FCC SAR Test Report

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT2311-3, XT2311-4, XT2311DL
FCC ID	:	IHDT56AH4
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
FA292212	Rev. 01	1. Initial issue of report.	Nov. 15, 2022

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Motorola Mobility LLC, Mobile Cellular Phone, XT2311-3, XT2311-4, XT2311DL,** 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	0.49	0.83	0.81	1.59
		GSM1900	0.22	1.40	1.37	
	WCDMA	Band II	0.28	1.29	1.20	
		Band IV	0.17	1.39	1.38	
		Band V	0.38	0.65	0.65	
	LTE	Band 7	0.69	1.20	1.20	
		Band 12/ Band 17	1.02	0.72	0.72	
		Band 13	0.60	0.60	0.60	
		Band 14	0.47	0.60	0.60	
		Band 25/ Band 2	1.36	1.39	1.39	
		Band 26/ Band 5	1.33	0.80	0.80	
		Band 30	0.59	1.11	1.11	
		Band 66/ Band 4	**1.38**	**1.41**	1.32	
		Band 71	0.46	0.79	0.79	
		Band 41/ Band 38	0.76	1.17	1.17	
		Band 48	1.37	1.24	1.24	
	5G NR	n7	0.47	1.39	1.36	
		n12	0.56	0.59	0.59	
		n14	0.22	0.48	0.48	
		n25/n2	**1.38**	1.40	**1.40**	
		n26/n5	**1.38**	1.01	0.65	
		n30	0.60	1.39	1.39	
		n66	1.32	1.31	1.39	
		n70	0.14	1.36	1.26	
		n71	0.48	0.47	0.47	
		n41	1.15	1.39	1.39	
		n48	**1.38**	1.39	1.39	
		n77/n78	**1.38**	1.26	1.39	
DTS	WLAN	2.4GHz WLAN	1.24	0.18	1.29	1.59
NII		5GHz WLAN	1.19	0.20	1.19	1.59
DSS	Bluetooth	2.4GHz Bluetooth	0.16	<0.10	<0.10	1.56

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	3.26	3.99
	WCDMA	Band II	3.49	
		Band IV	3.54	
	LTE	Band 7	3.49	
		Band 25/ Band 2	3.45	
		Band 30	3.25	
		Band 66/ Band 4	3.32	
		Band 41/ Band 38	3.46	
		Band 48	2.90	

	5G NR	n7	3.49	
		n25/ n2	3.37	
		n30	3.31	
		n66	3.53	
		n70	**3.59**	
		n41	3.12	
		n48	2.76	
		n77/n78	2.80	
DTS	WLAN	2.4GHz WLAN	2.42	3.99
NII		5GHz WLAN	2.64	3.96
Date of Testing:			2022/9/20~ 2022/10/21	

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 N2 / N5 / n78 and N25 / N26 / n77. Since the supported frequency span for 5GNR N2 / N5 / n78 falls completely within the supports frequency span for N25 / N26 / n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for N25 / N26 / n77.

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

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

2. Administration Data

Sporton International Inc. (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.
	SAR06-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	XT2311-3, XT2311-4, XT2311DL
FCC ID	IHDT56AH4
IMEI Code	Sample 1: 358373300025128 Sample 3: 358373300044467 Sample 4: 358373300049284
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 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n26 : 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 :1710 MHz ~ 1780 MHz 5G NR n70 : 1695 MHz ~ 1710 MHz 5G NR n71 : 663 MHz ~ 698 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 Bluetooth: 2402 MHz ~ 2480 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+(16QAM uplink is supported) LTE: QPSK, 16QAM, 64QAM

	5G NR : CP-OFDM / DFT-s-OFDM, PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	DVT2
SW Version	TTO33.44
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).
4. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12.
5. There are four samples, the different between them refer to the XT2311-3, XT2311-4, XT2311DL_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 3/4 to verify the worst case of sample 1. For sample 1 and sample 2, the difference between that sample 2 added eSIM (electronic SIM) enabled by software , since the difference does not affect SAR evaluated, so sample 2 are not tested.
6. The device implements Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). The device will invoke corresponding work scenarios power level, which are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
7. 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 at body-worn and extremity exposure conditions.
8. For some WWAN bands, sensor on power level is higher than hotspot power level, so front/back sensor on SAR can represent hotspot conservatively.
9. This device supports HPUE for LTE Band 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.
10. 5GNR n41/n77 supports HPUE. For 5GNR n41/n77 HPUE with higher power, 5GNR n41/n77 HPUE SAR can represent power class 3 level SAR.
11. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
12. 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.
13. 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.
14. 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.
15. 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.
16. For 5GNR EN-DC mode, standalone SAR performed for 5GNR band with the maximum power, EN-DC SAR summed 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
17. For 5GNR EN-DC mode, standalone SAR performed for 5GNR band with the maximum power, EN-DC SAR summed 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively. If the summation SAR is higher than 1.45W/kg, additional EN-DC level SAR at worst exposure position for Sim-Tx analysis to show the EN-DC Sim-Tx compliance.
18. This device supports 5GNR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20, 25, 30
	n5	FDD	15	5, 10, 15, 20, 25
	n7	FDD	15	5, 10, 15, 20, 25, 30, 40, 50
	n12	FDD	15	5, 10, 15
	n25	FDD	15	5, 10, 15, 20, 25, 30, 40
	n30	FDD	15	5, 10
	n66	FDD	15	5, 10, 15, 20, 25, 30, 40
	n71	FDD	15	5, 10, 15, 20
	n41	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30
	n5	FDD	15	5, 10, 15, 20, 25
	n7	FDD	15	5, 10, 15, 20, 25, 30, 40, 50
	n12	FDD	15	5, 10, 15
	n14	FDD	15	5, 10
	n25	FDD	15	5, 10, 15, 20, 25, 30, 40
	n26	FDD	15	5, 10, 15, 20
	n30	FDD	15	5, 10
	n66	FDD	15	5, 10, 15, 20, 25, 30, 40
	n70	FDD	15	5, 10, 15
	n71	FDD	15	5, 10, 15, 20
	n41	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
	n48	TDD	30	10, 15, 20, 40, 50, 60, 80, 90, 100
	n77	TDD	30	10, 15, 20, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05	
FCC ID	IHDT56AH4
Equipment Name	Mobile Cellular Phone
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz
uplink modulations used	QPSK / 16QAM / 64QAM
LTE Voice / Data requirements	Voice and Data
LTE Release Version	R15, Cat13
CA Support	Supported, Uplink and Downlink
LTE MPR permanently built-in by design	**Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3** Modulation | Channel bandwidth / Transmission bandwidth (N_{RB}) | MPR (dB) 1.4 MHz | 3.0 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz QPSK: > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 1 16 QAM: ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | ≤ 1 16 QAM: > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 2 64 QAM: ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | ≤ 2 64 QAM: > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 3 256 QAM: ≥ 1 | ≤ 5
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.
Power reduction applied to satisfy SAR compliance	Yes, when operating in Proximity sensors/receiver/hotspot detect mechanism; head/ body-worn/hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 13.
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 13.
LTE Carrier Aggregation Additional Information	(1) This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band and inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. (2) This device supports maximum of 3 carriers in the downlink and 2 carriers in the uplink.

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

LTE Band 2

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

LTE Band 4

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

LTE Band 5

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

LTE Band 7

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

LTE Band 12

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

LTE Band 13

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

LTE Band 14

	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Channel #	Channel #	Freq.(MHz)
L	23305	790.5	23330	793
M	23330	793		
H	23355	795.5		

LTE Band 17

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

LTE Band 25

	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905

LTE Band 26

	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5

LTE Band 30				
	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Freq.(MHz)	Channel #	Freq.(MHz)
L	27685	2307.5	27710	2310
M	27710	2310		
H	27735	2312.5		

LTE Band 38								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610

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

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

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

LTE Band 48								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560
LM	55810	3607	55815	3607.5	55820	3608	55830	3609
MH	56170	3643	56165	3642.5	56160	3642	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690

<For LTE Overlap Bands Description>

1) LTE Bands BW

Band	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
LTE Band 2	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 25	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 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:

Band	Antenna	Head DSI 2 Receiver on Tune-up Limit	Body Worn DSI 3 Sensor on Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremely DSI 6 Handheld Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 12	Ant 0	24	24	24	24	24	24
LTE Band 17	Ant 0	24	24	24	24	24	24
LTE Band 2 SA	Ant 0	24	17	15	21.5	24	24
LTE Band 2 NSA	Ant 0	24	14	12	19	24	24
LTE Band 25 SA	Ant 0	24	17	15	21.5	24	24
LTE Band 25 NSA	Ant 0	24	14	12	19	24	24
LTE Band 5 SA	Ant 0	24	24	24	24	24	24
LTE Band 26 SA	Ant 0	24	24	24	24	24	24
LTE Band 4 SA	Ant 0	24	18.5	17	22	24	24
LTE Band 4 NSA	Ant 0	24	15.5	14	19.5	24	24
LTE Band 66 SA	Ant 0	24	18.5	17	22	24	24
LTE Band 66 NSA	Ant 0	24	15.5	14	19.5	24	24

Band	Antenna	Head DSI 2 Receiver on Tune-up Limit	Body Worn DSI 3 Sensor on Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremely DSI 6 Handheld Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 25 SA	Ant 4	22	21	21	23	23	23
LTE Band 25 NSA	Ant 4	18.5	17	17	21.5	23	23
LTE Band 2 SA	Ant 4	22	21	21	23	23	23
LTE Band 2 NSA	Ant 4	18.5	17	17	21.5	23	23
LTE Band 5 SA	Ant 4	24	24	24	24	24	24
LTE Band 5 NSA	Ant 4	20	23	23	24	24	24
LTE Band 26 SA	Ant 4	24	24	24	24	24	24
LTE Band 26 NSA	Ant 4	20	23	23	24	24	24
LTE Band 4 SA	Ant 4	22	21.5	21.5	23	23	23
LTE Band 4 NSA	Ant 4	19	19.5	19.5	21.5	23	23
LTE Band 66 SA	Ant 4	22	21.5	21.5	23	23	23
LTE Band 66 NSA	Ant 4	19	19.5	19.5	21.5	23	23

Band	Antenna	Head DSI 2 Receiver on Tune-up Limit	Body Worn DSI 3 Sensor on Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremely DSI 6 Handheld Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
LTE Band 38	Ant 1	24	19.5	19.5	21	24	24
LTE Band 41	Ant 1	24	19.5	19.5	21	24	24
LTE Band 41-HPUE	Ant 1	27	22.5	22.5	24	27	27

Note: 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.

4.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n26 : 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 :1710 MHz ~ 1780 MHz 5G NR n70 : 1695 MHz ~ 1710 MHz 5G NR n71 : 663 MHz ~ 698 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/ TDD: SCS15KHz/SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B2/5/7/12/13/14/30/48/66/71
LTE Anchor Bands for n5	LTE B2/7/30/48/66
LTE Anchor Bands for n7	LTE B2/5/7/66
LTE Anchor Bands for n12	LTE B2/66
LTE Anchor Bands for n25	LTE B12/66
LTE Anchor Bands for n30	LTE B2/5/12/14/66
LTE Anchor Bands for n66	LTE B2/5/7/12/13/14/30/48/66/71
LTE Anchor Bands for n71	LTE B2/7/48/66
LTE Anchor Bands for n41	LTE B2/4/12/25/26/66/71
LTE Anchor Bands for n77	LTE B2/5/7/12/13/14/25/30/66
LTE Anchor Bands for n78	LTE B2/4/5/7/12/13/25/66/71

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

NR Band 2

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865
M	376000	1880	376000	1880	376000	1880	376500	1882.5	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	381000	1905	379500	1897.5	379000	1895

NR Band 5

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

NR Band 7

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

NR Band 12

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	140300	701.5	140800	704	141300	706.5
M	141500	707.5	141500	707.5	141500	707.5
H	142700	713.5	142200	711	141700	708.5

NR Band 14				
	Bandwidth 5MHz		Bandwidth 10MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	158100	790.5	158600	793
M	158600	793		
H	159100	795.5		

NR Band 25														
	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	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	374000	1870
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379000	1895

NR Band 26								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	163300	816.5	163800	819	164300	821.5	164800	824
M	166300	831.5	166300	831.5	166300	831.5	166300	831.5
H	169300	846.5	168800	844	168300	841.5	167800	839

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

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

NR Band 70						
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	339500	1697.5	340000	1700	340500	1702.5
M	340500	1702.5	340500	1702.5		
H	341500	1707.5	341000	1705		

NR Band 71								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133100	665.5	133600	668	134100	670.5	134600	673
M	136100	680.5	136100	680.5	136100	680.5	136100	680.5
H	139100	695.5	138600	693	138100	690.5	137600	688

<For NR Overlap Bands Description>

1) NR Bands BW

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20, 25, 30,
	n25	FDD	15	5, 10, 15, 20, 25, 30, 40
	n77	TDD	30	10, 15, 20, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30,
	n5	FDD	15	5, 10, 15, 20, 25
	n25	FDD	15	5, 10, 15, 20, 25, 30, 40
	n26	FDD	15	5, 10, 15, 20
	n77	TDD	30	10, 15, 20, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100

2) NR Bands Tune up:

Band	Antenna	Head DSI 2 Receiver on Tune-up Limit	Body Worn DSI 3 Sensor on Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremely DSI 6 Handheld Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n2 SA	Ant 0	24	18.5	16.5	23.5	24	24
5G NR n25 SA	Ant 0	24	18.5	16.5	23.5	24	24
5G NR n2 NSA	Ant 0	24	16	14	21	24	24
5G NR n25 NSA	Ant 0	24	16	14	21	24	24
5G NR n5 SA	Ant 0	24	24	24	24	24	24
5G NR n26 SA	Ant 0	24	24	24	24	24	24

Band	Antenna	Head DSI 2 Receiver on Tune-up Limit	Body Worn DSI 3 Sensor on Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremely DSI 6 Handheld Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n77 SA	Ant 1	18	18	18	18	18	18
5G NR n77-HPUE SA	Ant 1	21	21	21	21	21	21
5G NR n78 SA	Ant 1	19	19	19	19	19	19

Band	Antenna	Head DSI 2 Receiver on Tune-up Limit	Body Worn DSI 3 Sensor on Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremely DSI 6 Handheld Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n77 SA	Ant 3	20	14.5	14.5	18.5	18.5	20
5G NR n77 NSA	Ant 3	20	11	11	15.5	15.5	20
5G NR n77-HPUE SA	Ant 3	23	14.5	14.5	18.5	18.5	23
5G NR n77-HPUE NSA	Ant 3	23	11	11	15.5	15.5	23
5G NR n78	Ant 3	20	14.5	14.5	18.5	18.5	20

Band	Antenna	Head DSI 2 Receiver on Tune-up Limit	Body Worn DSI 3 Sensor on Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremely DSI 6 Handheld Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n2 SA	Ant 4	22.5	23	23	23	23	23
5G NR n25 SA	Ant 4	22.5	23	23	23	23	23
5G NR n2 NSA	Ant 4	18.5	19.5	19.5	22	23	23
5G NR n25 NSA	Ant 4	18.5	19.5	19.5	22	23	23
5G NR n5 SA	Ant 4	24	24	24	24	24	24
5G NR n26 SA	Ant 4	24	24	24	24	24	24

Band	Antenna	Head DSI 2 Receiver on Tune-up Limit	Body Worn DSI 3 Sensor on Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremely DSI 6 Handheld Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n77 SA	Ant 5	18	20.5	18	21	24	24
5G NR n77 NSA	Ant 5	14	17	14	17	24	24
5G NR n77-HPUE SA	Ant 5	18	20.5	18	21	27	27
5G NR n77-HPUE NSA	Ant 5	14	17	14	17	27	27
5G NR n78 SA	Ant 5	18	20.5	18	21	24	24
5G NR n78 NSA	Ant 5	14	17	14	17	24	24

Band	Antenna	Head DSI 2 Receiver on Tune-up Limit	Body Worn DSI 3 Sensor on Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremely DSI 6 Handheld Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n77	Ant 7	21	19	19	21	21	21
5G NR n77-HPUE	Ant 7	24	19	19	22	22	24
5G NR n78	Ant 7	22	19	19	22	22	22

Note: This device supports 5GNR N2 / N5 / n78 and N25 / N26 / n77. Since the supported frequency span for 5GNR N2 / N5 / n78 falls completely within the supports frequency span for N25 / N26 / n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for N25 / N26 / n77.

NR Band 41																						
	Bandwidth 10MHz		Bandwidth 15MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500202	2501.01	500700	2503.5	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	505200	2526	506202	2531.01	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	537000	2685	536496	2682.48	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640

NR Band 48																				
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	637000	3555	637168	3557.52	637334	3560.01	638000	3570	638334	3575.01	638668	3580.02	639334	3590.01	639668	3595.02	640000	3600		
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99		
H	646332	3694.98	646166	3692.49	646000	3690	645332	3679.98	645000	3675	644666	3669.99	644000	3660	643666	3654.99	643332	3649.98		

NR Band 77																				
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	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	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930

NR Band 78																				
	Bandwidth 10MHz		Bandwidth 15MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	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	3750.00	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	653000	3795	652832	3792.48	652666	3789.99	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		

For <3450 MHz ~ 3550 MHz >

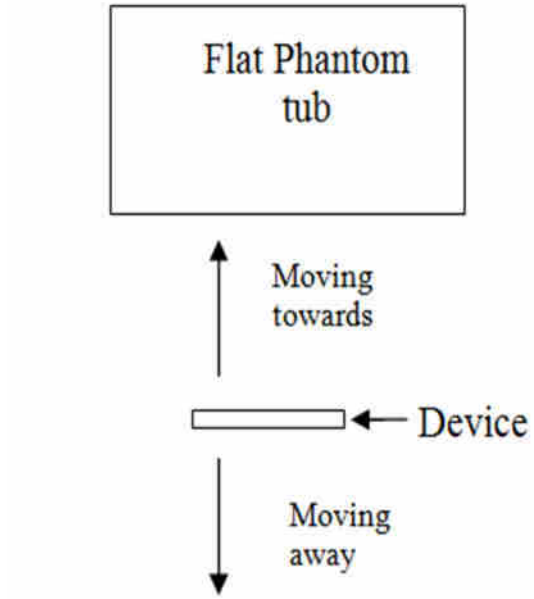
NR Band 77																				
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	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	633334	3500.01
H	636332	3544.98	636166	3542.49	636000	3540	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

NR Band 78																				
	Bandwidth 10MHz		Bandwidth 15MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	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	633334	3500.01	633334	3500.01
H	636334	3545.01	636168	3542.52	636000	3540	635668	3535.02	635334	3530.01	635000	3525	634668	3520.02	634334	3515.01	634000	3510	633668	3505.02		

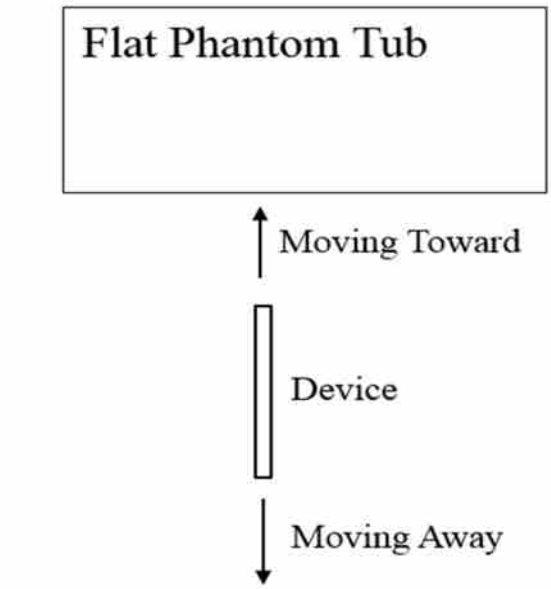
5. Proximity Sensor Triggering Test

<Proximity Sensor Triggering Distance>:

1. Proximity sensor triggering distance testing was performed according and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (5850MHz) and lowest (1750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's body 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 detection test set-up, front and back sides



Sensor detection test set-up, top, bottom, right and left sides

<P-Sensor>

Proximity Sensor Triggering Distance (mm)				
Position	Front		Back	
	Moving towards	Moving away	Moving towards	Moving away
Minimum	18	15	25	22

<Handheld for ANT0>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Bottom Side		Right Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	17	20	24	26	18	27	9	17

<Handheld for ANT1>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Left Side		Bottom Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	9	6	19	22	15	20	15	23

<Handheld for ANT4>

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	11	13	14	21	8	15	16	22

<Handheld for ANT5>

Proximity Sensor Triggering Distance (mm)						
Position	Front		Back		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	4	6	10	14	8	10

<Handheld for ANT8>

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	9	10	11	15	9	10	13	16

6. RF Exposure Limits

6.1 Uncontrolled Environment

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

6.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

7. Specific Absorption Rate (SAR)

7.1 Introduction

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

7.2 SAR Definition

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

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

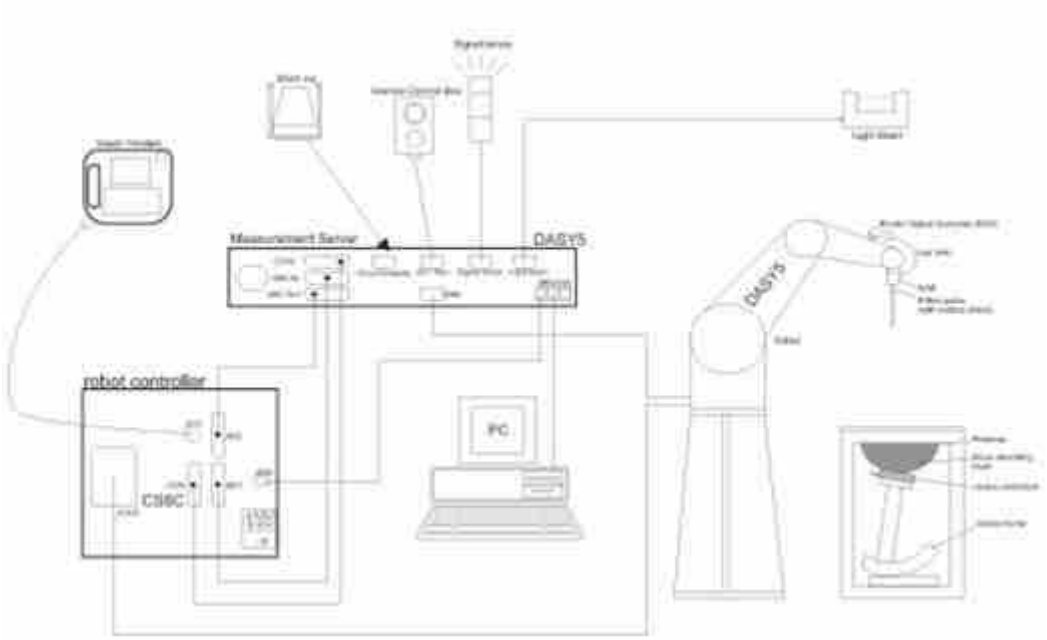
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

8. System Description and Setup

The 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.

8.1 E-Field Probe

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

<EX3DV4 Probe>

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

8.2 Data Acquisition Electronics (DAE)

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

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

Photo of DAE

8.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

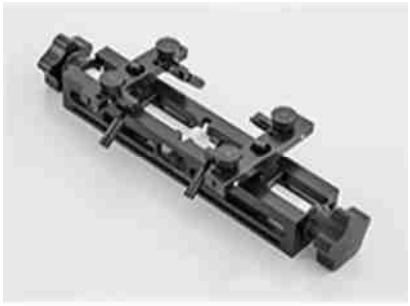
The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

8.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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

Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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

Mounting Device for Laptops

9. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

9.1 Spatial Peak SAR Evaluation

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

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

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

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

9.2 Power Reference Measurement

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

9.3 Area Scan

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

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

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

9.4 Zoom Scan

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

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

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

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

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

9.5 Volume Scan Procedures

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

9.6 Power Drift Monitoring

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

10. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1087	2022/2/24	2023/2/23
SPEAG	835MHz System Validation Kit	D835V2	4d091	2022/8/19	2023/8/18
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	2300MHz System Validation Kit	D2300V2	1055	2020/9/15	2023/9/13
SPEAG	2450MHz System Validation Kit	D2450V2	1040	2020/5/6	2023/5/4
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	2023/5/12
SPEAG	5000MHz System Validation Kit	D5GHzV2	1341	2021/12/13	2022/12/12
SPEAG	Data Acquisition Electronics	DAE4	1305	2022/4/27	2023/4/26
SPEAG	Dosimetric E-Field Probe	EX3DV4	7630	2022/3/4	2023/3/3
SPEAG	Dosimetric E-Field Probe	EX3DV4	3857	2021/11/24	2022/11/23
SPEAG	SAM Twin Phantom	SAM Twin	TP-2022	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8821C	6262306175	2022/7/14	2023/7/13
Agilent	ENA Series Network Analyzer	E5071C	MY46104587	2022/5/24	2023/5/23
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	2022/7/14	2023/7/13
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	2022/7/14	2023/7/13
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	2022/7/14	2023/7/13
Rohde & Schwarz	CBT BLUETOOTH TESTER	CBT	100641	2022/1/5	2023/1/4
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	2021/10/14	2022/10/13
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	2022/10/12	2023/10/11
TES	DIGITAC THERMOMETER	1310	200505600	2022/7/12	2023/7/11
Testo	Thermo-Hygrometer	608-H1	1241332126	2022/1/6	2023/1/5
ARRA	Power Divider	A3200-2	N/A	Note 1	
MCL	Attenuation1	BW-S10W5+	N/A	Note 1	
MCL	Attenuation2	BW-S10W5+	N/A	Note 1	
MCL	Attenuation3	BW-S10W5+	N/A	Note 1	
BONN	POWER AMPLIFIER	BLMA 0830-3	087193A	Note 1	
BONN	POWER AMPLIFIER	BLMA 2060-2	087193B	Note 1	
Agilent	Dual Directional Coupler	778D	20500	Note 1	
Agilent	Dual Directional Coupler	11691D	MY48151020	Note 1	

Note:

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

11. System Verification

11.1 Tissue Simulating Liquids

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

Fig 11.1 Photo of Liquid Height for Head SAR

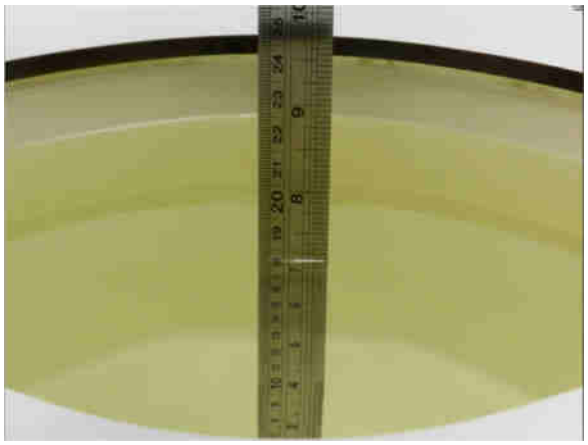


Fig 11.2 Photo of Liquid Height for Body SAR

11.2 Tissue Verification

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

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

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
750	Head	22.7	0.903	41.431	0.89	41.90	1.46	-1.12	±5	2022/9/20
835	Head	22.8	0.933	41.178	0.90	41.50	3.67	-0.78	±5	2022/9/21
1750	Head	22.6	1.351	40.380	1.37	40.10	-1.39	0.70	±5	2022/9/22
1900	Head	22.9	1.459	40.035	1.40	40.00	4.21	0.09	±5	2022/9/23
2300	Head	22.7	1.731	39.155	1.67	39.50	3.65	-0.87	±5	2022/9/24
2450	Head	22.8	1.868	40.816	1.80	39.20	3.78	4.12	±5	2022/9/25
2600	Head	22.6	1.978	40.595	1.96	39.00	0.92	4.09	±5	2022/9/26
3500	Head	22.9	2.881	38.499	2.91	37.90	-1.00	1.58	±5	2022/9/27
3700	Head	22.6	3.077	38.036	3.12	37.70	-1.38	0.89	±5	2022/9/28
3900	Head	22.9	3.280	37.614	3.32	37.50	-1.20	0.30	±5	2022/9/29
5250	Head	22.7	4.588	36.225	4.71	35.90	-2.59	0.91	±5	2022/10/21
5600	Head	22.9	4.968	35.680	5.07	35.50	-2.01	0.51	±5	2022/10/21
5750	Head	22.6	5.137	35.509	5.22	35.40	-1.59	0.31	±5	2022/10/21
750	Head	22.6	0.900	41.184	0.89	41.90	1.12	-1.71	±5	2022/9/30
835	Head	22.7	0.930	40.910	0.90	41.50	3.33	-1.42	±5	2022/10/1
1750	Head	22.6	1.409	40.671	1.37	40.10	2.85	1.42	±5	2022/10/2
1900	Head	22.9	1.449	39.912	1.40	40.00	3.50	-0.22	±5	2022/10/3
2300	Head	22.6	1.720	39.445	1.67	39.50	2.99	-0.14	±5	2022/10/4
2600	Head	22.7	1.930	39.035	1.96	39.00	-1.53	0.09	±5	2022/10/6
3500	Head	22.8	2.788	38.925	2.91	37.90	-4.19	2.70	±5	2022/10/7
3700	Head	22.6	3.024	38.720	3.12	37.70	-3.08	2.71	±5	2022/10/8
3900	Head	22.8	3.226	38.420	3.32	37.50	-2.83	2.45	±5	2022/10/9
750	Head	22.6	0.899	41.195	0.89	41.90	1.01	-1.68	±5	2022/10/10
835	Head	22.9	0.934	41.827	0.90	41.50	3.78	0.79	±5	2022/10/11
1750	Head	22.7	1.395	40.500	1.37	40.10	1.82	1.00	±5	2022/10/12
1900	Head	22.9	1.450	39.971	1.40	40.00	3.57	-0.07	±5	2022/10/13
2300	Head	22.6	1.716	40.058	1.67	39.50	2.75	1.41	±5	2022/10/14
2600	Head	22.7	1.980	39.097	1.96	39.00	1.02	0.25	±5	2022/10/16
3500	Head	22.9	2.835	39.048	2.91	37.90	-2.58	3.03	±5	2022/10/17
3700	Head	22.6	2.988	38.363	3.12	37.70	-4.23	1.76	±5	2022/10/18
3900	Head	22.9	3.229	38.414	3.32	37.50	-2.74	2.44	±5	2022/10/19

11.3 System Performance Check Results

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

<1g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2022/9/20	750	Head	50	1087	7630	1305	0.426	8.58	8.52	-0.70
2022/9/21	835	Head	50	4d091	7630	1305	0.492	9.45	9.84	4.13
2022/9/22	1750	Head	50	1090	7630	1305	1.830	37.00	36.6	-1.08
2022/9/23	1900	Head	50	5d182	7630	1305	2.090	39.60	41.8	5.56
2022/9/24	2300	Head	50	1055	7630	1305	2.410	47.70	48.2	1.05
2022/9/25	2450	Head	50	1040	7630	1305	2.610	51.80	52.2	0.77
2022/9/26	2600	Head	50	1061	7630	1305	2.700	56.60	54	-4.59
2022/9/27	3500	Head	50	1037	7630	1305	3.220	68.00	64.4	-5.29
2022/9/28	3700	Head	50	1008	7630	1305	3.190	67.60	63.8	-5.62
2022/9/29	3900	Head	50	1048	3857	1305	3.260	70.20	65.2	-7.12
2022/10/21	5250	Head	50	1341	7630	1305	3.810	80.70	76.2	-5.58
2022/10/21	5600	Head	50	1341	7630	1305	3.910	84.50	78.2	-7.46
2022/10/21	5750	Head	50	1341	7630	1305	3.840	80.60	76.8	-4.71
2022/9/30	750	Head	50	1087	7630	1305	0.423	8.58	8.46	-1.40
2022/10/1	835	Head	50	4d091	7630	1305	0.490	9.45	9.8	3.70
2022/10/2	1750	Head	50	1090	7630	1305	1.900	37.00	38	2.70
2022/10/3	1900	Head	50	5d182	7630	1305	2.060	39.60	41.2	4.04
2022/10/4	2300	Head	50	1055	7630	1305	2.360	47.70	47.2	-1.05
2022/10/6	2600	Head	50	1061	7630	1305	2.630	56.60	52.6	-7.07
2022/10/7	3500	Head	50	1037	7630	1305	3.130	68.00	62.6	-7.94
2022/10/8	3700	Head	50	1008	7630	1305	3.190	67.60	63.8	-5.62
2022/10/9	3900	Head	50	1048	3857	1305	3.240	70.20	64.8	-7.69
2022/10/10	750	Head	50	1087	7630	1305	0.422	8.58	8.44	-1.63
2022/10/11	835	Head	50	4d091	7630	1305	0.494	9.45	9.88	4.55
2022/10/12	1750	Head	50	1090	7630	1305	1.880	37.00	37.6	1.62
2022/10/13	1900	Head	50	5d182	7630	1305	2.070	39.60	41.4	4.55
2022/10/14	2300	Head	50	1055	7630	1305	2.350	47.70	47	-1.47
2022/10/16	2600	Head	50	1061	7630	1305	2.690	56.60	53.8	-4.95
2022/10/17	3500	Head	50	1037	7630	1305	3.130	68.00	62.6	-7.94
2022/10/18	3700	Head	50	1008	7630	1305	3.140	67.60	62.8	-7.10
2022/10/19	3900	Head	50	1048	3857	1305	3.230	70.20	64.6	-7.98

<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 (%)
2022/9/20	750	Head	50	1087	7630	1305	0.284	5.65	5.68	0.53
2022/9/21	835	Head	50	4d091	7630	1305	0.324	6.22	6.48	4.18
2022/9/22	1750	Head	50	1090	7630	1305	0.977	19.50	19.54	0.21
2022/9/23	1900	Head	50	5d182	7630	1305	1.080	20.20	21.6	6.93
2022/9/24	2300	Head	50	1055	7630	1305	1.160	22.90	23.2	1.31
2022/9/25	2450	Head	50	1040	7630	1305	1.220	24.00	24.4	1.67
2022/9/26	2600	Head	50	1061	7630	1305	1.220	25.10	24.4	-2.79
2022/9/27	3500	Head	50	1037	7630	1305	1.200	25.40	24	-5.51
2022/9/28	3700	Head	50	1008	7630	1305	1.200	24.40	24	-1.64
2022/9/29	3900	Head	50	1048	3857	1305	1.180	24.40	23.6	-3.28
2022/10/21	5250	Head	50	1341	7630	1305	1.140	23.10	22.8	-1.30
2022/10/21	5600	Head	50	1341	7630	1305	1.190	24.00	23.8	-0.83
2022/10/21	5750	Head	50	1341	7630	1305	1.210	22.70	24.2	6.61
2022/9/30	750	Head	50	1087	7630	1305	0.281	5.65	5.62	-0.53
2022/10/1	835	Head	50	4d091	7630	1305	0.322	6.22	6.44	3.54
2022/10/2	1750	Head	50	1090	7630	1305	1.020	19.50	20.4	4.62
2022/10/3	1900	Head	50	5d182	7630	1305	1.080	20.20	21.6	6.93
2022/10/4	2300	Head	50	1055	7630	1305	1.130	22.90	22.6	-1.31
2022/10/6	2600	Head	50	1061	7630	1305	1.200	25.10	24	-4.38
2022/10/7	3500	Head	50	1037	7630	1305	1.190	25.40	23.8	-6.30
2022/10/8	3700	Head	50	1008	7630	1305	1.160	24.40	23.2	-4.92
2022/10/9	3900	Head	50	1048	3857	1305	1.160	24.40	23.2	-4.92
2022/10/10	750	Head	50	1087	7630	1305	0.281	5.65	5.62	-0.53
2022/10/11	835	Head	50	4d091	7630	1305	0.325	6.22	6.5	4.50
2022/10/12	1750	Head	50	1090	7630	1305	1.010	19.50	20.2	3.59
2022/10/13	1900	Head	50	5d182	7630	1305	1.080	20.20	21.6	6.93
2022/10/14	2300	Head	50	1055	7630	1305	1.130	22.90	22.6	-1.31
2022/10/16	2600	Head	50	1061	7630	1305	1.220	25.10	24.4	-2.79
2022/10/17	3500	Head	50	1037	7630	1305	1.210	25.40	24.2	-4.72
2022/10/18	3700	Head	50	1008	7630	1305	1.180	24.40	23.6	-3.28
2022/10/19	3900	Head	50	1048	3857	1305	1.160	24.40	23.2	-4.92

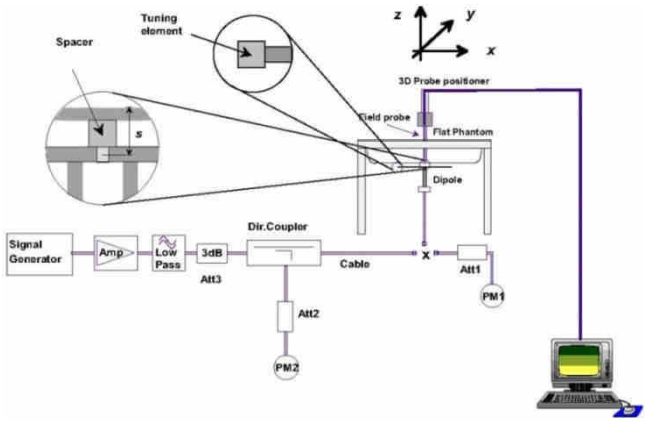


Fig 11.3.1 System Performance Check Setup

Fig 11.3.2 Setup Photo

12. RF Exposure Positions

12.1 Ear and handset reference point

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

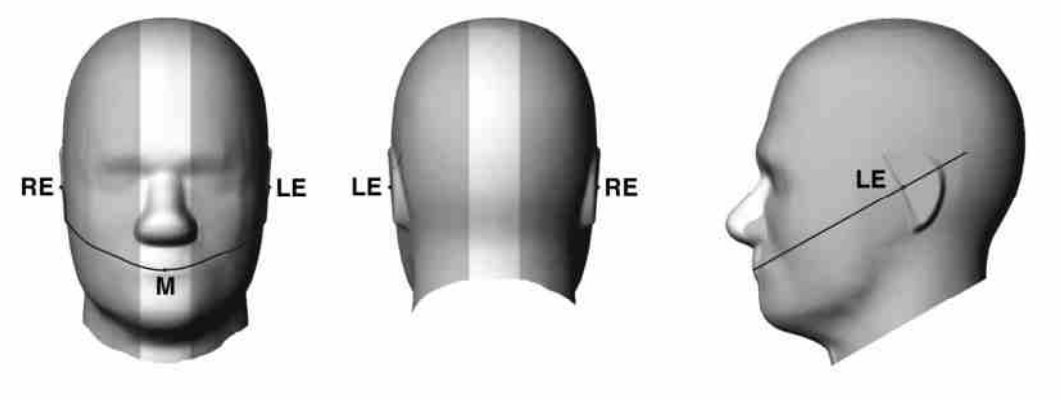


Fig 12.1.1 Front, back, and side views of SAM twin phantom

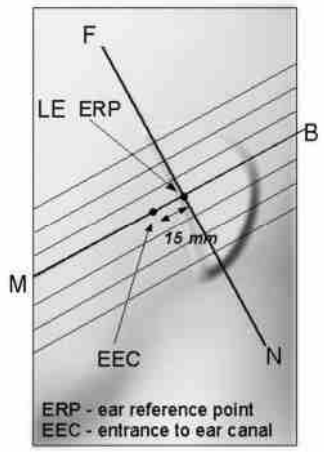


Fig 12.1.2 Close-up side view of phantom showing the ear region.

