

FCC SAR Test Report

APPLICANT : Xiaomi Communications Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : POCO
MODEL NAME : 24122RKC7G
FCC ID : 2AFZZRKC7G
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.



Approved by: Si Zhang

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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA491407	Rev. 01	Initial issue of report.	Oct. 31, 2024

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Xiaomi Communications Co., Ltd., Mobile Phone, 24122RKC7G**, are as follows.

Highest 1g SAR Summary							
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 10mm)	Body-worn (Separation 15mm)	Highest Simultaneous Transmission	
			1g SAR (W/kg)			1g SAR (W/kg)	
Licensed	GSM	GSM850	0.98	0.60	0.66	1.57	
		GSM1900	1.08	0.81	0.30		
	WCDMA	WCDMA II	0.90	1.02	0.42		
		WCDMA IV	0.96	0.96	0.68		
		WCDMA V	0.67	0.63	0.67		
	LTE	LTE Band 2	1.08	0.90	0.73		
		LTE Band 4	1.08	1.07	0.66		
		LTE Band 5	0.91	0.63	0.73		
		LTE Band 7	0.98	0.52	1.06		
		LTE Band 26	0.83	0.69	0.61		
		LTE Band 66	1.09	1.04	0.70		
		LTE Band 38	1.04	0.64	0.61		
		LTE Band 41	1.07	0.66	0.57		
		LTE Band 42	0.96	0.68	1.08		
		LTE Band 48	1.07	0.71	0.68		
		5G NR	FR1 n2	1.04	0.63		0.60
			FR1 n5	1.00	0.70		0.68
	FR1 n7		1.01	0.61	0.96		
	FR1 n26		0.99	0.81	0.68		
	FR1 n66		1.01	0.91	0.74		
	FR1 n38		0.95	0.45	0.93		
	FR1 n41		1.08	0.52	0.87		
	FR1 n48		1.05	0.61	0.88		
	FR1 n77		0.96	0.77	0.90		
	FR1 n78	1.05	0.88	0.95			
DTS	WLAN	2.4GHz WLAN	0.99	0.97	0.33	1.57	
NII		5GHz WLAN	1.04	0.91	0.41	1.57	
DSS	Bluetooth	2.4GHz Bluetooth	0.75	0.35	<0.10	1.57	
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	GSM850	1.83			2.56	
		GSM1900	1.90				
	WCDMA	WCDMA II	2.09				
		WCDMA IV	2.55				
	LTE	LTE Band 2	2.40				
		LTE Band 4	2.56				
		LTE Band 66	2.30				
	FR1	FR1 n2	2.49				
		FR1 n66	2.21				
NII	WLAN	5GHz WLAN	2.55			2.56	
Date of Testing:			2024/9/23~ 2024/10/29				

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 5145.01.

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.
	SAR07-KS	CN1257	314309

Applicant	
Company Name	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

Manufacturer	
Company Name	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

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 Phone
Brand Name	POCO
Model Name	24122RKC7G
FCC ID	2AFZZRKC7G
IMEI Code	IMEI1: 864775070043403 IMEI2: 864775070043411 Bluetooth test Sample: IMEI1: 864775070043528 IMEI2: 864775070043536
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 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 48: 3550 MHz ~ 3700 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 n66: 1710 MHz ~ 1780 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz WPT: 110 kHz~148 kHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA/HSUPA DC-HSDPA HSPA+(16QAM uplink is 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/be HE20/HE40/EHT20/EHT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160 WLAN 5GHz 802.11be EHT20/EHT40/EHT80/EHT160 Bluetooth BR/EDR/LE

	NFC: ASK WPT: ASK
HW Version	13510011U
SW Version	Xiaomi HyperOS 2.0
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. The 2.4GHz/5GHz WLAN can transmit in SISO/MIMO antenna mode. 5. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 33. 6. For dual SIM card mobile has two SIM slots and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). After pre-scan two SIM cards power, we found test result of the SIM1 was the worse, so we chose SIM1 slot to perform all tests. 7. The device implements Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. The device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to appendix E. power table. 8. 5GNR n41/n77/n78 supports HPUE mode, HPUE power and SAR testing performed separately. 9. 5GNR n41/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 verify the worst case of power class 3 SAR. 10. For 5GNR n41/n77/n78 HPUE, 5GNR n41/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 5GNR, the simultaneous transmission analysis is used standalone SAR at total power level to show compliance. 12. Bluetooth supports UL MIMO mode. 13. Bluetooth BR/EDR supports Beamforming mode, and BLE don't supports Beamforming. 14. This device has NFC function and the NFC SAR report will be separately submitted. 15. RF exposure report for WPC (Wireless power charging) will be separately submitted. 16. There are two samples. The difference between them is memory capacity: sample 1 with 12+256G capacity, Sample 2 with 16+512G capacity. According to the difference, sample 1 was chosen to perform full SAR testing. 17. 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	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	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, 35, 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
	n48	TDD	30	10, 15, 20, 30, 40
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05								
FCC ID	2AFZZRKC7G							
Equipment Name	Mobile 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 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 48: 3550 MHz ~ 3700 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 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 48: 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	R16							
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 3 carriers in the downlink and 2 carriers in the uplink.							

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		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	20407	824.7	20415	825.5	20425	826.5	20450	829	20450	829	20450	829
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844	20600	844	20600	844
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz		Bandwidth 20 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510	20850	2510	20850	2510
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21350	2560	21350	2560
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 15 MHz	
	Ch. #	Freq. (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	26765	821.5
M	26865	831.5	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	26965	841.5
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz		Bandwidth 20 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580	37850	2580	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610	38150	2610	38150	2610
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz		Bandwidth 20 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506	39750	2506	39750	2506
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5	40185	2549.5	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5	41055	2636.5	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680	41490	2680	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

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

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 n66: 1710 MHz ~ 1780 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5GNR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n5	LTE B7
LTE Anchor Bands for n7	LTE B5
LTE Anchor Bands for n66	LTE B5/7
LTE Anchor Bands for n78	LTE B2/5/7/38/41

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 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	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	503500	2517.5	504000	2520
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510500	2552.5	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 38 SCS30KHz												
	Bandwidth10MHz		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)
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	506202	2531.01	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
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 48										
	Bandwidth 10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	637000	3555	637168	3557.52	637334	3560.01	637668	3565.02	638000	3570
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H	646332	3694.98	646166	3692.49	646000	3690	645666	3684.99	645332	3679.98

NR Band 77																								
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 <3450 MHz ~ 3550 MHz >

NR Band 77 SCS30KHz																								
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01
H	636334	3545.01	636168	3542.52	636000	3540	635834	3537.51	635668	3535.02	635334	3530.01	635000	3525	634668	3520.02	634334	3515.01	634000	3510	633668	3505.02		

NR Band 78 SCS30KHz																								
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01	633334	3500.01
H	636334	3545.01	636168	3542.52	636000	3540	635834	3537.51	635668	3535.02	635334	3530.01	635000	3525	634668	3520.02	634334	3515.01	634000	3510	633668	3505.02		

5. Smart Transmit feature for RF Exposure compliance

The Qualcomm® Smart Transmit™ 5.0 of Smart Transmit (GEN2) Feature 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 23 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.

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 & ANT2 & ANT3 & ANT4 & ANT6 & ANT7 & ANT8 & ANT16 & ANT17
Antenna Group 1 (AG1)	ANT0 & ANT5

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 P_{max}, when needed, but enforces power limiting to maintain time-averaged transmit power to P_{limit}. Below table shows P_{limit} EFS settings and maximum tune up output power P_{max} 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	DSI1	DSI3	DSI4	DSI6	P _{max} *	Total Uncertainty dB (k=2)
GSM850	Ant 0	28.4	24.0	24.0	27.6	24.0	1.00
GSM850	Ant 1	19.5	25.5	26.2	19.5	24.0	1.50
GSM1900	Ant 5	31.8	21.0	21.0	22.3	21.0	1.00
GSM1900	Ant 2	19.0	22.4	26.7	19.0	21.0	1.50
WCDMA V	Ant 0	27.8	24.0	24.0	26.4	24.0	1.00
WCDMA V	Ant 1	18.0	20.0	25.6	18.0	23.5	1.50
WCDMA IV	Ant 3	17.0	23.0	29.0	17.0	24.0	1.00
WCDMA IV	Ant 2	16.5	22.0	25.1	16.5	23.0	1.50
WCDMA IV	Ant 5	29.8	20.5	20.5	20.5	23.0	1.50
WCDMA II	Ant 5	30.6	21.0	21.0	20.5	24.0	1.00
WCDMA II	Ant 3	16.5	21.0	28.6	16.5	24.5	0.50
LTE Band 5	Ant 0	28.4	24.0	24.0	24.0	25.0	0.70
LTE Band 5	Ant 1	19.0	20.5	26.3	19.0	24.5	1.20
LTE Band 26	Ant 0	28.9	24.5	24.5	24.5	25.0	0.70
LTE Band 26	Ant 1	19.0	21.5	27.0	19.0	24.5	1.20
LTE Band 4	Ant 3	18.5	23.5	30.1	18.5	25.0	0.70
LTE Band 4	Ant 2	18.0	22.5	26.7	18.0	24.5	1.20
LTE Band 4	Ant 5	30.9	22.0	22.0	22.0	24.5	1.20
LTE Band 66	Ant 3	18.0	22.0	30.0	18.0	25.0	0.70
LTE Band 66	Ant 2	18.0	22.5	26.5	18.0	24.5	1.20
LTE Band 66	Ant 5	30.7	22.0	22.0	22.0	24.5	1.20
LTE Band 2_Main PA	Ant 3	17.0	21.0	28.6	17.0	24.5	1.00
LTE Band 2_Other PA	Ant 2	16.0	22.0	25.8	16.0	24.0	1.50
LTE Band 2_Main PA	Ant 2	15.5	21.5	25.8	15.5	23.5	1.50
LTE Band 2_Other PA	Ant 5	30.3	21.0	21.0	20.5	24.0	1.00
LTE Band 7_Main PA	Ant 3	16.5	19.5	25.2	16.5	25.0	0.70
LTE Band 7_Other PA	Ant 3	13.0	16.0	26.1	13.0	21.5	1.50
LTE Band 7_Other PA	Ant 2	14.5	17.5	27.1	14.5	23.5	1.50
LTE Band 7_Main PA	Ant 2	15.0	18.0	27.4	15.0	24.0	1.50
LTE Band 7_Other PA	Ant 5	29.0	18.0	18.0	18.0	23.0	1.50
LTE Band 7_Main PA	Ant 5	30.5	19.5	19.5	19.5	24.5	1.00
LTE Band 38_Main PA	Ant 3	16.0	19.5	25.6	16.0	23.0	0.70
LTE Band 38_Other PA	Ant 3	12.0	15.5	25.3	12.0	19.0	1.50
LTE Band 38_Other PA	Ant 2	13.5	17.0	25.7	13.5	21.5	1.50
LTE Band 38_Main PA	Ant 2	14.0	17.5	26.4	14.0	22.0	1.50
LTE Band 38_Other PA	Ant 5	27.8	19.0	19.0	19.0	21.0	1.50
LTE Band 38_Main PA	Ant 5	30.0	20.5	20.5	20.5	22.5	1.00
LTE Band 38_Other PA	Ant 4	15.5	18.5	28.2	15.5	20.5	1.50
LTE Band 38_Main PA	Ant 4	16.0	19.0	28.7	16.0	21.0	1.50
LTE Band 41_Main PA	Ant 3	16.0	19.0	25.7	16.0	23.0	0.70
LTE Band 41_Other PA	Ant 3	12.0	15.0	24.8	12.0	19.0	1.50
LTE Band 41_Other PA	Ant 2	13.5	17.0	26.0	13.5	21.5	1.50
LTE Band 41_Main PA	Ant 2	14.0	17.5	26.5	14.0	22.0	1.50
LTE Band 41_Other PA	Ant 5	28.1	19.0	19.0	19.0	21.0	1.50
LTE Band 41_Main PA	Ant 5	30.2	20.5	20.5	20.5	22.5	1.00
LTE Band 41_Other PA	Ant 4	15.5	19.0	28.0	15.5	20.5	1.50
LTE Band 41_Main PA	Ant 4	16.0	19.5	28.9	16.0	21.0	1.50
LTE Band 42	Ant 6	13.5	17.5	29.4	13.5	23.0	1.00
LTE Band 42	Ant 1	18.0	19.0	29.9	18.0	19.5	1.50
LTE Band 42	Ant 7	15.0	18.0	26.5	15.0	22.0	1.50
LTE Band 42	Ant 8	30.1	16.5	20.5	16.0	21.5	1.50
LTE Band 48	Ant 6	14.0	16.5	29.3	14.0	22.0	1.00



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LTE Band 48	Ant 1	17.5	18.5	31.0	17.5	18.5	1.50
LTE Band 48	Ant 7	16.5	18.0	27.3	16.5	21.5	1.50
LTE Band 48	Ant 8	27.4	17.5	19.5	15.5	20.5	1.50
FR1 n5	Ant 0	28.1	24.5	24.5	24.5	25.0	0.70
FR1 n5	Ant 1	19.0	20.0	26.6	19.0	24.5	1.20
FR1 n26	Ant 0	28.5	25.0	25.0	26.4	25.0	0.70
FR1 n26	Ant 1	19.5	21.0	26.6	19.5	24.5	1.20
FR1 n66	Ant 3	18.5	20.5	29.4	18.5	25.0	0.70
FR1 n66	Ant 2	16.5	21.0	25.7	16.5	24.0	1.50
FR1 n66	Ant 5	30.1	22.0	22.0	21.0	24.0	1.50
FR1 n2	Ant 3	17.5	21.0	28.9	17.5	24.5	1.00
FR1 n2	Ant 2	17.0	21.0	26.1	17.0	23.5	1.50
FR1 n7	Ant 3	16.5	19.5	25.0	16.5	25.0	0.70
FR1 n7	Ant 2	15.5	18.5	27.3	15.5	24.0	1.50
FR1 n7	Ant 5	30.1	20.0	20.0	20.0	24.0	1.50
FR1 n38	Ant 3	16.0	19.5	24.5	16.0	25.0	0.70
FR1 n38	Ant 2	14.5	18.0	25.8	14.5	24.0	1.50
FR1 n38	Ant 5	29.5	19.5	19.5	19.5	24.0	1.50
FR1 n38	Ant 4	16.5	19.0	28.6	16.5	23.0	1.50
FR1 n41_PC3	Ant 3	15.5	19.0	24.5	15.5	25.0	0.70
FR1 n41_PC2	Ant 3	15.5	19.0	24.5	15.5	23.0	1.00
FR1 n41_PC3	Ant 2	15.0	18.5	25.2	15.0	24.0	1.50
FR1 n41_PC2	Ant 2	15.0	18.5	25.2	15.0	22.0	1.50
FR1 n41_PC3	Ant 5	29.5	19.5	19.5	19.5	24.0	1.50
FR1 n41_PC2	Ant 5	29.5	19.5	19.5	19.5	22.0	1.50
FR1 n41_PC3	Ant 4	16.5	19.0	27.8	16.5	22.5	1.50
FR1 n41_PC2	Ant 4	16.5	19.0	27.8	16.5	20.5	1.50
FR1 n48	Ant 6	13.0	17.5	27.8	13.0	24.0	1.00
FR1 n48	Ant 1	16.5	20.0	28.6	16.5	20.5	1.50
FR1 n48	Ant 7	17.5	19.0	26.7	17.5	23.5	1.50
FR1 n48	Ant 8	24.7	18.0	20.0	16.0	22.5	1.50
FR1 n77_PC3	Ant 6	12.5	16.0	26.7	12.5	25.0	1.00
FR1 n77_PC2	Ant 6	12.5	16.0	26.7	12.5	24.0	1.50
FR1 n77_PC3	Ant 1	16.0	19.0	26.9	16.0	22.0	1.50
FR1 n77_PC2	Ant 1	16.0	19.0	26.9	16.0	21.0	1.50
FR1 n77_PC3	Ant 7	14.5	17.0	25.1	14.5	23.5	1.50
FR1 n77_PC2	Ant 7	14.5	17.0	25.1	14.5	23.0	1.50
FR1 n77_PC3	Ant 8	21.5	16.5	20.5	16.5	23.5	1.50
FR1 n77_PC2	Ant 8	21.5	16.5	20.5	16.5	22.5	1.50
FR1 n78_PC3	Ant 6	12.0	17.0	26.3	12.0	25.0	1.00
FR1 n78_PC2	Ant 6	12.0	17.0	26.3	12.0	24.0	1.50
FR1 n78_PC3	Ant 1	17.5	19.0	26.9	17.5	21.5	1.50
FR1 n78_PC2	Ant 1	17.5	19.0	26.9	17.5	20.5	1.50
FR1 n78_PC3	Ant 7	14.5	17.5	25.1	14.5	24.0	1.50
FR1 n78_PC2	Ant 7	14.5	17.5	25.1	14.5	23.0	1.50
FR1 n78_PC3	Ant 8	21.5	16.5	20.5	16.5	23.5	1.50
FR1 n78_PC2	Ant 8	21.5	16.5	20.5	16.5	22.5	1.50

Band	Antenna	DSI1	DSI4	DSI3	DSI6	Pmax*	Total Uncertainty dB (k=2)
WLAN2.4GHz	Ant 16	11.90	23.00	17.90	16.90	17.90	2.00
WLAN2.4GHz	Ant 7	11.90	23.00	17.90	16.90	17.90	2.00
WLAN2.4GHz	Ant 16+7	11.90	23.00	17.90	16.90	20.90	2.00
Bluetooth	ANT 7	15.40	24.50	13.40	18.70	13.40	2.00
Bluetooth	ANT 16	15.90	26.80	13.90	21.80	13.90	2.00
WLAN5GHz(B1)	Ant 6	13.00	22.50	16.00	18.60	18.00	2.00
WLAN5GHz(B1)	Ant 17	13.00	22.50	16.00	18.60	18.00	2.00
WLAN5GHz(B1)	Ant 17+6	13.00	22.50	16.00	18.60	21.00	2.00
WLAN5GHz(B2)	Ant 6	13.00	22.50	16.00		18.00	2.00
WLAN5GHz(B2)	Ant 17	13.00	22.50	16.00		18.00	2.00
WLAN5GHz(B2)	Ant 17+6	13.00	22.50	16.00		21.00	2.00
WLAN5GHz(B3)	Ant 6	12.50	22.20	16.00		18.00	2.00
WLAN5GHz(B3)	Ant 17	12.50	22.20	16.00		18.00	2.00
WLAN5GHz(B3)	Ant 17+6	12.50	22.20	16.00		21.00	2.00
WLAN5GHz(B4)	Ant 6	12.50	22.30	17.50	18.80	17.50	2.00
WLAN5GHz(B4)	Ant 17	12.50	22.30	17.50	18.80	17.50	2.00
WLAN5GHz(B4)	Ant 17+6	12.50	22.30	17.50	18.80	20.50	2.00

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

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

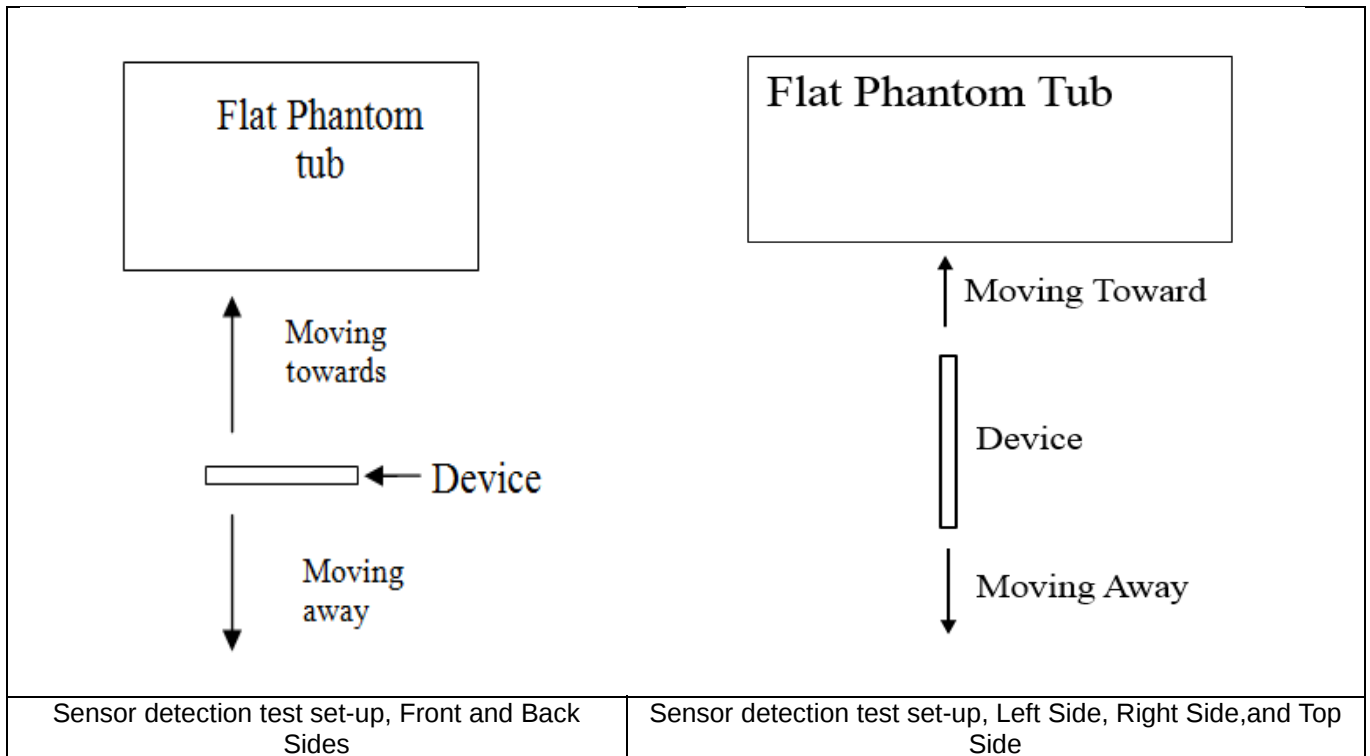
3) The max allowed output power is the P_{limit} + Total uncertainty, and if P_{limit} is higher than Pmax, the device output power will be Pmax instead.

4) GSM/WCDMA applies force peak method, and in single active Tx scenario, Smart Transmit can guarantee Tx power level of P_{limit} at all times.

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



< Sensor for Ant 2/7/17>

Proximity Sensor Triggering Distance (mm)						
Position	Front		Back		Right Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	6	6	6	6	8	8

< Sensor for Ant 1/3/4/6/8>

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	6	6	6	6	6	6	6	6

<Sensor for Ant 17+6>

Proximity Sensor Triggering Distance (mm)										
Position	Front		Back		Top Side		Right Side		Left Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	6	6	6	6	6	6	8	8	6	6

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:

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

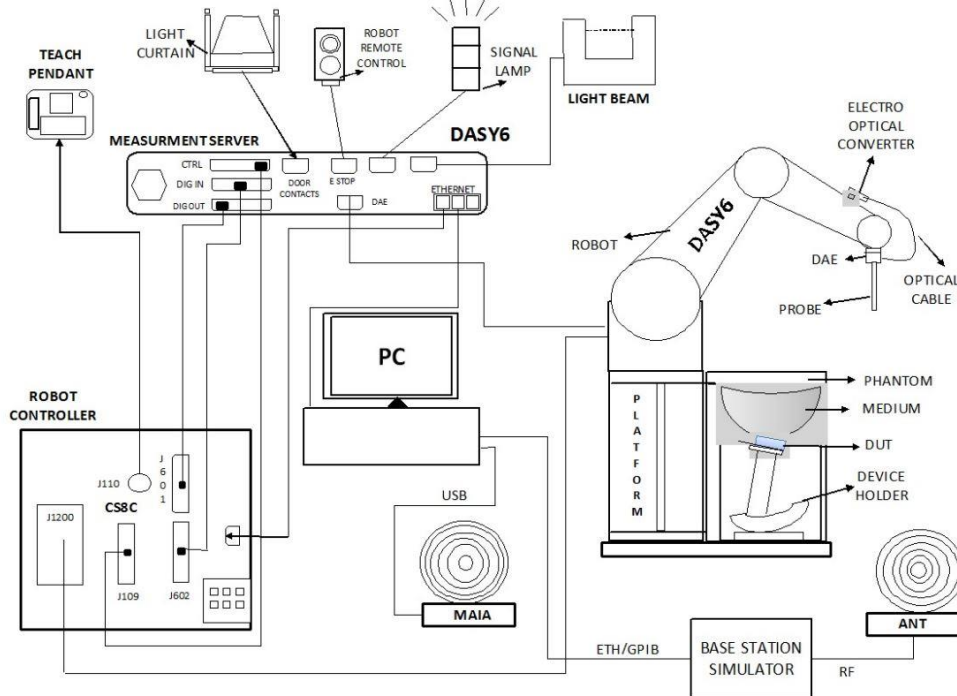
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. System Description and Setup

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



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running 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	4 MHz – 10 GHz Linearity: ± 0.2 dB (30 MHz – 10 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g – >100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

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 from the measurement grid to the high-resolution grid
- (e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- (f) Calculation of the averaged SAR within masses of 1g and 10g

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 dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

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

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

10.4 Zoom Scan

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

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

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

10.5 Volume Scan Procedures

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

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	835MHz System Validation Kit	D835V2	4d298	2024/1/26	2025/1/25
SPEAG	1750MHz System Validation Kit	D1750V2	1090	2022/2/24	2025/2/22
SPEAG	1900MHz System Validation Kit	D1900V2	5d118	2022/3/30	2025/3/28
SPEAG	2450MHz System Validation Kit	D2450V2	1095	2024/2/8	2025/2/7
SPEAG	2600MHz System Validation Kit	D2600V2	1112	2023/12/18	2024/12/17
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	2024/7/3	2025/7/2
SPEAG	Dosimetric E-Field Probe	EX3DV4	7706	2024/1/24	2025/1/23
SPEAG	SAM Twin Phantom	SAM Twin	TP-2024	NCR	NCR
CHIGO	Thermo-Hygrometer	HTC-1	55009	2024/1/4	2025/1/3
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8821C	6262306175	2024/7/4	2025/7/3
Agilent	ENA Series Network Analyzer	E5071C	MY46112129	2024/7/4	2025/7/3
SPEAG	Dielectric Probe Kit	DAK-3.5	1071	2024/2/19	2025/2/18
Anritsu	Vector Signal Generator	MG3710A	6201682672	2024/1/2	2025/1/1
Rohde & Schwarz	Power Meter	NRVD	102081	2024/7/4	2025/7/3
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	2024/7/4	2025/7/3
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	2024/7/4	2025/7/3
R&S	BLUETOOTH TESTER	CBT	101246	2024/7/4	2025/7/3
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	2023/10/11	2024/10/10
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	2024/10/11	2025/10/10
TES	DIGITAC THERMOMETER	TYPE-K	220305411	2024/1/4	2025/1/3
ARRA	Power Divider	A3200-2	N/A	Note 1	
MCL	Attenuation1	BW-S10W5+	N/A	Note 1	
MCL	Attenuation2	BW-S10W5+	N/A	Note 1	
MCL	Attenuation3	BW-S10W5+	N/A	Note 1	
BONN	POWER AMPLIFIER	BLMA 0830-3	087193A	Note 1	
BONN	POWER AMPLIFIER	BLMA 2060-2	087193B	Note 1	
Agilent	Dual Directional Coupler	778D	20500	Note 1	
Agilent	Dual Directional Coupler	11691D	MY48151020	Note 1	

Note:

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

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.

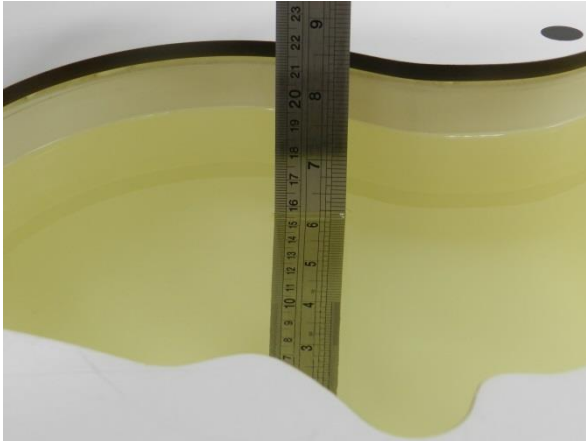


Fig 11.1 Photo of Liquid Height for Head SAR

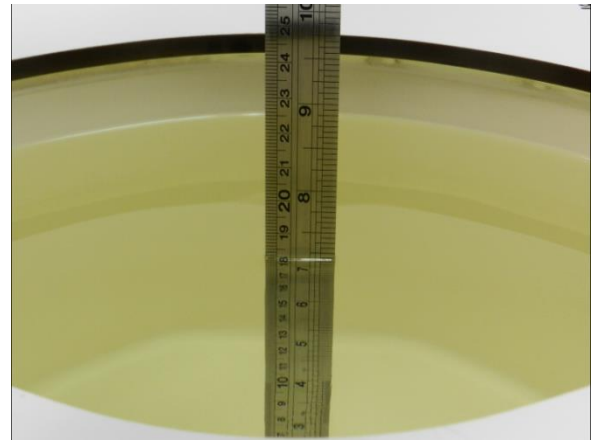


Fig 11.2 Photo of Liquid Height for Body SAR

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 (ϵ_r)
For Head								
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.40	40.0
2450	55.0	0	0	0	0	45.0	1.80	39.2
2600	54.8	0	0	0.1	0	45.1	1.96	39.0

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
835	Head	22.6	0.924	41.4	0.90	41.50	2.67	-0.24	±5	2024/9/23
1750	Head	22.9	1.35	40.1	1.37	40.10	-1.46	0.00	±5	2024/9/24
1900	Head	22.8	1.43	39.8	1.40	40.00	2.14	-0.50	±5	2024/9/25
2450	Head	22.7	1.85	39.1	1.80	39.20	2.78	-0.26	±5	2024/9/26
2600	Head	22.6	1.98	39.0	1.96	39.00	1.02	0.00	±5	2024/9/27
3500	Head	22.9	2.80	38.9	2.91	37.90	-3.78	2.64	±5	2024/9/28
3700	Head	22.8	2.98	38.6	3.12	37.70	-4.49	2.39	±5	2024/9/29
3900	Head	22.7	3.18	38.3	3.32	37.50	-4.22	2.13	±5	2024/9/30
5250	Head	22.6	4.56	35.0	4.71	35.90	-3.18	-2.51	±5	2024/10/1
5600	Head	22.8	4.94	34.3	5.07	35.50	-2.56	-3.38	±5	2024/10/2
5750	Head	22.9	5.12	34.1	5.22	35.40	-1.92	-3.67	±5	2024/10/3
835	Head	22.6	0.911	42.7	0.90	41.50	1.22	2.89	±5	2024/10/4
1750	Head	22.9	1.34	38.5	1.37	40.10	-2.19	-3.99	±5	2024/10/5
1900	Head	22.8	1.40	41.4	1.40	40.00	0.00	3.50	±5	2024/10/6
2450	Head	22.7	1.83	37.5	1.80	39.20	1.67	-4.34	±5	2024/10/7
2600	Head	22.9	1.93	38.3	1.96	39.00	-1.53	-1.79	±5	2024/10/8
3500	Head	22.8	2.85	38.6	2.91	37.90	-2.06	1.85	±5	2024/10/9
3700	Head	22.7	3.08	38.0	3.12	37.70	-1.28	0.80	±5	2024/10/10
3900	Head	22.6	3.28	37.6	3.32	37.50	-1.20	0.27	±5	2024/10/11
5250	Head	22.8	4.58	35.7	4.71	35.90	-2.76	-0.56	±5	2024/10/12
5600	Head	22.9	4.95	35.1	5.07	35.50	-2.37	-1.13	±5	2024/10/13
5750	Head	22.7	5.11	34.9	5.22	35.40	-2.11	-1.41	±5	2024/10/14
2450	Head	22.7	1.86	38.4	1.80	39.20	3.33	-2.04	±5	2024/10/29

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 (%)
2024/9/23	835	Head	50	4d298	7706	1649	0.495	9.89	9.9	0.10
2024/9/24	1750	Head	50	1090	7706	1649	1.96	37.00	39.2	5.95
2024/9/25	1900	Head	50	5d118	7706	1649	2.07	39.30	41.4	5.34
2024/9/26	2450	Head	50	1095	7706	1649	2.68	52.60	53.6	1.90
2024/9/27	2600	Head	50	1112	7706	1649	2.68	55.10	53.6	-2.72
2024/9/28	3500	Head	50	1037	7706	1649	3.15	65.40	63	-3.67
2024/9/29	3700	Head	50	1008	7706	1649	3.31	67.20	66.2	-1.49
2024/9/30	3900	Head	50	1048	7706	1649	3.25	69.10	65	-5.93
2024/10/1	5250	Head	50	1113	7706	1649	3.77	81.50	75.4	-7.48
2024/10/2	5600	Head	50	1113	7706	1649	3.90	82.60	78	-5.57
2024/10/3	5750	Head	50	1113	7706	1649	3.82	80.80	76.4	-5.45
2024/10/4	835	Head	50	4d298	7706	1649	0.456	9.89	9.12	-7.79
2024/10/5	1750	Head	50	1090	7706	1649	1.88	37.00	37.6	1.62
2024/10/6	1900	Head	50	5d118	7706	1649	1.95	39.30	39	-0.76
2024/10/7	2450	Head	50	1095	7706	1649	2.72	52.60	54.4	3.42
2024/10/8	2600	Head	50	1112	7706	1649	2.91	55.10	58.2	5.63
2024/10/9	3500	Head	50	1037	7706	1649	3.19	65.40	63.8	-2.45
2024/10/10	3700	Head	50	1008	7706	1649	3.40	67.20	68	1.19
2024/10/11	3900	Head	50	1048	7706	1649	3.51	69.10	70.2	1.59
2024/10/12	5250	Head	50	1113	7706	1649	3.81	81.50	76.2	-6.50
2024/10/13	5600	Head	50	1113	7706	1649	4.08	82.60	81.6	-1.21
2024/10/14	5750	Head	50	1113	7706	1649	3.76	80.80	75.2	-6.93
2024/10/29	2450	Head	50	1095	7706	1649	2.72	52.60	54.4	3.42

<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 (%)
2024/9/23	835	Head	50	4d298	7706	1649	0.330	6.45	6.6	2.33
2024/9/24	1750	Head	50	1090	7706	1649	1.01	19.50	20.2	3.59
2024/9/25	1900	Head	50	5d118	7706	1649	1.05	20.40	21	2.94
2024/9/26	2450	Head	50	1095	7706	1649	1.24	24.70	24.8	0.40
2024/9/27	2600	Head	50	1112	7706	1649	1.21	24.80	24.2	-2.42
2024/9/28	3500	Head	50	1037	7706	1649	1.20	24.70	24	-2.83
2024/9/29	3700	Head	50	1008	7706	1649	1.22	24.40	24.4	0.00
2024/9/30	3900	Head	50	1048	7706	1649	1.18	24.10	23.6	-2.07
2024/10/1	5250	Head	50	1113	7706	1649	1.11	23.30	22.2	-4.72
2024/10/2	5600	Head	50	1113	7706	1649	1.12	23.70	22.4	-5.49
2024/10/3	5750	Head	50	1113	7706	1649	1.10	23.00	22	-4.35
2024/10/4	835	Head	50	4d298	7706	1649	0.304	6.45	6.08	-5.74
2024/10/5	1750	Head	50	1090	7706	1649	1.01	19.50	20.2	3.59
2024/10/6	1900	Head	50	5d118	7706	1649	1.05	20.40	21	2.94
2024/10/7	2450	Head	50	1095	7706	1649	1.31	24.70	26.2	6.07
2024/10/8	2600	Head	50	1112	7706	1649	1.31	24.80	26.2	5.65
2024/10/9	3500	Head	50	1037	7706	1649	1.22	24.70	24.4	-1.21
2024/10/10	3700	Head	50	1008	7706	1649	1.28	24.40	25.6	4.92
2024/10/11	3900	Head	50	1048	7706	1649	1.27	24.10	25.4	5.39
2024/10/12	5250	Head	50	1113	7706	1649	1.12	23.30	22.4	-3.86
2024/10/13	5600	Head	50	1113	7706	1649	1.18	23.70	23.6	-0.42
2024/10/14	5750	Head	50	1113	7706	1649	1.10	23.00	22	-4.35
2024/10/29	2450	Head	50	1095	7706	1649	1.30	24.70	26	5.26

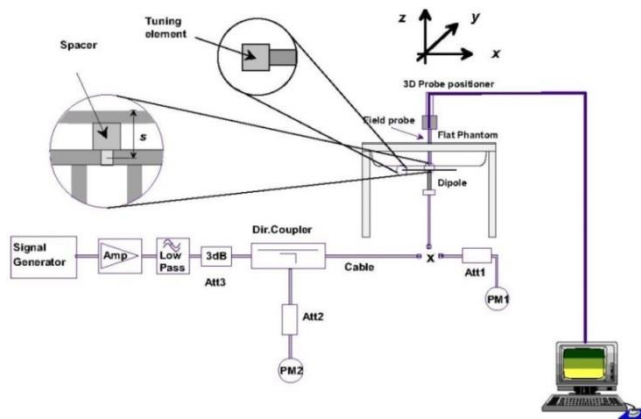


Fig 11.3.1 System Performance Check Setup



Fig 11.3.2 Setup Photo

13. RF Exposure Positions

13.1 Ear and handset reference point

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

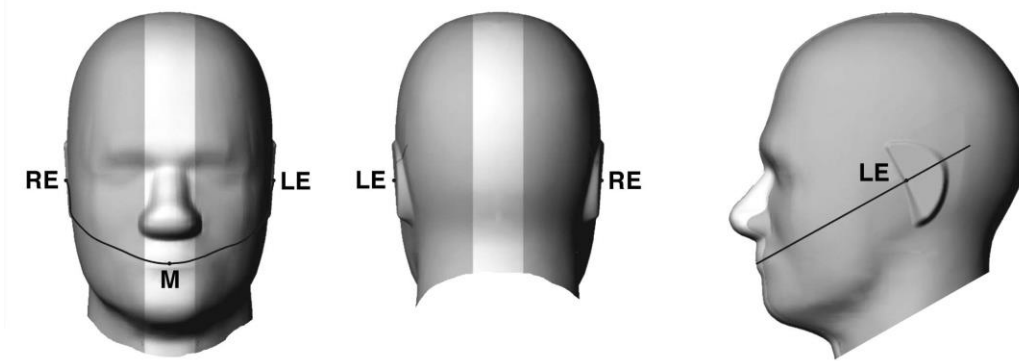


Fig 12.1.1 Front, back, and side views of SAM twin phantom

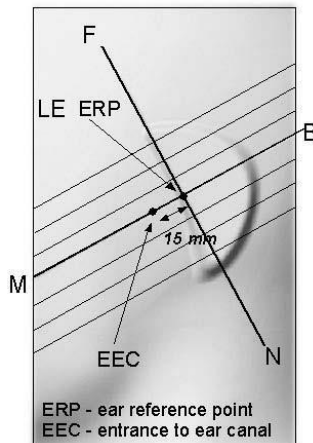


Fig 12.1.2 Close-up side view of phantom showing the ear region.

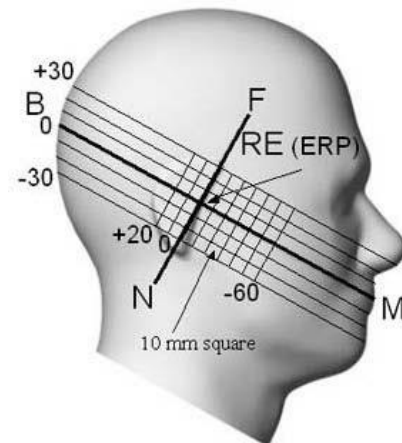


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

13.2 Definition of the cheek position

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

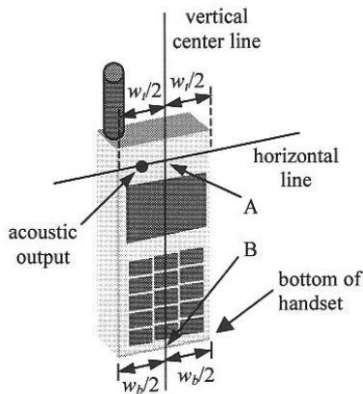


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

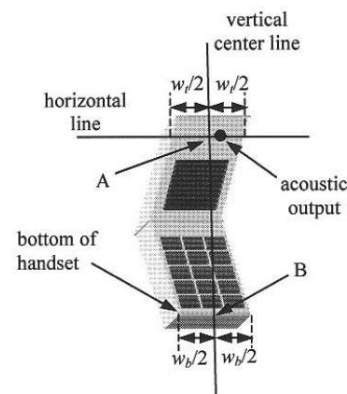


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

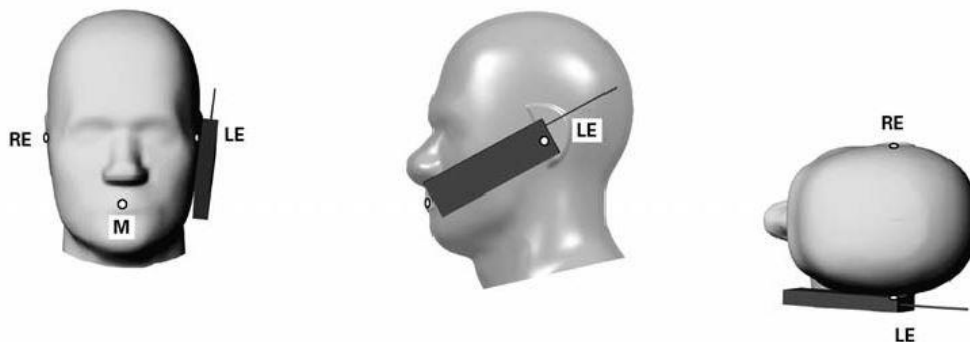


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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

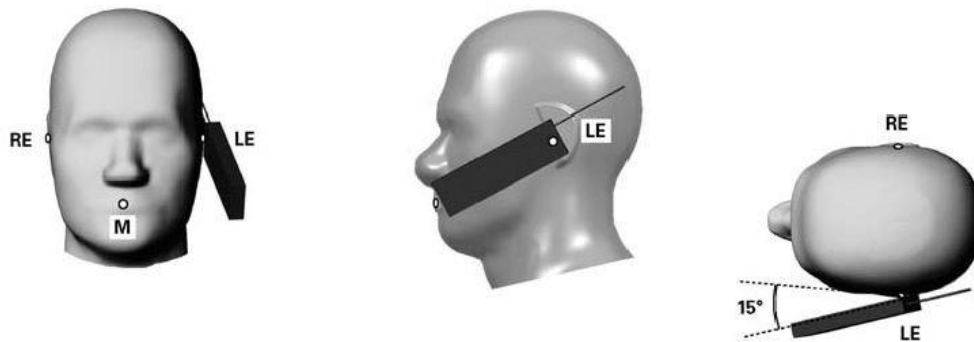


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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 $> 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

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

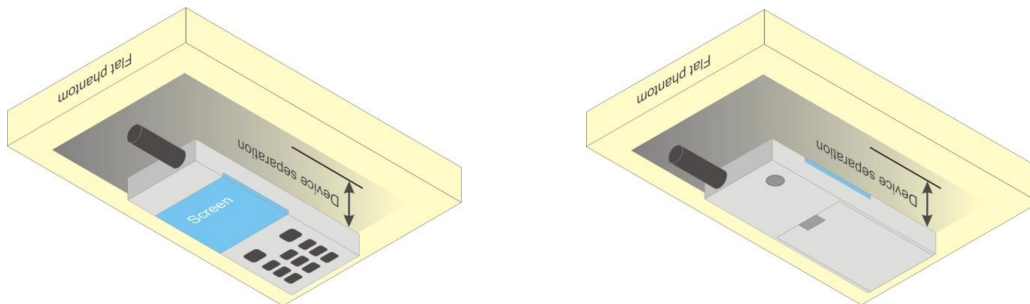


Fig 12.4 Body Worn Position

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 ($L \times W \geq 9$ cm x 5 cm) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

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

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 $\leq 1/4$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

<WCDMA Conducted Power>

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

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

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

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

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

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

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{hs} = 24/15 * \beta_c$.

