	0.031	0.93	1.02	0.64

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.223	0.192	0.258	0.175	0.017	0.61
	Back	0.250	0.346	0.321	0.416	0.031	1.04
LTE Band 30 Ant 3	Front	0.174	0.192	0.258	0.175	0.017	0.56
	Back	0.388	0.346	0.321	0.416	0.031	1.18
LTE Band 66 Ant 3	Front	0.211	0.192	0.258	0.175	0.017	0.60
	Back	0.261	0.346	0.321	0.416	0.031	1.05

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n25 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 66 Ant 2	Front	0.063	0.214	0.258	0.175	0.017	0.54	0.45	0.29
	Back	0.122	0.257	0.321	0.416	0.031	0.70	0.80	0.41

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n25 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 66 Ant 2	Front	0.063	0.214	0.258	0.175	0.017	0.47
	Back	0.122	0.257	0.321	0.416	0.031	0.83



WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	FR1 n66 Ant 3	FR1 n66 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 2	Front	0.187	0.245	0.068	0.258	0.175	0.017	0.69	0.61	0.45			
	Back	0.418	0.292	0.140	0.321	0.416	0.031	1.03	1.13	0.74			
LTE Band 12 Ant 0	Front	0.248	0.245	0.068	0.258	0.175	0.017	0.75	0.67	0.51			
	Back	0.450	0.292	0.140	0.321	0.416	0.031	1.06	1.16	0.77			
LTE Band 13 Ant 0	Front	0.311	0.245	0.068	0.258	0.175	0.017	0.81	0.73	0.57			
	Back	0.560	0.292	0.140	0.321	0.416	0.031	1.17	1.27	0.88			
LTE Band 5 Ant 0	Front	0.265	0.245	0.068	0.258	0.175	0.017	0.77	0.69	0.53			
	Back	0.394	0.292	0.140	0.321	0.416	0.031	1.01	1.10	0.72			
LTE Band 30 Ant 3	Front	0.174	0.245	0.068	0.258	0.175	0.017				0.50	0.42	0.26
	Back	0.388	0.292	0.140	0.321	0.416	0.031				0.85	0.94	0.56
LTE Band 66 Ant 2	Front	0.063	0.245	0.068	0.258	0.175	0.017	0.57	0.48	0.33			
	Back	0.122	0.292	0.140	0.321	0.416	0.031	0.74	0.83	0.45			

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	FR1 n66 Ant 3	FR1 n66 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.187	0.245	0.068	0.258	0.175	0.017	0.62	
	Back	0.418	0.292	0.140	0.321	0.416	0.031	1.16	
LTE Band 12 Ant 0	Front	0.248	0.245	0.068	0.258	0.175	0.017	0.69	
	Back	0.450	0.292	0.140	0.321	0.416	0.031	1.19	
LTE Band 13 Ant 0	Front	0.311	0.245	0.068	0.258	0.175	0.017	0.75	
	Back	0.560	0.292	0.140	0.321	0.416	0.031	1.30	
LTE Band 5 Ant 0	Front	0.265	0.245	0.068	0.258	0.175	0.017	0.70	
	Back	0.394	0.292	0.140	0.321	0.416	0.031	1.13	
LTE Band 30 Ant 3	Front	0.174	0.245	0.068	0.258	0.175	0.017		0.43
	Back	0.388	0.292	0.140	0.321	0.416	0.031		0.98
LTE Band 66 Ant 2	Front	0.063	0.245	0.068	0.258	0.175	0.017	0.50	
	Back	0.122	0.292	0.140	0.321	0.416	0.031	0.86	

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n71 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.223	0.253	0.258	0.175	0.017	0.73	0.65	0.49
	Back	0.250	0.405	0.321	0.416	0.031	0.98	1.07	0.69
LTE Band 66 Ant 3	Front	0.211	0.253	0.258	0.175	0.017	0.72	0.64	0.48
	Back	0.261	0.405	0.321	0.416	0.031	0.99	1.08	0.70

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n71 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.223	0.253	0.258	0.175	0.017	0.67
	Back	0.250	0.405	0.321	0.416	0.031	1.10
LTE Band 66 Ant 3	Front	0.211	0.253	0.258	0.175	0.017	0.66
	Back	0.261	0.405	0.321	0.416	0.031	1.11

