FCC SAR Test Report

APPLICANT	: Motorola Mobility LLC
EQUIPMENT	: Mobile Cellular Phone
BRAND NAME	: Motorola
MODEL NAME	: XT2243-1
FCC ID	: IHDT56AF5
STANDARD	: FCC 47 CFR Part 2 (2.1093)

We, Sporton International Inc. (Kunshan), 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. (Kunshan), the test report shall not be reproduced except in full.

Si Zhang

Approved by: Si Zhang

ACCREDITED Cert #5145.02

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

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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA242301	Rev. 01	Initial issue of report.	Jun. 29, 2022

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Motorola Mobility LLC, Mobile Cellular Phone, XT2243-1,** are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 5mm)	Body-worn (Separation 5mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
			1g SAR (W/kg)			
Licensed	GSM	GSM850	0.32	0.92	0.92	1.59
		GSM1900	<0.10	**1.39**	1.16	
	WCDMA	WCDMA II	0.14	1.37	1.10	
		WCDMA IV	0.21	1.27	1.01	
		WCDMA V	0.24	1.02	1.02	
	LTE	LTE Band 5	1.07	0.86	1.02	
		LTE Band 7	1.23	1.07	1.20	
		LTE Band 12/17	0.22	0.93	0.93	
		LTE Band 13	0.17	0.78	0.78	
		LTE Band 25/2	0.19	1.27	**1.35**	
		LTE Band 26	0.25	0.94	0.94	
		LTE Band 66/4	0.18	1.35	1.08	
		LTE Band 41/38	<0.10	1.21	1.21	
		LTE Band 42	1.14	0.84	1.21	
	5G NR	FR1 n5	1.16	0.82	1.05	
		FR1 n7	1.22	1.11	1.19	
		FR1 n66	1.21	1.12	1.31	
		FR1 n41/n38	0.13	1.16	1.16	
		FR1 n77	1.25	0.96	1.06	
		FR1 n78	1.15	1.10	1.13	
DTS	WLAN	2.4GHz WLAN	**1.41**	0.23	1.04	1.55
NII		5GHz WLAN	1.19	0.38	1.17	1.58
DSS	Bluetooth	2.4GHz Bluetooth	0.15	<0.10	<0.10	1.59

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	GSM	GSM1900	2.59	3.99
	WCDMA	WCDMA II	2.87	
		WCDMA IV	3.18	
	LTE	LTE Band 7	3.05	
		LTE Band 25	2.86	
		LTE Band 66/4	3.20	
		LTE Band 41/38	**3.31**	
		LTE Band 42	2.41	
	5G NR	FR1 n7	3.16	
		FR1 n66	3.16	
		FR1 n41/n38	3.15	
		FR1 n77	2.75	
		FR1 n78	2.95	
NII	WLAN	5GHz WLAN	2.46	3.99
Date of Testing:			2022/5/19~ 2022/6/11	

Remark:

1. This device supports LTE B2 / B4 / B5 / B17 / B38 and B25 / B66 / B26 / B12 / B41. Since the supported frequency span for LTE B2 / B4 / B5 / B17 / B38 falls completely within the supports frequency span for LTE B25 / B66 / B26 / B12 / B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B12 / B41.
2. This device supports 5GNR N38 and N41. Since the supported frequency span for 5GNR N38 falls completely within the supports frequency span for N41, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for N41.

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

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

2. Administration Data

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

Testing Laboratory			
Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR04-KS	CN1257	314309

Applicant	
Company Name	Motorola Mobility LLC
Address	222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

Manufacturer	
Company Name	Motorola Mobility LLC
Address	222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

3. Guidance Applied

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

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

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2243-1
FCC ID	IHDT56AF5
IMEI Code	Sample1: IMEI 1 : 353593830025596 IMEI 2 : 353593830025604 Sample2: IMEI 1 : 353593830029770 IMEI 2 : 353593830029788
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz WLAN 6E U-NII-5: 5925 MHz ~ 6425 MHz WLAN 6E U-NII-6: 6425 MHz ~ 6525 MHz WLAN 6E U-NII-7: 6525 MHz ~ 6875 MHz WLAN 6E U-NII-8: 6875 MHz ~ 7125 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Mode	GSM/GPRS/EGPRS AMR / RMC 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink is not supported) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR : CP-OFDM / DFT-s-OFDM, PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ac/ax VHT20/VHT40/HE20/HE40

	WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac/ax VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160 WLAN 6GHz 802.11a/ax HE20/HE40/HE80/HE160 WLAN 6GHz 802.11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC:ASK
HW Version	DVT2
SW Version	SSJ32.60
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype

Remark:

1. This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (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). WIFI 6E has no hotspot function.
4. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12.
5. This device has NFC operations, the NFC antenna is integrated into the device for this model, therefore, all SAR test were performed with the device which already incorporates the NFC antenna. A diagram showing the location of the antenna can be found in the operational description. According to FCC KDB publication 447498 D01v06, transmitters are consider to be operating simultaneously when there is overlapping transmission, with the exception of transmission during network hand-offs with maximum hand-off duration less than 30 seconds.
6. For dual SIM card mobile has two SIM slots and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). After pre-scan two SIM cards power, we found test result of the SIM1 was the worse, so we chose SIM1 slot to perform all tests.
7. There are two samples, the different between them refer to the XT2243-1_Operational Description of Product Equality Declaration which is exhibit separately. According to the differences, we choose sample 1 to perform full SAR testing and sample 2 to verify the worst case of sample 1.
8. The device implements the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
9. The device has two headsets, only supplier is different, so we chose one headset to perform full SAR testing.
10. The device has two batteries. For battery 1/2 only suppliers are different. All the other capacity and specifications are same. We chose battery 1 to perform full SAR testing in sample 1 and battery 2 verified the worst case in sample 2.
11. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head. For WLAN when transmit simultaneous with WWAN and Proximity sensors trigger, power reduction will be activated to body-worn and Handheld.
12. For some WWAN bands, sensor on reduced power level is higher than hotspot reduced power level, so front/back sensor on SAR can represent hotspot conservatively.
13. This device supports HPUE for LTE Band 38/41 with class 2 level, HPUE power has been measured separately. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR.
14. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
15. 5G NR n78 supports HPUE, HPUE power and SAR testing performed separately, n78 HPUE SAR can represent power class 3 level SAR.
16. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
17. 5GNR NSA mode, the power level is the same as 5GNR SA mode, so 5GNR NSA mode and SA mode power table only show one time.
18. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
19. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
20. This device supports 5GNR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.

21. SAR Power density test report for WIFI 6E U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth, always chose higher SAR of WLAN5G U-NII-1/2A/2C/3 and U-NII-5/6/7/8.
22. The device support DBS (Dual Band Simultaneous) function, when the device 2.4GHz and 5GHz or 6GHz transmit at the same time the module will limit different output power for simultaneous transmission compliance.

<5G NR>

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

4.2 General LTE SAR Test and Reporting Considerations

<table>
<tr><th colspan="2">Summarized necessary items addressed in KDB 941225 D05 v02r05</th></tr>
<tr><td>FCC ID</td><td>IHDT56AF5</td></tr>
<tr><td>Equipment Name</td><td>Mobile Cellular Phone</td></tr>
<tr><td>Operating Frequency Range of each LTE transmission band</td><td>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 38: 2570 MHz ~ 2620 MHz
LTE Band 41: 2496 MHz ~ 2690 MHz
LTE Band 42: 3450 MHz ~ 3550 MHz
LTE Band 66: 1710 MHz ~ 1780 MHz</td></tr>
<tr><td>Channel Bandwidth</td><td>LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz
LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz
LTE Band 13: 5MHz, 10MHz
LTE Band 17: 5MHz, 10MHz
LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz
LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz</td></tr>
<tr><td>uplink modulations used</td><td>QPSK / 16QAM / 64QAM / 256QAM</td></tr>
<tr><td>LTE Voice / Data requirements</td><td>Voice and Data</td></tr>
<tr><td>LTE Release Version</td><td>R15, Cat18</td></tr>
<tr><td>CA Support</td><td>Supported, Uplink and Downlink</td></tr>
<tr><td>LTE MPR permanently built-in by design</td><td>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3
<table>
<tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th><th rowspan="2">MPR (dB)</th></tr>
<tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr>
<tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr>
<tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr>
<tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr>
<tr><td>64 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 2</td></tr>
<tr><td>64 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 3</td></tr>
<tr><td>256 QAM</td><td colspan="6">≥ 1</td><td>≤ 5</td></tr>
</table></td></tr>
<tr><td>LTE A-MPR</td><td>In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)</td></tr>
<tr><td>Spectrum plots for RB configuration</td><td>A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.</td></tr>
<tr><td>Power reduction applied to satisfy SAR compliance</td><td>Yes, 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 14.</td></tr>
<tr><td>LTE Carrier Aggregation Combinations</td><td>Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 14.</td></tr>
<tr><td>LTE Carrier Aggregation Additional Information</td><td>1. This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance.
2. This device supports maximum of 3 carriers in the downlink and 2 carriers in the uplink.</td></tr>
</table>

Transmission (H, M, L) channel numbers and frequencies in each LTE band

LTE Band 2

	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900

LTE Band 4

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

LTE Band 5

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

LTE Band 7

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

LTE Band 12

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

LTE Band 13

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

LTE Band 17

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

LTE Band 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 38

	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595

H	38225	2617.5	38200	2615	38175	2612.5	38150	2610

LTE Band 41								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680

LTE Band 42								
	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	42115	3452.5	42140	3455	42165	3457.5	42190	3460
M	42590	3500	42590	3500	42590	3500	42590	3500
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540

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

<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 12	Yes	Yes	Yes	Yes		
LTE Band 17			Yes	Yes		
LTE Band 5	Yes	Yes	Yes	Yes		
LTE Band 26	Yes	Yes	Yes	Yes	Yes	
LTE Band 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes

2) LTE Bands Tune up Limit

Band	Antenna	Head DSI 2 Standalone Tune-up Limit	Head DSI 2 Simultaneous Tune-up Limit	Body Worn DSI 3 Standalone Tune-up Limit	Body Worn & Hotspot DSI 3 Simultaneous Tune-up Limit	Extremely DSI6 Standalone Tune-up Limit	Extremely DSI6 Simultaneous Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 17	Ant 0	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 12	Ant 0	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 2	Ant 0	24.00	24.00	17.40	16.30	23.30	23.30	24.00	24.00
LTE Band 25	Ant 0	24.00	24.00	17.40	16.30	23.30	23.30	24.00	24.00
LTE Band 5	Ant 0	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 26	Ant 0	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 38	Ant 0	24.00	24.00	20.80	20.80	23.80	23.80	24.00	24.00
LTE Band 41	Ant 0	24.00	24.00	20.80	20.80	23.80	23.80	24.00	24.00
LTE Band 38-HPUE	Ant 0	27.00	27.00	22.40	22.40	25.40	25.40	27.00	27.00
LTE Band 41-HPUE	Ant 0	27.00	27.00	22.40	22.40	25.40	25.40	27.00	27.00
LTE Band 4	Ant 0	24.00	24.00	17.30	16.60	21.50	21.50	24.00	24.00
LTE Band 66	Ant 0	24.00	24.00	17.30	16.60	21.50	21.50	24.00	24.00

4.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
Operating Frequency Range of each 5G NR transmission band	5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 :1710 MHz ~ 1780 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5GNR 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 n5	LTE B7
LTE Anchor Bands for n7	LTE B2/5/66
LTE Anchor Bands for n66	LTE B2/5/7
LTE Anchor Bands for n77	LTE B41
LTE Anchor Bands for n78	LTE B2/5/7/38/41/66

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band

NR Band 5

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

NR Band 7

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	504000	2520
M	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

NR Band 66

	Bandwidth 5MHz		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)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	345000	1725	346000	1730
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353000	1765	352000	1760

NR Band 41

	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	516000	2580	517002	2585.01	518004	2590.02
M	519000	2595	519000	2595	519000	2595
H	522000	2610	520998	2604.99	519996	2599.98

NR Band 41

	Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	505200	2526	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
H	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	529998	2649.99	528996	2644.98	528000	2640

NR Band 77

	Bandwidth 20MHz		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)
L	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840

H	664666	3970.02	664332	3965.01	664000	3960	663666	3954.99	663332	3950.01	663000	3945	662666	3940.02	662332	3935.01	662000	3930

NR Band 78																		
	Bandwidth 20MHz		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)
L	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02		
M	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	652668.00	3790.02	652334	3785.01	652000	3780	651668	3775.02	651334	3770.01	651000	3765	650668	3760.02	650332	3755.01		

For <3450 MHz ~ 3550 MHz >

NR Band 77																		
	Bandwidth 20MHz		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)
L	630668	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01
H	636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

NR Band 78																		
	Bandwidth 20MHz		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)
L	630668	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01
H	636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

<For NR Overlap Bands Description>

1) NR Bands BW

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n77	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
SA	n38	TDD	30	20, 30, 40
	n41	TDD	30	20, 30, 40, 50, 60, 80, 90, 100
	n77	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100

2) NR Bands Tune up Limit

Band	Antenna	Head DSI 2 Standalone Tune-up Limit	Head DSI 2 Simultaneous Tune-up Limit	Body Worn DSI 3 Standalone Tune-up Limit	Body Worn & Hotspot DSI 3 Simultaneous Tune-up Limit	Extremely DSI6 Standalone Tune-up Limit	Extremely DSI6 Simultaneous Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
FR1 n38	Ant 0	24.00	24.00	18.00	18.00	22.50	22.50	24.00	24.00
FR1 n41	Ant 0	24.00	24.00	18.00	18.00	22.50	22.50	24.00	24.00

Band	Antenna	Head DSI 2 Standalone Tune-up Limit	Head DSI 2 Simultaneous Tune-up Limit	Body Worn DSI 3 Standalone Tune-up Limit	Body Worn & Hotspot DSI 3 Simultaneous Tune-up Limit	Extremely DSI6 Standalone Tune-up Limit	Extremely DSI6 Simultaneous Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
FR1 n77	Ant 2	18.00	17.00	19.80	16.80	22.50	22.00	24.00	24.00
FR1 n78 HPUE	Ant 2	18.00	17.00	20.00	17.00	22.50	22.00	27.00	27.00
FR1 n78	Ant 2	18.00	17.00	20.00	17.00	22.50	22.00	24.00	24.00

5. Smart Transmit feature for RF Exposure compliance

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

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

<Terminologies in this report>

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

<SAR Characterization>

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

<SAR design target and uncertainty>

	Uncertainty dB (k=2)
Total uncertainty	1.5

To account for total uncertainty, SAR_design_target should be determined as:

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

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target, below the predefined time-averaged power limit, for each characterized technology and band.

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

<P_{limit} for supported technologies and bands (P_{limit} in EFS file)>

Band	Antenna	Head DSI 2 Standalone	Head DSI 2 Simultaneous	Body Worn DSI 3 Standalone	Body Worn & Hotspot DSI 3 Simultaneous	Extremely DSI6 Standalone	Extremely DSI6 Simultaneous	Sensor Off DSI4	Pmax*
GSM850	Ant 0	31.2	31.2	26.6	26.6	25.2	25.2	25.2	25.2
GSM1900	Ant 0	33.8	33.8	16.7	15.5	22.2	22.2	27.2	22.2
WCDMA II	Ant 0	32.4	32.4	17.0	15.3	22.5	22.5	25.5	23.0
WCDMA VI	Ant 0	30.7	30.7	16.9	15.6	20.4	20.4	24.0	23.0
WCDMA V	Ant 0	30.1	30.1	23.9	23.9	23.0	23.0	23.0	23.0
LTE Band 5	Ant 1	21.3	20.3	23.9	22.5	23.0	23.0	23.0	23.0
LTE Band 7	Ant 0	34.6	34.6	17.7	17.7	21.0	21.0	27.0	23.0
LTE Band 7	Ant 1	16.5	15.5	17.9	16.8	19.1	18.6	30.5	23.0
LTE Band 12(17)	Ant 0	30.6	30.6	24.3	24.3	23.0	23.0	23.0	23.0
LTE Band 13	Ant 0	31.6	31.6	25.1	25.1	23.0	23.0	23.0	23.0
LTE Band 25(2)	Ant 0	31.2	31.2	16.4	15.3	22.3	22.3	24.5	23.0
LTE Band 26(5)	Ant 0	30.0	30.0	24.2	24.2	23.0	23.0	23.0	23.0
LTE Band 41(38)	Ant 0	34.8	34.8	17.8	17.8	20.8	20.8	28.7	21.0
LTE Band 41 HPUE(38)	Ant 0	34.8	34.8	17.8	17.8	20.8	20.8	30.9	22.4
LTE Band 66(4)	Ant 0	31.5	31.5	16.3	15.6	20.5	20.5	24.6	23.0
LTE Band 42	Ant 2	17.4	16.4	19.0	16.0	22.0	21.5	28.2	21.0
FR1 n5	Ant 1	21.2	20.2	23.7	22.5	23.0	23.0	23.0	23.0
FR1 n7	Ant 0	33.3	33.3	17.0	17.0	21.4	21.4	28.2	23.0
FR1 n7	Ant 1	16.3	15.3	18.0	17.0	19.2	18.7	31.1	23.0
FR1 n66	Ant 0	32.2	32.2	16.4	15.6	20.4	20.4	26.8	23.0
FR1 n66	Ant 1	17.4	16.4	17.5	16.5	21.1	20.6	28.6	23.0
FR1 n41(38)	Ant 0	33.7	33.7	17.0	17.0	21.5	21.5	28.4	23.0
FR1 n77	Ant 2	17.0	16.0	18.8	15.8	21.5	21.0	29.7	23.0
FR1 n78 HPUE	Ant 2	17.0	16.0	19.0	16.0	21.5	21.0	31.2	26.0
FR1 n78 HPUE	Ant 4	15.0	14.0	17.0	13.5	19.5	19.0	34.9	25.0
FR1 n78 HPUE	Ant 6	16.5	15.5	17.0	12.0	17.5	17.5	17.5	25.0
FR1 n78 HPUE	Ant 7	31.9	31.9	27.0	20.0	20.0	20.0	20.0	26.0
FR1 n78	Ant 2	17.0	16.0	19.0	16.0	21.5	21.0	31.2	23.0
FR1 n78	Ant 4	15.0	14.0	17.0	13.5	19.5	19.0	34.9	23.0
FR1 n78	Ant 6	16.5	15.5	17.0	12.0	17.5	17.5	17.5	23.0
FR1 n78	Ant 7	31.9	31.9	27.0	20.0	20.0	20.0	20.0	23.0

Note:

1) *P_{max} is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + 1.0 dB device uncertainty.

2) All P_{limit} power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD).

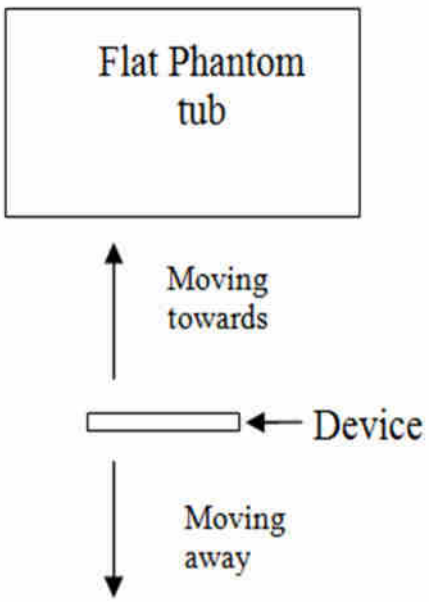
3) The max allowed output power is the Plimit + 1.0 dB device uncertainty, and if Plimit is higher than Pmax, the device output power will be Pmax instead.

4) LTE B7 Ant 1 only for LTE inter-band uplink CA. LTE B5 Ant 1 only for EN-DC combination and LTE inter-band uplink CA

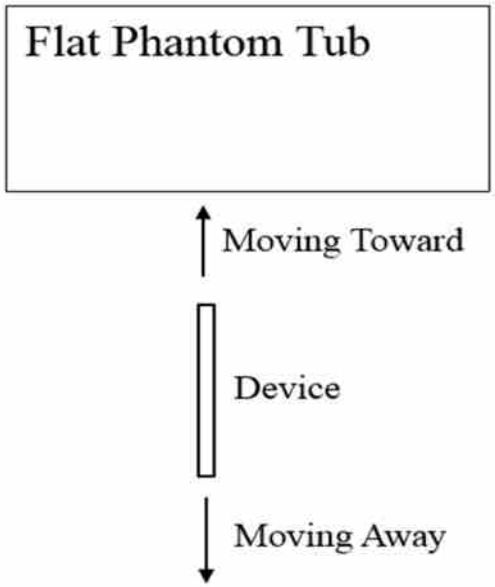
6. Proximity Sensor Triggering Test

<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 (7125MHz) and lowest (835MHz) 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 at the front or back of the device.
3. The output power will reduce to body worn power level when top and bottom sensor pad be detected.
4. The sensors used to detect the proximity of the user's body at the front or back surface of the device use a detection threshold distance. The data shown in the sections below shows the distance(s). When front or back body worn condition is detected reduced power will be active.
5. The device employs proximity sensors also can detect the presence of the user's a finger or hand when handheld state at the front/back/top/bottom/left/right sides of the device. When front/back/top/bottom/left/right sides of handheld condition is detected reduced power will be active.
6. 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:



Sensor/Handheld detection test set-up, Front and Back sides



Handheld detection test set-up, Left Side, Right Side, Bottom Side and Top Side

<P-Sensor>

Proximity Sensor Triggering Distance (mm)				
Position	Front		Back	
	Moving towards	Moving away	Moving towards	Moving away
Minimum	18	20	26	32

<Handheld for ANT0>

Proximity Sensor Triggering Distance (mm)						
Position	Front		Back		Bottom Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	12	15	13	18	15	18

<Handheld for ANT1>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Left Side		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	9	12	15	20	10	12	10	13

<Handheld for ANT2>

Proximity Sensor Triggering Distance (mm)						
Position	Front		Back		Left Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	4	5	9	12	6	10

<Handheld for ANT3/4/5>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Right Side		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	14	19	12	16	6	10	10	14

7. RF Exposure Limits

7.1 Uncontrolled Environment

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

7.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

8. Specific Absorption Rate (SAR)

8.1 Introduction

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

8.2 SAR Definition

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

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

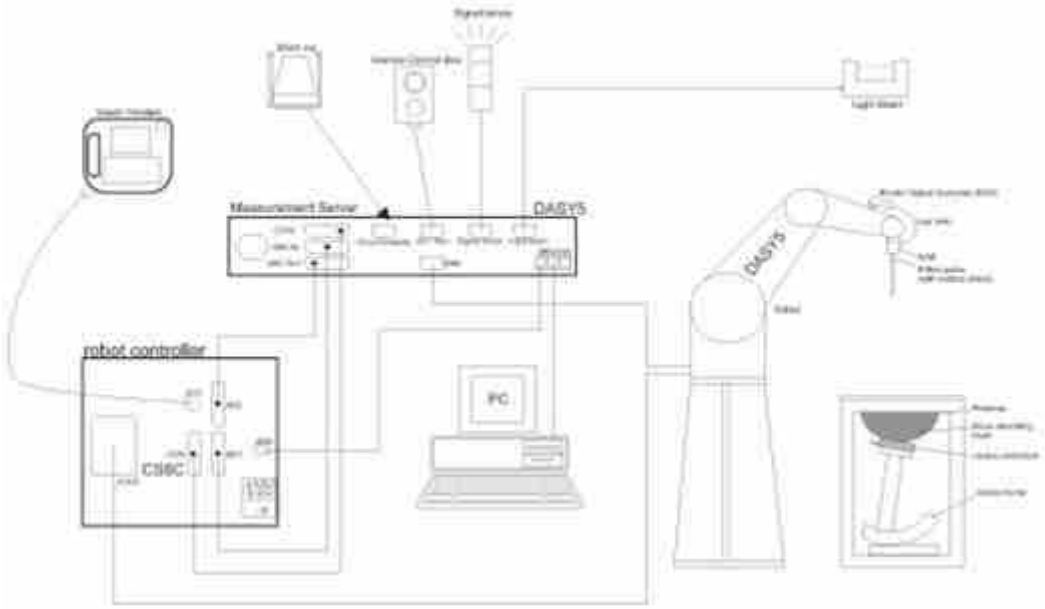
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. 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 WinXP or Win10 and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

9.1 E-Field Probe

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

<EX3DV4 Probe>

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

9.2 Data Acquisition Electronics (DAE)

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

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

Photo of DAE

9.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

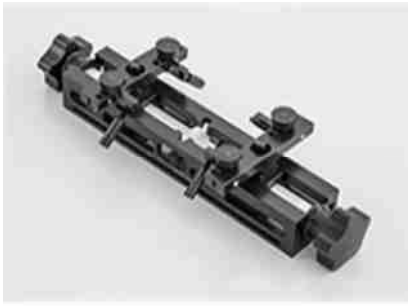
The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

9.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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

Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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

Mounting Device for Laptops

10. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

10.1 Spatial Peak SAR Evaluation

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

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

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

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

10.2 Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe 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.

10.3 Area Scan

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

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

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

10.4 Zoom Scan

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

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

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

10.5 Volume Scan Procedures

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

10.6 Power Drift Monitoring

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

11. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1087	2022/2/24	2023/2/23
SPEAG	835MHz System Validation Kit	D835V2	4d162	2021/12/17	2024/12/16
SPEAG	1750MHz System Validation Kit	D1750V2	1090	2022/2/24	2023/2/23
SPEAG	1900MHz System Validation Kit	D1900V2	5d182	2021/12/20	2022/12/19
SPEAG	2450MHz System Validation Kit	D2450V2	924	2020/9/2	2023/9/1
SPEAG	2600MHz System Validation Kit	D2600V2	1061	2020/11/26	2023/11/25
SPEAG	3500MHz System Validation Kit	D3500V2	1037	2020/11/25	2023/11/24
SPEAG	3700MHz System Validation Kit	D3700V2	1008	2020/11/25	2023/11/24
SPEAG	3900MHz System Validation Kit	D3900V2	1048	2020/5/14	2023/5/13
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	2019/9/24	2022/9/22
SPEAG	Data Acquisition Electronics	DAE4	1650	2021/6/9	2022/6/8
SPEAG	Data Acquisition Electronics	DAE4	1279	2021/9/21	2022/9/20
SPEAG	Dosimetric E-Field Probe	EX3DV4	7592	2021/6/24	2022/6/23
SPEAG	SAM Twin Phantom	SAM Twin	TP-1644	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8821C	6262306173	2021/7/15	2022/7/14
Agilent	ENA Series Network Analyzer	E5071C	MY46106933	2021/7/31	2022/7/30
SPEAG	Dielectric Probe Kit	DAK-3.5	1071	2022/1/24	2023/1/23
Anritsu	Vector Signal Generator	MG3710A	6201682672	2022/1/6	2023/1/5
Rohde & Schwarz	Power Meter	NRVD	102081	2021/8/12	2022/8/11
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	2021/8/12	2022/8/11
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	2021/8/12	2022/8/11
R&S	CBT BLUETOOTH TESTER	CBT	100641	2022/1/5	2023/1/4
EXA	Spectrum Analyzer	FSV7	101631	2021/10/14	2022/10/13
FLUKE	DIGITAC THERMOMETER	51II	97240029	2021/10/23	2022/10/22
Testo	Thermo-Hygrometer	608-H1	1241332126	2022/1/6	2023/1/5
SPEAG	Phone Positioner	N/A	N/A	Note 1	
Agilent	Dual Directional Coupler	778D	20500	Note 1	
Agilent	Dual Directional Coupler	11691D	MY48151020	Note 1	
MCL	Attenuation1	BW-S10W5+	N/A	Note 1	
MCL	Attenuation2	BW-S10W5+	N/A	Note 1	
MCL	Attenuation3	BW-S10W5+	N/A	Note 1	
BONN	POWER AMPLIFIER	BLMA 0830-3	087193A	Note 1	
BONN	POWER AMPLIFIER	BLMA 2060-2	087193B	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.

12. System Verification

12.1 Tissue Simulating Liquids

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

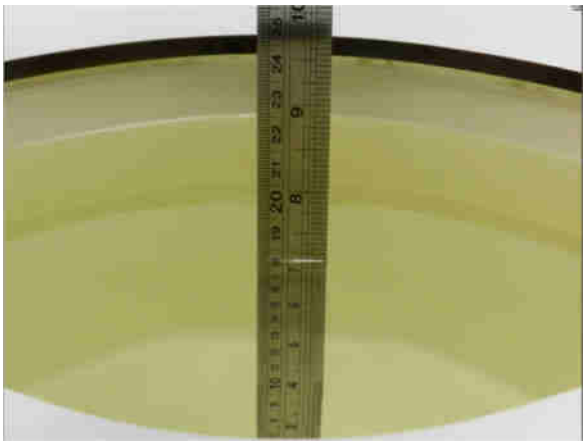


Fig 11.2 Photo of Liquid Height for Body SAR

12.2 Tissue Verification

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

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

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
750	Head	22.8	0.872	41.171	0.89	41.90	-2.02	-1.74	±5	2022/5/19
835	Head	22.7	0.911	42.719	0.90	41.50	1.22	2.94	±5	2022/5/20
1750	Head	22.8	1.343	38.540	1.37	40.10	-1.97	-3.89	±5	2022/5/21
1900	Head	22.8	1.398	41.444	1.40	40.00	-0.14	3.61	±5	2022/5/22
2450	Head	22.9	1.810	38.621	1.80	39.20	0.56	-1.48	±5	2022/5/23
2600	Head	22.8	1.927	38.323	1.96	39.00	-1.68	-1.74	±5	2022/5/24
3500	Head	22.8	2.785	38.965	2.91	37.90	-4.30	2.81	±5	2022/5/25
3700	Head	22.9	3.078	38.038	3.12	37.70	-1.35	0.90	±5	2022/5/26
3900	Head	22.8	3.282	37.613	3.32	37.50	-1.14	0.30	±5	2022/5/27
5250	Head	22.7	4.579	36.302	4.71	35.90	-2.78	1.12	±5	2022/5/28
5600	Head	22.7	4.947	35.742	5.07	35.50	-2.43	0.68	±5	2022/5/29
5750	Head	22.8	5.128	35.554	5.22	35.40	-1.76	0.44	±5	2022/5/30
750	Head	22.9	0.900	41.192	0.89	41.90	1.12	-1.69	±5	2022/5/31
835	Head	22.8	0.902	41.240	0.90	41.50	0.22	-0.63	±5	2022/6/1
1750	Head	22.8	1.409	40.669	1.37	40.10	2.85	1.42	±5	2022/6/2
1900	Head	22.9	1.397	39.035	1.40	40.00	-0.21	-2.41	±5	2022/6/3
2450	Head	22.7	1.806	38.605	1.80	39.20	0.33	-1.52	±5	2022/6/4
2600	Head	22.8	1.926	38.230	1.96	39.00	-1.73	-1.97	±5	2022/6/5
3500	Head	22.7	2.784	38.912	2.91	37.90	-4.33	2.67	±5	2022/6/6
3700	Head	22.8	2.994	38.681	3.12	37.70	-4.04	2.60	±5	2022/6/7
3900	Head	22.9	3.194	38.385	3.32	37.50	-3.80	2.36	±5	2022/6/8
5250	Head	22.8	4.553	36.114	4.71	35.90	-3.33	0.60	±5	2022/6/9
5600	Head	22.8	4.924	35.585	5.07	35.50	-2.88	0.24	±5	2022/6/10
5750	Head	22.8	5.100	35.396	5.22	35.40	-2.30	-0.01	±5	2022/6/11

12.3 System Performance Check Results

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

<1g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2022/5/19	750	Head	50	1087	7592	1650	0.395	8.58	7.9	-7.93
2022/5/20	835	Head	50	4d162	7592	1650	0.445	9.64	8.9	-7.68
2022/5/21	1750	Head	50	1090	7592	1650	1.730	37.00	34.6	-6.49
2022/5/22	1900	Head	50	5d182	7592	1650	1.910	39.60	38.2	-3.54
2022/5/23	2450	Head	50	924	7592	1650	2.560	51.40	51.2	-0.39
2022/5/24	2600	Head	50	1061	7592	1650	2.610	56.60	52.2	-7.77
2022/5/25	3500	Head	50	1037	7592	1650	3.150	68.00	63	-7.35
2022/5/26	3700	Head	50	1008	7592	1650	3.410	67.60	68.2	0.89
2022/5/27	3900	Head	50	1048	7592	1650	3.270	70.20	65.4	-6.84
2022/5/28	5250	Head	50	1113	7592	1650	3.890	80.50	77.8	-3.35
2022/5/29	5600	Head	50	1113	7592	1650	4.290	83.40	85.8	2.88
2022/5/30	5750	Head	50	1113	7592	1650	3.840	80.00	76.8	-4.00
2022/5/31	750	Head	50	1087	7592	1279	0.408	8.58	8.16	-4.90
2022/6/1	835	Head	50	4d162	7592	1279	0.451	9.64	9.02	-6.43
2022/6/2	1750	Head	50	1090	7592	1279	1.760	37.00	35.2	-4.86
2022/6/3	1900	Head	50	5d182	7592	1279	1.910	39.60	38.2	-3.54
2022/6/4	2450	Head	50	924	7592	1279	2.550	51.40	51	-0.78
2022/6/5	2600	Head	50	1061	7592	1279	2.660	56.60	53.2	-6.01
2022/6/6	3500	Head	50	1037	7592	1279	3.130	68.00	62.6	-7.94
2022/6/7	3700	Head	50	1008	7592	1279	3.300	67.60	66	-2.37
2022/6/8	3900	Head	50	1048	7592	1279	3.270	70.20	65.4	-6.84
2022/6/9	5250	Head	50	1113	7592	1279	3.840	80.50	76.8	-4.60
2022/6/10	5600	Head	50	1113	7592	1279	4.250	83.40	85	1.92
2022/6/11	5750	Head	50	1113	7592	1279	3.810	80.00	76.2	-4.75

<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 (%)
2022/5/19	750	Head	50	1087	7592	1650	0.260	5.65	5.2	-7.96
2022/5/20	835	Head	50	4d162	7592	1650	0.296	6.26	5.92	-5.43
2022/5/21	1750	Head	50	1090	7592	1650	0.941	19.50	18.82	-3.49
2022/5/22	1900	Head	50	5d182	7592	1650	1.020	20.20	20.4	0.99
2022/5/23	2450	Head	50	924	7592	1650	1.180	24.00	23.6	-1.67
2022/5/24	2600	Head	50	1061	7592	1650	1.200	25.10	24	-4.38
2022/5/25	3500	Head	50	1037	7592	1650	1.200	25.40	24	-5.51
2022/5/26	3700	Head	50	1008	7592	1650	1.260	24.40	25.2	3.28
2022/5/27	3900	Head	50	1048	7592	1650	1.160	24.40	23.2	-4.92
2022/5/28	5250	Head	50	1113	7592	1650	1.100	23.10	22	-4.76
2022/5/29	5600	Head	50	1113	7592	1650	1.200	23.80	24	0.84
2022/5/30	5750	Head	50	1113	7592	1650	1.090	22.80	21.8	-4.39
2022/5/31	750	Head	50	1087	7592	1279	0.267	5.65	5.34	-5.49
2022/6/1	835	Head	50	4d162	7592	1279	0.294	6.26	5.88	-6.07
2022/6/2	1750	Head	50	1090	7592	1279	0.980	19.50	19.6	0.51
2022/6/3	1900	Head	50	5d182	7592	1279	1.030	20.20	20.6	1.98
2022/6/4	2450	Head	50	924	7592	1279	1.180	24.00	23.6	-1.67
2022/6/5	2600	Head	50	1061	7592	1279	1.250	25.10	25	-0.40
2022/6/6	3500	Head	50	1037	7592	1279	1.190	25.40	23.8	-6.30
2022/6/7	3700	Head	50	1008	7592	1279	1.220	24.40	24.4	0.00
2022/6/8	3900	Head	50	1048	7592	1279	1.220	24.40	24.4	0.00
2022/6/9	5250	Head	50	1113	7592	1279	1.090	23.10	21.8	-5.63
2022/6/10	5600	Head	50	1113	7592	1279	1.190	23.80	23.8	0.00
2022/6/11	5750	Head	50	1113	7592	1279	1.080	22.80	21.6	-5.26

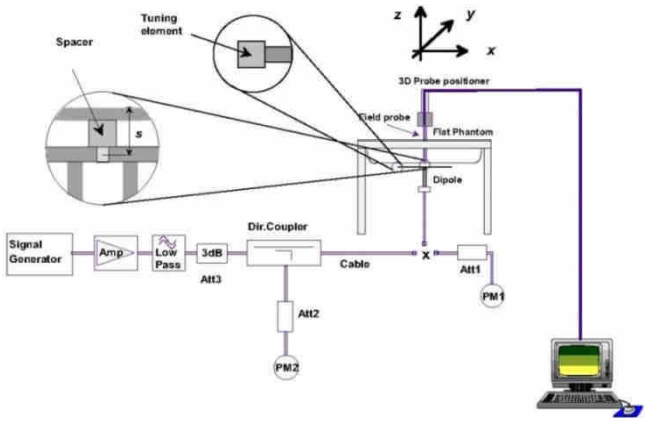


Fig 11.3.1 System Performance Check Setup

Fig 11.3.2 Setup Photo

13. RF Exposure Positions

13.1 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.

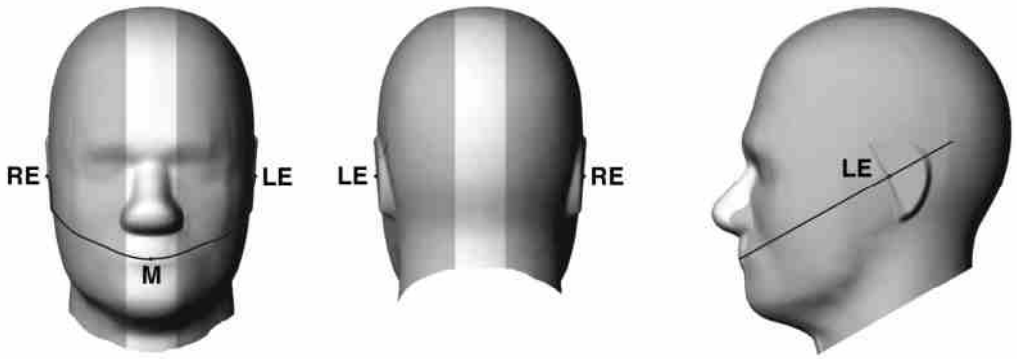


Fig 12.1.1 Front, back, and side views of SAM twin phantom

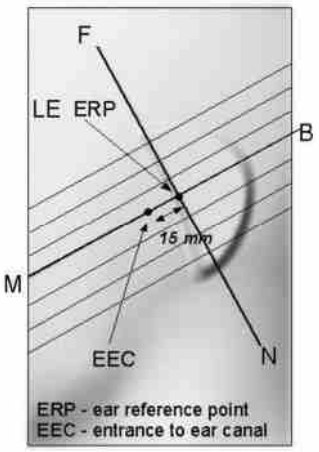


Fig 12.1.2 Close-up side view of phantom showing the ear region.