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

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

Setup Configuration

HSUPA Setup Configuration:

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

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

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

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

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

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

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

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

- a. The EUT was connected to Base Station 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:
 1. Set RMC 12.2Kbps + HSDPA mode.
 2. Set Cell Power = -25 dBm
 3. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
 4. Select HSDPA Uplink Parameters
 5. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - a). Subtest 1: $\beta_c/\beta_d=2/15$
 - b). Subtest 2: $\beta_c/\beta_d=12/15$
 - c). Subtest 3: $\beta_c/\beta_d=15/8$
 - d). Subtest 4: $\beta_c/\beta_d=15/4$
 6. Set Delta ACK, Delta NACK and Delta CQI = 8
 7. Set Ack-Nack Repetition Factor to 3
 8. Set CQI Feedback Cycle (k) to 4 ms
 9. Set CQI Repetition Factor to 2
 10. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

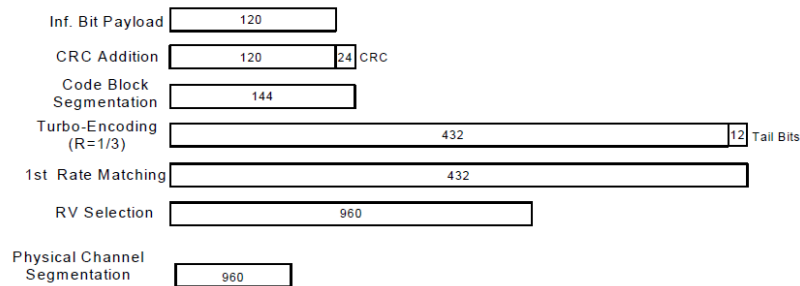


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK) Setup Configuration

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

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

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

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

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

Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).

Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default.

Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signaled to use the extrapolation algorithm.

Setup Configuration

<WCDMA Conducted Power>

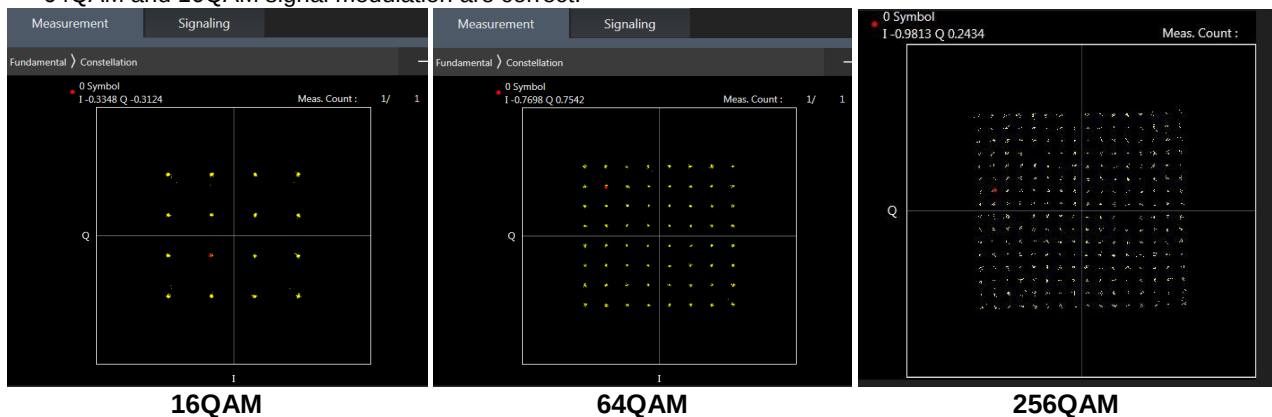
General Note:

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

<LTE Conducted Power>

General Note:

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



<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

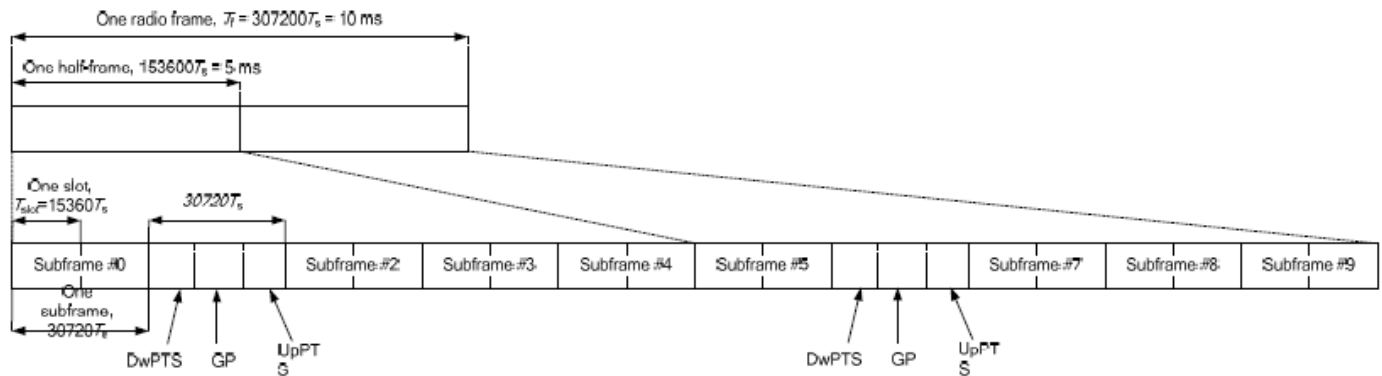


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

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

<LTE Carrier Aggregation>

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

General Note:

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

2CC Downlink Carrier Aggregation				3CC Downlink Carrier Aggregation			
Number	Combination	4X4 MIMO	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Covered by Measurement Superset
1	CA_2A-4A			1	CA_2A-7A-7A		
2	CA_2A-7A		3CC-1	2	CA_5A-7A-7A	7A-7A	
3	CA_38C	38C		3	CA_2A-7C		
4	CA_41A-41A	41A-41A		4	CA_41D	41D	
5	CA_41C	41C		5	CA_4A-7C	4A,7C	
6	CA_4A-5A	4A					
7	CA_4A-7A	4A,7A					
9	CA_7A-7A	7A-7A					
10	CA_7C	7C					
11	CA_66C	66C					
12	CA_66B	66B					
13	CA_2A-2A						
14	CA_66A-66A	66A-66A					
15	CA_5A-7A	7A	3CC-2				
16	CA_7A-66A	7A,66A					

LTE Carrier Aggregation Conducted Power (Downlink)

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

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

LTE 4x4 MIMO (Downlink)

This device supports downlink 4x4 MIMO operations for LTE Band LTE Band 4/7/38/41/66 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 4/7/38/41/66

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation
Intra-band	Antenna Tx
CA_7C	Ant3/2/5
CA_38C	Ant3/2/5/4

<Intra-band>

General Note:

- i. The device supports intra-band uplink carrier aggregation for LTE B7/38 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 with 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.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n26/n66/n38/n41/n48/n77/n78 is SA mode.
2. 5G NR n5/n7/n66/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. For 5G NR n41/n77/n78 HPUE, 5G NR n41/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.
5. 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.
6. 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.
7. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
8. 5G NR NSA mode, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time.
9. When channel bandwidth of SA and NSA is same, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time. When channel bandwidth of SA and NSA is different, chose the largest channel bandwidth mode among SA and NSA to perform power measurement.
10. For the NR bands, when channel bandwidth of SA and NSA is same, and the maximum power of NSA mode is same as SA total power level, SA SAR can represent NSA mode SAR. For the bands, when channel bandwidth of SA and NSA is different, choose the largest channel bandwidth with maximum power to perform SAR testing, so the largest channel bandwidth SAR can represent the smallest channel bandwidth SAR.
11. 5G NR n41/n77/n78 supports HPUE mode, HPUE power and SAR testing performed separately.
12. 5G NR n41/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 verify the worst case of power class 3 SAR.

<3GPP 38.101 MPR for EN-DC>

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

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

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

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

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

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

<EN-DC combination>

ENDC	Antenna Tx	
	LTE Antenna Tx	FR1 Antenna Tx
DC_2A_n78A	B2:Ant5/2	n78:Ant6/1/7/8
DC_38A_n78A	B38:Ant5/4/3/2	n78:Ant6/1/7/8
DC_41A_n78A	B41:Ant5/4/3/2	n78:Ant6/1/7/8
DC_5A_n78A	B5:Ant0/1	n78:Ant6/1/7/8
DC_7A_n78A	B7:Ant5/3/2	n78:Ant6/1/7/8
DC_7A_n5A	B7:Ant3/2/5	n5:Ant0/1
DC_5A_n7A	B5:Ant0/1	n7:Ant 3/2/5
DC_5A_n66A	B5:Ant0/1	n66:Ant3/2/5
DC_7A_n66A	B7:ANT5/2	n66:Ant3/2/5

<WLAN Conducted Power>

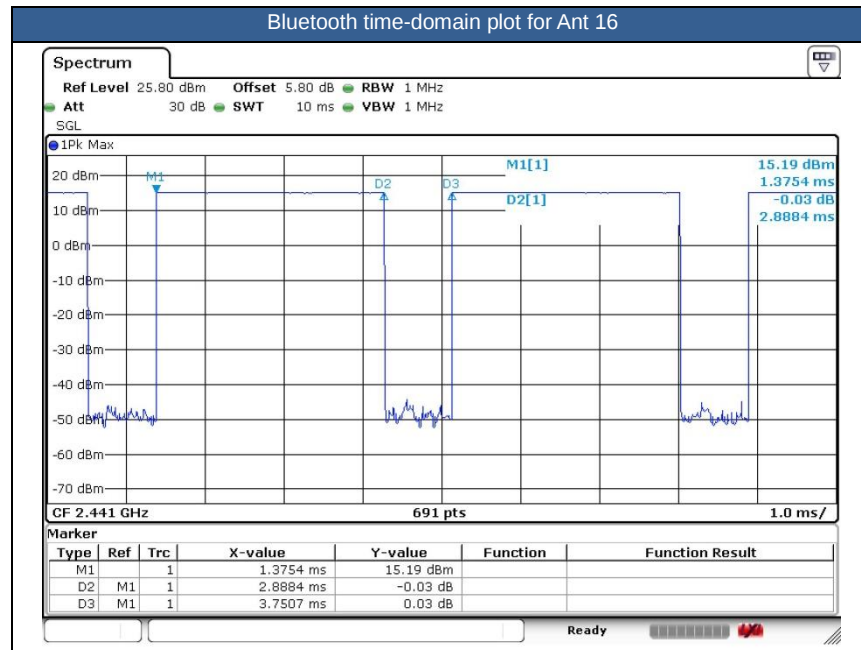
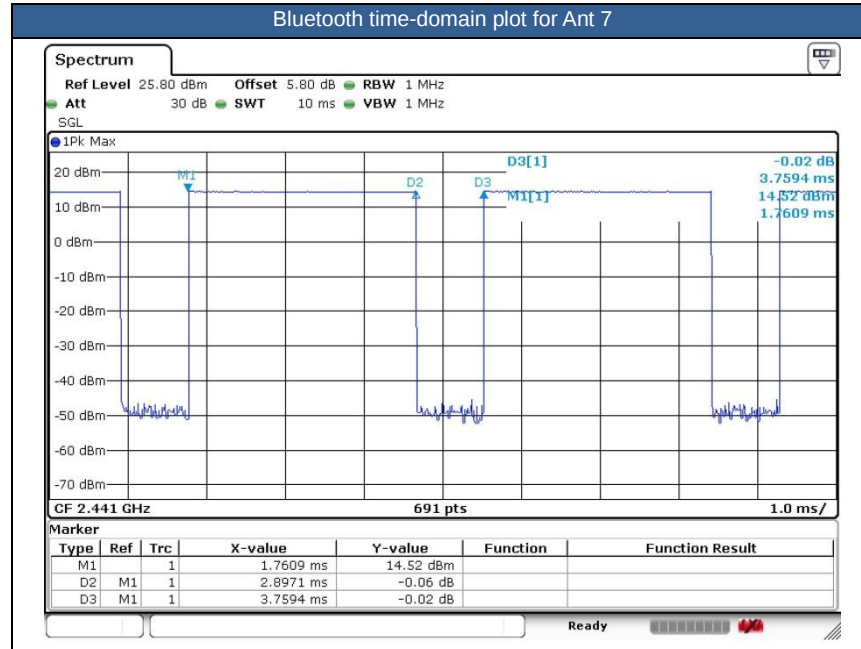
General Note:

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. 802.11ax/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. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing.
8. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of two antennas respectively to calculate sum of the power for MIMO 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 77.06% for ant 7 and 77.01% for ant 16 as following figure, Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation.





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.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements Proximity sensors/receiver detect mechanism/hotspot trigger reduced power for the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity), and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. The device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to appendix E. power table.
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 (for handheld on state, the maximum full power means reduced power), including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. For this device SAR for WWAN/WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of GSM850/GSM1900, WCDMA Band II/IV, LTE Band 2/4/66, 5G NR n2/n66 and WLAN5.2GHz 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. 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).
7. Based on Qualcomm Smart Transmit algorithm, the BT MIMO antennas located in same AGs and the MIMO Plimit is not populated in the EFS file, so additional verification tests need to be added, the more detail UL MIMO analysis results please referred to appendix H.
8. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot SAR.
9. For Phablet devices, when hotspot mode is not supported, Product specific 10-g SAR is required for all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.
10. The device for LTE Band 48/5G NR n48 SAR testing was configured by the 3GPP MPR implementations and in order to more conservative RF exposure assessment to determine SAR compliance, the actual maximum output power in production unit refer to Part 96 report and tune up document.

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

WCDMA Note:

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

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / 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.

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. $\text{PI}/2$ BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, $\text{PI}/2$ BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - e. Smaller bandwidth output power for each RB allocation configuration for this device will not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - f. For 5G FR1 n2/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. Per KDB 248227 D01v02r02, when SAR measurement is required for at least one of the two U-NII bands and the highest reported SAR adjusted by the ratio of specified maximum output power of aggregated to standalone band is < 1.2 W/kg, SAR is not required for the 160 MHz channel.
4. 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.
5. 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. During SAR testing the WLAN transmission was verified using a spectrum analyzer.
7. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing.
8. 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 conditions	Trigger Conditions	DSI
Head	Receiver on	DSI1
Body Worn (15mm)	Sensor Off / Receiver off	DSI4
Hotspot (10mm)	Hotspot On	DSI6
Extremity (Handheld)	Sensor On	DSI3
	Sensor Off / Receiver off	DSI4

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)	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)
835MHz																				
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 0	DSI 1	189	836.4	26.17	28.00	1.524	-	-	0.04	0.259	0.395
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 0	DSI 1	189	836.4	26.17	28.00	1.524	-	-	-0.1	0.123	0.187
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 0	DSI 1	189	836.4	26.17	28.00	1.524	-	-	0.07	0.161	0.245
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 0	DSI 1	189	836.4	26.17	28.00	1.524	-	-	0.18	0.083	0.126
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 1	DSI 1	189	836.4	22.16	24.00	1.528	-	-	0.19	0.416	0.635
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	DSI 1	189	836.4	22.16	24.00	1.528	-	-	0.07	0.076	0.116
01	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	DSI 1	189	836.4	22.16	24.00	1.528	-	-	0.19	0.641	0.979
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	DSI 1	128	824.2	22.04	24.00	1.570	-	-	-0.18	0.614	0.964
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	DSI 1	251	848.8	22.08	24.00	1.556	-	-	0.03	0.624	0.971
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 1	DSI 1	189	836.4	22.16	24.00	1.528	-	-	-0.15	0.082	0.125
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	DSI 1	4182	836.4	24.64	25.00	1.086	-	-	0.09	0.417	0.453
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	DSI 1	4182	836.4	24.64	25.00	1.086	-	-	-0.1	0.199	0.216
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	DSI 1	4182	836.4	24.64	25.00	1.086	-	-	0.01	0.300	0.326
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	DSI 1	4182	836.4	24.64	25.00	1.086	-	-	-0.15	0.148	0.161
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	DSI 1	4182	836.4	18.59	19.50	1.233	-	-	0.1	0.350	0.432
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	DSI 1	4182	836.4	18.59	19.50	1.233	-	-	0.12	0.064	0.079
02	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	DSI 1	4182	836.4	18.59	19.50	1.233	-	-	0.09	0.542	0.668
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	DSI 1	4182	836.4	18.59	19.50	1.233	-	-	0.08	0.073	0.090
	LTE Band 5	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	20525	836.5	25.35	25.70	1.084	-	-	-0.01	0.464	0.503
	LTE Band 5	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	DSI 1	20525	836.5	24.41	24.70	1.069	-	-	-0.08	0.380	0.406
	LTE Band 5	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 1	20525	836.5	25.35	25.70	1.084	-	-	0.1	0.252	0.273
	LTE Band 5	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	DSI 1	20525	836.5	24.41	24.70	1.069	-	-	-0.18	0.209	0.223
	LTE Band 5	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 1	20525	836.5	25.35	25.70	1.084	-	-	0.1	0.336	0.364
	LTE Band 5	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	DSI 1	20525	836.5	24.41	24.70	1.069	-	-	0.12	0.279	0.298
	LTE Band 5	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 1	20525	836.5	25.35	25.70	1.084	-	-	0.08	0.192	0.208
	LTE Band 5	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	DSI 1	20525	836.5	24.41	24.70	1.069	-	-	-0.17	0.158	0.169
	LTE Band 5	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	20525	836.5	19.18	20.20	1.265	-	-	-0.17	0.449	0.568
	LTE Band 5	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	DSI 1	20525	836.5	19.10	20.20	1.288	-	-	-0.03	0.470	0.605
	LTE Band 5	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	20525	836.5	19.18	20.20	1.265	-	-	0.14	0.080	0.101
	LTE Band 5	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	DSI 1	20525	836.5	19.10	20.20	1.288	-	-	0.11	0.082	0.106
03	LTE Band 5	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	20525	836.5	19.18	20.20	1.265	-	-	0.09	0.718	0.908
	LTE Band 5	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	DSI 1	20525	836.5	19.10	20.20	1.288	-	-	-0.05	0.700	0.902
	LTE Band 5	10M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	20525	836.5	19.09	20.20	1.291	-	-	0.18	0.698	0.901
	LTE Band 5	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	20525	836.5	19.18	20.20	1.265	-	-	0.14	0.090	0.114
	LTE Band 5	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	DSI 1	20525	836.5	19.10	20.20	1.288	-	-	-0.17	0.090	0.116
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	DSI 1	26865	831.5	25.36	25.70	1.081	-	-	-0.04	0.415	0.449
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	DSI 1	26865	831.5	24.42	24.70	1.067	-	-	-0.03	0.335	0.357
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	DSI 1	26865	831.5	25.36	25.70	1.081	-	-	0.14	0.219	0.237
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	DSI 1	26865	831.5	24.42	24.70	1.067	-	-	0.11	0.188	0.201
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	DSI 1	26865	831.5	25.36	25.70	1.081	-	-	-0.05	0.285	0.308
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	DSI 1	26865	831.5	24.42	24.70	1.067	-	-	0.18	0.237	0.253
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	DSI 1	26865	831.5	25.36	25.70	1.081	-	-	0.14	0.173	0.187
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	DSI 1	26865	831.5	24.42	24.70	1.067	-	-	-0.17	0.145	0.155
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	26865	831.5	19.16	20.20	1.271	-	-	0.08	0.429	0.545
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 1	DSI 1	26865	831.5	18.98	20.20	1.324	-	-	0.01	0.450	0.596
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	26865	831.5	19.16	20.20	1.271	-	-	0.03	0.077	0.098
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 1	DSI 1	26865	831.5	18.98	20.20	1.324	-	-	-0.08	0.082	0.109
04	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	26865	831.5	19.16	20.20	1.271	-	-	0.03	0.651	0.827
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 1	DSI 1	26865	831.5	18.98	20.20	1.324	-	-	-0.08	0.617	0.817
	LTE Band 26	15M	QPSK	75	0	-	Left Cheek	0mm	Ant 1	DSI 1	26865	831.5	18.99	20.20	1.321	-	-	0.02	0.613	0.810



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	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	26865	831.5	19.16	20.20	1.271	-	-	0.1	0.085	0.108
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 1	DSI 1	26865	831.5	18.98	20.20	1.324	-	-	-0.18	0.090	0.119
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	167300	836.5	25.21	25.70	1.119	-	-	0.1	0.435	0.487
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	167300	836.5	25.04	25.70	1.164	-	-	-0.02	0.469	0.546
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	167300	836.5	25.21	25.70	1.119	-	-	-0.17	0.230	0.257
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	167300	836.5	25.04	25.70	1.164	-	-	0.04	0.249	0.290
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	167300	836.5	25.21	25.70	1.119	-	-	-0.01	0.305	0.341
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	167300	836.5	25.04	25.70	1.164	-	-	-0.08	0.333	0.388
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	167300	836.5	25.21	25.70	1.119	-	-	0.05	0.185	0.207
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	167300	836.5	25.04	25.70	1.164	-	-	0.06	0.190	0.221
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	167300	836.5	19.22	20.20	1.253	-	-	0.08	0.478	0.599
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	167300	836.5	19.10	20.20	1.288	-	-	0.01	0.499	0.643
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	167300	836.5	19.22	20.20	1.253	-	-	0.03	0.079	0.099
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	167300	836.5	19.10	20.20	1.288	-	-	-0.08	0.084	0.108
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	167300	836.5	19.22	20.20	1.253	-	-	-0.08	0.724	0.907
05	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	167300	836.5	19.10	20.20	1.288	-	-	-0.14	0.774	0.997
	FR1 n5	20M	QPSK	100	0	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	167300	836.5	18.86	20.20	1.361	-	-	0.1	0.729	0.992
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	167300	836.5	19.22	20.20	1.253	-	-	-0.18	0.097	0.122
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	167300	836.5	19.10	20.20	1.288	-	-	0.1	0.100	0.129
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	166300	831.5	25.19	25.70	1.125	-	-	-0.09	0.388	0.436
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	DSI 1	166300	831.5	25.07	25.70	1.156	-	-	-0.03	0.431	0.498
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	166300	831.5	25.19	25.70	1.125	-	-	-0.08	0.209	0.235
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	DSI 1	166300	831.5	25.07	25.70	1.156	-	-	0.13	0.233	0.269
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	166300	831.5	25.19	25.70	1.125	-	-	0.12	0.267	0.300
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	DSI 1	166300	831.5	25.07	25.70	1.156	-	-	0.03	0.323	0.373
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	166300	831.5	25.19	25.70	1.125	-	-	0.18	0.159	0.179
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	DSI 1	166300	831.5	25.07	25.70	1.156	-	-	0.16	0.179	0.207
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	166300	831.5	19.66	20.70	1.271	-	-	0.12	0.474	0.602
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	DSI 1	166300	831.5	19.57	20.70	1.297	-	-	0.08	0.491	0.637
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	166300	831.5	19.66	20.70	1.271	-	-	-0.17	0.073	0.093
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	DSI 1	166300	831.5	19.57	20.70	1.297	-	-	-0.03	0.086	0.112
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	166300	831.5	19.66	20.70	1.271	-	-	0.14	0.699	0.888
06	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	166300	831.5	19.57	20.70	1.297	-	-	-0.02	0.759	0.985
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	DSI 1	166300	831.5	19.29	20.70	1.384	-	-	0.11	0.705	0.975
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	166300	831.5	19.66	20.70	1.271	-	-	-0.05	0.096	0.122
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	DSI 1	166300	831.5	19.57	20.70	1.297	-	-	0.18	0.104	0.135
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	DSI 1	1413	1732.6	17.08	18.00	1.236	-	-	0.08	0.690	0.853
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	DSI 1	1312	1712.4	16.96	18.00	1.271	-	-	0.01	0.683	0.868
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	DSI 1	1513	1752.6	16.99	18.00	1.262	-	-	0.05	0.724	0.914
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	DSI 1	1413	1732.6	17.08	18.00	1.236	-	-	0.03	0.229	0.283
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 3	DSI 1	1413	1732.6	17.08	18.00	1.236	-	-	-0.08	0.188	0.232
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 3	DSI 1	1413	1732.6	17.08	18.00	1.236	-	-	-0.08	0.108	0.133
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	DSI 1	1413	1732.6	16.67	18.00	1.358	-	-	0.1	0.579	0.786
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	DSI 1	1413	1732.6	16.67	18.00	1.358	-	-	-0.18	0.101	0.137
07	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	DSI 1	1413	1732.6	16.67	18.00	1.358	-	-	0.01	0.705	0.958
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	DSI 1	1312	1712.4	16.54	18.00	1.400	-	-	0.1	0.657	0.920
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	DSI 1	1513	1752.6	16.56	18.00	1.393	-	-	0.12	0.682	0.950
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 2	DSI 1	1413	1732.6	16.67	18.00	1.358	-	-	0.08	0.138	0.187
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 5	DSI 1	1413	1732.6	23.31	24.50	1.315	-	-	0.08	0.174	0.229
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 5	DSI 1	1413	1732.6	23.31	24.50	1.315	-	-	-0.1	0.075	0.099
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 5	DSI 1	1413	1732.6	23.31	24.50	1.315	-	-	0.07	0.106	0.139
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 5	DSI 1	1413	1732.6	23.31	24.50	1.315	-	-	0.18	0.068	0.089
	LTE Band 4	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	20175	1732.5	18.69	19.20	1.125	-	-	-0.05	0.856	0.963
	LTE Band 4	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	20175	1732.5	18.67	19.20	1.130	-	-	-0.17	0.843	0.952
	LTE Band 4	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 3	DSI 1	20175	1732.5	18.66	19.20	1.132	-	-	-0.03	0.817	0.925



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	LTE Band 4	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	20175	1732.5	18.69	19.20	1.125	-	-	0.14	0.291	0.327
	LTE Band 4	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	20175	1732.5	18.67	19.20	1.130	-	-	0.11	0.315	0.356
	LTE Band 4	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	20175	1732.5	18.69	19.20	1.125	-	-	-0.05	0.256	0.288
	LTE Band 4	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	20175	1732.5	18.67	19.20	1.130	-	-	0.18	0.272	0.307
	LTE Band 4	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	20175	1732.5	18.69	19.20	1.125	-	-	0.14	0.157	0.177
	LTE Band 4	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	20175	1732.5	18.67	19.20	1.130	-	-	-0.17	0.161	0.182
	LTE Band 4	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	20175	1732.5	18.04	19.20	1.306	-	-	0.17	0.659	0.861
	LTE Band 4	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	20175	1732.5	17.96	19.20	1.330	-	-	-0.05	0.661	0.879
	LTE Band 4	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 1	20175	1732.5	17.91	19.20	1.346	-	-	0.02	0.652	0.878
	LTE Band 4	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	20175	1732.5	18.04	19.20	1.306	-	-	0.01	0.110	0.144
	LTE Band 4	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	20175	1732.5	17.96	19.20	1.330	-	-	0.1	0.113	0.150
08	LTE Band 4	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	20175	1732.5	18.04	19.20	1.306	-	-	0.07	0.828	1.082
	LTE Band 4	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	20175	1732.5	17.96	19.20	1.330	-	-	-0.17	0.812	1.080
	LTE Band 4	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 2	DSI 1	20175	1732.5	17.91	19.20	1.346	-	-	0.04	0.800	1.077
	LTE Band 4	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	20175	1732.5	18.04	19.20	1.306	-	-	-0.01	0.162	0.212
	LTE Band 4	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	20175	1732.5	17.96	19.20	1.330	-	-	-0.08	0.173	0.230
	LTE Band 4	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	20175	1732.5	24.43	25.70	1.340	-	-	-0.03	0.189	0.253
	LTE Band 4	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	20175	1732.5	23.41	24.70	1.346	-	-	0.08	0.156	0.210
	LTE Band 4	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	20175	1732.5	24.43	25.70	1.340	-	-	0.01	0.089	0.119
	LTE Band 4	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	20175	1732.5	23.41	24.70	1.346	-	-	0.03	0.073	0.098
	LTE Band 4	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	20175	1732.5	24.43	25.70	1.340	-	-	-0.08	0.110	0.147
	LTE Band 4	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	20175	1732.5	23.41	24.70	1.346	-	-	-0.08	0.088	0.118
	LTE Band 4	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	20175	1732.5	24.43	25.70	1.340	-	-	0.1	0.065	0.087
	LTE Band 4	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	20175	1732.5	23.41	24.70	1.346	-	-	-0.18	0.053	0.071
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	132322	1745	18.17	18.70	1.130	-	-	0.05	0.854	0.965
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	132072	1720	18.15	18.70	1.135	-	-	0.06	0.861	0.977
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	132572	1770	18.10	18.70	1.148	-	-	-0.02	0.925	1.062
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	132322	1745	18.13	18.70	1.140	-	-	-0.09	0.852	0.971
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	132072	1720	18.04	18.70	1.164	-	-	-0.08	0.859	1.000
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	132572	1770	18.07	18.70	1.156	-	-	0.13	0.913	1.056
	LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 3	DSI 1	132322	1745	18.12	18.70	1.143	-	-	0.12	0.880	1.006
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	132322	1745	18.17	18.70	1.130	-	-	0.03	0.284	0.321
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	132322	1745	18.13	18.70	1.140	-	-	0.18	0.294	0.335
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	132322	1745	18.17	18.70	1.130	-	-	0.16	0.243	0.275
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	132322	1745	18.13	18.70	1.140	-	-	-0.1	0.251	0.286
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	132322	1745	18.17	18.70	1.130	-	-	0.07	0.145	0.164
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	132322	1745	18.13	18.70	1.140	-	-	0.18	0.147	0.168
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	132322	1745	17.90	19.20	1.349	-	-	0.08	0.650	0.877
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	132072	1720	17.87	19.20	1.358	-	-	0.15	0.642	0.872
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	132572	1770	17.84	19.20	1.368	-	-	-0.09	0.638	0.873
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	132322	1745	17.86	19.20	1.361	-	-	0.01	0.655	0.892
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	132072	1720	17.78	19.20	1.387	-	-	0.11	0.640	0.888
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	132572	1770	17.81	19.20	1.377	-	-	-0.05	0.618	0.851
	LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 1	132322	1745	17.80	19.20	1.380	-	-	-0.08	0.626	0.864
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	132322	1745	17.90	19.20	1.349	-	-	0.03	0.109	0.147
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	132322	1745	17.86	19.20	1.361	-	-	-0.08	0.110	0.150
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	132322	1745	17.90	19.20	1.349	-	-	-0.08	0.787	1.062
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	132072	1720	17.87	19.20	1.358	-	-	0.1	0.749	1.017
09	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	132572	1770	17.84	19.20	1.368	-	-	-0.02	0.793	1.085
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	132322	1745	17.86	19.20	1.361	-	-	-0.18	0.789	1.074
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	132072	1720	17.78	19.20	1.387	-	-	0.1	0.750	1.040
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	132572	1770	17.81	19.20	1.377	-	-	0.12	0.771	1.062
	LTE Band 66	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 2	DSI 1	132322	1745	17.80	19.20	1.380	-	-	0.08	0.772	1.066
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	132322	1745	17.90	19.20	1.349	-	-	-0.17	0.161	0.217
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	132322	1745	17.86	19.20	1.361	-	-	-0.03	0.160	0.218
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	132322	1745	24.50	25.70	1.318	-	-	0.01	0.201	0.265



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	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	132322	1745	23.48	24.70	1.324	-	-	0.1	0.165	0.219
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	132322	1745	24.50	25.70	1.318	-	-	0.12	0.102	0.134
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	132322	1745	23.48	24.70	1.324	-	-	0.08	0.084	0.111
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	132322	1745	24.50	25.70	1.318	-	-	-0.17	0.160	0.211
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	132322	1745	23.48	24.70	1.324	-	-	-0.03	0.143	0.189
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	132322	1745	24.50	25.70	1.318	-	-	0.14	0.091	0.120
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	132322	1745	23.48	24.70	1.324	-	-	0.11	0.078	0.103
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	349000	1745	18.83	19.20	1.089	-	-	0.14	0.852	0.928
10	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	349000	1745	18.76	19.20	1.107	-	-	-0.1	0.910	1.007
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	349000	1745	18.51	19.20	1.172	-	-	0.11	0.838	0.982
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	349000	1745	18.83	19.20	1.089	-	-	-0.05	0.293	0.319
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	349000	1745	18.76	19.20	1.107	-	-	0.18	0.320	0.354
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	349000	1745	18.83	19.20	1.089	-	-	0.14	0.242	0.264
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	349000	1745	18.76	19.20	1.107	-	-	-0.17	0.273	0.302
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	349000	1745	18.83	19.20	1.089	-	-	0.17	0.140	0.152
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	349000	1745	18.76	19.20	1.107	-	-	-0.05	0.161	0.178
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	349000	1745	16.95	18.00	1.274	-	-	0.01	0.574	0.731
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	349000	1745	16.91	18.00	1.285	-	-	0.1	0.602	0.774
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	349000	1745	16.95	18.00	1.274	-	-	-0.17	0.103	0.131
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	349000	1745	16.91	18.00	1.285	-	-	0.04	0.100	0.129
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	349000	1745	16.95	18.00	1.274	-	-	-0.01	0.755	0.961
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	349000	1745	16.91	18.00	1.285	-	-	0.05	0.776	0.997
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	349000	1745	16.62	18.00	1.374	-	-	-0.08	0.720	0.989
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	349000	1745	16.95	18.00	1.274	-	-	0.05	0.152	0.194
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	349000	1745	16.91	18.00	1.285	-	-	0.06	0.154	0.198
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	349000	1745	24.39	25.50	1.291	-	-	0.1	0.208	0.269
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	349000	1745	24.31	25.50	1.315	-	-	0.14	0.192	0.253
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	349000	1745	24.39	25.50	1.291	-	-	-0.17	0.125	0.161
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	349000	1745	24.31	25.50	1.315	-	-	0.17	0.124	0.163
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	24.39	25.50	1.291	-	-	-0.05	0.189	0.244
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	349000	1745	24.31	25.50	1.315	-	-	0.01	0.200	0.263
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	349000	1745	24.39	25.50	1.291	-	-	0.1	0.108	0.139
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	349000	1745	24.31	25.50	1.315	-	-	-0.17	0.109	0.143
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 5	DSI 1	661	1880	23.65	25.00	1.365	-	-	-0.01	0.066	0.090
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 5	DSI 1	661	1880	23.65	25.00	1.365	-	-	-0.1	0.038	0.052
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 5	DSI 1	661	1880	23.65	25.00	1.365	-	-	0.01	0.062	0.085
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 5	DSI 1	661	1880	23.65	25.00	1.365	-	-	-0.15	0.031	0.042
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 2	DSI 1	661	1880	21.64	23.50	1.535	-	-	0.16	0.550	0.844
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 2	DSI 1	512	1850.2	21.57	23.50	1.560	-	-	-0.06	0.554	0.864
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 2	DSI 1	810	1909.8	21.51	23.50	1.581	-	-	0.02	0.557	0.881
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 2	DSI 1	661	1880	21.64	23.50	1.535	-	-	-0.16	0.095	0.146
11	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 2	DSI 1	661	1880	21.64	23.50	1.535	-	-	0.04	0.705	1.082
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 2	DSI 1	512	1850.2	21.57	23.50	1.560	-	-	0.05	0.645	1.006
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 2	DSI 1	810	1909.8	21.51	23.50	1.581	-	-	-0.03	0.675	1.067
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 2	DSI 1	661	1880	21.64	23.50	1.535	-	-	0.17	0.149	0.229
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 5	DSI 1	9400	1880	24.18	25.00	1.208	-	-	-0.03	0.197	0.238
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 5	DSI 1	9400	1880	24.18	25.00	1.208	-	-	0.17	0.137	0.165
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 5	DSI 1	9400	1880	24.18	25.00	1.208	-	-	0.18	0.173	0.209
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 5	DSI 1	9400	1880	24.18	25.00	1.208	-	-	-0.04	0.122	0.147
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	DSI 1	9400	1880	16.52	17.00	1.117	-	-	-0.09	0.780	0.871
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	DSI 1	9262	1852.4	16.48	17.00	1.127	-	-	0.03	0.724	0.816
12	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 3	DSI 1	9538	1907.6	16.46	17.00	1.132	-	-	0.05	0.790	0.895
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 3	DSI 1	9400	1880	16.52	17.00	1.117	-	-	-0.08	0.285	0.318
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 3	DSI 1	9400	1880	16.52	17.00	1.117	-	-	0.13	0.233	0.260
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 3	DSI 1	9400	1880	16.52	17.00	1.117	-	-	0.12	0.124	0.138



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	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	18900	1880	16.73	18.00	1.340	-	-	0.18	0.776	1.040
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	18700	1860	16.68	18.00	1.355	-	-	0.16	0.764	1.035
13	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	19100	1900	16.64	18.00	1.368	-	-	0.08	0.790	1.081
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	18900	1880	16.69	18.00	1.352	-	-	-0.1	0.774	1.047
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	18700	1860	16.58	18.00	1.387	-	-	0.07	0.744	1.032
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	19100	1900	16.58	18.00	1.387	-	-	0.18	0.765	1.061
	LTE Band 2	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 3	DSI 1	18900	1880	16.67	18.00	1.358	-	-	-0.1	0.771	1.047
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	18900	1880	16.73	18.00	1.340	-	-	0.01	0.274	0.367
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	18900	1880	16.69	18.00	1.352	-	-	-0.15	0.277	0.375
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	18900	1880	16.73	18.00	1.340	-	-	0.19	0.233	0.312
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	18900	1880	16.69	18.00	1.352	-	-	0.07	0.233	0.315
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	18900	1880	16.73	18.00	1.340	-	-	-0.18	0.121	0.162
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	18900	1880	16.69	18.00	1.352	-	-	0.03	0.122	0.165
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	18900	1880	16.37	17.50	1.297	-	-	0.1	0.445	0.577
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	18900	1880	16.26	17.50	1.330	-	-	-0.17	0.463	0.616
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	18900	1880	16.37	17.50	1.297	-	-	-0.05	0.085	0.110
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	18900	1880	16.26	17.50	1.330	-	-	0.18	0.090	0.120
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	18900	1880	16.37	17.50	1.297	-	-	0.14	0.645	0.837
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	18700	1860	16.17	17.50	1.358	-	-	-0.17	0.641	0.871
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	19100	1900	16.33	17.50	1.309	-	-	-0.13	0.670	0.877
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	18900	1880	16.26	17.50	1.330	-	-	0.17	0.542	0.721
	LTE Band 2_Other PA	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 2	DSI 1	18900	1880	16.14	17.50	1.368	-	-	0.1	0.552	0.755
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	18900	1880	16.37	17.50	1.297	-	-	-0.17	0.128	0.166
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	18900	1880	16.26	17.50	1.330	-	-	0.04	0.127	0.169
	LTE Band 2_Main PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	19100	1900	15.36	17.00	1.459	-	-	0.04	0.507	0.740
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	18900	1880	24.17	25.00	1.211	-	-	0.11	0.212	0.257
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	18900	1880	23.19	24.00	1.205	-	-	0.08	0.168	0.202
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	18900	1880	24.17	25.00	1.211	-	-	0.01	0.098	0.119
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	18900	1880	23.19	24.00	1.205	-	-	0.03	0.072	0.087
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	18900	1880	24.17	25.00	1.211	-	-	-0.08	0.186	0.225
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	18900	1880	23.19	24.00	1.205	-	-	-0.08	0.142	0.171
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	18900	1880	24.17	25.00	1.211	-	-	0.1	0.101	0.122
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	18900	1880	23.19	24.00	1.205	-	-	-0.18	0.078	0.094
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	376000	1880	17.74	18.50	1.191	-	-	0.07	0.777	0.926
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	376000	1880	17.57	18.50	1.239	-	-	0.04	0.727	0.901
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	376000	1880	17.44	18.50	1.276	-	-	-0.01	0.719	0.918
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	376000	1880	17.74	18.50	1.191	-	-	-0.08	0.269	0.320
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	376000	1880	17.57	18.50	1.239	-	-	0.05	0.279	0.346
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	376000	1880	17.74	18.50	1.191	-	-	0.06	0.234	0.279
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	376000	1880	17.57	18.50	1.239	-	-	-0.09	0.233	0.289
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	376000	1880	17.74	18.50	1.191	-	-	-0.08	0.126	0.150
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	376000	1880	17.57	18.50	1.239	-	-	0.13	0.119	0.147
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	376000	1880	17.28	18.50	1.324	-	-	-0.15	0.622	0.824
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	376000	1880	17.21	18.50	1.346	-	-	-0.15	0.612	0.824
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	376000	1880	16.98	18.50	1.419	-	-	0.11	0.566	0.803
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	376000	1880	17.28	18.50	1.324	-	-	-0.08	0.115	0.152
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	376000	1880	17.21	18.50	1.346	-	-	-0.17	0.116	0.156
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	376000	1880	17.28	18.50	1.324	-	-	-0.08	0.751	0.995
14	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	376000	1880	17.21	18.50	1.346	-	-	0.03	0.769	1.035
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	376000	1880	16.98	18.50	1.419	-	-	-0.04	0.709	1.006
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	376000	1880	17.28	18.50	1.324	-	-	-0.08	0.177	0.234
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	376000	1880	17.21	18.50	1.346	-	-	0.17	0.162	0.218
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	21100	2535	16.63	17.20	1.140	-	-	0.08	0.829	0.945
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	20850	2510	16.60	17.20	1.148	-	-	0.01	0.791	0.908
15	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	21350	2560	16.51	17.20	1.172	-	-	0.01	0.837	0.981



