FCC SAR Test Report

APPLICANT	: Motorola Mobility LLC
EQUIPMENT	: Mobile Cellular Phone
BRAND NAME	: Motorola
MODEL NAME	: XT2401-1
FCC ID	: IHDT56AQ7
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

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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA420701	Rev. 01	Initial issue of report.	Apr. 02, 2024
FA420701	Rev. 02	1. Added the UWB information in Section 4.1. 2. Added 5GNR n41 UL MIMO description: note12 on page 8, note12 on page 53 and UL MIMO Bands Configuration on page 55.	Apr. 03, 2024

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Motorola Mobility LLC, Mobile Cellular Phone, XT2401-1,** are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 5mm)	Body-worn (Separation 5mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
			1g SAR (W/kg)			
Licensed	GSM	GSM850	1.19	1.20	1.20	1.59
		GSM1900	1.29	1.30	1.30	
	WCDMA	WCDMA II	1.30	1.28	1.28	
		WCDMA IV	1.29	1.31	1.27	
		WCDMA V	1.25	1.31	1.31	
	LTE	LTE Band 7	1.30	1.30	1.32	
		LTE Band 12/17	1.29	0.99	0.99	
		LTE Band 13	1.01	0.92	0.88	
		LTE Band 25/2	1.28	1.29	1.31	
		LTE Band 26/5	1.27	1.29	1.29	
		LTE Band 66/4	1.30	1.30	1.30	
		LTE Band 41/38	1.34	**1.32**	**1.34**	
		LTE Band 42	1.31	1.30	1.20	
	5G NR	FR1 n2	1.27	1.28	1.29	
		FR1 n7	1.29	1.30	1.29	
		FR1 n26/n5	1.10	0.90	0.90	
		FR1 n41/n38	1.28	1.29	1.29	
		FR1 n66	1.29	1.29	1.30	
		FR1 n71	0.68	0.55	0.55	
		FR1 n77/n78	1.30	1.29	1.29	
DTS	WLAN	2.4GHz WLAN	**1.39**	**1.32**	1.32	1.59
NII		5GHz WLAN	1.13	1.19	1.19	1.59
DSS	Bluetooth	2.4GHz Bluetooth	0.41	0.74	0.74	1.59

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	GSM	GSM1900	3.09	3.93
	WCDMA	WCDMA II	3.20	
		WCDMA IV	3.22	
		WCDMA V	1.60	
	LTE	LTE Band 7	**3.31**	
		LTE Band 25/2	3.24	
		LTE Band 26/5	1.89	
		LTE Band 66/4	3.27	
		LTE Band 41/38	3.24	
		LTE Band 42	3.13	
	5G NR	FR1 n2	3.19	
		FR1 n7	3.20	
		FR1 n41/38	3.19	

		FR1 n66	3.26	
		FR1 n77/n78	3.17	
DTS	WLAN	2.4GHz WLAN	2.91	3.93
NII		5GHz WLAN	3.16	3.93
Date of Testing:			2024/2/26 ~ 2024/3/17	

Remark:

1. This device supports LTE B2 / B4 / B5 / B17 / B38 and B25 / B66 / B26 / B12 / B41. Since the supported frequency span for LTE B2 / B4 / B5 / B17 / B38 falls completely within the supports frequency span for LTE B25 / B66 / B26 / B12 / B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B12 / B41.
2. This device supports 5GNR n38/n5/n78 and n41/n26/n77. Since the supported frequency span for 5GNR n38/n5/n78 falls completely within the supports frequency span for n41/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 n41/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		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR06-KS SAR04-KS	CN1257	314309

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

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

3. Guidance Applied

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

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

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2401-1
FCC ID	IHDT56AQ7
IMEI Code	Sample 1 IMEI1: 357505570025392 IMEI2: 357505570025400 Sample 2 IMEI1: 357505570038635 IMEI2: 357505570038643
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz WLAN 6GHz U-NII-5: 5925 MHz ~ 6425 MHz WLAN 6GHz U-NII-6: 6425 MHz ~ 6525 MHz WLAN 6GHz U-NII-7: 6525 MHz ~ 6875 MHz WLAN 6GHz U-NII-8: 6875 MHz ~ 7125 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz WPT: 110 kHz ~ 148 kHz UWB: 6489.6MHz & 7987.2MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA

	HSPA+(16QAM uplink is not supported) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR : CP-OFDM / DFT-s-OFDM, PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ax HE20/HE40 WLAN 2.4GHz 802.11be EHT20/EHT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac/ax VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160 WLAN 5GHz 802.11be EHT20/EHT40/EHT80/EHT160 WLAN 6GHz 802.11a/ax HE20/HE40/HE80/HE160 WLAN 6GHz 802.11be EHT20/EHT40/EHT80/EHT160/EHT320 Bluetooth BR/EDR/LE NFC: ASK WPT: ASK UWB: BPM-BPSK
HW Version	DVT2
SW Version	UUV34.71
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, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
3. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
4. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12.
5. The 2.4GHz/5GHz/6GHz WLAN can transmit in MIMO antenna mode only.
6. For dual SIM card mobile has single SIM slots + eSIM (electronic SIM) and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active).
7. The device implements the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
8. This device implements antenna tuning techniques for several WWAN (cellular) operating modes and frequencies for the purpose of improving antenna efficiency over a broad range of frequencies. Specifically, these techniques are employed in the LTE and 5GNR modes. In this report SAR was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing. The detail descriptions of the antenna tuner and supplemental data for additional information can be referred to section 18 and appendix F.
9. LTE Band 41 and 5GNR n77/n78 supports HPUE, HPUE power and SAR testing performed separately.
10. LTE Band 41 and 5GNR n77/n78 HPUE with higher power, 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 verified the worst case of power class 3 SAR.
11. For 5GNR n77/n78 HPUE, 5GNR n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands, using FTM to perform SAR with default 100% transmission.
12. 5G NR n41 supports UL MIMO.
13. The UWB output power is -12.4dBm and it is less than 1mW and exempt from power density testing.
14. There are two samples, the different between them refer to the XT2401-1_Operational Description of Product Equality Declaration which is exhibit separately. According to the differences, so choose sample 1 to perform full SAR testing and sample 2 to verify the worst case of sample 1.
15. This device has NFC function and the NFC SAR report will be separately submitted.
16. RF exposure report for WPC (Wireless power charging) will be separately submitted.
17. SAR and Power density test report for WLAN 6GHz U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth always chose higher SAR of WLAN5GHz U-NII-1/2A/2C/3 and WLAN 6GHz U-NII-5/6/7/8.
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, 35, 40
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 40
	n26	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n38	TDD	30	10, 15, 20, 25, 30, 40
	n41	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 40
	n26	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n71	FDD	15	5, 10, 15, 20
	n38	TDD	30	10, 15, 20, 25, 30, 40
	n41	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05	
FCC ID	IHDT56AQ7
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 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM
LTE Voice / Data requirements	Voice and Data
LTE Release Version	R17, Cat18
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 14.
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 14.
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 5 carriers in the downlink and 2 carriers in the uplink.

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

LTE Band 2

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

LTE Band 4

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

LTE Band 5

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

LTE Band 7

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

LTE Band 12

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

LTE Band 13

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

LTE Band 17

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

LTE Band 25

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

LTE Band 26

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

LTE Band 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 42								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	42115	3452.5	42140	3455	42165	3457.5	42190	3460
M	42590	3500	42590	3500	42590	3500	42590	3500
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540

<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 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 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 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes

2) LTE Bands tune up:

Band	Antenna	Head DSI 2 Tune-up Limit	Body-worn DSI 3 Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremity DSI 6 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 12	Ant 1	23.4	24	24	24	24	24
LTE Band 17	Ant 1	23.4	24	24	24	24	24
LTE Band 5	Ant 0	24	24	24	24	24	24
LTE Band 26	Ant 0	24	24	24	24	24	24
LTE Band 5	Ant 1	23.5	23.4	23.4	24	24	24
LTE Band 26	Ant 1	23.5	23.4	23.4	24	24	24
LTE Band 2	Ant 2	24	21.1	19.5	22.2	24	24
LTE Band 25	Ant 2	24	21.1	19.5	22.2	24	24

LTE Band 2	Ant 1	17.4	17.5	17.5	19.5	24	24
LTE Band 25	Ant 1	17.4	17.5	17.5	19.5	24	24
LTE Band 2 Other PA	Ant 1	17.4	17.5	17.5	19.5	24	24
LTE Band 4	Ant 2	24	20	18.9	22	24	24
LTE Band 66	Ant 2	24	20	18.9	22	24	24
LTE Band 4	Ant 1	18.2	18.6	18.6	20.4	24	24
LTE Band 66	Ant 1	18.2	18.6	18.6	20.4	24	24
LTE Band 4 Other PA	Ant 1	18.2	18.6	18.6	20.4	24	24
LTE Band 66 Other PA	Ant 1	18.2	18.6	18.6	20.4	24	24
LTE Band 38	Ant 2	24	22.3	21.7	22.8	24	24
LTE Band 41	Ant 2	24	22.3	21.7	22.8	24	24
LTE Band 41 HPUE	Ant 2	27	23.9	23.3	24.4	27	27
LTE Band 38	Ant 1	20	22.6	19	23	24	24
LTE Band 41	Ant 1	20	22.6	19	23	24	24
LTE Band 41 HPUE	Ant 1	21.6	24.2	20.6	24.6	27	27
LTE Band 38 Other PA	Ant 1	20	22.6	19	23	24	24
LTE Band 41 Other PA	Ant 1	20	22.6	19	23	24	24
LTE Band 41 HPUE Other PA	Ant 1	21.6	24.2	20.6	24.6	27	27
LTE Band 38	Ant 0	24	23.8	21.5	24	24	24
LTE Band 41	Ant 0	24	23.8	21.5	24	24	24
LTE Band 41 HPUE	Ant 0	27	25.4	23.1	26.2	27	27
LTE Band 38	Ant 3	19.9	23	19.5	23	23	23
LTE Band 41	Ant 3	19.9	23	19.5	23	23	23
LTE Band 41 HPUE	Ant 3	21.5	26	21.1	25.5	26	26

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 n26: 814 MHz ~ 849 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5GNR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B4/66
LTE Anchor Bands for n5	LTE B7/66
LTE Anchor Bands for n7	LTE B2/4/5/66
LTE Anchor Bands for n26	LTE B7
LTE Anchor Bands for n38	LTE B4/66
LTE Anchor Bands for n41	LTE B4/5/66
LTE Anchor Bands for n66	LTE B2/5/7/13
LTE Anchor Bands for n77	LTE B7/41
LTE Anchor Bands for n78	LTE B2/4/5/7/26/38/41/66

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

NR Band 2

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870
M	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378500	1892.5	378000	1890

NR Band 5

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

NR Band 7

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

NR Band 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 66

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

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

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

NR Band 41																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500202	2501.01	500700	2503.5	501204	2506.02	501702	2508.51	502200	2511	503202	2516.01	504204	2521.02	505200	2526	500202	2501.01	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	537000	2685	536496	2682.48	535998	2679.99	535500	2677.5	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	537000	2685	529998	2649.99	528996	2644.98	528000	2640

NR Band 77																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840.00	656000	3840.00	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930

NR Band 78																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02		
M	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	653000	3795	652834	3792.51	652668	3790.02	652500	3787.5	652334	3785.01	652000	3780	651668	3775.02	651334	3770.01	651000	3765	650668	3760.02	650334	3755.01		

<For NR Overlap Bands Description>

1) NR Bands BW

Band	5 MHz	10 MHz	15 MHz	20 MHz	25 MHz	30 MHz	40 MHz	50 MHz	60 MHz	70 MHz	80 MHz	90 MHz	100 MHz
FR1 n5	Yes	Yes	Yes	Yes									
FR1 n26	Yes	Yes	Yes	Yes									
FR1 n38		Yes	Yes	Yes	Yes	Yes	Yes						
FR1 n41		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FR1 n77		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FR1 n78		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

2) NR Bands Tune up:

Band	Antenna	Head DSI 2 Tune-up Limit	Body-worn DSI 3 Tune-up Limit	Hotspot DSI 7 Tune-up Limit	Extremity DSI 6 Tune-up Limit	Sensor Off DSI4 Tune-up Limit	Default Tune-up Limit
5G NR n5	Ant 0	24	24	24	24	24	24
5G NR n26	Ant 0	24	24	24	24	24	24

5G NR n5	Ant 1	24	24	24	24	24	24
5G NR n26	Ant 1	24	24	24	24	24	24
5G NR n38	Ant 2	24	21.4	19.7	20.6	24	24
5G NR n41	Ant 2	24	21.4	19.7	20.6	24	24
5G NR n38	Ant 1	18.3	21.3	17.6	21.7	24	24
5G NR n41	Ant 1	18.3	21.3	17.6	21.7	24	24
5G NR n38	Ant 0	24	23.7	20.9	21	24	24
5G NR n41	Ant 0	24	23.7	20.9	21	24	24
5G NR n38	Ant 3	18.4	22.5	18.8	22.4	24	24
5G NR n41	Ant 3	18.4	22.5	18.8	22.4	24	24
5G NR n77	Ant 4	20.8	20.6	17.6	21.4	24	24
5G NR n78	Ant 4	20.8	20.6	17.6	21.4	24	24
5G NR n77 HPUE	Ant 4	23.8	23.6	20.6	24.4	26.5	26.5
5G NR n78 HPUE	Ant 4	23.8	23.6	20.6	24.4	26.5	26.5
5G NR n77	Ant 5	19.7	20.2	19.4	22.9	24	24
5G NR n78	Ant 5	19.7	20.2	19.4	22.9	24	24
5G NR n77 HPUE	Ant 5	22.7	23.2	22.4	25.9	26	26
5G NR n78 HPUE	Ant 5	22.7	23.2	22.4	25.9	26	26
5G NR n77	Ant 7	18.4	20	17.1	21.3	24	24
5G NR n78	Ant 7	18.4	20	17.1	21.3	24	24
5G NR n77 HPUE	Ant 7	21.4	23	20.1	24.3	27	27
5G NR n78 HPUE	Ant 7	21.4	23	20.1	24.3	27	27
5G NR n77	Ant 8	24	24	22.6	24	24	24
5G NR n78	Ant 8	24	24	22.6	24	24	24
5G NR n77 HPUE	Ant 8	27	27	25.6	27	27	27
5G NR n78 HPUE	Ant 8	27	27	25.6	27	27	27

5. Smart Transmit feature for RF Exposure compliance

The 2nd generation of Smart Transmit (GEN2) operates based on pre-defined sub6 antenna groups (AG). This Device is enabled with the Qualcomm® Smart Transmit Gen2 feature. The RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN and WLAN/BT transmitter to ensure the product in compliance with RF exposure limit over a defined time window. To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.

This report describes the procedures for the SAR char generation, and the parameters obtained from SAR characterization (referred to as SAR char, respectively) will be used as input for Smart Transmit. SAR char will be entered via the Embedded File System (EFS) version 21 to enable the Smart Transmit Gen2 Feature.

<Terminologies in this report>

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

<SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at WWAN and WLAN/BT bands. It will then be used as input for Smart Transmit to control and manage RF exposure for WWAN and WLAN/BT bands.

<SAR design target and uncertainty>

Item	Uncertainty dB (k=2)
Total uncertainty	1.5

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

$$SAR_design_target < SAR_{regulatory_limit} \times 10^{\frac{-total\ uncertainty}{10}}$$

Antenna Group:

Antenna Group 0 (AG0)	ANT1 & ANT3& ANT4 & ANT5 & ANT6 & ANT7
Antenna Group 1 (AG1)	ANT0 & ANT2 & ANT8

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

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

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

Band	Antenna	Head DSI 2	Body-Worn DSI 3	Hotspot DSI 7	Extremity DSI 6	Sensor off DSI 4	Pmax*
GSM850	Ant 0	33.5	26.4	26.4	24.7	24.7	24.7
GSM850	Ant 1	23.2	25.1	25.1	24.7	24.7	24.7
GSM1900	Ant 2	34.4	21.9	21.9	22.3	21.7	21.7
GSM1900	Ant 1	19.9	18.8	18.8	20	19.7	19.7
WCDMA II	Ant 2	31	20.1	20.1	21.2	23.0	23.0
WCDMA II	Ant 1	17	17.2	17.2	18.8	20.5	20.5
WCDMA IV	Ant 2	31.4	19.2	17.9	21.5	23.0	23.0
WCDMA IV	Ant 1	17.5	17.9	17.9	19.2	20.5	20.5
WCDMA V	Ant 0	31.2	23.5	23.5	23.0	23.0	23.0
WCDMA V	Ant 1	23.1	22.5	22.5	26.0	23.0	23.0
LTE Band 7	Ant 2	29.3	19.6	17.9	19.3	23.0	23.0
LTE Band 7	Ant 1	17.4	19.8	15.7	20.2	23.0	23.0
LTE Band 7 Other PA	Ant 1	17.4	19.8	15.7	20.2	23.0	23.0
LTE Band 7	Ant 0	31.3	21.7	21.7	21.9	23.0	23.0
LTE Band 7	Ant 3	18.2	21.8	20.4	22	22.0	22.0
LTE Band 12(17)	Ant 0	32	24.7	24.5	23.0	23.0	23.0
LTE Band 12(17)	Ant 1	22.4	24.1	24.1	23.0	23.0	23.0
LTE Band 13	Ant 0	32.2	24.6	24.4	23.0	23.0	23.0
LTE Band 13 ENDC	Ant 1	24.1	24.7	24.7	23.0	23.0	23.0
LTE Band 25(2)	Ant 2	29.9	20.1	18.5	21.2	23.0	23.0
LTE Band 25(2)	Ant 1	16.4	16.5	16.5	18.5	23.0	23.0
LTE Band 2 Other PA	Ant 1	16.4	16.5	16.5	18.5	23.0	23.0
LTE Band 26(5)	Ant 0	29.7	23.2	23.2	23.0	23.0	23.0
LTE Band 26(5)	Ant 1	22.5	22.4	22.4	25.3	23.0	23.0
LTE Band 66(4)	Ant 2	29.6	19	17.9	21	23.0	23.0
LTE Band 66(4)	Ant 1	17.2	17.6	17.6	19.4	23.0	23.0
LTE Band 66(4) Other PA	Ant 1	17.2	17.6	17.6	19.4	23.0	23.0
LTE Band 41(38)	Ant 2	28.7	19.3	18.7	19.8	22.4	21.0
LTE Band 41 HPUE	Ant 2	28.7	19.3	18.7	19.8	22.4	22.4
LTE Band 41(38)	Ant 1	17	19.6	16	20	22.4	21.0
LTE Band 41 HPUE	Ant 1	17	19.6	16	20	22.4	22.4
LTE Band 41(38) Other PA	Ant 1	17	19.6	16	20	22.4	21.0
LTE Band 41 HPUE Other PA	Ant 1	17	19.6	16	20	22.4	22.4
LTE Band 41(38)	Ant 0	33.6	20.8	18.5	21.6	22.4	21.0
LTE Band 41 HPUE	Ant 0	33.6	20.8	18.5	21.6	22.4	22.4
LTE Band 41(38)	Ant 3	16.9	21.9	16.5	20.9	21.4	20.0
LTE Band 41 HPUE	Ant 3	16.9	21.9	16.5	20.9	21.4	21.4
LTE Band 42	Ant 7	18	21.3	17.7	21.1	21.0	21.0
FR1 n26(5)	Ant 0	32.5	25.2	25.2	23.0	23.0	23.0
FR1 n26(5)	Ant 1	23.7	24.5	24.5	23.0	23.0	23.0
FR1 n2	Ant 2	32.3	20	19.3	23.3	23.0	23.0
FR1 n2	Ant 1	17.5	18.1	18.1	20.3	23.0	23.0
FR1 n7	Ant 2	30.7	20	17.9	20.6	23.0	23.0
FR1 n7	Ant 1	17.6	20.6	17.1	20.8	23.0	23.0
FR1 n66	Ant 2	31.3	19.9	18.4	22.6	23.0	23.0

FR1 n66	Ant 1	19.1	21	21	21.7	23.0	23.0
FR1 n71	Ant 0	34	26.7	26.7	23.0	23.0	23.0
FR1 n71	Ant 1	25.8	28.5	28.5	23.0	23.0	23.0
FR1 n41(38)	Ant 2	31.2	20.4	18.7	19.6	23.0	23.0
FR1 n41(38)	Ant 1	17.3	20.3	16.6	20.7	23.0	23.0
FR1 n41(38)	Ant 0	28.2	22.7	19.9	20	23.0	23.0
FR1 n41(38)	Ant 3	17.4	21.5	17.8	21.4	23.0	23.0
FR1 n77 Part 27O	Ant 4	19.8	19.6	16.6	20.4	23.0	23.0
FR1 n77 Part 27O HPUE	Ant 4	19.8	19.6	16.6	20.4	23.0	22.5
FR1 n77 Part 27O	Ant 5	18.7	19.2	18.4	21.9	23.0	23.0
FR1 n77 Part 27O HPUE	Ant 5	18.7	19.2	18.4	21.9	23.0	22.0
FR1 n77 Part 27O	Ant 7	17.4	19.0	16.1	20.3	23.0	23.0
FR1 n77 Part 27O HPUE	Ant 7	17.4	19.0	16.1	20.3	23.0	23.0
FR1 n77 Part 27O	Ant 8	28.6	24.2	21.6	23.0	23.0	23.0
FR1 n77 Part 27O HPUE	Ant 8	28.6	24.2	21.6	23.0	23.0	23.0

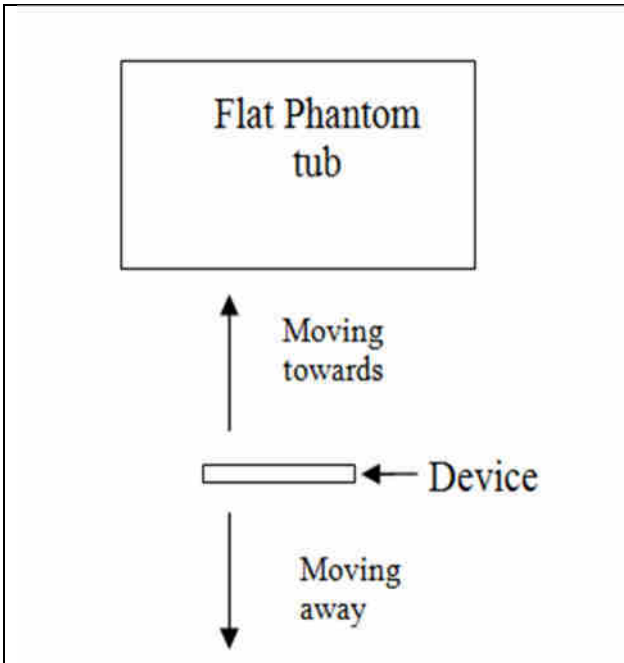
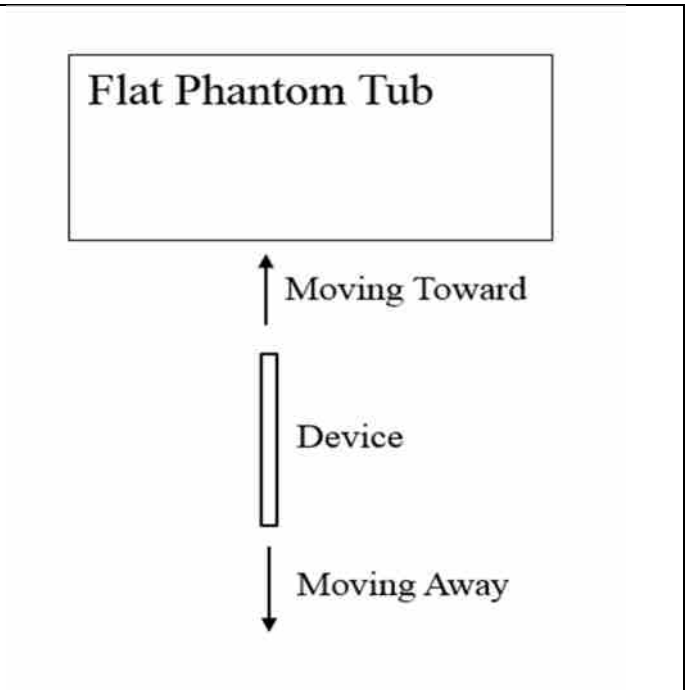
Band	Antenna	Head DSI 2	Body-Worn DSI 3	Extremity DSI 6	Hotspot DSI 7	Sensor off DSI 4	Pmax*
WLAN2.4GHz	Ant 6	17.50	17.00	20.50	17.00	21.90	21.90
WLAN2.4GHz	Ant 3	17.50	17.00	20.50	17.00	21.90	21.90
WLAN2.4GHz	Ant 6+3	17.50	17.00	20.50	17.00	24.90	24.90
Bluetooth	ANT 6	22.50	18.10	14.90	18.10	14.90	14.90
Bluetooth	ANT 3	22.20	22.60	16.40	22.60	16.40	16.40
WLAN5GHz(B1)	Ant 5	15.50	15.50	20.70	15.50	18.50	18.50
WLAN5GHz(B1)	Ant 4	15.50	15.50	20.70	15.50	18.50	18.50
WLAN5GHz(B1)	Ant 5+4	15.50	15.50	20.70	15.50	21.50	21.50
WLAN5GHz(B2)	Ant 5	15.50	15.50	21.40		18.50	18.50
WLAN5GHz(B2)	Ant 4	15.50	15.50	21.40		18.50	18.50
WLAN5GHz(B2)	Ant 5+4	15.50	15.50	21.40		21.50	21.50
WLAN5GHz(B3)	Ant 5	17.00	15.00	19.00		19.00	19.00
WLAN5GHz(B3)	Ant 4	17.00	15.00	19.00		19.00	19.00
WLAN5GHz(B3)	Ant 5+4	17.00	15.00	19.00		22.00	22.00
WLAN5GHz(B4)	Ant 5	17.00	18.50	18.50	18.50	18.50	18.50
WLAN5GHz(B4)	Ant 4	17.00	18.50	18.50	18.50	18.50	18.50
WLAN5GHz(B4)	Ant 5+4	17.00	18.50	18.50	18.50	21.50	21.50
WLAN6GHz(B5)	Ant 5	16.00	16.50	16.00		16.50	16.50
WLAN6GHz(B5)	Ant 4	16.00	16.50	16.00		16.50	16.50
WLAN6GHz(B5)	Ant 5+4	16.00	16.50	16.00		19.50	19.50
WLAN6GHz(B6)	Ant 5	16.00	17.00	16.00		17.00	17.00
WLAN6GHz(B6)	Ant 4	16.00	17.00	16.00		17.00	17.00
WLAN6GHz(B6)	Ant 5+4	16.00	17.00	16.00		20.00	20.00
WLAN6GHz(B7)	Ant 5	15.00	17.00	15.00		17.00	17.00
WLAN6GHz(B7)	Ant 4	15.00	17.00	15.00		17.00	17.00
WLAN6GHz(B7)	Ant 5+4	15.00	17.00	15.00		20.00	20.00
WLAN6GHz(B8)	Ant 5	14.50	15.00	14.50		15.00	15.00
WLAN6GHz(B8)	Ant 4	14.50	15.00	14.50		15.00	15.00
WLAN6GHz(B8)	Ant 5+4	14.50	15.00	14.50		18.00	18.00

Note:
1) *Pmax is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + total uncertainty (The device uncertainty for sub-6GHz WWAN is 1.0 dB for this DUT, the device uncertainty for WLAN/BT Bands is 1.5 dB).
2) All Plimit power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD).
3) The max allowed output power is the Plimit + 1.0 dB device uncertainty, and if Plimit is higher than Pmax, the device output power will be Pmax instead.
4) For 5GNR n77/n78 HPUE, 5GNR n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands, using FTM to perform SAR with default 100% transmission.

6. Proximity Sensor Triggering Test

<Proximity Sensor Triggering Distance>:

1. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (7125MHz) and lowest (835MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's body at the front or back of the device.
3. The output power will reduce to body worn power level when top and bottom sensor pad be detected.
4. The sensors used to detect the proximity of the user's body at the front or back surface of the device use a detection threshold distance. The data shown in the sections below shows the distance(s). When front or back body worn condition is detected reduced power will be active.
5. The device employs proximity sensors also can detect the presence of the user's a finger or hand when handheld state at the front/back/top/bottom/left/right sides of the device. When front/back/top/bottom/left/right sides of handheld condition is detected reduced power will be active.
6. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed:

	
Sensor/Handheld detection test set-up, Front and Back sides	Handheld detection test set-up, Left Side, Right Side, Bottom Side and Top Side

<P-Sensor>

Proximity Sensor Triggering Distance (mm)				
Position	Front		Back	
	Moving towards	Moving away	Moving towards	Moving away
Minimum	18	23	19	24

<Handheld for ANT 0&2>

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	12	17	10	16	10	16	13	19

<Handheld for ANT1&7>

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	7	13	12	18	12	18	9	15

<Handheld for ANT3&4&5&6>

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	8	14	11	16	12	18	9	15

7. RF Exposure Limits

7.1 Uncontrolled Environment

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

7.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

8. Specific Absorption Rate (SAR)

8.1 Introduction

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

8.2 SAR Definition

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

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

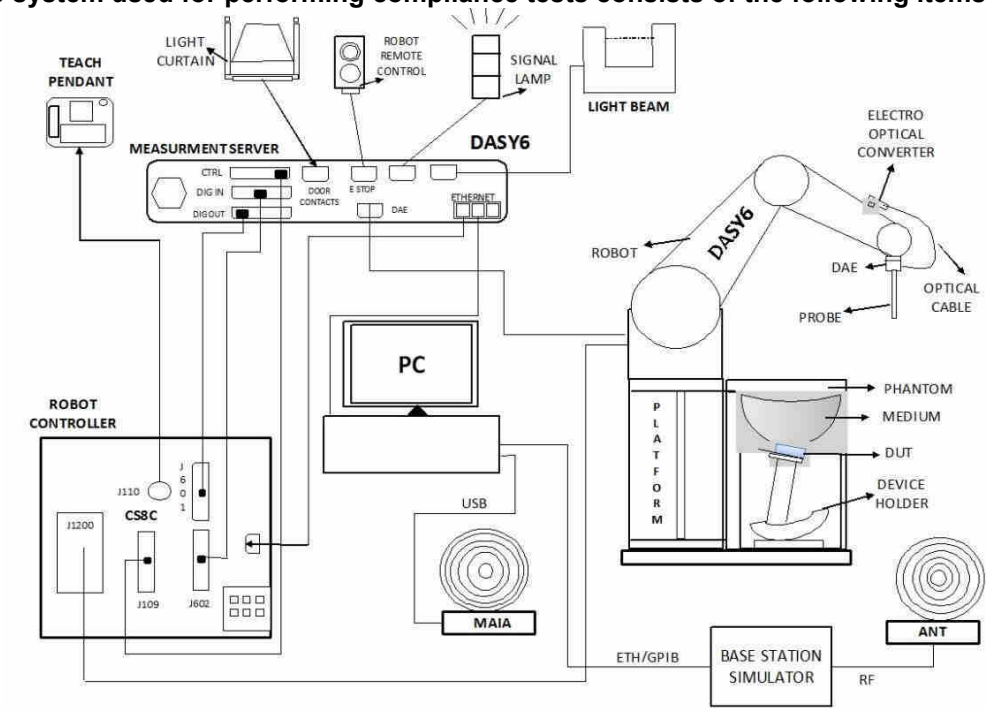
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. System Description and Setup

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



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

9.1 E-Field Probe

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

<EX3DV4 Probe>

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

9.2 Data Acquisition Electronics (DAE)

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

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

Photo of DAE

9.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

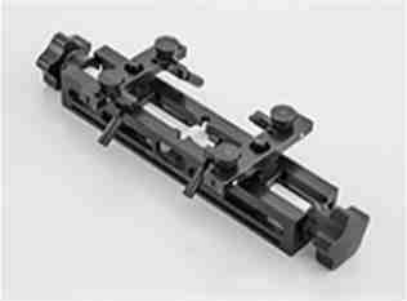
The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices or for evaluating transmitters operating at low frequencies. ELI is fully compatible with standard and all known tissue simulating liquids.