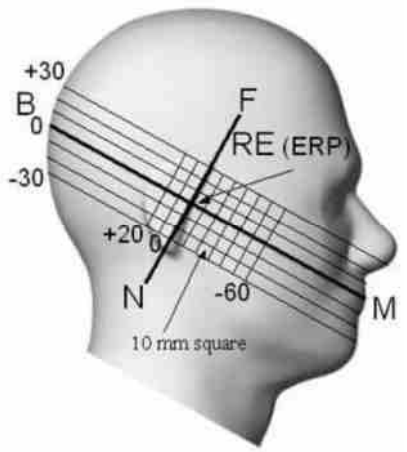


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

12.2 Definition of the cheek position

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

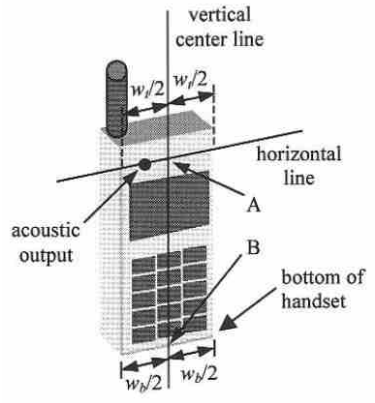


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case

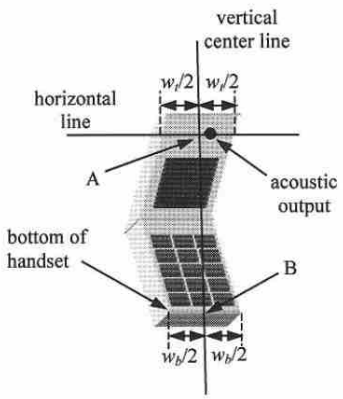


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

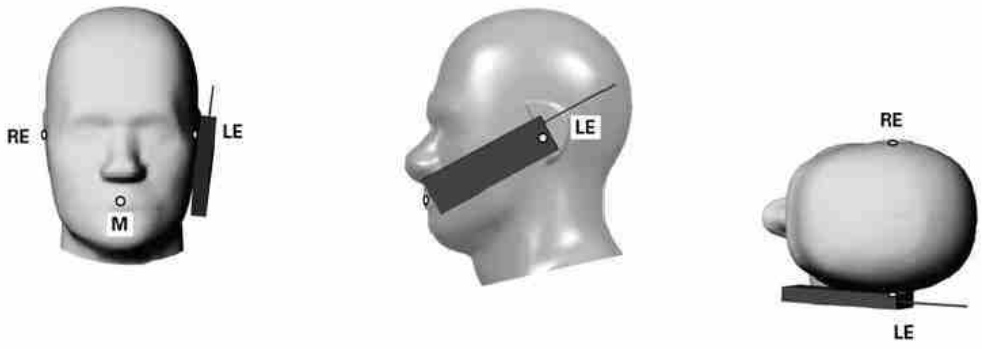


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

12.3 Definition of the tilt position

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

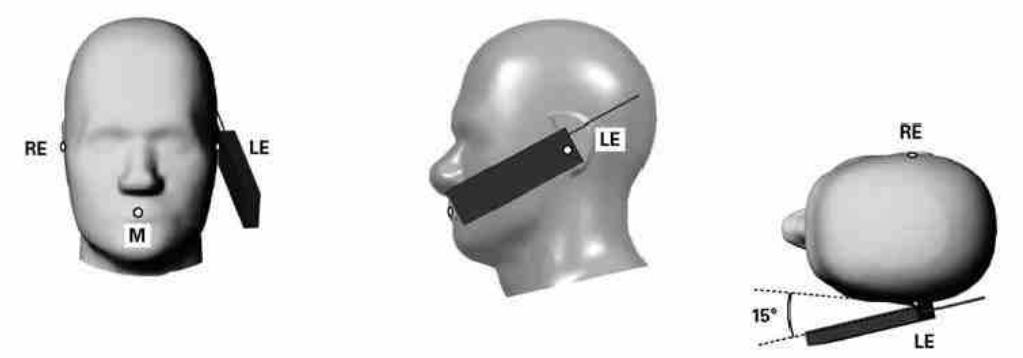


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

12.4 Body Worn Accessory

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

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

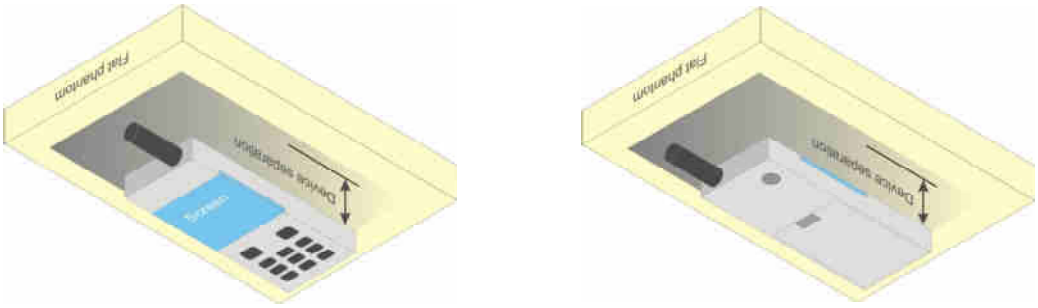


Fig 12.4 Body Worn Position

12.5 Product Specific 10g SAR Exposure

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

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

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

12.6 Wireless Router

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

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

13. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
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.		

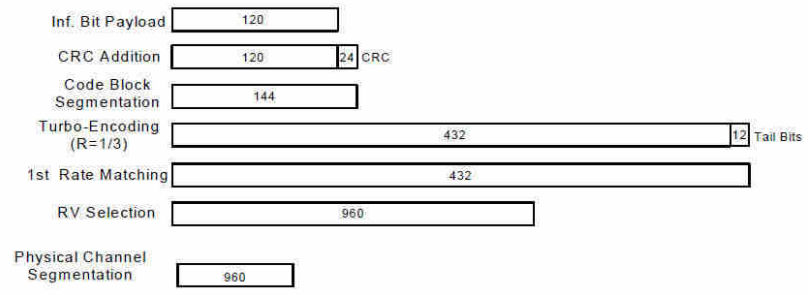


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

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

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

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

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed}1: 30/15 β_{ed}2: 30/15	β_{ed}3: 24/15 β_{ed}4: 24/15	3.5	2.5	14	105	105

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

Setup Configuration

<WCDMA Conducted Power>

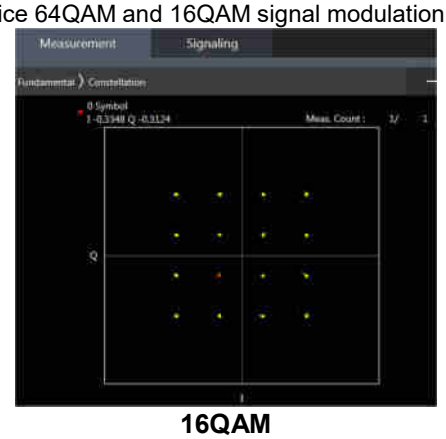
General Note:

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

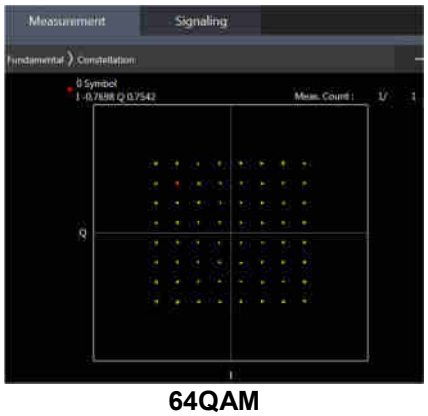
<LTE Conducted Power>

General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is > not 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 May 2017 TCB workshop, for 16QAM and 64QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 64QAM and 16QAM signal modulation are correct.



16QAM



64QAM

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

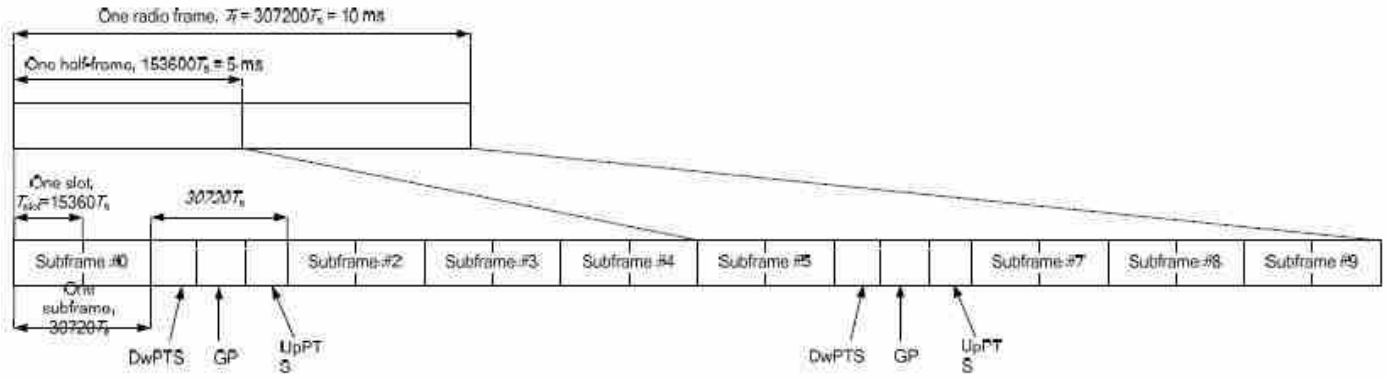


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

For LTE TDD Power class 2

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

For LTE TDD Power class 3

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

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

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

<LTE Carrier Aggregation>

General Note:

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

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
1	CA_2C	3CC#8	1	CA_2A-2A-4A	
2	CA_2A-2A	3CC#1	2	CA_2A-2A-5A	
3	CA_2A-4A	3CC#1	3	CA_2A-2A-7A	
4	CA_2A-5A	3CC#2	4	CA_2A-2A-12A	
5	CA_2A-7A	3CC#3	5	CA_2A-2A-13A	
6	CA_2A-12A	3CC#14	6	CA_2A-2A-14A	
7	CA_2A-13A	3CC#15	7	CA_2A-2A-30A	
8	CA_2A-14A	3CC#29	8	CA_2C-66A	
9	CA_2A-29A		9	CA_2A-2A-66A	
10	CA_2A-30A	3CC#25	10	CA_2A-2A-71A	
11	CA_2A-48A	3CC#27	11	CA_2A-4A-4A	
12	CA_2A-66A	3CC#28	12	CA_2A-4A-5A	
13	CA_2A-71A	3CC#17	13	CA_2A-4A-7A	
14	CA_4A-4A	3CC#11	14	CA_2A-4A-12A	
15	CA_4A-5A	3CC#12	15	CA_2A-4A-13A	
16	CA_4A-7A	3CC#13	16	CA_2A-4A-30A	
17	CA_4A-12A	3CC#14	17	CA_2A-4A-71A	
18	CA_4A-13A	3CC#15	18	CA_2A-5B	
19	CA_4A-17A		19	CA_2A-5A-30A	
20	CA_4A-29A	3CC#48	20	CA_2A-5A-48A	
21	CA_4A-30A	3CC#16	21	CA_2A-5A-66A	
22	CA_4A-48A		22	CA_2A-7A-7A	
23	CA_4A-71A	3CC#17	23	CA_2A-7A-66A	
24	CA_5B	3CC#43	24	CA_2A-12B	
25	CA_5A-5A	3CC#51	25	CA_2A-12A-30A	
26	CA_5A-7A		26	CA_2A-12A-66A	
27	CA_5A-30A	3CC#52	27	CA_2A-13A-48A	
28	CA_5A-41A		28	CA_2A-13A-66A	
29	CA_5A-48A	3CC#54	29	CA_2A-14A-30A	
30	CA_5A-66A	3CC#52	30	CA_2A-14A-66A	
31	CA_7B		31	CA_2A-29A-30A	
32	CA_7C	3CC#58	32	CA_2A-30A-66A	
33	CA_7A-7A	3CC#60	33	CA_2A-48C	
34	CA_7A-12A		34	CA_2A-48A-66A	
35	CA_7A-13A	3CC#58	35	CA_2A-66B	
36	CA_7A-25A		36	CA_2A-66C	
37	CA_7A-66A	3CC#60	37	CA_2A-66A-66A	
38	CA_7A-71A		38	CA_2A-66A-71A	
39	CA_12B	3CC#61	39	CA_4A-4A-5A	
40	CA_12A-30A	3CC#62	40	CA_4A-4A-12A	
41	CA_12A-48A	3CC#63	41	CA_4A-4A-13A	
42	CA_12A-66A	3CC#62	42	CA_4A-4A-71A	
43	CA_13A-48A	3CC#27	43	CA_4A-5B	
44	CA_13A-66A	3CC#28	44	CA_4A-5A-30A	
45	CA_14A-30A	3CC#29	45	CA_4A-7A-7A	
46	CA_14A-66A	3CC#30	46	CA_4A-12B	

47	CA_25A-25A	3CC#74	47	CA_4A-12A-30A	
48	CA_25A-26A	3CC#74	48	CA_4A-29A-30A	
49	CA_25A-41A	3CC#75	49	CA_4A-48C	
50	CA_25A-66A		50	CA_5B-66A	
51	CA_26A-41A	3CC#76	51	CA_5A-5A-66A	
52	CA_29A-30A		52	CA_5A-30A-66A	
53	CA_29A-66A		53	CA_5A-48C	
54	CA_30A-66A	3CC#77	54	CA_5A-48A-66A	
55	CA_41C	3CC#79	55	CA_5A-66B	
56	CA_41A-41A	3CC#79	56	CA_5A-66C	
57	CA_48B	3CC#81	57	CA_5A-66A-66A	
58	CA_48C	3CC#82	58	CA_7C-13A	
59	CA_48A-66A	3CC#85	59	CA_7C-66A	
60	CA_66B	3CC#83	60	CA_7A-7A-66A	
61	CA_66C	3CC#84	61	CA_12B-66A	
62	CA_66A-66A	3CC#85	62	CA_12A-30A-66A	
63	CA_66A-71A	3CC#89	63	CA_12A-48C	
			64	CA_12A-66C	
			65	CA_12A-66A-66A	
			66	CA_13A-48B	
			67	CA_13A-48C	
			68	CA_13A-48A-66A	
			69	CA_13A-66B	
			70	CA_13A-66C	
			71	CA_13A-66A-66A	
			72	CA_14A-30A-66A	
			73	CA_14A-66A-66A	
			74	CA_25A-25A-26A	
			75	CA_25A-41C	
			76	CA_26A-41C	
			77	CA_30A-66A-66A	
			78	CA_41D	
			79	CA_41A-41C	
			80	CA_48D	
			81	CA_48B-66A	
			82	CA_48C-66A	
			83	CA_48A-66B	
			84	CA_48A-66C	
			85	CA_48A-66A-66A	
			86	CA_66A-66B	
			87	CA_66A-66C	
			88	CA_66C-71A	
			89	CA_66A-66A-71A	

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 three 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 Bands 2/4/7/25/30/41/48/66 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 B2/4/7/25/30/41/48/66

LTE Carrier Aggregation Conducted Power (Uplink)

2CC Uplink Carrier Aggregation		
Number	Combination	Ant No.
1	CA_5B	Ant 0/4
2	CA_66B	Ant 0/4
3	CA_66C	Ant 0/4
4	CA_41C	Ant 1
5	CA_48B	Ant 5
6	CA_48C	Ant 5

<Intra-band>

General Note:

i. The device supports intra-band uplink carrier aggregation for LTE B5/41/48/66 with a maximum of two 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 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 Nov. 2017 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.

v. LTE CA_66B/48B test was covered by CA_66C/48C; therefore, SAR was only assessed for CA_66C/48C.

<Inter-band uplink carrier aggregation consideration>

LTE Uplink	Main Antenna Tx		ASDiv Tx	
UL CA	PCC Aantenna Tx	SCC Antenna Tx	PCC Aantenna Tx	SCC Antenna Tx
CA_2A-4A	ANT0	ANT4	ANT4	ANT0
CA_2A-5A	ANT0	ANT4	ANT4	ANT0
CA_2A-12A	ANT0	ANT4	ANT4	ANT0
CA_2A-13A	ANT0	ANT4	ANT4	ANT0
CA_2A-14A	ANT0	ANT4		
CA_2A-66A	ANT0	ANT4	ANT4	ANT0
CA_2A-71A	ANT0	ANT4	ANT4	ANT0
CA_4A-5A	ANT0	ANT4	ANT4	ANT0
CA_4A-12A	ANT0	ANT4	ANT4	ANT0
CA_4A-13A	ANT0	ANT4	ANT4	ANT0
CA_5A-66A	ANT4	ANT0	ANT0	ANT4
CA_12A-66A	ANT4	ANT0	ANT0	ANT4
CA_13A-66A	ANT4	ANT0	ANT0	ANT4
CA_14A-66A	ANT4	ANT0		
CA_5A-30A	ANT4	ANT1		
CA_12A-30A	ANT4	ANT1		
CA_14A-30A	ANT4	ANT1		
CA_48A-66A	ANT5	ANT0	ANT5	ANT4
CA_2A-48A	ANT0	ANT5	ANT4	ANT5
CA_5A-48A	ANT0	ANT5	ANT4	ANT5
CA_13A-48A	ANT0	ANT5	ANT4	ANT5

General Note:

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

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n12/n25/n30/n66/n71/n41/n77/n78 is NSA mode.
2. 5G NR n2/n5/n7/n12/n14/n25/n26/n30/n66/n70/n71/n41/n48/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-QPSK and the reported SAR for the DFT-QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
   b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/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. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission.
5. 5G NR n41 / n77 supports HPUE, HPUE power and SAR testing performed separately.
6. 5G NR n41 / n77 HPUE with higher power, 5G NR n77 HPUE SAR can represent power class 3 level SAR.
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.
11. For Inter-band CA co-located SAR analysis is performed using standalone SAR summed together and they are more conservatively for Inter-band CA.

<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		

NSA-ENDC	Main Antenna Tx		ASDiv Tx	
	LTE TX	NR TX	LTE TX	NR TX
DC_2A_n2A	ANT0	ANT4	ANT4	ANT0
DC_ 2A_n5A	ANT0	ANT4	ANT4	ANT0
DC_2A_n12A	ANT0	ANT4	ANT4	ANT0
DC_2A_n41A	ANT4	ANT1	ANT0	ANT1
DC_2A_n66A	ANT0	ANT4	ANT4	ANT0
DC_2A_n71A	ANT0	ANT4	ANT4	ANT0
DC_2A_n77A	ANT0	ANT5	ANT4	ANT3
DC_4A_n41A	ANT4	ANT1	ANT0	ANT1
DC_5A_n2A	ANT4	ANT0	ANT0	ANT4
DC_5A_n66A	ANT4	ANT0	ANT0	ANT4
DC_5A_n77A	ANT0	ANT5	ANT4	ANT3
DC_12A_n2A	ANT4	ANT0	ANT0	ANT4
DC_12A_n25A	ANT4	ANT0	ANT0	ANT4
DC_12A_n41A	ANT4	ANT1	ANT0	ANT1
DC_12A_n66A	ANT4	ANT0	ANT0	ANT4
DC_12A_n77A	ANT0	ANT5	ANT4	ANT3
DC_13A_n2A	ANT4	ANT0	ANT0	ANT4
DC_13A_n66A	ANT4	ANT0	ANT0	ANT4
DC_13A_n77A	ANT0	ANT5	ANT4	ANT3
DC_25A_n41A	ANT4	ANT1	ANT0	ANT1
DC_25A_n77A	ANT0	ANT5	ANT4	ANT3
DC_26A_n41A	ANT4	ANT1	ANT0	ANT1
DC_48A_n2A	ANT5	ANT4	ANT5	ANT0
DC_48A_n5A	ANT5	ANT0	ANT5	ANT4
DC_48A_n66A	ANT5	ANT4	ANT5	ANT0
DC_48A_n71A	ANT5	ANT0	ANT5	ANT4
DC_66A_n2A	ANT0	ANT4	ANT4	ANT0

DC_66A_n5A	ANT0	ANT4	ANT4	ANT0
DC_66A_n12A	ANT0	ANT4	ANT4	ANT0
DC_66A_n25A	ANT0	ANT4	ANT4	ANT0
DC_66A_n41A	ANT4	ANT1	ANT0	ANT1
DC_66A_n71A	ANT0	ANT4	ANT4	ANT0
DC_66A_n77A	ANT0	ANT5	ANT4	ANT3
DC_71A_n2A	ANT4	ANT0	ANT0	ANT4
DC_71A_n41A	ANT4	ANT1	ANT0	ANT1
DC_71A_n66A	ANT4	ANT0	ANT0	ANT4
DC_66A_n66A	ANT0	ANT4	ANT4	ANT0
DC_2A_n7A	ANT0	ANT4	NA	NA
DC_2A_n30A	ANT0	ANT4	NA	NA
DC_2A_n78A	ANT0	ANT5	NA	NA
DC_4A_n78A	ANT0	ANT5	NA	NA
DC_5A_n7A	ANT4	ANT1	NA	NA
DC_5A_n30A	ANT4	ANT1	NA	NA
DC_5A_n78A	ANT0	ANT5	NA	NA
DC_7A_n2A	ANT1	ANT4	NA	NA
DC_7A_n5A	ANT1	ANT4	NA	NA
DC_7A_n7A	ANT1	ANT4	NA	NA
DC_7A_n66A	ANT1	ANT4	NA	NA
DC_7A_n71A	ANT1	ANT4	NA	NA
DC_7A_n77A	ANT4	ANT5	NA	NA
DC_7A_n78A	ANT4	ANT5	NA	NA
DC_12A_n30A	ANT4	ANT1	NA	NA
DC_12A_n78A	ANT0	ANT5	NA	NA
DC_13A_n78A	ANT0	ANT5	NA	NA
DC_14A_n2A	ANT4	ANT0	NA	NA
DC_14A_n30A	ANT4	ANT1	NA	NA
DC_14A_n66A	ANT4	ANT0	NA	NA
DC_14A_n77A	ANT0	ANT5	NA	NA
DC_25A_n78A	ANT0	ANT5	NA	NA
DC_30A_n2A	ANT1	ANT4	NA	NA
DC_30A_n5A	ANT1	ANT4	NA	NA
DC_30A_n66A	ANT1	ANT4	NA	NA
DC_30A_n77A	ANT4	ANT5	NA	NA
DC_66A_n7A	ANT0	ANT4	NA	NA
DC_66A_n30A	ANT0	ANT4	NA	NA
DC_66A_n78A	ANT0	ANT5	NA	NA
DC_71A_n78A	ANT0	ANT5	NA	NA

<WLAN Conducted Power>

General Note:

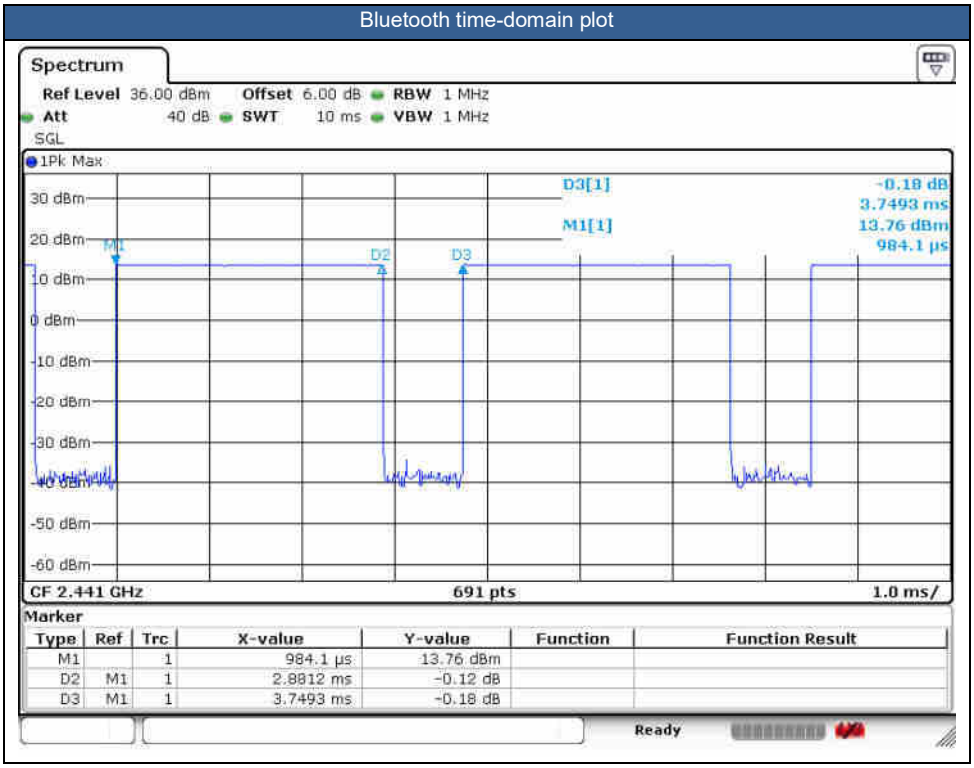
1. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements.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

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 76.85% considered in SAR testing, and the duty cycle would be scaled to theoretical 83.3% in reported SAR calculation.

Bluetooth time-domain plot



14. Antenna Location

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

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For SAR testing of WLAN 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 SAR testing of Bluetooth signal with 83.3% theoretical duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle) *83.3%".
   d. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
   e. For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
   f. 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.
   g. 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 Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). The device will invoke corresponding work scenarios power level, which are provided in the operational description. 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. 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 at body-worn and extremity exposure conditions.
6. For some WWAN bands, sensor on power level is higher than hotspot power level, so front/back sensor on SAR can represent hotspot conservatively.
7. This device supports HPUE for LTE Band 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.
8. 5GNR n41/n77 supports HPUE. For 5GNR n41/n77 HPUE with higher power, 5G NR n41/n77 HPUE SAR can represent power class 3 level SAR.
9. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
10. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
11. 5GNR NSA mode, the power level is the same as 5GNR SA mode, so 5GNR NSA mode and SA mode power table only show one time.
12. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.

13. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
14. This device supports 5GNR FR1 bands, including NSA mode and SA mode. NSA and SA mode performed SAR separately.
15. For 5GNR EN-DC mode, standalone SAR performed for 5GNR band with the maximum power, EN-DC SAR summed 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively. If the summation SAR is higher than 1.45W/kg, additional EN-DC level SAR at worst exposure position for Sim-Tx analysis to show the EN-DC Sim-Tx compliance.
16. 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 2/4/7/25/30/66/38/41/48, 5GNR n2/n7/n25/n30/ n66/n41/n48/n70/n77/n78, WLAN2.4G&WLAN5.2/5.8GHz, therefore product specific 10g SAR is necessary.
    b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
    c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
17. For extremity exposure conditions, WLAN 2.4GHz/WLAN 5GHz SAR test at Front/Back/Top side 0mm used full power SAR testing, so WLAN 2.4GHz/5GHz distance SAR test is not required.
18. Although the headset SAR is greater than 0.8 W/kg, the headset SAR verified the worst of the non-headset SAR and less than non-headset SAR, so there is no need to be tested other channels.
19. Although the distance SAR is greater than 0.8 W/kg at body-worn exposure conditions, the distance SAR verified the worst of the non-distance SAR and less than non-distance SAR, so there is no need to be tested other channels.

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 / HSPA+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 / HSPA+ to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA / HSPA+) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is > not 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/n66/n41/n77/n78 the maximum bandwidth does not support three non-overlapping channels, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

WLAN/Bluetooth Note:

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

15.1 Head SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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																			
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	136100	680.5	1	22.77	24.00	1.327	-0.08	0.121	0.161
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	136100	680.5	1	22.75	24.00	1.334	0.04	0.150	0.200
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	136100	680.5	1	22.77	24.00	1.327	0.13	0.056	0.074
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	136100	680.5	1	22.75	24.00	1.334	0.16	0.076	0.101
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	136100	680.5	1	22.77	24.00	1.327	0.03	0.105	0.139
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	136100	680.5	1	22.75	24.00	1.334	0.06	0.133	0.177
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	136100	680.5	1	22.77	24.00	1.327	0.01	0.054	0.072
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	136100	680.5	1	22.75	24.00	1.334	-0.11	0.068	0.091
01	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Full Power	136100	680.5	1	22.55	24.00	1.396	0.07	0.346	**0.483**
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Full Power	136100	680.5	1	22.43	24.00	1.435	0.03	0.317	0.455
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Full Power	136100	680.5	1	22.55	24.00	1.396	0.05	0.312	0.436
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Full Power	136100	680.5	1	22.43	24.00	1.435	0.06	0.274	0.393
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Full Power	136100	680.5	1	22.55	24.00	1.396	-0.06	0.334	0.466
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Full Power	136100	680.5	1	22.43	24.00	1.435	0.07	0.289	0.415
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Full Power	136100	680.5	1	22.55	24.00	1.396	0.02	0.338	0.472
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Full Power	136100	680.5	1	22.43	24.00	1.435	-0.16	0.281	0.403
	LTE Band 71	20M	QPSK	1	0	-	Right Cheek	0mm	Ant0	Full Power	133322	683	1	22.44	24.00	1.432	0.02	0.181	0.259
	LTE Band 71	20M	QPSK	50	0	-	Right Cheek	0mm	Ant0	Full Power	133322	683	1	21.61	23.00	1.377	0.07	0.154	0.212
	LTE Band 71	20M	QPSK	1	0	-	Right Tilted	0mm	Ant0	Full Power	133322	683	1	22.44	24.00	1.432	-0.04	0.105	0.150
	LTE Band 71	20M	QPSK	50	0	-	Right Tilted	0mm	Ant0	Full Power	133322	683	1	21.61	23.00	1.377	-0.1	0.082	0.113
	LTE Band 71	20M	QPSK	1	0	-	Left Cheek	0mm	Ant0	Full Power	133322	683	1	22.44	24.00	1.432	-0.1	0.132	0.189
	LTE Band 71	20M	QPSK	50	0	-	Left Cheek	0mm	Ant0	Full Power	133322	683	1	21.61	23.00	1.377	0.03	0.135	0.186
	LTE Band 71	20M	QPSK	1	0	-	Left Tilted	0mm	Ant0	Full Power	133322	683	1	22.44	24.00	1.432	0.05	0.101	0.145
	LTE Band 71	20M	QPSK	50	0	-	Left Tilted	0mm	Ant0	Full Power	133322	683	1	21.61	23.00	1.377	0.09	0.080	0.110
02	LTE Band 71	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	133322	683	1	22.48	24.00	1.419	0.02	0.322	**0.457**
	LTE Band 71	20M	QPSK	50	0	-	Right Cheek	0mm	Ant4	Full Power	133322	683	1	21.45	23.00	1.429	-0.02	0.225	0.322
	LTE Band 71	20M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Full Power	133322	683	1	22.48	24.00	1.419	-0.17	0.276	0.392
	LTE Band 71	20M	QPSK	50	0	-	Right Tilted	0mm	Ant4	Full Power	133322	683	1	21.45	23.00	1.429	-0.17	0.206	0.294
	LTE Band 71	20M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Full Power	133322	683	1	22.48	24.00	1.419	0.02	0.305	0.433
	LTE Band 71	20M	QPSK	50	0	-	Left Cheek	0mm	Ant4	Full Power	133322	683	1	21.45	23.00	1.429	0.08	0.215	0.307
	LTE Band 71	20M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Full Power	133322	683	1	22.48	24.00	1.419	0.17	0.309	0.438
	LTE Band 71	20M	QPSK	50	0	-	Left Tilted	0mm	Ant4	Full Power	133322	683	1	21.45	23.00	1.429	-0.19	0.225	0.322
	LTE Band 12 (17)	10M	QPSK	1	0	-	Right Cheek	0mm	Ant0	Full Power	23095	707.5	1	22.44	24.00	1.432	-0.09	0.118	0.169
	LTE Band 12 (17)	10M	QPSK	25	0	-	Right Cheek	0mm	Ant0	Full Power	23095	707.5	1	21.46	23.00	1.426	0.09	0.098	0.140
	LTE Band 12 (17)	10M	QPSK	1	0	-	Right Tilted	0mm	Ant0	Full Power	23095	707.5	1	22.44	24.00	1.432	0.06	0.071	0.102
	LTE Band 12 (17)	10M	QPSK	25	0	-	Right Tilted	0mm	Ant0	Full Power	23095	707.5	1	21.46	23.00	1.426	0.04	0.055	0.078
	LTE Band 12 (17)	10M	QPSK	1	0	-	Left Cheek	0mm	Ant0	Full Power	23095	707.5	1	22.44	24.00	1.432	-0.18	0.111	0.159
	LTE Band 12 (17)	10M	QPSK	25	0	-	Left Cheek	0mm	Ant0	Full Power	23095	707.5	1	21.46	23.00	1.426	0.08	0.087	0.124
	LTE Band 12 (17)	10M	QPSK	1	0	-	Left Tilted	0mm	Ant0	Full Power	23095	707.5	1	22.44	24.00	1.432	0.07	0.061	0.087
	LTE Band 12 (17)	10M	QPSK	25	0	-	Left Tilted	0mm	Ant0	Full Power	23095	707.5	1	21.46	23.00	1.426	0.03	0.049	0.070
03	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	23095	707.5	1	22.30	24.00	1.479	-0.03	0.689	**1.019**
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	23095	707.5	3	22.30	24.00	1.479	0.04	0.605	0.895
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	23095	707.5	4	22.30	24.00	1.479	0.08	0.587	0.868
	LTE Band 12 ENDC	10M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	23095	707.5	1	19.84	21.50	1.466	0.02	0.344	0.504
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant4	Full Power	23095	707.5	1	21.34	23.00	1.466	0.04	0.547	0.802
	LTE Band 12	10M	QPSK	50	0	-	Right Cheek	0mm	Ant4	Full Power	23095	707.5	1	21.14	23.00	1.535	0.17	0.557	0.855
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Full Power	23095	707.5	1	22.30	24.00	1.479	-0.05	0.580	0.858
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant4	Full Power	23095	707.5	1	21.34	23.00	1.466	-0.08	0.460	0.674
	LTE Band 12	10M	QPSK	50	0	-	Right Tilted	0mm	Ant4	Full Power	23095	707.5	1	21.14	23.00	1.535	0.13	0.468	0.718
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Full Power	23095	707.5	1	22.30	24.00	1.479	-0.11	0.639	0.945
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant4	Full Power	23095	707.5	1	21.34	23.00	1.466	0.17	0.505	0.740