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	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	21100	2535	16.58	17.20	1.153	-	-	0.03	0.822	0.948
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	20850	2510	16.54	17.20	1.164	-	-	-0.08	0.806	0.938
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	21350	2560	16.46	17.20	1.186	-	-	-0.08	0.822	0.975
	LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 3	DSI 1	21100	2535	16.55	17.20	1.161	-	-	0.1	0.822	0.955
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	21100	2535	16.63	17.20	1.140	-	-	-0.18	0.392	0.447
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	21100	2535	16.58	17.20	1.153	-	-	0.1	0.394	0.454
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	21100	2535	16.63	17.20	1.140	-	-	0.12	0.293	0.334
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	21100	2535	16.58	17.20	1.153	-	-	0.08	0.291	0.336
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	21100	2535	16.63	17.20	1.140	-	-	-0.17	0.159	0.181
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	21100	2535	16.58	17.20	1.153	-	-	-0.03	0.157	0.181
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	21350	2560	13.92	14.50	1.143	-	-	0.08	0.593	0.678
	LTE Band 7C	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	21350+21152	2560+2540.2	16.31	17.20	1.227	-	-	0.03	0.786	0.965
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	21100	2535	15.30	16.00	1.175	-	-	0.01	0.691	0.812
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	20850	2510	15.12	16.00	1.225	-	-	-0.15	0.685	0.839
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	15.24	16.00	1.191	-	-	-0.05	0.744	0.886
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	21100	2535	15.24	16.00	1.191	-	-	0.19	0.711	0.847
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	20850	2510	15.04	16.00	1.247	-	-	0.07	0.669	0.834
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	15.13	16.00	1.222	-	-	-0.18	0.691	0.844
	LTE Band 7_Other PA	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 1	21100	2535	15.03	16.00	1.250	-	-	0.03	0.667	0.834
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	21100	2535	15.30	16.00	1.175	-	-	-0.15	0.059	0.069
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	21100	2535	15.24	16.00	1.191	-	-	-0.15	0.060	0.071
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	21100	2535	15.30	16.00	1.175	-	-	0.11	0.331	0.389
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	21100	2535	15.24	16.00	1.191	-	-	-0.08	0.337	0.401
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	21100	2535	15.30	16.00	1.175	-	-	-0.17	0.100	0.117
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	21100	2535	15.24	16.00	1.191	-	-	-0.08	0.101	0.120
	LTE Band 7_Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350	2560	15.02	16.50	1.406	-	-	0.04	0.623	0.876
	LTE Band 7C	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	21350+21152	2560+2540.2	14.85	16.50	1.462	-	-	0.03	0.591	0.864
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	24.16	24.50	1.081	-	-	-0.05	0.202	0.218
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	21100	2535	23.16	23.50	1.081	-	-	0.18	0.165	0.178
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	21100	2535	24.16	24.50	1.081	-	-	0.14	0.134	0.145
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	21100	2535	23.16	23.50	1.081	-	-	-0.17	0.101	0.109
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	21100	2535	24.16	24.50	1.081	-	-	0.01	0.257	0.278
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	21100	2535	23.16	23.50	1.081	-	-	0.17	0.220	0.238
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	21100	2535	24.16	24.50	1.081	-	-	-0.05	0.077	0.083
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	21100	2535	23.16	23.50	1.081	-	-	0.01	0.056	0.061
	LTE Band 7_Main PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	21100	2535	24.10	25.50	1.380	-	-	0.01	0.201	0.277
	LTE Band 7C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 5	DSI 1	21100+21298	2535+2554.8	23.97	25.50	1.422	-	-	0.03	0.189	0.269
	LTE Band 38	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	38000	2595	18.46	18.70	1.057	62.9	1.006	0.14	0.763	0.811
	LTE Band 38	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	37850	2580	18.45	18.70	1.059	62.9	1.006	0.11	0.775	0.826
	LTE Band 38	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	38150	2610	18.40	18.70	1.072	62.9	1.006	0.07	0.790	0.852
	LTE Band 38	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	38000	2595	18.40	18.70	1.072	62.9	1.006	-0.05	0.785	0.846
	LTE Band 38	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	37850	2580	18.32	18.70	1.091	62.9	1.006	0.18	0.769	0.844
	LTE Band 38	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	38150	2610	18.32	18.70	1.091	62.9	1.006	0.14	0.767	0.842
	LTE Band 38	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 3	DSI 1	38000	2595	18.37	18.70	1.079	62.9	1.006	-0.17	0.782	0.849
	LTE Band 38	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	38000	2595	18.46	18.70	1.057	62.9	1.006	0.17	0.373	0.397
	LTE Band 38	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	38000	2595	18.40	18.70	1.072	62.9	1.006	-0.05	0.375	0.404
	LTE Band 38	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	38000	2595	18.46	18.70	1.057	62.9	1.006	0.01	0.337	0.358
	LTE Band 38	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	38000	2595	18.40	18.70	1.072	62.9	1.006	0.1	0.333	0.359
	LTE Band 38	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	38000	2595	18.46	18.70	1.057	62.9	1.006	-0.17	0.151	0.161
	LTE Band 38	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	38000	2595	18.40	18.70	1.072	62.9	1.006	0.04	0.147	0.158
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	38150	2610	14.85	15.50	1.161	62.9	1.006	-0.04	0.579	0.677
	LTE Band 38C	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	38150+37952	2610+2590.2	18.19	18.70	1.125	62.9	1.006	0.01	0.742	0.839
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	38000	2595	15.98	17.00	1.265	62.9	1.006	0.01	0.805	1.024
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	37850	2580	15.78	17.00	1.324	62.9	1.006	0.03	0.760	1.013
16	LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	38150	2610	15.93	17.00	1.279	62.9	1.006	0.1	0.806	1.037



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LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	38000	2595	15.83	17.00	1.309	62.9	1.006	-0.08	0.780	1.027
LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	37850	2580	15.68	17.00	1.355	62.9	1.006	-0.08	0.752	1.025
LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	38150	2610	15.81	17.00	1.315	62.9	1.006	0.1	0.753	0.996
LTE Band 38_Other PA	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 1	38000	2595	15.67	17.00	1.358	62.9	1.006	-0.18	0.739	1.010
LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	38000	2595	15.98	17.00	1.265	62.9	1.006	0.1	0.046	0.059
LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	38000	2595	15.83	17.00	1.309	62.9	1.006	0.12	0.046	0.061
LTE Band 38_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	38000	2595	15.98	17.00	1.265	62.9	1.006	0.08	0.365	0.464
LTE Band 38_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	38000	2595	15.83	17.00	1.309	62.9	1.006	-0.17	0.366	0.482
LTE Band 38_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	38000	2595	15.98	17.00	1.265	62.9	1.006	-0.03	0.096	0.122
LTE Band 38_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	38000	2595	15.83	17.00	1.309	62.9	1.006	0.14	0.088	0.116
LTE Band 38_Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	38150	2610	16.11	17.50	1.377	62.9	1.006	0.06	0.689	0.955
LTE Band 38C	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	38150+37952	2610+2590.2	15.98	17.50	1.419	62.9	1.006	0.02	0.656	0.936
LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	38000	2595	23.72	24.50	1.197	62.9	1.006	-0.01	0.101	0.122
LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	38000	2595	22.78	23.50	1.180	62.9	1.006	-0.08	0.078	0.093
LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	38000	2595	23.72	24.50	1.197	62.9	1.006	0.05	0.057	0.069
LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	38000	2595	22.78	23.50	1.180	62.9	1.006	0.06	0.045	0.053
LTE Band 38_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	38000	2595	23.72	24.50	1.197	62.9	1.006	0.17	0.192	0.231
LTE Band 38_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	38000	2595	22.78	23.50	1.180	62.9	1.006	-0.09	0.155	0.184
LTE Band 38_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	38000	2595	23.72	24.50	1.197	62.9	1.006	-0.08	0.045	0.054
LTE Band 38_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	38000	2595	22.78	23.50	1.180	62.9	1.006	0.13	0.032	0.038
LTE Band 38_Main PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	38000	2595	24.24	25.50	1.337	62.9	1.006	0.17	0.145	0.195
LTE Band 38C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 5	DSI 1	37901+38099	2585.1+2604.9	24.07	25.50	1.390	62.9	1.006	0.03	0.133	0.186
LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	38000	2595	17.90	19.00	1.288	62.9	1.006	0.08	0.615	0.797
LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	38000	2595	17.82	19.00	1.312	62.9	1.006	0.01	0.603	0.796
LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	38000	2595	17.90	19.00	1.288	62.9	1.006	0.08	0.791	1.025
LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	37850	2580	17.79	19.00	1.321	62.9	1.006	0.03	0.770	1.024
LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	38150	2610	17.82	19.00	1.312	62.9	1.006	-0.08	0.776	1.024
LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	38000	2595	17.82	19.00	1.312	62.9	1.006	-0.08	0.729	0.962
LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	37850	2580	17.55	19.00	1.396	62.9	1.006	0.1	0.721	1.013
LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	38150	2610	17.80	19.00	1.318	62.9	1.006	-0.18	0.754	1.000
LTE Band 38_Other PA	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 4	DSI 1	38000	2595	17.67	19.00	1.358	62.9	1.006	0.1	0.725	0.991
LTE Band 38_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 1	38000	2595	17.90	19.00	1.288	62.9	1.006	0.12	0.390	0.505
LTE Band 38_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 1	38000	2595	17.82	19.00	1.312	62.9	1.006	0.08	0.392	0.517
LTE Band 38_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 1	38000	2595	17.90	19.00	1.288	62.9	1.006	-0.17	0.496	0.643
LTE Band 38_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 1	38000	2595	17.82	19.00	1.312	62.9	1.006	-0.03	0.502	0.663
LTE Band 38_Main PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	38000	2595	18.16	19.50	1.361	62.9	1.006	-0.01	0.615	0.842
LTE Band 38C	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	37901+38099	2585.1+2604.9	17.99	19.50	1.416	62.9	1.006	0.06	0.588	0.837
LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	40620	2593	18.50	18.70	1.047	62.9	1.006	0.08	0.653	0.688
LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	39750	2506	18.39	18.70	1.074	62.9	1.006	0.01	0.610	0.659
LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	40185	2549.5	18.30	18.70	1.096	62.9	1.006	0.03	0.659	0.727
LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	41055	2636.5	18.20	18.70	1.122	62.9	1.006	-0.08	0.701	0.791
LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	41490	2680	18.32	18.70	1.091	62.9	1.006	0.01	0.787	0.864
LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	40620	2593	18.45	18.70	1.059	62.9	1.006	-0.08	0.663	0.706
LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	39750	2506	18.31	18.70	1.094	62.9	1.006	0.1	0.607	0.668
LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	40185	2549.5	18.25	18.70	1.109	62.9	1.006	-0.18	0.644	0.719
LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	41055	2636.5	18.17	18.70	1.130	62.9	1.006	0.1	0.701	0.797
LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 3	DSI 1	41490	2680	18.18	18.70	1.127	62.9	1.006	0.12	0.729	0.827
LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 3	DSI 1	40620	2593	18.43	18.70	1.064	62.9	1.006	0.08	0.656	0.702
LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 3	DSI 1	40620	2593	18.50	18.70	1.047	62.9	1.006	-0.17	0.306	0.322
LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 3	DSI 1	40620	2593	18.45	18.70	1.059	62.9	1.006	-0.03	0.318	0.339
LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 3	DSI 1	40620	2593	18.50	18.70	1.047	62.9	1.006	0.14	0.268	0.282
LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 3	DSI 1	40620	2593	18.45	18.70	1.059	62.9	1.006	0.11	0.286	0.305
LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 3	DSI 1	40620	2593	18.50	18.70	1.047	62.9	1.006	-0.05	0.123	0.130
LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 3	DSI 1	40620	2593	18.45	18.70	1.059	62.9	1.006	0.18	0.124	0.132
LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	41490	2680	14.81	15.50	1.172	62.9	1.006	-0.01	0.582	0.686



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	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	40620	2593	15.93	17.00	1.279	62.9	1.006	-0.05	0.724	0.932
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	39750	2506	15.77	17.00	1.327	62.9	1.006	0.11	0.665	0.888
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	40185	2549.5	15.74	17.00	1.337	62.9	1.006	-0.05	0.660	0.887
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	41055	2636.5	15.76	17.00	1.330	62.9	1.006	0.18	0.635	0.850
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	41490	2680	15.72	17.00	1.343	62.9	1.006	0.14	0.667	0.901
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	40620	2593	15.85	17.00	1.303	62.9	1.006	-0.17	0.710	0.931
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	39750	2506	15.74	17.00	1.337	62.9	1.006	0.17	0.676	0.909
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	40185	2549.5	15.78	17.00	1.324	62.9	1.006	-0.05	0.678	0.903
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	41055	2636.5	15.78	17.00	1.324	62.9	1.006	0.01	0.654	0.871
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	DSI 1	41490	2680	15.68	17.00	1.355	62.9	1.006	0.1	0.672	0.916
	LTE Band 41_Other PA	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 2	DSI 1	40620	2593	15.84	17.00	1.306	62.9	1.006	-0.17	0.698	0.917
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	DSI 1	40620	2593	15.93	17.00	1.279	62.9	1.006	0.04	0.043	0.055
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	DSI 1	40620	2593	15.85	17.00	1.303	62.9	1.006	-0.01	0.043	0.056
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	DSI 1	40620	2593	15.93	17.00	1.279	62.9	1.006	-0.08	0.336	0.432
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	DSI 1	40620	2593	15.85	17.00	1.303	62.9	1.006	0.05	0.340	0.446
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	DSI 1	40620	2593	15.93	17.00	1.279	62.9	1.006	0.06	0.085	0.109
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	DSI 1	40620	2593	15.85	17.00	1.303	62.9	1.006	-0.09	0.085	0.111
	LTE Band 41_Main PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	DSI 1	40620	2593	16.17	17.50	1.358	62.9	1.006	0.08	0.588	0.803
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	DSI 1	40620	2593	23.60	24.50	1.230	62.9	1.006	0.07	0.096	0.119
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	DSI 1	40620	2593	22.64	23.50	1.219	62.9	1.006	0.18	0.079	0.097
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	DSI 1	40620	2593	23.60	24.50	1.230	62.9	1.006	-0.1	0.054	0.067
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	DSI 1	40620	2593	22.64	23.50	1.219	62.9	1.006	0.01	0.042	0.052
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	40620	2593	23.60	24.50	1.230	62.9	1.006	-0.08	0.176	0.218
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	DSI 1	40620	2593	22.64	23.50	1.219	62.9	1.006	-0.15	0.160	0.196
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	DSI 1	40620	2593	23.60	24.50	1.230	62.9	1.006	0.19	0.041	0.051
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	DSI 1	40620	2593	22.64	23.50	1.219	62.9	1.006	0.07	0.039	0.048
	LTE Band 41_Main PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	DSI 1	40620	2593	24.19	25.50	1.352	62.9	1.006	-0.01	0.137	0.186
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	40620	2593	17.74	19.00	1.337	62.9	1.006	0.13	0.609	0.819
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	39750	2506	17.66	19.00	1.361	62.9	1.006	-0.04	0.588	0.805
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	40185	2549.5	17.63	19.00	1.371	62.9	1.006	-0.05	0.596	0.822
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	41055	2636.5	17.65	19.00	1.365	62.9	1.006	0.17	0.575	0.789
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	DSI 1	41490	2680	17.67	19.00	1.358	62.9	1.006	-0.13	0.563	0.769
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	40620	2593	17.71	19.00	1.346	62.9	1.006	0.12	0.602	0.815
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	39750	2506	17.51	19.00	1.409	62.9	1.006	-0.01	0.575	0.815
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	40185	2549.5	17.45	19.00	1.429	62.9	1.006	-0.09	0.596	0.857
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	41055	2636.5	17.61	19.00	1.377	62.9	1.006	0.05	0.523	0.725
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	DSI 1	41490	2680	17.62	19.00	1.374	62.9	1.006	0.02	0.564	0.780
	LTE Band 41_Other PA	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 4	DSI 1	40620	2593	17.57	19.00	1.390	62.9	1.006	-0.13	0.573	0.801
17	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	40620	2593	17.74	19.00	1.337	62.9	1.006	0.01	0.796	1.070
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	39750	2506	17.66	19.00	1.361	62.9	1.006	0.03	0.726	0.994
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	40185	2549.5	17.63	19.00	1.371	62.9	1.006	0.18	0.702	0.968
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	41055	2636.5	17.65	19.00	1.365	62.9	1.006	0.16	0.746	1.024
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	41490	2680	17.67	19.00	1.358	62.9	1.006	-0.1	0.697	0.952
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	40620	2593	17.71	19.00	1.346	62.9	1.006	0.07	0.789	1.068
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	39750	2506	17.51	19.00	1.409	62.9	1.006	0.18	0.704	0.998
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	40185	2549.5	17.45	19.00	1.429	62.9	1.006	-0.1	0.725	1.042
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	41055	2636.5	17.61	19.00	1.377	62.9	1.006	0.01	0.761	1.054
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	DSI 1	41490	2680	17.62	19.00	1.374	62.9	1.006	-0.15	0.716	0.990
	LTE Band 41_Other PA	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 4	DSI 1	40620	2593	17.57	19.00	1.390	62.9	1.006	0.19	0.738	1.032
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	DSI 1	40620	2593	17.74	19.00	1.337	62.9	1.006	0.07	0.390	0.524
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	DSI 1	40620	2593	17.71	19.00	1.346	62.9	1.006	-0.18	0.396	0.536
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 1	40620	2593	17.74	19.00	1.337	62.9	1.006	0.03	0.531	0.714
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 1	39750	2506	17.66	19.00	1.361	62.9	1.006	0.06	0.521	0.714
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 1	40185	2549.5	17.63	19.00	1.371	62.9	1.006	0.02	0.512	0.706
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 1	41055	2636.5	17.65	19.00	1.365	62.9	1.006	-0.04	0.509	0.699
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	DSI 1	41490	2680	17.67	19.00	1.358	62.9	1.006	-0.15	0.506	0.691



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	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 1	40620	2593	17.71	19.00	1.346	62.9	1.006	-0.15	0.524	0.709
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 1	39750	2506	17.51	19.00	1.409	62.9	1.006	0.11	0.521	0.739
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 1	40185	2549.5	17.45	19.00	1.429	62.9	1.006	-0.02	0.520	0.747
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 1	41055	2636.5	17.61	19.00	1.377	62.9	1.006	0.1	0.518	0.718
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	DSI 1	41490	2680	17.62	19.00	1.374	62.9	1.006	0.04	0.507	0.701
	LTE Band 41_Other PA	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 4	DSI 1	40620	2593	17.57	19.00	1.390	62.9	1.006	0.13	0.511	0.715
	LTE Band 41_Main PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	DSI 1	40620	2593	18.14	19.50	1.368	62.9	1.006	0.01	0.637	0.876
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	507000	2535	16.85	17.20	1.084	-	-	0.12	0.838	0.908
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	507000	2535	16.73	17.20	1.114	-	-	-0.19	0.847	0.944
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 3	DSI 1	507000	2535	16.53	17.20	1.167	-	-	0.03	0.801	0.935
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	507000	2535	16.85	17.20	1.084	-	-	0.18	0.447	0.485
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 3	DSI 1	507000	2535	16.73	17.20	1.114	-	-	0.16	0.435	0.485
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	507000	2535	16.85	17.20	1.084	-	-	-0.1	0.296	0.321
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 3	DSI 1	507000	2535	16.73	17.20	1.114	-	-	0.07	0.313	0.349
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	507000	2535	16.85	17.20	1.084	-	-	0.18	0.178	0.193
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 3	DSI 1	507000	2535	16.73	17.20	1.114	-	-	-0.1	0.184	0.205
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	507000	2535	15.87	17.00	1.297	-	-	0.01	0.680	0.882
18	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	507000	2535	15.80	17.00	1.318	-	-	-0.15	0.765	1.008
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	DSI 1	507000	2535	15.49	17.00	1.416	-	-	-0.15	0.706	1.000
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	507000	2535	15.87	17.00	1.297	-	-	0.19	0.062	0.080
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	DSI 1	507000	2535	15.80	17.00	1.318	-	-	0.07	0.061	0.080
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	507000	2535	15.87	17.00	1.297	-	-	-0.18	0.389	0.505
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	DSI 1	507000	2535	15.80	17.00	1.318	-	-	0.03	0.428	0.564
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	507000	2535	15.87	17.00	1.297	-	-	-0.15	0.097	0.126
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	DSI 1	507000	2535	15.80	17.00	1.318	-	-	-0.15	0.101	0.133
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	507000	2535	24.28	25.50	1.324	-	-	-0.07	0.133	0.176
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 5	DSI 1	507000	2535	24.15	25.50	1.365	-	-	0.05	0.145	0.198
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	507000	2535	24.28	25.50	1.324	-	-	-0.11	0.097	0.128
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 5	DSI 1	507000	2535	24.15	25.50	1.365	-	-	-0.12	0.098	0.134
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	507000	2535	24.28	25.50	1.324	-	-	0.03	0.188	0.249
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 5	DSI 1	507000	2535	24.15	25.50	1.365	-	-	0.08	0.197	0.269
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	507000	2535	24.28	25.50	1.324	-	-	-0.16	0.067	0.089
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 5	DSI 1	507000	2535	24.15	25.50	1.365	-	-	-0.02	0.071	0.097
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 1	519000	2595	16.41	16.70	1.069	-	-	0.05	0.862	0.922
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 1	519000	2595	16.30	16.70	1.096	-	-	0.11	0.828	0.908
	FR1 n38	40M	QPSK	100	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 1	519000	2595	16.02	16.70	1.169	-	-	-0.08	0.784	0.917
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 1	519000	2595	16.41	16.70	1.069	-	-	-0.17	0.440	0.470
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 1	519000	2595	16.30	16.70	1.096	-	-	-0.08	0.422	0.463
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 1	519000	2595	16.41	16.70	1.069	-	-	-0.04	0.363	0.388
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 1	519000	2595	16.30	16.70	1.096	-	-	-0.08	0.358	0.393
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 1	519000	2595	16.41	16.70	1.069	-	-	0.17	0.174	0.186
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 1	519000	2595	16.30	16.70	1.096	-	-	0.18	0.161	0.177
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	519000	2595	14.83	16.00	1.309	-	-	-0.07	0.674	0.882
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	519000	2595	14.69	16.00	1.352	-	-	-0.04	0.645	0.872
	FR1 n38	40M	QPSK	100	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	519000	2595	14.43	16.00	1.435	-	-	-0.08	0.606	0.870
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 1	519000	2595	14.83	16.00	1.309	-	-	-0.13	0.010	0.013
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 1	519000	2595	14.69	16.00	1.352	-	-	-0.13	0.005	0.007
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 1	519000	2595	14.83	16.00	1.309	-	-	0.06	0.324	0.424
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 1	519000	2595	14.69	16.00	1.352	-	-	-0.03	0.310	0.419
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 1	519000	2595	14.83	16.00	1.309	-	-	-0.03	0.077	0.101
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 1	519000	2595	14.69	16.00	1.352	-	-	0.08	0.066	0.089
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	519000	2595	24.42	25.50	1.282	-	-	0.15	0.173	0.222
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	519000	2595	24.28	25.50	1.324	-	-	-0.09	0.164	0.217
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	519000	2595	24.42	25.50	1.282	-	-	0.11	0.114	0.146
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	519000	2595	24.28	25.50	1.324	-	-	-0.05	0.109	0.144
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	519000	2595	24.42	25.50	1.282	-	-	-0.16	0.241	0.309



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	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	519000	2595	24.28	25.50	1.324	-	-	-0.08	0.227	0.301
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	519000	2595	24.42	25.50	1.282	-	-	0.16	0.072	0.092
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	519000	2595	24.28	25.50	1.324	-	-	0.05	0.075	0.099
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 1	519000	2595	17.01	18.00	1.256	-	-	-0.12	0.639	0.803
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 1	519000	2595	16.92	18.00	1.282	-	-	0.03	0.624	0.800
	FR1 n38	40M	QPSK	100	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 1	519000	2595	16.75	18.00	1.334	-	-	-0.16	0.582	0.776
19	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 1	519000	2595	17.01	18.00	1.256	-	-	0.02	0.759	0.953
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 1	519000	2595	16.92	18.00	1.282	-	-	-0.02	0.726	0.931
	FR1 n38	40M	QPSK	100	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 1	519000	2595	16.75	18.00	1.334	-	-	0.15	0.701	0.935
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 1	519000	2595	17.01	18.00	1.256	-	-	-0.09	0.422	0.530
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 1	519000	2595	16.92	18.00	1.282	-	-	0.11	0.424	0.544
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 1	519000	2595	17.01	18.00	1.256	-	-	-0.05	0.512	0.643
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 1	519000	2595	16.92	18.00	1.282	-	-	-0.08	0.492	0.631
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 1	518598	2592.99	15.88	16.20	1.076	-	-	-0.04	0.781	0.841
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 1	518598	2592.99	15.68	16.20	1.127	-	-	0.05	0.733	0.826
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 1	518598	2592.99	15.58	16.20	1.153	-	-	-0.03	0.703	0.811
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 1	518598	2592.99	15.88	16.20	1.076	-	-	-0.15	0.388	0.418
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 3	DSI 1	518598	2592.99	15.68	16.20	1.127	-	-	0.02	0.373	0.420
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 1	518598	2592.99	15.88	16.20	1.076	-	-	0.07	0.307	0.330
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 3	DSI 1	518598	2592.99	15.68	16.20	1.127	-	-	0.16	0.352	0.397
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 1	518598	2592.99	15.88	16.20	1.076	-	-	0.13	0.164	0.177
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 3	DSI 1	518598	2592.99	15.68	16.20	1.127	-	-	-0.18	0.151	0.170
	FR1 n41 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 3	DSI 1	518598	2592.99	18.89	19.50	1.151	50	1.000	0.13	0.843	0.970
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	518598	2592.99	15.02	16.50	1.406	-	-	0.02	0.709	0.997
20	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	518598	2592.99	14.99	16.50	1.416	-	-	-0.04	0.763	1.080
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	518598	2592.99	14.65	16.50	1.531	-	-	0.16	0.702	1.075
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 1	518598	2592.99	15.02	16.50	1.406	-	-	-0.03	0.052	0.073
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	DSI 1	518598	2592.99	14.99	16.50	1.416	-	-	0.07	0.046	0.065
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 1	518598	2592.99	15.02	16.50	1.406	-	-	0.02	0.362	0.509
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	DSI 1	518598	2592.99	14.99	16.50	1.416	-	-	0.01	0.364	0.515
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 1	518598	2592.99	15.02	16.50	1.406	-	-	-0.01	0.096	0.135
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	DSI 1	518598	2592.99	14.99	16.50	1.416	-	-	-0.06	0.076	0.108
	FR1 n41 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	DSI 1	518598	2592.99	17.84	19.50	1.466	50	1.000	0.09	0.733	1.074
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	24.48	25.50	1.265	-	-	-0.04	0.161	0.204
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	DSI 1	518598	2592.99	24.35	25.50	1.303	-	-	-0.09	0.162	0.211
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	518598	2592.99	24.48	25.50	1.265	-	-	-0.17	0.115	0.145
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	DSI 1	518598	2592.99	24.35	25.50	1.303	-	-	-0.1	0.104	0.136
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	518598	2592.99	24.48	25.50	1.265	-	-	0.09	0.241	0.305
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	518598	2592.99	24.35	25.50	1.303	-	-	0.18	0.225	0.293
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	518598	2592.99	24.48	25.50	1.265	-	-	-0.17	0.084	0.106
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	DSI 1	518598	2592.99	24.35	25.50	1.303	-	-	-0.04	0.067	0.087
	FR1 n41 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	DSI 1	518598	2592.99	25.42	26.50	1.282	50	1.000	-0.05	0.152	0.195
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 1	518598	2592.99	17.18	18.00	1.208	-	-	0.16	0.579	0.699
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	DSI 1	518598	2592.99	17.08	18.00	1.236	-	-	0.05	0.594	0.734
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 1	518598	2592.99	17.18	18.00	1.208	-	-	-0.03	0.746	0.901
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 1	518598	2592.99	17.08	18.00	1.236	-	-	-0.03	0.715	0.884
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 1	518598	2592.99	16.89	18.00	1.291	-	-	-0.15	0.683	0.882
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 1	518598	2592.99	17.18	18.00	1.208	-	-	0.02	0.377	0.455
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	DSI 1	518598	2592.99	17.08	18.00	1.236	-	-	0.07	0.399	0.493
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 1	518598	2592.99	17.18	18.00	1.208	-	-	0.16	0.462	0.558
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	DSI 1	518598	2592.99	17.08	18.00	1.236	-	-	0.13	0.469	0.580
	FR1 n41 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	DSI 1	518598	2592.99	20.21	21.00	1.199	50	1.000	-0.04	0.783	0.939
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	42590	3500	15.65	16.50	1.216	62.9	1.006	0.02	0.351	0.429
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	42590	3500	15.51	16.50	1.256	62.9	1.006	0.16	0.356	0.450
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	42590	3500	15.65	16.50	1.216	62.9	1.006	-0.03	0.401	0.491



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	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	42590	3500	15.51	16.50	1.256	62.9	1.006	0.07	0.399	0.504
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	42590	3500	15.65	16.50	1.216	62.9	1.006	0.02	0.663	0.811
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	42190	3460	15.41	16.50	1.285	62.9	1.006	0.01	0.644	0.833
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	42990	3540	15.56	16.50	1.242	62.9	1.006	-0.01	0.657	0.821
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	42590	3500	15.51	16.50	1.256	62.9	1.006	-0.06	0.645	0.815
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	42190	3460	15.47	16.50	1.268	62.9	1.006	-0.04	0.639	0.815
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	42990	3540	15.59	16.50	1.233	62.9	1.006	-0.09	0.667	0.827
	LTE Band 42	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 6	DSI 1	42590	3500	15.45	16.50	1.274	62.9	1.006	-0.17	0.637	0.816
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	42590	3500	15.65	16.50	1.216	62.9	1.006	-0.1	0.740	0.905
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	42190	3460	15.41	16.50	1.285	62.9	1.006	0.18	0.724	0.936
21	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	42990	3540	15.56	16.50	1.242	62.9	1.006	-0.17	0.771	0.963
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	42590	3500	15.51	16.50	1.256	62.9	1.006	-0.04	0.739	0.934
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	42190	3460	15.47	16.50	1.268	62.9	1.006	-0.05	0.716	0.913
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	42990	3540	15.59	16.50	1.233	62.9	1.006	0.01	0.739	0.917
	LTE Band 42	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 6	DSI 1	42590	3500	15.45	16.50	1.274	62.9	1.006	-0.13	0.742	0.951
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	42590	3500	20.03	21.50	1.403	62.9	1.006	0.02	0.652	0.920
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	42190	3460	19.97	21.50	1.422	62.9	1.006	0.06	0.638	0.913
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	42990	3540	19.99	21.50	1.416	62.9	1.006	0.02	0.622	0.886
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	42590	3500	20.00	21.50	1.413	62.9	1.006	0.08	0.599	0.851
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	42190	3460	19.85	21.50	1.462	62.9	1.006	0.12	0.578	0.850
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	42990	3540	19.86	21.50	1.459	62.9	1.006	-0.16	0.586	0.860
	LTE Band 42	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 1	42590	3500	19.97	21.50	1.422	62.9	1.006	-0.12	0.556	0.796
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	42590	3500	20.03	21.50	1.403	62.9	1.006	0.01	0.203	0.286
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 1	42590	3500	20.00	21.50	1.413	62.9	1.006	0.03	0.205	0.291
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	42590	3500	20.03	21.50	1.403	62.9	1.006	-0.08	0.240	0.339
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	42590	3500	20.00	21.50	1.413	62.9	1.006	-0.08	0.293	0.416
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	42590	3500	20.03	21.50	1.403	62.9	1.006	0.1	0.073	0.103
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 1	42590	3500	20.00	21.50	1.413	62.9	1.006	-0.18	0.068	0.097
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	42590	3500	17.21	18.50	1.346	62.9	1.006	0.03	0.124	0.168
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	42590	3500	17.06	18.50	1.393	62.9	1.006	-0.15	0.125	0.175
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	42590	3500	17.21	18.50	1.346	62.9	1.006	-0.15	0.082	0.111
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	42590	3500	17.06	18.50	1.393	62.9	1.006	0.11	0.085	0.119
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	42590	3500	17.21	18.50	1.346	62.9	1.006	0.18	0.593	0.803
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	42190	3460	17.08	18.50	1.387	62.9	1.006	-0.08	0.568	0.792
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	42990	3540	17.10	18.50	1.380	62.9	1.006	-0.17	0.556	0.772
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	42590	3500	17.06	18.50	1.393	62.9	1.006	-0.08	0.573	0.803
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	42190	3460	17.09	18.50	1.384	62.9	1.006	-0.04	0.568	0.791
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	42990	3540	17.09	18.50	1.384	62.9	1.006	-0.08	0.563	0.784
	LTE Band 42	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 7	DSI 1	42590	3500	17.13	18.50	1.371	62.9	1.006	0.17	0.580	0.800
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	42590	3500	17.21	18.50	1.346	62.9	1.006	0.18	0.238	0.322
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	42590	3500	17.06	18.50	1.393	62.9	1.006	-0.04	0.246	0.345
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 8	DSI 1	42590	3500	23.55	25.00	1.396	62.9	1.006	-0.06	0.110	0.155
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 8	DSI 1	42590	3500	22.60	24.00	1.380	62.9	1.006	-0.08	0.106	0.147
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 8	DSI 1	42590	3500	23.55	25.00	1.396	62.9	1.006	-0.13	0.064	0.090
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 8	DSI 1	42590	3500	22.60	24.00	1.380	62.9	1.006	-0.13	0.074	0.103
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	42590	3500	23.55	25.00	1.396	62.9	1.006	0.06	0.040	0.056
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	42590	3500	22.60	24.00	1.380	62.9	1.006	-0.03	0.054	0.075
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 1	42590	3500	23.55	25.00	1.396	62.9	1.006	-0.03	0.059	0.083
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 1	42590	3500	22.60	24.00	1.380	62.9	1.006	0.08	0.054	0.075
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 6	DSI 1	55830	3609	16.15	17.00	1.216	62.9	1.006	-0.09	0.332	0.406
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 6	DSI 1	55830	3609	16.05	17.00	1.245	62.9	1.006	0.14	0.344	0.431
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 6	DSI 1	55830	3609	16.15	17.00	1.216	62.9	1.006	0.1	0.388	0.475
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 6	DSI 1	55830	3609	16.05	17.00	1.245	62.9	1.006	-0.09	0.390	0.488
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	55830	3609	16.15	17.00	1.216	62.9	1.006	0.07	0.663	0.811
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	55340	3560	15.91	17.00	1.285	62.9	1.006	-0.09	0.678	0.877
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	56150	3641	16.00	17.00	1.259	62.9	1.006	-0.16	0.596	0.755



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	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 6	DSI 1	56640	3690	16.01	17.00	1.256	62.9	1.006	-0.18	0.565	0.714
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	55830	3609	16.05	17.00	1.245	62.9	1.006	-0.07	0.662	0.829
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	55340	3560	15.89	17.00	1.291	62.9	1.006	0.11	0.681	0.885
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	56150	3641	16.05	17.00	1.245	62.9	1.006	-0.08	0.605	0.757
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 6	DSI 1	56640	3690	16.05	17.00	1.245	62.9	1.006	-0.1	0.594	0.744
	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 6	DSI 1	55830	3609	16.10	17.00	1.230	62.9	1.006	-0.01	0.632	0.782
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	55830	3609	16.15	17.00	1.216	62.9	1.006	-0.09	0.747	0.914
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	55340	3560	15.91	17.00	1.285	62.9	1.006	-0.02	0.765	0.989
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	56150	3641	16.00	17.00	1.259	62.9	1.006	-0.06	0.711	0.900
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 6	DSI 1	56640	3690	16.01	17.00	1.256	62.9	1.006	-0.17	0.680	0.859
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	55830	3609	16.05	17.00	1.245	62.9	1.006	-0.01	0.754	0.944
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	55340	3560	15.89	17.00	1.291	62.9	1.006	-0.11	0.753	0.978
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	56150	3641	16.05	17.00	1.245	62.9	1.006	0.14	0.714	0.894
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 6	DSI 1	56640	3690	16.05	17.00	1.245	62.9	1.006	0.03	0.666	0.834
	LTE Band 48	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 6	DSI 1	55830	3609	16.10	17.00	1.230	62.9	1.006	0.1	0.734	0.908
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	55830	3609	19.73	21.00	1.340	62.9	1.006	0.08	0.585	0.788
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	55340	3560	19.60	21.00	1.380	62.9	1.006	-0.16	0.665	0.923
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	56150	3641	19.65	21.00	1.365	62.9	1.006	0.01	0.575	0.789
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	DSI 1	56640	3690	19.65	21.00	1.365	62.9	1.006	0.03	0.603	0.828
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	55830	3609	19.69	21.00	1.352	62.9	1.006	-0.08	0.602	0.819
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	55340	3560	19.52	21.00	1.406	62.9	1.006	-0.08	0.647	0.915
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	56150	3641	19.53	21.00	1.403	62.9	1.006	0.1	0.577	0.814
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	DSI 1	56640	3690	19.53	21.00	1.403	62.9	1.006	-0.18	0.618	0.872
	LTE Band 48	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	DSI 1	55830	3609	19.66	21.00	1.361	62.9	1.006	0.1	0.597	0.818
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	DSI 1	55830	3609	19.73	21.00	1.340	62.9	1.006	0.12	0.219	0.295
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	DSI 1	55830	3609	19.69	21.00	1.352	62.9	1.006	0.08	0.217	0.295
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	DSI 1	55830	3609	19.73	21.00	1.340	62.9	1.006	-0.17	0.329	0.443
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	DSI 1	55830	3609	19.69	21.00	1.352	62.9	1.006	-0.03	0.298	0.405
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	DSI 1	55830	3609	19.73	21.00	1.340	62.9	1.006	0.14	0.079	0.106
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	DSI 1	55830	3609	19.69	21.00	1.352	62.9	1.006	0.11	0.068	0.092
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	DSI 1	55830	3609	18.49	20.00	1.416	62.9	1.006	-0.07	0.186	0.265
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	DSI 1	55830	3609	18.37	20.00	1.455	62.9	1.006	0.05	0.190	0.278
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	DSI 1	55830	3609	18.49	20.00	1.416	62.9	1.006	-0.11	0.092	0.131
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	DSI 1	55830	3609	18.37	20.00	1.455	62.9	1.006	-0.12	0.097	0.142
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	55830	3609	18.49	20.00	1.416	62.9	1.006	0.03	0.645	0.919
22	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	55340	3560	18.29	20.00	1.483	62.9	1.006	0.13	0.715	1.066
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	56150	3641	18.32	20.00	1.472	62.9	1.006	-0.16	0.624	0.924
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	DSI 1	56640	3690	18.28	20.00	1.486	62.9	1.006	-0.02	0.625	0.934
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	55830	3609	18.37	20.00	1.455	62.9	1.006	0.15	0.653	0.956
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	55340	3560	18.34	20.00	1.466	62.9	1.006	-0.09	0.713	1.051
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	56150	3641	18.32	20.00	1.472	62.9	1.006	0.11	0.635	0.941
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	DSI 1	56640	3690	18.23	20.00	1.503	62.9	1.006	-0.05	0.635	0.960
	LTE Band 48	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 7	DSI 1	55830	3609	18.45	20.00	1.429	62.9	1.006	-0.08	0.649	0.933
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	DSI 1	55830	3609	18.49	20.00	1.416	62.9	1.006	0.16	0.278	0.396
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	DSI 1	55830	3609	18.37	20.00	1.455	62.9	1.006	0.05	0.291	0.426
	LTE Band 48	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 8	DSI 1	55830	3609	22.65	24.00	1.365	62.9	1.006	0.13	0.165	0.227
	LTE Band 48	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 8	DSI 1	55830	3609	21.70	23.00	1.349	62.9	1.006	-0.05	0.164	0.223
	LTE Band 48	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 8	DSI 1	55830	3609	22.65	24.00	1.365	62.9	1.006	0.18	0.116	0.159
	LTE Band 48	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 8	DSI 1	55830	3609	21.70	23.00	1.349	62.9	1.006	0.14	0.115	0.156
	LTE Band 48	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	DSI 1	55830	3609	22.65	24.00	1.365	62.9	1.006	-0.17	0.066	0.091
	LTE Band 48	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	DSI 1	55830	3609	21.70	23.00	1.349	62.9	1.006	0.17	0.062	0.084
	LTE Band 48	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	DSI 1	55830	3609	22.65	24.00	1.365	62.9	1.006	-0.05	0.079	0.108
	LTE Band 48	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	DSI 1	55830	3609	21.70	23.00	1.349	62.9	1.006	0.01	0.067	0.091
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	641666	3624.99	13.27	14.00	1.183	-	-	0.08	0.349	0.413
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	641666	3624.99	13.23	14.00	1.194	-	-	-0.01	0.348	0.416
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	641666	3624.99	13.27	14.00	1.183	-	-	-0.09	0.415	0.491