9.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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

Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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

Mounting Device for Laptops

10. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

10.1 Spatial Peak SAR Evaluation

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

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

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

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

10.2 Power Reference Measurement

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

10.3 Area Scan

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

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

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

10.4 Zoom Scan

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

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

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

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

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

10.5 Volume Scan Procedures

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

10.6 Power Drift Monitoring

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

11. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1087	2022/2/24	2025/2/22
SPEAG	835MHz System Validation Kit	D835V2	4d091	2022/8/19	2025/8/18
SPEAG	1750MHz System Validation Kit	D1750V2	1090	2022/2/24	2025/2/22
SPEAG	1900MHz System Validation Kit	D1900V2	5d118	2022/3/30	2025/3/29
SPEAG	2450MHz System Validation Kit	D2450V2	1040	2023/4/25	2024/4/24
SPEAG	2600MHz System Validation Kit	D2600V2	1070	2021/12/20	2024/12/18
SPEAG	3500MHz System Validation Kit	D3500V2	1037	2023/11/20	2024/11/19
SPEAG	3700MHz System Validation Kit	D3700V2	1008	2023/11/20	2024/11/19
SPEAG	3900MHz System Validation Kit	D3900V2	1048	2023/3/9	2026/3/8
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	2022/9/23	2025/9/22
SPEAG	Data Acquisition Electronics	DAE4	1649	2023/4/24	2024/4/23
SPEAG	Data Acquisition Electronics	DAE4	690	2023/6/20	2024/6/19
SPEAG	Dosimetric E-Field Probe	EX3DV4	7627	2023/6/6	2024/6/5
SPEAG	Dosimetric E-Field Probe	EX3DV4	7764	2023/10/5	2024/10/4
SPEAG	SAM Twin Phantom	SAM Twin	TP-1644	NCR	NCR
SPEAG	SAM Twin Phantom	SAM Twin	TP-2022	NCR	NCR
Testo	Thermo-Hygrometer	608-H1	1241332126	2023/7/10	2024/7/9
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8821C	6262306175	2023/7/5	2024/7/4
Agilent	ENA Series Network Analyzer	E5071C	MY46111157	2023/7/5	2024/7/4
SPEAG	Dielectric Probe Kit	DAK-3.5	1144	2023/8/17	2024/8/16
Anritsu	Vector Signal Generator	MG3710A	6201682672	2024/1/2	2025/1/1
Rohde & Schwarz	Power Meter	NRVD	102081	2023/7/5	2024/7/4
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	2023/7/5	2024/7/4
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	2023/7/5	2024/7/4
R&S	BLUETOOTH TESTER	CBT	101246	2023/5/15	2024/5/14
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	2023/10/11	2024/10/10
TES	DIGITAC THERMOMETER	1310	220305411	2023/7/8	2024/7/7
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	
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	

Note:

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

12. System Verification

12.1 Tissue Simulating Liquids

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

Fig 11.1 Photo of Liquid Height for Head SAR

Fig 11.2 Photo of Liquid Height for Body SAR

12.2 Tissue Verification

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

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

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
750	Head	22.6	0.900	41.200	0.89	41.90	1.12	-1.67	±5	2024/2/26
835	Head	22.8	0.902	41.200	0.90	41.50	0.22	-0.72	±5	2024/2/27
1750	Head	22.7	1.400	40.700	1.37	40.10	2.19	1.50	±5	2024/2/28
1900	Head	22.9	1.400	39.000	1.40	40.00	0.00	-2.50	±5	2024/2/29
2600	Head	22.7	1.930	38.200	1.96	39.00	-1.53	-2.05	±5	2024/3/1
3500	Head	22.7	2.780	38.900	2.91	37.90	-4.47	2.64	±5	2024/3/2
3700	Head	22.8	2.990	38.700	3.12	37.70	-4.17	2.65	±5	2024/3/4
3900	Head	22.8	3.190	38.400	3.32	37.50	-3.92	2.40	±5	2024/3/5
750	Head	22.8	0.926	42.500	0.89	41.90	4.04	1.43	±5	2024/3/6
835	Head	22.7	0.938	42.100	0.90	41.50	4.22	1.45	±5	2024/3/7
1750	Head	22.9	1.380	40.300	1.37	40.10	0.73	0.50	±5	2024/3/8
1900	Head	22.7	1.450	40.000	1.40	40.00	3.57	0.00	±5	2024/3/9
2600	Head	22.6	1.940	39.100	1.96	39.00	-1.02	0.26	±5	2024/3/10
3500	Head	22.9	2.790	39.600	2.91	37.90	-4.12	4.49	±5	2024/3/11
3700	Head	22.7	2.990	38.400	3.12	37.70	-4.17	1.86	±5	2024/3/12
3900	Head	22.8	3.190	38.400	3.32	37.50	-3.92	2.40	±5	2024/3/13
2450	Head	22.7	1.860	38.400	1.80	39.20	3.33	-2.04	±5	2024/3/14
5250	Head	22.6	4.600	35.900	4.71	35.90	-2.34	0.00	±5	2024/3/15
5600	Head	22.7	5.000	35.300	5.07	35.50	-1.38	-0.56	±5	2024/3/16
5750	Head	22.5	5.170	35.100	5.22	35.40	-0.96	-0.85	±5	2024/3/17

12.3 System Performance Check Results

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

<1g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2024/2/26	750	Head	50	1087	7764	1649	0.444	8.58	8.88	3.50
2024/2/27	835	Head	50	4d091	7764	1649	0.486	9.45	9.72	2.86
2024/2/28	1750	Head	50	1090	7764	1649	1.890	37.00	37.8	2.16
2024/2/29	1900	Head	50	5d118	7764	1649	2.070	39.30	41.4	5.34
2024/3/1	2600	Head	50	1070	7764	1649	2.820	56.20	56.4	0.36
2024/3/2	3500	Head	50	1037	7764	1649	3.310	65.40	66.2	1.22
2024/3/4	3700	Head	50	1008	7764	1649	3.460	67.20	69.2	2.98
2024/3/5	3900	Head	50	1048	7764	1649	3.420	69.10	68.4	-1.01
2024/3/6	750	Head	50	1087	7627	690	0.457	8.58	9.14	6.53
2024/3/7	835	Head	50	4d091	7627	690	0.502	9.45	10.04	6.24
2024/3/8	1750	Head	50	1090	7627	690	1.860	37.00	37.2	0.54
2024/3/9	1900	Head	50	5d118	7627	690	2.090	39.30	41.8	6.36
2024/3/10	2600	Head	50	1070	7627	690	2.830	56.20	56.6	0.71
2024/3/11	3500	Head	50	1037	7627	690	3.180	65.40	63.6	-2.75
2024/3/12	3700	Head	50	1008	7627	690	3.150	67.20	63	-6.25
2024/3/13	3900	Head	50	1048	7764	690	3.280	69.10	65.6	-5.07
2024/3/14	2450	Head	50	1040	7627	690	2.530	52.70	50.6	-3.98
2024/3/15	5250	Head	50	1113	7627	690	3.810	81.50	76.2	-6.50
2024/3/16	5600	Head	50	1113	7627	690	4.330	82.60	86.6	4.84
2024/3/17	5750	Head	50	1113	7627	690	4.220	80.80	84.4	4.46

<10g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2024/2/26	750	Head	50	1087	7764	1649	0.297	5.65	5.94	5.13
2024/2/27	835	Head	50	4d091	7764	1649	0.322	6.22	6.44	3.54
2024/2/28	1750	Head	50	1090	7764	1649	0.993	19.50	19.86	1.85
2024/2/29	1900	Head	50	5d118	7764	1649	1.080	20.40	21.6	5.88
2024/3/1	2600	Head	50	1070	7764	1649	1.280	24.60	25.6	4.07
2024/3/2	3500	Head	50	1037	7764	1649	1.260	24.70	25.2	2.02
2024/3/4	3700	Head	50	1008	7764	1649	1.290	24.40	25.8	5.74
2024/3/5	3900	Head	50	1048	7764	1649	1.240	24.10	24.8	2.90
2024/3/6	750	Head	50	1087	7627	690	0.305	5.65	6.1	7.96
2024/3/7	835	Head	50	4d091	7627	690	0.335	6.22	6.7	7.72
2024/3/8	1750	Head	50	1090	7627	690	0.980	19.50	19.6	0.51
2024/3/9	1900	Head	50	5d118	7627	690	1.090	20.40	21.8	6.86
2024/3/10	2600	Head	50	1070	7627	690	1.290	24.60	25.8	4.88
2024/3/11	3500	Head	50	1037	7627	690	1.210	24.70	24.2	-2.02
2024/3/12	3700	Head	50	1008	7627	690	1.180	24.40	23.6	-3.28
2024/3/13	3900	Head	50	1048	7764	690	1.180	24.10	23.6	-2.07
2024/3/14	2450	Head	50	1040	7627	690	1.200	24.60	24	-2.44
2024/3/15	5250	Head	50	1113	7627	690	1.080	23.30	21.6	-7.30
2024/3/16	5600	Head	50	1113	7627	690	1.250	23.70	25	5.49
2024/3/17	5750	Head	50	1113	7627	690	1.210	23.00	24.2	5.22

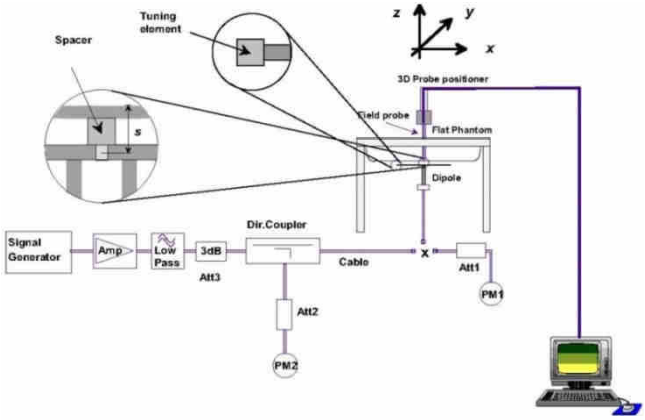


Fig 11.3.1 System Performance Check Setup

Fig 11.3.2 Setup Photo

13. RF Exposure Positions

13.1 Ear and handset reference point

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

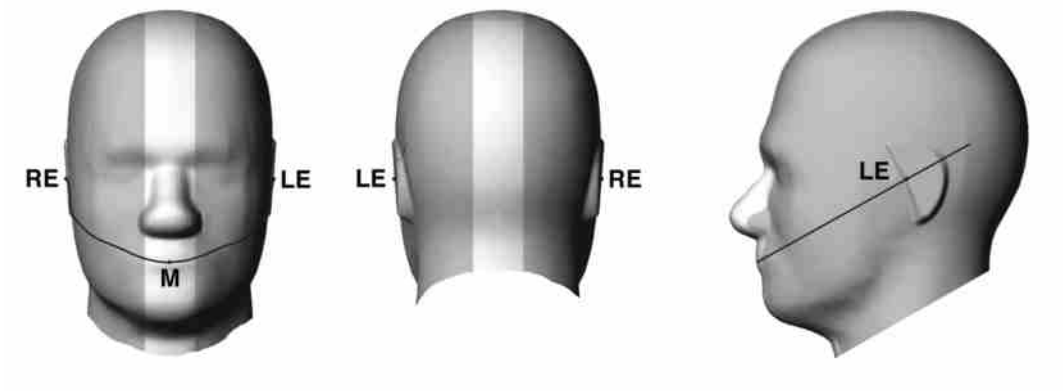


Fig 12.1.1 Front, back, and side views of SAM twin phantom

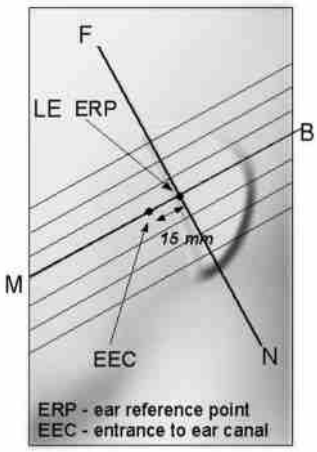


Fig 12.1.2 Close-up side view of phantom showing the ear region.

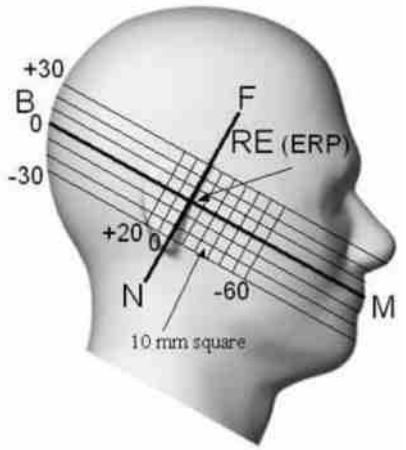


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

13.2 Definition of the cheek position

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

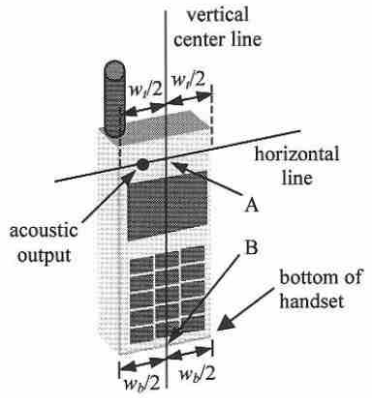


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case

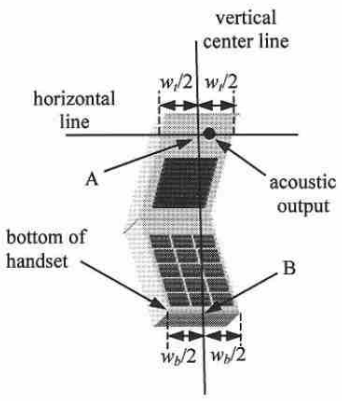


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

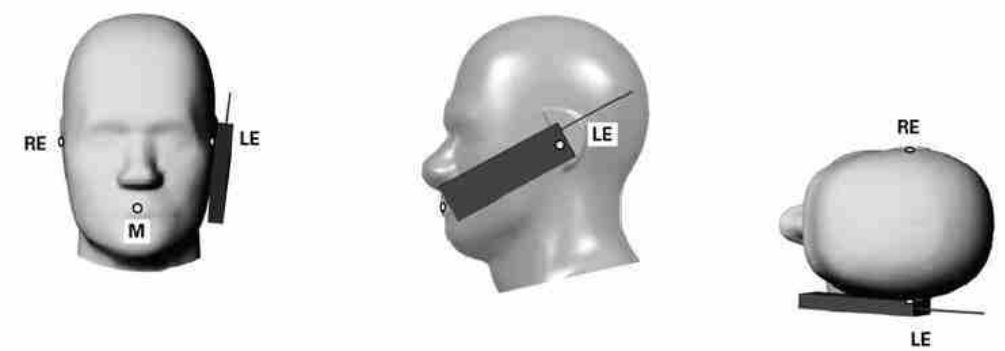


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

13.3 Definition of the tilt position

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

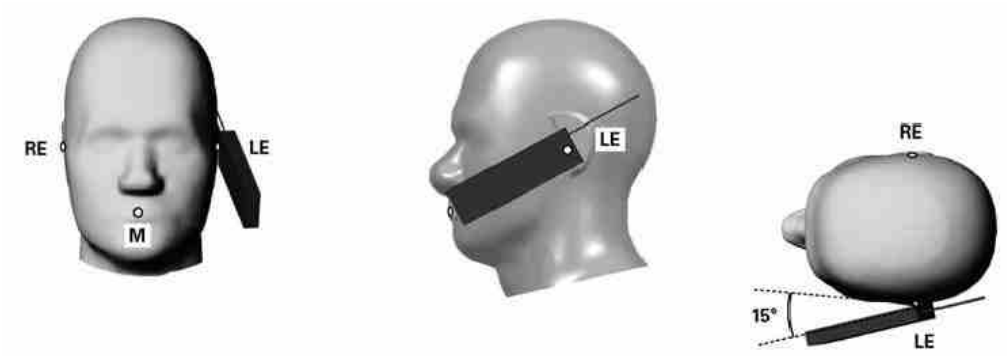


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

13.4 Body Worn Accessory

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

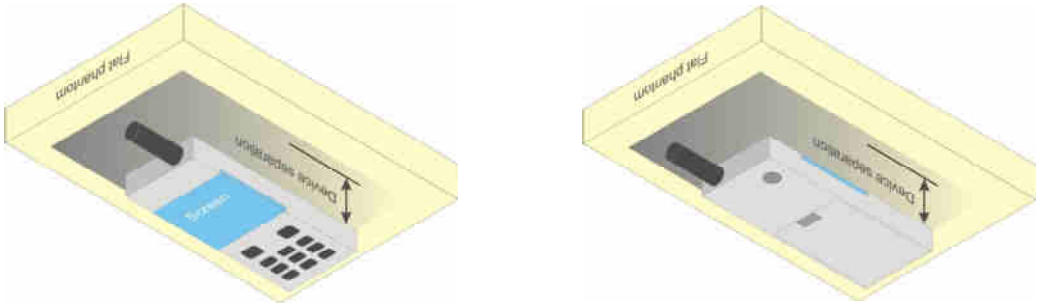


Fig 12.4 Body Worn Position

13.5 Product Specific 10g SAR Exposure

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, that 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.

13.6 Wireless Router

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

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

14. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

<WCDMA Conducted Power>

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

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

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

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

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

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_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 β_{hs} = 30/15 * β_c, and Δ_{CQI} = 24/15 with β_{hs} = 24/15 * β_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 β_{hs} = 30/15 * β_c. For sub-test 5, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 5/15 with β_{hs} = 5/15 * β_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 Agilent E5515C referred to the Setup Configuration below
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set RMC 12.2Kbps + HSDPA mode.
   ii. Set Cell Power = -25 dBm
   iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
   iv. Select HSDPA Uplink Parameters
   v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
      a). Subtest 1: 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	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

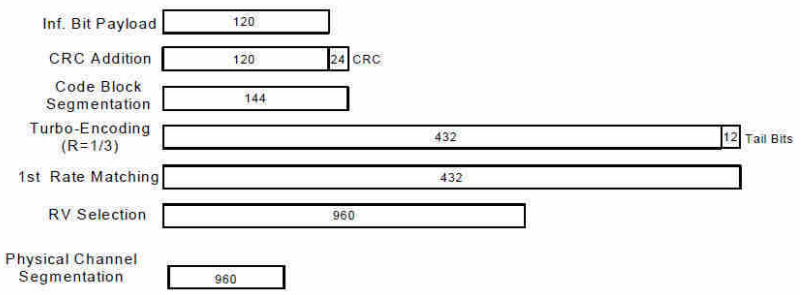


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

<WCDMA Conducted Power>

General Note:

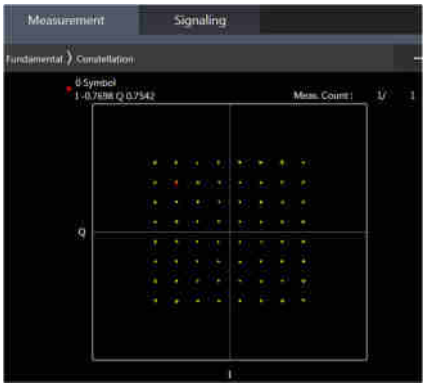
1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA/ DC-HSDPA is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

<LTE Conducted Power>

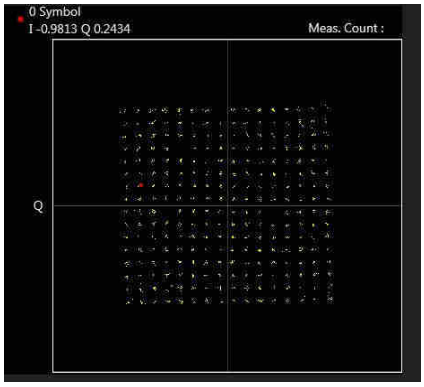
General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B2 /B4 /B5 / B17 / B38 SAR test was covered by B25 / B66 / B26 / B12 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. the maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion
   b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.

16QAM



64QAM



256QAM

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

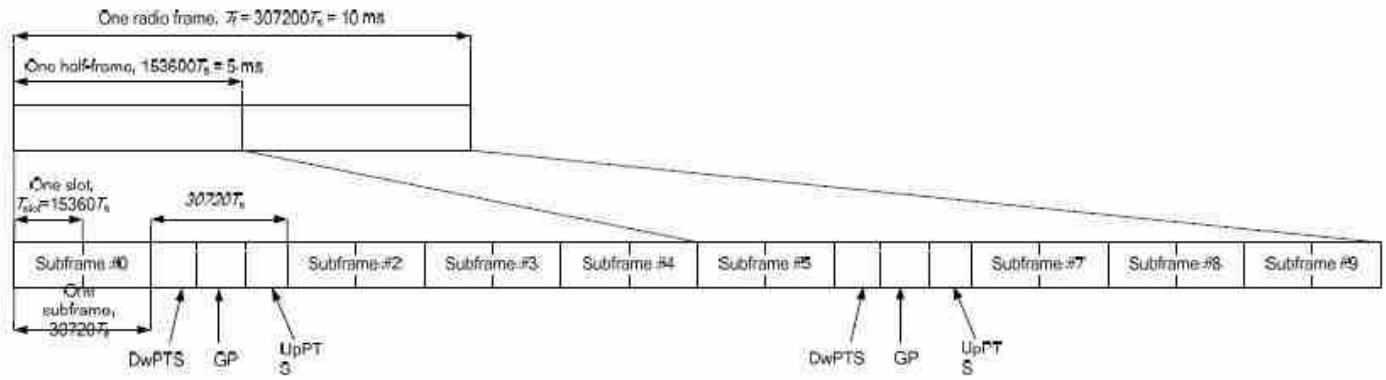


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

For 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				4CC Downlink Carrier Aggregation				5CC Downlink Carrier Aggregation			
Number	Combination	4X4 MIMO	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Covered by Measurement Superset
1	CA_2A-2A	2A	3CC-2	1	CA_26A-41C	41C, 41A		1	CA_2A-2A-4A-5A	4A, 2A		1	CA_5A-7C-66A-66A	7C,7A, 66A	
2	CA_2A-4A	4A, 2A	3CC-4	2	CA_2A-2A-5A	2A	4CC-1	2	CA_2A-4A-7C	7C, 7A, 4A, 2A		2	CA_41C-41D	41D, 41C, 41A	
3	CA_2A-5A	2A	3CC-4	3	CA_2A-2A-7A	7A, 2A		3	CA_2A-7C-38A	7C, 7A, 38A, 2A		3	CA_41F		
4	CA_2A-7A	7A, 2A	3CC-5	4	CA_2A-4A-5A	4A, 2A	4CC-1	4	CA_41A-41A-41C	41C, 41A					
5	CA_2A-26A	2A		5	CA_2A-4A-7A	7A, 4A, 2A		5	CA_41A-41D	41D,41C, 41A					
6	CA_2A-38A	38A, 2A	3CC-7	6	CA_2A-5A-7A	7A, 2A		6	CA_41C-41C	41C, 41A					
7	CA_2C	2C, 2A		7	CA_2A-7A-38A	7A, 38A, 2A		7	CA_41C-42C	42C, 41C, 42A, 41A					
8	CA_38C	38C, 38A		8	CA_2A-7A-7A	7A, 2A		8	CA_41E	41E, 41D, 41C, 41A					
9	CA_41A-41A	41A	3CC-19	9	CA_2A-7A-66A	7A, 66A, 2A		9	CA_42E	42E, 42D, 42C, 42A					
10	CA_41A-42A	42A, 41A		10	CA_2A-7C	7C, 7A, 2A	4CC-2	10	CA_5A-7A-66A-66A	7A, 66A					
11	CA_41C	41C, 41A	3CC-20	11	CA_4A-4A-7A	7A, 4A		11	CA_5A-7C-66A	7C, 7A, 66A	5CC-1				
12	CA_42A-42A	42A		12	CA_4A-7C	7C, 7A, 4A	4CC-2	12	CA_7C-66A-66A	7C, 7A, 66A	5CC-1				
13	CA_42C	42C, 42A	3CC-21	14	CA_5A-66A-66A	66A	4CC-10								
14	CA_4A-4A	4A	3CC-11	15	CA_5A-7A-66A	7A, 66A	4CC-10								
15	CA_4A-5A	4A	3CC-4	16	CA_5A-7C	7C, 7A	4CC-11								
16	CA_4A-7A	7A, 4A	3CC-5	17	CA_7A-26A-66A	7A, 66A									
17	CA_5A-66A	66A	3CC-14	18	CA_7A-66A-66A	7A, 66A	4CC-10								
18	CA_5A-7A	7A	3CC-6	19	CA_41A-41A-41A	41A									
19	CA_66A-66A	66A	3CC-14	20	CA_41A-41C	41C, 41A	4CC-4								
20	CA_66B	66B, 66A		21	CA_41A-42C	42C,42A, 41A									
21	CA_66C	66C, 66A		22	CA_41C-42A	41C, 42A, 41A									
22	CA_7A-7A	7A	3CC-8	23	CA_41D	41D, 41C, 41A									
23	CA_7A-26A	7A	3CC-17	24	CA_42D	42D, 42C, 42A									
24	CA_7A-42A	7A, 42A													
25	CA_7A-66A	7A, 66A	3CC-17												
26	CA_7B	7B, 7A													
27	CA_7C	7C, 7A													

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 five carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.

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

v. For 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.

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

LTE 4x4 MIMO (Downlink)

This device supports downlink 4x4 MIMO operations for LTE Band 2/4/7/38/41/42/66 only. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

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

4X4 MIMO	Band
	LTE Band 2/4/7/38/41/42/66

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation
Intra-band	Antenna Tx
CA_7C	Ant0/1/2/3
CA_38C	Ant0/1/2/3
CA_41C	Ant0/1/2/3
CA_42C	Ant7

<Intra-band>

General Note:

i. The device supports intra-band uplink carrier aggregation for LTE B7/38/41/42 with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.

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

iii. According 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.

<Inter-band uplink carrier aggregation consideration>

LTE Uplink CA	2CC Uplink Carrier Aggregation	
Inter-band	LTE Tx	LTE Tx
CA_2A-4A	Ant1/2	Ant1/2
CA_2A-7A	Ant1/2	Ant1/2
CA_4A-5A	Ant1/2	Ant0/1
CA_4A-7A	Ant1/2	Ant1/2
CA_5A-66A	Ant0/1	Ant1/2
CA_5A-7A	Ant0/1	Ant0/1/2/3

General Note:

1. The single carrier of inter band CA uplink power level is the same as Non-CA standalone LTE power level.
2. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with FCC RF exposure limit over a defined time window. To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.
3. For LTE inter-band CA mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure between two LTE bands. Smart Transmit algorithm controls the total RF exposure base on LTE inter band ULCA bands to not exceed FCC limit.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n26/n66/n71/n38/n41/n77/n78 is SA mode.
2. 5G NR n2/n5/n7/n26/n66/n38/n41/n77/n78 is NSA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
   a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
   b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
   c. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
   d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
   e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
   f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
   g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. 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.
5. 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.
6. 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.
7. 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.
8. 5GNR n77/n78 supports HPUE, HPUE power and SAR testing performed separately.
9. 5GNR n77/n78 HPUE with higher power, 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 verified the worst case of power class 3 SAR.
10. For 5GNR n77/n78 HPUE, 5GNR n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands, using FTM to perform SAR with default 100% transmission.
11. For NR inter-band CA mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure between two NR bands. Smart Transmit algorithm controls the total RF exposure base on NR inter band ULCA bands to not exceed FCC limit.
12. 5G NR n41 supports UL MIMO. Based on Qualcomm Smart Transmit algorithm, MIMO antennas located in different AGs do not require additional evaluation testing. Therefore, in this report, it is evaluated whether the sum of the groups of each antenna does not exceed FCC limit or spatial separation is applied, more detail please refers to section 17.

<3GPP 38.101 MPR for EN-DC>

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

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

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

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

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

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

<EN-DC combination>

ENDC	LTE TX	NR TX
DC_13A_n66A	Ant1	Ant2
DC_2A_n66A	Ant1/2	Ant1/2
DC_2A_n78A	Ant1/2	Ant4/5/7/8
DC_2A_n7A	Ant1/2	Ant1/2
DC_38A_n78A	Ant0/1/2/3	Ant4/5/7/8
DC_41A_n77A	Ant0/1/2/3	Ant4/5/7/8
DC_41A_n78A	Ant0/1/2/3	Ant4/5/7/8
DC_4A_n2A	Ant1/2	Ant1/2
DC_4A_n38A	Ant1/2	Ant1/2
DC_4A_n41A	Ant1/2	Ant1/2
DC_4A_n78A	Ant1/2	Ant4/5/7/8
DC_4A_n7A	Ant1/2	Ant1/2
DC_5A_n41A	Ant0/1	Ant0/1/2/3
DC_5A_n66A	Ant0/1	Ant1/2
DC_5A_n78A	Ant0/1	Ant4/5/7/8
DC_5A_n7A	Ant0/1	Ant1/2
DC_66A_n2A	Ant1/2	Ant1/2
DC_66A_n38A	Ant1/2	Ant1/2
DC_66A_n41A	Ant1/2	Ant1/2
DC_66A_n5A	Ant1/2	Ant0/1
DC_66A_n78A	Ant1/2	Ant4/5/7/8
DC_66A_n7A	Ant1/2	Ant1/2
DC_7A_n5A	Ant0/1/2/3	Ant0/1
DC_7A_n66A	Ant1/2	Ant1/2
DC_7A_n77A	Ant0/1/2/3	Ant4/5/7/8
DC_7A_n78A	Ant0/1/2/3	Ant4/5/7/8
DC_7A_n26A	Ant0/1/2/3	Ant0/1
DC_26A_n78A	Ant0/1	Ant4/5/7/8

Inter-Band CA Configuration:

NR Uplink CA	2CC Uplink Carrier Aggregation	
Inter-band	NR Tx	NR Tx
CA_n7A-n78A	Ant1/2	Ant4/5/7/8

NR UL MIMO Bands Configuration:

ULMIMO	Tx Ant	Tx Ant
5G NR n41	Ant 2+Ant 1	Ant 0+Ant 3

<WLAN Conducted Power>

General Note:

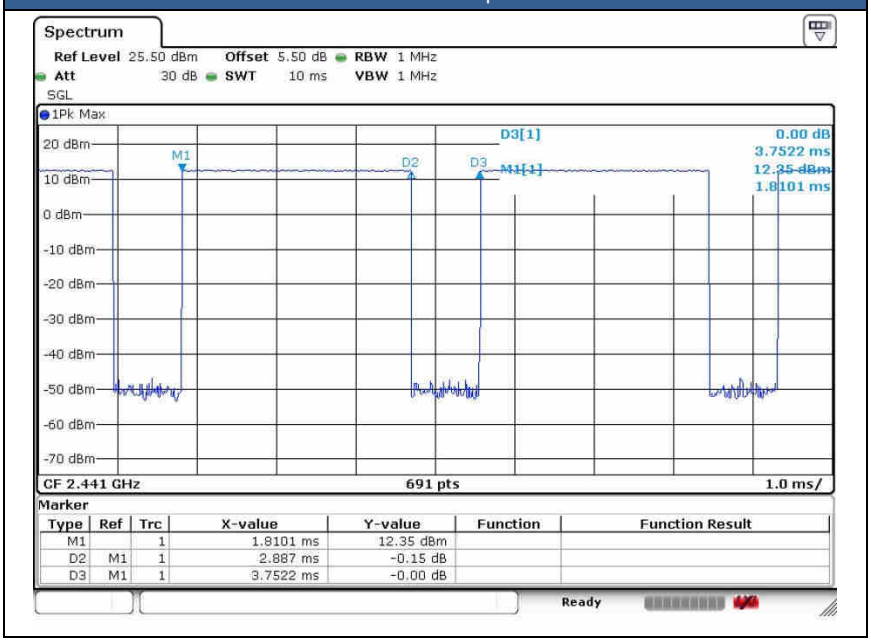
1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration. Additional output power measurements were not necessary.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
   a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
   b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
   c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
6. 802.11 ax/be supports both full tone size mode and partial tone size mode, after verification on partial tone size mode that partial size tone mode power will not be higher than full tone size mode, therefore, full tone mode power was chosen to be measured in this report.
7. The 2.4GHz/5GHz/6GHz WLAN can transmit in MIMO antenna mode.

<2.4GHz Bluetooth>

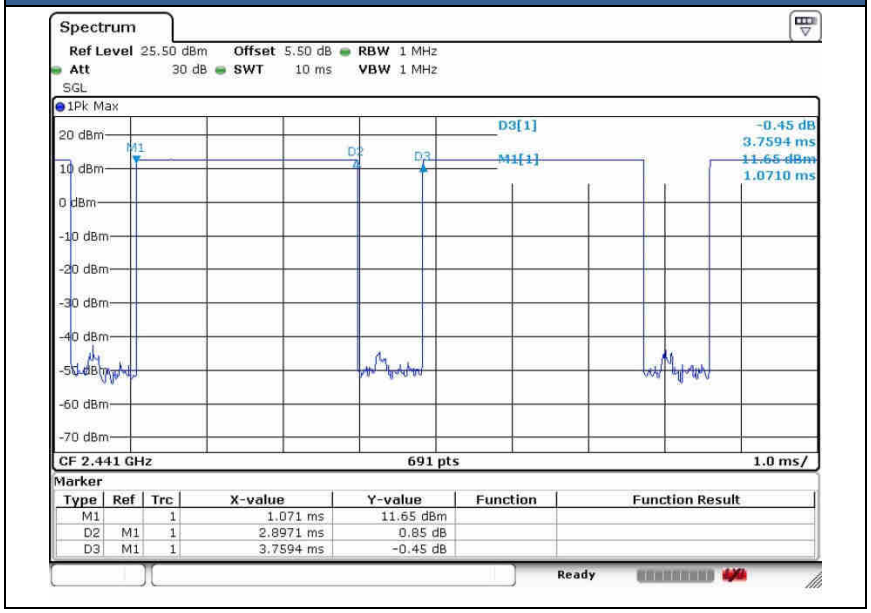
General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 76.94% for ant 3 and 77.06% for ant 6 as following figure, for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to 83.3% for Bluetooth reported SAR calculation

Bluetooth time-domain plot for Ant 3



Bluetooth time-domain plot for Ant 6



15. Antenna Location

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

16. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For SAR testing of 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 the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. 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/V, LTE Band 2/4/5/7/25/26/66/38/41/42, 5GNR n2/n7/n66/n38/ n41/n78/n77, WLAN2.4/5.2GHz, 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.
6. 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.
7. According to Nov. 2017 TCB workshop, when the reported 1gSAR for UL CA configuration is <1.2 W/kg, UL CA 1gSAR is not required for all required test channels (PCC based).
8. LTE B2/4/7/66/38/41 at ant1 support different PAs and LTE bands support Other PA only under ENDC & UL CA. whether it is the maximum power of Main PA is higher than and very close to the other PA, for RF exposure, after verification all PAs in a same position, so the worst-case PA was chosen to perform full SAR testing to ensure the

RF exposure is compliance and other PAs verified the worst case.

GSM Note:

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

WCDMA Note:

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

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 / B26 / B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B2 /B4 /B5 / B17 / B38 SAR test was covered by 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/n26/n66/n38/n41/n77 the maximum bandwidth does not support three non-overlapping channels, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

WLAN/Bluetooth Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
2. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.
6. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. Further simplification chose the worse SAR value and the worst scaling factor from each transmit chain perform reported SAR calculation conservatively. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain.

DSI status description:

The device has the following DSI state which used at different exposure condition.

This WWAN and WLAN/BT bands enabled with Qualcomm Smart Transmit feature which located at chapter 5. The default power is Pmax power, When Plimit power higher than Pmax power, the output power will be limited at Pmax, and so the SAR will use Pmax power to do the testing.

