

FCC SAR Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2507-1
FCC ID : IHDT56AU3
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

Sporton International Inc. (Kunshan)

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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA510906	Rev. 01	Initial issue of report.	Mar. 10, 2025

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Motorola Mobility LLC, Mobile Cellular Phone, XT2507-1**, are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 5mm)	Body-worn (Separation 5mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
			1g SAR (W/kg)			
Licensed	GSM	GSM850	0.60	0.77	0.85	1.59
		GSM1900	0.88	1.28	1.27	
	WCDMA	WCDMA II	0.89	1.29	1.30	
		WCDMA IV	0.89	1.30	1.30	
		WCDMA V	0.87	1.15	1.15	
	LTE	LTE Band 7	0.89	1.28	1.30	
		LTE Band 12/17	0.83	1.04	1.04	
		LTE Band 13	0.76	1.28	1.28	
		LTE Band 25/2	0.89	1.28	1.27	
		LTE Band 26/5	0.81	1.27	1.27	
		LTE Band 66/4	0.88	1.29	1.30	
		LTE Band 71	0.37	0.62	0.62	
		LTE Band 41/38	0.89	1.29	1.27	
		LTE Band 42	0.90	1.30	0.89	
	5G NR	FR1 n2	0.88	1.29	1.42	
		FR1 n7	0.88	1.28	1.27	
		FR1 n26/n5	0.89	1.22	1.22	
		FR1 n66	0.88	1.27	1.28	
		FR1 n71	0.53	0.53	0.53	
		FR1 n41/ n38	0.89	1.29	1.28	
		FR1 n77/n78	0.89	1.27	1.29	
DTS	WLAN	2.4GHz WLAN	1.35	0.70	1.37	1.59
NII		5GHz WLAN	1.20	0.62	1.06	1.59
DSS	Bluetooth	2.4GHz Bluetooth	0.27	0.20	0.19	1.59

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	GSM	GSM1900	1.79	3.97
	WCDMA	WCDMA II	3.30	
		WCDMA IV	3.18	
	LTE	LTE Band 7	3.19	
		LTE Band 13	2.53	
		LTE Band 25/2	3.17	
		LTE Band 26/5	2.61	
		LTE Band 66/4	3.14	
		LTE Band 41/38	3.22	
		LTE Band 42	3.23	
		5G NR	FR1 n2	
	FR1 n7		3.19	
	FR1 n26/n5		2.10	
	FR1 n66		3.18	
	FR1 n41/ n38		3.16	
	FR1 n77/n78		3.17	
DTS	WLAN	2.4GHz WLAN	3.50	3.97
NII		WLAN5GHz	3.03	3.97
Date of Testing:			2025/2/8 ~ 2025/2/28	

Remark:

1. This device supports LTE B2 / B4 / B5 / B17 / B38 and B25 / B66 / B26 / B12 / B41. Since the supported frequency span for LTE B2 / B4 / B5 / B17 / B38 falls completely within the support's frequency span for LTE B25 / B66 / B26 / B12 / B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B12 / B41.
2. This device supports 5GNR n5 / n38 / n78 and n26 / n41 / n77. Since the supported frequency span for 5GNR n5 / n38 / n78 falls completely within the support's frequency span for n26 / n41 / n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for n26 / n41 / n77.

Declaration of Conformity:

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

Comments and Explanations:

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

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

2. Administration Data

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

Testing Laboratory			
Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR03-KS, SAR04-KS	CN1257	314309

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

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

3. Guidance Applied

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

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

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2507-1
FCC ID	IHDT56AU3
IMEI Code	IMEI 1: 358346690023978 IMEI 2: 358346690023986
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz WLAN 6GHz U-NII 5: 5925 MHz ~ 6425 MHz WLAN 6GHz U-NII 6: 6425 MHz ~ 6525 MHz WLAN 6GHz U-NII 7: 6525 MHz ~ 6875 MHz WLAN 6GHz U-NII 8: 6875 MHz ~ 7125 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+ (16QAM uplink is supported) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ax HE20/HE40

	WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160 WLAN 6GHz 802.11a/ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC: ASK
HW Version	DVT2
SW Version	V2VV35.35
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). WLAN 6GHz has no hotspot function. 4. The 2.4GHz/5GHz/6GHz 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 12. 6. This device supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). 7. The device implements the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the MediaTek TA-SAR will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E. 8. For WLAN/BT when transmit simultaneously with each other, or when transmit simultaneous with WWAN, power reduction will be activated to head exposure condition. For WLAN when transmit simultaneous with WWAN/BT and Proximity sensors trigger, power reduction will be activated to body-worn and extremity exposure conditions. 9. For some WWAN bands, sensor on power level is higher than hotspot power level, so front/back sensor on SAR can represent hotspot conservatively. 10. This device implements antenna tuning techniques for several WWAN (cellular) operating modes and frequencies for the purpose of improving antenna efficiency over a broad range of frequencies. Specifically, these techniques are employed in the LTE and 5GNR modes. In this report SAR was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing. The detail descriptions of the antenna tuner and supplemental data for additional information can be referred to section 18 and appendix H. 11. This device supports HPUE mode for LTE Band41 and 5GNR n77/n78 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 power class 3 was chosen to perform full SAR testing and power class 2 verified the worst case of power class 3 SAR. 12. For 5GNR n77/n78 HPUE, 5GNR n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing. 13. 5G NR n41 supports UL MIMO. 14. The device support DBS (Dual Band Simultaneous) function, when the device WLAN 2.4GHz and WLAN 5GHz or WLAN 6GHz transmit at the same time the device will limit different output power for simultaneous transmission compliance. 15. There are two samples, the difference between them refer to the XT2507-1_Operational Description of Product Equality Declaration which is exhibit separately. According to the differences, so sample 1 was chosen to perform full SAR testing. For sample 2, the differences do not affect the test, so sample 2 are not tested. 16. This device has NFC function and the NFC SAR report will be separately submitted. 17. SAR and Power density test report for WLAN 6GHz U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth always chose higher SAR of WLAN5GHz U-NII-1/2A/2C/3 and WLAN 6GHz U-NII-5/6/7/8. 18. This device supports 5GNR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.	

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50
	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, 35, 40, 45, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50
	n26	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n71	FDD	15	5, 10, 15, 20
	n38	TDD	30	10, 15, 20, 25, 30, 40
	n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																													
FCC ID	IHDT56AU3																																																																												
Equipment Name	Mobile Cellular Phone																																																																												
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																																												
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																																												
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																																												
LTE Voice / Data requirements	Voice and Data																																																																												
LTE Release Version	R15																																																																												
CA Support	Supported, Uplink and Downlink																																																																												
LTE MPR permanently built-in by design	<table><tr><th colspan="8">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</th></tr><tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th><th rowspan="2">MPR (dB)</th></tr><tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr><tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 3</td></tr><tr><td>256 QAM</td><td colspan="6">≥ 1</td><td>≤ 5</td></tr></table>							Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3								Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
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256 QAM	≥ 1						≤ 5																																																																						
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																																												
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																												
Power reduction applied to satisfy SAR compliance	Yes, when operating in Proximity sensors/receiver/hotspot detect mechanism, head/body-worn /hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 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 4 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	20475	830.5	20500	831.5
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	20575	843.5	20550	842.5
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz		Bandwidth 25 MHz		Bandwidth 30 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	20875	2512.5	20900	2515
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21325	2557.5	21300	2555
LTE Band 12												
	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	23017	699.7	23025	700.5	23035	701.5	23060	704	23085	706.5	23110	708.5
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23105	709.5	23080	707.5
LTE Band 13												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782		23255		784.5	
M	23230		782		23255		784.5		23280		786.5	
H	23255		784.5		23280		786.5		23305		788.5	
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23755		706.5		23780		709		23805		711.5	
M	23790		710		23790		710		23790		710	
H	23825		713.5		23800		711		23775		708.5	
LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 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	26790	824.5
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	26940	838.5

LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	38000	2595	38000	2595				
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610				
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506				
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680				
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770
LTE Band 71												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	133147	665.5	133172	668	133197	670.5	133222	673				
M	133247	675.5	133272	678	133297	680.5	133322	683				
H	133447	695.5	133422	693	133397	690.5	133372	688				
LTE Band 42												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	42115	3452.5	42140	3455	42165	3457.5	42190	3460				
M	42590	3500	42590	3500	42590	3500	42590	3500				
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540				

<For LTE Overlap Bands Description>

1) LTE Bands BW

Band	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
LTE Band 2	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 25	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 5	Yes	Yes	Yes	Yes		
LTE Band 26	Yes	Yes	Yes	Yes	Yes	
LTE Band 12	Yes	Yes	Yes	Yes		
LTE Band 17			Yes	Yes		
LTE Band 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes

2) LTE Bands tune up:

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
LTE Band 2	Ant 0	22.5	18.4	18.4	21.3	22.5	22.5
LTE Band 25	Ant 0	22.5	18.4	18.4	21.3	22.5	22.5
LTE Band 4	Ant 0	22.5	18.4	18.4	21.5	22.5	22.5
LTE Band 66	Ant 0	22.5	18.4	18.4	21.5	22.5	22.5
LTE Band 5	Ant 0	24	24	24	24	24	24
LTE Band 26	Ant 0	24	24	24	24	24	24
LTE Band 12	Ant 0	24	24	24	24	24	24



LTE Band 17	Ant 0	24	24	24	24	24	24
LTE Band 38	Ant 0	22.5	21.6	21.7	22.5	22.5	22.5
LTE Band 41	Ant 0	22.5	21.6	21.7	22.5	22.5	22.5
LTE Band 41 HPUE	Ant 0	25.5	23.2	23.3	25.5	25.5	25.5

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
LTE Band 2	Ant 1	16.1	17.3	14.7	20.1	23	23
LTE Band 25	Ant 1	16.1	17.3	14.7	20.1	23	23
LTE Band 4	Ant 1	16.6	20.3	16.9	22.5	23	23
LTE Band 66	Ant 1	16.6	20.3	16.9	22.5	23	23
LTE Band 5	Ant 1	23	23	22.8	23	23	23
LTE Band 26	Ant 1	23	23	22.8	23	23	23
LTE Band 12	Ant 1	23	23	23	23	23	23
LTE Band 17	Ant 1	23	23	23	23	23	23
LTE Band 38	Ant 1	19.4	20.8	17.9	23	23	23
LTE Band 41	Ant 1	19.4	20.8	17.9	23	23	23
LTE Band 41 HPUE	Ant 1	21	22.4	19.5	26	26	26

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
LTE Band 2	Ant 2	24	24	22.1	24	24	24
LTE Band 25	Ant 2	24	24	22.1	24	24	24
LTE Band 4	Ant 2	24	23.3	22.3	24	24	24
LTE Band 66	Ant 2	24	23.3	22.3	24	24	24
LTE Band 38	Ant 2	24	24	23.5	23.5	24	24
LTE Band 41	Ant 2	24	24	23.5	23.5	24	24
LTE Band 41 HPUE	Ant 2	27	27	25.1	25.1	27	27

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
LTE Band 2	Ant 9	22.6	20.8	16.4	21.6	24	24
LTE Band 25	Ant 9	22.6	20.8	16.4	21.6	24	24
LTE Band 4	Ant 9	24	23.7	19	23.1	24	24
LTE Band 66	Ant 9	24	23.7	19	23.1	24	24
LTE Band 38	Ant 9	24	21.3	15.3	21.8	24	24
LTE Band 41	Ant 9	24	21.3	15.3	21.8	24	24
LTE Band 41 HPUE	Ant 9	25.8	22.9	16.9	23.4	27	27

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
LTE Band 4_Other PA	Ant 0	22.5	18.4	18.4	21.5	22.5	22.5
LTE Band 66_Other PA	Ant 0	22.5	18.4	18.4	21.5	22.5	22.5
LTE Band 4_Other PA	Ant 1	16.6	20.3	16.9	22.5	23	23
LTE Band 66_Other PA	Ant 1	16.6	20.3	16.9	22.5	23	23
LTE Band 4_Other PA	Ant 2	24	23.3	22.3	24	24	24
LTE Band 66_Other PA	Ant 2	24	23.3	22.3	24	24	24
LTE Band 4_Other PA	Ant 9	24	23.7	19	23.1	24	24
LTE Band 66_Other PA	Ant 9	24	23.7	19	23.1	24	24

4.3 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
Operating Frequency Range of each 5G NR transmission band	5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5GNR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B4/5
LTE Anchor Bands for n5	LTE B2/7/66
LTE Anchor Bands for n7	LTE B2/4/5/66
LTE Anchor Bands for n66	LTE B2/5/7/13
LTE Anchor Bands for n38	LTE B2/4/66
LTE Anchor Bands for n41	LTE B4/5/66
LTE Anchor Bands for n77	LTE B7/41
LTE Anchor Bands for n78	LTE B2/4/5/7/26/38/41/66