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n41 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.187	0.167	0.258	0.175	0.017	0.61	0.53	0.37
	Back	0.418	0.319	0.321	0.416	0.031	1.06	1.15	0.77
LTE Band 66 Ant 2	Front	0.063	0.167	0.258	0.175	0.017	0.49	0.41	0.25
	Back	0.122	0.319	0.321	0.416	0.031	0.76	0.86	0.47

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n41 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.187	0.167	0.258	0.175	0.017	0.55
	Back	0.418	0.319	0.321	0.416	0.031	1.18
LTE Band 66 Ant 2	Front	0.063	0.167	0.258	0.175	0.017	0.42
	Back	0.122	0.319	0.321	0.416	0.031	0.89

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n77 Ant 4	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.187	0.143	0.258	0.175	0.017	0.59	0.51	0.35
	Back	0.418	0.242	0.321	0.416	0.031	0.98	1.08	0.69
LTE Band 12 Ant 0	Front	0.248	0.143	0.258	0.175	0.017	0.65	0.57	0.41
	Back	0.450	0.242	0.321	0.416	0.031	1.01	1.11	0.72
LTE Band 13 Ant 0	Front	0.311	0.143	0.258	0.175	0.017	0.71	0.63	0.47
	Back	0.560	0.242	0.321	0.416	0.031	1.12	1.22	0.83
LTE Band 5 Ant 0	Front	0.265	0.143	0.258	0.175	0.017	0.67	0.58	0.43
	Back	0.394	0.242	0.321	0.416	0.031	0.96	1.05	0.67
LTE Band 30 Ant 2	Front	0.095	0.143	0.258	0.175	0.017	0.50	0.41	0.26
	Back	0.334	0.242	0.321	0.416	0.031	0.90	0.99	0.61
LTE Band 66 Ant 2	Front	0.063	0.143	0.258	0.175	0.017	0.46	0.38	0.22
	Back	0.122	0.242	0.321	0.416	0.031	0.69	0.78	0.40

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n77 Ant 4	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.187	0.143	0.258	0.175	0.017	0.52
	Back	0.418	0.242	0.321	0.416	0.031	1.11
LTE Band 12 Ant 0	Front	0.248	0.143	0.258	0.175	0.017	0.58
	Back	0.450	0.242	0.321	0.416	0.031	1.14
LTE Band 13 Ant 0	Front	0.311	0.143	0.258	0.175	0.017	0.65
	Back	0.560	0.242	0.321	0.416	0.031	1.25
LTE Band 5 Ant 0	Front	0.265	0.143	0.258	0.175	0.017	0.60
	Back	0.394	0.242	0.321	0.416	0.031	1.08
LTE Band 30 Ant 2	Front	0.095	0.143	0.258	0.175	0.017	0.43
	Back	0.334	0.242	0.321	0.416	0.031	1.02
LTE Band 66 Ant 2	Front	0.063	0.143	0.258	0.175	0.017	0.40
	Back	0.122	0.242	0.321	0.416	0.031	0.81



FCC SAR Test Report

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WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	LTE Band 2 Ant 3	LTE Band 2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 12 Ant 0	Front	0.248	0.223	0.187	0.258	0.175	0.017	0.73	0.65	0.49			
	Back	0.450	0.250	0.418	0.321	0.416	0.031	1.02	1.12	0.73			
LTE Band 5 Ant 0	Front	0.265	0.223	0.187	0.258	0.175	0.017	0.75	0.66	0.51			
	Back	0.394	0.250	0.418	0.321	0.416	0.031	0.97	1.06	0.68			
LTE Band 66 Ant 3	Front	0.211	0.223	0.187	0.258	0.175	0.017				0.66	0.57	0.42
	Back	0.261	0.250	0.418	0.321	0.416	0.031				1.00	1.10	0.71

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	LTE Band 2 Ant 3	LTE Band 2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Front	0.248	0.223	0.187	0.258	0.175	0.017	0.66	
	Back	0.450	0.250	0.418	0.321	0.416	0.031	1.15	
LTE Band 5 Ant 0	Front	0.265	0.223	0.187	0.258	0.175	0.017	0.68	
	Back	0.394	0.250	0.418	0.321	0.416	0.031	1.09	
LTE Band 66 Ant 3	Front	0.211	0.223	0.187	0.258	0.175	0.017		0.59
	Back	0.261	0.250	0.418	0.321	0.416	0.031		1.13