	LTE Band 12	10M	QPSK	50	0	-	Left Cheek	0mm	Ant4	Full Power	23095	707.5	1	21.14	23.00	1.535	0.03	0.518	0.795
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Full Power	23095	707.5	1	22.30	24.00	1.479	0.09	0.629	0.930
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant4	Full Power	23095	707.5	1	21.34	23.00	1.466	-0.14	0.505	0.740
	LTE Band 12	10M	QPSK	50	0	-	Left Tilted	0mm	Ant4	Full Power	23095	707.5	1	21.14	23.00	1.535	0.05	0.518	0.795
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	141500	707.5	1	22.87	24.00	1.297	-0.03	0.103	0.134
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	141500	707.5	1	22.83	24.00	1.309	0.09	0.131	0.172
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	141500	707.5	1	22.87	24.00	1.297	0.06	0.002	0.003
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	141500	707.5	1	22.83	24.00	1.309	0.02	0.068	0.089
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	141500	707.5	1	22.87	24.00	1.297	0.02	0.098	0.127
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	141500	707.5	1	22.83	24.00	1.309	0.04	0.120	0.157
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	141500	707.5	1	22.87	24.00	1.297	0.08	0.001	0.001
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	141500	707.5	1	22.83	24.00	1.309	0.04	0.068	0.089
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Full Power	141500	707.5	1	22.31	24.00	1.476	0.18	0.373	0.550
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Full Power	141500	707.5	1	22.26	24.00	1.493	0.17	0.374	0.558
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Full Power	141500	707.5	1	22.31	24.00	1.476	0.05	0.318	0.469
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Full Power	141500	707.5	1	22.26	24.00	1.493	-0.18	0.339	0.506
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Full Power	141500	707.5	1	22.31	24.00	1.476	0.07	0.330	0.487
04	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Full Power	141500	707.5	1	22.26	24.00	1.493	-0.07	0.375	**0.560**
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Full Power	141500	707.5	1	22.31	24.00	1.476	0.13	0.326	0.481
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Full Power	141500	707.5	1	22.26	24.00	1.493	0.06	0.356	0.531
	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant0	Full Power	23230	782	1	22.51	24.00	1.409	-0.02	0.175	0.247
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant0	Full Power	23230	782	1	21.47	23.00	1.422	-0.05	0.133	0.189
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant0	Full Power	23230	782	1	22.51	24.00	1.409	0.06	0.099	0.140
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant0	Full Power	23230	782	1	21.47	23.00	1.422	0.01	0.079	0.112
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant0	Full Power	23230	782	1	22.51	24.00	1.409	0.14	0.157	0.221
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant0	Full Power	23230	782	1	21.47	23.00	1.422	-0.15	0.124	0.176
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant0	Full Power	23230	782	1	22.51	24.00	1.409	-0.02	0.103	0.145
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant0	Full Power	23230	782	1	21.47	23.00	1.422	0.11	0.082	0.117
05	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	23230	782	1	22.48	24.00	1.419	-0.02	0.421	**0.597**
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant4	Full Power	23230	782	1	21.38	23.00	1.452	0.03	0.341	0.495
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Full Power	23230	782	1	22.48	24.00	1.419	0.04	0.325	0.461
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant4	Full Power	23230	782	1	21.38	23.00	1.452	0.04	0.260	0.378
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Full Power	23230	782	1	22.48	24.00	1.419	0.06	0.390	0.553
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant4	Full Power	23230	782	1	21.38	23.00	1.452	0.08	0.310	0.450
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Full Power	23230	782	1	22.48	24.00	1.419	-0.15	0.364	0.517
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant4	Full Power	23230	782	1	21.38	23.00	1.452	-0.05	0.290	0.421
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	158600	793	1	22.58	24.00	1.387	-0.03	0.149	0.207
06	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	158600	793	1	22.55	24.00	1.396	0.06	0.154	**0.215**
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	158600	793	1	22.58	24.00	1.387	0.05	0.089	0.123
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	158600	793	1	22.55	24.00	1.396	0.16	0.089	0.124
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	158600	793	1	22.58	24.00	1.387	0.03	0.144	0.200
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	158600	793	1	22.55	24.00	1.396	-0.08	0.139	0.194
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	158600	793	1	22.58	24.00	1.387	-0.11	0.084	0.116
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	158600	793	1	22.55	24.00	1.396	-0.18	0.085	0.119
	LTE Band 14	10M	QPSK	1	0	-	Right Cheek	0mm	Ant0	Full Power	23330	793	1	22.48	24.00	1.419	0.09	0.165	0.234
	LTE Band 14	10M	QPSK	25	0	-	Right Cheek	0mm	Ant0	Full Power	23330	793	1	21.34	23.00	1.466	0.06	0.128	0.188
	LTE Band 14	10M	QPSK	1	0	-	Right Tilted	0mm	Ant0	Full Power	23330	793	1	22.48	24.00	1.419	-0.1	0.090	0.128
	LTE Band 14	10M	QPSK	25	0	-	Right Tilted	0mm	Ant0	Full Power	23330	793	1	21.34	23.00	1.466	0.14	0.071	0.104
	LTE Band 14	10M	QPSK	1	0	-	Left Cheek	0mm	Ant0	Full Power	23330	793	1	22.48	24.00	1.419	-0.02	0.153	0.217
	LTE Band 14	10M	QPSK	25	0	-	Left Cheek	0mm	Ant0	Full Power	23330	793	1	21.34	23.00	1.466	-0.19	0.122	0.179
	LTE Band 14	10M	QPSK	1	0	-	Left Tilted	0mm	Ant0	Full Power	23330	793	1	22.48	24.00	1.419	0.07	0.088	0.125
	LTE Band 14	10M	QPSK	25	0	-	Left Tilted	0mm	Ant0	Full Power	23330	793	1	21.34	23.00	1.466	-0.08	0.070	0.103
07	LTE Band 14 ENDC	10M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	23330	793	1	22.44	24.00	1.432	-0.01	0.329	**0.471**
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Right Cheek	0mm	Ant4	Full Power	23330	793	1	21.30	23.00	1.479	0.02	0.248	0.367
	LTE Band 14 ENDC	10M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Full Power	23330	793	1	22.44	24.00	1.432	0.05	0.238	0.341
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Right Tilted	0mm	Ant4	Full Power	23330	793	1	21.30	23.00	1.479	-0.01	0.194	0.287

	LTE Band 14 ENDC	10M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Full Power	23330	793	1	22.44	24.00	1.432	-0.16	0.314	0.450
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Left Cheek	0mm	Ant4	Full Power	23330	793	1	21.30	23.00	1.479	-0.14	0.239	0.354
	LTE Band 14 ENDC	10M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Full Power	23330	793	1	22.44	24.00	1.432	0.16	0.294	0.421
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Left Tilted	0mm	Ant4	Full Power	23330	793	1	21.30	23.00	1.479	0.17	0.221	0.327
								835MHz											
08	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant0	Full Power	189	836.4	1	29.36	30.50	1.300	-0.02	0.375	**0.488**
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant0	Full Power	189	836.4	1	29.36	30.50	1.300	0.08	0.213	0.277
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant0	Full Power	189	836.4	1	29.36	30.50	1.300	0.02	0.341	0.443
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant0	Full Power	189	836.4	1	29.36	30.50	1.300	-0.08	0.196	0.255
09	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant0	Full Power	4182	836.4	1	22.64	24.00	1.368	0.01	0.279	**0.382**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant0	Full Power	4182	836.4	1	22.64	24.00	1.368	0.13	0.153	0.209
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant0	Full Power	4182	836.4	1	22.64	24.00	1.368	0.06	0.258	0.353
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant0	Full Power	4182	836.4	1	22.64	24.00	1.368	-0.18	0.145	0.198
	LTE Band 26 (5)	15M	QPSK	1	0	-	Right Cheek	0mm	Ant0	Full Power	26865	831.5	1	22.47	24.00	1.422	0.09	0.168	0.239
	LTE Band 26 (5)	15M	QPSK	36	0	-	Right Cheek	0mm	Ant0	Full Power	26865	831.5	1	21.56	23.00	1.393	-0.08	0.146	0.203
	LTE Band 26 (5)	15M	QPSK	1	0	-	Right Tilted	0mm	Ant0	Full Power	26865	831.5	1	22.47	24.00	1.422	-0.08	0.100	0.142
	LTE Band 26 (5)	15M	QPSK	36	0	-	Right Tilted	0mm	Ant0	Full Power	26865	831.5	1	21.56	23.00	1.393	-0.03	0.078	0.109
	LTE Band 26 (5)	15M	QPSK	1	0	-	Left Cheek	0mm	Ant0	Full Power	26865	831.5	1	22.47	24.00	1.422	0.06	0.172	0.245
	LTE_CA_5B	10M	QPSK	1	49	-	Left Cheek	0mm	Ant0	Full Power	20476+ 20575	831.6+ 841.5	1	22.34	24.00	1.466	0.03	0.155	0.227
	LTE Band 26 (5)	15M	QPSK	36	0	-	Left Cheek	0mm	Ant0	Full Power	26865	831.5	1	21.56	23.00	1.393	-0.1	0.132	0.184
	LTE Band 26 (5)	15M	QPSK	1	0	-	Left Tilted	0mm	Ant0	Full Power	26865	831.5	1	22.47	24.00	1.422	0.05	0.094	0.134
	LTE Band 26 (5)	15M	QPSK	36	0	-	Left Tilted	0mm	Ant0	Full Power	26865	831.5	1	21.56	23.00	1.393	0.12	0.074	0.103
10	LTE Band 26 (5)	15M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	26865	831.5	1	22.49	24.00	1.416	0.12	0.941	**1.332**
	LTE_CA_5B	10M	QPSK	1	49	-	Right Cheek	0mm	Ant4	Full Power	20476+ 20575	831.6+ 841.5	1	22.20	24.00	1.514	0.03	0.843	1.276
	LTE_CA_5B	10M	QPSK	1	49	-	Right Cheek	0mm	Ant4	Full Power	20450+ 20549	829+ 838.9	1	22.16	24.00	1.528	0.01	0.822	1.256
	LTE_CA_5B	10M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	20600+ 20501	844+ 834.1	1	22.11	24.00	1.545	0.06	0.814	1.258
	LTE Band 26 (5)	15M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	26865	831.5	3	22.49	24.00	1.416	0.11	0.797	1.128
	LTE Band 26 (5)	15M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Full Power	26865	831.5	4	22.49	24.00	1.416	0.02	0.687	0.973
	LTE Band 26 (5)ENDC	15M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	26865	831.5	1	18.50	20.00	1.413	0.02	0.386	0.545
	LTE Band 26 (5)	15M	QPSK	36	0	-	Right Cheek	0mm	Ant4	Full Power	26865	831.5	1	21.25	23.00	1.496	0.03	0.774	1.158
	LTE Band 26 (5)	15M	QPSK	75	0	-	Right Cheek	0mm	Ant4	Full Power	26865	831.5	1	21.18	23.00	1.521	0.08	0.770	1.171
	LTE Band 26 (5)	15M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Full Power	26865	831.5	1	22.49	24.00	1.416	-0.03	0.761	1.077
	LTE Band 26 (5)	15M	QPSK	36	0	-	Right Tilted	0mm	Ant4	Full Power	26865	831.5	1	21.25	23.00	1.496	-0.04	0.599	0.896
	LTE Band 26 (5)	15M	QPSK	75	0	-	Right Tilted	0mm	Ant4	Full Power	26865	831.5	1	21.18	23.00	1.521	0.16	0.597	0.908
	LTE Band 26 (5)	15M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Full Power	26865	831.5	1	22.49	24.00	1.416	-0.14	0.935	1.324
	LTE Band 26 (5)	15M	QPSK	36	0	-	Left Cheek	0mm	Ant4	Full Power	26865	831.5	1	21.25	23.00	1.496	0.04	0.745	1.115
	LTE Band 26 (5)	15M	QPSK	75	0	-	Left Cheek	0mm	Ant4	Full Power	26865	831.5	1	21.18	23.00	1.521	-0.02	0.743	1.130
	LTE Band 26 (5)	15M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Full Power	26865	831.5	1	22.49	24.00	1.416	-0.04	0.880	1.246
	LTE Band 26 (5)	15M	QPSK	36	0	-	Left Tilted	0mm	Ant4	Full Power	26865	831.5	1	21.25	23.00	1.496	-0.07	0.685	1.025
	LTE Band 26 (5)	15M	QPSK	75	0	-	Left Tilted	0mm	Ant4	Full Power	26865	831.5	1	21.18	23.00	1.521	0.12	0.684	1.040
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	166300	831.5	1	22.76	24.00	1.330	-0.02	0.152	0.202
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	166300	831.5	1	22.75	24.00	1.334	0.04	0.169	0.225
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	166300	831.5	1	22.76	24.00	1.330	0.05	0.079	0.105
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	166300	831.5	1	22.75	24.00	1.334	0.04	0.090	0.120
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	166300	831.5	1	22.76	24.00	1.330	0.11	0.141	0.188
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	166300	831.5	1	22.75	24.00	1.334	0.02	0.152	0.203
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	166300	831.5	1	22.76	24.00	1.330	-0.17	0.079	0.105
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	166300	831.5	1	22.75	24.00	1.334	-0.06	0.088	0.117
11	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Full Power	166300	831.5	1	22.45	24.00	1.429	0.03	0.966	**1.380**
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Full Power	166300	831.5	1	22.28	24.00	1.486	0.02	0.892	1.325
	FR1 n26 (5)	20M	QPSK	100	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Full Power	166300	831.5	1	21.46	23.00	1.426	0.07	0.745	1.062
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Full Power	166300	831.5	1	22.45	24.00	1.429	0.18	0.750	1.072
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Full Power	166300	831.5	1	22.28	24.00	1.486	0.03	0.725	1.077
	FR1 n26 (5)	20M	QPSK	100	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Full Power	166300	831.5	1	21.46	23.00	1.426	-0.19	0.588	0.838
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Full Power	166300	831.5	1	22.45	24.00	1.429	0.02	0.910	1.300

	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Full Power	166300	831.5	1	22.28	24.00	1.486	0.16	0.899	1.336
	FR1 n26 (5)	20M	QPSK	100	0	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Full Power	166300	831.5	1	21.46	23.00	1.426	0.02	0.724	1.032
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Full Power	166300	831.5	1	22.45	24.00	1.429	0.02	0.847	1.210
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Full Power	166300	831.5	1	22.28	24.00	1.486	0.07	0.802	1.192
	FR1 n26 (5)	20M	QPSK	100	0	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Full Power	166300	831.5	1	21.46	23.00	1.426	0.14	0.652	0.929
	FR1 n5 NSA	25M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	167300	836.5	1	19.17	20.50	1.358	0.01	0.383	0.520
1750MHz																			
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant0	Full Power	1413	1732.6	1	23.04	24.00	1.247	-0.02	0.118	0.147
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant0	Full Power	1413	1732.6	1	23.04	24.00	1.247	-0.05	0.089	0.111
12	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant0	Full Power	1413	1732.6	1	23.04	24.00	1.247	0.07	0.139	**0.173**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant0	Full Power	1413	1732.6	1	23.04	24.00	1.247	0.18	0.083	0.104
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	340500	1702.5	1	22.73	24.00	1.340	0.08	0.071	0.095
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	340500	1702.5	1	22.70	24.00	1.349	-0.12	0.076	0.103
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	340500	1702.5	1	22.73	24.00	1.340	0.04	0.060	0.080
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	340500	1702.5	1	22.70	24.00	1.349	0.1	0.059	0.080
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	340500	1702.5	1	22.73	24.00	1.340	-0.18	0.101	0.135
13	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	340500	1702.5	1	22.70	24.00	1.349	-0.03	0.105	**0.142**
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	340500	1702.5	1	22.73	24.00	1.340	0.1	0.048	0.064
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	340500	1702.5	1	22.70	24.00	1.349	0.06	0.049	0.066
	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Cheek	0mm	Ant0	Full Power	132322	1745	1	22.61	24.00	1.377	0.05	0.117	0.161
	LTE Band 66 (4)	20M	QPSK	50	0	-	Right Cheek	0mm	Ant0	Full Power	132322	1745	1	21.82	23.00	1.312	0.05	0.091	0.119
	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Tilted	0mm	Ant0	Full Power	132322	1745	1	22.61	24.00	1.377	-0.18	0.074	0.102
	LTE Band 66 (4)	20M	QPSK	50	0	-	Right Tilted	0mm	Ant0	Full Power	132322	1745	1	21.82	23.00	1.312	0.05	0.059	0.077
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Cheek	0mm	Ant0	Full Power	132322	1745	1	22.61	24.00	1.377	0.04	0.124	0.171
	LTE_CA_66C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant0	Full Power	132322+ 132520	1745+ 1764.8	1	22.40	24.00	1.445	0.02	0.110	0.159
	LTE Band 66 (4)	20M	QPSK	50	0	-	Left Cheek	0mm	Ant0	Full Power	132322	1745	1	21.82	23.00	1.312	0.09	0.097	0.127
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Tilted	0mm	Ant0	Full Power	132322	1745	1	22.61	24.00	1.377	0.17	0.076	0.105
	LTE Band 66 (4)	20M	QPSK	50	0	-	Left Tilted	0mm	Ant0	Full Power	132322	1745	1	21.82	23.00	1.312	0.06	0.063	0.083
	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	132322	1745	1	20.83	22.00	1.309	0.09	0.925	1.211
	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	132072	1720	1	20.72	22.00	1.343	0.06	0.921	1.237
14	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	132572	1770	1	20.59	22.00	1.384	0.08	0.996	**1.378**
	LTE_CA_66C	20M	QPSK	1	99		Right Cheek	0mm	Ant4	Reduced	132322+ 132520	1745+ 1764.8		20.63	22.00	1.371	0.04	0.872	1.195
	LTE Band 66 (4)ENDC	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	132572	1770	1	18.26	19.50	1.330	0.02	0.401	0.534
	LTE_CA_66C	20M	QPSK	1	99		Right Cheek	0mm	Ant4	Reduced	132322+ 132520	1745+ 1764.8		18.12	19.50	1.374	0.01	0.374	0.514
	LTE Band 66 (4)	20M	QPSK	50	0	-	Right Cheek	0mm	Ant4	Reduced	132322	1745	1	20.43	21.50	1.279	0.06	0.754	0.965
	LTE Band 66 (4)	20M	QPSK	50	0	-	Right Cheek	0mm	Ant4	Reduced	132072	1720	1	20.34	21.50	1.306	0.06	0.719	0.939
	LTE Band 66 (4)	20M	QPSK	50	0	-	Right Cheek	0mm	Ant4	Reduced	132572	1770	1	20.30	21.50	1.318	0.05	0.783	1.032
	LTE Band 66 (4)	20M	QPSK	100	0	-	Right Cheek	0mm	Ant4	Reduced	132322	1745	1	20.23	21.50	1.340	-0.04	0.754	1.010
	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Reduced	132322	1745	1	20.83	22.00	1.309	0.14	0.648	0.848
	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Reduced	132072	1720	1	20.72	22.00	1.343	0.14	0.621	0.834
	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Reduced	132572	1770	1	20.59	22.00	1.384	0.02	0.695	0.962
	LTE Band 66 (4)	20M	QPSK	50	0	-	Right Tilted	0mm	Ant4	Reduced	132322	1745	1	20.43	21.50	1.279	0.05	0.516	0.660
	LTE Band 66 (4)	20M	QPSK	100	0	-	Right Tilted	0mm	Ant4	Reduced	132322	1745	1	20.23	21.50	1.340	-0.08	0.515	0.690
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Reduced	132322	1745	1	20.83	22.00	1.309	0.07	0.674	0.882
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Reduced	132072	1720	1	20.72	22.00	1.343	0.06	0.671	0.901
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Reduced	132572	1770	1	20.59	22.00	1.384	0.06	0.688	0.952
	LTE Band 66 (4)	20M	QPSK	50	0	-	Left Cheek	0mm	Ant4	Reduced	132322	1745	1	20.43	21.50	1.279	0.16	0.534	0.683
	LTE Band 66 (4)	20M	QPSK	100	0	-	Left Cheek	0mm	Ant4	Reduced	132322	1745	1	20.23	21.50	1.340	0.05	0.533	0.714
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Reduced	132322	1745	1	20.83	22.00	1.309	0.17	0.691	0.905
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Reduced	132072	1720	1	20.72	22.00	1.343	0.17	0.685	0.920
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Reduced	132572	1770	1	20.59	22.00	1.384	0.04	0.712	0.985
	LTE Band 66 (4)	20M	QPSK	50	0	-	Left Tilted	0mm	Ant4	Reduced	132322	1745	1	20.43	21.50	1.279	-0.11	0.551	0.705
	LTE Band 66 (4)	20M	QPSK	100	0	-	Left Tilted	0mm	Ant4	Reduced	132322	1745	1	20.23	21.50	1.340	-0.1	0.542	0.726
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	349000	1745	1	23.20	24.00	1.202	-0.13	0.077	0.093
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	349000	1745	1	22.84	24.00	1.306	0.17	0.080	0.104

	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	349000	1745	1	23.20	24.00	1.202	-0.17	0.061	0.073
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	349000	1745	1	22.84	24.00	1.306	0.19	0.063	0.082
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	349000	1745	1	23.20	24.00	1.202	0.04	0.097	0.117
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	349000	1745	1	22.84	24.00	1.306	0.11	0.088	0.115
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	349000	1745	1	23.20	24.00	1.202	0.04	0.056	0.067
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	349000	1745	1	22.84	24.00	1.306	-0.18	0.062	0.081
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	349000	1745	1	19.24	20.00	1.191	0.02	0.862	1.027
15	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	349000	1745	1	18.88	20.00	1.294	0.06	1.020	**1.320**
	FR1 n66 NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	349000	1745	1	16.88	18.00	1.294	0.02	0.459	0.594
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	349000	1745	1	18.57	20.00	1.390	-0.04	0.943	1.311
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	349000	1745	1	19.24	20.00	1.191	-0.05	0.601	0.716
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	349000	1745	1	18.88	20.00	1.294	0.13	0.727	0.941
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	349000	1745	1	18.57	20.00	1.390	0.09	0.657	0.913
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Reduced	349000	1745	1	19.24	20.00	1.191	0.04	0.633	0.754
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Reduced	349000	1745	1	18.88	20.00	1.294	0.03	0.769	0.995
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Reduced	349000	1745	1	18.57	20.00	1.390	0.07	0.730	1.015
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Reduced	349000	1745	1	19.24	20.00	1.191	0.15	0.643	0.766
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Reduced	349000	1745	1	18.88	20.00	1.294	0.05	0.765	0.990
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Reduced	349000	1745	1	18.57	20.00	1.390	0.07	0.745	1.036

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
										1900MHz											
16	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Right Cheek	0mm	Ant0	Full Power	661	1880	1	28.41	29.50	1.285	-	-	0.01	0.169	**0.217**
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Right Tilted	0mm	Ant0	Full Power	661	1880	1	28.41	29.50	1.285	-	-	0.11	0.073	0.094
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Left Cheek	0mm	Ant0	Full Power	661	1880	1	28.41	29.50	1.285	-	-	0.06	0.121	0.156
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Left Tilted	0mm	Ant0	Full Power	661	1880	1	28.41	29.50	1.285	-	-	0.06	0.099	0.127
17	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant0	Full Power	9400	1880	1	22.85	24.00	1.303	-	-	-0.04	0.211	**0.275**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant0	Full Power	9400	1880	1	22.85	24.00	1.303	-	-	0.03	0.093	0.121
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant0	Full Power	9400	1880	1	22.85	24.00	1.303	-	-	0.05	0.155	0.202
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant0	Full Power	9400	1880	1	22.85	24.00	1.303	-	-	0.04	0.126	0.164
	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Cheek	0mm	Ant0	Full Power	26340	1880	1	22.41	24.00	1.442	-	-	-0.03	0.181	**0.261**
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Cheek	0mm	Ant0	Full Power	26340	1880	1	21.37	23.00	1.455	-	-	0.03	0.154	0.224
	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Tilted	0mm	Ant0	Full Power	26340	1880	1	22.41	24.00	1.442	-	-	-0.08	0.083	0.120
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Tilted	0mm	Ant0	Full Power	26340	1880	1	21.37	23.00	1.455	-	-	-0.06	0.066	0.096
	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Cheek	0mm	Ant0	Full Power	26340	1880	1	22.41	24.00	1.442	-	-	0.04	0.138	0.199
	LTE Band 25 (2)	20M	QPSK	50	0	-	Left Cheek	0mm	Ant0	Full Power	26340	1880	1	21.37	23.00	1.455	-	-	-0.1	0.114	0.166
	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Tilted	0mm	Ant0	Full Power	26340	1880	1	22.41	24.00	1.442	-	-	0.05	0.117	0.169
	LTE Band 25 (2)	20M	QPSK	50	0	-	Left Tilted	0mm	Ant0	Full Power	26340	1880	1	21.37	23.00	1.455	-	-	-0.14	0.090	0.131
	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	26340	1880	1	20.78	22.00	1.324	-	-	-0.17	1.010	1.338
	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	26140	1860	1	20.71	22.00	1.346	-	-	0.12	1.010	1.359
18	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	26590	1905	1	20.74	22.00	1.337	-	-	-0.01	1.020	**1.363**
	LTE Band 25 (2) ENDC	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	26590	1905	1	17.15	18.50	1.365	-	-	0.02	0.438	0.598
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Cheek	0mm	Ant4	Reduced	26340	1880	1	20.31	21.50	1.315	-	-	0.03	0.793	1.043
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Cheek	0mm	Ant4	Reduced	26140	1860	1	20.21	21.50	1.346	-	-	0.09	0.793	1.067
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Cheek	0mm	Ant4	Reduced	26590	1905	1	20.23	21.50	1.340	-	-	0.02	0.816	1.093
	LTE Band 25 (2)	20M	QPSK	100	0	-	Right Cheek	0mm	Ant4	Reduced	26340	1880	1	20.31	21.50	1.315	-	-	0.1	0.763	1.004
	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Reduced	26340	1880	1	20.78	22.00	1.324	-	-	0.06	0.786	1.041
	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Reduced	26140	1860	1	20.71	22.00	1.346	-	-	0.04	0.755	1.016
	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Reduced	26590	1905	1	20.74	22.00	1.337	-	-	0.05	0.899	1.202
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Tilted	0mm	Ant4	Reduced	26340	1880	1	20.31	21.50	1.315	-	-	0.05	0.617	0.811
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Tilted	0mm	Ant4	Reduced	26140	1860	1	20.21	21.50	1.346	-	-	0.04	0.593	0.798
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Tilted	0mm	Ant4	Reduced	26590	1905	1	20.23	21.50	1.340	-	-	0.06	0.699	0.936
	LTE Band 25 (2)	20M	QPSK	100	0	-	Right Tilted	0mm	Ant4	Reduced	26340	1880	1	20.31	21.50	1.315	-	-	0.08	0.604	0.794
	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Reduced	26340	1880	1	20.78	22.00	1.324	-	-	0.03	0.635	0.841

	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Reduced	26140	1860	1	20.71	22.00	1.346	-	-	-0.06	0.640	0.861
	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Reduced	26590	1905	1	20.74	22.00	1.337	-	-	0.1	0.680	0.909
	LTE Band 25 (2)	20M	QPSK	50	0	-	Left Cheek	0mm	Ant4	Reduced	26340	1880	1	20.31	21.50	1.315	-	-	0.03	0.501	0.659
	LTE Band 25 (2)	20M	QPSK	100	0	-	Left Cheek	0mm	Ant4	Reduced	26340	1880	1	20.31	21.50	1.315	-	-	0.06	0.485	0.638
	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Reduced	26340	1880	1	20.78	22.00	1.324	-	-	0.12	0.684	0.906
	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Reduced	26140	1860	1	20.71	22.00	1.346	-	-	-0.16	0.675	0.908
	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Reduced	26590	1905	1	20.74	22.00	1.337	-	-	0.17	0.763	1.020
	LTE Band 25 (2)	20M	QPSK	50	0	-	Left Tilted	0mm	Ant4	Reduced	26340	1880	1	20.31	21.50	1.315	-	-	0.09	0.537	0.706
	LTE Band 25 (2)	20M	QPSK	100	0	-	Left Tilted	0mm	Ant4	Reduced	26340	1880	1	20.31	21.50	1.315	-	-	0.08	0.520	0.684
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	376500	1882.5	1	22.89	24.00	1.291	-	-	0.03	0.109	0.141
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant0	Full Power	376500	1882.5	1	22.72	24.00	1.343	-	-	0.01	0.133	0.179
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	376500	1882.5	1	22.89	24.00	1.291	-	-	0.03	0.045	0.058
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant0	Full Power	376500	1882.5	1	22.72	24.00	1.343	-	-	0.03	0.058	0.078
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	376500	1882.5	1	22.89	24.00	1.291	-	-	0.05	0.072	0.093
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant0	Full Power	376500	1882.5	1	22.72	24.00	1.343	-	-	0.03	0.091	0.122
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	376500	1882.5	1	22.89	24.00	1.291	-	-	0.05	0.061	0.079
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant0	Full Power	376500	1882.5	1	22.72	24.00	1.343	-	-	0.06	0.081	0.109
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	376500	1882.5	1	21.34	22.50	1.306	-	-	0.07	0.864	1.129
19	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	376500	1882.5	1	21.11	22.50	1.377	-	-	0.08	1.000	**1.377**
	FR1 n25 (2) NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	376500	1882.5	1	17.28	18.50	1.324	-	-	0.03	0.412	0.546
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	376500	1882.5	1	21.00	22.50	1.413	-	-	0.09	0.931	1.315
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	376500	1882.5	1	21.34	22.50	1.306	-	-	-0.06	0.693	0.905
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	376500	1882.5	1	21.11	22.50	1.377	-	-	0.05	0.822	1.132
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	376500	1882.5	1	21.00	22.50	1.413	-	-	0.11	0.793	1.120
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Reduced	376500	1882.5	1	21.34	22.50	1.306	-	-	0.06	0.578	0.755
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Reduced	376500	1882.5	1	21.11	22.50	1.377	-	-	0.02	0.638	0.879
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Reduced	376500	1882.5	1	21.34	22.50	1.306	-	-	0.1	0.594	0.776
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Reduced	376500	1882.5	1	21.11	22.50	1.377	-	-	0.19	0.706	0.972
	2300MHz																				
	LTE Band 30	10M	QPSK	1	0	-	Right Cheek	0mm	Ant1	Full Power	27710	2310	1	22.79	24.00	1.321	-	-	0.12	0.134	0.177
	LTE Band 30	10M	QPSK	25	0	-	Right Cheek	0mm	Ant1	Full Power	27710	2310	1	21.88	23.00	1.294	-	-	0.03	0.112	0.145
	LTE Band 30	10M	QPSK	1	0	-	Right Tilted	0mm	Ant1	Full Power	27710	2310	1	22.79	24.00	1.321	-	-	0.09	0.104	0.137
	LTE Band 30	10M	QPSK	25	0	-	Right Tilted	0mm	Ant1	Full Power	27710	2310	1	21.88	23.00	1.294	-	-	0.13	0.081	0.105
	LTE Band 30	10M	QPSK	1	0	-	Left Cheek	0mm	Ant1	Full Power	27710	2310	1	22.79	24.00	1.321	-	-	0.07	0.232	0.307
	LTE Band 30	10M	QPSK	25	0	-	Left Cheek	0mm	Ant1	Full Power	27710	2310	1	21.88	23.00	1.294	-	-	-0.06	0.181	0.234
	LTE Band 30	10M	QPSK	1	0	-	Left Tilted	0mm	Ant1	Full Power	27710	2310	1	22.79	24.00	1.321	-	-	0.1	0.073	0.096
	LTE Band 30	10M	QPSK	25	0	-	Left Tilted	0mm	Ant1	Full Power	27710	2310	1	21.88	23.00	1.294	-	-	0.05	0.057	0.074
20	LTE Band 30 ENDC	10M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	27710	2310	1	15.57	17.00	1.390	-	-	-0.06	0.424	**0.589**
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Right Cheek	0mm	Ant4	Reduced	27710	2310	1	15.54	17.00	1.400	-	-	0.02	0.339	0.474
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Reduced	27710	2310	1	15.57	17.00	1.390	-	-	0.02	0.413	0.574
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Right Tilted	0mm	Ant4	Reduced	27710	2310	1	15.54	17.00	1.400	-	-	0.06	0.371	0.519
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Reduced	27710	2310	1	15.57	17.00	1.390	-	-	0.06	0.268	0.373
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Left Cheek	0mm	Ant4	Reduced	27710	2310	1	15.54	17.00	1.400	-	-	-0.17	0.229	0.321
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Reduced	27710	2310	1	15.57	17.00	1.390	-	-	-0.18	0.300	0.417
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Left Tilted	0mm	Ant4	Reduced	27710	2310	1	15.54	17.00	1.400	-	-	0.02	0.261	0.365
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant1	Full Power	462000	2310	1	22.87	24.00	1.297	-	-	0.01	0.111	0.144
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Right Cheek	0mm	Ant1	Full Power	462000	2310	1	22.83	24.00	1.309	-	-	-0.06	0.113	0.148
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant1	Full Power	462000	2310	1	22.87	24.00	1.297	-	-	0.06	0.090	0.117
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Right Tilted	0mm	Ant1	Full Power	462000	2310	1	22.83	24.00	1.309	-	-	0.05	0.098	0.128
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant1	Full Power	462000	2310	1	22.87	24.00	1.297	-	-	0.09	0.176	0.228
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Left Cheek	0mm	Ant1	Full Power	462000	2310	1	22.83	24.00	1.309	-	-	0.07	0.196	**0.257**
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant1	Full Power	462000	2310	1	22.87	24.00	1.297	-	-	-0.19	0.054	0.070
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Left Tilted	0mm	Ant1	Full Power	462000	2310	1	22.83	24.00	1.309	-	-	0.17	0.058	0.076
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	462000	2310	1	19.45	21.00	1.429	-	-	0.02	0.372	0.532
21	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	462000	2310	1	19.41	21.00	1.442	-	-	0.05	0.414	**0.597**
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	462000	2310	1	19.45	21.00	1.429	-	-	-0.12	0.204	0.291

	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	462000	2310	1	19.41	21.00	1.442	-	-	0.01	0.240	0.346
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Reduced	462000	2310	1	19.45	21.00	1.429	-	-	0.07	0.114	0.163
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Reduced	462000	2310	1	19.41	21.00	1.442	-	-	0.16	0.148	0.213
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Reduced	462000	2310	1	19.45	21.00	1.429	-	-	0.08	0.087	0.124
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Reduced	462000	2310	1	19.41	21.00	1.442	-	-	0.06	0.112	0.162
2600MHz																					
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant1	Full Power	507000	2535	1	23.16	24.00	1.213	-	-	0.03	0.177	0.215
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Cheek	0mm	Ant1	Full Power	507000	2535	1	23.08	24.00	1.236	-	-	0.18	0.206	0.255
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant1	Full Power	507000	2535	1	23.16	24.00	1.213	-	-	0.07	0.160	0.194
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Tilted	0mm	Ant1	Full Power	507000	2535	1	23.08	24.00	1.236	-	-	0.08	0.191	0.236
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant1	Full Power	507000	2535	1	23.16	24.00	1.213	-	-	0.05	0.308	0.374
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Cheek	0mm	Ant1	Full Power	507000	2535	1	23.08	24.00	1.236	-	-	0.02	0.355	0.439
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant1	Full Power	507000	2535	1	23.16	24.00	1.213	-	-	0.06	0.089	0.108
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Tilted	0mm	Ant1	Full Power	507000	2535	1	23.08	24.00	1.236	-	-	0.07	0.104	0.129
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	507000	2535	1	15.86	16.50	1.159	-	-	0.05	0.123	0.143
22	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Right Cheek	0mm	Ant4	Reduced	507000	2535	1	15.83	16.50	1.167	-	-	-0.11	0.402	**0.469**
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	507000	2535	1	15.86	16.50	1.159	-	-	-0.19	0.075	0.087
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Right Tilted	0mm	Ant4	Reduced	507000	2535	1	15.83	16.50	1.167	-	-	-0.08	0.343	0.400
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Reduced	507000	2535	1	15.86	16.50	1.159	-	-	-0.07	0.047	0.054
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Left Cheek	0mm	Ant4	Reduced	507000	2535	1	15.83	16.50	1.167	-	-	-0.04	0.192	0.224
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Reduced	507000	2535	1	15.86	16.50	1.159	-	-	0.07	0.047	0.054
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Left Tilted	0mm	Ant4	Reduced	507000	2535	1	15.83	16.50	1.167	-	-	0.11	0.248	0.289
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant1	Full Power	21100	2535	1	22.85	24.00	1.303	-	-	-0.19	0.297	0.387
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant1	Full Power	21100	2535	1	21.83	23.00	1.309	-	-	-0.14	0.241	0.316
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant1	Full Power	21100	2535	1	22.85	24.00	1.303	-	-	0.08	0.286	0.373
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant1	Full Power	21100	2535	1	21.83	23.00	1.309	-	-	-0.09	0.229	0.300
23	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant1	Full Power	21100	2535	1	22.85	24.00	1.303	-	-	0.06	0.528	**0.688**
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant1	Full Power	21100	2535	1	21.83	23.00	1.309	-	-	0.09	0.422	0.552
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant1	Full Power	21100	2535	1	22.85	24.00	1.303	-	-	0.07	0.162	0.211
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant1	Full Power	21100	2535	1	21.83	23.00	1.309	-	-	-0.18	0.128	0.168
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Right Cheek	0mm	Ant4	Reduced	21100	2535	1	13.78	15.00	1.324	-	-	0.18	0.295	0.391
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Right Cheek	0mm	Ant4	Reduced	21100	2535	1	13.63	15.00	1.371	-	-	-0.04	0.240	0.329
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Right Tilted	0mm	Ant4	Reduced	21100	2535	1	13.78	15.00	1.324	-	-	-0.08	0.446	0.591
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Right Tilted	0mm	Ant4	Reduced	21100	2535	1	13.63	15.00	1.371	-	-	0.05	0.274	0.376
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Left Cheek	0mm	Ant4	Reduced	21100	2535	1	13.78	15.00	1.324	-	-	0.05	0.168	0.222
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Left Cheek	0mm	Ant4	Reduced	21100	2535	1	13.63	15.00	1.371	-	-	0.04	0.133	0.182
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Left Tilted	0mm	Ant4	Reduced	21100	2535	1	13.78	15.00	1.324	-	-	0.04	0.210	0.278
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Left Tilted	0mm	Ant4	Reduced	21100	2535	1	13.63	15.00	1.371	-	-	-0.06	0.171	0.234
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant1	Full Power	40620	2593	1	22.50	24.00	1.413	62.9	1.006	-0.02	0.259	0.368
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant1	Full Power	40620	2593	1	21.52	23.00	1.406	62.9	1.006	0.1	0.211	0.298
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant1	Full Power	40620	2593	1	22.50	24.00	1.413	62.9	1.006	0.05	0.223	0.317
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant1	Full Power	40620	2593	1	21.52	23.00	1.406	62.9	1.006	-0.08	0.184	0.260
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant1	Full Power	40620	2593	1	22.50	24.00	1.413	62.9	1.006	-0.07	0.421	0.598
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant1	Full Power	40620	2593	1	21.52	23.00	1.406	62.9	1.006	-0.11	0.356	0.504
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant1	Full Power	40620	2593	1	22.50	24.00	1.413	62.9	1.006	0.05	0.125	0.178
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant1	Full Power	40620	2593	1	21.52	23.00	1.406	62.9	1.006	0.03	0.102	0.144
24	LTE Band 41_HPUE	20M	QPSK	1	0	-	Left Cheek	0mm	Ant1	Full Power	40620	2593	1	25.42	27.00	1.439	42.9	1.009	0.07	0.520	**0.755**
	LTE_CA_41C HPUE	20M	QPSK	1	99	-	Left Cheek	0mm	Ant1	Full Power	40620+ 40818	2593+ 2612.8	1	25.23	27.00	1.503	42.9	1.009	0.04	0.489	0.742
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant1	Reduced	518598	2592.99	1	23.66	25.00	1.361	-	-	0.09	0.354	0.482
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant1	Reduced	518598	2592.99	1	23.97	25.00	1.268	-	-	0.08	0.455	0.577
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant1	Reduced	518598	2592.99	1	23.66	25.00	1.361	-	-	-0.15	0.326	0.444
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant1	Reduced	518598	2592.99	1	23.97	25.00	1.268	-	-	0.12	0.420	0.532
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant1	Reduced	518598	2592.99	1	23.66	25.00	1.361	-	-	0.11	0.465	0.633
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant1	Reduced	518598	2592.99	1	23.97	25.00	1.268	-	-	**-0.01**	0.564	0.715
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant1	Reduced	518598	2592.99	1	23.89	25.00	1.291	-	-	0.01	0.551	0.711
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant1	Reduced	518598	2592.99	1	23.66	25.00	1.361	-	-	0.09	0.178	0.242