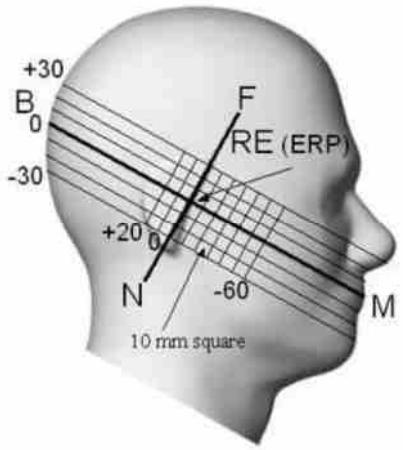


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

13.2 Definition of the cheek position

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

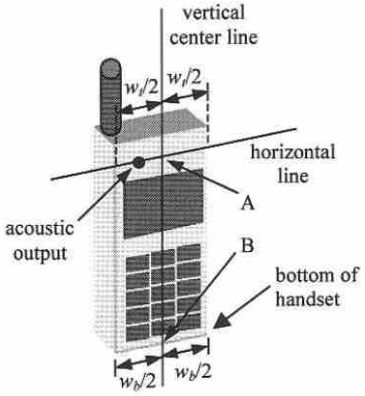


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case

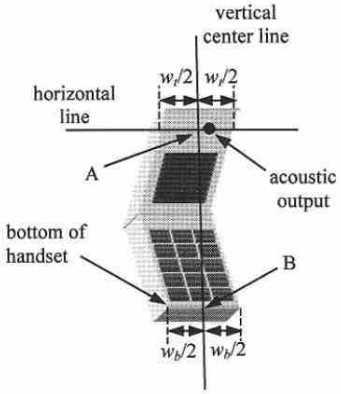


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

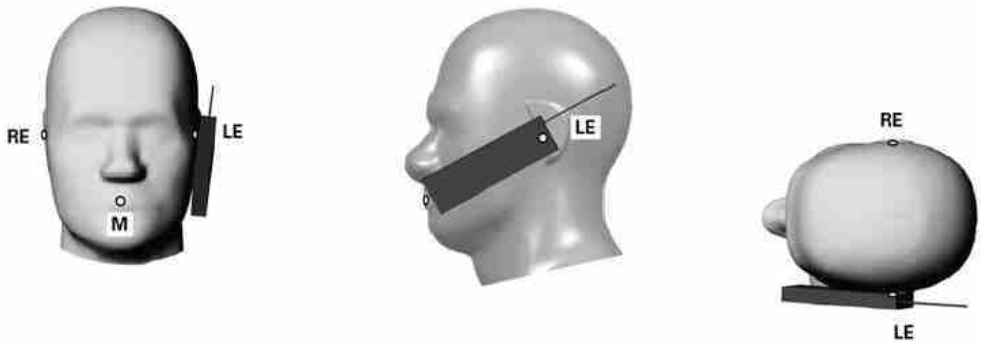


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

13.3 Definition of the tilt position

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

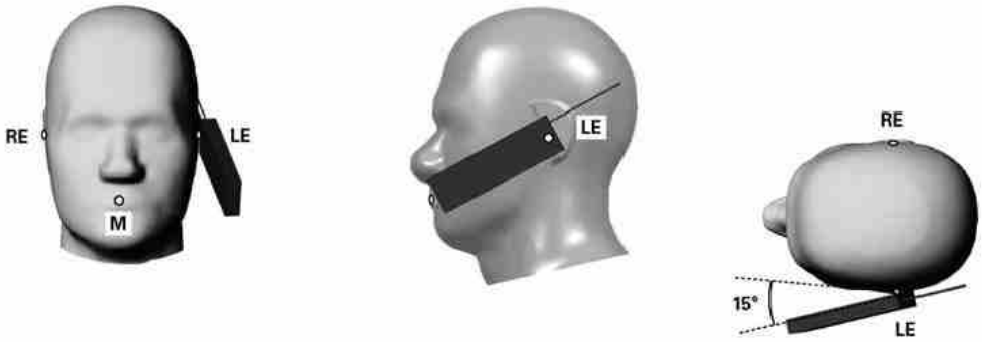


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

13.4 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 12.4). Per KDB648474 D04v01r03, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

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

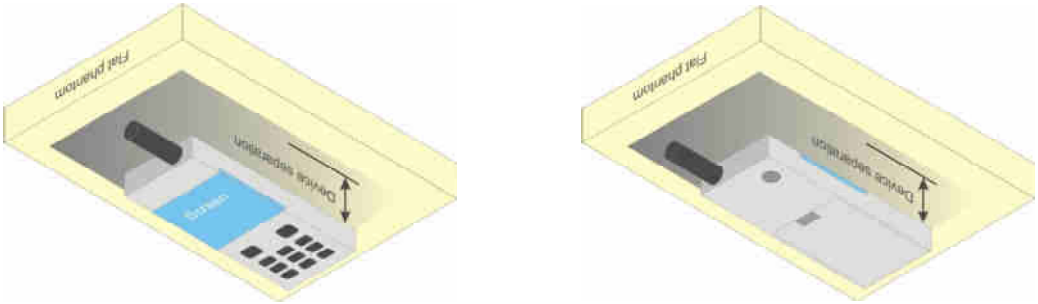


Fig 12.4 Body Worn Position

13.5 Product Specific 10g SAR Exposure

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

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.

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

13.6 Wireless Router

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

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

14. 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 ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

<WCDMA Conducted Power>

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

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

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

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

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with $\beta_{hs} = 30/15 * \beta_c$.

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 Δ_{NACK} = 30/15 with $\beta_{hs} = 30/15 * \beta_c$, and Δ_{CQI} = 24/15 with $\beta_{hs} = 24/15 * \beta_c$.

Note 3: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15.

Setup Configuration

HSUPA Setup Configuration:

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

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

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed}1$: 47/15 $\beta_{ed}2$: 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

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

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

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

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

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

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

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

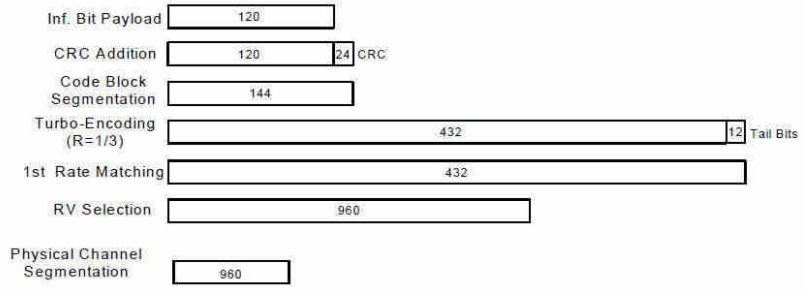


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

<WCDMA Conducted Power>

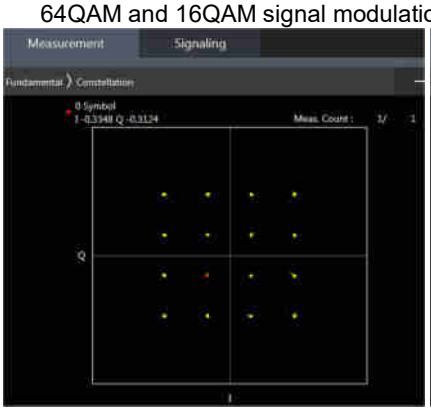
General Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

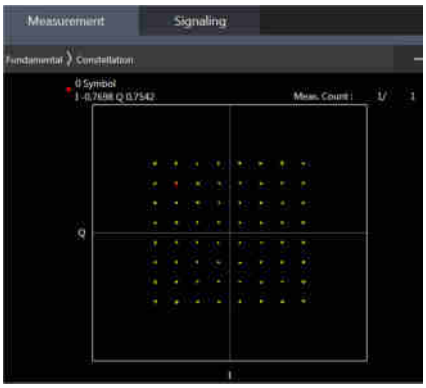
<LTE Conducted Power>

General Note:

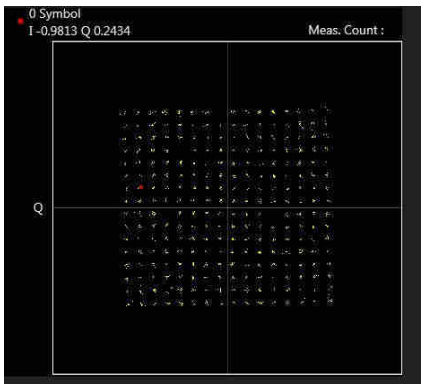
1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B2 / B4 /B5 / B17 / B38 SAR test was covered by B25 / B66 / B26 / B12 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. the maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion
   b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to 2017 TCB workshop, for 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.



16QAM



64QAM



256QAM

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

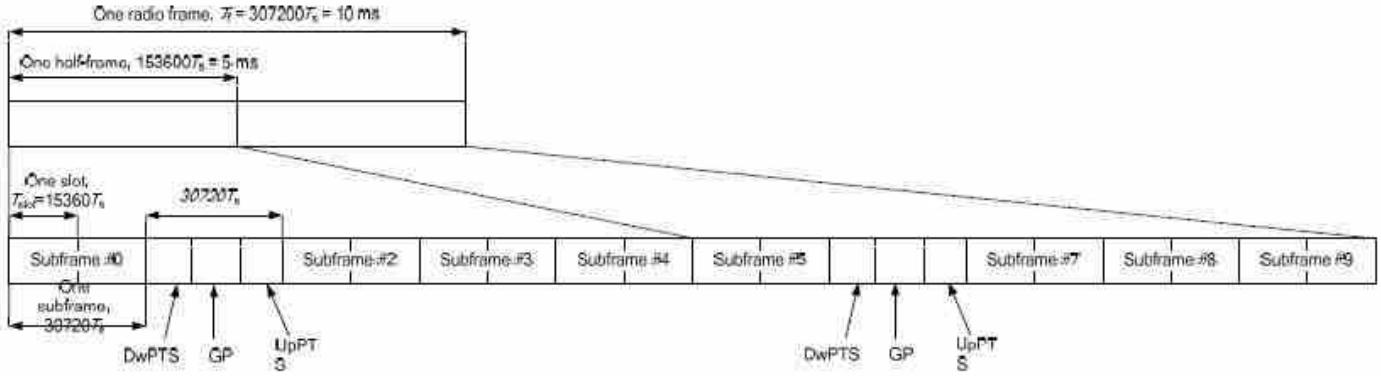


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

For Power class 2

i. Uplink-downlink configuration: 1. In a half-frame consisted of 5 subfames, uplink operation is in 2 uplink subframes and 1 special subframe.
ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (2+0.167)/5 = 43.3%
iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (2+0.143)/5 = 42.9%
v. For TDD LTE SAR measurement, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

For Power class 3

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

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

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

<LTE Carrier Aggregation>

General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need combination, and for this device that all the configurations were choose to power measurement.
3. The gray color table is covered by other combinations and no need to verify power.

Number	Combination	4X4 MIMO	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Covered by Measurement Superset
1	CA_2A-4A	2A, 4A	3CC-1	1	CA_2A-4A-5A	2A, 4A		1	CA_41C-41C	41C	
2	CA_2A-5A	2A	3CC-1	2	CA_2A_7C	2A, 7C		2	CA_41E	41E	
3	CA_2A-7A	2A, 7A	3CC-3	3	CA_2A-7A-7A	2A, 7A		3	CA_41A-41D	41A, 41D	
4	CA_2A-17A	2A		4	CA_4A_7C	4A, 7C					
5	CA_4A-5A	4A	3CC-1	5	CA_5A_7C	7C					
6	CA_4A-7A	4A, 7A		6	CA_5A-7A-66A	7A, 66A					
7	CA_4A-17A	4A		7	CA_7A-66A-66A	7A, 66A					
8	CA_5A-7A	7A	3CC-6	8	CA_41A-41A-41A	41A					
9	CA_5A-66A	66A	3CC-6	9	CA_41D	41D					
10	CA_7B	7B		10	CA_42D	42D					
11	CA_7C	7C	3CC-2	11	CA_41A-41C	41A, 41C					
12	CA_7A-7A	7A	3CC-3								
13	CA_7A-26A	7A									
14	CA_7A-42A	7A, 42A									
15	CA_7A-66A	7A, 66A	3CC-7								
16	CA_38C	38C									
17	CA_41C	41C	3CC-11								
18	CA_41A_41A	41A	3CC-8								
19	CA_42A-42A	42A									
20	CA_66A-66A	66A	3CC-7								
21	CA_66B	66B									
22	CA_66C	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 four carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.

iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.

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

vi. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.

vii. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

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

LTE 4x4 MIMO (Downlink)

This device supports downlink 4x4 MIMO operations for LTE B2/4/7/38/41/42/66 only. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per FCC Guidance, SAR for downlink 4x4 MIMO was not needed since the maximum average output power in 4x4 downlink MIMO mode was not > 0.25 dB higher than the maximum output power with downlink 4x4 MIMO inactive. When carrier aggregation is applicable, power measurements were performed with the downlink carrier aggregation and 4x4 DL MIMO active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

4X4 MIMO	Band
	LTE Band B2/4/7/38/41/42/66

LTE Carrier Aggregation Conducted Power (Uplink)

2CC Uplink Carrier Aggregation		
Number	Combination	Ant No.
1	CA_7C	ANT0
2	CA_41C	ANT0

<Intra-band>

General Note:

i. The device supports intra-band uplink carrier aggregation for LTE B7/41with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.

ii. The device supports uplink carrier aggregation with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre the 3GPP requirement.

iii. According TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.

iv. Additional SAR measurement for LTE UL CA whit other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.

<Inter-band uplink carrier aggregation consideration>

CA	Main Antenna Tx0	Main Antenna Tx1
CA_2A-7A	Ant 0	Ant 1
CA_4A-5A	Ant 0	Ant 1
CA_4A-7A	Ant 0	Ant 1
CA_5A-7A	Ant 1	Ant 0

General Note:

1. The single carrier of inter band CA uplink power level is the same as Non-CA standalone LTE power level.
2. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with FCC RF exposure limit over a defined time window, for SAR (transmit frequency ≤ 6GHz). To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.
3. For LTE inter-band CA mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure between two LTE bands. Smart Transmit algorithm controls the total RF exposure base on LTE inter CA bands to not exceed FCC limit. In Part 1 Report, simultaneous transmission compliance was evaluated with other Radios (WLAN or BT) using standalone LTE SAR mode.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n5 / n7 / n66 / n77 / n78 is NSA mode.
2. 5G NR n7 / n38 / n41 / n77 / n78 is SA 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. 5G NR n78 HPUE with higher power, n78 HPUE SAR can represent power class 3 level SAR.
5. 5G NR n78 supports HPUE, HPUE power and SAR testing performed separately.
6. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
7. 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.
8. 5GNR NSA mode, the power level is the same as 5GNR SA mode, so 5GNR NSA mode and SA mode power table only show one time.
9. 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.
10. 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.

<3GPP 38.101 MPR for EN-DC>

Table 6.2.2-1 Maximum power reduction (MPR) for power class 3

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

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

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

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

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

EN-DC	4G UL	5G-NR UL
DC_7A_n5A	Ant 0	Ant 1
DC_2A_n7A	Ant 0	Ant 1
DC_5A_n7A	Ant 1	Ant 0
DC_66A_n7A	Ant 0	Ant 1
DC_2A_n66A	Ant 0	Ant 1
DC_5A_n66A	Ant 1	Ant 0
DC_7A_n66A	Ant 0	Ant 1
DC_41A_n77A	Ant 0	Ant 2
DC_2A_n78A	Ant 0	Ant 2/4/6/7
DC_5A_n78A	Ant 0	Ant 2/4/6/7
DC_7A_n78A	Ant 0	Ant 2/4/6/7
DC_38A_n78A	Ant 0	Ant 2/4/6/7
DC_41A_n78A	Ant 0	Ant 2/4/6/7
DC_66A_n78A	Ant 0	Ant 2/4/6/7

<WLAN Conducted Power>

General Note:

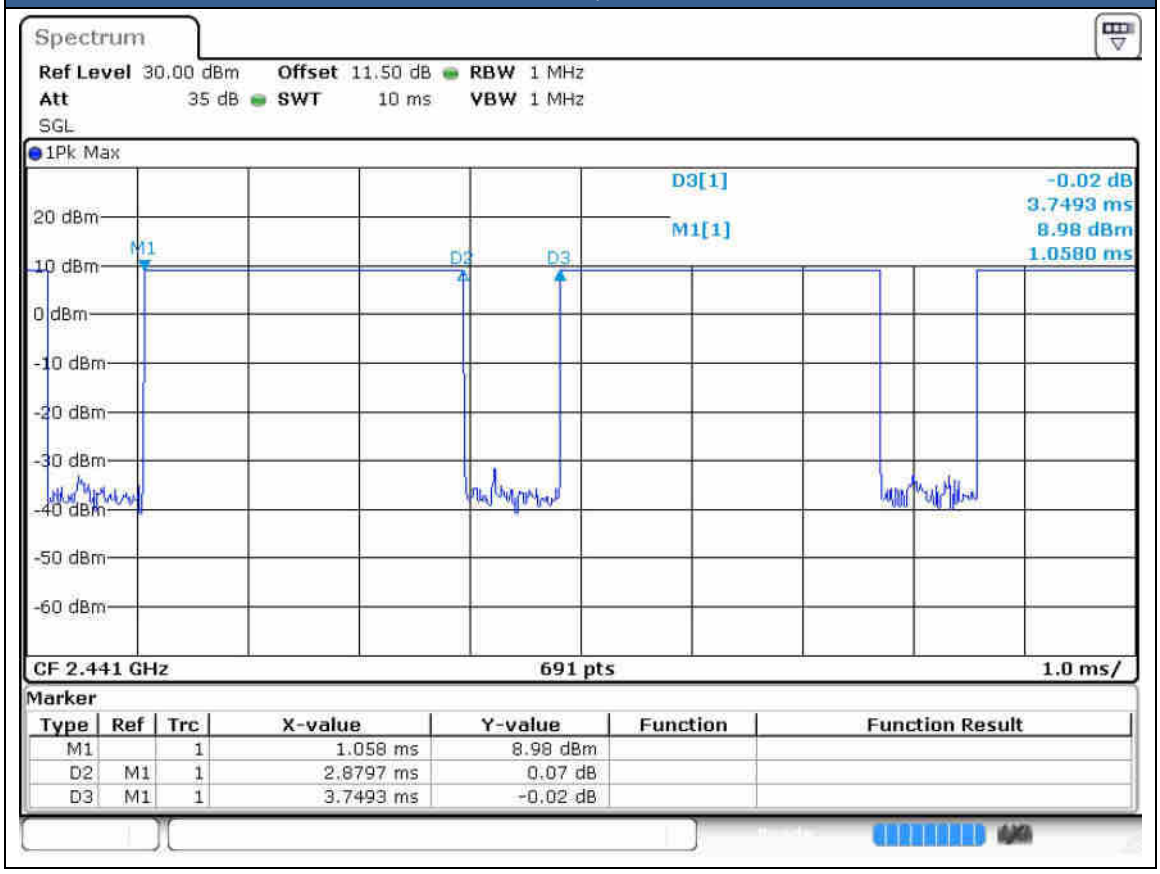
1. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
2. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
3. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
4. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
   a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
   b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
   c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. For 802.11ax, the device doesn't support OFDMA for partial RU tone, therefore the full RU perform full test.
6. The 2.4GHz/5GHz/6GHz WLAN can transmit in MIMO antenna mode only and it has no SISO antenna mode.

<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 are76.81% as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to100% for Bluetooth reported SAR calculation

Bluetooth time-domain plot for ANT3/ ANT5



15. Antenna Location

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

16. 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 BT/WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
   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.
   f. For TDD LTE SAR measurement of power class 2, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 is applied to scale-up the measured SAR result. The 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 ≥ 0.8W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. The device has two headsets, only supplier is different, so we chose one headset to perform full SAR testing.
6. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head. For WLAN when transmit simultaneous with WWAN and Proximity sensors trigger, power reduction will be activated to body-worn and Handheld.
7. For some WWAN bands, sensor on reduced power level is higher than hotspot reduced power level, so front/back sensor on SAR can represent hotspot conservatively.
8. This device supports HPUE for LTE Band 38/41 with class 2 level, HPUE power has been measured separately. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR.
9. 5G NR n78 supports HPUE, HPUE power and SAR testing performed separately, n78 HPUE SAR can represent power class 3 level SAR.
10. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
11. 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.
12. 5GNR NSA mode, the power level is the same as 5GNR SA mode, so 5GNR NSA mode and SA mode power table only show one time.
13. 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.
14. 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.

15. 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, 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 2/4/7/25/66/38/41/42, 5GNR n7/n66/n38/n41/n77/n78, WLAN5.8GHz, therefore product specific 10g SAR is necessary.
    b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
    c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
16. For distance SAR and non-distance SAR in body-worn, always chose higher SAR to do co-located analysis.

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

WCDMA Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA , and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA .

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 / B26 / B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B2 / B4 / B5 / B17 / B38 SAR test was covered by LTE B25 / B66 / B26 / B12 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
    a. the maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion
    b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
   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 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.
   e. 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
   f. For 5G FR1 n5 /n7/n38/n41/n66/n77 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.

16.1 Head SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																			
01	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	23095	707.5	1	23.27	24.00	1.183	-0.03	0.182	**0.215**
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	DSI 2	23095	707.5	1	22.15	23.00	1.216	0.08	0.164	0.199
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	23095	707.5	1	23.27	24.00	1.183	0.02	0.105	0.124
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	DSI 2	23095	707.5	1	22.15	23.00	1.216	-0.14	0.094	0.114
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	23095	707.5	1	23.27	24.00	1.183	0.06	0.150	0.177
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	DSI 2	23095	707.5	1	22.15	23.00	1.216	0.1	0.095	0.116
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	23095	707.5	1	23.27	24.00	1.183	0.05	0.088	0.104
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	DSI 2	23095	707.5	1	22.15	23.00	1.216	0.05	0.075	0.091
02	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	23230	782	1	23.09	24.00	1.233	-0.05	0.140	**0.173**
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	DSI 2	23230	782	1	22.13	23.00	1.222	-0.16	0.124	0.152
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	23230	782	1	23.09	24.00	1.233	0.12	0.069	0.085
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	DSI 2	23230	782	1	22.13	23.00	1.222	-0.13	0.055	0.067
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	23230	782	1	23.09	24.00	1.233	0.08	0.079	0.097
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	DSI 2	23230	782	1	22.13	23.00	1.222	0.08	0.047	0.057
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	23230	782	1	23.09	24.00	1.233	-0.15	0.057	0.070
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	DSI 2	23230	782	1	22.13	23.00	1.222	-0.15	0.049	0.060
835MHz																			
03	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 0	DSI 2	189	836.4	1	29.25	30.50	1.334	-0.09	0.238	**0.317**
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 0	DSI 2	189	836.4	1	29.25	30.50	1.334	0.01	0.106	0.141
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 0	DSI 2	189	836.4	1	29.25	30.50	1.334	0.1	0.133	0.177
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant 0	DSI 2	189	836.4	1	29.25	30.50	1.334	0.02	0.082	0.109
04	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 2	4182	836.4	1	23.36	24.00	1.159	0.05	0.209	**0.242**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 2	4182	836.4	1	23.36	24.00	1.159	0.11	0.090	0.104
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 2	4182	836.4	1	23.36	24.00	1.159	0.06	0.128	0.148
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 2	4182	836.4	1	23.36	24.00	1.159	0.11	0.081	0.094
05	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	23.11	24.00	1.227	-0.12	0.202	**0.248**
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	21.95	23.00	1.274	-0.09	0.184	0.234
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	23.11	24.00	1.227	0.03	0.082	0.101
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	21.95	23.00	1.274	0.09	0.054	0.069
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	23.11	24.00	1.227	0.04	0.128	0.157
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	21.95	23.00	1.274	0.05	0.084	0.107
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	23.11	24.00	1.227	-0.16	0.093	0.114
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	21.95	23.00	1.274	0.04	0.061	0.078
	LTE Band 5	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	20525	836.5	1	21.62	22.30	1.169	0.05	0.844	0.987
	LTE Band 5	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	DSI 2	20525	836.5	1	21.60	22.30	1.175	0.11	0.798	0.938
	LTE Band 5	10M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	20525	836.5	1	21.52	22.30	1.197	0.03	0.765	0.916
06	LTE Band 5	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	20525	836.5	1	21.62	22.30	1.169	-0.1	0.918	**1.074**
	LTE Band 5	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	DSI 2	20525	836.5	1	21.60	22.30	1.175	0.1	0.792	0.931
	LTE Band 5	10M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	20525	836.5	1	21.52	22.30	1.197	0.07	0.760	0.910
	LTE Band 5	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	20525	836.5	1	21.62	22.30	1.169	0.09	0.444	0.519
	LTE Band 5	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	DSI 2	20525	836.5	1	21.60	22.30	1.175	-0.09	0.374	0.439
	LTE Band 5	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	20525	836.5	1	21.62	22.30	1.169	0.08	0.491	0.574
	LTE Band 5	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	DSI 2	20525	836.5	1	21.60	22.30	1.175	0.02	0.410	0.482
	LTE Band 5	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2 Simultaneous	20525	836.5	1	20.69	21.30	1.151	0.02	0.716	0.824
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	167300	836.5	1	21.42	22.20	1.197	-0.08	0.651	0.779
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	167300	836.5	1	21.33	22.20	1.222	-0.06	0.779	0.952
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	167300	836.5	1	21.28	22.20	1.236	0.15	0.675	0.834
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	167300	836.5	1	21.42	22.20	1.197	0.07	0.911	1.090
07	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	167300	836.5	1	21.33	22.20	1.222	-0.08	0.948	**1.158**
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	167300	836.5	2	21.33	22.20	1.222	-0.08	0.863	1.054
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	167300	836.5	1	21.28	22.20	1.236	0.03	0.779	0.963

	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	167300	836.5	1	21.42	22.20	1.197	0.03	0.345	0.413
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	167300	836.5	1	21.33	22.20	1.222	0.08	0.397	0.485
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	167300	836.5	1	21.42	22.20	1.197	0.07	0.489	0.585
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	167300	836.5	1	21.33	22.20	1.222	0.02	0.527	0.644
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2 Simultaneous	167300	836.5	1	20.28	21.20	1.236	0.02	0.714	0.882
1750MHz																			
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 2	1413	1732.6	1	23.15	24.00	1.216	-0.07	0.094	0.114
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 2	1413	1732.6	1	23.15	24.00	1.216	-0.13	0.068	0.083
08	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 2	1413	1732.6	1	23.15	24.00	1.216	0.04	0.173	**0.210**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 2	1413	1732.6	1	23.15	24.00	1.216	-0.18	0.065	0.079
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	132322	1745	1	23.11	24.00	1.227	0.16	0.073	0.090
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 2	132322	1745	1	22.06	23.00	1.242	0.04	0.049	0.061
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	132322	1745	1	23.11	24.00	1.227	0.03	0.052	0.064
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 2	132322	1745	1	22.06	23.00	1.242	0.03	0.000	0.000
09	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	132322	1745	1	23.11	24.00	1.227	0.06	0.144	**0.177**
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 2	132322	1745	1	22.06	23.00	1.242	0.07	0.098	0.122
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	132322	1745	1	23.11	24.00	1.227	0.03	0.051	0.063
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 2	132322	1745	1	22.06	23.00	1.242	0.07	0.044	0.055
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	349000	1745	1	23.48	24.00	1.127	0.12	0.064	0.072
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	349000	1745	1	23.28	24.00	1.180	0.12	0.063	0.074
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	349000	1745	1	23.48	24.00	1.127	-0.07	0.041	0.046
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	349000	1745	1	23.28	24.00	1.180	0.02	0.048	0.057
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	349000	1745	1	23.48	24.00	1.127	0.02	0.089	0.100
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	349000	1745	1	23.28	24.00	1.180	0.06	0.126	0.149
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	349000	1745	1	23.48	24.00	1.127	0.04	0.040	0.045
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	349000	1745	1	23.28	24.00	1.180	-0.13	0.041	0.048
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	349000	1745	1	17.38	18.40	1.265	0.02	0.892	1.128
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	349000	1745	1	17.27	18.40	1.297	0.07	0.869	1.127
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	349000	1745	1	17.24	18.40	1.306	0.04	0.690	0.901
10	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	349000	1745	1	17.38	18.40	1.265	0.01	0.956	**1.209**
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	349000	1745	2	17.38	18.40	1.265	0.11	0.901	1.140
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	349000	1745	1	17.27	18.40	1.297	-0.13	0.910	1.180
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	349000	1745	1	17.24	18.40	1.306	-0.02	0.729	0.952
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	349000	1745	1	17.38	18.40	1.265	-0.12	0.459	0.581
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	349000	1745	1	17.27	18.40	1.297	0.16	0.475	0.616
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	349000	1745	1	17.38	18.40	1.265	0.07	0.578	0.731
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	349000	1745	1	17.27	18.40	1.297	0.07	0.589	0.764
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2 Simultaneous	349000	1745	1	16.21	17.40	1.315	0.03	0.749	0.985
1900MHz																			
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 0	DSI 2	661	1880	1	26.37	27.50	1.297	-0.03	0.042	0.054
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 0	DSI 2	661	1880	1	26.37	27.50	1.297	0.08	0.001	0.001
11	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 0	DSI 2	661	1880	1	26.37	27.50	1.297	0.02	0.067	**0.087**
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant 0	DSI 2	661	1880	1	26.37	27.50	1.297	-0.1	0.003	0.004
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 2	9400	1880	1	23.22	24.00	1.197	0.15	0.073	0.087
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 2	9400	1880	1	23.22	24.00	1.197	0.16	0.057	0.068
12	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 2	9400	1880	1	23.22	24.00	1.197	0.01	0.119	**0.142**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 2	9400	1880	1	23.22	24.00	1.197	0.04	0.046	0.055
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	26340	1880	1	22.98	24.00	1.265	0.11	0.087	0.110
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 2	26340	1880	1	21.90	23.00	1.288	0.02	0.057	0.073
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	26340	1880	1	22.98	24.00	1.265	0.01	0.066	0.083
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 2	26340	1880	1	21.90	23.00	1.288	0.05	0.000	0.000
13	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	26340	1880	1	22.98	24.00	1.265	0.01	0.150	**0.190**
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 2	26340	1880	1	21.90	23.00	1.288	-0.04	0.091	0.117
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	26340	1880	1	22.98	24.00	1.265	-0.06	0.064	0.081
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 2	26340	1880	1	21.90	23.00	1.288	0.01	0.051	0.066

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	21100	2535	1	23.03	24.00	1.250	-	-	-0.08	0.037	0.046
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 2	21100	2535	1	22.12	23.00	1.225	-	-	-0.06	0.035	0.043
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	21100	2535	1	23.03	24.00	1.250	-	-	0.02	0.031	0.039
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 2	21100	2535	1	22.12	23.00	1.225	-	-	0.11	0.029	0.036
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	21100	2535	1	23.03	24.00	1.250	-	-	-0.05	0.069	0.086
	LTE Band 7C	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	21100+ 21298	2535+ 2554.8	1	23.01	24.00	1.256	-	-	0.11	0.051	0.064
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 2	21100	2535	1	22.12	23.00	1.225	-	-	0.03	0.065	0.080
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	21100	2535	1	23.03	24.00	1.250	-	-	-0.06	0.003	0.004
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 2	21100	2535	1	22.12	23.00	1.225	-	-	0.1	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	21100	2535	1	16.34	17.50	1.306	-	-	-0.09	0.839	1.096
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	20850	2510	1	16.32	17.50	1.312	-	-	-0.15	0.785	1.030
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	21350	2560	1	16.21	17.50	1.346	-	-	0.09	0.824	1.109
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	21100	2535	1	16.32	17.50	1.312	-	-	0.17	0.736	0.966
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	20850	2510	1	16.17	17.50	1.358	-	-	0.17	0.711	0.966
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	21350	2560	1	16.12	17.50	1.374	-	-	0.17	0.724	0.995
	LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 2	21100	2535	1	16.30	17.50	1.318	-	-	0.11	0.681	0.898
14	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	21100	2535	1	16.34	17.50	1.306	-	-	-0.09	0.942	**1.230**
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	20850	2510	1	16.32	17.50	1.312	-	-	0.16	0.888	1.165
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	21350	2560	1	16.21	17.50	1.346	-	-	0.18	0.867	1.167
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	21100	2535	1	16.32	17.50	1.312	-	-	0.07	0.794	1.042
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	20850	2510	1	16.17	17.50	1.358	-	-	0.07	0.751	1.020
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	21350	2560	1	16.12	17.50	1.374	-	-	0.07	0.733	1.007
	LTE Band 7	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	DSI 2	21100	2535	1	16.30	17.50	1.318	-	-	0.05	0.764	1.007
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	21100	2535	1	16.34	17.50	1.306	-	-	0.06	0.532	0.695
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	21100	2535	1	16.32	17.50	1.312	-	-	-0.15	0.512	0.672
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	21100	2535	1	16.34	17.50	1.306	-	-	0.04	0.553	0.722
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	21100	2535	1	16.32	17.50	1.312	-	-	-0.02	0.510	0.669
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2 Simultaneous	21100	2535	1	15.44	16.50	1.276	-	-	0.03	0.712	0.909
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	40620	2593	1	23.27	24.00	1.183	62.9	1.006	0.04	0.030	0.036
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 2	40620	2593	1	22.15	23.00	1.216	62.9	1.006	0.11	0.022	0.027
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	40620	2593	1	23.27	24.00	1.183	62.9	1.006	0.05	0.030	0.036
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 2	40620	2593	1	22.15	23.00	1.216	62.9	1.006	-0.07	0.024	0.029
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	40620	2593	1	23.27	24.00	1.183	62.9	1.006	0.01	0.064	0.076
	LTE Band 41C	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	40620+ 40818	2593+ 2612.8	1	23.09	24.00	1.233	62.9	1.006	0.11	0.048	0.060
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 2	40620	2593	1	22.15	23.00	1.216	62.9	1.006	0.08	0.042	0.051
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	40620	2593	1	23.27	24.00	1.183	62.9	1.006	0.07	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 2	40620	2593	1	22.15	23.00	1.216	62.9	1.006	0.05	0.021	0.026
15	LTE Band 41_HPUE	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	40620	2593	1	25.55	27.00	1.396	42.9	1.009	-0.04	0.067	**0.094**
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	507000	2535	1	23.48	24.00	1.127	-	-	0.04	0.029	0.033
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	507000	2535	1	23.39	24.00	1.151	-	-	0.01	0.030	0.035
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	507000	2535	1	23.48	24.00	1.127	-	-	-0.13	0.044	0.050
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	507000	2535	1	23.39	24.00	1.151	-	-	-0.05	0.040	0.046
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	507000	2535	1	23.48	24.00	1.127	-	-	-0.06	0.090	0.101
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	507000	2535	1	23.39	24.00	1.151	-	-	-0.02	0.101	0.116
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	507000	2535	1	23.48	24.00	1.127	-	-	0.07	0.029	0.033
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	507000	2535	1	23.39	24.00	1.151	-	-	0.18	0.030	0.035
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	507000	2535	1	16.55	17.30	1.189	-	-	0.08	0.774	0.920
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	507000	2535	1	16.41	17.30	1.227	-	-	0.07	0.849	1.042
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	507000	2535	1	16.48	17.30	1.208	-	-	0.05	0.697	0.842
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	507000	2535	1	16.55	17.30	1.189	-	-	0.04	0.898	1.067
16	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	507000	2535	1	16.41	17.30	1.227	-	-	0.17	0.995	**1.221**
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	507000	2535	1	16.48	17.30	1.208	-	-	0.16	0.862	1.041

	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	507000	2535	1	16.55	17.30	1.189	-	-	-0.13	0.544	0.647
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	507000	2535	1	16.41	17.30	1.227	-	-	-0.15	0.633	0.777
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	507000	2535	1	16.55	17.30	1.189	-	-	0.07	0.684	0.813
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	507000	2535	1	16.41	17.30	1.227	-	-	0.16	0.747	0.917
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	507000	2535	1	16.48	17.30	1.208	-	-	0.06	0.599	0.723
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2 Simultaneous	507000	2535	1	15.52	16.30	1.197	-	-	0.01	0.733	0.877
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 0	DSI 2	518598	2592.99	1	23.55	24.00	1.109	-	-	0.04	0.033	0.037
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 0	DSI 2	518598	2592.99	1	23.34	24.00	1.164	-	-	0.11	0.034	0.040
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 0	DSI 2	518598	2592.99	1	23.55	24.00	1.109	-	-	0.03	0.051	0.057
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 0	DSI 2	518598	2592.99	1	23.34	24.00	1.164	-	-	0.07	0.045	0.052
17	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 0	DSI 2	518598	2592.99	1	23.55	24.00	1.109	-	-	-0.08	0.120	**0.133**
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 0	DSI 2	518598	2592.99	1	23.34	24.00	1.164	-	-	0.12	0.110	0.128
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 0	DSI 2	518598	2592.99	1	23.55	24.00	1.109	-	-	0.07	0.033	0.037
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 0	DSI 2	518598	2592.99	1	23.34	24.00	1.164	-	-	0.11	0.034	0.040
	3500~3900MHZ																				
18	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 2	42590	3500	1	19.84	20.40	1.138	62.9	1.006	0.02	0.996	**1.140**
	LTE Band 42	20M	QPSK	1	0		Right Cheek	0mm	Ant 2	DSI 2	42190	3460	1	19.80	20.40	1.148	62.9	1.006	0.03	0.953	1.101
	LTE Band 42	20M	QPSK	1	0		Right Cheek	0mm	Ant 2	DSI 2	42990	3540	1	19.78	20.40	1.153	62.9	1.006	0.01	0.970	1.126
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 2	42590	3500	1	19.82	20.40	1.143	62.9	1.006	-0.18	0.904	1.039
	LTE Band 42	20M	QPSK	50	0		Right Cheek	0mm	Ant 2	DSI 2	42190	3460	1	19.76	20.40	1.159	62.9	1.006	0.09	0.879	1.025
	LTE Band 42	20M	QPSK	50	0		Right Cheek	0mm	Ant 2	DSI 2	42990	3540	1	19.58	20.40	1.208	62.9	1.006	0.01	0.888	1.079
	LTE Band 42	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 2	42590	3500	1	19.69	20.40	1.178	62.9	1.006	-0.14	0.882	1.045
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 2	42590	3500	1	19.84	20.40	1.138	62.9	1.006	-0.07	0.330	0.378
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 2	42590	3500	1	19.82	20.40	1.143	62.9	1.006	0.07	0.318	0.366
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 2	42590	3500	1	19.84	20.40	1.138	62.9	1.006	0.15	0.242	0.277
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 2	42590	3500	1	19.82	20.40	1.143	62.9	1.006	-0.17	0.212	0.244
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	42590	3500	1	19.84	20.40	1.138	62.9	1.006	0.08	0.125	0.143
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 2	42590	3500	1	19.82	20.40	1.143	62.9	1.006	0.07	0.111	0.128
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 2 Simultaneous	42590	3500	1	18.91	19.40	1.119	62.9	1.006	0.03	0.780	0.878
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	656000	3840	1	17.44	18.00	1.138	-	-	-0.1	0.376	0.428
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	656000	3840	1	17.38	18.00	1.153	-	-	-0.16	0.346	0.399
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	656000	3840	1	17.44	18.00	1.138	-	-	-0.05	0.128	0.146
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	656000	3840	1	17.38	18.00	1.153	-	-	0.03	0.105	0.121
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	656000	3840	1	17.44	18.00	1.138	-	-	0.04	0.105	0.119
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	656000	3840	1	17.38	18.00	1.153	-	-	0.08	0.086	0.099
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	656000	3840	1	17.44	18.00	1.138	-	-	-0.06	0.050	0.057
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	656000	3840	1	17.38	18.00	1.153	-	-	-0.09	0.040	0.046
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2 Simultaneous	656000	3840	1	16.58	17.00	1.102	-	-	0.02	0.319	0.351
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.48	18.00	1.127	-	-	0.13	0.912	1.028
19	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.42	18.00	1.143	-	-	-0.03	1.090	**1.246**
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	633334	3500.01	2	17.42	18.00	1.143	-	-	0.01	0.985	1.126
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	633334	3500.01	1	17.48	18.00	1.127	-	-	0.02	0.311	0.351
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	633334	3500.01	1	17.42	18.00	1.143	-	-	-0.17	0.326	0.373
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.48	18.00	1.127	-	-	-0.08	0.212	0.239
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.42	18.00	1.143	-	-	0.06	0.193	0.221
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	633334	3500.01	1	17.48	18.00	1.127	-	-	-0.12	0.142	0.160
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	633334	3500.01	1	17.42	18.00	1.143	-	-	0.02	0.132	0.151
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2 Simultaneous	633334	3500.01	1	16.61	17.00	1.094	-	-	0.01	0.771	0.843
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	650000	3750	1	17.68	18.00	1.076	-	-	0.09	0.650	0.700
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	650000	3750	1	17.62	18.00	1.091	-	-	0.03	0.632	0.690
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	650000	3750	1	17.68	18.00	1.076	-	-	-0.15	0.496	0.534
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	650000	3750	1	17.62	18.00	1.091	-	-	0.13	0.190	0.207
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	650000	3750	1	17.68	18.00	1.076	-	-	-0.09	0.132	0.142
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	650000	3750	1	17.62	18.00	1.091	-	-	0.12	0.151	0.165
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	650000	3750	1	17.68	18.00	1.076	-	-	0.09	0.117	0.126