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 66 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Front	0.248	0.211	0.258	0.175	0.017	0.72	0.63	0.48
	Back	0.450	0.261	0.321	0.416	0.031	1.03	1.13	0.74
LTE Band 13 Ant 0	Front	0.311	0.211	0.258	0.175	0.017	0.78	0.70	0.54
	Back	0.560	0.261	0.321	0.416	0.031	1.14	1.24	0.85
LTE Band 5 Ant 0	Front	0.265	0.211	0.258	0.175	0.017	0.73	0.65	0.49
	Back	0.394	0.261	0.321	0.416	0.031	0.98	1.07	0.69

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 66 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Front	0.248	0.211	0.258	0.175	0.017	0.65
	Back	0.450	0.261	0.321	0.416	0.031	1.16
LTE Band 13 Ant 0	Front	0.311	0.211	0.258	0.175	0.017	0.71
	Back	0.560	0.261	0.321	0.416	0.031	1.27
LTE Band 5 Ant 0	Front	0.265	0.211	0.258	0.175	0.017	0.67
	Back	0.394	0.261	0.321	0.416	0.031	1.10

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.174	0.265	0.258	0.175	0.017	0.70	0.61	0.46
	Back	0.388	0.394	0.321	0.416	0.031	1.10	1.20	0.81
LTE Band 66 Ant 3	Front	0.211	0.265	0.258	0.175	0.017	0.73	0.65	0.49
	Back	0.261	0.394	0.321	0.416	0.031	0.98	1.07	0.69



WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.174	0.265	0.258	0.175	0.017	0.63
	Back	0.388	0.394	0.321	0.416	0.031	1.23
LTE Band 66 Ant 3	Front	0.211	0.265	0.258	0.175	0.017	0.67
	Back	0.261	0.394	0.321	0.416	0.031	1.10

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 12 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.174	0.248	0.258	0.175	0.017	0.68	0.60	0.44
	Back	0.388	0.450	0.321	0.416	0.031	1.16	1.25	0.87
LTE Band 66 Ant 3	Front	0.211	0.248	0.258	0.175	0.017	0.72	0.63	0.48
	Back	0.261	0.450	0.321	0.416	0.031	1.03	1.13	0.74

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 12 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.174	0.248	0.258	0.175	0.017	0.61
	Back	0.388	0.450	0.321	0.416	0.031	1.29
LTE Band 66 Ant 3	Front	0.211	0.248	0.258	0.175	0.017	0.65
	Back	0.261	0.450	0.321	0.416	0.031	1.16

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 13 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.223	0.311	0.258	0.175	0.017	0.79	0.71	0.55
	Back	0.250	0.560	0.321	0.416	0.031	1.13	1.23	0.84
LTE Band 66 Ant 3	Front	0.211	0.311	0.258	0.175	0.017	0.78	0.70	0.54
	Back	0.261	0.560	0.321	0.416	0.031	1.14	1.24	0.85

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 13 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.223	0.311	0.258	0.175	0.017	0.73
	Back	0.250	0.560	0.321	0.416	0.031	1.26
LTE Band 66 Ant 3	Front	0.211	0.311	0.258	0.175	0.017	0.71
	Back	0.261	0.560	0.321	0.416	0.031	1.27



Sensor off

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	FR1 n25 Ant 3	FR1 n2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 2	Front	0.304	0.461	0.371	0.161	0.471		0.93	1.24	0.77			
	Back	0.335	0.381	0.430	0.130	0.578		0.85	1.29	0.72			
LTE Band 12 Ant 0	Front	0.230	0.461	0.371	0.161	0.471		0.85	1.16	0.69			
	Back	0.321	0.381	0.430	0.130	0.578		0.83	1.28	0.70			
LTE Band 13 Ant 0	Front	0.263	0.461	0.371	0.161	0.471		0.89	1.20	0.72			
	Back	0.353	0.381	0.430	0.130	0.578		0.86	1.31	0.73			
LTE Band 5 Ant 0	Front	0.248	0.461	0.371	0.161	0.471		0.87	1.18	0.71			
	Back	0.284	0.381	0.430	0.130	0.578		0.80	1.24	0.67			
LTE Band 30 Ant 2	Front	0.180	0.461	0.371	0.161	0.471		0.80	1.11	0.64			
	Back	0.352	0.381	0.430	0.130	0.578		0.86	1.31	0.73			
LTE Band 66 Ant 3	Front	0.508	0.461	0.371	0.161	0.471					1.04	1.35	0.88
	Back	0.284	0.381	0.430	0.130	0.578					0.84	1.29	0.71