	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant1	Reduced	518598	2592.99	1	23.97	25.00	1.268	-	-	0.1	0.237	0.300
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant3	Full Power	518598	2592.99	1	24.84	26.00	1.306	-	-	0.07	0.517	0.675
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant3	Full Power	518598	2592.99	1	24.69	26.00	1.352	-	-	**-0.07**	0.548	0.741
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant3	Full Power	518598	2592.99	1	24.84	26.00	1.306	-	-	0.05	0.246	0.321
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant3	Full Power	518598	2592.99	1	24.69	26.00	1.352	-	-	0.13	0.310	0.419
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant3	Full Power	518598	2592.99	1	24.84	26.00	1.306	-	-	-0.15	0.228	0.298
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant3	Full Power	518598	2592.99	1	24.69	26.00	1.352	-	-	0.04	0.325	0.439
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant3	Full Power	518598	2592.99	1	24.84	26.00	1.306	-	-	0.07	0.212	0.277
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant3	Full Power	518598	2592.99	1	24.69	26.00	1.352	-	-	-0.08	0.262	0.354
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant4	Reduced	518598	2592.99	1	15.31	16.00	1.172	-	-	0.12	0.741	0.869
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant4	Reduced	518598	2592.99	1	15.07	16.00	1.239	-	-	0.09	0.880	1.090
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant4	Reduced	518598	2592.99	1	14.98	15.00	1.005	-	-	0.1	0.770	0.774
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant4	Reduced	518598	2592.99	1	15.31	16.00	1.172	-	-	0.06	0.859	1.007
25	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant4	Reduced	518598	2592.99	1	15.07	16.00	1.239	-	-	0.03	0.928	**1.150**
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant4	Reduced	518598	2592.99	1	14.98	15.00	1.005	-	-	0.07	0.806	0.810
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant4	Reduced	518598	2592.99	1	15.31	16.00	1.172	-	-	0.17	0.414	0.485
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant4	Reduced	518598	2592.99	1	15.07	16.00	1.239	-	-	-0.1	0.433	0.536
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant4	Reduced	518598	2592.99	1	15.31	16.00	1.172	-	-	0.08	0.528	0.619
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant4	Reduced	518598	2592.99	1	15.07	16.00	1.239	-	-	-0.19	0.557	0.690
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant4	Reduced	518598	2592.99	1	14.98	15.00	1.005	-	-	0.03	0.533	0.535
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant6	Reduced	518598	2592.99	1	17.47	18.50	1.268	-	-	0.08	0.177	0.224
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant6	Reduced	518598	2592.99	1	17.45	18.50	1.274	-	-	0.07	0.257	0.327
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant6	Reduced	518598	2592.99	1	17.47	18.50	1.268	-	-	0.04	0.115	0.146
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant6	Reduced	518598	2592.99	1	17.45	18.50	1.274	-	-	-0.18	0.163	0.208
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant6	Reduced	518598	2592.99	1	17.47	18.50	1.268	-	-	0.05	0.724	0.918
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant6	Reduced	518598	2592.99	1	17.45	18.50	1.274	-	-	0.09	0.869	1.107
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant6	Reduced	518598	2592.99	1	17.36	18.50	1.300	-	-	0.06	0.704	0.915
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant6	Reduced	518598	2592.99	1	17.47	18.50	1.268	-	-	-0.17	0.362	0.459
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant6	Reduced	518598	2592.99	1	17.45	18.50	1.274	-	-	0.04	0.464	0.591
3500MHz																					
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant5	Reduced	55830	3609	1	16.63	18.00	1.371	62.9	1.006	0.02	0.579	0.799
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant5	Reduced	55340	3560	1	16.42	18.00	1.439	62.9	1.006	-0.14	0.586	0.848
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant5	Reduced	56150	3641	1	16.44	18.00	1.432	62.9	1.006	0.05	0.591	0.852
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant5	Reduced	56640	3690	1	16.20	18.00	1.514	62.9	1.006	0.02	0.559	0.851
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant5	Reduced	55830	3609	1	16.59	18.00	1.384	62.9	1.006	0.03	0.429	0.597
	LTE Band 48	20M	QPSK	100	0	-	Right Cheek	0mm	Ant5	Reduced	55830	3609	1	16.54	18.00	1.400	62.9	1.006	0.08	0.444	0.625
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant5	Reduced	55830	3609	1	16.63	18.00	1.371	62.9	1.006	0.15	0.586	0.808
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant5	Reduced	55340	3560	1	16.42	18.00	1.439	62.9	1.006	-0.15	0.581	0.841
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant5	Reduced	56150	3641	1	16.44	18.00	1.432	62.9	1.006	0.09	0.557	0.803
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant5	Reduced	56640	3690	1	16.20	18.00	1.514	62.9	1.006	0.06	0.561	0.854
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant5	Reduced	55830	3609	1	16.59	18.00	1.384	62.9	1.006	0.05	0.444	0.618
	LTE Band 48	20M	QPSK	100	0	-	Right Tilted	0mm	Ant5	Reduced	55830	3609	1	16.54	18.00	1.400	62.9	1.006	0.04	0.449	0.632
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant5	Reduced	55830	3609	1	16.63	18.00	1.371	62.9	1.006	-0.06	0.866	1.194
26	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant5	Reduced	55340	3560	1	16.42	18.00	1.439	62.9	1.006	-0.09	0.944	**1.366**
	LTE_CA_48C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant5	Reduced	55830+ 56028	3609+ 3628.8	1	16.49	18.00	1.416	62.9	1.006	0.05	0.913	1.300
	LTE_CA_48C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant5	Reduced	55340+ 55538	3560+ 3579.8	1	16.28	18.00	1.486	62.9	1.006	0.02	0.844	1.262
	LTE_CA_48C	20M	QPSK	1	0	-	Left Cheek	0mm	Ant5	Reduced	56640+ 56442	3690+ 3670.2	1	16.16	18.00	1.528	62.9	1.006	0.04	0.874	1.343
	LTE Band 48 NSA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant5	Reduced	55340	3560	1	12.44	14.00	1.432	62.9	1.006	-0.09	0.398	0.573
	LTE_CA_48C ENDC	20M	QPSK	1	99	-	Left Cheek	0mm	Ant5	Reduced	55830+ 56028	3609+ 3628.8	1	12.43	14.00	1.435	62.9	1.006	-0.05	0.387	0.559
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant5	Reduced	56150	3641	1	16.44	18.00	1.432	62.9	1.006	-0.13	0.905	1.304
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant5	Reduced	56640	3690	1	16.20	18.00	1.514	62.9	1.006	-0.06	0.861	1.311
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant5	Reduced	55830	3609	1	16.59	18.00	1.384	62.9	1.006	-0.08	0.706	0.983
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant5	Reduced	55340	3560	1	16.40	18.00	1.445	62.9	1.006	-0.02	0.790	1.149
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant5	Reduced	56150	3641	1	16.46	18.00	1.426	62.9	1.006	-0.15	0.718	1.030
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant5	Reduced	56640	3690	1	16.21	18.00	1.510	62.9	1.006	0.04	0.745	1.132

	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant5	Reduced	55830	3609	1	16.54	18.00	1.400	62.9	1.006	0.02	0.792	1.115
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant5	Reduced	55830	3609	1	16.63	18.00	1.371	62.9	1.006	0.04	0.814	1.123
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant5	Reduced	55340	3560	1	16.42	18.00	1.439	62.9	1.006	0.09	0.910	1.317
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant5	Reduced	56150	3641	1	16.44	18.00	1.432	62.9	1.006	0.18	0.897	1.292
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant5	Reduced	56640	3690	1	16.20	18.00	1.514	62.9	1.006	0.08	0.834	1.270
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant5	Reduced	55830	3609	1	16.59	18.00	1.384	62.9	1.006	0.05	0.672	0.935
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant5	Reduced	55340	3560	1	16.40	18.00	1.445	62.9	1.006	0.03	0.684	0.995
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant5	Reduced	56150	3641	1	16.46	18.00	1.426	62.9	1.006	0.08	0.723	1.037
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant5	Reduced	56640	3690	1	16.21	18.00	1.510	62.9	1.006	0.01	0.623	0.946
	LTE Band 48	20M	QPSK	100	0	-	Left Tilted	0mm	Ant5	Reduced	55830	3609	1	16.54	18.00	1.400	62.9	1.006	0.04	0.679	0.956
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant5	Reduced	641666	3624.99	1	18.69	19.00	1.074	-	-	-0.13	0.626	0.672
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant5	Reduced	641666	3624.99	1	18.54	19.00	1.112	-	-	0.18	0.782	0.869
	FR1 n48	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant5	Reduced	641666	3624.99	1	18.41	19.00	1.146	-	-	0.18	0.691	0.792
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant5	Reduced	641666	3624.99	1	18.69	19.00	1.074	-	-	0.02	0.633	0.680
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant5	Reduced	641666	3624.99	1	18.54	19.00	1.112	-	-	-0.14	0.815	0.906
	FR1 n48	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant5	Reduced	641666	3624.99	1	18.41	19.00	1.146	-	-	0.02	0.691	0.792
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	641666	3624.99	1	18.69	19.00	1.074	-	-	0.09	0.980	1.053
27	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	641666	3624.99	1	18.54	19.00	1.112	-	-	-0.09	1.240	**1.379**
	FR1 n48	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	641666	3624.99	1	18.41	19.00	1.146	-	-	-0.14	1.160	1.329
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant5	Reduced	641666	3624.99	1	18.69	19.00	1.074	-	-	0.07	0.941	1.011
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant5	Reduced	641666	3624.99	1	18.54	19.00	1.112	-	-	-0.09	1.170	1.301
	FR1 n48	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant5	Reduced	641666	3624.99	1	18.41	19.00	1.146	-	-	0.07	1.090	1.249
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant3	Full Power	656000	3840	1	22.11	23.00	1.227	-	-	0.03	0.052	0.064
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant3	Full Power	656000	3840	1	22.17	23.00	1.211	-	-	-0.06	0.106	0.128
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant3	Full Power	656000	3840	1	22.11	23.00	1.227	-	-	0.04	0.048	0.059
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant3	Full Power	656000	3840	1	22.17	23.00	1.211	-	-	0.17	0.076	0.092
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant3	Full Power	656000	3840	1	22.11	23.00	1.227	-	-	0.06	0.027	0.033
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant3	Full Power	656000	3840	1	22.17	23.00	1.211	-	-	0.06	0.039	0.047
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant3	Full Power	656000	3840	1	22.11	23.00	1.227	-	-	0.03	0.033	0.041
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant3	Full Power	656000	3840	1	22.17	23.00	1.211	-	-	0.03	0.046	0.056
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant3	Full Power	633334	3500.01	1	21.45	23.00	1.429	-	-	0.02	0.059	0.084
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant3	Full Power	633334	3500.01	1	21.39	23.00	1.449	-	-	**0.01**	0.060	0.087
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant3	Full Power	633334	3500.01	1	21.45	23.00	1.429	-	-	0.07	0.034	0.049
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant3	Full Power	633334	3500.01	1	21.39	23.00	1.449	-	-	0.08	0.033	0.048
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant3	Full Power	633334	3500.01	1	21.45	23.00	1.429	-	-	-0.14	0.002	0.003
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant3	Full Power	633334	3500.01	1	21.39	23.00	1.449	-	-	-0.13	0.001	0.001
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant3	Full Power	633334	3500.01	1	21.45	23.00	1.429	-	-	0.08	0.003	0.004
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant3	Full Power	633334	3500.01	1	21.39	23.00	1.449	-	-	0.18	0.032	0.046
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant5	Reduced	656000	3840	1	17.18	18.00	1.208	-	-	-0.09	0.528	0.638
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant5	Reduced	656000	3840	1	17.08	18.00	1.236	-	-	-0.17	0.441	0.545
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant5	Reduced	656000	3840	1	17.18	18.00	1.208	-	-	0.07	0.520	0.628
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant5	Reduced	656000	3840	1	17.08	18.00	1.236	-	-	0.1	0.443	0.548
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	656000	3840	1	17.18	18.00	1.208	-	-	0.18	0.735	0.888
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	656000	3840	1	17.08	18.00	1.236	-	-	0.08	0.728	0.900
	FR1 n77 HPUE _Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	656000	3840	1	16.96	18.00	1.271	-	-	**0.01**	0.842	1.070
	FR1 n77 HPUE _Part27O NSA	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	656000	3840	1	12.99	14.00	1.262	-	-	0.04	0.341	0.430
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant5	Reduced	656000	3840	1	17.18	18.00	1.208	-	-	0.06	0.755	0.912
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant5	Reduced	656000	3840	1	17.08	18.00	1.236	-	-	0.11	0.715	0.884
	FR1 n77 HPUE _Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant5	Reduced	656000	3840	1	16.96	18.00	1.271	-	-	0.04	0.770	0.978
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant5	Reduced	633334	3500.01	1	17.25	18.00	1.189	-	-	0.03	0.558	0.663

	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant5	Reduced	633334	3500.01	1	17.20	18.00	1.202	-	-	0.09	0.684	0.822
	FR1 n77 HPUE _Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant5	Reduced	633334	3500.01	1	17.17	18.00	1.211		1.000	-0.18	0.674	0.816
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant5	Reduced	633334	3500.01	1	17.25	18.00	1.189	-	-	0.06	0.522	0.620
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant5	Reduced	633334	3500.01	1	17.20	18.00	1.202	-	-	-0.1	0.640	0.769
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	633334	3500.01	1	17.25	18.00	1.189	-	-	0.1	0.958	1.139
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	633334	3500.01	1	17.20	18.00	1.202	-	-	0.16	1.120	1.347
28	FR1 n77 HPUE _Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	633334	3500.01	1	17.17	18.00	1.211		1.000	0.01	1.140	**1.380**
	FR1 n77 HPUE _Part27Q NSA	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant5	Reduced	633334	3500.01	1	13.09	14.00	1.233	-	-	0.02	0.458	0.565
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant5	Reduced	633334	3500.01	1	17.25	18.00	1.189	-	-	0.17	0.872	1.036
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant5	Reduced	633334	3500.01	1	17.20	18.00	1.202	-	-	0.04	1.020	1.226
	FR1 n77 HPUE _Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant5	Reduced	633334	3500.01	1	17.17	18.00	1.211		1.000	0.11	1.060	1.283
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant1	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	0.06	0.046	0.055
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant1	Full Power	656000	3840	1	20.03	21.00	1.250	-	-	0.13	0.054	0.068
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant1	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	0.08	0.064	0.077
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant1	Full Power	656000	3840	1	20.03	21.00	1.250	-	-	-0.15	0.070	0.088
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant1	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	-0.11	0.086	0.103
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant1	Full Power	656000	3840	1	20.03	21.00	1.250	-	-	0.06	0.098	0.123
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant1	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	0.14	0.051	0.061
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant1	Full Power	656000	3840	1	20.03	21.00	1.250	-	-	0.07	0.057	0.071
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant1	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	-0.04	0.046	0.056
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant1	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.02	0.056	0.070
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant1	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	0.08	0.067	0.082
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant1	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.06	0.077	0.096
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant1	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	0.06	0.093	0.114
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant1	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.02	0.117	0.145
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant1	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	0.05	0.048	0.059
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant1	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.03	0.056	0.070
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant7	Full Power	656000	3840	1	23.37	24.00	1.156	-	-	0.06	0.112	0.129
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant7	Full Power	656000	3840	1	23.13	24.00	1.222	-	-	-0.12	0.124	0.152
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant7	Full Power	656000	3840	1	23.37	24.00	1.156	-	-	0.01	0.034	0.039
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant7	Full Power	656000	3840	1	23.13	24.00	1.222	-	-	-0.16	0.041	0.050
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant7	Full Power	656000	3840	1	23.37	24.00	1.156	-	-	0.04	0.134	0.155
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant7	Full Power	656000	3840	1	23.13	24.00	1.222	-	-	-0.03	0.143	0.175
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant7	Full Power	656000	3840	1	23.37	24.00	1.156	-	-	0.02	0.057	0.066
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant7	Full Power	656000	3840	1	23.13	24.00	1.222	-	-	0.15	0.094	0.115
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant7	Full Power	633334	3500.01	1	23.34	24.00	1.164	-	-	0.04	0.041	0.048
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant7	Full Power	633334	3500.01	1	23.02	24.00	1.253	-	-	0.07	0.099	0.124
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant7	Full Power	633334	3500.01	1	23.34	24.00	1.164	-	-	-0.01	0.003	0.003
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant7	Full Power	633334	3500.01	1	23.02	24.00	1.253	-	-	-0.06	0.039	0.049
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant7	Full Power	633334	3500.01	1	23.34	24.00	1.164	-	-	0.02	0.046	0.054
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant7	Full Power	633334	3500.01	1	23.02	24.00	1.253	-	-	-0.01	0.102	0.128
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant7	Full Power	633334	3500.01	1	23.34	24.00	1.164	-	-	0.04	0.035	0.041
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant7	Full Power	633334	3500.01	1	23.02	24.00	1.253	-	-	-0.15	0.066	0.083

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
WLAN/Bluetooth																	
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 8	Standlone	1	2412	1	17.91	19.00	1.285	100	1.000	0.07	0.296	0.380
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 8	Standlone	1	2412	1	17.91	19.00	1.285	100	1.000	0.04	0.277	0.356
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Standlone	1	2412	1	17.91	19.00	1.285	100	1.000	0.02	0.936	1.203
29	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Standlone	6	2437	1	17.89	19.00	1.291	100	1.000	0.09	0.962	**1.242**
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Simultaneous	6	2437	1	9.55	11.00	1.396	100	1.000	0.11	0.142	0.198
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8	Standlone	11	2462	1	17.90	19.00	1.288	100	1.000	0.03	0.881	1.135
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 8	Standlone	6	2437	1	17.23	19.00	1.503	100	1.000	0.03	0.781	1.174
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 8	Standlone	1	2412	1	17.91	19.00	1.285	100	1.000	0.08	0.706	0.907
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 8	Standlone	11	2462	1	17.90	19.00	1.288	100	1.000	0.1	0.722	0.930
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 8	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	-0.03	0.036	0.050
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 8	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	0.04	0.034	0.047
30	Bluetooth	1Mbps	Left Cheek	0mm	Ant 8	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	0.06	0.112	**0.156**
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 8	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	0.08	0.087	0.121
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 8	Standalone	54	5270	1	17.84	19.00	1.306	94.90	1.054	0.08	0.320	0.441
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 8	Standalone	54	5270	1	17.84	19.00	1.306	94.90	1.054	0.08	0.358	0.493
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 8	Standalone	54	5270	1	17.84	19.00	1.306	94.90	1.054	0.03	0.779	1.072
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 8	Standalone	62	5310	1	17.11	18.50	1.378	94.90	1.054	0.07	0.698	1.014
31	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	54	5270	1	17.84	19.00	1.306	94.90	1.054	-0.05	0.780	**1.074**
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	54	5270	3	17.84	19.00	1.306	94.90	1.054	0.02	0.778	1.071
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	54	5270	4	17.84	19.00	1.306	94.90	1.054	0.06	0.775	1.067
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Simultaneous	58	5290	1	10.51	12.00	1.409	90.69	1.103	-0.07	0.128	0.199
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	62	5310	1	17.11	18.50	1.378	94.90	1.054	0.17	0.760	1.104
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 8	Standalone	126	5630	1	17.01	18.50	1.409	94.90	1.054	0.16	0.341	0.507
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 8	Standalone	126	5630	1	17.01	18.50	1.409	94.90	1.054	0.08	0.397	0.590
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 8	Standalone	126	5630	1	17.01	18.50	1.409	94.90	1.054	0.03	0.578	0.859
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 8	Standalone	110	5550		16.65	18.00	1.365	94.90	1.054	0.05	0.416	0.599
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	126	5630	1	17.01	18.50	1.409	94.90	1.054	0.16	0.678	1.007
32	WLAN5.5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	110	5550	1	16.65	18.00	1.365	94.90	1.054	-0.04	0.795	**1.144**
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Simultaneous	122	5610	1	10.79	12.50	1.483	90.69	1.103	-0.07	0.121	0.198
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 8	Standalone	159	5795	1	18.35	20.00	1.462	94.90	1.054	-0.09	0.518	0.798
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 8	Standalone	159	5795	1	18.35	20.00	1.462	94.90	1.054	-0.15	0.597	0.920
	WLAN5.8GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 8	Standalone	151	5755	1	18.21	19.50	1.347	94.90	1.054	0.03	0.588	0.835
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 8	Standalone	159	5795	1	18.35	20.00	1.462	94.90	1.054	0.1	0.750	1.156
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 8	Standalone	151	5755	1	18.21	19.50	1.347	94.90	1.054	0.05	0.746	1.059
33	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	159	5795	1	18.35	20.00	1.462	94.90	1.054	-0.02	0.774	**1.193**
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	159	5795	3	18.35	20.00	1.462	94.90	1.054	0.08	0.456	0.703
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	159	5795	4	18.35	20.00	1.462	94.90	1.054	0.03	0.501	0.772
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 8	Simultaneous	155	5775	1	12.13	13.50	1.371	90.69	1.103	-0.02	0.132	0.200
	WLAN5.8GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 8	Standalone	151	5755	1	18.21	19.50	1.347	94.90	1.054	0.17	0.761	1.080

15.2 Hotspot SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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											
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	Full Power	136100	680.5	1	22.77	24.00	1.327	-0.16	0.187	0.248
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant0	Full Power	136100	680.5	1	22.75	24.00	1.334	-0.09	0.192	0.256
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	Full Power	136100	680.5	1	22.77	24.00	1.327	-0.1	0.309	0.410
34	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant0	Full Power	136100	680.5	1	22.75	24.00	1.334	-0.03	0.349	**0.465**
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant0	Full Power	136100	680.5	1	22.77	24.00	1.327	-0.19	0.131	0.174
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant0	Full Power	136100	680.5	1	22.75	24.00	1.334	0.02	0.157	0.209
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant0	Full Power	136100	680.5	1	22.77	24.00	1.327	0.15	0.223	0.296
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant0	Full Power	136100	680.5	1	22.75	24.00	1.334	0.03	0.256	0.341
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Full Power	136100	680.5	1	22.77	24.00	1.327	0.11	0.175	0.232
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Full Power	136100	680.5	1	22.75	24.00	1.334	-0.09	0.160	0.213
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	Full Power	136100	680.5	1	22.55	24.00	1.396	0.11	0.143	0.200
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant4	Full Power	136100	680.5	1	22.43	24.00	1.435	0.07	0.119	0.171
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	Full Power	136100	680.5	1	22.55	24.00	1.396	-0.08	0.229	0.320
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant4	Full Power	136100	680.5	1	22.43	24.00	1.435	0.06	0.187	0.268
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant4	Full Power	136100	680.5	1	22.55	24.00	1.396	0.08	0.080	0.112
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant4	Full Power	136100	680.5	1	22.43	24.00	1.435	-0.05	0.072	0.103
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant4	Full Power	136100	680.5	1	22.55	24.00	1.396	0.05	0.049	0.068
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant4	Full Power	136100	680.5	1	22.43	24.00	1.435	-0.18	0.046	0.066
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	136100	680.5	1	22.55	24.00	1.396	0.04	0.212	0.296
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	136100	680.5	1	22.43	24.00	1.435	0.09	0.137	0.197
	LTE Band 71	20M	QPSK	1	0	-	Front	5mm	Ant0	Full Power	133322	683	1	22.44	24.00	1.432	0.13	0.385	0.551
	LTE Band 71	20M	QPSK	50	0	-	Front	5mm	Ant0	Full Power	133322	683	1	21.61	23.00	1.377	0.08	0.320	0.441
35	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant0	Full Power	133322	683	1	22.44	24.00	1.432	-0.02	0.553	**0.792**
	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant0	Full Power	133322	683	3	22.44	24.00	1.432	0.06	0.542	0.776
	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant0	Full Power	133322	683	4	22.44	24.00	1.432	0.01	0.475	0.680
	LTE Band 71	20M	QPSK	50	0	-	Back	5mm	Ant0	Full Power	133322	683	1	21.61	23.00	1.377	-0.1	0.438	0.603
	LTE Band 71	20M	QPSK	1	0	-	Left Side	5mm	Ant0	Full Power	133322	683	1	22.44	24.00	1.432	0.06	0.310	0.444
	LTE Band 71	20M	QPSK	50	0	-	Left Side	5mm	Ant0	Full Power	133322	683	1	21.61	23.00	1.377	-0.14	0.277	0.381
	LTE Band 71	20M	QPSK	1	0	-	Right Side	5mm	Ant0	Full Power	133322	683	1	22.44	24.00	1.432	0.02	0.517	0.740
	LTE Band 71	20M	QPSK	50	0	-	Right Side	5mm	Ant0	Full Power	133322	683	1	21.61	23.00	1.377	0.07	0.441	0.607
	LTE Band 71	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Full Power	133322	683	1	22.44	24.00	1.432	0.07	0.521	0.746
	LTE Band 71	20M	QPSK	50	0	-	Bottom Side	5mm	Ant0	Full Power	133322	683	1	21.61	23.00	1.377	0.06	0.416	0.573
	LTE Band 71	20M	QPSK	1	0	-	Front	5mm	Ant4	Full Power	133322	683	1	22.48	24.00	1.419	-0.14	0.196	0.278
	LTE Band 71	20M	QPSK	50	0	-	Front	5mm	Ant4	Full Power	133322	683	1	21.45	23.00	1.429	0.01	0.148	0.211
	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant4	Full Power	133322	683	1	22.48	24.00	1.419	-0.01	0.244	0.346
	LTE Band 71	20M	QPSK	50	0	-	Back	5mm	Ant4	Full Power	133322	683	1	21.45	23.00	1.429	0.14	0.231	0.330
	LTE Band 71	20M	QPSK	1	0	-	Left Side	5mm	Ant4	Full Power	133322	683	1	22.48	24.00	1.419	0.09	0.145	0.206
	LTE Band 71	20M	QPSK	50	0	-	Left Side	5mm	Ant4	Full Power	133322	683	1	21.45	23.00	1.429	0.06	0.097	0.139
	LTE Band 71	20M	QPSK	1	0	-	Right Side	5mm	Ant4	Full Power	133322	683	1	22.48	24.00	1.419	0.08	0.102	0.145
	LTE Band 71	20M	QPSK	50	0	-	Right Side	5mm	Ant4	Full Power	133322	683	1	21.45	23.00	1.429	0.02	0.071	0.101
	LTE Band 71	20M	QPSK	1	0	-	Top Side	5mm	Ant4	Full Power	133322	683	1	22.48	24.00	1.419	-0.16	0.219	0.311
	LTE Band 71	20M	QPSK	50	0	-	Top Side	5mm	Ant4	Full Power	133322	683	1	21.45	23.00	1.429	-0.11	0.162	0.231
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	Full Power	141500	707.5	1	22.87	24.00	1.297	0.04	0.229	0.297
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Front	5mm	Ant0	Full Power	141500	707.5	1	22.83	24.00	1.309	0.05	0.234	0.306
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	Full Power	141500	707.5	1	22.87	24.00	1.297	0.02	0.332	0.431
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Back	5mm	Ant0	Full Power	141500	707.5	1	22.83	24.00	1.309	0.08	0.351	0.460
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant0	Full Power	141500	707.5	1	22.87	24.00	1.297	-0.17	0.137	0.178
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Side	5mm	Ant0	Full Power	141500	707.5	1	22.83	24.00	1.309	-0.16	0.172	0.225
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant0	Full Power	141500	707.5	1	22.87	24.00	1.297	-0.05	0.221	0.287
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Side	5mm	Ant0	Full Power	141500	707.5	1	22.83	24.00	1.309	0.04	0.270	0.353
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Full Power	141500	707.5	1	22.87	24.00	1.297	-0.03	0.215	0.279

	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Full Power	141500	707.5	1	22.83	24.00	1.309	0.04	0.180	0.236
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	Full Power	141500	707.5	1	22.31	24.00	1.476	-0.03	0.220	0.325
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Front	5mm	Ant4	Full Power	141500	707.5	1	22.26	24.00	1.493	-0.06	0.251	0.375
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	Full Power	141500	707.5	1	22.31	24.00	1.476	0.09	0.392	0.578
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Back	5mm	Ant4	Full Power	141500	707.5	1	22.26	24.00	1.493	-0.1	0.393	0.587
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant4	Full Power	141500	707.5	1	22.31	24.00	1.476	-0.08	0.104	0.153
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Left Side	5mm	Ant4	Full Power	141500	707.5	1	22.26	24.00	1.493	0.09	0.122	0.182
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant4	Full Power	141500	707.5	1	22.31	24.00	1.476	0.05	0.081	0.120
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Right Side	5mm	Ant4	Full Power	141500	707.5	1	22.26	24.00	1.493	-0.09	0.098	0.146
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	141500	707.5	1	22.31	24.00	1.476	0.03	0.361	0.533
36	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	141500	707.5	1	22.26	24.00	1.493	0.05	0.396	**0.591**
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant4	Full Power	23095	707.5	1	22.30	24.00	1.479	-0.08	0.230	0.340
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant4	Full Power	23095	707.5	1	21.34	23.00	1.466	0.1	0.000	0.000
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant4	Full Power	23095	707.5	1	22.30	24.00	1.479	-0.12	0.379	0.561
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant4	Full Power	23095	707.5	1	21.34	23.00	1.466	0.06	0.000	0.000
	LTE Band 12	10M	QPSK	1	0	-	Left Side	5mm	Ant4	Full Power	23095	707.5	1	22.30	24.00	1.479	-0.06	0.109	0.161
	LTE Band 12	10M	QPSK	25	0	-	Left Side	5mm	Ant4	Full Power	23095	707.5	1	21.34	23.00	1.466	-0.06	0.000	0.000
	LTE Band 12	10M	QPSK	1	0	-	Right Side	5mm	Ant4	Full Power	23095	707.5	1	22.30	24.00	1.479	0.07	0.097	0.143
	LTE Band 12	10M	QPSK	25	0	-	Right Side	5mm	Ant4	Full Power	23095	707.5	1	21.34	23.00	1.466	0.08	0.000	0.000
	LTE Band 12	10M	QPSK	1	0	-	Top Side	5mm	Ant4	Full Power	23095	707.5	1	22.30	24.00	1.479	0.03	0.451	0.667
	LTE Band 12	10M	QPSK	25	0	-	Top Side	5mm	Ant4	Full Power	23095	707.5	1	21.34	23.00	1.466	0.01	0.411	0.602
	LTE Band 12 ENDC	10M	QPSK	25	0	-	Top Side	5mm	Ant4	Hotspot	23095	707.5	1	21.77	23.50	1.489	0.01	0.402	0.599
	LTE Band 12 (17)	10M	QPSK	1	0	-	Front	5mm	Ant0	Full Power	23095	707.5	1	22.44	24.00	1.432	0.07	0.359	0.514
	LTE Band 12 (17)	10M	QPSK	25	0	-	Front	5mm	Ant0	Full Power	23095	707.5	1	21.46	23.00	1.426	0.06	0.332	0.473
37	LTE Band 12 (17)	10M	QPSK	1	0	-	Back	5mm	Ant0	Full Power	23095	707.5	1	22.44	24.00	1.432	-0.01	0.503	**0.720**
	LTE Band 12 (17)	10M	QPSK	25	0	-	Back	5mm	Ant0	Full Power	23095	707.5	1	21.46	23.00	1.426	-0.08	0.399	0.569
	LTE Band 12 (17)	10M	QPSK	1	0	-	Left Side	5mm	Ant0	Full Power	23095	707.5	1	22.44	24.00	1.432	-0.13	0.275	0.394
	LTE Band 12 (17)	10M	QPSK	25	0	-	Left Side	5mm	Ant0	Full Power	23095	707.5	1	21.46	23.00	1.426	-0.14	0.223	0.318
	LTE Band 12 (17)	10M	QPSK	1	0	-	Right Side	5mm	Ant0	Full Power	23095	707.5	1	22.44	24.00	1.432	0.03	0.436	0.624
	LTE Band 12 (17)	10M	QPSK	25	0	-	Right Side	5mm	Ant0	Full Power	23095	707.5	1	21.46	23.00	1.426	-0.13	0.354	0.505
	LTE Band 12 (17)	10M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Full Power	23095	707.5	1	22.44	24.00	1.432	-0.07	0.320	0.458
	LTE Band 12 (17)	10M	QPSK	25	0	-	Bottom Side	5mm	Ant0	Full Power	23095	707.5	1	21.46	23.00	1.426	-0.07	0.222	0.316
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant0	Full Power	23230	782	1	22.51	24.00	1.409	0.17	0.380	0.536
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant0	Full Power	23230	782	1	21.47	23.00	1.422	0.08	0.288	0.410
38	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant0	Full Power	23230	782	1	22.51	24.00	1.409	0.02	0.428	**0.603**
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant0	Full Power	23230	782	1	21.47	23.00	1.422	-0.06	0.316	0.449
	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant0	Full Power	23230	782	1	22.51	24.00	1.409	0.05	0.264	0.372
	LTE Band 13	10M	QPSK	25	0	-	Left Side	5mm	Ant0	Full Power	23230	782	1	21.47	23.00	1.422	0.08	0.199	0.283
	LTE Band 13	10M	QPSK	1	0	-	Right Side	5mm	Ant0	Full Power	23230	782	1	22.51	24.00	1.409	0.17	0.416	0.586
	LTE Band 13	10M	QPSK	25	0	-	Right Side	5mm	Ant0	Full Power	23230	782	1	21.47	23.00	1.422	0.06	0.326	0.464
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Full Power	23230	782	1	22.51	24.00	1.409	0.09	0.288	0.406
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	5mm	Ant0	Full Power	23230	782	1	21.47	23.00	1.422	0.02	0.239	0.340
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant4	Full Power	23230	782	1	22.48	24.00	1.419	-0.03	0.198	0.281
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant4	Full Power	23230	782	1	21.38	23.00	1.452	0.15	0.183	0.266
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant4	Full Power	23230	782	1	22.48	24.00	1.419	-0.13	0.262	0.372
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant4	Full Power	23230	782	1	21.38	23.00	1.452	-0.07	0.212	0.308
	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant4	Full Power	23230	782	1	22.48	24.00	1.419	-0.13	0.088	0.125
	LTE Band 13	10M	QPSK	25	0	-	Left Side	5mm	Ant4	Full Power	23230	782	1	21.38	23.00	1.452	0.03	0.071	0.103
	LTE Band 13	10M	QPSK	1	0	-	Right Side	5mm	Ant4	Full Power	23230	782	1	22.48	24.00	1.419	0.02	0.075	0.106
	LTE Band 13	10M	QPSK	25	0	-	Right Side	5mm	Ant4	Full Power	23230	782	1	21.38	23.00	1.452	-0.08	0.062	0.090
	LTE Band 13	10M	QPSK	1	0	-	Top Side	5mm	Ant4	Full Power	23230	782	1	22.48	24.00	1.419	0.02	0.174	0.247
	LTE Band 13	10M	QPSK	25	0	-	Top Side	5mm	Ant4	Full Power	23230	782	1	21.38	23.00	1.452	-0.13	0.162	0.235
39	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	Full Power	158600	793	1	22.58	24.00	1.387	-0.03	0.348	**0.483**
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Front	5mm	Ant0	Full Power	158600	793	1	22.55	24.00	1.396	0.03	0.308	0.430
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	Full Power	158600	793	1	22.58	24.00	1.387	0.18	0.336	0.466
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant0	Full Power	158600	793	1	22.55	24.00	1.396	0.09	0.333	0.465