	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	650000	3750	1	17.62	18.00	1.091	-	-	0.16	0.070	0.076
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2 Simultaneous	650000	3750	1	16.64	17.00	1.086	-	-	-0.02	0.498	0.541
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.69	18.00	1.074	-	-	0.08	0.968	1.040
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.67	18.00	1.079	-	-	-0.07	0.816	0.880
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.49	18.00	1.125	-	-	0.06	0.887	0.998
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	633334	3500.01	1	17.69	18.00	1.074	-	-	0.11	0.274	0.294
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	633334	3500.01	1	17.67	18.00	1.079	-	-	0.07	0.294	0.317
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.69	18.00	1.074	-	-	-0.05	0.187	0.201
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.67	18.00	1.079	-	-	-0.11	0.186	0.201
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	633334	3500.01	1	17.69	18.00	1.074	-	-	0.07	0.097	0.104
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	633334	3500.01	1	17.67	18.00	1.079	-	-	0.02	0.107	0.115
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2 Simultaneous	633334	3500.01	1	16.72	17.00	1.067	-	-	-0.01	0.782	0.834
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 2	650000	3750	1	15.54	16.00	1.112	-	-	0.02	0.430	0.478
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 2	650000	3750	1	15.51	16.00	1.119	-	-	0.11	0.429	0.480
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 2	650000	3750	1	15.54	16.00	1.112	-	-	-0.13	0.554	0.616
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 2	650000	3750	1	15.51	16.00	1.119	-	-	-0.18	0.560	0.627
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 2	650000	3750	1	15.54	16.00	1.112	-	-	0.08	0.534	0.594
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 2	650000	3750	1	15.51	16.00	1.119	-	-	-0.03	0.554	0.620
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2	650000	3750	1	15.54	16.00	1.112	-	-	0.17	0.643	0.715
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2	650000	3750	1	15.51	16.00	1.119	-	-	0.03	0.655	0.733
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2 Simultaneous	650000	3750	1	14.54	15.00	1.112	-	-	-0.02	0.435	0.484
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 2	633334	3500.01	1	15.53	16.00	1.114	-	-	0.17	0.597	0.665
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 2	633334	3500.01	1	15.51	16.00	1.119	-	-	0.05	0.559	0.626
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 2	633334	3500.01	1	15.53	16.00	1.114	-	-	0.13	0.827	0.922
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 2	633334	3500.01	1	15.51	16.00	1.119	-	-	0.11	0.768	0.860
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 2	633334	3500.01	1	15.50	16.00	1.122	-	-	-0.15	0.775	0.870
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 2	633334	3500.01	1	15.53	16.00	1.114	-	-	0.06	0.812	0.905
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 2	633334	3500.01	1	15.51	16.00	1.119	-	-	0.04	0.722	0.808
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 2	633334	3500.01	1	15.50	16.00	1.122	-	-	-0.18	0.777	0.872
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2	633334	3500.01	1	15.53	16.00	1.114	-	-	0.13	0.960	1.070
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2	633334	3500.01	1	15.51	16.00	1.119	-	-	0.04	0.979	1.096
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2	633334	3500.01	1	15.50	16.00	1.122	-	-	0.04	0.854	0.958
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2 Simultaneous	633334	3500.01	1	14.53	15.00	1.114	-	-	0.02	0.762	0.849
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 2	650000	3750	1	17.06	17.50	1.107	-	-	0.06	0.301	0.333
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 2	650000	3750	1	17.02	17.50	1.117	-	-	-0.1	0.263	0.294
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 2	650000	3750	1	17.06	17.50	1.107	-	-	0.02	0.148	0.164
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 2	650000	3750	1	17.02	17.50	1.117	-	-	0.04	0.130	0.145
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 2	650000	3750	1	17.06	17.50	1.107	-	-	0.06	0.580	0.642
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 2	650000	3750	1	17.02	17.50	1.117	-	-	0.08	0.535	0.598
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 2	650000	3750	1	17.06	17.50	1.107	-	-	-0.13	0.409	0.453
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 2	650000	3750	1	17.02	17.50	1.117	-	-	-0.04	0.346	0.386
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 2 Simultaneous	650000	3750	1	16.08	16.50	1.102	-	-	0.01	0.450	0.496
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 2	633334	3500.01	1	17.01	17.50	1.119	-	-	0.15	0.530	0.593
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 2	633334	3500.01	1	16.98	17.50	1.127	-	-	0.11	0.509	0.574
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 2	633334	3500.01	1	17.01	17.50	1.119	-	-	0.19	0.151	0.169
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 2	633334	3500.01	1	16.98	17.50	1.127	-	-	-0.12	0.165	0.186
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 2	633334	3500.01	1	17.01	17.50	1.119	-	-	-0.05	0.821	0.919
20	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 2	633334	3500.01	1	16.98	17.50	1.127	-	-	0.01	1.020	**1.150**
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 2	633334	3500.01	2	16.98	17.50	1.127	-	-	0.06	0.996	1.123
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 2	633334	3500.01	1	17.00	17.50	1.122	-	-	0.05	0.805	0.903
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 2	633334	3500.01	1	17.01	17.50	1.119	-	-	0.06	0.320	0.358
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 2	633334	3500.01	1	16.98	17.50	1.127	-	-	0.17	0.429	0.484
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 2 Simultaneous	633334	3500.01	1	16.03	16.50	1.114	-	-	0.02	0.809	0.901
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	650000	3750	1	25.79	27.00	1.321	-	-	0.01	0.094	0.124
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	650000	3750	1	25.71	27.00	1.346	-	-	-0.19	0.107	0.144

	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 2	650000	3750	1	25.79	27.00	1.321	-	-	0.15	0.115	0.152
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 2	650000	3750	1	25.71	27.00	1.346	-	-	0.06	0.110	0.148
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 2	650000	3750	1	25.79	27.00	1.321	-	-	0.06	0.173	0.229
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 2	650000	3750	1	25.71	27.00	1.346	-	-	-0.02	0.177	0.238
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 2	650000	3750	1	25.79	27.00	1.321	-	-	0.08	0.062	0.082
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 2	650000	3750	1	25.71	27.00	1.346	-	-	-0.11	0.084	0.113
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	633334	3500.01	1	25.81	27.00	1.315	-	-	0.15	0.109	0.143
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	633334	3500.01	1	25.51	27.00	1.409	-	-	0.06	0.134	0.189
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 2	633334	3500.01	1	25.81	27.00	1.315	-	-	-0.11	0.119	0.157
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 2	633334	3500.01	1	25.51	27.00	1.409	-	-	0.05	0.158	0.223
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 2	633334	3500.01	1	25.81	27.00	1.315	-	-	-0.01	0.170	0.224
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 2	633334	3500.01	1	25.51	27.00	1.409	-	-	0.03	0.218	0.307
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 2	633334	3500.01	1	25.81	27.00	1.315	-	-	0.11	0.075	0.099
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 2	633334	3500.01	1	25.51	27.00	1.409	-	-	0.07	0.102	0.144

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
						WIFI/ Bluetooth											
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3+5	Standalone	1	2412	1	20.76	22.50	1.493	100	1.000	0.01	0.489	0.730
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3+5	Standalone	1	2412	1	20.76	22.50	1.493	100	1.000	0.09	0.484	0.723
21	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+5	Standalone	1	2412	1	20.76	22.50	1.493	100	1.000	-0.07	0.947	**1.414**
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+5	Standalone	1	2412	2	20.76	22.50	1.493	100	1.000	0.02	0.933	1.393
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+5	Standalone	6	2437	1	20.67	22.50	1.524	100	1.000	0.11	0.871	1.327
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+5	Standalone	11	2462	1	20.46	22.00	1.426	100	1.000	0.03	0.849	1.210
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3+5	Standalone	1	2412	1	20.76	22.50	1.493	100	1.000	0.04	0.764	1.140
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3+5	Standalone	6	2437	1	20.67	22.50	1.524	100	1.000	-0.01	0.819	1.248
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3+5	Standalone	11	2462	1	20.46	22.00	1.426	100	1.000	0.03	0.803	1.145
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 3+5	Standalone	6	2437	1	21.07	22.50	1.390	99.27	1.007	-0.12	0.933	1.306
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 3+5	Standalone	1	2412	1	21.06	22.50	1.393	99.27	1.007	0.01	0.936	1.313
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 3+5	Standalone	11	2462	1	20.81	22.50	1.476	99.27	1.007	0.02	0.938	1.394
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 3+5	Standalone	6	2437	1	21.07	22.50	1.390	99.27	1.007	-0.01	0.804	1.125
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 3+5	Standalone	1	2412	1	21.06	22.50	1.393	99.27	1.007	0.01	0.752	1.055
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 3+5	Standalone	11	2462	1	20.81	22.50	1.476	99.27	1.007	0.06	0.793	1.178
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 3+5	Standalone	6	2437	1	20.72	22.50	1.507	100	1.000	0.03	0.925	1.394
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 3+5	Standalone	1	2412	1	19.61	21.50	1.545	100	1.000	0.01	0.724	1.119
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Cheek	0mm	Ant 3+5	Standalone	11	2462	1	17.56	19.00	1.393	100	1.000	0.02	0.455	0.634
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Tilted	0mm	Ant 3+5	Standalone	6	2437	1	20.72	22.50	1.507	100	1.000	0.07	0.855	1.288
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Tilted	0mm	Ant 3+5	Standalone	1	2412	1	19.61	21.50	1.545	100	1.000	0.08	0.617	0.953
	WLAN2.4GHz	802.11n-HT20 MCS0	Left Tilted	0mm	Ant 3+5	Standalone	11	2462	1	17.56	19.00	1.393	100	1.000	0.01	0.411	0.573
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+5	DBS Only	1	2412	1	17.11	19.00	1.545	100	1.000	0.08	0.460	0.711
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+5	WWAN+non DBS	1	2412	1	15.22	17.00	1.507	100	1.000	-0.11	0.261	0.393
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+5	WWAN+DBS	1	2412	1	12.27	14.00	1.489	100	1.000	0.01	0.132	0.197
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 5	Full power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.03	0.013	0.024
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 5	Full power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.01	0.020	0.037
22	Bluetooth	1Mbps	Left Cheek	0mm	Ant 5	Full power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.09	0.083	**0.153**
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 5	Full power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.01	0.054	0.099
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	Full power	39	2441	1	11.00	12.50	1.413	76.81	1.302	-0.02	0.034	0.063
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3	Full power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.01	0.040	0.074
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	Full power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.03	0.078	0.143
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3	Full power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.07	0.062	0.114
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+5	Standalone	58	5290	1	15.73	17.50	1.503	86.31	1.159	0.01	0.203	0.354
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+5	Standalone	58	5290	1	15.73	17.50	1.503	86.31	1.159	-0.07	0.260	0.453
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5	Standalone	58	5290	1	15.73	17.50	1.503	86.31	1.159	0.04	0.416	0.725
23	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	Standalone	58	5290	1	15.73	17.50	1.503	86.31	1.159	0.07	0.624	**1.087**
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	Standalone	58	5290	2	15.73	17.50	1.503	86.31	1.159	0.01	0.594	1.035

	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	DBS Only	58	5290	1	14.88	16.50	1.452	86.31	1.159	0.05	0.469	0.789
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	WWAN+non DBS	58	5290	1	11.73	13.00	1.340	86.31	1.159	0.11	0.251	0.390
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	WWAN+DBS	58	5290	1	8.68	10.50	1.521	86.31	1.159	0.07	0.112	0.197
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+5	Standalone	122	5610	1	15.77	17.50	1.489	86.31	1.159	0.05	0.346	0.597
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+5	Standalone	122	5610	1	15.77	17.50	1.489	86.31	1.159	0.11	0.398	0.687
24	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5	Standalone	122	5610	1	15.77	17.50	1.489	86.31	1.159	-0.01	0.691	**1.193**
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5	Standalone	122	5610	2	15.77	17.50	1.489	86.31	1.159	-0.06	0.652	1.125
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5	Standalone	106	5530	1	15.72	17.50	1.507	86.31	1.159	0.11	0.598	1.044
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	Standalone	122	5610	1	15.77	17.50	1.489	86.31	1.159	-0.19	0.578	0.998
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	Standalone	106	5530	1	15.72	17.50	1.507	86.31	1.159	0.06	0.632	1.104
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5	DBS Only	122	5610	1	14.32	16.00	1.472	86.31	1.159	-0.02	0.461	0.787
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5	WWAN+non DBS	122	5610	1	11.38	13.00	1.452	86.31	1.159	0.06	0.230	0.387
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5	WWAN+DBS	122	5610	1	8.12	10.00	1.542	86.31	1.159	0.05	0.110	0.197
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+5	Standalone	155	5775	1	16.26	17.50	1.330	86.31	1.159	0.04	0.372	0.574
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+5	Standalone	155	5775	1	16.26	17.50	1.330	86.31	1.159	-0.07	0.442	0.682
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+5	Standalone	155	5775	1	16.26	17.50	1.330	86.31	1.159	0.07	0.568	0.876
25	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	Standalone	155	5775	1	16.26	17.50	1.330	86.31	1.159	0.04	0.621	**0.958**
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	DBS Only	155	5775	1	15.26	17.00	1.493	86.31	1.159	0.11	0.430	0.744
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	WWAN+non DBS	155	5775	1	12.31	14.00	1.476	86.31	1.159	0.03	0.228	0.390
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+5	WWAN+DBS	155	5775	1	9.26	11.00	1.493	86.31	1.159	0.09	0.111	0.192

16.2 Hotspot SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
									750MHz										
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	23.27	24.00	1.183	-0.06	0.586	0.693
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	22.15	23.00	1.216	0.03	0.356	0.433
26	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	23.27	24.00	1.183	-0.07	0.786	**0.930**
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	22.15	23.00	1.216	0.03	0.471	0.573
	LTE Band 12	10M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	22.14	23.00	1.219	0.05	0.758	0.924
	LTE Band 12	10M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	23.27	24.00	1.183	-0.02	0.113	0.134
	LTE Band 12	10M	QPSK	25	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	22.15	23.00	1.216	0.04	0.061	0.074
	LTE Band 12	10M	QPSK	1	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	23.27	24.00	1.183	-0.18	0.319	0.377
	LTE Band 12	10M	QPSK	25	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	22.15	23.00	1.216	0.09	0.192	0.234
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	23.27	24.00	1.183	0.03	0.374	0.442
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	23095	707.5	1	22.15	23.00	1.216	-0.04	0.231	0.281
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	23.09	24.00	1.233	0.07	0.495	0.610
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	22.13	23.00	1.222	0.14	0.291	0.356
27	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	23.09	24.00	1.233	0.08	0.629	**0.776**
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	22.13	23.00	1.222	0.05	0.377	0.461
	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	23.09	24.00	1.233	0.09	0.087	0.107
	LTE Band 13	10M	QPSK	25	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	22.13	23.00	1.222	0.08	0.054	0.066
	LTE Band 13	10M	QPSK	1	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	23.09	24.00	1.233	-0.03	0.236	0.291
	LTE Band 13	10M	QPSK	25	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	22.13	23.00	1.222	0.08	0.142	0.173
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	23.09	24.00	1.233	0.16	0.362	0.446
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	23230	782	1	22.13	23.00	1.222	0.09	0.212	0.259
									835MHz										
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 0	DSI3 Simultaneous	189	836.4	1	29.25	30.50	1.334	0.18	0.533	0.711
28	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	DSI3 Simultaneous	189	836.4	1	29.25	30.50	1.334	-0.02	0.687	**0.916**
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	DSI3 Simultaneous	128	824.2	1	29.19	30.50	1.352	0.03	0.666	0.900
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	DSI3 Simultaneous	251	848.8	1	29.16	30.50	1.361	0.07	0.670	0.912
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant 0	DSI3 Simultaneous	189	836.4	1	29.25	30.50	1.334	0.09	0.064	0.085
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Side	5mm	Ant 0	DSI3 Simultaneous	189	836.4	1	29.25	30.50	1.334	-0.03	0.160	0.213
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	189	836.4	1	29.25	30.50	1.334	0.02	0.363	0.484
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	DSI3 Simultaneous	4182	836.4	1	23.40	24.00	1.148	0.05	0.421	0.483
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI3 Simultaneous	4182	836.4	1	23.40	24.00	1.148	0.08	0.772	0.886
29	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI3 Simultaneous	4132	826.4	1	23.36	24.00	1.159	0.02	0.876	**1.015**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI3 Simultaneous	4233	846.6	1	23.31	24.00	1.172	0.08	0.790	0.926
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	DSI3 Simultaneous	4182	836.4	1	23.40	24.00	1.148	0.05	0.097	0.111
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	DSI3 Simultaneous	4182	836.4	1	23.40	24.00	1.148	0.02	0.283	0.325
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	4182	836.4	1	23.40	24.00	1.148	0.05	0.495	0.568
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	23.11	24.00	1.227	0.06	0.664	0.815
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	21.95	23.00	1.274	0.04	0.426	0.543
	LTE Band 26	15M	QPSK	75	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	22.03	23.00	1.250	0.02	0.654	0.818
30	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	23.11	24.00	1.227	0.13	0.767	**0.941**
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	21.95	23.00	1.274	0.13	0.498	0.634
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	22.03	23.00	1.250	0.07	0.750	0.938
	LTE Band 26	15M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	23.11	24.00	1.227	0.1	0.093	0.114
	LTE Band 26	15M	QPSK	36	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	21.95	23.00	1.274	-0.05	0.061	0.078
	LTE Band 26	15M	QPSK	1	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	23.11	24.00	1.227	-0.16	0.236	0.290
	LTE Band 26	15M	QPSK	36	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	21.95	23.00	1.274	-0.03	0.147	0.187
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	23.11	24.00	1.227	-0.06	0.537	0.659
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	26865	831.5	1	21.95	23.00	1.274	-0.06	0.347	0.442
	LTE Band 5	10M	QPSK	1	0	-	Front	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.61	23.50	1.227	-0.09	0.379	0.465
	LTE Band 5	10M	QPSK	25	0	-	Front	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.36	23.50	1.300	-0.02	0.340	0.442
31	LTE Band 5	10M	QPSK	1	0	-	Back	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.61	23.50	1.227	0.01	0.702	**0.862**

	LTE Band 5	10M	QPSK	1	0	-	Back	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	2	22.61	23.50	1.227	0.02	0.677	0.831
	LTE Band 5	10M	QPSK	25	0	-	Back	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.36	23.50	1.300	0.06	0.632	0.822
	LTE Band 5	10M	QPSK	50	0	-	Back	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.16	23.50	1.361	0.06	0.629	0.856
	LTE Band 5	10M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.61	23.50	1.227	0.07	0.161	0.198
	LTE Band 5	10M	QPSK	25	0	-	Left Side	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.36	23.50	1.300	-0.09	0.171	0.222
	LTE Band 5	10M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.61	23.50	1.227	0.04	0.567	0.696
	LTE Band 5	10M	QPSK	25	0	-	Top Side	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.36	23.50	1.300	-0.03	0.638	0.830
	LTE Band 5	10M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI3 Simultaneous	20525	836.5	1	22.16	23.50	1.361	0.03	0.628	0.855
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	23.18	23.50	1.076	0.05	0.317	0.341
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	23.12	23.50	1.091	0.06	0.314	0.343
32	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	23.18	23.50	1.076	0.16	0.759	**0.817**
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	23.12	23.50	1.091	-0.07	0.697	0.761
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	22.61	23.00	1.094	-0.17	0.692	0.757
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	23.18	23.50	1.076	-0.09	0.169	0.182
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	23.12	23.50	1.091	-0.15	0.159	0.174
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	23.18	23.50	1.076	0.03	0.709	0.763
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	23.12	23.50	1.091	-0.05	0.693	0.756
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	167300	836.5	1	22.61	23.00	1.094	0.08	0.685	0.749
									1750MHz										
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	DSI3 Simultaneous	1413	1732.6	1	15.90	16.60	1.175	0.03	0.287	0.337
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI3 Simultaneous	1413	1732.6	1	15.90	16.60	1.175	-0.17	0.569	0.669
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	DSI3 Simultaneous	1413	1732.6	1	15.90	16.60	1.175	0.13	0.028	0.033
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	DSI3 Simultaneous	1413	1732.6	1	15.90	16.60	1.175	0.05	0.066	0.078
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	1413	1732.6	1	15.90	16.60	1.175	-0.02	1.03	1.205
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	1312	1712.4	1	15.70	16.60	1.230	0.19	0.930	1.144
33	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	1513	1752.6	1	15.77	16.60	1.211	-0.03	1.05	**1.271**
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.80	16.60	1.202	-0.09	0.448	0.539
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.66	16.60	1.242	0.04	0.404	0.502
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.80	16.60	1.202	0.03	0.561	0.674
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.66	16.60	1.242	-0.12	0.403	0.500
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.80	16.60	1.202	0.04	0.025	0.030
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.66	16.60	1.242	0.07	0.015	0.019
	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.80	16.60	1.202	0.05	0.050	0.060
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.66	16.60	1.242	0.03	0.038	0.047
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.80	16.60	1.202	0.04	0.862	1.036
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132072	1720	1	15.66	16.60	1.242	0.14	0.825	1.024
34	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132572	1770	1	15.68	16.60	1.236	0.02	1.09	1.347
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132572	1770	2	15.68	16.60	1.236	0.03	0.997	1.232
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.66	16.60	1.242	0.16	0.644	0.800
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132072	1720	1	15.65	16.60	1.245	0.07	0.670	0.834
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132572	1770	1	15.65	16.60	1.245	-0.1	0.651	0.810
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132322	1745	1	15.66	16.60	1.242	0.19	0.616	0.765
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.10	16.60	1.122	0.09	0.356	0.399
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.08	16.60	1.127	0.03	0.487	0.549
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.10	16.60	1.122	0.07	0.437	0.490
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.08	16.60	1.127	0.03	0.536	0.604
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.10	16.60	1.122	0.03	0.014	0.016
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.08	16.60	1.127	0.15	0.021	0.024
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.10	16.60	1.122	-0.14	0.038	0.043
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.08	16.60	1.127	0.03	0.043	0.048
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.10	16.60	1.122	0.08	0.605	0.679
35	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.08	16.60	1.127	0.09	0.993	**1.119**
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	349000	1745	1	16.04	16.60	1.138	0.07	0.804	0.915
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.73	17.50	1.194	0.16	0.441	0.527
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.68	17.50	1.208	0.05	0.447	0.540
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.73	17.50	1.194	-0.09	0.796	0.950

	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.68	17.50	1.208	-0.05	0.658	0.795
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.67	17.50	1.211	0.03	0.531	0.643
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.73	17.50	1.194	-0.19	0.152	0.181
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.68	17.50	1.208	0.09	0.146	0.176
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.73	17.50	1.194	-0.09	0.712	0.850
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.68	17.50	1.208	-0.1	0.644	0.778
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	349000	1745	1	16.67	17.50	1.211	0.05	0.506	0.613
1900MHz																			
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 0	DSI3 Simultaneous	661	1880	1	19.65	20.80	1.303	0.02	0.429	0.559
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	DSI3 Simultaneous	661	1880	1	19.65	20.80	1.303	0.03	0.640	0.834
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	DSI3 Simultaneous	512	1850.2	1	19.62	20.80	1.312	-0.04	0.659	0.865
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	DSI3 Simultaneous	810	1909.8	1	19.61	20.80	1.315	-0.01	0.580	0.763
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant 0	DSI3 Simultaneous	661	1880	1	19.65	20.80	1.303	0.06	0.023	0.030
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Side	5mm	Ant 0	DSI3 Simultaneous	661	1880	1	19.65	20.80	1.303	0.02	0.038	0.050
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	661	1880	1	19.65	20.80	1.303	-0.07	1.04	1.355
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	512	1850.2	1	19.62	20.80	1.312	-0.02	1.03	1.352
36	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	810	1909.8	1	19.61	20.80	1.315	0.18	1.06	**1.394**
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	810	1909.8	2	19.61	20.80	1.315	0.12	0.98	1.284
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	DSI3 Simultaneous	9400	1880	1	15.32	16.30	1.253	-0.11	0.259	0.325
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI3 Simultaneous	9400	1880	1	15.32	16.30	1.253	-0.05	0.537	0.673
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	DSI3 Simultaneous	9400	1880	1	15.32	16.30	1.253	0.03	0.021	0.026
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	DSI3 Simultaneous	9400	1880	1	15.32	16.30	1.253	0.1	0.039	0.049
37	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	9400	1880	1	15.32	16.30	1.253	-0.02	1.09	**1.366**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	9262	1852.4	1	15.31	16.30	1.256	-0.01	1.07	1.344
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	9538	1907.6	1	15.22	16.30	1.282	0.02	0.944	1.211
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.45	16.30	1.216	0.15	0.567	0.690
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.31	16.30	1.256	0.02	0.555	0.697
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.45	16.30	1.216	0.17	0.769	0.935
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26140	1860	1	15.34	16.30	1.247	-0.18	0.773	0.964
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26590	1905	1	15.21	16.30	1.285	-0.08	0.778	1.000
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.31	16.30	1.256	0.03	0.725	0.911
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26140	1860	1	15.21	16.30	1.285	0.08	0.711	0.914
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26590	1905	1	15.19	16.30	1.291	0.01	0.700	0.904
	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.25	16.30	1.274	0.09	0.717	0.913
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.45	16.30	1.216	0.02	0.024	0.029
	LTE Band 25	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.31	16.30	1.256	-0.15	0.014	0.018
	LTE Band 25	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.45	16.30	1.216	-0.06	0.047	0.057
	LTE Band 25	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.31	16.30	1.256	0.06	0.028	0.035
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.45	16.30	1.216	0.05	0.950	1.155
38	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	26140	1860	1	15.34	16.30	1.247	-0.02	1.02	**1.272**
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	26590	1905	1	15.21	16.30	1.285	0.04	0.974	1.252
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.31	16.30	1.256	0.08	0.827	1.039
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.21	16.30	1.285	0.02	0.811	1.042
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.19	16.30	1.291	0.07	0.805	1.039
	LTE Band 25	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	26340	1880	1	15.25	16.30	1.274	0.08	0.801	1.020

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.63	18.70	1.279	-	-	-0.12	0.282	0.361
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.58	18.70	1.294	-	-	0.07	0.226	0.292
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.63	18.70	1.279	-	-	0.07	0.671	0.858
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	20850	2510	1	17.49	18.70	1.321	-	-	0.08	0.555	0.733
39	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	21350	2560	1	17.61	18.70	1.285	-	-	-0.07	0.831	**1.068**
	LTE Band 7C	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	21350+ 21152	2560+ 2540.2	1	17.58	18.70	1.294	-	-	0.11	0.801	1.037
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.58	18.70	1.294	-	-	-0.08	0.542	0.701
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.47	18.70	1.327	-	-	0.17	0.562	0.746
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.63	18.70	1.279	-	-	0.08	0.061	0.078
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.58	18.70	1.294	-	-	0.05	0.050	0.065
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.63	18.70	1.279	-	-	0.07	0.065	0.083
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.58	18.70	1.294	-	-	0.13	0.054	0.070
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.63	18.70	1.279	-	-	-0.12	0.501	0.641
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	21100	2535	1	17.58	18.70	1.294	-	-	0.09	0.419	0.542
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	DSI3 Simultaneous	21100	2535	1	16.89	17.80	1.233	-	-	0.05	0.280	0.345
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	DSI3 Simultaneous	21100	2535	1	16.85	17.80	1.245	-	-	0.05	0.201	0.250
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI3 Simultaneous	21100	2535	1	16.89	17.80	1.233	-	-	-0.09	0.524	0.646
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI3 Simultaneous	21100	2535	1	16.85	17.80	1.245	-	-	0.04	0.364	0.453
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI3 Simultaneous	21100	2535	1	16.89	17.80	1.233	-	-	0.15	0.057	0.070
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	DSI3 Simultaneous	21100	2535	1	16.85	17.80	1.245	-	-	-0.14	0.041	0.051
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI3 Simultaneous	21100	2535	1	16.89	17.80	1.233	-	-	-0.19	0.741	0.914
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI3 Simultaneous	20850	2510	1	16.81	17.80	1.256	-	-	-0.16	0.541	0.680
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI3 Simultaneous	21350	2560	1	16.84	17.80	1.247	-	-	0.12	0.653	0.815
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI3 Simultaneous	21100	2535	1	16.85	17.80	1.245	-	-	-0.04	0.492	0.612
	LTE Band 7	20M	QPSK	100	0	-	Top Side	5mm	Ant 1	DSI3 Simultaneous	21100	2535	1	16.77	17.80	1.268	-	-	0.09	0.601	0.762
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.73	20.80	1.279	62.9	1.006	-0.06	0.391	0.503
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.68	20.80	1.294	62.9	1.006	0.05	0.346	0.450
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.73	20.80	1.279	62.9	1.006	-0.03	0.841	1.082
40	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	39750	2506	1	19.36	20.80	1.393	62.9	1.006	0.08	0.862	**1.208**
	LTE Band 41C	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	39750+ 39948	2506+ 2525.8	1	19.72	20.80	1.282	62.9	1.006	0.08	0.796	1.027
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	40185	2549.5	1	19.52	20.80	1.343	62.9	1.006	0.08	0.841	1.136
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	41055	2636.5	1	19.70	20.80	1.288	62.9	1.006	0.08	0.867	1.124
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	41490	2680	1	19.68	20.80	1.294	62.9	1.006	0.05	0.801	1.043
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.68	20.80	1.294	62.9	1.006	-0.07	0.542	0.706
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	39750	2506	1	19.24	20.80	1.432	62.9	1.006	-0.02	0.624	0.899
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	40185	2549.5	1	19.51	20.80	1.346	62.9	1.006	-0.15	0.609	0.825
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	41055	2636.5	1	19.58	20.80	1.324	62.9	1.006	0.05	0.590	0.786
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	41490	2680	1	19.47	20.80	1.358	62.9	1.006	-0.06	0.542	0.741
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.68	20.80	1.294	62.9	1.006	0.07	0.546	0.711
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.73	20.80	1.279	62.9	1.006	-0.09	0.116	0.149
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.68	20.80	1.294	62.9	1.006	-0.04	0.059	0.077
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.73	20.80	1.279	62.9	1.006	0.04	0.164	0.211
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.68	20.80	1.294	62.9	1.006	0.07	0.104	0.135
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.73	20.80	1.279	62.9	1.006	-0.06	0.867	1.116
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	39750	2506	1	19.36	20.80	1.393	62.9	1.006	0.1	0.694	0.973
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	40185	2549.5	1	19.52	20.80	1.343	62.9	1.006	0.03	0.797	1.077
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	41055	2636.5	1	19.70	20.80	1.288	62.9	1.006	0.08	0.878	1.138
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	41490	2680	1	19.68	20.80	1.294	62.9	1.006	0.03	0.768	1.000
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.68	20.80	1.294	62.9	1.006	0.11	0.561	0.730
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	39750	2506	1	19.24	20.80	1.432	62.9	1.006	0.05	0.461	0.664
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	40185	2549.5	1	19.51	20.80	1.346	62.9	1.006	0.09	0.531	0.719
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	41055	2636.5	1	19.58	20.80	1.324	62.9	1.006	-0.18	0.565	0.753

	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	41490	2680	1	19.47	20.80	1.358	62.9	1.006	0.03	0.476	0.650
	LTE Band 41	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	40620	2593	1	19.68	20.80	1.294	62.9	1.006	0.08	0.613	0.798
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI3 Simultaneous	39750	2506	1	21.51	22.40	1.227	42.9	1.009	0.08	0.877	1.086
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.35	18.00	1.161	-	-	-0.16	0.354	0.411
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.34	18.00	1.164	-	-	0.08	0.409	0.476
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.35	18.00	1.161	-	-	0.03	0.786	0.913
41	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.34	18.00	1.164	-	-	-0.03	0.949	**1.105**
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.30	18.00	1.175	-	-	-0.11	0.729	0.857
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.35	18.00	1.161	-	-	-0.02	0.103	0.120
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.34	18.00	1.164	-	-	0.04	0.114	0.133
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.35	18.00	1.161	-	-	-0.16	0.068	0.079
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.34	18.00	1.164	-	-	0.01	0.091	0.106
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.35	18.00	1.161	-	-	0.03	0.544	0.632
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	507000	2535	1	17.34	18.00	1.164	-	-	-0.02	0.686	0.799
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI3 Simultaneous	507000	2535	1	16.89	18.00	1.291	-	-	0.07	0.309	0.399
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI3 Simultaneous	507000	2535	1	16.86	18.00	1.300	-	-	0.02	0.255	0.332
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI3 Simultaneous	507000	2535	1	16.89	18.00	1.291	-	-	0.09	0.518	0.669
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI3 Simultaneous	507000	2535	1	16.86	18.00	1.300	-	-	-0.09	0.425	0.553
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI3 Simultaneous	507000	2535	1	16.89	18.00	1.291	-	-	0.03	0.053	0.068
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI3 Simultaneous	507000	2535	1	16.86	18.00	1.300	-	-	-0.06	0.052	0.068
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	507000	2535	1	16.89	18.00	1.291	-	-	0.09	0.747	0.965
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	507000	2535	2	16.89	18.00	1.291	-	-	0.06	0.612	0.790
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	507000	2535	1	16.86	18.00	1.300	-	-	0.09	0.595	0.774
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI3 Simultaneous	507000	2535	1	16.83	18.00	1.309	-	-	0.09	0.650	0.851
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.22	18.00	1.197	-	-	0.14	0.432	0.517
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.18	18.00	1.208	-	-	0.05	0.362	0.437
42	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.22	18.00	1.197	-	-	0.09	0.967	**1.157**
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.18	18.00	1.208	-	-	0.15	0.918	1.109
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.17	18.00	1.211	-	-	-0.06	0.703	0.851
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.22	18.00	1.197	-	-	-0.05	0.112	0.134
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.18	18.00	1.208	-	-	0.09	0.077	0.093
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.22	18.00	1.197	-	-	-0.09	0.131	0.157
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.18	18.00	1.208	-	-	0.14	0.103	0.124
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.22	18.00	1.197	-	-	-0.19	0.887	1.062
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.18	18.00	1.208	-	-	0.1	0.877	1.059
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	518598	2592.99	1	17.17	18.00	1.211	-	-	0.17	0.250	0.303
	3500~3900MHZ																				
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI3 Simultaneous	42590	3500	1	18.38	19.00	1.153	62.9	1.006	0.06	0.186	0.216
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI3 Simultaneous	42590	3500	1	18.32	19.00	1.169	62.9	1.006	0.02	0.117	0.138
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI3 Simultaneous	42590	3500	1	18.38	19.00	1.153	62.9	1.006	0.01	0.298	0.346
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI3 Simultaneous	42590	3500	1	18.32	19.00	1.169	62.9	1.006	0.05	0.247	0.291
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	DSI3 Simultaneous	42590	3500	1	18.38	19.00	1.153	62.9	1.006	0.11	0.712	0.826
43	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	DSI3 Simultaneous	42190	3460	1	18.34	19.00	1.164	62.9	1.006	0.09	0.714	**0.836**
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	DSI3 Simultaneous	42990	3540	1	18.35	19.00	1.161	62.9	1.006	0.06	0.660	0.771
	LTE Band 42	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	DSI3 Simultaneous	42590	3500	1	18.32	19.00	1.169	62.9	1.006	-0.12	0.454	0.534
	LTE Band 42	20M	QPSK	100	0	-	Left Side	5mm	Ant 2	DSI3 Simultaneous	42590	3500	1	18.25	19.00	1.189	62.9	1.006	0.05	0.450	0.538
	LTE Band 42	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI3 Simultaneous	42590	3500	1	18.38	19.00	1.153	62.9	1.006	0.07	0.008	0.009
	LTE Band 42	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI3 Simultaneous	42590	3500	1	18.32	19.00	1.169	62.9	1.006	0.09	0.006	0.007
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI3 Simultaneous	656000	3840	1	16.05	16.80	1.189	-	-	0.05	0.263	0.313
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI3 Simultaneous	656000	3840	1	16.01	16.80	1.199	-	-	0.09	0.215	0.258
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI3 Simultaneous	656000	3840	1	16.05	16.80	1.189	-	-	0.07	0.613	0.729
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI3 Simultaneous	656000	3840	1	16.01	16.80	1.199	-	-	0.1	0.589	0.707
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	656000	3840	1	16.05	16.80	1.189	-	-	0.01	0.618	0.734
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	656000	3840	1	16.01	16.80	1.199	-	-	0.03	0.473	0.567
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI3 Simultaneous	656000	3840	1	16.05	16.80	1.189	-	-	-0.16	0.089	0.106
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI3 Simultaneous	656000	3840	1	16.01	16.80	1.199	-	-	0.13	0.086	0.103

	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.99	16.80	1.205	-	-	-0.11	0.395	0.476
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.93	16.80	1.222	-	-	-0.14	0.403	0.492
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.99	16.80	1.205	-	-	-0.04	0.507	0.611
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.93	16.80	1.222	-	-	-0.03	0.462	0.564
44	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.99	16.80	1.205	-	-	0.01	0.793	**0.956**
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.93	16.80	1.222	-	-	-0.17	0.734	0.897
	FR1 n77 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.84	16.80	1.247	-	-	0.03	0.745	0.929
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.99	16.80	1.205	-	-	-0.18	0.076	0.092
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.93	16.80	1.222	-	-	0.07	0.084	0.103
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI3 Simultaneous	650000	3750	1	16.14	17.00	1.219	-	-	0.1	0.268	0.327
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI3 Simultaneous	650000	3750	1	16.05	17.00	1.245	-	-	0.07	0.190	0.236
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI3 Simultaneous	650000	3750	1	16.14	17.00	1.219	-	-	0.02	0.424	0.517
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI3 Simultaneous	650000	3750	1	16.05	17.00	1.245	-	-	0.07	0.390	0.485
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	650000	3750	1	16.14	17.00	1.219	-	-	0.02	0.567	0.691
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	650000	3750	1	16.05	17.00	1.245	-	-	0.07	0.455	0.566
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI3 Simultaneous	650000	3750	1	16.14	17.00	1.219	-	-	0.18	0.056	0.068
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI3 Simultaneous	650000	3750	1	16.05	17.00	1.245	-	-	-0.13	0.054	0.067
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.98	17.00	1.265	-	-	0.09	0.324	0.410
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.89	17.00	1.291	-	-	0.02	0.334	0.431
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.98	17.00	1.265	-	-	-0.08	0.400	0.506
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.89	17.00	1.291	-	-	0.03	0.376	0.485
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.98	17.00	1.265	-	-	0.04	0.625	0.790
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.89	17.00	1.291	-	-	-0.13	0.743	0.959
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.96	17.00	1.271	-	-	0.03	0.733	0.931
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.98	17.00	1.265	-	-	-0.16	0.066	0.083
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 2	DSI3 Simultaneous	633334	3500.01	1	15.89	17.00	1.291	-	-	0.13	0.081	0.105
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	-0.13	0.215	0.242
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	0.02	0.247	0.278
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.97	14.50	1.130	-	-	-0.13	0.249	0.281
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	0.09	0.383	0.432
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	-0.12	0.358	0.404
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.97	14.50	1.130	-	-	-0.11	0.346	0.391
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	0.01	0.027	0.030
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	0.08	0.029	0.033
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	0.01	0.036	0.041
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	-0.08	0.042	0.047
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	-0.04	0.615	0.693
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	0.09	0.44	0.496
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI3 Simultaneous	650000	3750	1	13.97	14.50	1.130	-	-	0.02	0.469	0.530
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.06	14.50	1.107	-	-	-0.15	0.275	0.304
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.03	14.50	1.114	-	-	-0.08	0.298	0.332
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.01	14.50	1.119	-	-	0.18	0.302	0.338
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.06	14.50	1.107	-	-	0.03	0.430	0.476
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.03	14.50	1.114	-	-	0.11	0.412	0.459
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.01	14.50	1.119	-	-	-0.08	0.418	0.468
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.06	14.50	1.107	-	-	0.03	0.040	0.044
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.03	14.50	1.114	-	-	0.06	0.025	0.028
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.01	14.50	1.119	-	-	0.01	0.025	0.028
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.06	14.50	1.107	-	-	0.04	0.030	0.033
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.03	14.50	1.114	-	-	0.15	0.031	0.035
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.06	14.50	1.107	-	-	0.06	0.651	0.720
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.03	14.50	1.114	-	-	0.08	0.59	0.657
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI3 Simultaneous	633334	3500.01	1	14.01	14.50	1.119	-	-	-0.06	0.687	0.769
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.53	13.00	1.114	-	-	0.06	0.186	0.207
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.52	13.00	1.117	-	-	-0.07	0.141	0.157
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.50	13.00	1.122	-	-	0.15	0.151	0.169