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	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	641666	3624.99	13.23	14.00	1.194	-	-	0.05	0.408	0.487
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	641666	3624.99	13.27	14.00	1.183	-	-	0.02	0.696	0.823
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	638000	3570	13.24	14.00	1.191	-	-	-0.13	0.703	0.837
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	645332	3679.98	13.23	14.00	1.194	-	-	0.17	0.687	0.820
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	641666	3624.99	13.23	14.00	1.194	-	-	0.06	0.683	0.815
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	638000	3570	13.07	14.00	1.239	-	-	0.02	0.694	0.860
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	645332	3679.98	13.12	14.00	1.225	-	-	-0.04	0.683	0.836
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	641666	3624.99	12.98	14.00	1.265	-	-	-0.15	0.639	0.808
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	641666	3624.99	13.27	14.00	1.183	-	-	0.11	0.777	0.919
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	638000	3570	13.24	14.00	1.191	-	-	-0.02	0.810	0.965
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	645332	3679.98	13.23	14.00	1.194	-	-	0.1	0.741	0.885
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	641666	3624.99	13.23	14.00	1.194	-	-	0.04	0.760	0.907
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	638000	3570	13.07	14.00	1.239	-	-	0.01	0.826	1.023
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	645332	3679.98	13.12	14.00	1.225	-	-	0.13	0.786	0.963
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	641666	3624.99	12.98	14.00	1.265	-	-	0.01	0.774	0.979
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	641666	3624.99	16.64	18.00	1.368	-	-	0.04	0.487	0.666
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	641666	3624.99	16.55	18.00	1.396	-	-	-0.05	0.460	0.642
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	641666	3624.99	16.64	18.00	1.368	-	-	0.01	0.191	0.261
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	641666	3624.99	16.55	18.00	1.396	-	-	-0.13	0.191	0.267
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	641666	3624.99	16.64	18.00	1.368	-	-	-0.01	0.294	0.402
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	641666	3624.99	16.55	18.00	1.396	-	-	-0.09	0.265	0.370
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	641666	3624.99	16.64	18.00	1.368	-	-	0.05	0.058	0.079
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	641666	3624.99	16.55	18.00	1.396	-	-	0.02	0.073	0.102
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	641666	3624.99	17.58	19.00	1.387	-	-	0.03	0.213	0.295
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	641666	3624.99	17.53	19.00	1.403	-	-	-0.08	0.212	0.297
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	641666	3624.99	17.58	19.00	1.387	-	-	-0.08	0.109	0.151
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	641666	3624.99	17.53	19.00	1.403	-	-	0.1	0.151	0.212
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	641666	3624.99	17.58	19.00	1.387	-	-	-0.18	0.649	0.900
23	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	638000	3570	17.56	19.00	1.393	-	-	-0.03	0.754	1.050
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	645332	3679.98	17.49	19.00	1.416	-	-	0.1	0.681	0.964
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	641666	3624.99	17.53	19.00	1.403	-	-	0.12	0.642	0.901
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	638000	3570	17.32	19.00	1.472	-	-	0.08	0.703	1.035
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	645332	3679.98	17.36	19.00	1.459	-	-	-0.17	0.664	0.969
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	641666	3624.99	17.25	19.00	1.496	-	-	-0.03	0.625	0.935
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	641666	3624.99	17.58	19.00	1.387	-	-	0.14	0.326	0.452
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	641666	3624.99	17.53	19.00	1.403	-	-	0.11	0.329	0.462
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	641666	3624.99	22.65	24.00	1.365	-	-	-0.13	0.440	0.600
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	641666	3624.99	22.60	24.00	1.380	-	-	0.06	0.484	0.668
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	641666	3624.99	22.65	24.00	1.365	-	-	0.17	0.287	0.392
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	641666	3624.99	22.60	24.00	1.380	-	-	0.06	0.315	0.435
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	641666	3624.99	22.65	24.00	1.365	-	-	0.02	0.141	0.192
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	641666	3624.99	22.60	24.00	1.380	-	-	-0.04	0.176	0.243
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	641666	3624.99	22.65	24.00	1.365	-	-	-0.15	0.181	0.247
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	641666	3624.99	22.60	24.00	1.380	-	-	0.11	0.188	0.260
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	12.91	13.50	1.146	-	-	-0.05	0.213	0.244
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	656000	3840	12.84	13.50	1.164	-	-	0.18	0.209	0.243
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	656000	3840	12.91	13.50	1.146	-	-	0.14	0.270	0.309
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	656000	3840	12.84	13.50	1.164	-	-	-0.17	0.252	0.293
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	656000	3840	12.91	13.50	1.146	-	-	0.17	0.364	0.417
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	656000	3840	12.84	13.50	1.164	-	-	-0.05	0.339	0.395
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	656000	3840	12.91	13.50	1.146	-	-	0.09	0.493	0.565
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	656000	3840	12.84	13.50	1.164	-	-	0.01	0.443	0.516
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	656000	3840	15.84	17.00	1.306	50	1.000	-0.02	0.512	0.669
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	12.82	13.50	1.169	-	-	0.1	0.335	0.392
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	12.75	13.50	1.189	-	-	-0.17	0.310	0.368
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	633334	3500.01	12.82	13.50	1.169	-	-	0.04	0.372	0.435



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	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	633334	3500.01	12.75	13.50	1.189	-	-	-0.01	0.344	0.409
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	633334	3500.01	12.82	13.50	1.169	-	-	-0.08	0.650	0.760
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	633334	3500.01	12.75	13.50	1.189	-	-	0.05	0.614	0.730
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	12.82	13.50	1.169	-	-	0.03	0.743	0.869
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	12.75	13.50	1.189	-	-	-0.09	0.702	0.834
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	12.50	13.50	1.259	-	-	-0.08	0.667	0.840
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	15.73	17.00	1.340	50	1.000	0.01	0.705	0.944
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	656000	3840	16.15	17.50	1.365	-	-	-0.02	0.448	0.611
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	656000	3840	16.04	17.50	1.400	-	-	0.1	0.435	0.609
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	656000	3840	16.15	17.50	1.365	-	-	0.04	0.190	0.259
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	656000	3840	16.04	17.50	1.400	-	-	0.13	0.190	0.266
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	656000	3840	16.15	17.50	1.365	-	-	-0.18	0.236	0.322
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	656000	3840	16.04	17.50	1.400	-	-	-0.11	0.215	0.301
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	656000	3840	16.15	17.50	1.365	-	-	-0.16	0.051	0.070
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	656000	3840	16.04	17.50	1.400	-	-	-0.15	0.053	0.074
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	656000	3840	19.17	20.50	1.358	50	1.000	0.01	0.446	0.606
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	15.97	17.50	1.422	-	-	-0.06	0.439	0.624
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	15.82	17.50	1.472	-	-	-0.14	0.370	0.545
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	633334	3500.01	15.97	17.50	1.422	-	-	-0.19	0.128	0.182
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	633334	3500.01	15.82	17.50	1.472	-	-	0.01	0.122	0.180
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	633334	3500.01	15.97	17.50	1.422	-	-	0.06	0.228	0.324
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	633334	3500.01	15.82	17.50	1.472	-	-	0.02	0.177	0.261
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	633334	3500.01	15.97	17.50	1.422	-	-	0.12	0.054	0.077
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	633334	3500.01	15.82	17.50	1.472	-	-	-0.16	0.044	0.065
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	19.01	20.50	1.409	50	1.000	0.02	0.444	0.626
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	656000	3840	15.14	16.00	1.219	-	-	0.08	0.110	0.134
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	656000	3840	14.97	16.00	1.268	-	-	0.01	0.085	0.108
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	656000	3840	15.14	16.00	1.219	-	-	0.03	0.047	0.057
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	656000	3840	14.97	16.00	1.268	-	-	-0.08	0.035	0.044
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	656000	3840	15.14	16.00	1.219	-	-	0.08	0.272	0.332
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	656000	3840	14.97	16.00	1.268	-	-	-0.08	0.193	0.245
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	656000	3840	15.14	16.00	1.219	-	-	0.1	0.146	0.178
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	656000	3840	14.97	16.00	1.268	-	-	-0.18	0.103	0.131
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	656000	3840	18.16	19.00	1.213	50	1.000	0.1	0.269	0.326
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.21	16.00	1.199	-	-	0.13	0.186	0.223
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.13	16.00	1.222	-	-	0.12	0.136	0.166
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.21	16.00	1.199	-	-	0.03	0.124	0.149
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.13	16.00	1.222	-	-	0.18	0.097	0.119
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.21	16.00	1.199	-	-	0.09	0.780	0.936
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.13	16.00	1.222	-	-	0.16	0.704	0.860
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	14.99	16.00	1.262	-	-	-0.1	0.662	0.835
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.21	16.00	1.199	-	-	0.07	0.359	0.431
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.13	16.00	1.222	-	-	0.18	0.281	0.343
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	18.22	19.00	1.197	50	1.000	0.02	0.733	0.877
24	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	656000	3840	21.81	23.00	1.315	-	-	0.01	0.729	0.959
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	656000	3840	21.73	23.00	1.340	-	-	0.12	0.683	0.915
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	656000	3840	21.52	23.00	1.406	-	-	0.08	0.667	0.938
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	656000	3840	21.81	23.00	1.315	-	-	-0.17	0.517	0.680
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	656000	3840	21.73	23.00	1.340	-	-	-0.03	0.505	0.677
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	21.81	23.00	1.315	-	-	0.11	0.335	0.441
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	656000	3840	21.73	23.00	1.340	-	-	-0.05	0.344	0.461
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	656000	3840	21.81	23.00	1.315	-	-	0.14	0.364	0.479
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	656000	3840	21.73	23.00	1.340	-	-	-0.17	0.385	0.516
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	656000	3840	24.81	26.00	1.315	50	1.000	0.07	0.672	0.884
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	22.07	23.00	1.239	-	-	0.07	0.133	0.165
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	22.00	23.00	1.259	-	-	-0.1	0.075	0.094



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	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	633334	3500.01	22.07	23.00	1.239	-	-	0.01	0.090	0.111
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	633334	3500.01	22.00	23.00	1.259	-	-	-0.15	0.061	0.077
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	22.07	23.00	1.239	-	-	0.19	0.052	0.064
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	22.00	23.00	1.259	-	-	0.07	0.033	0.042
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	633334	3500.01	22.07	23.00	1.239	-	-	-0.18	0.063	0.078
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	633334	3500.01	22.00	23.00	1.259	-	-	0.03	0.045	0.057
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	24.95	26.00	1.274	50	1.000	-0.03	0.140	0.178
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	650000	3750	12.26	13.00	1.186	-	-	-0.15	0.226	0.268
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	650000	3750	12.15	13.00	1.216	-	-	-0.15	0.204	0.248
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	650000	3750	12.26	13.00	1.186	-	-	0.11	0.272	0.323
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	650000	3750	12.15	13.00	1.216	-	-	-0.08	0.244	0.297
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	650000	3750	12.26	13.00	1.186	-	-	-0.17	0.399	0.473
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	650000	3750	12.15	13.00	1.216	-	-	-0.08	0.354	0.431
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	650000	3750	12.26	13.00	1.186	-	-	0.01	0.501	0.594
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	650000	3750	12.15	13.00	1.216	-	-	-0.04	0.430	0.523
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	650000	3750	15.29	16.50	1.321	50	1.000	0.12	0.496	0.655
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	12.33	13.00	1.167	-	-	-0.08	0.301	0.351
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 6	DSI 1	633334	3500.01	12.25	13.00	1.189	-	-	0.17	0.263	0.313
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	633334	3500.01	12.33	13.00	1.167	-	-	0.18	0.330	0.385
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 6	DSI 1	633334	3500.01	12.25	13.00	1.189	-	-	-0.04	0.301	0.358
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	633334	3500.01	12.33	13.00	1.167	-	-	-0.08	0.561	0.655
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 6	DSI 1	633334	3500.01	12.25	13.00	1.189	-	-	-0.13	0.502	0.597
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	12.33	13.00	1.167	-	-	0.01	0.665	0.776
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	12.25	13.00	1.189	-	-	0.06	0.569	0.676
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	15.37	16.50	1.297	50	1.000	0.07	0.723	0.938
	FR1 n78 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	15.22	16.50	1.343	50	1.000	-0.02	0.685	0.920
	FR1 n78 PC2	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	633334	3500.01	14.98	16.50	1.419	50	1.000	-0.09	0.634	0.900
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	650000	3750	18.06	19.00	1.242	-	-	-0.09	0.637	0.791
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	650000	3750	17.96	19.00	1.271	-	-	-0.08	0.620	0.788
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	650000	3750	18.06	19.00	1.242	-	-	0.13	0.282	0.350
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	650000	3750	17.96	19.00	1.271	-	-	0.12	0.275	0.349
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	650000	3750	18.06	19.00	1.242	-	-	0.03	0.361	0.448
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	650000	3750	17.96	19.00	1.271	-	-	0.18	0.394	0.501
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	650000	3750	18.06	19.00	1.242	-	-	0.16	0.090	0.112
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	650000	3750	17.96	19.00	1.271	-	-	-0.1	0.088	0.112
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	650000	3750	21.04	22.00	1.247	50	1.000	-0.05	0.666	0.831
	FR1 n78 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	650000	3750	20.99	22.00	1.262	50	1.000	0.06	0.645	0.814
	FR1 n78 PC2	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	650000	3750	20.66	22.00	1.361	50	1.000	0.01	0.600	0.817
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.76	19.00	1.330	-	-	-0.05	0.765	1.018
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.64	19.00	1.368	-	-	0.01	0.634	0.867
	FR1 n78	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.42	19.00	1.439	-	-	0.1	0.605	0.870
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	633334	3500.01	17.76	19.00	1.330	-	-	-0.17	0.226	0.301
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	DSI 1	633334	3500.01	17.64	19.00	1.368	-	-	0.04	0.197	0.269
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.76	19.00	1.330	-	-	-0.01	0.338	0.450
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	DSI 1	633334	3500.01	17.64	19.00	1.368	-	-	-0.08	0.288	0.394
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	633334	3500.01	17.76	19.00	1.330	-	-	0.05	0.085	0.113
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	DSI 1	633334	3500.01	17.64	19.00	1.368	-	-	0.06	0.078	0.107
25	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	DSI 1	633334	3500.01	20.70	22.00	1.349	50	1.000	0.05	0.780	1.052
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	650000	3750	15.13	16.00	1.222	-	-	0.02	0.176	0.215
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	650000	3750	15.01	16.00	1.256	-	-	0.02	0.163	0.205
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	650000	3750	15.13	16.00	1.222	-	-	0.11	0.086	0.105
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	650000	3750	15.01	16.00	1.256	-	-	-0.17	0.074	0.093
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	650000	3750	15.13	16.00	1.222	-	-	0.02	0.460	0.562
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	650000	3750	15.01	16.00	1.256	-	-	-0.04	0.411	0.516
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	650000	3750	15.13	16.00	1.222	-	-	-0.17	0.258	0.315
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	650000	3750	15.01	16.00	1.256	-	-	-0.07	0.220	0.276



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	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	650000	3750	18.14	19.00	1.219	50	1.000	0.04	0.435	0.530
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.08	16.00	1.236	-	-	-0.03	0.183	0.226
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.04	16.00	1.247	-	-	0.08	0.141	0.176
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.08	16.00	1.236	-	-	-0.07	0.122	0.151
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.04	16.00	1.247	-	-	0.05	0.095	0.119
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.08	16.00	1.236	-	-	0.09	0.754	0.932
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	15.04	16.00	1.247	-	-	-0.11	0.710	0.886
	FR1 n78	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	14.85	16.00	1.303	-	-	-0.12	0.653	0.851
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.08	16.00	1.236	-	-	0.03	0.360	0.445
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	DSI 1	633334	3500.01	15.04	16.00	1.247	-	-	-0.16	0.284	0.354
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	DSI 1	633334	3500.01	18.11	19.00	1.227	50	1.000	0.01	0.700	0.859
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	650000	3750	21.83	23.00	1.309	-	-	-0.03	0.627	0.821
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	650000	3750	21.76	23.00	1.330	-	-	0.17	0.771	1.026
	FR1 n78	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	650000	3750	21.61	23.00	1.377	-	-	0.03	0.722	0.994
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	650000	3750	21.83	23.00	1.309	-	-	0.01	0.438	0.573
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	650000	3750	21.76	23.00	1.330	-	-	0.04	0.549	0.730
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	650000	3750	21.83	23.00	1.309	-	-	-0.12	0.241	0.316
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	650000	3750	21.76	23.00	1.330	-	-	-0.08	0.329	0.438
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	650000	3750	21.83	23.00	1.309	-	-	-0.18	0.279	0.365
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	650000	3750	21.76	23.00	1.330	-	-	-0.13	0.375	0.499
	FR1 n78 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	650000	3750	24.75	26.00	1.334	50	1.000	0.02	0.722	0.963
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	21.85	23.00	1.303	-	-	0.06	0.147	0.192
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	21.73	23.00	1.340	-	-	-0.16	0.088	0.118
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	633334	3500.01	21.85	23.00	1.303	-	-	-0.02	0.105	0.137
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	DSI 1	633334	3500.01	21.73	23.00	1.340	-	-	0.08	0.075	0.100
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	21.85	23.00	1.303	-	-	0.01	0.064	0.083
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	DSI 1	633334	3500.01	21.73	23.00	1.340	-	-	-0.04	0.038	0.051
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	633334	3500.01	21.85	23.00	1.303	-	-	0.17	0.074	0.096
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	DSI 1	633334	3500.01	21.73	23.00	1.340	-	-	0.18	0.050	0.067
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	DSI 1	633334	3500.01	24.9	26.00	1.288	50	1.000	0.09	0.145	0.187

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 16+7(7)	Standalone	11	2462	13.10	14.00	1.230	97.03	1.031	0.08	0.191	0.242
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 16+7(7)	Standalone	11	2462	13.10	14.00	1.230	97.03	1.031	0.01	0.174	0.221
26	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 16+7(7)	Standalone	11	2462	13.10	14.00	1.230	97.03	1.031	0.04	0.777	0.986
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 16+7(16)	Standalone	6	2437	12.45	13.50	1.274	97.03	1.031	-0.08	0.566	0.743
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 16+7(7)	Standalone	11	2462	13.10	14.00	1.230	97.03	1.031	-0.08	0.501	0.635
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 7	Standalone	0	2402	15.45	16.50	1.273	77.06	1.081	-0.09	0.365	0.502
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 7	Standalone	0	2402	15.45	16.50	1.273	77.06	1.081	-0.08	0.132	0.182
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 7	Standalone	0	2402	15.45	16.50	1.273	77.06	1.081	-0.06	0.532	0.732
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 7	Standalone	0	2402	15.45	16.50	1.273	77.06	1.081	0.13	0.293	0.403
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 16	Standalone	39	2441	15.54	17.00	1.400	77.01	1.082	0.1	0.179	0.271
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 16	Standalone	39	2441	15.54	17.00	1.400	77.01	1.082	-0.18	0.209	0.316
27	Bluetooth	1Mbps	Left Cheek	0mm	Ant 16	Standalone	39	2441	15.54	17.00	1.400	77.01	1.082	0.04	0.494	0.748
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 16	Standalone	39	2441	15.54	17.00	1.400	77.01	1.082	0.1	0.356	0.539
5000MHz																
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 17+6(6)	Standalone	50	5250	13.63	14.50	1.222	100	1.000	0.08	0.322	0.393
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 17+6(6)	Standalone	50	5250	13.63	14.50	1.222	100	1.000	-0.03	0.399	0.487
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 17+6(6)	Standalone	50	5250	13.63	14.50	1.222	100	1.000	0.17	0.658	0.804
28	WLAN5.3GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 17+6(6)	Standalone	50	5250	13.63	14.50	1.222	100	1.000	0.08	0.822	1.004
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 17+6(6)	Standalone	114	5570	13.42	14.00	1.143	100	1.000	-0.17	0.300	0.343
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 17+6(6)	Standalone	114	5570	13.42	14.00	1.143	100	1.000	0.04	0.339	0.387
29	WLAN5.5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 17+6(6)	Standalone	114	5570	13.42	14.00	1.143	100	1.000	0.05	0.884	1.010
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 17+6(6)	Standalone	114	5570	13.42	14.00	1.143	100	1.000	-0.08	0.713	0.815
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 17+6(17)	Standalone	155	5775	13.77	14.50	1.183	100	1.000	0.06	0.243	0.287
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 17+6(17)	Standalone	155	5775	13.77	14.50	1.183	100	1.000	-0.09	0.274	0.324
30	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 17+6(17)	Standalone	155	5775	13.77	14.50	1.183	100	1.000	-0.02	0.880	1.041
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 17+6(17)	Standalone	155	5775	13.77	14.50	1.183	100	1.000	-0.08	0.601	0.711

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)	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)
850MHz																				
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	10mm	Ant 0	DSI 6	189	836.4	26.17	28.00	1.524	-	-	0.1	0.186	0.283
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	10mm	Ant 0	DSI 6	189	836.4	26.17	28.00	1.524	-	-	0.12	0.210	0.320
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Side	10mm	Ant 0	DSI 6	189	836.4	26.17	28.00	1.524	-	-	-0.09	0.312	0.476
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	10mm	Ant 0	DSI 6	189	836.4	26.17	28.00	1.524	-	-	0.08	0.140	0.213
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	10mm	Ant 1	DSI 6	189	836.4	22.16	24.00	1.528	-	-	-0.17	0.269	0.411
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	10mm	Ant 1	DSI 6	189	836.4	22.16	24.00	1.528	-	-	-0.03	0.233	0.356
31	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Side	10mm	Ant 1	DSI 6	189	836.4	22.16	24.00	1.528	-	-	0.06	0.393	0.600
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 0	DSI 6	4182	836.4	24.64	25.00	1.086	-	-	0.08	0.379	0.412
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 0	DSI 6	4182	836.4	24.64	25.00	1.086	-	-	0.01	0.389	0.423
32	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 0	DSI 6	4182	836.4	24.64	25.00	1.086	-	-	-0.03	0.575	0.625
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 0	DSI 6	4182	836.4	24.64	25.00	1.086	-	-	0.03	0.295	0.320
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 1	DSI 6	4182	836.4	18.59	19.50	1.233	-	-	-0.08	0.278	0.343
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 1	DSI 6	4182	836.4	18.59	19.50	1.233	-	-	-0.08	0.245	0.302
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 1	DSI 6	4182	836.4	18.59	19.50	1.233	-	-	-0.04	0.375	0.462
	LTE Band 5	10M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 6	20525	836.5	24.51	24.70	1.045	-	-	0.1	0.358	0.374
	LTE Band 5	10M	QPSK	25	0	-	Front	10mm	Ant 0	DSI 6	20525	836.5	24.43	24.70	1.064	-	-	-0.18	0.332	0.353
	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 6	20525	836.5	24.51	24.70	1.045	-	-	0.1	0.412	0.430
	LTE Band 5	10M	QPSK	25	0	-	Back	10mm	Ant 0	DSI 6	20525	836.5	24.43	24.70	1.064	-	-	0.12	0.369	0.393
33	LTE Band 5	10M	QPSK	1	0	-	Right Side	10mm	Ant 0	DSI 6	20525	836.5	24.51	24.70	1.045	-	-	-0.03	0.598	0.625
	LTE Band 5	10M	QPSK	25	0	-	Right Side	10mm	Ant 0	DSI 6	20525	836.5	24.43	24.70	1.064	-	-	0.08	0.547	0.582
	LTE Band 5	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 6	20525	836.5	24.51	24.70	1.045	-	-	-0.17	0.310	0.324
	LTE Band 5	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 0	DSI 6	20525	836.5	24.43	24.70	1.064	-	-	-0.03	0.281	0.299
	LTE Band 5	10M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 6	20525	836.5	19.18	20.20	1.265	-	-	0.14	0.311	0.393
	LTE Band 5	10M	QPSK	25	0	-	Front	10mm	Ant 1	DSI 6	20525	836.5	19.10	20.20	1.288	-	-	0.11	0.316	0.407
	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 6	20525	836.5	19.18	20.20	1.265	-	-	-0.05	0.282	0.357
	LTE Band 5	10M	QPSK	25	0	-	Back	10mm	Ant 1	DSI 6	20525	836.5	19.10	20.20	1.288	-	-	0.18	0.291	0.375
	LTE Band 5	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 6	20525	836.5	19.18	20.20	1.265	-	-	-0.01	0.449	0.568
	LTE Band 5	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	DSI 6	20525	836.5	19.10	20.20	1.288	-	-	0.14	0.433	0.558
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 0	DSI 6	26865	831.5	24.91	25.20	1.069	-	-	-0.17	0.389	0.416
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 0	DSI 6	26865	831.5	23.99	24.70	1.178	-	-	0.17	0.324	0.382
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 0	DSI 6	26865	831.5	24.91	25.20	1.069	-	-	-0.05	0.430	0.460
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 0	DSI 6	26865	831.5	23.99	24.70	1.178	-	-	0.01	0.365	0.430
34	LTE Band 26	15M	QPSK	1	0	-	Right Side	10mm	Ant 0	DSI 6	26865	831.5	24.91	25.20	1.069	-	-	0.01	0.641	0.685
	LTE Band 26	15M	QPSK	36	0	-	Right Side	10mm	Ant 0	DSI 6	26865	831.5	23.99	24.70	1.178	-	-	0.1	0.538	0.634
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	10mm	Ant 0	DSI 6	26865	831.5	24.91	25.20	1.069	-	-	-0.17	0.322	0.344
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	10mm	Ant 0	DSI 6	26865	831.5	23.99	24.70	1.178	-	-	0.04	0.280	0.330
	LTE Band 26	15M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 6	26865	831.5	19.16	20.20	1.271	-	-	-0.01	0.264	0.335
	LTE Band 26	15M	QPSK	36	0	-	Front	10mm	Ant 1	DSI 6	26865	831.5	18.98	20.20	1.324	-	-	-0.08	0.280	0.371
	LTE Band 26	15M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 6	26865	831.5	19.16	20.20	1.271	-	-	0.05	0.243	0.309
	LTE Band 26	15M	QPSK	36	0	-	Back	10mm	Ant 1	DSI 6	26865	831.5	18.98	20.20	1.324	-	-	0.06	0.262	0.347
	LTE Band 26	15M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 6	26865	831.5	19.16	20.20	1.271	-	-	0.02	0.404	0.513
	LTE Band 26	15M	QPSK	36	0	-	Left Side	10mm	Ant 1	DSI 6	26865	831.5	18.98	20.20	1.324	-	-	-0.09	0.382	0.506
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 6	167300	836.5	24.69	25.20	1.125	-	-	-0.08	0.428	0.481
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 6	167300	836.5	24.58	25.20	1.153	-	-	0.13	0.505	0.582
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 6	167300	836.5	24.69	25.20	1.125	-	-	0.12	0.479	0.539
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 6	167300	836.5	24.58	25.20	1.153	-	-	0.03	0.525	0.606
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 6	167300	836.5	24.69	25.20	1.125	-	-	0.18	0.605	0.680
35	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 6	167300	836.5	24.58	25.20	1.153	-	-	-0.07	0.606	0.699
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 6	167300	836.5	24.69	25.20	1.125	-	-	0.16	0.412	0.463
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 6	167300	836.5	24.58	25.20	1.153	-	-	-0.1	0.461	0.532



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	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 6	167300	836.5	19.22	20.20	1.253	-	-	0.07	0.306	0.383
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 6	167300	836.5	19.10	20.20	1.288	-	-	0.18	0.354	0.456
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 6	167300	836.5	19.22	20.20	1.253	-	-	-0.1	0.295	0.370
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 6	167300	836.5	19.10	20.20	1.288	-	-	0.01	0.327	0.421
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 6	167300	836.5	19.22	20.20	1.253	-	-	-0.15	0.434	0.544
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 6	167300	836.5	19.10	20.20	1.288	-	-	-0.05	0.488	0.629
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 6	166300	831.5	25.19	25.70	1.125	-	-	0.19	0.446	0.502
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 0	DSI 6	166300	831.5	25.07	25.70	1.156	-	-	0.07	0.501	0.579
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 6	166300	831.5	25.19	25.70	1.125	-	-	-0.18	0.518	0.583
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 0	DSI 6	166300	831.5	25.07	25.70	1.156	-	-	0.03	0.565	0.653
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 6	166300	831.5	25.19	25.70	1.125	-	-	-0.15	0.689	0.775
36	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 6	166300	831.5	25.07	25.70	1.156	-	-	0.09	0.697	0.806
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Right Side	10mm	Ant 0	DSI 6	166300	831.5	24.03	24.70	1.167	-	-	0.06	0.553	0.645
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 6	166300	831.5	25.19	25.70	1.125	-	-	-0.15	0.371	0.417
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	10mm	Ant 0	DSI 6	166300	831.5	25.07	25.70	1.156	-	-	0.11	0.442	0.511
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 6	166300	831.5	19.66	20.70	1.271	-	-	-0.08	0.384	0.488
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	10mm	Ant 1	DSI 6	166300	831.5	19.57	20.70	1.297	-	-	-0.17	0.439	0.569
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 6	166300	831.5	19.66	20.70	1.271	-	-	-0.08	0.353	0.449
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	10mm	Ant 1	DSI 6	166300	831.5	19.57	20.70	1.297	-	-	-0.04	0.407	0.528
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 6	166300	831.5	19.66	20.70	1.271	-	-	-0.08	0.551	0.700
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	10mm	Ant 1	DSI 6	166300	831.5	19.57	20.70	1.297	-	-	0.04	0.595	0.772
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 3	DSI 6	1413	1732.6	17.08	18.00	1.236	-	-	0.17	0.095	0.117
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 3	DSI 6	1413	1732.6	17.08	18.00	1.236	-	-	0.18	0.103	0.127
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 3	DSI 6	1413	1732.6	17.08	18.00	1.236	-	-	-0.04	0.172	0.213
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 3	DSI 6	1413	1732.6	17.08	18.00	1.236	-	-	-0.04	0.047	0.058
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 2	DSI 6	1413	1732.6	16.67	18.00	1.358	-	-	-0.08	0.168	0.228
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 2	DSI 6	1413	1732.6	16.67	18.00	1.358	-	-	-0.13	0.198	0.269
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 2	DSI 6	1413	1732.6	16.67	18.00	1.358	-	-	0.02	0.314	0.427
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 5	DSI 6	1413	1732.6	20.87	22.00	1.297	-	-	0.02	0.387	0.502
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 5	DSI 6	1413	1732.6	20.87	22.00	1.297	-	-	0.01	0.388	0.503
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 5	DSI 6	1413	1732.6	20.87	22.00	1.297	-	-	0.18	0.169	0.219
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 5	DSI 6	1413	1732.6	20.87	22.00	1.297	-	-	-0.11	0.688	0.892
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 5	DSI 6	1312	1712.4	20.78	22.00	1.324	-	-	-0.05	0.680	0.901
37	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 5	DSI 6	1513	1752.6	20.74	22.00	1.337	-	-	-0.04	0.719	0.961
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 6	20175	1732.5	18.69	19.20	1.125	-	-	-0.13	0.145	0.163
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 6	20175	1732.5	18.67	19.20	1.130	-	-	0.06	0.146	0.165
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 6	20175	1732.5	18.69	19.20	1.125	-	-	-0.03	0.158	0.178
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 6	20175	1732.5	18.67	19.20	1.130	-	-	-0.03	0.149	0.168
	LTE Band 4	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 6	20175	1732.5	18.69	19.20	1.125	-	-	-0.03	0.254	0.286
	LTE Band 4	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 6	20175	1732.5	18.67	19.20	1.130	-	-	0.08	0.252	0.285
	LTE Band 4	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	DSI 6	20175	1732.5	18.69	19.20	1.125	-	-	-0.07	0.085	0.096
	LTE Band 4	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	DSI 6	20175	1732.5	18.67	19.20	1.130	-	-	0.05	0.087	0.098
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 6	20175	1732.5	18.04	19.20	1.306	-	-	-0.11	0.208	0.272
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 6	20175	1732.5	17.96	19.20	1.330	-	-	-0.12	0.210	0.279
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 6	20175	1732.5	18.04	19.20	1.306	-	-	0.03	0.233	0.304
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 6	20175	1732.5	17.96	19.20	1.330	-	-	-0.16	0.245	0.326
	LTE Band 4	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	20175	1732.5	18.04	19.20	1.306	-	-	0.01	0.381	0.498
	LTE Band 4	20M	QPSK	50	0	-	Right Side	10mm	Ant 2	DSI 6	20175	1732.5	17.96	19.20	1.330	-	-	-0.02	0.366	0.487
	LTE Band 4	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 6	20175	1732.5	21.97	23.20	1.327	-	-	0.08	0.354	0.470
	LTE Band 4	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 6	20175	1732.5	21.93	23.20	1.340	-	-	0.01	0.379	0.508
	LTE Band 4	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 6	20175	1732.5	21.97	23.20	1.327	-	-	0.03	0.362	0.481
	LTE Band 4	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 6	20175	1732.5	21.93	23.20	1.340	-	-	-0.08	0.360	0.482
	LTE Band 4	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 6	20175	1732.5	21.97	23.20	1.327	-	-	-0.08	0.126	0.167
	LTE Band 4	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 6	20175	1732.5	21.93	23.20	1.340	-	-	0.1	0.133	0.178
	LTE Band 4	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	20175	1732.5	21.97	23.20	1.327	-	-	-0.18	0.681	0.904



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38	LTE Band 4	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	20175	1732.5	21.93	23.20	1.340	-	-	-0.03	0.795	1.065
	LTE Band 4	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 5	DSI 6	20175	1732.5	21.91	23.20	1.346	-	-	-0.03	0.725	0.976
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 6	132322	1745	18.17	18.70	1.130	-	-	0.15	0.128	0.145
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 6	132322	1745	18.13	18.70	1.140	-	-	-0.09	0.133	0.152
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 6	132322	1745	18.17	18.70	1.130	-	-	0.11	0.144	0.163
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 6	132322	1745	18.13	18.70	1.140	-	-	-0.05	0.151	0.172
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 6	132322	1745	18.17	18.70	1.130	-	-	-0.13	0.244	0.276
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 6	132322	1745	18.13	18.70	1.140	-	-	-0.08	0.235	0.268
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	DSI 6	132322	1745	18.17	18.70	1.130	-	-	0.16	0.077	0.087
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	DSI 6	132322	1745	18.13	18.70	1.140	-	-	0.05	0.074	0.084
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 6	132322	1745	17.90	19.20	1.349	-	-	0.05	0.196	0.264
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 6	132322	1745	17.86	19.20	1.361	-	-	-0.03	0.193	0.263
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 6	132322	1745	17.90	19.20	1.349	-	-	-0.15	0.219	0.295
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 6	132322	1745	17.86	19.20	1.361	-	-	0.02	0.223	0.304
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	132322	1745	17.90	19.20	1.349	-	-	0.02	0.403	0.544
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 2	DSI 6	132322	1745	17.86	19.20	1.361	-	-	0.07	0.341	0.464
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 6	132322	1745	22.05	23.20	1.303	-	-	0.14	0.422	0.550
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 6	132322	1745	21.96	23.20	1.330	-	-	0.11	0.434	0.577
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 6	132322	1745	22.05	23.20	1.303	-	-	-0.05	0.407	0.530
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 6	132322	1745	21.96	23.20	1.330	-	-	0.18	0.424	0.564
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 6	132322	1745	22.05	23.20	1.303	-	-	0.14	0.151	0.197
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 6	132322	1745	21.96	23.20	1.330	-	-	-0.17	0.160	0.213
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	132322	1745	22.05	23.20	1.303	-	-	0.17	0.723	0.942
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	132072	1720	21.97	23.20	1.327	-	-	-0.05	0.654	0.868
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	132572	1770	22.02	23.20	1.312	-	-	0.01	0.742	0.974
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	132322	1745	21.96	23.20	1.330	-	-	0.1	0.741	0.986
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	132072	1720	21.86	23.20	1.361	-	-	-0.17	0.701	0.954
39	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	132572	1770	21.92	23.20	1.343	-	-	-0.01	0.772	1.037
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 5	DSI 6	132322	1745	21.92	23.20	1.343	-	-	0.04	0.722	0.969
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 6	349000	1745	18.83	19.20	1.089	-	-	0.16	0.230	0.250
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 6	349000	1745	18.76	19.20	1.107	-	-	0.13	0.222	0.246
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 6	349000	1745	18.83	19.20	1.089	-	-	-0.18	0.252	0.274
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 6	349000	1745	18.76	19.20	1.107	-	-	0.02	0.235	0.260
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 6	349000	1745	18.83	19.20	1.089	-	-	-0.07	0.487	0.530
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 6	349000	1745	18.76	19.20	1.107	-	-	0.16	0.428	0.474
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 3	DSI 6	349000	1745	18.83	19.20	1.089	-	-	-0.03	0.010	0.011
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 3	DSI 6	349000	1745	18.76	19.20	1.107	-	-	0.07	0.006	0.007
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 6	349000	1745	16.95	18.00	1.274	-	-	0.05	0.154	0.196
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 6	349000	1745	16.91	18.00	1.285	-	-	0.01	0.156	0.201
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 6	349000	1745	16.95	18.00	1.274	-	-	-0.01	0.176	0.224
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 6	349000	1745	16.91	18.00	1.285	-	-	-0.06	0.168	0.216
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 2	DSI 6	349000	1745	16.95	18.00	1.274	-	-	-0.04	0.311	0.396
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 2	DSI 6	349000	1745	16.91	18.00	1.285	-	-	0.05	0.320	0.411
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 6	349000	1745	21.55	22.50	1.245	-	-	-0.01	0.512	0.637
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 6	349000	1745	21.42	22.50	1.282	-	-	-0.08	0.535	0.686
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 6	349000	1745	21.55	22.50	1.245	-	-	0.05	0.490	0.610
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 6	349000	1745	21.42	22.50	1.282	-	-	0.06	0.506	0.649
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 6	349000	1745	21.55	22.50	1.245	-	-	-0.09	0.159	0.198
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 6	349000	1745	21.42	22.50	1.282	-	-	-0.08	0.133	0.171
40	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 6	349000	1745	21.55	22.50	1.245	-	-	-0.01	0.732	0.911
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 6	349000	1745	21.42	22.50	1.282	-	-	0.13	0.709	0.909
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 6	349000	1745	21.15	22.50	1.365	-	-	0.06	0.655	0.894
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	10mm	Ant 5	DSI 6	661	1880	23.65	25.00	1.365	-	-	-0.09	0.308	0.420
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	10mm	Ant 5	DSI 6	661	1880	23.65	25.00	1.365	-	-	-0.17	0.296	0.404
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	10mm	Ant 5	DSI 6	661	1880	23.65	25.00	1.365	-	-	-0.1	0.111	0.151



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	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	10mm	Ant 5	DSI 6	661	1880	23.65	25.00	1.365	-	-	-0.04	0.587	0.801
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	10mm	Ant 5	DSI 6	512	1850.2	23.60	25.00	1.380	-	-	0.02	0.577	0.796
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	10mm	Ant 5	DSI 6	810	1909.8	23.61	25.00	1.377	-	-	0.01	0.563	0.775
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	10mm	Ant 2	DSI 6	661	1880	21.64	23.50	1.535	-	-	0.18	0.323	0.496
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	10mm	Ant 2	DSI 6	661	1880	21.64	23.50	1.535	-	-	-0.17	0.338	0.519
41	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	10mm	Ant 2	DSI 6	661	1880	21.64	23.50	1.535	-	-	-0.15	0.529	0.812
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	10mm	Ant 2	DSI 6	512	1850.2	21.57	23.50	1.560	-	-	-0.02	0.512	0.798
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	10mm	Ant 2	DSI 6	810	1909.8	21.51	23.50	1.581	-	-	0.1	0.510	0.806
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 5	DSI 6	9400	1880	20.71	21.50	1.199	-	-	-0.04	0.398	0.477
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 5	DSI 6	9400	1880	20.71	21.50	1.199	-	-	0.12	0.406	0.487
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 5	DSI 6	9400	1880	20.71	21.50	1.199	-	-	0.09	0.140	0.168
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 5	DSI 6	9400	1880	20.71	21.50	1.199	-	-	-0.02	0.810	0.972
42	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 5	DSI 6	9262	1852.4	20.60	21.50	1.230	-	-	-0.03	0.827	1.017
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 5	DSI 6	9538	1907.6	20.61	21.50	1.227	-	-	-0.16	0.766	0.940
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 3	DSI 6	9400	1880	16.52	17.00	1.117	-	-	-0.04	0.153	0.171
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 3	DSI 6	9400	1880	16.52	17.00	1.117	-	-	-0.05	0.165	0.184
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 3	DSI 6	9400	1880	16.52	17.00	1.117	-	-	-0.02	0.295	0.329
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 3	DSI 6	9400	1880	16.52	17.00	1.117	-	-	0.01	0.077	0.086
	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 6	18900	1880	16.73	18.00	1.340	-	-	-0.13	0.103	0.138
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 6	18900	1880	16.69	18.00	1.352	-	-	-0.01	0.101	0.137
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 6	18900	1880	16.73	18.00	1.340	-	-	-0.09	0.118	0.158
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 6	18900	1880	16.69	18.00	1.352	-	-	0.05	0.118	0.160
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 6	18900	1880	16.73	18.00	1.340	-	-	-0.01	0.185	0.248
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 6	18900	1880	16.69	18.00	1.352	-	-	0.02	0.181	0.245
	LTE Band 2	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	DSI 6	18900	1880	16.73	18.00	1.340	-	-	-0.13	0.051	0.068
	LTE Band 2	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	DSI 6	18900	1880	16.69	18.00	1.352	-	-	0.17	0.049	0.066
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 6	18900	1880	16.37	17.50	1.297	-	-	0.08	0.188	0.244
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 6	18900	1880	16.26	17.50	1.330	-	-	0.01	0.187	0.249
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 6	18900	1880	16.37	17.50	1.297	-	-	0.03	0.212	0.275
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 6	18900	1880	16.26	17.50	1.330	-	-	-0.08	0.219	0.291
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	18900	1880	16.37	17.50	1.297	-	-	0.01	0.313	0.406
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Right Side	10mm	Ant 2	DSI 6	18900	1880	16.26	17.50	1.330	-	-	-0.08	0.300	0.399
	LTE Band 2_Main PA	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	18900	1880	15.53	17.00	1.403	-	-	0.02	0.212	0.297
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 6	18900	1880	20.85	21.50	1.161	-	-	-0.03	0.390	0.453
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 6	18900	1880	20.76	21.50	1.186	-	-	-0.06	0.365	0.433
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 6	18900	1880	20.85	21.50	1.161	-	-	0.08	0.373	0.433
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 6	18900	1880	20.76	21.50	1.186	-	-	-0.07	0.393	0.466
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 6	18900	1880	20.85	21.50	1.161	-	-	0.11	0.142	0.165
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 6	18900	1880	20.76	21.50	1.186	-	-	-0.13	0.147	0.174
43	LTE Band 2_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	18900	1880	20.85	21.50	1.161	-	-	-0.04	0.771	0.895
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	18700	1860	20.66	21.50	1.213	-	-	0.04	0.728	0.883
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	19100	1900	20.73	21.50	1.194	-	-	0.17	0.720	0.860
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	18900	1880	20.76	21.50	1.186	-	-	-0.1	0.709	0.841
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	18700	1860	20.54	21.50	1.247	-	-	0.17	0.707	0.882
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	19100	1900	20.61	21.50	1.227	-	-	-0.15	0.704	0.864
	LTE Band 2_Other PA	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 5	DSI 6	18900	1880	20.53	21.50	1.250	-	-	0.18	0.709	0.886
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 6	376000	1880	17.74	18.50	1.191	-	-	-0.02	0.140	0.167
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 6	376000	1880	17.57	18.50	1.239	-	-	0.1	0.144	0.178
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 6	376000	1880	17.74	18.50	1.191	-	-	0.04	0.147	0.175
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 6	376000	1880	17.57	18.50	1.239	-	-	0.13	0.155	0.192
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 6	376000	1880	17.74	18.50	1.191	-	-	-0.08	0.248	0.295
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 6	376000	1880	17.57	18.50	1.239	-	-	-0.18	0.233	0.289
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 3	DSI 6	376000	1880	17.74	18.50	1.191	-	-	-0.11	0.068	0.081
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 3	DSI 6	376000	1880	17.57	18.50	1.239	-	-	-0.16	0.064	0.079
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 6	376000	1880	17.28	18.50	1.324	-	-	-0.15	0.274	0.363
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 6	376000	1880	17.21	18.50	1.346	-	-	-0.06	0.270	0.363