Exposure Condition	DSI	Trigger Conditions
Head SAR	DSI 2	Receiver on
Body worn SAR	DSI 3	Sensor On
Hotspot SAR	DSI 7	Hotspot On
Extremity (Handheld) SAR	DSI 6	Sensor On
Sensor Off SAR	DSI 4	Sensor Off

16.1 Head SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
									750MHz												
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	23095	707.5	1	22.71	24.00	1.346	-	-	-0.08	0.092	0.124
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	DSI 2	23095	707.5	1	21.83	23.00	1.309	-	-	0.02	0.047	0.062
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	23095	707.5	1	22.71	24.00	1.346	-	-	-0.15	0.051	0.069
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	DSI 2	23095	707.5	1	21.83	23.00	1.309	-	-	0.09	0.000	0.000
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	23095	707.5	1	22.71	24.00	1.346	-	-	0.03	0.121	0.163
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	DSI 2	23095	707.5	1	21.83	23.00	1.309	-	-	-0.05	0.071	0.093
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	23095	707.5	1	22.71	24.00	1.346	-	-	0.02	0.093	0.125
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	DSI 2	23095	707.5	1	21.83	23.00	1.309	-	-	-0.01	0.049	0.064
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	23095	707.5	1	22.50	23.40	1.230	-	-	0.15	1.020	1.255
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	DSI 2	23095	707.5	1	21.56	23.00	1.393	-	-	-0.05	0.627	0.874
	LTE Band 12	10M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	23095	707.5	1	21.53	23.00	1.403	-	-	-0.14	0.621	0.871
01	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	23095	707.5	1	22.50	23.40	1.230	-	-	0.03	1.050	**1.292**
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	23095	707.5	2	22.50	23.40	1.230	-	-	0.07	0.967	1.190
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	DSI 2	23095	707.5	1	21.56	23.00	1.393	-	-	-0.16	0.661	0.921
	LTE Band 12	10M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	23095	707.5	1	21.53	23.00	1.403	-	-	0.17	0.651	0.913
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	23095	707.5	1	22.50	23.40	1.230	-	-	0.12	0.404	0.497
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	DSI 2	23095	707.5	1	21.56	23.00	1.393	-	-	0.17	0.256	0.357
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	23095	707.5	1	22.50	23.40	1.230	-	-	0.03	0.435	0.535
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	DSI 2	23095	707.5	1	21.56	23.00	1.393	-	-	0.04	0.265	0.369
	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	23230	782	1	22.71	24.00	1.346	-	-	0.05	0.077	0.104
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	DSI 2	23230	782	1	21.68	23.00	1.355	-	-	0.06	0.048	0.065
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	23230	782	1	22.71	24.00	1.346	-	-	0.06	0.051	0.069
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	DSI 2	23230	782	1	21.68	23.00	1.355	-	-	0.07	0.000	0.000
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	23230	782	1	22.71	24.00	1.346	-	-	0.04	0.114	0.153
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	DSI 2	23230	782	1	21.68	23.00	1.355	-	-	0.07	0.073	0.099
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	23230	782	1	22.71	24.00	1.346	-	-	-0.11	0.059	0.079
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	DSI 2	23230	782	1	21.68	23.00	1.355	-	-	0.14	0.038	0.051
	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	23230	782	1	22.48	24.00	1.419	-	-	0.08	0.649	0.921
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	DSI 2	23230	782	1	21.54	23.00	1.400	-	-	-0.17	0.490	0.686
	LTE Band 13	10M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	23230	782	1	21.51	23.00	1.409	-	-	-0.03	0.478	0.674
02	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	23230	782	1	22.48	24.00	1.419	-	-	0.14	0.708	**1.005**
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	DSI 2	23230	782	1	21.54	23.00	1.400	-	-	0.11	0.554	0.775
	LTE Band 13	10M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	23230	782	1	21.51	23.00	1.409	-	-	-0.05	0.511	0.720
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	23230	782	1	22.48	24.00	1.419	-	-	0.18	0.296	0.420
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	DSI 2	23230	782	1	21.54	23.00	1.400	-	-	0.14	0.220	0.308
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	23230	782	1	22.48	24.00	1.419	-	-	-0.17	0.318	0.451
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	DSI 2	23230	782	1	21.54	23.00	1.400	-	-	0.02	0.241	0.337
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	136100	680.5	1	22.57	24.00	1.390	-	-	0.15	0.048	0.067
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	136100	680.5	1	22.55	24.00	1.396	-	-	0.15	0.045	0.063
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	136100	680.5	1	22.57	24.00	1.390	-	-	-0.1	0.000	0.000
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	136100	680.5	1	22.55	24.00	1.396	-	-	-0.14	0.000	0.000
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	136100	680.5	1	22.57	24.00	1.390	-	-	0.07	0.073	0.101
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	136100	680.5	1	22.55	24.00	1.396	-	-	-0.03	0.067	0.094
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	136100	680.5	1	22.57	24.00	1.390	-	-	0.06	0.000	0.000
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	136100	680.5	1	22.55	24.00	1.396	-	-	-0.18	0.000	0.000
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	136100	680.5	1	22.54	24.00	1.400	-	-	0.08	0.420	0.588
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	136100	680.5	1	22.49	24.00	1.416	-	-	0.03	0.331	0.469
03	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	136100	680.5	1	22.54	24.00	1.400	-	-	0.06	0.484	**0.677**
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	136100	680.5	1	22.49	24.00	1.416	-	-	0.07	0.365	0.517
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	136100	680.5	1	22.54	24.00	1.400	-	-	0.02	0.167	0.234

	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	136100	680.5	1	22.49	24.00	1.416	-	-	0.13	0.130	0.184
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	136100	680.5	1	22.54	24.00	1.400	-	-	0.18	0.196	0.274
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	136100	680.5	1	22.49	24.00	1.416	-	-	0.11	0.146	0.207
835MHz																					
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 0	DSI 2	189	836.4	1	29.33	30.00	1.167	-	-	0.04	0.081	0.095
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 0	DSI 2	189	836.4	1	29.33	30.00	1.167	-	-	0.02	0.048	0.056
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 0	DSI 2	189	836.4	1	29.33	30.00	1.167	-	-	0.05	0.145	0.169
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant 0	DSI 2	189	836.4	1	29.33	30.00	1.167	-	-	0.02	0.076	0.089
04	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 1	DSI 2	251	848.8	1	27.48	28.50	1.265	-	-	0.03	0.943	**1.193**
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 1	DSI 2	128	824.2	1	26.55	28.50	1.567	-	-	0.05	0.489	0.766
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 1	DSI 2	189	836.4	1	27.08	28.50	1.387	-	-	0.09	0.607	0.842
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 1	DSI 2	251	848.8	1	27.48	28.50	1.265	-	-	-0.15	0.796	1.007
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 1	DSI 2	128	824.2	1	26.55	28.50	1.567	-	-	0.02	0.523	0.819
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 1	DSI 2	189	836.4	1	27.08	28.50	1.387	-	-	-0.08	0.636	0.882
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 1	DSI 2	251	848.8	1	27.48	28.50	1.265	-	-	-0.18	0.185	0.234
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant 1	DSI 2	251	848.8	1	27.48	28.50	1.265	-	-	-0.1	0.196	0.248
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 2	4182	836.4	1	22.64	24.00	1.368	-	-	0.01	0.079	0.108
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 2	4182	836.4	1	22.64	24.00	1.368	-	-	0.06	0.048	0.066
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 2	4182	836.4	1	22.64	24.00	1.368	-	-	-0.12	0.142	0.194
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 2	4182	836.4	1	22.64	24.00	1.368	-	-	0.03	0.075	0.103
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 2	4182	836.4	1	22.71	24.00	1.346	-	-	-0.16	0.888	1.195
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 2	4132	826.4	1	22.64	24.00	1.368	-	-	0.06	0.851	1.164
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 2	4233	846.6	1	22.65	24.00	1.365	-	-	-0.02	0.843	1.150
05	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 2	4182	836.4	1	22.71	24.00	1.346	-	-	0.05	0.929	**1.250**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 2	4132	826.4	1	22.64	24.00	1.368	-	-	0.06	0.864	1.182
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 2	4233	846.6	1	22.65	24.00	1.365	-	-	-0.05	0.875	1.194
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 2	4182	836.4	1	22.71	24.00	1.346	-	-	0.02	0.413	0.556
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	DSI 2	4182	836.4	1	22.71	24.00	1.346	-	-	-0.02	0.408	0.549
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	22.49	24.00	1.416	-	-	0.06	0.114	0.161
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	21.57	23.00	1.390	-	-	-0.17	0.067	0.093
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	22.49	24.00	1.416	-	-	0.02	0.060	0.085
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	21.57	23.00	1.390	-	-	0.03	0.000	0.000
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	22.49	24.00	1.416	-	-	0.05	**0.193**	0.273
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	DSI 2	26865	831.5	1	21.57	23.00	1.390	-	-	0.04	0.111	0.154
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	22.49	24.00	1.416	-	-	-0.15	0.084	0.119
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	DSI 2	26865	831.5	1	21.57	23.00	1.390	-	-	0.03	0.047	0.065
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	26865	831.5	1	22.54	23.50	1.247	-	-	0.08	0.990	1.235
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 1	DSI 2	26865	831.5	1	21.62	23.00	1.374	-	-	0.14	0.768	1.055
	LTE Band 26	15M	QPSK	75	0	-	Right Cheek	0mm	Ant 1	DSI 2	26865	831.5	1	21.55	23.00	1.396	-	-	0.06	0.766	1.070
06	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	26865	831.5	1	22.54	23.50	1.247	-	-	0.17	1.020	**1.272**
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 1	DSI 2	26865	831.5	1	21.62	23.00	1.374	-	-	0.07	0.818	1.124
	LTE Band 26	15M	QPSK	75	0	-	Right Tilted	0mm	Ant 1	DSI 2	26865	831.5	1	21.55	23.00	1.396	-	-	0.04	0.818	1.142
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	26865	831.5	1	22.54	23.50	1.247	-	-	-0.1	0.443	0.553
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 1	DSI 2	26865	831.5	1	21.62	23.00	1.374	-	-	0.03	0.344	0.473
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	26865	831.5	1	22.54	23.50	1.247	-	-	0.06	0.457	0.570
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 1	DSI 2	26865	831.5	1	21.62	23.00	1.374	-	-	-0.08	0.356	0.489
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	166300	831.5	1	22.68	24.00	1.355	-	-	-0.1	0.060	0.081
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 2	166300	831.5	1	22.64	24.00	1.368	-	-	0.15	0.063	0.086
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	166300	831.5	1	22.68	24.00	1.355	-	-	-0.08	0.000	0.000
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 2	166300	831.5	1	22.64	24.00	1.368	-	-	0.04	0.000	0.000
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	166300	831.5	1	22.68	24.00	1.355	-	-	0.08	0.102	0.138
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 2	166300	831.5	1	22.64	24.00	1.368	-	-	0.03	0.105	0.144
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	166300	831.5	1	22.68	24.00	1.355	-	-	-0.02	0.056	0.076
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 2	166300	831.5	1	22.64	24.00	1.368	-	-	0.06	0.056	0.077
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	166300	831.5	1	22.50	24.00	1.413	-	-	-0.08	0.721	1.018
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	166300	831.5	1	22.49	24.00	1.416	-	-	-0.16	0.733	1.038

	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	166300	831.5	1	21.59	23.00	1.384	-	-	0.04	0.546	0.755
07	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	166300	831.5	1	22.50	24.00	1.413	-	-	0.03	0.781	**1.103**
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	166300	831.5	1	22.49	24.00	1.416	-	-	-0.02	0.750	1.062
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	166300	831.5	1	21.59	23.00	1.384	-	-	0.09	0.604	0.836
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	166300	831.5	1	22.50	24.00	1.413	-	-	-0.08	0.333	0.470
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	166300	831.5	1	22.49	24.00	1.416	-	-	-0.03	0.336	0.476
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	166300	831.5	1	22.50	24.00	1.413	-	-	0.09	0.356	0.503
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	166300	831.5	1	22.49	24.00	1.416	-	-	-0.11	0.363	0.514
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 2	1413	1732.6	1	22.51	24.00	1.409	-	-	0.13	0.131	0.185
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	DSI 2	1413	1732.6	1	22.51	24.00	1.409	-	-	0.06	0.070	0.099
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	DSI 2	1413	1732.6	1	22.51	24.00	1.409	-	-	-0.13	0.129	0.182
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 2	DSI 2	1413	1732.6	1	22.51	24.00	1.409	-	-	-0.12	0.075	0.106
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 2	1413	1732.6	1	17.47	18.50	1.268	-	-	0.17	0.999	1.266
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 2	1312	1712.4	1	17.38	18.50	1.294	-	-	0.06	0.972	1.258
08	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 2	1513	1752.6	1	17.45	18.50	1.274	-	-	-0.05	1.010	**1.286**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 2	1413	1732.6	1	17.47	18.50	1.268	-	-	0.08	0.929	1.178
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 2	1312	1712.4	1	17.38	18.50	1.294	-	-	0.08	0.886	1.147
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 2	1513	1752.6	1	17.45	18.50	1.274	-	-	0.06	0.940	1.197
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 2	1413	1732.6	1	17.47	18.50	1.268	-	-	0.1	0.351	0.445
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	DSI 2	1413	1732.6	1	17.47	18.50	1.268	-	-	0.09	0.404	0.512
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 2	132322	1745	1	22.54	24.00	1.400	-	-	0.02	0.199	0.279
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 2	132322	1745	1	21.54	23.00	1.400	-	-	0.04	0.128	0.179
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 2	132322	1745	1	22.54	24.00	1.400	-	-	0.18	0.105	0.147
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 2	132322	1745	1	21.54	23.00	1.400	-	-	-0.16	0.071	0.099
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 2	132322	1745	1	22.54	24.00	1.400	-	-	0.02	0.135	0.189
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 2	132322	1745	1	21.54	23.00	1.400	-	-	-0.13	0.085	0.119
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	132322	1745	1	22.54	24.00	1.400	-	-	0.08	0.094	0.132
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 2	132322	1745	1	21.54	23.00	1.400	-	-	0.01	0.061	0.085
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	132322	1745	1	17.17	18.20	1.268	-	-	-0.03	0.861	1.091
09	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	132072	1720	1	17.16	18.20	1.271	-	-	-0.06	1.020	**1.296**
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	132572	1770	1	17.13	18.20	1.279	-	-	-0.03	0.969	1.240
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	132322	1745	1	17.15	18.20	1.274	-	-	0.07	0.818	1.042
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	132072	1720	1	17.09	18.20	1.291	-	-	-0.12	0.875	1.130
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	132572	1770	1	17.08	18.20	1.294	-	-	0.08	0.843	1.091
	LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 2	132322	1745	1	17.14	18.20	1.276	-	-	-0.1	0.714	0.911
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	132322	1745	1	17.17	18.20	1.268	-	-	0.08	0.786	0.996
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	132072	1720	1	17.16	18.20	1.271	-	-	0.06	0.888	1.128
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	132572	1770	1	17.13	18.20	1.279	-	-	0.08	0.884	1.131
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	132322	1745	1	17.15	18.20	1.274	-	-	0.07	0.839	1.068
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	132072	1720	1	17.09	18.20	1.291	-	-	-0.07	0.784	1.012
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	132572	1770	1	17.08	18.20	1.294	-	-	-0.1	0.777	1.006
	LTE Band 66	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	DSI 2	132322	1745	1	17.14	18.20	1.276	-	-	-0.11	0.657	0.839
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	132322	1745	1	17.17	18.20	1.268	-	-	0.02	0.316	0.401
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	132322	1745	1	17.15	18.20	1.274	-	-	-0.1	0.270	0.344
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	132322	1745	1	17.17	18.20	1.268	-	-	0.16	0.342	0.434
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	132322	1745	1	17.15	18.20	1.274	-	-	0.08	0.285	0.363
	LTE Band 66_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	132072	1720	1	16.77	18.20	1.390	-	-	0.05	0.667	0.927
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 2	349000	1745	1	22.66	24.00	1.361	-	-	0.09	0.139	0.189
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 2	349000	1745	1	22.58	24.00	1.387	-	-	0.09	0.119	0.165
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 2	349000	1745	1	22.66	24.00	1.361	-	-	-0.1	0.067	0.091
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 2	349000	1745	1	22.58	24.00	1.387	-	-	-0.16	0.056	0.078
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 2	349000	1745	1	22.66	24.00	1.361	-	-	-0.05	0.127	0.173
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 2	349000	1745	1	22.58	24.00	1.387	-	-	0.07	0.113	0.157
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 2	349000	1745	1	22.66	24.00	1.361	-	-	-0.11	0.081	0.110
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 2	349000	1745	1	22.58	24.00	1.387	-	-	0.15	0.057	0.079

	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	349000	1745	1	19.21	20.10	1.227	-	-	0.07	0.877	1.076
10	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	349000	1745	1	19.18	20.10	1.236	-	-	0.04	1.040	**1.285**
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	349000	1745	1	19.16	20.10	1.242	-	-	0.06	0.880	1.093
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	349000	1745	1	19.21	20.10	1.227	-	-	0.18	0.790	0.970
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	349000	1745	1	19.18	20.10	1.236	-	-	0.06	0.947	1.170
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	349000	1745	1	19.16	20.10	1.242	-	-	-0.02	0.930	1.155
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	349000	1745	1	19.21	20.10	1.227	-	-	-0.06	0.324	0.398
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	349000	1745	1	19.18	20.10	1.236	-	-	0.04	0.385	0.476
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	349000	1745	1	19.21	20.10	1.227	-	-	0.04	0.352	0.432
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	349000	1745	1	19.18	20.10	1.236	-	-	-0.01	0.432	0.534
1900MHz																					
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 2	DSI 2	661	1880	1	26.19	27.00	1.205	-	-	0.19	0.058	0.070
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 2	DSI 2	661	1880	1	26.19	27.00	1.205	-	-	-0.18	0.000	0.000
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 2	DSI 2	661	1880	1	26.19	27.00	1.205	-	-	0.11	0.000	0.000
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant 2	DSI 2	661	1880	1	26.19	27.00	1.205	-	-	0.02	0.000	0.000
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 1	DSI 2	661	1880	1	24.26	25.00	1.186	-	-	0.02	0.968	1.148
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 1	DSI 2	512	1850.2	1	23.14	25.00	1.535	-	-	0.02	0.789	1.211
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 1	DSI 2	810	1909.8	1	24.16	25.00	1.213	-	-	0.04	1.030	1.250
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 1	DSI 2	661	1880	1	24.26	25.00	1.186	-	-	0.13	0.940	1.115
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 1	DSI 2	512	1850.2	1	23.14	25.00	1.535	-	-	0.05	0.786	1.206
11	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 1	DSI 2	810	1909.8	1	24.16	25.00	1.213	-	-	0.06	1.060	**1.286**
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 1	DSI 2	661	1880	1	24.26	25.00	1.186	-	-	-0.01	0.364	0.432
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant 1	DSI 2	661	1880	1	24.26	25.00	1.186	-	-	-0.14	0.561	0.665
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 2	9400	1880	1	22.45	24.00	1.429	-	-	0.03	0.142	0.203
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	DSI 2	9400	1880	1	22.45	24.00	1.429	-	-	0.06	0.059	0.084
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	DSI 2	9400	1880	1	22.45	24.00	1.429	-	-	0.06	0.074	0.106
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 2	DSI 2	9400	1880	1	22.45	24.00	1.429	-	-	0.16	0.055	0.079
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 2	9400	1880	1	16.74	18.00	1.337	-	-	-0.16	0.874	1.168
12	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 2	9262	1852.4	1	16.66	18.00	1.361	-	-	0.01	0.957	**1.303**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 2	9538	1907.6	1	16.68	18.00	1.355	-	-	0.09	0.790	1.071
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 2	9400	1880	1	16.74	18.00	1.337	-	-	0.13	0.864	1.155
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 2	9262	1852.4	1	16.66	18.00	1.361	-	-	0.08	0.913	1.243
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 2	9538	1907.6	1	16.68	18.00	1.355	-	-	0.06	0.824	1.117
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 2	9400	1880	1	16.74	18.00	1.337	-	-	-0.14	0.334	0.446
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	DSI 2	9400	1880	1	16.74	18.00	1.337	-	-	0.13	0.443	0.592
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 2	26340	1880	1	22.49	24.00	1.416	-	-	-0.14	0.186	0.263
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 2	26340	1880	1	21.48	23.00	1.419	-	-	-0.1	0.113	0.160
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 2	26340	1880	1	22.49	24.00	1.416	-	-	0.06	0.080	0.113
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 2	26340	1880	1	21.48	23.00	1.419	-	-	0.07	0.053	0.075
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 2	26340	1880	1	22.49	24.00	1.416	-	-	-0.12	0.138	0.195
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 2	26340	1880	1	21.48	23.00	1.419	-	-	0.03	0.087	0.123
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	26340	1880	1	22.49	24.00	1.416	-	-	0.03	0.088	0.125
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 2	26340	1880	1	21.48	23.00	1.419	-	-	0.07	0.056	0.079
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	26340	1880	1	16.68	17.40	1.180	-	-	0.03	1.060	1.251
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	26140	1860	1	16.65	17.40	1.189	-	-	0.16	1.070	1.272
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	26590	1905	1	16.61	17.40	1.199	-	-	0.11	0.989	1.186
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	26340	1880	1	16.65	17.40	1.189	-	-	0.01	0.812	0.965
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	26140	1860	1	16.59	17.40	1.205	-	-	0.04	0.864	1.041
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	26590	1905	1	16.61	17.40	1.199	-	-	-0.01	0.766	0.919
	LTE Band 25	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 2	26340	1880	1	16.62	17.40	1.197	-	-	0.03	0.805	0.963
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	26340	1880	1	16.68	17.40	1.180	-	-	0.08	1.030	1.216
13	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	26140	1860	1	16.65	17.40	1.189	-	-	0.07	1.080	**1.284**
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	26590	1905	1	16.61	17.40	1.199	-	-	0.15	1.040	1.247
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	26340	1880	1	16.65	17.40	1.189	-	-	0.13	0.832	0.989
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	26140	1860	1	16.59	17.40	1.205	-	-	0.03	0.883	1.064
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	26590	1905	1	16.61	17.40	1.199	-	-	0.03	0.799	0.958

	LTE Band 25	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	DSI 2	26340	1880	1	16.62	17.40	1.197	-	-	-0.19	0.821	0.983
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	26340	1880	1	16.68	17.40	1.180	-	-	0.02	0.417	0.492
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	26340	1880	1	16.65	17.40	1.189	-	-	-0.19	0.332	0.395
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	26340	1880	1	16.68	17.40	1.180	-	-	0.07	0.619	0.731
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	26340	1880	1	16.65	17.40	1.189	-	-	-0.07	0.492	0.585
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	18900	1880	1	16.61	17.40	1.199	-	-	-0.02	0.589	0.707
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 2	376000	1880	1	22.55	24.00	1.396	-	-	0.03	0.108	0.151
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 2	376000	1880	1	22.51	24.00	1.409	-	-	0.1	0.089	0.125
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 2	376000	1880	1	22.55	24.00	1.396	-	-	-0.14	0.046	0.064
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 2	376000	1880	1	22.51	24.00	1.409	-	-	0.01	0.043	0.061
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 2	376000	1880	1	22.55	24.00	1.396	-	-	0.04	0.051	0.071
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 2	376000	1880	1	22.51	24.00	1.409	-	-	-0.01	0.053	0.075
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 2	376000	1880	1	22.55	24.00	1.396	-	-	0.07	0.041	0.057
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 2	376000	1880	1	22.51	24.00	1.409	-	-	0.06	0.000	0.000
14	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	376000	1880	1	17.25	18.50	1.334	-	-	0.01	0.954	**1.272**
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	374000	1870	1	17.23	18.50	1.340	-	-	0.13	0.885	1.186
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	378000	1890	1	17.21	18.50	1.346	-	-	-0.16	0.925	1.245
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	376000	1880	1	17.24	18.50	1.337	-	-	0.16	0.885	1.183
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	374000	1870	1	17.18	18.50	1.355	-	-	-0.03	0.878	1.190
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	378000	1890	1	17.16	18.50	1.361	-	-	0.06	0.903	1.229
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	376000	1880	1	17.22	18.50	1.343	-	-	0.04	0.945	1.269
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	376000	1880	1	17.25	18.50	1.334	-	-	-0.04	0.907	1.210
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	374000	1870	1	17.23	18.50	1.340	-	-	-0.06	0.907	1.215
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	378000	1890	1	17.21	18.50	1.346	-	-	-0.1	0.939	1.264
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	376000	1880	1	17.24	18.50	1.337	-	-	0.02	0.929	1.242
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	374000	1870	1	17.18	18.50	1.355	-	-	0.18	0.927	1.256
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	378000	1890	1	17.16	18.50	1.361	-	-	0.14	0.900	1.225
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	376000	1880	1	17.22	18.50	1.343	-	-	0.19	0.929	1.247
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	376000	1880	1	17.25	18.50	1.334	-	-	0.1	0.366	0.488
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	376000	1880	1	17.24	18.50	1.337	-	-	0.06	0.352	0.470
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	376000	1880	1	17.25	18.50	1.334	-	-	0.09	0.522	0.696
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	376000	1880	1	17.24	18.50	1.337	-	-	0.1	0.511	0.683
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 2	21100	2535	1	22.65	24.00	1.365	-	-	0.03	0.143	0.195
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 2	21100	2535	1	21.58	23.00	1.387	-	-	0.08	0.089	0.123
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 2	21100	2535	1	22.65	24.00	1.365	-	-	0.07	0.054	0.074
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 2	21100	2535	1	21.58	23.00	1.387	-	-	-0.1	0.000	0.000
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 2	21100	2535	1	22.65	24.00	1.365	-	-	-0.14	0.219	0.299
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 2	21100	2535	1	21.58	23.00	1.387	-	-	0.08	0.142	0.197
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	21100	2535	1	22.65	24.00	1.365	-	-	0.05	0.105	0.143
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 2	21100	2535	1	21.58	23.00	1.387	-	-	-0.11	0.061	0.085
	LTE Band 7_UL CA	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 2	DSI 2	21100+ 21298	2535+ 2554.8	1	22.55	24.00	1.396	-	-	0.03	0.204	0.285
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.28	18.40	1.294	-	-	-0.1	0.792	1.025
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	20850	2510	1	17.22	18.40	1.312	-	-	0.05	0.749	0.983
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	21350	2560	1	17.25	18.40	1.303	-	-	-0.01	0.808	1.053
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.27	18.40	1.297	-	-	-0.07	0.678	0.879
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	20850	2510	1	17.22	18.40	1.312	-	-	0.02	0.649	0.852
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	21350	2560	1	17.16	18.40	1.330	-	-	-0.02	0.688	0.915
	LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.25	18.40	1.303	-	-	-0.03	0.674	0.878
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.28	18.40	1.294	-	-	-0.14	0.978	1.266
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	20850	2510	1	17.22	18.40	1.312	-	-	-0.1	0.921	1.209
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	21350	2560	1	17.25	18.40	1.303	-	-	0.02	0.994	1.295
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.27	18.40	1.297	-	-	0.03	0.649	0.842
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	20850	2510	1	17.22	18.40	1.312	-	-	-0.19	0.603	0.791
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	21350	2560	1	17.16	18.40	1.330	-	-	0.03	0.673	0.895
	LTE Band 7	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.25	18.40	1.303	-	-	-0.17	0.652	0.850

	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.28	18.40	1.294	-	-	-0.14	0.652	0.844
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	20850	2510	1	17.22	18.40	1.312	-	-	-0.05	0.593	0.778
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	21350	2560	1	17.25	18.40	1.303	-	-	0.03	0.665	0.867
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.27	18.40	1.297	-	-	0.03	0.652	0.846
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	20850	2510	1	17.22	18.40	1.312	-	-	0.02	0.641	0.841
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	21350	2560	1	17.16	18.40	1.330	-	-	-0.07	0.625	0.832
	LTE Band 7	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 1	DSI 2	21100	2535	1	17.25	18.40	1.303	-	-	0.09	0.642	0.837
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.28	18.40	1.294	-	-	0.03	0.835	1.081
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	20850	2510	1	17.22	18.40	1.312	-	-	0.02	0.781	1.025
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	21350	2560	1	17.25	18.40	1.303	-	-	0.08	0.824	1.074
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.27	18.40	1.297	-	-	0.09	0.706	0.916
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	20850	2510	1	17.22	18.40	1.312	-	-	-0.04	0.711	0.933
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	21350	2560	1	17.16	18.40	1.330	-	-	0.07	0.724	0.963
	LTE Band 7	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 1	DSI 2	21100	2535	1	17.25	18.40	1.303	-	-	0.02	0.695	0.906
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	21350	2560	1	17.14	18.40	1.337	-	-	0.03	0.676	0.904
	LTE Band 7_UL CA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	21350+ 21152	2560+ 2540.2	1	17.19	18.40	1.321	-	-	0.02	0.905	1.196
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	21100	2535	1	22.59	24.00	1.384	-	-	0.05	0.099	0.137
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 2	21100	2535	1	21.62	23.00	1.374	-	-	0.04	0.059	0.081
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	21100	2535	1	22.59	24.00	1.384	-	-	0.13	0.071	0.098
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 2	21100	2535	1	21.62	23.00	1.374	-	-	-0.04	0.048	0.066
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	21100	2535	1	22.59	24.00	1.384	-	-	-0.1	0.137	0.190
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 2	21100	2535	1	21.62	23.00	1.374	-	-	0.06	0.084	0.115
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	21100	2535	1	22.59	24.00	1.384	-	-	0.11	0.047	0.065
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 2	21100	2535	1	21.62	23.00	1.374	-	-	0.02	0.000	0.000
	LTE Band 7_UL CA	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 0	DSI 2	21100+ 21298	2535+ 2554.8	1	22.54	24.00	1.400	-	-	-0.1	0.125	0.175
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 2	21100	2535	1	18.08	19.20	1.294	-	-	0.06	0.415	0.537
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 2	21100	2535	1	18.07	19.20	1.297	-	-	0.05	0.361	0.468
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 2	21100	2535	1	18.08	19.20	1.294	-	-	-0.05	0.447	0.579
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 2	21100	2535	1	18.07	19.20	1.297	-	-	0.07	0.385	0.499
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	21100	2535	1	18.08	19.20	1.294	-	-	-0.11	0.992	1.284
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	20850	2510	1	18.05	19.20	1.303	-	-	0.02	0.907	1.182
15	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	21350	2560	1	18.06	19.20	1.300	-	-	0.04	0.997	**1.296**
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 2	21100	2535	1	18.07	19.20	1.297	-	-	-0.18	0.843	1.094
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 2	20850	2510	1	18.02	19.20	1.312	-	-	-0.06	0.846	1.110
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 2	21350	2560	1	18.04	19.20	1.306	-	-	0.02	0.861	1.125
	LTE Band 7	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 3	DSI 2	21100	2535	1	18.06	19.20	1.300	-	-	0.06	0.833	1.083
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 2	21100	2535	1	18.08	19.20	1.294	-	-	0.05	0.785	1.016
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 2	20850	2510	1	18.05	19.20	1.303	-	-	0.18	0.713	0.929
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 2	21350	2560	1	18.06	19.20	1.300	-	-	0.03	0.799	1.039
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 2	21100	2535	1	18.07	19.20	1.297	-	-	0.04	0.662	0.859
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 2	20850	2510	1	18.02	19.20	1.312	-	-	0.01	0.673	0.883
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 2	21350	2560	1	18.04	19.20	1.306	-	-	-0.05	0.659	0.861
	LTE Band 7	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 3	DSI 2	21100	2535	1	18.06	19.20	1.300	-	-	0.05	0.663	0.862
	LTE Band 7_UL CA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	21350+ 21152	2560+ 2540.2	1	18.03	19.20	1.309	-	-	0.03	0.912	1.194
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 2	40620	2593	1	22.71	24.00	1.346	62.9	1.006	0.04	0.092	0.125
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 2	40620	2593	1	21.68	23.00	1.355	62.9	1.006	0.05	0.062	0.085
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 2	40620	2593	1	22.71	24.00	1.346	62.9	1.006	0.03	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 2	40620	2593	1	21.68	23.00	1.355	62.9	1.006	0.06	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 2	40620	2593	1	22.71	24.00	1.346	62.9	1.006	0.15	0.162	0.219
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 2	40620	2593	1	21.68	23.00	1.355	62.9	1.006	0.04	0.104	0.142
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 2	40620	2593	1	22.71	24.00	1.346	62.9	1.006	-0.11	0.063	0.085
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 2	40620	2593	1	21.68	23.00	1.355	62.9	1.006	-0.09	0.000	0.000
	LTE Band 41 PC2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 2	40620	2593	1	25.62	27.00	1.374	42.9	1.009	0.02	0.219	0.304
	LTE Band 41_UL CA	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 2	DSI 2	40620+ 40818	2593+ 2612.8	1	22.58	24.00	1.387	62.9	1.006	0.02	0.154	0.215
	LTE Band 41 PC2_UL CA	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 2	DSI 2	40620+ 40818	2593+ 2612.8	1	25.58	27.00	1.387	42.9	1.009	-0.06	0.201	0.281