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	FR1 n25 Ant 3	FR1 n2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.304	0.461	0.371	0.161	0.471		1.24	
	Back	0.335	0.381	0.430	0.130	0.578		1.29	
LTE Band 12 Ant 0	Front	0.230	0.461	0.371	0.161	0.471		1.16	
	Back	0.321	0.381	0.430	0.130	0.578		1.28	
LTE Band 13 Ant 0	Front	0.263	0.461	0.371	0.161	0.471		1.20	
	Back	0.353	0.381	0.430	0.130	0.578		1.31	
LTE Band 5 Ant 0	Front	0.248	0.461	0.371	0.161	0.471		1.18	
	Back	0.284	0.381	0.430	0.130	0.578		1.24	
LTE Band 30 Ant 2	Front	0.180	0.461	0.371	0.161	0.471		1.11	
	Back	0.352	0.381	0.430	0.130	0.578		1.31	
LTE Band 66 Ant 3	Front	0.508	0.461	0.371	0.161	0.471			1.35
	Back	0.284	0.381	0.430	0.130	0.578			1.29

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.304	0.095	0.161	0.471		0.56	0.87	0.40
	Back	0.335	0.118	0.130	0.578		0.58	1.03	0.45
LTE Band 12 Ant 0	Front	0.230	0.095	0.161	0.471		0.49	0.80	0.33
	Back	0.321	0.118	0.130	0.578		0.57	1.02	0.44
LTE Band 13 Ant 0	Front	0.263	0.095	0.161	0.471		0.52	0.83	0.36
	Back	0.353	0.118	0.130	0.578		0.60	1.05	0.47
LTE Band 5 Ant 0	Front	0.248	0.095	0.161	0.471		0.50	0.81	0.34
	Back	0.284	0.118	0.130	0.578		0.53	0.98	0.40
LTE Band 30 Ant 2	Front	0.180	0.095	0.161	0.471		0.44	0.75	0.28
	Back	0.352	0.118	0.130	0.578		0.60	1.05	0.47
LTE Band 66 Ant 3	Front	0.508	0.095	0.161	0.471		0.76	1.07	0.60
	Back	0.284	0.118	0.130	0.578		0.53	0.98	0.40

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.348	0.095	0.161	0.471		0.91
	Back	0.278	0.118	0.130	0.578		0.97
LTE Band 30 Ant 3	Front	0.579	0.095	0.161	0.471		1.15
	Back	0.586	0.118	0.130	0.578		1.28
LTE Band 66 Ant 3	Front	0.508	0.095	0.161	0.471		1.07
	Back	0.284	0.118	0.130	0.578		0.98

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n25 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 66 Ant 2	Front	0.051	0.461	0.161	0.471		0.67	0.98	0.51
	Back	0.071	0.381	0.130	0.578		0.58	1.03	0.45

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n25 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 66 Ant 2	Front	0.051	0.461	0.161	0.471		0.98
	Back	0.071	0.381	0.130	0.578		1.03

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	FR1 n66 Ant 3	FR1 n66 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 2 Ant 2	Front	0.304	0.347	0.050	0.161	0.471		0.81	1.12	0.65			
	Back	0.335	0.286	0.071	0.130	0.578		0.75	1.20	0.62			
LTE Band 12 Ant 0	Front	0.230	0.347	0.050	0.161	0.471		0.74	1.05	0.58			
	Back	0.321	0.286	0.071	0.130	0.578		0.74	1.19	0.61			
LTE Band 13 Ant 0	Front	0.263	0.347	0.050	0.161	0.471		0.77	1.08	0.61			
	Back	0.353	0.286	0.071	0.130	0.578		0.77	1.22	0.64			
LTE Band 5 Ant 0	Front	0.248	0.347	0.050	0.161	0.471		0.76	1.07	0.60			
	Back	0.284	0.286	0.071	0.130	0.578		0.70	1.15	0.57			
LTE Band 30 Ant 3	Front	0.579	0.347	0.050	0.161	0.471					0.79	1.10	0.63
	Back	0.586	0.286	0.071	0.130	0.578					0.79	1.24	0.66
LTE Band 66 Ant 2	Front	0.051	0.347	0.050	0.161	0.471		0.56	0.87	0.40			
	Back	0.071	0.286	0.071	0.130	0.578		0.49	0.94	0.36			