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

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

NR Band 7																		
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 50MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	503500	2517.5	504000	2520	505000	2525
M	507000	2535	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	509000	2545

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

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



NR Band 71 SCS15KHz								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133100	665.5	133600	668	134100	670.5	134600	673
M	136100	680.5	136100	680.5	136100	680.5	136100	680.5
H	139100	695.5	138600	693	138100	690.5	137600	688

NR Band 38												
	Bandwidth10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		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 35MHz		Bandwidth 40MHz		Bandwidth 45MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 500202	2501.01	500700	2503.5	501204	2506.02	501702	2508.51	502200	2511	502704	2513.52	503202	2516.01	503700	2518.5	504204	2521.02	505200	2526	500202	2501.01	507204	2536.02	508200	2541	509202	2546.01
M 518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H 537000	2685	536496	2682.48	535998	2679.99	535500	2677.5	534996	2674.98	534498	2672.49	534000	2670	533496	2667.48	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640

NR Band 77																								
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840.00	656000	3840.00	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664834	3972.51	664668	3970.02	664500	3967.50	664334	3965.01	664000	3960	663668	3955.02	663334	3950.01	663000	3945	662668	3940.02	662334	3935.01	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	3750.00	650000	3750.00	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	653000	3795	652834	3792.51	652668	3790.02	652500	3787.5	652334	3785.01	652000	3780	651668	3775.02	651334	3770.01	651000	3765	650668	3760.02	650334	3755.01		

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

Band	Duplex	SCS(KHz)	Bandwidths(BW)
n5	FDD	15	5, 10, 15, 20
n26	FDD	15	5, 10, 15, 20
n38	TDD	30	10, 15, 20, 25, 30, 40
n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

2) NR Bands Tune up:

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
5G NR n5	Ant 0	24	24	24	24	24	24
5G NR n26	Ant 0	24	24	24	24	24	24
5G NR n38	Ant 0	24	19.3	19.3	22.8	24	24
5G NR n41	Ant 0	24	19.3	19.3	22.8	24	24

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
5G NR n5	Ant 1	23.2	24	23.5	24	24	24
5G NR n26	Ant 1	23.2	24	23.5	24	24	24
5G NR n38	Ant 1	19.3	19.5	18.2	22.7	24	24
5G NR n41	Ant 1	19.3	19.5	18.2	22.7	24	24

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
5G NR n38	Ant 2	24	24	22.2	22.2	24	24
5G NR n41	Ant 2	24	24	22.2	22.2	24	24

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
5G NR n38	Ant 9	20.6	19.3	14.1	19.5	24	24
5G NR n41	Ant 9	20.6	19.3	14.1	19.5	24	24

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
5G NR n77	Ant 7	18.2	17.8	15.1	19	24.5	24.5
5G NR n78	Ant 7	18.2	17.8	15.1	19	24.5	24.5
5G NR n77 HPUE	Ant 7	21.2	20.8	18.1	22	27.5	27.5
5G NR n78 HPUE	Ant 7	21.2	20.8	18.1	22	27.5	27.5

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
5G NR n77	Ant 4	18.6	19.8	18.7	24.5	24.5	24.5
5G NR n78	Ant 4	18.6	19.8	18.7	24.5	24.5	24.5
5G NR n77 HPUE	Ant 4	21.6	22.8	21.7	27.5	27.5	27.5
5G NR n78 HPUE	Ant 4	21.6	22.8	21.7	27.5	27.5	27.5

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
5G NR n77	Ant 8	24.5	21.9	18.8	24.5	9.2	24.5
5G NR n78	Ant 8	24.5	21.9	18.8	24.5	9.2	24.5
5G NR n77 HPUE	Ant 8	27.5	24.9	21.8	27.5	22.2	27.5
5G NR n78 HPUE	Ant 8	27.5	24.9	21.8	27.5	22.2	27.5

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
5G NR n77	Ant 10	24.5	15.2	13.7	24.5	22.8	24.5
5G NR n78	Ant 10	24.5	15.2	13.7	24.5	22.8	24.5
5G NR n77 HPUE	Ant 10	27.5	18.2	16.7	27.5	25.8	27.5
5G NR n78 HPUE	Ant 10	27.5	18.2	16.7	27.5	25.8	27.5

Band	Antenna	Head	Body-worn	Hotspot	Extremity	Sensor Off	Default Tune-up Limit
		ECI 2	ECI 3	ECI 7	ECI 6	ECI4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
5G NR n38_Other PA	Ant 0	24	19.3	19.3	22.8	24	24
5G NR n41_Other PA	Ant 0	24	19.3	19.3	22.8	24	24
5G NR n38_Other PA	Ant 1	19.3	19.5	18.2	22.7	24	24
5G NR n41_Other PA	Ant 1	19.3	19.5	18.2	22.7	24	24
5G NR n38_Other PA	Ant 2	24	24	22.2	22.2	24	24
5G NR n41_Other PA	Ant 2	24	24	22.2	22.2	24	24
5G NR n38_Other PA	Ant 9	20.6	19.3	14.1	19.5	24	24
5G NR n41_Other PA	Ant 9	20.6	19.3	14.1	19.5	24	24

5. TA-SAR feature for RF Exposure compliance

WWAN bands are all enabled with MediaTek TA-SAR Gen2 feature to improve antenna performance by applying separate SAR budgets to each predefined antenna group. This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time.

Note that WLAN/BT operations are not enabled with TA-SAR Gen2 feature.

The FCC RF exposure limit is defined based on time-averaged RF exposure. The product implements MediaTek TA-SAR feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with FCC RF exposure limit over a defined time window, for SAR (transmit frequency $\leq 6\text{GHz}$). 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.

The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC SAR limits when transmitting in static transmission scenario at maximum allowable time-averaged power levels.

The P_{limit} values correspond to SAR_{design_target}. The power will be fixed at the static reduce power level at different exposure conditions for RF exposure compliance. For the GSM (TDD) P_{limit} power levels in the table correspond to the burst average power levels which don't account for TX duty cycle.

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 TA-SAR Gen2 algorithm. SAR char will be entered via the MediaTek's NV suggestion to enable the TA-SAR 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 ECI

<SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at 6 GHz or below. It will then be used as input for TA-SAR Gen2 algorithm to control and manage RF exposure for $f < 6\text{GHz}$.

SPLSR_Group (Antenna Group):

Antenna Group 0 (AG0)	ANT0 & ANT2 & ANT8
Antenna Group 1 (AG1)	ANT1 & ANT4 & ANT7 & ANT9 & ANT10

<SAR design target and uncertainty>

Item	Uncertainty dB (k=2)
Total uncertainty	1.5

To account for total uncertainty, SAR_{design_target} should be determined as:

$$SAR_{design_target} < SAR_{regulatory_limit} \times 10^{\frac{-total_uncertainty}{10}}$$

The TA-SAR Gen2 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.

TA-SAR allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit.

<Plimit for supported technologies and bands >

Band	Antenna	Head ECI2	Body-worn ECI 3	Hotspot ECI 7	Extremity ECI 6	Sensor off ECI 4	Pmax*
GSM850	Ant 0	33.2	25.3	25.3	23.5	23.5	23.5
GSM850	Ant 1	24.7	26.0	24.5	23.0	23.0	23.0
GSM1900	Ant 2	50.5	24.7	22.2	20.5	20.5	20.5
GSM1900	Ant 1	16.1	18.0	14.9	21.9	20.5	20.5
GSM1900	Ant 9	24.6	23.3	16.0	22.7	21.0	21.0
GSM1900	Ant 0	49.8	19.0	19.0	23.3	20.0	20.0
WCDMA II	Ant 2	31.9	22.5	19.8	23.0	23.0	23.0
WCDMA II	Ant 1	15.1	15.9	14.0	21.0	21.0	21.0
WCDMA II	Ant 9	21.0	20.0	15.7	20.5	22.0	22.0
WCDMA II	Ant 0	32.0	17.4	17.3	21.0	21.0	21.0
WCDMA IV	Ant 2	31.6	22.3	20.8	22.7	23.0	23.0
WCDMA IV	Ant 1	15.2	17.5	15.2	20.0	21.0	21.0
WCDMA IV	Ant 9	27.8	26.6	22.2	22.0	22.0	22.0
WCDMA IV	Ant 0	34.7	17.7	17.7	21.4	21.0	21.0
WCDMA V	Ant 0	28.5	22.5	22.5	24.1	22.0	22.0
WCDMA V	Ant 1	22.1	23.3	22.0	22.0	22.0	22.0
LTE Band 25(2)	Ant 2	33.7	23.1	21.1	23.7	23.0	23.0
LTE Band 2_Other PA	Ant 2	33.7	23.1	21.1	23.7	23.0	23.0
LTE Band 25(2)	Ant 1	15.1	16.3	13.7	19.1	22.0	22.0
LTE Band 2_Other PA	Ant 1	15.1	16.3	13.7	19.1	22.0	22.0
LTE Band 25(2)	Ant 9	21.6	19.8	15.4	20.6	23.0	23.0
LTE Band 2_Other PA	Ant 9	21.6	19.8	15.4	20.6	23.0	23.0
LTE Band 25(2)	Ant 0	33.7	17.4	17.4	20.3	21.5	21.5
LTE Band 2_Other PA	Ant 0	33.7	17.4	17.4	20.3	21.5	21.5
LTE Band 66(4)	Ant 2	32.6	22.3	21.3	23.6	23.0	23.0
LTE Band 66(4)_Other PA	Ant 2	32.6	22.3	21.3	23.6	23.0	23.0
LTE Band 66(4)	Ant 1	15.6	19.3	15.9	21.5	22.0	22.0
LTE Band 66(4)_Other PA	Ant 1	15.6	19.3	15.9	21.5	22.0	22.0
LTE Band 66(4)	Ant 9	25.8	22.7	18.0	22.1	23.0	23.0
LTE Band 66(4)_Other PA	Ant 9	25.8	22.7	18.0	22.1	23.0	23.0
LTE Band 66(4)	Ant 0	34.4	17.4	17.4	20.5	21.5	21.5
LTE Band 66(4)_Other PA	Ant 0	34.4	17.4	17.4	20.5	21.5	21.5
LTE Band 26(5)	Ant 0	29.6	23.0	23.0	23.9	23.0	23.0
LTE Band 26(5)	Ant 1	22.4	23.4	21.8	22.0	22.0	22.0
LTE Band 7	Ant 2	30.4	23.4	21.0	21.0	23.0	23.0
LTE Band 7_Other PA	Ant 2	30.4	23.4	21.0	21.0	23.0	23.0
LTE Band 7	Ant 1	16.4	18.0	14.4	21.5	22.0	22.0
LTE Band 7_Other PA	Ant 1	16.4	18.0	14.4	21.5	22.0	22.0
LTE Band 7	Ant 9	21.1	19.2	12.7	18.2	23.0	23.0
LTE Band 7_Other PA	Ant 9	21.1	19.2	12.7	18.2	23.0	23.0
LTE Band 7	Ant 0	31.3	18.1	18.1	19.8	21.5	21.5
LTE Band 7_Other PA	Ant 0	31.3	18.1	18.1	19.8	21.5	21.5
LTE Band 12(17)	Ant 0	30.2	23.9	23.9	23.0	23.0	23.0
LTE Band 12(17)	Ant 1	22.3	24.8	23.3	22.0	22.0	22.0
LTE Band 13	Ant 0	30.3	23.0	23.0	24.0	23.0	23.0
LTE Band 13	Ant 1	23.7	24.9	23.4	23.0	23.0	23.0
LTE Band 71	Ant 0	32.2	26.1	26.1	23.0	23.0	23.0
LTE Band 71	Ant 1	25.8	30.0	26.9	22.0	22.0	22.0