	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	40620	2593	1	18.77	20.00	1.327	62.9	1.006	0.09	0.774	1.034
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	39750	2506	1	18.72	20.00	1.343	62.9	1.006	-0.17	0.669	0.904
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	40185	2549.5	1	18.68	20.00	1.355	62.9	1.006	0.04	0.790	1.077
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	41055	2636.5	1	18.72	20.00	1.343	62.9	1.006	-0.15	0.794	1.073
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 2	41490	2680	1	18.74	20.00	1.337	62.9	1.006	-0.17	0.810	1.089
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	40620	2593	1	18.75	20.00	1.334	62.9	1.006	0.08	0.665	0.892
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	39750	2506	1	18.70	20.00	1.349	62.9	1.006	0.05	0.590	0.801
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	40185	2549.5	1	18.71	20.00	1.346	62.9	1.006	0.06	0.688	0.932
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	41055	2636.5	1	18.68	20.00	1.355	62.9	1.006	0.03	0.664	0.905
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 2	41490	2680	1	18.69	20.00	1.352	62.9	1.006	0.08	0.702	0.955
	LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 2	40620	2593	1	18.73	20.00	1.340	62.9	1.006	-0.04	0.674	0.908
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	40620	2593	1	18.77	20.00	1.327	62.9	1.006	-0.16	0.967	1.291
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	39750	2506	1	18.72	20.00	1.343	62.9	1.006	0.13	0.866	1.170
16	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	40185	2549.5	1	18.68	20.00	1.355	62.9	1.006	-0.02	0.979	**1.335**
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	40185	2549.5	2	18.68	20.00	1.355	62.9	1.006	0.08	0.884	1.205
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	41055	2636.5	1	18.72	20.00	1.343	62.9	1.006	0.11	0.955	1.290
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	41490	2680	1	18.74	20.00	1.337	62.9	1.006	0.13	0.959	1.289
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	40620	2593	1	18.75	20.00	1.334	62.9	1.006	0.07	0.826	1.108
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	39750	2506	1	18.70	20.00	1.349	62.9	1.006	0.08	0.755	1.025
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	40185	2549.5	1	18.71	20.00	1.346	62.9	1.006	-0.07	0.862	1.167
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	41055	2636.5	1	18.68	20.00	1.355	62.9	1.006	-0.09	0.818	1.115
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 2	41490	2680	1	18.69	20.00	1.352	62.9	1.006	0.13	0.849	1.155
	LTE Band 41	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	DSI 2	40620	2593	1	18.73	20.00	1.340	62.9	1.006	-0.14	0.836	1.127
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	40620	2593	1	18.77	20.00	1.327	62.9	1.006	0.16	0.624	0.833
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	39750	2506	1	18.72	20.00	1.343	62.9	1.006	-0.03	0.552	0.746
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	40185	2549.5	1	18.68	20.00	1.355	62.9	1.006	0.13	0.653	0.890
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	41055	2636.5	1	18.72	20.00	1.343	62.9	1.006	0.19	0.592	0.800
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 2	41490	2680	1	18.74	20.00	1.337	62.9	1.006	0.02	0.608	0.818
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	40620	2593	1	18.75	20.00	1.334	62.9	1.006	0.01	0.534	0.716
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	39750	2506	1	18.70	20.00	1.349	62.9	1.006	-0.02	0.512	0.695
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	40185	2549.5	1	18.71	20.00	1.346	62.9	1.006	0.05	0.511	0.692
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	41055	2636.5	1	18.68	20.00	1.355	62.9	1.006	-0.01	0.592	0.807
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 2	41490	2680	1	18.69	20.00	1.352	62.9	1.006	0.07	0.517	0.703
	LTE Band 41	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 1	DSI 2	40620	2593	1	18.73	20.00	1.340	62.9	1.006	0.05	0.530	0.714
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	40620	2593	1	18.77	20.00	1.327	62.9	1.006	0.01	0.761	1.016
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	39750	2506	1	18.72	20.00	1.343	62.9	1.006	0.09	0.745	1.006
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	40185	2549.5	1	18.68	20.00	1.355	62.9	1.006	0.08	0.818	1.115
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	41055	2636.5	1	18.72	20.00	1.343	62.9	1.006	0.06	0.749	1.012
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 2	41490	2680	1	18.74	20.00	1.337	62.9	1.006	0.06	0.745	1.002
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	40620	2593	1	18.75	20.00	1.334	62.9	1.006	-0.18	0.660	0.885
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	39750	2506	1	18.70	20.00	1.349	62.9	1.006	0.12	0.639	0.867
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	40185	2549.5	1	18.71	20.00	1.346	62.9	1.006	-0.16	0.709	0.960
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	41055	2636.5	1	18.68	20.00	1.355	62.9	1.006	0.1	0.637	0.868
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 2	41490	2680	1	18.69	20.00	1.352	62.9	1.006	0.05	0.646	0.879
	LTE Band 41	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 1	DSI 2	40620	2593	1	18.73	20.00	1.340	62.9	1.006	-0.03	0.651	0.877
	LTE Band 41 PC2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	40185	2549.5	1	20.41	21.60	1.315	42.9	1.009	0.1	0.951	1.262
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	40185	2549.5	1	18.07	20.00	1.560	62.9	1.006	0.03	0.552	0.866
	LTE Band 41 PC2_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 2	40185	2549.5	1	19.66	21.60	1.563	42.9	1.009	-0.05	0.541	0.853
	LTE Band 41_UL CA	20M	QPSK	1	99	-	Right Tilted	0mm	Ant 1	DSI 2	40185+40383	2549.5+2569.3	1	18.61	20.00	1.377	62.9	1.006	-0.02	0.857	1.187
	LTE Band 41 PC2_UL CA	20M	QPSK	1	99	-	Right Tilted	0mm	Ant 1	DSI 2	40185+40383	2549.5+2569.3	1	20.38	21.60	1.324	42.9	1.009	0.1	0.847	1.132
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 2	40620	2593	1	22.53	24.00	1.403	62.9	1.006	0.12	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	DSI 2	40620	2593	1	21.59	23.00	1.384	62.9	1.006	0.09	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 2	40620	2593	1	22.53	24.00	1.403	62.9	1.006	0.1	0.036	0.051
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	DSI 2	40620	2593	1	21.59	23.00	1.384	62.9	1.006	0.14	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	40620	2593	1	22.53	24.00	1.403	62.9	1.006	0.03	0.050	0.071
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	DSI 2	40620	2593	1	21.59	23.00	1.384	62.9	1.006	0.14	0.000	0.000

	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 2	40620	2593	1	22.53	24.00	1.403	62.9	1.006	0.08	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	DSI 2	40620	2593	1	21.59	23.00	1.384	62.9	1.006	-0.08	0.000	0.000
	LTE Band 41 PC2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 2	40620	2593	1	25.46	27.00	1.426	42.9	1.009	-0.02	**0.067**	0.096
	LTE Band 41_UL CA	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 0	DSI 2	40620+ 40818	2593+ 2612.8	1	22.49	24.00	1.416	62.9	1.006	0.03	0.042	0.060
	LTE Band 41 PC2_UL CA	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 0	DSI 2	40620+ 40818	2593+ 2612.8	1	25.42	27.00	1.439	42.9	1.009	-0.02	0.056	0.081
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 2	40620	2593	1	19.02	19.90	1.225	62.9	1.006	0.04	0.527	0.649
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 2	39750	2506	1	18.94	19.90	1.247	62.9	1.006	-0.06	0.322	0.404
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 2	40185	2549.5	1	18.99	19.90	1.233	62.9	1.006	0.03	0.346	0.429
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 2	41055	2636.5	1	18.93	19.90	1.250	62.9	1.006	-0.12	0.609	0.766
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 2	41490	2680	1	18.92	19.90	1.253	62.9	1.006	-0.03	0.609	0.768
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 2	40620	2593	1	19.01	19.90	1.227	62.9	1.006	0.11	0.457	0.564
	LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 3	DSI 2	40620	2593	1	18.98	19.90	1.236	62.9	1.006	0.03	0.472	0.587
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 2	40620	2593	1	19.02	19.90	1.225	62.9	1.006	0.01	0.505	0.622
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 2	39750	2506	1	18.94	19.90	1.247	62.9	1.006	0.05	0.430	0.540
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 2	40185	2549.5	1	18.99	19.90	1.233	62.9	1.006	0.02	0.394	0.489
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 2	41055	2636.5	1	18.93	19.90	1.250	62.9	1.006	0.04	0.678	0.853
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 2	41490	2680	1	18.92	19.90	1.253	62.9	1.006	-0.17	0.695	0.876
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 2	40620	2593	1	19.01	19.90	1.227	62.9	1.006	0.07	0.479	0.591
	LTE Band 41	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 3	DSI 2	40620	2593	1	18.98	19.90	1.236	62.9	1.006	0.16	0.453	0.563
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	40620	2593	1	19.02	19.90	1.225	62.9	1.006	-0.13	0.902	1.111
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	39750	2506	1	18.94	19.90	1.247	62.9	1.006	0.03	0.724	0.909
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	40185	2549.5	1	18.99	19.90	1.233	62.9	1.006	0.06	0.781	0.969
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	41055	2636.5	1	18.93	19.90	1.250	62.9	1.006	-0.01	1.040	1.308
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	41490	2680	1	18.92	19.90	1.253	62.9	1.006	0.09	0.983	1.239
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 2	40620	2593	1	19.01	19.90	1.227	62.9	1.006	0.05	0.724	0.894
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 2	39750	2506	1	18.87	19.90	1.268	62.9	1.006	0.04	0.606	0.773
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 2	40185	2549.5	1	18.97	19.90	1.239	62.9	1.006	0.04	0.618	0.770
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 2	41055	2636.5	1	18.98	19.90	1.236	62.9	1.006	0.08	0.822	1.022
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 2	41490	2680	1	18.95	19.90	1.245	62.9	1.006	0.15	0.777	0.973
	LTE Band 41	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 3	DSI 2	40620	2593	1	18.98	19.90	1.236	62.9	1.006	0.01	0.729	0.906
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 2	40620	2593	1	19.02	19.90	1.225	62.9	1.006	0.14	0.776	0.956
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 2	39750	2506	1	18.94	19.90	1.247	62.9	1.006	0.13	0.557	0.699
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 2	40185	2549.5	1	18.99	19.90	1.233	62.9	1.006	0.14	0.638	0.791
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 2	41055	2636.5	1	18.93	19.90	1.250	62.9	1.006	-0.09	0.925	1.163
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 2	41490	2680	1	18.92	19.90	1.253	62.9	1.006	0.17	0.902	1.137
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 2	40620	2593	1	19.01	19.90	1.227	62.9	1.006	0.07	0.638	0.788
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 2	39750	2506	1	18.87	19.90	1.268	62.9	1.006	0.14	0.457	0.583
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 2	40185	2549.5	1	18.97	19.90	1.239	62.9	1.006	0.04	0.507	0.632
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 2	41055	2636.5	1	18.98	19.90	1.236	62.9	1.006	0.01	0.736	0.915
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 2	41490	2680	1	18.95	19.90	1.245	62.9	1.006	-0.03	0.734	0.919
	LTE Band 41	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 3	DSI 2	40620	2593	1	18.98	19.90	1.236	62.9	1.006	0.13	0.627	0.780
	LTE Band 41 PC2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 2	41055	2636.5	1	20.65	21.50	1.216	42.9	1.009	0.07	0.983	1.206
	LTE Band 41_UL CA	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 3	DSI 2	41055+ 41253	2636.5+ 2656.3	1	18.49	19.90	1.384	62.9	1.006	-0.01	0.857	1.193
	LTE Band 41 PC2_UL CA	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 3	DSI 2	41055+ 41253	2636.5+ 2656.3	1	20.58	21.50	1.236	42.9	1.009	0.07	0.846	1.055
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 2	507000	2535	1	22.56	24.00	1.393	-	-	-0.18	0.129	0.180
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 2	507000	2535	1	22.52	24.00	1.406	-	-	0.03	0.143	0.201
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 2	507000	2535	1	22.56	24.00	1.393	-	-	0.06	0.066	0.092
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 2	507000	2535	1	22.52	24.00	1.406	-	-	0.14	0.070	0.098
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 2	507000	2535	1	22.56	24.00	1.393	-	-	0.01	0.156	0.217
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 2	507000	2535	1	22.52	24.00	1.406	-	-	0.07	0.157	0.221
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 2	507000	2535	1	22.56	24.00	1.393	-	-	0.09	0.062	0.086
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 2	507000	2535	1	22.52	24.00	1.406	-	-	0.06	0.081	0.114
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	507000	2535	1	17.75	18.60	1.216	-	-	0.17	0.846	1.029
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	507000	2535	1	17.74	18.60	1.219	-	-	-0.09	0.861	1.050
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 2	507000	2535	1	17.68	18.60	1.236	-	-	0.05	0.853	1.054

17	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	507000	2535	1	17.75	18.60	1.216	-	-	-0.01	1.060	**1.289**
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	507000	2535	1	17.74	18.60	1.219	-	-	-0.11	1.040	1.268
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 2	507000	2535	1	17.68	18.60	1.236	-	-	-0.05	1.000	1.236
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	507000	2535	1	17.75	18.60	1.216	-	-	-0.04	0.694	0.844
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	507000	2535	1	17.74	18.60	1.219	-	-	0.02	0.701	0.855
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 2	507000	2535	1	17.68	18.60	1.236	-	-	0.07	0.703	0.869
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	507000	2535	1	17.75	18.60	1.216	-	-	0.17	0.877	1.067
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	507000	2535	1	17.74	18.60	1.219	-	-	-0.06	0.869	1.059
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 2	507000	2535	1	17.68	18.60	1.236	-	-	-0.03	0.871	1.077
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	518598	2592.99	1	22.62	24.00	1.374	-	-	0.15	0.119	0.164
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 2	518598	2592.99	1	22.53	24.00	1.403	-	-	0.06	0.125	0.175
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	518598	2592.99	1	22.62	24.00	1.374	-	-	0.07	0.049	0.067
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 2	518598	2592.99	1	22.53	24.00	1.403	-	-	-0.14	0.046	0.065
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	518598	2592.99	1	22.62	24.00	1.374	-	-	0.02	0.142	0.195
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 2	518598	2592.99	1	22.53	24.00	1.403	-	-	0.07	0.121	0.170
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	518598	2592.99	1	22.62	24.00	1.374	-	-	0.11	0.072	0.099
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 2	518598	2592.99	1	22.53	24.00	1.403	-	-	0.03	0.077	0.108
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 2	518598	2592.99	1	17.39	18.30	1.233	-	-	0.09	0.861	1.062
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 2	518598	2592.99	1	17.37	18.30	1.239	-	-	0.03	0.955	1.183
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 2	518598	2592.99	1	17.32	18.30	1.253	-	-	-0.13	0.878	1.100
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 2	518598	2592.99	1	17.39	18.30	1.233	-	-	-0.05	1.030	1.270
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 2	518598	2592.99	1	17.37	18.30	1.239	-	-	-0.03	0.884	1.095
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 2	518598	2592.99	1	17.32	18.30	1.253	-	-	0.07	1.000	1.253
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 2	518598	2592.99	1	17.39	18.30	1.233	-	-	0.05	0.688	0.848
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 2	518598	2592.99	1	17.37	18.30	1.239	-	-	0.03	0.708	0.877
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 2	518598	2592.99	1	17.32	18.30	1.253	-	-	-0.14	0.713	0.893
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 2	518598	2592.99	1	17.39	18.30	1.233	-	-	-0.12	0.928	1.144
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 2	518598	2592.99	1	17.37	18.30	1.239	-	-	0.03	0.911	1.129
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 2	518598	2592.99	1	17.32	18.30	1.253	-	-	0.06	0.942	1.180
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 0	DSI 2	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.18	0.158	0.209
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 0	DSI 2	518598	2592.99	1	22.74	24.00	1.337	-	-	0.06	0.124	0.166
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 0	DSI 2	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.09	0.139	0.184
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 0	DSI 2	518598	2592.99	1	22.74	24.00	1.337	-	-	0.07	0.108	0.144
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 0	DSI 2	518598	2592.99	1	22.78	24.00	1.324	-	-	0.04	0.289	0.383
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 0	DSI 2	518598	2592.99	1	22.74	24.00	1.337	-	-	-0.14	0.201	0.269
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 0	DSI 2	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.08	0.100	0.132
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 0	DSI 2	518598	2592.99	1	22.74	24.00	1.337	-	-	-0.06	0.076	0.102
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 2	518598	2592.99	1	17.69	18.40	1.178	-	-	0.09	0.590	0.695
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 2	518598	2592.99	1	17.65	18.40	1.189	-	-	0.09	0.593	0.705
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 2	518598	2592.99	1	17.69	18.40	1.178	-	-	0.07	0.648	0.763
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 2	518598	2592.99	1	17.65	18.40	1.189	-	-	0.07	0.715	0.850
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 2	518598	2592.99	1	17.61	18.40	1.199	-	-	-0.09	0.680	0.816
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 2	518598	2592.99	1	17.69	18.40	1.178	-	-	0.09	0.842	0.992
18	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 2	518598	2592.99	1	17.65	18.40	1.189	-	-	0.04	1.080	**1.284**
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 2	518598	2592.99	1	17.61	18.40	1.199	-	-	0.18	0.957	1.148
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 2	518598	2592.99	1	17.69	18.40	1.178	-	-	-0.12	0.742	0.874
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 2	518598	2592.99	1	17.65	18.40	1.189	-	-	0.02	0.979	1.164
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 2	518598	2592.99	1	17.61	18.40	1.199	-	-	-0.15	0.872	1.046
3500MHz																					
19	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 2	42590	3500	1	19.71	21.00	1.346	62.9	1.006	0.08	0.966	**1.308**
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 2	42590	3500	2	19.71	21.00	1.346	62.9	1.006	-0.07	0.886	1.200
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 2	42190	3460	1	19.68	21.00	1.355	62.9	1.006	0.05	0.945	1.288
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 2	42990	3540	1	19.65	21.00	1.365	62.9	1.006	0.01	0.923	1.267
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 2	42590	3500	1	19.68	21.00	1.355	62.9	1.006	0.08	0.834	1.137
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 2	42190	3460	1	19.64	21.00	1.368	62.9	1.006	-0.02	0.814	1.120
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 2	42990	3540	1	19.65	21.00	1.365	62.9	1.006	0.05	0.821	1.127

	LTE Band 42	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 7	DSI 2	42590	3500	1	19.67	21.00	1.358	62.9	1.006	0.08	0.858	1.172
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 2	42590	3500	1	19.71	21.00	1.346	62.9	1.006	0.07	0.526	0.712
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 2	42190	3460	1	19.68	21.00	1.355	62.9	1.006	-0.05	0.512	0.698
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 2	42990	3540	1	19.65	21.00	1.365	62.9	1.006	0.06	0.498	0.684
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 2	42590	3500	1	19.68	21.00	1.355	62.9	1.006	0.17	0.464	0.633
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 2	42190	3460	1	19.64	21.00	1.368	62.9	1.006	-0.03	0.454	0.625
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 2	42990	3540	1	19.65	21.00	1.365	62.9	1.006	0.04	0.449	0.616
	LTE Band 42	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 7	DSI 2	42590	3500	1	19.67	21.00	1.358	62.9	1.006	0.07	0.471	0.644
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 2	42590	3500	1	19.71	21.00	1.346	62.9	1.006	-0.02	0.441	0.597
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 2	42590	3500	1	19.68	21.00	1.355	62.9	1.006	0.09	0.417	0.569
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 2	42590	3500	1	19.71	21.00	1.346	62.9	1.006	0.17	0.245	0.332
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 2	42590	3500	1	19.68	21.00	1.355	62.9	1.006	0.05	0.213	0.290
	LTE Band 42_UL CA	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 7	DSI 2	42590+ 42788	3500+ 3519.8	1	19.54	21.00	1.400	62.9	1.006	0.08	0.851	1.198
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 2	656000	3840	1	20.15	20.80	1.161	-	-	0.17	0.785	0.912
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 2	656000	3840	1	20.12	20.80	1.169	-	-	0.03	0.606	0.709
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 2	656000	3840	1	20.10	20.80	1.175	-	-	-0.11	0.523	0.614
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 2	656000	3840	1	20.15	20.80	1.161	-	-	-0.07	0.957	1.112
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 2	656000	3840	1	20.12	20.80	1.169	-	-	0.13	0.737	0.862
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 2	656000	3840	1	20.10	20.80	1.175	-	-	0.11	0.653	0.767
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 2	656000	3840	1	20.15	20.80	1.161	-	-	0.07	0.933	1.084
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 2	656000	3840	1	20.12	20.80	1.169	-	-	0.05	0.636	0.744
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 2	656000	3840	1	20.10	20.80	1.175	-	-	0.1	0.609	0.716
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2	656000	3840	1	20.15	20.80	1.161	-	-	0.01	1.070	1.243
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2	656000	3840	1	20.12	20.80	1.169	-	-	0.09	0.791	0.925
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2	656000	3840	1	20.10	20.80	1.175	-	-	0.12	0.719	0.845
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 2	656000	3840	1	23.11	23.80	1.172	50	1.000	-0.08	0.964	1.130
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 2	656000	3840	1	18.34	19.70	1.368	-	-	-0.07	0.284	0.388
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 2	656000	3840	1	18.32	19.70	1.374	-	-	0.06	0.423	0.581
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 2	656000	3840	1	18.34	19.70	1.368	-	-	-0.18	0.406	0.555
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 2	656000	3840	1	18.32	19.70	1.374	-	-	0.16	0.456	0.627
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 2	656000	3840	1	18.34	19.70	1.368	-	-	-0.15	0.679	0.929
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 2	656000	3840	1	18.32	19.70	1.374	-	-	0.12	0.763	1.048
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 2	656000	3840	1	18.29	19.70	1.384	-	-	0.12	0.745	1.031
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 2	656000	3840	1	18.34	19.70	1.368	-	-	0.04	0.770	1.053
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 2	656000	3840	1	18.32	19.70	1.374	-	-	-0.09	0.928	1.275
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 2	656000	3840	2	18.32	19.70	1.374	-	-	0.05	0.853	1.172
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 2	656000	3840	1	18.29	19.70	1.384	-	-	0.17	0.908	1.256
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 2	656000	3840	1	21.32	22.70	1.374	50	1.000	0.12	0.854	1.173
20	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	656000	3840	1	17.69	18.40	1.178	-	-	-0.02	1.100	**1.295**
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	656000	3840	2	17.69	18.40	1.178	-	-	0.05	1.020	1.201
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	656000	3840	1	17.68	18.40	1.180	-	-	0.09	1.050	1.239
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	656000	3840	1	17.65	18.40	1.189	-	-	0.1	0.986	1.172
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 2	656000	3840	1	17.69	18.40	1.178	-	-	-0.04	0.431	0.508
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 2	656000	3840	1	17.68	18.40	1.180	-	-	0.19	0.444	0.524
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 2	656000	3840	1	17.69	18.40	1.178	-	-	-0.01	0.354	0.417
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 2	656000	3840	1	17.68	18.40	1.180	-	-	0.08	0.338	0.399
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 2	656000	3840	1	17.69	18.40	1.178	-	-	0.01	0.197	0.232
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 2	656000	3840	1	17.68	18.40	1.180	-	-	0.08	0.167	0.197
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 2	656000	3840	1	20.72	21.40	1.169	50	1.000	0.09	1.010	1.181
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 2	656000	3840	1	22.60	24.00	1.380	-	-	0.05	0.210	0.290
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 2	656000	3840	1	22.57	24.00	1.390	-	-	0.08	0.255	0.354
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 2	656000	3840	1	22.60	24.00	1.380	-	-	0.06	0.073	0.101
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 2	656000	3840	1	22.57	24.00	1.390	-	-	0.06	0.088	0.122
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 2	656000	3840	1	22.60	24.00	1.380	-	-	0.05	0.125	0.173
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 2	656000	3840	1	22.57	24.00	1.390	-	-	-0.09	0.185	0.257
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 2	656000	3840	1	22.60	24.00	1.380	-	-	0.1	0.108	0.149

	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 2	656000	3840	1	22.57	24.00	1.390	-	-	0.02	0.134	0.186
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 2	656000	3840	1	25.75	27.00	1.334	50	1.000	0.03	0.247	0.329

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																	
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 6+3(6)	Standalone	6	2437	1	17.85	19.50	1.462	97.38	1.027	0.08	0.482	0.724
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 6+3(3)	Standalone	11	2462	1	16.86	18.50	1.459	97.38	1.027	0.01	0.473	0.709
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6+3(6)	Standalone	6	2437	1	17.85	19.50	1.462	97.38	1.027	0.03	0.504	0.757
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6+3(3)	Standalone	11	2462	1	16.86	18.50	1.459	97.38	1.027	-0.08	0.451	0.676
21	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(6)	Standalone	6	2437	1	17.85	19.50	1.462	97.38	1.027	-0.06	0.928	**1.394**
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(6)	Standalone	6	2437	2	17.85	19.50	1.462	97.38	1.027	0.07	0.692	1.039
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(3)	Standalone	11	2462	1	16.86	18.50	1.459	97.38	1.027	-0.08	0.897	1.344
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(6)	Standalone	1	2412	1	17.81	19.50	1.476	97.38	1.027	0.02	0.885	1.341
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6+3(6)	Standalone	6	2437	1	17.85	19.50	1.462	97.38	1.027	0.1	0.696	1.045
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6+3(3)	Standalone	11	2462	1	16.86	18.50	1.459	97.38	1.027	-0.18	0.647	0.969
	WLAN2.4GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6+3(3)	Standalone	3	2422	1	17.04	18.50	1.400	100	1.000	0.02	0.817	1.143
	WLAN2.4GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6+3(3)	Standalone	6	2437	1	17.01	18.50	1.409	100	1.000	-0.05	0.806	1.136
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 6	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	0.1	0.127	0.185
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 6	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	0.12	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	-0.07	0.184	0.268
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 6	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	0.08	0.054	0.079
22	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	-0.03	0.265	**0.408**
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	-0.17	0.116	0.179
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	-0.03	0.172	0.265
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	0.14	0.134	0.206
5000MHz																	
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 5+4(4)	Standalone	62	5310	1	15.27	17.00	1.489	100	1.000	0.11	0.309	0.460
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 5+4(4)	Standalone	62	5310	1	15.27	17.00	1.489	100	1.000	-0.05	0.285	0.424
23	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 5+4(4)	Standalone	62	5310	1	15.27	17.00	1.489	100	1.000	0.06	0.739	**1.101**
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 5+4(4)	Standalone	54	5270	1	15.01	16.50	1.409	100	1.000	0.02	0.721	1.016
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 5+4(4)	Standalone	62	5310	1	15.27	17.00	1.489	100	1.000	0.18	0.658	0.980
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 5+4(4)	Standalone	54	5270	1	15.01	16.50	1.409	100	1.000	0.12	0.641	0.903
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 5+4(4)	Standalone	138	5690	1	16.45	18.00	1.429	100	1.000	0.14	0.313	0.447
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 5+4(4)	Standalone	138	5690	1	16.45	18.00	1.429	100	1.000	-0.17	0.307	0.439
24	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(4)	Standalone	138	5690	1	16.45	18.00	1.429	100	1.000	0.03	0.791	**1.130**
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(4)	Standalone	138	5690	2	16.45	18.00	1.429	100	1.000	0.05	0.596	0.852
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(4)	Standalone	122	5610	1	16.48	18.00	1.419	100	1.000	0.17	0.660	0.937
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5+4(4)	Standalone	138	5690	1	16.45	18.00	1.429	100	1.000	-0.05	0.589	0.842
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5+4(4)	Standalone	122	5610	1	16.48	18.00	1.419	100	1.000	0.02	0.566	0.803
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 5+4(5)	Standalone	155	5775	1	16.84	18.50	1.466	100	1.000	0.01	0.393	0.576
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 5+4(5)	Standalone	155	5775	1	16.84	18.50	1.466	100	1.000	0.1	0.363	0.532
25	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(5)	Standalone	155	5775	1	16.84	18.50	1.466	100	1.000	-0.07	0.758	**1.111**
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5+4(5)	Standalone	155	5775	1	16.84	18.50	1.466	100	1.000	-0.17	0.598	0.876

16.2 Hotspot SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	23095	707.5	1	22.71	24.00	1.346	-	-	0.05	0.448	0.603
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 0	DSI 7	23095	707.5	1	21.83	23.00	1.309	-	-	0.14	0.267	0.350
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	23095	707.5	1	22.71	24.00	1.346	-	-	0.02	0.566	0.762
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 0	DSI 7	23095	707.5	1	21.83	23.00	1.309	-	-	-0.12	0.389	0.509
	LTE Band 12	10M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI 7	23095	707.5	1	22.71	24.00	1.346	-	-	0.05	0.680	0.915
	LTE Band 12	10M	QPSK	25	0	-	Left Side	5mm	Ant 0	DSI 7	23095	707.5	1	21.83	23.00	1.309	-	-	-0.11	0.476	0.623
	LTE Band 12	10M	QPSK	50	0	-	Left Side	5mm	Ant 0	DSI 7	23095	707.5	1	21.73	23.00	1.340	-	-	0.06	0.512	0.686
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	23095	707.5	1	22.71	24.00	1.346	-	-	0.04	0.580	0.781
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	5mm	Ant 0	DSI 7	23095	707.5	1	21.83	23.00	1.309	-	-	0.02	0.356	0.466
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 7	23095	707.5	1	22.50	24.00	1.413	-	-	0.03	0.262	0.370
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 1	DSI 7	23095	707.5	1	21.56	23.00	1.393	-	-	-0.08	0.180	0.251
26	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	23095	707.5	1	22.50	24.00	1.413	-	-	-0.16	0.703	**0.993**
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 1	DSI 7	23095	707.5	1	21.56	23.00	1.393	-	-	0.05	0.456	0.635
	LTE Band 12	10M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	23095	707.5	1	21.53	23.00	1.403	-	-	0.15	0.437	0.613
	LTE Band 12	10M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	23095	707.5	1	22.50	24.00	1.413	-	-	-0.13	0.339	0.479
	LTE Band 12	10M	QPSK	25	0	-	Left Side	5mm	Ant 1	DSI 7	23095	707.5	1	21.56	23.00	1.393	-	-	0.01	0.218	0.304
	LTE Band 12	10M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	23095	707.5	1	22.50	24.00	1.413	-	-	-0.07	0.500	0.706
	LTE Band 12	10M	QPSK	25	0	-	Top Side	5mm	Ant 1	DSI 7	23095	707.5	1	21.56	23.00	1.393	-	-	0.18	0.321	0.447
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	23230	782	1	22.71	24.00	1.346	-	-	0.04	0.445	0.599
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 0	DSI 7	23230	782	1	21.68	23.00	1.355	-	-	-0.11	0.280	0.379
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	23230	782	1	22.71	24.00	1.346	-	-	-0.06	0.545	0.733
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 0	DSI 7	23230	782	1	21.68	23.00	1.355	-	-	0.05	0.413	0.560
27	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI 7	23230	782	1	22.71	24.00	1.346	-	-	0.03	0.685	**0.922**
	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI 7	23230	782	2	22.71	24.00	1.346	-	-	0.05	0.599	0.806
	LTE Band 13	10M	QPSK	25	0	-	Left Side	5mm	Ant 0	DSI 7	23230	782	1	21.68	23.00	1.355	-	-	0.04	0.483	0.655
	LTE Band 13	10M	QPSK	50	0	-	Left Side	5mm	Ant 0	DSI 7	23230	782	1	21.67	23.00	1.358	-	-	0.04	0.538	0.731
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	23230	782	1	22.71	24.00	1.346	-	-	0.01	0.531	0.715
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	5mm	Ant 0	DSI 7	23230	782	1	21.68	23.00	1.355	-	-	-0.17	0.341	0.462
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 7	23230	782	1	22.48	24.00	1.419	-	-	0.08	0.289	0.410
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 1	DSI 7	23230	782	1	21.54	23.00	1.400	-	-	0.01	0.230	0.322
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	23230	782	1	22.48	24.00	1.419	-	-	0.03	0.612	0.868
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 1	DSI 7	23230	782	1	21.54	23.00	1.400	-	-	-0.08	0.510	0.714
	LTE Band 13	10M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	23230	782	1	21.51	23.00	1.409	-	-	-0.08	0.526	0.741
	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	23230	782	1	22.48	24.00	1.419	-	-	0.1	0.387	0.549
	LTE Band 13	10M	QPSK	25	0	-	Left Side	5mm	Ant 1	DSI 7	23230	782	1	21.54	23.00	1.400	-	-	-0.18	0.283	0.396
	LTE Band 13	10M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	23230	782	1	22.48	24.00	1.419	-	-	0.1	0.559	0.793
	LTE Band 13	10M	QPSK	25	0	-	Top Side	5mm	Ant 1	DSI 7	23230	782	1	21.54	23.00	1.400	-	-	0.12	0.498	0.697
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI 7	136100	680.5	1	22.57	24.00	1.390	-	-	0.04	0.258	0.359
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI 7	136100	680.5	1	22.55	24.00	1.396	-	-	0.07	0.225	0.314
28	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI 7	136100	680.5	1	22.57	24.00	1.390	-	-	0.06	0.397	**0.552**
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI 7	136100	680.5	1	22.55	24.00	1.396	-	-	0.05	0.317	0.443
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI 7	136100	680.5	1	22.57	24.00	1.390	-	-	0.02	0.287	0.399
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI 7	136100	680.5	1	22.55	24.00	1.396	-	-	0.07	0.276	0.385
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI 7	136100	680.5	1	22.57	24.00	1.390	-	-	0.19	0.350	0.486
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI 7	136100	680.5	1	22.55	24.00	1.396	-	-	0.03	0.305	0.426
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	136100	680.5	1	22.54	24.00	1.400	-	-	-0.14	0.095	0.133
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	136100	680.5	1	22.49	24.00	1.416	-	-	0.13	0.078	0.110
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	136100	680.5	1	22.54	24.00	1.400	-	-	-0.03	0.261	0.365
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	136100	680.5	1	22.49	24.00	1.416	-	-	-0.02	0.157	0.222
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	136100	680.5	1	22.54	24.00	1.400	-	-	-0.09	0.204	0.286