	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant0	Full Power	158600	793	1	22.58	24.00	1.387	-0.19	0.197	0.273
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Left Side	5mm	Ant0	Full Power	158600	793	1	22.55	24.00	1.396	0.03	0.195	0.272
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant0	Full Power	158600	793	1	22.58	24.00	1.387	-0.12	0.313	0.434
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Right Side	5mm	Ant0	Full Power	158600	793	1	22.55	24.00	1.396	0.07	0.304	0.424
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Full Power	158600	793	1	22.58	24.00	1.387	0.04	0.242	0.336
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Full Power	158600	793	1	22.55	24.00	1.396	0.05	0.298	0.416
	LTE Band 14	10M	QPSK	1	0	-	Front	5mm	Ant0	Full Power	23330	793	1	22.48	24.00	1.419	0.17	0.410	0.582
	LTE Band 14	10M	QPSK	25	0	-	Front	5mm	Ant0	Full Power	23330	793	1	21.34	23.00	1.466	0.03	0.294	0.431
40	LTE Band 14	10M	QPSK	1	0	-	Back	5mm	Ant0	Full Power	23330	793	1	22.48	24.00	1.419	-0.05	0.422	**0.599**
	LTE Band 14	10M	QPSK	25	0	-	Back	5mm	Ant0	Full Power	23330	793	1	21.34	23.00	1.466	0.07	0.320	0.469
	LTE Band 14	10M	QPSK	1	0	-	Left Side	5mm	Ant0	Full Power	23330	793	1	22.48	24.00	1.419	-0.04	0.228	0.324
	LTE Band 14	10M	QPSK	25	0	-	Left Side	5mm	Ant0	Full Power	23330	793	1	21.34	23.00	1.466	0.03	0.173	0.254
	LTE Band 14	10M	QPSK	1	0	-	Right Side	5mm	Ant0	Full Power	23330	793	1	22.48	24.00	1.419	0.08	0.325	0.461
	LTE Band 14	10M	QPSK	25	0	-	Right Side	5mm	Ant0	Full Power	23330	793	1	21.34	23.00	1.466	0.06	0.257	0.377
	LTE Band 14	10M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Full Power	23330	793	1	22.48	24.00	1.419	0.02	0.281	0.399
	LTE Band 14	10M	QPSK	25	0	-	Bottom Side	5mm	Ant0	Full Power	23330	793	1	21.34	23.00	1.466	0.08	0.220	0.322
	LTE Band 14 ENDC	10M	QPSK	1	0	-	Front	5mm	Ant4	Full Power	23330	793	1	22.44	24.00	1.432	-0.11	0.161	0.231
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Front	5mm	Ant4	Full Power	23330	793	1	21.30	23.00	1.479	0.06	0.149	0.220
	LTE Band 14 ENDC	10M	QPSK	1	0	-	Back	5mm	Ant4	Full Power	23330	793	1	22.44	24.00	1.432	-0.06	0.206	0.295
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Back	5mm	Ant4	Full Power	23330	793	1	21.30	23.00	1.479	0.03	0.189	0.280
	LTE Band 14 ENDC	10M	QPSK	1	0	-	Left Side	5mm	Ant4	Full Power	23330	793	1	22.44	24.00	1.432	0.11	0.063	0.090
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Left Side	5mm	Ant4	Full Power	23330	793	1	21.30	23.00	1.479	-0.06	0.050	0.074
	LTE Band 14 ENDC	10M	QPSK	1	0	-	Right Side	5mm	Ant4	Full Power	23330	793	1	22.44	24.00	1.432	0.12	0.045	0.064
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Right Side	5mm	Ant4	Full Power	23330	793	1	21.30	23.00	1.479	-0.06	0.042	0.062
	LTE Band 14 ENDC	10M	QPSK	1	0	-	Top Side	5mm	Ant4	Full Power	23330	793	1	22.44	24.00	1.432	-0.02	0.152	0.218
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Top Side	5mm	Ant4	Full Power	23330	793	1	21.30	23.00	1.479	0.06	0.145	0.214
	835MHz																		
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant0	Full Power	189	836.4	1	29.36	30.50	1.300	0.19	0.614	0.798
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant0	Full Power	189	836.4	1	29.36	30.50	1.300	0.05	0.568	0.738
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant0	Full Power	189	836.4	1	29.36	30.50	1.300	0.06	0.344	0.447
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Side	5mm	Ant0	Full Power	189	836.4	1	29.36	30.50	1.300	0.05	0.600	0.780
41	GSM850	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant0	Full Power	189	836.4	1	29.36	30.50	1.300	-0.02	0.641	**0.833**
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant0	Full Power	128	824.2	1	29.11	30.50	1.377	0.03	0.566	0.780
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant0	Full Power	251	848.8	1	29.20	30.50	1.349	0.06	0.584	0.788
42	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	Full Power	4182	836.4	1	22.64	24.00	1.368	0.01	0.478	**0.654**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	Full Power	4182	836.4	1	22.64	24.00	1.368	0.03	0.454	0.621
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant0	Full Power	4182	836.4	1	22.64	24.00	1.368	-0.19	0.195	0.267
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant0	Full Power	4182	836.4	1	22.64	24.00	1.368	-0.1	0.275	0.376
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant0	Full Power	4182	836.4	1	22.64	24.00	1.368	-0.08	0.442	0.605
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	Full Power	166300	831.5	1	22.76	24.00	1.330	-0.04	0.488	0.649
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant0	Full Power	166300	831.5	1	22.75	24.00	1.334	0.04	0.465	0.620
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	Full Power	166300	831.5	1	22.76	24.00	1.330	-0.02	0.440	0.585
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant0	Full Power	166300	831.5	1	22.75	24.00	1.334	0.06	0.461	0.615
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant0	Full Power	166300	831.5	1	22.76	24.00	1.330	-0.16	0.169	0.225
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant0	Full Power	166300	831.5	1	22.75	24.00	1.334	0.02	0.193	0.257
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant0	Full Power	166300	831.5	1	22.76	24.00	1.330	-0.03	0.263	0.350
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant0	Full Power	166300	831.5	1	22.75	24.00	1.334	0.02	0.293	0.391
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Full Power	166300	831.5	1	22.76	24.00	1.330	0.06	0.433	0.576
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Full Power	166300	831.5	1	22.75	24.00	1.334	0.16	0.388	0.517
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	Full Power	166300	831.5	1	22.45	24.00	1.429	-0.05	0.367	0.524
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant4	Full Power	166300	831.5	1	22.28	24.00	1.486	0.06	0.372	0.553
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	Full Power	166300	831.5	1	22.45	24.00	1.429	0.02	0.502	0.717
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant4	Full Power	166300	831.5	1	22.28	24.00	1.486	0.03	0.486	0.722
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant4	Full Power	166300	831.5	1	22.45	24.00	1.429	0.02	0.114	0.163
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant4	Full Power	166300	831.5	1	22.28	24.00	1.486	0.05	0.105	0.156
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant4	Full Power	166300	831.5	1	22.45	24.00	1.429	-0.07	0.116	0.166

	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant4	Full Power	166300	831.5	1	22.28	24.00	1.486	-0.15	0.128	0.190
43	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	166300	831.5	1	22.45	24.00	1.429	-0.09	0.703	**1.005**
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	166300	831.5	3	22.45	24.00	1.429	0.03	0.614	0.877
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	166300	831.5	4	22.45	24.00	1.429	0.05	0.600	0.857
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	166300	831.5	1	22.28	24.00	1.486	0.08	0.637	0.947
	FR1 n26 (5)	20M	QPSK	100	0	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	166300	831.5	1	21.46	23.00	1.426	0.07	0.446	0.636
	FR1 n5 NSA	25M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant4	Reduced	167300	836.5	1	20.18	21.50	1.355	0.04	0.396	0.537
44	LTE Band 26 (5)	15M	QPSK	1	0	-	Front	5mm	Ant0	Full Power	26865	831.5	1	22.47	24.00	1.422	0.01	0.560	**0.797**
	LTE_CA_5B	15M	QPSK	1	49	-	Front	5mm	Ant0	Full Power	20476+ 20575	831.6+ 841.5	1	22.34	24.00	1.466	0.03	0.529	0.775
	LTE Band 26 (5)	15M	QPSK	36	0	-	Front	5mm	Ant0	Full Power	26865	831.5	1	21.56	23.00	1.393	-0.15	0.453	0.631
	LTE Band 26 (5)	15M	QPSK	1	0	-	Back	5mm	Ant0	Full Power	26865	831.5	1	22.47	24.00	1.422	0.12	0.495	0.704
	LTE Band 26 (5)	15M	QPSK	36	0	-	Back	5mm	Ant0	Full Power	26865	831.5	1	21.56	23.00	1.393	0.05	0.417	0.581
	LTE Band 26 (5)	15M	QPSK	1	0	-	Left Side	5mm	Ant0	Full Power	26865	831.5	1	22.47	24.00	1.422	-0.18	0.226	0.321
	LTE Band 26 (5)	15M	QPSK	36	0	-	Left Side	5mm	Ant0	Full Power	26865	831.5	1	21.56	23.00	1.393	0.15	0.179	0.249
	LTE Band 26 (5)	15M	QPSK	1	0	-	Right Side	5mm	Ant0	Full Power	26865	831.5	1	22.47	24.00	1.422	0.13	0.334	0.475
	LTE Band 26 (5)	15M	QPSK	36	0	-	Right Side	5mm	Ant0	Full Power	26865	831.5	1	21.56	23.00	1.393	-0.05	0.286	0.398
	LTE Band 26 (5)	15M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Full Power	26865	831.5	1	22.47	24.00	1.422	0.04	0.435	0.619
	LTE Band 26 (5)	15M	QPSK	36	0	-	Bottom Side	5mm	Ant0	Full Power	26865	831.5	1	21.56	23.00	1.393	0.13	0.358	0.499
	LTE Band 26 (5)	15M	QPSK	1	0	-	Front	5mm	Ant4	Full Power	26865	831.5	1	22.49	24.00	1.416	-0.15	0.383	0.542
	LTE Band 26 (5)	15M	QPSK	36	0	-	Front	5mm	Ant4	Full Power	26865	831.5	1	21.25	23.00	1.496	-0.14	0.312	0.467
	LTE Band 26 (5)	15M	QPSK	1	0	-	Back	5mm	Ant4	Full Power	26865	831.5	1	22.49	24.00	1.416	-0.1	0.505	0.715
	LTE_CA_5B	15M	QPSK	1	49	-	Back	5mm	Ant4	Full Power	20476+ 20575	831.6+ 841.5	1	22.20	24.00	1.514	0.05	0.488	0.739
	LTE Band 26 (5) ENDC	15M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	26865	831.5	1	21.37	23.00	1.455	-0.08	0.339	0.493
	LTE Band 26 (5)	15M	QPSK	36	0	-	Back	5mm	Ant4	Full Power	26865	831.5	1	21.25	23.00	1.496	-0.05	0.396	0.593
	LTE Band 26 (5)	15M	QPSK	1	0	-	Left Side	5mm	Ant4	Full Power	26865	831.5	1	22.49	24.00	1.416	-0.08	0.111	0.157
	LTE Band 26 (5)	15M	QPSK	36	0	-	Left Side	5mm	Ant4	Full Power	26865	831.5	1	21.25	23.00	1.496	0.12	0.094	0.141
	LTE Band 26 (5)	15M	QPSK	1	0	-	Right Side	5mm	Ant4	Full Power	26865	831.5	1	22.49	24.00	1.416	0.03	0.109	0.154
	LTE Band 26 (5)	15M	QPSK	36	0	-	Right Side	5mm	Ant4	Full Power	26865	831.5	1	21.25	23.00	1.496	0.1	0.087	0.130
	LTE Band 26 (5)	15M	QPSK	1	0	-	Top Side	5mm	Ant4	Full Power	26865	831.5	1	22.49	24.00	1.416	0.02	0.499	0.706
	LTE Band 26 (5)	15M	QPSK	36	0	-	Top Side	5mm	Ant4	Full Power	26865	831.5	1	21.25	23.00	1.496	-0.17	0.374	0.560
1750MHz																			
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	Reduced	1413	1732.6	1	16.09	17.00	1.233	0.05	0.607	0.748
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	Reduced	1413	1732.6	1	16.09	17.00	1.233	0.02	0.475	0.586
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant0	Reduced	1413	1732.6	1	16.09	17.00	1.233	0.17	0.045	0.055
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant0	Reduced	1413	1732.6	1	16.09	17.00	1.233	0.17	0.042	0.052
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant0	Reduced	1413	1732.6	1	16.09	17.00	1.233	0.01	0.971	1.197
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant0	Reduced	1312	1712.4	1	16.03	17.00	1.250	0.02	0.872	1.090
45	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant0	Reduced	1513	1752.6	1	15.87	17.00	1.297	0.04	1.07	**1.388**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant0	Reduced	1513	1752.6	3	15.87	17.00	1.297	0.02	0.998	1.295
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant0	Reduced	1513	1752.6	4	15.87	17.00	1.297	0.03	1.03	1.336
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	Reduced	340500	1702.5	1	18.39	19.50	1.291	-0.15	0.672	0.868
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Front	5mm	Ant0	Reduced	340500	1702.5	1	18.33	19.50	1.309	0.03	0.744	0.974
	FR1 n70	15M	QPSK	75	0	DFT-SCS-15KHz	Front	5mm	Ant0	Reduced	340500	1702.5	1	18.28	19.50	1.324	0.07	0.741	0.981
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	Reduced	340500	1702.5	1	18.39	19.50	1.291	0.08	0.441	0.569
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Back	5mm	Ant0	Reduced	340500	1702.5	1	18.33	19.50	1.309	0.06	0.461	0.604
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant0	Reduced	340500	1702.5	1	18.39	19.50	1.291	0.07	0.067	0.087
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Left Side	5mm	Ant0	Reduced	340500	1702.5	1	18.33	19.50	1.309	-0.12	0.046	0.060
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant0	Reduced	340500	1702.5	1	18.39	19.50	1.291	0.04	0.052	0.067
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Right Side	5mm	Ant0	Reduced	340500	1702.5	1	18.33	19.50	1.309	0.11	0.050	0.065
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	340500	1702.5	1	18.39	19.50	1.291	-0.09	0.911	1.176
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	340500	1702.5	1	18.33	19.50	1.309	0.05	0.961	1.258
46	FR1 n70	15M	QPSK	75	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	340500	1702.5	1	18.28	19.50	1.324	0.01	1.03	**1.364**
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Front	5mm	Ant0	Reduced	349000	1745	1	17.61	18.50	1.227	0.02	0.532	0.653
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant0	Reduced	349000	1745	1	17.32	18.50	1.312	0.18	0.674	0.884
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant0	Reduced	349000	1745	1	16.94	18.50	1.432	0.06	0.579	0.829

	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Back	5mm	Ant0	Reduced	349000	1745	1	17.61	18.50	1.227	0.13	0.378	0.464
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant0	Reduced	349000	1745	1	17.32	18.50	1.312	0.16	0.535	0.702
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Left Side	5mm	Ant0	Reduced	349000	1745	1	17.61	18.50	1.227	0.02	0.038	0.047
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant0	Reduced	349000	1745	1	17.32	18.50	1.312	0.04	0.039	0.051
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Right Side	5mm	Ant0	Reduced	349000	1745	1	17.61	18.50	1.227	0.08	0.040	0.049
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant0	Reduced	349000	1745	1	17.32	18.50	1.312	-0.13	0.041	0.054
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	349000	1745	1	17.61	18.50	1.227	0.06	0.723	0.887
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	349000	1745	1	17.32	18.50	1.312	0.04	0.944	1.239
	FR1 n66 NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	349000	1745	1	14.82	16.00	1.312	0.02	0.610	0.800
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	349000	1745	1	16.94	18.50	1.432	-0.06	0.848	1.214
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Front	5mm	Ant4	Reduced	349000	1745	1	19.24	20.00	1.191	0.04	0.377	0.449
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant4	Reduced	349000	1745	1	18.88	20.00	1.294	-0.14	0.428	0.554
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Back	5mm	Ant4	Reduced	349000	1745	1	19.24	20.00	1.191	-0.13	0.874	1.041
47	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	Reduced	349000	1745	1	18.88	20.00	1.294	-0.04	1.01	**1.307**
	FR1 n66 NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	Reduced	349000	1745	1	15.35	16.50	1.303	0.04	0.457	0.596
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant4	Reduced	349000	1745	1	18.57	20.00	1.390	0.03	0.765	1.063
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Left Side	5mm	Ant4	Reduced	349000	1745	1	19.24	20.00	1.191	-0.15	0.209	0.249
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant4	Reduced	349000	1745	1	18.88	20.00	1.294	-0.18	0.260	0.336
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Right Side	5mm	Ant4	Reduced	349000	1745	1	19.24	20.00	1.191	0.04	0.087	0.104
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant4	Reduced	349000	1745	1	18.88	20.00	1.294	0.04	0.110	0.142
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Top Side	5mm	Ant4	Reduced	349000	1745	1	19.24	20.00	1.191	0.01	0.657	0.783
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant4	Reduced	349000	1745	1	18.88	20.00	1.294	0.15	0.756	0.978
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	5mm	Ant4	Reduced	349000	1745	1	18.57	20.00	1.390	0.05	0.620	0.862
	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	5mm	Ant0	Reduced	132322	1745	1	15.62	17.00	1.374	0.12	0.537	0.738
	LTE Band 66 (4)	20M	QPSK	50	0	-	Front	5mm	Ant0	Reduced	132322	1745	1	15.60	17.00	1.380	0.03	0.429	0.592
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant0	Reduced	132322	1745	1	15.62	17.00	1.374	0.15	0.412	0.566
	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant0	Reduced	132322	1745	1	15.60	17.00	1.380	-0.04	0.354	0.489
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Side	5mm	Ant0	Reduced	132322	1745	1	15.62	17.00	1.374	0.05	0.038	0.052
	LTE Band 66 (4)	20M	QPSK	50	0	-	Left Side	5mm	Ant0	Reduced	132322	1745	1	15.60	17.00	1.380	0.02	0.029	0.040
	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Side	5mm	Ant0	Reduced	132322	1745	1	15.62	17.00	1.374	0.03	0.039	0.054
	LTE Band 66 (4)	20M	QPSK	50	0	-	Right Side	5mm	Ant0	Reduced	132322	1745	1	15.60	17.00	1.380	0.13	0.030	0.041
	LTE Band 66 (4)	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Reduced	132322	1745	1	15.62	17.00	1.374	-0.04	0.908	1.248
	LTE Band 66 (4)	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Reduced	132072	1720	1	15.37	17.00	1.455	-0.03	0.840	1.223
48	LTE Band 66 (4)	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Reduced	132572	1770	1	15.59	17.00	1.384	-0.02	1.02	**1.411**
	LTE_CA_66C	20M	QPSK	1	99	-	Bottom Side	5mm	Ant0	Reduced	132322+ 132520	1745+ 1764.8	1	15.42	17.00	1.439	0.06	0.954	1.373
	LTE_CA_66C	20M	QPSK	1	99	-	Bottom Side	5mm	Ant0	Reduced	132072+ 132270	1720+ 1739.8	1	15.20	17.00	1.514	0.02	0.874	1.323
	LTE_CA_66C	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Reduced	132572+ 132374	1770+ 1750	1	15.42	17.00	1.439	0.07	0.891	1.282
	LTE Band 66 (4) ENDC	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Reduced	132572	1770	1	12.49	14.00	1.416	0.02	0.564	0.799
	LTE_CA_66C ENDC	20M	QPSK	1	99	-	Bottom Side	5mm	Ant0	Reduced	132322+ 132520	1745+ 1764.8	1	12.50	14.00	1.413	-0.09	0.542	0.766
	LTE Band 66 (4)	20M	QPSK	50	0	-	Bottom Side	5mm	Ant0	Reduced	132322	1745	1	15.60	17.00	1.380	0.18	0.748	1.033
	LTE Band 66 (4)	20M	QPSK	50	0	-	Bottom Side	5mm	Ant0	Reduced	132072	1720	1	15.38	17.00	1.452	0.03	0.640	0.929
	LTE Band 66 (4)	20M	QPSK	50	0	-	Bottom Side	5mm	Ant0	Reduced	132572	1770	1	15.55	17.00	1.396	0.03	0.800	1.117
	LTE Band 66 (4)	20M	QPSK	100	0	-	Bottom Side	5mm	Ant0	Reduced	132322	1745	1	15.58	17.00	1.387	0.12	0.708	0.982
	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	5mm	Ant4	Reduced	132322	1745	1	20.35	21.50	1.303	0.09	0.436	0.568
	LTE Band 66 (4)	20M	QPSK	50	0	-	Front	5mm	Ant4	Reduced	132322	1745	1	20.33	21.50	1.309	0.02	0.365	0.478
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	132322	1745	1	20.35	21.50	1.303	-0.03	0.945	1.231
	LTE_CA_66C	20M	QPSK	1	0		Back	5mm	Ant4	Reduced	132572+ 132374	1770+ 1750	1	20.20	21.50	1.349	0.05	0.901	1.215
	LTE_CA_66C	20M	QPSK	1	99		Back	5mm	Ant4	Back	132072+ 132270	1720+ 1739.8	1	20.18	21.50	1.355	-0.07	0.887	1.202
	LTE_CA_66C	20M	QPSK	1	99		Back	5mm	Ant4	Back	132322+ 132520	1745+ 1764.8	1	20.15	21.50	1.365	-0.04	0.861	1.175
	LTE Band 66 (4) ENDC	20M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	132322	1745	1	18.28	19.50	1.324	-0.02	0.440	0.583
	LTE_CA_66C	20M	QPSK	1	99		Back	5mm	Ant4	Reduced	132322+ 132520	1745+ 1764.8	1	18.12	19.50	1.374	0.09	0.415	0.570
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	132072	1720	1	20.29	21.50	1.321	0.08	0.893	1.180
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	132572	1770	1	20.30	21.50	1.318	-0.13	0.902	1.189
	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant4	Reduced	132322	1745	1	20.33	21.50	1.309	0.07	0.783	1.025

	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant4	Reduced	132072	1720	1	20.29	21.50	1.321	-0.14	0.779	1.029
	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant4	Reduced	132572	1770	1	20.30	21.50	1.318	0.09	0.867	1.143
	LTE Band 66 (4)	20M	QPSK	100	0	-	Back	5mm	Ant4	Reduced	132322	1745	1	20.24	21.50	1.337	0.13	0.792	1.059
	LTE Band 66 (4)	20M	QPSK	1	0	-	Left Side	5mm	Ant4	Reduced	132322	1745	1	20.35	21.50	1.303	-0.1	0.252	0.328
	LTE Band 66 (4)	20M	QPSK	50	0	-	Left Side	5mm	Ant4	Reduced	132322	1745	1	20.33	21.50	1.309	0.03	0.212	0.278
	LTE Band 66 (4)	20M	QPSK	1	0	-	Right Side	5mm	Ant4	Reduced	132322	1745	1	20.35	21.50	1.303	0.03	0.105	0.137
	LTE Band 66 (4)	20M	QPSK	50	0	-	Right Side	5mm	Ant4	Reduced	132322	1745	1	20.33	21.50	1.309	0.05	0.096	0.126
	LTE Band 66 (4)	20M	QPSK	1	0	-	Top Side	5mm	Ant4	Reduced	132322	1745	1	20.35	21.50	1.303	0.05	0.802	1.045
	LTE Band 66 (4)	20M	QPSK	1	0	-	Top Side	5mm	Ant4	Reduced	132072	1720	1	20.29	21.50	1.321	-0.1	0.763	1.008
	LTE Band 66 (4)	20M	QPSK	1	0	-	Top Side	5mm	Ant4	Reduced	132572	1770	1	20.30	21.50	1.318	0.09	0.786	1.036
	LTE Band 66 (4)	20M	QPSK	50	0	-	Top Side	5mm	Ant4	Reduced	132322	1745	1	20.33	21.50	1.309	0.15	0.672	0.880
	LTE Band 66 (4)	20M	QPSK	50	0	-	Top Side	5mm	Ant4	Reduced	132072	1720	1	20.29	21.50	1.321	0.18	0.586	0.774
	LTE Band 66 (4)	20M	QPSK	50	0	-	Top Side	5mm	Ant4	Reduced	132572	1770	1	20.30	21.50	1.318	0.12	0.700	0.923
	LTE Band 66 (4)	20M	QPSK	100	0	-	Top Side	5mm	Ant4	Reduced	132322	1745	1	20.24	21.50	1.337	0.03	0.688	0.920
1900MHz																			
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	5mm	Ant0	Reduced	661	1880	1	20.42	21.50	1.282	0.08	0.369	0.473
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Back	5mm	Ant0	Reduced	661	1880	1	20.42	21.50	1.282	0.05	0.524	0.672
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Left Side	5mm	Ant0	Reduced	661	1880	1	20.42	21.50	1.282	0.04	0.017	0.022
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Right Side	5mm	Ant0	Reduced	661	1880	1	20.42	21.50	1.282	0.19	0.058	0.074
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Bottom Side	5mm	Ant0	Reduced	661	1880	1	20.42	21.50	1.282	-0.05	0.990	1.270
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Bottom Side	5mm	Ant0	Reduced	512	1850.2	1	20.35	21.50	1.303	0.09	0.872	1.136
49	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Bottom Side	5mm	Ant0	Reduced	810	1909.8	1	20.34	21.50	1.306	0.03	1.07	**1.398**
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Bottom Side	5mm	Ant0	Reduced	810	1909.8	3	20.34	21.50	1.306	0.06	0.998	1.304
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Bottom Side	5mm	Ant0	Reduced	810	1909.8	4	20.34	21.50	1.306	0.03	0.986	1.288
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	Reduced	9400	1880	1	13.83	15.00	1.309	0.050	0.425	0.556
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	Reduced	9400	1880	1	13.83	15.00	1.309	0.07	0.677	0.886
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant0	Reduced	9400	1880	1	13.83	15.00	1.309	0.04	0.052	0.068
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant0	Reduced	9400	1880	1	13.83	15.00	1.309	0.03	0.013	0.017
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant0	Reduced	9400	1880	1	13.83	15.00	1.309	0.02	0.942	1.233
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant0	Reduced	9262	1852.4	1	13.79	15.00	1.321	0.08	0.891	1.177
50	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant0	Reduced	9538	1907.6	1	13.78	15.00	1.324	0.03	0.973	**1.289**
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Front	5mm	Ant0	Reduced	376500	1882.5	1	15.37	16.50	1.297	-0.09	0.374	0.485
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant0	Reduced	376500	1882.5	1	15.36	16.50	1.300	0.07	0.451	0.586
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Back	5mm	Ant0	Reduced	376500	1882.5	1	15.37	16.50	1.297	-0.14	0.555	0.720
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant0	Reduced	376500	1882.5	1	15.36	16.50	1.300	0.02	0.709	0.922
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant0	Reduced	376500	1882.5	1	15.24	16.50	1.337	0.05	0.645	0.862
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Left Side	5mm	Ant0	Reduced	376500	1882.5	1	15.37	16.50	1.297	0.06	0.011	0.014
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant0	Reduced	376500	1882.5	1	15.36	16.50	1.300	0.09	0.010	0.013
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Right Side	5mm	Ant0	Reduced	376500	1882.5	1	15.37	16.50	1.297	0.12	0.042	0.054
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant0	Reduced	376500	1882.5	1	15.36	16.50	1.300	-0.16	0.044	0.057
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	376500	1882.5	1	15.37	16.50	1.297	0.03	0.857	1.112
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	376500	1882.5	1	15.36	16.50	1.300	-0.12	1.01	1.309
51	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	376500	1882.5	1	15.24	16.50	1.337	0.03	1.05	**1.403**
	FR1 n25 (2) NSA	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant0	Reduced	376500	1882.5	1	12.64	14.00	1.368	0.07	0.563	0.770
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Front	5mm	Ant4	Full Power	376500	1882.5	1	21.88	23.00	1.294	-0.12	0.378	0.489
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant4	Full Power	376500	1882.5	1	21.54	23.00	1.400	-0.13	0.460	0.644
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Back	5mm	Ant4	Full Power	376500	1882.5	1	21.88	23.00	1.294	-0.12	0.825	1.068
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	Full Power	376500	1882.5	1	21.54	23.00	1.400	-0.01	0.995	1.393
	FR1 n25 (2) NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	Reduced	376500	1882.5	1	18.23	19.50	1.340	0.04	0.441	0.591
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant4	Full Power	376500	1882.5	1	21.47	23.00	1.422	0.02	0.943	1.341
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Left Side	5mm	Ant4	Full Power	376500	1882.5	1	21.88	23.00	1.294	0.06	0.203	0.263
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant4	Full Power	376500	1882.5	1	21.54	23.00	1.400	-0.17	0.272	0.381
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Right Side	5mm	Ant4	Full Power	376500	1882.5	1	21.88	23.00	1.294	-0.11	0.071	0.092
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant4	Full Power	376500	1882.5	1	21.54	23.00	1.400	-0.02	0.086	0.120
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	376500	1882.5	1	21.88	23.00	1.294	0.07	0.557	0.721
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant4	Full Power	376500	1882.5	1	21.54	23.00	1.400	0.07	0.567	0.794

	LTE Band 25 (2)	20M	QPSK	1	0	-	Front	5mm	Ant0	Reduced	26340	1880	1	13.47	15.00	1.422	0.05	0.424	0.603
	LTE Band 25 (2)	20M	QPSK	50	0	-	Front	5mm	Ant0	Reduced	26340	1880	1	13.45	15.00	1.429	-0.07	0.334	0.477
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant0	Reduced	26340	1880	1	13.47	15.00	1.422	0.08	0.660	0.939
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant0	Reduced	26140	1860	1	13.38	15.00	1.452	0.13	0.604	0.877
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant0	Reduced	26590	1905	1	13.39	15.00	1.449	0.03	0.704	1.020
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant0	Reduced	26340	1880	1	13.45	15.00	1.429	0.03	0.542	0.774
	LTE Band 25 (2)	20M	QPSK	100	0	-	Back	5mm	Ant0	Reduced	26340	1880	1	13.46	15.00	1.426	0.06	0.511	0.728
	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Side	5mm	Ant0	Reduced	26340	1880	1	13.47	15.00	1.422	0.15	0.011	0.016
	LTE Band 25 (2)	20M	QPSK	50	0	-	Left Side	5mm	Ant0	Reduced	26340	1880	1	13.45	15.00	1.429	0.04	0.006	0.009
	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Side	5mm	Ant0	Reduced	26340	1880	1	13.47	15.00	1.422	-0.16	0.033	0.047
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Side	5mm	Ant0	Reduced	26340	1880	1	13.45	15.00	1.429	0.09	0.040	0.057
	LTE Band 25 (2)	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Reduced	26340	1880	1	13.47	15.00	1.422	-0.04	0.925	1.316
	LTE Band 25 (2)	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Reduced	26140	1860	1	13.38	15.00	1.452	0.07	0.913	1.326
	LTE Band 25 (2)	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Reduced	26590	1905	1	13.39	15.00	1.449	0.09	0.957	1.386
	LTE Band 25 (2) ENDC	20M	QPSK	1	0	-	Bottom Side	5mm	Ant0	Reduced	26590	1905	1	10.87	12.50	1.455	0.03	0.536	0.780
	LTE Band 25 (2)	20M	QPSK	50	0	-	Bottom Side	5mm	Ant0	Reduced	26340	1880	1	13.45	15.00	1.429	-0.05	0.786	1.123
	LTE Band 25 (2)	20M	QPSK	50	0	-	Bottom Side	5mm	Ant0	Reduced	26140	1860	1	13.36	15.00	1.459	0.14	0.776	1.132
	LTE Band 25 (2)	20M	QPSK	50	0	-	Bottom Side	5mm	Ant0	Reduced	26590	1905	1	13.35	15.00	1.462	0.15	0.752	1.100
	LTE Band 25 (2)	20M	QPSK	100	0	-	Bottom Side	5mm	Ant0	Reduced	26340	1880	1	13.46	15.00	1.426	-0.12	0.715	1.019
	LTE Band 25 (2)	20M	QPSK	1	0	-	Front	5mm	Ant4	Reduced	26340	1880	1	19.79	21.00	1.321	-0.09	0.405	0.535
	LTE Band 25 (2)	20M	QPSK	50	0	-	Front	5mm	Ant4	Reduced	26340	1880	1	19.74	21.00	1.337	0.06	0.348	0.465
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	26340	1880	1	19.79	21.00	1.321	0.08	0.888	1.173
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	26140	1860	1	19.71	21.00	1.346	-0.07	0.891	1.199
52	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	26590	1905	1	19.77	21.00	1.327	-0.07	1.05	**1.394**
	LTE Band 25 (2) ENDC	20M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	26590	1905	1	15.70	17.00	1.349	0.03	0.403	0.544
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant4	Reduced	26340	1880	1	19.74	21.00	1.337	0.05	0.797	1.065
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant4	Reduced	26140	1860	1	19.64	21.00	1.368	-0.06	0.781	1.068
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant4	Reduced	26590	1905	1	19.53	21.00	1.403	0.04	0.761	1.068
	LTE Band 25 (2)	20M	QPSK	100	0	-	Back	5mm	Ant4	Reduced	26340	1880	1	19.76	21.00	1.330	0.07	0.750	0.998
	LTE Band 25 (2)	20M	QPSK	1	0	-	Left Side	5mm	Ant4	Reduced	26340	1880	1	19.79	21.00	1.321	0.14	0.277	0.366
	LTE Band 25 (2)	20M	QPSK	50	0	-	Left Side	5mm	Ant4	Reduced	26340	1880	1	19.74	21.00	1.337	0.06	0.238	0.318
	LTE Band 25 (2)	20M	QPSK	1	0	-	Right Side	5mm	Ant4	Reduced	26340	1880	1	19.79	21.00	1.321	0.07	0.074	0.098
	LTE Band 25 (2)	20M	QPSK	50	0	-	Right Side	5mm	Ant4	Reduced	26340	1880	1	19.74	21.00	1.337	0.09	0.055	0.074
	LTE Band 25 (2)	20M	QPSK	1	0	-	Top Side	5mm	Ant4	Reduced	26340	1880	1	19.79	21.00	1.321	-0.15	0.674	0.891
	LTE Band 25 (2)	20M	QPSK	1	0	-	Top Side	5mm	Ant4	Reduced	26140	1860	1	19.71	21.00	1.346	0.18	0.705	0.949
	LTE Band 25 (2)	20M	QPSK	1	0	-	Top Side	5mm	Ant4	Reduced	26590	1905	1	19.77	21.00	1.327	0.02	0.722	0.958
	LTE Band 25 (2)	20M	QPSK	50	0	-	Top Side	5mm	Ant4	Reduced	26340	1880	1	19.74	21.00	1.337	0.03	0.571	0.763
	LTE Band 25 (2)	20M	QPSK	100	0	-	Top Side	5mm	Ant4	Reduced	26340	1880	1	19.76	21.00	1.330	-0.09	0.561	0.746
2300MHz																			
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant1	Reduced	462000	2310	1	21.91	23.00	1.285	0.02	0.730	0.938
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Front	5mm	Ant1	Reduced	462000	2310	1	21.82	23.00	1.312	-0.03	0.740	0.971
	FR1 n30	10M	QPSK	50	0	DFT-SCS-15KHz	Front	5mm	Ant1	Reduced	462000	2310	1	21.80	23.00	1.318	0.09	0.749	0.987
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	462000	2310	1	21.91	23.00	1.285	0.02	0.931	1.197
53	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	462000	2310	1	21.82	23.00	1.312	0.05	1.06	**1.391**
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	462000	2310	3	21.82	23.00	1.312	0.09	0.913	1.198
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	462000	2310	4	21.82	23.00	1.312	-0.06	1.04	1.358
	FR1 n30 NSA	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	462000	2310	1	19.47	20.50	1.268	0.01	0.551	0.698
	FR1 n30	10M	QPSK	50	0	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	462000	2310	1	21.80	23.00	1.318	0.09	0.905	1.193
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant1	Reduced	462000	2310	1	21.91	23.00	1.285	0.19	0.495	0.636
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Left Side	5mm	Ant1	Reduced	462000	2310	1	21.82	23.00	1.312	-0.11	0.515	0.676
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant1	Reduced	462000	2310	1	21.91	23.00	1.285	0.11	0.074	0.095
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Right Side	5mm	Ant1	Reduced	462000	2310	1	21.82	23.00	1.312	0.02	0.076	0.100
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant1	Reduced	462000	2310	1	21.91	23.00	1.285	0.08	0.701	0.901
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Bottom Side	5mm	Ant1	Reduced	462000	2310	1	21.82	23.00	1.312	-0.03	0.789	1.035
	FR1 n30	10M	QPSK	50	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant1	Reduced	462000	2310	1	21.80	23.00	1.318	0.06	0.759	1.001
	FR1 n30 NSA	10M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	Reduced	462000	2310	1	17.89	19.50	1.449	0.07	0.136	0.197

	FR1 n30 NSA	10M	QPSK	25	14	DFT-SCS-15KHz	Front	5mm	Ant4	Reduced	462000	2310	1	17.86	19.50	1.459	0.03	0.176	0.257
	FR1 n30 NSA	10M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	Reduced	462000	2310	1	17.89	19.50	1.449	0.03	0.267	0.387
	FR1 n30 NSA	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant4	Reduced	462000	2310	1	17.86	19.50	1.459	-0.13	0.341	0.497
	FR1 n30 NSA	10M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant4	Reduced	462000	2310	1	17.89	19.50	1.449	-0.06	0.326	0.472
	FR1 n30 NSA	10M	QPSK	25	14	DFT-SCS-15KHz	Left Side	5mm	Ant4	Reduced	462000	2310	1	17.86	19.50	1.459	0.04	0.402	0.586
	FR1 n30 NSA	10M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant4	Reduced	462000	2310	1	17.89	19.50	1.449	0.08	0.007	0.010
	FR1 n30 NSA	10M	QPSK	25	14	DFT-SCS-15KHz	Right Side	5mm	Ant4	Reduced	462000	2310	1	17.86	19.50	1.459	-0.1	0.003	0.004
	FR1 n30 NSA	10M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant4	Reduced	462000	2310	1	17.89	19.50	1.449	0.05	0.069	0.100
	FR1 n30 NSA	10M	QPSK	25	14	DFT-SCS-15KHz	Top Side	5mm	Ant4	Reduced	462000	2310	1	17.86	19.50	1.459	0.06	0.096	0.140
	LTE Band 30	10M	QPSK	1	0	-	Front	5mm	Ant1	Reduced	27710	2310	1	19.78	21.00	1.324	0.04	0.566	0.750
	LTE Band 30	10M	QPSK	25	0	-	Front	5mm	Ant1	Reduced	27710	2310	1	19.72	21.00	1.343	-0.08	0.463	0.622
54	LTE Band 30	10M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	27710	2310	1	19.78	21.00	1.324	-0.01	0.839	**1.111**
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	27710	2310	1	17.34	18.50	1.306	-0.03	0.526	0.687
	LTE Band 30	10M	QPSK	25	0	-	Back	5mm	Ant1	Reduced	27710	2310	1	19.72	21.00	1.343	0.04	0.690	0.927
	LTE Band 30	10M	QPSK	50	0	-	Back	5mm	Ant1	Reduced	27710	2310	1	19.73	21.00	1.340	0.03	0.707	0.947
	LTE Band 30	10M	QPSK	1	0	-	Left Side	5mm	Ant1	Reduced	27710	2310	1	19.78	21.00	1.324	0.07	0.391	0.518
	LTE Band 30	10M	QPSK	25	0	-	Left Side	5mm	Ant1	Reduced	27710	2310	1	19.72	21.00	1.343	0.03	0.321	0.431
	LTE Band 30	10M	QPSK	1	0	-	Right Side	5mm	Ant1	Reduced	27710	2310	1	19.78	21.00	1.324	0.05	0.060	0.079
	LTE Band 30	10M	QPSK	25	0	-	Right Side	5mm	Ant1	Reduced	27710	2310	1	19.72	21.00	1.343	0.07	0.055	0.074
	LTE Band 30	10M	QPSK	1	0	-	Bottom Side	5mm	Ant1	Reduced	27710	2310	1	19.78	21.00	1.324	0.1	0.583	0.772
	LTE Band 30	10M	QPSK	25	0	-	Bottom Side	5mm	Ant1	Reduced	27710	2310	1	19.72	21.00	1.343	-0.13	0.492	0.661
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Front	5mm	Ant4	Reduced	27710	2310	1	14.37	16.00	1.455	0.04	0.167	0.243
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Front	5mm	Ant4	Reduced	27710	2310	1	14.05	16.00	1.567	0.03	0.020	0.031
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	27710	2310	1	14.37	16.00	1.455	0.05	0.381	0.555
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Back	5mm	Ant4	Reduced	27710	2310	1	14.05	16.00	1.567	0.04	0.046	0.072
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Left Side	5mm	Ant4	Reduced	27710	2310	1	14.37	16.00	1.455	0.04	0.043	0.063
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Left Side	5mm	Ant4	Reduced	27710	2310	1	14.05	16.00	1.567	-0.14	0.015	0.024
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Right Side	5mm	Ant4	Reduced	27710	2310	1	14.37	16.00	1.455	0.15	0.010	0.015
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Right Side	5mm	Ant4	Reduced	27710	2310	1	14.05	16.00	1.567	-0.02	0.002	0.003
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Top Side	5mm	Ant4	Reduced	27710	2310	1	14.37	16.00	1.455	0.16	0.306	0.445
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Top Side	5mm	Ant4	Reduced	27710	2310	1	14.05	16.00	1.567	0.06	0.039	0.061