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	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 6	376000	1880	17.28	18.50	1.324	-	-	-0.14	0.299	0.396
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 6	376000	1880	17.21	18.50	1.346	-	-	-0.19	0.292	0.393
44	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 2	DSI 6	376000	1880	17.28	18.50	1.324	-	-	0.01	0.472	0.625
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 2	DSI 6	376000	1880	17.21	18.50	1.346	-	-	0.01	0.431	0.580
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 6	21100	2535	16.63	17.20	1.140	-	-	0.06	0.246	0.281
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 6	21100	2535	16.58	17.20	1.153	-	-	0.02	0.249	0.287
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 6	21100	2535	16.63	17.20	1.140	-	-	0.12	0.288	0.328
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 6	21100	2535	16.58	17.20	1.153	-	-	-0.16	0.288	0.332
45	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 6	21100	2535	16.63	17.20	1.140	-	-	-0.01	0.455	0.519
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 6	21100	2535	16.58	17.20	1.153	-	-	-0.02	0.448	0.517
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	DSI 6	21100	2535	16.63	17.20	1.140	-	-	0.07	0.045	0.051
	LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	DSI 6	21100	2535	16.58	17.20	1.153	-	-	-0.02	0.043	0.050
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 6	21100	2535	13.97	14.50	1.130	-	-	-0.15	0.322	0.364
	LTE Band 7C	20M	QPSK	1	99	-	Left Side	10mm	Ant 3	DSI 6	21100+21298	2535+2554.8	16.47	17.20	1.183	-	-	0.06	0.410	0.485
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 6	21100	2535	15.30	16.00	1.175	-	-	-0.05	0.147	0.173
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 6	21100	2535	15.24	16.00	1.191	-	-	-0.13	0.147	0.175
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 6	21100	2535	15.30	16.00	1.175	-	-	0.08	0.148	0.174
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 6	21100	2535	15.24	16.00	1.191	-	-	0.16	0.156	0.186
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	21100	2535	15.30	16.00	1.175	-	-	-0.01	0.280	0.329
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Right Side	10mm	Ant 2	DSI 6	21100	2535	15.24	16.00	1.191	-	-	0.01	0.258	0.307
	LTE Band 7_Main PA	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	21100	2535	15.04	16.50	1.400	-	-	0.02	0.171	0.239
	LTE Band 7C	20M	QPSK	1	99	-	Right Side	10mm	Ant 2	DSI 6	21100+21298	2535+2554.8	14.89	16.50	1.449	-	-	0.03	0.148	0.214
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 6	21100	2535	19.28	19.50	1.052	-	-	-0.04	0.247	0.260
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 6	21100	2535	19.20	19.50	1.072	-	-	-0.08	0.254	0.272
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 6	21100	2535	19.28	19.50	1.052	-	-	0.01	0.235	0.247
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 6	21100	2535	19.20	19.50	1.072	-	-	-0.14	0.236	0.253
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 6	21100	2535	19.28	19.50	1.052	-	-	0.01	0.125	0.131
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 6	21100	2535	19.20	19.50	1.072	-	-	0.18	0.126	0.135
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	21100	2535	19.28	19.50	1.052	-	-	0.02	0.421	0.443
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	21100	2535	19.20	19.50	1.072	-	-	-0.06	0.406	0.435
	LTE Band 7_Main PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	21100	2535	19.28	20.50	1.324	-	-	-0.02	0.341	0.452
	LTE Band 7C	20M	QPSK	1	99	-	Bottom Side	10mm	Ant 5	DSI 6	21100+21298	2535+2554.8	18.97	20.50	1.422	-	-	0.02	0.306	0.435
	LTE Band 38	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 6	38000	2595	18.46	18.70	1.057	62.9	1.006	-0.16	0.199	0.212
	LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 6	38000	2595	18.40	18.70	1.072	62.9	1.006	0.1	0.191	0.206
	LTE Band 38	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 6	38000	2595	18.46	18.70	1.057	62.9	1.006	-0.04	0.222	0.236
	LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 6	38000	2595	18.40	18.70	1.072	62.9	1.006	-0.01	0.222	0.239
	LTE Band 38	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 6	38000	2595	18.46	18.70	1.057	62.9	1.006	-0.1	0.355	0.377
	LTE Band 38	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 6	38000	2595	18.40	18.70	1.072	62.9	1.006	0.06	0.341	0.368
	LTE Band 38	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	DSI 6	38000	2595	18.46	18.70	1.057	62.9	1.006	-0.11	0.050	0.053
	LTE Band 38	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	DSI 6	38000	2595	18.40	18.70	1.072	62.9	1.006	-0.06	0.043	0.046
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 6	38000	2595	14.95	15.50	1.135	62.9	1.006	-0.08	0.248	0.283
	LTE Band 38C	20M	QPSK	1	99	-	Left Side	10mm	Ant 3	DSI 6	37901+38099	2585.1+2604.9	18.32	18.70	1.091	62.9	1.006	0.02	0.312	0.343
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 6	38000	2595	15.98	17.00	1.265	62.9	1.006	-0.15	0.149	0.190
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 6	38000	2595	15.83	17.00	1.309	62.9	1.006	0.03	0.145	0.191
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 6	38000	2595	15.98	17.00	1.265	62.9	1.006	-0.13	0.161	0.205
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 6	38000	2595	15.83	17.00	1.309	62.9	1.006	0.16	0.164	0.216
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	38000	2595	15.98	17.00	1.265	62.9	1.006	0.01	0.296	0.377
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Right Side	10mm	Ant 2	DSI 6	38000	2595	15.83	17.00	1.309	62.9	1.006	-0.15	0.280	0.369
	LTE Band 38_Main PA	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	38000	2595	16.25	17.50	1.334	62.9	1.006	0.03	0.169	0.227
	LTE Band 38C	20M	QPSK	1	99	-	Right Side	10mm	Ant 2	DSI 6	37901+38099	2585.1+2604.9	16.04	17.50	1.400	62.9	1.006	0.06	0.155	0.218
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 6	38000	2595	21.86	22.50	1.159	62.9	1.006	0.16	0.322	0.375
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 6	38000	2595	21.73	22.50	1.194	62.9	1.006	0.06	0.329	0.395
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 6	38000	2595	21.86	22.50	1.159	62.9	1.006	-0.02	0.379	0.442
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 6	38000	2595	21.73	22.50	1.194	62.9	1.006	0.07	0.346	0.416



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	LTE Band 38_Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 6	38000	2595	21.86	22.50	1.159	62.9	1.006	-0.17	0.124	0.145
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 6	38000	2595	21.73	22.50	1.194	62.9	1.006	0.1	0.118	0.142
46	LTE Band 38_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	38000	2595	21.86	22.50	1.159	62.9	1.006	0.03	0.545	0.635
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	38000	2595	21.73	22.50	1.194	62.9	1.006	0.01	0.528	0.634
	LTE Band 38_Main PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	38000	2595	22.28	23.50	1.324	62.9	1.006	-0.02	0.340	0.453
	LTE Band 38C	20M	QPSK	1	99	-	Bottom Side	10mm	Ant 5	DSI 6	37901+38099	2585.1+2604.9	22.16	23.50	1.361	62.9	1.006	0.09	0.310	0.425
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 6	38000	2595	17.90	19.00	1.288	62.9	1.006	-0.12	0.099	0.128
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 6	38000	2595	17.82	19.00	1.312	62.9	1.006	-0.06	0.101	0.133
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 6	38000	2595	17.90	19.00	1.288	62.9	1.006	-0.19	0.105	0.136
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 6	38000	2595	17.82	19.00	1.312	62.9	1.006	0.09	0.154	0.203
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 6	38000	2595	17.90	19.00	1.288	62.9	1.006	0.13	0.054	0.070
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 6	38000	2595	17.82	19.00	1.312	62.9	1.006	-0.08	0.058	0.077
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 6	38000	2595	17.90	19.00	1.288	62.9	1.006	0.08	0.282	0.365
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 6	38000	2595	17.82	19.00	1.312	62.9	1.006	0.04	0.270	0.356
	LTE Band 38_Main PA	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 6	38000	2595	18.16	19.50	1.361	62.9	1.006	-0.02	0.189	0.259
	LTE Band 38C	20M	QPSK	1	99	-	Top Side	10mm	Ant 4	DSI 6	37901+38099	2585.1+2604.9	17.99	19.50	1.416	62.9	1.006	0.06	0.166	0.236
	LTE Band 41	20M	QPSK	1	0	-	Front	10mm	Ant 3	DSI 6	40620	2593	18.50	18.70	1.047	62.9	1.006	-0.02	0.171	0.180
	LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 3	DSI 6	40620	2593	18.45	18.70	1.059	62.9	1.006	-0.09	0.174	0.185
	LTE Band 41	20M	QPSK	1	0	-	Back	10mm	Ant 3	DSI 6	40620	2593	18.50	18.70	1.047	62.9	1.006	0.14	0.194	0.204
	LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 3	DSI 6	40620	2593	18.45	18.70	1.059	62.9	1.006	0.1	0.205	0.218
	LTE Band 41	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 6	40620	2593	18.50	18.70	1.047	62.9	1.006	-0.03	0.333	0.351
	LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	DSI 6	40620	2593	18.45	18.70	1.059	62.9	1.006	-0.09	0.320	0.341
	LTE Band 41	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	DSI 6	40620	2593	18.50	18.70	1.047	62.9	1.006	0.07	0.040	0.042
	LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	DSI 6	40620	2593	18.45	18.70	1.059	62.9	1.006	-0.09	0.038	0.040
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	DSI 6	40620	2593	14.89	15.50	1.151	62.9	1.006	-0.04	0.239	0.277
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 2	DSI 6	40620	2593	15.93	17.00	1.279	62.9	1.006	-0.16	0.165	0.212
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 2	DSI 6	40620	2593	15.85	17.00	1.303	62.9	1.006	-0.18	0.156	0.205
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 2	DSI 6	40620	2593	15.93	17.00	1.279	62.9	1.006	-0.07	0.179	0.230
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 2	DSI 6	40620	2593	15.85	17.00	1.303	62.9	1.006	0.11	0.174	0.228
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	40620	2593	15.93	17.00	1.279	62.9	1.006	-0.06	0.319	0.411
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Right Side	10mm	Ant 2	DSI 6	40620	2593	15.85	17.00	1.303	62.9	1.006	-0.08	0.299	0.392
	LTE Band 41_Main PA	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	DSI 6	40620	2593	16.17	17.50	1.358	62.9	1.006	0.02	0.176	0.240
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 5	DSI 6	40620	2593	21.71	22.50	1.199	62.9	1.006	0.01	0.342	0.413
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 5	DSI 6	40620	2593	21.58	22.50	1.236	62.9	1.006	-0.13	0.354	0.440
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 5	DSI 6	40620	2593	21.71	22.50	1.199	62.9	1.006	-0.1	0.354	0.427
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 5	DSI 6	40620	2593	21.58	22.50	1.236	62.9	1.006	-0.07	0.339	0.422
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	DSI 6	40620	2593	21.71	22.50	1.199	62.9	1.006	0.11	0.118	0.142
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	DSI 6	40620	2593	21.58	22.50	1.236	62.9	1.006	-0.17	0.120	0.149
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	40620	2593	21.71	22.50	1.199	62.9	1.006	0.01	0.513	0.619
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	39750	2506	21.55	22.50	1.245	62.9	1.006	-0.13	0.490	0.613
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	40185	2549.5	21.59	22.50	1.233	62.9	1.006	0.08	0.492	0.610
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	41055	2636.5	21.63	22.50	1.222	62.9	1.006	0.16	0.502	0.617
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	DSI 6	41490	2680	21.60	22.50	1.230	62.9	1.006	0.01	0.488	0.604
47	LTE Band 41_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	40620	2593	21.58	22.50	1.236	62.9	1.006	0.02	0.531	0.660
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	39750	2506	21.44	22.50	1.276	62.9	1.006	-0.16	0.512	0.657
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	40185	2549.5	21.47	22.50	1.268	62.9	1.006	0.1	0.514	0.655
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	41055	2636.5	21.62	22.50	1.225	62.9	1.006	-0.04	0.503	0.620
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	41490	2680	21.58	22.50	1.236	62.9	1.006	-0.01	0.486	0.604
	LTE Band 41_Other PA	20M	QPSK	100	0	-	Bottom Side	10mm	Ant 5	DSI 6	40620	2593	21.49	22.50	1.262	62.9	1.006	0.03	0.495	0.628
	LTE Band 41_Main PA	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	DSI 6	40620	2593	22.19	23.50	1.352	62.9	1.006	-0.02	0.452	0.615
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Front	10mm	Ant 4	DSI 6	40620	2593	17.76	19.00	1.330	62.9	1.006	0.03	0.093	0.124
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Front	10mm	Ant 4	DSI 6	40620	2593	17.71	19.00	1.346	62.9	1.006	0.16	0.094	0.127
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Back	10mm	Ant 4	DSI 6	40620	2593	17.76	19.00	1.330	62.9	1.006	0.01	0.135	0.181
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Back	10mm	Ant 4	DSI 6	40620	2593	17.71	19.00	1.346	62.9	1.006	-0.06	0.137	0.185
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Left Side	10mm	Ant 4	DSI 6	40620	2593	17.76	19.00	1.330	62.9	1.006	0.14	0.048	0.064
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Left Side	10mm	Ant 4	DSI 6	40620	2593	17.71	19.00	1.346	62.9	1.006	-0.09	0.052	0.070



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	LTE Band 41_Other PA	20M	QPSK	1	0	-	Top Side	10mm	Ant 4	DSI 6	40620	2593	17.76	19.00	1.330	62.9	1.006	-0.09	0.197	0.264
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 6	40620	2593	17.71	19.00	1.346	62.9	1.006	0.01	0.274	0.371
	LTE Band 41_Main PA	20M	QPSK	50	0	-	Top Side	10mm	Ant 4	DSI 6	40620	2593	18.09	19.50	1.384	62.9	1.006	0.02	0.178	0.248
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 6	507000	2535	16.75	17.20	1.109	-	-	-0.1	0.187	0.207
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 3	DSI 6	507000	2535	16.38	17.20	1.208	-	-	-0.01	0.191	0.231
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 6	507000	2535	16.75	17.20	1.109	-	-	-0.09	0.193	0.214
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 3	DSI 6	507000	2535	16.38	17.20	1.208	-	-	-0.06	0.206	0.249
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 6	507000	2535	16.75	17.20	1.109	-	-	-0.17	0.301	0.334
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 3	DSI 6	507000	2535	16.38	17.20	1.208	-	-	-0.02	0.311	0.376
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	10mm	Ant 3	DSI 6	507000	2535	16.75	17.20	1.109	-	-	-0.01	0.010	0.011
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	10mm	Ant 3	DSI 6	507000	2535	16.38	17.20	1.208	-	-	-0.11	0.005	0.006
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 6	507000	2535	15.87	17.00	1.297	-	-	0.07	0.146	0.189
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 2	DSI 6	507000	2535	15.80	17.00	1.318	-	-	0.05	0.157	0.207
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 6	507000	2535	15.87	17.00	1.297	-	-	-0.12	0.136	0.176
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 2	DSI 6	507000	2535	15.80	17.00	1.318	-	-	0.19	0.158	0.208
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	10mm	Ant 2	DSI 6	507000	2535	15.87	17.00	1.297	-	-	-0.01	0.270	0.350
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	10mm	Ant 2	DSI 6	507000	2535	15.80	17.00	1.318	-	-	-0.02	0.289	0.381
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 6	507000	2535	20.38	21.50	1.294	-	-	0.14	0.251	0.325
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	10mm	Ant 5	DSI 6	507000	2535	20.23	21.50	1.340	-	-	0.03	0.282	0.378
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 6	507000	2535	20.38	21.50	1.294	-	-	0.1	0.259	0.335
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	10mm	Ant 5	DSI 6	507000	2535	20.23	21.50	1.340	-	-	0.16	0.288	0.386
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 6	507000	2535	20.38	21.50	1.294	-	-	-0.06	0.127	0.164
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	10mm	Ant 5	DSI 6	507000	2535	20.23	21.50	1.340	-	-	0.02	0.134	0.180
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 6	507000	2535	20.38	21.50	1.294	-	-	-0.16	0.454	0.588
48	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	10mm	Ant 5	DSI 6	507000	2535	20.23	21.50	1.340	-	-	0.02	0.457	0.612
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 3	DSI 6	519000	2595	16.41	16.70	1.069	-	-	-0.19	0.176	0.188
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 3	DSI 6	519000	2595	16.30	16.70	1.096	-	-	-0.03	0.164	0.180
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 3	DSI 6	519000	2595	16.41	16.70	1.069	-	-	-0.08	0.182	0.195
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 3	DSI 6	519000	2595	16.30	16.70	1.096	-	-	0.1	0.193	0.212
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 3	DSI 6	519000	2595	16.41	16.70	1.069	-	-	-0.17	0.309	0.330
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 3	DSI 6	519000	2595	16.30	16.70	1.096	-	-	0.15	0.298	0.327
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 3	DSI 6	519000	2595	16.41	16.70	1.069	-	-	0.12	0.043	0.046
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 3	DSI 6	519000	2595	16.30	16.70	1.096	-	-	-0.12	0.045	0.049
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI 6	519000	2595	14.83	16.00	1.309	-	-	-0.15	0.147	0.192
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI 6	519000	2595	14.69	16.00	1.352	-	-	-0.19	0.137	0.185
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI 6	519000	2595	14.83	16.00	1.309	-	-	-0.13	0.150	0.196
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI 6	519000	2595	14.69	16.00	1.352	-	-	-0.05	0.151	0.204
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 2	DSI 6	519000	2595	14.83	16.00	1.309	-	-	-0.01	0.285	0.373
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Right Side	10mm	Ant 2	DSI 6	519000	2595	14.69	16.00	1.352	-	-	-0.12	0.267	0.361
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 6	519000	2595	20.46	21.00	1.132	-	-	0.05	0.220	0.249
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 6	519000	2595	20.36	21.00	1.159	-	-	-0.03	0.243	0.282
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 6	519000	2595	20.46	21.00	1.132	-	-	0.17	0.221	0.250
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 6	519000	2595	20.36	21.00	1.159	-	-	-0.15	0.228	0.264
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 6	519000	2595	20.46	21.00	1.132	-	-	0.16	0.101	0.114
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 6	519000	2595	20.36	21.00	1.159	-	-	0.05	0.095	0.110
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 6	519000	2595	20.46	21.00	1.132	-	-	-0.06	0.380	0.430
49	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 6	519000	2595	20.36	21.00	1.159	-	-	0.04	0.385	0.446
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 4	DSI 6	519000	2595	17.01	18.00	1.256	-	-	0.18	0.109	0.137
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 4	DSI 6	519000	2595	16.92	18.00	1.282	-	-	0.14	0.098	0.126
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI 6	519000	2595	17.01	18.00	1.256	-	-	0.03	0.157	0.197
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI 6	519000	2595	16.92	18.00	1.282	-	-	0.09	0.149	0.191
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 4	DSI 6	519000	2595	17.01	18.00	1.256	-	-	-0.13	0.057	0.072
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 4	DSI 6	519000	2595	16.92	18.00	1.282	-	-	-0.09	0.049	0.063
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 4	DSI 6	519000	2595	17.01	18.00	1.256	-	-	0.01	0.300	0.377
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 4	DSI 6	519000	2595	16.92	18.00	1.282	-	-	-0.18	0.275	0.353
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 3	DSI 6	518598	2592.99	15.88	16.20	1.076	-	-	0.12	0.186	0.200



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	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 3	DSI 6	518598	2592.99	15.68	16.20	1.127	-	-	0.11	0.188	0.212
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 3	DSI 6	518598	2592.99	15.88	16.20	1.076	-	-	0.11	0.193	0.208
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 3	DSI 6	518598	2592.99	15.68	16.20	1.127	-	-	-0.06	0.222	0.250
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 3	DSI 6	518598	2592.99	15.88	16.20	1.076	-	-	-0.02	0.311	0.335
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 3	DSI 6	518598	2592.99	15.68	16.20	1.127	-	-	-0.05	0.326	0.367
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 3	DSI 6	518598	2592.99	15.88	16.20	1.076	-	-	0.02	0.058	0.062
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 3	DSI 6	518598	2592.99	15.68	16.20	1.127	-	-	0.12	0.057	0.064
	FR1 n41 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 3	DSI 6	518598	2592.99	18.68	19.50	1.208	50	1.000	0.02	0.318	0.384
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI 6	518598	2592.99	15.02	16.50	1.406	-	-	-0.11	0.147	0.207
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 2	DSI 6	518598	2592.99	14.99	16.50	1.416	-	-	-0.11	0.156	0.221
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI 6	518598	2592.99	15.02	16.50	1.406	-	-	-0.05	0.158	0.222
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 2	DSI 6	518598	2592.99	14.99	16.50	1.416	-	-	0.03	0.170	0.241
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 2	DSI 6	518598	2592.99	15.02	16.50	1.406	-	-	-0.06	0.289	0.406
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 2	DSI 6	518598	2592.99	14.99	16.50	1.416	-	-	0.01	0.304	0.430
	FR1 n41 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 2	DSI 6	518598	2592.99	17.84	19.50	1.466	50	1.000	0.01	0.306	0.448
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 6	518598	2592.99	20.01	21.00	1.256	-	-	-0.01	0.237	0.298
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 5	DSI 6	518598	2592.99	19.91	21.00	1.285	-	-	-0.11	0.261	0.335
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 6	518598	2592.99	20.01	21.00	1.256	-	-	0.19	0.224	0.281
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	DSI 6	518598	2592.99	19.91	21.00	1.285	-	-	-0.14	0.248	0.319
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 6	518598	2592.99	20.01	21.00	1.256	-	-	-0.18	0.109	0.137
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 5	DSI 6	518598	2592.99	19.91	21.00	1.285	-	-	-0.06	0.091	0.117
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 6	518598	2592.99	20.01	21.00	1.256	-	-	0.02	0.370	0.465
50	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 6	518598	2592.99	19.91	21.00	1.285	-	-	-0.07	0.406	0.522
	FR1 n41 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 5	DSI 6	518598	2592.99	23.09	24.00	1.233	50	1.000	0.13	0.404	0.498
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 4	DSI 6	518598	2592.99	17.18	18.00	1.208	-	-	-0.03	0.112	0.135
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 4	DSI 6	518598	2592.99	17.08	18.00	1.236	-	-	0.03	0.122	0.151
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI 6	518598	2592.99	17.18	18.00	1.208	-	-	-0.17	0.172	0.208
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 4	DSI 6	518598	2592.99	17.08	18.00	1.236	-	-	0.02	0.185	0.229
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 4	DSI 6	518598	2592.99	17.18	18.00	1.208	-	-	-0.11	0.055	0.066
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 4	DSI 6	518598	2592.99	17.08	18.00	1.236	-	-	0.18	0.057	0.070
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 4	DSI 6	518598	2592.99	17.18	18.00	1.208	-	-	0.16	0.321	0.388
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 4	DSI 6	518598	2592.99	17.08	18.00	1.236	-	-	0.19	0.326	0.403
	FR1 n41 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 4	DSI 6	518598	2592.99	20.06	21.00	1.242	50	1.000	0.05	0.339	0.421
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 6	42590	3500	15.65	16.50	1.216	62.9	1.006	0.01	0.154	0.188
	LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 6	42590	3500	15.51	16.50	1.256	62.9	1.006	-0.04	0.071	0.090
	LTE Band 42	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 6	42590	3500	15.65	16.50	1.216	62.9	1.006	0.13	0.082	0.100
	LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 6	42590	3500	15.51	16.50	1.256	62.9	1.006	0.12	0.085	0.107
	LTE Band 42	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 6	42590	3500	15.65	16.50	1.216	62.9	1.006	0.07	0.057	0.070
	LTE Band 42	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 6	42590	3500	15.51	16.50	1.256	62.9	1.006	0.08	0.045	0.057
	LTE Band 42	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 6	42590	3500	15.65	16.50	1.216	62.9	1.006	0.19	0.152	0.186
	LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI 6	42590	3500	15.51	16.50	1.256	62.9	1.006	0.16	0.163	0.206
	LTE Band 42	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 6	42590	3500	20.03	21.50	1.403	62.9	1.006	-0.06	0.071	0.100
	LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI 6	42590	3500	20.00	21.50	1.413	62.9	1.006	0.02	0.070	0.099
	LTE Band 42	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 6	42590	3500	20.03	21.50	1.403	62.9	1.006	-0.03	0.138	0.195
	LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 6	42590	3500	20.00	21.50	1.413	62.9	1.006	0.07	0.148	0.210
	LTE Band 42	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 6	42590	3500	20.03	21.50	1.403	62.9	1.006	-0.14	0.215	0.303
	LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI 6	42590	3500	20.00	21.50	1.413	62.9	1.006	-0.12	0.179	0.254
	LTE Band 42	20M	QPSK	1	0	-	Front	10mm	Ant 7	DSI 6	42590	3500	17.21	18.50	1.346	62.9	1.006	0.1	0.109	0.148
	LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 7	DSI 6	42590	3500	17.06	18.50	1.393	62.9	1.006	0.11	0.101	0.142
	LTE Band 42	20M	QPSK	1	0	-	Back	10mm	Ant 7	DSI 6	42590	3500	17.21	18.50	1.346	62.9	1.006	-0.07	0.080	0.108
	LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 7	DSI 6	42590	3500	17.06	18.50	1.393	62.9	1.006	0.18	0.086	0.121
	LTE Band 42	20M	QPSK	1	0	-	Right Side	10mm	Ant 7	DSI 6	42590	3500	17.21	18.50	1.346	62.9	1.006	-0.08	0.238	0.322
	LTE Band 42	20M	QPSK	50	0	-	Right Side	10mm	Ant 7	DSI 6	42590	3500	17.06	18.50	1.393	62.9	1.006	0.12	0.221	0.310
	LTE Band 42	20M	QPSK	1	0	-	Top Side	10mm	Ant 7	DSI 6	42590	3500	17.21	18.50	1.346	62.9	1.006	0.07	0.006	0.008
	LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 7	DSI 6	42590	3500	17.06	18.50	1.393	62.9	1.006	0.15	0.003	0.004



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	LTE Band 42	20M	QPSK	1	0	-	Front	10mm	Ant 8	DSI 6	42590	3500	18.10	19.50	1.380	62.9	1.006	-0.02	0.006	0.008
	LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 8	DSI 6	42590	3500	18.08	19.50	1.387	62.9	1.006	-0.1	0.100	0.140
	LTE Band 42	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 6	42590	3500	18.10	19.50	1.380	62.9	1.006	0.14	0.422	0.586
51	LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 6	42590	3500	18.08	19.50	1.387	62.9	1.006	-0.04	0.488	0.681
	LTE Band 42	20M	QPSK	1	0	-	Left Side	10mm	Ant 8	DSI 6	42590	3500	18.10	19.50	1.380	62.9	1.006	0.04	0.138	0.192
	LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 8	DSI 6	42590	3500	18.08	19.50	1.387	62.9	1.006	-0.05	0.146	0.204
	LTE Band 42	20M	QPSK	1	0	-	Top Side	10mm	Ant 8	DSI 6	42590	3500	18.10	19.50	1.380	62.9	1.006	-0.04	0.065	0.090
	LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 8	DSI 6	42590	3500	18.08	19.50	1.387	62.9	1.006	0.14	0.077	0.107
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 6	DSI 6	55830	3609	16.15	17.00	1.216	62.9	1.006	0.06	0.157	0.192
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 6	DSI 6	55830	3609	16.05	17.00	1.245	62.9	1.006	-0.06	0.138	0.173
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 6	DSI 6	55830	3609	16.15	17.00	1.216	62.9	1.006	-0.15	0.119	0.146
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 6	DSI 6	55830	3609	16.05	17.00	1.245	62.9	1.006	-0.12	0.096	0.120
	LTE Band 48	20M	QPSK	1	0	-	Right Side	10mm	Ant 6	DSI 6	55830	3609	16.15	17.00	1.216	62.9	1.006	-0.16	0.005	0.006
	LTE Band 48	20M	QPSK	50	0	-	Right Side	10mm	Ant 6	DSI 6	55830	3609	16.05	17.00	1.245	62.9	1.006	-0.03	0.003	0.004
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 6	DSI 6	55830	3609	16.15	17.00	1.216	62.9	1.006	0.17	0.157	0.192
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 6	DSI 6	55830	3609	16.05	17.00	1.245	62.9	1.006	-0.04	0.186	0.233
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 1	DSI 6	55830	3609	19.73	21.00	1.340	62.9	1.006	-0.03	0.062	0.084
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 1	DSI 6	55830	3609	19.69	21.00	1.352	62.9	1.006	0.02	0.067	0.091
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 1	DSI 6	55830	3609	19.73	21.00	1.340	62.9	1.006	0.12	0.096	0.129
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 1	DSI 6	55830	3609	19.69	21.00	1.352	62.9	1.006	0.02	0.099	0.135
	LTE Band 48	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	DSI 6	55830	3609	19.73	21.00	1.340	62.9	1.006	-0.17	0.181	0.244
	LTE Band 48	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	DSI 6	55830	3609	19.69	21.00	1.352	62.9	1.006	-0.03	0.171	0.233
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 7	DSI 6	55830	3609	18.49	20.00	1.416	62.9	1.006	0.14	0.145	0.207
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 7	DSI 6	55830	3609	18.37	20.00	1.455	62.9	1.006	-0.03	0.142	0.208
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 7	DSI 6	55830	3609	18.49	20.00	1.416	62.9	1.006	-0.14	0.122	0.174
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 7	DSI 6	55830	3609	18.37	20.00	1.455	62.9	1.006	0.17	0.130	0.190
	LTE Band 48	20M	QPSK	1	0	-	Right Side	10mm	Ant 7	DSI 6	55830	3609	18.49	20.00	1.416	62.9	1.006	-0.13	0.326	0.464
	LTE Band 48	20M	QPSK	50	0	-	Right Side	10mm	Ant 7	DSI 6	55830	3609	18.37	20.00	1.455	62.9	1.006	0.11	0.305	0.447
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 7	DSI 6	55830	3609	18.49	20.00	1.416	62.9	1.006	0.07	0.006	0.009
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 7	DSI 6	55830	3609	18.37	20.00	1.455	62.9	1.006	-0.04	0.003	0.004
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 8	DSI 6	55830	3609	17.66	19.00	1.361	62.9	1.006	-0.18	0.010	0.014
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 8	DSI 6	55830	3609	17.58	19.00	1.387	62.9	1.006	-0.13	0.008	0.011
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 6	55830	3609	17.66	19.00	1.361	62.9	1.006	-0.13	0.469	0.642
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 6	55340	3560	17.45	19.00	1.429	62.9	1.006	-0.11	0.470	0.676
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 6	56150	3641	17.52	19.00	1.406	62.9	1.006	-0.04	0.464	0.656
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 8	DSI 6	56640	3690	17.56	19.00	1.393	62.9	1.006	-0.15	0.458	0.642
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 6	55830	3609	17.58	19.00	1.387	62.9	1.006	-0.09	0.462	0.645
52	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 6	55340	3560	17.32	19.00	1.472	62.9	1.006	-0.03	0.479	0.709
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 6	56150	3641	17.41	19.00	1.442	62.9	1.006	0.05	0.465	0.675
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 8	DSI 6	56640	3690	17.46	19.00	1.426	62.9	1.006	0.13	0.474	0.680
	LTE Band 48	20M	QPSK	100	0	-	Back	10mm	Ant 8	DSI 6	55830	3609	17.55	19.00	1.396	62.9	1.006	0.1	0.423	0.594
	LTE Band 48	20M	QPSK	1	0	-	Left Side	10mm	Ant 8	DSI 6	55830	3609	17.66	19.00	1.361	62.9	1.006	-0.12	0.046	0.063
	LTE Band 48	20M	QPSK	50	0	-	Left Side	10mm	Ant 8	DSI 6	55830	3609	17.58	19.00	1.387	62.9	1.006	0.15	0.057	0.080
	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 8	DSI 6	55830	3609	17.66	19.00	1.361	62.9	1.006	-0.05	0.035	0.048
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 8	DSI 6	55830	3609	17.58	19.00	1.387	62.9	1.006	-0.07	0.046	0.064
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	641666	3624.99	13.27	14.00	1.183	-	-	-0.03	0.100	0.118
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	641666	3624.99	13.23	14.00	1.194	-	-	0.12	0.100	0.119
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	641666	3624.99	13.27	14.00	1.183	-	-	0.19	0.122	0.144
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	641666	3624.99	13.23	14.00	1.194	-	-	-0.09	0.114	0.136
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	641666	3624.99	13.27	14.00	1.183	-	-	-0.12	0.126	0.149
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	641666	3624.99	13.23	14.00	1.194	-	-	0.07	0.072	0.086
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	641666	3624.99	13.27	14.00	1.183	-	-	-0.18	0.233	0.276
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	641666	3624.99	13.23	14.00	1.194	-	-	0.08	0.241	0.288
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	641666	3624.99	16.64	18.00	1.368	-	-	-0.06	0.050	0.068
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	641666	3624.99	16.55	18.00	1.396	-	-	0.07	0.052	0.073
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	641666	3624.99	16.64	18.00	1.368	-	-	-0.15	0.068	0.093



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	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	641666	3624.99	16.55	18.00	1.396	-	-	-0.15	0.070	0.098
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	641666	3624.99	16.64	18.00	1.368	-	-	-0.04	0.127	0.174
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	641666	3624.99	16.55	18.00	1.396	-	-	-0.08	0.123	0.172
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	641666	3624.99	17.58	19.00	1.387	-	-	0.01	0.229	0.318
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	641666	3624.99	17.53	19.00	1.403	-	-	-0.1	0.225	0.316
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	641666	3624.99	17.58	19.00	1.387	-	-	0.05	0.176	0.244
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	641666	3624.99	17.53	19.00	1.403	-	-	0.02	0.184	0.258
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	641666	3624.99	17.58	19.00	1.387	-	-	-0.04	0.435	0.603
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	641666	3624.99	17.53	19.00	1.403	-	-	0.07	0.424	0.595
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	641666	3624.99	17.58	19.00	1.387	-	-	0.15	0.075	0.104
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	641666	3624.99	17.53	19.00	1.403	-	-	-0.05	0.066	0.093
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	641666	3624.99	16.23	17.50	1.340	-	-	-0.08	0.019	0.025
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	641666	3624.99	16.20	17.50	1.349	-	-	-0.08	0.027	0.036
53	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	641666	3624.99	16.23	17.50	1.340	-	-	0.04	0.457	0.612
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	641666	3624.99	16.20	17.50	1.349	-	-	-0.11	0.365	0.492
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	641666	3624.99	16.23	17.50	1.340	-	-	-0.05	0.057	0.076
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	641666	3624.99	16.20	17.50	1.349	-	-	0.14	0.055	0.074
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	641666	3624.99	16.23	17.50	1.340	-	-	-0.01	0.043	0.058
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	641666	3624.99	16.20	17.50	1.349	-	-	-0.12	0.045	0.061
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	656000	3840	12.91	13.50	1.146	-	-	0.05	0.056	0.064
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	656000	3840	12.84	13.50	1.164	-	-	0.04	0.056	0.065
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	656000	3840	12.91	13.50	1.146	-	-	0.15	0.062	0.071
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	656000	3840	12.84	13.50	1.164	-	-	0.03	0.068	0.079
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	656000	3840	12.91	13.50	1.146	-	-	-0.1	0.029	0.033
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	656000	3840	12.84	13.50	1.164	-	-	0.14	0.029	0.034
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	656000	3840	12.91	13.50	1.146	-	-	-0.16	0.121	0.139
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	656000	3840	12.84	13.50	1.164	-	-	-0.11	0.139	0.162
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	656000	3840	15.77	17.00	1.327	50	1.000	-0.02	0.133	0.177
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	633334	3500.01	12.82	13.50	1.169	-	-	0.1	0.099	0.116
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	633334	3500.01	12.75	13.50	1.189	-	-	-0.1	0.085	0.101
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	633334	3500.01	12.82	13.50	1.169	-	-	-0.05	0.103	0.120
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	633334	3500.01	12.75	13.50	1.189	-	-	-0.04	0.092	0.109
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	633334	3500.01	12.82	13.50	1.169	-	-	0.01	0.032	0.037
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	633334	3500.01	12.75	13.50	1.189	-	-	-0.09	0.033	0.039
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	633334	3500.01	12.82	13.50	1.169	-	-	0.03	0.198	0.232
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	633334	3500.01	12.75	13.50	1.189	-	-	-0.11	0.179	0.213
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	633334	3500.01	15.73	17.00	1.340	50	1.000	0.05	0.179	0.240
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	656000	3840	16.15	17.50	1.365	-	-	-0.16	0.044	0.060
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	656000	3840	16.04	17.50	1.400	-	-	0.15	0.049	0.069
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	656000	3840	16.15	17.50	1.365	-	-	-0.15	0.053	0.072
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	656000	3840	16.04	17.50	1.400	-	-	0.06	0.049	0.069
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	656000	3840	16.15	17.50	1.365	-	-	0.15	0.087	0.119
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	656000	3840	16.04	17.50	1.400	-	-	-0.1	0.069	0.097
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	656000	3840	19.17	20.50	1.358	50	1.000	-0.16	0.089	0.121
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	633334	3500.01	15.97	17.50	1.422	-	-	0.17	0.045	0.064
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	633334	3500.01	15.82	17.50	1.472	-	-	0.13	0.034	0.050
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	633334	3500.01	15.97	17.50	1.422	-	-	-0.02	0.060	0.085
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	633334	3500.01	15.82	17.50	1.472	-	-	0.01	0.045	0.066
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	633334	3500.01	15.97	17.50	1.422	-	-	0.1	0.108	0.154
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	633334	3500.01	15.82	17.50	1.472	-	-	0.13	0.090	0.133
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	633334	3500.01	19.01	20.50	1.409	50	1.000	-0.11	0.109	0.154
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	656000	3840	15.14	16.00	1.219	-	-	-0.04	0.118	0.144
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	656000	3840	14.97	16.00	1.268	-	-	-0.12	0.080	0.101
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	656000	3840	15.14	16.00	1.219	-	-	-0.07	0.096	0.117
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	656000	3840	14.97	16.00	1.268	-	-	-0.03	0.067	0.085
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	656000	3840	15.14	16.00	1.219	-	-	0.05	0.235	0.286



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	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	656000	3840	14.97	16.00	1.268	-	-	-0.13	0.181	0.229
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	656000	3840	15.14	16.00	1.219	-	-	0.05	0.050	0.061
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	656000	3840	14.97	16.00	1.268	-	-	-0.15	0.039	0.049
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	656000	3840	18.16	19.00	1.213	50	1.000	-0.11	0.228	0.277
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	633334	3500.01	15.21	16.00	1.199	-	-	0.07	0.214	0.257
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	633334	3500.01	15.13	16.00	1.222	-	-	0.09	0.173	0.211
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	633334	3500.01	15.21	16.00	1.199	-	-	0.04	0.158	0.190
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	633334	3500.01	15.13	16.00	1.222	-	-	0.11	0.133	0.162
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	633334	3500.01	15.21	16.00	1.199	-	-	-0.02	0.425	0.510
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	633334	3500.01	15.13	16.00	1.222	-	-	-0.13	0.375	0.458
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	633334	3500.01	15.21	16.00	1.199	-	-	0.12	0.074	0.089
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	633334	3500.01	15.13	16.00	1.222	-	-	-0.11	0.058	0.071
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	633334	3500.01	18.22	19.00	1.197	50	1.000	-0.03	0.421	0.504
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	656000	3840	16.93	18.00	1.279	-	-	0.03	0.060	0.077
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	656000	3840	16.85	18.00	1.303	-	-	0.04	0.071	0.093
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	656000	3840	16.93	18.00	1.279	-	-	0.05	0.299	0.383
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	656000	3840	16.85	18.00	1.303	-	-	-0.09	0.196	0.255
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	656000	3840	16.93	18.00	1.279	-	-	0.01	0.066	0.084
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	656000	3840	16.85	18.00	1.303	-	-	0.11	0.081	0.106
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	656000	3840	16.93	18.00	1.279	-	-	0.14	0.137	0.175
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	656000	3840	16.85	18.00	1.303	-	-	-0.15	0.130	0.169
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	656000	3840	19.93	21.00	1.279	50	1.000	0.02	0.291	0.372
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	633334	3500.01	17.15	18.00	1.216	-	-	0.17	0.025	0.030
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	633334	3500.01	17.14	18.00	1.219	-	-	-0.16	0.031	0.038
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	633334	3500.01	17.15	18.00	1.216	-	-	-0.17	0.601	0.731
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	633334	3500.01	17.14	18.00	1.219	-	-	0.07	0.622	0.758
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	633334	3500.01	17.15	18.00	1.216	-	-	0.11	0.116	0.141
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	633334	3500.01	17.14	18.00	1.219	-	-	-0.05	0.112	0.137
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	633334	3500.01	17.15	18.00	1.216	-	-	-0.01	0.081	0.099
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	633334	3500.01	17.14	18.00	1.219	-	-	-0.14	0.081	0.099
54	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	633334	3500.01	19.97	21.00	1.268	50	1.000	-0.01	0.606	0.768
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	650000	3750	12.26	13.00	1.186	-	-	0.06	0.080	0.095
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	650000	3750	12.15	13.00	1.216	-	-	0.01	0.069	0.084
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	650000	3750	12.26	13.00	1.186	-	-	-0.11	0.082	0.097
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	650000	3750	12.26	13.00	1.186	-	-	0.03	0.067	0.079
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	650000	3750	12.26	13.00	1.186	-	-	0.09	0.044	0.052
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	650000	3750	12.26	13.00	1.186	-	-	-0.02	0.038	0.045
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	650000	3750	12.26	13.00	1.186	-	-	-0.18	0.167	0.198
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	650000	3750	12.26	13.00	1.186	-	-	0.15	0.147	0.174
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	650000	3750	15.29	16.50	1.321	50	1.000	-0.08	0.164	0.217
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	633334	3500.01	12.33	13.00	1.167	-	-	-0.15	0.127	0.148
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 6	DSI 6	633334	3500.01	12.25	13.00	1.189	-	-	-0.12	0.118	0.140
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	633334	3500.01	12.33	13.00	1.167	-	-	-0.17	0.128	0.149
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 6	DSI 6	633334	3500.01	12.25	13.00	1.189	-	-	0.08	0.120	0.143
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	633334	3500.01	12.33	13.00	1.167	-	-	0.01	0.045	0.053
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 6	DSI 6	633334	3500.01	12.25	13.00	1.189	-	-	0.02	0.062	0.074
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	633334	3500.01	12.33	13.00	1.167	-	-	-0.11	0.179	0.209
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	633334	3500.01	12.25	13.00	1.189	-	-	-0.01	0.152	0.181
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 6	DSI 6	633334	3500.01	15.37	16.50	1.297	50	1.000	0.08	0.189	0.245
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	650000	3750	18.06	19.00	1.242	-	-	0.13	0.111	0.138
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	650000	3750	17.96	19.00	1.271	-	-	-0.03	0.113	0.144
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	650000	3750	18.06	19.00	1.242	-	-	0.09	0.143	0.178
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	650000	3750	17.96	19.00	1.271	-	-	0.06	0.134	0.170
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	650000	3750	18.06	19.00	1.242	-	-	-0.02	0.215	0.267
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	650000	3750	17.96	19.00	1.271	-	-	-0.04	0.184	0.234
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	650000	3750	21.04	22.00	1.247	50	1.000	0.17	0.209	0.261