LTE Band 41(38)	Ant 2	32.9	22.5	20.5	20.5	22.4	21.0
LTE Band 41 HPUE	Ant 2	32.9	22.5	20.5	20.5	22.4	22.4
LTE Band 41(38)	Ant 1	16.4	17.8	14.9	22.9	21.4	20.0
LTE Band 41 HPUE	Ant 1	16.4	17.8	14.9	22.9	21.4	21.4
LTE Band 41(38)	Ant 9	21.2	18.3	12.3	18.8	22.4	21.0
LTE Band 41 HPUE	Ant 9	21.2	18.3	12.3	18.8	22.4	22.4
LTE Band 41(38)	Ant 0	33.0	18.6	18.7	22.7	20.9	19.5
LTE Band 41 HPUE	Ant 0	33.0	18.6	18.7	22.7	20.9	20.9
LTE Band 42 Part 27Q	Ant 7	15.6	17.6	14.2	19.7	21.0	21.0
LTE Band 42 Part 27Q	Ant 4	15.3	17.4	15.9	23.3	18.0	18.0
LTE Band 42 Part 27Q	Ant 8	25.5	20.8	20.0	19.1	19.1	20.0
LTE Band 42 Part 27Q	Ant 10	27.0	14.9	11.7	19.6	19.6	19.5
FR1 n2	Ant 2	33.3	23.0	20.2	22.8	23.0	23.0
FR1 n2_Other PA	Ant 2	33.3	23.0	20.2	22.8	23.0	23.0
FR1 n2	Ant 1	15.3	16.5	13.7	18.7	22.0	22.0
FR1 n2_Other PA	Ant 1	15.3	16.5	13.7	18.7	23.0	23.0
FR1 n26(5)	Ant 0	30.5	23.2	23.2	24.8	23.0	23.0
FR1 n26(5)	Ant 1	22.2	24.0	22.5	23.0	23.0	23.0
FR1 n7	Ant 2	30.9	23.0	21.2	21.7	23.0	23.0
FR1 n7_Other PA	Ant 2	30.9	23.0	21.2	21.7	23.0	23.0
FR1 n7	Ant 1	17.1	18.4	14.8	20.9	22.0	22.0
FR1 n7_Other PA	Ant 1	17.1	18.4	14.8	20.9	23.0	23.0
FR1 n66	Ant 2	33.0	22.2	20.5	22.8	23.0	23.0
FR1 n66_Other PA	Ant 2	33.0	22.2	20.5	22.8	23.0	23.0
FR1 n66	Ant 1	17.0	18.7	16.0	21.5	22.0	22.0
FR1 n66_Other PA	Ant 1	17.0	18.7	16.0	21.5	23.0	23.0
FR1 n71	Ant 0	33.1	26.8	26.8	23.0	23.0	23.0
FR1 n71	Ant 1	25.2	28.3	26.6	23.0	23.0	23.0
FR1 n41(38)	Ant 2	31.5	23.9	21.2	21.2	23.0	23.0
FR1 n41(38)_Other PA	Ant 2	31.5	23.9	21.2	21.2	23.0	23.0
FR1 n41(38)	Ant 1	18.3	18.5	17.2	21.7	23.0	23.0
FR1 n41(38)_Other PA	Ant 1	18.3	18.5	17.2	21.7	23.0	23.0
FR1 n41(38)	Ant 9	19.6	18.3	13.1	18.5	23.0	23.0
FR1 n41(38)_Other PA	Ant 9	19.6	18.3	13.1	18.5	23.0	23.0
FR1 n41(38)	Ant 0	32.1	18.3	18.3	21.8	23.0	23.0
FR1 n41(38)_Other PA	Ant 0	32.1	18.3	18.3	21.8	23.0	23.0
FR1 n77(78)	Ant 7	17.2	16.8	14.1	18.0	23.5	23.5
FR1 n77(78) HPUE	Ant 7	17.2	16.8	14.1	18.0	23.5	23.5
FR1 n77(78)	Ant 4	17.6	18.8	17.7	24.3	23.5	23.5
FR1 n77(78) HPUE	Ant 4	17.6	18.8	17.7	24.3	23.5	23.5
FR1 n77(78)	Ant 8	25.7	20.9	17.8	18.2	18.2	23.5
FR1 n77(78) HPUE	Ant 8	25.7	20.9	17.8	18.2	18.2	23.5
FR1 n77(78)	Ant 10	25.0	14.2	12.7	21.8	21.8	23.5
FR1 n77(78) HPUE	Ant 10	25.0	14.2	12.7	21.8	21.8	23.5

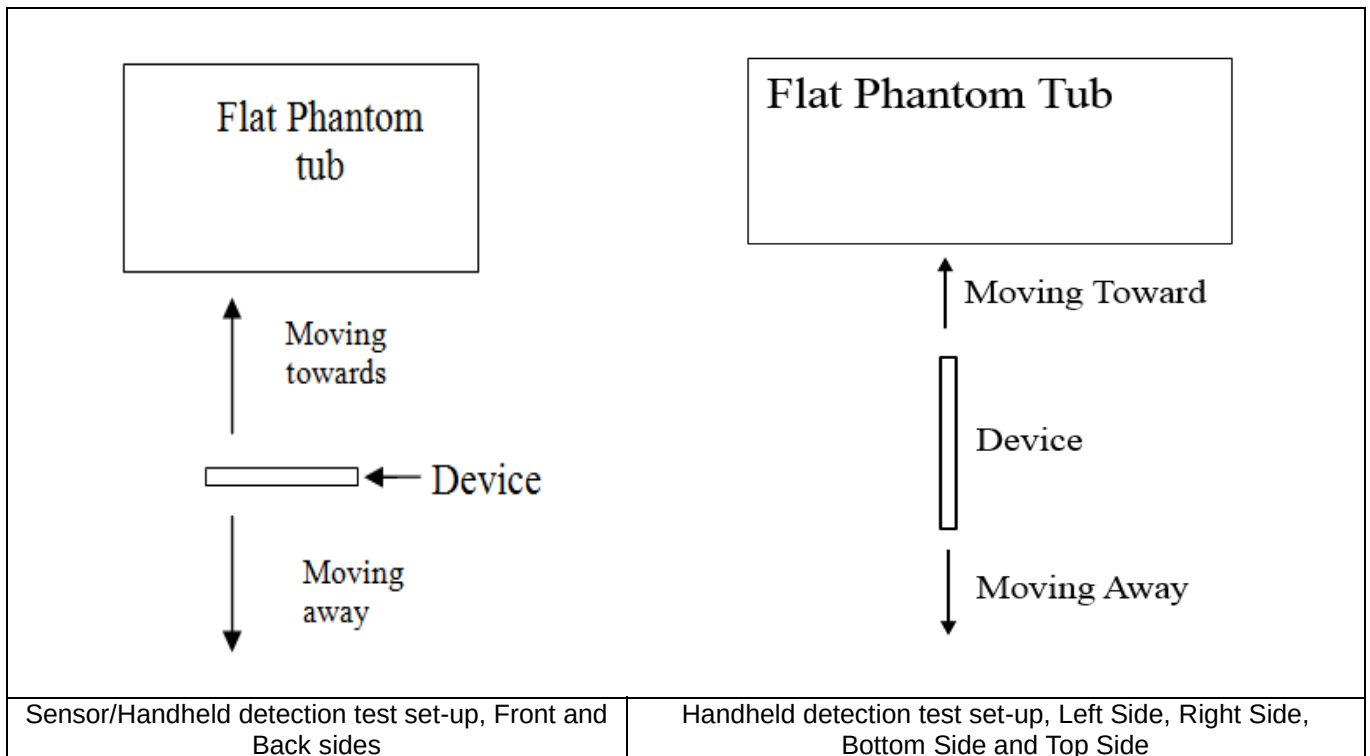
Note:

- 1) *Pmax is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + 1.0 dB device uncertainty.
- 2) All Plimit power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD).
- 3) The max allowed output power is the Plimit + 1.0 dB device uncertainty, and if Plimit is higher than Pmax, the device output power will be Pmax instead.

6. Proximity Sensor Triggering Test

<Proximity Sensor Triggering Distance>:

1. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (7125MHz) and lowest (1750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's body at the front or back of the device.
3. The output power will reduce to body worn power level when top and bottom sensor pad be detected.
4. The sensors used to detect the proximity of the user's body at the front or back surface of the device use a detection threshold distance. The data shown in the sections below shows the distance(s). When front or back body worn condition is detected reduced power will be active.
5. The device employs proximity sensors also can detect the presence of the user's a finger or hand when handheld state at the front/back/top/bottom/left/right sides of the device. When front/back/top/bottom/left/right sides of handheld condition is detected reduced power will be active.
6. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed:



<P-Sensor>

Proximity Sensor Triggering Distance (mm)				
Position	Front		Back	
	Moving towards	Moving away	Moving towards	Moving away
Minimum	14	16	17	19

<Handheld for ANT 0>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Left Side		Bottom Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	5	10	11	15	6	11	9	13

<Handheld for ANT1&7&9>

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	15	17	16	19	9	13	20	21

<Handheld for ANT 2>

Proximity Sensor Triggering Distance (mm)							
Position	Front		Back		Bottom Side		
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving away
Minimum	4	8	7	10	11		15

<Handheld for ANT 3&4&5&6>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Right Side		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	11	13	12	14	15	16	13	15

7. RF Exposure Limits

7.1 Uncontrolled Environment

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

7.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

8. Specific Absorption Rate (SAR)

8.1 Introduction

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

8.2 SAR Definition

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

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

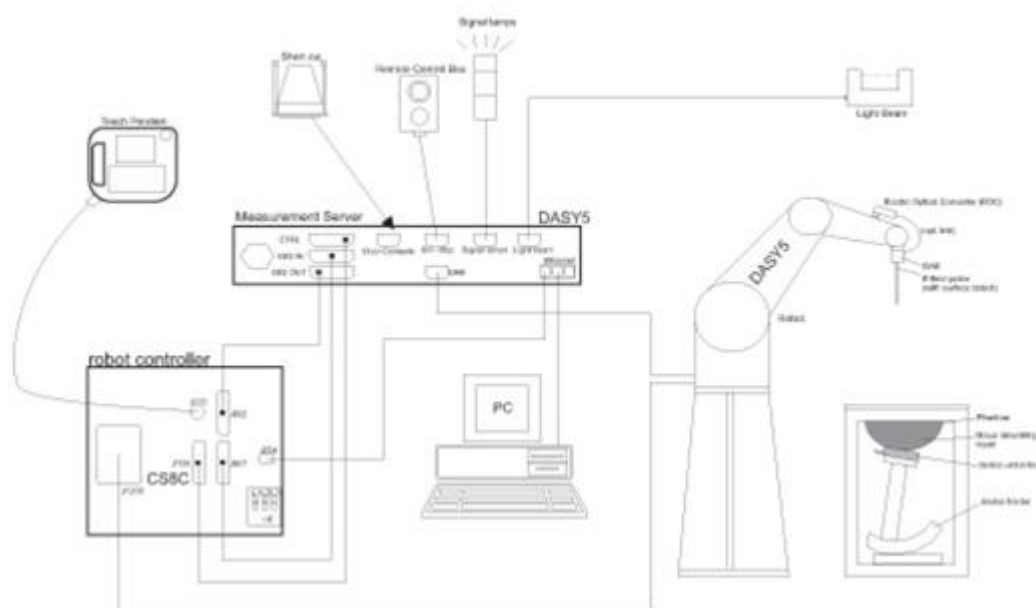
SAR is expressed in units of Watts per kilogram (W/kg)

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

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 WinXP or Win7 and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

9.1 E-Field Probe

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

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	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.

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

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 <u>area scan based 1-g SAR estimation</u> 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	750MHz System Validation Kit	D750V3	1099	2024/12/13	2025/12/12
SPEAG	835MHz System Validation Kit	D835V2	4d162	2024/12/13	2025/12/12
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	2027/2/7
SPEAG	2600MHz System Validation Kit	D2600V2	1112	2023/12/18	2026/12/17
SPEAG	3500MHz System Validation Kit	D3500V2	1037	2023/11/20	2026/11/19
SPEAG	3700MHz System Validation Kit	D3700V2	1008	2023/11/20	2026/11/19
SPEAG	3900MHz System Validation Kit	D3900V2	1048	2023/3/9	2026/3/8
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	2022/9/23	2025/9/21
SPEAG	Data Acquisition Electronics	DAE4	1279	2024/8/20	2025/8/19
SPEAG	Dosimetric E-Field Probe	EX3DV4	7764	2024/9/2	2025/9/1
SPEAG	SAM Twin Phantom	SAM Twin	TP-1697	NCR	NCR
CHIGO	Thermo-Hygrometer	HTC-1	1929539	2024/5/15	2025/5/14
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	1144	2024/8/20	2025/8/19
Anritsu	Vector Signal Generator	MG3710A	6201682672	2025/1/3	2026/1/2
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	2024/10/11	2025/10/10
TES	DIGITAC THERMOMETER	TYPE-K	220305411	2025/1/2	2026/1/1
ARRA	Power Divider	A3200-2	N/A	Note 1	
MCL	Attenuation1	BW-S10W5+	N/A	Note 1	
MCL	Attenuation2	BW-S10W5+	N/A	Note 1	
MCL	Attenuation3	BW-S10W5+	N/A	Note 1	
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.