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	FR1 n66 Ant 3	FR1 n66 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.304	0.347	0.050	0.161	0.471		1.12	
	Back	0.335	0.286	0.071	0.130	0.578		1.20	
LTE Band 12 Ant 0	Front	0.230	0.347	0.050	0.161	0.471		1.05	
	Back	0.321	0.286	0.071	0.130	0.578		1.19	
LTE Band 13 Ant 0	Front	0.263	0.347	0.050	0.161	0.471		1.08	
	Back	0.353	0.286	0.071	0.130	0.578		1.22	
LTE Band 5 Ant 0	Front	0.248	0.347	0.050	0.161	0.471		1.07	
	Back	0.284	0.286	0.071	0.130	0.578		1.15	
LTE Band 30 Ant	Front	0.579	0.347	0.050	0.161	0.471			1.10



3	Back	0.586	0.286	0.071	0.130	0.578			1.24
LTE Band 66 Ant 2	Front	0.051	0.347	0.050	0.161	0.471		0.87	
	Back	0.071	0.286	0.071	0.130	0.578		0.94	

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n71 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.348	0.087	0.161	0.471		0.60	0.91	0.44
	Back	0.278	0.132	0.130	0.578		0.54	0.99	0.41
LTE Band 66 Ant 3	Front	0.508	0.087	0.161	0.471		0.76	1.07	0.60
	Back	0.284	0.132	0.130	0.578		0.55	0.99	0.42

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n71 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.348	0.087	0.161	0.471		0.91
	Back	0.278	0.132	0.130	0.578		0.99
LTE Band 66 Ant 3	Front	0.508	0.087	0.161	0.471		1.07
	Back	0.284	0.132	0.130	0.578		0.99

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n41 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.304	0.518	0.161	0.471		0.98	1.29	0.82
	Back	0.335	0.566	0.130	0.578		1.03	1.48	0.90
LTE Band 66 Ant 2	Front	0.051	0.518	0.161	0.471		0.73	1.04	0.57
	Back	0.071	0.566	0.130	0.578		0.77	1.22	0.64

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n41 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.304	0.518	0.161	0.471		1.29
	Back	0.335	0.566	0.130	0.578		1.48
LTE Band 66 Ant 2	Front	0.051	0.518	0.161	0.471		1.04
	Back	0.071	0.566	0.130	0.578		1.22

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	FR1 n77 Ant 4	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.304	0.413	0.161	0.471		0.88	1.19	0.72
	Back	0.335	0.423	0.130	0.578		0.89	1.34	0.76
LTE Band 12 Ant 0	Front	0.230	0.413	0.161	0.471		0.80	1.11	0.64
	Back	0.321	0.423	0.130	0.578		0.87	1.32	0.74
LTE Band 13 Ant 0	Front	0.263	0.413	0.161	0.471		0.84	1.15	0.68
	Back	0.353	0.423	0.130	0.578		0.91	1.35	0.78
LTE Band 5 Ant 0	Front	0.248	0.413	0.161	0.471		0.82	1.13	0.66
	Back	0.284	0.423	0.130	0.578		0.84	1.29	0.71
LTE Band 30 Ant 2	Front	0.180	0.413	0.161	0.471		0.75	1.06	0.59
	Back	0.352	0.423	0.130	0.578		0.91	1.35	0.78
LTE Band 66 Ant 2	Front	0.051	0.413	0.161	0.471		0.63	0.94	0.46
	Back	0.071	0.423	0.130	0.578		0.62	1.07	0.49



WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	FR1 n77 Ant 4	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 2	Front	0.304	0.413	0.161	0.471		1.19
	Back	0.335	0.423	0.130	0.578		1.34
LTE Band 12 Ant 0	Front	0.230	0.413	0.161	0.471		1.11
	Back	0.321	0.423	0.130	0.578		1.32
LTE Band 13 Ant 0	Front	0.263	0.413	0.161	0.471		1.15
	Back	0.353	0.423	0.130	0.578		1.35
LTE Band 5 Ant 0	Front	0.248	0.413	0.161	0.471		1.13
	Back	0.284	0.423	0.130	0.578		1.29
LTE Band 30 Ant 2	Front	0.180	0.413	0.161	0.471		1.06
	Back	0.352	0.423	0.130	0.578		1.35
LTE Band 66 Ant 2	Front	0.051	0.413	0.161	0.471		0.94
	Back	0.071	0.423	0.130	0.578		1.07