	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.53	13.00	1.114	-	-	0.02	0.266	0.296
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.52	13.00	1.117	-	-	0.06	0.236	0.264
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.50	13.00	1.122	-	-	0.02	0.231	0.259
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.53	13.00	1.114	-	-	0.09	0.640	0.713
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.52	13.00	1.117	-	-	-0.12	0.498	0.556
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.50	13.00	1.122	-	-	0.11	0.511	0.573
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.53	13.00	1.114	-	-	0.13	0.159	0.177
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.52	13.00	1.117	-	-	0.09	0.180	0.201
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant 6	DSI3 Simultaneous	650000	3750	1	12.50	13.00	1.122	-	-	0.02	0.176	0.197
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.66	13.00	1.081	-	-	-0.17	0.184	0.199
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.60	13.00	1.096	-	-	0.02	0.213	0.234
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.61	13.00	1.094	-	-	-0.17	0.162	0.177
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.66	13.00	1.081	-	-	0.08	0.269	0.291
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.60	13.00	1.096	-	-	0.16	0.303	0.332
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.61	13.00	1.094	-	-	0.03	0.271	0.296
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.66	13.00	1.081	-	-	-0.08	0.585	0.633
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.60	13.00	1.096	-	-	0.05	0.660	0.724
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	2	12.60	13.00	1.096	-	-	0.06	0.649	0.712
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.61	13.00	1.094	-	-	-0.14	0.607	0.664
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.66	13.00	1.081	-	-	-0.14	0.052	0.056
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.60	13.00	1.096	-	-	0.02	0.079	0.087
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant 6	DSI3 Simultaneous	633334	3500.01	1	12.61	13.00	1.094	-	-	0.02	0.059	0.065
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.64	21.00	1.368	-	-	-0.17	0.192	0.263
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.61	21.00	1.377	-	-	-0.14	0.240	0.331
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.41	21.00	1.442	-	-	0.01	0.197	0.284
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.64	21.00	1.368	-	-	0.04	0.199	0.272
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.61	21.00	1.377	-	-	-0.01	0.245	0.337
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.41	21.00	1.442	-	-	0.01	0.205	0.296
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.64	21.00	1.368	-	-	0.14	0.434	0.594
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.61	21.00	1.377	-	-	-0.01	0.467	0.643
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.41	21.00	1.442	-	-	0.01	0.386	0.557
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.64	21.00	1.368	-	-	0.06	0.142	0.194
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 7	DSI3 Simultaneous	650000	3750	1	19.61	21.00	1.377	-	-	-0.06	0.155	0.213
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	1	19.60	21.00	1.380	-	-	-0.04	0.239	0.330
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	1	19.56	21.00	1.393	-	-	0.03	0.300	0.418
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	1	19.60	21.00	1.380	-	-	0.04	0.217	0.300
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	1	19.56	21.00	1.393	-	-	-0.02	0.345	0.481
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	1	19.60	21.00	1.380	-	-	-0.08	0.701	0.968
45	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	1	19.56	21.00	1.393	-	-	0.03	0.790	**1.101**
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	2	19.56	21.00	1.393	-	-	0.06	0.741	1.032
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	1	19.34	21.00	1.466	-	-	0.09	0.692	1.014
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	1	19.60	21.00	1.380	-	-	-0.02	0.083	0.115
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 7	DSI3 Simultaneous	633334	3500.01	1	19.56	21.00	1.393	-	-	0.05	0.088	0.123

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
WIFI/ Bluetooth																	
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 3+5	WWAN +non DBS	1	2412	1	14.16	16.00	1.528	100	1.000	0.03	0.038	0.058
46	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+5	WWAN +non DBS	1	2412	1	14.16	16.00	1.528	100	1.000	0.07	0.148	**0.226**
	WLAN2.4GHz	802.11b 1Mbps	Left Side	5mm	Ant 3+5	WWAN +non DBS	1	2412	1	14.16	16.00	1.528	100	1.000	0.09	0.005	0.008
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 3+5	WWAN +non DBS	1	2412	1	14.16	16.00	1.528	100	1.000	0.07	0.097	0.148
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 3+5	WWAN +non DBS	1	2412	1	14.16	16.00	1.528	100	1.000	0.05	0.065	0.099
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+5	WWAN + DBS	1	2412	1	10.96	12.50	1.426	100	1.000	0.06	0.073	0.104
	Bluetooth	1Mbps	Front	5mm	Ant 5	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.07	0.038	0.070
47	Bluetooth	1Mbps	Back	5mm	Ant 5	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.01	0.050	**0.092**
	Bluetooth	1Mbps	Left Side	5mm	Ant 5	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.03	0.005	0.009
	Bluetooth	1Mbps	Right Side	5mm	Ant 5	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.01	0.037	0.068
	Bluetooth	1Mbps	Top Side	5mm	Ant 5	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.09	0.015	0.028
	Bluetooth	1Mbps	Front	5mm	Ant 3	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.06	0.043	0.079
	Bluetooth	1Mbps	Back	5mm	Ant 3	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.03	0.048	0.088
	Bluetooth	1Mbps	Left Side	5mm	Ant 3	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.1	0.002	0.004
	Bluetooth	1Mbps	Right Side	5mm	Ant 3	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.07	0.018	0.033
	Bluetooth	1Mbps	Top Side	5mm	Ant 3	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.02	0.045	0.083
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+5	WWAN +non DBS	42	5210	1	14.77	16.50	1.489	86.31	1.159	0.07	0.135	0.233
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5	WWAN +non DBS	42	5210	1	14.77	16.50	1.489	86.31	1.159	0.05	0.120	0.207
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 4+5	WWAN +non DBS	42	5210	1	14.77	16.50	1.489	86.31	1.159	0.03	0.006	0.010
48	WLAN5.2GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 4+5	WWAN +non DBS	42	5210	1	14.77	16.50	1.489	86.31	1.159	0.18	0.218	**0.376**
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 4+5	WWAN +non DBS	42	5210	1	14.77	16.50	1.489	86.31	1.159	0.02	0.203	0.350
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 4+5	WWAN + DBS	42	5210	1	11.77	13.50	1.489	86.31	1.159	0.03	0.093	0.161
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+5	WWAN +non DBS	155	5775	1	13.31	15.00	1.476	86.31	1.159	0.04	0.133	0.227
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5	WWAN +non DBS	155	5775	1	13.31	15.00	1.476	86.31	1.159	0.05	0.102	0.174
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 4+5	WWAN +non DBS	155	5775	1	13.31	15.00	1.476	86.31	1.159	0.03	0.011	0.019
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 4+5	WWAN +non DBS	155	5775	1	13.31	15.00	1.476	86.31	1.159	0.09	0.052	0.089
49	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 4+5	WWAN +non DBS	155	5775	1	13.31	15.00	1.476	86.31	1.159	0.06	0.181	**0.310**
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 4+5	WWAN + DBS	155	5775	1	10.41	12.00	1.442	86.31	1.159	0.01	0.118	0.197

16.3 Body Worn Accessory SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	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	5mm	Ant 0	-	DSI 3	23095	707.5	1	23.27	24.00	1.183	-	-	-0.06	0.586	0.693
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 0	-	DSI 3	23095	707.5	1	22.15	23.00	1.216	-	-	0.03	0.356	0.433
50	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	23095	707.5	1	23.27	24.00	1.183	-	-	-0.07	0.786	**0.930**
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	23095	707.5	2	23.27	24.00	1.183	-	-	0.03	0.564	0.667
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 0	-	DSI 3	23095	707.5	1	22.15	23.00	1.216	-	-	0.03	0.471	0.573
	LTE Band 12	10M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	23095	707.5	1	22.14	23.00	1.219	-	-	0.05	0.758	0.924
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	23230	782	1	23.09	24.00	1.233	-	-	0.07	0.495	0.610
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 0	-	DSI 3	23230	782	1	22.13	23.00	1.222	-	-	0.14	0.291	0.356
51	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	23230	782	1	23.09	24.00	1.233	-	-	0.08	0.629	**0.776**
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 0	-	DSI 3	23230	782	1	22.13	23.00	1.222	-	-	0.05	0.377	0.461
835MHz																						
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 0	-	DSI 3	189	836.4	1	29.25	30.50	1.334	-	-	0.18	0.533	0.711
52	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	DSI 3	189	836.4	1	29.25	30.50	1.334	-	-	-0.02	0.687	**0.916**
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	DSI 3	128	824.2	1	29.19	30.50	1.352	-	-	0.03	0.666	0.900
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	DSI 3	251	848.8	1	29.16	30.50	1.361	-	-	0.07	0.670	0.912
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	DSI 3	4182	836.4	1	23.40	24.00	1.148	-	-	0.05	0.421	0.483
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4182	836.4	1	23.40	24.00	1.148	-	-	0.08	0.772	0.886
53	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4132	826.4	1	23.36	24.00	1.159	-	-	0.02	0.876	**1.015**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4132	826.4	2	23.36	24.00	1.159	-	-	0.03	0.694	0.804
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4233	846.6	1	23.31	24.00	1.172	-	-	0.08	0.790	0.926
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	26865	831.5	1	23.11	24.00	1.227	-	-	0.06	0.664	0.815
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	-	DSI 3	26865	831.5	1	21.95	23.00	1.274	-	-	0.04	0.426	0.543
	LTE Band 26	15M	QPSK	75	0	-	Front	5mm	Ant 0	-	DSI 3	26865	831.5	1	22.03	23.00	1.250	-	-	0.02	0.654	0.818
54	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	1	23.11	24.00	1.227	-	-	0.13	0.767	**0.941**
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	1	21.95	23.00	1.274	-	-	0.13	0.498	0.634
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	1	22.03	23.00	1.250	-	-	0.07	0.750	0.938
	LTE Band 5	10M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	20525	836.5	1	23.38	24.00	1.153	-	-	-0.09	0.479	0.553
	LTE Band 5	10M	QPSK	25	0	-	Front	5mm	Ant 1	-	DSI 3	20525	836.5	1	22.28	23.00	1.180	-	-	-0.02	0.366	0.432
55	LTE Band 5	10M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	20525	836.5	1	23.38	24.00	1.153	-	-	0.02	0.887	**1.023**
	LTE Band 5	10M	QPSK	25	0	-	Back	5mm	Ant 1	-	DSI 3	20525	836.5	1	22.28	23.00	1.180	-	-	0.06	0.862	1.017
	LTE Band 5	10M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	20525	836.5	1	22.19	23.00	1.205	-	-	0.06	0.845	1.018
	LTE Band 5	10M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3 Simultaneous	20525	836.5	1	22.61	23.50	1.227	-	-	-0.09	0.379	0.465
	LTE Band 5	10M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3 Simultaneous	20525	836.5	1	22.61	23.50	1.227	-	-	0.01	0.702	0.862
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	167300	836.5	1	23.78	24.00	1.052	-	-	0.05	0.418	0.440
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	167300	836.5	1	23.64	24.00	1.086	-	-	0.06	0.414	0.450
56	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	167300	836.5	1	23.78	24.00	1.052	-	-	0.05	1.000	**1.052**
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	167300	836.5	1	23.64	24.00	1.086	-	-	-0.07	0.918	0.997
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	167300	836.5	1	22.57	23.00	1.104	-	-	-0.17	0.648	0.715
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3 Simultaneous	167300	836.5	1	23.12	23.50	1.091	-	-	0.06	0.314	0.343
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3 Simultaneous	167300	836.5	1	23.18	23.50	1.076	-	-	0.16	0.759	0.817
1750MHz																						
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	DSI 3	1413	1732.6	1	17.30	17.90	1.148	-	-	0.03	0.387	0.444
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	1413	1732.6	1	17.30	17.90	1.148	-	-	-0.17	0.768	0.882
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	1312	1712.4	1	17.26	17.90	1.159	-	-	0.01	0.720	0.834
57	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	1513	1752.6	1	17.28	17.90	1.153	-	-	-0.07	0.863	**0.995**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	17mm	Ant 0	-	DSI 4	1413	1732.6	1	23.15	24.00	1.216	-	-	-0.09	0.810	0.985
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	17mm	Ant 0	-	DSI 4	1312	1712.4	1	23.11	24.00	1.227	-	-	0.03	0.792	0.972
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	17mm	Ant 0	-	DSI 4	1513	1752.6	1	23.07	24.00	1.239	-	-	0.02	0.802	0.994
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	25mm	Ant 0	-	DSI 4	1413	1732.6	1	23.15	24.00	1.216	-	-	-0.02	0.446	0.542

	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	132322	1745	1	16.24	17.30	1.276	-	-	-0.09	0.526	0.671
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	132322	1745	1	16.15	17.30	1.303	-	-	0.04	0.475	0.619
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	132322	1745	1	16.24	17.30	1.276	-	-	0.03	0.659	0.841
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	132072	1720	1	16.15	17.30	1.303	-	-	-0.04	0.649	0.846
58	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	132572	1770	1	16.22	17.30	1.282	-	-	-0.05	0.840	**1.077**
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	132322	1745	1	16.15	17.30	1.303	-	-	-0.12	0.610	0.795
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	DSI 3	132322	1745	1	16.18	17.30	1.294	-	-	0.07	0.614	0.795
	LTE Band 66	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	132322	1745	1	23.11	24.00	1.227	-	-	0.06	0.696	0.854
	LTE Band 66	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	132072	1720	1	22.85	24.00	1.303	-	-	0.08	0.586	0.764
	LTE Band 66	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	132572	1770	1	22.82	24.00	1.312	-	-	0.04	0.676	0.887
	LTE Band 66	20M	QPSK	1	0	-	Back	25mm	Ant 0	-	DSI 4	132322	1745	1	23.11	24.00	1.227	-	-	0.06	0.381	0.468
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	349000	1745	1	16.60	17.40	1.202	-	-	0.09	0.427	0.513
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	349000	1745	1	16.58	17.40	1.208	-	-	0.03	0.585	0.707
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	349000	1745	1	16.60	17.40	1.202	-	-	0.07	0.525	0.631
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	349000	1745	1	16.58	17.40	1.208	-	-	0.03	0.685	0.827
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	349000	1745	1	16.50	17.40	1.230	-	-	-0.03	0.719	0.885
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	17mm	Ant 0	-	DSI 4	349000	1745	1	23.48	24.00	1.127	-	-	0.03	0.458	0.516
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	25mm	Ant 0	-	DSI 4	349000	1745	1	23.48	24.00	1.127	-	-	-0.04	0.255	0.287
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	349000	1745	1	17.38	18.50	1.294	-	-	0.16	0.508	0.657
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	349000	1745	1	17.27	18.50	1.327	-	-	0.05	0.514	0.682
59	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	349000	1745	1	17.38	18.50	1.294	-	-	-0.04	0.916	**1.185**
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	349000	1745	1	17.27	18.50	1.327	-	-	-0.05	0.757	1.005
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	349000	1745	1	17.24	18.50	1.337	-	-	0.03	0.611	0.817
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	17mm	Ant 1	-	DSI 4	349000	1745	1	23.31	24.00	1.172	-	-	-0.01	0.293	0.343
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	25mm	Ant 1	-	DSI 4	349000	1745	1	23.31	24.00	1.172	-	-	-0.05	0.235	0.275
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3 Simultaneous	349000	1745	1	16.68	17.50	1.208	-	-	0.05	0.447	0.540
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3 Simultaneous	349000	1745	1	16.73	17.50	1.194	-	-	-0.09	0.796	0.950
1900MHz																						
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 0	-	DSI 3	661	1880	1	20.80	22.00	1.318	-	-	0.02	0.566	0.746
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	DSI 3	661	1880	1	20.80	22.00	1.318	-	-	0.03	0.844	1.113
60	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	DSI 3	512	1850.2	1	20.76	22.00	1.330	-	-	-0.05	0.869	**1.156**
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	DSI 3	810	1909.8	1	20.70	22.00	1.349	-	-	-0.01	0.764	1.031
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	17mm	Ant 0	-	DSI 4	661	1880	1	26.37	27.50	1.297	-	-	0.02	0.305	0.396
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	25mm	Ant 0	-	DSI 4	661	1880	1	26.37	27.50	1.297	-	-	0.03	0.169	0.219
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	DSI 3	9400	1880	1	17.26	18.00	1.186	-	-	-0.11	0.383	0.454
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	9400	1880	1	17.26	18.00	1.186	-	-	-0.05	0.795	0.943
61	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	9262	1852.4	1	17.25	18.00	1.189	-	-	-0.01	0.925	**1.099**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	9538	1907.6	1	17.17	18.00	1.211	-	-	0.18	0.691	0.837
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	17mm	Ant 0	-	DSI 4	9400	1880	1	23.22	24.00	1.197	-	-	-0.14	0.579	0.693
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	25mm	Ant 0	-	DSI 4	9400	1880	1	23.22	24.00	1.197	-	-	-0.11	0.337	0.403
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	26340	1880	1	16.30	17.40	1.288	-	-	0.15	0.731	0.942
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	26140	1860	1	16.24	17.40	1.306	-	-	-0.03	0.796	1.040
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	26590	1905	1	16.08	17.40	1.355	-	-	0.06	0.760	1.030
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	26340	1880	1	16.18	17.40	1.324	-	-	0.02	0.770	1.020
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	26140	1860	1	16.03	17.40	1.371	-	-	-0.03	0.764	1.047
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	26590	1905	1	15.88	17.40	1.419	-	-	0.06	0.750	1.064
	LTE Band 25	20M	QPSK	100	0	-	Front	5mm	Ant 0	-	DSI 3	26340	1880	1	16.08	17.40	1.355	-	-	-0.07	0.762	1.033
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	26340	1880	1	16.30	17.40	1.288	-	-	0.17	0.991	1.277
62	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	26140	1860	1	16.24	17.40	1.306	-	-	-0.18	1.030	**1.345**
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	DSI 3	26140	1860	1	16.24	17.40	1.306	-	-	-0.18	0.964	1.259
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	26140	1860	2	16.24	17.40	1.306	-	-	0.06	0.911	1.190
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	26590	1905	1	16.08	17.40	1.355	-	-	-0.08	0.944	1.279
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	26340	1880	1	16.18	17.40	1.324	-	-	0.03	0.905	1.199
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	26140	1860	1	16.03	17.40	1.371	-	-	0.15	0.871	1.194
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	26590	1905	1	15.88	17.40	1.419	-	-	-0.18	0.831	1.179

	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	DSI 3	26340	1880	1	16.08	17.40	1.355	-	-	0.09	0.840	1.138
	LTE Band 25	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	26340	1880	1	22.98	24.00	1.265	-	-	0.02	0.689	0.871
	LTE Band 25	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	26140	1860	1	22.83	24.00	1.309	-	-	0.06	0.667	0.873
	LTE Band 25	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	26590	1905	1	22.81	24.00	1.315	-	-	0.08	0.582	0.765
	LTE Band 25	20M	QPSK	1	0	-	Back	25mm	Ant 0	-	DSI 4	26340	1880	1	22.98	24.00	1.265	-	-	-0.07	0.304	0.384
2600MHz																						
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	21100	2535	1	17.63	18.70	1.279	-	-	-0.12	0.282	0.361
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	21100	2535	1	17.58	18.70	1.294	-	-	0.07	0.226	0.292
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	21100	2535	1	17.63	18.70	1.279	-	-	0.07	0.671	0.858
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	20850	2510	1	17.49	18.70	1.321	-	-	0.08	0.555	0.733
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	21350	2560	1	17.61	18.70	1.285	-	-	-0.07	0.831	1.068
	LTE Band 7C	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	21350+ 21152	2560+ 2540.2	1	17.58	18.70	1.294	-	-	-0.07	0.798	1.033
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	21100	2535	1	17.58	18.70	1.294	-	-	-0.08	0.542	0.701
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	DSI 3	21100	2535	1	17.47	18.70	1.327	-	-	0.17	0.562	0.746
	LTE Band 7	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	21100	2535	1	23.03	24.00	1.250	-	-	0.07	0.399	0.499
	LTE Band 7	20M	QPSK	1	0	-	Back	25mm	Ant 0	-	DSI 4	21100	2535	1	23.03	24.00	1.250	-	-	0.08	0.208	0.260
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	21100	2535	1	17.90	18.90	1.259	-	-	0.05	0.509	0.641
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	DSI 3	21100	2535	1	17.88	18.90	1.265	-	-	0.05	0.366	0.463
63	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	21100	2535	1	17.90	18.90	1.259	-	-	-0.09	0.952	**1.198**
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	20850	2510	1	17.82	18.90	1.282	-	-	0.17	0.675	0.866
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	21350	2560	1	17.76	18.90	1.300	-	-	-0.08	0.739	0.961
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	21100	2535	1	17.88	18.90	1.265	-	-	0.04	0.662	0.837
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	20850	2510	1	17.81	18.90	1.285	-	-	-0.17	0.551	0.708
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	21350	2560	1	17.70	18.90	1.318	-	-	-0.18	0.691	0.911
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	DSI 3	21100	2535	1	17.85	18.90	1.274	-	-	0.04	0.764	0.973
	LTE Band 7	20M	QPSK	1	0	-	Front	17mm	Ant 1	-	DSI 4	21100	2535	1	23.05	24.00	1.245	-	-	0.17	0.177	0.220
	LTE Band 7	20M	QPSK	1	0	-	Back	25mm	Ant 1	-	DSI 4	21100	2535	1	23.05	24.00	1.245	-	-	-0.08	0.155	0.193
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3 Simultaneous	21100	2535	1	16.89	17.80	1.233	-	-	0.05	0.280	0.345
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3 Simultaneous	21100	2535	1	16.89	17.80	1.233	-	-	-0.09	0.524	0.646
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	40620	2593	1	19.73	20.80	1.279	62.9	1.006	-0.06	0.391	0.503
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	40620	2593	1	19.68	20.80	1.294	62.9	1.006	0.05	0.246	0.320
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	40620	2593	1	19.73	20.80	1.279	62.9	1.006	-0.03	0.841	1.082
64	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	39750	2506	1	19.36	20.80	1.393	62.9	1.006	0.08	0.862	**1.208**
	LTE Band 41C	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	39750+ 39948	2506+ 2525.8	1	19.72	20.80	1.282	62.9	1.006	-0.01	0.811	1.046
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	39750	2506	2	19.36	20.80	1.393	62.9	1.006	0.02	0.730	1.023
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	DSI 3	39750	2506	1	19.36	20.80	1.393	62.9	1.006	0.01	0.855	1.198
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	40185	2549.5	1	19.52	20.80	1.343	62.9	1.006	0.08	0.841	1.136
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	41055	2636.5	1	19.70	20.80	1.288	62.9	1.006	0.08	0.857	1.111
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	41490	2680	1	19.68	20.80	1.294	62.9	1.006	0.05	0.801	1.043
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	40620	2593	1	19.68	20.80	1.294	62.9	1.006	-0.07	0.542	0.706
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	39750	2506	1	19.24	20.80	1.432	62.9	1.006	-0.02	0.624	0.899
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	40185	2549.5	1	19.51	20.80	1.346	62.9	1.006	-0.15	0.609	0.825
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	41055	2636.5	1	19.58	20.80	1.324	62.9	1.006	0.05	0.590	0.786
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	41490	2680	1	19.47	20.80	1.358	62.9	1.006	-0.06	0.542	0.741
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	DSI 3	40620	2593	1	19.68	20.80	1.294	62.9	1.006	0.07	0.546	0.711
	LTE Band 41	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	40620	2593	1	23.27	24.00	1.183	62.9	1.006	0.05	0.178	0.212
	LTE Band 41	20M	QPSK	1	0	-	Back	25mm	Ant 0	-	DSI 4	40620	2593	1	23.27	24.00	1.183	62.9	1.006	-0.07	0.098	0.117
	LTE Band 41_HPUE	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	39750	2506	1	21.51	22.40	1.227	42.9	1.009	0.08	0.401	0.497
	LTE Band 41_HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	39750	2506	1	21.51	22.40	1.227	42.9	1.009	0.08	0.877	1.086
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	507000	2535	1	17.35	18.00	1.161	-	-	-0.16	0.354	0.411
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	507000	2535	1	17.34	18.00	1.164	-	-	0.08	0.409	0.476
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	507000	2535	1	17.35	18.00	1.161	-	-	0.03	0.786	0.913
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	507000	2535	1	17.34	18.00	1.164	-	-	-0.03	0.949	1.105
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	507000	2535	1	17.30	18.00	1.175	-	-	-0.11	0.729	0.857
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	17mm	Ant 0	-	DSI 4	507000	2535	1	23.48	24.00	1.127	-	-	0.05	0.335	0.378

	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	25mm	Ant 0	-	DSI 4	507000	2535	1	23.48	24.00	1.127	-	-	0.09	0.141	0.159
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	507000	2535	1	17.77	19.00	1.327	-	-	0.07	0.586	0.778
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	507000	2535	1	17.73	19.00	1.340	-	-	0.02	0.485	0.650
65	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	507000	2535	1	17.77	19.00	1.327	-	-	-0.09	0.984	**1.306**
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	507000	2535	2	17.77	19.00	1.327	-	-	-0.01	0.903	1.199
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	Headset	DSI 3	507000	2535	1	17.77	19.00	1.327	-	-	0.05	0.977	1.297
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	507000	2535	1	17.73	19.00	1.340	-	-	-0.09	0.807	1.081
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	507000	2535	1	17.69	19.00	1.352	-	-	0.16	0.904	1.222
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	17mm	Ant 1	-	DSI 4	507000	2535	1	23.39	24.00	1.151	-	-	0.02	0.166	0.191
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	25mm	Ant 1	-	DSI 4	507000	2535	1	23.39	24.00	1.151	-	-	-0.09	0.137	0.158
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3 Simultaneous	507000	2535	1	16.89	18.00	1.291	-	-	0.07	0.309	0.399
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3 Simultaneous	507000	2535	1	16.89	18.00	1.291	-	-	0.09	0.518	0.669
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 0	-	DSI 3	518598	2592.99	1	17.22	18.00	1.197	-	-	0.14	0.432	0.517
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 0	-	DSI 3	518598	2592.99	1	17.18	18.00	1.208	-	-	0.05	0.362	0.437
66	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	-	DSI 3	518598	2592.99	1	17.22	18.00	1.197	-	-	0.09	0.967	**1.157**
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	-	DSI 3	518598	2592.99	1	17.18	18.00	1.208	-	-	0.15	0.918	1.109
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 0	-	DSI 3	518598	2592.99	1	17.17	18.00	1.211	-	-	-0.06	0.703	0.851
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 0	-	DSI 4	518598	2592.99	1	23.55	24.00	1.109	-	-	0.08	0.121	0.134
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	25mm	Ant 0	-	DSI 4	518598	2592.99	1	23.55	24.00	1.109	-	-	0.03	0.075	0.083

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	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)
	3500~3900MHZ																					
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	42590	3500	1	21.41	22.00	1.146	62.9	1.006	0.06	0.637	0.734
	LTE Band 42	20M	QPSK	1	0		Front	5mm	Ant 2		DSI 3	42190	3460	1	21.38	22.00	1.153	62.9	1.006	0.02	0.611	0.709
	LTE Band 42	20M	QPSK	1	0		Front	5mm	Ant 2		DSI 3	42990	3540	1	21.35	22.00	1.161	62.9	1.006	0.07	0.621	0.726
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	42590	3500	1	21.40	22.00	1.148	62.9	1.006	0.02	0.398	0.460
	LTE Band 42	20M	QPSK	100	0		Front	5mm	Ant 2		DSI 3	42590	3500	1	21.31	22.00	1.172	62.9	1.006	-0.03	0.305	0.360
67	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	42590	3500	1	21.41	22.00	1.146	62.9	1.006	-0.09	1.050	**1.210**
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	DSI 3	42590	3500	1	21.41	22.00	1.146	62.9	1.006	0.03	1.000	1.152
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	42190	3460	1	21.38	22.00	1.153	62.9	1.006	0.01	1.010	1.172
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	42990	3540	1	21.35	22.00	1.161	62.9	1.006	0.02	1.030	1.203
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	42590	3500	1	21.40	22.00	1.148	62.9	1.006	0.05	0.845	0.976
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	42190	3460	1	21.28	22.00	1.180	62.9	1.006	0.13	0.915	1.086
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	42990	3540	1	21.22	22.00	1.197	62.9	1.006	0.05	0.992	1.194
	LTE Band 42	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	DSI 3	42590	3500	1	21.31	22.00	1.172	62.9	1.006	-0.07	0.672	0.792
	LTE Band 42	20M	QPSK	1	0	-	Front	17mm	Ant 2	-	DSI 4	42590	3500	1	23.53	24.00	1.114	62.9	1.006	0.02	0.215	0.241
	LTE Band 42	20M	QPSK	1	0	-	Back	25mm	Ant 2	-	DSI 4	42190	3460	1	23.53	24.00	1.114	62.9	1.006	0.01	0.180	0.202
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3 Simultaneous	42590	3500	1	18.38	19.00	1.153	62.9	1.006	0.06	0.186	0.216
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3 Simultaneous	42590	3500	1	18.38	19.00	1.153	62.9	1.006	0.01	0.298	0.346
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	656000	3840	1	19.71	19.80	1.021	-	-	0.05	0.395	0.403
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	656000	3840	1	19.65	19.80	1.035	-	-	0.09	0.323	0.334
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	656000	3840	1	19.71	19.80	1.021	-	-	0.07	0.921	0.940
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	656000	3840	1	19.65	19.80	1.035	-	-	0.1	0.885	0.916
	FR1 n77 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	656000	3840	1	19.65	19.80	1.035	-	-	-0.16	0.696	0.720
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 2	-	DSI 4	656000	3840	1	23.51	24.00	1.119	-	-	0.09	0.191	0.214
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	25mm	Ant 2	-	DSI 4	656000	3840	1	23.51	24.00	1.119	-	-	0.07	0.235	0.263
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3 Simultaneous	656000	3840	1	16.05	16.80	1.189	-	-	0.05	0.263	0.313
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3 Simultaneous	656000	3840	1	16.05	16.80	1.189	-	-	0.07	0.613	0.729
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.68	19.80	1.028	-	-	-0.11	0.803	0.825
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.63	19.80	1.040	-	-	-0.14	0.818	0.851
	FR1 n77 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.62	19.80	1.042	-	-	0.06	0.581	0.606
68	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.68	19.80	1.028	-	-	-0.04	1.030	**1.059**
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	633334	3500.01	2	19.68	19.80	1.028	-	-	0.03	0.998	1.026

	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.63	19.80	1.040	-	-	-0.03	0.938	0.975
	FR1 n77 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.62	19.80	1.042	-	-	0.05	0.701	0.731
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 2	-	DSI 4	633334	3500.01	1	23.56	24.00	1.107	-	-	0.06	0.164	0.181
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	25mm	Ant 2	-	DSI 4	633334	3500.01	1	23.56	24.00	1.107	-	-	-0.04	0.107	0.118
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3 Simultaneous	633334	3500.01	1	15.93	16.80	1.222	-	-	-0.14	0.403	0.492
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3 Simultaneous	633334	3500.01	1	15.99	16.80	1.205	-	-	-0.04	0.507	0.611
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	650000	3750	1	19.67	20.00	1.079	-	-	0.1	0.652	0.703
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	650000	3750	1	19.64	20.00	1.086	-	-	0.07	0.460	0.500
69	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	650000	3750	1	19.67	20.00	1.079	-	-	0.02	1.050	**1.133**
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	650000	3750	2	19.67	20.00	1.079	-	-	0.02	0.987	1.065
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	650000	3750	1	19.64	20.00	1.086	-	-	0.07	0.948	1.030
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	650000	3750	1	19.57	20.00	1.104	-	-	0.02	0.819	0.904
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 2	-	DSI 4	650000	3750	1	26.57	27.00	1.104	-	-	0.1	0.321	0.354
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	25mm	Ant 2	-	DSI 4	650000	3750	1	26.57	27.00	1.104	-	-	0.07	0.341	0.376
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3 Simultaneous	650000	3750	1	16.14	17.00	1.219	-	-	0.1	0.268	0.327
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3 Simultaneous	650000	3750	1	16.14	17.00	1.219	-	-	0.02	0.424	0.517
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.76	20.00	1.057	-	-	0.09	0.825	0.872
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.71	20.00	1.069	-	-	0.02	0.851	0.910
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.69	20.00	1.074	-	-	0.09	0.729	0.783
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.76	20.00	1.057	-	-	-0.08	1.020	1.078
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.71	20.00	1.069	-	-	0.03	0.959	1.025
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	633334	3500.01	1	19.69	20.00	1.074	-	-	-0.13	0.884	0.949
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 2	-	DSI 4	633334	3500.01	1	26.57	27.00	1.104	-	-	0.09	0.272	0.300
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	25mm	Ant 2	-	DSI 4	633334	3500.01	1	26.57	27.00	1.104	-	-	0.02	0.171	0.189
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3 Simultaneous	633334	3500.01	1	15.89	17.00	1.291	-	-	0.02	0.334	0.431
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3 Simultaneous	633334	3500.01	1	15.98	17.00	1.265	-	-	-0.08	0.400	0.506
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3	650000	3750	1	17.50	18.00	1.122	-	-	0.03	0.690	0.774
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3	650000	3750	1	17.45	18.00	1.135	-	-	0.02	0.645	0.732
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3	650000	3750	1	17.48	18.00	1.127	-	-	0.01	0.505	0.569
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	650000	3750	1	17.50	18.00	1.122	-	-	-0.09	0.799	0.896
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	650000	3750	2	17.50	18.00	1.122	-	-	0.06	0.735	0.825
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	650000	3750	1	17.45	18.00	1.135	-	-	-0.05	0.639	0.725
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	650000	3750	1	17.48	18.00	1.127	-	-	0.06	0.571	0.644
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 4	-	DSI 4	650000	3750	1	25.66	26.00	1.081	-	-	0.03	0.068	0.074
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	25mm	Ant 4	-	DSI 4	650000	3750	1	25.66	26.00	1.081	-	-	0.02	0.061	0.066
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	-0.13	0.215	0.242
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3 Simultaneous	650000	3750	1	13.98	14.50	1.127	-	-	0.09	0.383	0.432
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3	633334	3500.01	1	17.56	18.00	1.107	-	-	0.04	0.533	0.590
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3	633334	3500.01	1	17.53	18.00	1.114	-	-	0.05	0.577	0.643
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3	633334	3500.01	1	17.46	18.00	1.132	-	-	0.06	0.584	0.661
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	633334	3500.01	1	17.56	18.00	1.107	-	-	0.01	1.020	1.129
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	633334	3500.01	2	17.56	18.00	1.107	-	-	0.03	1.000	1.107
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	633334	3500.01	1	17.53	18.00	1.114	-	-	0.01	0.799	0.890
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	633334	3500.01	1	17.46	18.00	1.132	-	-	0.05	0.810	0.917
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 4	-	DSI 4	633334	3500.01	1	25.71	26.00	1.069	-	-	0.04	0.119	0.127
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	25mm	Ant 4	-	DSI 4	633334	3500.01	1	25.71	26.00	1.069	-	-	0.05	0.096	0.103
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3 Simultaneous	633334	3500.01	1	14.01	14.50	1.119	-	-	0.18	0.302	0.338
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3 Simultaneous	633334	3500.01	1	14.06	14.50	1.107	-	-	0.03	0.430	0.476
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 6	-	DSI 3	650000	3750	1	17.55	18.00	1.109	-	-	0.09	0.536	0.595
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 6	-	DSI 3	650000	3750	1	17.54	18.00	1.112	-	-	0.05	0.406	0.451
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 6	-	DSI 3	650000	3750	1	17.51	18.00	1.119	-	-	-0.01	0.434	0.486
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 6	-	DSI 3	650000	3750	1	17.55	18.00	1.109	-	-	0.09	0.764	0.847
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 6	-	DSI 3	650000	3750	2	17.55	18.00	1.109	-	-	0.02	0.742	0.823
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 6	-	DSI 3	650000	3750	1	17.54	18.00	1.112	-	-	-0.02	0.678	0.754

	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 6	-	DSI 3	650000	3750	1	17.51	18.00	1.119	-	-	-0.05	0.666	0.746
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 6	-	DSI 4	650000	3750	1	25.55	26.00	1.109	-	-	0.09	0.115	0.128
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	25mm	Ant 6	-	DSI 4	650000	3750	1	25.55	26.00	1.109	-	-	0.05	0.083	0.092
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 6	-	DSI 3 Simultaneous	650000	3750	1	12.53	13.00	1.114	-	-	0.06	0.186	0.207
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 6	-	DSI 3 Simultaneous	650000	3750	1	12.53	13.00	1.114	-	-	0.02	0.266	0.296
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 6	-	DSI 3	633334	3500.01	1	17.53	18.00	1.114	-	-	0.07	0.570	0.635
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 6	-	DSI 3	633334	3500.01	1	17.52	18.00	1.117	-	-	0.02	0.659	0.736
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 6	-	DSI 3	633334	3500.01	1	17.49	18.00	1.125	-	-	0.07	0.500	0.562
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 6	-	DSI 3	633334	3500.01	1	17.53	18.00	1.114	-	-	0.02	0.784	0.874
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 6	-	DSI 3	633334	3500.01	1	17.52	18.00	1.117	-	-	-0.05	0.937	1.047
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 6	-	DSI 3	633334	3500.01	1	17.49	18.00	1.125	-	-	0.01	0.594	0.668
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 6	-	DSI 4	633334	3500.01	1	25.64	26.00	1.086	-	-	0.07	0.097	0.105
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	25mm	Ant 6	-	DSI 4	633334	3500.01	1	25.64	26.00	1.086	-	-	0.02	0.077	0.084
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 6	-	DSI 3 Simultaneous	633334	3500.01	1	12.60	13.00	1.096	-	-	0.02	0.213	0.234
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 6	-	DSI 3 Simultaneous	633334	3500.01	1	12.60	13.00	1.096	-	-	0.16	0.303	0.332
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	650000	3750	1	25.79	27.00	1.321	-	-	-0.17	0.586	0.774
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	650000	3750	1	25.71	27.00	1.346	-	-	-0.14	0.731	0.984
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	650000	3750	1	24.63	26.00	1.371	-	-	0.01	0.599	0.821
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	650000	3750	1	25.79	27.00	1.321	-	-	0.04	0.608	0.803
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	650000	3750	1	25.71	27.00	1.346	-	-	-0.01	0.748	1.007
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	650000	3750	2	25.71	27.00	1.346	-	-	0.02	0.685	0.922
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	650000	3750	1	24.63	26.00	1.371	-	-	0.01	0.623	0.854
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	633334	3500.01	1	25.81	27.00	1.315	-	-	-0.04	0.487	0.641
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	633334	3500.01	1	25.51	27.00	1.409	-	-	0.03	0.613	0.864
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	633334	3500.01	1	24.58	26.00	1.387	-	-	0.03	0.530	0.735
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	633334	3500.01	1	25.81	27.00	1.315	-	-	0.04	0.443	0.583
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	633334	3500.01	1	25.51	27.00	1.409	-	-	-0.02	0.704	0.992
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	633334	3500.01	1	24.58	26.00	1.387	-	-	0.09	0.588	0.815

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	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)
WIFI/ Bluetooth																		
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 3+5	-	Standalone	1	2412	1	20.76	22.50	1.493	100	1.000	0.03	0.195	0.291
70	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+5	-	Standalone	1	2412	1	20.76	22.50	1.493	100	1.000	-0.01	0.695	**1.037**
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+5	-	Standalone	6	2437	1	20.67	22.50	1.524	100	1.000	0.02	0.654	0.997
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+5	-	DBS Only	1	2412	1	17.11	19.00	1.545	100	1.000	0.07	0.439	0.678
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+5	-	WWAN+non DBS	1	2412	1	14.16	16.00	1.528	100	1.000	0.02	0.222	0.339
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+5	-	WWAN+DBS	1	2412	1	10.96	12.50	1.426	100	1.000	0.06	0.112	0.160
	WLAN2.4GHz	802.11b 1Mbps	Front	17mm	Ant 3+5	-	Full Power	1	2412	1	20.76	22.50	1.493	100	1.000	0.03	0.067	0.100
	WLAN2.4GHz	802.11b 1Mbps	Back	25mm	Ant 3+5	-	Full Power	1	2412	1	20.76	22.50	1.493	100	1.000	0.06	0.041	0.061
	Bluetooth	1Mbps	Front	5mm	Ant 5	-	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.07	0.038	0.070
71	Bluetooth	1Mbps	Back	5mm	Ant 5	-	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.01	0.050	**0.092**
	Bluetooth	1Mbps	Front	5mm	Ant 3	-	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.06	0.043	0.079
	Bluetooth	1Mbps	Back	5mm	Ant 3	-	Full Power	39	2441	1	11.00	12.50	1.413	76.81	1.302	0.03	0.048	0.088
72	WLAN 5.3GHz	802.11a 6Mbps	Front	5mm	Ant 4+5	-	Standalone	60	5300	1	19.80	21.50	1.479	89.93	1.112	-0.09	0.614	**1.010**
	WLAN 5.3GHz	802.11a 6Mbps	Front	5mm	Ant 4+5	-	Standalone	52	5260	1	19.79	21.50	1.483	89.93	1.112	0.03	0.608	1.002
	WLAN 5.3GHz	802.11a 6Mbps	Back	5mm	Ant 4+5	-	Standalone	60	5300	1	19.80	21.50	1.479	89.93	1.112	0.02	0.512	0.842
	WLAN 5.3GHz	802.11a 6Mbps	Back	5mm	Ant 4+5	-	Standalone	52	5260	1	19.79	21.50	1.483	89.93	1.112	0.06	0.502	0.828
	WLAN 5.3GHz	802.11ac-VHT40 MCS0	Front	5mm	Ant 4+5	-	DBS Only	54	5270	1	19.14	20.50	1.368	88.56	1.129	0.03	0.514	0.794
	WLAN 5.3GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+5	-	WWAN+non DBS	58	5290	1	15.73	17.50	1.503	86.31	1.159	0.02	0.228	0.397
	WLAN 5.3GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5	-	WWAN+non DBS	58	5290	1	15.73	17.50	1.503	86.31	1.159	0.03	0.150	0.261
	WLAN 5.3GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+5	-	WWAN+DBS	58	5290	1	12.77	14.50	1.489	86.31	1.159	0.01	0.111	0.192
	WLAN 5.3GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5	-	WWAN+DBS	58	5290	1	12.77	14.50	1.489	86.31	1.159	0.09	0.093	0.161
	WLAN 5.3GHz	802.11a 6Mbps	Front	17mm	Ant 4+5	-	Full Power	60	5300	1	19.80	21.50	1.479	89.93	1.112	0.01	0.133	0.219