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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	Ant1	Reduced	21100	2535	1	18.83	20.00	1.309	-	-	0.04	0.605	0.792
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant1	Reduced	21100	2535	1	18.77	20.00	1.327	-	-	-0.04	0.518	0.688
55	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	21100	2535	1	18.83	20.00	1.309	-	-	0.06	0.919	**1.203**
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	21100	2535	1	15.83	17.00	1.309	-	-	0.05	0.564	0.738
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	20850	2510	1	18.69	20.00	1.352	-	-	-0.14	0.811	1.097
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	21350	2560	1	18.82	20.00	1.312	-	-	-0.17	0.907	1.190
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant1	Reduced	21100	2535	1	18.77	20.00	1.327	-	-	0.03	0.724	0.961
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant1	Reduced	20850	2510	1	18.72	20.00	1.343	-	-	-0.16	0.689	0.925
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant1	Reduced	21350	2560	1	18.73	20.00	1.340	-	-	0.09	0.759	1.017
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant1	Reduced	21100	2535	1	18.79	20.00	1.321	-	-	0.11	0.715	0.945
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant1	Reduced	21100	2535	1	18.83	20.00	1.309	-	-	0.02	0.445	0.583
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant1	Reduced	21100	2535	1	18.77	20.00	1.327	-	-	0.02	0.355	0.471
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant1	Reduced	21100	2535	1	18.83	20.00	1.309	-	-	-0.14	0.085	0.111
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant1	Reduced	21100	2535	1	18.77	20.00	1.327	-	-	0.03	0.072	0.096
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant1	Reduced	21100	2535	1	18.83	20.00	1.309	-	-	-0.07	0.579	0.758
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant1	Reduced	21100	2535	1	18.77	20.00	1.327	-	-	0.05	0.506	0.672
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Front	5mm	Ant4	Reduced	21100	2535	1	13.10	14.50	1.380	-	-	0.03	0.129	0.178
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Front	5mm	Ant4	Reduced	21100	2535	1	13.08	14.50	1.387	-	-	-0.17	0.102	0.141
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Back	5mm	Ant4	Reduced	21100	2535	1	13.10	14.50	1.380	-	-	0.05	0.259	0.358
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Back	5mm	Ant4	Reduced	21100	2535	1	13.08	14.50	1.387	-	-	0.09	0.137	0.190

	LTE Band 7 ENDC	20M	QPSK	1	0	-	Left Side	5mm	Ant4	Reduced	21100	2535	1	13.10	14.50	1.380	-	-	-0.12	0.049	0.068
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Left Side	5mm	Ant4	Reduced	21100	2535	1	13.08	14.50	1.387	-	-	0.02	0.035	0.049
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Right Side	5mm	Ant4	Reduced	21100	2535	1	13.10	14.50	1.380	-	-	0.02	0.004	0.006
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Right Side	5mm	Ant4	Reduced	21100	2535	1	13.08	14.50	1.387	-	-	0.07	0.001	0.001
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Top Side	5mm	Ant4	Reduced	21100	2535	1	13.10	14.50	1.380	-	-	0.04	0.418	0.577
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Top Side	5mm	Ant4	Reduced	21100	2535	1	13.08	14.50	1.387	-	-	-0.04	0.301	0.417
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant1	Reduced	507000	2535	1	20.17	21.00	1.211	-	-	-0.15	0.692	0.838
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant1	Reduced	507000	2535	1	20.15	21.00	1.216	-	-	0.04	0.772	0.939
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Front	5mm	Ant1	Reduced	507000	2535	1	20.05	21.00	1.245	-	-	0.05	0.772	0.961
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	507000	2535	1	20.17	21.00	1.211	-	-	0.03	1.04	1.259
56	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	507000	2535	1	20.15	21.00	1.216	-	-	-0.02	1.14	**1.386**
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	507000	2535	1	16.77	18.00	1.327	-	-	-0.04	0.530	0.704
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant1	Reduced	507000	2535	1	20.05	21.00	1.245	-	-	0.07	1.11	1.381
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant1	Reduced	507000	2535	1	20.17	21.00	1.211	-	-	-0.12	0.452	0.547
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Side	5mm	Ant1	Reduced	507000	2535	1	20.15	21.00	1.216	-	-	-0.05	0.538	0.654
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant1	Reduced	507000	2535	1	20.17	21.00	1.211	-	-	0.02	0.074	0.090
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Side	5mm	Ant1	Reduced	507000	2535	1	20.15	21.00	1.216	-	-	0.1	0.095	0.116
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant1	Reduced	507000	2535	1	20.17	21.00	1.211	-	-	-0.05	0.589	0.713
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	5mm	Ant1	Reduced	507000	2535	1	20.15	21.00	1.216	-	-	0.01	0.739	0.899
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant1	Reduced	507000	2535	1	20.05	21.00	1.245	-	-	0.07	0.688	0.856
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	Reduced	507000	2535	1	18.82	19.50	1.169	-	-	-0.04	0.125	0.146
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant4	Reduced	507000	2535	1	18.81	19.50	1.172	-	-	-0.08	0.130	0.152
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	Reduced	507000	2535	1	18.82	19.50	1.169	-	-	0.07	0.237	0.277
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant4	Reduced	507000	2535	1	18.81	19.50	1.172	-	-	0.15	0.239	0.280
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant4	Reduced	507000	2535	1	18.82	19.50	1.169	-	-	0.01	0.361	0.422
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Left Side	5mm	Ant4	Reduced	507000	2535	1	18.81	19.50	1.172	-	-	-0.1	0.352	0.413
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant4	Reduced	507000	2535	1	18.82	19.50	1.169	-	-	-0.18	0.020	0.023
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Right Side	5mm	Ant4	Reduced	507000	2535	1	18.81	19.50	1.172	-	-	0.01	0.010	0.012
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant4	Reduced	507000	2535	1	18.82	19.50	1.169	-	-	0.08	0.101	0.118
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Top Side	5mm	Ant4	Reduced	507000	2535	1	18.81	19.50	1.172	-	-	0.05	0.096	0.113
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant1	Reduced	40620	2593	1	18.03	19.50	1.403	62.9	1.006	0.08	0.521	0.735
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant1	Reduced	39750	2506	1	17.85	19.50	1.462	62.9	1.006	0.11	0.477	0.702
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant1	Reduced	40185	2549.5	1	17.88	19.50	1.452	62.9	1.006	0.15	0.493	0.720
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant1	Reduced	41055	2636.5	1	17.97	19.50	1.422	62.9	1.006	0.09	0.501	0.717
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant1	Reduced	41490	2680	1	17.92	19.50	1.439	62.9	1.006	0.04	0.481	0.696
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant1	Reduced	40620	2593	1	17.99	19.50	1.416	62.9	1.006	-0.05	0.440	0.627
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant1	Reduced	39750	2506	1	17.78	19.50	1.486	62.9	1.006	0.06	0.387	0.579
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant1	Reduced	40185	2549.5	1	17.84	19.50	1.466	62.9	1.006	0.01	0.393	0.579
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant1	Reduced	41055	2636.5	1	17.92	19.50	1.439	62.9	1.006	0.06	0.411	0.595
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant1	Reduced	41490	2680	1	17.88	19.50	1.452	62.9	1.006	0.09	0.403	0.589
	LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant1	Reduced	40620	2593	1	18.00	19.50	1.413	62.9	1.006	0.05	0.451	0.641
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	40620	2593	1	18.03	19.50	1.403	62.9	1.006	-0.02	0.655	0.924
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	39750	2506	1	17.85	19.50	1.462	62.9	1.006	-0.07	0.549	0.808
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	40185	2549.5	1	17.88	19.50	1.452	62.9	1.006	0.18	0.592	0.865
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	41055	2636.5	1	17.97	19.50	1.422	62.9	1.006	0.15	0.641	0.917
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	41490	2680	1	17.92	19.50	1.439	62.9	1.006	0.06	0.561	0.812
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	Reduced	40620	2593	1	17.99	19.50	1.416	62.9	1.006	-0.13	0.573	0.816
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	Reduced	39750	2506	1	17.78	19.50	1.486	62.9	1.006	-0.06	0.540	0.807
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	Reduced	40185	2549.5	1	17.84	19.50	1.466	62.9	1.006	0.04	0.535	0.789
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	Reduced	41055	2636.5	1	17.92	19.50	1.439	62.9	1.006	-0.02	0.575	0.832
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	Reduced	41490	2680	1	17.88	19.50	1.452	62.9	1.006	0.01	0.474	0.692
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant1	Reduced	40620	2593	1	18.00	19.50	1.413	62.9	1.006	0.03	0.547	0.777
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant1	Reduced	40620	2593	1	18.03	19.50	1.403	62.9	1.006	0.05	0.346	0.488
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant1	Reduced	40620	2593	1	17.99	19.50	1.416	62.9	1.006	0.08	0.301	0.429
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant1	Reduced	40620	2593	1	18.03	19.50	1.403	62.9	1.006	-0.07	0.058	0.082
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant1	Reduced	40620	2593	1	17.99	19.50	1.416	62.9	1.006	0.02	0.050	0.071

	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant1	Reduced	40620	2593	1	18.03	19.50	1.403	62.9	1.006	-0.07	0.413	0.583
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant1	Reduced	40620	2593	1	17.99	19.50	1.416	62.9	1.006	-0.06	0.391	0.557
57	LTE Band 41_HPUE	20M	QPSK	1	0	-	Back	5mm	Ant1	Reduced	40620	2593	1	21.00	22.50	1.413	42.9	1.009	-0.07	0.821	**1.170**
	LTE_CA_41C HPUE	20M	QPSK	1	99	-	Back	5mm	Ant1	Reduced	40620+ 40818	2593+ 2612.8	1	20.90	22.50	1.445	42.9	1.009	-0.03	0.798	1.164
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant1	Reduced	518598	2592.99	1	19.86	20.50	1.159	-	-	-0.04	0.665	0.771
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant1	Reduced	518598	2592.99	1	19.89	20.50	1.151	-	-	-0.16	0.877	1.009
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant1	Reduced	518598	2592.99	1	19.66	20.50	1.213	-	-	0.08	0.627	0.761
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant1	Reduced	518598	2592.99	1	19.86	20.50	1.159	-	-	0.02	0.993	1.151
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant1	Reduced	518598	2592.99	1	19.89	20.50	1.151	-	-	-0.07	1.11	1.277
	FR1 n41 HPUE NSA	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant1	Reduced	518598	2592.99	1	17.10	17.50	1.096	-	-	0.05	0.615	0.674
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant1	Reduced	518598	2592.99	1	19.66	20.50	1.213	-	-	0.08	0.906	1.099
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant1	Reduced	518598	2592.99	1	19.86	20.50	1.159	-	-	0.17	0.451	0.523
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant1	Reduced	518598	2592.99	1	19.89	20.50	1.151	-	-	-0.06	0.554	0.638
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant1	Reduced	518598	2592.99	1	19.66	20.50	1.213	-	-	0.16	0.442	0.536
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant1	Reduced	518598	2592.99	1	19.86	20.50	1.159	-	-	0.08	0.092	0.107
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant1	Reduced	518598	2592.99	1	19.89	20.50	1.151	-	-	0.1	0.120	0.138
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Bottom Side	5mm	Ant1	Reduced	518598	2592.99	1	19.86	20.50	1.159	-	-	0.03	0.529	0.613
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant1	Reduced	518598	2592.99	1	19.89	20.50	1.151	-	-	0.05	0.676	0.778
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Bottom Side	5mm	Ant1	Reduced	518598	2592.99	1	19.66	20.50	1.213	-	-	0.08	0.575	0.698
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant6	Reduced	518598	2592.99	1	19.94	20.00	1.014	-	-	-0.05	0.498	0.505
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant6	Reduced	518598	2592.99	1	19.80	20.00	1.047	-	-	0.07	0.523	0.548
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant6	Reduced	518598	2592.99	1	19.94	20.00	1.014	-	-	0.06	0.917	0.930
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant6	Reduced	518598	2592.99	1	19.80	20.00	1.047	-	-	0.05	0.876	0.917
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant6	Reduced	518598	2592.99	1	19.49	20.00	1.125	-	-	0.09	0.725	0.815
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant6	Reduced	518598	2592.99	1	19.94	20.00	1.014	-	-	-0.06	0.523	0.530
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant6	Reduced	518598	2592.99	1	19.80	20.00	1.047	-	-	-0.07	0.699	0.732
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	5mm	Ant6	Reduced	518598	2592.99	1	19.49	20.00	1.125	-	-	0.06	0.528	0.594
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant6	Reduced	518598	2592.99	1	19.94	20.00	1.014	-	-	0.08	0.093	0.094
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant6	Reduced	518598	2592.99	1	19.80	20.00	1.047	-	-	-0.17	0.098	0.103
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant4	Reduced	518598	2592.99	1	15.31	16.00	1.172	-	-	0.08	0.363	0.426
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant4	Reduced	518598	2592.99	1	15.07	16.00	1.239	-	-	-0.16	0.194	0.240
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant4	Reduced	518598	2592.99	1	15.31	16.00	1.172	-	-	0.03	1.10	1.289
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant4	Reduced	518598	2592.99	1	15.07	16.00	1.239	-	-	0.08	0.201	0.249
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant4	Reduced	518598	2592.99	1	15.03	16.00	1.250	-	-	-0.02	0.442	0.553
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant4	Reduced	518598	2592.99	1	15.31	16.00	1.172	-	-	-0.13	0.102	0.120
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant4	Reduced	518598	2592.99	1	15.07	16.00	1.239	-	-	0.05	0.083	0.103
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant4	Reduced	518598	2592.99	1	15.31	16.00	1.172	-	-	-0.18	0.006	0.007
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant4	Reduced	518598	2592.99	1	15.07	16.00	1.239	-	-	0.05	0.003	0.004
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant4	Reduced	518598	2592.99	1	15.31	16.00	1.172	-	-	0.05	0.985	1.155
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant4	Reduced	518598	2592.99	1	15.07	16.00	1.239	-	-	0.05	0.432	0.535
58	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant4	Reduced	518598	2592.99	1	15.03	16.00	1.250	-	-	-0.02	1.11	**1.388**
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant3	Reduced	518598	2592.99	1	17.85	18.00	1.035	-	-	-0.15	0.108	0.112
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant3	Reduced	518598	2592.99	1	17.71	18.00	1.069	-	-	0.08	0.134	0.143
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	518598	2592.99	1	17.85	18.00	1.035	-	-	0.1	1.269	1.314
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	518598	2592.99	1	17.71	18.00	1.069	-	-	-0.07	1.29	1.379
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	518598	2592.99	3	17.71	18.00	1.069	-	-	-0.09	1.180	1.261
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	518598	2592.99	4	17.71	18.00	1.069	-	-	0.18	1.190	1.272
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	518598	2592.99	1	17.60	18.00	1.096	-	-	-0.16	1.060	1.162
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant3	Reduced	518598	2592.99	1	17.85	18.00	1.035	-	-	-0.06	0.291	0.301
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant3	Reduced	518598	2592.99	1	17.71	18.00	1.069	-	-	-0.15	0.350	0.374
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant3	Reduced	518598	2592.99	1	17.85	18.00	1.035	-	-	0.04	0.012	0.012
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant3	Reduced	518598	2592.99	1	17.71	18.00	1.069	-	-	0.07	0.012	0.013
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant3	Reduced	518598	2592.99	1	17.85	18.00	1.035	-	-	-0.16	0.064	0.066
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant3	Reduced	518598	2592.99	1	17.71	18.00	1.069	-	-	-0.15	0.068	0.073
3500MHz																					
	LTE Band 48	20M	QPSK	1	0	-	Front	5mm	Ant5	Reduced	56150	3641	1	17.03	18.50	1.403	62.9	1.006	0.04	0.544	0.768

	LTE Band 48	20M	QPSK	1	0	-	Front	5mm	Ant5	Reduced	55340	3560	1	16.98	18.50	1.419	62.9	1.006	0.09	0.452	0.645
	LTE Band 48	20M	QPSK	1	0	-	Front	5mm	Ant5	Reduced	55830	3609	1	17.15	18.50	1.365	62.9	1.006	0.05	0.444	0.610
	LTE Band 48	20M	QPSK	1	0	-	Front	5mm	Ant5	Reduced	56640	3690	1	16.77	18.50	1.489	62.9	1.006	-0.1	0.437	0.655
	LTE Band 48	20M	QPSK	50	0	-	Front	5mm	Ant5	Reduced	56150	3641	1	17.01	18.50	1.409	62.9	1.006	0.03	0.447	0.634
	LTE Band 48	20M	QPSK	50	0	-	Front	5mm	Ant5	Reduced	55340	3560	1	16.93	18.50	1.435	62.9	1.006	0.09	0.402	0.581
	LTE Band 48	20M	QPSK	50	0	-	Front	5mm	Ant5	Reduced	55830	3609	1	17.10	18.50	1.380	62.9	1.006	0.12	0.407	0.565
	LTE Band 48	20M	QPSK	50	0	-	Front	5mm	Ant5	Reduced	56640	3690	1	16.70	18.50	1.514	62.9	1.006	-0.03	0.402	0.612
	LTE Band 48	20M	QPSK	100	0	-	Front	5mm	Ant5	Reduced	55830	3609	1	17.12	18.50	1.374	62.9	1.006	-0.16	0.412	0.570
59	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant5	Reduced	56150	3641	1	17.03	18.50	1.403	62.9	1.006	-0.03	0.881	**1.243**
	LTE_CA_48C	20M	QPSK	1	99	-	Back	5mm	Ant5	Reduced	55830+ 56028	3609+ 3628.8	1	17.00	18.50	1.413	62.9	1.006	0.01	0.854	1.214
	LTE_CA_48C	20M	QPSK	1	99	-	Back	5mm	Ant5	Reduced	55340+ 55538	3560+ 3579.8	1	16.89	18.50	1.449	62.9	1.006	0.03	0.805	1.173
	LTE_CA_48C	20M	QPSK	1	0	-	Back	5mm	Ant5	Reduced	56640+ 56442	3690+ 3670.2	1	16.57	18.50	1.560	62.9	1.006	0.07	0.746	1.170
	LTE Band 48 ENDC	20M	QPSK	1	0	-	Back	5mm	Ant5	Reduced	56150	3641	1	12.99	14.50	1.416	62.9	1.006	0.02	0.351	0.500
	LTE_CA_48C ENDC	20M	QPSK	1	99	-	Back	5mm	Ant5	Reduced	55830+ 56028	3609+ 3628.8	1	13.05	14.50	1.396	62.9	1.006	-0.07	0.336	0.472
	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant5	Reduced	55340	3560	1	16.98	18.50	1.419	62.9	1.006	0.07	0.845	1.206
	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant5	Reduced	55830	3609	1	17.15	18.50	1.365	62.9	1.006	-0.07	0.871	1.196
	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant5	Reduced	56640	3690	1	16.77	18.50	1.489	62.9	1.006	-0.04	0.802	1.202
	LTE Band 48	20M	QPSK	50	0	-	Back	5mm	Ant5	Reduced	56150	3641	1	17.01	18.50	1.409	62.9	1.006	0.01	0.724	1.026
	LTE Band 48	20M	QPSK	50	0	-	Back	5mm	Ant5	Reduced	55340	3560	1	16.93	18.50	1.435	62.9	1.006	0.02	0.809	1.168
	LTE Band 48	20M	QPSK	50	0	-	Back	5mm	Ant5	Reduced	55830	3609	1	17.10	18.50	1.380	62.9	1.006	-0.03	0.804	1.116
	LTE Band 48	20M	QPSK	50	0	-	Back	5mm	Ant5	Reduced	56640	3690	1	16.70	18.50	1.514	62.9	1.006	0.05	0.781	1.189
	LTE Band 48	20M	QPSK	100	0	-	Back	5mm	Ant5	Reduced	55830	3609	1	17.12	18.50	1.374	62.9	1.006	-0.18	0.779	1.077
	LTE Band 48	20M	QPSK	1	0	-	Left Side	5mm	Ant5	Reduced	55830	3609	1	17.15	18.50	1.365	62.9	1.006	-0.04	0.155	0.213
	LTE Band 48	20M	QPSK	50	0	-	Left Side	5mm	Ant5	Reduced	55830	3609	1	17.10	18.50	1.380	62.9	1.006	0.18	0.125	0.174
	LTE Band 48	20M	QPSK	1	0	-	Right Side	5mm	Ant5	Reduced	55830	3609	1	17.15	18.50	1.365	62.9	1.006	0.06	0.143	0.196
	LTE Band 48	20M	QPSK	50	0	-	Right Side	5mm	Ant5	Reduced	55830	3609	1	17.10	18.50	1.380	62.9	1.006	0.08	0.119	0.165
	LTE Band 48	20M	QPSK	1	0	-	Top Side	5mm	Ant5	Reduced	56150	3641	1	17.03	18.50	1.403	62.9	1.006	0.1	0.701	0.989
	LTE Band 48	20M	QPSK	1	0	-	Top Side	5mm	Ant5	Reduced	55340	3560	1	16.98	18.50	1.419	62.9	1.006	0.18	0.744	1.062
	LTE Band 48	20M	QPSK	1	0	-	Top Side	5mm	Ant5	Reduced	55830	3609	1	17.15	18.50	1.365	62.9	1.006	0.04	0.671	0.921
	LTE Band 48	20M	QPSK	1	0	-	Top Side	5mm	Ant5	Reduced	56640	3690	1	16.77	18.50	1.489	62.9	1.006	-0.03	0.649	0.972
	LTE Band 48	20M	QPSK	50	0	-	Top Side	5mm	Ant5	Reduced	56150	3641	1	17.01	18.50	1.409	62.9	1.006	0.14	0.574	0.814
	LTE Band 48	20M	QPSK	50	0	-	Top Side	5mm	Ant5	Reduced	55340	3560	1	16.93	18.50	1.435	62.9	1.006	-0.17	0.614	0.887
	LTE Band 48	20M	QPSK	50	0	-	Top Side	5mm	Ant5	Reduced	55830	3609	1	17.10	18.50	1.380	62.9	1.006	-0.17	0.559	0.776
	LTE Band 48	20M	QPSK	50	0	-	Top Side	5mm	Ant5	Reduced	56640	3690	1	16.70	18.50	1.514	62.9	1.006	0.15	0.539	0.821
	LTE Band 48	20M	QPSK	100	0	-	Top Side	5mm	Ant5	Reduced	55830	3609	1	17.12	18.50	1.374	62.9	1.006	0.1	0.507	0.701
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant5	Reduced	641666	3624.99	1	19.17	19.50	1.079	-	-	0.15	0.682	0.736
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant5	Reduced	641666	3624.99	1	19.09	19.50	1.099	-	-	0.03	0.828	0.910
	FR1 n48	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant5	Reduced	641666	3624.99	1	18.97	19.50	1.130	-	-	0.07	0.670	0.757
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant5	Reduced	641666	3624.99	1	19.17	19.50	1.079	-	-	0.07	0.848	0.915
60	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	Reduced	641666	3624.99	1	19.09	19.50	1.099	-	-	-0.07	1.26	**1.385**
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	Reduced	641666	3624.99	3	19.09	19.50	1.099	-	-	-0.08	0.923	1.014
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	Reduced	641666	3624.99	4	19.09	19.50	1.099	-	-	-0.08	0.989	1.087
	FR1 n48	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant5	Reduced	641666	3624.99	1	18.97	19.50	1.130	-	-	-0.13	0.936	1.057
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant5	Reduced	641666	3624.99	1	19.17	19.50	1.079	-	-	0.02	0.285	0.307
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant5	Reduced	641666	3624.99	1	19.09	19.50	1.099	-	-	0.18	0.321	0.353
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant5	Reduced	641666	3624.99	1	19.17	19.50	1.079	-	-	0.18	0.224	0.242
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant5	Reduced	641666	3624.99	1	19.09	19.50	1.099	-	-	0.15	0.239	0.263
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	641666	3624.99	1	19.17	19.50	1.079	-	-	0.05	1.03	1.111
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	641666	3624.99	1	19.09	19.50	1.099	-	-	0.05	1.08	1.187
	FR1 n48	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	641666	3624.99	1	18.97	19.50	1.130	-	-	0.04	1.08	1.220
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant3	Reduced	656000	3840	1	13.84	14.50	1.164	-	-	0.01	0.008	0.009
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant3	Reduced	656000	3840	1	13.65	14.50	1.216	-	-	-0.17	0.011	0.013
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	656000	3840	1	13.84	14.50	1.164	-	-	0.07	0.373	0.434
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	656000	3840	1	13.65	14.50	1.216	-	-	-0.04	0.827	1.006
	FR1 n77 HPUE_Part27O NSA	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	656000	3840	1	10.15	11.00	1.216	-	-	0.02	0.369	0.449

	FR1 n77 HPUE_Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	656000	3840	1	13.59	14.50	1.233	-	-	0.03	0.806	0.994
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant3	Reduced	656000	3840	1	13.84	14.50	1.164	-	-	0.16	0.095	0.111
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant3	Reduced	656000	3840	1	13.65	14.50	1.216	-	-	-0.14	0.141	0.171
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant3	Reduced	656000	3840	1	13.84	14.50	1.164	-	-	0.14	0.010	0.012
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant3	Reduced	656000	3840	1	13.65	14.50	1.216	-	-	0.14	0.017	0.021
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant3	Reduced	633334	3500.01	1	13.22	14.50	1.343	-	-	-0.09	0.008	0.011
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant3	Reduced	633334	3500.01	1	13.30	14.50	1.318	-	-	0.16	0.010	0.013
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	633334	3500.01	1	13.22	14.50	1.343	-	-	0.02	0.120	0.161
	FR1 n77 HPUE_Part27Q NSA	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	633334	3500.01	1	10.59	11.00	1.099	-	-	0.07	0.064	0.070
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	Reduced	633334	3500.01	1	13.30	14.50	1.318	-	-	-0.04	0.107	0.141
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant3	Reduced	633334	3500.01	1	13.22	14.50	1.343	-	-	0.05	0.035	0.047
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant3	Reduced	633334	3500.01	1	13.30	14.50	1.318	-	-	-0.03	0.042	0.055
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant3	Reduced	633334	3500.01	1	13.22	14.50	1.343	-	-	-0.06	0.009	0.012
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant3	Reduced	633334	3500.01	1	13.30	14.50	1.318	-	-	0.08	0.008	0.011
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant5	Reduced	656000	3840	1	17.18	18.00	1.208	-	-	0.03	0.449	0.542
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant5	Reduced	656000	3840	1	17.08	18.00	1.236	-	-	0.12	0.322	0.398
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant5	Reduced	656000	3840	1	17.18	18.00	1.208	-	-	0.1	0.506	0.611
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	Reduced	656000	3840	1	17.08	18.00	1.236	-	-	0.12	0.592	0.732
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant5	Reduced	656000	3840	1	17.18	18.00	1.208	-	-	0.05	0.060	0.072
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant5	Reduced	656000	3840	1	17.08	18.00	1.236	-	-	0.04	0.077	0.095
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	656000	3840	1	17.18	18.00	1.208	-	-	-0.05	0.608	0.734
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	656000	3840	1	17.08	18.00	1.236	-	-	0.03	0.645	0.797
	FR1 n77 HPUE_Part27O NSA	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	656000	3840	1	13.06	14.00	1.242	-	-	0.06	0.258	0.320
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant5	Reduced	633334	3500.01	1	17.25	18.00	1.189	-	-	0.08	0.557	0.662
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant5	Reduced	633334	3500.01	1	17.20	18.00	1.202	-	-	-0.18	0.632	0.760
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant5	Reduced	633334	3500.01	1	17.25	18.00	1.189	-	-	0.01	0.549	0.652
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	Reduced	633334	3500.01	1	17.20	18.00	1.202	-	-	0.05	0.609	0.732
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant5	Reduced	633334	3500.01	1	17.25	18.00	1.189	-	-	0.02	0.187	0.222
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant5	Reduced	633334	3500.01	1	17.20	18.00	1.202	-	-	0.04	0.199	0.239
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant5	Reduced	633334	3500.01	1	17.25	18.00	1.189	-	-	0.02	0.135	0.160
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant5	Reduced	633334	3500.01	1	17.20	18.00	1.202	-	-	0.13	0.155	0.186
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	633334	3500.01	1	17.25	18.00	1.189	-	-	0.03	0.740	0.879
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	633334	3500.01	1	17.20	18.00	1.202	-	-	-0.02	0.949	1.141
	FR1 n77 HPUE_Part27Q NSA	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	633334	3500.01	1	13.17	14.00	1.211	-	-	0.01	0.380	0.460
	FR1 n77 HPUE_Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant5	Reduced	633334	3500.01	1	17.12	18.00	1.225	-	-	0.06	0.846	1.036
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant1	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	-0.09	0.481	0.577
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant1	Full Power	656000	3840	1	20.03	21.00	1.251	-	-	0.09	0.399	0.499
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant1	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	0.15	0.415	0.498
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant1	Full Power	656000	3840	1	20.03	21.00	1.251	-	-	0.09	0.410	0.513
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant1	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	0.19	0.315	0.378
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant1	Full Power	656000	3840	1	20.03	21.00	1.251	-	-	-0.09	0.359	0.449
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant1	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	0.17	0.040	0.048
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant1	Full Power	656000	3840	1	20.03	21.00	1.251	-	-	0.1	0.043	0.054
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Bottom Side	5mm	Ant1	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	0.19	0.272	0.326
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant1	Full Power	656000	3840	1	20.03	21.00	1.251	-	-	-0.05	0.347	0.434
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant1	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	0.14	0.370	0.453
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant1	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.05	0.352	0.437
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant1	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	-0.01	0.431	0.528
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant1	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.06	0.430	0.534
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant1	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	0.08	0.249	0.305
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant1	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.03	0.280	0.348
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant1	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	-0.08	0.008	0.010
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant1	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.02	0.035	0.043
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Bottom Side	5mm	Ant1	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	0.09	0.302	0.370
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant1	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	-0.15	0.368	0.457
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant7	Reduced	656000	3840	1	18.69	19.00	1.074	-	-	-0.06	0.059	0.063

	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant7	Reduced	656000	3840	1	18.58	19.00	1.102	-	-	0.05	0.054	0.059
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant7	Reduced	656000	3840	1	18.69	19.00	1.074	-	-	-0.1	0.454	0.488
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant7	Reduced	656000	3840	1	18.58	19.00	1.102	-	-	-0.02	0.631	0.695
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant7	Reduced	656000	3840	1	18.69	19.00	1.074	-	-	0.09	0.244	0.262
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant7	Reduced	656000	3840	1	18.58	19.00	1.102	-	-	-0.14	0.186	0.205
	FR1 n77 HPUE_Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant7	Reduced	656000	3840	1	18.69	19.00	1.074	-	-	0.02	0.047	0.050
	FR1 n77 HPUE_Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant7	Reduced	656000	3840	1	18.58	19.00	1.102	-	-	-0.16	0.053	0.058
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant7	Reduced	633334	3500.01	1	18.57	19.00	1.104	-	-	0.15	0.072	0.079
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant7	Reduced	633334	3500.01	1	18.32	19.00	1.169	-	-	-0.1	0.087	0.102
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant7	Reduced	633334	3500.01	1	18.57	19.00	1.104	-	-	-0.03	0.899	0.993
61	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant7	Reduced	633334	3500.01	1	18.32	19.00	1.169	-	-	-0.02	1.08	**1.263**
	FR1 n77 HPUE_Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant7	Reduced	633334	3500.01	1	18.12	19.00	1.225	-	-	0.04	0.879	1.076
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant7	Reduced	633334	3500.01	1	18.57	19.00	1.104	-	-	0.04	0.232	0.256
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant7	Reduced	633334	3500.01	1	18.32	19.00	1.169	-	-	-0.13	0.347	0.406
	FR1 n77 HPUE_Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant7	Reduced	633334	3500.01	1	18.57	19.00	1.104	-	-	0.1	0.038	0.042
	FR1 n77 HPUE_Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant7	Reduced	633334	3500.01	1	18.32	19.00	1.169	-	-	-0.09	0.079	0.092

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
WLAN/ Bluetooth																	
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 8	Simultaneous	1	2412	1	10.23	12.00	1.503	100	1.000	0.03	0.041	0.062
62	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	Simultaneous	1	2412	1	10.23	12.00	1.503	100	1.000	0.03	0.120	**0.180**
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	Simultaneous	1	2412	3	10.23	12.00	1.503	100	1.000	0.02	0.086	0.129
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	Simultaneous	1	2412	4	10.23	12.00	1.503	100	1.000	-0.1	0.119	0.179
	WLAN2.4GHz	802.11b 1Mbps	Left Side	5mm	Ant 8	Simultaneous	1	2412	1	10.23	12.00	1.503	100	1.000	-0.14	0.005	0.008
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 8	Simultaneous	1	2412	1	10.23	12.00	1.503	100	1.000	0.19	0.030	0.045
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 8	Simultaneous	1	2412	1	10.23	12.00	1.503	100	1.000	-0.15	0.033	0.050
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 8	Simultaneous	6	2437	1	10.17	12.00	1.524	100	1.000	0.07	0.041	0.062
	Bluetooth	1Mbps	Front	5mm	Ant 8	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	-0.04	0.038	0.053
63	Bluetooth	1Mbps	Back	5mm	Ant 8	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	0.04	0.065	**0.090**
	Bluetooth	1Mbps	Left Side	5mm	Ant 8	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	-0.1	0.005	0.007
	Bluetooth	1Mbps	Right Side	5mm	Ant 8	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	0.05	0.027	0.038
	Bluetooth	1Mbps	Top Side	5mm	Ant 8	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	-0.15	0.031	0.043
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 8	Simultaneous	42	5210	1	7.07	8.50	1.390	90.69	1.103	-0.07	0.016	0.025
64	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	Simultaneous	42	5210	1	7.07	8.50	1.390	90.69	1.103	0.01	0.130	**0.199**
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	Simultaneous	42	5210	3	7.07	8.50	1.390	90.69	1.103	0.05	0.125	0.192
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	Simultaneous	42	5210	4	7.07	8.50	1.390	90.69	1.103	0.06	0.120	0.184
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 8	Simultaneous	42	5210	1	7.07	8.50	1.390	90.69	1.103	-0.04	0.001	0.002
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 8	Simultaneous	42	5210	1	7.07	8.50	1.390	90.69	1.103	-0.12	0.008	0.012
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 8	Simultaneous	42	5210	1	7.07	8.50	1.390	90.69	1.103	0.01	0.048	0.074
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 8	Simultaneous	155	5775	1	9.42	11.00	1.439	90.69	1.103	-0.02	0.020	0.032
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	Simultaneous	155	5775	1	9.42	11.00	1.439	90.69	1.103	-0.04	0.060	0.095
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 8	Simultaneous	155	5775	1	9.42	11.00	1.439	90.69	1.103	0.08	0.006	0.010
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 8	Simultaneous	155	5775	1	9.42	11.00	1.439	90.69	1.103	0.01	0.010	0.016
65	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 8	Simultaneous	155	5775	1	9.42	11.00	1.439	90.69	1.103	0.09	0.125	**0.198**
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 8	Simultaneous	155	5775	3	9.42	11.00	1.439	90.69	1.103	0.11	0.094	0.149
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 8	Simultaneous	155	5775	4	9.42	11.00	1.439	90.69	1.103	-0.08	0.123	0.195