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+5	1+3+6	1+3+7	1+4+5	1+4+6	1+4+7
		WWAN	LTE Band 2 Ant 3	LTE Band 2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	Summed	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
LTE Band 12 Ant 0	Front	0.230	0.348	0.304	0.161	0.471		0.74	1.05	0.58			
	Back	0.321	0.278	0.335	0.130	0.578		0.73	1.18	0.60			
LTE Band 5 Ant 0	Front	0.248	0.348	0.304	0.161	0.471		0.76	1.07	0.60			
	Back	0.284	0.278	0.335	0.130	0.578		0.69	1.14	0.56			
LTE Band 66 Ant 3	Front	0.508	0.348	0.304	0.161	0.471					0.97	1.28	0.81
	Back	0.284	0.278	0.335	0.130	0.578					0.75	1.20	0.62

WWAN Band	Exposure Position	1	3	4	5	6	7	1+3+6+7	1+4+6+7
		WWAN	LTE Band 2 Ant 3	LTE Band 2 Ant 2	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Front	0.230	0.348	0.304	0.161	0.471		1.05	
	Back	0.321	0.278	0.335	0.130	0.578		1.18	
LTE Band 5 Ant 0	Front	0.248	0.348	0.304	0.161	0.471		1.07	
	Back	0.284	0.278	0.335	0.130	0.578		1.14	
LTE Band 66 Ant 3	Front	0.508	0.348	0.304	0.161	0.471			1.28
	Back	0.284	0.278	0.335	0.130	0.578			1.20

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 66 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Front	0.230	0.508	0.161	0.471		0.90	1.21	0.74
	Back	0.321	0.284	0.130	0.578		0.74	1.18	0.61
LTE Band 13 Ant 0	Front	0.263	0.508	0.161	0.471		0.93	1.24	0.77
	Back	0.353	0.284	0.130	0.578		0.77	1.22	0.64
LTE Band 5 Ant 0	Front	0.248	0.508	0.161	0.471		0.92	1.23	0.76
	Back	0.284	0.284	0.130	0.578		0.70	1.15	0.57

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 66 Ant 3	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 12 Ant 0	Front	0.230	0.508	0.161	0.471		1.21
	Back	0.321	0.284	0.130	0.578		1.18
LTE Band 13 Ant 0	Front	0.263	0.508	0.161	0.471		1.24
	Back	0.353	0.284	0.130	0.578		1.22
LTE Band 5 Ant 0	Front	0.248	0.508	0.161	0.471		1.23
	Back	0.284	0.284	0.130	0.578		1.15

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.579	0.248	0.161	0.471		0.99	1.30	0.83
	Back	0.586	0.284	0.130	0.578		1.00	1.45	0.87
LTE Band 66 Ant 3	Front	0.508	0.248	0.161	0.471		0.92	1.23	0.76
	Back	0.284	0.284	0.130	0.578		0.70	1.15	0.57

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 5 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.579	0.248	0.161	0.471		1.30
	Back	0.586	0.284	0.130	0.578		1.45
LTE Band 66 Ant 3	Front	0.508	0.248	0.161	0.471		1.23
	Back	0.284	0.284	0.130	0.578		1.15

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 12 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.579	0.230	0.161	0.471		0.97	1.28	0.81
	Back	0.586	0.321	0.130	0.578		1.04	1.49	0.91
LTE Band 66 Ant 3	Front	0.508	0.230	0.161	0.471		0.90	1.21	0.74
	Back	0.284	0.321	0.130	0.578		0.74	1.18	0.61

WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 12 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 30 Ant 3	Front	0.579	0.230	0.161	0.471		1.28
	Back	0.586	0.321	0.130	0.578		1.49
LTE Band 66 Ant 3	Front	0.508	0.230	0.161	0.471		1.21
	Back	0.284	0.321	0.130	0.578		1.18

WWAN Band	Exposure Position	1	3	5	6	7	1+3+5	1+3+6	1+3+7
		WWAN	LTE Band 13 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.348	0.263	0.161	0.471		0.77	1.08	0.61
	Back	0.278	0.353	0.130	0.578		0.76	1.21	0.63
LTE Band 66 Ant 3	Front	0.508	0.263	0.161	0.471		0.93	1.24	0.77
	Back	0.284	0.353	0.130	0.578		0.77	1.22	0.64



WWAN Band	Exposure Position	1	3	5	6	7	1+3+6+7
		WWAN	LTE Band 13 Ant 0	WLAN2.4GHz Ant 5	WLAN5GHz Ant 5	Bluetooth Ant 5	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)
LTE Band 2 Ant 3	Front	0.348	0.263	0.161	0.471		1.08
	Back	0.278	0.353	0.130	0.578		1.21
LTE Band 66 Ant 3	Front	0.508	0.263	0.161	0.471		1.24
	Back	0.284	0.353	0.130	0.578		1.22

16.4 Product specific 10g SAR Exposure Conditions

Remark:

- For WLAN2.4GHz/ Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.