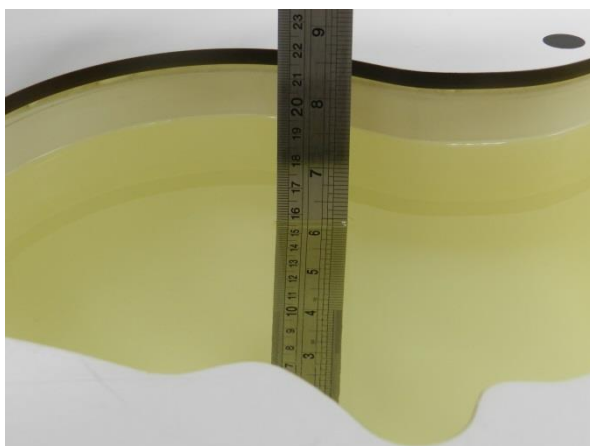


Fig 11.1 Photo of Liquid Height for Head SAR



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								
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.40	40.0
2450	55.0	0	0	0	0	45.0	1.80	39.2
2600	54.8	0	0	0.1	0	45.1	1.96	39.0

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
750	Head	22.6	0.898	42.323	0.89	41.90	0.90	1.01	±5	2025/2/8
835	Head	22.9	0.928	42.060	0.90	41.50	3.11	1.35	±5	2025/2/9
1750	Head	22.8	1.401	40.508	1.37	40.10	2.26	1.02	±5	2025/2/10
1900	Head	22.7	1.422	38.963	1.40	40.00	1.57	-2.59	±5	2025/2/11
2600	Head	22.8	2.008	40.561	1.96	39.00	2.45	4.00	±5	2025/2/12
3500	Head	22.9	2.881	38.499	2.91	37.90	-1.00	1.58	±5	2025/2/13
3900	Head	22.6	3.281	37.612	3.32	37.50	-1.17	0.30	±5	2025/2/14
750	Head	22.8	0.888	42.260	0.89	41.90	-0.22	0.86	±5	2025/2/15
835	Head	22.8	0.912	41.937	0.90	41.50	1.33	1.05	±5	2025/2/16
1750	Head	22.6	1.317	40.224	1.37	40.10	-3.87	0.31	±5	2025/2/17
1900	Head	22.9	1.407	40.215	1.40	40.00	0.50	0.54	±5	2025/2/18
2600	Head	22.6	2.030	40.346	1.96	39.00	3.57	3.45	±5	2025/2/19
3500	Head	22.8	2.813	38.735	2.91	37.90	-3.33	2.20	±5	2025/2/20
3900	Head	22.7	3.171	39.019	3.32	37.50	-4.49	4.05	±5	2025/2/21
2450	Head	22.6	1.767	39.366	1.80	39.20	-1.83	0.42	±5	2025/2/22
5250	Head	22.9	4.557	36.100	4.71	35.90	-3.25	0.56	±5	2025/2/24
5600	Head	22.9	4.932	35.572	5.07	35.50	-2.72	0.20	±5	2025/2/26
5750	Head	22.8	5.113	35.387	5.22	35.40	-2.05	-0.04	±5	2025/2/27
3700	Head	22.6	3.083	38.026	3.12	37.70	-1.19	0.86	±5	2025/2/28

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 (%)
2025/2/8	750	Head	50	1099	7764	1279	0.439	8.28	8.78	6.04
2025/2/9	835	Head	50	4d162	7764	1279	0.481	9.08	9.62	5.95
2025/2/10	1750	Head	50	1090	7764	1279	1.980	37.00	39.6	7.03
2025/2/11	1900	Head	50	5d118	7764	1279	1.830	39.30	36.6	-6.87
2025/2/12	2600	Head	50	1112	7764	1279	2.710	55.10	54.2	-1.63
2025/2/13	3500	Head	50	1037	7764	1279	3.160	65.40	63.2	-3.36
2025/2/14	3900	Head	50	1048	7764	1279	3.420	69.10	68.4	-1.01
2025/2/15	750	Head	50	1099	7764	1279	0.415	8.28	8.3	0.24
2025/2/16	835	Head	50	4d162	7764	1279	0.485	9.08	9.7	6.83
2025/2/17	1750	Head	50	1090	7764	1279	1.960	37.00	39.2	5.95
2025/2/18	1900	Head	50	5d118	7764	1279	1.950	39.30	39	-0.76
2025/2/19	2600	Head	50	1112	7764	1279	2.930	55.10	58.6	6.35
2025/2/20	3500	Head	50	1037	7764	1279	3.120	65.40	62.4	-4.59
2025/2/21	3900	Head	50	1048	7764	1279	3.670	69.10	73.4	6.22
2025/2/22	2450	Head	50	1095	7764	1279	2.480	52.60	49.6	-5.70
2025/2/24	5250	Head	50	1113	7764	1279	3.900	81.50	78	-4.29
2025/2/26	5600	Head	50	1113	7764	1279	4.030	82.60	80.6	-2.42
2025/2/27	5750	Head	50	1113	7764	1279	3.720	80.80	74.4	-7.92
2025/2/28	3700	Head	50	1008	7764	1279	3.160	67.20	63.2	-5.95

<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 (%)
2025/2/8	750	Head	50	1099	7764	1279	0.288	5.37	5.76	7.26
2025/2/9	835	Head	50	4d162	7764	1279	0.308	5.85	6.16	5.30
2025/2/10	1750	Head	50	1090	7764	1279	1.010	19.50	20.2	3.59
2025/2/11	1900	Head	50	5d118	7764	1279	0.954	20.40	19.08	-6.47
2025/2/12	2600	Head	50	1112	7764	1279	1.250	24.80	25	0.81
2025/2/13	3500	Head	50	1037	7764	1279	1.300	24.70	26	5.26
2025/2/14	3900	Head	50	1048	7764	1279	1.210	24.10	24.2	0.41
2025/2/15	750	Head	50	1099	7764	1279	0.283	5.37	5.66	5.40
2025/2/16	835	Head	50	4d162	7764	1279	0.303	5.85	6.06	3.59
2025/2/17	1750	Head	50	1090	7764	1279	1.040	19.50	20.8	6.67
2025/2/18	1900	Head	50	5d118	7764	1279	1.060	20.40	21.2	3.92
2025/2/19	2600	Head	50	1112	7764	1279	1.290	24.80	25.8	4.03
2025/2/20	3500	Head	50	1037	7764	1279	1.200	24.70	24	-2.83
2025/2/21	3900	Head	50	1048	7764	1279	1.250	24.10	25	3.73
2025/2/22	2450	Head	50	1095	7764	1279	1.160	24.70	23.2	-6.07
2025/2/24	5250	Head	50	1113	7764	1279	1.110	23.30	22.2	-4.72
2025/2/26	5600	Head	50	1113	7764	1279	1.160	23.70	23.2	-2.11
2025/2/27	5750	Head	50	1113	7764	1279	1.080	23.00	21.6	-6.09
2025/2/28	3700	Head	50	1008	7764	1279	1.210	24.40	24.2	-0.82

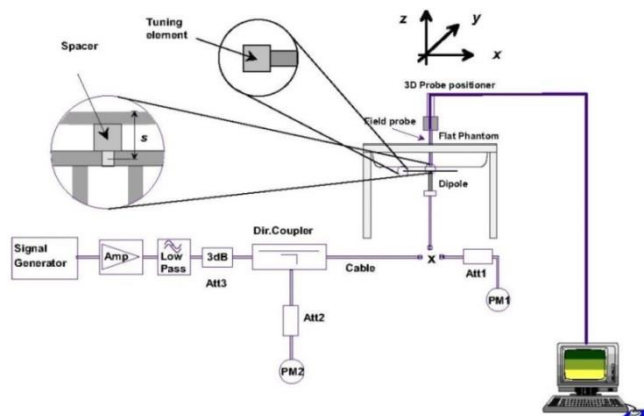

Fig 11.3.1 System Performance Check Setup

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.

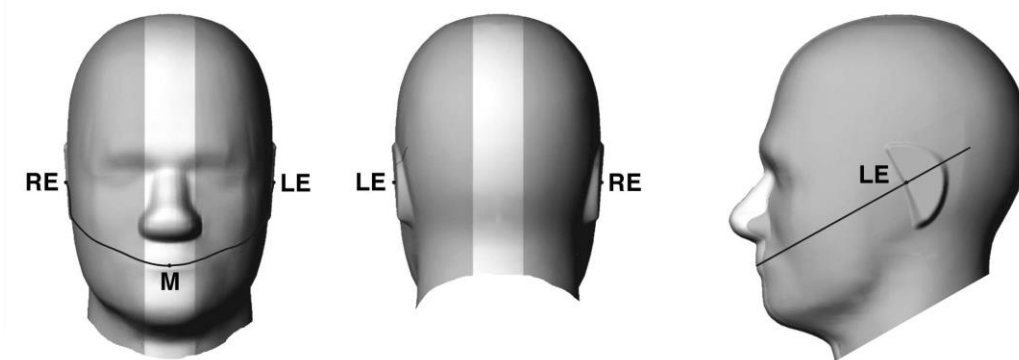


Fig 12.1.1 Front, back, and side views of SAM twin phantom

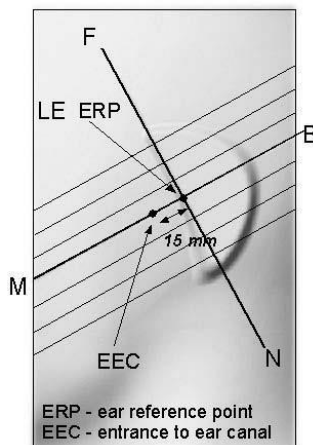


Fig 12.1.2 Close-up side view of phantom showing the ear region.

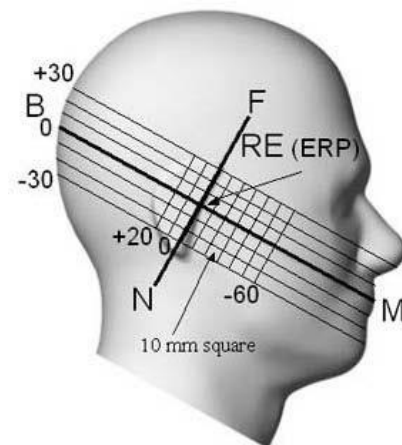


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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 handset. 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.

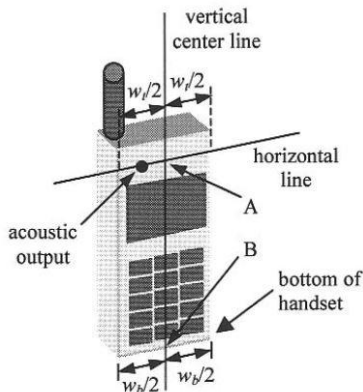


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

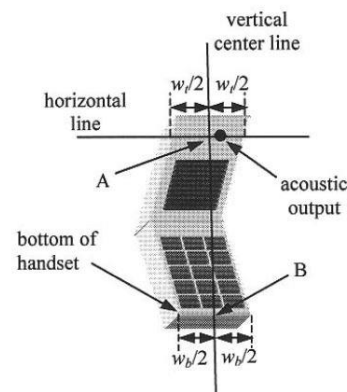


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

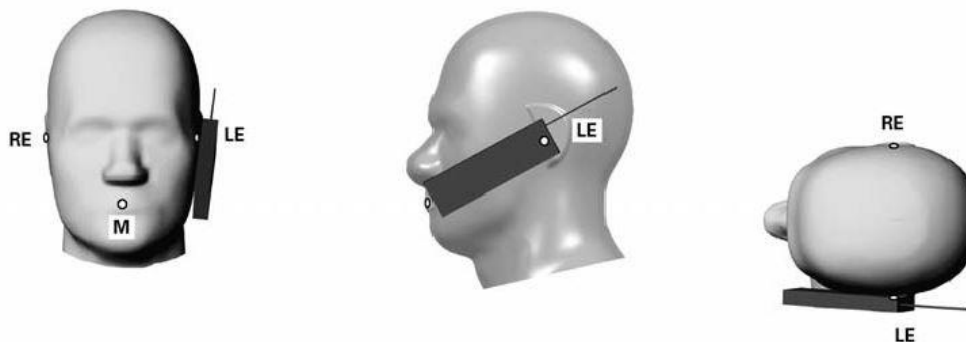


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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

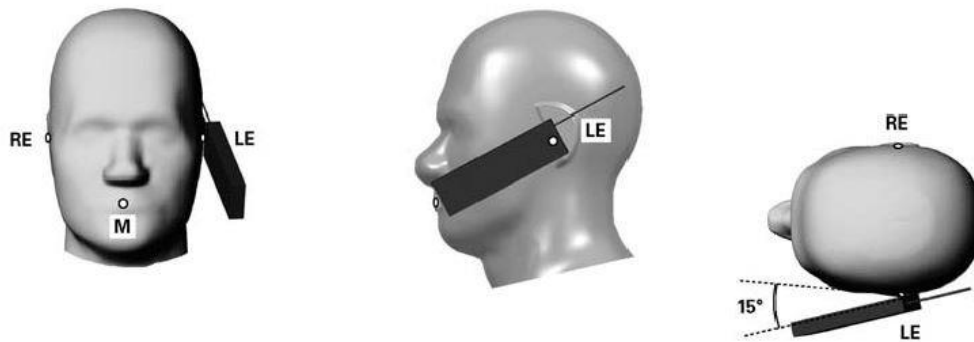


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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.