	WLAN 5.3GHz	802.11a 6Mbps	Back	25mm	Ant 4+5	-	Full Power	60	5300	1	19.80	21.50	1.479	89.93	1.112	0.06	0.130	0.214
73	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Front	5mm	Ant 4+5	-	Standalone&DBS Only	142	5710	1	18.98	20.50	1.420	88.56	1.129	-0.07	0.376	**0.603**
	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Back	5mm	Ant 4+5	-	Standalone&DBS Only	142	5710	1	18.98	20.50	1.420	88.56	1.129	0.01	0.199	0.319
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+5	-	WWAN+non DBS	122	5610	1	16.75	18.50	1.496	86.31	1.159	0.05	0.228	0.395
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5	-	WWAN+non DBS	122	5610	1	16.75	18.50	1.496	86.31	1.159	0.08	0.121	0.210
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+5	-	WWAN+DBS	122	5610	1	13.80	15.50	1.479	86.31	1.159	0.03	0.112	0.192
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5	-	WWAN+DBS	122	5610	1	13.80	15.50	1.479	86.31	1.159	0.02	0.059	0.101
	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Front	17mm	Ant 4+5	-	Full Power	142	5710	1	18.98	20.50	1.420	88.56	1.129	0.02	0.121	0.194
	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Back	25mm	Ant 4+5	-	Full Power	142	5710	1	18.98	20.50	1.420	88.56	1.129	0.06	0.093	0.149
74	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Front	5mm	Ant 4+5	-	Standalone	159	5795	1	19.46	21.00	1.426	88.56	1.129	0.01	0.728	**1.172**
	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Front	5mm	Ant 4+5	-	Standalone	151	5755	1	19.31	21.00	1.477	88.56	1.129	0.03	0.685	1.142
	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Back	5mm	Ant 4+5	-	Standalone	159	5795	1	19.46	21.00	1.426	88.56	1.129	0.03	0.487	0.784
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+5	-	DBS Only	155	5775	1	16.26	17.50	1.330	86.31	1.159	0.06	0.516	0.796
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+5	-	WWAN+non DBS	155	5775	1	13.31	15.00	1.476	86.31	1.159	0.06	0.181	0.310
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5	-	WWAN+non DBS	155	5775	1	13.31	15.00	1.476	86.31	1.159	0.01	0.121	0.207
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+5	-	WWAN+DBS	155	5775	1	10.41	12.00	1.442	86.31	1.159	0.01	0.118	0.197
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+5	-	WWAN+DBS	155	5775	1	10.41	12	1.442	86.31	1.159	0.03	0.079	0.132
	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Front	5mm	Ant 4+5	-	Standalone	159	5795	2	19.46	21.00	1.426	88.56	1.129	0.02	0.704	1.134
	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Front	17mm	Ant 4+5	-	Full Power	159	5795	1	19.46	21.00	1.426	88.56	1.129	-0.09	0.140	0.225
	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Back	25mm	Ant 4+5	-	Full Power	159	5795	1	19.46	21.00	1.426	88.56	1.129	0.02	0.144	0.232

16.4 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)	Sample	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 0	DSI 6	1413	1732.6	1	20.43	21.40	1.250	-	-	-0.06	2.44	3.051
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	DSI 6	1312	1712.4	1	20.36	21.40	1.271	-	-	0.04	2.38	3.024
75	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	DSI 6	1513	1752.6	1	20.37	21.40	1.268	-	-	0.06	2.51	**3.182**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	1413	1732.6	1	20.43	21.40	1.250	-	-	-0.06	2.46	3.076
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	1312	1712.4	1	20.36	21.40	1.271	-	-	-0.14	2.44	3.100
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	1513	1752.6	1	20.37	21.40	1.268	-	-	0.08	2.24	2.840
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	1413	1732.6	1	20.43	21.40	1.250	-	-	-0.06	1.79	2.238
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	1312	1712.4	1	20.36	21.40	1.271	-	-	-0.1	1.68	2.135
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	1513	1752.6	1	20.37	21.40	1.268	-	-	0.09	1.52	1.927
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	11mm	Ant 0	DSI 4	1413	1732.6	1	23.15	24.00	1.216	-	-	-0.06	0.906	1.102
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	12mm	Ant 0	DSI 4	1413	1732.6	1	23.15	24.00	1.216	-	-	-0.14	0.993	1.208
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	14mm	Ant 0	DSI 4	1413	1732.6	1	23.15	24.00	1.216	-	-	0.08	1.090	1.326
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 0	DSI 6	132322	1745	1	20.45	21.50	1.274	-	-	0.04	2.13	2.713
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 0	DSI 6	132072	1720	1	20.36	21.50	1.300	-	-	-0.07	2.11	2.743
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 0	DSI 6	132572	1770	1	20.32	21.50	1.312	-	-	-0.08	2.35	3.084
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 0	DSI 6	132322	1745	1	20.42	21.50	1.282	-	-	0.02	1.85	2.372
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 0	DSI 6	132072	1720	1	20.22	21.50	1.343	-	-	0.03	1.78	2.390
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 0	DSI 6	132572	1770	1	20.28	21.50	1.324	-	-	0.01	1.72	2.278
	LTE Band 66	20M	QPSK	100	0	-	Front	0mm	Ant 0	DSI 6	132322	1745	1	20.35	21.50	1.303	-	-	-0.18	1.84	2.398
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	132322	1745	1	20.45	21.50	1.274	-	-	0.01	2.13	2.713
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	132072	1720	1	20.36	21.50	1.300	-	-	0.08	2.12	2.756
76	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	132572	1770	1	20.32	21.50	1.312	-	-	-0.03	2.44	**3.202**
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	132572	1770	2	20.32	21.50	1.312	-	-	0.02	1.36	1.785
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	132322	1745	1	20.42	21.50	1.282	-	-	0.04	1.64	2.103
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	132072	1720	1	20.22	21.50	1.343	-	-	0.02	1.50	2.014
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	132572	1770	1	20.28	21.50	1.324	-	-	0.13	1.59	2.106
	LTE Band 66	20M	QPSK	100	0	-	Back	0mm	Ant 0	DSI 6	132322	1745	1	20.35	21.50	1.303	-	-	-0.08	1.61	2.098
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	DSI 6	132322	1745	1	20.45	21.50	1.274	-	-	-0.18	0.820	1.044
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 0	DSI 6	132322	1745	1	20.42	21.50	1.282	-	-	0.01	0.700	0.898
	LTE Band 66	20M	QPSK	1	0	-	Front	11mm	Ant 0	DSI 4	132322	1745	1	23.11	24.00	1.227	-	-	-0.07	0.908	1.115
	LTE Band 66	20M	QPSK	1	0	-	Back	12mm	Ant 0	DSI 4	132322	1745	1	23.11	24.00	1.227	-	-	-0.08	0.911	1.118
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	14mm	Ant 0	DSI 4	132322	1745	1	23.11	24.00	1.227	-	-	0.02	0.926	1.137
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 0	DSI 6	349000	1745	1	20.62	21.40	1.197	-	-	-0.17	1.27	1.520
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant 0	DSI 6	349000	1745	1	20.58	21.40	1.208	-	-	0.03	1.70	2.053
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	0mm	Ant 0	DSI 6	349000	1745	1	20.55	21.40	1.216	-	-	-0.17	1.52	1.849
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 0	DSI 6	349000	1745	1	20.62	21.40	1.197	-	-	0.15	1.49	1.783
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 0	DSI 6	349000	1745	1	20.58	21.40	1.208	-	-	-0.04	2.40	2.899
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant 0	DSI 6	349000	1745	1	20.55	21.40	1.216	-	-	0.07	2.25	2.736
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 0	DSI 6	349000	1745	1	20.62	21.40	1.197	-	-	0.12	0.800	0.957
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 0	DSI 6	349000	1745	1	20.58	21.40	1.208	-	-	-0.11	0.682	0.824
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	11mm	Ant 0	DSI 4	349000	1745	1	23.48	24.00	1.127	-	-	-0.17	0.615	0.693
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	12mm	Ant 0	DSI 4	349000	1745	1	23.48	24.00	1.127	-	-	0.15	0.657	0.741
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	14mm	Ant 0	DSI 4	349000	1745	1	23.48	24.00	1.127	-	-	-0.04	0.625	0.704
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 1	DSI 6	349000	1745	1	21.35	22.10	1.189	-	-	-0.04	2.02	2.401
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant 1	DSI 6	349000	1745	1	21.22	22.10	1.225	-	-	-0.07	1.95	2.388
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	0mm	Ant 1	DSI 6	349000	1745	1	21.20	22.10	1.230	-	-	0.07	1.63	2.005
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	DSI 6	349000	1745	1	21.35	22.10	1.189	-	-	-0.07	1.91	2.270
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 1	DSI 6	349000	1745	1	21.22	22.10	1.225	-	-	0.05	1.98	2.425
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant 1	DSI 6	349000	1745	1	21.20	22.10	1.230	-	-	-0.06	1.09	1.341
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	0mm	Ant 1	DSI 6	349000	1745	1	21.35	22.10	1.189	-	-	0.08	1.39	1.652

	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	0mm	Ant 1	DSI 6	349000	1745	1	21.22	22.10	1.225	-	-	0.18	1.01	1.237
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	349000	1745	1	21.35	22.10	1.189	-	-	0.06	2.31	2.745
77	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	349000	1745	1	21.22	22.10	1.225	-	-	0.05	2.58	**3.160**
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	349000	1745	2	21.22	22.10	1.225	-	-	0.02	1.94	2.376
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	349000	1745	1	21.20	22.10	1.230	-	-	0.03	2.03	2.497
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6 Simultaneous	349000	1745	1	20.79	21.60	1.205	-	-	0.09	2.19	2.639
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	8mm	Ant 1	DSI 4	349000	1745	1	23.31	24.00	1.172	-	-	-0.19	0.622	0.729
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	14mm	Ant 1	DSI 4	349000	1745	1	23.31	24.00	1.172	-	-	0.09	0.467	0.547
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	9mm	Ant 1	DSI 4	349000	1745	1	23.31	24.00	1.172	-	-	-0.09	0.203	0.238
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	9mm	Ant 1	DSI 4	349000	1745	1	23.31	24.00	1.172	-	-	-0.1	0.943	1.105
1900MHz																					
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	0mm	Ant 0	DSI 6	661	1880	1	26.37	27.50	1.297	-	-	-0.11	1.35	1.751
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	0mm	Ant 0	DSI 6	661	1880	1	26.37	27.50	1.297	-	-	-0.17	1.59	2.063
78	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	0mm	Ant 0	DSI 6	512	1850.2	1	26.18	27.50	1.355	-	-	0.19	1.91	**2.588**
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	0mm	Ant 0	DSI 6	810	1909.8	1	26.23	27.50	1.340	-	-	0.05	1.51	2.023
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	0mm	Ant 0	DSI 6	661	1880	1	26.37	27.50	1.297	-	-	0.15	0.867	1.125
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	DSI 6	9400	1880	1	23.01	23.50	1.119	-	-	0.16	2.10	2.351
79	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	DSI 6	9262	1852.4	1	22.95	23.50	1.135	-	-	0.09	2.53	**2.872**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	DSI 6	9262	1852.4	2	22.95	23.50	1.135	-	-	0.01	2.36	2.679
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	DSI 6	9538	1907.6	1	22.97	23.50	1.130	-	-	0.06	1.69	1.909
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	9400	1880	1	23.01	23.50	1.119	-	-	-0.17	2.09	2.340
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	9262	1852.4	1	22.95	23.50	1.135	-	-	0.06	2.35	2.667
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	DSI 6	9538	1907.6	1	22.97	23.50	1.130	-	-	0.06	1.70	1.921
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	DSI 6	9400	1880	1	23.01	23.50	1.119	-	-	0.03	1.50	1.679
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	11mm	Ant 0	DSI 4	9400	1880	1	23.22	24.00	1.197	-	-	0.06	0.685	0.820
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	12mm	Ant 0	DSI 4	9400	1880	1	23.22	24.00	1.197	-	-	0.05	0.865	1.035
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	14mm	Ant 0	DSI 4	9400	1880	1	23.22	24.00	1.197	-	-	0.08	1.100	1.316
	LTE Band 25	20M	QPSK	1	0	-	Front	0mm	Ant 0	DSI 6	26340	1880	1	22.30	23.30	1.259	-	-	0.09	2.07	2.606
	LTE Band 25	20M	QPSK	1	0	-	Front	0mm	Ant 0	DSI 6	26140	1860	1	22.14	23.30	1.306	-	-	0.15	2.15	2.808
	LTE Band 25	20M	QPSK	1	0	-	Front	0mm	Ant 0	DSI 6	26590	1905	1	22.08	23.30	1.324	-	-	0.1	2.05	2.715
	LTE Band 25	20M	QPSK	50	0	-	Front	0mm	Ant 0	DSI 6	26340	1880	1	22.10	23.00	1.230	-	-	0.02	1.20	1.476
	LTE Band 25	20M	QPSK	100	0	-	Front	0mm	Ant 0	DSI 6	26340	1880	1	22.03	23.00	1.250	-	-	-0.17	1.16	1.450
	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	26340	1880	1	22.30	23.30	1.259	-	-	0.07	2.02	2.543
80	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	26140	1860	1	22.14	23.30	1.306	-	-	0.04	2.19	**2.861**
	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	26590	1905	1	22.08	23.30	1.324	-	-	0.04	2.08	2.755
	LTE Band 25	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	26340	1880	1	22.10	23.00	1.230	-	-	0.05	1.22	1.501
	LTE Band 25	20M	QPSK	100	0	-	Back	0mm	Ant 0	DSI 6	26340	1880	1	22.03	23.00	1.250	-	-	-0.09	1.27	1.588
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	DSI 6	26340	1880	1	22.30	23.30	1.259	-	-	0.04	1.23	1.548
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 0	DSI 6	26340	1880	1	22.10	23.00	1.230	-	-	-0.12	0.730	0.898
	LTE Band 25	20M	QPSK	1	0	-	Front	11mm	Ant 0	DSI 4	26340	1880	1	22.98	24.00	1.265	-	-	0.02	0.648	0.820
	LTE Band 25	20M	QPSK	1	0	-	Back	12mm	Ant 0	DSI 4	26340	1880	1	22.98	24.00	1.265	-	-	0.01	0.805	1.018
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	14mm	Ant 0	DSI 4	26340	1880	1	22.98	24.00	1.265	-	-	0.06	1.000	1.265
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	0mm	Ant 0	DSI 6	21100	2535	1	20.96	22.00	1.271	-	-	0.02	1.26	1.601
	LTE Band 7	20M	QPSK	50	0	-	Front	0mm	Ant 0	DSI 6	21100	2535	1	20.92	22.00	1.282	-	-	-0.18	1.02	1.308
81	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	21100	2535	1	20.96	22.00	1.271	-	-	0.06	2.40	**3.049**
	LTE Band 7C	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	21100+ 21298	2535+ 2554.8	1	20.74	22.00	1.337	-	-	0.04	2.19	2.927
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	20850	2510	1	20.81	22.00	1.315	-	-	0.04	2.26	2.972
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	21350	2560	1	20.89	22.00	1.291	-	-	0.03	2.30	2.970
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	21100	2535	1	20.92	22.00	1.282	-	-	0.09	1.84	2.359
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	20850	2510	1	20.63	22.00	1.371	-	-	0.06	1.81	2.481
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	21350	2560	1	20.81	22.00	1.315	-	-	0.03	1.64	2.157
	LTE Band 7	20M	QPSK	100	0	-	Back	0mm	Ant 0	DSI 6	21100	2535	1	20.90	22.00	1.288	-	-	0.04	1.86	2.396
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	DSI 6	21100	2535	1	20.96	22.00	1.271	-	-	-0.08	1.01	1.283
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 0	DSI 6	21100	2535	1	20.92	22.00	1.282	-	-	-0.02	0.830	1.064

	LTE Band 7	20M	QPSK	1	0	-	Front	11mm	Ant 0	DSI 4	21100	2535	1	23.03	24.00	1.250	-	-	0.02	0.328	0.410
	LTE Band 7	20M	QPSK	1	0	-	Back	12mm	Ant 0	DSI 4	21100	2535	1	23.03	24.00	1.250	-	-	0.01	0.410	0.513
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	14mm	Ant 0	DSI 4	21100	2535	1	23.03	24.00	1.250	-	-	0.06	0.399	0.499
	LTE Band 7	20M	QPSK	1	0	-	Front	0mm	Ant 1	DSI 6	21100	2535	1	19.00	20.10	1.288	-	-	-0.11	0.765	0.986
	LTE Band 7	20M	QPSK	50	0	-	Front	0mm	Ant 1	DSI 6	21100	2535	1	18.98	20.10	1.294	-	-	-0.03	0.782	1.012
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	21100	2535	1	19.00	20.10	1.288	-	-	0.05	0.761	0.980
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	21100	2535	1	18.98	20.10	1.294	-	-	0.1	0.606	0.784
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 6	21100	2535	1	19.00	20.10	1.288	-	-	0.08	2.13	2.744
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 6	20850	2510	1	18.94	20.10	1.306	-	-	0.02	2.21	2.887
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 6	21350	2560	1	18.99	20.10	1.291	-	-	0.08	2.36	3.047
	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 6	21100	2535	1	18.98	20.10	1.294	-	-	-0.15	1.62	2.097
	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 6	20850	2510	1	18.88	20.10	1.324	-	-	0.04	1.71	2.265
	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	DSI 6	21350	2560	1	18.91	20.10	1.315	-	-	0.04	1.61	2.118
	LTE Band 7	20M	QPSK	100	0	-	Top Side	0mm	Ant 1	DSI 6	21100	2535	1	18.95	20.10	1.303	-	-	-0.15	1.75	2.281
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	DSI 6 Simultaneous	21350	2560	1	18.39	19.60	1.321	-	-	0.06	2.12	2.801
	LTE Band 7	20M	QPSK	1	0	-	Front	8mm	Ant 1	DSI 4	21100	2535	1	23.05	24.00	1.245	-	-	0.06	0.416	0.518
	LTE Band 7	20M	QPSK	1	0	-	Back	14mm	Ant 1	DSI 4	21100	2535	1	23.05	24.00	1.245	-	-	0.08	0.276	0.343
	LTE Band 7	20M	QPSK	1	0	-	Top Side	9mm	Ant 1	DSI 4	21100	2535	1	23.05	24.00	1.245	-	-	-0.02	0.857	1.067
	LTE Band 41	20M	QPSK	1	0	-	Front	0mm	Ant 0	DSI 6	40620	2593	1	22.97	23.80	1.211	62.9	1.006	0.05	1.04	1.267
	LTE Band 41	20M	QPSK	50	0	-	Front	0mm	Ant 0	DSI 6	40620	2593	1	22.13	23.00	1.222	62.9	1.006	0.05	0.874	1.074
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	40620	2593	1	22.97	23.80	1.211	62.9	1.006	-0.05	1.69	2.058
82	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	39750	2506	1	22.63	23.80	1.309	62.9	1.006	0.03	2.51	**3.306**
	LTE Band 41C	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	39750+ 39948	2506+ 2525.8	1	22.83	23.80	1.250	62.9	1.006	0.03	2.33	2.931
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	40185	2549.5	1	22.80	23.80	1.259	62.9	1.006	-0.13	2.12	2.685
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	41055	2636.5	1	22.88	23.80	1.236	62.9	1.006	-0.13	1.78	2.213
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	41490	2680	1	22.81	23.80	1.256	62.9	1.006	0.05	1.48	1.870
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 0	DSI 6	40620	2593	1	22.13	23.00	1.222	62.9	1.006	-0.16	1.07	1.315
	LTE Band 41	20M	QPSK	100	0	-	Back	0mm	Ant 0	DSI 6	40620	2593	1	22.19	23.00	1.205	62.9	1.006	0.04	1.24	1.503
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	DSI 6	40620	2593	1	22.97	23.80	1.211	62.9	1.006	-0.08	0.870	1.060
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 0	DSI 6	40620	2593	1	22.13	23.00	1.222	62.9	1.006	-0.15	0.542	0.666
	LTE Band 41_HPUE	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	39750	2506	1	24.45	25.40	1.245	42.9	1.009	-0.03	2.35	2.951
	LTE Band 41	20M	QPSK	1	0	-	Front	11mm	Ant 0	DSI 4	40620	2593	1	23.27	24.00	1.183	62.9	1.006	-0.03	0.220	0.262
	LTE Band 41	20M	QPSK	1	0	-	Back	12mm	Ant 0	DSI 4	40620	2593	1	23.27	24.00	1.183	62.9	1.006	-0.06	0.240	0.286
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	14mm	Ant 0	DSI 4	40620	2593	1	23.27	24.00	1.183	62.9	1.006	-0.04	0.238	0.283
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 0	DSI 6	507000	2535	1	21.15	22.40	1.334	-	-	0.06	1.47	1.960
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant 0	DSI 6	507000	2535	1	21.12	22.40	1.343	-	-	-0.09	1.34	1.799
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Front	0mm	Ant 0	DSI 6	507000	2535	1	21.11	22.40	1.346	-	-	0.05	1.32	1.777
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 0	DSI 6	507000	2535	1	21.15	22.40	1.334	-	-	0.06	1.97	2.627
83	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 0	DSI 6	507000	2535	1	21.12	22.40	1.343	-	-	-0.09	2.35	**3.155**
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 0	DSI 6	507000	2535	2	21.12	22.40	1.343	-	-	0.06	2.22	2.981
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant 0	DSI 6	507000	2535	1	21.11	22.40	1.346	-	-	0.05	1.67	2.248
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 0	DSI 6	507000	2535	1	21.15	22.40	1.334	-	-	0.06	0.938	1.251
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 0	DSI 6	507000	2535	1	21.12	22.40	1.343	-	-	-0.09	0.872	1.171
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant 0	DSI 6	507000	2535	1	21.11	22.40	1.346	-	-	0.05	0.987	1.328
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	11mm	Ant 0	DSI 4	507000	2535	1	23.48	24.00	1.127	-	-	0.06	0.313	0.353
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	12mm	Ant 0	DSI 4	507000	2535	1	23.48	24.00	1.127	-	-	0.06	0.312	0.352
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	14mm	Ant 0	DSI 4	507000	2535	1	23.48	24.00	1.127	-	-	0.06	0.336	0.379
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 1	DSI 6	507000	2535	1	19.24	20.20	1.247	-	-	0.02	1.26	1.572
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant 1	DSI 6	507000	2535	1	19.21	20.20	1.256	-	-	-0.02	1.05	1.319
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	DSI 6	507000	2535	1	19.24	20.20	1.247	-	-	0.16	0.800	0.998
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 1	DSI 6	507000	2535	1	19.21	20.20	1.256	-	-	0.02	0.760	0.955
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	507000	2535	1	19.24	20.20	1.247	-	-	0.06	2.47	3.081
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	507000	2535	2	19.24	20.20	1.247	-	-	-0.01	1.69	2.108
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	507000	2535	1	19.21	20.20	1.256	-	-	0.09	1.96	2.462
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	507000	2535	1	19.19	20.20	1.262	-	-	-0.19	1.88	2.372

	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6 Simultaneous	507000	2535	1	18.73	19.70	1.250	-	-	0.06	2.02	2.526
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	8mm	Ant 1	DSI 4	507000	2535	1	23.39	24.00	1.151	-	-	0.03	0.311	0.358
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	14mm	Ant 1	DSI 4	507000	2535	1	23.39	24.00	1.151	-	-	0.06	0.239	0.275
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	9mm	Ant 1	DSI 4	507000	2535	1	23.39	24.00	1.151	-	-	0.04	0.720	0.829
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 0	DSI 6	518598	2592.99	1	21.25	22.50	1.334	-	-	0.01	1.23	1.640
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 0	DSI 6	518598	2592.99	1	21.23	22.50	1.340	-	-	-0.11	0.860	1.152
84	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 0	DSI 6	518598	2592.99	1	21.25	22.50	1.334	-	-	0.01	2.36	**3.147**
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 0	DSI 6	518598	2592.99	1	21.23	22.50	1.340	-	-	0.09	1.97	2.639
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 0	DSI 6	518598	2592.99	1	21.19	22.50	1.352	-	-	-0.14	1.48	2.001
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	0mm	Ant 0	DSI 6	518598	2592.99	1	21.25	22.50	1.334	-	-	-0.03	0.990	1.320
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	0mm	Ant 0	DSI 6	518598	2592.99	1	21.23	22.50	1.340	-	-	0.03	0.800	1.072
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	11mm	Ant 0	DSI 4	518598	2592.99	1	23.55	24.00	1.109	-	-	0.02	0.289	0.321
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	12mm	Ant 0	DSI 4	518598	2592.99	1	23.55	24.00	1.109	-	-	0.03	0.263	0.292
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	14mm	Ant 0	DSI 4	518598	2592.99	1	23.55	24.00	1.109	-	-	-0.04	0.258	0.286

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
3500~3900MHZ																					
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 6	42590	3500	1	23.53	24.00	1.114	62.9	1.006	0.02	1.37	1.536
	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 2	DSI 6	42590	3500	1	22.55	23.00	1.109	62.9	1.006	0.08	0.90	1.009
	LTE Band 42	20M	QPSK	1	0	-	Left Side	0mm	Ant 2	DSI 6	42590	3500	1	23.53	24.00	1.114	62.9	1.006	-0.15	2.07	2.320
85	LTE Band 42	20M	QPSK	1	0	-	Left Side	0mm	Ant 2	DSI 6	42190	3460	1	23.49	24.00	1.125	62.9	1.006	0.07	2.13	**2.410**
	LTE Band 42	20M	QPSK	1	0	-	Left Side	0mm	Ant 2	DSI 6	42990	3540	1	23.48	24.00	1.127	62.9	1.006	0.07	2.06	2.336
	LTE Band 42	20M	QPSK	50	0	-	Left Side	0mm	Ant 2	DSI 6	42590	3500	1	22.55	23.00	1.109	62.9	1.006	0.14	1.33	1.484
	LTE Band 42	20M	QPSK	100	0	-	Left Side	0mm	Ant 2	DSI 6	42590	3500	1	22.50	23.00	1.122	62.9	1.006	0.08	1.20	1.355
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 6	656000	3840	1	22.14	22.50	1.086	-	-	-0.03	1.44	1.562
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 6	656000	3840	1	22.11	22.50	1.094	-	-	-0.12	0.975	1.067
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	656000	3840	1	22.14	22.50	1.086	-	-	0.08	1.46	1.589
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	656000	3840	1	22.11	22.50	1.094	-	-	0.17	1.27	1.384
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	656000	3840	1	22.14	22.50	1.086	-	-	0.06	1.86	2.021
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	656000	3840	2	22.14	22.50	1.086	-	-	0.03	1.77	1.923
	FR1 n77 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	656000	3840	1	22.11	22.50	1.094	-	-	0.07	1.44	1.573
	FR1 n77 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	656000	3840	1	22.09	22.50	1.099	-	-	0.06	1.56	1.714
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6 Simultaneous	656000	3840	1	21.75	22.00	1.059	-	-	0.01	1.21	1.282
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	3mm	Ant 2	DSI 4	656000	3840	1	23.51	24.00	1.119	-	-	0.07	0.323	0.362
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	8mm	Ant 2	DSI 4	656000	3840	1	23.51	24.00	1.119	-	-	0.1	0.282	0.316
	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 4	656000	3840	1	23.51	24.00	1.119	-	-	0.01	0.809	0.906
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 6	633334	3500.01	1	22.19	22.50	1.074	-	-	0.05	1.68	1.804
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 6	633334	3500.01	1	22.16	22.50	1.081	-	-	-0.08	1.67	1.806
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	633334	3500.01	1	22.19	22.50	1.074	-	-	0.05	1.40	1.504
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	633334	3500.01	1	22.16	22.50	1.081	-	-	0.08	1.42	1.536
86	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	633334	3500.01	1	22.19	22.50	1.074	-	-	0.01	2.56	**2.749**
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	633334	3500.01	2	22.19	22.50	1.074	-	-	0.05	2.43	2.610
	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	633334	3500.01	1	22.16	22.50	1.081	-	-	0.02	2.31	2.498
	FR1 n77 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	633334	3500.01	1	22.15	22.50	1.084	-	-	0.04	1.80	1.951
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6 Simultaneous	633334	3500.01	1	21.69	22.00	1.074	-	-	0.09	2.26	2.427
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	3mm	Ant 2	DSI 4	633334	3500.01	1	23.56	24.00	1.107	-	-	0.07	1.15	1.273
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	8mm	Ant 2	DSI 4	633334	3500.01	1	23.56	24.00	1.107	-	-	0.05	0.63	0.700
	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 4	633334	3500.01	1	23.56	24.00	1.107	-	-	-0.08	1.32	1.461
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 6	650000	3750	1	22.12	22.50	1.091	-	-	-0.08	1.42	1.550
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 6	650000	3750	1	22.08	22.50	1.102	-	-	-0.08	1.28	1.410
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	650000	3750	1	22.12	22.50	1.091	-	-	-0.05	1.42	1.550
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	650000	3750	1	22.08	22.50	1.102	-	-	0.12	1.20	1.322
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	650000	3750	1	22.12	22.50	1.091	-	-	0.01	1.73	1.888
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	650000	3750	2	22.12	22.50	1.091	-	-	0.03	1.61	1.757

	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	650000	3750	1	22.08	22.50	1.102	-	-	0.1	1.44	1.586
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6 Simultaneous	650000	3750	1	21.61	22.00	1.094	-	-	0.01	1.59	1.739
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	3mm	Ant 2	DSI 4	650000	3750	1	26.57	27.00	1.104	-	-	0.02	1.56	1.722
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	8mm	Ant 2	DSI 4	650000	3750	1	26.57	27.00	1.104	-	-	0.07	1.16	1.281
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 4	650000	3750	1	26.57	27.00	1.104	-	-	0.18	1.65	1.822
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 6	633334	3500.01	1	22.22	22.50	1.067	-	-	0.08	1.90	2.027
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 6	633334	3500.01	1	22.17	22.50	1.079	-	-	0.06	1.85	1.996
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 2	DSI 6	633334	3500.01	1	22.12	22.50	1.091	-	-	0.01	1.77	1.932
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	633334	3500.01	1	22.22	22.50	1.067	-	-	0.06	1.46	1.557
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 2	DSI 6	633334	3500.01	1	22.17	22.50	1.079	-	-	0.15	1.43	1.543
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	633334	3500.01	1	22.22	22.50	1.067	-	-	0.04	2.54	2.709
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	633334	3500.01	1	22.17	22.50	1.079	-	-	0.05	2.36	2.546
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	633334	3500.01	1	22.12	22.50	1.091	-	-	0.18	1.95	2.128
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6 Simultaneous	633334	3500.01	1	21.59	22.00	1.099	-	-	0.04	2.25	2.473
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	3mm	Ant 2	DSI 4	633334	3500.01	1	26.57	27.00	1.104	-	-	0.08	2.21	2.440
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	3mm	Ant 2	DSI 4	633334	3500.01	1	26.24	27.00	1.191	-	-	0.05	2.12	2.525
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	3mm	Ant 2	DSI 4	633334	3500.01	1	25.18	26.00	1.208	-	-	-0.03	2.08	2.512
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	8mm	Ant 2	DSI 4	633334	3500.01	1	26.57	27.00	1.104	-	-	0.06	0.92	1.017
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 4	633334	3500.01	1	26.57	27.00	1.104	-	-	0.06	2.41	2.661
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 4	633334	3500.01	1	26.24	27.00	1.191	-	-	0.05	2.15	2.561
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 4	633334	3500.01	1	25.18	26.00	1.208	-	-	-0.02	2.21	2.669
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 4	DSI 6	650000	3750	1	20.10	20.50	1.096	-	-	0.14	1.91	2.099
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 4	DSI 6	650000	3750	1	20.09	20.50	1.099	-	-	-0.18	1.90	2.091
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 4	DSI 6	650000	3750	1	20.06	20.50	1.107	-	-	-0.08	1.84	2.031
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 4	DSI 6	650000	3750	1	20.10	20.50	1.096	-	-	0.02	1.04	1.143
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 4	DSI 6	650000	3750	1	20.09	20.50	1.099	-	-	0.08	0.893	0.981
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 4	DSI 6	650000	3750	1	20.06	20.50	1.107	-	-	0.07	0.898	0.994
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	650000	3750	1	20.10	20.50	1.096	-	-	0.02	2.09	2.287
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	650000	3750	1	20.09	20.50	1.099	-	-	-0.09	2.28	2.506
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	650000	3750	2	20.09	20.50	1.099	-	-	0.03	2.16	2.374
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	650000	3750	1	20.06	20.50	1.107	-	-	0.13	1.85	2.048
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6 Simultaneous	650000	3750	1	19.56	20.00	1.107	-	-	0.01	2.03	2.246
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 4	DSI 4	650000	3750	1	25.66	26.00	1.081	-	-	0.07	0.271	0.293
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	11mm	Ant 4	DSI 4	650000	3750	1	25.66	26.00	1.081	-	-	0.02	0.605	0.654
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	9mm	Ant 4	DSI 4	650000	3750	1	25.66	26.00	1.081	-	-	-0.09	1.19	1.287
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 4	DSI 6	633334	3500.01	1	20.10	20.50	1.096	-	-	-0.15	2.27	2.489
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 4	DSI 6	633334	3500.01	1	20.10	20.50	1.096	-	-	0.03	2.00	2.189
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 4	DSI 6	633334	3500.01	1	20.09	20.50	1.099	-	-	0.06	2.14	2.349
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 4	DSI 6	633334	3500.01	1	20.10	20.50	1.096	-	-	0.09	1.30	1.425
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 4	DSI 6	633334	3500.01	1	20.10	20.50	1.096	-	-	-0.07	1.24	1.361
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 4	DSI 6	633334	3500.01	1	20.09	20.50	1.099	-	-	0.18	1.28	1.407
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	633334	3500.01	1	20.10	20.50	1.096	-	-	0.09	2.40	2.632
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	633334	3500.01	2	20.10	20.50	1.096	-	-	0.02	1.21	1.327
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	633334	3500.01	1	20.10	20.50	1.096	-	-	0.05	2.29	2.511
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	633334	3500.01	1	20.09	20.50	1.099	-	-	0.02	2.18	2.396
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6 Simultaneous	633334	3500.01	1	19.60	20.00	1.096	-	-	0.01	2.07	2.270
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 4	DSI 4	633334	3500.01	1	25.71	26.00	1.069	-	-	0.04	0.439	0.469
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	11mm	Ant 4	DSI 4	633334	3500.01	1	25.71	26.00	1.069	-	-	0.15	0.874	0.934
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	9mm	Ant 4	DSI 4	633334	3500.01	1	25.71	26.00	1.069	-	-	0.06	1.59	1.700
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	9mm	Ant 4	DSI 4	633334	3500.01	1	25.68	26.00	1.076	-	-	0.03	1.51	1.625
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	9mm	Ant 4	DSI 4	633334	3500.01	1	25.65	26.00	1.084	-	-	-0.02	1.48	1.604
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 6	DSI 6	650000	3750	1	18.06	18.50	1.107	-	-	-0.18	0.686	0.759
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 6	DSI 6	650000	3750	1	18.05	18.50	1.109	-	-	-0.15	0.690	0.765
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 6	DSI 6	650000	3750	1	18.04	18.50	1.112	-	-	0.04	0.668	0.743
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 6	DSI 6	650000	3750	1	18.06	18.50	1.107	-	-	0.04	0.520	0.575

	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 6	DSI 6	650000	3750	1	18.05	18.50	1.109	-	-	-0.12	0.522	0.579
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 6	DSI 6	650000	3750	1	18.04	18.50	1.112	-	-	0.08	0.465	0.517
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 6	DSI 6	650000	3750	1	18.06	18.50	1.107	-	-	0.01	1.57	1.737
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 6	DSI 6	650000	3750	2	18.06	18.50	1.107	-	-	0.01	1.51	1.671
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 6	DSI 6	650000	3750	1	18.05	18.50	1.109	-	-	0.06	1.33	1.471
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	0mm	Ant 6	DSI 6	650000	3750	1	18.04	18.50	1.112	-	-	0.09	1.37	1.523
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DSI 6	650000	3750	1	18.06	18.50	1.107	-	-	-0.16	0.456	0.505
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DSI 6	650000	3750	1	18.05	18.50	1.109	-	-	-0.01	0.447	0.496
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	0mm	Ant 6	DSI 6	650000	3750	1	18.04	18.50	1.112	-	-	-0.03	0.503	0.559
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 6	DSI 6	633334	3500.01	1	18.10	18.50	1.096	-	-	0.06	0.793	0.870
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 6	DSI 6	633334	3500.01	1	18.07	18.50	1.104	-	-	-0.05	0.924	1.020
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 6	DSI 6	633334	3500.01	1	18.05	18.50	1.109	-	-	-0.1	0.000	0.000
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 6	DSI 6	633334	3500.01	1	18.10	18.50	1.096	-	-	-0.16	0.566	0.621
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 6	DSI 6	633334	3500.01	1	18.07	18.50	1.104	-	-	0.03	0.671	0.741
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 6	DSI 6	633334	3500.01	1	18.05	18.50	1.109	-	-	0.02	0.562	0.623
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 6	DSI 6	633334	3500.01	1	18.10	18.50	1.096	-	-	-0.05	1.82	1.994
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 6	DSI 6	633334	3500.01	1	18.07	18.50	1.104	-	-	0.03	2.11	2.330
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 6	DSI 6	633334	3500.01	2	18.07	18.50	1.104	-	-	0.06	1.81	1.998
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	0mm	Ant 6	DSI 6	633334	3500.01	1	18.05	18.50	1.109	-	-	-0.01	1.75	1.937
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 7	DSI 6	650000	3750	1	19.64	21.00	1.368	-	-	0.01	0.580	0.793
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 7	DSI 6	650000	3750	1	19.61	21.00	1.377	-	-	0.14	0.739	1.018
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 7	DSI 6	650000	3750	1	19.41	21.00	1.442	-	-	0.07	0.635	0.916
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 6	650000	3750	1	19.64	21.00	1.368	-	-	0.01	0.744	1.018
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 6	650000	3750	1	19.61	21.00	1.377	-	-	0.06	0.817	1.125
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 6	650000	3750	1	19.41	21.00	1.442	-	-	0.03	0.705	1.017
	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI 6	650000	3750	1	19.64	21.00	1.368	-	-	0.14	1.550	2.120
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI 6	650000	3750	1	19.61	21.00	1.377	-	-	0.08	1.860	2.562
	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI 6	650000	3750	2	19.61	21.00	1.377	-	-	0.05	1.740	2.396
	FR1 n78 Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI 6	650000	3750	1	19.41	21.00	1.442	-	-	0.01	1.490	2.149
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 7	DSI 6	633334	3500.01	1	19.60	21.00	1.380	-	-	0.02	0.87	1.201
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 7	DSI 6	633334	3500.01	1	19.56	21.00	1.393	-	-	-0.17	0.81	1.127
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 7	DSI 6	633334	3500.01	1	19.34	21.00	1.466	-	-	0.08	0.82	1.200
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 6	633334	3500.01	1	19.60	21.00	1.380	-	-	0.16	1.11	1.532
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 6	633334	3500.01	1	19.56	21.00	1.393	-	-	0.03	1.12	1.560
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 7	DSI 6	633334	3500.01	1	19.34	21.00	1.466	-	-	-0.08	1.14	1.671
	FR1 n78 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI 6	633334	3500.01	1	19.60	21.00	1.380	-	-	-0.08	1.95	2.692
87	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI 6	633334	3500.01	1	19.56	21.00	1.393	-	-	0.03	2.12	**2.953**
	FR1 n78 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI 6	633334	3500.01	2	19.56	21.00	1.393	-	-	0.02	1.87	2.605
	FR1 n78 Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 7	DSI 6	633334	3500.01	1	19.34	21.00	1.466	-	-	0.09	1.79	2.623