WWAN Band	Exposure Position	1	4	1+4
		WWAN	WLAN5GHz Ant 5	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
GSM850 Ant 0	Front		1.111	1.11
	Back		0.926	0.93
	Left side			0.00
	Right side		0.660	0.66
	Top side		1.143	1.14
	Bottom side			0.00
GSM1900 Ant 3	Front	1.569	1.111	2.68
	Back	1.350	0.926	2.28
	Left side			0.00
	Right side		0.660	0.66
	Top side	1.982	1.143	3.13
	Bottom side			0.00
WCDMA II Ant 3	Front	1.046	1.111	2.16
	Back	1.347	0.926	2.27
	Left side			0.00
	Right side		0.660	0.66
	Top side	2.211	1.143	3.35
	Bottom side			0.00
WCDMA IV Ant 3	Front	1.408	1.111	2.52
	Back	1.740	0.926	2.67
	Left side			0.00
	Right side		0.660	0.66
	Top side	2.032	1.143	3.18
	Bottom side			0.00
WCDMA V Ant 0	Front		1.111	1.11
	Back		0.926	0.93
	Left side			0.00
	Right side		0.660	0.66
	Top side		1.143	1.14
	Bottom side			0.00
LTE Band 7 Ant 3	Front		1.111	1.11
	Back	2.369	0.926	3.30
	Left side	1.521		1.52
	Right side		0.660	0.66
	Top side	1.153	1.143	2.30
	Bottom side			0.00
LTE Band 12 Ant 0	Front		1.111	1.11
	Back		0.926	0.93
	Left side			0.00
	Right side		0.660	0.66
	Top side		1.143	1.14
	Bottom side			0.00
LTE Band 13 Ant 0	Front		1.111	1.11
	Back		0.926	0.93
	Left side			0.00
	Right side		0.660	0.66
	Top side		1.143	1.14



	Bottom side			0.00
LTE Band 25 Ant 3	Front	1.375	1.111	2.49
	Back	1.177	0.926	2.10
	Left side			0.00
	Right side		0.660	0.66
	Top side	2.175	1.143	3.32
	Bottom side			0.00
LTE Band 26 Ant 0	Front		1.111	1.11
	Back		0.926	0.93
	Left side			0.00
	Right side		0.660	0.66
	Top side		1.143	1.14
	Bottom side			0.00
LTE Band 30 Ant 3	Front	1.753	1.111	2.86
	Back	2.287	0.926	3.21
	Left side			0.00
	Right side		0.660	0.66
	Top side	2.211	1.143	3.35
	Bottom side			0.00
LTE Band 66 Ant 3	Front	1.322	1.111	2.43
	Back	1.639	0.926	2.57
	Left side			0.00
	Right side		0.660	0.66
	Top side	1.896	1.143	3.04
	Bottom side			0.00
LTE Band 71 Ant 0	Front		1.111	1.11
	Back		0.926	0.93
	Left side			0.00
	Right side		0.660	0.66
	Top side		1.143	1.14
	Bottom side			0.00
LTE Band 48 Ant 4	Front		1.111	1.11
	Back	1.984	0.926	2.91
	Left side			0.00
	Right side		0.660	0.66
	Top side	2.150	1.143	3.29
	Bottom side			0.00
FR1 n7 Ant 3	Front		1.111	1.11
	Back	1.930	0.926	2.86
	Left side			0.00
	Right side		0.660	0.66
	Top side		1.143	1.14
	Bottom side			0.00
FR1 n25 Ant 3	Front	1.484	1.111	2.60
	Back	1.237	0.926	2.16
	Left side			0.00
	Right side		0.660	0.66
	Top side	2.043	1.143	3.19
	Bottom side			0.00
FR1 n30 Ant 3	Front	1.788	1.111	2.90
	Back	2.049	0.926	2.98
	Left side			0.00
	Right side		0.660	0.66
	Top side	1.951	1.143	3.09
	Bottom side			0.00
FR1 n66 Ant 3	Front		1.111	1.11