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	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	633334	3500.01	17.76	19.00	1.330	-	-	0.09	0.102	0.136
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 1	DSI 6	633334	3500.01	17.64	19.00	1.368	-	-	0.1	0.085	0.116
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	633334	3500.01	17.76	19.00	1.330	-	-	-0.04	0.140	0.186
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 1	DSI 6	633334	3500.01	17.64	19.00	1.368	-	-	0.15	0.108	0.148
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	633334	3500.01	17.76	19.00	1.330	-	-	-0.13	0.235	0.313
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	633334	3500.01	17.64	19.00	1.368	-	-	0.09	0.183	0.250
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 1	DSI 6	633334	3500.01	20.73	22.00	1.340	50	1.000	-0.16	0.233	0.312
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	650000	3750	15.13	16.00	1.222	-	-	-0.04	0.160	0.195
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	650000	3750	15.01	16.00	1.256	-	-	0.02	0.129	0.162
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	650000	3750	15.13	16.00	1.222	-	-	-0.07	0.128	0.156
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	650000	3750	15.01	16.00	1.256	-	-	-0.08	0.117	0.147
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	650000	3750	15.13	16.00	1.222	-	-	-0.16	0.367	0.448
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	650000	3750	15.01	16.00	1.256	-	-	0.12	0.331	0.416
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	650000	3750	15.13	16.00	1.222	-	-	-0.07	0.043	0.053
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	650000	3750	15.01	16.00	1.256	-	-	-0.05	0.041	0.051
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	650000	3750	18.14	19.00	1.219	50	1.000	-0.04	0.352	0.429
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	633334	3500.01	15.08	16.00	1.236	-	-	0.05	0.196	0.242
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 7	DSI 6	633334	3500.01	15.04	16.00	1.247	-	-	0.08	0.156	0.195
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	633334	3500.01	15.08	16.00	1.236	-	-	-0.18	0.129	0.159
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 7	DSI 6	633334	3500.01	15.04	16.00	1.247	-	-	-0.03	0.107	0.133
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	633334	3500.01	15.08	16.00	1.236	-	-	-0.1	0.360	0.445
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	633334	3500.01	15.04	16.00	1.247	-	-	-0.04	0.271	0.338
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	633334	3500.01	15.08	16.00	1.236	-	-	-0.09	0.047	0.058
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 7	DSI 6	633334	3500.01	15.04	16.00	1.247	-	-	0.18	0.035	0.044
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	10mm	Ant 7	DSI 6	633334	3500.01	18.11	19.00	1.227	50	1.000	0.11	0.348	0.427
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	650000	3750	16.88	18.00	1.294	-	-	0.06	0.032	0.041
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	650000	3750	16.86	18.00	1.300	-	-	0.15	0.042	0.055
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	650000	3750	16.88	18.00	1.294	-	-	-0.08	0.390	0.505
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	650000	3750	16.86	18.00	1.300	-	-	-0.05	0.311	0.404
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	650000	3750	16.88	18.00	1.294	-	-	-0.18	0.051	0.066
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	650000	3750	16.86	18.00	1.300	-	-	-0.08	0.049	0.064
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	650000	3750	16.88	18.00	1.294	-	-	0.18	0.059	0.076
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	650000	3750	16.86	18.00	1.300	-	-	0.1	0.077	0.100
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	650000	3750	19.91	21.00	1.285	50	1.000	0.06	0.408	0.524
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	633334	3500.01	16.95	18.00	1.274	-	-	0.07	0.033	0.042
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	10mm	Ant 8	DSI 6	633334	3500.01	16.87	18.00	1.297	-	-	-0.03	0.029	0.038
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	633334	3500.01	16.95	18.00	1.274	-	-	0.09	0.520	0.662
55	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	633334	3500.01	16.87	18.00	1.297	-	-	0.08	0.680	0.882
	FR1 n78	100M	QPSK	270	0	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	633334	3500.01	16.90	18.00	1.288	-	-	0.06	0.660	0.850
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	633334	3500.01	16.95	18.00	1.274	-	-	-0.08	0.127	0.162
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	10mm	Ant 8	DSI 6	633334	3500.01	16.87	18.00	1.297	-	-	-0.05	0.117	0.152
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	633334	3500.01	16.95	18.00	1.274	-	-	-0.03	0.063	0.080
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	10mm	Ant 8	DSI 6	633334	3500.01	16.87	18.00	1.297	-	-	0.17	0.069	0.090
	FR1 n78 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 8	DSI 6	633334	3500.01	19.93	21.00	1.279	50	1.000	-0.14	0.640	0.819

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 16+7(7)	Standalone	11	2462	18.16	19.00	1.213	97.03	1.031	0.18	0.493	0.617
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 16+7(7)	Standalone	11	2462	18.16	19.00	1.213	97.03	1.031	-0.1	0.522	0.653
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 16+7(7)	Standalone	11	2462	18.16	19.00	1.213	97.03	1.031	0.01	0.010	0.013
56	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 16+7(7)	Standalone	11	2462	18.16	19.00	1.213	97.03	1.031	-0.05	0.778	0.973
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 16+7(7)	Standalone	6	2437	18.08	19.00	1.236	97.03	1.031	0.03	0.755	0.962
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 16+7(7)	Standalone	11	2462	18.16	19.00	1.213	97.03	1.031	-0.15	0.319	0.399
	Bluetooth	1Mbps	Front	10mm	Ant 7	Full power	0	2402	15.45	16.50	1.273	77.06	1.081	0.04	0.054	0.074
	Bluetooth	1Mbps	Back	10mm	Ant 7	Full power	0	2402	15.45	16.50	1.273	77.06	1.081	-0.01	0.114	0.157
	Bluetooth	1Mbps	Left Side	10mm	Ant 7	Full power	0	2402	15.45	16.50	1.273	77.06	1.081	-0.08	0.001	0.001
57	Bluetooth	1Mbps	Right Side	10mm	Ant 7	Full power	0	2402	15.45	16.50	1.273	77.06	1.081	0.04	0.252	0.347
	Bluetooth	1Mbps	Top Side	10mm	Ant 7	Full power	0	2402	15.45	16.50	1.273	77.06	1.081	0.05	0.029	0.040
	Bluetooth	1Mbps	Front	10mm	Ant 16	Full power	39	2441	15.54	17.00	1.400	77.01	1.082	0.01	0.060	0.091
	Bluetooth	1Mbps	Back	10mm	Ant 16	Full power	39	2441	15.54	17.00	1.400	77.01	1.082	0.03	0.061	0.092
	Bluetooth	1Mbps	Left Side	10mm	Ant 16	Full power	39	2441	15.54	17.00	1.400	77.01	1.082	-0.08	0.017	0.026
	Bluetooth	1Mbps	Right Side	10mm	Ant 16	Full power	39	2441	15.54	17.00	1.400	77.01	1.082	-0.08	0.022	0.033
	Bluetooth	1Mbps	Top Side	10mm	Ant 16	Full power	39	2441	15.54	17.00	1.400	77.01	1.082	-0.08	0.127	0.192
5000MHz																
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 17+6(17)	Full power	44	5220	19.25	20.00	1.189	98.97	1.010	0.19	0.289	0.347
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	Ant 17+6(17)	Full power	44	5220	19.25	20.00	1.189	98.97	1.010	0.07	0.385	0.462
	WLAN5.2GHz	802.11a 6Mbps	Left Side	10mm	Ant 17+6(17)	Full power	44	5220	19.25	20.00	1.189	98.97	1.010	-0.18	0.087	0.104
	WLAN5.2GHz	802.11a 6Mbps	Right Side	10mm	Ant 17+6(17)	Full power	44	5220	19.25	20.00	1.189	98.97	1.010	0.03	0.404	0.485
58	WLAN5.2GHz	802.11a 6Mbps	Top Side	10mm	Ant 17+6(17)	Full power	44	5220	19.25	20.00	1.189	98.97	1.010	-0.02	0.761	0.913
	WLAN5.2GHz	802.11a 6Mbps	Top Side	10mm	Ant 17+6(6)	Full power	48	5240	18.72	19.50	1.197	98.97	1.010	-0.15	0.705	0.852
	WLAN5.8GHz	802.11a 6Mbps	Front	10mm	Ant 17+6(6)	Full power	165	5825	18.52	19.50	1.253	98.97	1.010	0.17	0.371	0.470
	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	Ant 17+6(6)	Full power	165	5825	18.52	19.50	1.253	98.97	1.010	-0.05	0.521	0.659
	WLAN5.8GHz	802.11a 6Mbps	Left Side	10mm	Ant 17+6(6)	Full power	165	5825	18.52	19.50	1.253	98.97	1.010	0.01	0.089	0.113
59	WLAN5.8GHz	802.11a 6Mbps	Right Side	10mm	Ant 17+6(6)	Full power	165	5825	18.52	19.50	1.253	98.97	1.010	0.01	0.662	0.838
	WLAN5.8GHz	802.11a 6Mbps	Right Side	10mm	Ant 17+6(17)	Full power	149	5745	18.54	19.50	1.247	98.97	1.010	0.1	0.625	0.787
	WLAN5.8GHz	802.11a 6Mbps	Top Side	10mm	Ant 17+6(6)	Full power	165	5825	18.52	19.50	1.253	98.97	1.010	-0.17	0.593	0.751

16.3 Body Worn Accessory SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
850MHz																				
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	15mm	Ant 0	DSI 4	189	836.4	26.17	28.00	1.524	-	-	0.1	0.176	0.268
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 0	DSI 4	189	836.4	26.17	28.00	1.524	-	-	-0.05	0.184	0.280
60	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	15mm	Ant 1	DSI 4	189	836.4	26.70	28.50	1.514	-	-	0.01	0.433	0.655
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 1	DSI 4	189	836.4	26.70	28.50	1.514	-	-	0.17	0.388	0.587
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 0	DSI 4	4182	836.4	24.64	25.00	1.086	-	-	-0.06	0.230	0.250
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 0	DSI 4	4182	836.4	24.64	25.00	1.086	-	-	-0.03	0.243	0.264
61	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 1	DSI 4	4182	836.4	24.05	25.00	1.245	-	-	-0.02	0.541	0.673
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	DSI 4	4182	836.4	24.05	25.00	1.245	-	-	0.07	0.505	0.628
	LTE Band 5	10M	QPSK	1	0	-	Front	15mm	Ant 0	DSI 4	20525	836.5	24.51	24.70	1.045	-	-	0.11	0.285	0.298
	LTE Band 5	10M	QPSK	25	0	-	Front	15mm	Ant 0	DSI 4	20525	836.5	24.43	24.70	1.064	-	-	-0.18	0.259	0.276
	LTE Band 5	10M	QPSK	1	0	-	Back	15mm	Ant 0	DSI 4	20525	836.5	24.51	24.70	1.045	-	-	0.03	0.286	0.299
	LTE Band 5	10M	QPSK	25	0	-	Back	15mm	Ant 0	DSI 4	20525	836.5	24.43	24.70	1.064	-	-	0.11	0.255	0.271
62	LTE Band 5	10M	QPSK	1	0	-	Front	15mm	Ant 1	DSI 4	20525	836.5	24.63	25.70	1.279	-	-	-0.04	0.571	0.731
	LTE Band 5	10M	QPSK	25	0	-	Front	15mm	Ant 1	DSI 4	20525	836.5	23.67	24.70	1.268	-	-	-0.01	0.489	0.620
	LTE Band 5	10M	QPSK	1	0	-	Back	15mm	Ant 1	DSI 4	20525	836.5	24.63	25.70	1.279	-	-	-0.11	0.527	0.674
	LTE Band 5	10M	QPSK	25	0	-	Back	15mm	Ant 1	DSI 4	20525	836.5	23.67	24.70	1.268	-	-	0.04	0.445	0.564
	LTE Band 26	15M	QPSK	1	0	-	Front	15mm	Ant 0	DSI 4	26865	831.5	24.91	25.20	1.069	-	-	0.16	0.296	0.316
	LTE Band 26	15M	QPSK	36	0	-	Front	15mm	Ant 0	DSI 4	26865	831.5	23.99	24.70	1.178	-	-	0.17	0.246	0.290
	LTE Band 26	15M	QPSK	1	0	-	Back	15mm	Ant 0	DSI 4	26865	831.5	24.91	25.20	1.069	-	-	0.01	0.302	0.323
	LTE Band 26	15M	QPSK	36	0	-	Back	15mm	Ant 0	DSI 4	26865	831.5	23.99	24.70	1.178	-	-	0.06	0.246	0.290
63	LTE Band 26	15M	QPSK	1	0	-	Front	15mm	Ant 1	DSI 4	26865	831.5	24.58	25.70	1.294	-	-	-0.01	0.473	0.612
	LTE Band 26	15M	QPSK	36	0	-	Front	15mm	Ant 1	DSI 4	26865	831.5	23.59	24.70	1.291	-	-	-0.15	0.406	0.524
	LTE Band 26	15M	QPSK	1	0	-	Back	15mm	Ant 1	DSI 4	26865	831.5	24.58	25.70	1.294	-	-	0.11	0.429	0.555
	LTE Band 26	15M	QPSK	36	0	-	Back	15mm	Ant 1	DSI 4	26865	831.5	23.59	24.70	1.291	-	-	-0.08	0.376	0.485
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	167300	836.5	24.69	25.20	1.125	-	-	0.05	0.279	0.314
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	167300	836.5	24.58	25.20	1.153	-	-	0.01	0.287	0.331
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	167300	836.5	24.69	25.20	1.125	-	-	-0.04	0.291	0.327
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	167300	836.5	24.58	25.20	1.153	-	-	0.07	0.280	0.323
64	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	167300	836.5	24.71	25.70	1.256	-	-	-0.01	0.543	0.682
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	167300	836.5	24.59	25.70	1.291	-	-	0.15	0.480	0.620
	FR1 n5	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	167300	836.5	24.71	25.70	1.256	-	-	-0.05	0.428	0.538
	FR1 n5	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	167300	836.5	24.59	25.70	1.291	-	-	-0.08	0.479	0.618
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	166300	831.5	25.19	25.70	1.125	-	-	-0.05	0.298	0.335
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 0	DSI 4	166300	831.5	25.07	25.70	1.156	-	-	-0.08	0.287	0.332
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	166300	831.5	25.19	25.70	1.125	-	-	-0.13	0.278	0.313
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 0	DSI 4	166300	831.5	25.07	25.70	1.156	-	-	0.01	0.295	0.341
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	166300	831.5	24.64	25.70	1.276	-	-	-0.11	0.436	0.557
65	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	15mm	Ant 1	DSI 4	166300	831.5	24.61	25.70	1.285	-	-	0.01	0.529	0.680
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	166300	831.5	24.64	25.70	1.276	-	-	0.03	0.394	0.503
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	15mm	Ant 1	DSI 4	166300	831.5	24.61	25.70	1.285	-	-	-0.05	0.477	0.613
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 3	DSI 4	1413	1732.6	24.03	25.00	1.250	-	-	-0.16	0.245	0.306
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 3	DSI 4	1413	1732.6	24.03	25.00	1.250	-	-	0.05	0.280	0.350
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 2	DSI 4	1413	1732.6	23.13	24.50	1.371	-	-	-0.19	0.418	0.573
66	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 2	DSI 4	1413	1732.6	23.13	24.50	1.371	-	-	-0.02	0.495	0.679
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 5	DSI 4	1413	1732.6	20.87	22.00	1.297	-	-	0.17	0.176	0.228
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 5	DSI 4	1413	1732.6	20.87	22.00	1.297	-	-	-0.01	0.178	0.231
	LTE Band 4	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	20175	1732.5	25.17	25.70	1.130	-	-	-0.08	0.281	0.317
	LTE Band 4	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	20175	1732.5	24.22	24.70	1.117	-	-	0.03	0.248	0.277
	LTE Band 4	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	20175	1732.5	25.17	25.70	1.130	-	-	0.05	0.305	0.345



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	LTE Band 4	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	20175	1732.5	24.22	24.70	1.117	-	-	0.12	0.268	0.299
	LTE Band 4	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	20175	1732.5	24.28	25.70	1.387	-	-	-0.17	0.443	0.614
	LTE Band 4	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	20175	1732.5	23.33	24.70	1.371	-	-	-0.17	0.395	0.541
67	LTE Band 4	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	20175	1732.5	24.28	25.70	1.387	-	-	-0.09	0.473	0.656
	LTE Band 4	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	20175	1732.5	23.33	24.70	1.371	-	-	0.02	0.446	0.611
	LTE Band 4	20M	QPSK	1	0	-	Front	15mm	Ant 5	DSI 4	20175	1732.5	21.97	23.20	1.327	-	-	-0.07	0.217	0.288
	LTE Band 4	20M	QPSK	50	0	-	Front	15mm	Ant 5	DSI 4	20175	1732.5	21.93	23.20	1.340	-	-	-0.03	0.226	0.303
	LTE Band 4	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	20175	1732.5	21.97	23.20	1.327	-	-	-0.02	0.227	0.301
	LTE Band 4	20M	QPSK	50	0	-	Back	15mm	Ant 5	DSI 4	20175	1732.5	21.93	23.20	1.340	-	-	0.02	0.221	0.296
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	132322	1745	25.18	25.70	1.127	-	-	0.09	0.279	0.314
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	132322	1745	24.22	24.70	1.117	-	-	-0.02	0.245	0.274
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	132322	1745	25.18	25.70	1.127	-	-	-0.02	0.307	0.346
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	132322	1745	24.22	24.70	1.117	-	-	-0.07	0.266	0.297
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	132322	1745	24.43	25.70	1.340	-	-	-0.16	0.465	0.623
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	132322	1745	23.52	24.70	1.312	-	-	-0.03	0.395	0.518
68	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	132322	1745	24.43	25.70	1.340	-	-	-0.16	0.520	0.697
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	132322	1745	23.52	24.70	1.312	-	-	0.03	0.453	0.594
	LTE Band 66	20M	QPSK	1	0	-	Front	15mm	Ant 5	DSI 4	132322	1745	22.05	23.20	1.303	-	-	-0.01	0.380	0.495
	LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 5	DSI 4	132322	1745	21.96	23.20	1.330	-	-	0.1	0.345	0.459
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	132322	1745	22.05	23.20	1.303	-	-	0.03	0.375	0.489
	LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 5	DSI 4	132322	1745	21.96	23.20	1.330	-	-	0.06	0.348	0.463
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	349000	1745	25.31	25.70	1.094	-	-	0.12	0.304	0.333
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	349000	1745	25.18	25.70	1.127	-	-	-0.03	0.308	0.347
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	349000	1745	25.31	25.70	1.094	-	-	0.11	0.340	0.372
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	349000	1745	25.18	25.70	1.127	-	-	-0.02	0.355	0.400
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	349000	1745	24.48	25.50	1.265	-	-	0.08	0.553	0.699
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	349000	1745	24.41	25.50	1.285	-	-	0.07	0.516	0.663
69	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	349000	1745	24.48	25.50	1.265	-	-	-0.04	0.583	0.737
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	349000	1745	24.41	25.50	1.285	-	-	0.09	0.571	0.734
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	349000	1745	22.43	23.50	1.279	-	-	-0.12	0.451	0.577
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	349000	1745	22.28	23.50	1.324	-	-	0.1	0.454	0.601
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	349000	1745	22.43	23.50	1.279	-	-	0.03	0.473	0.605
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	349000	1745	22.28	23.50	1.324	-	-	-0.16	0.449	0.595
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	15mm	Ant 5	DSI 4	661	1880	23.65	25.00	1.365	-	-	-0.1	0.161	0.220
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 5	DSI 4	661	1880	23.65	25.00	1.365	-	-	0.17	0.176	0.240
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	15mm	Ant 2	DSI 4	661	1880	23.65	25.50	1.531	-	-	0.12	0.186	0.285
70	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 2	DSI 4	661	1880	23.65	25.50	1.531	-	-	0.06	0.194	0.297
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 5	DSI 4	9400	1880	21.15	22.00	1.216	-	-	-0.01	0.293	0.356
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 5	DSI 4	9400	1880	21.15	22.00	1.216	-	-	-0.11	0.328	0.399
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 3	DSI 4	9400	1880	24.54	25.00	1.112	-	-	-0.12	0.340	0.378
71	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 3	DSI 4	9400	1880	24.54	25.00	1.112	-	-	-0.01	0.381	0.424
	LTE Band 2	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	18900	1880	24.22	25.50	1.343	-	-	-0.1	0.287	0.385
	LTE Band 2	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	18900	1880	23.26	24.50	1.330	-	-	0.16	0.243	0.323
	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	18900	1880	24.22	25.50	1.343	-	-	-0.08	0.320	0.430
	LTE Band 2	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	18900	1880	23.26	24.50	1.330	-	-	-0.09	0.272	0.362
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	18900	1880	24.25	25.50	1.334	-	-	-0.09	0.469	0.625
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	18900	1880	23.29	24.50	1.321	-	-	0.08	0.415	0.548
72	LTE Band 2_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	18900	1880	24.25	25.50	1.334	-	-	-0.08	0.548	0.731
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	18900	1880	23.29	24.50	1.321	-	-	0.06	0.474	0.626
	LTE Band 2_Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	18900	1880	23.24	25.00	1.500	-	-	-0.06	0.430	0.645
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 5	DSI 4	18900	1880	21.27	22.00	1.183	-	-	0.1	0.192	0.227
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 5	DSI 4	18900	1880	21.17	22.00	1.211	-	-	0.1	0.186	0.225
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	18900	1880	21.27	22.00	1.183	-	-	-0.07	0.196	0.232
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 5	DSI 4	18900	1880	21.17	22.00	1.211	-	-	0.01	0.213	0.258
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	376000	1880	24.69	25.50	1.205	-	-	0.12	0.259	0.312



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	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	376000	1880	24.51	25.50	1.256	-	-	0.08	0.282	0.354
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	376000	1880	24.69	25.50	1.205	-	-	0.15	0.285	0.343
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	376000	1880	24.51	25.50	1.256	-	-	0.02	0.319	0.401
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	376000	1880	23.74	25.00	1.337	-	-	-0.11	0.401	0.536
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	376000	1880	23.61	25.00	1.377	-	-	-0.05	0.391	0.538
73	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	376000	1880	23.74	25.00	1.337	-	-	0.04	0.448	0.599
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	376000	1880	23.61	25.00	1.377	-	-	0.02	0.429	0.591
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	21100	2535	25.10	25.70	1.148	-	-	-0.05	0.768	0.882
	LTE Band 7	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	20850	2510	25.08	25.70	1.153	-	-	0.11	0.755	0.871
	LTE Band 7	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	21350	2560	25.02	25.70	1.169	-	-	-0.08	0.736	0.861
	LTE Band 7	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	21100	2535	24.07	24.70	1.156	-	-	-0.11	0.635	0.734
	LTE Band 7	20M	QPSK	100	0	-	Front	15mm	Ant 3	DSI 4	21100	2535	24.06	24.70	1.159	-	-	-0.17	0.622	0.721
	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	21100	2535	25.10	25.70	1.148	-	-	0.03	0.861	0.989
	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	20850	2510	25.08	25.70	1.153	-	-	0.05	0.885	1.021
74	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	21350	2560	25.02	25.70	1.169	-	-	0.06	0.903	1.056
	LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	21100	2535	24.07	24.70	1.156	-	-	-0.14	0.771	0.891
	LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	20850	2510	24.05	24.70	1.161	-	-	-0.08	0.766	0.890
	LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	21350	2560	24.06	24.70	1.159	-	-	-0.04	0.752	0.871
	LTE Band 7	20M	QPSK	100	0	-	Back	15mm	Ant 3	DSI 4	21100	2535	24.06	24.70	1.159	-	-	-0.17	0.745	0.863
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	21350	2560	22.28	23.00	1.180	-	-	-0.07	0.325	0.384
	LTE Band 7C	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	21350+21152	2560+2540.2	24.76	25.70	1.242	-	-	0.03	0.832	1.033
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	21100	2535	24.21	25.00	1.199	-	-	0.05	0.393	0.471
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	21100	2535	23.27	24.00	1.183	-	-	0.13	0.333	0.394
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	21100	2535	24.21	25.00	1.199	-	-	0.04	0.402	0.482
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	21100	2535	23.27	24.00	1.183	-	-	0.05	0.357	0.422
	LTE Band 7_Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	21100	2535	24.05	25.50	1.396	-	-	-0.02	0.363	0.507
	LTE Band 7C	20M	QPSK	1	99	-	Back	15mm	Ant 2	DSI 4	21100+21298	2535+2554.8	23.88	25.50	1.452	-	-	0.01	0.331	0.481
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 5	DSI 4	21100	2535	19.28	19.50	1.052	-	-	-0.03	0.145	0.153
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 5	DSI 4	21100	2535	19.20	19.50	1.072	-	-	-0.12	0.145	0.155
	LTE Band 7_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	21100	2535	19.28	19.50	1.052	-	-	0.01	0.154	0.162
	LTE Band 7_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 5	DSI 4	21100	2535	19.20	19.50	1.072	-	-	0.03	0.150	0.161
	LTE Band 7_Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	21100	2535	19.13	20.50	1.371	-	-	0.02	0.108	0.148
	LTE Band 7C	20M	QPSK	1	99	-	Back	15mm	Ant 5	DSI 4	21100+21298	2535+2554.8	18.97	20.50	1.422	-	-	0.06	0.095	0.135
	LTE Band 38	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	38000	2595	25.50	25.70	1.047	62.9	1.006	0.18	0.480	0.506
	LTE Band 38	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	38000	2595	24.53	24.70	1.040	62.9	1.006	0.1	0.375	0.392
75	LTE Band 38	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	38000	2595	25.50	25.70	1.047	62.9	1.006	0.03	0.579	0.610
	LTE Band 38	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	38000	2595	24.53	24.70	1.040	62.9	1.006	-0.05	0.469	0.491
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	38000	2595	21.81	22.50	1.172	62.9	1.006	-0.17	0.220	0.259
	LTE Band 38C	20M	QPSK	1	99	-	Back	15mm	Ant 3	DSI 4	37901+38099	2585.1+2604.9	25.31	25.70	1.094	62.9	1.006	0.01	0.523	0.576
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	38000	2595	23.86	25.00	1.300	62.9	1.006	-0.01	0.271	0.354
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	38000	2595	22.92	24.00	1.282	62.9	1.006	0.02	0.226	0.292
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	38000	2595	23.86	25.00	1.300	62.9	1.006	-0.04	0.322	0.421
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	38000	2595	22.92	24.00	1.282	62.9	1.006	0.07	0.244	0.315
	LTE Band 38_Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	38000	2595	24.2	25.50	1.349	62.9	1.006	-0.03	0.296	0.402
	LTE Band 38C	20M	QPSK	1	99	-	Back	15mm	Ant 2	DSI 4	37901+38099	2585.1+2604.9	24.03	25.50	1.403	62.9	1.006	0.01	0.255	0.360
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 5	DSI 4	38000	2595	21.86	22.50	1.159	62.9	1.006	-0.18	0.200	0.233
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 5	DSI 4	38000	2595	21.73	22.50	1.194	62.9	1.006	0.06	0.195	0.234
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	38000	2595	21.86	22.50	1.159	62.9	1.006	0.01	0.224	0.261
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 5	DSI 4	38000	2595	21.73	22.50	1.194	62.9	1.006	0.15	0.209	0.251
	LTE Band 38_Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	38000	2595	22.28	23.50	1.324	62.9	1.006	-0.19	0.165	0.220
	LTE Band 38C	20M	QPSK	1	99	-	Back	15mm	Ant 5	DSI 4	37901+38099	2585.1+2604.9	22.16	23.50	1.361	62.9	1.006	0.06	0.148	0.203
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 4	DSI 4	38000	2595	22.78	24.00	1.324	62.9	1.006	-0.06	0.102	0.136
	LTE Band 38_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 4	DSI 4	38000	2595	21.82	23.00	1.312	62.9	1.006	-0.15	0.077	0.102
	LTE Band 38_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	38000	2595	22.78	24.00	1.324	62.9	1.006	0.01	0.142	0.189



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	LTE Band 38_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 4	DSI 4	38000	2595	21.82	23.00	1.312	62.9	1.006	-0.03	0.116	0.153
	LTE Band 38_Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	38000	2595	23.15	24.50	1.365	62.9	1.006	0.03	0.138	0.189
	LTE Band 38C	20M	QPSK	1	99	-	Back	15mm	Ant 4	DSI 4	37901+38099	2585.1+2604.9	22.96	24.50	1.426	62.9	1.006	0.06	0.121	0.174
	LTE Band 41	20M	QPSK	1	0	-	Front	15mm	Ant 3	DSI 4	40620	2593	25.48	25.70	1.052	62.9	1.006	0.1	0.428	0.453
	LTE Band 41	20M	QPSK	50	0	-	Front	15mm	Ant 3	DSI 4	40620	2593	24.51	24.70	1.045	62.9	1.006	-0.05	0.346	0.364
76	LTE Band 41	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	40620	2593	25.48	25.70	1.052	62.9	1.006	0.01	0.541	0.573
	LTE Band 41	20M	QPSK	50	0	-	Back	15mm	Ant 3	DSI 4	40620	2593	24.51	24.70	1.045	62.9	1.006	-0.12	0.428	0.450
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	41490	2680	21.63	22.50	1.222	62.9	1.006	-0.05	0.237	0.291
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 2	DSI 4	40620	2593	23.74	25.00	1.337	62.9	1.006	-0.16	0.267	0.359
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 2	DSI 4	40620	2593	22.80	24.00	1.318	62.9	1.006	0.18	0.216	0.286
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	40620	2593	23.74	25.00	1.337	62.9	1.006	0.09	0.294	0.395
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 2	DSI 4	40620	2593	22.80	24.00	1.318	62.9	1.006	-0.08	0.238	0.316
	LTE Band 41_Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 2	DSI 4	40620	2593	24.15	25.50	1.365	62.9	1.006	-0.06	0.287	0.394
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 5	DSI 4	40620	2593	21.71	22.50	1.199	62.9	1.006	0.04	0.219	0.264
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 5	DSI 4	40620	2593	21.58	22.50	1.236	62.9	1.006	-0.07	0.204	0.254
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	40620	2593	21.71	22.50	1.199	62.9	1.006	0.01	0.233	0.281
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 5	DSI 4	40620	2593	21.58	22.50	1.236	62.9	1.006	0.13	0.217	0.270
	LTE Band 41_Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 5	DSI 4	40620	2593	22.23	23.50	1.340	62.9	1.006	-0.03	0.185	0.249
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Front	15mm	Ant 4	DSI 4	40620	2593	22.68	24.00	1.355	62.9	1.006	-0.07	0.098	0.134
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Front	15mm	Ant 4	DSI 4	40620	2593	21.73	23.00	1.340	62.9	1.006	0.11	0.082	0.111
	LTE Band 41_Other PA	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	40620	2593	22.68	24.00	1.355	62.9	1.006	0.02	0.144	0.196
	LTE Band 41_Other PA	20M	QPSK	50	0	-	Back	15mm	Ant 4	DSI 4	40620	2593	21.73	23.00	1.340	62.9	1.006	-0.12	0.115	0.155
	LTE Band 41_Main PA	20M	QPSK	1	0	-	Back	15mm	Ant 4	DSI 4	40620	2593	23.11	24.50	1.377	62.9	1.006	0.07	0.131	0.181
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	507000	2535	25.20	25.70	1.122	-	-	-0.08	0.744	0.835
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	507000	2535	24.31	24.70	1.094	-	-	-0.16	0.766	0.838
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Front	15mm	Ant 3	DSI 4	507000	2535	24.05	24.70	1.161	-	-	-0.03	0.703	0.816
77	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	507000	2535	25.20	25.70	1.122	-	-	0.01	0.855	0.959
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	507000	2535	24.31	24.70	1.094	-	-	0.06	0.806	0.882
	FR1 n7	40M	QPSK	216	0	DFT-SCS-15KHz	Back	15mm	Ant 3	DSI 4	507000	2535	24.05	24.70	1.161	-	-	-0.03	0.765	0.889
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	507000	2535	24.36	25.50	1.300	-	-	-0.02	0.344	0.447
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 2	DSI 4	507000	2535	24.27	25.50	1.327	-	-	0.04	0.361	0.479
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	507000	2535	24.36	25.50	1.300	-	-	-0.18	0.323	0.420
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 2	DSI 4	507000	2535	24.27	25.50	1.327	-	-	0.04	0.389	0.516
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	507000	2535	20.38	21.50	1.294	-	-	-0.07	0.158	0.204
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Front	15mm	Ant 5	DSI 4	507000	2535	20.23	21.50	1.340	-	-	-0.14	0.168	0.225
	FR1 n7	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	507000	2535	20.38	21.50	1.294	-	-	-0.07	0.177	0.229
	FR1 n7	40M	QPSK	108	54	DFT-SCS-15KHz	Back	15mm	Ant 5	DSI 4	507000	2535	20.23	21.50	1.340	-	-	0.02	0.179	0.240
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 3	DSI 4	519000	2595	24.96	25.20	1.057	-	-	0.12	0.713	0.754
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 3	DSI 4	519000	2595	24.75	25.20	1.109	-	-	0.03	0.696	0.772
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 3	DSI 4	519000	2595	24.96	25.20	1.057	-	-	0.16	0.827	0.874
78	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 3	DSI 4	519000	2595	24.75	25.20	1.109	-	-	0.03	0.842	0.934
	FR1 n38	40M	QPSK	100	0	DFT-SCS-30KHz	Back	15mm	Ant 3	DSI 4	519000	2595	24.24	24.70	1.112	-	-	-0.1	0.679	0.755
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 2	DSI 4	519000	2595	24.28	25.50	1.324	-	-	0.1	0.488	0.646
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 2	DSI 4	519000	2595	24.02	25.50	1.406	-	-	0.05	0.488	0.686
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 2	DSI 4	519000	2595	24.28	25.50	1.324	-	-	0.01	0.548	0.726
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 2	DSI 4	519000	2595	24.02	25.50	1.406	-	-	0.18	0.523	0.735
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	519000	2595	20.46	21.00	1.132	-	-	0.02	0.210	0.238
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	519000	2595	20.36	21.00	1.159	-	-	0.04	0.202	0.234
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	519000	2595	20.46	21.00	1.132	-	-	0.12	0.214	0.242
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	519000	2595	20.36	21.00	1.159	-	-	-0.12	0.201	0.233
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 4	DSI 4	519000	2595	23.46	24.50	1.271	-	-	0.15	0.155	0.197
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 4	DSI 4	519000	2595	23.24	24.50	1.337	-	-	-0.07	0.152	0.203
	FR1 n38	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 4	DSI 4	519000	2595	23.46	24.50	1.271	-	-	0.09	0.238	0.302
	FR1 n38	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 4	DSI 4	519000	2595	23.24	24.50	1.337	-	-	0.04	0.236	0.315
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 3	DSI 4	518598	2592.99	24.84	25.20	1.086	-	-	0.04	0.672	0.730
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 3	DSI 4	518598	2592.99	24.80	25.20	1.096	-	-	0.1	0.665	0.729



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	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 3	DSI 4	518598	2592.99	24.84	25.20	1.086	-	-	0.08	0.758	0.824
79	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 3	DSI 4	518598	2592.99	24.80	25.20	1.096	-	-	0.13	0.790	0.866
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	15mm	Ant 3	DSI 4	518598	2592.99	24.69	25.20	1.125	-	-	0.07	0.725	0.815
	FR1 n41 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 3	DSI 4	518598	2592.99	26.32	27.00	1.169	50	1.000	-0.09	0.562	0.657
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 2	DSI 4	518598	2592.99	23.98	25.50	1.419	-	-	0.1	0.356	0.505
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 2	DSI 4	518598	2592.99	23.90	25.50	1.445	-	-	-0.09	0.430	0.622
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 2	DSI 4	518598	2592.99	23.98	25.50	1.419	-	-	0.02	0.378	0.536
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DSI 4	518598	2592.99	23.90	25.50	1.445	-	-	0.07	0.479	0.692
	FR1 n41 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 2	DSI 4	518598	2592.99	24.82	26.50	1.472	50	1.000	-0.04	0.317	0.467
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	518598	2592.99	20.01	21.00	1.256	-	-	0.12	0.188	0.236
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 5	DSI 4	518598	2592.99	19.91	21.00	1.285	-	-	0.08	0.206	0.265
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	20.01	21.00	1.256	-	-	-0.17	0.202	0.254
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	19.91	21.00	1.285	-	-	-0.03	0.208	0.267
	FR1 n41 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	DSI 4	518598	2592.99	23.09	24.00	1.233	50	1.000	0.11	0.216	0.266
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 4	DSI 4	518598	2592.99	23.14	24.00	1.219	-	-	-0.08	0.150	0.183
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 4	DSI 4	518598	2592.99	23.08	24.00	1.236	-	-	-0.03	0.157	0.194
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 4	DSI 4	518598	2592.99	23.14	24.00	1.219	-	-	-0.06	0.227	0.277
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 4	DSI 4	518598	2592.99	23.08	24.00	1.236	-	-	0.04	0.247	0.305
	FR1 n41 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 4	DSI 4	518598	2592.99	24.07	25.00	1.239	50	1.000	0.14	0.167	0.207
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Front	15mm	Ant 6	DSI 4	42590	3500	25.13	26.00	1.222	62.9	1.006	0.18	0.153	0.188
	LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 6	DSI 4	42590	3500	24.16	25.00	1.213	62.9	1.006	0.01	0.159	0.194
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	42590	3500	25.13	26.00	1.222	62.9	1.006	0.03	0.205	0.252
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 6	DSI 4	42590	3500	24.16	25.00	1.213	62.9	1.006	-0.01	0.165	0.201
	LTE Band 42	20M	QPSK	1	0	-	Front	15mm	Ant 1	DSI 4	42590	3500	21.52	23.00	1.406	62.9	1.006	-0.01	0.028	0.040
	LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 1	DSI 4	42590	3500	20.54	22.00	1.400	62.9	1.006	-0.18	0.036	0.051
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 1	DSI 4	42590	3500	21.52	23.00	1.406	62.9	1.006	-0.05	0.071	0.100
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 1	DSI 4	42590	3500	20.54	22.00	1.400	62.9	1.006	-0.04	0.061	0.086
	LTE Band 42	20M	QPSK	1	0	-	Front	15mm	Ant 7	DSI 4	42590	3500	24.10	25.50	1.380	62.9	1.006	0.01	0.284	0.394
	LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 7	DSI 4	42590	3500	23.15	24.50	1.365	62.9	1.006	-0.14	0.233	0.320
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 7	DSI 4	42590	3500	24.10	25.50	1.380	62.9	1.006	0.06	0.244	0.339
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 7	DSI 4	42590	3500	23.15	24.50	1.365	62.9	1.006	-0.13	0.194	0.266
	LTE Band 42	20M	QPSK	1	0	-	Front	15mm	Ant 8	DSI 4	42590	3500	22.56	24.00	1.393	62.9	1.006	0.07	0.043	0.060
	LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 8	DSI 4	42590	3500	22.53	24.00	1.403	62.9	1.006	0.18	0.041	0.058
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 8	DSI 4	42590	3500	22.56	24.00	1.393	62.9	1.006	-0.1	0.685	0.960
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 8	DSI 4	42190	3460	22.54	24.00	1.400	62.9	1.006	0.01	0.686	0.966
80	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 8	DSI 4	42990	3540	22.45	24.00	1.429	62.9	1.006	0.02	0.753	1.082
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 8	DSI 4	42590	3500	22.53	24.00	1.403	62.9	1.006	-0.15	0.620	0.875
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 8	DSI 4	42190	3460	22.44	24.00	1.432	62.9	1.006	0.19	0.627	0.903
	LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 8	DSI 4	42990	3540	22.32	24.00	1.472	62.9	1.006	0.07	0.686	1.016
	LTE Band 42	20M	QPSK	100	0	-	Back	15mm	Ant 8	DSI 4	42990	3540	22.50	24.00	1.413	62.9	1.006	-0.18	0.628	0.892
	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 6	DSI 4	55830	3609	24.07	25.00	1.239	62.9	1.006	-0.11	0.105	0.131
	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 6	DSI 4	55830	3609	23.07	24.00	1.239	62.9	1.006	-0.05	0.117	0.146
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 6	DSI 4	55830	3609	24.07	25.00	1.239	62.9	1.006	-0.15	0.164	0.204
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 6	DSI 4	55830	3609	23.07	24.00	1.239	62.9	1.006	0.02	0.127	0.158
	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 1	DSI 4	55830	3609	20.71	22.00	1.346	62.9	1.006	0.04	0.040	0.054
	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 1	DSI 4	55830	3609	19.72	21.00	1.343	62.9	1.006	0.08	0.034	0.046
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 1	DSI 4	55830	3609	20.71	22.00	1.346	62.9	1.006	-0.02	0.046	0.062
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 1	DSI 4	55830	3609	19.72	21.00	1.343	62.9	1.006	0.01	0.044	0.059
	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 7	DSI 4	55830	3609	23.40	25.00	1.445	62.9	1.006	0.02	0.200	0.291
	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 7	DSI 4	55830	3609	22.43	24.00	1.435	62.9	1.006	-0.03	0.165	0.238
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 7	DSI 4	55830	3609	23.40	25.00	1.445	62.9	1.006	-0.06	0.190	0.276
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 7	DSI 4	55830	3609	22.43	24.00	1.435	62.9	1.006	0.08	0.153	0.221
	LTE Band 48	20M	QPSK	1	0	-	Front	15mm	Ant 8	DSI 4	55830	3609	21.63	23.00	1.371	62.9	1.006	-0.11	0.010	0.014
	LTE Band 48	20M	QPSK	50	0	-	Front	15mm	Ant 8	DSI 4	55830	3609	21.61	23.00	1.377	62.9	1.006	-0.17	0.006	0.008
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 8	DSI 4	55830	3609	21.63	23.00	1.371	62.9	1.006	0.15	0.438	0.604