	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	136100	680.5	1	22.49	24.00	1.416	-	-	0.03	0.144	0.204
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	136100	680.5	1	22.54	24.00	1.400	-	-	0.06	0.232	0.325
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	136100	680.5	1	22.49	24.00	1.416	-	-	-0.06	0.183	0.259
835MHz																					
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 0	DSI 7	189	836.4	1	29.33	30.00	1.167	-	-	0.05	0.533	0.622
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	DSI 7	189	836.4	1	29.33	30.00	1.167	-	-	0.09	0.714	0.833
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	DSI 7	128	824.2	1	28.16	30.00	1.528	-	-	0.12	0.484	0.739
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	DSI 7	251	848.8	1	29.31	30.00	1.172	-	-	-0.12	0.747	0.876
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant 0	DSI 7	189	836.4	1	29.33	30.00	1.167	-	-	0.05	0.455	0.531
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 0	DSI 7	189	836.4	1	29.33	30.00	1.167	-	-	-0.16	0.532	0.621
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 1	DSI 7	189	836.4	1	28.97	30.00	1.268	-	-	0.12	0.343	0.435
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	DSI 7	189	836.4	1	28.97	30.00	1.268	-	-	-0.13	0.639	0.810
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	DSI 7	128	824.2	1	28.12	30.00	1.542	-	-	0.07	0.696	1.073
29	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	DSI 7	251	848.8	1	28.88	30.00	1.294	-	-	0.03	0.923	**1.195**
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant 1	DSI 7	189	836.4	1	28.97	30.00	1.268	-	-	0.11	0.294	0.373
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Top Side	5mm	Ant 1	DSI 7	189	836.4	1	28.97	30.00	1.268	-	-	-0.07	0.482	0.611
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	DSI 7	4182	836.4	1	22.64	24.00	1.368	-	-	0.08	0.527	0.721
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 7	4182	836.4	1	22.64	24.00	1.368	-	-	0.03	0.790	1.081
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 7	4132	826.4	1	22.58	24.00	1.387	-	-	0.13	0.787	1.091
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	DSI 7	4233	846.6	1	22.63	24.00	1.371	-	-	0.06	0.844	1.157
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	DSI 7	4182	836.4	1	22.64	24.00	1.368	-	-	0.07	0.716	0.979
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	DSI 7	4132	826.4	1	22.58	24.00	1.387	-	-	0.02	0.674	0.935
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	DSI 7	4233	846.6	1	22.63	24.00	1.371	-	-	0.06	0.736	1.009
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	DSI 7	4182	836.4	1	22.64	24.00	1.368	-	-	-0.01	0.581	0.795
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	DSI 7	4182	836.4	1	22.71	23.50	1.199	-	-	0.1	0.445	0.534
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 7	4182	836.4	1	22.71	23.50	1.199	-	-	-0.04	0.851	1.021
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 7	4132	826.4	1	22.64	23.50	1.219	-	-	-0.08	0.968	1.180
30	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 7	4233	846.6	1	22.65	23.50	1.216	-	-	-0.07	1.080	**1.313**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	DSI 7	4182	836.4	1	22.71	23.50	1.199	-	-	0.06	0.581	0.697
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 7	4182	836.4	1	22.71	23.50	1.199	-	-	-0.05	0.819	0.982
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 7	4132	826.4	1	22.64	23.50	1.219	-	-	-0.19	0.853	1.040
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 7	4233	846.6	1	22.65	23.50	1.216	-	-	0.04	0.802	0.975
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	26865	831.5	1	22.49	24.00	1.416	-	-	0.08	0.563	0.797
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	DSI 7	26865	831.5	1	21.57	23.00	1.390	-	-	0.18	0.332	0.461
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	26865	831.5	1	22.49	24.00	1.416	-	-	-0.12	0.844	1.195
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	DSI 7	26865	831.5	1	21.57	23.00	1.390	-	-	0.06	0.518	0.720
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 0	DSI 7	26865	831.5	1	21.56	23.00	1.393	-	-	0.08	0.516	0.719
	LTE Band 26	15M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI 7	26865	831.5	1	22.49	24.00	1.416	-	-	-0.18	0.693	0.981
	LTE Band 26	15M	QPSK	36	0	-	Left Side	5mm	Ant 0	DSI 7	26865	831.5	1	21.57	23.00	1.390	-	-	0.08	0.416	0.578
	LTE Band 26	15M	QPSK	75	0	-	Left Side	5mm	Ant 0	DSI 7	26865	831.5	1	21.56	23.00	1.393	-	-	-0.02	0.512	0.713
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	26865	831.5	1	22.49	24.00	1.416	-	-	0.08	0.664	0.940
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	5mm	Ant 0	DSI 7	26865	831.5	1	21.57	23.00	1.390	-	-	0.04	0.406	0.564
	LTE Band 26	15M	QPSK	75	0	-	Bottom Side	5mm	Ant 0	DSI 7	26865	831.5	1	21.56	23.00	1.393	-	-	-0.06	0.415	0.578
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 7	26865	831.5	1	22.54	23.40	1.219	-	-	0.04	0.484	0.590
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 1	DSI 7	26865	831.5	1	21.62	23.00	1.374	-	-	0.1	0.305	0.419
31	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	26865	831.5	1	22.54	23.40	1.219	-	-	0.02	1.060	**1.292**
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 1	DSI 7	26865	831.5	1	21.62	23.00	1.374	-	-	-0.19	0.686	0.943
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 1	DSI 7	26865	831.5	1	21.55	23.00	1.396	-	-	0.08	0.680	0.950
	LTE Band 26	15M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	26865	831.5	1	22.54	23.40	1.219	-	-	0.06	0.602	0.734
	LTE Band 26	15M	QPSK	36	0	-	Left Side	5mm	Ant 1	DSI 7	26865	831.5	1	21.62	23.00	1.374	-	-	0.07	0.383	0.526
	LTE Band 26	15M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	26865	831.5	1	22.54	23.40	1.219	-	-	0.03	0.842	1.026
	LTE Band 26	15M	QPSK	36	0	-	Top Side	5mm	Ant 1	DSI 7	26865	831.5	1	21.62	23.00	1.374	-	-	0.12	0.547	0.752
	LTE Band 26	15M	QPSK	75	0	-	Top Side	5mm	Ant 1	DSI 7	26865	831.5	1	21.55	23.00	1.396	-	-	0.03	0.523	0.730

	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI 7	166300	831.5	1	22.68	24.00	1.355	-	-	-0.15	0.358	0.485
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	DSI 7	166300	831.5	1	22.64	24.00	1.368	-	-	0.13	0.305	0.417
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI 7	166300	831.5	1	22.68	24.00	1.355	-	-	0.06	0.568	0.770
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	DSI 7	166300	831.5	1	22.64	24.00	1.368	-	-	0.08	0.449	0.614
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI 7	166300	831.5	1	22.68	24.00	1.355	-	-	-0.05	0.463	0.627
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 0	DSI 7	166300	831.5	1	22.64	24.00	1.368	-	-	0.01	0.401	0.548
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI 7	166300	831.5	1	22.68	24.00	1.355	-	-	0.08	0.381	0.516
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	DSI 7	166300	831.5	1	22.64	24.00	1.368	-	-	0.05	0.411	0.562
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	166300	831.5	1	22.50	24.00	1.413	-	-	0.09	0.296	0.418
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	166300	831.5	1	22.49	24.00	1.416	-	-	-0.15	0.309	0.437
32	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	166300	831.5	1	22.50	24.00	1.413	-	-	-0.02	0.637	**0.900**
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	166300	831.5	1	22.49	24.00	1.416	-	-	0.01	0.543	0.769
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	166300	831.5	1	21.59	23.00	1.384	-	-	-0.03	0.528	0.731
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	166300	831.5	1	22.50	24.00	1.413	-	-	0.05	0.407	0.575
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	166300	831.5	1	22.49	24.00	1.416	-	-	0.03	0.328	0.464
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	166300	831.5	1	22.50	24.00	1.413	-	-	0.03	0.537	0.759
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	166300	831.5	1	22.49	24.00	1.416	-	-	-0.03	0.559	0.791
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	DSI 7	1413	1732.6	1	17.48	18.90	1.387	-	-	0.12	0.844	1.170
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	DSI 7	1312	1712.4	1	17.46	18.90	1.393	-	-	0.1	0.800	1.115
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	DSI 7	1513	1752.6	1	17.42	18.90	1.406	-	-	0.05	0.833	1.171
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	DSI 7	1413	1732.6	1	17.48	18.90	1.387	-	-	-0.15	0.681	0.944
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	DSI 7	1312	1712.4	1	17.46	18.90	1.393	-	-	0.06	0.652	0.908
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	DSI 7	1513	1752.6	1	17.42	18.90	1.406	-	-	-0.09	0.678	0.953
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 2	DSI 7	1413	1732.6	1	17.48	18.90	1.387	-	-	0.02	0.019	0.026
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 2	DSI 7	1413	1732.6	1	17.48	18.90	1.387	-	-	0.12	0.271	0.376
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	DSI 7	1413	1732.6	1	17.48	18.90	1.387	-	-	0.08	0.903	1.252
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	DSI 7	1312	1712.4	1	17.46	18.90	1.393	-	-	0.01	0.870	1.212
33	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	DSI 7	1513	1752.6	1	17.42	18.90	1.406	-	-	-0.01	0.933	**1.312**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	DSI 7	1513	1752.6	2	17.42	18.90	1.406	-	-	0.05	0.814	1.145
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	DSI 7	1413	1732.6	1	17.91	18.90	1.256	-	-	0.07	0.652	0.819
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	DSI 7	1312	1712.4	1	17.87	18.90	1.268	-	-	0.11	0.543	0.688
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	DSI 7	1513	1752.6	1	17.90	18.90	1.259	-	-	0.04	0.572	0.720
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 7	1413	1732.6	1	17.91	18.90	1.256	-	-	0.03	0.997	1.252
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 7	1312	1712.4	1	17.87	18.90	1.268	-	-	0.12	0.943	1.195
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 7	1513	1752.6	1	17.90	18.90	1.259	-	-	0.02	1.010	1.272
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	DSI 7	1413	1732.6	1	17.91	18.90	1.256	-	-	0.04	0.905	1.137
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	DSI 7	1312	1712.4	1	17.87	18.90	1.268	-	-	-0.1	0.872	1.105
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	DSI 7	1513	1752.6	1	17.90	18.90	1.259	-	-	-0.12	0.905	1.139
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 7	1413	1732.6	1	17.91	18.90	1.256	-	-	0.08	0.643	0.808
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 7	1312	1712.4	1	17.87	18.90	1.268	-	-	-0.13	0.586	0.743
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 7	1513	1752.6	1	17.90	18.90	1.259	-	-	-0.13	0.716	0.901
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	132322	1745	1	17.56	18.90	1.361	-	-	0.05	0.736	1.002
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	132072	1720	1	17.54	18.90	1.368	-	-	0.19	0.733	1.003
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	132572	1770	1	17.51	18.90	1.377	-	-	0.02	0.695	0.957
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	132322	1745	1	17.55	18.90	1.365	-	-	0.04	0.661	0.902
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	132072	1720	1	17.51	18.90	1.377	-	-	0.19	0.654	0.901
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	132572	1770	1	17.49	18.90	1.384	-	-	0.02	0.639	0.884
	LTE Band 66	20M	QPSK	100	0	-	Front	5mm	Ant 2	DSI 7	132322	1745	1	17.52	18.90	1.374	-	-	0.08	0.561	0.771
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	132322	1745	1	17.56	18.90	1.361	-	-	0.12	0.612	0.833
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	132072	1720	1	17.54	18.90	1.368	-	-	0.13	0.612	0.837
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	132572	1770	1	17.51	18.90	1.377	-	-	0.14	0.588	0.810
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 7	132322	1745	1	17.55	18.90	1.365	-	-	0.09	0.582	0.794
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 2	DSI 7	132322	1745	1	17.52	18.90	1.374	-	-	0.04	0.549	0.754
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	DSI 7	132322	1745	1	17.56	18.90	1.361	-	-	-0.01	0.282	0.384
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	DSI 7	132322	1745	1	17.55	18.90	1.365	-	-	-0.02	0.177	0.242

	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	DSI 7	132322	1745	1	17.56	18.90	1.361	-	-	0.04	0.343	0.467
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	DSI 7	132322	1745	1	17.55	18.90	1.365	-	-	0.01	0.218	0.297
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	132322	1745	1	17.56	18.90	1.361	-	-	-0.05	0.936	1.274
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	132072	1720	1	17.54	18.90	1.368	-	-	0.02	**0.939**	1.284
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	132572	1770	1	17.51	18.90	1.377	-	-	0.05	0.767	1.056
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	132322	1745	1	17.55	18.90	1.365	-	-	0.07	0.702	0.958
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	132072	1720	1	17.51	18.90	1.377	-	-	-0.11	0.716	0.986
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	132572	1770	1	17.49	18.90	1.384	-	-	0.18	0.709	0.981
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	DSI 7	132322	1745	1	17.52	18.90	1.374	-	-	-0.07	0.788	1.083
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 7	132322	1745	1	17.65	18.60	1.245	-	-	-0.07	0.467	0.581
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 1	DSI 7	132322	1745	1	17.62	18.60	1.253	-	-	0.05	0.386	0.484
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	132322	1745	1	17.65	18.60	1.245	-	-	-0.07	0.940	1.170
34	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	132072	1720	1	17.58	18.60	1.265	-	-	-0.14	1.030	**1.303**
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	132072	1720	2	17.58	18.60	1.265	-	-	0.05	1.010	1.277
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	132572	1770	1	17.54	18.60	1.276	-	-	0.03	0.822	1.049
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	132322	1745	1	17.62	18.60	1.253	-	-	0.06	0.818	1.025
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	132072	1720	1	17.59	18.60	1.262	-	-	0.15	0.866	1.093
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	132572	1770	1	17.59	18.60	1.262	-	-	0.04	0.723	0.912
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 1	DSI 7	132322	1745	1	17.61	18.60	1.256	-	-	-0.09	0.812	1.020
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	132322	1745	1	17.65	18.60	1.245	-	-	0.01	0.649	0.808
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	132072	1720	1	17.58	18.60	1.265	-	-	-0.08	0.784	0.992
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	132572	1770	1	17.54	18.60	1.276	-	-	0.05	0.710	0.906
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	DSI 7	132322	1745	1	17.62	18.60	1.253	-	-	-0.04	0.633	0.793
	LTE Band 66	20M	QPSK	100	0	-	Left Side	5mm	Ant 1	DSI 7	132322	1745	1	17.61	18.60	1.256	-	-	0.07	0.629	0.790
	LTE Band 66	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	132322	1745	1	17.65	18.60	1.245	-	-	0.13	0.654	0.814
	LTE Band 66	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	132072	1720	1	17.58	18.60	1.265	-	-	0.06	0.632	0.799
	LTE Band 66	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	132572	1770	1	17.54	18.60	1.276	-	-	-0.02	0.618	0.789
	LTE Band 66	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	132322	1745	1	17.62	18.60	1.253	-	-	0.03	0.591	0.741
	LTE Band 66	20M	QPSK	100	0	-	Top Side	5mm	Ant 1	DSI 7	132322	1745	1	17.61	18.60	1.256	-	-	0.05	0.554	0.696
	LTE Band 66_Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	132072	1720	1	17.67	18.60	1.239	-	-	0.05	0.667	0.826
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	DSI 7	349000	1745	1	18.65	19.40	1.189	-	-	0.06	0.718	0.853
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	DSI 7	349000	1745	1	18.63	19.40	1.194	-	-	0.06	0.713	0.851
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant 2	DSI 7	349000	1745	1	18.61	19.40	1.199	-	-	0.07	0.693	0.831
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	DSI 7	349000	1745	1	18.65	19.40	1.189	-	-	0.09	0.718	0.853
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	DSI 7	349000	1745	1	18.63	19.40	1.194	-	-	0.06	0.638	0.762
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 2	DSI 7	349000	1745	1	18.61	19.40	1.199	-	-	0.07	0.649	0.778
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 2	DSI 7	349000	1745	1	18.65	19.40	1.189	-	-	0.09	0.160	0.190
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 2	DSI 7	349000	1745	1	18.63	19.40	1.194	-	-	0.04	0.152	0.181
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 2	DSI 7	349000	1745	1	18.65	19.40	1.189	-	-	-0.18	0.298	0.354
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 2	DSI 7	349000	1745	1	18.63	19.40	1.194	-	-	0.02	0.345	0.412
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	DSI 7	349000	1745	1	18.65	19.40	1.189	-	-	-0.02	1.070	1.272
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	DSI 7	349000	1745	1	18.63	19.40	1.194	-	-	-0.05	1.060	1.266
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	DSI 7	349000	1745	1	18.61	19.40	1.199	-	-	-0.09	0.820	0.984
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	349000	1745	1	20.73	22.00	1.340	-	-	-0.16	0.387	0.518
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	349000	1745	1	20.71	22.00	1.346	-	-	0.03	0.379	0.510
35	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	349000	1745	1	20.73	22.00	1.340	-	-	0.08	0.961	**1.287**
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	349000	1745	1	20.71	22.00	1.346	-	-	0.09	0.710	0.956
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	349000	1745	1	20.68	22.00	1.355	-	-	0.18	0.742	1.006
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	349000	1745	1	20.73	22.00	1.340	-	-	0.07	0.778	1.042
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	349000	1745	1	20.71	22.00	1.346	-	-	-0.09	0.699	0.941
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	349000	1745	1	20.68	22.00	1.355	-	-	0.03	0.513	0.695
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	349000	1745	1	20.73	22.00	1.340	-	-	0.08	0.795	1.065
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	349000	1745	1	20.71	22.00	1.346	-	-	0.09	0.685	0.922
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	349000	1745	1	20.68	22.00	1.355	-	-	0.03	0.654	0.886
1900MHz																					
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 2	DSI 7	661	1880	1	26.19	27.00	1.205	-	-	0.05	0.850	1.024

	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 2	DSI 7	512	1850.2	1	25.01	27.00	1.581	-	-	0.02	0.755	1.194
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 2	DSI 7	810	1909.8	1	26.12	27.00	1.225	-	-	0.13	1.020	1.249
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 2	DSI 7	661	1880	1	26.19	27.00	1.205	-	-	0.06	0.540	0.651
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant 2	DSI 7	661	1880	1	26.19	27.00	1.205	-	-	0.19	0.097	0.117
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Side	5mm	Ant 2	DSI 7	661	1880	1	26.19	27.00	1.205	-	-	0.08	0.593	0.715
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 2	DSI 7	661	1880	1	26.19	27.00	1.205	-	-	-0.18	0.964	1.162
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 2	DSI 7	512	1850.2	1	25.01	27.00	1.581	-	-	-0.18	0.726	1.148
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 2	DSI 7	810	1909.8	1	26.12	27.00	1.225	-	-	-0.02	1.010	1.237
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 1	DSI 7	661	1880	1	23.43	24.10	1.167	-	-	-0.1	0.573	0.669
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	DSI 7	661	1880	1	23.43	24.10	1.167	-	-	-0.13	0.941	1.098
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	DSI 7	512	1850.2	1	22.43	24.10	1.469	-	-	-0.14	0.857	1.259
36	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	DSI 7	810	1909.8	1	23.36	24.10	1.186	-	-	0.07	1.100	**1.304**
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	DSI 7	810	1909.8	2	23.36	24.10	1.186	-	-	0.05	0.872	1.034
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant 1	DSI 7	661	1880	1	23.43	24.10	1.167	-	-	0.01	0.893	1.042
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant 1	DSI 7	512	1850.2	1	22.43	24.10	1.469	-	-	0.18	0.689	1.012
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant 1	DSI 7	810	1909.8	1	23.36	24.10	1.186	-	-	0.05	0.805	0.955
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Top Side	5mm	Ant 1	DSI 7	661	1880	1	23.43	24.10	1.167	-	-	-0.14	0.877	1.023
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Top Side	5mm	Ant 1	DSI 7	512	1850.2	1	22.43	24.10	1.469	-	-	-0.03	0.758	1.113
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Top Side	5mm	Ant 1	DSI 7	810	1909.8	1	23.36	24.10	1.186	-	-	-0.15	0.933	1.106
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	DSI 7	9400	1880	1	20.46	21.10	1.159	-	-	0.02	1.100	1.275
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	DSI 7	9262	1852.4	1	20.45	21.10	1.161	-	-	0.05	1.060	1.231
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	DSI 7	9538	1907.6	1	20.42	21.10	1.169	-	-	-0.06	1.080	1.263
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	DSI 7	9400	1880	1	20.46	21.10	1.159	-	-	0.02	0.725	0.840
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	DSI 7	9262	1852.4	1	20.45	21.10	1.161	-	-	0.04	0.817	0.949
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	DSI 7	9538	1907.6	1	20.42	21.10	1.169	-	-	0.18	0.698	0.816
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 2	DSI 7	9400	1880	1	20.46	21.10	1.159	-	-	0.06	0.099	0.115
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 2	DSI 7	9400	1880	1	20.46	21.10	1.159	-	-	0.18	0.427	0.495
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	DSI 7	9400	1880	1	20.46	21.10	1.159	-	-	0.04	1.010	1.170
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	DSI 7	9262	1852.4	1	20.45	21.10	1.161	-	-	-0.18	1.030	1.196
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	DSI 7	9538	1907.6	1	20.42	21.10	1.169	-	-	-0.17	1.050	1.228
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	DSI 7	9400	1880	1	17.23	18.20	1.250	-	-	-0.19	0.578	0.723
37	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 7	9400	1880	1	17.23	18.20	1.250	-	-	0.01	1.020	**1.275**
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 7	9262	1852.4	1	17.19	18.20	1.262	-	-	0.01	0.996	1.257
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	DSI 7	9538	1907.6	1	17.22	18.20	1.253	-	-	0.04	0.982	1.231
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	DSI 7	9400	1880	1	17.23	18.20	1.250	-	-	0.04	0.907	1.134
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	DSI 7	9262	1852.4	1	17.19	18.20	1.262	-	-	0.02	0.931	1.175
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	DSI 7	9538	1907.6	1	17.22	18.20	1.253	-	-	0.11	0.855	1.071
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 7	9400	1880	1	17.23	18.20	1.250	-	-	0.04	0.752	0.940
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 7	9262	1852.4	1	17.19	18.20	1.262	-	-	0.05	0.719	0.907
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	DSI 7	9538	1907.6	1	17.22	18.20	1.253	-	-	0.05	0.837	1.049
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	26340	1880	1	18.57	19.50	1.239	-	-	0.05	0.757	0.938
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	26140	1860	1	18.54	19.50	1.247	-	-	-0.1	0.788	0.983
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	26590	1905	1	18.55	19.50	1.245	-	-	0.07	0.743	0.925
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	26340	1880	1	18.55	19.50	1.245	-	-	0.08	0.685	0.852
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	26140	1860	1	18.52	19.50	1.253	-	-	0.05	0.712	0.892
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	26590	1905	1	18.51	19.50	1.256	-	-	-0.02	0.674	0.847
	LTE Band 25	20M	QPSK	100	0	-	Front	5mm	Ant 2	DSI 7	26340	1880	1	18.54	19.50	1.247	-	-	-0.12	0.688	0.858
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	26340	1880	1	18.57	19.50	1.239	-	-	0.19	0.588	0.728
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 7	26340	1880	1	18.55	19.50	1.245	-	-	-0.1	0.471	0.586
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	DSI 7	26340	1880	1	18.57	19.50	1.239	-	-	-0.18	0.255	0.316
	LTE Band 25	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	DSI 7	26340	1880	1	18.55	19.50	1.245	-	-	0.02	0.231	0.287
	LTE Band 25	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	DSI 7	26340	1880	1	18.57	19.50	1.239	-	-	-0.04	0.469	0.581

	LTE Band 25	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	DSI 7	26340	1880	1	18.55	19.50	1.245	-	-	0.07	0.413	0.514
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	26340	1880	1	18.57	19.50	1.239	-	-	-0.11	0.848	1.050
38	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	26140	1860	1	18.54	19.50	1.247	-	-	-0.03	1.030	**1.285**
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	26590	1905	1	18.55	19.50	1.245	-	-	0.04	0.716	0.891
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	26340	1880	1	18.55	19.50	1.245	-	-	0.03	0.642	0.799
	LTE Band 25	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	DSI 7	26340	1880	1	18.54	19.50	1.247	-	-	-0.06	0.628	0.783
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 7	26340	1880	1	16.17	17.50	1.358	-	-	-0.04	0.480	0.652
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 1	DSI 7	26340	1880	1	16.15	17.50	1.365	-	-	0.04	0.427	0.583
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	26340	1880	1	16.17	17.50	1.358	-	-	0.01	0.894	1.214
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	26140	1860	1	16.15	17.50	1.365	-	-	-0.07	0.938	1.280
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	26590	1905	1	16.11	17.50	1.377	-	-	-0.17	0.844	1.162
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	26340	1880	1	16.15	17.50	1.365	-	-	0.04	0.735	1.003
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	26140	1860	1	16.12	17.50	1.374	-	-	-0.04	0.731	1.004
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	26590	1905	1	16.13	17.50	1.371	-	-	-0.04	0.675	0.925
	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 1	DSI 7	26340	1880	1	16.14	17.50	1.368	-	-	-0.18	0.694	0.949
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	26340	1880	1	16.17	17.50	1.358	-	-	-0.08	0.676	0.918
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	26140	1860	1	16.15	17.50	1.365	-	-	0.08	0.702	0.958
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	26590	1905	1	16.11	17.50	1.377	-	-	-0.11	0.653	0.899
	LTE Band 25	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	DSI 7	26340	1880	1	16.15	17.50	1.365	-	-	-0.19	0.581	0.793
	LTE Band 25	20M	QPSK	100	0	-	Left Side	5mm	Ant 1	DSI 7	26340	1880	1	16.14	17.50	1.368	-	-	0.05	0.554	0.758
	LTE Band 25	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	26340	1880	1	16.17	17.50	1.358	-	-	0.14	0.732	0.994
	LTE Band 25	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	26140	1860	1	16.15	17.50	1.365	-	-	-0.08	0.744	1.015
	LTE Band 25	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	26590	1905	1	16.11	17.50	1.377	-	-	0.06	0.690	0.950
	LTE Band 25	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	26340	1880	1	16.15	17.50	1.365	-	-	-0.07	0.578	0.789
	LTE Band 25	20M	QPSK	100	0	-	Top Side	5mm	Ant 1	DSI 7	26340	1880	1	16.14	17.50	1.368	-	-	0.04	0.555	0.759
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	18900	1880	1	16.15	17.50	1.365	-	-	0.05	0.671	0.916
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	DSI 7	376000	1880	1	19.54	20.30	1.191	-	-	-0.04	0.955	1.138
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	DSI 7	376000	1880	1	19.52	20.30	1.197	-	-	0.15	0.898	1.075
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant 2	DSI 7	376000	1880	1	19.49	20.30	1.205	-	-	0.04	0.852	1.027
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	DSI 7	376000	1880	1	19.54	20.30	1.191	-	-	0.04	0.755	0.899
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	DSI 7	376000	1880	1	19.52	20.30	1.197	-	-	0.05	0.738	0.883
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 2	DSI 7	376000	1880	1	19.49	20.30	1.205	-	-	0.13	0.698	0.841
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 2	DSI 7	376000	1880	1	19.54	20.30	1.191	-	-	-0.14	0.115	0.137
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 2	DSI 7	376000	1880	1	19.52	20.30	1.197	-	-	-0.14	0.127	0.152
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 2	DSI 7	376000	1880	1	19.54	20.30	1.191	-	-	-0.05	0.419	0.499
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 2	DSI 7	376000	1880	1	19.52	20.30	1.197	-	-	0.05	0.371	0.444
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	DSI 7	376000	1880	1	19.54	20.30	1.191	-	-	-0.01	1.070	1.275
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	DSI 7	376000	1880	1	19.52	20.30	1.197	-	-	-0.19	1.040	1.245
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	DSI 7	376000	1880	1	19.49	20.30	1.205	-	-	0.07	0.744	0.897
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	376000	1880	1	18.30	19.10	1.202	-	-	-0.06	0.574	0.690
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	376000	1880	1	18.28	19.10	1.208	-	-	-0.12	0.590	0.713
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	376000	1880	1	18.30	19.10	1.202	-	-	0.05	0.948	1.140
39	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	376000	1880	1	18.28	19.10	1.208	-	-	-0.01	1.060	**1.280**
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	376000	1880	1	18.27	19.10	1.211	-	-	0.16	0.819	0.991
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	376000	1880	1	18.30	19.10	1.202	-	-	-0.18	0.919	1.105
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	376000	1880	1	18.28	19.10	1.208	-	-	-0.06	0.952	1.150
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	376000	1880	1	18.27	19.10	1.211	-	-	0.03	0.687	0.832
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	376000	1880	1	18.30	19.10	1.202	-	-	-0.19	0.915	1.100
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	376000	1880	1	18.28	19.10	1.208	-	-	0.1	0.948	1.145
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	376000	1880	1	18.27	19.10	1.211	-	-	-0.12	0.771	0.933
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	21100	2535	1	17.59	18.90	1.352	-	-	0.16	0.570	0.771
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	21100	2535	1	17.58	18.90	1.355	-	-	-0.14	0.485	0.657
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	21100	2535	1	17.59	18.90	1.352	-	-	-0.1	0.587	0.794
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 7	21100	2535	1	17.58	18.90	1.355	-	-	0.07	0.521	0.706
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	DSI 7	21100	2535	1	17.59	18.90	1.352	-	-	0.04	0.030	0.041

	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	DSI 7	21100	2535	1	17.58	18.90	1.355	-	-	0.05	0.057	0.077
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	DSI 7	21100	2535	1	17.59	18.90	1.352	-	-	-0.14	0.228	0.308
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	DSI 7	21100	2535	1	17.58	18.90	1.355	-	-	-0.01	0.185	0.251
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	21100	2535	1	17.59	18.90	1.352	-	-	0.03	0.937	1.267
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	20850	2510	1	17.55	18.90	1.365	-	-	0.06	0.806	1.100
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	21350	2560	1	17.53	18.90	1.371	-	-	-0.04	0.949	1.301
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	21100	2535	1	17.58	18.90	1.355	-	-	0.08	0.785	1.064
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	20850	2510	1	17.51	18.90	1.377	-	-	0.08	0.703	0.968
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	21350	2560	1	17.52	18.90	1.374	-	-	0.05	0.640	0.879
	LTE Band 7	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	DSI 7	21100	2535	1	17.55	18.90	1.365	-	-	-0.06	0.664	0.906
	LTE Band 7_ UL CA	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	21350+ 21152	2560+ 2540.2	1	17.51	18.90	1.377	-	-	-0.04	0.870	1.198
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 7	21100	2535	1	15.83	16.70	1.222	-	-	0.03	0.407	0.497
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	DSI 7	21100	2535	1	15.82	16.70	1.225	-	-	0.16	0.368	0.451
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	21100	2535	1	15.83	16.70	1.222	-	-	0.13	0.540	0.660
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	21100	2535	1	15.82	16.70	1.225	-	-	0.1	0.471	0.577
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	21100	2535	1	15.83	16.70	1.222	-	-	0.05	0.334	0.408
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	DSI 7	21100	2535	1	15.82	16.70	1.225	-	-	0.03	0.316	0.387
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	21100	2535	1	15.83	16.70	1.222	-	-	-0.01	1.040	1.271
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	20850	2510	1	15.79	16.70	1.233	-	-	0.05	1.020	1.258
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	21350	2560	1	15.81	16.70	1.227	-	-	0.04	1.010	1.240
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	21100	2535	1	15.82	16.70	1.225	-	-	-0.05	0.883	1.081
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	20850	2510	1	15.72	16.70	1.253	-	-	0.05	0.807	1.011
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	21350	2560	1	15.77	16.70	1.239	-	-	0.09	0.865	1.072
	LTE Band 7	20M	QPSK	100	0	-	Top Side	5mm	Ant 1	DSI 7	21100	2535	1	15.79	16.70	1.233	-	-	-0.1	0.888	1.095
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	21100	2535	1	15.63	16.70	1.279	-	-	0.02	0.713	0.912
	LTE Band 7_UL CA	20M	QPSK	1	99	-	Top Side	5mm	Ant 1	DSI 7	21100+ 21298	2535+ 2554.8	1	15.75	16.70	1.245	-	-	-0.01	0.961	1.196
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	21100	2535	1	21.54	22.70	1.306	-	-	0.03	0.687	0.897
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	20850	2510	1	21.47	22.70	1.327	-	-	-0.02	0.707	0.938
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	21350	2560	1	21.48	22.70	1.324	-	-	0.04	0.619	0.820
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI 7	21100	2535	1	21.52	22.70	1.312	-	-	-0.12	0.660	0.866
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI 7	20850	2510	1	21.49	22.70	1.321	-	-	-0.02	0.637	0.842
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI 7	21350	2560	1	21.47	22.70	1.327	-	-	0.04	0.611	0.811
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 0	DSI 7	21100	2535	1	21.51	22.70	1.315	-	-	-0.16	0.554	0.729
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	21100	2535	1	21.54	22.70	1.306	-	-	0.07	0.913	1.193
40	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	20850	2510	1	21.47	22.70	1.327	-	-	-0.03	0.982	**1.304**
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	21350	2560	1	21.48	22.70	1.324	-	-	-0.05	0.619	0.820
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI 7	21100	2535	1	21.52	22.70	1.312	-	-	0.02	0.772	1.013
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI 7	20850	2510	1	21.49	22.70	1.321	-	-	-0.05	0.754	0.996
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI 7	21350	2560	1	21.47	22.70	1.327	-	-	0.02	0.731	0.970
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 0	DSI 7	21100	2535	1	21.51	22.70	1.315	-	-	0.08	0.698	0.918
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI 7	21100	2535	1	21.54	22.70	1.306	-	-	-0.17	0.499	0.652
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	DSI 7	21100	2535	1	21.52	22.70	1.312	-	-	-0.08	0.409	0.537
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	21100	2535	1	21.54	22.70	1.306	-	-	-0.03	0.967	1.263
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	20850	2510	1	21.47	22.70	1.327	-	-	0.06	0.959	1.273
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	21350	2560	1	21.48	22.70	1.324	-	-	0.08	0.830	1.099
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 7	21100	2535	1	21.52	22.70	1.312	-	-	0.07	0.764	1.003
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 7	20850	2510	1	21.49	22.70	1.321	-	-	0.17	0.759	1.003
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 7	21350	2560	1	21.47	22.70	1.327	-	-	0.08	0.679	0.901
	LTE Band 7	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	DSI 7	21100	2535	1	21.51	22.70	1.315	-	-	0.13	0.664	0.873
	LTE Band 7_UL CA	20M	QPSK	1	99	-	Back	5mm	Ant 0	DSI 7	20850+ 21048	2510+ 2529.8	1	21.42	22.70	1.343	-	-	-0.03	0.890	1.195
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 3	DSI 7	21100	2535	1	20.57	21.40	1.211	-	-	0.13	0.695	0.841
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 3	DSI 7	20850	2510	1	20.54	21.40	1.219	-	-	0.05	0.624	0.761
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 3	DSI 7	21350	2560	1	20.55	21.40	1.216	-	-	-0.07	0.659	0.801
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 3	DSI 7	21100	2535	1	20.56	21.40	1.213	-	-	0.07	0.613	0.744
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 3	DSI 7	21100	2535	1	20.53	21.40	1.222	-	-	-0.13	0.610	0.745