	Back		0.926	0.93
	Left side			0.00
	Right side		0.660	0.66
	Top side	2.013	1.143	3.16
	Bottom side			0.00
FR1 n71 Ant 0	Front		1.111	1.11
	Back		0.926	0.93
	Left side			0.00
	Right side		0.660	0.66
	Top side		1.143	1.14
FR1 n41 Ant 3	Bottom side			0.00
	Front	1.234	1.111	2.35
	Back	2.165	0.926	3.09
	Left side	1.778		1.78
	Right side		0.660	0.66
FR1 n48 Ant 4	Top side	1.029	1.143	2.17
	Bottom side			0.00
	Front		1.111	1.11
	Back	1.907	0.926	2.83
	Left side			0.00
FR1 n77 Ant 4	Right side		0.660	0.66
	Top side	2.072	1.143	3.22
	Bottom side			0.00
	Front	1.303	1.111	2.41
	Back	1.490	0.926	2.42
	Left side			0.00
	Right side		0.660	0.66
	Top side	2.103	1.143	3.25
	Bottom side			0.00

For ENDC

WWAN Band	Exposure Position	1	3	4	6	1+3+6	1+4+6
		WWAN 10g SAR (W/kg)	FR1 n25 Ant 3 10g SAR (W/kg)	FR1 n2 Ant 2 10g SAR (W/kg)	WLAN5GHz Ant 5 10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)
LTE Band 2 Ant 2	Front	0.258	0.715	0.501	1.111	2.08	
	Back	0.997	0.603	1.096	0.926	2.53	
	Left side	1.034		1.134		1.03	
	Right side				0.660	0.66	
	Top side		0.969		1.143	2.11	
	Bottom side					0.00	
LTE Band 30 Ant 2	Front		0.715	0.501	1.111	1.83	
	Back	1.028	0.603	1.096	0.926	2.56	
	Left side	0.758		1.134		0.76	
	Right side				0.660	0.66	
	Top side		0.969		1.143	2.11	
	Bottom side					0.00	
LTE Band 66 Ant 3	Front	0.617	0.715	0.501	1.111		2.23
	Back	0.762	0.603	1.096	0.926		2.78
	Left side			1.134			1.13
	Right side				0.660		0.66
	Top side	0.863	0.969		1.143		2.01
	Bottom side						0.00



WWAN Band	Exposure Position	1	3	6	1+3+6 Summed 10g SAR (W/kg)
		WWAN	FR1 n66 Ant 3	WLAN5GHz Ant 5	
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
LTE Band 2 Ant 2	Front	0.258		1.111	1.37
	Back	0.997		0.926	1.92
	Left side	1.034			1.03
	Right side			0.660	0.66
	Top side		0.973	1.143	2.12
	Bottom side				0.00

WWAN Band	Exposure Position	1	3	6	1+3+6 Summed 10g SAR (W/kg)
		WWAN	FR1 n41 Ant 3	WLAN5GHz Ant 5	
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
LTE Band 2 Ant 2	Front	0.258	0.604	1.111	1.97
	Back	0.997	1.031	0.926	2.95
	Left side	1.034	0.837		1.87
	Right side			0.660	0.66
	Top side		0.495	1.143	1.64
	Bottom side				0.00

WWAN Band	Exposure Position	1	3	6	1+3+6 Summed 10g SAR (W/kg)
		WWAN	FR1 n77 Ant 4	WLAN5GHz Ant 5	
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
LTE Band 2 Ant 2	Front	0.258	0.650	1.111	2.02
	Back	0.997	0.730	0.926	2.65
	Left side	1.034			1.03
	Right side			0.660	0.66
	Top side		1.020	1.143	2.16
	Bottom side				0.00
LTE Band 30 Ant 2	Front		0.650	1.111	1.76
	Back	1.028	0.730	0.926	2.68
	Left side	0.758			0.76
	Right side			0.660	0.66
	Top side		1.020	1.143	2.16
	Bottom side				0.00

WWAN Band	Exposure Position	1	3	4	6	1+3+6 Summed 10g SAR (W/kg)	1+4+6 Summed 10g SAR (W/kg)
		WWAN	LTE Band 2 Ant 3	LTE Band 2 Ant 2	WLAN5GHz Ant 5		
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)		
LTE Band 66 Ant 3	Front	0.617	0.655	0.258	1.111		1.99
	Back	0.762	0.565	0.997	0.926		2.69
	Left side			1.034			1.03
	Right side				0.660		0.66
	Top side	0.863	1.020		1.143		2.01
	Bottom side						0.00

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17. Uncertainty Assessment

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

18. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
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- [5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [6] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [7] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
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- [13] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [14] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015

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