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
WIFI/ Bluetooth																	
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 4+5	Standalone&DBS Only	60	5300	1	19.80	21.50	1.479	89.93	1.112	0.04	0.620	1.020
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 4+5	Standalone&DBS Only	60	5300	1	19.80	21.50	1.479	89.93	1.112	0.06	0.287	0.472
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+5	Standalone&DBS Only	60	5300	1	19.80	21.50	1.479	89.93	1.112	0.02	0.042	0.069
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+5	Standalone&DBS Only	60	5300	1	19.80	21.50	1.479	89.93	1.112	0.01	0.487	0.801
88	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+5	Standalone&DBS Only	60	5300	1	19.80	21.50	1.479	89.93	1.112	0.05	0.702	**1.155**
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+5	Standalone&DBS Only	60	5300	2	19.80	21.50	1.479	89.93	1.112	0.02	0.687	1.130
	WLAN5.3GHz	802.11ac-VHT40 MCS0	Top Side	0mm	Ant 4+5	WWAN +non DBS& WWAN+DBS	54	5270	1	18.14	19.50	1.368	88.56	1.129	0.11	0.509	0.786
	WLAN5.3GHz	802.11a 6Mbps	Top Side	9mm	Ant 4+5	Full Power	60	5300	1	19.80	21.50	1.479	89.93	1.112	0.02	0.227	0.373
	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Front	0mm	Ant 4+5	Standalone&DBS Only	142	5710	1	18.98	20.50	1.420	88.56	1.129	0.05	0.646	1.035
	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Back	0mm	Ant 4+5	Standalone&DBS Only	142	5710	1	18.98	20.50	1.420	88.56	1.129	0.09	0.304	0.487
	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Left Side	0mm	Ant 4+5	Standalone&DBS Only	142	5710	1	18.98	20.50	1.420	88.56	1.129	0.07	0.052	0.083
	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Right Side	0mm	Ant 4+5	Standalone&DBS Only	142	5710	1	18.98	20.50	1.420	88.56	1.129	0.02	0.310	0.497
89	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Top Side	0mm	Ant 4+5	Standalone&DBS Only	142	5710	1	18.98	20.50	1.420	88.56	1.129	0.09	0.991	**1.588**
	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Top Side	0mm	Ant 4+5	Standalone&DBS Only	142	5710	2	18.98	20.50	1.420	88.56	1.129	0.05	0.864	1.385
	WLAN 5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+5	WWAN +non DBS& WWAN+DBS	122	5610	1	14.82	16.50	1.472	86.31	1.159	0.02	0.431	0.735
	WLAN 5.5GHz	802.11ac-VHT40 MCS0	Top Side	9mm	Ant 4+5	Full Power	142	5710	1	18.98	20.50	1.420	88.56	1.129	0.09	0.133	0.213
90	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Top Side	0mm	Ant 4+5	Standalone	159	5795	1	19.46	21.00	1.426	88.56	1.129	0.03	1.530	**2.464**
	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Top Side	0mm	Ant 4+5	Standalone	159	5795	2	19.46	21.00	1.426	88.56	1.129	0.06	1.350	2.174
	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Top Side	0mm	Ant 4+5	Standalone	151	5755	1	19.31	21.00	1.477	88.56	1.129	0.11	1.440	2.401
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+5	DBS Only	155	5775	1	17.16	19.00	1.528	86.31	1.159	0.02	0.862	1.526
	WLAN 5.8GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+5	WWAN +non DBS& WWAN+DBS	155	5775	1	14.31	16.00	1.476	86.31	1.159	0.02	0.384	0.657
	WLAN 5.8GHz	802.11ac-VHT40 MCS0	Top Side	9mm	Ant 4+5	Full Power	159	5795	1	19.46	21.00	1.426	88.56	1.129	0.03	0.209	0.337

16.5 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)	Sample	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 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	507000	2535	1	16.41	17.30	1.227	-	-	0.17	0.995	1	1.221
2nd	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	507000	2535	1	16.41	17.30	1.227	-	-	0.02	0.974	1.022	1.196
1st	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.42	18.00	1.143	-	-	-0.03	1.090	1	1.246
2nd	FR1 n77 Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	633334	3500.01	1	17.42	18.00	1.143	-	-	0.06	1.020	1.069	1.166
1st	WLAN 2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 3+5	Standalone	1	2412	1	20.76	22.50	1.493	100	1.000	-0.07	0.947	1	1.414
2nd	WLAN 2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 3+5	Standalone	1	2412	1	20.76	22.50	1.493	100	1.000	0.05	0.936	1.012	1.397
1st	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132572	1770	1	15.68	16.60	1.236	-	-	0.02	1.09	1	1.347
2nd	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	132572	1770	1	15.68	16.60	1.236	-	-	0.02	1.01	1.079	1.248
1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	9400	1880	1	15.32	16.30	1.253	-	-	-0.02	1.09	1	1.366
2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI3 Simultaneous	9400	1880	1	15.32	16.30	1.253	-	-	0.06	1.00	1.090	1.247
1st	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 3	167300	836.5	1	23.78	24.00	1.052	-	-	0.05	1.000	1	1.052
2nd	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 3	167300	836.5	1	23.78	24.00	1.052	-	-	0.03	0.989	1.011	1.040
1st	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI 3	656000	3840	1	19.71	19.80	1.021	-	-	0.07	0.921	1	0.940
2nd	FR1 n77 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI 3	656000	3840	1	19.71	19.80	1.021	-	-	0.03	0.911	011	0.930
1st	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI 3	650000	3750	1	19.67	20.00	1.079	-	-	0.02	1.050	1	1.133
2nd	FR1 n78 Part27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI 3	650000	3750	1	19.67	20.00	1.079	-	-	0.01	1.000	1.050	1.079

<10g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	349000	1745	1	21.22	22.10	1.225	-	-	0.05	2.58	1	3.160
2nd	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant 1	DSI 6	349000	1745	1	21.22	22.10	1.225	-	-	0.01	2.42	1.066	2.964
1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	DSI 6	9262	1852.4	1	22.95	23.50	1.135	-	-	0.09	2.53	1	2.872
2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	DSI 6	9262	1852.4	1	22.95	23.50	1.135	-	-	0.03	2.41	1.050	2.735
1st	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	39750	2506	1	22.63	23.80	1.309	62.9	1.006	0.03	2.51	1	3.306
2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	DSI 6	39750	2506	1	22.63	23.80	1.309	62.9	1.006	0.06	2.41	1.041	3.174
1st	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	633334	3500.01	1	22.19	22.50	1.074	-	-	0.01	2.56	1	2.749
2nd	FR1 n77 Part27Q	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 2	DSI 6	633334	3500.01	1	22.19	22.50	1.074	-	-	0.03	2.41	1.062	2.588
1st	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	650000	3750	1	20.09	20.50	1.099	-	-	-0.09	2.28	1	2.506
2nd	FR1 n78 Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	DSI 6	650000	3750	1	20.09	20.50	1.099	-	-	-0.09	2.16	1.056	2.374

General Note:

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

16.6 TDD B41 Linearity Data Analysis

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

LTE Band 41(HPUE) Ant 0-Linearity Data for Head		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00
Reported 1g SAR (W/kg)	0.076	0.094
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	217.01
Linearity SAR (W/kg)	0.104	
% deviation from expected linearity		-9.38%
LTE Band 41(HPUE) Ant 0-Linearity Data for Hotspot		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	20.80	22.40
Reported 1g SAR (W/kg)	1.208	1.086
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	76.10	75.25
Linearity SAR (W/kg)	1.194	
% deviation from expected linearity		-9.08%
LTE Band 41(HPUE) Ant 0-Linearity Data for Body-worn		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	20.80	22.40
Reported 1g SAR (W/kg)	1.208	1.086
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	76.10	75.25
Linearity SAR (W/kg)	1.194	
% deviation from expected linearity		-9.08%
LTE Band 38(HPUE) Ant 0-Linearity Data for Extremity SAR		
	LTE Band 38 (Power Class 3)	LTE Band 38 (Power Class 2)
Maximum Tune up Power (dBm)	23.80	25.40
Reported 1g SAR (W/kg)	3.306	2.951
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	151.85	150.14
Linearity SAR (W/kg)	3.269	
% deviation from expected linearity		-9.72%

17. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + WLAN6GHz	Yes	Yes	Yes	Yes
4.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
5.	WLAN2.4GHz + WLAN5GHz	Yes	Yes	Yes	Yes
6.	WLAN2.4GHz + WLAN6GHz	Yes	Yes	Yes	Yes
7.	WLAN5GHz+ Bluetooth	Yes	Yes	Yes	Yes
8.	WLAN6GHz+ Bluetooth	Yes	Yes	Yes	Yes
9.	WWAN + WLAN2.4GHz + WLAN5GHz	Yes	Yes	Yes	Yes
10.	WWAN + WLAN2.4GHz + WLAN6GHz	Yes	Yes	Yes	Yes
11.	WWAN + WLAN5GHz+ Bluetooth	Yes	Yes	Yes	Yes
12.	WWAN + WLAN6GHz+ Bluetooth	Yes	Yes	Yes	Yes

General Note:

1. This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. WWAN above includes 5G NR bands and and EN-DC combination.
3. The 2.4GHz/5GHz/6GHz WLAN can transmit in MIMO antenna mode only and it has no SISO antenna mode.
4. EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
5. For EN-DC mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G NR operation is demonstrated in the Part 2 Report during algorithm validation. In Part 1 Report, simultaneous transmission compliance was evaluated individually with other Radios (WLAN or BT) using one of 4G or 5G NR.
6. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
7. 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). WIFI 6E has no hotspot function.
8. The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
9. WLAN 2.4GHz and Bluetooth share the same antenna, and they cannot transmit simultaneously each other.
10. According to the EUT characteristic, WLAN 5GHz/6GHz and Bluetooth can transmit simultaneously.
11. According to the EUT characteristic, WLAN 5GHz/6GHz and WLAN 2.4GHz can transmit simultaneously.
12. According to the EUT characteristic, WLAN 5GHz and WLAN 6GHz can't transmit simultaneously.
13. The maximum SAR summation is calculated based on the same configuration and test position.
14. For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in this section did not additional to evaluate 2TX combination of simultaneously transmission.
15. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
    i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
    ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of [(x1-x2)2 + (y1-y2)2 + (z1-z2)2], where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
    iii) If SPLSR ≤ 0.04 for 1g SAR and SPLSR≤ 0.10 for 10g SAR , simultaneously transmission SAR measurement is not necessary.
    iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
    v) The SPLSR calculated results please refer to section 17.6.

17.1 5G NR + LTE + WLAN + BT Sim-Tx analysis

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

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

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

*x% * A + (100-x)% * B ≤ 1.0,*

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

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

*x% * A + (100-x)% * B + C ≤ 1.0* (1)

x% * A + (100-x)% * B ≤ x% * max(A, B) + (100-x)% * max(A, B) ≤ max(A, B)

*x% * A + (100-x)% * B + C ≤ max(A, B) + C ≤ 1.0* (2)

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

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

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

Above analysis is also apply to LTE inter-band uplink, LTE1 + LTE2 + WLAN + BT simultaneous transmission, So inter-band CA uplink no need to do additional simultaneously analysis again. Only required comply with total exposure ratio (TER) of LTE + WLAN + BT < 1.

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17.2 Head Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	5	6	1+2	1+3+4	1+3+5	1+4+6	1+5+6
		WWAN	WLAN2.4GHz Ant 3+5	WLAN5GHz Ant 4+5	Bluetooth Ant 5	Bluetooth Ant 3	WIFI 6E Ant 4+5	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)
GSM850 Ant 0	Right Cheek	0.317	0.393	0.390	0.153	0.144	0.262	0.71	0.86	0.85	0.73	0.72
	Right Tilted	0.141	0.393	0.390	0.153	0.144	0.210	0.53	0.68	0.68	0.50	0.50
	Left Cheek	0.177	0.393	0.390	0.153	0.144	0.205	0.57	0.72	0.71	0.54	0.53
	Left Tilted	0.109	0.393	0.390	0.153	0.144	0.180	0.50	0.65	0.64	0.44	0.43
GSM1900 Ant 0	Right Cheek	0.054	0.393	0.390	0.153	0.144	0.262	0.45	0.60	0.59	0.47	0.46
	Right Tilted	0.001	0.393	0.390	0.153	0.144	0.210	0.39	0.54	0.54	0.36	0.36
	Left Cheek	0.087	0.393	0.390	0.153	0.144	0.205	0.48	0.63	0.62	0.45	0.44
	Left Tilted	0.004	0.393	0.390	0.153	0.144	0.180	0.40	0.55	0.54	0.34	0.33
WCDMA II Ant 0	Right Cheek	0.087	0.393	0.390	0.153	0.144	0.262	0.48	0.63	0.62	0.50	0.49
	Right Tilted	0.068	0.393	0.390	0.153	0.144	0.210	0.46	0.61	0.60	0.43	0.42
	Left Cheek	0.142	0.393	0.390	0.153	0.144	0.205	0.54	0.69	0.68	0.50	0.49
	Left Tilted	0.055	0.393	0.390	0.153	0.144	0.180	0.45	0.60	0.59	0.39	0.38
WCDMA IV Ant 0	Right Cheek	0.114	0.393	0.390	0.153	0.144	0.262	0.51	0.66	0.65	0.53	0.52
	Right Tilted	0.083	0.393	0.390	0.153	0.144	0.210	0.48	0.63	0.62	0.45	0.44
	Left Cheek	0.210	0.393	0.390	0.153	0.144	0.205	0.60	0.75	0.74	0.57	0.56
	Left Tilted	0.079	0.393	0.390	0.153	0.144	0.180	0.47	0.62	0.61	0.41	0.40
WCDMA V Ant 0	Right Cheek	0.242	0.393	0.390	0.153	0.144	0.262	0.64	0.79	0.78	0.66	0.65
	Right Tilted	0.104	0.393	0.390	0.153	0.144	0.210	0.50	0.65	0.64	0.47	0.46
	Left Cheek	0.148	0.393	0.390	0.153	0.144	0.205	0.54	0.69	0.68	0.51	0.50
	Left Tilted	0.094	0.393	0.390	0.153	0.144	0.180	0.49	0.64	0.63	0.43	0.42
LTE Band 5 Ant 1	Right Cheek	0.824	0.393	0.390	0.153	0.144	0.262	1.22	1.37	1.36	1.24	1.23
	Right Tilted	0.824	0.393	0.390	0.153	0.144	0.210	1.22	1.37	1.36	1.19	1.18
	Left Cheek	0.824	0.393	0.390	0.153	0.144	0.205	1.22	1.37	1.36	1.18	1.17
	Left Tilted	0.824	0.393	0.390	0.153	0.144	0.180	1.22	1.37	1.36	1.16	1.15
LTE Band 7 Ant 0	Right Cheek	0.046	0.393	0.390	0.153	0.144	0.262	0.44	0.59	0.58	0.46	0.45
	Right Tilted	0.039	0.393	0.390	0.153	0.144	0.210	0.43	0.58	0.57	0.40	0.39
	Left Cheek	0.086	0.393	0.390	0.153	0.144	0.205	0.48	0.63	0.62	0.44	0.44
	Left Tilted	0.004	0.393	0.390	0.153	0.144	0.180	0.40	0.55	0.54	0.34	0.33
LTE Band 7 Ant 1	Right Cheek	0.909	0.393	0.390	0.153	0.144	0.262	1.30	1.45	1.44	1.32	1.32
	Right Tilted	0.909	0.393	0.390	0.153	0.144	0.210	1.30	1.45	1.44	1.27	1.26
	Left Cheek	0.909	0.393	0.390	0.153	0.144	0.205	1.30	1.45	1.44	1.27	1.26
	Left Tilted	0.909	0.393	0.390	0.153	0.144	0.180	1.30	1.45	1.44	1.24	1.23
LTE Band 12 Ant 0	Right Cheek	0.215	0.393	0.390	0.153	0.144	0.262	0.61	0.76	0.75	0.63	0.62
	Right Tilted	0.124	0.393	0.390	0.153	0.144	0.210	0.52	0.67	0.66	0.49	0.48
	Left Cheek	0.177	0.393	0.390	0.153	0.144	0.205	0.57	0.72	0.71	0.54	0.53
	Left Tilted	0.104	0.393	0.390	0.153	0.144	0.180	0.50	0.65	0.64	0.44	0.43
LTE Band 13 Ant 0	Right Cheek	0.173	0.393	0.390	0.153	0.144	0.262	0.57	0.72	0.71	0.59	0.58
	Right Tilted	0.085	0.393	0.390	0.153	0.144	0.210	0.48	0.63	0.62	0.45	0.44
	Left Cheek	0.097	0.393	0.390	0.153	0.144	0.205	0.49	0.64	0.63	0.46	0.45
	Left Tilted	0.070	0.393	0.390	0.153	0.144	0.180	0.46	0.61	0.60	0.40	0.39
LTE Band 25 Ant 0	Right Cheek	0.110	0.393	0.390	0.153	0.144	0.262	0.50	0.65	0.64	0.53	0.52
	Right Tilted	0.083	0.393	0.390	0.153	0.144	0.210	0.48	0.63	0.62	0.45	0.44
	Left Cheek	0.190	0.393	0.390	0.153	0.144	0.205	0.58	0.73	0.72	0.55	0.54
	Left Tilted	0.081	0.393	0.390	0.153	0.144	0.180	0.47	0.62	0.62	0.41	0.41
LTE Band 26 Ant 0	Right Cheek	0.248	0.393	0.390	0.153	0.144	0.262	0.64	0.79	0.78	0.66	0.65
	Right Tilted	0.101	0.393	0.390	0.153	0.144	0.210	0.49	0.64	0.64	0.46	0.46
	Left Cheek	0.157	0.393	0.390	0.153	0.144	0.205	0.55	0.70	0.69	0.52	0.51
	Left Tilted	0.114	0.393	0.390	0.153	0.144	0.180	0.51	0.66	0.65	0.45	0.44

LTE Band 66 Ant 0	Right Cheek	0.090	0.393	0.390	0.153	0.144	0.262	0.48	0.63	0.62	0.51	0.50
	Right Tilted	0.064	0.393	0.390	0.153	0.144	0.210	0.46	0.61	0.60	0.43	0.42
	Left Cheek	0.177	0.393	0.390	0.153	0.144	0.205	0.57	0.72	0.71	0.54	0.53
	Left Tilted	0.063	0.393	0.390	0.153	0.144	0.180	0.46	0.61	0.60	0.40	0.39
LTE Band 41 Ant 0	Right Cheek	0.036	0.393	0.390	0.153	0.144	0.262	0.43	0.58	0.57	0.45	0.44
	Right Tilted	0.036	0.393	0.390	0.153	0.144	0.210	0.43	0.58	0.57	0.40	0.39
	Left Cheek	0.076	0.393	0.390	0.153	0.144	0.205	0.47	0.62	0.61	0.43	0.43
	Left Tilted	0.026	0.393	0.390	0.153	0.144	0.180	0.42	0.57	0.56	0.36	0.35
LTE Band 41_HPUE Ant 0	Right Cheek	0.094	0.393	0.390	0.153	0.144	0.262	0.49	0.64	0.63	0.51	0.50
	Right Tilted	0.094	0.393	0.390	0.153	0.144	0.210	0.49	0.64	0.63	0.46	0.45
	Left Cheek	0.094	0.393	0.390	0.153	0.144	0.205	0.49	0.64	0.63	0.45	0.44
	Left Tilted	0.094	0.393	0.390	0.153	0.144	0.180	0.49	0.64	0.63	0.43	0.42
LTE Band 42 Ant 2	Right Cheek	0.878	0.393	0.390	0.153	0.144	0.262	1.27	1.42	1.41	1.29	1.28
	Right Tilted	0.878	0.393	0.390	0.153	0.144	0.210	1.27	1.42	1.41	1.24	1.23
	Left Cheek	0.878	0.393	0.390	0.153	0.144	0.205	1.27	1.42	1.41	1.24	1.23
	Left Tilted	0.878	0.393	0.390	0.153	0.144	0.180	1.27	1.42	1.41	1.21	1.20

WWAN Band	Exposure Position	1	2	3	4	5	6	1+2	1+3+4	1+3+5	1+4+6	1+5+6
		FR1	WLAN2.4GHz Ant 4+5	WLAN5GHz Ant 4+5	Bluetooth Ant 5	Bluetooth Ant 3	WIFI 6E Ant 4+5	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)
FR1 n5 Ant 1	Right Cheek	0.882	0.393	0.390	0.153	0.144	0.262	1.28	1.43	1.42	1.30	1.29
	Right Tilted	0.882	0.393	0.390	0.153	0.144	0.210	1.28	1.43	1.42	1.25	1.24
	Left Cheek	0.882	0.393	0.390	0.153	0.144	0.205	1.28	1.43	1.42	1.24	1.23
	Left Tilted	0.882	0.393	0.390	0.153	0.144	0.180	1.28	1.43	1.42	1.22	1.21
FR1 n7 Ant 0	Right Cheek	0.035	0.393	0.390	0.153	0.144	0.262	0.43	0.58	0.57	0.45	0.44
	Right Tilted	0.050	0.393	0.390	0.153	0.144	0.210	0.44	0.59	0.58	0.41	0.40
	Left Cheek	0.116	0.393	0.390	0.153	0.144	0.205	0.51	0.66	0.65	0.47	0.47
	Left Tilted	0.035	0.393	0.390	0.153	0.144	0.180	0.43	0.58	0.57	0.37	0.36
FR1 n7 Ant 1	Right Cheek	0.877	0.393	0.390	0.153	0.144	0.262	1.27	1.42	1.41	1.29	1.28
	Right Tilted	0.877	0.393	0.390	0.153	0.144	0.210	1.27	1.42	1.41	1.24	1.23
	Left Cheek	0.877	0.393	0.390	0.153	0.144	0.205	1.27	1.42	1.41	1.24	1.23
	Left Tilted	0.877	0.393	0.390	0.153	0.144	0.180	1.27	1.42	1.41	1.21	1.20
FR1 n66 Ant 0	Right Cheek	0.074	0.393	0.390	0.153	0.144	0.262	0.47	0.62	0.61	0.49	0.48
	Right Tilted	0.057	0.393	0.390	0.153	0.144	0.210	0.45	0.60	0.59	0.42	0.41
	Left Cheek	0.149	0.393	0.390	0.153	0.144	0.205	0.54	0.69	0.68	0.51	0.50
	Left Tilted	0.048	0.393	0.390	0.153	0.144	0.180	0.44	0.59	0.58	0.38	0.37
FR1 n66 Ant 1	Right Cheek	0.985	0.393	0.390	0.153	0.144	0.262	1.38	1.53	1.52	1.40	1.39
	Right Tilted	0.985	0.393	0.390	0.153	0.144	0.210	1.38	1.53	1.52	1.35	1.34
	Left Cheek	0.985	0.393	0.390	0.153	0.144	0.205	1.38	1.53	1.52	1.34	1.33
	Left Tilted	0.985	0.393	0.390	0.153	0.144	0.180	1.38	1.53	1.52	1.32	1.31
FR1 n41 Ant 0	Right Cheek	0.040	0.393	0.390	0.153	0.144	0.262	0.43	0.58	0.57	0.46	0.45
	Right Tilted	0.057	0.393	0.390	0.153	0.144	0.210	0.45	0.60	0.59	0.42	0.41
	Left Cheek	0.133	0.393	0.390	0.153	0.144	0.205	0.53	0.68	0.67	0.49	0.48
	Left Tilted	0.040	0.393	0.390	0.153	0.144	0.180	0.43	0.58	0.57	0.37	0.36
FR1 n77 Ant 2	Right Cheek	0.843	0.393	0.390	0.153	0.144	0.262	1.24	1.39	1.38	1.26	1.25
	Right Tilted	0.843	0.393	0.390	0.153	0.144	0.210	1.24	1.39	1.38	1.21	1.20
	Left Cheek	0.843	0.393	0.390	0.153	0.144	0.205	1.24	1.39	1.38	1.20	1.19
	Left Tilted	0.843	0.393	0.390	0.153	0.144	0.180	1.24	1.39	1.38	1.18	1.17
FR1 n78 Ant 2	Right Cheek	0.834	0.393	0.390	0.153	0.144	0.262	1.23	1.38	1.37	1.25	1.24
	Right Tilted	0.834	0.393	0.390	0.153	0.144	0.210	1.23	1.38	1.37	1.20	1.19
	Left Cheek	0.834	0.393	0.390	0.153	0.144	0.205	1.23	1.38	1.37	1.19	1.18
	Left Tilted	0.834	0.393	0.390	0.153	0.144	0.180	1.23	1.38	1.37	1.17	1.16
FR1	Right Cheek	0.849	0.393	0.390	0.153	0.144	0.262	1.24	1.39	1.38	1.26	1.26

n78 Ant 4	Right Tilted	0.849	0.393	0.390	0.153	0.144	0.210	1.24	1.39	1.38	1.21	1.20
	Left Cheek	0.849	0.393	0.390	0.153	0.144	0.205	1.24	1.39	1.38	1.21	1.20
	Left Tilted	0.849	0.393	0.390	0.153	0.144	0.180	1.24	1.39	1.38	1.18	1.17
FR1 n78 Ant 6	Right Cheek	0.901	0.393	0.390	0.153	0.144	0.262	1.29	1.44	1.44	1.32	1.31
	Right Tilted	0.901	0.393	0.390	0.153	0.144	0.210	1.29	1.44	1.44	1.26	1.26
	Left Cheek	0.901	0.393	0.390	0.153	0.144	0.205	1.29	1.44	1.44	1.26	1.25
	Left Tilted	0.901	0.393	0.390	0.153	0.144	0.180	1.29	1.44	1.44	1.23	1.23
FR1 n78 Ant 7	Right Cheek	0.189	0.393	0.390	0.153	0.144	0.262	0.58	0.73	0.72	0.60	0.60
	Right Tilted	0.223	0.393	0.390	0.153	0.144	0.210	0.62	0.77	0.76	0.59	0.58
	Left Cheek	0.307	0.393	0.390	0.153	0.144	0.205	0.70	0.85	0.84	0.67	0.66
	Left Tilted	0.144	0.393	0.390	0.153	0.144	0.180	0.54	0.69	0.68	0.48	0.47

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 WLAN2.4GHz Ant 4+5 1g SAR (W/kg)	3 WLAN5GHz Ant 4+5 1g SAR (W/kg)	4 WIFI 6E Ant 4+5 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)
GSM850 Ant 0	Right Cheek	0.317	0.197	0.197	0.262	0.71	0.78
	Right Tilted	0.141	0.197	0.197	0.210	0.54	0.55
	Left Cheek	0.177	0.197	0.197	0.205	0.57	0.58
	Left Tilted	0.109	0.197	0.197	0.180	0.50	0.49
GSM1900 Ant 0	Right Cheek	0.054	0.197	0.197	0.262	0.45	0.51
	Right Tilted	0.001	0.197	0.197	0.210	0.40	0.41
	Left Cheek	0.087	0.197	0.197	0.205	0.48	0.49
	Left Tilted	0.004	0.197	0.197	0.180	0.40	0.38
WCDMA II Ant 0	Right Cheek	0.087	0.197	0.197	0.262	0.48	0.55
	Right Tilted	0.068	0.197	0.197	0.210	0.46	0.48
	Left Cheek	0.142	0.197	0.197	0.205	0.54	0.54
	Left Tilted	0.055	0.197	0.197	0.180	0.45	0.43
WCDMA IV Ant 0	Right Cheek	0.114	0.197	0.197	0.262	0.51	0.57
	Right Tilted	0.083	0.197	0.197	0.210	0.48	0.49
	Left Cheek	0.210	0.197	0.197	0.205	0.60	0.61
	Left Tilted	0.079	0.197	0.197	0.180	0.47	0.46
WCDMA V Ant 0	Right Cheek	0.242	0.197	0.197	0.262	0.64	0.70
	Right Tilted	0.104	0.197	0.197	0.210	0.50	0.51
	Left Cheek	0.148	0.197	0.197	0.205	0.54	0.55
	Left Tilted	0.094	0.197	0.197	0.180	0.49	0.47
LTE Band 5 Ant 1	Right Cheek	0.824	0.197	0.197	0.262	1.22	1.28
	Right Tilted	0.824	0.197	0.197	0.210	1.22	1.23
	Left Cheek	0.824	0.197	0.197	0.205	1.22	1.23
	Left Tilted	0.824	0.197	0.197	0.180	1.22	1.20
LTE Band 7 Ant 0	Right Cheek	0.046	0.197	0.197	0.262	0.44	0.51
	Right Tilted	0.039	0.197	0.197	0.210	0.43	0.45
	Left Cheek	0.086	0.197	0.197	0.205	0.48	0.49
	Left Tilted	0.004	0.197	0.197	0.180	0.40	0.38
LTE Band 7 Ant 1	Right Cheek	0.909	0.197	0.197	0.262	1.30	1.37
	Right Tilted	0.909	0.197	0.197	0.210	1.30	1.32
	Left Cheek	0.909	0.197	0.197	0.205	1.30	1.31
	Left Tilted	0.909	0.197	0.197	0.180	1.30	1.29
LTE Band 12 Ant 0	Right Cheek	0.215	0.197	0.197	0.262	0.61	0.67
	Right Tilted	0.124	0.197	0.197	0.210	0.52	0.53
	Left Cheek	0.177	0.197	0.197	0.205	0.57	0.58
	Left Tilted	0.104	0.197	0.197	0.180	0.50	0.48
LTE Band 13 Ant 0	Right Cheek	0.173	0.197	0.197	0.262	0.57	0.63
	Right Tilted	0.085	0.197	0.197	0.210	0.48	0.49
	Left Cheek	0.097	0.197	0.197	0.205	0.49	0.50
	Left Tilted	0.070	0.197	0.197	0.180	0.46	0.45

LTE Band 25 Ant 0	Right Cheek	0.110	0.197	0.197	0.262	0.50	0.57
	Right Tilted	0.083	0.197	0.197	0.210	0.48	0.49
	Left Cheek	0.190	0.197	0.197	0.205	0.58	0.59
	Left Tilted	0.081	0.197	0.197	0.180	0.48	0.46
LTE Band 26 Ant 0	Right Cheek	0.248	0.197	0.197	0.262	0.64	0.71
	Right Tilted	0.101	0.197	0.197	0.210	0.50	0.51
	Left Cheek	0.157	0.197	0.197	0.205	0.55	0.56
	Left Tilted	0.114	0.197	0.197	0.180	0.51	0.49
LTE Band 66 Ant 0	Right Cheek	0.090	0.197	0.197	0.262	0.48	0.55
	Right Tilted	0.064	0.197	0.197	0.210	0.46	0.47
	Left Cheek	0.177	0.197	0.197	0.205	0.57	0.58
	Left Tilted	0.063	0.197	0.197	0.180	0.46	0.44
LTE Band 41 Ant 0	Right Cheek	0.036	0.197	0.197	0.262	0.43	0.50
	Right Tilted	0.036	0.197	0.197	0.210	0.43	0.44
	Left Cheek	0.076	0.197	0.197	0.205	0.47	0.48
	Left Tilted	0.026	0.197	0.197	0.180	0.42	0.40
LTE Band 41_HPUE Ant 0	Right Cheek	0.094	0.197	0.197	0.262	0.49	0.55
	Right Tilted	0.094	0.197	0.197	0.210	0.49	0.50
	Left Cheek	0.094	0.197	0.197	0.205	0.49	0.50
	Left Tilted	0.094	0.197	0.197	0.180	0.49	0.47
LTE Band 42 Ant 2	Right Cheek	0.878	0.197	0.197	0.262	1.27	1.34
	Right Tilted	0.878	0.197	0.197	0.210	1.27	1.29
	Left Cheek	0.878	0.197	0.197	0.205	1.27	1.28
	Left Tilted	0.878	0.197	0.197	0.180	1.27	1.26

FR1 Band	Exposure Position	1 FR1 1g SAR (W/kg)	2 WLAN2.4GHz Ant 4+5 1g SAR (W/kg)	3 WLAN5GHz Ant 4+5 1g SAR (W/kg)	4 WIFI 6E Ant 4+5 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)
FR1 n5 Ant 1	Right Cheek	0.882	0.197	0.197	0.262	1.28	1.34
	Right Tilted	0.882	0.197	0.197	0.210	1.28	1.29
	Left Cheek	0.882	0.197	0.197	0.205	1.28	1.28
	Left Tilted	0.882	0.197	0.197	0.180	1.28	1.26
FR1 n7 Ant 0	Right Cheek	0.035	0.197	0.197	0.262	0.43	0.49
	Right Tilted	0.050	0.197	0.197	0.210	0.44	0.46
	Left Cheek	0.116	0.197	0.197	0.205	0.51	0.52
	Left Tilted	0.035	0.197	0.197	0.180	0.43	0.41
FR1 n7 Ant 1	Right Cheek	0.877	0.197	0.197	0.262	1.27	1.34
	Right Tilted	0.877	0.197	0.197	0.210	1.27	1.28
	Left Cheek	0.877	0.197	0.197	0.205	1.27	1.28
	Left Tilted	0.877	0.197	0.197	0.180	1.27	1.25
FR1 n66 Ant 0	Right Cheek	0.074	0.197	0.197	0.262	0.47	0.53
	Right Tilted	0.057	0.197	0.197	0.210	0.45	0.46
	Left Cheek	0.149	0.197	0.197	0.205	0.54	0.55
	Left Tilted	0.048	0.197	0.197	0.180	0.44	0.43
FR1 n66 Ant 1	Right Cheek	0.985	0.197	0.197	0.262	1.38	1.44
	Right Tilted	0.985	0.197	0.197	0.210	1.38	1.39
	Left Cheek	0.985	0.197	0.197	0.205	1.38	1.39
	Left Tilted	0.985	0.197	0.197	0.180	1.38	1.36
FR1 n41 Ant 0	Right Cheek	0.040	0.197	0.197	0.262	0.43	0.50
	Right Tilted	0.057	0.197	0.197	0.210	0.45	0.46
	Left Cheek	0.133	0.197	0.197	0.205	0.53	0.54
	Left Tilted	0.040	0.197	0.197	0.180	0.43	0.42
FR1 n77 Ant 2	Right Cheek	0.843	0.197	0.197	0.262	1.24	1.30
	Right Tilted	0.843	0.197	0.197	0.210	1.24	1.25
	Left Cheek	0.843	0.197	0.197	0.205	1.24	1.25

	Left Tilted	0.843	0.197	0.197	0.180	1.24	1.22
FR1 n78 Ant 2	Right Cheek	0.834	0.197	0.197	0.262	1.23	1.29
	Right Tilted	0.834	0.197	0.197	0.210	1.23	1.24
	Left Cheek	0.834	0.197	0.197	0.205	1.23	1.24
	Left Tilted	0.834	0.197	0.197	0.180	1.23	1.21
FR1 n78 Ant 4	Right Cheek	0.849	0.197	0.197	0.262	1.24	1.31
	Right Tilted	0.849	0.197	0.197	0.210	1.24	1.26
	Left Cheek	0.849	0.197	0.197	0.205	1.24	1.25
	Left Tilted	0.849	0.197	0.197	0.180	1.24	1.23
FR1 n78 Ant 6	Right Cheek	0.901	0.197	0.197	0.262	1.30	1.36
	Right Tilted	0.901	0.197	0.197	0.210	1.30	1.31
	Left Cheek	0.901	0.197	0.197	0.205	1.30	1.30
	Left Tilted	0.901	0.197	0.197	0.180	1.30	1.28
FR1 n78 Ant 7	Right Cheek	0.189	0.197	0.197	0.262	0.58	0.65
	Right Tilted	0.223	0.197	0.197	0.210	0.62	0.63
	Left Cheek	0.307	0.197	0.197	0.205	0.70	0.71
	Left Tilted	0.144	0.197	0.197	0.180	0.54	0.52

Exposure Position	1 WLAN2.4GHz Ant 4+5 1g SAR (W/kg)	2 WLAN5GHz Ant 4+5 1g SAR (W/kg)	3 WIFI 6E Ant 4+5 1g SAR (W/kg)	**1+2 Summed 1g SAR (W/kg)**	**1+3 Summed 1g SAR (W/kg)**
Right Cheek	0.711	0.789	0.262	1.50	0.97
Right Tilted	0.711	0.789	0.210	1.50	0.92
Left Cheek	0.711	0.789	0.205	1.50	0.92
Left Tilted	0.711	0.789	0.180	1.50	0.89

17.3 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 WLAN2.4GHz Ant 3+5 1g SAR (W/kg)	3 WLAN5GHz Ant 4+5 1g SAR (W/kg)	4 Bluetooth Ant 3 1g SAR (W/kg)	5 Bluetooth Ant 5 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)
GSM850 Ant 0	Front	0.711	0.226	0.376	0.088	0.092	0.94	1.18	1.18
	Back	0.916	0.226	0.376	0.088	0.092	1.14	1.38	1.38
	Left side	0.085	0.226	0.376	0.088	0.092	0.31	0.55	0.55
	Right side	0.213	0.226	0.376	0.088	0.092	0.44	0.68	0.68
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.484					0.48	0.48	0.48
GSM1900 Ant 0	Front	0.559	0.226	0.376	0.088	0.092	0.79	1.02	1.03
	Back	0.865	0.226	0.376	0.088	0.092	1.09	1.33	1.33
	Left side	0.030	0.226	0.376	0.088	0.092	0.26	0.49	0.50
	Right side	0.050	0.226	0.376	0.088	0.092	0.28	0.51	0.52
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	1.394					1.39	1.39	1.39
WCDMA II Ant 0	Front	0.325	0.226	0.376	0.088	0.092	0.55	0.79	0.79
	Back	0.673	0.226	0.376	0.088	0.092	0.90	1.14	1.14
	Left side	0.026	0.226	0.376	0.088	0.092	0.25	0.49	0.49
	Right side	0.049	0.226	0.376	0.088	0.092	0.28	0.51	0.52
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	1.366					1.37	1.37	1.37
WCDMA IV Ant 0	Front	0.337	0.226	0.376	0.088	0.092	0.56	0.80	0.81
	Back	0.669	0.226	0.376	0.088	0.092	0.90	1.13	1.14
	Left side	0.033	0.226	0.376	0.088	0.092	0.26	0.50	0.50
	Right side	0.078	0.226	0.376	0.088	0.092	0.30	0.54	0.55
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	1.271					1.27	1.27	1.27
WCDMA V Ant 0	Front	0.483	0.226	0.376	0.088	0.092	0.71	0.95	0.95
	Back	1.015	0.226	0.376	0.088	0.092	1.24	1.48	1.48
	Left side	0.111	0.226	0.376	0.088	0.092	0.34	0.58	0.58
	Right side	0.325	0.226	0.376	0.088	0.092	0.55	0.79	0.79
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.568					0.57	0.57	0.57
LTE Band 5 Ant 1	Front	0.465	0.226	0.376	0.088	0.092	0.69	0.93	0.93
	Back	0.862	0.226	0.376	0.088	0.092	1.09	1.33	1.33
	Left side	0.222	0.226	0.376	0.088	0.092	0.45	0.69	0.69
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side	0.855	0.226	0.376	0.088	0.092	1.08	1.32	1.32
	Bottom side						0.00	0.00	0.00
LTE Band 7 Ant 0	Front	0.361	0.226	0.376	0.088	0.092	0.59	0.83	0.83
	Back	1.068	0.226	0.376	0.088	0.092	1.29	1.53	1.54
	Left side	0.078	0.226	0.376	0.088	0.092	0.30	0.54	0.55
	Right side	0.083	0.226	0.376	0.088	0.092	0.31	0.55	0.55
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.641					0.64	0.64	0.64
LTE Band 7 Ant 1	Front	0.345	0.226	0.376	0.088	0.092	0.57	0.81	0.81
	Back	0.646	0.226	0.376	0.088	0.092	0.87	1.11	1.11
	Left side	0.070	0.226	0.376	0.088	0.092	0.30	0.53	0.54
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side	0.914	0.226	0.376	0.088	0.092	1.14	1.38	1.38
	Bottom side						0.00	0.00	0.00
LTE Band 12 Ant 0	Front	0.693	0.226	0.376	0.088	0.092	0.92	1.16	1.16
	Back	0.930	0.226	0.376	0.088	0.092	1.16	1.39	1.40