	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 3	DSI 7	21100	2535	1	20.57	21.40	1.211	-	-	0.17	0.588	0.712
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 3	DSI 7	21100	2535	1	20.56	21.40	1.213	-	-	-0.11	0.343	0.416
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 3	DSI 7	21100	2535	1	20.57	21.40	1.211	-	-	-0.17	0.306	0.370
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 3	DSI 7	21100	2535	1	20.56	21.40	1.213	-	-	0.06	0.190	0.231
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	21100	2535	1	20.57	21.40	1.211	-	-	-0.18	0.952	1.152
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	20850	2510	1	20.54	21.40	1.219	-	-	0.02	1.070	1.304
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	21350	2560	1	20.55	21.40	1.216	-	-	0.04	1.040	1.265
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 3	DSI 7	21100	2535	1	20.56	21.40	1.213	-	-	0.02	0.875	1.062
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 3	DSI 7	20850	2510	1	20.48	21.40	1.236	-	-	0.07	0.730	0.902
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 3	DSI 7	21350	2560	1	20.40	21.40	1.259	-	-	0.08	0.723	0.910
	LTE Band 7	20M	QPSK	100	0	-	Top Side	5mm	Ant 3	DSI 7	21100	2535	1	20.53	21.40	1.222	-	-	0.17	0.640	0.782
	LTE Band 7_UL CA	20M	QPSK	1	99	-	Top Side	5mm	Ant 3	DSI 7	20850+ 21048	2510+ 2529.8	1	20.45	21.40	1.245	-	-	0.02	0.957	1.191
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	40620	2593	1	20.58	21.70	1.294	62.9	1.006	0.03	0.643	0.837
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	39750	2506	1	20.48	21.70	1.324	62.9	1.006	-0.18	0.572	0.762
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	40185	2549.5	1	20.55	21.70	1.303	62.9	1.006	0.12	0.623	0.817
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	41055	2636.5	1	20.56	21.70	1.300	62.9	1.006	0.18	0.852	1.114
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	DSI 7	41490	2680	1	20.52	21.70	1.312	62.9	1.006	-0.12	0.857	1.131
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	40620	2593	1	20.56	21.70	1.300	62.9	1.006	-0.05	0.533	0.697
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	39750	2506	1	20.55	21.70	1.303	62.9	1.006	-0.16	0.469	0.615
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	40185	2549.5	1	20.47	21.70	1.327	62.9	1.006	0.01	0.501	0.669
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	41055	2636.5	1	20.53	21.70	1.309	62.9	1.006	0.1	0.546	0.719
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	DSI 7	41490	2680	1	20.52	21.70	1.312	62.9	1.006	0.04	0.526	0.694
	LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant 2	DSI 7	40620	2593	1	20.55	21.70	1.303	62.9	1.006	-0.05	0.487	0.638
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	40620	2593	1	20.58	21.70	1.294	62.9	1.006	0.09	0.704	0.917
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	39750	2506	1	20.48	21.70	1.324	62.9	1.006	-0.04	0.618	0.823
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	40185	2549.5	1	20.55	21.70	1.303	62.9	1.006	-0.15	0.674	0.884
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	41055	2636.5	1	20.56	21.70	1.300	62.9	1.006	0.14	0.801	1.048
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	DSI 7	41490	2680	1	20.52	21.70	1.312	62.9	1.006	-0.13	0.755	0.997
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 7	40620	2593	1	20.56	21.70	1.300	62.9	1.006	0.06	0.608	0.795
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 7	39750	2506	1	20.55	21.70	1.303	62.9	1.006	0.05	0.547	0.717
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 7	40185	2549.5	1	20.47	21.70	1.327	62.9	1.006	-0.02	0.589	0.787
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 7	41055	2636.5	1	20.53	21.70	1.309	62.9	1.006	-0.15	0.658	0.867
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	DSI 7	41490	2680	1	20.52	21.70	1.312	62.9	1.006	-0.02	0.625	0.825
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 2	DSI 7	40620	2593	1	20.55	21.70	1.303	62.9	1.006	0.08	0.609	0.798
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	DSI 7	40620	2593	1	20.58	21.70	1.294	62.9	1.006	0.12	0.123	0.160
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	DSI 7	40620	2593	1	20.56	21.70	1.300	62.9	1.006	0.12	0.079	0.103
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	DSI 7	40620	2593	1	20.58	21.70	1.294	62.9	1.006	0.05	0.158	0.206
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	DSI 7	40620	2593	1	20.56	21.70	1.300	62.9	1.006	0.02	0.109	0.143
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	40620	2593	1	20.58	21.70	1.294	62.9	1.006	0.07	0.847	1.103
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	39750	2506	1	20.48	21.70	1.324	62.9	1.006	-0.1	0.985	1.312
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	40185	2549.5	1	20.55	21.70	1.303	62.9	1.006	0.03	0.965	1.265
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	41055	2636.5	1	20.56	21.70	1.300	62.9	1.006	-0.09	0.806	1.054
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	41490	2680	1	20.52	21.70	1.312	62.9	1.006	0.03	0.949	1.253
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	40620	2593	1	20.56	21.70	1.300	62.9	1.006	-0.11	0.742	0.971
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	39750	2506	1	20.55	21.70	1.303	62.9	1.006	-0.19	0.783	1.027
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	40185	2549.5	1	20.47	21.70	1.327	62.9	1.006	0.08	0.768	1.026
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	41055	2636.5	1	20.53	21.70	1.309	62.9	1.006	-0.18	0.671	0.884
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	DSI 7	41490	2680	1	20.52	21.70	1.312	62.9	1.006	0.13	0.762	1.006
	LTE Band 41	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	DSI 7	40620	2593	1	20.55	21.70	1.303	62.9	1.006	0.09	0.717	0.940
	LTE Band 41 PC2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	DSI 7	39750	2506	1	22.10	23.30	1.318	42.9	1.009	-0.14	0.976	1.298
	LTE Band 41_UL CA	20M	QPSK	1	99	-	Bottom Side	5mm	Ant 2	DSI 7	39750+ 39948	2506+ 2525.8	1	20.21	21.70	1.409	62.9	1.006	-0.1	0.845	1.198
	LTE Band 41 PC2_UL CA	20M	QPSK	1	99	-	Bottom Side	5mm	Ant 2	DSI 7	39750+ 39948	2506+ 2525.8	1	21.86	23.30	1.393	42.9	1.009	-0.14	0.837	1.177
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	DSI 7	40620	2593	1	17.75	19.00	1.334	62.9	1.006	0.13	0.354	0.475
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	DSI 7	40620	2593	1	17.73	19.00	1.340	62.9	1.006	-0.15	0.342	0.461
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	40620	2593	1	17.75	19.00	1.334	62.9	1.006	0.12	0.506	0.679

	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	39750	2506	1	17.69	19.00	1.352	62.9	1.006	0.06	0.470	0.639
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	40185	2549.5	1	17.73	19.00	1.340	62.9	1.006	-0.15	0.530	0.714
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	41055	2636.5	1	17.72	19.00	1.343	62.9	1.006	0.02	0.476	0.643
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	DSI 7	41490	2680	1	17.71	19.00	1.346	62.9	1.006	0.03	0.473	0.640
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	DSI 7	40620	2593	1	17.73	19.00	1.340	62.9	1.006	0.02	0.361	0.487
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 1	DSI 7	40620	2593	1	17.72	19.00	1.343	62.9	1.006	0.07	0.330	0.446
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	DSI 7	40620	2593	1	17.75	19.00	1.334	62.9	1.006	0.06	0.336	0.451
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	DSI 7	40620	2593	1	17.73	19.00	1.340	62.9	1.006	-0.15	0.324	0.437
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	40620	2593	1	17.75	19.00	1.334	62.9	1.006	-0.16	0.878	1.178
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	39750	2506	1	17.69	19.00	1.352	62.9	1.006	0.15	0.958	1.303
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	40185	2549.5	1	17.73	19.00	1.340	62.9	1.006	-0.07	0.955	1.287
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	41055	2636.5	1	17.72	19.00	1.343	62.9	1.006	0.06	0.821	1.109
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	41490	2680	1	17.71	19.00	1.346	62.9	1.006	0.04	0.904	1.224
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	40620	2593	1	17.73	19.00	1.340	62.9	1.006	0.07	0.659	0.888
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	39750	2506	1	17.69	19.00	1.352	62.9	1.006	0.19	0.710	0.966
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	40185	2549.5	1	17.71	19.00	1.346	62.9	1.006	0.02	0.716	0.969
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	41055	2636.5	1	17.68	19.00	1.355	62.9	1.006	-0.12	0.612	0.834
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	DSI 7	41490	2680	1	17.66	19.00	1.361	62.9	1.006	0.16	0.686	0.940
	LTE Band 41	20M	QPSK	100	0	-	Top Side	5mm	Ant 1	DSI 7	40620	2593	1	17.72	19.00	1.343	62.9	1.006	0.06	0.596	0.805
	LTE Band 41 PC2	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	39750	2506	1	19.45	20.60	1.303	42.9	1.009	0.03	0.931	1.224
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	39750	2506	1	17.07	19.00	1.560	62.9	1.006	0.02	0.641	1.006
	LTE Band 41 PC2_Other PA	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	DSI 7	39750	2506	1	18.66	20.60	1.563	42.9	1.009	-0.01	0.625	0.986
	LTE Band 41_UL CA	20M	QPSK	1	99	-	Top Side	5mm	Ant 1	DSI 7	39750+ 39948	2506+ 2525.8	1	17.64	19.00	1.368	62.9	1.006	0.15	0.871	1.198
	LTE Band 41 PC2_UL CA	20M	QPSK	1	99	-	Top Side	5mm	Ant 1	DSI 7	39750+ 39948	2506+ 2525.8	1	19.38	20.60	1.324	42.9	1.009	0.03	0.870	1.163
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	40620	2593	1	20.58	21.50	1.236	62.9	1.006	0.02	0.528	0.656
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	39750	2506	1	20.56	21.50	1.242	62.9	1.006	0.08	0.510	0.637
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	40185	2549.5	1	20.57	21.50	1.239	62.9	1.006	0.03	0.528	0.658
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	41055	2636.5	1	20.54	21.50	1.247	62.9	1.006	-0.05	0.700	0.878
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	DSI 7	41490	2680	1	20.55	21.50	1.245	62.9	1.006	0.03	0.713	0.893
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI 7	40620	2593	1	20.55	21.50	1.245	62.9	1.006	-0.06	0.610	0.764
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI 7	39750	2506	1	20.49	21.50	1.262	62.9	1.006	0.08	0.525	0.666
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI 7	40185	2549.5	1	20.52	21.50	1.253	62.9	1.006	0.03	0.686	0.865
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI 7	41055	2636.5	1	20.52	21.50	1.253	62.9	1.006	-0.05	0.716	0.903
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	DSI 7	41490	2680	1	20.53	21.50	1.250	62.9	1.006	0.02	0.724	0.911
	LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant 0	DSI 7	40620	2593	1	20.52	21.50	1.253	62.9	1.006	-0.06	0.590	0.744
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	40620	2593	1	20.58	21.50	1.236	62.9	1.006	0.08	0.573	0.712
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	39750	2506	1	20.56	21.50	1.242	62.9	1.006	0.08	0.522	0.652
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	40185	2549.5	1	20.57	21.50	1.239	62.9	1.006	0.03	0.590	0.735
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	41055	2636.5	1	20.54	21.50	1.247	62.9	1.006	-0.05	0.633	0.794
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	DSI 7	41490	2680	1	20.55	21.50	1.245	62.9	1.006	-0.02	0.570	0.714
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI 7	40620	2593	1	20.55	21.50	1.245	62.9	1.006	0.03	0.602	0.754
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI 7	39750	2506	1	20.49	21.50	1.262	62.9	1.006	0.08	0.495	0.628
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI 7	40185	2549.5	1	20.52	21.50	1.253	62.9	1.006	0.03	0.656	0.827
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI 7	41055	2636.5	1	20.52	21.50	1.253	62.9	1.006	-0.05	0.691	0.871
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	DSI 7	41490	2680	1	20.53	21.50	1.250	62.9	1.006	0.02	0.593	0.746
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 0	DSI 7	40620	2593	1	20.52	21.50	1.253	62.9	1.006	0.08	0.562	0.708
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	DSI 7	40620	2593	1	20.58	21.50	1.236	62.9	1.006	0.07	0.110	0.137
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	DSI 7	40620	2593	1	20.55	21.50	1.245	62.9	1.006	0.05	0.114	0.143
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	40620	2593	1	20.58	21.50	1.236	62.9	1.006	-0.04	0.783	0.974
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	39750	2506	1	20.56	21.50	1.242	62.9	1.006	0.08	0.931	1.163
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	40185	2549.5	1	20.57	21.50	1.239	62.9	1.006	-0.05	0.922	1.149
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	41055	2636.5	1	20.54	21.50	1.247	62.9	1.006	-0.04	0.774	0.971
41	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	41490	2680	1	20.55	21.50	1.245	62.9	1.006	0.16	1.050	**1.315**
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 7	40620	2593	1	20.55	21.50	1.245	62.9	1.006	-0.09	0.828	1.037
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 7	39750	2506	1	20.49	21.50	1.262	62.9	1.006	0.08	0.958	1.216
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 7	40185	2549.5	1	20.52	21.50	1.253	62.9	1.006	-0.05	0.922	1.162

	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 7	41055	2636.5	1	20.52	21.50	1.253	62.9	1.006	-0.04	0.747	0.942
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 7	41490	2680	1	20.53	21.50	1.250	62.9	1.006	0.16	1.030	1.295
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	41490	2680	2	20.55	21.50	1.245	62.9	1.006	0.08	1.010	1.265
	LTE Band 41	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	DSI 7	40620	2593	1	20.52	21.50	1.253	62.9	1.006	0.04	0.831	1.048
	LTE Band 41 PC2	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	DSI 7	41490	2680	1	22.21	23.10	1.227	42.9	1.009	-0.17	0.986	1.221
	LTE Band 41_UL CA	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	41490+ 41292	2680+ 2660.2	1	20.43	21.50	1.279	62.9	1.006	0.16	0.927	1.193
	LTE Band 41 PC2_UL CA	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	DSI 7	41490+ 41292	2680+ 2660.2	1	22.13	23.10	1.250	42.9	1.009	-0.17	0.911	1.149
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 3	DSI 7	40620	2593	1	18.47	19.50	1.268	62.9	1.006	0.02	0.326	0.416
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 3	DSI 7	40620	2593	1	18.46	19.50	1.271	62.9	1.006	-0.18	0.267	0.341
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 3	DSI 7	40620	2593	1	18.47	19.50	1.268	62.9	1.006	0.12	0.322	0.411
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 3	DSI 7	40620	2593	1	18.46	19.50	1.271	62.9	1.006	-0.09	0.253	0.323
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 3	DSI 7	40620	2593	1	18.47	19.50	1.268	62.9	1.006	-0.07	0.119	0.152
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 3	DSI 7	40620	2593	1	18.46	19.50	1.271	62.9	1.006	-0.13	0.086	0.110
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	40620	2593	1	18.47	19.50	1.268	62.9	1.006	-0.14	0.717	0.914
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	39750	2506	1	18.43	19.50	1.279	62.9	1.006	-0.04	0.554	0.713
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	40185	2549.5	1	18.44	19.50	1.276	62.9	1.006	0.04	0.508	0.652
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	41055	2636.5	1	18.42	19.50	1.282	62.9	1.006	-0.09	1.010	1.303
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	41490	2680	1	18.45	19.50	1.274	62.9	1.006	-0.16	1.020	1.307
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 3	DSI 7	40620	2593	1	18.46	19.50	1.271	62.9	1.006	0.1	0.572	0.731
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 3	DSI 7	39750	2506	1	18.44	19.50	1.276	62.9	1.006	0.05	0.546	0.701
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 3	DSI 7	40185	2549.5	1	18.41	19.50	1.285	62.9	1.006	-0.01	0.523	0.676
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 3	DSI 7	41055	2636.5	1	18.38	19.50	1.294	62.9	1.006	0.05	0.742	0.966
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 3	DSI 7	41490	2680	1	18.41	19.50	1.285	62.9	1.006	-0.09	0.751	0.971
	LTE Band 41	20M	QPSK	100	0	-	Top Side	5mm	Ant 3	DSI 7	40620	2593	1	18.45	19.50	1.274	62.9	1.006	0.06	0.541	0.693
	LTE Band 41 PC2	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	41490	2680	1	20.16	21.10	1.242	42.9	1.009	0.03	0.984	1.233
	LTE Band 41_UL CA	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	41490+ 41292	2680+ 2660.2	1	18.26	19.50	1.330	62.9	1.006	-0.16	0.891	1.193
	LTE Band 41 PC2_UL CA	20M	QPSK	1	0	-	Top Side	5mm	Ant 3	DSI 7	41490+ 41292	2680+ 2660.2	1	19.95	21.10	1.303	42.9	1.009	0.03	0.887	1.166
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	DSI 7	507000	2535	1	18.03	18.90	1.222	-	-	0.05	0.588	0.718
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	DSI 7	507000	2535	1	18.02	18.90	1.225	-	-	0.19	0.643	0.787
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	DSI 7	507000	2535	1	18.03	18.90	1.222	-	-	-0.06	0.699	0.854
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	DSI 7	507000	2535	1	18.02	18.90	1.225	-	-	-0.04	0.703	0.861
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 2	DSI 7	507000	2535	1	17.99	18.90	1.233	-	-	0.14	0.532	0.656
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 2	DSI 7	507000	2535	1	18.03	18.90	1.222	-	-	-0.17	0.110	0.134
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 2	DSI 7	507000	2535	1	18.02	18.90	1.225	-	-	0.05	0.112	0.137
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 2	DSI 7	507000	2535	1	18.03	18.90	1.222	-	-	0.02	0.202	0.247
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 2	DSI 7	507000	2535	1	18.02	18.90	1.225	-	-	0.08	0.196	0.240
42	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	DSI 7	507000	2535	1	18.03	18.90	1.222	-	-	0.03	1.060	**1.295**
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	DSI 7	507000	2535	1	18.02	18.90	1.225	-	-	0.03	1.030	1.261
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	DSI 7	507000	2535	1	17.99	18.90	1.233	-	-	0.17	0.742	0.915
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	507000	2535	1	16.71	18.10	1.377	-	-	0.02	0.310	0.427
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	DSI 7	507000	2535	1	16.69	18.10	1.384	-	-	-0.16	0.341	0.472
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	507000	2535	1	16.71	18.10	1.377	-	-	-0.04	0.444	0.611
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	DSI 7	507000	2535	1	16.69	18.10	1.384	-	-	0.08	0.428	0.592
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	507000	2535	1	16.71	18.10	1.377	-	-	-0.14	0.070	0.096
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 1	DSI 7	507000	2535	1	16.69	18.10	1.384	-	-	-0.17	0.074	0.102
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	507000	2535	1	16.71	18.10	1.377	-	-	-0.02	0.929	1.279
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	507000	2535	1	16.69	18.10	1.384	-	-	-0.03	0.916	1.267
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	5mm	Ant 1	DSI 7	507000	2535	1	16.65	18.10	1.396	-	-	0.08	0.725	1.012
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI 7	518598	2592.99	1	18.61	19.70	1.285	-	-	0.02	0.542	0.697
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	DSI 7	518598	2592.99	1	18.60	19.70	1.288	-	-	0.01	0.604	0.778
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI 7	518598	2592.99	1	18.61	19.70	1.285	-	-	0.15	0.554	0.712
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	DSI 7	518598	2592.99	1	18.60	19.70	1.288	-	-	0.03	0.615	0.792
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 7	518598	2592.99	1	18.61	19.70	1.285	-	-	0.06	0.095	0.122
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 2	DSI 7	518598	2592.99	1	18.60	19.70	1.288	-	-	-0.06	0.085	0.110
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 2	DSI 7	518598	2592.99	1	18.61	19.70	1.285	-	-	0.05	0.141	0.181

	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 2	DSI 7	518598	2592.99	1	18.60	19.70	1.288	-	-	0.16	0.165	0.213
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 2	DSI 7	518598	2592.99	1	18.61	19.70	1.285	-	-	0.04	0.858	1.103
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 2	DSI 7	518598	2592.99	1	18.60	19.70	1.288	-	-	0.04	0.998	1.286
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Bottom Side	5mm	Ant 2	DSI 7	518598	2592.99	1	18.58	19.70	1.294	-	-	0.02	0.694	0.898
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 1	DSI 7	518598	2592.99	1	16.39	17.60	1.321	-	-	-0.08	0.338	0.447
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 1	DSI 7	518598	2592.99	1	16.37	17.60	1.327	-	-	-0.16	0.326	0.433
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 1	DSI 7	518598	2592.99	1	16.39	17.60	1.321	-	-	-0.04	0.505	0.667
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	DSI 7	518598	2592.99	1	16.37	17.60	1.327	-	-	-0.09	0.447	0.593
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 1	DSI 7	518598	2592.99	1	16.39	17.60	1.321	-	-	0.03	0.075	0.099
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 1	DSI 7	518598	2592.99	1	16.37	17.60	1.327	-	-	0.02	0.070	0.093
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 1	DSI 7	518598	2592.99	1	16.39	17.60	1.321	-	-	0.08	0.978	1.292
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 1	DSI 7	518598	2592.99	1	16.37	17.60	1.327	-	-	0.11	0.821	1.090
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant 1	DSI 7	518598	2592.99	1	16.34	17.60	1.337	-	-	0.18	0.630	0.842
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 0	DSI 7	518598	2592.99	1	19.79	20.90	1.291	-	-	0.1	0.403	0.520
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 0	DSI 7	518598	2592.99	1	19.78	20.90	1.294	-	-	0.08	0.522	0.676
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	DSI 7	518598	2592.99	1	19.79	20.90	1.291	-	-	0.04	0.480	0.620
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	DSI 7	518598	2592.99	1	19.78	20.90	1.294	-	-	0.06	0.608	0.787
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 0	DSI 7	518598	2592.99	1	19.79	20.90	1.291	-	-	0.07	0.271	0.350
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 0	DSI 7	518598	2592.99	1	19.78	20.90	1.294	-	-	-0.11	0.296	0.383
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	DSI 7	518598	2592.99	1	19.79	20.90	1.291	-	-	0.04	0.788	1.017
43	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	DSI 7	518598	2592.99	1	19.78	20.90	1.294	-	-	-0.01	1.000	**1.294**
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	DSI 7	518598	2592.99	1	19.77	20.90	1.297	-	-	-0.06	0.705	0.915
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 3	DSI 7	518598	2592.99	1	17.69	18.80	1.291	-	-	0.08	0.583	0.753
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 3	DSI 7	518598	2592.99	1	17.65	18.80	1.303	-	-	-0.04	0.606	0.790
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 3	DSI 7	518598	2592.99	1	17.69	18.80	1.291	-	-	0.06	0.469	0.606
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 3	DSI 7	518598	2592.99	1	17.65	18.80	1.303	-	-	0.18	0.526	0.685
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 3	DSI 7	518598	2592.99	1	17.69	18.80	1.291	-	-	0.04	0.234	0.302
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 3	DSI 7	518598	2592.99	1	17.65	18.80	1.303	-	-	0.18	0.227	0.296
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 3	DSI 7	518598	2592.99	1	17.69	18.80	1.291	-	-	0.06	0.819	1.058
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 3	DSI 7	518598	2592.99	1	17.65	18.80	1.303	-	-	-0.01	0.982	1.280
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant 3	DSI 7	518598	2592.99	1	17.61	18.80	1.315	-	-	-0.13	0.842	1.107
									3500MHz												
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 7	DSI 7	42590	3500	1	19.67	20.70	1.268	62.9	1.006	-0.1	0.417	0.532
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 7	DSI 7	42590	3500	1	19.61	20.70	1.285	62.9	1.006	0.1	0.272	0.352
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 7	DSI 7	42590	3500	1	19.67	20.70	1.268	62.9	1.006	0.12	0.373	0.476
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 7	DSI 7	42590	3500	1	19.61	20.70	1.285	62.9	1.006	0.04	0.376	0.486
44	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 7	DSI 7	42590	3500	1	19.67	20.70	1.268	62.9	1.006	0.04	1.020	**1.301**
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 7	DSI 7	42190	3460	1	19.64	20.70	1.276	62.9	1.006	0.05	0.975	1.252
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 7	DSI 7	42990	3540	1	19.63	20.70	1.279	62.9	1.006	0.12	0.985	1.268
	LTE Band 42	20M	QPSK	50	0	-	Left Side	5mm	Ant 7	DSI 7	42590	3500	1	19.61	20.70	1.285	62.9	1.006	0.02	0.666	0.861
	LTE Band 42	20M	QPSK	50	0	-	Left Side	5mm	Ant 7	DSI 7	42190	3460	1	19.54	20.70	1.306	62.9	1.006	-0.05	0.641	0.842
	LTE Band 42	20M	QPSK	50	0	-	Left Side	5mm	Ant 7	DSI 7	42990	3540	1	19.59	20.70	1.291	62.9	1.006	-0.02	0.652	0.847
	LTE Band 42	20M	QPSK	100	0	-	Left Side	5mm	Ant 7	DSI 7	42590	3500	1	19.58	20.70	1.294	62.9	1.006	0.13	0.650	0.846
	LTE Band 42	20M	QPSK	1	0	-	Top Side	5mm	Ant 7	DSI 7	42590	3500	1	19.67	20.70	1.268	62.9	1.006	-0.04	0.100	0.128
	LTE Band 42	20M	QPSK	50	0	-	Top Side	5mm	Ant 7	DSI 7	42590	3500	1	19.61	20.70	1.285	62.9	1.006	-0.06	0.064	0.083
	LTE Band 42_UL CA	20M	QPSK	1	99	-	Left Side	5mm	Ant 7	DSI 7	42590+ 42788	3500+ 3519.8	1	19.34	20.70	1.368	62.9	1.006	0.04	0.870	1.197
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	DSI 7	656000	3840	1	16.63	17.60	1.250	-	-	0.16	0.343	0.429
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	DSI 7	656000	3840	1	16.62	17.60	1.253	-	-	-0.14	0.269	0.337
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	DSI 7	656000	3840	1	16.63	17.60	1.250	-	-	0.02	0.553	0.691
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	DSI 7	656000	3840	1	16.62	17.60	1.253	-	-	0.09	0.482	0.604
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 4	DSI 7	656000	3840	1	16.63	17.60	1.250	-	-	0.08	0.103	0.129
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 4	DSI 7	656000	3840	1	16.62	17.60	1.253	-	-	-0.01	0.090	0.113
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 4	DSI 7	656000	3840	1	16.63	17.60	1.250	-	-	0.07	0.072	0.090
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 4	DSI 7	656000	3840	1	16.62	17.60	1.253	-	-	-0.09	0.059	0.074
45	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI 7	656000	3840	1	16.63	17.60	1.250	-	-	0.01	1.030	**1.288**
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI 7	656000	3840	2	16.63	17.60	1.250	-	-	0.05	0.666	0.833

	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI 7	656000	3840	1	16.62	17.60	1.253	-	-	0.03	0.828	1.038
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI 7	656000	3840	1	16.58	17.60	1.265	-	-	-0.07	0.673	0.851
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 4	DSI 7	656000	3840	1	19.55	20.60	1.274	50	1.000	-0.05	0.987	1.257
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 5	DSI 7	656000	3840	1	17.75	19.40	1.462	-	-	0.04	0.313	0.458
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 5	DSI 7	656000	3840	1	17.73	19.40	1.469	-	-	-0.11	0.242	0.355
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 5	DSI 7	656000	3840	1	17.75	19.40	1.462	-	-	0.05	0.449	0.657
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	DSI 7	656000	3840	1	17.73	19.40	1.469	-	-	-0.17	0.415	0.610
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 5	DSI 7	656000	3840	1	17.75	19.40	1.462	-	-	0.06	0.519	0.759
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 5	DSI 7	656000	3840	1	17.73	19.40	1.469	-	-	-0.09	0.512	0.752
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 5	DSI 7	656000	3840	1	17.75	19.40	1.462	-	-	-0.12	0.530	0.775
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 5	DSI 7	656000	3840	1	17.73	19.40	1.469	-	-	0.03	0.504	0.740
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	5mm	Ant 5	DSI 7	656000	3840	1	17.71	19.40	1.476	-	-	0.02	0.458	0.676
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 5	DSI 7	650000	3840	1	20.77	22.40	1.455	50	1.000	0.05	0.515	0.750
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	DSI 7	656000	3840	1	16.18	17.10	1.236	-	-	0.12	0.314	0.388
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	DSI 7	656000	3840	1	16.15	17.10	1.245	-	-	0.07	0.328	0.408
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI 7	656000	3840	1	16.18	17.10	1.236	-	-	0.02	0.520	0.643
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	DSI 7	656000	3840	1	16.15	17.10	1.245	-	-	-0.12	0.456	0.567
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI 7	656000	3840	1	16.18	17.10	1.236	-	-	0.08	0.945	1.168
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI 7	656000	3840	1	16.15	17.10	1.245	-	-	0.06	1.030	1.282
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI 7	656000	3840	1	16.14	17.10	1.247	-	-	0.04	0.753	0.939
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 7	DSI 7	656000	3840	1	16.18	17.10	1.236	-	-	0.13	0.095	0.117
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 7	DSI 7	656000	3840	1	16.15	17.10	1.245	-	-	0.1	0.093	0.116
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 7	DSI 7	656000	3840	1	19.19	20.10	1.233	50	1.000	0.05	0.948	1.169
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 8	DSI 7	656000	3840	1	21.65	22.60	1.245	-	-	0.1	0.246	0.306
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 8	DSI 7	656000	3840	1	21.62	22.60	1.253	-	-	-0.11	0.306	0.383
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	DSI 7	656000	3840	1	21.65	22.60	1.245	-	-	0.09	0.280	0.348
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 8	DSI 7	656000	3840	1	21.62	22.60	1.253	-	-	0.04	0.337	0.422
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 8	DSI 7	656000	3840	1	21.65	22.60	1.245	-	-	-0.08	0.991	1.233
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 8	DSI 7	656000	3840	2	21.65	22.60	1.245	-	-	0.07	0.981	1.221
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 8	DSI 7	656000	3840	1	21.62	22.60	1.253	-	-	-0.01	0.966	1.211
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	5mm	Ant 8	DSI 7	656000	3840	1	21.61	22.60	1.256	-	-	0.09	0.910	1.143
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 8	DSI 7	656000	3840	1	21.65	22.60	1.245	-	-	0.01	0.315	0.392
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 8	DSI 7	656000	3840	1	21.62	22.60	1.253	-	-	-0.03	0.308	0.386
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 8	DSI 7	656000	3840	1	24.69	25.60	1.233	50	1.000	0.04	0.938	1.157

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																	
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6+3(6)	Standalone	6	2437	1	17.37	19.00	1.455	97.38	1.027	0.04	0.563	0.842
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6+3(6)	Standalone	11	2462	1	17.45	19.00	1.429	97.38	1.027	0.02	0.541	0.794
46	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	Standalone	6	2437	1	17.37	19.00	1.455	97.38	1.027	-0.01	0.885	**1.323**
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	Standalone	6	2437	2	17.37	19.00	1.455	97.38	1.027	0.12	0.874	1.306
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	Standalone	11	2462	1	17.45	19.00	1.429	97.38	1.027	-0.08	0.814	1.195
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	Standalone	1	2412	1	17.35	19.00	1.462	97.38	1.027	0.02	0.786	1.180
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 6+3(6)	Standalone	6	2437	1	17.37	19.00	1.455	97.38	1.027	0.06	0.761	1.138
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 6+3(6)	Standalone	11	2462	1	17.45	19.00	1.429	97.38	1.027	-0.09	0.729	1.070
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 6+3(6)	Standalone	6	2462	1	17.37	19.00	1.455	97.38	1.027	-0.08	0.637	0.952
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 6+3(6)	Standalone	11	2462	1	17.45	19.00	1.429	97.38	1.027	0.13	0.619	0.908
	WLAN2.4GHz	802.11n-HT40 MCS0	Back	5mm	Ant 6+3(3)	Standalone	3	2422	1	16.56	18.00	1.393	100	1.000	-0.01	0.831	1.158
	WLAN2.4GHz	802.11n-HT40 MCS0	Back	5mm	Ant 6+3(3)	Standalone	6	2437	1	16.54	18.00	1.400	100	1.000	0.03	0.817	1.143
	Bluetooth	1Mbps	Front	5mm	Ant 6	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	0.03	0.138	0.201
47	Bluetooth	1Mbps	Back	5mm	Ant 6	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	0.04	0.510	**0.743**
	Bluetooth	1Mbps	Right Side	5mm	Ant 6	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	-0.02	0.350	0.510
	Bluetooth	1Mbps	Top Side	5mm	Ant 6	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	0.15	0.041	0.060
	Bluetooth	1Mbps	Front	5mm	Ant 3	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	-0.05	0.086	0.133
	Bluetooth	1Mbps	Back	5mm	Ant 3	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	-0.01	0.242	0.373
	Bluetooth	1Mbps	Right Side	5mm	Ant 3	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	0.16	0.232	0.357
	Bluetooth	1Mbps	Top Side	5mm	Ant 3	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	0.05	0.122	0.188
5000MHz																	
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	5mm	Ant 5+4(5)	Standalone	46	5230	1	15.54	17.00	1.400	100	1.000	-0.18	0.421	0.589
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	5mm	Ant 5+4(5)	Standalone	46	5230	1	15.54	17.00	1.400	100	1.000	0.1	0.809	1.132
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	5mm	Ant 5+4(5)	Standalone	38	5190	1	12.75	14.50	1.496	100	1.000	0.12	0.452	0.676
	WLAN5.2GHz	802.11a 6Mbps	Left Side	5mm	Ant 5+4(4)	Full Power	40	5200	1	18.61	20.00	1.376	99.32	1.007	0.08	0.098	0.136
48	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	5mm	Ant 5+4(5)	Standalone	46	5230	1	15.54	17.00	1.400	100	1.000	-0.17	0.829	**1.160**
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	5mm	Ant 5+4(5)	Standalone	38	5190	1	12.75	14.50	1.496	100	1.000	-0.03	0.516	0.772
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	5mm	Ant 5+4(5)	Standalone	46	5230	1	15.54	17.00	1.400	100	1.000	0.14	0.326	0.456
	WLAN5.8GHz	802.11a 6Mbps	Front	5mm	Ant 5+4(5)	Full Power	157	5785	1	18.57	20.00	1.390	99.32	1.007	-0.1	0.498	0.697
49	WLAN5.8GHz	802.11a 6Mbps	Back	5mm	Ant 5+4(5)	Full Power	157	5785	1	18.57	20.00	1.390	99.32	1.007	-0.02	0.852	**1.193**
	WLAN5.8GHz	802.11a 6Mbps	Back	5mm	Ant 5+4(5)	Full Power	165	5825	1	18.42	20.00	1.439	99.32	1.007	-0.06	0.822	1.191
	WLAN5.8GHz	802.11a 6Mbps	Left Side	5mm	Ant 5+4(5)	Full Power	157	5785	1	18.57	20.00	1.390	99.32	1.007	0.18	0.119	0.167
	WLAN5.8GHz	802.11a 6Mbps	Right Side	5mm	Ant 5+4(5)	Full Power	157	5785	1	18.57	20.00	1.390	99.32	1.007	-0.17	0.848	1.187
	WLAN5.8GHz	802.11a 6Mbps	Right Side	5mm	Ant 5+4(5)	Full Power	165	5825	1	18.42	20.00	1.439	99.32	1.007	-0.04	0.823	1.192
	WLAN5.8GHz	802.11a 6Mbps	Top Side	5mm	Ant 5+4(5)	Full Power	157	5785	1	18.57	20.00	1.390	99.32	1.007	-0.05	0.462	0.647