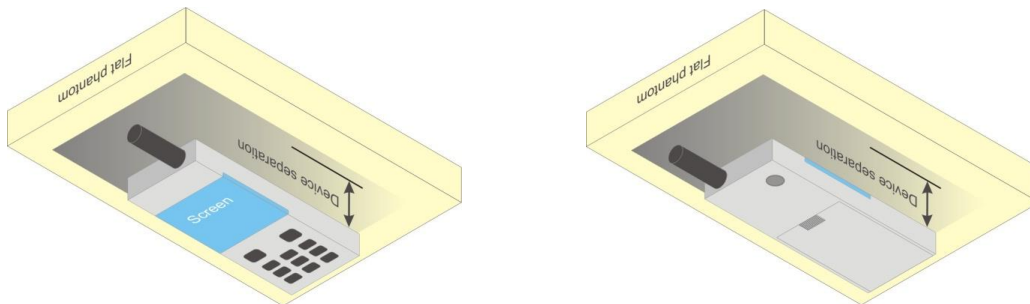


Fig 12.4 Body Worn Position

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 DPDCCH, 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 Agilent E5515C referred to the Setup Configuration below
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set RMC 12.2Kbps + HSDPA mode.
 - ii. Set Cell Power = -25 dBm
 - iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
 - iv. Select HSDPA Uplink Parameters
 - v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - a). Subtest 1: $\beta_c/\beta_d=2/15$
 - b). Subtest 2: $\beta_c/\beta_d=12/15$
 - c). Subtest 3: $\beta_c/\beta_d=15/8$
 - d). Subtest 4: $\beta_c/\beta_d=15/4$
 - vi. Set Delta ACK, Delta NACK and Delta CQI = 8
 - vii. Set Ack-Nack Repetition Factor to 3
 - viii. Set CQI Feedback Cycle (k) to 4 ms
 - ix. Set CQI Repetition Factor to 2
 - x. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

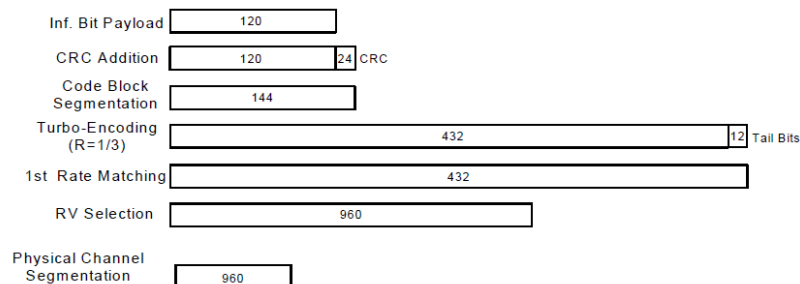


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

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

- i. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- ii. The RF path losses were compensated into the measurements.
- iii. A call was established between EUT and Base Station with following setting * :
 4. Call Configs = 5.2E:HSPA+:UL with 16QAM
 5. 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
 6. Set Channel Params
 7. Set Cell Power = -86 dBm
 8. Set Channel Type = HSPA
 9. Set UE Target Power = 21 dBm
 10. Power Ctrl Mode= All Up Bits
 11. Set Manual Uplink DPCH Bc/Bd = Manual
 12. Set Manual Uplink DPCH Bc and Bd=15,15(for 34.121-1 v8.10.0 table C11.1.4 sub-test 1)
 13. Set HSPA Conn DL Channel Levels
 14. Set HS-SCCH Configs
 15. Set RB Test Mode Setup
 16. Set Common HSUPA Parameters
 17. Set Serving Grant
 18. Confirm that E-TFCI is equal to the target E-TFCI of 105 for sub-test 1, and other subtest's E-TFCI
- iv. 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 (Note 3)	β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105

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

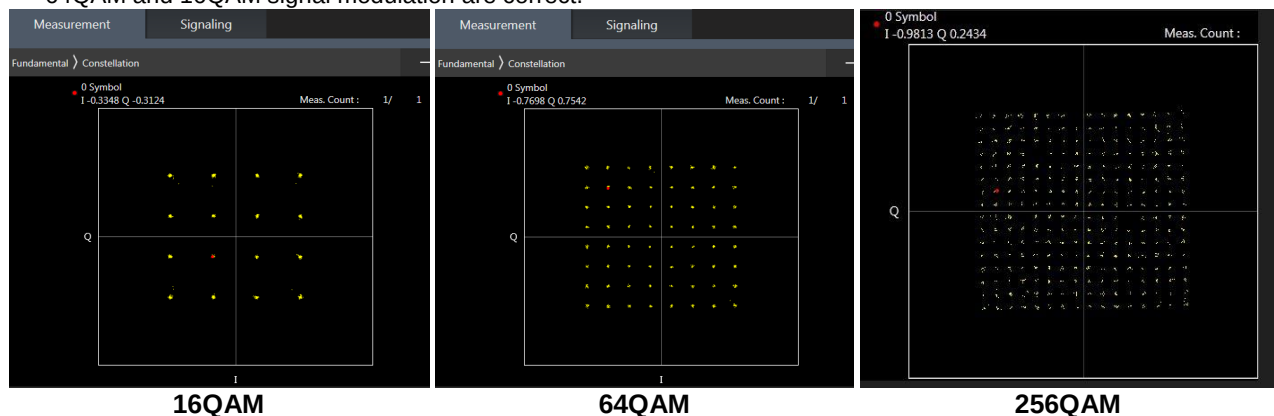
Setup Configuration
<WCDMA Conducted Power>
General Note:

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

<LTE Conducted Power>

General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 / B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B2 / B17 / B4 / B5 / B38 SAR test was covered by B25 / B12 / B66 / B26 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

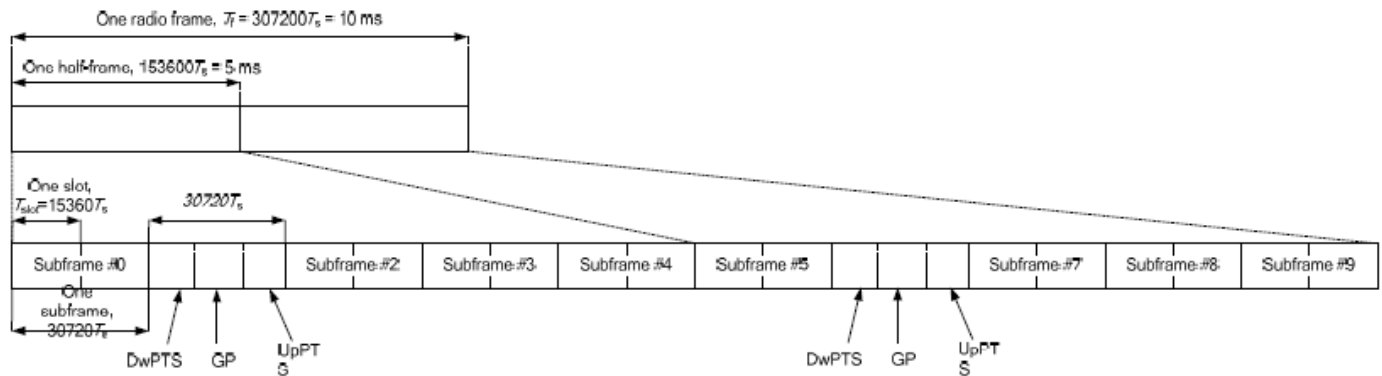


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

For LTE TDD Power class 2

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

For LTE TDD Power class 3

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

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

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

<LTE Carrier Aggregation>

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. Per Oct. 2024 TCB workshop, Manufacturer declares that TX power measurement for multiple DL CA configurations is deemed not required as the DL CA has no impact on the TX power according to preliminary scan. TX power measured in LTE standalone operation represents the worst case.

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation			4CC Downlink Carrier Aggregation		
Number	Combination	4X4 MIMO	Number	Combination	4X4 MIMO	Number	Combination	4X4 MIMO
1	CA_38A-66A	38A-66A, 66A, 38A	1	CA_2A-2A-4A	2A-2A, 2A	1	CA_2A-2A-4A-4A	2A-2A, 2A
2	CA_38C	38C, 38A	2	CA_2A-2A-5A	2A-2A, 2A	2	CA_2A-2A-4A-5A	2A-2A, 2A
3	CA_41A-41A	41A-41A, 41A	3	CA_2A-2A-66A	2A-2A, 2A	3	CA_2A-2A-5A-66A	2A-2A, 2A
4	CA_41A-42A	41A-42A, 42A, 41A	4	CA_2A-2A-7A	2A-2A-7A, 2A-7A, 2A-2A, 7A, 2A	4	CA_2A-2A-66A-66A	2A-2A, 2A
5	CA_41C	41C, 41A	5	CA_2A-4A-4A	2A	5	CA_2A-4A-4A-5A	2A
6	CA_42A-42A	42A-42A, 42A	6	CA_2A-4A-5A	2A	6	CA_2A-5A-66A-66A	2A
7	CA_42C	42C, 42A	7	CA_2A-4A-7A	7A	7	CA_2A-7C-38A	7C, 2A-38A, 7A, 38A, 2A
8	CA_4A-4A	4A-4A, 4A	8	CA_2A-5A-66A	2A	8	CA_41A-41A-41C	41C, 41A-41A, 41A
9	CA_4A-5A	4A	9	CA_2A-5A-7A	2A-7A, 7A, 2A	9	CA_41A-41D	41A
10	CA_4A-7A	4A-7A, 7A, 4A	10	CA_2A-66A-66A	2A	10	CA_41C-41C	41C, 41A
11	CA_4C	4C, 4A	11	CA_2A-7A-38A	7A-38A, 2A-7A, 2A-38A, 7A, 38A, 2A	11	CA_41C-42C	42C, 41C, 42A, 41A
12	CA_5A-5A		12	CA_2A-7A-66A	7A	12	CA_41E	
13	CA_5A-66A	66A	13	CA_2A-7A-7A	2A-7A-7A, 7A-7A, 2A-7A, 7A, 2A	13	CA_42E	
14	CA_5A-7A	7A	14	CA_2A-7C	2A-7C, 7C, 2A-7A, 7A, 2A	14	CA_5A-5A-66A-66A	66A-66A, 66A
15	CA_66A-66A	66A-66A, 66A	15	CA_2C-66A	2C, 2A	15	CA_5A-7A-66A-66A	7A-66A, 66A-66A, 7A, 66A
16	CA_66B	66B, 66A	16	CA_2C-7A	2C-7A, 2A-7A, 7A, 2A	16	CA_5A-7A-66C	66C, 7A, 66A
17	CA_66C	66C, 66A	17	CA_41A-41A-41A	41A-41A-41A, 41A-41A, 41A	17	CA_5A-7C-66A	7C, 7A, 66A
18	CA_7A-26A	7A	18	CA_41A-41C	41A-41C, 41C, 41A-41A, 41A	18	CA_7C-66A-66A	7C, 66A-66A, 7A, 66A
19	CA_7A-42A	7A-42A, 7A, 42A	19	CA_41A-42C	41A-42C, 42C, 41A-42A, 42A, 41A			
20	CA_7A-66A	7A-66A, 7A, 66A	20	CA_41C-42A	41C-42A, 41C, 41A-42A, 42A, 41A			
21	CA_7A-7A	7A-7A, 7A	21	CA_41D	41D, 41C, 41A			
22	CA_7B	7B, 7A	22	CA_42A-42C	42A-42C, 42C, 42A-42A, 42A			
23	CA_7C	7C, 7A	23	CA_42D	42D, 42C, 42A			
			24	CA_4A-4A-5A	4A-4A, 4A			
			25	CA_4A-4A-7A	4A-4A-7A, 4A-7A, 4A-4A, 7A, 4A			
			26	CA_4A-5A-7A	4A-7A, 7A, 4A			
			27	CA_4A-7C	4A-7C, 7C, 4A-7A, 7A, 4A			
			28	CA_4C-7A	4C-7A, 4C, 4A-7A, 7A, 4A			
			29	CA_5A-5A-66A	66A			
			30	CA_5A-66A-66A	66A-66A, 66A			
			31	CA_5A-66C	66C, 66A			
			32	CA_5A-7A-66A	7A-66A, 7A, 66A			
			33	CA_5A-7A-7A	7A-7A, 7A			
			34	CA_5A-7C	7C, 7A			
			35	CA_7A-26A-66A	7A-66A, 7A, 66A			
			36	CA_7A-38A-66A	7A-66A, 7A-38A, 38A-66A, 7A, 66A, 38A			
			37	CA_7A-42A-42A	7A-42A, 42A-42A, 7A, 42A			
			38	CA_7A-66A-66A	7A-66A-66A, 7A-66A, 66A-66A, 7A, 66A			
			39	CA_7A-66C	7A-66C, 66C, 7A, 66A			