	Left side	0.134	0.226	0.376	0.088	0.092	0.36	0.60	0.60
	Right side	0.377	0.226	0.376	0.088	0.092	0.60	0.84	0.85
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.442					0.44	0.44	0.44
LTE Band 13 Ant 0	Front	0.610	0.226	0.376	0.088	0.092	0.84	1.07	1.08
	Back	0.776	0.226	0.376	0.088	0.092	1.00	1.24	1.24
	Left side	0.107	0.226	0.376	0.088	0.092	0.33	0.57	0.58
	Right side	0.291	0.226	0.376	0.088	0.092	0.52	0.76	0.76
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.446					0.45	0.45	0.45
LTE Band 25 Ant 0	Front	0.697	0.226	0.376	0.088	0.092	0.92	1.16	1.17
	Back	1.000	0.226	0.376	0.088	0.092	1.23	1.46	1.47
	Left side	0.029	0.226	0.376	0.088	0.092	0.26	0.49	0.50
	Right side	0.057	0.226	0.376	0.088	0.092	0.28	0.52	0.53
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	1.272					1.27	1.27	1.27
LTE Band 26 Ant 0	Front	0.818	0.226	0.376	0.088	0.092	1.04	1.28	1.29
	Back	0.941	0.226	0.376	0.088	0.092	1.17	1.41	1.41
	Left side	0.114	0.226	0.376	0.088	0.092	0.34	0.58	0.58
	Right side	0.290	0.226	0.376	0.088	0.092	0.52	0.75	0.76
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.659					0.66	0.66	0.66
LTE Band 66 Ant 0	Front	0.539	0.226	0.376	0.088	0.092	0.77	1.00	1.01
	Back	0.674	0.226	0.376	0.088	0.092	0.90	1.14	1.14
	Left side	0.030	0.226	0.376	0.088	0.092	0.26	0.49	0.50
	Right side	0.060	0.226	0.376	0.088	0.092	0.29	0.52	0.53
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	1.347					1.35	1.35	1.35
LTE Band 41 Ant 0	Front	0.503	0.226	0.376	0.088	0.092	0.73	0.97	0.97
	Back	1.208	0.226	0.207	0.088	0.092	1.43	1.50	1.51
	Left side	0.149	0.226	0.376	0.088	0.092	0.38	0.61	0.62
	Right side	0.211	0.226	0.376	0.088	0.092	0.44	0.68	0.68
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	1.138					1.14	1.14	1.14
LTE Band 41_HPUE Ant 0	Front	1.111	0.226	0.376	0.088	0.092	1.34	1.58	1.58
	Back	1.111	0.226	0.376	0.088	0.092	1.34	1.58	1.58
	Left side	1.111	0.226	0.376	0.088	0.092	1.34	**1.58**	1.58
	Right side	1.111	0.226	0.376	0.088	0.092	1.34	1.58	1.58
	Top side	1.111	0.226	0.376	0.088	0.092	1.34	1.58	1.58
	Bottom side	1.111					1.11	1.11	1.11
LTE Band 42 Ant 2	Front	0.216	0.226	0.376	0.088	0.092	0.44	0.68	0.68
	Back	0.346	0.226	0.376	0.088	0.092	0.57	0.81	0.81
	Left side	0.836	0.226	0.376	0.088	0.092	1.06	1.30	1.30
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.009					0.01	0.01	0.01

WWAN Band	Exposure Position	1 NR 1g SAR (W/kg)	2 WLAN2.4GHz Ant 3+5 1g SAR (W/kg)	3 WLAN5GHz Ant 4+5 1g SAR (W/kg)	4 Bluetooth Ant 3 1g SAR (W/kg)	5 Bluetooth Ant 5 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)
FR1 n5 Ant 1	Front	0.343	0.226	0.376	0.088	0.092	0.57	0.81	0.81
	Back	0.817	0.226	0.376	0.088	0.092	1.04	1.28	1.29
	Left side	0.182	0.226	0.376	0.088	0.092	0.41	0.65	0.65
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side	0.763	0.226	0.376	0.088	0.092	0.99	1.23	1.23
	Bottom side						0.00	0.00	0.00
FR1 n7 Ant 0	Front	0.476	0.226	0.376	0.088	0.092	0.70	0.94	0.94
	Back	1.105	0.226	0.376	0.088	0.092	1.33	1.57	1.57
	Left side	0.133	0.226	0.376	0.088	0.092	0.36	0.60	0.60
	Right side	0.106	0.226	0.376	0.088	0.092	0.33	0.57	0.57
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.799					0.80	0.80	0.80
FR1 n7 Ant 1	Front	0.399	0.226	0.376	0.088	0.092	0.63	0.86	0.87
	Back	0.669	0.226	0.376	0.088	0.092	0.90	1.13	1.14
	Left side	0.068	0.226	0.376	0.088	0.092	0.29	0.53	0.54
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side	0.965	0.226	0.376	0.088	0.092	1.19	1.43	1.43
	Bottom side						0.00	0.00	0.00
FR1 n66 Ant 0	Front	0.549	0.226	0.376	0.088	0.092	0.78	1.01	1.02
	Back	0.604	0.226	0.376	0.088	0.092	0.83	1.07	1.07
	Left side	0.024	0.226	0.376	0.088	0.092	0.25	0.49	0.49
	Right side	0.048	0.226	0.376	0.088	0.092	0.27	0.51	0.52
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	1.119					1.12	1.12	1.12
FR1 n66 Ant 1	Front	0.540	0.226	0.376	0.088	0.092	0.77	1.00	1.01
	Back	0.950	0.226	0.376	0.088	0.092	1.18	1.41	1.42
	Left side	0.181	0.226	0.376	0.088	0.092	0.41	0.65	0.65
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side	0.850	0.226	0.376	0.088	0.092	1.08	1.31	1.32
	Bottom side						0.00	0.00	0.00
FR1 n41 Ant 0	Front	0.517	0.226	0.376	0.088	0.092	0.74	0.98	0.99
	Back	1.157	0.226	0.207	0.088	0.092	1.38	1.45	1.46
	Left side	0.134	0.226	0.376	0.088	0.092	0.36	0.60	0.60
	Right side	0.157	0.226	0.376	0.088	0.092	0.38	0.62	0.63
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	1.062					1.06	1.06	1.06
FR1 n77 Part27O Ant 2	Front	0.313	0.226	0.376	0.088	0.092	0.54	0.78	0.78
	Back	0.729	0.226	0.376	0.088	0.092	0.96	1.19	1.20
	Left side	0.734	0.226	0.376	0.088	0.092	0.96	1.20	1.20
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side	0.106	0.226	0.376	0.088	0.092	0.33	0.57	0.57
	Bottom side						0.00	0.00	0.00
FR1 n77 Part27Q Ant 2	Front	0.492	0.226	0.376	0.088	0.092	0.72	0.96	0.96
	Back	0.611	0.226	0.376	0.088	0.092	0.84	1.08	1.08
	Left side	0.956	0.226	0.376	0.088	0.092	1.18	1.42	1.42
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side	0.103	0.226	0.376	0.088	0.092	0.33	0.57	0.57
	Bottom side						0.00	0.00	0.00
FR1 n78 Part27O Ant 2	Front	0.327	0.226	0.376	0.088	0.092	0.55	0.79	0.80
	Back	0.517	0.226	0.376	0.088	0.092	0.74	0.98	0.99
	Left side	0.691	0.226	0.376	0.088	0.092	0.92	1.16	1.16
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47

	Top side	0.068	0.226	0.376	0.088	0.092	0.29	0.53	0.54
	Bottom side						0.00	0.00	0.00
FR1 n78 Part27Q Ant 2	Front	0.431	0.226	0.376	0.088	0.092	0.66	0.90	0.90
	Back	0.506	0.226	0.376	0.088	0.092	0.73	0.97	0.97
	Left side	0.959	0.226	0.376	0.088	0.092	1.19	1.42	1.43
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side	0.105	0.226	0.376	0.088	0.092	0.33	0.57	0.57
	Bottom side						0.00	0.00	0.00
FR1 n78 Part27O Ant 4	Front	0.281	0.226	0.376	0.088	0.092	0.51	0.75	0.75
	Back	0.432	0.226	0.376	0.088	0.092	0.66	0.90	0.90
	Left side	0.033	0.226	0.376	0.088	0.092	0.26	0.50	0.50
	Right side	0.047	0.226	0.376	0.088	0.092	0.27	0.51	0.52
	Top side	0.693	0.226	0.376	0.088	0.092	0.92	1.16	1.16
	Bottom side						0.00	0.00	0.00
FR1 n78 Part27Q Ant 4	Front	0.338	0.226	0.376	0.088	0.092	0.56	0.80	0.81
	Back	0.476	0.226	0.376	0.088	0.092	0.70	0.94	0.94
	Left side	0.044	0.226	0.376	0.088	0.092	0.27	0.51	0.51
	Right side	0.035	0.226	0.376	0.088	0.092	0.26	0.50	0.50
	Top side	0.769	0.226	0.376	0.088	0.092	1.00	1.23	1.24
	Bottom side						0.00	0.00	0.00
FR1 n78 Part27O Ant 6	Front	0.207	0.226	0.376	0.088	0.092	0.43	0.67	0.68
	Back	0.296	0.226	0.376	0.088	0.092	0.52	0.76	0.76
	Left side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Right side	0.713	0.226	0.376	0.088	0.092	0.94	1.18	1.18
	Top side	0.201	0.226	0.376	0.088	0.092	0.43	0.67	0.67
	Bottom side						0.00	0.00	0.00
FR1 n78 Part27Q Ant 6	Front	0.234	0.226	0.376	0.088	0.092	0.46	0.70	0.70
	Back	0.332	0.226	0.376	0.088	0.092	0.56	0.80	0.80
	Left side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Right side	0.724	0.226	0.376	0.088	0.092	0.95	1.19	1.19
	Top side	0.087	0.226	0.376	0.088	0.092	0.31	0.55	0.56
	Bottom side						0.00	0.00	0.00
FR1 n78 Part27O Ant 7	Front	0.331	0.226	0.376	0.088	0.092	0.56	0.80	0.80
	Back	0.337	0.226	0.376	0.088	0.092	0.56	0.80	0.81
	Left side	0.643	0.226	0.376	0.088	0.092	0.87	1.11	1.11
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.213					0.21	0.21	0.21
FR1 n78 Part27Q Ant 7	Front	0.418	0.226	0.376	0.088	0.092	0.64	0.88	0.89
	Back	0.481	0.226	0.376	0.088	0.092	0.71	0.95	0.95
	Left side	1.101	0.226	0.376	0.088	0.092	1.33	1.57	1.57
	Right side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Top side		0.226	0.376	0.088	0.092	0.23	0.46	0.47
	Bottom side	0.123					0.12	0.12	0.12

WWAN Band	Exposure Position	1 WWAN 1g SAR (W/kg)	2 WLAN2.4GHz Ant 3+5 1g SAR (W/kg)	3 WLAN5GHz Ant 4+5 1g SAR (W/kg)	1+2+3 Summed 1g SAR (W/kg)
GSM850 Ant 0	Front	0.711	0.104	0.197	1.01
	Back	0.916	0.104	0.197	1.22
	Left side	0.085	0.104	0.197	0.39
	Right side	0.213	0.104	0.197	0.51
	Top side		0.104	0.197	0.30
	Bottom side	0.484			0.48
GSM1900 Ant 0	Front	0.559	0.104	0.197	0.86
	Back	0.865	0.104	0.197	1.17
	Left side	0.030	0.104	0.197	0.33
	Right side	0.050	0.104	0.197	0.35
	Top side		0.104	0.197	0.30
	Bottom side	1.394			1.39
WCDMA II Ant 0	Front	0.325	0.104	0.197	0.63
	Back	0.673	0.104	0.197	0.97
	Left side	0.026	0.104	0.197	0.33
	Right side	0.049	0.104	0.197	0.35
	Top side		0.104	0.197	0.30
	Bottom side	1.366			1.37
WCDMA IV Ant 0	Front	0.337	0.104	0.197	0.64
	Back	0.669	0.104	0.197	0.97
	Left side	0.033	0.104	0.197	0.33
	Right side	0.078	0.104	0.197	0.38
	Top side		0.104	0.197	0.30
	Bottom side	1.271			1.27
WCDMA V Ant 0	Front	0.483	0.104	0.197	0.78
	Back	1.015	0.104	0.197	1.32
	Left side	0.111	0.104	0.197	0.41
	Right side	0.325	0.104	0.197	0.63
	Top side		0.104	0.197	0.30
	Bottom side	0.568			0.57
LTE Band 5 Ant 1	Front	0.465	0.104	0.197	0.77
	Back	0.862	0.104	0.197	1.16
	Left side	0.222	0.104	0.197	0.52
	Right side		0.104	0.197	0.30
	Top side	0.855	0.104	0.197	1.16
	Bottom side				0.00
LTE Band 7 Ant 0	Front	0.361	0.104	0.197	0.66
	Back	1.068	0.104	0.197	1.37
	Left side	0.078	0.104	0.197	0.38
	Right side	0.083	0.104	0.197	0.38
	Top side		0.104	0.197	0.30
	Bottom side	0.641			0.64
LTE Band 7 Ant 1	Front	0.345	0.104	0.197	0.65
	Back	0.646	0.104	0.197	0.95
	Left side	0.070	0.104	0.197	0.37
	Right side		0.104	0.197	0.30
	Top side	0.914	0.104	0.197	1.22
	Bottom side				0.00
LTE Band 12 Ant 0	Front	0.693	0.104	0.197	0.99
	Back	0.930	0.104	0.197	1.23
	Left side	0.134	0.104	0.197	0.44

	Right side	0.377	0.104	0.197	0.68
	Top side		0.104	0.197	0.30
	Bottom side	0.442			0.44
LTE Band 13 Ant 0	Front	0.610	0.104	0.197	0.91
	Back	0.776	0.104	0.197	1.08
	Left side	0.107	0.104	0.197	0.41
	Right side	0.291	0.104	0.197	0.59
	Top side		0.104	0.197	0.30
	Bottom side	0.446			0.45
LTE Band 25 Ant 0	Front	0.697	0.104	0.197	1.00
	Back	1.000	0.104	0.197	1.30
	Left side	0.029	0.104	0.197	0.33
	Right side	0.057	0.104	0.197	0.36
	Top side		0.104	0.197	0.30
	Bottom side	1.272			1.27
LTE Band 26 Ant 0	Front	0.818	0.104	0.197	1.12
	Back	0.941	0.104	0.197	1.24
	Left side	0.114	0.104	0.197	0.42
	Right side	0.290	0.104	0.197	0.59
	Top side		0.104	0.197	0.30
	Bottom side	0.659			0.66
LTE Band 66 Ant 0	Front	0.539	0.104	0.197	0.84
	Back	0.674	0.104	0.197	0.98
	Left side	0.030	0.104	0.197	0.33
	Right side	0.060	0.104	0.197	0.36
	Top side		0.104	0.197	0.30
	Bottom side	1.347			1.35
LTE Band 41 Ant 0	Front	0.503	0.104	0.197	0.80
	Back	1.208	0.104	0.197	1.51
	Left side	0.149	0.104	0.197	0.45
	Right side	0.211	0.104	0.197	0.51
	Top side		0.104	0.197	0.30
	Bottom side	1.138			1.14
LTE Band 41_HPUE Ant 0	Front		0.104	0.197	0.30
	Back	1.086	0.104	0.197	1.39
	Left side		0.104	0.197	0.30
	Right side		0.104	0.197	0.30
	Top side		0.104	0.197	0.30
	Bottom side				0.00
LTE Band 42 Ant 2	Front	0.216	0.104	0.197	0.52
	Back	0.346	0.104	0.197	0.65
	Left side	0.836	0.104	0.197	1.14
	Right side		0.104	0.197	0.30
	Top side		0.104	0.197	0.30
	Bottom side	0.009			0.01

WWAN Band	Exposure Position	1	2	3	1+2+3
		WWAN	WLAN2.4GHz Ant 3+5	WLAN5GHz Ant 4+5	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
FR1 n5 Ant 1	Front	0.343	0.104	0.197	0.64
	Back	0.817	0.104	0.197	1.12
	Left side	0.182	0.104	0.197	0.48
	Right side		0.104	0.197	0.30
	Top side	0.763	0.104	0.197	1.06
	Bottom side			0.197	0.20
FR1 n7 Ant 0	Front	0.476	0.104	0.197	0.78
	Back	1.105	0.104	0.197	1.41
	Left side	0.133	0.104	0.197	0.43
	Right side	0.106	0.104	0.197	0.41
	Top side		0.104	0.197	0.30
	Bottom side	0.799		0.197	1.00
FR1 n7 Ant 1	Front	0.399	0.104	0.197	0.70
	Back	0.669	0.104	0.197	0.97
	Left side	0.068	0.104	0.197	0.37
	Right side		0.104	0.197	0.30
	Top side	0.965	0.104	0.197	1.27
	Bottom side			0.197	0.20
FR1 n66 Ant 0	Front	0.549	0.104	0.197	0.85
	Back	0.604	0.104	0.197	0.91
	Left side	0.024	0.104	0.197	0.33
	Right side	0.048	0.104	0.197	0.35
	Top side		0.104	0.197	0.30
	Bottom side	1.119		0.197	1.32
FR1 n66 Ant 1	Front	0.540	0.104	0.197	0.84
	Back	0.950	0.104	0.197	1.25
	Left side	0.181	0.104	0.197	0.48
	Right side		0.104	0.197	0.30
	Top side	0.850	0.104	0.197	1.15
	Bottom side			0.197	0.20
FR1 n41 Ant 0	Front	0.517	0.104	0.197	0.82
	Back	1.157	0.104	0.197	1.46
	Left side	0.134	0.104	0.197	0.44
	Right side	0.157	0.104	0.197	0.46
	Top side		0.104	0.197	0.30
	Bottom side	1.062		0.197	1.26
FR1 n77 Part27O Ant 2	Front	0.313	0.104	0.197	0.61
	Back	0.729	0.104	0.197	1.03
	Left side	0.734	0.104	0.197	1.04
	Right side		0.104	0.197	0.30
	Top side	0.106	0.104	0.197	0.41
	Bottom side			0.197	0.20
FR1 n77 Part27Q Ant 2	Front	0.492	0.104	0.197	0.79
	Back	0.611	0.104	0.197	0.91
	Left side	0.956	0.104	0.197	1.26
	Right side		0.104	0.197	0.30
	Top side	0.103	0.104	0.197	0.40
	Bottom side			0.197	0.20
FR1 n78 Part27O Ant 2	Front	0.327	0.104	0.197	0.63
	Back	0.517	0.104	0.197	0.82
	Left side	0.691	0.104	0.197	0.99

	Right side		0.104	0.197	0.30
	Top side	0.068	0.104	0.197	0.37
	Bottom side			0.197	0.20
FR1 n78 Part27Q Ant 2	Front	0.431	0.104	0.197	0.73
	Back	0.506	0.104	0.197	0.81
	Left side	0.959	0.104	0.197	1.26
	Right side		0.104	0.197	0.30
	Top side	0.105	0.104	0.197	0.41
	Bottom side			0.197	0.20
FR1 n78 Part27O Ant 4	Front	0.281	0.104	0.197	0.58
	Back	0.432	0.104	0.197	0.73
	Left side	0.033	0.104	0.197	0.33
	Right side	0.047	0.104	0.197	0.35
	Top side	0.693	0.104	0.197	0.99
	Bottom side			0.197	0.20
FR1 n78 Part27Q Ant 4	Front	0.338	0.104	0.197	0.64
	Back	0.476	0.104	0.197	0.78
	Left side	0.044	0.104	0.197	0.35
	Right side	0.035	0.104	0.197	0.34
	Top side	0.769	0.104	0.197	1.07
	Bottom side			0.197	0.20
FR1 n78 Part27O Ant 6	Front	0.207	0.104	0.197	0.51
	Back	0.296	0.104	0.197	0.60
	Left side		0.104	0.197	0.30
	Right side	0.713	0.104	0.197	1.01
	Top side	0.201	0.104	0.197	0.50
	Bottom side			0.197	0.20
FR1 n78 Part27Q Ant 6	Front	0.234	0.104	0.197	0.54
	Back	0.332	0.104	0.197	0.63
	Left side		0.104	0.197	0.30
	Right side	0.724	0.104	0.197	1.03
	Top side	0.087	0.104	0.197	0.39
	Bottom side			0.197	0.20
FR1 n78 Part27O Ant 7	Front	0.331	0.104	0.197	0.63
	Back	0.337	0.104	0.197	0.64
	Left side	0.643	0.104	0.197	0.94
	Right side		0.104	0.197	0.30
	Top side		0.104	0.197	0.30
	Bottom side	0.213		0.197	0.41
FR1 n78 Part27Q Ant 7	Front	0.418	0.104	0.197	0.72
	Back	0.481	0.104	0.197	0.78
	Left side	1.101	0.104	0.197	1.40
	Right side		0.104	0.197	0.30
	Top side		0.104	0.197	0.30
	Bottom side	0.123		0.197	0.32

17.4 Body-Worn Accessory Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	5	6	1+2	1+3+4	1+3+5	1+4+6	1+5+6	Case No
		WWAN	WLAN2.4GHz Ant 3+5	WLAN5GHz Ant 4+5	Bluetooth Ant 3	Bluetooth Ant 5	WIFI6E Ant 4+5	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)	
GSM850 Ant 0	Front	0.711	0.339	0.397	0.088	0.092	0.112	1.05	1.20	1.20	0.91	0.92	
	Back	0.916	0.339	0.261	0.088	0.092	0.152	1.26	1.27	1.27	1.16	1.16	
GSM1900 Ant 0	Front	0.746	0.339	0.397	0.088	0.092	0.112	1.09	1.23	1.24	0.95	0.95	
	Back	1.156	0.339	0.261	0.088	0.092	0.152	1.50	1.51	1.51	1.40	1.40	
WCDMA II Ant 0	Front	0.454	0.339	0.397	0.088	0.092	0.112	0.79	0.94	0.94	0.65	0.66	
	Back	1.099	0.339	0.261	0.088	0.092	0.152	1.44	1.45	1.45	1.34	1.34	
WCDMA IV Ant 0	Front	0.444	0.339	0.397	0.088	0.092	0.112	0.78	0.93	0.93	0.64	0.65	
	Back	0.995	0.339	0.261	0.088	0.092	0.152	1.33	1.34	1.35	1.24	1.24	
WCDMA V Ant 0	Front	0.483	0.339	0.397	0.088	0.092	0.112	0.82	0.97	0.97	0.68	0.69	
	Back	1.015	0.339	0.261	0.088	0.092	0.152	1.35	1.36	1.37	1.26	1.26	
LTE Band 5 Ant 1	Front	0.465	0.339	0.397	0.088	0.092	0.112	0.80	0.95	0.95	0.67	0.67	
	Back	0.862	0.339	0.261	0.088	0.092	0.152	1.20	1.21	1.22	1.10	1.11	
LTE Band 7 Ant 0	Front	0.361	0.339	0.397	0.088	0.092	0.112	0.70	0.85	0.85	0.56	0.57	
	Back	1.068	0.339	0.261	0.088	0.092	0.152	1.41	1.42	1.42	1.31	1.31	
LTE Band 7 Ant 1	Front	0.345	0.339	0.397	0.088	0.092	0.112	0.68	0.83	0.83	0.55	0.55	
	Back	0.646	0.339	0.261	0.088	0.092	0.152	0.99	1.00	1.00	0.89	0.89	
LTE Band 12 Ant 0	Front	0.693	0.339	0.397	0.088	0.092	0.112	1.03	1.18	1.18	0.89	0.90	
	Back	0.930	0.339	0.261	0.088	0.092	0.152	1.27	1.28	1.28	1.17	1.17	
LTE Band 13 Ant 0	Front	0.610	0.339	0.397	0.088	0.092	0.112	0.95	1.10	1.10	0.81	0.81	
	Back	0.776	0.339	0.261	0.088	0.092	0.152	1.12	1.13	1.13	1.02	1.02	
LTE Band 25 Ant 0	Front	1.064	0.339	0.397	0.088	0.092	0.112	1.40	1.55	1.55	1.26	1.27	
	Back	1.345	0.339	0.261	0.088	0.092	0.152	**1.68**	**1.69**	**1.70**	**1.59**	1.59	**1&2&3**
LTE Band 26 Ant 0	Front	0.818	0.339	0.397	0.088	0.092	0.112	1.16	1.30	1.31	1.02	1.02	
	Back	0.941	0.339	0.261	0.088	0.092	0.152	1.28	1.29	1.29	1.18	1.19	
LTE Band 66 Ant 0	Front	0.671	0.339	0.397	0.088	0.092	0.112	1.01	1.16	1.16	0.87	0.88	
	Back	1.077	0.339	0.261	0.088	0.092	0.152	1.42	1.43	1.43	1.32	1.32	
LTE Band 41 Ant 0	Front	0.503	0.339	0.397	0.088	0.092	0.112	0.84	0.99	0.99	0.70	0.71	
	Back	1.208	0.339	0.261	0.088	0.092	0.152	**1.55**	1.56	1.56	1.45	1.45	
LTE Band 41_HPUE Ant 0	Front	0.497	0.339	0.397	0.088	0.092	0.112	0.84	0.98	0.99	0.70	0.70	
	Back	1.086	0.339	0.261	0.088	0.092	0.152	1.43	1.44	1.44	1.33	1.33	
LTE Band 42 Ant 2	Front	0.216	0.339	0.397	0.088	0.092	0.112	0.56	0.70	0.71	0.42	0.42	
	Back	0.346	0.339	0.261	0.088	0.092	0.152	0.69	0.70	0.70	0.59	0.59	

WWAN Band	Exposure Position	1	2	3	4	5	6	1+2	1+3+4	1+3+5	1+4+6	1+5+6
		NR	WLAN2.4GHz Ant 3+5	WLAN5GHz Ant 4+5	Bluetooth Ant 3	Bluetooth Ant 5	WIFI6E Ant 4+5	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)
FR1 n5 Ant 1	Front	0.343	0.339	0.397	0.088	0.092	0.112	0.68	0.83	0.83	0.54	0.55
	Back	0.817	0.339	0.261	0.088	0.092	0.152	1.16	1.17	1.17	1.06	1.06
FR1 n7 Ant 0	Front	0.476	0.339	0.397	0.088	0.092	0.112	0.82	0.96	0.97	0.68	0.68
	Back	1.105	0.339	0.261	0.088	0.092	0.152	1.44	1.45	1.46	1.35	1.35
FR1 n7 Ant 1	Front	0.399	0.339	0.397	0.088	0.092	0.112	0.74	0.88	0.89	0.60	0.60
	Back	0.669	0.339	0.261	0.088	0.092	0.152	1.01	1.02	1.02	0.91	0.91
FR1 n66 Ant 0	Front	0.707	0.339	0.397	0.088	0.092	0.112	1.05	1.19	1.20	0.91	0.91
	Back	0.885	0.339	0.261	0.088	0.092	0.152	1.22	1.23	1.24	1.13	1.13
FR1 n66 Ant 1	Front	0.540	0.339	0.397	0.088	0.092	0.112	0.88	1.03	1.03	0.74	0.74
	Back	0.950	0.339	0.261	0.088	0.092	0.152	1.29	1.30	1.30	1.19	1.19
FR1 n41 Ant 0	Front	0.517	0.339	0.397	0.088	0.092	0.112	0.86	1.00	1.01	0.72	0.72
	Back	1.157	0.339	0.261	0.088	0.092	0.152	1.50	1.51	1.51	1.40	1.40
FR1 n77 Ant 2	Front	0.492	0.339	0.397	0.088	0.092	0.112	0.83	0.98	0.98	0.69	0.70
	Back	0.729	0.339	0.261	0.088	0.092	0.152	1.07	1.08	1.08	0.97	0.97
FR1 n78 Ant 2	Front	0.431	0.339	0.397	0.088	0.092	0.112	0.77	0.92	0.92	0.63	0.64
	Back	0.517	0.339	0.261	0.088	0.092	0.152	0.86	0.87	0.87	0.76	0.76
FR1 n78 Ant 4	Front	0.338	0.339	0.397	0.088	0.092	0.112	0.68	0.82	0.83	0.54	0.54
	Back	0.476	0.339	0.261	0.088	0.092	0.152	0.82	0.83	0.83	0.72	0.72
FR1 n78 Ant 6	Front	0.234	0.339	0.397	0.088	0.092	0.112	0.57	0.72	0.72	0.43	0.44
	Back	0.332	0.339	0.261	0.088	0.092	0.152	0.67	0.68	0.69	0.57	0.58
FR1 n78 Ant 7	Front	0.984	0.339	0.397	0.088	0.092	0.112	1.32	1.47	1.47	1.18	1.19
	Back	1.007	0.339	0.261	0.088	0.092	0.152	1.35	1.36	1.36	1.25	1.25

WWAN Band	Exposure Position	1	2	3	4	1+2+3	1+2+4	Case No
		WWAN	WLAN2.4GHz Ant 3+5	WLAN5GHz Ant 4+5	WIFI6E Ant 4+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)	
GSM850 Ant 0	Front	0.711	0.160	0.197	0.112	1.07	0.98	
	Back	0.916	0.160	0.161	0.152	1.24	1.23	
GSM1900 Ant 0	Front	0.746	0.160	0.197	0.112	1.10	1.02	
	Back	1.156	0.160	0.161	0.152	1.48	1.47	
WCDMA II Ant 0	Front	0.454	0.160	0.197	0.112	0.81	0.73	
	Back	1.099	0.160	0.161	0.152	1.42	1.41	
WCDMA IV Ant 0	Front	0.444	0.160	0.197	0.112	0.80	0.72	
	Back	0.995	0.160	0.161	0.152	1.32	1.31	
WCDMA V Ant 0	Front	0.483	0.160	0.197	0.112	0.84	0.76	
	Back	1.015	0.160	0.161	0.152	1.34	1.33	
LTE Band 5 Ant 1	Front	0.465	0.160	0.197	0.112	0.82	0.74	
	Back	0.862	0.160	0.161	0.152	1.18	1.17	
LTE Band 7 Ant 0	Front	0.361	0.160	0.197	0.112	0.72	0.63	
	Back	1.068	0.160	0.161	0.152	1.39	1.38	
LTE Band 7 Ant 1	Front	0.345	0.160	0.197	0.112	0.70	0.62	
	Back	0.646	0.160	0.161	0.152	0.97	0.96	
LTE Band 12 Ant 0	Front	0.693	0.160	0.197	0.112	1.05	0.97	
	Back	0.930	0.160	0.161	0.152	1.25	1.24	
LTE Band 13 Ant 0	Front	0.610	0.160	0.197	0.112	0.97	0.88	
	Back	0.776	0.160	0.161	0.152	1.10	1.09	
LTE Band 25 Ant 0	Front	1.064	0.160	0.197	0.112	1.42	1.34	
	Back	1.345	0.160	0.161	0.152	**1.67**	**1.66**	**4&5**
LTE Band 26 Ant 0	Front	0.818	0.160	0.197	0.112	1.18	1.09	
	Back	0.941	0.160	0.161	0.152	1.26	1.25	
LTE Band 66 Ant 0	Front	0.671	0.160	0.197	0.112	1.03	0.94	
	Back	1.077	0.160	0.161	0.152	1.40	1.39	
LTE Band 41 Ant 0	Front	0.503	0.160	0.197	0.112	0.86	0.78	
	Back	1.208	0.160	0.161	0.152	1.53	1.52	
LTE Band 41_HPUE Ant 0	Front	0.497	0.160	0.197	0.112	0.85	0.77	
	Back	1.086	0.160	0.161	0.152	1.41	1.40	
LTE Band 42 Ant 2	Front	0.216	0.160	0.197	0.112	0.57	0.49	
	Back	0.346	0.160	0.161	0.152	0.67	0.66	

WWAN Band	Exposure Position	1	2	3	4	1+2+3	1+2+4
		NR	WLAN2.4GHz Ant 1+2	WLAN5GHz Ant 1+2	WIFI 6E Ant 4+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)
FR1 n5 Ant 1	Front	0.343	0.160	0.197	0.112	0.70	0.62
	Back	0.817	0.160	0.161	0.152	1.14	1.13
FR1 n7 Ant 0	Front	0.476	0.160	0.197	0.112	0.83	0.75
	Back	1.105	0.160	0.161	0.152	1.43	1.42
FR1 n7 Ant 1	Front	0.399	0.160	0.197	0.112	0.76	0.67
	Back	0.669	0.160	0.161	0.152	0.99	0.98
FR1 n66 Ant 0	Front	0.707	0.160	0.197	0.112	1.06	0.98
	Back	0.885	0.160	0.161	0.152	1.21	1.20
FR1 n66 Ant 1	Front	0.540	0.160	0.197	0.112	0.90	0.81
	Back	0.950	0.160	0.161	0.152	1.27	1.26
FR1 n41 Ant 0	Front	0.517	0.160	0.197	0.112	0.87	0.79
	Back	1.157	0.160	0.161	0.152	1.48	1.47
FR1 n77 Ant 2	Front	0.492	0.160	0.197	0.112	0.85	0.76
	Back	0.729	0.160	0.161	0.152	1.05	1.04
FR1 n78 Ant 2	Front	0.431	0.160	0.197	0.112	0.79	0.70
	Back	0.517	0.160	0.161	0.152	0.84	0.83
FR1 n78 Ant 4	Front	0.338	0.160	0.197	0.112	0.70	0.61
	Back	0.476	0.160	0.161	0.152	0.80	0.79
FR1 n78 Ant 6	Front	0.234	0.160	0.197	0.112	0.59	0.51
	Back	0.332	0.160	0.161	0.152	0.65	0.64
FR1 n78 Ant 7	Front	0.984	0.160	0.197	0.112	1.34	1.26
	Back	1.007	0.160	0.161	0.152	1.33	1.32

Exposure Position	1	2	3	1+2	1+3
	WLAN2.4GHz Ant 1+2	WLAN5GHz Ant 1+2	WIFI 6E Ant 4+5	Summed	Summed
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
Front	0.678	0.796	0.112	1.47	0.79
Back	0.678	0.796	0.152	1.47	0.83

Sensor off

WWAN Band	Exposure Position	1	2	3	4	1+2+3	1+2+4
		WWAN	WLAN2.4GHz Ant 3+5	WLAN5GHz Ant 4+5	WLAN6E Ant 4+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)
GSM1900 Ant 0	Front	0.396	0.100	0.197	0.061	0.69	0.56
	Back	0.219	0.061	0.161	0.069	0.44	0.35
WCDMA II Ant 0	Front	0.693	0.100	0.197	0.061	0.99	0.85
	Back	0.403	0.061	0.161	0.069	0.63	0.53
WCDMA IV Ant 0	Front	0.994	0.100	0.197	0.061	1.29	1.16
	Back	0.542	0.061	0.161	0.069	0.76	0.67
LTE Band 7 Ant 0	Front	0.499	0.100	0.197	0.061	0.80	0.66
	Back	0.260	0.061	0.161	0.069	0.48	0.39
LTE Band 7 Ant 1	Front	0.220	0.100	0.197	0.061	0.52	0.38
	Back	0.193	0.061	0.161	0.069	0.42	0.32
LTE Band 25 Ant 0	Front	0.873	0.100	0.197	0.061	1.17	1.03
	Back	0.384	0.061	0.161	0.069	0.61	0.51
LTE Band 66 Ant 0	Front	0.887	0.100	0.197	0.061	1.18	1.05
	Back	0.468	0.061	0.161	0.069	0.69	0.60
LTE Band 41 Ant 0	Front	0.212	0.100	0.197	0.061	0.51	0.37
	Back	0.117	0.061	0.161	0.069	0.34	0.25
LTE Band 41_HPUE Ant 0	Front	0.175	0.100	0.197	0.061	0.47	0.34
	Back	0.092	0.061	0.161	0.069	0.31	0.22
LTE Band 42 Ant 2	Front	0.241	0.100	0.197	0.061	0.54	0.40
	Back	0.346	0.061	0.161	0.069	0.57	0.48
FR1 n7 Ant 0	Front	0.378	0.100	0.225	0.061	0.70	0.54
	Back	0.159	0.061	0.224	0.069	0.44	0.29
FR1 n7 Ant 1	Front	0.191	0.100	0.225	0.061	0.52	0.35
	Back	0.158	0.061	0.224	0.069	0.44	0.29
FR1 n66 Ant 0	Front	0.516	0.100	0.225	0.061	0.84	0.68
	Back	0.287	0.061	0.224	0.069	0.57	0.42
FR1 n41 Ant 0	Front	0.134	0.100	0.225	0.061	0.46	0.30
	Back	0.083	0.061	0.224	0.069	0.37	0.21
FR1 n77 Ant 2	Front	0.214	0.100	0.225	0.061	0.54	0.38
	Back	0.263	0.061	0.224	0.069	0.55	0.39
FR1 n78 Ant 2	Front	0.354	0.100	0.225	0.061	0.68	0.52
	Back	0.376	0.061	0.224	0.069	0.66	0.51
FR1 n78 Ant 4	Front	0.127	0.100	0.225	0.061	0.45	0.29
	Back	0.103	0.061	0.224	0.069	0.39	0.23
FR1 n78 Ant 6	Front	0.128	0.100	0.225	0.061	0.45	0.29
	Back	0.092	0.061	0.224	0.069	0.38	0.22

17.5 Product specific 10g SAR Exposure Conditions

Remark:
1. For 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	2	3	1+2	1+3	Case No
		WWAN	WLAN5GHz Ant 4+5	WIFI 6E Ant 4+5	Summed	Summed	
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
GSM1900 Ant 0	Front	1.751	0.786	0.204	2.54	1.96	
	Back	2.588	0.786	0.204	3.37	2.79	
	Left side		0.786	0.204	0.79	0.20	
	Right side		0.786	0.204	0.79	0.20	
	Top side		0.786	0.204	0.79	0.20	
	Bottom side	1.125	0.786	0.204	1.91	1.33	
WCDMA II Ant 0	Front	2.872	0.786	0.204	3.66	3.08	
	Back	2.667	0.786	0.204	3.45	2.87	
	Left side		0.786	0.204	0.79	0.20	
	Right side		0.786	0.204	0.79	0.20	
	Top side		0.786	0.204	0.79	0.20	
	Bottom side	1.679	0.786	0.204	2.47	1.88	
WCDMA IV Ant 0	Front	3.182	0.786	0.204	3.97	3.39	
	Back	3.100	0.786	0.204	3.89	3.30	
	Left side		0.786	0.204	0.79	0.20	
	Right side		0.786	0.204	0.79	0.20	
	Top side		0.786	0.204	0.79	0.20	
	Bottom side	2.238	0.786	0.204	3.02	2.44	
LTE Band 7 Ant 0	Front	1.601	0.786	0.204	2.39	1.81	
	Back	3.049	0.786	0.204	3.84	3.25	
	Left side		0.786	0.204	0.79	0.20	
	Right side		0.786	0.204	0.79	0.20	
	Top side		0.786	0.204	0.79	0.20	
	Bottom side	1.283	0.786	0.204	2.07	1.49	
LTE Band 7 Ant 1	Front	2.801	0.786	0.204	3.59	3.01	
	Back	2.801	0.786	0.204	3.59	3.01	
	Left side		0.786	0.204	0.79	0.20	
	Right side		0.786	0.204	0.79	0.20	
	Top side	2.801	0.786	0.204	3.59	3.01	
	Bottom side		0.786	0.204	0.79	0.20	
LTE Band 25 Ant 0	Front	2.808	0.786	0.204	3.59	3.01	
	Back	2.861	0.786	0.204	3.65	3.07	
	Left side		0.786	0.204	0.79	0.20	
	Right side		0.786	0.204	0.79	0.20	
	Top side		0.786	0.204	0.79	0.20	
	Bottom side	1.548	0.786	0.204	2.33	1.75	
LTE Band 41 Ant 0	Front	1.267	0.786	0.204	2.05	1.47	
	Back	3.306	0.786	0.204	**4.09**	3.51	**6**
	Left side		0.786	0.204	0.79	0.20	
	Right side		0.786	0.204	0.79	0.20	
	Top side		0.786	0.204	0.79	0.20	
	Bottom side	1.060	0.786	0.204	1.85	1.26	
LTE Band 41_HPUE Ant 0	Front	2.951	0.786	0.204	3.74	3.16	
	Back	2.951	0.786	0.204	3.74	3.16	
	Left side		0.786	0.204	0.79	0.20	
	Right side		0.786	0.204	0.79	0.20	
	Top side		0.786	0.204	0.79	0.20	
	Bottom side	2.951	0.786	0.204	3.74	3.16	
LTE Band 66 Ant 0	Front	3.084	0.786	0.204	3.87	3.29	

	Back	3.202	0.786	0.204	3.99	3.41	
	Left side		0.786	0.204	0.79	0.20	
	Right side		0.786	0.204	0.79	0.20	
	Top side		0.786	0.204	0.79	0.20	
	Bottom side	1.044	0.786	0.204	1.83	1.25	
LTE Band 42 Ant 2	Front		0.786	0.204	0.79	0.20	
	Back	2.410	0.786	0.204	3.20	2.61	
	Left side	2.410	0.786	0.204	3.20	2.61	
	Right side		0.786	0.204	0.79	0.20	
	Top side		0.786	0.204	0.79	0.20	
	Bottom side		0.786	0.204	0.79	0.20	