16.3 Body Worn Accessory SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
											750MHz											
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	23095	707.5	1	22.71	24.00	1.346	-	-	0.05	0.431	0.580
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 0	-	DSI 3	23095	707.5	1	21.83	23.00	1.309	-	-	0.14	0.257	0.336
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	23095	707.5	1	22.71	24.00	1.346	-	-	0.02	0.641	0.863
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 0	-	DSI 3	23095	707.5	1	21.83	23.00	1.309	-	-	-0.12	0.375	0.491
	LTE Band 12	10M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	23095	707.5	1	21.73	23.00	1.340	-	-	-0.13	0.412	0.552
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	23095	707.5	1	22.50	24.00	1.413	-	-	0.03	0.262	0.370
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 1	-	DSI 3	23095	707.5	1	21.56	23.00	1.393	-	-	-0.08	0.180	0.251
50	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	23095	707.5	1	22.50	24.00	1.413	-	-	-0.16	0.703	**0.993**
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 1	-	DSI 3	23095	707.5	1	21.56	23.00	1.393	-	-	0.05	0.456	0.635
	LTE Band 12	10M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	23095	707.5	1	21.53	23.00	1.403	-	-	0.15	0.437	0.613
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	23230	782	1	22.71	24.00	1.346	-	-	0.04	0.453	0.610
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 0	-	DSI 3	23230	782	1	21.68	23.00	1.355	-	-	-0.11	0.285	0.386
51	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	23230	782	1	22.71	24.00	1.346	-	-	-0.06	0.657	**0.884**
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 0	-	DSI 3	23230	782	1	21.68	23.00	1.355	-	-	0.05	0.420	0.569
	LTE Band 13	10M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	23230	782	1	21.67	23.00	1.358	-	-	0.06	0.435	0.591
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	23230	782	1	22.48	24.00	1.419	-	-	0.08	0.289	0.410
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 1	-	DSI 3	23230	782	1	21.54	23.00	1.400	-	-	0.01	0.230	0.322
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	23230	782	1	22.48	24.00	1.419	-	-	0.03	0.612	0.868
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 1	-	DSI 3	23230	782	1	21.54	23.00	1.400	-	-	-0.08	0.510	0.714
	LTE Band 13	10M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	23230	782	1	21.51	23.00	1.409	-	-	-0.08	0.426	0.600
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	136100	680.5	1	22.57	24.00	1.390	-	-	0.04	0.258	0.359
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	136100	680.5	1	22.55	24.00	1.396	-	-	0.07	0.225	0.314
52	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	136100	680.5	1	22.57	24.00	1.390	-	-	0.06	0.397	**0.552**
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	136100	680.5	1	22.55	24.00	1.396	-	-	0.05	0.317	0.443
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	136100	680.5	1	22.54	24.00	1.400	-	-	-0.14	0.095	0.133
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	136100	680.5	1	22.49	24.00	1.416	-	-	0.13	0.078	0.110
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	136100	680.5	1	22.54	24.00	1.400	-	-	-0.03	0.261	0.365
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	136100	680.5	1	22.49	24.00	1.416	-	-	-0.02	0.157	0.222
											835MHz											
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 0	-	DSI 3	189	836.4	1	29.33	30.00	1.167	-	-	0.05	0.533	0.622
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	DSI 3	189	836.4	1	29.33	30.00	1.167	-	-	0.09	0.714	0.833
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	DSI 3	128	824.2	1	28.16	30.00	1.528	-	-	0.12	0.484	0.739
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	DSI 3	251	848.8	1	29.31	30.00	1.172	-	-	-0.12	0.747	0.876
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 1	-	DSI 3	189	836.4	1	28.97	30.00	1.268	-	-	0.12	0.343	0.435
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	-	DSI 3	189	836.4	1	28.97	30.00	1.268	-	-	-0.13	0.709	0.899
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	-	DSI 3	128	824.2	1	28.12	30.00	1.542	-	-	0.07	0.696	1.073
53	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	-	DSI 3	251	848.8	1	28.88	30.00	1.294	-	-	0.03	0.923	**1.195**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	DSI 3	4182	836.4	1	22.64	24.00	1.368	-	-	0.08	0.527	0.721
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4182	836.4	1	22.64	24.00	1.368	-	-	0.03	0.790	1.081
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4132	826.4	1	22.58	24.00	1.387	-	-	0.13	0.787	1.091
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	DSI 3	4233	846.6	1	22.63	24.00	1.371	-	-	0.06	0.844	1.157
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	DSI 3	4182	836.4	1	22.71	23.50	1.199	-	-	0.1	0.445	0.534
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	4182	836.4	1	22.71	23.50	1.199	-	-	-0.04	0.851	1.021
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	4132	826.4	1	22.64	23.50	1.219	-	-	-0.08	0.968	1.180
54	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	4233	846.6	1	22.65	23.50	1.216	-	-	-0.07	1.080	**1.313**
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	4233	846.6	2	22.65	23.50	1.216	-	-	0.08	0.851	1.035
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	Headset	DSI 3	4233	846.6	1	22.65	23.50	1.216	-	-	0.06	0.998	1.214
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	17mm	Ant 1	-	DSI 4	4182	836.4	1	22.71	24.00	1.346	-	-	0.02	0.145	0.195
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	18mm	Ant 1	-	DSI 4	4233	846.6	1	22.65	24.00	1.365	-	-	0.05	0.247	0.337
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	26865	831.5	1	22.49	24.00	1.416	-	-	0.08	0.563	0.797

	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	-	DSI 3	26865	831.5	1	21.57	23.00	1.390	-	-	0.18	0.332	0.461
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	1	22.49	24.00	1.416	-	-	-0.12	0.860	1.218
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	2	22.49	24.00	1.416	-	-	0.03	0.597	0.845
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	DSI 3	26865	831.5	1	22.49	24.00	1.416	-	-	-0.03	0.845	1.196
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	1	21.57	23.00	1.390	-	-	0.06	0.518	0.720
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 0	-	DSI 3	26865	831.5	1	21.56	23.00	1.393	-	-	0.08	0.516	0.719
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	26865	831.5	1	22.54	23.40	1.219	-	-	0.04	0.484	0.590
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 1	-	DSI 3	26865	831.5	1	21.62	23.00	1.374	-	-	0.1	0.305	0.419
55	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	26865	831.5	1	22.54	23.40	1.219	-	-	0.02	1.060	**1.292**
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 1	Headset	DSI 3	26865	831.5	1	22.54	23.40	1.219	-	-	-0.03	1.010	1.231
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 1	-	DSI 3	26865	831.5	1	21.62	23.00	1.374	-	-	-0.19	0.686	0.943
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 1	-	DSI 3	26865	831.5	1	21.55	23.00	1.396	-	-	0.08	0.680	0.950
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	166300	831.5	1	22.68	24.00	1.355	-	-	-0.15	0.358	0.485
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	-	DSI 3	166300	831.5	1	22.64	24.00	1.368	-	-	0.13	0.305	0.417
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	166300	831.5	1	22.68	24.00	1.355	-	-	0.06	0.568	0.770
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	-	DSI 3	166300	831.5	1	22.64	24.00	1.368	-	-	0.08	0.449	0.614
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	166300	831.5	1	22.50	24.00	1.413	-	-	0.09	0.296	0.418
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	166300	831.5	1	22.49	24.00	1.416	-	-	-0.15	0.309	0.437
56	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	166300	831.5	1	22.50	24.00	1.413	-	-	-0.02	0.637	**0.900**
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	166300	831.5	1	22.49	24.00	1.416	-	-	0.01	0.543	0.769
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	166300	831.5	1	21.59	23.00	1.384	-	-	-0.03	0.528	0.731
1750MHz																						
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	DSI 3	1413	1732.6	1	19.46	20.20	1.186	-	-	0.12	1.070	1.269
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	Headset	DSI 3	1413	1732.6	1	19.46	20.20	1.186	-	-	-0.06	1.010	1.198
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	DSI 3	1312	1712.4	1	19.44	20.20	1.191	-	-	0.1	1.010	1.203
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	DSI 3	1513	1752.6	1	19.40	20.20	1.202	-	-	0.05	1.050	1.262
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	DSI 3	1413	1732.6	1	19.46	20.20	1.186	-	-	-0.15	0.864	1.025
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	DSI 3	1312	1712.4	1	19.44	20.20	1.191	-	-	0.06	0.826	0.984
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	DSI 3	1513	1752.6	1	19.40	20.20	1.202	-	-	-0.09	0.859	1.033
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	17mm	Ant 2	-	DSI 4	1413	1732.6	1	22.51	24.00	1.409	-	-	-0.18	0.419	0.590
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	18mm	Ant 2	-	DSI 4	1513	1752.6	1	22.45	24.00	1.429	-	-	0.03	0.380	0.543
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	DSI 3	1413	1732.6	1	17.91	18.90	1.256	-	-	0.07	0.652	0.819
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	DSI 3	1312	1712.4	1	17.87	18.90	1.268	-	-	0.11	0.543	0.688
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	DSI 3	1513	1752.6	1	17.90	18.90	1.259	-	-	0.04	0.572	0.720
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	1413	1732.6	1	17.91	18.90	1.256	-	-	0.03	0.997	1.252
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	1312	1712.4	1	17.87	18.90	1.268	-	-	0.12	0.943	1.195
57	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	1513	1752.6	1	17.90	18.90	1.259	-	-	0.02	1.010	**1.272**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	Headset	DSI 3	1513	1752.6	1	17.90	18.90	1.259	-	-	-0.05	0.967	1.217
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	17mm	Ant 1	-	DSI 4	1413	1732.6	1	20.77	21.50	1.183	-	-	0.19	0.173	0.205
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	18mm	Ant 1	-	DSI 4	1513	1752.6	1	20.74	21.50	1.191	-	-	0.07	0.249	0.297
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	132322	1745	1	19.05	20.00	1.245	-	-	0.03	1.040	1.294
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	Headset	DSI 3	132322	1745	1	19.05	20.00	1.245	-	-	-0.05	0.986	1.227
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	132072	1720	1	19.03	20.00	1.250	-	-	0.19	1.020	1.275
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	132572	1770	1	18.99	20.00	1.262	-	-	0.02	0.982	1.239
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	132322	1745	1	19.04	20.00	1.247	-	-	0.04	0.820	1.023
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	132072	1720	1	19.01	20.00	1.256	-	-	0.02	0.851	1.069
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	132572	1770	1	19.00	20.00	1.259	-	-	0.05	0.777	0.978
	LTE Band 66	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	DSI 3	132322	1745	1	19.02	20.00	1.253	-	-	0.08	0.820	1.028
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	132322	1745	1	19.05	20.00	1.245	-	-	0.12	0.865	1.077
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	132072	1720	1	19.03	20.00	1.250	-	-	0.13	0.865	1.081
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	132572	1770	1	18.99	20.00	1.262	-	-	0.14	0.831	1.049
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	132322	1745	1	19.04	20.00	1.247	-	-	0.09	0.624	0.778
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	DSI 3	132322	1745	1	19.02	20.00	1.253	-	-	0.04	0.598	0.749
	LTE Band 66	20M	QPSK	1	0	-	Front	17mm	Ant 2	-	DSI 4	132322	1745	1	22.54	24.00	1.400	-	-	0.01	0.400	0.560
	LTE Band 66	20M	QPSK	1	0	-	Back	18mm	Ant 2	-	DSI 4	132072	1720	1	22.44	24.00	1.432	-	-	-0.15	0.386	0.553
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	132322	1745	1	17.65	18.60	1.245	-	-	-0.07	0.467	0.581

	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	DSI 3	132322	1745	1	17.62	18.60	1.253	-	-	0.05	0.386	0.484
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	132322	1745	1	17.65	18.60	1.245	-	-	-0.07	0.940	1.170
58	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	132072	1720	1	17.58	18.60	1.265	-	-	-0.14	1.030	**1.303**
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	Headset	DSI 3	132072	1720	1	17.58	18.60	1.265	-	-	-0.12	0.978	1.237
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	132572	1770	1	17.54	18.60	1.276	-	-	0.03	0.822	1.049
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	132322	1745	1	17.62	18.60	1.253	-	-	0.06	0.818	1.025
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	132072	1720	1	17.59	18.60	1.262	-	-	0.15	0.866	1.093
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	132572	1770	1	17.59	18.60	1.262	-	-	0.04	0.723	0.912
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	DSI 3	132322	1745	1	17.61	18.60	1.256	-	-	-0.09	0.812	1.020
	LTE Band 66_Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	132072	1720	1	17.67	18.60	1.239	-	-	0.05	0.667	0.826
	LTE Band 66	20M	QPSK	1	0	-	Front	17mm	Ant 1	-	DSI 4	132322	1745	1	22.52	24.00	1.406	-	-	0.18	0.249	0.350
	LTE Band 66	20M	QPSK	1	0	-	Back	18mm	Ant 1	-	DSI 4	132072	1720	1	22.45	24.00	1.429	-	-	-0.1	0.431	0.616
59	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	DSI 3	349000	1745	1	19.65	20.90	1.334	-	-	0.06	0.971	**1.295**
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	Headset	DSI 3	349000	1745	1	19.65	20.90	1.334	-	-	0.03	0.957	1.276
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	-	DSI 3	349000	1745	1	19.63	20.90	1.340	-	-	0.06	0.965	1.293
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant 2	-	DSI 3	349000	1745	1	19.60	20.90	1.349	-	-	0.07	0.802	1.082
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	DSI 3	349000	1745	1	19.65	20.90	1.334	-	-	0.09	0.965	1.287
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	Headset	DSI 3	349000	1745	1	19.65	20.90	1.334	-	-	0.05	0.943	1.258
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	-	DSI 3	349000	1745	1	19.63	20.90	1.340	-	-	0.06	0.862	1.155
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 2	-	DSI 3	349000	1745	1	19.60	20.90	1.349	-	-	0.07	0.663	0.894
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	17mm	Ant 2	-	DSI 4	349000	1745	1	22.66	24.00	1.361	-	-	-0.1	0.310	0.422
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	18mm	Ant 2	-	DSI 4	349000	1745	1	22.66	24.00	1.361	-	-	0.07	0.311	0.423
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	349000	1745	1	20.73	22.00	1.340	-	-	-0.16	0.387	0.518
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	349000	1745	1	20.71	22.00	1.346	-	-	0.03	0.379	0.510
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	349000	1745	1	20.73	22.00	1.340	-	-	0.08	0.961	1.287
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	Headset	DSI 3	349000	1745	1	20.73	22.00	1.340	-	-	-0.02	0.945	1.266
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	349000	1745	1	20.71	22.00	1.346	-	-	0.09	0.710	0.956
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	349000	1745	1	20.68	22.00	1.355	-	-	0.18	0.542	0.735
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	17mm	Ant 1	-	DSI 4	349000	1745	1	22.69	24.00	1.352	-	-	0.18	0.131	0.177
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	18mm	Ant 1	-	DSI 4	349000	1745	1	22.69	24.00	1.352	-	-	0.16	0.190	0.257
									1900MHz													
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 2	-	DSI 3	661	1880	1	26.19	27.00	1.205	-	-	0.05	0.850	1.024
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 2	-	DSI 3	512	1850.2	1	25.01	27.00	1.581	-	-	0.02	0.755	1.194
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 2	-	DSI 3	810	1909.8	1	26.12	27.00	1.225	-	-	0.13	1.020	1.249
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 2	Headset	DSI 3	810	1909.8	1	26.12	27.00	1.225	-	-	-0.06	0.974	1.193
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 2	-	DSI 3	661	1880	1	26.19	27.00	1.205	-	-	0.06	0.540	0.651
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	17mm	Ant 2	-	DSI 4	810	1909.8	1	26.12	27.00	1.225	-	-	0.12	0.241	0.295
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	18mm	Ant 2	-	DSI 4	661	1880	1	26.19	27.00	1.205	-	-	0.03	0.236	0.284
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 1	-	DSI 3	661	1880	1	23.43	24.10	1.167	-	-	-0.1	0.573	0.669
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	-	DSI 3	661	1880	1	23.43	24.10	1.167	-	-	-0.13	0.941	1.098
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	-	DSI 3	512	1850.2	1	22.43	24.10	1.469	-	-	-0.14	0.837	1.229
60	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	-	DSI 3	810	1909.8	1	23.36	24.10	1.186	-	-	0.07	1.100	**1.304**
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 1	Headset	DSI 3	810	1909.8	1	23.36	24.10	1.186	-	-	0.03	0.989	1.173
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	17mm	Ant 1	-	DSI 4	661	1880	1	24.26	25.00	1.186	-	-	-0.08	0.178	0.211
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	18mm	Ant 1	-	DSI 4	810	1909.8	1	24.16	25.00	1.213	-	-	0.13	0.258	0.313
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	DSI 3	9400	1880	1	20.46	21.10	1.159	-	-	0.02	1.100	1.275
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	Headset	DSI 3	9400	1880	1	20.46	21.10	1.159	-	-	0.06	0.996	1.154
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	DSI 3	9262	1852.4	1	20.45	21.10	1.161	-	-	0.05	1.060	1.231
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	DSI 3	9538	1907.6	1	20.42	21.10	1.169	-	-	-0.06	1.080	1.263
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	DSI 3	9400	1880	1	20.46	21.10	1.159	-	-	0.02	0.725	0.840
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	DSI 3	9262	1852.4	1	20.45	21.10	1.161	-	-	0.04	0.817	0.949
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	DSI 3	9538	1907.6	1	20.42	21.10	1.169	-	-	0.18	0.698	0.816
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	17mm	Ant 2	-	DSI 4	9400	1880	1	22.45	24.00	1.429	-	-	0.06	0.255	0.364
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	18mm	Ant 2	-	DSI 4	9262	1852.4	1	22.34	24.00	1.466	-	-	-0.09	0.241	0.353
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	DSI 3	9400	1880	1	17.23	18.20	1.250	-	-	-0.19	0.578	0.723
61	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	9400	1880	1	17.23	18.20	1.250	-	-	0.01	1.020	**1.275**

	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	Headset	DSI 3	9400	1880	1	17.23	18.20	1.250	-	-	0.03	0.985	1.232
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	9262	1852.4	1	17.19	18.20	1.262	-	-	0.01	0.996	1.257
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	DSI 3	9538	1907.6	1	17.22	18.20	1.253	-	-	0.04	0.982	1.231
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	17mm	Ant 1	-	DSI 4	9400	1880	1	20.61	21.50	1.227	-	-	-0.08	0.170	0.209
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	18mm	Ant 1	-	DSI 4	9400	1880	1	20.61	21.50	1.227	-	-	0.05	0.267	0.328
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	26340	1880	1	20.06	21.10	1.271	-	-	0.05	0.979	1.244
62	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	26140	1860	1	20.02	21.10	1.282	-	-	-0.1	1.020	**1.308**
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	26140	1860	2	20.02	21.10	1.282	-	-	0.06	0.912	1.169
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	Headset	DSI 3	26140	1860	1	20.02	21.10	1.282	-	-	-0.05	0.967	1.240
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	26590	1905	1	20.04	21.10	1.276	-	-	0.07	0.961	1.227
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	26340	1880	1	20.04	21.10	1.276	-	-	0.08	0.645	0.823
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	26140	1860	1	20.01	21.10	1.285	-	-	0.15	0.654	0.841
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	26590	1905	1	20.00	21.10	1.288	-	-	0.04	0.601	0.774
	LTE Band 25	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	DSI 3	26340	1880	1	20.03	21.10	1.279	-	-	-0.12	0.631	0.807
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	26340	1880	1	20.06	21.10	1.271	-	-	0.19	0.761	0.967
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	26140	1860	1	20.02	21.10	1.282	-	-	0.07	0.814	1.044
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	26590	1905	1	20.04	21.10	1.276	-	-	-0.15	0.678	0.865
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	26340	1880	1	20.04	21.10	1.276	-	-	-0.1	0.481	0.614
	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	DSI 3	26340	1880	1	20.03	21.10	1.279	-	-	-0.11	0.479	0.613
	LTE Band 25	20M	QPSK	1	0	-	Front	17mm	Ant 2	-	DSI 4	26140	1860	1	22.43	24.00	1.435	-	-	0.04	0.309	0.444
	LTE Band 25	20M	QPSK	1	0	-	Back	18mm	Ant 2	-	DSI 4	26140	1860	1	22.43	24.00	1.435	-	-	-0.01	0.272	0.390
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	26340	1880	1	16.17	17.50	1.358	-	-	-0.04	0.480	0.652
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	DSI 3	26340	1880	1	16.15	17.50	1.365	-	-	0.04	0.427	0.583
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	26340	1880	1	16.17	17.50	1.358	-	-	0.01	0.894	1.214
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	26140	1860	1	16.15	17.50	1.365	-	-	-0.07	0.938	1.280
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	Headset	DSI 3	26140	1860	1	16.15	17.50	1.365	-	-	-0.02	0.916	1.250
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	26590	1905	1	16.11	17.50	1.377	-	-	-0.17	0.844	1.162
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	26340	1880	1	16.15	17.50	1.365	-	-	0.04	0.735	1.003
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	26140	1860	1	16.12	17.50	1.374	-	-	-0.04	0.731	1.004
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	26590	1905	1	16.13	17.50	1.371	-	-	-0.04	0.675	0.925
	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	DSI 3	26340	1880	1	16.14	17.50	1.368	-	-	-0.18	0.694	0.949
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	18900	1880	1	16.15	17.50	1.365	-	-	0.05	0.671	0.916
	LTE Band 25	20M	QPSK	1	0	-	Front	17mm	Ant 1	-	DSI 4	26340	1880	1	22.61	24.00	1.377	-	-	0.1	0.289	0.398
	LTE Band 25	20M	QPSK	1	0	-	Back	18mm	Ant 1	-	DSI 4	26140	1860	1	22.56	24.00	1.393	-	-	-0.17	0.519	0.723
63	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	DSI 3	376000	1880	1	20.12	21.00	1.225	-	-	-0.04	1.050	**1.286**
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	Headset	DSI 3	376000	1880	1	20.12	21.00	1.225	-	-	-0.06	0.995	1.218
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	-	DSI 3	376000	1880	1	20.10	21.00	1.230	-	-	0.15	1.040	1.279
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant 2	-	DSI 3	376000	1880	1	20.08	21.00	1.236	-	-	0.04	0.773	0.955
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	DSI 3	376000	1880	1	20.12	21.00	1.225	-	-	0.04	0.900	1.102
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	-	DSI 3	376000	1880	1	20.10	21.00	1.230	-	-	0.05	0.886	1.090
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 2	-	DSI 3	376000	1880	1	20.08	21.00	1.236	-	-	0.13	0.627	0.775
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	17mm	Ant 2	-	DSI 4	376000	1880	1	22.55	24.00	1.396	-	-	-0.05	0.205	0.286
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	18mm	Ant 2	-	DSI 4	376000	1880	1	22.55	24.00	1.396	-	-	0.01	0.203	0.283
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	376000	1880	1	18.30	19.10	1.202	-	-	-0.06	0.575	0.691
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	376000	1880	1	18.28	19.10	1.208	-	-	-0.12	0.590	0.713
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	376000	1880	1	18.30	19.10	1.202	-	-	0.05	0.948	1.140
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	376000	1880	1	18.28	19.10	1.208	-	-	-0.01	1.060	1.280
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	Headset	DSI 3	376000	1880	1	18.28	19.10	1.208	-	-	-0.03	0.978	1.181
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	376000	1880	1	18.27	19.10	1.211	-	-	0.16	0.819	0.991
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	17mm	Ant 1	-	DSI 4	376000	1880	1	22.71	24.00	1.346	-	-	0.14	0.173	0.233
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	18mm	Ant 1	-	DSI 4	376000	1880	1	22.71	24.00	1.346	-	-	0.17	0.309	0.416
2600MHz																						
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	21100	2535	1	19.59	20.60	1.262	-	-	0.16	0.871	1.099
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	20850	2510	1	19.56	20.60	1.271	-	-	-0.11	0.792	1.006
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	21350	2560	1	19.54	20.60	1.276	-	-	0.13	0.996	1.271
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	Headset	DSI 3	21350	2560	1	19.54	20.60	1.276	-	-	0.15	0.984	1.256

	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	21100	2535	1	19.57	20.60	1.268	-	-	-0.14	0.788	0.999
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	20850	2510	1	19.52	20.60	1.282	-	-	-0.11	0.752	0.964
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	21350	2560	1	19.56	20.60	1.271	-	-	0.13	0.696	0.884
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	DSI 3	21100	2535	1	19.55	20.60	1.274	-	-	0.08	0.747	0.951
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	21100	2535	1	19.59	20.60	1.262	-	-	-0.1	0.903	1.139
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	20850	2510	1	19.56	20.60	1.271	-	-	-0.1	0.852	1.083
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	21350	2560	1	19.54	20.60	1.276	-	-	0.01	1.010	1.289
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	DSI 3	21350	2560	1	19.54	20.60	1.276	-	-	0.06	0.981	1.252
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	21100	2535	1	19.57	20.60	1.268	-	-	0.07	0.844	1.070
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	20850	2510	1	19.52	20.60	1.282	-	-	0.08	0.812	1.041
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	21350	2560	1	19.56	20.60	1.271	-	-	-0.08	0.816	1.037
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	DSI 3	21100	2535	1	19.55	20.60	1.274	-	-	-0.02	0.839	1.068
	LTE Band 7	20M	QPSK	1	0	-	Front	17mm	Ant 2	-	DSI 4	21350	2560	1	22.64	24.00	1.368	-	-	0.08	0.399	0.546
	LTE Band 7	20M	QPSK	1	0	-	Back	18mm	Ant 2	-	DSI 4	21350	2560	1	22.64	24.00	1.368	-	-	-0.1	0.374	0.512
	LTE Band 7_UL CA	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	21350+ 21152	2560+ 2540.2	1	19.52	20.60	1.282	-	-	0.01	0.927	1.189
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	21100	2535	1	19.81	20.80	1.256	-	-	0.03	0.756	0.950
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	20850	2510	1	19.79	20.80	1.262	-	-	0.03	0.642	0.810
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	21350	2560	1	19.76	20.80	1.271	-	-	0.01	0.756	0.961
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	DSI 3	21100	2535	1	19.78	20.80	1.265	-	-	0.16	0.697	0.882
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	DSI 3	20850	2510	1	19.74	20.80	1.276	-	-	0.03	0.632	0.807
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	DSI 3	21350	2560	1	19.75	20.80	1.274	-	-	0.01	0.626	0.797
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 1	-	DSI 3	21100	2535	1	19.77	20.80	1.268	-	-	0.04	0.597	0.757
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	21100	2535	1	19.81	20.80	1.256	-	-	0.13	0.998	1.254
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	20850	2510	1	19.79	20.80	1.262	-	-	-0.03	0.928	1.171
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	21350	2560	1	19.76	20.80	1.271	-	-	0.08	1.010	1.283
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	Headset	DSI 3	21350	2560	1	19.76	20.80	1.271	-	-	0.03	0.968	1.230
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	21100	2535	1	19.78	20.80	1.265	-	-	0.1	0.889	1.124
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	20850	2510	1	19.74	20.80	1.276	-	-	0.16	0.834	1.065
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	21350	2560	1	19.75	20.80	1.274	-	-	0.01	0.893	1.137
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	DSI 3	21100	2535	1	19.77	20.80	1.268	-	-	-0.14	0.881	1.117
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	21350	2560	1	19.58	20.80	1.324	-	-	-0.02	0.685	0.907
	LTE Band 7	20M	QPSK	1	0	-	Front	17mm	Ant 1	-	DSI 4	21350	2560	1	22.86	24.00	1.300	-	-	0.08	0.302	0.393
	LTE Band 7	20M	QPSK	1	0	-	Back	18mm	Ant 1	-	DSI 4	21350	2560	1	22.86	24.00	1.300	-	-	-0.1	0.431	0.560
	LTE Band 7_UL CA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	21350+ 21152	2560+ 2540.2	1	19.66	20.80	1.300	-	-	0.08	0.921	1.197
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	21100	2535	1	21.54	22.70	1.306	-	-	0.03	0.687	0.897
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	20850	2510	1	21.47	22.70	1.327	-	-	-0.02	0.707	0.938
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	21350	2560	1	21.48	22.70	1.324	-	-	0.04	0.619	0.820
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	21100	2535	1	21.52	22.70	1.312	-	-	-0.12	0.660	0.866
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	20850	2510	1	21.49	22.70	1.321	-	-	-0.02	0.637	0.842
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	21350	2560	1	21.47	22.70	1.327	-	-	0.04	0.611	0.811
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 0	-	DSI 3	21100	2535	1	21.51	22.70	1.315	-	-	-0.16	0.554	0.729
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	21100	2535	1	21.54	22.70	1.306	-	-	0.07	0.913	1.193
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	20850	2510	1	21.47	22.70	1.327	-	-	-0.03	0.982	1.304
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	DSI 3	20850	2510	1	21.47	22.70	1.327	-	-	-0.03	0.971	1.289
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	21350	2560	1	21.48	22.70	1.324	-	-	-0.05	0.619	0.820
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	21100	2535	1	21.52	22.70	1.312	-	-	-0.04	0.772	1.013
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	20850	2510	1	21.49	22.70	1.321	-	-	-0.03	0.754	0.996
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	21350	2560	1	21.47	22.70	1.327	-	-	-0.05	0.731	0.970
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	DSI 3	21100	2535	1	21.51	22.70	1.315	-	-	0.08	0.698	0.918
	LTE Band 7	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	20850	2510	1	22.49	24.00	1.416	-	-	-0.03	0.127	0.180
	LTE Band 7	20M	QPSK	1	0	-	Back	18mm	Ant 0	-	DSI 4	20850	2510	1	22.49	24.00	1.416	-	-	0.08	0.108	0.153
	LTE Band 7_UL CA	20M	QPSK	1	99	-	Back	5mm	Ant 0	-	DSI 3	20850+ 21048	2510+ 2529.8	1	21.42	22.70	1.343	-	-	-0.03	0.890	1.195
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 3	-	DSI 3	21100	2535	1	21.63	22.80	1.309	-	-	0.13	0.901	1.180
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 3	-	DSI 3	20850	2510	1	21.52	22.80	1.343	-	-	0.05	0.920	1.235
64	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 3	-	DSI 3	21350	2560	1	21.48	22.80	1.355	-	-	-0.07	0.971	**1.316**

	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 3	-	DSI 3	21350	2560	2	21.48	22.80	1.355	-	-	0.15	0.750	1.016
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 3	Headset	DSI 3	21350	2560	1	21.48	22.80	1.355	-	-	-0.07	0.954	1.293
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 3	-	DSI 3	21100	2535	1	20.68	22.00	1.355	-	-	0.07	0.708	0.959
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 3	-	DSI 3	20850	2510	1	20.59	22.00	1.384	-	-	0.07	0.636	0.880
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 3	-	DSI 3	21350	2560	1	20.62	22.00	1.374	-	-	0.12	0.653	0.897
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 3	-	DSI 3	21100	2535	1	20.65	22.00	1.365	-	-	-0.13	0.604	0.824
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	21100	2535	1	21.63	22.80	1.309	-	-	0.17	0.794	1.039
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	20850	2510	1	21.52	22.80	1.343	-	-	0.02	0.946	1.270
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 3	Headset	DSI 3	20850	2510	1	21.52	22.80	1.343	-	-	0.05	0.927	1.245
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	21350	2560	1	21.48	22.80	1.355	-	-	-0.17	0.850	1.152
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 3	-	DSI 3	21100	2535	1	20.68	22.00	1.355	-	-	-0.11	0.656	0.889
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 3	-	DSI 3	20850	2510	1	20.59	22.00	1.384	-	-	0.05	0.627	0.867
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 3	-	DSI 3	21350	2560	1	20.62	22.00	1.374	-	-	-0.17	0.641	0.881
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 3	-	DSI 3	21100	2535	1	20.65	22.00	1.365	-	-	-0.13	0.602	0.821
	LTE Band 7	20M	QPSK	1	0	-	Front	17mm	Ant 3	-	DSI 4	21350	2560	1	21.48	23.00	1.419	-	-	0.05	0.103	0.146
	LTE Band 7	20M	QPSK	1	0	-	Back	18mm	Ant 3	-	DSI 4	20850	2510	1	21.52	23.00	1.406	-	-	-0.15	0.112	0.157
	LTE Band 7_UL CA	20M	QPSK	1	0	-	Front	5mm	Ant 3	-	DSI 3	21350+ 21152	2560+ 2540.2	1	21.45	22.80	1.365	-	-	-0.07	0.879	1.199
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	40620	2593	1	21.58	22.30	1.180	62.9	1.006	0.03	0.818	0.971
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	39750	2506	1	21.51	22.30	1.199	62.9	1.006	-0.18	0.727	0.877
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	40185	2549.5	1	21.54	22.30	1.191	62.9	1.006	0.12	0.792	0.949
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	41055	2636.5	1	21.52	22.30	1.197	62.9	1.006	0.18	1.080	1.300
65	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	41490	2680	1	21.43	22.30	1.222	62.9	1.006	-0.12	1.090	**1.340**
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	41490	2680	2	21.43	22.30	1.222	62.9	1.006	0.02	0.822	1.010
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	Headset	DSI 3	41490	2680	1	21.43	22.30	1.222	62.9	1.006	-0.15	0.986	1.212
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	40620	2593	1	21.56	22.30	1.186	62.9	1.006	-0.05	0.789	0.941
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	39750	2506	1	21.52	22.30	1.197	62.9	1.006	-0.16	0.669	0.805
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	40185	2549.5	1	21.52	22.30	1.197	62.9	1.006	0.01	0.709	0.854
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	41055	2636.5	1	21.51	22.30	1.199	62.9	1.006	0.1	0.894	1.079
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	DSI 3	41490	2680	1	21.55	22.30	1.189	62.9	1.006	0.04	0.868	1.038
	LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	DSI 3	40620	2593	1	21.57	22.30	1.183	62.9	1.006	-0.05	0.692	0.824
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	40620	2593	1	21.58	22.30	1.180	62.9	1.006	0.09	0.895	1.063
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	39750	2506	1	21.51	22.30	1.199	62.9	1.006	-0.04	0.785	0.947
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	40185	2549.5	1	21.54	22.30	1.191	62.9	1.006	-0.15	0.856	1.026
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	41055	2636.5	1	21.52	22.30	1.197	62.9	1.006	0.14	1.010	1.216
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	DSI 3	41055	2636.5	1	21.52	22.30	1.197	62.9	1.006	0.15	0.979	1.179
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	DSI 3	41490	2680	1	21.43	22.30	1.222	62.9	1.006	-0.13	0.960	1.180
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	40620	2593	1	21.56	22.30	1.186	62.9	1.006	0.06	0.761	0.908
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	39750	2506	1	21.52	22.30	1.197	62.9	1.006	0.06	0.708	0.852
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	40185	2549.5	1	21.52	22.30	1.197	62.9	1.006	0.04	0.748	0.901
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	41055	2636.5	1	21.51	22.30	1.199	62.9	1.006	0.03	0.849	1.024
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	DSI 3	41490	2680	1	21.55	22.30	1.189	62.9	1.006	0.01	0.792	0.947
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	DSI 3	40620	2593	1	21.57	22.30	1.183	62.9	1.006	0.08	0.720	0.857
	LTE Band 41 PC2	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	41490	2680	1	23.07	23.90	1.211	42.9	1.009	0.07	1.030	1.258
	LTE Band 41	20M	QPSK	1	0	-	Front	17mm	Ant 2	-	DSI 4	41490	2680	1	22.62	24.00	1.374	62.9	1.006	-0.05	0.257	0.355
	LTE Band 41 PC2	20M	QPSK	1	0	-	Front	17mm	Ant 2	-	DSI 4	41490	2680	1	25.61	27.00	1.377	42.9	1.009	0.09	0.321	0.446
	LTE Band 41	20M	QPSK	1	0	-	Back	18mm	Ant 2	-	DSI 4	41055	2636.5	1	22.68	24.00	1.355	62.9	1.006	-0.04	0.252	0.344
	LTE Band 41_UL CA	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	41490+ 41292	2680+ 2660.2	1	21.22	22.30	1.282	62.9	1.006	-0.12	0.922	1.189
	LTE Band 41 PC2_UL CA	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	DSI 3	41490+ 41292	2680+ 2660.2	1	22.88	23.90	1.265	42.9	1.009	0.07	0.903	1.152
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	40620	2593	1	21.38	22.60	1.324	62.9	1.006	0.13	0.650	0.866
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	39750	2506	1	21.31	22.60	1.346	62.9	1.006	-0.06	0.563	0.762
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	40185	2549.5	1	21.35	22.60	1.334	62.9	1.006	0.06	0.672	0.902
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	41055	2636.5	1	21.33	22.60	1.340	62.9	1.006	-0.16	0.656	0.884
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	DSI 3	41490	2680	1	21.29	22.60	1.352	62.9	1.006	0.08	0.672	0.914
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	DSI 3	40620	2593	1	21.37	22.60	1.327	62.9	1.006	-0.15	0.445	0.594
	LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant 1	-	DSI 3	40620	2593	1	21.35	22.60	1.334	62.9	1.006	0.03	0.406	0.545