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	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 8	DSI 4	55340	3560	21.50	23.00	1.413	62.9	1.006	-0.17	0.459	0.652
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 8	DSI 4	56150	3641	21.51	23.00	1.409	62.9	1.006	-0.02	0.431	0.611
	LTE Band 48	20M	QPSK	1	0	-	Back	15mm	Ant 8	DSI 4	56640	3690	21.54	23.00	1.400	62.9	1.006	0.09	0.427	0.601
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 8	DSI 4	55830	3609	21.61	23.00	1.377	62.9	1.006	0.1	0.452	0.626
81	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 8	DSI 4	55340	3560	21.42	23.00	1.439	62.9	1.006	0.02	0.469	0.679
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 8	DSI 4	56150	3641	21.39	23.00	1.449	62.9	1.006	0.12	0.429	0.625
	LTE Band 48	20M	QPSK	50	0	-	Back	15mm	Ant 8	DSI 4	56640	3690	21.48	23.00	1.419	62.9	1.006	-0.11	0.448	0.640
	LTE Band 48	20M	QPSK	100	0	-	Back	15mm	Ant 8	DSI 4	55830	3609	21.56	23.00	1.393	62.9	1.006	-0.01	0.429	0.601
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	641666	3624.99	24.29	25.00	1.178	-	-	0.14	0.279	0.329
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	641666	3624.99	24.17	25.00	1.211	-	-	0.12	0.280	0.339
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	641666	3624.99	24.29	25.00	1.178	-	-	-0.03	0.359	0.423
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	641666	3624.99	24.17	25.00	1.211	-	-	0.05	0.373	0.452
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	641666	3624.99	20.67	22.00	1.358	-	-	-0.01	0.077	0.105
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	641666	3624.99	20.58	22.00	1.387	-	-	-0.06	0.072	0.100
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	641666	3624.99	20.67	22.00	1.358	-	-	-0.1	0.111	0.151
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	641666	3624.99	20.58	22.00	1.387	-	-	0.02	0.123	0.171
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	641666	3624.99	23.46	25.00	1.426	-	-	0.12	0.366	0.522
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	641666	3624.99	23.39	25.00	1.449	-	-	-0.08	0.367	0.532
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	641666	3624.99	23.46	25.00	1.426	-	-	0.02	0.293	0.418
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	641666	3624.99	23.39	25.00	1.449	-	-	0.01	0.292	0.423
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	641666	3624.99	20.19	21.50	1.352	-	-	0.05	0.050	0.068
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	641666	3624.99	20.02	21.50	1.406	-	-	-0.16	0.043	0.060
82	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	641666	3624.99	20.19	21.50	1.352	-	-	0.05	0.651	0.880
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	638000	3570	20.17	21.50	1.358	-	-	0.08	0.638	0.867
	FR1 n48	40M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	645332	3679.98	20.16	21.50	1.361	-	-	-0.09	0.605	0.824
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	641666	3624.99	20.02	21.50	1.406	-	-	-0.17	0.571	0.803
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	638000	3570	19.95	21.50	1.429	-	-	0.08	0.560	0.800
	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	645332	3679.98	19.92	21.50	1.439	-	-	-0.07	0.558	0.803
	FR1 n48	40M	QPSK	100	0	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	641666	3624.99	19.95	21.50	1.429	-	-	-0.09	0.583	0.833
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	656000	3840	25.38	26.00	1.153	-	-	0.18	0.347	0.400
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	656000	3840	25.09	26.00	1.233	-	-	-0.07	0.320	0.395
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000	3840	25.38	26.00	1.153	-	-	0.01	0.488	0.563
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000	3840	25.09	26.00	1.233	-	-	0.06	0.451	0.556
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	656000	3840	27.35	28.50	1.303	50	1.000	0.05	0.388	0.506
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	633334	3500.01	25.38	26.00	1.153	-	-	-0.05	0.583	0.672
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	633334	3500.01	25.29	26.00	1.178	-	-	-0.05	0.481	0.566
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	25.38	26.00	1.153	-	-	0.02	0.646	0.745
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	25.29	26.00	1.178	-	-	-0.07	0.578	0.681
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	27.41	28.50	1.285	50	1.000	0.03	0.498	0.640
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	656000	3840	22.12	23.50	1.374	-	-	-0.11	0.112	0.154
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	656000	3840	22.08	23.50	1.387	-	-	-0.03	0.117	0.162
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	656000	3840	22.12	23.50	1.374	-	-	0.03	0.136	0.187
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	656000	3840	22.08	23.50	1.387	-	-	0.04	0.129	0.179
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	656000	3840	24.13	25.50	1.371	50	1.000	-0.08	0.107	0.147
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	633334	3500.01	21.96	23.50	1.426	-	-	-0.1	0.166	0.237
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	633334	3500.01	21.69	23.50	1.517	-	-	0.07	0.123	0.187
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	633334	3500.01	21.96	23.50	1.426	-	-	0.02	0.250	0.356
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	633334	3500.01	21.69	23.50	1.517	-	-	0.03	0.184	0.279
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	633334	3500.01	24.04	25.50	1.400	50	1.000	-0.01	0.195	0.273
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	656000	3840	24.09	25.00	1.233	-	-	0.02	0.333	0.411
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	656000	3840	23.84	25.00	1.306	-	-	0.04	0.239	0.312
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	656000	3840	24.09	25.00	1.233	-	-	-0.16	0.278	0.343
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	656000	3840	23.84	25.00	1.306	-	-	-0.17	0.226	0.295
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	656000	3840	26.06	27.50	1.393	50	1.000	0.04	0.250	0.348
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	633334	3500.01	24.19	25.00	1.205	-	-	0.01	0.629	0.758
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	633334	3500.01	24.14	25.00	1.219	-	-	-0.13	0.501	0.611



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	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	633334	3500.01	24.19	25.00	1.205	-	-	-0.1	0.464	0.559
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	633334	3500.01	24.14	25.00	1.219	-	-	-0.04	0.386	0.471
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	633334	3500.01	26.31	27.50	1.315	50	1.000	-0.17	0.513	0.675
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	656000	3840	20.79	22.00	1.321	-	-	0.03	0.075	0.099
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	656000	3840	20.73	22.00	1.340	-	-	-0.15	0.074	0.099
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000	3840	20.79	22.00	1.321	-	-	0.01	0.276	0.365
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000	3840	20.73	22.00	1.340	-	-	-0.15	0.232	0.311
	FR1 n77 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	656000	3840	23.84	25.00	1.306	50	1.000	0.1	0.270	0.353
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	633334	3500.01	21.06	22.00	1.242	-	-	0.11	0.022	0.027
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	633334	3500.01	20.92	22.00	1.282	-	-	-0.08	0.031	0.040
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	21.06	22.00	1.242	-	-	-0.17	0.697	0.865
83	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	20.92	22.00	1.282	-	-	0.03	0.704	0.903
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	20.73	22.00	1.340	-	-	0.06	0.622	0.833
	FR1 n77 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	24.14	25.00	1.219	50	1.000	0.01	0.684	0.834
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	650000	3750	25.13	26.00	1.222	-	-	0.03	0.372	0.455
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	650000	3750	25.12	26.00	1.225	-	-	-0.08	0.356	0.436
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	650000	3750	25.13	26.00	1.222	-	-	0.05	0.452	0.552
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	650000	3750	25.12	26.00	1.225	-	-	0.13	0.416	0.509
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	650000	3750	27.08	28.50	1.387	50	1.000	-0.05	0.352	0.488
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	633334	3500.01	25.19	26.00	1.205	-	-	0.15	0.582	0.701
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 6	DSI 4	633334	3500.01	24.95	26.00	1.274	-	-	0.01	0.512	0.652
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	25.19	26.00	1.205	-	-	0.04	0.617	0.744
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	24.95	26.00	1.274	-	-	-0.04	0.574	0.731
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 6	DSI 4	633334	3500.01	27.16	28.50	1.361	50	1.000	0.17	0.471	0.641
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	650000	3750	22.01	23.00	1.256	-	-	-0.19	0.103	0.129
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	650000	3750	21.97	23.00	1.268	-	-	-0.09	0.109	0.138
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	650000	3750	22.01	23.00	1.256	-	-	0.02	0.154	0.193
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	650000	3750	21.97	23.00	1.268	-	-	-0.13	0.138	0.175
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	650000	3750	23.93	25.00	1.279	50	1.000	-0.17	0.120	0.154
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	633334	3500.01	21.73	23.00	1.340	-	-	0.06	0.137	0.184
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 1	DSI 4	633334	3500.01	21.67	23.00	1.358	-	-	0.18	0.110	0.149
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	633334	3500.01	21.73	23.00	1.340	-	-	0.02	0.227	0.304
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	633334	3500.01	21.67	23.00	1.358	-	-	-0.07	0.182	0.247
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	DSI 4	633334	3500.01	23.66	25.00	1.361	50	1.000	0.14	0.186	0.253
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	650000	3750	24.58	25.50	1.236	-	-	0.01	0.494	0.611
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	650000	3750	24.43	25.50	1.279	-	-	-0.1	0.438	0.560
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	650000	3750	24.58	25.50	1.236	-	-	0.14	0.374	0.462
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	650000	3750	24.43	25.50	1.279	-	-	-0.14	0.350	0.448
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	650000	3750	26.53	27.50	1.250	50	1.000	0.18	0.403	0.504
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	633334	3500.01	24.56	25.50	1.242	-	-	0.01	0.681	0.846
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	633334	3500.01	24.35	25.50	1.303	-	-	0.03	0.636	0.829
	FR1 n78	100M	QPSK	270	0	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	633334	3500.01	24.42	25.50	1.282	-	-	0.06	0.623	0.799
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	633334	3500.01	24.56	25.50	1.242	-	-	0.04	0.503	0.625
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	DSI 4	633334	3500.01	24.35	25.50	1.303	-	-	0.04	0.420	0.547
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 7	DSI 4	633334	3500.01	26.51	27.50	1.256	50	1.000	-0.05	0.524	0.658
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	650000	3750	20.92	22.00	1.282	-	-	0.07	0.036	0.046
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	650000	3750	20.82	22.00	1.312	-	-	0.13	0.050	0.066
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	650000	3750	20.92	22.00	1.282	-	-	0.01	0.437	0.560
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	650000	3750	20.82	22.00	1.312	-	-	-0.15	0.360	0.472
	FR1 n78 PC2	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	650000	3750	23.88	25.00	1.294	50	1.000	0.11	0.422	0.546
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	633334	3500.01	20.90	22.00	1.288	-	-	-0.04	0.056	0.072
	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Front	15mm	Ant 8	DSI 4	633334	3500.01	20.76	22.00	1.330	-	-	0.12	0.043	0.057
	FR1 n78	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	20.90	22.00	1.288	-	-	-0.09	0.706	0.910
84	FR1 n78	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	20.76	22.00	1.330	-	-	0.03	0.713	0.949
	FR1 n78	100M	QPSK	270	0	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	20.60	22.00	1.380	-	-	0.06	0.675	0.932
	FR1 n78 PC2	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 8	DSI 4	633334	3500.01	23.94	25.00	1.276	50	1.000	-0.02	0.730	0.932

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 16+7(7)	Full power	11	2462	19.05	20.00	1.245	97.03	1.031	0.12	0.214	0.275
85	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 16+7(7)	Full power	11	2462	19.05	20.00	1.245	97.03	1.031	0.02	0.257	0.330
	Bluetooth	1Mbps	Front	15mm	Ant 7	Full power	0	2402	15.45	16.50	1.273	77.06	1.081	0.06	0.010	0.014
86	Bluetooth	1Mbps	Back	15mm	Ant 7	Full power	0	2402	15.45	16.50	1.273	77.06	1.081	-0.03	0.066	0.091
	Bluetooth	1Mbps	Front	15mm	Ant 16	Full power	39	2441	15.54	17.00	1.400	77.01	1.082	0.01	0.040	0.061
	Bluetooth	1Mbps	Back	15mm	Ant 16	Full power	39	2441	15.54	17.00	1.400	77.01	1.082	0.08	0.025	0.038
5000MHz																
	WLAN5.3GHz	802.11a 6Mbps	Front	15mm	Ant 17+6(17)	Full power	60	5300	19.19	20.00	1.205	98.97	1.010	0.03	0.224	0.273
87	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 17+6(17)	Full power	60	5300	19.19	20.00	1.205	98.97	1.010	0.06	0.305	0.371
	WLAN5.5GHz	802.11a 6Mbps	Front	15mm	Ant 17+6(17)	Full power	116	5580	19.16	20.00	1.213	98.97	1.010	0.16	0.275	0.337
88	WLAN5.5GHz	802.11a 6Mbps	Back	15mm	Ant 17+6(17)	Full power	116	5580	19.16	20.00	1.213	98.97	1.010	-0.03	0.331	0.406
	WLAN5.8GHz	802.11a 6Mbps	Front	15mm	Ant 17+6(6)	Full power	165	5825	18.52	19.50	1.253	98.97	1.010	0.07	0.197	0.249
89	WLAN5.8GHz	802.11a 6Mbps	Back	15mm	Ant 17+6(6)	Full power	165	5825	18.52	19.50	1.253	98.97	1.010	-0.09	0.293	0.371



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)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Measured (dB)	10g SAR (W/kg)	Reported 10g SAR (W/kg)
850MHz																		
90	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Side	0mm	Ant 1	DSI 3	189	836.4	26.70	28.50	1.514	0.01	1.21	1.831
1750MHz																		
91	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	0mm	Ant 2	DSI 3	1413	1732.6	22.10	23.50	1.380	-0.01	1.85	2.554
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	0mm	Ant 2	DSI 3	1312	1712.4	22.01	23.50	1.409	0.11	1.79	2.523
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	0mm	Ant 2	DSI 3	1513	1752.6	22.08	23.50	1.387	-0.05	1.76	2.441
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	7mm	Ant 2	DSI 4	1413	1732.6	23.13	24.50	1.371	0.08	1.68	2.303
	LTE Band 4	20M	QPSK	1	0	-	Right Side	0mm	Ant 2	DSI 3	20175	1732.5	22.45	23.70	1.334	-0.05	1.88	2.507
	LTE Band 4	20M	QPSK	50	0	-	Right Side	0mm	Ant 2	DSI 3	20175	1732.5	22.39	23.70	1.352	0.01	1.80	2.434
	LTE Band 4	20M	QPSK	100	0	-	Right Side	0mm	Ant 2	DSI 3	20175	1732.5	22.35	23.70	1.365	0.06	1.75	2.388
	LTE Band 4	20M	QPSK	1	0	-	Right Side	7mm	Ant 2	DSI 4	20175	1732.5	24.28	25.70	1.387	0.02	1.45	2.011
92	LTE Band 4	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 5	DSI 4	20175	1732.5	21.97	23.20	1.327	-0.06	1.93	2.562
	LTE Band 4	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 5	DSI 4	20175	1732.5	21.93	23.20	1.340	0.02	1.85	2.478
	LTE Band 4	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 5	DSI 4	20175	1732.5	21.91	23.20	1.346	0.01	1.82	2.449
93	LTE Band 66	20M	QPSK	1	0	-	Right Side	0mm	Ant 2	DSI 3	132322	1745	22.44	23.70	1.337	-0.04	1.72	2.299
	LTE Band 66	20M	QPSK	1	0	-	Right Side	0mm	Ant 2	DSI 3	132072	1720	22.38	23.70	1.355	0.16	1.66	2.250
	LTE Band 66	20M	QPSK	1	0	-	Right Side	0mm	Ant 2	DSI 3	132572	1770	22.34	23.70	1.368	0.13	1.63	2.229
	LTE Band 66	20M	QPSK	50	0	-	Right Side	0mm	Ant 2	DSI 3	132322	1745	22.40	23.70	1.349	0.14	1.67	2.253
	LTE Band 66	20M	QPSK	50	0	-	Right Side	0mm	Ant 2	DSI 3	132072	1720	22.25	23.70	1.396	-0.18	1.62	2.262
	LTE Band 66	20M	QPSK	50	0	-	Right Side	0mm	Ant 2	DSI 3	132572	1770	22.27	23.70	1.390	0.02	1.58	2.196
	LTE Band 66	20M	QPSK	100	0	-	Right Side	0mm	Ant 2	DSI 3	132322	1745	22.39	23.70	1.352	0.16	1.55	2.096
	LTE Band 66	20M	QPSK	1	0	-	Right Side	7mm	Ant 2	DSI 4	132322	1745	24.43	25.70	1.340	0.01	1.50	2.010
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 5	DSI 4	132322	1745	22.05	23.20	1.303	0.1	1.36	1.772
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 5	DSI 4	132322	1745	21.96	23.20	1.330	0.02	1.29	1.716
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	0mm	Ant 2	DSI 3	349000	1745	21.63	22.50	1.222	-0.04	1.70	2.077
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	0mm	Ant 2	DSI 3	349000	1745	21.55	22.50	1.245	0.07	1.68	2.091
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Side	0mm	Ant 2	DSI 3	349000	1745	21.55	22.50	1.245	0.01	1.61	2.004
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	7mm	Ant 2	DSI 4	349000	1745	24.48	25.50	1.265	-0.04	1.63	2.062
94	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 5	DSI 4	349000	1745	22.43	23.50	1.279	0.02	1.73	2.213
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 5	DSI 4	349000	1745	22.28	23.50	1.324	0.01	1.65	2.185
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant 5	DSI 4	349000	1745	22.17	23.50	1.358	0.05	1.60	2.173
1900MHz																		
95	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	0mm	Ant 2	DSI 3	661	1880	23.65	25.50	1.531	0.01	1.24	1.899
96	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 5	DSI 4	9400	1880	21.15	22.00	1.216	0.01	1.72	2.092
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 5	DSI 4	9262	1852.4	21.14	22.00	1.219	0.02	1.65	2.011
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 5	DSI 4	9538	1907.6	21.11	22.00	1.227	0.03	1.62	1.988
97	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	18900	1880	20.77	22.00	1.327	0.08	1.81	2.403
	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	18700	1860	20.68	22.00	1.355	0.01	1.59	2.155
	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 3	DSI 3	19100	1900	20.70	22.00	1.349	0.03	1.73	2.334
	LTE Band 2	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	18900	1880	20.73	22.00	1.340	-0.08	1.75	2.344
	LTE Band 2	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	18700	1860	20.60	22.00	1.380	-0.08	1.71	2.360
	LTE Band 2	20M	QPSK	50	0	-	Left Side	0mm	Ant 3	DSI 3	19100	1900	20.56	22.00	1.393	0.1	1.65	2.299
	LTE Band 2	20M	QPSK	100	0	-	Left Side	0mm	Ant 3	DSI 3	18900	1880	20.67	22.00	1.358	-0.18	1.46	1.983
	LTE Band 2	20M	QPSK	1	0	-	Left Side	5mm	Ant 3	DSI 4	18900	1880	24.22	25.50	1.343	-0.05	1.47	1.974
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Back	0mm	Ant 2	DSI 3	18900	1880	22.35	23.50	1.303	0.03	1.24	1.616
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Back	0mm	Ant 2	DSI 3	18900	1880	22.20	23.50	1.349	-0.08	1.21	1.632
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Right Side	0mm	Ant 2	DSI 3	18900	1880	22.35	23.50	1.303	-0.05	1.71	2.228
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Right Side	0mm	Ant 2	DSI 3	18700	1860	22.16	23.50	1.361	0.04	1.65	2.246
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Right Side	0mm	Ant 2	DSI 3	19100	1900	22.21	23.50	1.346	0.13	1.62	2.180
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Right Side	0mm	Ant 2	DSI 3	18900	1880	22.20	23.50	1.349	-0.08	1.62	2.185
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Right Side	0mm	Ant 2	DSI 3	18700	1860	22.25	23.50	1.334	-0.18	1.60	2.134
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Right Side	0mm	Ant 2	DSI 3	19100	1900	22.19	23.50	1.352	-0.11	1.59	2.150



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	LTE Band 2_Other PA	20M	QPSK	100	0	-	Right Side	0mm	Ant 2	DSI 3	18900	1880	22.24	23.50	1.337	-0.16	1.55	2.072
	LTE Band 2_Main PA	20M	QPSK	50	0	-	Right Side	0mm	Ant 2	DSI 3	18900	1880	21.47	23.00	1.422	0.01	1.49	2.119
	LTE Band 2_Main PA	20M	QPSK	1	0	-	Right Side	7mm	Ant 2	DSI 4	18900	1880	23.24	25.00	1.500	-0.04	1.44	2.160
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 5	DSI 4	18900	1880	21.27	22.00	1.183	0.1	1.96	2.319
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 5	DSI 4	18700	1860	21.11	22.00	1.227	-0.15	1.82	2.234
	LTE Band 2_Other PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 5	DSI 4	19100	1900	21.22	22.00	1.197	-0.06	1.85	2.214
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 5	DSI 4	18900	1880	21.17	22.00	1.211	0.12	1.88	2.276
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 5	DSI 4	18700	1860	21.05	22.00	1.245	-0.14	1.81	2.253
	LTE Band 2_Other PA	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 5	DSI 4	19100	1900	21.11	22.00	1.227	-0.19	1.76	2.160
	LTE Band 2_Other PA	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 5	DSI 4	18900	1880	21.04	22.00	1.247	0.01	1.73	2.158
98	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	0mm	Ant 3	DSI 3	376000	1880	21.28	22.00	1.180	0.08	2.11	2.490
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	0mm	Ant 3	DSI 3	376000	1880	21.25	22.00	1.189	-0.17	2.04	2.425
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Left Side	0mm	Ant 3	DSI 3	376000	1880	21.26	22.00	1.186	0.06	2.00	2.372
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 3	DSI 4	376000	1880	24.69	25.50	1.205	-0.07	1.59	1.916
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	0mm	Ant 2	DSI 3	376000	1880	21.31	22.50	1.315	-0.07	1.38	1.815
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	0mm	Ant 2	DSI 3	376000	1880	21.24	22.50	1.337	0.04	1.28	1.711
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	7mm	Ant 2	DSI 4	376000	1880	23.74	25.00	1.337	-0.04	1.46	1.951

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
5000MHz																
99	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(17)	Standalone	46	5230	17.43	18.00	1.140	100	1.000	-0.01	2.24	2.554
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(17)	Standalone	38	5190	17.12	18.00	1.225	100	1.000	0.08	2.00	2.449
	WLAN5.2GHz	802.11a 6Mbps	Top Side	5mm	Ant 17+6(17)	Full power	44	5220	19.25	20.00	1.189	98.97	1.010	0.08	0.854	1.025
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	0mm	Ant 17+6(6)	Standalone	54	5270	16.66	17.50	1.213	100	1.000	0.01	0.953	1.156
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 17+6(6)	Standalone	54	5270	16.66	17.50	1.213	100	1.000	0.03	0.351	0.426
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 17+6(6)	Standalone	54	5270	16.66	17.50	1.213	100	1.000	-0.08	0.078	0.095
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 17+6(6)	Standalone	54	5270	16.66	17.50	1.213	100	1.000	-0.08	1.45	1.759
100	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(6)	Standalone	54	5270	16.66	17.50	1.213	100	1.000	0.12	2.06	2.500
	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(17)	Standalone	62	5310	16.11	17.00	1.227	100	1.000	-0.18	1.86	2.283
	WLAN5.3GHz	802.11a 6Mbps	Top Side	5mm	Ant 17+6(17)	Full power	60	5300	19.19	20.00	1.205	98.97	1.010	0.01	0.880	1.071
	WLAN5.3GHz	802.11a 6Mbps	Right Side	7mm	Ant 17+6(17)	Full power	60	5300	19.19	20.00	1.205	98.97	1.010	0.04	0.383	0.466
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 17+6(17)	Standalone	126	5630	17.15	18.00	1.216	100	1.000	0.14	1.38	1.678
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 17+6(17)	Standalone	126	5630	17.15	18.00	1.216	100	1.000	-0.05	0.33	0.403
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 17+6(17)	Standalone	126	5630	17.15	18.00	1.216	100	1.000	0.18	0.06	0.073
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 17+6(17)	Standalone	126	5630	17.15	18.00	1.216	100	1.000	0.14	1.31	1.593
101	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(17)	Standalone	126	5630	17.15	18.00	1.216	100	1.000	0.01	1.94	2.359
	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(17)	Standalone	110	5550	17.20	18.00	1.202	100	1.000	0.08	1.91	2.296
	WLAN5.5GHz	802.11a 6Mbps	Top Side	5mm	Ant 17+6(17)	Full power	116	5580	19.16	20.00	1.213	98.97	1.010	-0.01	0.822	1.007
	WLAN5.5GHz	802.11a 6Mbps	Right Side	7mm	Ant 17+6(17)	Full power	116	5580	19.16	20.00	1.213	98.97	1.010	0.13	0.399	0.489

16.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	132572	1770	18.10	18.70	1.148	-	-	-0.02	0.925	1	1.062
2nd	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 3	DSI 1	132572	1770	18.10	18.70	1.148	-	-	0.01	0.918	1.008	1.054
1st	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	638000	3570	13.07	14.00	1.239	-	-	0.01	0.826	1	1.023
2nd	FR1 n48	40M	QPSK	50	28	DFT-SCS-30KHz	Left Tilted	0mm	Ant 6	DSI 1	638000	3570	13.07	14.00	1.239	-	-	0.06	0.815	1.013	1.010
1st	WLAN5.3GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 17+6(6)	Standalone	50	5250	13.63	14.50	1.222	100	1.000	0.08	0.822	1	1.004
2nd	WLAN5.3GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 17+6(6)	Standalone	50	5250	13.63	14.50	1.222	100	1.000	0.06	0.815	1.009	0.996
1st	WLAN5.5GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 17+6(6)	Standalone	114	5570	13.42	14.00	1.143	100	1.000	0.05	0.884	1	1.010
2nd	WLAN5.5GHz	-	-	-	-	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 17+6(6)	Standalone	114	5570	13.42	14.00	1.143	100	1.000	0.06	0.879	1.006	1.005
1st	WLAN5.8GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 17+6(17)	Standalone	155	5775	13.77	14.50	1.183	100	1.000	-0.02	0.880	1	1.041
2nd	WLAN5.8GHz	-	-	-	-	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 17+6(17)	Standalone	155	5775	13.77	14.50	1.183	100	1.000	0.01	0.871	1.010	1.030
1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 5	DSI 6	9262	1852.4	20.60	21.50	1.230	-	-	-0.03	0.827	1	1.017
2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 5	DSI 6	9262	1852.4	20.60	21.50	1.230	-	-	0.06	0.820	1.009	1.009
1st	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	21350	2560	25.02	25.70	1.169	-	-	0.06	0.903	1	1.056
2nd	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 3	DSI 4	21350	2560	25.02	25.70	1.169	-	-	0.01	0.895	1.009	1.047

<10g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	0mm	Ant 3	DSI 3	376000	1880	21.28	22.00	1.180	-	-	0.08	2.11	1	2.490
2nd	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	0mm	Ant 3	DSI 3	376000	1880	21.28	22.00	1.180	-	-	0.03	2.08	1.014	2.455
1st	WLAN5.2GHz	-	-	-	-	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(17)	Standalone	46	5230	17.43	18.00	1.140	100	1.000	-0.01	2.24	1	2.554
2nd	WLAN5.2GHz	-	-	-	-	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(17)	Standalone	46	5230	17.43	18.00	1.140	100	1.000	0.06	2.20	1.018	2.509
1st	WLAN5.3GHz	-	-	-	-	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(6)	Standalone	54	5270	16.66	17.50	1.213	100	1.000	0.12	2.06	1	2.500
2nd	WLAN5.3GHz	-	-	-	-	802.11n-HT40 MCS0	Top Side	0mm	Ant 17+6(6)	Standalone	54	5270	16.66	17.50	1.213	100	1.000	0.02	2.03	1.015	2.463

General Note:

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

16.6 TDD 5G NR Linearity Data Analysis

General Note:

This device support Power Class 2 and Power Class 3 operations for 5G NR n41/n77/n78. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each 5G NR configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg for 1g and < 3.5 W/kg for 10g, Separate SAR testing for Power Class 2 is not required.

FR1 n41 HPUE (HPUE)-Linearity Data for Head Ant2			FR1 n41 HPUE (HPUE)-Linearity Data for Head Ant3		
	NR n41 (Power Class 3)	NR n41 (Power Class 2)		NR n41 (Power Class 3)	NR n41 (Power Class 2)
Maximum Tune up Power (dBm)	16.50	19.50	Maximum Tune up Power (dBm)	16.20	19.50
Reported 1g SAR (W/kg)	1.080	1.074	Reported 1g SAR (W/kg)	0.841	0.970
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	44.67	44.56	Frame Averaged (mW)	41.69	44.56
Linearity SAR (W/kg)	1.077		Linearity SAR (W/kg)	0.899	
% deviation from expected linearity		-0.32%	% deviation from expected linearity		7.90%
FR1 n41 HPUE (HPUE)-Linearity Data for Body-worn Ant2			FR1 n41 HPUE (HPUE)-Linearity Data for Body-worn Ant3		
	NR n41 (Power Class 3)	NR n41 (Power Class 2)		NR n41 (Power Class 3)	NR n41 (Power Class 2)
Maximum Tune up Power (dBm)	25.50	26.50	Maximum Tune up Power (dBm)	25.20	27.00
Reported 1g SAR (W/kg)	0.692	0.467	Reported 1g SAR (W/kg)	0.866	0.657
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	354.81	223.34	Frame Averaged (mW)	331.13	250.59
Linearity SAR (W/kg)	0.436		Linearity SAR (W/kg)	0.655	
% deviation from expected linearity		7.21%	% deviation from expected linearity		0.25%
FR1 n41 HPUE (HPUE)-Linearity Data for Hotspot Ant2			FR1 n41 HPUE (HPUE)-Linearity Data for Hotspot Ant3		
	NR n41 (Power Class 3)	NR n41 (Power Class 2)		NR n41 (Power Class 3)	NR n41 (Power Class 2)
Maximum Tune up Power (dBm)	16.50	19.50	Maximum Tune up Power (dBm)	16.20	19.50
Reported 1g SAR (W/kg)	0.430	0.448	Reported 1g SAR (W/kg)	0.367	0.384
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	44.67	44.56	Frame Averaged (mW)	41.69	44.56
Linearity SAR (W/kg)	0.429		Linearity SAR (W/kg)	0.392	
% deviation from expected linearity		4.43%	% deviation from expected linearity		-2.12%
FR1 n41 HPUE (HPUE)-Linearity Data for Head Ant4			FR1 n41 HPUE (HPUE)-Linearity Data for Head Ant5		
	NR n41 (Power Class 3)	NR n41 (Power Class 2)		NR n41 (Power Class 3)	NR n41 (Power Class 2)
Maximum Tune up Power (dBm)	18.00	21.00	Maximum Tune up Power (dBm)	25.50	26.50
Reported 1g SAR (W/kg)	0.901	0.939	Reported 1g SAR (W/kg)	0.305	0.195
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	63.10	62.95	Frame Averaged (mW)	354.81	223.34
Linearity SAR (W/kg)	0.899		Linearity SAR (W/kg)	0.192	
% deviation from expected linearity		4.46%	% deviation from expected linearity		1.57%
FR1 n41 HPUE (HPUE)-Linearity Data for Body-worn Ant4			FR1 n41 HPUE (HPUE)-Linearity Data for Body-worn Ant5		
	NR n41 (Power Class 3)	NR n41 (Power Class 2)		NR n41 (Power Class 3)	NR n41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	25.00	Maximum Tune up Power (dBm)	21.00	24.00
Reported 1g SAR (W/kg)	0.305	0.207	Reported 1g SAR (W/kg)	0.267	0.266
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	158.11	Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	0.192		Linearity SAR (W/kg)	0.266	
% deviation from expected linearity		7.82%	% deviation from expected linearity		-0.14%
FR1 n41 HPUE (HPUE)-Linearity Data for Hotspot Ant4			FR1 n41 HPUE (HPUE)-Linearity Data for Hotspot Ant5		
	NR n41 (Power Class 3)	NR n41 (Power Class 2)		NR n41 (Power Class 3)	NR n41 (Power Class 2)
Maximum Tune up Power (dBm)	18.00	21.00	Maximum Tune up Power (dBm)	21.00	24.00
Reported 1g SAR (W/kg)	0.403	0.421	Reported 1g SAR (W/kg)	0.522	0.498



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Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	63.10	62.95	Frame Averaged (mW)	125.89	125.59
Linearity SAR (W/kg)	0.402		Linearity SAR (W/kg)	0.521	
% deviation from expected linearity		4.71%	% deviation from expected linearity		-4.37%

NR n77 Part270 (HPUE)-Linearity Data for Head Ant1			NR n77 Part27Q (HPUE)-Linearity Data for Head Ant1		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	17.50	20.50	Maximum Tune up Power (dBm)	17.50	20.50
Reported 1g SAR (W/kg)	0.611	0.606	Reported 1g SAR (W/kg)	0.624	0.626
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	56.23	56.10	Frame Averaged (mW)	56.23	56.10
Linearity SAR (W/kg)	0.610		Linearity SAR (W/kg)	0.623	
% deviation from expected linearity		-0.58%	% deviation from expected linearity		0.56%
NR n77 Part270 (HPUE)-Linearity Data for Body-worn Ant1			NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant1		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.50	25.50	Maximum Tune up Power (dBm)	23.50	25.50
Reported 1g SAR (W/kg)	0.187	0.147	Reported 1g SAR (W/kg)	0.356	0.273
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	223.87	177.41	Frame Averaged (mW)	223.87	177.41
Linearity SAR (W/kg)	0.148		Linearity SAR (W/kg)	0.282	
% deviation from expected linearity		-0.80%	% deviation from expected linearity		-3.23%
NR n77 Part270 (HPUE)-Linearity Data for Hotspot Ant1			NR n77 Part27Q (HPUE)-Linearity Data for Hotspot Ant1		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	17.50	20.50	Maximum Tune up Power (dBm)	17.50	20.50
Reported 1g SAR (W/kg)	0.119	0.121	Reported 1g SAR (W/kg)	0.154	0.154
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	56.23	56.10	Frame Averaged (mW)	56.23	56.10
Linearity SAR (W/kg)	0.119		Linearity SAR (W/kg)	0.154	
% deviation from expected linearity		1.92%	% deviation from expected linearity		0.24%

NR n77 Part270 (HPUE)-Linearity Data for Head Ant6			NR n77 Part27Q (HPUE)-Linearity Data for Head Ant6		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	13.50	17.00	Maximum Tune up Power (dBm)	13.50	17.00
Reported 1g SAR (W/kg)	0.565	0.669	Reported 1g SAR (W/kg)	0.869	0.944
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	22.39	25.06	Frame Averaged (mW)	22.39	25.06
Linearity SAR (W/kg)	0.632		Linearity SAR (W/kg)	0.973	
% deviation from expected linearity		5.78%	% deviation from expected linearity		-2.95%
NR n77 Part270 (HPUE)-Linearity Data for Body-worn Ant6			NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant6		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	26.00	28.50	Maximum Tune up Power (dBm)	26.00	28.50
Reported 1g SAR (W/kg)	0.563	0.506	Reported 1g SAR (W/kg)	0.745	0.640
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	398.11	353.97	Frame Averaged (mW)	398.11	353.97
Linearity SAR (W/kg)	0.501		Linearity SAR (W/kg)	0.662	
% deviation from expected linearity		1.08%	% deviation from expected linearity		-3.38%
NR n77 Part270 (HPUE)-Linearity Data for Hotspot Ant6			NR n77 Part27Q (HPUE)-Linearity Data for Hotspot Ant6		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	13.50	17.00	Maximum Tune up Power (dBm)	13.50	17.00
Reported 1g SAR (W/kg)	0.162	0.177	Reported 1g SAR (W/kg)	0.232	0.240
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	22.39	25.06	Frame Averaged (mW)	22.39	25.06
Linearity SAR (W/kg)	0.181		Linearity SAR (W/kg)	0.260	
% deviation from expected linearity		-2.39%	% deviation from expected linearity		-7.58%

NR n77 Part270 (HPUE)-Linearity Data for Head Ant7			NR n77 Part27Q (HPUE)-Linearity Data for Head Ant7		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	16.00	19.00	Maximum Tune up Power (dBm)	16.00	19.00
Reported 1g SAR (W/kg)	0.332	0.326	Reported 1g SAR (W/kg)	0.936	0.877
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	39.81	39.72	Frame Averaged (mW)	39.81	39.72
Linearity SAR (W/kg)	0.331		Linearity SAR (W/kg)	0.934	
% deviation from expected linearity		-1.57%	% deviation from expected linearity		-6.08%
NR n77 Part270 (HPUE)-Linearity Data for Body-worn Ant7			NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant7		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	25.00	27.50	Maximum Tune up Power (dBm)	25.00	27.50
Reported 1g SAR (W/kg)	0.411	0.348	Reported 1g SAR (W/kg)	0.758	0.675
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	316.23	281.17	Frame Averaged (mW)	316.23	281.17
Linearity SAR (W/kg)	0.365		Linearity SAR (W/kg)	0.674	
% deviation from expected linearity		-4.77%	% deviation from expected linearity		0.15%
NR n77 Part270 (HPUE)-Linearity Data for Hotspot Ant7			NR n77 Part27Q (HPUE)-Linearity Data for Hotspot Ant7		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	16.00	19.00	Maximum Tune up Power (dBm)	16.00	19.00
Reported 1g SAR (W/kg)	0.286	0.277	Reported 1g SAR (W/kg)	0.510	0.504
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	39.81	39.72	Frame Averaged (mW)	39.81	39.72
Linearity SAR (W/kg)	0.285		Linearity SAR (W/kg)	0.509	
% deviation from expected linearity		-2.92%	% deviation from expected linearity		-0.94%
NR n77 Part270 (HPUE)-Linearity Data for Head Ant8			NR n77 Part27Q (HPUE)-Linearity Data for Head Ant8		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00	Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	0.959	0.884	Reported 1g SAR (W/kg)	0.165	0.178
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05	Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	0.957		Linearity SAR (W/kg)	0.165	
% deviation from expected linearity		-7.60%	% deviation from expected linearity		8.13%
NR n77 Part270 (HPUE)-Linearity Data for Body-worn Ant8			NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant8		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.00	25.00	Maximum Tune up Power (dBm)	22.00	25.00
Reported 1g SAR (W/kg)	0.365	0.353	Reported 1g SAR (W/kg)	0.903	0.834
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	158.49	158.11	Frame Averaged (mW)	158.49	158.11
Linearity SAR (W/kg)	0.364		Linearity SAR (W/kg)	0.901	
% deviation from expected linearity		-3.06%	% deviation from expected linearity		-7.42%
NR n77 Part270 (HPUE)-Linearity Data for Hotspot Ant8			NR n77 Part27Q (HPUE)-Linearity Data for Hotspot Ant8		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	18.00	21.00	Maximum Tune up Power (dBm)	18.00	21.00
Reported 1g SAR (W/kg)	0.383	0.372	Reported 1g SAR (W/kg)	0.758	0.768
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	63.10	62.95	Frame Averaged (mW)	63.10	62.95
Linearity SAR (W/kg)	0.382		Linearity SAR (W/kg)	0.756	
% deviation from expected linearity		-2.64%	% deviation from expected linearity		1.56%

NR N78 Part27O (HPUE)-Linearity Data for Head Ant1			NR N78 Part27Q (HPUE)-Linearity Data for Head Ant1		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	19.00	22.00	Maximum Tune up Power (dBm)	19.00	22.00
Reported 1g SAR (W/kg)	0.791	0.831	Reported 1g SAR (W/kg)	1.018	1.052
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	79.43	79.24	Frame Averaged (mW)	79.43	79.24
Linearity SAR (W/kg)	0.789		Linearity SAR (W/kg)	1.016	
% deviation from expected linearity		5.31%	% deviation from expected linearity		3.59%
NR N78 Part27O (HPUE)-Linearity Data for Body-worn Ant1			NR N78 Part27Q (HPUE)-Linearity Data for Body-worn Ant1		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	25.00	Maximum Tune up Power (dBm)	23.00	25.00
Reported 1g SAR (W/kg)	0.193	0.154	Reported 1g SAR (W/kg)	0.304	0.253
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	158.11	Frame Averaged (mW)	199.53	158.11
Linearity SAR (W/kg)	0.153		Linearity SAR (W/kg)	0.241	
% deviation from expected linearity		0.69%	% deviation from expected linearity		5.02%
NR N78 Part27O (HPUE)-Linearity Data for Hotspot Ant1			NR N78 Part27Q (HPUE)-Linearity Data for Hotspot Ant1		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	19.00	22.00	Maximum Tune up Power (dBm)	19.00	22.00
Reported 1g SAR (W/kg)	0.267	0.261	Reported 1g SAR (W/kg)	0.313	0.312
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	79.43	79.24	Frame Averaged (mW)	79.43	79.24
Linearity SAR (W/kg)	0.266		Linearity SAR (W/kg)	0.312	
% deviation from expected linearity		-2.02%	% deviation from expected linearity		-0.08%
NR N78 Part27O (HPUE)-Linearity Data for Head Ant6			NR N78 Part27Q (HPUE)-Linearity Data for Head Ant6		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	13.00	16.50	Maximum Tune up Power (dBm)	13.00	16.50
Reported 1g SAR (W/kg)	0.594	0.655	Reported 1g SAR (W/kg)	0.776	0.938
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	19.95	22.33	Frame Averaged (mW)	19.95	22.33
Linearity SAR (W/kg)	0.665		Linearity SAR (W/kg)	0.869	
% deviation from expected linearity		-1.49%	% deviation from expected linearity		7.99%
NR N78 Part27O (HPUE)-Linearity Data for Body-worn Ant6			NR N78 Part27Q (HPUE)-Linearity Data for Body-worn Ant6		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	26.00	28.50	Maximum Tune up Power (dBm)	26.00	28.50
Reported 1g SAR (W/kg)	0.552	0.488	Reported 1g SAR (W/kg)	0.744	0.641
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	398.11	353.97	Frame Averaged (mW)	398.11	353.97
Linearity SAR (W/kg)	0.491		Linearity SAR (W/kg)	0.662	
% deviation from expected linearity		-0.57%	% deviation from expected linearity		-3.10%
NR N78 Part27O (HPUE)-Linearity Data for Hotspot Ant6			NR N78 Part27Q (HPUE)-Linearity Data for Hotspot Ant6		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	13.00	16.50	Maximum Tune up Power (dBm)	13.00	16.50
Reported 1g SAR (W/kg)	0.198	0.217	Reported 1g SAR (W/kg)	0.209	0.245
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	19.95	22.33	Frame Averaged (mW)	19.95	22.33
Linearity SAR (W/kg)	0.222		Linearity SAR (W/kg)	0.234	
% deviation from expected linearity		-2.09%	% deviation from expected linearity		4.72%