			40	CA_7A-7A-66A	7A-7A-66A, 7A-7A, 7A-66A, 7A, 66A			
			41	CA_7C-26A	7C, 7A			
			42	CA_7C-66A	7C-66A, 7C, 7A-66A, 7A, 66A			

LTE Carrier Aggregation Conducted Power (Downlink)

- 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.
- 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.
- The device supports downlink four carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
- 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.
- 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.
- 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.
- 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 2/4/7/25/38/41/42/66 only. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

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

4X4 MIMO	Band
	LTE Band 2/4/7/25/38/41/42/66

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation	
Intra-band	Antenna Tx	ASDiv-1 Tx
CA_7C	Ant 2	Ant 1/9/0
CA_38C	Ant 2	Ant 1/9/0
CA_41C	Ant 2	Ant 1/9/0
CA_42C	Ant 7	Ant 4/8/10

<Intra-band>
General Note:

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

<Inter-band uplink carrier aggregation consideration>

LTE Uplink CA	2CC Uplink Carrier Aggregation			
Inter-band	Main Antenna Tx	ASDiv-1 Tx	ASDiv-2 Tx	ASDiv-3 Tx
CA_2A-4A	ANT 2+ANT 1/ANT 9/ANT 0	ANT 1+ANT 2/ANT 9/ANT 0	ANT 9+ANT 2/ANT 1/ANT 0	ANT 0+ANT 2/ANT 1/ANT 9
CA_2A-5A	ANT 2+ANT 0/ANT 1	ANT 1+ANT 0	ANT 9+ANT 0/ANT 1	ANT 0+ANT 1
CA_2A-66A	ANT 2+ANT 1/ANT 9/ANT 0	ANT 1+ANT 2/ANT 9/ANT 0	ANT 9+ANT 2/ANT 1/ANT 0	ANT 0+ANT 2/ANT 1/ANT 9
CA_2A-7A	ANT 2+ANT 1/ANT 9/ANT 0	ANT 1+ANT 2/ANT 9/ANT 0	ANT 9+ANT 2/ANT 1/ANT 0	ANT 0+ANT 2/ANT 1/ANT 9
CA_4A-5A	ANT 2+ANT 0/ANT 1	ANT 1+ANT 0	ANT 9+ANT 0/ANT 1	ANT 0+ANT 1
CA_4A-7A	ANT 2+ANT 1/ANT 9/ANT 0	ANT 1+ANT 2/ANT 9/ANT 0	ANT 9+ANT 2/ANT 1/ANT 0	ANT 0+ANT 2/ANT 1/ANT 9
CA_5A-66A	ANT 0+ANT 2/ANT 1/ANT 9	ANT 1+ANT 2/ANT 9/ANT 0		
CA_5A-7A	ANT 0+ANT 2/ANT 1/ANT 9	ANT 1+ANT 2/ANT 9/ANT 0		

General Note:

- The single carrier of inter band CA uplink power level is the same as Non-CA standalone LTE power level.
- The product implements MediaTek TA-SAR Gen2 feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with RF exposure limit over a defined time window, for SAR (transmit frequency ≤ 6GHz). To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.
- For LTE inter-band CA mode, MediaTek TA-SAR Gen2 algorithm in WWAN adds directly the time-averaged RF exposure between two LTE bands. TA-SAR Gen2 algorithm controls the total RF exposure based on LTE inter CA bands to not exceed FCC limit. In Part 1 Report, simultaneous transmission compliance was evaluated with other Radios (WLAN or BT) using standalone LTE SAR mode.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n66/n38/n41/n77/n78 is NSA mode.
2. 5G NR n2/n5/n7/n26/n66/n71/n38/n41/n77/n78 is SA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
 - b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
 - c. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
 - d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
 - f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. This device supports HPUE mode for 5G NR n77/n78 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.
5. For 5G NR n77/n78 HPUE, 5G NR 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 test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
6. For 5G NR, the simultaneous transmission analysis is used standalone SAR at total power level to show compliance.
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. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
10. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
11. 5G NR n41 supports UL MIMO.
12. For 5G NR inter-band CA mode, MediaTek TA-SAR Gen2 algorithm in WWAN adds directly the time-averaged RF exposure between two 5G NR bands. MediaTek algorithm controls the total RF exposure base on 5G NR inter CA bands to not exceed FCC limit.

<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	Main Antenna Tx		ASDiv-1 Tx	
	Main Antenna Tx	ASDiv-1 Tx	ASDiv-2 Tx	ASDiv-3 Tx
DC_13A_n66A	A0+A2/A1	A1+A2	/	/
DC_26A_n78A	A0+A7/A4/A8/A10	A1+A7/A4/A8/A10	/	/
DC_2A_n38A	A2+A1/A9/A0	A1+A2/A9/A0	A9+A2/A1/A0	A0+A2/A1/A9
DC_2A_n5A	A2+A0/A1	A1+A0	A9+A0/A1	A0+A1
DC_2A_n66A	A2+A1	A1+A2	A9+A2/A1	A0+A2/A1
DC_2A_n78A	A2+A7/A4/A8/A10	A1+A7/A4/A8/A10	A9+A7/A4/A8/A10	A0+A7/A4/A8/A10
DC_2A_n7A	A2+A1	A1+A2	A9+A2/A1	A0+A2/A1
DC_38A_n78A	A2+A7/A4/A8/A10	A1+A7/A4/A8/A10	A9+A7/A4/A8/A10	A0+A7/A4/A8/A10
DC_41A_n77A	A2+A7/A4/A8/A10	A1+A7/A4/A8/A10	A9+A7/A4/A8/A10	A0+A7/A4/A8/A10
DC_41A_n78A	A2+A7/A4/A8/A10	A1+A7/A4/A8/A10	A9+A7/A4/A8/A10	A0+A7/A4/A8/A10
DC_4A_n2A	A2+A1	A1+A2	A9+A2/A1	A0+A2/A1
DC_4A_n38A	A2+A1/A9/A0	A1+A2/A9/A0	A9+A2/A1/A0	A0+A2/A1/A9
DC_4A_n41A	A2+A1/A9/A0	A1+A2/A9/A0	A9+A2/A1/A0	A0+A2/A1/A9
DC_4A_n78A	A2+A7/A4/A8/A10	A1+A7/A4/A8/A10	A9+A7/A4/A8/A10	A0+A7/A4/A8/A10
DC_4A_n7A	A2+A1	A1+A2	A9+A2/A1	A0+A2/A1
DC_5A_n2A	A0+A2/A1	A1+A2	/	/
DC_5A_n41A	A0+A2/A1/A9	A1+A2/A9/A0	/	/
DC_5A_n66A	A0+A2/A1	A1+A2	/	/
DC_5A_n78A	A0+A7/A4/A8/A10	A1+A7/A4/A8/A10	/	/
DC_5A_n7A	A0+A2/A1	A1+A2	/	/
DC_66A_n38A	A2+A1/A9/A0	A1+A2/A9/A0	A9+A2/A1/A0	A0+A2/A1/A9
DC_66A_n41A	A2+A1/A9/A0	A1+A2/A9/A0	A9+A2/A1/A0	A0+A2/A1/A9
DC_66A_n5A	A2+A0/A1	A1+A0	A9+A0/A1	A0+A1
DC_66A_n78A	A2+A7/A4/A8/A10	A1+A7/A4/A8/A10	A9+A7/A4/A8/A10	A0+A7/A4/A8/A10
DC_66A_n7A	A2+A1	A1+A2	A9+A2/A1	A0+A2/A1
DC_7A_n5A	A2+A0/A1	A1+A0	A9+A0/A1	A0+A1
DC_7A_n66A	A2+A1	A1+A2	A9+A2/A1	A0+A2/A1



DC_7A_n77A	A2+A7/A4/A8/A10	A1+A7/A4/A8/A10	A9+A7/A4/A8/A10	A0+A7/A4/A8/A10
DC_7A_n78A	A2+A7/A4/A8/A10	A1+A7/A4/A8/A10	A9+A7/A4/A8/A10	A0+A7/A4/A8/A10

Inter-Band CA Configuration:

NR CA	2CC Uplink Carrier Aggregation			
Inter-band	Main Antenna Tx	ASDiv-1 Tx	ASDiv-2 Tx	ASDiv-3 Tx
CA_n41A-n71A	A2+A0/A1	A1+A0	A9+A0/A1	A0+A1
CA_n5A-n78A	A0+A7/A4/A8/A10	A1+A7/A4/A8/A10		
CA_n71A-n78A	A0+A7/A4/A8/A10	A1+A7/A4/A8/A10		
CA_n7A-n78A	A2+A7/A4/A8/A10	A1+A7/A4/A8/A10		

NR UL MIMO Bands Configuration:

UL MIMO	Main Antenna Tx	ASDiv-1 Tx	ASDiv-2 Tx
n41	Ant2+Ant1	A9+A1	A9+A0

<WLAN Conducted Power>

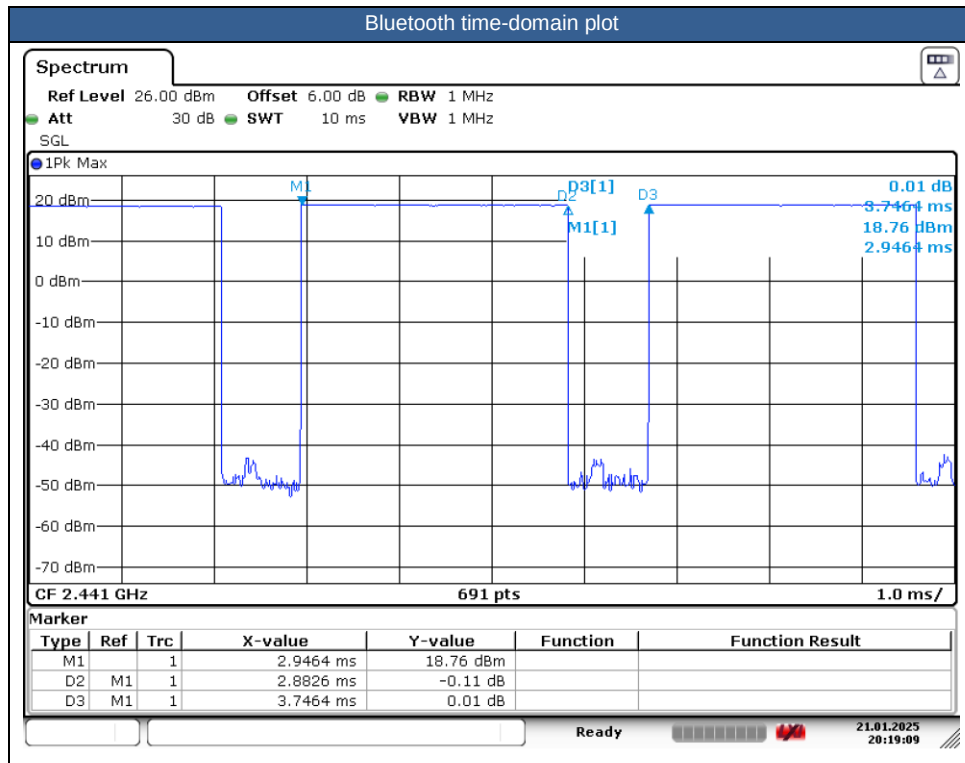
General Note:

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration. Additional output power measurements were not necessary.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
 - a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
 - b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
 - c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
6. 802.11 ax 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. 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 SISO antennas respectively to calculate sum of the power for MIMO mode.
8. 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.