	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	40620	2593	1	21.38	22.60	1.324	62.9	1.006	0.12	0.929	1.238
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	39750	2506	1	21.31	22.60	1.346	62.9	1.006	0.06	0.864	1.170
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	40185	2549.5	1	21.35	22.60	1.334	62.9	1.006	-0.15	0.973	1.305
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	Headset	DSI 3	40185	2549.5	1	21.35	22.60	1.334	62.9	1.006	-0.11	0.951	1.276
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	41055	2636.5	1	21.33	22.60	1.340	62.9	1.006	0.02	0.875	1.179
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	41490	2680	1	21.29	22.60	1.352	62.9	1.006	0.03	0.869	1.182
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	40620	2593	1	21.37	22.60	1.327	62.9	1.006	0.02	0.712	0.951
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	39750	2506	1	21.32	22.60	1.343	62.9	1.006	0.14	0.652	0.881
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	40185	2549.5	1	21.35	22.60	1.334	62.9	1.006	-0.14	0.729	0.978
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	41055	2636.5	1	21.35	22.60	1.334	62.9	1.006	-0.05	0.663	0.889
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	DSI 3	41490	2680	1	21.29	22.60	1.352	62.9	1.006	-0.07	0.679	0.924
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	DSI 3	40620	2593	1	21.35	22.60	1.334	62.9	1.006	0.07	0.707	0.948
	LTE Band 41 PC2	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	40185	2549.5	1	22.90	24.20	1.349	42.9	1.009	-0.12	0.948	1.290
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	40185	2549.5	1	20.62	22.60	1.578	62.9	1.006	0.02	0.634	1.006
	LTE Band 41 PC2_Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	DSI 3	40185	2549.5	1	22.38	24.20	1.521	42.9	1.009	-0.05	0.619	0.950
	LTE Band 41	20M	QPSK	1	0	-	Front	17mm	Ant 1	-	DSI 4	41490	2680	1	22.68	24.00	1.355	62.9	1.006	-0.16	0.176	0.240
	LTE Band 41	20M	QPSK	1	0	-	Back	18mm	Ant 1	-	DSI 4	40185	2549.5	1	22.61	24.00	1.377	62.9	1.006	0.08	0.248	0.344
	LTE Band 41 PC2	20M	QPSK	1	0	-	Back	18mm	Ant 1	-	DSI 4	40185	2549.5	1	25.53	27.00	1.403	42.9	1.009	0.03	0.305	0.432
	LTE Band 41_UL CA	20M	QPSK	1	99	-	Back	5mm	Ant 1	-	DSI 3	40185+ 40383	2549.5+ 2569.3	1	21.25	22.60	1.365	62.9	1.006	0.05	0.870	1.194
	LTE Band 41 PC2_UL CA	20M	QPSK	1	99	-	Back	5mm	Ant 1	-	DSI 3	40185+ 40383	2549.5+ 2569.3	1	22.87	24.20	1.358	42.9	1.009	-0.12	0.857	1.175
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	40620	2593	1	22.53	23.80	1.340	62.9	1.006	0.02	0.698	0.941
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	39750	2506	1	22.41	23.80	1.377	62.9	1.006	0.08	0.675	0.935
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	40185	2549.5	1	22.47	23.80	1.358	62.9	1.006	0.03	0.700	0.957
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	41055	2636.5	1	22.46	23.80	1.361	62.9	1.006	-0.05	0.926	1.268
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	41490	2680	1	22.45	23.80	1.365	62.9	1.006	0.03	0.958	1.315
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	Headset	DSI 3	41490	2680	1	22.45	23.80	1.365	62.9	1.006	0.07	0.926	1.271
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	40620	2593	1	21.59	23.00	1.384	62.9	1.006	-0.06	0.806	1.122
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	39750	2506	1	21.48	23.00	1.419	62.9	1.006	0.08	0.695	0.992
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	40185	2549.5	1	21.57	23.00	1.390	62.9	1.006	0.03	0.908	1.270
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	41055	2636.5	1	21.54	23.00	1.400	62.9	1.006	-0.05	0.931	1.311
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	DSI 3	41490	2680	1	21.55	23.00	1.396	62.9	1.006	0.02	0.926	1.301
	LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant 0	-	DSI 3	40620	2593	1	21.60	23.00	1.380	62.9	1.006	-0.06	0.781	1.085
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	40620	2593	1	22.53	23.80	1.340	62.9	1.006	0.08	0.759	1.023
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	39750	2506	1	22.41	23.80	1.377	62.9	1.006	0.08	0.691	0.957
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	40185	2549.5	1	22.47	23.80	1.358	62.9	1.006	0.03	0.781	1.067
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	41055	2636.5	1	22.46	23.80	1.361	62.9	1.006	-0.05	0.897	1.229
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	DSI 3	41055	2636.5	1	22.46	23.80	1.361	62.9	1.006	-0.08	0.887	1.215
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	DSI 3	41490	2680	1	22.45	23.80	1.365	62.9	1.006	-0.02	0.754	1.035
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	40620	2593	1	21.59	23.00	1.384	62.9	1.006	0.03	0.798	1.111
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	39750	2506	1	21.48	23.00	1.419	62.9	1.006	0.08	0.655	0.935
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	40185	2549.5	1	21.57	23.00	1.390	62.9	1.006	0.03	0.868	1.214
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	41055	2636.5	1	21.54	23.00	1.400	62.9	1.006	-0.05	0.857	1.207
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	DSI 3	41490	2680	1	21.55	23.00	1.396	62.9	1.006	0.02	0.785	1.103
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	DSI 3	40620	2593	1	21.60	23.00	1.380	62.9	1.006	0.08	0.743	1.032
	LTE Band 41 PC2	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	41490	2680	1	24.53	25.40	1.222	42.9	1.009	0.05	0.955	1.177
	LTE Band 41	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	41490	2680	1	22.45	24.00	1.429	62.9	1.006	0.03	0.058	0.083
	LTE Band 41 PC2	20M	QPSK	1	0	-	Front	17mm	Ant 0	-	DSI 4	41490	2680	1	25.41	27.00	1.442	42.9	1.009	-0.05	0.082	0.119
	LTE Band 41	20M	QPSK	1	0	-	Back	18mm	Ant 0	-	DSI 4	41055	2636.5	1	22.46	24.00	1.426	62.9	1.006	0.02	0.051	0.073
	LTE Band 41_UL CA	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	41490+ 41292	2680+ 2660.2	1	22.48	23.80	1.355	62.9	1.006	0.03	0.875	1.193
	LTE Band 41 PC2_UL CA	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	DSI 3	41490+ 41292	2680+ 2660.2	1	24.47	25.40	1.239	42.9	1.009	0.05	0.861	1.076
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 3	-	DSI 3	40620	2593	1	21.54	23.00	1.400	62.9	1.006	0.02	0.424	0.597
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 3	-	DSI 3	40620	2593	1	20.65	22.00	1.365	62.9	1.006	-0.18	0.275	0.378
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	40620	2593	1	21.54	23.00	1.400	62.9	1.006	0.12	0.435	0.612
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	39750	2506	1	21.43	23.00	1.435	62.9	1.006	-0.19	0.371	0.536
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	40185	2549.5	1	21.51	23.00	1.409	62.9	1.006	0.08	0.294	0.417

	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	41055	2636.5	1	21.39	23.00	1.449	62.9	1.006	0.08	0.593	0.864
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	41490	2680	1	21.40	23.00	1.445	62.9	1.006	-0.03	0.600	0.872
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 3	-	DSI 3	40620	2593	1	20.65	22.00	1.365	62.9	1.006	-0.09	0.257	0.353
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 3	-	DSI 3	40620	2593	1	20.64	22.00	1.368	62.9	1.006	-0.13	0.258	0.355
	LTE Band 41 PC2	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	41490	2680	1	24.37	26.00	1.455	42.9	1.009	-0.05	0.754	1.107
	LTE Band 41_UL CA	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	41490+ 41292	2680+ 2660.2	1	21.42	23.00	1.439	62.9	1.006	0.02	0.564	0.816
	LTE Band 41 PC2_UL CA	20M	QPSK	1	0	-	Back	5mm	Ant 3	-	DSI 3	41490+ 41292	2680+ 2660.2	1	24.39	26.00	1.449	42.9	1.009	0.06	0.712	1.041
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	DSI 3	507000	2535	1	20.09	21.00	1.233	-	-	0.05	0.861	1.062
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	-	DSI 3	507000	2535	1	20.07	21.00	1.239	-	-	0.19	0.943	1.168
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant 2	-	DSI 3	507000	2535	1	20.05	21.00	1.245	-	-	0.07	0.809	1.007
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	DSI 3	507000	2535	1	20.09	21.00	1.233	-	-	-0.06	1.020	1.258
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	-	DSI 3	507000	2535	1	20.07	21.00	1.239	-	-	-0.04	1.030	1.276
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	Headset	DSI 3	507000	2535	1	20.07	21.00	1.239	-	-	-0.06	0.975	1.208
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 2	-	DSI 3	507000	2535	1	20.05	21.00	1.245	-	-	0.14	0.780	0.971
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	17mm	Ant 2	-	DSI 4	507000	2535	1	22.52	24.00	1.406	-	-	0.02	0.304	0.427
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	18mm	Ant 2	-	DSI 4	507000	2535	1	22.52	24.00	1.406	-	-	-0.04	0.300	0.422
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	507000	2535	1	20.25	21.60	1.365	-	-	0.02	0.680	0.928
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	507000	2535	1	20.23	21.60	1.371	-	-	-0.16	0.747	1.024
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant 1	-	DSI 3	507000	2535	1	20.22	21.60	1.374	-	-	0.03	0.512	0.704
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	507000	2535	1	20.25	21.60	1.365	-	-	-0.04	0.934	1.275
66	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	507000	2535	1	20.23	21.60	1.371	-	-	0.08	0.940	**1.289**
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	Headset	DSI 3	507000	2535	1	20.23	21.60	1.371	-	-	0.02	0.925	1.268
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	DSI 3	507000	2535	1	20.22	21.60	1.374	-	-	0.17	0.725	0.996
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	17mm	Ant 1	-	DSI 4	507000	2535	1	22.67	24.00	1.358	-	-	0.05	0.264	0.359
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	18mm	Ant 1	-	DSI 4	507000	2535	1	22.67	24.00	1.358	-	-	0.19	0.311	0.422
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	518598	2592.99	1	20.65	21.40	1.189	-	-	0.02	0.912	1.084
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	518598	2592.99	1	20.63	21.40	1.194	-	-	0.01	0.998	1.192
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 2	-	DSI 3	518598	2592.99	1	20.61	21.40	1.199	-	-	0.02	0.853	1.023
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	518598	2592.99	1	20.65	21.40	1.189	-	-	0.15	0.932	1.108
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	518598	2592.99	1	20.63	21.40	1.194	-	-	0.03	1.070	1.278
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	Headset	DSI 3	518598	2592.99	1	20.63	21.40	1.194	-	-	0.06	0.997	1.190
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	DSI 3	518598	2592.99	1	20.61	21.40	1.199	-	-	-0.02	0.781	0.937
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	17mm	Ant 2	-	DSI 4	518598	2592.99	1	22.53	24.00	1.403	-	-	0.08	0.307	0.431
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	18mm	Ant 2	-	DSI 4	518598	2592.99	1	22.53	24.00	1.403	-	-	0.03	0.360	0.505
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 1	-	DSI 3	518598	2592.99	1	20.29	21.30	1.262	-	-	-0.08	0.683	0.862
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 1	-	DSI 3	518598	2592.99	1	20.27	21.30	1.268	-	-	-0.16	0.659	0.835
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 1	-	DSI 3	518598	2592.99	1	20.25	21.30	1.274	-	-	0.17	0.547	0.697
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 1	-	DSI 3	518598	2592.99	1	20.29	21.30	1.262	-	-	-0.04	1.020	1.287
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 1	Headset	DSI 3	518598	2592.99	1	20.29	21.30	1.262	-	-	-0.07	0.982	1.239
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	-	DSI 3	518598	2592.99	1	20.27	21.30	1.268	-	-	-0.09	0.903	1.145
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 1	-	DSI 3	518598	2592.99	1	20.25	21.30	1.274	-	-	0.08	0.698	0.889
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 1	-	DSI 4	518598	2592.99	1	22.98	24.00	1.265	-	-	-0.04	0.301	0.381
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	18mm	Ant 1	-	DSI 4	518598	2592.99	1	22.98	24.00	1.265	-	-	0.08	0.350	0.443
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 0	-	DSI 3	518598	2592.99	1	22.78	23.70	1.236	-	-	0.1	0.682	0.843
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 0	-	DSI 3	518598	2592.99	1	22.74	23.70	1.247	-	-	0.08	0.885	1.104
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 0	-	DSI 3	518598	2592.99	1	21.82	23.00	1.312	-	-	0.03	0.837	1.098
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	-	DSI 3	518598	2592.99	1	22.78	23.70	1.236	-	-	0.04	0.813	1.005
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	-	DSI 3	518598	2592.99	1	22.74	23.70	1.247	-	-	0.06	1.030	1.285
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	Headset	DSI 3	518598	2592.99	1	22.74	23.70	1.247	-	-	0.02	0.985	1.229
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 0	-	DSI 3	518598	2592.99	1	21.82	23.00	1.312	-	-	-0.11	0.762	1.000
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	17mm	Ant 0	-	DSI 4	518598	2592.99	1	22.74	24.00	1.337	-	-	0.02	0.053	0.071
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	18mm	Ant 0	-	DSI 4	518598	2592.99	1	22.74	24.00	1.337	-	-	0.15	0.047	0.063
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 3	-	DSI 3	518598	2592.99	1	21.18	22.50	1.355	-	-	0.08	0.912	1.236
67	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 3	-	DSI 3	518598	2592.99	1	21.15	22.50	1.365	-	-	-0.04	0.947	**1.292**
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 3	Headset	DSI 3	518598	2592.99	1	21.15	22.50	1.365	-	-	-0.08	0.915	1.249

	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 3	-	DSI 3	518598	2592.99	1	21.14	22.50	1.368	-	-	0.1	0.742	1.015
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 3	-	DSI 3	518598	2592.99	1	21.18	22.50	1.355	-	-	0.06	0.733	0.993
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 3	-	DSI 3	518598	2592.99	1	21.15	22.50	1.365	-	-	0.18	0.823	1.123
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 3	-	DSI 3	518598	2592.99	1	21.14	22.50	1.368	-	-	0.09	0.538	0.736
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	17mm	Ant 3	-	DSI 4	518598	2592.99	1	22.68	24.00	1.355	-	-	0.02	0.192	0.260
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	18mm	Ant 3	-	DSI 4	518598	2592.99	1	22.68	24.00	1.355	-	-	0.05	0.173	0.234
3500MHz																						
68	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 7	-	DSI 3	42590	3500	1	22.75	24.00	1.334	62.9	1.006	-0.1	0.894	**1.199**
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 7	-	DSI 3	42190	3460	1	22.68	24.00	1.355	62.9	1.006	0.08	0.865	1.179
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 7	-	DSI 3	42990	3540	1	22.73	24.00	1.340	62.9	1.006	0.01	0.848	1.143
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 7	-	DSI 3	42590	3500	1	21.74	23.00	1.337	62.9	1.006	0.1	0.582	0.783
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 7	-	DSI 3	42190	3460	1	21.63	23.00	1.371	62.9	1.006	0.03	0.542	0.747
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 7	-	DSI 3	42990	3540	1	21.59	23.00	1.384	62.9	1.006	-0.08	0.539	0.750
	LTE Band 42	20M	QPSK	100	0	-	Front	5mm	Ant 7	-	DSI 3	42590	3500	1	21.73	23.00	1.340	62.9	1.006	-0.07	0.575	0.775
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	DSI 3	42590	3500	1	22.75	24.00	1.334	62.9	1.006	0.12	0.799	1.072
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	DSI 3	42190	3460	1	22.68	24.00	1.355	62.9	1.006	-0.08	0.784	1.069
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	DSI 3	42990	3540	1	22.73	24.00	1.340	62.9	1.006	0.1	0.775	1.044
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 7	-	DSI 3	42590	3500	1	21.74	23.00	1.337	62.9	1.006	0.04	0.805	1.082
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 7	-	DSI 3	42190	3460	1	21.63	23.00	1.371	62.9	1.006	-0.18	0.765	1.055
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 7	-	DSI 3	42990	3540	1	21.59	23.00	1.384	62.9	1.006	0.1	0.771	1.073
	LTE Band 42	20M	QPSK	100	0	-	Back	5mm	Ant 7	-	DSI 3	42590	3500	1	21.73	23.00	1.340	62.9	1.006	-0.11	0.806	1.086
	LTE Band 42_UL CA	20M	QPSK	1	99	-	Front	5mm	Ant 7	-	DSI 3	42590+ 42788	3500+ 3519.8	1	22.71	24.00	1.346	62.9	1.006	0.02	0.875	1.185
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3	656000	3840	1	19.15	20.60	1.396	-	-	0.16	0.568	0.793
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	-	DSI 3	656000	3840	1	19.14	20.60	1.400	-	-	-0.14	0.445	0.623
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	656000	3840	1	19.15	20.60	1.396	-	-	0.02	0.915	1.278
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	Headset	DSI 3	656000	3840	1	19.15	20.60	1.396	-	-	0.05	0.895	1.250
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	656000	3840	1	19.14	20.60	1.400	-	-	0.09	0.798	1.117
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	656000	3840	1	19.12	20.60	1.406	-	-	-0.12	0.563	0.792
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	DSI 3	656000	3840	1	22.09	23.60	1.416	50	1.000	0.02	0.896	1.269
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 4	-	DSI 4	656000	3840	1	22.65	24.00	1.365	-	-	0.11	0.103	0.141
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	18mm	Ant 4	-	DSI 4	656000	3840	1	22.65	24.00	1.365	-	-	-0.17	0.237	0.323
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	18mm	Ant 4	-	DSI 4	656000	3840	1	25.57	26.50	1.239	50	1.000	-0.08	0.212	0.263
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 5	-	DSI 3	656000	3840	1	18.84	20.20	1.368	-	-	0.04	0.426	0.583
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 5	-	DSI 3	656000	3840	1	18.82	20.20	1.374	-	-	-0.11	0.330	0.453
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 5	-	DSI 3	656000	3840	1	18.84	20.20	1.368	-	-	0.05	0.678	0.927
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	-	DSI 3	656000	3840	1	18.82	20.20	1.374	-	-	-0.17	0.709	0.974
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 5	-	DSI 3	656000	3840	1	18.80	20.20	1.380	-	-	0.04	0.598	0.825
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	-	DSI 3	656000	3840	1	21.86	23.20	1.361	50	1.000	0.05	0.694	0.945
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	17mm	Ant 5	-	DSI 4	656000	3840	1	22.27	24.00	1.489	-	-	-0.04	0.150	0.223
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	18mm	Ant 5	-	DSI 4	656000	3840	1	22.25	24.00	1.496	-	-	-0.13	0.153	0.229
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	18mm	Ant 5	-	DSI 4	656000	3750	1	25.17	26.00	1.211	50	1.000	-0.13	0.155	0.188
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	656000	3840	1	19.23	20.00	1.194	-	-	0.12	0.651	0.777
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	656000	3840	1	19.21	20.00	1.199	-	-	0.07	0.681	0.817
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 7	-	DSI 3	656000	3840	1	19.18	20.00	1.208	-	-	0.02	0.637	0.769
69	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	656000	3840	1	19.23	20.00	1.194	-	-	0.02	1.080	**1.290**
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	Headset	DSI 3	656000	3840	1	19.23	20.00	1.194	-	-	0.05	0.978	1.168
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	656000	3840	1	19.21	20.00	1.199	-	-	-0.12	0.947	1.136
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	656000	3840	1	19.18	20.00	1.208	-	-	-0.05	0.823	0.994
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	-	DSI 3	656000	3840	1	22.16	23.00	1.213	50	1.000	0.05	0.986	1.196
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	17mm	Ant 7	-	DSI 4	656000	3840	1	22.64	24.00	1.368	-	-	-0.07	0.260	0.356
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	18mm	Ant 7	-	DSI 4	656000	3840	1	22.70	24.00	1.349	-	-	-0.11	0.294	0.397
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	18mm	Ant 7	-	DSI 4	656000	3840	1	25.68	27.00	1.355	50	1.000	-0.12	0.267	0.362
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 8	-	DSI 3	656000	3840	1	22.60	24.00	1.380	-	-	0.1	0.397	0.548
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 8	-	DSI 3	656000	3840	1	22.57	24.00	1.390	-	-	-0.11	0.494	0.687
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	-	DSI 3	656000	3840	1	22.60	24.00	1.380	-	-	0.09	0.452	0.624
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 8	-	DSI 3	656000	3840	1	22.57	24.00	1.390	-	-	0.04	0.544	0.756

	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 8	-	DSI 3	656000	3840	1	25.75	27.00	1.334	50	1.000	0.06	0.531	0.708

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																		
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6+3(6)	-	Standalone	6	2437	1	17.37	19.00	1.455	97.38	1.027	0.04	0.563	0.842
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6+3(6)	-	Standalone	11	2462	1	17.45	19.00	1.429	97.38	1.027	0.02	0.541	0.794
70	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	-	Standalone	6	2437	1	17.37	19.00	1.455	97.38	1.027	-0.01	0.885	**1.323**
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	Headset	Standalone	6	2437	1	17.37	19.00	1.455	97.38	1.027	0.05	0.864	1.291
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	-	Standalone	11	2462	1	17.45	19.00	1.429	97.38	1.027	-0.08	0.814	1.195
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	-	Standalone	1	2412	1	17.35	19.00	1.462	97.38	1.027	0.02	0.786	1.180
	WLAN2.4GHz	802.11n-HT40 MCS0	Back	5mm	Ant 6+3(3)	-	Standalone	3	2422	1	16.56	18.00	1.393	100	1.000	-0.01	0.831	1.158
	WLAN2.4GHz	802.11n-HT40 MCS0	Back	5mm	Ant 6+3(3)	-	Standalone	6	2437	1	16.54	18.00	1.400	100	1.000	0.03	0.817	1.143
	WLAN2.4GHz	802.11b 1Mbps	Front	17mm	Ant 6+3(6)	-	Full Power	1	2412	1	22.34	24.00	1.466	97.38	1.027	-0.09	0.178	0.268
	WLAN2.4GHz	802.11b 1Mbps	Back	18mm	Ant 6+3(6)	-	Full Power	1	2412	1	22.34	24.00	1.466	97.38	1.027	0.11	0.283	0.426
	Bluetooth	1Mbps	Front	5mm	Ant 6	-	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	0.03	0.138	0.201
71	Bluetooth	1Mbps	Back	5mm	Ant 6	-	Full Power	0	2402	1	16.20	17.50	1.348	77.06	1.081	0.04	0.510	**0.743**
	Bluetooth	1Mbps	Front	5mm	Ant 3	-	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	-0.05	0.086	0.133
	Bluetooth	1Mbps	Back	5mm	Ant 3	-	Full Power	0	2402	1	17.47	19.00	1.423	76.94	1.083	-0.01	0.242	0.373
5000MHz																		
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	5mm	Ant 5+4(4)	-	Standalone	54	5270	1	15.44	17.00	1.432	100	1.000	0.05	0.440	0.630
72	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 5+4(4)	-	Standalone	54	5270	1	15.44	17.00	1.432	100	1.000	-0.01	0.827	**1.184**
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 5+4(4)	-	Standalone	54	5270	2	15.44	17.00	1.432	100	1.000	0.06	0.716	1.025
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 5+4(4)	-	Standalone	62	5310	1	15.27	17.00	1.489	100	1.000	-0.06	0.786	1.171
	WLAN5.3GHz	802.11a 6Mbps	Front	17mm	Ant 5+4(5)	-	Full Power	56	5280	1	18.39	20.00	1.449	99.32	1.007	-0.05	0.102	0.149
	WLAN5.3GHz	802.11a 6Mbps	Back	18mm	Ant 5+4(5)	-	Full Power	56	5280	1	18.39	20.00	1.449	99.32	1.007	-0.08	0.173	0.252
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 5+4(5)	-	Standalone	106	5530	1	15.26	16.50	1.330	100	1.000	0.03	0.316	0.420
73	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(5)	-	Standalone	106	5530	1	15.26	16.50	1.330	100	1.000	0.05	0.735	**0.978**
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(5)	-	Standalone	122	5610	1	15.06	16.50	1.393	100	1.000	0.08	0.694	0.967
	WLAN5.5GHz	802.11a 6Mbps	Front	17mm	Ant 5+4(5)	-	Full Power	144	5720	1	18.80	20.50	1.479	99.32	1.007	0.16	0.064	0.095
	WLAN5.5GHz	802.11a 6Mbps	Back	18mm	Ant 5+4(5)	-	Full Power	144	5720	1	18.80	20.50	1.479	99.32	1.007	0.05	0.147	0.219
	WLAN5.8GHz	802.11a 6Mbps	Front	5mm	Ant 5+4(5)	-	Full Power	157	5785	1	18.57	20.00	1.390	99.32	1.007	-0.06	0.485	0.679
74	WLAN5.8GHz	802.11a 6Mbps	Back	5mm	Ant 5+4(5)	-	Full Power	157	5785	1	18.57	20.00	1.390	99.32	1.007	-0.02	0.852	**1.193**
	WLAN5.8GHz	802.11a 6Mbps	Back	5mm	Ant 5+4(5)	-	Full Power	157	5785	2	18.57	20.00	1.390	99.32	1.007	0.05	0.632	0.885
	WLAN5.8GHz	802.11a 6Mbps	Back	5mm	Ant 5+4(5)	-	Full Power	165	5825	1	18.42	20.00	1.439	99.32	1.007	-0.06	0.822	1.191

16.4 Product specific 10g SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
835MHz																					
75	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	DSI 6	4182	836.4	1	22.71	24.00	1.346	-	-	-0.08	1.190	**1.602**
76	LTE Band 26	15M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	26865	831.5	1	22.54	24.00	1.400	-	-	0.02	1.350	**1.889**
	LTE Band 26	15M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	26865	831.5	2	22.54	24.00	1.400	-	-	0.05	1.130	1.582
	LTE Band 26	15M	QPSK	36	0	-	Back	0mm	Ant 1	DSI 6	26865	831.5	1	21.62	23.00	1.374	-	-	0.02	1.180	1.621
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	DSI 6	1413	1732.6	1	21.46	22.50	1.271	-	-	-0.17	2.500	3.176
77	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	DSI 6	1312	1712.4	1	21.43	22.50	1.279	-	-	0.02	2.520	**3.224**
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	DSI 6	1513	1752.6	1	21.41	22.50	1.285	-	-	0.08	2.380	3.059
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	DSI 6	1413	1732.6	1	21.46	22.50	1.271	-	-	0.06	1.680	2.135
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	DSI 6	1312	1712.4	1	21.43	22.50	1.279	-	-	-0.05	1.560	1.996
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	DSI 6	1513	1752.6	1	21.41	22.50	1.285	-	-	-0.04	1.530	1.966
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 6	1413	1732.6	1	21.46	22.50	1.271	-	-	0.11	1.950	2.478
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 6	1312	1712.4	1	21.43	22.50	1.279	-	-	0.17	2.030	2.597
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	DSI 6	1513	1752.6	1	21.41	22.50	1.285	-	-	-0.06	2.160	2.776
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	11mm	Ant 2	DSI 4	1312	1712.4	1	22.43	24.00	1.435	-	-	0.05	0.373	0.535
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	9mm	Ant 2	DSI 4	1413	1732.6	1	22.51	24.00	1.409	-	-	-0.03	0.358	0.505
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	12mm	Ant 2	DSI 4	1513	1752.6	1	22.45	24.00	1.429	-	-	-0.15	0.362	0.517
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	DSI 6	1413	1732.6	1	18.86	20.20	1.361	-	-	0.08	2.080	2.832
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	DSI 6	1312	1712.4	1	18.84	20.20	1.368	-	-	0.15	2.000	2.735
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	DSI 6	1513	1752.6	1	18.81	20.20	1.377	-	-	-0.06	2.030	2.796
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 1	DSI 6	1413	1732.6	1	18.86	20.20	1.361	-	-	0.06	1.520	2.069
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 1	DSI 6	1312	1712.4	1	18.84	20.20	1.368	-	-	0.05	1.440	1.970
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 1	DSI 6	1513	1752.6	1	18.81	20.20	1.377	-	-	-0.18	1.310	1.804
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	DSI 6	1413	1732.6	1	18.86	20.20	1.361	-	-	0.02	2.240	3.050
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	DSI 6	1312	1712.4	1	18.84	20.20	1.368	-	-	0.08	2.050	2.804
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	DSI 6	1513	1752.6	1	18.81	20.20	1.377	-	-	-0.03	2.320	3.195
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	11mm	Ant 1	DSI 4	1413	1732.6	1	20.77	21.50	1.183	-	-	0.02	0.354	0.419
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	11mm	Ant 1	DSI 4	1413	1732.6	1	20.77	21.50	1.183	-	-	0.07	0.325	0.384
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	8mm	Ant 1	DSI 4	1513	1752.6	1	20.74	21.50	1.191	-	-	0.16	0.668	0.796
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 2	DSI 6	132322	1745	1	20.67	22.00	1.358	-	-	0.19	2.250	3.056
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 2	DSI 6	132072	1720	1	20.63	22.00	1.371	-	-	0.06	2.320	3.180
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 2	DSI 6	132572	1770	1	20.62	22.00	1.374	-	-	0.11	2.180	2.995
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 2	DSI 6	132322	1745	1	20.65	22.00	1.365	-	-	0.1	1.820	2.484
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 2	DSI 6	132072	1720	1	20.60	22.00	1.380	-	-	0.03	1.980	2.733
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 2	DSI 6	132572	1770	1	20.57	22.00	1.390	-	-	0.08	1.860	2.585
	LTE Band 66	20M	QPSK	100	0	-	Front	0mm	Ant 2	DSI 6	132322	1745	1	20.62	22.00	1.374	-	-	-0.02	1.840	2.528
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 6	132322	1745	1	20.67	22.00	1.358	-	-	0.07	1.450	1.970
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 2	DSI 6	132322	1745	1	20.65	22.00	1.365	-	-	-0.15	1.290	1.760
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	DSI 6	132322	1745	1	20.67	22.00	1.358	-	-	0.01	1.460	1.983
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	DSI 6	132322	1745	1	20.65	22.00	1.365	-	-	0.04	1.350	1.842
	LTE Band 66	20M	QPSK	1	0	-	Front	11mm	Ant 2	DSI 4	132072	1720	1	22.44	24.00	1.432	-	-	0.13	0.397	0.569
	LTE Band 66	20M	QPSK	1	0	-	Back	9mm	Ant 2	DSI 4	132322	1745	1	22.54	24.00	1.400	-	-	-0.18	0.318	0.445
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	12mm	Ant 2	DSI 4	132322	1745	1	22.54	24.00	1.400	-	-	0.02	0.385	0.539
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	132322	1745	1	19.15	20.40	1.334	-	-	0.03	1.710	2.280
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	132072	1720	1	19.10	20.40	1.349	-	-	-0.14	1.770	2.388
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 1	DSI 6	132572	1770	1	19.02	20.40	1.374	-	-	0.03	1.730	2.377
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 1	DSI 6	132322	1745	1	19.14	20.40	1.337	-	-	-0.19	1.470	1.965
	LTE Band 66	20M	QPSK	100	0	-	Back	0mm	Ant 1	DSI 6	132322	1745	1	19.11	20.40	1.346	-	-	0.08	1.350	1.817
	LTE Band 66	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 6	132322	1745	1	19.15	20.40	1.334	-	-	0.1	1.690	2.254
	LTE Band 66	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	DSI 6	132072	1720	1	19.10	20.40	1.349	-	-	0.06	1.690	2.280