NR N78 Part27O (HPUE)-Linearity Data for Head Ant7			NR N78 Part27Q (HPUE)-Linearity Data for Head Ant7		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	16.00	19.00	Maximum Tune up Power (dBm)	16.00	19.00
Reported 1g SAR (W/kg)	0.562	0.530	Reported 1g SAR (W/kg)	0.932	0.859
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	39.81	39.72	Frame Averaged (mW)	39.81	39.72
Linearity SAR (W/kg)	0.561		Linearity SAR (W/kg)	0.930	
% deviation from expected linearity		-5.47%	% deviation from expected linearity		-7.61%
NR N78 Part27O (HPUE)-Linearity Data for Body-worn Ant7			NR N78 Part27Q (HPUE)-Linearity Data for Body-worn Ant7		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	25.50	27.50	Maximum Tune up Power (dBm)	25.50	27.50
Reported 1g SAR (W/kg)	0.611	0.504	Reported 1g SAR (W/kg)	0.846	0.658
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	354.81	281.17	Frame Averaged (mW)	354.81	281.17
Linearity SAR (W/kg)	0.484		Linearity SAR (W/kg)	0.670	
% deviation from expected linearity		4.09%	% deviation from expected linearity		-1.85%
NR N78 Part27O (HPUE)-Linearity Data for Hotspot Ant7			NR N78 Part27Q (HPUE)-Linearity Data for Hotspot Ant7		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	16.00	19.00	Maximum Tune up Power (dBm)	16.00	19.00
Reported 1g SAR (W/kg)	0.448	0.429	Reported 1g SAR (W/kg)	0.445	0.427
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	39.81	39.72	Frame Averaged (mW)	39.81	39.72
Linearity SAR (W/kg)	0.447		Linearity SAR (W/kg)	0.444	
% deviation from expected linearity		-4.01%	% deviation from expected linearity		-3.82%
NR N78 Part27O (HPUE)-Linearity Data for Head Ant8			NR N78 Part27Q (HPUE)-Linearity Data for Head Ant8		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00	Maximum Tune up Power (dBm)	23.00	26.00
Reported 1g SAR (W/kg)	1.026	0.963	Reported 1g SAR (W/kg)	0.192	0.187
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05	Frame Averaged (mW)	199.53	199.05
Linearity SAR (W/kg)	1.024		Linearity SAR (W/kg)	0.192	
% deviation from expected linearity		-5.92%	% deviation from expected linearity		-2.37%
NR N78 Part27O (HPUE)-Linearity Data for Body-worn Ant8			NR N78 Part27Q (HPUE)-Linearity Data for Body-worn Ant8		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	22.00	25.00	Maximum Tune up Power (dBm)	22.00	25.00
Reported 1g SAR (W/kg)	0.560	0.546	Reported 1g SAR (W/kg)	0.949	0.932
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	158.49	158.11	Frame Averaged (mW)	158.49	158.11
Linearity SAR (W/kg)	0.559		Linearity SAR (W/kg)	0.947	
% deviation from expected linearity		-2.27%	% deviation from expected linearity		-1.56%
NR N78 Part27O (HPUE)-Linearity Data for Hotspot Ant8			NR N78 Part27Q (HPUE)-Linearity Data for Hotspot Ant8		
	NR N78 (Power Class 3)	NR N78 (Power Class 2)		NR N78 (Power Class 3)	NR N78 (Power Class 2)
Maximum Tune up Power (dBm)	18.00	21.00	Maximum Tune up Power (dBm)	18.00	21.00
Reported 1g SAR (W/kg)	0.505	0.524	Reported 1g SAR (W/kg)	0.882	0.819
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	63.10	62.95	Frame Averaged (mW)	63.10	62.95
Linearity SAR (W/kg)	0.504		Linearity SAR (W/kg)	0.880	
% deviation from expected linearity		4.01%	% deviation from expected linearity		-6.92%

17. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + 2.4GHz WLAN	Yes	Yes	Yes	Yes
2.	WWAN + 5GHz WLAN	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
5.	5GHz WLAN + 2.4GHz WLAN	Yes	Yes	Yes	Yes
6.	WWAN +5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
7.	WWAN +5GHz WLAN + 2.4GHz WLAN	Yes	Yes	Yes	Yes
8.	WWAN + 2.4GHz WLAN+ NFC				Yes
9.	WWAN + 5GHz WLAN+ NFC				Yes
10.	WWAN + Bluetooth+ NFC				Yes
11.	5GHz WLAN + Bluetooth+ NFC				Yes
12.	5GHz WLAN + 2.4GHz WLAN+ NFC				Yes
13.	WWAN +5GHz WLAN + Bluetooth+ NFC				Yes
14.	WWAN +5GHzWLAN + 2.4GHz WLAN+ NFC				Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- WLAN2.4GHz/WLAN5GHz MIMO SAR can represent SISO SAR to do co-located SAR analysis.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
- For EN-DC mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed SAR exposure limit. Therefore, simultaneous transmission compliance between 4G+5G (PCC+SCC) operations within an antenna group is demonstrated in the Part 2 Report during algorithm validation.
- The equipment under test (EUT) contains the Qualcomm modems supporting 2G/3G/4G/5G technologies and WLAN/BT technologies. these modems are always enabled with Qualcomm Smart Transmit feature to control and manage transmitting power in real time and to ensure the time-averaged RF exposure follows the FCC requirement. Smart Transmit algorithm controls the total RF exposure from all WWAN/WLAN/BT to not exceed FCC limit and each antenna group has controlled the total RF exposure from all transmitter to not exceed FCC limit. Therefore, in Part.1 report, it is evaluated whether the sum of the groups of each antenna does not exceed FCC limit or spatial separation is applied. In addition, each antenna needs to satisfy simultaneous transmission analysis with External radios (NFC) in this report at extremity exposure condition.
- According to the EUT characteristic, WLAN2.4GHz and Bluetooth cannot transmit simultaneously.
- According to the EUT characteristic, WLAN5GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN5GHz and WLAN 2.4GHz can transmit simultaneously.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- When stand-alone SAR is not required for a transmitter or antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
- For standalone WWAN/BT/WLAN, always choose the highest SAR among all WWAN/BT/WLAN bands within all antennas for each exposure position to perform simultaneous transmission analysis. This is the worst co-located analysis and can represent each band.
- The maximum SAR summation is calculated based on the same configuration and test position.
- For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in this section did not additional to evaluate 2TX combination of simultaneously transmission.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.

- ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where $(x1, y1, z1)$ and $(x2, y2, z2)$ are the coordinates of the extrapolated peak SAR locations in the zoom scan.
- iii) If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
- iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
- v) The SPLSR calculated results please refer to section 17.7.

17.1 MIMO SAR Test condition and verification

General Note:

1. Smart Transmit EFS v20 (or lower) uses SISO Plimit to calculate RF exposure from MIMO transmission scenario. Therefore, if MIMO is supported for WWAN technologies (including 5G sub6 NR), below procedure should be performed for validity of Smart Transmit operation:
 - 1) Below procedure should also be performed for Smart Transmit EFS v21 (or higher) if MIMO Plimit is not populated in the EFS but MIMO operation is supported for antennas belonging to the same antenna group (refer to Section 4.2.5 of Qualcomm's document 80-W2112-4).
2. Measure SAR for supported MIMO scenarios in FTM mode with each of the MIMO antennas set to transmit continuously at $P_{test} = \text{minimum } \{Plimit(i), Pmax(i); i=1 \text{ to } n \text{ MIMO antennas}\}$, where $Plimit(i)$ is the power level entered in the Smart Transmit EFS for antenna i under the corresponding tech/band/DSI. For Smart Transmit to ensure the compliance in MIMO transmission scenario, the below criteria should be met for measured MIMO SAR (i.e., highest peak spatial-average SAR from the measurement):

$$\text{reported } SAR_{MIMO} = \text{Measured MIMO } SAR_{MIMO} \text{ at } (P_{test} + \text{device total uncertainty}) \leq \text{calc. SAR}$$

$$\text{Where } \text{calc. SAR} = \sum_{i=1}^n \left[SAR_design_target * 10^{\left(\frac{\text{total uncertainty} + P_{test} - Plimit(i) - \text{backoff}(i)}{10} \right)} \right]$$

Here,

- n is number of MIMO antennas (in case of 2x2MIMO, $n=2$).
 - $Plimit(i)$ is EFS $Plimit$ for antenna $i \in$ MIMO for a given tech/band/DSI. $Plimit$ corresponds to SAR_design_target .
 - $backoff(i)$ is backoff from SAR_design_target used for the i th antenna's $Plimit$ to meet TER with external radios (i.e., radios outside of Smart Transmit control). If EFS $Plimit$ of antenna i corresponds to SAR_design_target , then $backoff(i) = 0$ in the above equation.
 - P_{test} (i.e., power level used for MIMO SAR measurement, $MIMO.SAR @ P_{test}$) = $\min \{Plimit(i), Pmax(i), i = 1 \text{ to } n \text{ MIMO antenna}\}$. To further clarify, $P_{test} = \min \{Plimit(i), SISO.Pmax(i), MIMO.Pmax, i = 1 \text{ to } n \text{ antenna} \in MIMO\}$, where, $Plimit$ corresponds to SAR_design_target ; $SISO.Pmax$ and $MIMO.Pmax$ correspond to the maximum output power (nominal levels without device uncertainty) that device is capable; here, P_{test} is nominal power level, not measured level.
3. If the $\text{reported } SAR_{MIMO}$ does not meet the above condition, then $Plimit(i)$ for each of the MIMO antenna in the Smart Transmit EFS should be reduced by $10 \cdot \log_{10}[\text{reported } SAR_{MIMO} / \text{calc. SAR}]$ dB.
 4. Per Qualcomm's document guideline, WLAN MIMO Plimit is configured in the EFS and WLAN MIMO antennas belong to the same antenna group, then SAR measurement results at MIMO Plimit for the corresponding WLAN MIMO transmission scenario can be referred to section 16 in this report.
 5. Per Qualcomm's document guideline, BT MIMO Plimit is not populated in the EFS file, but MIMO operation is supported for antennas belonging to the same antenna group, the detail BT MIMO analysis results please referred to appendix H.

17.2 Sub6 Antenna Groups

The Qualcomm® Smart Transmit™ 5.0 of Smart Transmit (GEN2) Feature operates based on pre-defined sub6 antenna groups (AG). Sub6 Tx antennas in the device are grouped based on spatial variation of RF exposure distributions, where the RF exposure of one AG is mutually exclusive from other AG. This is accomplished by demonstrating below conditions for all exposure positions under each DSI for a given exposure category.

- 1) Case 1: Demonstrate that Sum of maximum reported SAR from each of the sub6 AGs and the reported normalized SAR values from radios outside Smart Transmit should be less than regulatory limits for each supported DSI. This condition must be demonstrated for all antenna combinations of sub6 AGs.
 - i. For a given DSI, obtain the highest *reported* SAR for each antenna out of all supported technologies and frequency bands. Obtain the maximum *reported* SAR for each AG by taking the maximum out of *reported* SAR for all antennas belonging to each AG.
 - ii. Demonstrate that the sum of maximum reported SAR (normalized to regulatory limit) from each of the sub6 AGs and the sum of reported SAR (normalized to regulatory limit) from all supported radios outside of Smart Transmit should be less than 1.0
- 2) Case 2: If the Case 1 is NOT met, then for a given antenna grouping scheme plus external radios/antennas (ERs) (referred to as 'configuration'), demonstrate all AG pairs, all ER pairs and all (AG, ER) pairs in the configuration meet SPLSR criteria (Section 4.3.2 (c) in FCC KDB 447498 D01 v06) for each exposure position under each supported DSI. For a given exposure position under a given DSI, prove all AG pairs, all ER pairs and all (AG, ER) pairs (if there are external radios outside Smart Transmit) in the configuration meet SPLSR.

This device supports two sub6 AG: AG0 and AG1, the detailed please refer to the below table:

Antenna Group 0 (AG0)	ANT1 & ANT2 & ANT3 & ANT4 & ANT6 & ANT7 & ANT8 & ANT16 & ANT17
Antenna Group 1 (AG1)	ANT0 & ANT5

- 3) This model's multi_Tx_factor is 1.0.

The conditions are verified through the following criterias:

- i) (SAR1 + SAR2 criteria): If SPLSR criteria is not used, then the highest reported SAR at *Plimit* for each antenna should be obtained out of all supported technologies and frequency bands for each DSI. Demonstrate that the sum of reported SAR of one antenna from each of the sub6 AGs and the sum of RF exposure from all supported radios outside of Smart Transmit should be less than the regulatory limit as given below for each DSI.
 1. Obtain the worst-case reported SAR for each antenna group (i.e., maximum *reported* SAR at *Plimit* out of all supported technologies, frequency bands and antennas in AG0 and AG1), denoted as max.SAR.AG0 and max.SAR.AG1, and obtain the worst-case RF exposure for each external radio, and demonstrate that the sum of these RF exposures meets: $\{ [\text{max.SAR.AG0} + \text{max.SAR.AG1}] + \text{each external radio worst-case reported SAR (ex: NFC)} \} \leq 1.6$ (for 1g, or 4.0 for 10g). (each external radio worst-case reported SAR is the worst SAR in all combinations of each external radio simultaneous transmission).
- ii) (SPLSR criteria): For each antenna, obtain the highest reported SAR value at *Plimit* out of all supported technologies for each frequency band. Using these values, demonstrate for a given DSI that every antenna from one sub6 AG meets SPLSR criteria with every antenna in another sub6 AG for all frequency bands. This criteria must be demonstrated for all antenna pair combinations irrespective of supported simultaneous transmission scenarios as given below for each DSI:
 - a. SPLSR criteria should be met for all antenna pair combinations of AG0 and AG1. As it can be seen, these include all combinations of antenna groups, antennas, and frequency bands.
 - b. Obtain combined SAR per AG: Obtain the worst-case conservative combined SAR and its peak location for each AG.
 - c. Use the 'closest' peak location out of all antennas of AGj to evaluate SPLSR with other AGs in the configuration. Note, by 'closest', select the peak location out of all antennas (ϵ AGj) that is closest to the peak location of other AG where SPLSR is evaluated.
- iii) (combination of SPLSR & SAR1+SAR2 criteria): If SPLSR criteria for all the combinations of sub6g antenna groups in (i) is demonstrated to show that each AG is mutually exclusive from other AGs, and if the WIFI/BT antennas supported outside of Smart Transmit do not meet SPLSR criteria, then the condition in (ii) reduces to: $\{ \text{max.SAR.AG0} + \text{worst-case reported SAR} \} \leq 1.6$ and $\{ \text{max.SAR.AG1} + \text{worst-case reported SAR} \} \leq 1.6$ for compliance demonstration (for 1g, or 4.0 for 10g).
- iv) Obtain the worst-case reported SAR for each antenna group, (i.e., maximum *reported* SAR at *Plimit* out of all supported technologies, frequency bands and antennas in AG0 and AG1), denoted as max.SAR.AG0 and max.SAR.AG1, and WIFI/BT antennas supported Smart Transmit technology and there is no other radios in this report, and demonstrate that the sum of these RF exposures meets: $\{ [\text{max.SAR.AG0} + \text{max.SAR.AG1}] \} \leq 1.6$ (for 1g, or 4.0 for 10g).

For summed SAR results and SPLSR detailed analysis please refer to section 17.3 / 17.4 / 17.5 / 17.6 of this report. All of the combinations of sub6 antenna groups are sufficient to show that AG0 is mutually exclusive from AG1 and that

simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528- 2013 Section 6.3.4.1.

17.3 Head Exposure Conditions

General Note: The unit of SAR evaluation is W/kg.

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

<AG0 maximum reported SAR>:

Test Position	Ant1	Ant2	Ant3	Ant4	Ant6	Ant7	Ant8	WLAN2.4GHz Ant16+7	WLAN5GHz Ant17+6	BT Ant7	BT Ant16	MAX
Right Cheek	1.052	1.080	1.081	0.857	0.450	0.297	1.026	0.242	0.393	0.502	0.271	1.081
Right Tilted	0.350	0.156	0.485	1.070	0.504	0.212	0.730	0.221	0.487	0.182	0.316	1.070
Left Cheek	0.997	1.085	0.397	0.544	0.885	1.066	0.461	0.986	1.041	0.732	0.748	1.085
Left Tilted	0.135	0.234	0.205	0.747	1.023	0.462	0.516	0.635	1.004	0.403	0.539	1.023

<AG1 maximum reported SAR>:

Test Position	Ant0	Ant5	MAX
Right Cheek	0.546	0.269	0.546
Right Tilted	0.290	0.165	0.290
Left Cheek	0.388	0.309	0.388
Left Tilted	0.221	0.147	0.221

<Simultaneous Transmission analysis of AG0 + AG1>:

Test Position	AG0	AG1	AG0+AG1
Right Cheek	1.081	0.546	1.63
Right Tilted	1.070	0.290	1.36
Left Cheek	1.085	0.388	1.47
Left Tilted	1.023	0.221	1.24

Note: The results marked yellow in above table refers to the detailed analysis corresponding to each position below tables.

Right Cheek				
Ant combination	AG1	AG0	AG0+AG1	SPLSR
	SAR	SAR		
Ant0-Ant1	0.546	1.052	1.60	Case 1
Ant0-Ant2	0.546	1.080	1.63	Case 2
Ant0-Ant3	0.546	1.081	1.63	Case 3
Ant0-Ant4	0.546	0.857	1.40	-
Ant0-Ant6	0.546	0.450	1.00	-
Ant0-Ant7	0.546	0.297	0.84	-
Ant0-Ant8	0.546	1.026	1.57	-
Ant0-WLAN2.4GHz Ant16+7	0.546	0.242	0.79	-
Ant0-WLAN5GHz Ant17+6	0.546	0.393	0.94	-
Ant0-BT Ant7	0.546	0.502	1.05	-
Ant0-BT Ant16	0.546	0.271	0.82	-
Ant5-Ant1	0.269	1.052	1.32	-
Ant5-Ant2	0.269	1.080	1.35	-
Ant5-Ant3	0.269	1.081	1.35	-
Ant5-Ant4	0.269	0.857	1.13	-
Ant5-Ant6	0.269	0.450	0.72	-
Ant5-Ant7	0.269	0.297	0.57	-
Ant5-Ant8	0.269	1.026	1.30	-
Ant5-WLAN2.4GHz Ant16+7	0.269	0.242	0.51	-
Ant5-WLAN5GHz Ant17+6	0.269	0.393	0.66	-
Ant5-BT Ant7	0.269	0.502	0.77	-
Ant5-BT Ant16	0.269	0.271	0.54	-

17.4 Hotspot Exposure Conditions

General Note: The unit of SAR evaluation is W/kg.

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

<AG0 maximum reported SAR>:

Test Position	Ant1	Ant2	Ant3	Ant4	Ant6	Ant7	Ant8	WLAN2.4GHz Ant16+7	WLAN5GHz Ant17+6	BT Ant7	BT Ant16	MAX
Front	0.569	0.496	0.287	0.151	0.192	0.318	0.140	0.617	0.470	0.074	0.091	0.617
Back	0.528	0.519	0.332	0.229	0.149	0.258	0.882	0.653	0.659	0.157	0.092	0.882
Left Side	0.772		0.530	0.077			0.204	0.013	0.113	0.001	0.026	0.772
Right Side		0.812			0.149	0.603		0.973	0.838	0.347	0.033	0.973
Top Side			0.098	0.421	0.288	0.104	0.175	0.399	0.913	0.040	0.192	0.913

<AG1 maximum reported SAR>:

Test Position	Ant0	Ant5	MAX
Front	0.582	0.686	0.686
Back	0.653	0.649	0.653
Left Side		0.219	0.219
Right Side	0.806		0.806
Bottom Side	0.532	1.065	1.065

<Simultaneous Transmission analysis of AG0 + AG1>:

Test Position	AG0	AG1	AG0+AG1
Front	0.617	0.686	1.30
Back	0.882	0.653	1.54
Left Side	0.772	0.219	0.99
Right Side	0.973	0.806	1.78
Top Side	0.913		0.91
Bottom Side		1.065	1.07

Note: The results marked yellow in above table refers to the detailed analysis corresponding to each position below tables.

Right Side				
Ant combination	AG1	AG0	AG0+AG1	SPLSR
	SAR	SAR		
Ant0-Ant1	0.806		0.81	-
Ant0-Ant2	0.806	0.812	1.62	Case 1
Ant0-Ant3	0.806		0.81	-
Ant0-Ant4	0.806		0.81	-
Ant0-Ant6	0.806	0.149	0.96	-
Ant0-Ant7	0.806	0.603	1.41	-
Ant0-Ant8	0.806		0.81	-
Ant0-WLAN2.4GHz Ant16+7	0.806	0.973	1.78	Case 2
Ant0-WLAN5GHz Ant17+6	0.806	0.838	1.64	Case 3
Ant0-BT Ant7	0.806	0.347	1.15	-
Ant0-BT Ant16	0.806	0.033	0.84	-
Ant5-Ant1			0.00	-
Ant5-Ant2		0.812	0.81	-
Ant5-Ant3			0.00	-
Ant5-Ant4			0.00	-
Ant5-Ant6		0.149	0.15	-
Ant5-Ant7		0.603	0.60	-
Ant5-Ant8			0.00	-
Ant5-WLAN2.4GHz Ant16+7		0.973	0.97	-
Ant5-WLAN5GHz Ant17+6		0.838	0.84	-
Ant5-BT Ant7		0.347	0.35	-
Ant5-BT Ant16		0.033	0.03	-

17.5 Body-Worn Accessory Exposure Conditions

General Note: The unit of SAR evaluation is W/kg.

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

<AG0 maximum reported SAR>:

Test Position	Ant1	Ant2	Ant3	Ant4	Ant6	Ant7	Ant8	WLAN2.4GHz Ant16+7	WLAN5GHz Ant17+6	BT Ant7	BT Ant16	MAX
Front	0.731	0.699	0.882	0.203	0.701	0.846	0.099	0.275	0.337	0.014	0.061	0.882
Back	0.674	0.737	1.056	0.315	0.745	0.625	1.082	0.330	0.406	0.091	0.038	1.082

<AG1 maximum reported SAR>:

Test Position	Ant0	Ant5	MAX
Front	0.335	0.601	0.601
Back	0.341	0.605	0.605

<Simultaneous Transmission analysis of AG0 + AG1>:

Test Position	AG0	AG1	AG0+AG1
Front	0.882	0.601	1.48
Back	1.082	0.605	1.69

Note: The results marked yellow in above table refers to the detailed analysis corresponding to each position below tables.

Back				
Ant combination	AG1	AG0	AG0+AG1	SPLSR
	SAR	SAR		
Ant0-Ant1	0.341	0.674	1.02	-
Ant0-Ant2	0.341	0.737	1.08	-
Ant0-Ant3	0.341	1.056	1.40	-
Ant0-Ant4	0.341	0.315	0.66	-
Ant0-Ant6	0.341	0.745	1.09	-
Ant0-Ant7	0.341	0.625	0.97	-
Ant0-Ant8	0.341	1.082	1.42	-
Ant0-WLAN2.4GHz Ant16+7	0.341	0.329	0.67	-
Ant0-WLAN5GHz Ant17+6	0.341	0.406	0.75	-
Ant0-BT Ant7	0.341	0.091	0.43	-
Ant0-BT Ant16	0.341	0.038	0.38	-
Ant5-Ant1	0.605	0.674	1.28	-
Ant5-Ant2	0.605	0.737	1.34	-
Ant5-Ant3	0.605	1.056	1.66	Case 1
Ant5-Ant4	0.605	0.315	0.92	-
Ant5-Ant6	0.605	0.745	1.35	-
Ant5-Ant7	0.605	0.625	1.23	-
Ant5-Ant8	0.605	1.082	1.69	Case 2
Ant5-WLAN2.4GHz Ant16+7	0.605	0.329	0.93	-
Ant5-WLAN5GHz Ant17+6	0.605	0.406	1.01	-
Ant5-BT Ant7	0.605	0.091	0.70	-
Ant5-BT Ant16	0.605	0.038	0.64	-

17.6 Product specific 10g SAR Exposure Conditions

Remark:

- For 2.4GHz/Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.

General Note: The unit of SAR evaluation is W/kg.

Simultaneous Transmission Evaluation of WWAN+WLAN+BT+NFC:

<AG0 maximum reported SAR>:

Test Position	Ant1	Ant2	Ant3	WLAN5GHz Ant17+6	MAX
Front				1.678	1.678
Back		1.632		0.426	1.632
Left Side	1.831		2.490	0.095	2.490
Right Side		2.554		1.759	2.554
Top Side				2.554	2.554

<AG1 maximum reported SAR>:

Test Position	Ant5	MAX
Front		0.000
Back		0.000
Left Side		0.000
Right Side		0.000
Bottom Side	2.562	2.562

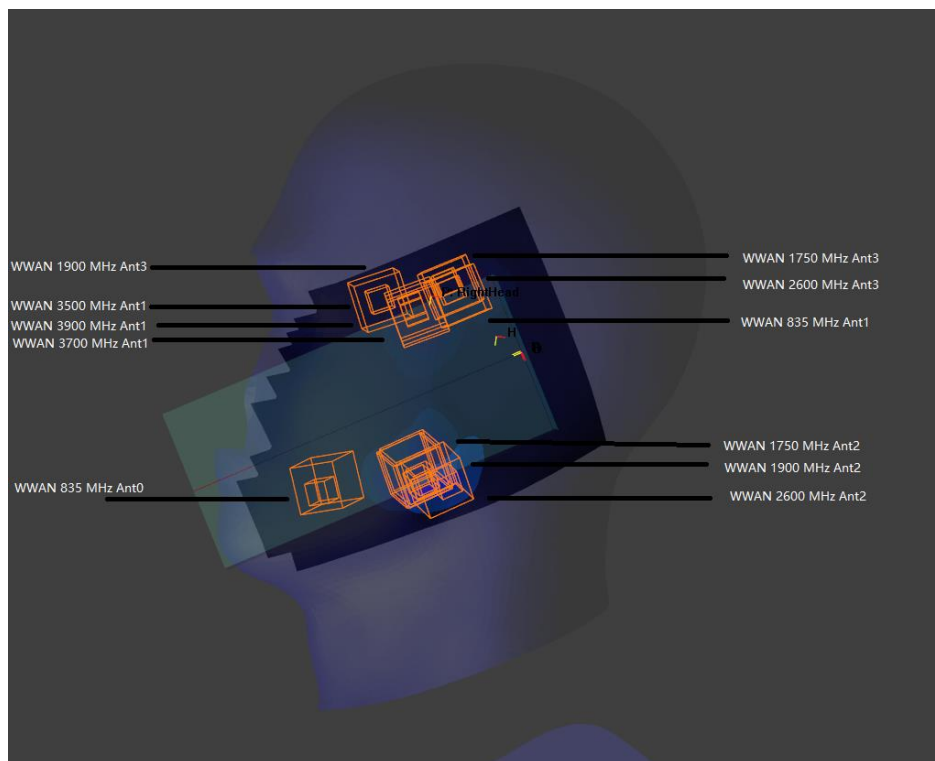
<Simultaneous Transmission analysis of AG0 + NFC >:

Test Position	AG0	AG1	NFC	AG0+AG1+NFC
Front	1.678		0.001	1.68
Back	1.632		0.022	1.65
Left Side	2.490		0.001	2.49
Right Side	2.554		0.001	2.56
Top Side	2.554		0.001	2.56
Bottom Side		2.562	0.001	2.56

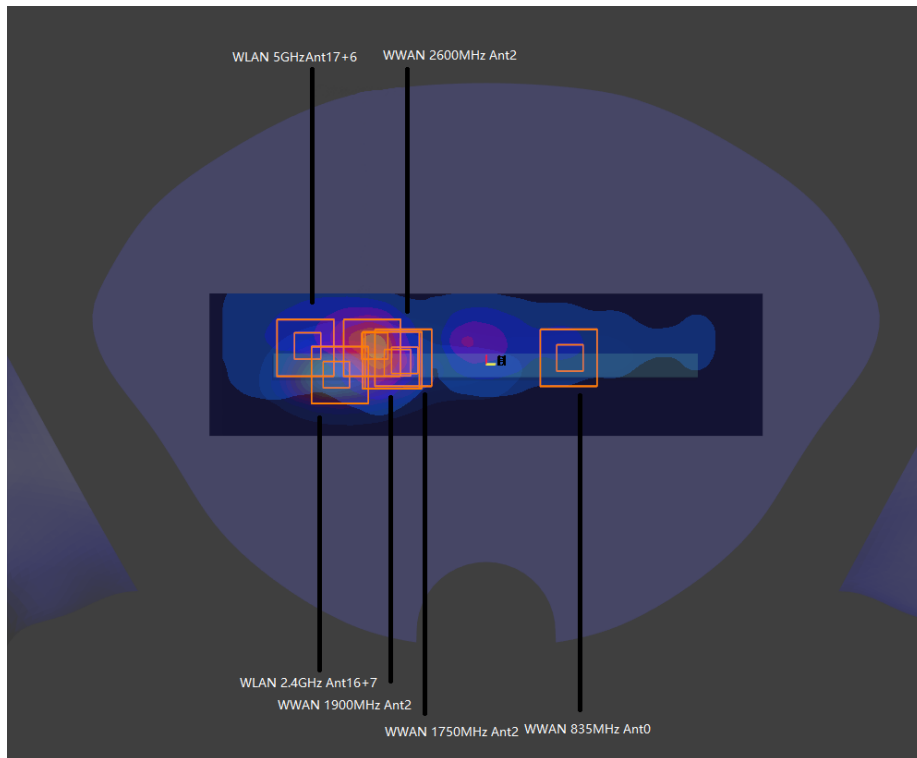
17.7 SPLSR Evaluation and Analysis

General Note:

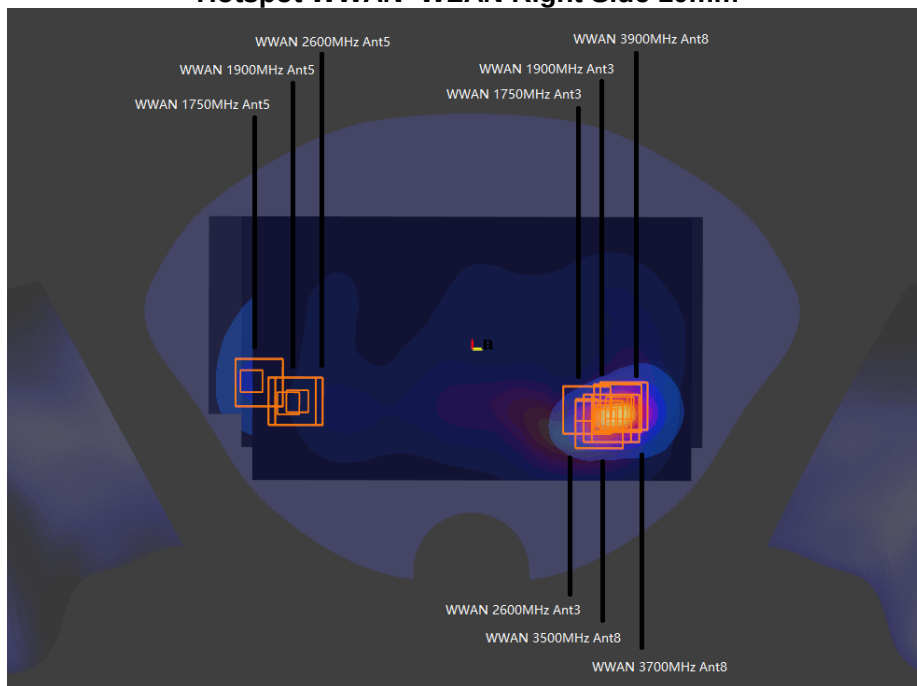
1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$, where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2. $SPLSR = (SAR_1 + SAR_2)1.5 / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$ for 1g SAR, simultaneously transmission SAR measurement is not necessary.
3. Per April 2022 TCB Workshop Notes, AG0 was summed algebraically with the BT/WIFI Antenna 7/16 for the purposes of hybrid SPLSR combination and they are located at the top of the device.
4. Per April 2022 TCB Workshop, instead of doing a small volume scan over a co-located antenna pair, used summing the SAR values of the co-located pair and using that value in SPLSR calculation. In the calculation used the minimum distance between the spatially separated antenna and the closest antenna of the co-located antenna pair to be conservative.
5. The detail hotspot point for each transmitter in each exposure condition are showing as below figure and the minimum 3D distance for each sum combination is used for SPLSR analysis.
6. The axis peak locations refer to Section 17.8.



Head WWAN+WWAN Right Check 0mm



Hotspot WWAN+WLAN Right Side 10mm



Body-worn WWAN+WWAN Back 15mm

<Head>

No.1 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Right Cheek	0.546	0.546	0mm	86.4	-241.9	-137.1	92.3	1.60	0.02	Not required
Ant 1		1.052	1.052	0mm	59.5	-322.4	-173.3				
No.2 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Right Cheek	0.546	0.546	0mm	85.5	-238.4	-137.3	55.0	1.63	0.04	Not required
Ant 2		1.080	1.080	0mm	44.9	-244.1	-173.9				
No.3 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Right Cheek	0.546	0.546	0mm	86.4	-241.9	-137.1	103.7	1.63	0.02	Not required
Ant 3		1.081	1.081	0mm	45.4	-329.5	-174.5				

<Hotspot>

No.1 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Right Side	0.806	0.806	10mm	-26.2	21.1	-207	61.6	1.62	0.03	Not required
Ant 2		0.812	0.812	10mm	-27.8	-40.5	-207				
No.2 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Right Side	0.806	0.806	10mm	-26.2	21.1	-207	80.4	1.78	0.03	Not required
WLAN2.4GHz Ant16+7		0.973	0.973	10mm	-19.5	-59	-207				
No.3 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Right Side	0.806	0.806	10mm	-26.2	21.1	-207	62.3	1.64	0.03	Not required
WLAN5GHz Ant17+6		0.838	0.838	10mm	-29.4	-41.1	-207				

<Body-worn>

No.1 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 5	Back	0.605	0.605	15mm	-1	-74.5	-207	91.8	1.66	0.02	Not required
Ant 3		1.056	1.056	15mm	-8	17	-207				
No.2 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 5	Back	0.605	0.605	15mm	-1	-74.5	-207	138.5	1.69	0.02	Not required
Ant 8		1.082	1.082	15mm	2.5	64	-207				

17.8 Maximum Reported SAR and SAR Peak Locations

General Note:

- The maximum reported SAR and SAR Peak Locations corresponding to each position of each frequency band of each antenna in the below tables are as follows.
- The unit of SAR evaluation is W/kg. The unit of x, y, z with Axis evaluation is mm.

<Head>

Right Cheek													
Band		Ant0			Ant1			Ant2			Ant3		
GSM850	SAR (W/kg)	0.395			0.635								
	Axis	85.9	-238.4	-136.5	56.9	-324.6	-173.5						
GSM1900	SAR (W/kg)							0.881					
	Axis							28.6	-247.5	-170.2			
WCDMA II	SAR (W/kg)										0.895		
	Axis										43.3	-331.6	-174.3
WCDMA IV	SAR (W/kg)							0.786			0.914		
	Axis							31.5	-245	-170	44.9	-330.4	-174.4
WCDMA V	SAR (W/kg)	0.453			0.432								
	Axis	86.4	-241.9	-137.1	55.6	-324.1	-173.5						
LTE Band 2	SAR (W/kg)							0.616			1.081		
	Axis							29.2	-248.6	-170.6	45.2	-330.5	-174.3
LTE Band 4	SAR (W/kg)							0.879			0.963		
	Axis							31	-245.5	-170.5	45.6	-330.2	-174.3
LTE Band 5	SAR (W/kg)	0.503			0.605								
	Axis	85.5	-238.4	-137.3	56.4	-325.2	-173.5						
LTE Band 26	SAR (W/kg)	0.449			0.596								
	Axis	85.8	-238.1	-137.2	56.1	-324.6	-173.5						
LTE Band 66	SAR (W/kg)							0.892			1.062		
	Axis							31.5	-245.8	-170.5	45.4	-329.5	-174.5
LTE Band 7	SAR (W/kg)							0.886			0.981		
	Axis							42.5	-245.6	-173.8	42.3	-330.8	-174.5
LTE Band 38	SAR (W/kg)							1.037			0.852		
	Axis							44.9	-244.1	-173.9	41.9	-331	-174.5
LTE Band 41	SAR (W/kg)							0.932			0.864		
	Axis							44.4	-244.5	-173.9	43.7	-330.1	-174.5
LTE Band 42	SAR (W/kg)				0.92								
	Axis				59.5	-323.6	-173.1						
LTE Band 48	SAR (W/kg)				0.923								
	Axis				59.2	-323.2	-173.2						
FR1 n2	SAR (W/kg)							0.824			0.926		
	Axis							29	-248.1	-170.4	42.2	-334.5	-174
FR1 n5	SAR (W/kg)	0.546			0.643								
	Axis	88.3	-239.4	-137.2	56.7	-325	-173.5						
FR1 n26	SAR (W/kg)	0.498			0.637								
	Axis	88.5	-240.7	-137.3	56.5	-324.8	-173.5						
FR1 n66	SAR (W/kg)							0.774			1.007		
	Axis							31.2	-245.5	-170.5	43.9	-333.8	-174
FR1 n7	SAR (W/kg)							1.008			0.944		
	Axis							41.5	-246.7	-173.8	41.1	-332.6	-174.4
FR1 n38	SAR (W/kg)							0.882			0.922		
	Axis							44.1	-243.6	-173.7	42.4	-331.9	-174.4
FR1 n41	SAR (W/kg)							1.08			0.841		
	Axis							42.3	-244.1	-173.6	42.3	-331.9	-174.4
FR1 n48	SAR (W/kg)				0.666								
	Axis				58.3	-322.4	-173.5						
FR1 n77	SAR (W/kg)				0.626								



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FR1 n78	Axis				56.4	-322.7	-173.9						
	SAR (W/kg)				1.052								
	Axis				59.5	-322.4	-173.3						

<Hotspot>

Right Side													
Band		Ant0			Ant2								
GSM850	SAR (W/kg)	0.476											
	Axis	-26.2	21.1	-207									
GSM1900	SAR (W/kg)				0.812								
	Axis				-27.8	-40.5	-207						
WCDMA IV	SAR (W/kg)				0.427								
	Axis				-26.5	-43.9	-207						
WCDMA V	SAR (W/kg)	0.625											
	Axis	-27.4	27.8	-207									
LTE Band 2	SAR (W/kg)				0.406								
	Axis				-25.1	-44.4	-207						
LTE Band 4	SAR (W/kg)				0.498								
	Axis				-24.6	-42.9	-207						
LTE Band 5	SAR (W/kg)	0.625											
	Axis	-25.4	23	-207									
LTE Band 26	SAR (W/kg)	0.685											
	Axis	-26.1	22.7	-207									
LTE Band 66	SAR (W/kg)				0.544								
	Axis				-24.6	-42.2	-207						
LTE Band 7	SAR (W/kg)				0.329								
	Axis				-24	-45.5	-207						
LTE Band 38	SAR (W/kg)				0.377								
	Axis				-24	-47	-207						
LTE Band 41	SAR (W/kg)				0.411								
	Axis				-25	-45.5	-207						
FR1 n2	SAR (W/kg)				0.625								
	Axis				-27	-41.2	-207						
FR1 n5	SAR (W/kg)	0.699											
	Axis	-18.9	27.5	-207									
FR1 n26	SAR (W/kg)	0.806											
	Axis	-26.6	28.2	-207									
FR1 n66	SAR (W/kg)				0.411								
	Axis				-27.9	-48.2	-207						
FR1 n7	SAR (W/kg)				0.381								
	Axis				-25.5	-45.5	-207						
FR1 n38	SAR (W/kg)				0.373								
	Axis				-21.2	-48	-207						
FR1 n41	SAR (W/kg)				0.448								
	Axis				-25.4	-45.5	-207						

WLAN2.4GHz Ant16+7	SAR (W/kg)	0.973											
	Axis	-19.5				-59				-207			

WLAN5GHz Ant17+6	SAR (W/kg)	0.838											
	Axis	-29.4				-41.1				-207			

<Body-worn>

Back									
Band		Ant3			Ant5			Ant8	
GSM1900	SAR (W/kg)				0.24				
	Axis				-6	-100.1	-207		
WCDMA II	SAR (W/kg)	0.424			0.399				
	Axis	-1	65	-207	-8.5	-89.1	-207		
WCDMA IV	SAR (W/kg)	0.35			0.231				
	Axis	2.7	33.9	-207	1.8	-84.6	-207		
LTE Band 2	SAR (W/kg)	0.43			0.258				
	Axis	-8	17	-207	-3.2	-75.4	-207		
LTE Band 4	SAR (W/kg)	0.345			0.301				
	Axis	1.5	36.8	-207	-0.8	-85.4	-207		
LTE Band 66	SAR (W/kg)	0.346			0.489				
	Axis	1.2	37.5	-207	-1	-83.8	-207		
LTE Band 7	SAR (W/kg)	1.056			0.162				
	Axis	2	56	-207	-1	-81	-207		
LTE Band 38	SAR (W/kg)	0.61			0.261				
	Axis	5	50.5	-207	-2	-82.5	-207		
LTE Band 41	SAR (W/kg)	0.573			0.281				
	Axis	5.5	48.5	-207	-1	-74.5	-207		
LTE Band 42	SAR (W/kg)							1.082	
	Axis							5	68 -207
LTE Band 48	SAR (W/kg)							0.679	
	Axis							5	68 -207
FR1 n2	SAR (W/kg)	0.401							
	Axis	3.5	35	-207					
FR1 n66	SAR (W/kg)	0.4			0.605				
	Axis	2.3	40.8	-207	-1.7	-82.6	-207		
FR1 n7	SAR (W/kg)	0.959			0.24				
	Axis	8.5	60.5	-207	-2.5	-76.5	-207		
FR1 n38	SAR (W/kg)	0.934			0.242				
	Axis	9.5	60	-207	-2	-78	-207		
FR1 n41	SAR (W/kg)	0.866			0.267				
	Axis	12	57	-207	-2.5	-88	-207		
FR1 n48	SAR (W/kg)							0.88	
	Axis							2.5	64 -207
FR1 n77	SAR (W/kg)							0.903	
	Axis							2.5	64.5 -207
FR1 n78	SAR (W/kg)							0.949	
	Axis							-1	69 -207

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18. Uncertainty Assessment

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

19. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [6] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [7] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [9] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [10] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [11] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [12] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [13] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [14] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015

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