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 76.94% as following figure, for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to 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 WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - f. For TDD LTE SAR measurement of power class 3, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = Measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
 - g. For TDD LTE SAR measurement of power class 2, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 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 the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the MediaTek TA-SAR will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. For this device SAR for WWAN/WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of GSM1900, WCDMA Band II/IV, LTE Band 2/4/5/7/13/25/26/66/38/41/42, 5GNR n2/n7 /n5/n26/n66/n38 /n41/n77/n78, WLAN 2.4/5.2/5.8GHz, therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
 - c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
6. Although the headset SAR is greater than 0.8 W/kg, the headset SAR verified the worst of the non-headset SAR and less than non-headset SAR, so there is no need to be tested other channels.
7. According to Nov. 2017 TCB workshop, when the reported 1gSAR for UL CA configuration is <1.2 W/kg, UL CA 1gSAR is not required for all required test channels (PCC based).
8. LTE B2/4/7/66 and 5GNR n38/41 at Ant 0/1/2/9 and 5GNR n2/7/66 at Ant 1/2 support different PAs for same antennas. And some LTE/NR bands support Other PA only under ENDC& UL CA. Some LTE/NR bands support different PAs for some antennas, whether it is the maximum power of Main PA is higher than and very close to the other PA, for RF

exposure, after verification all PAs in a same position, so the worst-case PA was chosen to perform full SAR testing to ensure the RF exposure is compliance and another PA verified the worst case.

9. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot SAR.
10. For Phablet devices, when hotspot mode is not supported, Product specific 10-g SAR is required for all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.

GSM Note:

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

WCDMA Note:

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

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is > not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B26 / B38 / B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B2 / B4 / B5 / B17 / B38 SAR test was covered by B25 / B66 / B26 / B12 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
 - b. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - c. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - d. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - e. Smaller bandwidth output power for each RB allocation configuration for this device will not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - f. For 5G FR1 n2/n5 /n7/n26/n66/n71/n38/n41 /n77 the maximum bandwidth does not support three non-overlapping channels, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

WLAN/Bluetooth Note:

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

ECI status description:

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

This WWAN bands enabled with MediaTek TA-SAR Gen2 feature which located at chapter 5. The default power is Pmax power, When Plimit power higher than Pmax power, the output power will be limited at Pmax, and so the SAR will use Pmax power to do the testing.

Exposure Condition	ECI	Trigger conditions
Head SAR	ECI2	Earpiece On
Hotspot SAR	ECI7	Hotspot On
Body worn SAR	ECI3	Sensor On
Extremity SAR	ECI6	Sensor On
Body worn/ Extremity SAR	ECI4	Sensor Off



16.1 Head SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																				
	LTE Band 71	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	133297	680.5	22.92	24.00	1.282	-	-	-0.09	0.086	0.110
	LTE Band 71	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	ECI 2	133297	680.5	21.89	23.00	1.291	-	-	0.11	0.069	0.089
	LTE Band 71	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	133297	680.5	22.92	24.00	1.282	-	-	-0.05	0.047	0.060
	LTE Band 71	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	ECI 2	133297	680.5	21.89	23.00	1.291	-	-	-0.08	0.000	0.000
	LTE Band 71	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	133297	680.5	22.92	24.00	1.282	-	-	0.16	0.119	0.153
	LTE Band 71	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	ECI 2	133297	680.5	21.89	23.00	1.291	-	-	0.05	0.097	0.125
	LTE Band 71	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	133297	680.5	22.92	24.00	1.282	-	-	0.05	0.070	0.090
	LTE Band 71	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	ECI 2	133297	680.5	21.89	23.00	1.291	-	-	-0.03	0.056	0.072
01	LTE Band 71	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	133297	680.5	22.11	23.00	1.227	-	-	-0.07	0.301	0.369
	LTE Band 71	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	133297	680.5	21.06	22.00	1.242	-	-	-0.02	0.245	0.304
	LTE Band 71	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	133297	680.5	22.11	23.00	1.227	-	-	-0.09	0.291	0.357
	LTE Band 71	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	133297	680.5	21.06	22.00	1.242	-	-	0.14	0.249	0.309
	LTE Band 71	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	133297	680.5	22.11	23.00	1.227	-	-	0.1	0.172	0.211
	LTE Band 71	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	133297	680.5	21.06	22.00	1.242	-	-	-0.09	0.143	0.178
	LTE Band 71	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	133297	680.5	22.11	23.00	1.227	-	-	0.07	0.185	0.227
	LTE Band 71	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	133297	680.5	21.06	22.00	1.242	-	-	-0.09	0.157	0.195
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	23095	707.5	22.59	24.00	1.384	-	-	-0.15	0.151	0.209
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	ECI 2	23095	707.5	21.55	23.00	1.396	-	-	0.02	0.120	0.168
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	23095	707.5	22.59	24.00	1.384	-	-	0.07	0.082	0.113
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	ECI 2	23095	707.5	21.55	23.00	1.396	-	-	0.16	0.064	0.089
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	23095	707.5	22.59	24.00	1.384	-	-	0.13	0.178	0.246
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	ECI 2	23095	707.5	21.55	23.00	1.396	-	-	-0.18	0.140	0.195
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	23095	707.5	22.59	24.00	1.384	-	-	0.02	0.109	0.151
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	ECI 2	23095	707.5	21.55	23.00	1.396	-	-	0.16	0.081	0.113
02	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	23095	707.5	21.85	23.00	1.303	-	-	0.03	0.637	0.830
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	ECI 2	23095	707.5	20.83	22.00	1.309	-	-	-0.03	0.507	0.664
	LTE Band 12	10M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	23095	707.5	20.81	22.00	1.315	-	-	0.07	0.510	0.671
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	23095	707.5	21.85	23.00	1.303	-	-	0	0.605	0.788
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	ECI 2	23095	707.5	20.83	22.00	1.309	-	-	0.01	0.477	0.624
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	23095	707.5	21.85	23.00	1.303	-	-	-0.06	0.393	0.512
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	ECI 2	23095	707.5	20.83	22.00	1.309	-	-	-0.04	0.315	0.412
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	23095	707.5	21.85	23.00	1.303	-	-	-0.09	0.376	0.490
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	ECI 2	23095	707.5	20.83	22.00	1.309	-	-	-0.17	0.299	0.391
	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	23230	782	22.85	24.00	1.303	-	-	-0.1	0.149	0.194
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	ECI 2	23230	782	21.83	23.00	1.309	-	-	0.18	0.116	0.152
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	23230	782	22.85	24.00	1.303	-	-	-0.17	0.082	0.107
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	ECI 2	23230	782	21.83	23.00	1.309	-	-	-0.04	0.066	0.086
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	23230	782	22.85	24.00	1.303	-	-	-0.05	0.183	0.238
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	ECI 2	23230	782	21.83	23.00	1.309	-	-	0	0.139	0.182
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	23230	782	22.85	24.00	1.303	-	-	-0.13	0.104	0.136
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	ECI 2	23230	782	21.83	23.00	1.309	-	-	-0.01	0.083	0.109
03	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	23230	782	22.37	24.00	1.455	-	-	0.04	0.522	0.760
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	ECI 2	23230	782	21.32	23.00	1.472	-	-	-0.09	0.406	0.598
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	23230	782	22.37	24.00	1.455	-	-	0.05	0.462	0.672
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	ECI 2	23230	782	21.32	23.00	1.472	-	-	0.02	0.360	0.530
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	23230	782	22.37	24.00	1.455	-	-	-0.13	0.333	0.485
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	ECI 2	23230	782	21.32	23.00	1.472	-	-	0.17	0.260	0.383
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	23230	782	22.37	24.00	1.455	-	-	0.06	0.302	0.440
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	ECI 2	23230	782	21.32	23.00	1.472	-	-	0	0.234	0.345
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	136100	680.5	23.14	24.00	1.219	-	-	-0.04	0.074	0.090



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	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	136100	680.5	23.10	24.00	1.230	-	-	-0.15	0.086	0.106
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	ECI 2	136100	680.5	23.14	24.00	1.219	-	-	0.11	0.000	0.000
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	ECI 2	136100	680.5	23.10	24.00	1.230	-	-	-0.02	0.046	0.057
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	ECI 2	136100	680.5	23.14	24.00	1.219	-	-	0.1	0.090	0.110
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	ECI 2	136100	680.5	23.10	24.00	1.230	-	-	0.04	0.101	0.124
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	ECI 2	136100	680.5	23.14	24.00	1.219	-	-	0.13	0.051	0.062
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	ECI 2	136100	680.5	23.10	24.00	1.230	-	-	-0.18	0.056	0.069
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	136100	680.5	22.62	24.00	1.374	-	-	-0.11	0.323	0.444
04	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	136100	680.5	22.58	24.00	1.387	-	-	0.14	0.381	0.528
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	136100	680.5	22.62	24.00	1.374	-	-	-0.16	0.350	0.481
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	136100	680.5	22.58	24.00	1.387	-	-	-0.15	0.352	0.488
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	136100	680.5	22.62	24.00	1.374	-	-	-0.06	0.198	0.272
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	136100	680.5	22.58	24.00	1.387	-	-	-0.14	0.235	0.326
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	136100	680.5	22.62	24.00	1.374	-	-	-0.19	0.204	0.280
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	136100	680.5	22.58	24.00	1.387	-	-	0.01	0.227	0.315
835MHz																				
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 0	ECI 2	189	836.4	25.94	27.50	1.432	-	-	0.08	0.091	0.130
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 0	ECI 2	189	836.4	25.94	27.50	1.432	-	-	0.01	0.000	0.000
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 0	ECI 2	189	836.4	25.94	27.50	1.432	-	-	0.03	0.096	0.137
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 0	ECI 2	189	836.4	25.94	27.50	1.432	-	-	-0.08	0.055	0.079
05	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 1	ECI 2	189	836.4	25.77	27.00	1.327	-	-	0.11	0.450	0.597
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	189	836.4	25.77	27.00	1.327	-	-	-0.15	0.371	0.492
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	ECI 2	189	836.4	25.77	27.00	1.327	-	-	0.16	0.286	0.380
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 1	ECI 2	189	836.4	25.77	27.00	1.327	-	-	0.05	0.267	0.354
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	ECI 2	4182	836.4	22.28	23.00	1.180	-	-	-0.08	0.203	0.240
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	ECI 2	4182	836.4	22.28	23.00	1.180	-	-	0.1	0.095	0.112
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	ECI 2	4182	836.4	22.28	23.00	1.180	-	-	-0.18	0.245	0.289
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	ECI 2	4182	836.4	22.28	23.00	1.180	-	-	0.1	0.141	0.166
06	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	4182	836.4	21.74	23.00	1.337	-	-	-0.1	0.652	0.871
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	4182	836.4	21.74	23.00	1.337	-	-	0.14	0.485	0.648
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	ECI 2	4182	836.4	21.74	23.00	1.337	-	-	0.03	0.359	0.480
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	ECI 2	4182	836.4	21.74	23.00	1.337	-	-	0.1	0.333	0.445
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	4132	826.4	21.71	23.00	1.346	-	-	0.16	0.618	0.832
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	4233	846.6	21.69	23.00	1.352	-	-	-0.06	0.641	0.867
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	26865	831.5	22.51	24.00	1.409	-	-	0.12	0.166	0.234
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	ECI 2	26865	831.5	21.48	23.00	1.419	-	-	0.08	0.129	0.183
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	26865	831.5	22.51	24.00	1.409	-	-	-0.17	0.084	0.118
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	ECI 2	26865	831.5	21.48	23.00	1.419	-	-	-0.03	0.065	0.092
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	26865	831.5	22.51	24.00	1.409	-	-	0.14	0.201	0.283
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	ECI 2	26865	831.5	21.48	23.00	1.419	-	-	0.11	0.160	0.227
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	26865	831.5	22.51	24.00	1.409	-	-	-0.05	0.119	0.168
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	ECI 2	26865	831.5	21.48	23.00	1.419	-	-	0.18	0.096	0.136
07	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	26865	831.5	21.99	23.00	1.262	-	-	0.01	0.640	0.808
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 1	ECI 2	26865	831.5	20.95	22.00	1.274	-	-	0.06	0.612	0.779
	LTE Band 26	15M	QPSK	75	0	-	Right Cheek	0mm	Ant 1	ECI 2	26865	831.5	20.91	22.00	1.285	-	-	0	0.604	0.776
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	26865	831.5	21.99	23.00	1.262	-	-	-0.04	0.566	0.714
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 1	ECI 2	26865	831.5	20.95	22.00	1.274	-	-	-0.15	0.425	0.541
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	26865	831.5	21.99	23.00	1.262	-	-	-0.02	0.422	0.532
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 1	ECI 2	26865	831.5	20.95	22.00	1.274	-	-	0.1	0.321	0.409
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	26865	831.5	21.99	23.00	1.262	-	-	0.13	0.375	0.473
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 1	ECI 2	26865	831.5	20.95	22.00	1.274	-	-	-0.18	0.282	0.359
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	166300	831.5	22.80	24.00	1.318	-	-	0.14	0.131	0.173
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	166300	831.5	22.77	24.00	1.327	-	-	-0.17	0.141	0.187
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	ECI 2	166300	831.5	22.80	24.00	1.318	-	-	0.17	0.077	0.102
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	ECI 2	166300	831.5	22.77	24.00	1.327	-	-	-0.05	0.080	0.106
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	ECI 2	166300	831.5	22.80	24.00	1.318	-	-	0.01	0.164	0.216