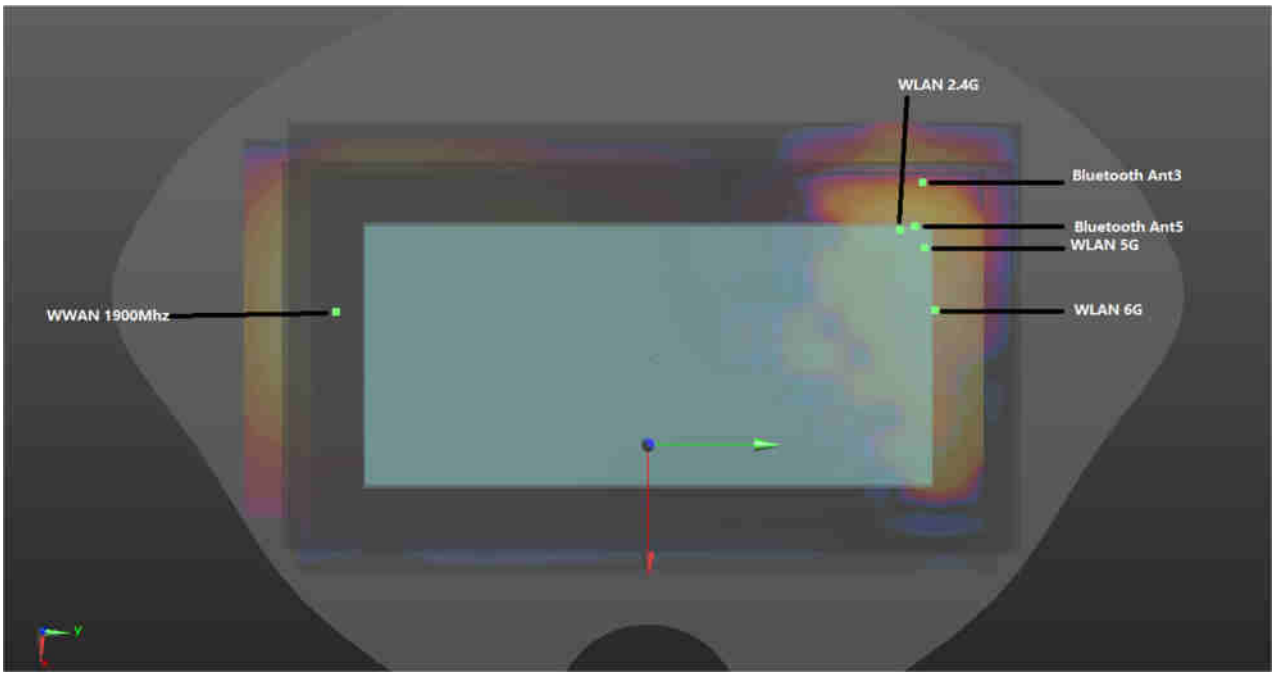
WWAN Band	Exposure Position	1 WWAN 10g SAR (W/kg)	2 WLAN5GHz Ant 4+5 10g SAR (W/kg)	3 WIFI 6E Ant 4+5 10g SAR (W/kg)	1+2 Summed 10g SAR (W/kg)	1+3 Summed 10g SAR (W/kg)
FR1 n7 Ant 0	Front	1.960	0.786	0.204	2.75	2.16
	Back	3.155	0.786	0.204	3.94	3.36
	Left side		0.786	0.204	0.79	0.20
	Right side		0.786	0.204	0.79	0.20
	Top side		0.786	0.204	0.79	0.20
	Bottom side	1.328	0.786	0.204	2.11	1.53
FR1 n7 Ant 1	Front	2.526	0.786	0.204	3.31	2.73
	Back	2.526	0.786	0.204	3.31	2.73
	Left side		0.786	0.204	0.79	0.20
	Right side		0.786	0.204	0.79	0.20
	Top side	2.526	0.786	0.204	3.31	2.73
	Bottom side		0.786	0.204	0.79	0.20
FR1 n66 Ant 0	Front	2.053	0.786	0.204	2.84	2.26
	Back	2.899	0.786	0.204	3.69	3.10
	Left side		0.786	0.204	0.79	0.20
	Right side		0.786	0.204	0.79	0.20
	Top side		0.786	0.204	0.79	0.20
	Bottom side	0.957	0.786	0.204	1.74	1.16
FR1 n66 Ant 1	Front	2.639	0.786	0.204	3.43	2.84
	Back	2.639	0.786	0.204	3.43	2.84
	Left side	2.639	0.786	0.204	3.43	2.84
	Right side		0.786	0.204	0.79	0.20
	Top side	2.639	0.786	0.204	3.43	2.84
	Bottom side		0.786	0.204	0.79	0.20
FR1 n41 Ant 0	Front	1.640	0.786	0.204	2.43	1.84
	Back	3.200	0.786	0.204	3.99	3.40
	Left side		0.786	0.204	0.79	0.20
	Right side		0.786	0.204	0.79	0.20
	Top side		0.786	0.204	0.79	0.20
	Bottom side	1.320	0.786	0.204	2.11	1.52
FR1 n77 Ant 2	Front	2.427	0.786	0.204	3.21	2.63
	Back	2.427	0.786	0.204	3.21	2.63
	Left side	2.427	0.786	0.204	3.21	2.63
	Right side		0.786	0.204	0.79	0.20
	Top side		0.786	0.204	0.79	0.20
	Bottom side		0.786	0.204	0.79	0.20
FR1 n78 Ant 2	Front	2.473	0.786	0.204	3.26	2.68
	Back	2.473	0.786	0.204	3.26	2.68
	Left side	2.473	0.786	0.204	3.26	2.68
	Right side		0.786	0.204	0.79	0.20

	Top side		0.786	0.204	0.79	0.20
	Bottom side		0.786	0.204	0.79	0.20
FR1 n78 Ant 4	Front	2.246	0.786	0.204	3.03	2.45
	Back	2.246	0.786	0.204	3.03	2.45
	Left side		0.786	0.204	0.79	0.20
	Right side		0.786	0.204	0.79	0.20
	Top side	2.246	0.786	0.204	3.03	2.45
	Bottom side		0.786	0.204	0.79	0.20
FR1 n78 Ant 6	Front	2.330	0.786	0.204	3.12	2.53
	Back	2.330	0.786	0.204	3.12	2.53
	Left side		0.786	0.204	0.79	0.20
	Right side	2.330	0.786	0.204	3.12	2.53
	Top side		0.786	0.204	0.79	0.20
	Bottom side		0.786	0.204	0.79	0.20
FR1 n78 Ant 7	Front	2.953	0.786	0.204	3.74	3.16
	Back	2.953	0.786	0.204	3.74	3.16
	Left side	2.953	0.786	0.204	3.74	3.16
	Right side		0.786	0.204	0.79	0.20
	Top side		0.786	0.204	0.79	0.20
	Bottom side		0.786	0.204	0.79	0.20

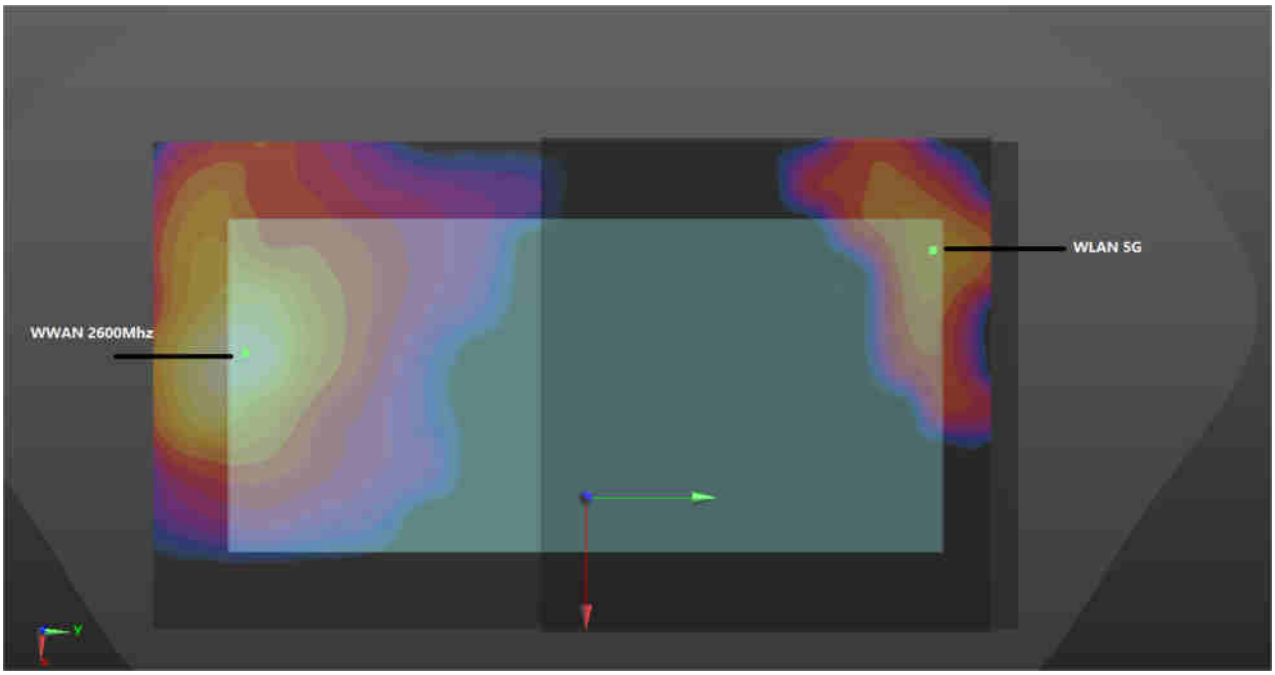
17.6 SPLSR Evaluation and Analysis

General Note:

1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of [(x1−x2)2 + (y1−y2)2 + (z1−z2)2], where (x1, y1, z1) and (x2, y2, z2) are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2. SPLSR = (SAR1 + SAR2)1.5 / (min. separation distance, mm). If SPLSR ≤ 0.04 for 1g SAR and SPLSR≤ 0.10 for 10g SAR, simultaneously transmission SAR measurement is not necessary.



WWAN+WLAN2.4GHz+ WLAN5GHz+ WLAN6GHz+ BT _Back 5mm



WWAN+WLAN5GHz_Back 0mm

Peak SAR location of each band of each antenna:

Band & Antenna	SAR peak location (mm)		
	X	Y	Z
WLAN 5GHz Ant 4+5	-30	81	1.21
Bluetooth Ant 3	-34	78.4	-0.95
Bluetooth Ant 5	-49.2	74.4	-1.02
LTE Band 25 Ant 0	-13.6	-87	1.51
WLAN2.4GHz Ant 3+5	-25.6	69.5	-2.91
WLAN 6GHz Ant 4+5	-13.77	80.92	-0.98
LTE Band 41 Ant 0	-8.2	-71.6	1.54
WLAN 5GHz Ant 4+5	-30	81	1.24

Peak SAR location of combine bands SPLSR Analysis:

	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
Case 1	LTE Band 25 Ant 0	Back	1.345	5	-13.6	-87	1.51	157.0	1.68	0.01	Not required
	WLAN2.4GHz Ant 3+5		0.339	5	-25.6	69.5	-2.91				
Case 2*	LTE Band 25 Ant 0	Back	1.345	5	-13.6	-87	1.51	168.8	1.69	0.01	Not required
	WLAN 5GHz Ant 4+5		0.261	5	-30	81	1.21				
	Bluetooth Ant 3		0.088	5							
Case 3*	LTE Band 25 Ant 0	Back	1.345	5	-13.6	-87	1.51	168.8	1.70	0.01	Not required
	WLAN 5GHz Ant 4+5		0.261	5	-30	81	1.21				
	Bluetooth Ant 5		0.092	5							
Case 4*	LTE Band 25 Ant 0	Back	1.345	5	-13.6	-87	1.51	157.0	1.67	0.01	Not required
	WLAN2.4GHz Ant 3+5		0.16	5	-25.6	69.5	-2.91				
	WLAN 5GHz Ant 4+5		0.161	5							
Case 5*	LTE Band 25 Ant 0	Back	1.345	5	-13.6	-87	1.51	167.9	1.66	0.01	Not required
	WLAN2.4GHz Ant 3+5		0.16	5	-13.77	80.92	-0.98				
	WLAN 6GHz Ant 1+2		0.152	5							
Case 6	LTE Band 41 Ant 0	Back	3.306	0	-8.2	-71.6	1.54	154.1	4.09	0.05	Not required
	WLAN 5GHz Ant 4+5		0.786	0	-30	81	1.24				

Note: *Instead of doing a small volume scan over a co-located antenna pair, used summing the SAR values of the co-located pair and using that value in SPLSR calculation. In the calculation used the minimum distance between the spatially separated antenna and the closest antenna of the co-located antenna pair to be conservative.

Test Engineer : Martin Li, Varus Wang, Ricky Gu, Light Wang, Damon Zhu

18. Uncertainty Assessment

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

19. References

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

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

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

[4] SPEAG DASY System Handbook

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

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

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

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

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

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

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

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

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

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

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

Appendix A. Plots of System Performance Check

The plots are shown as follows.

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/19

System Check_Head_750MHz

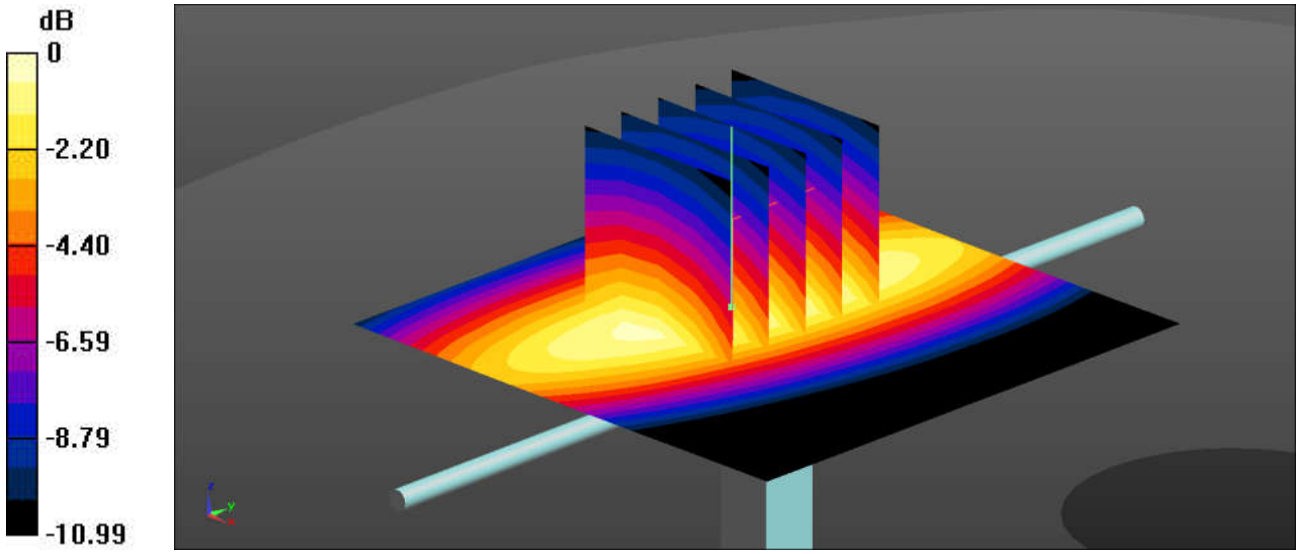
DUT: D750V3 - SN:1087

Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium: HSL_750 Medium parameters used: f = 750 MHz; σ = 0.872 S/m; ε_r = 41.171; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(10.25, 10.25, 10.25); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.518 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.79 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.601 W/kg
SAR(1 g) = 0.395 W/kg; SAR(10 g) = 0.260 W/kg
Maximum value of SAR (measured) = 0.532 W/kg



0 dB = 0.532 W/kg = -2.74 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/20

System Check_Head_835MHz

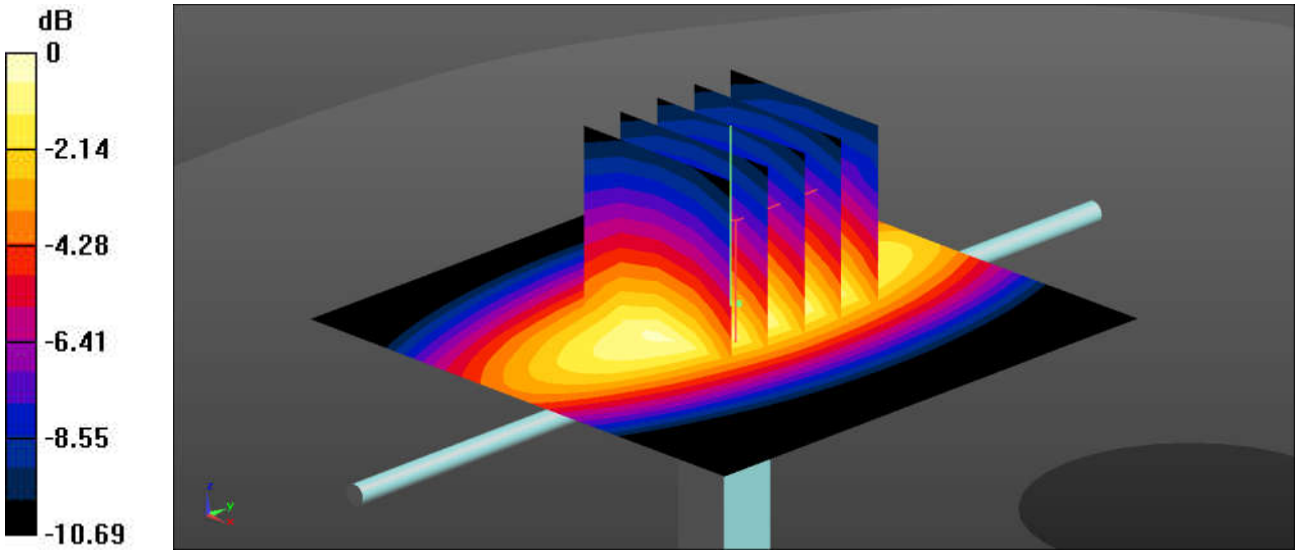
DUT: D835V2 - SN:4d162

Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL_835 Medium parameters used: f = 835 MHz; σ = 0.911 S/m; ε_r = 42.719; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(9.98, 9.98, 9.98); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.554 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.05 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.641 W/kg
SAR(1 g) = 0.445 W/kg; SAR(10 g) = 0.296 W/kg
Maximum value of SAR (measured) = 0.568 W/kg



0 dB = 0.568 W/kg = -2.46 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/21

System Check_Head_1750MHz

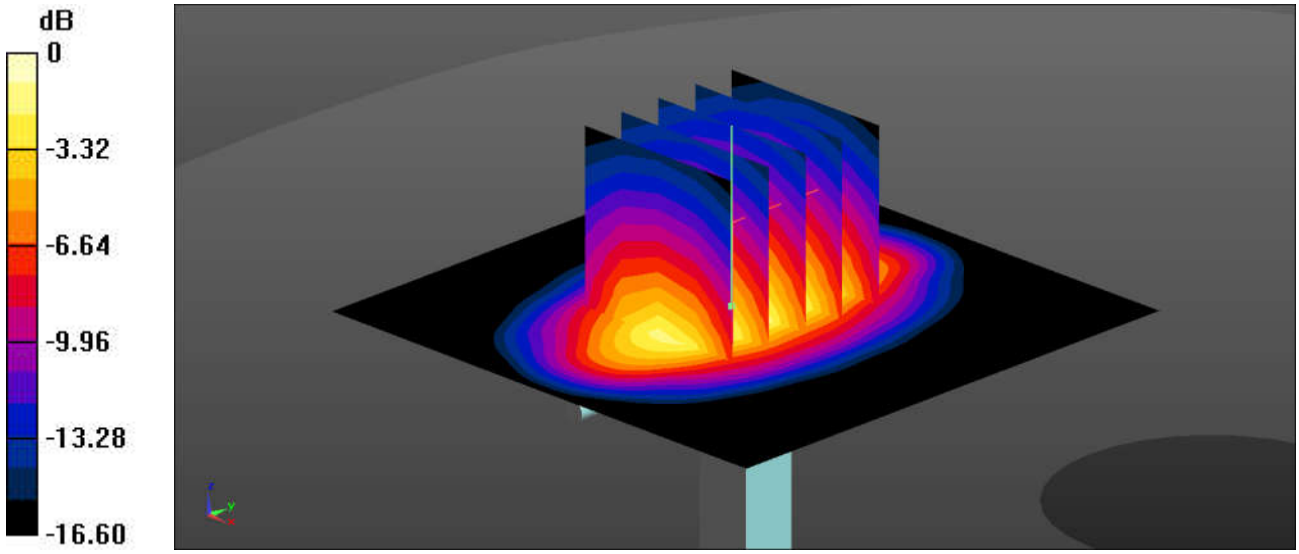
DUT: D1750V2 - SN:1090

Communication System: UID 0, CW (0); Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: HSL_1750 Medium parameters used: f = 1750 MHz; σ = 1.343 S/m; ε_r = 38.54; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(8.45, 8.45, 8.45); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.99 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 55.36 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 4.77 W/kg
SAR(1 g) = 1.73 W/kg; SAR(10 g) = 0.941 W/kg
Maximum value of SAR (measured) = 4.05 W/kg



0 dB = 4.05 W/kg = 6.07 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/22

System Check_Head_1900MHz

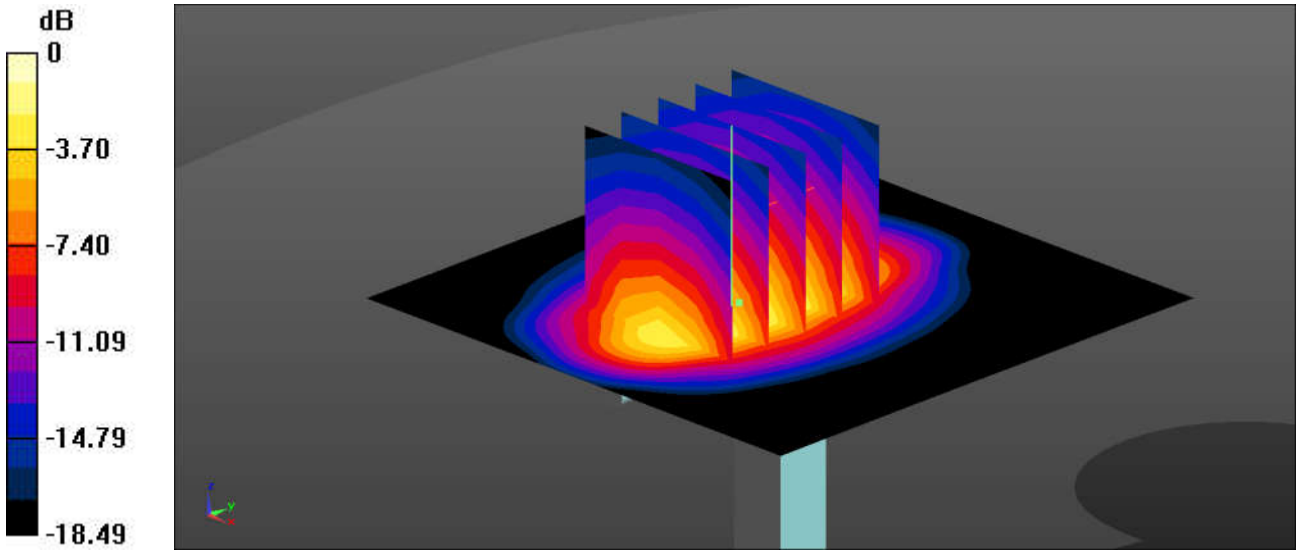
DUT: D1900V2 - SN:5d182

Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL_1900 Medium parameters used: f = 1900 MHz; σ = 1.398 S/m; ε_r = 41.444; ρ = 1000 kg/m^3
Ambient Temperature：23.1 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(8.13, 8.13, 8.13); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 4.58 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 54.15 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 5.43 W/kg
SAR(1 g) = 1.91 W/kg; SAR(10 g) = 1.02 W/kg
Maximum value of SAR (measured) = 4.51 W/kg



0 dB = 4.51 W/kg = 6.54 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/23

System Check_Head_2450MHz

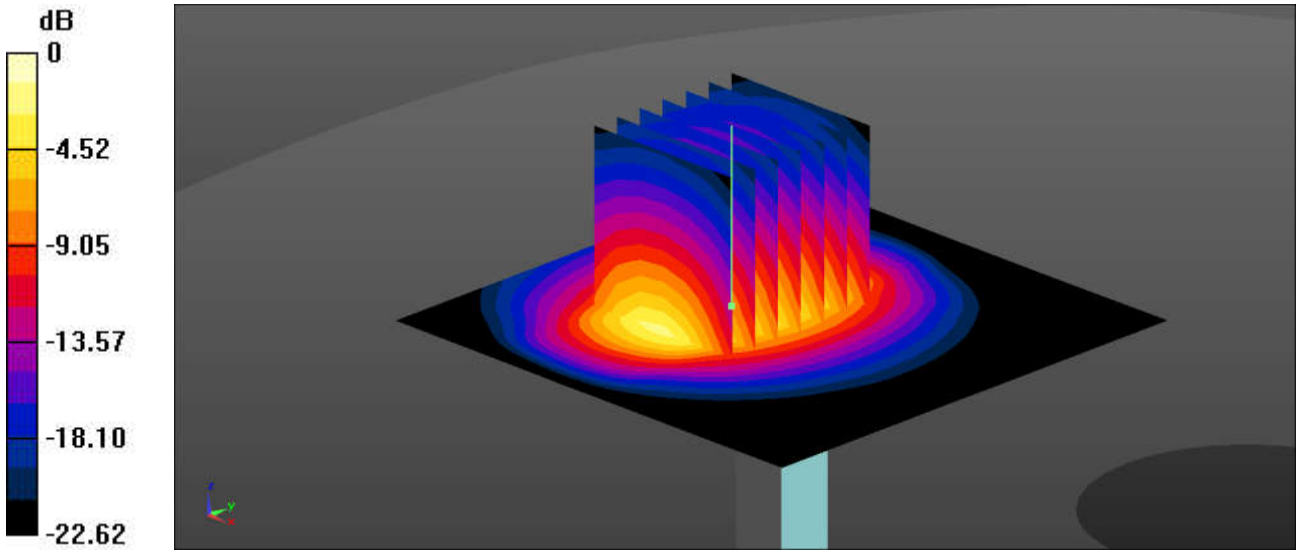
DUT: D2450V2 - SN:924

Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: HSL_2450 Medium parameters used: f = 2450 MHz; σ = 1.81 S/m; ε_r = 38.621; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.9 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(7.53, 7.53, 7.53); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.31 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 32.42 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 5.37 W/kg
SAR(1 g) = 2.56 W/kg; SAR(10 g) = 1.18 W/kg
Maximum value of SAR (measured) = 4.28 W/kg



0 dB = 4.28 W/kg = 6.31 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/24

System Check_Head_2600MHz

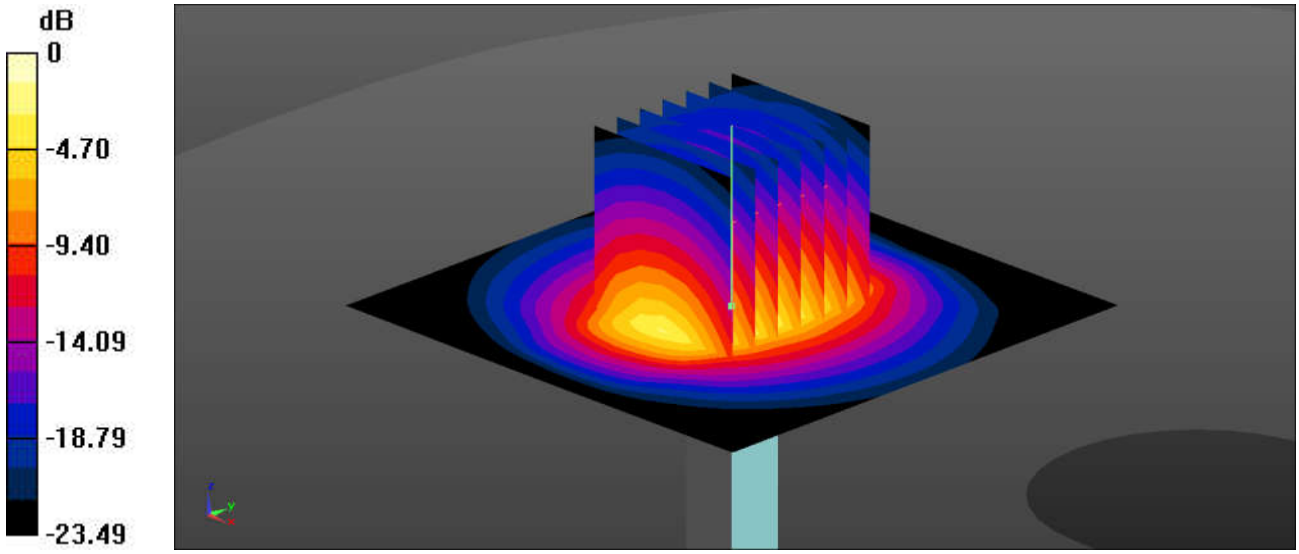
DUT: D2600V2 - SN:1061

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: HSL_2600 Medium parameters used: f = 2600 MHz; σ = 1.927 S/m; ε_r = 38.323; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(7.26, 7.26, 7.26); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.31 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.39 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 5.36 W/kg
SAR(1 g) = 2.61 W/kg; SAR(10 g) = 1.2 W/kg
Maximum value of SAR (measured) = 4.36 W/kg



0 dB = 4.36 W/kg = 6.39 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/25

System Check_Head_3500MHz

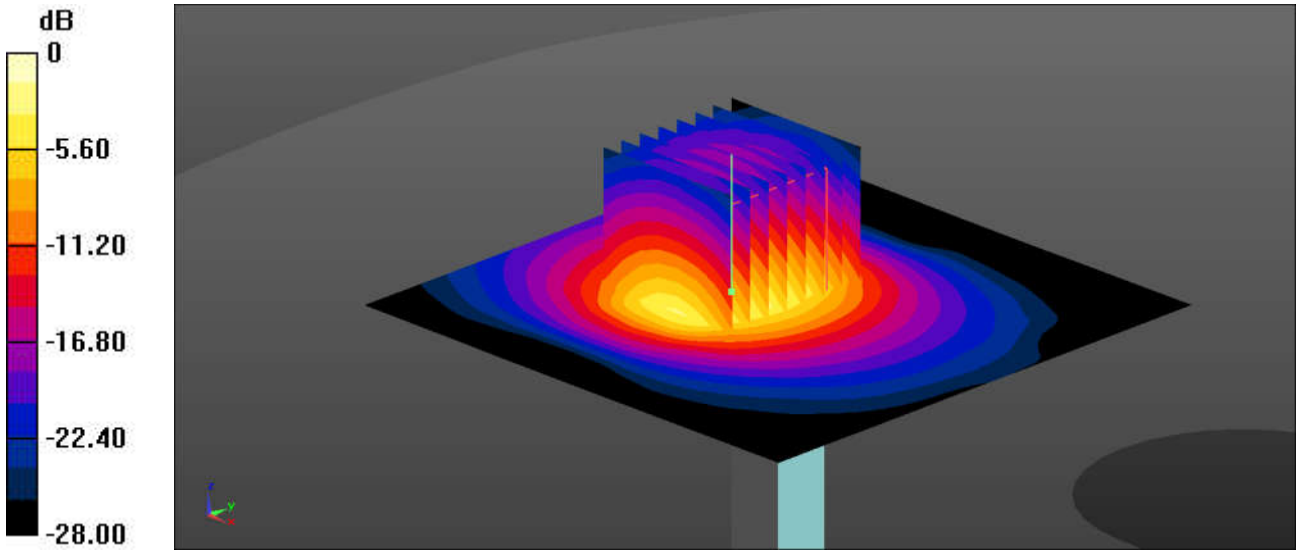
DUT: D3500V2 - SN:1037

Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium: HSL_3500 Medium parameters used: f = 3500 MHz; σ = 2.785 S/m; ε_r = 38.965; ρ = 1000 kg/m^3
Ambient Temperature：23.1 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(6.69, 6.69, 6.69); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 6.01 W/kg

Pin=50mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 32.34 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 7.87 W/kg
SAR(1 g) = 3.15 W/kg; SAR(10 g) = 1.2 W/kg
Maximum value of SAR (measured) = 6.03 W/kg



0 dB = 6.03 W/kg = 7.80 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/26

System Check_Head_3700MHz

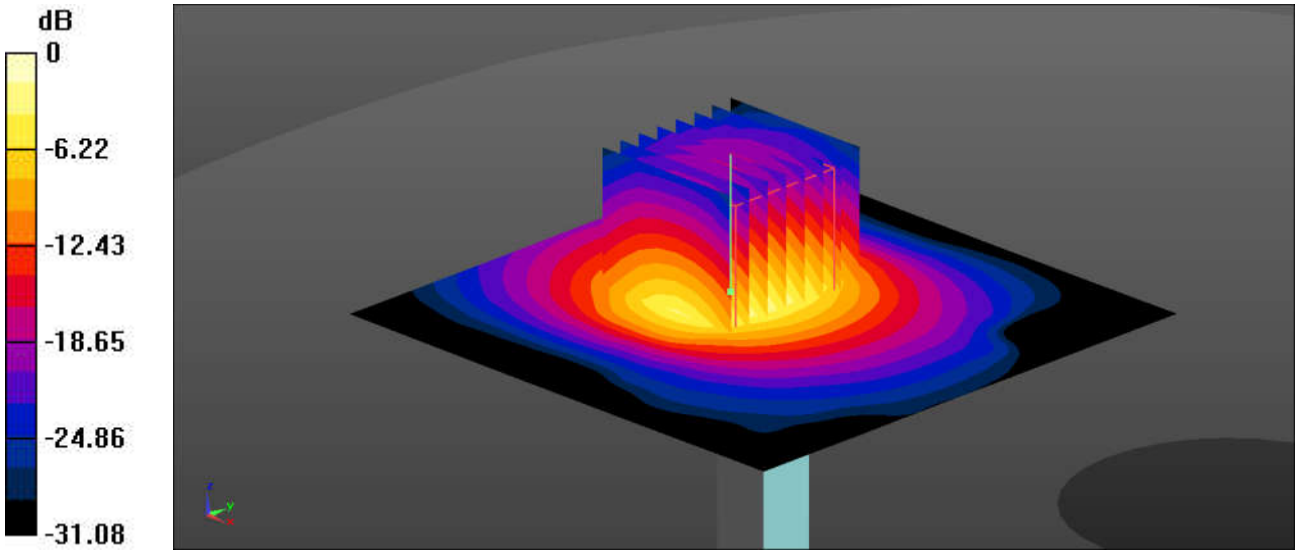
DUT: D3700V2 - SN:1008

Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium: HSL_3700 Medium parameters used: f = 3700 MHz; σ = 3.078 S/m; ε_r = 38.038; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.9 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(6.64, 6.64, 6.64); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 6.57 W/kg

Pin=50mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 31.09 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 8.96 W/kg
SAR(1 g) = 3.41 W/kg; SAR(10 g) = 1.26 W/kg
Maximum value of SAR (measured) = 6.75 W/kg



0 dB = 6.75 W/kg = 8.29 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/27

System Check_Head_3900MHz

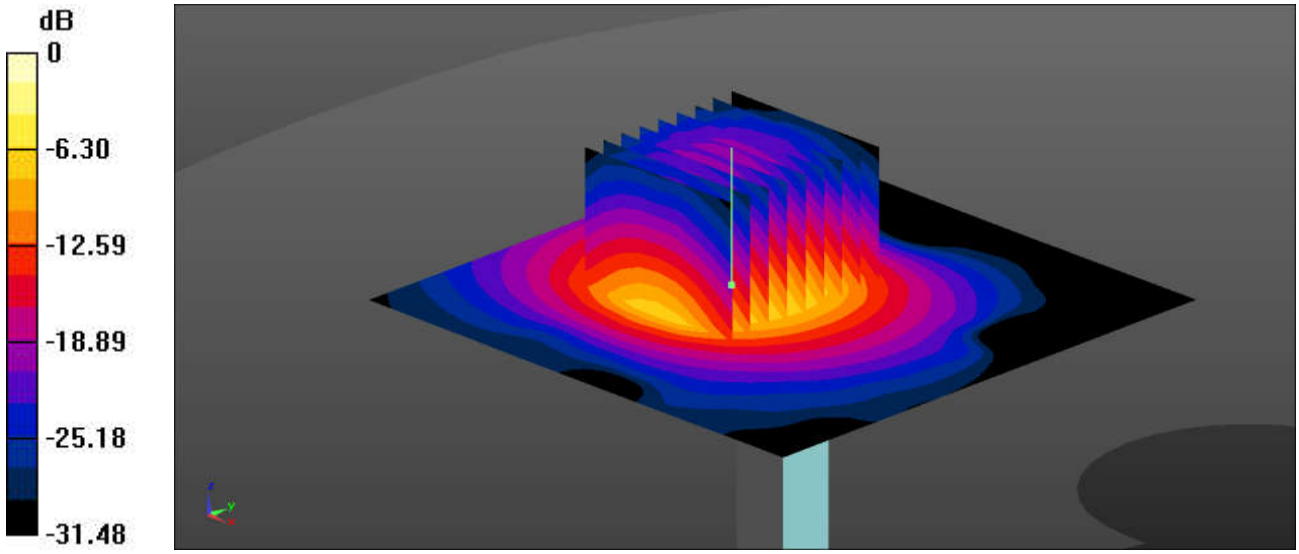
DUT: D3900V2 - SN:1048

Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium: HSL_3900 Medium parameters used: f = 3900 MHz; σ = 3.282 S/m; ε_r = 37.613; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(6.5, 6.5, 6.5); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 6.51 W/kg

Pin=50mW/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 28.77 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 8.83 W/kg
SAR(1 g) = 3.27 W/kg; SAR(10 g) = 1.16 W/kg
Maximum value of SAR (measured) = 6.57 W/kg



0 dB = 6.57 W/kg = 8.18 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/5/28

System Check_Head_5250MHz

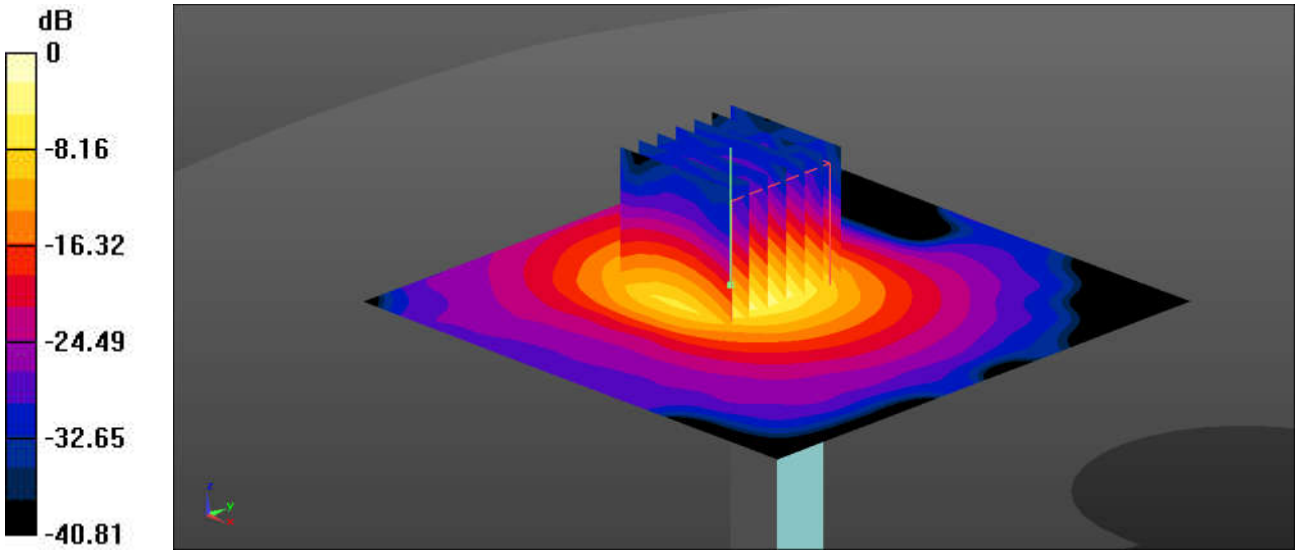
DUT: D5GHzV2 - SN:1113

Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: HSL_5000 Medium parameters used: f = 5250 MHz; σ = 4.579 S/m; ε_r = 36.302; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7592; ConvF(5.38, 5.38, 5.38); Calibrated: 2021/6/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1650; Calibrated: 2021/6/9
- Phantom: SAM Twin Phantom; Type: SAM Twin; Serial: TP-1644
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 9.10 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 28.50 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 15.6 W/kg
SAR(1 g) = 3.89 W/kg; SAR(10 g) = 1.1 W/kg
Maximum value of SAR (measured) = 9.84 W/kg



0 dB = 9.84 W/kg = 9.93 dBW/kg