15.3 Body Worn Accessory SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Power Reduction	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											
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	-	Full Power	136100	680.5	1	22.77	24.00	1.327	0.15	0.187	0.248
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant0	-	Full Power	136100	680.5	1	22.75	24.00	1.334	-0.14	0.192	0.256
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	-	Full Power	136100	680.5	1	22.77	24.00	1.327	0.08	0.309	0.410
66	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant0	-	Full Power	136100	680.5	1	22.75	24.00	1.334	-0.03	0.349	**0.465**
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	-	Full Power	136100	680.5	1	22.55	24.00	1.396	-0.15	0.143	0.200
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant4	-	Full Power	136100	680.5	1	22.43	24.00	1.435	-0.07	0.119	0.171
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	136100	680.5	1	22.55	24.00	1.396	-0.08	0.229	0.320
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	136100	680.5	1	22.43	24.00	1.435	-0.03	0.187	0.268
	LTE Band 71	20M	QPSK	1	0	-	Front	5mm	Ant0	-	Full Power	133322	683	1	22.44	24.00	1.432	0.13	0.385	0.551
	LTE Band 71	20M	QPSK	50	0	-	Front	5mm	Ant0	-	Full Power	133322	683	1	21.61	23.00	1.377	0.08	0.320	0.441
67	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant0	-	Full Power	133322	683	1	22.44	24.00	1.432	-0.02	0.553	**0.792**
	LTE Band 71	20M	QPSK	50	0	-	Back	5mm	Ant0	-	Full Power	133322	683	1	21.61	23.00	1.377	0.07	0.438	0.603
	LTE Band 71	20M	QPSK	1	0	-	Front	5mm	Ant4	-	Full Power	133322	683	1	22.48	24.00	1.419	0.18	0.196	0.278
	LTE Band 71	20M	QPSK	50	0	-	Front	5mm	Ant4	-	Full Power	133322	683	1	21.45	23.00	1.429	0.15	0.148	0.211
	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Full Power	133322	683	1	22.48	24.00	1.419	-0.01	0.244	0.346
	LTE Band 71	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Full Power	133322	683	1	21.45	23.00	1.429	0.05	0.231	0.330
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	-	Full Power	141500	707.5	1	22.87	24.00	1.297	0.01	0.229	0.297
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Front	5mm	Ant0	-	Full Power	141500	707.5	1	22.83	24.00	1.309	-0.1	0.234	0.306
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	-	Full Power	141500	707.5	1	22.87	24.00	1.297	0.1	0.332	0.431
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Back	5mm	Ant0	-	Full Power	141500	707.5	1	22.83	24.00	1.309	0.08	0.351	0.460
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	-	Full Power	141500	707.5	1	22.31	24.00	1.476	-0.1	0.220	0.325
	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Front	5mm	Ant4	-	Full Power	141500	707.5	1	22.26	24.00	1.493	0.03	0.251	0.375
	FR1 n12	15M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	141500	707.5	1	22.31	24.00	1.476	-0.15	0.392	0.578
68	FR1 n12	15M	QPSK	36	22	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	141500	707.5	1	22.26	24.00	1.493	-0.1	0.393	**0.587**
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant4	-	Full Power	23095	707.5	1	22.30	24.00	1.479	0.01	0.230	0.340
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant4	-	Full Power	23095	707.5	1	21.34	23.00	1.466	0.08	0.210	0.308
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant4	-	Full Power	23095	707.5	1	22.30	24.00	1.479	-0.12	0.379	0.561
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant4	-	Full Power	23095	707.5	1	21.34	23.00	1.466	0.07	0.356	0.522
	LTE Band 12 (17)	10M	QPSK	1	0	-	Front	5mm	Ant0	-	Full Power	23095	707.5	1	22.44	24.00	1.432	0.06	0.359	0.514
	LTE Band 12 (17)	10M	QPSK	25	0	-	Front	5mm	Ant0	-	Full Power	23095	707.5	1	21.46	23.00	1.426	0.02	0.332	0.473
69	LTE Band 12 (17)	10M	QPSK	1	0	-	Back	5mm	Ant0	-	Full Power	23095	707.5	1	22.44	24.00	1.432	-0.01	0.503	**0.720**
	LTE Band 12 (17)	10M	QPSK	25	0	-	Back	5mm	Ant0	-	Full Power	23095	707.5	1	21.46	23.00	1.426	-0.15	0.399	0.569
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant0	-	Full Power	23230	782	1	22.51	24.00	1.409	0.05	0.380	0.536
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant0	-	Full Power	23230	782	1	21.47	23.00	1.422	-0.09	0.288	0.410
70	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant0	-	Full Power	23230	782	1	22.51	24.00	1.409	0.02	0.428	**0.603**
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant0	-	Full Power	23230	782	1	21.47	23.00	1.422	0.08	0.316	0.449
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant4	-	Full Power	23230	782	1	22.48	24.00	1.419	0.09	0.198	0.281
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant4	-	Full Power	23230	782	1	21.38	23.00	1.452	0.09	0.188	0.273
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant4	-	Full Power	23230	782	1	22.48	24.00	1.419	-0.13	0.262	0.372
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant4	-	Full Power	23230	782	1	21.38	23.00	1.452	0.02	0.254	0.369
71	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	-	Full Power	158600	793	1	22.58	24.00	1.387	-0.03	0.348	**0.483**
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Front	5mm	Ant0	-	Full Power	158600	793	1	22.55	24.00	1.396	0.06	0.308	0.430
	FR1 n14	10M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	-	Full Power	158600	793	1	22.58	24.00	1.387	-0.1	0.336	0.466
	FR1 n14	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant0	-	Full Power	158600	793	1	22.55	24.00	1.396	-0.12	0.333	0.465
	LTE Band 14	10M	QPSK	1	0	-	Front	5mm	Ant0	-	Full Power	23330	793	1	22.48	24.00	1.419	-0.07	0.410	0.582
	LTE Band 14	10M	QPSK	25	0	-	Front	5mm	Ant0	-	Full Power	23330	793	1	21.34	23.00	1.466	0.04	0.294	0.431
72	LTE Band 14	10M	QPSK	1	0	-	Back	5mm	Ant0	-	Full Power	23330	793	1	22.48	24.00	1.419	-0.05	0.422	**0.599**
	LTE Band 14	10M	QPSK	25	0	-	Back	5mm	Ant0	-	Full Power	23330	793	1	21.34	23.00	1.466	0.18	0.320	0.469
	LTE Band 14 ENDC	10M	QPSK	1	0	-	Front	5mm	Ant4	-	Full Power	23330	793	1	22.44	24.00	1.432	-0.11	0.161	0.231
	LTE Band 14 ENDC	10M	QPSK	25	0	-	Front	5mm	Ant4	-	Full Power	23330	793	1	21.30	23.00	1.479	0.08	0.158	0.234
	LTE Band 14 ENDC	10M	QPSK	1	0	-	Back	5mm	Ant4	-	Full Power	23330	793	1	22.44	24.00	1.432	-0.06	0.206	0.295

	LTE Band 14 ENDC	10M	QPSK	25	0	-	Back	5mm	Ant4	-	Full Power	23330	793	1	21.30	23.00	1.479	0.09	0.189	0.280
									835MHz											
73	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant0	-	Full Power	189	836.4	1	29.36	30.50	1.300	0.17	0.619	**0.805**
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant0	-	Full Power	128	824.2	1	29.11	30.50	1.377	0.03	0.581	0.800
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant0	-	Full Power	251	848.8	1	29.20	30.50	1.349	0.09	0.577	0.778
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant0	-	Full Power	189	836.4	1	29.36	30.50	1.300	0.03	0.568	0.738
74	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	-	Full Power	4182	836.4	1	22.64	24.00	1.368	0.01	0.478	**0.654**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	-	Full Power	4182	836.4	1	22.64	24.00	1.368	-0.11	0.454	0.621
75	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	-	Full Power	166300	831.5	1	22.76	24.00	1.330	-0.04	0.488	**0.649**
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant0	-	Full Power	166300	831.5	1	22.75	24.00	1.334	0.07	0.465	0.620
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	-	Full Power	166300	831.5	1	22.76	24.00	1.330	0.05	0.440	0.585
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant0	-	Full Power	166300	831.5	1	22.75	24.00	1.334	0.09	0.461	0.615
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	-	Full Power	166300	831.5	1	22.45	24.00	1.429	0.08	0.393	0.562
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant4	-	Full Power	166300	831.5	1	22.28	24.00	1.486	0.04	0.399	0.593
	FR1 n26 (5)	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	166300	831.5	1	22.45	24.00	1.429	-0.02	0.418	0.597
	FR1 n26 (5)	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	166300	831.5	1	22.28	24.00	1.486	0.15	0.400	0.594
76	LTE Band 26 (5)	15M	QPSK	1	0	-	Front	5mm	Ant0	-	Full Power	26865	831.5	1	22.47	24.00	1.422	0.01	0.560	**0.797**
	LTE_CA_5B	10M	QPSK	1	49	-	Front	5mm	Ant0	-	Full Power	20476+ 20575	831.6+ 841.5	1	22.34	24.00	1.466	0.03	0.529	0.775
	LTE Band 26 (5)	15M	QPSK	36	0	-	Front	5mm	Ant0	-	Full Power	26865	831.5	1	21.56	23.00	1.393	0.13	0.453	0.631
	LTE Band 26 (5)	15M	QPSK	1	0	-	Back	5mm	Ant0	-	Full Power	26865	831.5	1	22.47	24.00	1.422	0.1	0.495	0.704
	LTE Band 26 (5)	15M	QPSK	36	0	-	Back	5mm	Ant0	-	Full Power	26865	831.5	1	21.56	23.00	1.393	-0.14	0.417	0.581
	LTE Band 26 (5)	15M	QPSK	1	0	-	Front	5mm	Ant4	-	Full Power	26865	831.5	1	22.49	24.00	1.416	-0.15	0.383	0.542
	LTE Band 26 (5)	15M	QPSK	36	0	-	Front	5mm	Ant4	-	Full Power	26865	831.5	1	21.25	23.00	1.496	0.07	0.312	0.467
	LTE Band 26 (5)	15M	QPSK	1	0	-	Back	5mm	Ant4	-	Full Power	26865	831.5	1	22.49	24.00	1.416	-0.1	0.505	0.715
	LTE_CA_5B	10M	QPSK	1	49	-	Back	5mm	Ant4	-	Full Power	20476+ 20575	831.6+ 841.5	1	22.20	24.00	1.514	0.02	0.432	0.654
	LTE Band 26 (5) ENDC	15M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	26865	831.5	1	21.37	23.00	1.455	-0.08	0.339	0.493
	LTE Band 26 (5)	15M	QPSK	36	0	-	Back	5mm	Ant4	-	Full Power	26865	831.5	1	21.25	23.00	1.496	0.15	0.396	0.593
									1750MHz											
77	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	-	Reduced	1413	1732.6	1	18.56	19.50	1.242	-0.07	1.110	**1.378**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	-	Reduced	1413	1732.6	3	18.56	19.50	1.242	0.01	0.828	1.028
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	-	Reduced	1413	1732.6	4	18.56	19.50	1.242	0.07	1.020	1.266
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	Headset	Reduced	1413	1732.6	1	18.56	19.50	1.242	-0.14	1.050	1.304
	WCDMA IV		-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	Headset	Reduced	1312	1712.4	1	18.52	19.50	1.253	0.02	0.941	1.179
	WCDMA IV		-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	Headset	Reduced	1513	1752.6	1	18.39	19.50	1.291	0.05	0.912	1.178
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	-	Reduced	1312	1712.4	1	18.52	19.50	1.253	0.07	0.978	1.226
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	-	Reduced	1513	1752.6	1	18.39	19.50	1.291	-0.17	1.060	1.369
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	-	Reduced	1413	1732.6	1	18.56	19.50	1.242	0.06	0.868	1.078
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	-	Reduced	1312	1712.4	1	18.52	19.50	1.253	0.07	0.700	0.877
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	-	Reduced	1513	1752.6	1	18.39	19.50	1.291	-0.01	1.040	1.343
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	Headset	Reduced	1513	1752.6		18.39	19.50	1.291	0.04	0.846	1.092
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	14mm	Ant0	-	Full Power	1413	1732.6	1	23.04	24.00	1.247	-0.02	0.901	1.124
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	21mm	Ant0	-	Full Power	1513	1752.6	1	22.89	24.00	1.291	0.01	0.424	0.547
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	340500	1702.5	1	19.40	20.50	1.288	0.06	0.870	1.121
78	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	340500	1702.5	1	19.33	20.50	1.309	0.03	0.964	**1.262**
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Front	5mm	Ant0	Headset	Reduced	340500	1702.5	1	19.33	20.50	1.309	0.01	0.944	1.236
	FR1 n70	15M	QPSK	75	0	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	340500	1702.5	1	19.25	20.50	1.334	0.16	0.935	1.247
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	340500	1702.5	1	19.40	20.50	1.288	-0.15	0.571	0.736
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	340500	1702.5	1	19.33	20.50	1.309	-0.03	0.646	0.846
	FR1 n70	15M	QPSK	75	0	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	340500	1702.5	1	19.25	20.50	1.334	-0.11	0.636	0.848
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Front	14mm	Ant0	-	Full Power	340500	1702.5	1	22.73	24.00	1.340	0.01	0.901	1.207
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Front	14mm	Ant0	-	Full Power	340500	1702.5	1	22.70	24.00	1.349	0.02	0.424	0.572
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Back	21mm	Ant0	-	Full Power	340500	1702.5	1	22.73	24.00	1.340	0.03	0.046	0.062
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Back	21mm	Ant0	-	Full Power	340500	1702.5	1	22.70	24.00	1.349	0.06	0.055	0.074
	FR1 n70	15M	QPSK	75	0	DFT-SCS-15KHz	Back	21mm	Ant0	-	Full Power	340500	1702.5	1	22.66	24.00	1.361	0.04	0.540	0.735
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Front	5mm	Ant4	-	Reduced	349000	1745	1	19.24	20.00	1.191	0.18	0.377	0.449

	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant4	-	Reduced	349000	1745	1	18.88	20.00	1.294	0.05	0.428	0.554
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant4	-	Reduced	349000	1745	1	18.57	20.00	1.390	0.06	0.337	0.468
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	349000	1745	1	19.24	20.00	1.191	-0.02	0.874	1.041
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	349000	1745	1	18.88	20.00	1.294	-0.04	1.010	1.307
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	Headset	Reduced	349000	1745	1	18.88	20.00	1.294	0.02	0.975	1.262
	FR1 n66 NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	349000	1745	1	15.55	16.50	1.245	0.04	0.477	0.594
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	349000	1745	1	18.57	20.00	1.390	0.02	0.765	1.063
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Front	14mm	Ant4	-	Full Power	349000	1745	1	22.01	23.00	1.256	0.02	0.135	0.170
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	14mm	Ant4	-	Full Power	349000	1745	1	21.78	23.00	1.324	0.01	0.141	0.187
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Back	21mm	Ant4	-	Full Power	349000	1745	1	22.01	23.00	1.256	0.06	0.185	0.232
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	21mm	Ant4	-	Full Power	349000	1745	1	21.78	23.00	1.324	-0.06	0.171	0.226
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	349000	1745	1	19.10	20.00	1.230	0.08	0.868	1.068
79	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	349000	1745	1	18.98	20.00	1.265	0.09	1.100	**1.391**
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant0	Headset	Reduced	349000	1745	1	18.98	20.00	1.265	0.05	0.996	1.260
	FR1 n66 NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	349000	1745	1	15.97	17.50	1.422	0.04	0.551	0.784
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	349000	1745	1	18.36	20.00	1.459	0.03	0.944	1.377
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	349000	1745	1	19.10	20.00	1.230	0.12	0.616	0.758
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	349000	1745	1	18.98	20.00	1.265	0.01	0.872	1.103
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	349000	1745	1	18.36	20.00	1.459	0.11	0.796	1.161
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Front	14mm	Ant0	-	Full Power	349000	1745	1	23.20	24.00	1.202	0.02	0.523	0.629
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	14mm	Ant0	-	Full Power	349000	1745	1	22.84	24.00	1.306	0.04	0.630	0.823
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Back	21mm	Ant0	-	Full Power	349000	1745	1	23.20	24.00	1.202	0.1	0.246	0.296
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	21mm	Ant0	-	Full Power	349000	1745	1	22.84	24.00	1.306	0.09	0.286	0.374
	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	5mm	Ant0	-	Reduced	132322	1745	1	17.16	18.50	1.361	0.01	0.869	1.183
	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	5mm	Ant0	-	Reduced	132072	1720	1	16.94	18.50	1.432	-0.07	0.720	1.031
80	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	5mm	Ant0	-	Reduced	132572	1770	1	17.03	18.50	1.403	0.02	0.944	**1.324**
	LTE_CA_66C	20M	QPSK	1	99	-	Front	5mm	Ant0	-	Reduced	132322+ 132520	1745+ 1764.8	1	17.00	18.50	1.413	0.06	0.912	1.288
	LTE_CA_66C	20M	QPSK	1	99		Front	5mm	Ant0		Reduced	132072+ 132270	1720+ 1739.8	1	16.82	18.50	1.472	0.07	0.867	1.276
	LTE_CA_66C	20M	QPSK	1	0		Front	5mm	Ant0		Reduced	132572+ 132374	1770+ 1750	1	16.88	18.50	1.452	-0.02	0.881	1.279
	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	5mm	Ant0	Headset	Reduced	132572	1770	1	17.03	18.50	1.403	0.1	0.920	1.291
	LTE Band 66 (4) ENDC	20M	QPSK	1	0	-	Front	5mm	Ant0	-	Reduced	132572	1770	1	14.04	15.50	1.400	-0.06	0.554	0.775
	LTE_CA_66C	20M	QPSK	1	99	-	Front	5mm	Ant0	-	Reduced	132322+ 132520	1745+ 1764.8	1	13.96	15.50	1.426	-0.03	0.521	0.743
	LTE Band 66 (4)	20M	QPSK	50	0	-	Front	5mm	Ant0	-	Reduced	132322	1745	1	17.15	18.50	1.365	0.04	0.695	0.948
	LTE Band 66 (4)	20M	QPSK	50	0	-	Front	5mm	Ant0	-	Reduced	132072	1720	1	16.84	18.50	1.466	0.02	0.608	0.891
	LTE Band 66 (4)	20M	QPSK	50	0	-	Front	5mm	Ant0	-	Reduced	132572	1770	1	16.96	18.50	1.426	0.04	0.792	1.129
	LTE Band 66 (4)	20M	QPSK	100	0	-	Front	5mm	Ant0	-	Reduced	132322	1745	1	17.08	18.50	1.387	0.07	0.687	0.953
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant0	-	Reduced	132322	1745	1	17.16	18.50	1.361	0.1	0.668	0.909
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant0	-	Reduced	132072	1720	1	16.94	18.50	1.432	-0.11	0.533	0.763
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant0	-	Reduced	132572	1770	1	17.03	18.50	1.403	-0.06	0.932	1.307
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant0	Headset	Reduced	132572	1770	1	17.03	18.50	1.403	0.02	0.816	1.145
	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant0	-	Reduced	132322	1745	1	17.15	18.50	1.365	-0.05	0.573	0.782
	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant0	-	Reduced	132072	1720	1	16.84	18.50	1.466	-0.13	0.441	0.646
	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant0	-	Reduced	132572	1770	1	16.96	18.50	1.426	0.15	0.760	1.083
	LTE Band 66 (4)	20M	QPSK	100	0	-	Back	5mm	Ant0	-	Reduced	132322	1745	1	17.08	18.50	1.387	0.06	0.560	0.777
	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	14mm	Ant0	-	Full Power	132572	1770	1	22.54	24.00	1.400	0.02	0.932	1.304
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	21mm	Ant0	-	Full Power	132572	1770	1	22.54	24.00	1.400	0.01	0.535	0.749
	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	5mm	Ant4	-	Reduced	132322	1745	1	20.35	21.50	1.303	-0.08	0.436	0.568
	LTE Band 66 (4)	20M	QPSK	50	0	-	Front	5mm	Ant4	-	Reduced	132322	1745	1	20.33	21.50	1.309	-0.1	0.365	0.478
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	132322	1745	1	20.35	21.50	1.303	-0.03	0.945	1.231
	LTE_CA_66C	20M	QPSK	1	0		Back	5mm	Ant4	-	Reduced	132572+ 132374	1770+ 1750	1	20.20	21.50	1.349	0.01	0.843	1.137
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant4	Headset	Reduced	132322	1745	1	20.35	21.50	1.303	0.03	0.921	1.2
	LTE Band 66 (4) ENDC	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	132322	1745	1	18.28	19.50	1.324	-0.02	0.440	0.583
	LTE_CA_66C	20M	QPSK	1	99		Back	5mm	Ant4	-	Reduced	132322+ 132520	1745+ 1764.8		18.12	19.50	1.374	0.06	0.416	0.572
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	132072	1720	1	20.29	21.50	1.321	0.06	0.893	1.18
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	132572	1770	1	20.30	21.50	1.318	0.18	0.91	1.2

	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	132322	1745	1	20.33	21.50	1.309	0.08	0.783	1.025
	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	132072	1720	1	20.29	21.50	1.321	-0.08	0.779	1.029
	LTE Band 66 (4)	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	132572	1770	1	20.30	21.50	1.318	0.04	0.867	1.143
	LTE Band 66 (4)	20M	QPSK	100	0	-	Back	5mm	Ant4	-	Reduced	132322	1745	1	20.24	21.50	1.337	-0.04	0.792	1.059
	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	14mm	Ant4	-	Full Power	132322	1745	-	21.29	22.50	1.321	0.05	0.468	0.618
	LTE Band 66 (4)	20M	QPSK	1	0	-	Back	21mm	Ant4	-	Full Power	132322	1745	1	21.29	22.50	1.321	-0.13	0.102	0.135
1900MHz																				
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	5mm	Ant0	-	Reduced	661	1880	1	22.42	23.50	1.282	0.05	0.678	0.869
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	5mm	Ant0	-	Reduced	512	1850.2	1	22.36	23.50	1.300	0.09	0.683	0.888
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	5mm	Ant0	-	Reduced	810	1909.8	1	22.36	23.50	1.300	0.05	0.747	0.971
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Back	5mm	Ant0	-	Reduced	661	1880	1	22.42	23.50	1.282	0.08	0.935	1.199
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Back	5mm	Ant0	-	Reduced	512	1850.2	1	22.36	23.50	1.300	-0.08	0.901	1.171
81	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Back	5mm	Ant0	-	Reduced	810	1909.8	1	22.36	23.50	1.300	-0.01	1.050	**1.365**
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Back	5mm	Ant0	Headset	Reduced	810	1909.8	1	22.36	23.50	1.300	0.08	1.040	1.352
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	14mm	Ant0	-	Full Power	810	1909.8	1	28.35	29.50	1.303	0.02	0.718	0.936
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Back	21mm	Ant0	-	Full Power	810	1909.8	1	28.35	29.50	1.303	0.09	0.606	0.790
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	-	Reduced	9400	1880	1	14.83	16.00	1.309	0.020	0.536	0.702
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	-	Reduced	9262	1852.4	1	14.75	16.00	1.334	-0.100	0.550	0.733
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant0	-	Reduced	9538	1907.6	1	14.80	16.00	1.318	0.02	0.556	0.733
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	-	Reduced	9400	1880	1	14.83	16.00	1.309	0.08	0.853	1.117
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	-	Reduced	9262	1852.4	1	14.75	16.00	1.334	0.11	0.822	1.096
82	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	-	Reduced	9538	1907.6	1	14.80	16.00	1.318	0.01	0.911	**1.201**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant0	Headset	Reduced	9538	1907.6	1	14.80	16.00	1.318	0.05	0.879	1.159
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	14mm	Ant0	-	Full Power	9538	1907.6	1	22.81	24.00	1.315	0.02	0.906	1.192
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	21mm	Ant0	-	Full Power	9538	1907.6	1	22.81	24.00	1.315	0.06	0.716	0.942
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	376500	1882.5	1	17.41	18.50	1.285	0.09	0.551	0.708
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	376500	1882.5	1	17.40	18.50	1.288	0.02	0.665	0.857
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant0	-	Reduced	376500	1882.5	1	17.36	18.50	1.300	-0.09	0.674	0.876
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	376500	1882.5	1	17.41	18.50	1.285	-0.03	0.817	1.050
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	376500	1882.5	1	17.40	18.50	1.288	0.03	1.030	1.327
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	376500	1882.5	1	17.36	18.50	1.300	0.06	1.060	1.378
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant0	Headset	Reduced	376500	1882.5	1	17.36	18.50	1.300	0.02	1.000	1.300
	FR1 n25 (2) NSA	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant0	-	Reduced	376500	1882.5	1	14.82	16.00	1.312	0.09	0.564	0.740
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Front	14mm	Ant0	-	Full Power	376500	1882.5	1	22.89	24.00	1.291	0.03	0.531	0.686
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Front	14mm	Ant0	-	Full Power	376500	1882.5	1	22.72	24.00	1.343	0.05	0.564	0.757
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Front	14mm	Ant0	-	Full Power	376500	1882.5	1	22.68	23.00	1.076	0.01	0.587	0.632
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Back	21mm	Ant0	-	Full Power	376500	1882.5	1	22.89	24.00	1.291	0.09	0.403	0.520
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Back	21mm	Ant0	-	Full Power	376500	1882.5	1	22.72	24.00	1.343	-0.01	0.421	0.565
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Back	21mm	Ant0	-	Full Power	376500	1882.5	1	22.68	23.00	1.076	0.06	0.454	0.489
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Front	5mm	Ant4	-	Full Power	376500	1882.5	1	21.88	23.00	1.294	0.01	0.378	0.489
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant4	-	Full Power	376500	1882.5	1	21.54	23.00	1.400	0.07	0.460	0.644
	FR1 n25 (2)	40M	QPSK	1	108	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	376500	1882.5	1	21.88	23.00	1.294	0.08	0.825	1.068
83	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	376500	1882.5	1	21.54	23.00	1.400	-0.01	1.000	**1.400**
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	Headset	Full Power	376500	1882.5	1	21.54	23.00	1.400	-0.03	0.985	1.379
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	376500	1882.5	3	21.54	23.00	1.400	0.07	0.993	1.390
	FR1 n25 (2)	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	376500	1882.5	4	21.54	23.00	1.400	-0.07	0.987	1.381
	FR1 n25 (2) NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	376500	1882.5	1	18.33	19.50	1.309	0.04	0.451	0.590
	FR1 n25 (2)	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant4	-	Full Power	376500	1882.5	1	21.47	23.00	1.422	0.11	0.943	1.341
	LTE Band 25 (2)	20M	QPSK	1	0	-	Front	5mm	Ant0	-	Reduced	26340	1880	1	15.46	17.00	1.426	0.02	0.593	0.845
	LTE Band 25 (2)	20M	QPSK	1	0	-	Front	5mm	Ant0	-	Reduced	26140	1860	1	15.42	17.00	1.439	0.09	0.540	0.777
	LTE Band 25 (2)	20M	QPSK	1	0	-	Front	5mm	Ant0	-	Reduced	26590	1905	1	15.38	17.00	1.452	0.07	0.519	0.754
	LTE Band 25 (2)	20M	QPSK	50	0	-	Front	5mm	Ant0	-	Reduced	26340	1880	1	15.41	17.00	1.442	0.1	0.467	0.673
	LTE Band 25 (2)	20M	QPSK	50	0	-	Front	5mm	Ant0	-	Reduced	26140	1860	1	15.40	17.00	1.445	0.08	0.418	0.604
	LTE Band 25 (2)	20M	QPSK	50	0	-	Front	5mm	Ant0	-	Reduced	26590	1905	1	15.36	17.00	1.459	0.06	0.427	0.623
	LTE Band 25 (2)	20M	QPSK	100	0	-	Front	5mm	Ant0	-	Reduced	26340	1880	1	15.40	17.00	1.445	0.03	0.448	0.648
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant0	-	Reduced	26340	1880	1	15.46	17.00	1.426	0.17	0.923	1.316

	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant0	-	Reduced	26140	1860	1	15.42	17.00	1.439	-0.04	0.845	1.216
84	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant0	-	Reduced	26590	1905	1	15.38	17.00	1.452	0.03	0.954	**1.385**
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant0	Headset	Reduced	26590	1905	1	15.38	17.00	1.452	0.09	0.889	1.291
	LTE Band 25 (2) ENDC	20M	QPSK	1	0	-	Back	5mm	Ant0	-	Reduced	26590	1905	1	12.36	14.00	1.459	0.01	0.548	0.799
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant0	-	Reduced	26340	1880	1	15.41	17.00	1.442	-0.14	0.758	1.093
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant0	-	Reduced	26140	1860	1	15.40	17.00	1.445	-0.07	0.682	0.986
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant0	-	Reduced	26590	1905	1	15.36	17.00	1.459	0.07	0.750	1.094
	LTE Band 25 (2)	20M	QPSK	100	0	-	Back	5mm	Ant0	-	Reduced	26340	1880	1	15.40	17.00	1.445	0.07	0.714	1.032
	LTE Band 25 (2)	20M	QPSK	1	0	-	Front	14mm	Ant0	-	Full Power	26340	1880	1	22.41	24.00	1.442	0.01	0.749	1.080
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	21mm	Ant0	-	Full Power	26590	1905	1	22.37	24.00	1.455	0.05	0.612	0.891
	LTE Band 25 (2)	20M	QPSK	1	0	-	Front	5mm	Ant4	-	Reduced	26340	1880	1	19.79	21.00	1.321	0.15	0.405	0.535
	LTE Band 25 (2)	20M	QPSK	50	0	-	Front	5mm	Ant4	-	Reduced	26340	1880	1	19.74	21.00	1.337	0.1	0.348	0.465
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	26340	1880	1	19.79	21.00	1.321	-0.09	0.888	1.173
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	26140	1860	1	19.71	21.00	1.346	-0.03	0.934	1.257
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	26590	1905	1	19.77	21.00	1.327	-0.07	0.965	1.281
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	5mm	Ant4	Headset	Reduced	26590	1905	1	19.77	21.00	1.327	0.06	0.948	1.258
	LTE Band 25 (2) ENDC	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	26590	1905	1	15.70	17.00	1.349	0.03	0.403	0.544
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	26340	1880	1	19.74	21.00	1.337	0.05	0.797	1.065
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	26140	1860	1	19.64	21.00	1.368	-0.04	0.781	1.068
	LTE Band 25 (2)	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	26590	1905	1	19.53	21.00	1.403	0.02	0.761	1.068
	LTE Band 25 (2)	20M	QPSK	100	0	-	Back	5mm	Ant4	-	Reduced	26340	1880	1	19.76	21.00	1.330	0.02	0.75	0.998
	LTE Band 25 (2)	20M	QPSK	1	0	-	Front	14mm	Ant4	-	Full Power	26590	1905	1	21.19	23.00	1.517	0.05	0.276	0.419
	LTE Band 25 (2)	20M	QPSK	1	0	-	Back	21mm	Ant4	-	Full Power	26590	1905	1	21.19	23.00	1.517	0.03	0.117	0.177
2300MHz																				
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant1	-	Reduced	462000	2310	1	21.91	23.00	1.285	0.15	0.730	0.938
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Front	5mm	Ant1	-	Reduced	462000	2310	1	21.88	23.00	1.294	-0.12	0.740	0.958
	FR1 n30	10M	QPSK	50	0	DFT-SCS-15KHz	Front	5mm	Ant1	-	Reduced	462000	2310	1	21.80	23.00	1.318	-0.04	0.749	0.987
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	462000	2310	1	21.91	23.00	1.285	0.07	0.994	1.278
85	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	462000	2310	1	21.88	23.00	1.294	0.05	1.070	**1.385**
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant1	Headset	Reduced	462000	2310	1	21.88	23.00	1.294	0.02	0.998	1.292
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	462000	2310	3	21.88	23.00	1.294	-0.06	0.913	1.182
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	462000	2310	4	21.88	23.00	1.294	-0.03	0.995	1.288
	FR1 n30 NSA	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	462000	2310	1	19.47	20.50	1.268	0.01	0.551	0.698
	FR1 n30	10M	QPSK	50	0	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	462000	2310	1	21.80	23.00	1.318	0.08	1.040	1.371
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Front	14mm	Ant1	-	Full Power	462000	2310	1	22.87	24.00	1.297	0.02	0.243	0.315
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Front	14mm	Ant1	-	Full Power	462000	2310	1	22.83	23.00	1.040	0.07	0.277	0.288
	FR1 n30	10M	QPSK	50	0	DFT-SCS-15KHz	Front	14mm	Ant1	-	Full Power	462000	2310	1	22.71	23.00	1.069	0.07	0.297	0.318
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Back	21mm	Ant1	-	Full Power	462000	2310	1	22.87	24.00	1.297	0.02	0.132	0.171
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Back	21mm	Ant1	-	Full Power	462000	2310	1	22.83	23.00	1.040	0.06	0.141	0.147
	FR1 n30 NSA	10M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	-	Reduced	462000	2310	1	16.94	18.50	1.432	-0.07	0.156	0.223
	FR1 n30 NSA	10M	QPSK	25	14	DFT-SCS-15KHz	Front	5mm	Ant4	-	Reduced	462000	2310	1	16.90	18.50	1.445	-0.15	0.202	0.292
	FR1 n30 NSA	10M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	462000	2310	1	16.94	18.50	1.432	-0.08	0.306	0.438
	FR1 n30 NSA	10M	QPSK	25	14	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	462000	2310	1	16.90	18.50	1.445	0.02	0.391	0.565
	FR1 n30 NSA	10M	QPSK	50	0	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	462000	2310	1	16.84	18.50	1.466	0.18	0.303	0.444
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Front	14mm	Ant4	-	Full Power	462000	2310	1	22.42	24.00	1.439	0.04	0.283	0.407
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Front	14mm	Ant4	-	Full Power	462000	2310	1	22.32	24.00	1.472	0.06	0.301	0.443
	FR1 n30	10M	QPSK	1	1	DFT-SCS-15KHz	Back	21mm	Ant4	-	Full Power	462000	2310	1	22.42	24.00	1.439	0.1	0.133	0.191
	FR1 n30	10M	QPSK	25	14	DFT-SCS-15KHz	Back	21mm	Ant4	-	Full Power	462000	2310	1	22.32	24.00	1.472	0.06	0.145	0.213
	LTE Band 30	10M	QPSK	1	0	-	Front	5mm	Ant1	-	Reduced	27710	2310	1	19.78	21.00	1.324	0.07	0.566	0.750
	LTE Band 30	10M	QPSK	25	0	-	Front	5mm	Ant1	-	Reduced	27710	2310	1	19.72	21.00	1.343	0.02	0.463	0.622
	LTE Band 30	10M	QPSK	50	0	-	Front	5mm	Ant1	-	Reduced	27710	2310	1	19.73	21.00	1.340	0.04	0.455	0.610
86	LTE Band 30	10M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	27710	2310	1	19.78	21.00	1.324	-0.01	0.839	**1.111**
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	27710	2310	1	17.34	18.50	1.306	-0.03	0.526	0.687
	LTE Band 30	10M	QPSK	25	0	-	Back	5mm	Ant1	-	Reduced	27710	2310	1	19.72	21.00	1.343	0.04	0.690	0.927
	LTE Band 30	10M	QPSK	50	0	-	Back	5mm	Ant1	-	Reduced	27710	2310	1	19.73	21.00	1.340	-0.17	0.707	0.947
	LTE Band 30	10M	QPSK	1	0	-	Front	14mm	Ant1	-	Full Power	27710	2310	1	22.79	24.00	1.321	0.03	0.275	0.363

	LTE Band 30	10M	QPSK	1	0	-	Back	21mm	Ant1	-	Full Power	27710	2310	1	22.79	24.00	1.321	0.09	0.198	0.262
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Front	5mm	Ant4	-	Reduced	27710	2310	1	14.37	16.00	1.455	0.02	0.167	0.243
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Front	5mm	Ant4	-	Reduced	27710	2310	1	14.05	16.00	1.567	-0.11	0.020	0.031
	LTE Band 30 ENDC	10M	QPSK	50	0	-	Front	5mm	Ant4	-	Reduced	27710	2310	1	14.10	16.00	1.549	0.05	0.100	0.155
	LTE Band 30 ENDC	10M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	27710	2310	1	14.37	16.00	1.455	0.05	0.381	0.555
	LTE Band 30 ENDC	10M	QPSK	25	0	-	Back	5mm	Ant4	-	Reduced	27710	2310	1	14.05	16.00	1.567	-0.08	0.046	0.072
	LTE Band 30 ENDC	10M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	27710	2310	1	14.10	16.00	1.549	-0.11	0.203	0.314
	LTE Band 30	10M	QPSK	1	0	-	Front	14mm	Ant4	-	Full Power	27710	2310	1	22.23	24.00	1.503	0.04	0.364	0.547
	LTE Band 30	10M	QPSK	1	0	-	Back	21mm	Ant4	-	Full Power	27710	2310	1	22.23	24.00	1.503	0.06	0.220	0.331

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Power Reduction	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	Ant1	-	Reduced	21100	2535	1	18.83	20.00	1.309	-	-	-0.13	0.605	0.792
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant1	-	Reduced	20850	2510	1	18.69	20.00	1.352	-	-	-0.16	0.602	0.814
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant1	-	Reduced	21350	2560	1	18.82	20.00	1.312	-	-	-0.06	0.666	0.874
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant1	-	Reduced	21100	2535	1	18.77	20.00	1.327	-	-	0.08	0.518	0.688
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant1	-	Reduced	20850	2510	1	18.72	20.00	1.343	-	-	-0.14	0.480	0.645
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant1	-	Reduced	21350	2560	1	18.73	20.00	1.340	-	-	0.08	0.532	0.713
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant1	-	Reduced	21100	2535	1	18.79	20.00	1.321	-	-	0.1	0.509	0.673
87	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	21100	2535	1	18.83	20.00	1.309	-	-	0.06	0.919	**1.203**
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant1	Headset	Reduced	21100	2535	1	18.83	20.00	1.309	-	-	0.03	0.889	1.164
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	21100	2535	1	15.83	17.00	1.309	-	-	0.05	0.564	0.738
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	20850	2510	1	18.69	20.00	1.352	-	-	0.08	0.811	1.097
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	21350	2560	1	18.82	20.00	1.312	-	-	0.05	0.907	1.190
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant1	-	Reduced	21100	2535	1	18.77	20.00	1.327	-	-	-0.04	0.724	0.961
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant1	-	Reduced	20850	2510	1	18.72	20.00	1.343	-	-	0.08	0.689	0.925
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant1	-	Reduced	21350	2560	1	18.73	20.00	1.340	-	-	-0.11	0.759	1.017
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant1	-	Reduced	21100	2535	1	18.79	20.00	1.321	-	-	-0.09	0.715	0.945
	LTE Band 7	20M	QPSK	1	0	-	Front	14mm	Ant1	-	Full Power	21350	2560	1	22.77	24.00	1.327	-	-	0.03	0.543	0.721
	LTE Band 7	20M	QPSK	1	0	-	Back	21mm	Ant1	-	Full Power	21100	2535	1	22.85	24.00	1.303	-	-	0.05	0.298	0.388
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Front	5mm	Ant4	-	Reduced	21100	2535	1	15.44	16.50	1.276	-	-	-0.14	0.192	0.245
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Front	5mm	Ant4	-	Reduced	20850	2510	1	15.20	16.50	1.349	-	-	0.05	0.242	0.326
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Front	5mm	Ant4	-	Reduced	21350	2560	1	15.13	16.50	1.371	-	-	0.04	0.188	0.258
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Front	5mm	Ant4	-	Reduced	21100	2535	1	15.42	16.50	1.282	-	-	-0.13	0.152	0.195
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Front	5mm	Ant4	-	Reduced	20850	2510	1	15.23	16.50	1.340	-	-	0.07	0.188	0.252
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Front	5mm	Ant4	-	Reduced	21350	2560	1	15.08	16.50	1.387	-	-	0.08	0.163	0.226
	LTE Band 7 ENDC	20M	QPSK	100	0	-	Front	5mm	Ant4	-	Reduced	21100	2535	1	15.25	16.50	1.334	-	-	0.04	0.156	0.208
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	21100	2535	1	15.44	16.50	1.276	-	-	-0.17	0.272	0.347
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	20850	2510	1	15.20	16.50	1.349	-	-	0.08	0.385	0.519
	LTE Band 7 ENDC	20M	QPSK	1	0	-	Back	5mm	Ant4	-	Reduced	21350	2560	1	15.13	16.50	1.371	-	-	-0.01	0.284	0.389
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	21100	2535	1	15.42	16.50	1.282	-	-	-0.08	0.204	0.262
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	20850	2510	1	15.23	16.50	1.340	-	-	-0.14	0.280	0.375
	LTE Band 7 ENDC	20M	QPSK	50	0	-	Back	5mm	Ant4	-	Reduced	21350	2560	1	15.08	16.50	1.387	-	-	-0.11	0.239	0.331
	LTE Band 7 ENDC	20M	QPSK	100	0	-	Back	5mm	Ant4	-	Reduced	21100	2535	1	15.25	16.50	1.334	-	-	0.13	0.206	0.275
	LTE Band 7	20M	QPSK	1	0	-	Front	14mm	Ant4	-	Full Power	20850	2510	1	22.45	24.00	1.429	-	-	0.05	0.435	0.622
	LTE Band 7	20M	QPSK	1	0	-	Back	21mm	Ant4	-	Full Power	20850	2510	1	22.45	24.00	1.429	-	-	0.02	0.265	0.379
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant1	-	Reduced	507000	2535	1	20.17	21.00	1.211	-	-	-0.06	0.692	0.838
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant1	-	Reduced	507000	2535	1	20.15	21.00	1.216	-	-	-0.17	0.772	0.939
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Front	5mm	Ant1	-	Reduced	507000	2535	1	20.05	21.00	1.245	-	-	-0.15	0.772	0.961
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	507000	2535	1	20.17	21.00	1.211	-	-	0.03	1.040	1.259
88	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	507000	2535	1	20.15	21.00	1.216	-	-	-0.02	1.120	**1.362**
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant1	Headset	Reduced	507000	2535	1	20.15	21.00	1.216	-	-	-0.06	1.010	1.228
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	507000	2535	1	16.77	18.00	1.327	-	-	-0.04	0.530	0.704
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant1	-	Reduced	507000	2535	1	20.05	21.00	1.245	-	-	-0.01	1.050	1.307
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	14mm	Ant1	-	Full Power	507000	2535	1	23.16	24.00	1.213	-	-	0.03	0.398	0.483

	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	14mm	Ant1	-	Full Power	507000	2535	1	23.08	24.00	1.236	-	-	0.09	0.415	0.513
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Front	14mm	Ant1	-	Full Power	507000	2535	1	22.76	23.00	1.057	-	-	0.01	0.416	0.440
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	21mm	Ant1	-	Full Power	507000	2535	1	23.16	24.00	1.213	-	-	0.05	0.234	0.284
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	21mm	Ant1	-	Full Power	507000	2535	1	23.08	24.00	1.236	-	-	-0.03	0.248	0.307
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant4	-	Reduced	507000	2535	1	18.82	19.50	1.169	-	-	-0.12	0.181	0.212
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant4	-	Reduced	507000	2535	1	18.81	19.50	1.172	-	-	0.16	0.188	0.220
	FR1 n7 NSA	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	507000	2535	1	18.82	19.50	1.169	-	-	0.01	0.341	0.399
	FR1 n7 NSA	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	507000	2535	1	18.81	19.50	1.172	-	-	0.09	0.344	0.403
	FR1 n7 NSA	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant4	-	Reduced	507000	2535	1	18.77	19.50	1.183	-	-	-0.03	0.297	0.351
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	14mm	Ant4	-	Full Power	507000	2535	1	22.87	24.00	1.297	-	-	0.05	0.103	0.134
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	14mm	Ant4	-	Full Power	507000	2535	1	22.83	24.00	1.309	-	-	0.01	0.251	0.329
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	21mm	Ant4	-	Full Power	507000	2535	1	22.87	24.00	1.297	-	-	0.08	0.080	0.104
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	21mm	Ant4	-	Full Power	507000	2535	1	22.83	24.00	1.309	-	-	0.03	0.154	0.202
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant1	-	Reduced	40620	2593	1	18.03	19.50	1.403	62.9	1.006	0.08	0.521	0.735
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant1	-	Reduced	40620	2593	1	17.99	19.50	1.416	62.9	1.006	-0.05	0.440	0.627
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	40620	2593	1	18.03	19.50	1.403	62.9	1.006	-0.02	0.661	0.933
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	39750	2506	1	17.85	19.50	1.462	62.9	1.006	-0.07	0.549	0.808
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	40185	2549.5	1	17.88	19.50	1.452	62.9	1.006	0.18	0.592	0.865
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	41055	2636.5	1	17.97	19.50	1.422	62.9	1.006	0.15	0.646	0.924
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	41490	2680	1	17.92	19.50	1.439	62.9	1.006	0.06	0.561	0.812
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	-	Reduced	40620	2593	1	17.99	19.50	1.416	62.9	1.006	-0.13	0.573	0.816
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	-	Reduced	39750	2506	1	17.78	19.50	1.486	62.9	1.006	-0.06	0.540	0.807
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	-	Reduced	40185	2549.5	1	17.84	19.50	1.466	62.9	1.006	0.04	0.535	0.789
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	-	Reduced	41055	2636.5	1	17.92	19.50	1.439	62.9	1.006	-0.02	0.575	0.832
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant1	-	Reduced	41490	2680	1	17.88	19.50	1.452	62.9	1.006	0.01	0.474	0.692
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant1	-	Reduced	40620	2593	1	18.00	19.50	1.413	62.9	1.006	0.03	0.547	0.777
89	LTE Band 41_HPUE	20M	QPSK	1	0	-	Back	5mm	Ant1	-	Reduced	40620	2593	1	21.00	22.50	1.413	42.9	1.009	-0.07	0.821	**1.170**
	LTE_CA_41C HPUE	20M	QPSK	1	99	-	Back	5mm	Ant1	-	Reduced	40620+ 40818	2593+ 2612.8	1	20.90	22.50	1.445	42.9	1.009	-0.03	0.798	1.164
	LTE Band 41	20M	QPSK	1	0	-	Front	14mm	Ant1	-	Full Power	40620	2593	1	22.50	24.00	1.413	62.9	1.006	0.02	0.535	0.760
	LTE Band 41	20M	QPSK	1	0	-	Back	21mm	Ant1	-	Full Power	40620	2593	1	22.50	24.00	1.413	62.9	1.006	0.09	0.306	0.435
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant1	-	Reduced	518598	2592.99	1	19.86	20.50	1.159	-	-	0.02	0.665	0.771
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant1	-	Reduced	518598	2592.99	1	19.89	20.50	1.151	-	-	0.09	0.877	1.009
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant1	-	Reduced	518598	2592.99	1	19.66	20.50	1.213	-	-	-0.02	0.627	0.761
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant1	-	Reduced	518598	2592.99	1	19.86	20.50	1.159	-	-	-0.18	0.993	1.151
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant1	-	Reduced	518598	2592.99	1	19.89	20.50	1.151	-	-	-0.07	1.110	1.277
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant1	Headset	Reduced	518598	2592.99	1	19.89	20.50	1.151	-	-	-0.03	1.050	1.208
	FR1 n41 HPUE NSA	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant1	-	Reduced	518598	2592.99	1	17.10	17.50	1.096	-	-	0.05	0.615	0.674
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant1	-	Reduced	518598	2592.99	1	19.66	20.50	1.213	-	-	0.06	0.906	1.099
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	14mm	Ant1	-	Full Power	518598	2592.99	1	25.48	27.00	1.419	-	-	0.05	0.756	1.073
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant1	-	Full Power	518598	2592.99	1	25.53	27.00	1.403	-	-	0.06	0.780	1.094
	FR1 n41 HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	21mm	Ant1	-	Full Power	518598	2592.99	1	25.48	27.00	1.419	-	-	-0.09	0.405	0.575
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	21mm	Ant1	-	Full Power	518598	2592.99	1	25.53	27.00	1.403	-	-	0.07	0.424	0.595
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant6	-	Reduced	518598	2592.99	1	19.94	20.00	1.014	-	-	-0.06	0.498	0.505
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant6	-	Reduced	518598	2592.99	1	19.80	20.00	1.047	-	-	0.13	0.523	0.548
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant6	-	Reduced	518598	2592.99	1	19.49	20.00	1.125	-	-	-0.05	0.453	0.509
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant6	-	Reduced	518598	2592.99	1	19.94	20.00	1.014	-	-	0.06	0.917	0.930
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant6	-	Reduced	518598	2592.99	1	19.80	20.00	1.047	-	-	0.06	0.876	0.917
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant6	-	Reduced	518598	2592.99	1	19.49	20.00	1.125	-	-	-0.02	0.725	0.815
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant6	-	Full Power	518598	2592.99	1	21.96	23.00	1.271	-	-	0.06	0.127	0.161
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant6	-	Full Power	518598	2592.99	1	21.93	23.00	1.279	-	-	0.07	0.261	0.334
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant6	-	Full Power	518598	2592.99	1	21.96	23.00	1.271	-	-	0.02	0.075	0.095
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant4	-	Reduced	518598	2592.99	1	18.62	19.50	1.225	-	-	0.05	0.800	0.980
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant4	-	Reduced	518598	2592.99	1	18.56	19.50	1.242	-	-	0.03	0.429	0.533
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant4	-	Reduced	518598	2592.99	1	18.36	19.50	1.300	-	-	-0.06	0.910	1.183
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant4	-	Reduced	518598	2592.99	1	18.62	19.50	1.225	-	-	-0.03	1.020	1.249
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant4	Headset	Reduced	518598	2592.99	1	18.62	19.50	1.225	-	-	-0.04	0.983	1.204

	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant4	-	Reduced	518598	2592.99	1	18.56	19.50	1.242	-	-	-0.09	0.443	0.550
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant4	-	Reduced	518598	2592.99	1	18.36	19.50	1.300	-	-	0.05	0.954	1.240
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant4	-	Full Power	518598	2592.99	1	23.56	25.00	1.393	-	-	0.06	0.601	0.837
	FR1 n41 HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant4	-	Full Power	518598	2592.99	1	23.48	25.00	1.419	-	-	0.08	0.484	0.687
	FR1 n41 HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Front	14mm	Ant4	-	Full Power	518598	2592.99	1	22.94	24.00	1.276	-	-	0.03	0.504	0.643
	FR1 n41 HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant4	-	Full Power	518598	2592.99	1	23.56	25.00	1.393	-	-	0.09	0.282	0.393
	FR1 n41_HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant3	-	Reduced	518598	2592.99	1	17.85	18.00	1.035	-	-	-0.18	0.108	0.112
	FR1 n41_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant3	-	Reduced	518598	2592.99	1	17.70	18.00	1.072	-	-	-0.09	0.134	0.144
	FR1 n41_HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	518598	2592.99	1	17.85	18.00	1.035	-	-	0.03	1.260	1.304
90	FR1 n41_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	518598	2592.99	1	17.70	18.00	1.072	-	-	-0.07	1.300	**1.393**
	FR1 n41_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	Headset	Reduced	518598	2592.99	1	17.70	18.00	1.072	-	-	0.03	1.189	1.274
	FR1 n41_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	518598	2592.99	3	17.70	18.00	1.072	-	-	0.03	1.220	1.307
	FR1 n41_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	518598	2592.99	4	17.70	18.00	1.072	-	-	0.01	1.260	1.350
	FR1 n41_HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	518598	2592.99	1	17.60	18.00	1.096	-	-	-0.06	1.148	1.259
	FR1 n41_HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant3	-	Full Power	518598	2592.99	1	24.84	26.00	1.306	-	-	0.06	0.152	0.199
	FR1 n41_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant3	-	Full Power	518598	2592.99	1	24.69	26.00	1.352	-	-	0.05	0.158	0.214
	FR1 n41_HPUE	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant3	-	Full Power	518598	2592.99	1	24.84	26.00	1.306	-	-	0.01	0.285	0.372
	FR1 n41_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	21mm	Ant3	-	Full Power	518598	2592.99	1	24.69	26.00	1.352	-	-	0.06	0.320	0.433
3500MHz																						
	LTE Band 48	20M	QPSK	1	0	-	Front	5mm	Ant5	-	Reduced	56150	3641	1	17.03	18.50	1.403	62.9	1.006	0.06	0.544	0.768
	LTE Band 48	20M	QPSK	1	0	-	Front	5mm	Ant5	-	Reduced	55340	3560	1	16.98	18.50	1.419	62.9	1.006	0.17	0.452	0.645
	LTE Band 48	20M	QPSK	1	0	-	Front	5mm	Ant5	-	Reduced	55830	3609	1	17.15	18.50	1.365	62.9	1.006	0.07	0.444	0.610
	LTE Band 48	20M	QPSK	1	0	-	Front	5mm	Ant5	-	Reduced	56640	3690	1	16.77	18.50	1.489	62.9	1.006	-0.1	0.437	0.655
	LTE Band 48	20M	QPSK	50	0	-	Front	5mm	Ant5	-	Reduced	56150	3641	1	17.01	18.50	1.409	62.9	1.006	0.08	0.447	0.634
	LTE Band 48	20M	QPSK	50	0	-	Front	5mm	Ant5	-	Reduced	55340	3560	1	16.93	18.50	1.435	62.9	1.006	0.03	0.402	0.581
	LTE Band 48	20M	QPSK	50	0	-	Front	5mm	Ant5	-	Reduced	55830	3609	1	17.10	18.50	1.380	62.9	1.006	-0.13	0.407	0.565
	LTE Band 48	20M	QPSK	50	0	-	Front	5mm	Ant5	-	Reduced	56640	3690	1	16.70	18.50	1.514	62.9	1.006	-0.15	0.402	0.612
	LTE Band 48	20M	QPSK	100	0	-	Front	5mm	Ant5	-	Reduced	55830	3609	1	17.12	18.50	1.374	62.9	1.006	0.01	0.412	0.570
91	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant5	-	Reduced	56150	3641	1	17.03	18.50	1.403	62.9	1.006	-0.03	0.881	**1.243**
	LTE_CA_48C	20M	QPSK	1	99	-	Back	5mm	Ant5	-	Reduced	55830+ 56028	3609+ 3628.8	1	17.00	18.50	1.413	62.9	1.006	0.01	0.854	1.214
	LTE_CA_48C	20M	QPSK	1	99	-	Back	5mm	Ant5	-	Reduced	55340+ 55538	3560+ 3579.8	1	16.89	18.50	1.449	62.9	1.006	0.05	0.813	1.185
	LTE_CA_48C	20M	QPSK	1	0	-	Back	5mm	Ant5	-	Reduced	56640+ 56442	3690+ 3670.2	1	16.57	18.50	1.560	62.9	1.006	0.04	0.766	1.202
	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant5	Headset	Reduced	56150	3641	1	17.03	18.50	1.403	62.9	1.006	-0.05	0.872	1.231
	LTE Band 48 ENDC	20M	QPSK	1	0	-	Back	5mm	Ant5	-	Reduced	56150	3641	1	12.99	14.50	1.416	62.9	1.006	0.02	0.351	0.500
	LTE_CA_48C ENDC	20M	QPSK	1	99	-	Back	5mm	Ant5	-	Reduced	55830+ 56028	3609+ 3628.8	1	13.05	14.50	1.396	62.9	1.006	-0.07	0.336	0.472
	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant5	-	Reduced	55340	3560	1	16.98	18.50	1.419	62.9	1.006	-0.07	0.871	1.243
	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant5	-	Reduced	55830	3609	1	17.15	18.50	1.365	62.9	1.006	-0.08	0.871	1.196
	LTE Band 48	20M	QPSK	1	0	-	Back	5mm	Ant5	-	Reduced	56640	3690	1	16.77	18.50	1.489	62.9	1.006	-0.06	0.813	1.218
	LTE Band 48	20M	QPSK	50	0	-	Back	5mm	Ant5	-	Reduced	56150	3641	1	17.01	18.50	1.409	62.9	1.006	0.13	0.724	1.026
	LTE Band 48	20M	QPSK	50	0	-	Back	5mm	Ant5	-	Reduced	55340	3560	1	16.93	18.50	1.435	62.9	1.006	0.17	0.809	1.168
	LTE Band 48	20M	QPSK	50	0	-	Back	5mm	Ant5	-	Reduced	55830	3609	1	17.10	18.50	1.380	62.9	1.006	0.05	0.804	1.116
	LTE Band 48	20M	QPSK	50	0	-	Back	5mm	Ant5	-	Reduced	56640	3690	1	16.70	18.50	1.514	62.9	1.006	0.1	0.781	1.189
	LTE Band 48	20M	QPSK	100	0	-	Back	5mm	Ant5	-	Reduced	55830	3609	1	17.12	18.50	1.374	62.9	1.006	-0.06	0.779	1.077
	LTE Band 48	20M	QPSK	1	0	-	Front	14mm	Ant5	-	Full Power	56150	3641	1	22.50	24.00	1.413	62.9	1.006	0.06	0.368	0.523
	LTE Band 48	20M	QPSK	1	0	-	Back	21mm	Ant5	-	Full Power	56150	3641	1	22.50	24.00	1.413	62.9	1.006	0.07	0.234	0.333
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	641666	3624.99	1	19.17	19.50	1.079	-	-	0.12	0.682	0.736
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	641666	3624.99	1	19.09	19.50	1.099	-	-	-0.02	0.828	0.910
	FR1 n48	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	641666	3624.99	1	18.97	19.50	1.130	-	-	-0.15	0.670	0.757
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	641666	3624.99	1	19.17	19.50	1.079	-	-	0.06	0.848	0.915
92	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	641666	3624.99	1	19.09	19.50	1.099	-	-	-0.07	1.260	**1.385**
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	Headset	Reduced	641666	3624.99	1	19.09	19.50	1.099	-	-	0.03	1.180	1.297
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	641666	3624.99	3	19.09	19.50	1.099	-	-	-0.13	0.923	1.014
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	641666	3624.99	4	19.09	19.50	1.099	-	-	-0.05	0.989	1.087
	FR1 n48	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	641666	3624.99	1	18.97	19.50	1.130	-	-	0.09	0.936	1.057
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant5	-	Full Power	641666	3624.99	1	23.71	24.00	1.069	-	-	0.03	0.384	0.411

	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant5	-	Full Power	641666	3624.99	1	23.57	24.00	1.104	-	-	0.07	0.545	0.602
	FR1 n48	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant5	-	Full Power	641666	3624.99	1	23.71	24.00	1.069	-	-	0.09	0.156	0.167
	FR1 n48	100M	QPSK	135	69	DFT-SCS-30KHz	Back	21mm	Ant5	-	Full Power	641666	3624.99	1	23.57	24.00	1.104	-	-	-0.1	0.240	0.265
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant3	-	Reduced	656000	3840	1	13.84	14.50	1.164	-	-	0.07	0.008	0.009
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant3	-	Reduced	656000	3840	1	13.65	14.50	1.216	-	-	0.14	0.011	0.013
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	656000	3840	1	13.84	14.50	1.164	-	-	-0.03	0.373	0.434
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	656000	3840	1	13.65	14.50	1.216	-	-	-0.04	0.827	1.006
	FR1 n77 HPUE _Part27O NSA	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	656000	3840	1	10.15	11.00	1.216	-	-	0.02	0.369	0.449
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant3	-	Sensor Off	656000	3840	1	17.82	18.50	1.169	-	-	0.06	0.055	0.064
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant3	-	Sensor Off	656000	3840	1	17.65	18.50	1.216	-	-	0.01	0.033	0.040
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant3	-	Sensor Off	656000	3840	1	17.82	18.50	1.169	-	-	0.02	0.128	0.150
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	21mm	Ant3	-	Sensor Off	656000	3840	1	17.65	18.50	1.216	-	-	0.01	0.118	0.144
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant3	-	Reduced	633334	3500.01	1	13.22	14.50	1.343	-	-	0.07	0.008	0.011
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant3	-	Reduced	633334	3500.01	1	13.30	13.50	1.047	-	-	0.05	0.010	0.010
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	633334	3500.01	1	13.22	13.50	1.067	-	-	0.02	0.120	0.128
	FR1 n77 HPUE _Part27Q NSA	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	633334	3500.01	1	10.59	11.00	1.099	-	-	0.07	0.064	0.070
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant3	-	Reduced	633334	3500.01	1	13.30	13.50	1.047	-	-	-0.13	0.107	0.112
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant3	-	Reduced	633334	3500.01	1	17.20	18.50	1.349	-	-	0.09	0.002	0.003
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant3	-	Reduced	633334	3500.01	1	17.20	18.50	1.349	-	-	-0.01	0.001	0.001
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	656000	3840	1	19.69	20.50	1.205	-	-	0.05	0.880	1.060
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	656000	3840	1	19.60	20.50	1.230	-	-	0.03	0.630	0.775
	FR1 n77 HPUE _Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	656000	3840	1	19.46	20.50	1.271	-	-	-0.02	0.626	0.795
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	656000	3840	1	19.69	20.50	1.205	-	-	0.16	0.991	1.194
93	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	656000	3840	1	19.60	20.50	1.230	-	-	-0.07	1.130	**1.390**
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	Headset	Reduced	656000	3840	1	19.60	20.50	1.230	-	-	-0.03	1.098	1.351
	FR1 n77 HPUE _Part27O NSA	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	656000	3840	1	16.22	17.00	1.197	-	-	0.06	0.500	0.598
	FR1 n77 HPUE _Part27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	656000	3840	1	19.46	20.50	1.271	-	-	0.04	0.718	0.912
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant5	-	Full Power	656000	3840	1	25.95	27.00	1.274	-	-	0.08	0.665	0.847
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant5	-	Full Power	656000	3840	1	25.95	27.00	1.274	-	-	0.04	0.331	0.422
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	21mm	Ant5	-	Full Power	656000	3840	1	26.42	27.00	1.143	-	-	0.06	0.267	0.305
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	633334	3500.01	1	19.62	20.50	1.225	-	-	-0.18	0.812	0.994
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	633334	3500.01	1	19.61	20.50	1.227	-	-	-0.01	0.922	1.132
	FR1 n77 HPUE _Part27Q NSA	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	633334	3500.01	1	15.94	17.00	1.276	-	-	0.03	0.413	0.527
	FR1 n77 HPUE _Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant5	-	Reduced	633334	3500.01	1	19.60	20.50	1.230	-	-	0.18	0.885	1.089
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	633334	3500.01	1	19.62	20.50	1.225	-	-	-0.18	0.801	0.981
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	633334	3500.01	1	19.61	20.50	1.227	-	-	0.04	0.888	1.090
	FR1 n77 HPUE _Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant5	-	Reduced	633334	3500.01	1	19.60	20.50	1.230	-	-	-0.03	0.888	1.092
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant5	-	Full Power	633334	3500.01	1	26.36	27.00	1.159	-	-	0.06	0.489	0.567
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant5	-	Full Power	633334	3500.01	1	26.38	27.00	1.153	-	-	0.07	0.544	0.627
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant5	-	Full Power	633334	3500.01	1	26.36	27.00	1.159	-	-	0.09	0.152	0.176
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	21mm	Ant5	-	Full Power	633334	3500.01	1	26.38	27.00	1.153	-	-	0.04	0.224	0.258
	FR1 n77 HPUE _Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	21mm	Ant5	-	Full Power	633334	3500.01	1	25.33	26.00	1.167	-	-	0.01	0.228	0.266
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant1	-	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	-0.09	0.481	0.577
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant1	-	Full Power	656000	3840	1	20.03	21.00	1.250	-	-	-0.17	0.399	0.499
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant1	-	Full Power	656000	3840	1	20.21	21.00	1.199	-	-	-0.18	0.415	0.498
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant1	-	Full Power	656000	3840	1	20.03	21.00	1.250	-	-	0.04	0.410	0.513
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant1	-	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	0.04	0.370	0.453

	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant1	-	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.11	0.352	0.437
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant1	-	Full Power	633334	3500.01	1	20.12	21.00	1.225	-	-	-0.01	0.431	0.528
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant1	-	Full Power	633334	3500.01	1	20.06	21.00	1.242	-	-	0.03	0.430	0.534
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant7	-	Reduced	656000	3840	1	18.69	19.00	1.074	-	-	-0.07	0.059	0.063
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant7	-	Reduced	656000	3840	1	18.58	19.00	1.102	-	-	0.05	0.054	0.059
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant7	-	Reduced	656000	3840	1	18.69	19.00	1.074	-	-	0.1	0.454	0.488
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant7	-	Reduced	656000	3840	1	18.58	19.00	1.102	-	-	-0.02	0.631	0.695
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant7	-	Sensor Off	656000	3840	1	21.05	22.00	1.245	-	-	0.09	0.277	0.345
	FR1 n77 HPUE _Part27O	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant7	-	Sensor Off	656000	3840	1	21.03	22.00	1.250	-	-	0.01	0.136	0.170
	FR1 n77 HPUE _Part27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	21mm	Ant7	-	Sensor Off	656000	3840	1	21.03	22.00	1.250	-	-	0.06	0.089	0.111
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant7	-	Reduced	633334	3500.01	1	18.57	19.00	1.104	-	-	0.06	0.072	0.079
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant7	-	Reduced	633334	3500.01	1	18.32	19.00	1.169	-	-	0.05	0.087	0.102
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant7	-	Reduced	633334	3500.01	1	18.57	19.00	1.104	-	-	0.13	0.899	0.993
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant7	-	Reduced	633334	3500.01	1	18.32	19.00	1.169	-	-	-0.02	1.080	1.263
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant7	Headset	Reduced	633334	3500.01	1	18.32	19.00	1.169	-	-	0.03	0.996	1.165
	FR1 n77 HPUE _Part27Q	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant7	-	Reduced	633334	3500.01	1	18.12	19.00	1.225	-	-	0.07	0.879	1.076
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Front	14mm	Ant7	-	Sensor Off	633334	3500.01	1	21.29	22.00	1.178	-	-	0.01	0.032	0.038
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant7	-	Sensor Off	633334	3500.01	1	21.06	22.00	1.242	-	-	0.1	0.023	0.029
	FR1 n77 HPUE _Part27Q	100M	QPSK	1	137	DFT-SCS-30KHz	Back	21mm	Ant7	-	Sensor Off	633334	3500.01	1	21.29	22.00	1.178	-	-	0.06	0.090	0.106
	FR1 n77 HPUE _Part27Q	100M	QPSK	135	69	DFT-SCS-30KHz	Back	21mm	Ant7	-	Sensor Off	633334	3500.01	1	21.06	22.00	1.242	-	-	0.09	0.080	0.099

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	Power Reduction	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)
WLAN/ Bluetooth																		
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 8	-	Standalone	1	2412	1	17.91	19.00	1.285	100	1.000	0.05	0.606	0.779
94	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	-	Standalone	1	2412	1	17.91	19.00	1.285	100	1.000	0.02	1.000	**1.285**
	WLAN2.4GHz	802.11g 6Mbps	Back	5mm	Ant 8	-	Standalone	1	2412	1	17.23	19.00	1.503	97.46	1.026	0.06	0.745	1.149
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	-	Standalone	1	2412	3	17.91	19.00	1.285	100	1.000	0.03	0.620	0.797
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	-	Standalone	1	2412	4	17.91	19.00	1.285	100	1.000	0.06	0.997	1.281
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	-	Simultaneous	1	2412	1	10.23	12.00	1.503	100	1.000	0.03	0.120	0.180
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	Headset	Standalone	1	2412	1	17.91	19.00	1.285	100	1.000	0.05	0.821	1.055
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	-	Standalone	6	2437	1	17.89	19.00	1.291	100	1.000	0.06	0.818	1.056
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 8	-	Standalone	11	2462	1	17.90	19.00	1.288	100	1.000	-0.17	0.993	1.279
	WLAN2.4GHz	802.11b 1Mbps	Front	14mm	Ant 8	-	Full Power	6	2437	1	20.55	22.00	1.396	100	1.000	0.03	0.197	0.275
	WLAN2.4GHz	802.11b 1Mbps	Back	21mm	Ant 8	-	Full Power	6	2437	1	20.55	22.00	1.396	100	1.000	0.1	0.097	0.135
	Bluetooth	1Mbps	Front	5mm	Ant 8	-	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	-0.04	0.038	0.053
95	Bluetooth	1Mbps	Back	5mm	Ant 8	-	Full Power	39	2441	1	13.43	14.50	1.278	76.85	1.084	0.04	0.065	**0.090**
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 8	-	Standalone	58	5290	1	13.23	14.50	1.340	90.69	1.103	-0.08	0.171	0.253
96	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	-	Standalone	58	5290	1	13.23	14.50	1.340	90.69	1.103	0	0.805	**1.190**
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	-	Simultaneous	58	5290	1	7.10	8.50	1.380	90.69	1.103	0.01	0.125	0.190
	WLAN5.3GHz	802.11a 6Mbps	Front	14mm	Ant 8	-	Full Power	52	5260	1	19.06	20.50	1.393	97.46	1.026	0.06	0.160	0.229
	WLAN5.3GHz	802.11a 6Mbps	Back	21mm	Ant 8	-	Full Power	52	5260	1	19.06	20.50	1.393	97.46	1.026	0.07	0.496	0.709
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 8	-	Standalone	122	5610	1	15.90	17.50	1.444	90.69	1.103	0.04	0.178	0.284
97	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	-	Standalone	122	5610	1	15.90	17.50	1.445	90.69	1.103	0.01	0.747	**1.191**
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	-	Standalone	122	5610	3	15.90	17.50	1.445	90.69	1.103	0.08	0.696	1.110
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	-	Standalone	122	5610	4	15.90	17.50	1.445	90.69	1.103	0.04	0.552	0.880
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	-	Simultaneous	122	5610	1	7.20	8.50	1.349	90.69	1.103	0.02	0.108	0.161
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	-	Standalone	106	5530	1	15.85	17.50	1.461	90.69	1.103	0.07	0.544	0.876
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	-	Standalone	138	5530	1	15.57	17.00	1.389	90.69	1.103	-0.01	0.498	0.763
	WLAN5.5GHz	802.11a 6Mbps	Front	14mm	Ant 8	-	Full Power	116	5580	1	18.99	20.50	1.415	97.46	1.026	0.06	0.109	0.158
	WLAN5.5GHz	802.11a 6Mbps	Back	21mm	Ant 8	-	Full Power	116	5580	1	18.99	20.50	1.415	97.46	1.026	0.01	0.455	0.661
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	5mm	Ant 8	-	Standalone	159	5795	1	17.19	18.50	1.352	94.9	1.054	0.09	0.258	0.368

98	WLAN5.8GHz	802.11n-HT40 MCS0	Back	5mm	Ant 8	-	Standalone	159	5795	1	17.19	18.50	1.352	94.9	1.054	0.03	0.830	**1.183**
	WLAN5.8GHz	802.11n-HT40 MCS0	Back	5mm	Ant 8	-	Standalone	151	5755	1	17.05	18.50	1.396	94.9	1.054	0.02	0.774	1.139
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 8	-	Simultaneous	155	5775	1	9.84	11.50	1.466	90.69	1.103	0.03	0.100	0.162
	WLAN5.8GHz	802.11a 6Mbps	Front	14mm	Ant 8	-	Full Power	149	5745	1	19.26	20.50	1.330	97.46	1.026	0.06	0.119	0.162
	WLAN5.8GHz	802.11a 6Mbps	Back	21mm	Ant 8	-	Full Power	149	5745	1	19.26	20.50	1.330	97.46	1.026	0.09	0.346	0.472

15.4 Product specific 10g SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
1750MHz																			
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant0	Reduced	1413	1732.6	1	20.92	22.00	1.282	0.11	2.51	3.219
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant0	Reduced	1312	1712.4	1	20.90	22.00	1.288	-0.13	2.47	3.182
99	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant0	Reduced	1513	1752.6	1	20.90	22.00	1.288	0.06	2.75	**3.543**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant0	Reduced	1513	1752.6	3	20.90	22.00	1.288	0.03	2.18	2.808
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant0	Reduced	1513	1752.6	4	20.90	22.00	1.288	0.05	2.36	3.040
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant0	Reduced	1413	1732.6	1	20.92	22.00	1.282	-0.19	2.11	2.706
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant0	Reduced	1312	1712.4	1	20.90	22.00	1.288	0.04	1.95	2.512
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant0	Reduced	1513	1752.6	1	20.90	22.00	1.288	0.03	2.60	3.349
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant0	Reduced	1413	1732.6	1	20.92	22.00	1.282	0.07	1.83	2.347
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant0	Reduced	1312	1712.4	1	20.90	22.00	1.288	0.03	1.80	2.319
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant0	Reduced	1513	1752.6	1	20.90	22.00	1.288	0.12	1.63	2.100
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	16mm	Ant0	Full Power	1513	1752.6	1	22.89	24.00	1.291	0.03	0.448	0.578
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	23mm	Ant0	Full Power	1513	1752.6	1	22.89	24.00	1.291	0.05	0.239	0.309
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	17mm	Ant0	Full Power	1413	1732.6	1	23.04	24.00	1.247	0.09	0.538	0.671
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant0	Full Power	340500	1702.5	1	22.73	24.00	1.340	-0.11	2.34	3.128
100	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Front	0mm	Ant0	Full Power	340500	1702.5	1	22.70	24.00	1.349	0.03	2.66	**3.588**
	FR1 n70	15M	QPSK	75	0	DFT-SCS-15KHz	Front	0mm	Ant0	Full Power	340500	1702.5	1	22.66	24.00	1.361	-0.08	2.52	3.434
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant0	Full Power	340500	1702.5	1	22.73	24.00	1.340	0.04	1.76	2.362
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Back	0mm	Ant0	Full Power	340500	1702.5	1	22.70	24.00	1.349	0.04	1.94	2.618
	FR1 n70	15M	QPSK	75	0	DFT-SCS-15KHz	Back	0mm	Ant0	Full Power	340500	1702.5	1	22.66	24.00	1.361	0.03	1.87	2.549
	FR1 n70	15M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant0	Full Power	340500	1702.5	1	22.73	24.00	1.340	0.1	2.02	2.706
	FR1 n70	15M	QPSK	36	22	DFT-SCS-15KHz	Bottom Side	0mm	Ant0	Full Power	340500	1702.5	1	22.70	24.00	1.349	-0.05	2.10	2.830
	FR1 n70	15M	QPSK	75	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant0	Full Power	340500	1702.5	1	22.66	24.00	1.361	-0.14	2.10	2.856
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Front	0mm	Ant0	Full Power	349000	1745	1	23.20	24.00	1.202	0.11	2.33	2.800
101	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant0	Full Power	349000	1745	1	22.84	24.00	1.306	0.09	2.70	**3.527**
	FR1 n66 NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant0	Reduced	349000	1745	1	20.94	22.00	1.276	0.08	1.50	1.915
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	0mm	Ant0	Full Power	349000	1745	1	22.72	23.00	1.067	0.08	2.61	2.778
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Back	0mm	Ant0	Full Power	349000	1745	1	23.20	24.00	1.202	0.02	1.81	2.171
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant0	Full Power	349000	1745	1	22.84	24.00	1.306	-0.13	2.23	2.906
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant0	Full Power	349000	1745	1	22.72	23.00	1.067	-0.09	2.10	2.241
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Bottom Side	0mm	Ant0	Full Power	349000	1745	1	23.20	24.00	1.202	-0.03	1.29	1.555
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant0	Full Power	349000	1745	1	22.84	24.00	1.306	0.13	1.44	1.876
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Back	0mm	Ant4	Full Power	349000	1745	1	22.01	23.00	1.256	0.02	1.75	2.202
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant4	Full Power	349000	1745	1	21.78	23.00	1.324	-0.18	1.98	2.626
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant4	Full Power	349000	1745	1	21.56	23.00	1.393	-0.02	1.58	2.203
	FR1 n66	40M	QPSK	1	108	DFT-SCS-15KHz	Top Side	0mm	Ant4	Full Power	349000	1745	1	22.01	23.00	1.256	0.03	2.06	2.587
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant4	Full Power	349000	1745	1	21.78	23.00	1.324	0.08	2.28	3.019
	FR1 n66 NSA	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant4	Reduced	349000	1745	1	18.79	20.00	1.321	0.11	1.11	1.467
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	0mm	Ant4	Full Power	349000	1745	1	21.56	23.00	1.393	0.08	1.79	2.495
102	LTE Band 66 (4)	20M	QPSK	1	0	-	Front	0mm	Ant0	Reduced	132322	1745	1	20.59	22.00	1.384	0.05	2.40	**3.321**
	LTE_CA_66C	20M	QPSK	1	99	-	Front	0mm	Ant0	Reduced	132322+ 132520	1745+ 1764.8	1	20.47	22.00	1.422	0.07	2.21	3.143
	LTE_CA_66C	20M	QPSK	1	99		Front	0mm	Ant0	Reduced	132072+ 132270	1720+ 1739.8	1	20.28	22.00	1.486	-0.05	2.05	3.046
	LTE_CA_66C	20M	QPSK	1	0		Front	0mm	Ant0	Reduced	132572+ 132374	1770+ 1750	1	20.25	22.00	1.496	0.04	1.98	2.963
	LTE Band 66 (4) ENDC	20M	QPSK	1	0	-	Front	0mm	Ant0	Reduced	132322	1745	1	18.19	19.50	1.352	0.03	1.39	1.879
	LTE_CA_66C ENDC	20M	QPSK	1	0	-	Front	0mm	Ant0	Reduced	132322+ 132520	1745+ 1764.8	1	18.04	19.50	1.400	0.06	1.28	1.791