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	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	ECI 2	166300	831.5	22.77	24.00	1.327	-	-	0.1	0.172	0.228
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	ECI 2	166300	831.5	22.80	24.00	1.318	-	-	-0.17	0.105	0.138
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	ECI 2	166300	831.5	22.77	24.00	1.327	-	-	0.04	0.105	0.139
08	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	166300	831.5	22.09	23.20	1.291	-	-	0.03	0.688	0.888
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	166300	831.5	21.76	23.20	1.393	-	-	-0.01	0.634	0.883
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	166300	831.5	21.42	22.70	1.343	-	-	-0.08	0.616	0.827
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	166300	831.5	22.09	23.20	1.291	-	-	0.05	0.513	0.662
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	166300	831.5	21.76	23.20	1.393	-	-	0.06	0.550	0.766
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	166300	831.5	22.09	23.20	1.291	-	-	-0.08	0.444	0.573
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	166300	831.5	21.76	23.20	1.393	-	-	0.13	0.408	0.568
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	166300	831.5	22.09	23.20	1.291	-	-	0.12	0.406	0.524
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	166300	831.5	21.76	23.20	1.393	-	-	0.03	0.380	0.529
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	ECI 2	1413	1732.6	22.27	24.00	1.489	-	-	0.18	0.119	0.177
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	ECI 2	1413	1732.6	22.27	24.00	1.489	-	-	0.16	0.091	0.136
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	ECI 2	1413	1732.6	22.27	24.00	1.489	-	-	-0.1	0.081	0.121
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 2	ECI 2	1413	1732.6	22.27	24.00	1.489	-	-	0.07	0.113	0.168
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	1413	1732.6	15.28	16.20	1.236	-	-	0.14	0.463	0.572
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	1413	1732.6	15.28	16.20	1.236	-	-	0.18	0.683	0.844
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	1312	1712.4	15.26	16.20	1.242	-	-	0.14	0.671	0.833
09	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	1513	1752.6	15.21	16.20	1.256	-	-	0.03	0.709	0.891
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	ECI 2	1413	1732.6	15.28	16.20	1.236	-	-	0.17	0.323	0.399
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	ECI 2	1413	1732.6	15.28	16.20	1.236	-	-	0.1	0.475	0.587
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 9	ECI 2	1413	1732.6	22.33	23.00	1.167	-	-	0.19	0.197	0.230
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 9	ECI 2	1413	1732.6	22.33	23.00	1.167	-	-	0.07	0.000	0.000
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 9	ECI 2	1413	1732.6	22.33	23.00	1.167	-	-	-0.18	0.177	0.207
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 9	ECI 2	1413	1732.6	22.33	23.00	1.167	-	-	0.03	0.000	0.000
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	ECI 2	1413	1732.6	20.99	22.00	1.262	-	-	-0.15	0.043	0.054
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	ECI 2	1413	1732.6	20.99	22.00	1.262	-	-	0.11	0.000	0.000
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	ECI 2	1413	1732.6	20.99	22.00	1.262	-	-	-0.08	0.000	0.000
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	ECI 2	1413	1732.6	20.99	22.00	1.262	-	-	-0.17	0.000	0.000
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	132322	1745	23.17	24.00	1.211	-	-	-0.08	0.116	0.140
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	ECI 2	132322	1745	21.94	23.00	1.276	-	-	-0.04	0.089	0.114
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	ECI 2	132322	1745	23.17	24.00	1.211	-	-	-0.08	0.073	0.088
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	ECI 2	132322	1745	21.94	23.00	1.276	-	-	0.17	0.057	0.073
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	ECI 2	132322	1745	23.17	24.00	1.211	-	-	0.18	0.102	0.123
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	ECI 2	132322	1745	21.94	23.00	1.276	-	-	-0.04	0.073	0.093
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	ECI 2	132322	1745	23.17	24.00	1.211	-	-	-0.08	0.090	0.109
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	ECI 2	132322	1745	21.94	23.00	1.276	-	-	-0.13	0.067	0.086
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	132322	1745	23.17	24.00	1.211	-	-	0.08	0.108	0.131
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	132322	1745	15.21	16.60	1.377	-	-	-0.01	0.530	0.730
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	132322	1745	15.19	16.60	1.384	-	-	0.06	0.419	0.580
10	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	132322	1745	15.21	16.60	1.377	-	-	0.06	0.641	0.883
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	132072	1720	15.16	16.60	1.393	-	-	0.03	0.591	0.823
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	132572	1770	15.18	16.60	1.387	-	-	0.18	0.628	0.871
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	132322	1745	15.19	16.60	1.384	-	-	0.16	0.602	0.833
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	132072	1720	15.03	16.60	1.435	-	-	-0.1	0.581	0.834
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	132572	1770	15.15	16.60	1.396	-	-	0.07	0.590	0.824
	LTE Band 66	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	ECI 2	132322	1745	15.17	16.60	1.390	-	-	0.18	0.500	0.695
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	132322	1745	15.21	16.60	1.377	-	-	-0.1	0.363	0.500
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	132322	1745	15.19	16.60	1.384	-	-	0.19	0.325	0.450
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	132322	1745	15.21	16.60	1.377	-	-	-0.15	0.500	0.689
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	132322	1745	15.19	16.60	1.384	-	-	-0.08	0.391	0.541
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	132322	1745	15.21	16.60	1.377	-	-	0.01	0.455	0.627
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	132322	1745	23.11	24.00	1.227	-	-	0.15	0.377	0.463



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	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	132322	1745	21.98	23.00	1.265	-	-	-0.05	0.310	0.392
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 9	ECI 2	132322	1745	23.11	24.00	1.227	-	-	-0.08	0.061	0.075
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 9	ECI 2	132322	1745	21.98	23.00	1.265	-	-	-0.08	0.052	0.066
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	132322	1745	23.11	24.00	1.227	-	-	-0.13	0.335	0.411
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	132322	1745	21.98	23.00	1.265	-	-	0.01	0.272	0.344
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 9	ECI 2	132322	1745	23.11	24.00	1.227	-	-	-0.11	0.077	0.095
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 9	ECI 2	132322	1745	21.98	23.00	1.265	-	-	0.03	0.059	0.075
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	132322	1745	23.11	24.00	1.227	-	-	0.03	0.351	0.431
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	132322	1745	21.32	22.50	1.312	-	-	-0.13	0.050	0.066
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	ECI 2	132322	1745	20.29	21.50	1.321	-	-	0.06	0.041	0.054
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	132322	1745	21.32	22.50	1.312	-	-	-0.03	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	ECI 2	132322	1745	20.29	21.50	1.321	-	-	-0.03	0.000	0.000
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	132322	1745	21.32	22.50	1.312	-	-	0.08	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	ECI 2	132322	1745	20.29	21.50	1.321	-	-	-0.07	0.000	0.000
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	132322	1745	21.32	22.50	1.312	-	-	0.05	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	ECI 2	132322	1745	20.29	21.50	1.321	-	-	-0.11	0.000	0.000
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	132322	1745	21.32	22.50	1.312	-	-	-0.08	0.003	0.004
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	349000	1745	23.15	24.00	1.216	-	-	-0.12	0.106	0.129
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	349000	1745	23.08	24.00	1.236	-	-	0.03	0.087	0.108
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	349000	1745	23.15	24.00	1.216	-	-	-0.16	0.060	0.073
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	349000	1745	23.08	24.00	1.236	-	-	-0.02	0.054	0.067
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	349000	1745	23.15	24.00	1.216	-	-	0.15	0.070	0.085
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	349000	1745	23.08	24.00	1.236	-	-	-0.09	0.066	0.082
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	349000	1745	23.15	24.00	1.216	-	-	0.11	0.056	0.068
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	349000	1745	23.08	24.00	1.236	-	-	-0.05	0.058	0.072
	FR1 n66 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	349000	1745	23.15	24.00	1.216	-	-	-0.08	0.089	0.108
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	349000	1745	16.79	18.00	1.321	-	-	-0.08	0.530	0.700
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	349000	1745	16.76	18.00	1.330	-	-	0.16	0.512	0.681
11	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	349000	1745	16.79	18.00	1.321	-	-	0.05	0.664	0.877
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	349000	1745	16.76	18.00	1.330	-	-	-0.03	0.645	0.858
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	349000	1745	16.73	18.00	1.340	-	-	-0.15	0.608	0.815
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	349000	1745	16.79	18.00	1.321	-	-	0.02	0.356	0.470
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	349000	1745	16.76	18.00	1.330	-	-	0.07	0.349	0.464
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	349000	1745	16.79	18.00	1.321	-	-	0.13	0.490	0.647
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	349000	1745	16.76	18.00	1.330	-	-	-0.18	0.471	0.627
	FR1 n66 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	349000	1745	16.79	18.00	1.321	-	-	0.1	0.589	0.778
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 2	ECI 2	661	1880	23.48	24.50	1.265	-	-	0.16	0.000	0.000
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 2	ECI 2	661	1880	23.48	24.50	1.265	-	-	-0.03	0.000	0.000
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 2	ECI 2	661	1880	23.48	24.50	1.265	-	-	0	0.001	0.001
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 2	ECI 2	661	1880	23.48	24.50	1.265	-	-	0	0.000	0.000
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 1	ECI 2	661	1880	18.97	20.10	1.297	-	-	0.08	0.579	0.751
12	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	661	1880	18.97	20.10	1.297	-	-	0.03	0.681	0.883
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	512	1850.2	18.89	20.10	1.321	-	-	-0.08	0.642	0.848
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	810	1909.8	18.90	20.10	1.318	-	-	0.1	0.638	0.841
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	ECI 2	661	1880	18.97	20.10	1.297	-	-	-0.18	0.346	0.449
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 1	ECI 2	661	1880	18.97	20.10	1.297	-	-	0.08	0.509	0.660
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 9	ECI 2	661	1880	23.87	25.00	1.297	-	-	0.01	0.299	0.388
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 9	ECI 2	661	1880	23.87	25.00	1.297	-	-	-0.01	0.049	0.064
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 9	ECI 2	661	1880	23.87	25.00	1.297	-	-	-0.06	0.254	0.329
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 9	ECI 2	661	1880	23.87	25.00	1.297	-	-	-0.04	0.000	0.000
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 0	ECI 2	661	1880	22.71	24.00	1.346	-	-	-0.17	0.000	0.000
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 0	ECI 2	661	1880	22.71	24.00	1.346	-	-	-0.1	0.000	0.000
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 0	ECI 2	661	1880	22.71	24.00	1.346	-	-	0	0.001	0.001
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 0	ECI 2	661	1880	22.71	24.00	1.346	-	-	-0.17	0.000	0.000



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	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	ECI 2	9400	1880	22.32	24.00	1.472	-	-	-0.04	0.111	0.163
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	ECI 2	9400	1880	22.32	24.00	1.472	-	-	-0.05	0.070	0.103
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	ECI 2	9400	1880	22.32	24.00	1.472	-	-	0	0.107	0.158
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 2	ECI 2	9400	1880	22.32	24.00	1.472	-	-	-0.13	0.059	0.087
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	9400	1880	14.88	16.10	1.324	-	-	0.11	0.559	0.740
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	9400	1880	14.88	16.10	1.324	-	-	-0.02	0.667	0.883
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	9262	1852.4	14.86	16.10	1.330	-	-	-0.13	0.632	0.841
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	9538	1907.6	14.82	16.10	1.343	-	-	-0.13	0.623	0.837
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	ECI 2	9400	1880	14.88	16.10	1.324	-	-	0	0.375	0.497
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	ECI 2	9400	1880	14.88	16.10	1.324	-	-	-0.09	0.511	0.677
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 9	ECI 2	9400	1880	20.75	22.00	1.334	-	-	0.18	0.625	0.833
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 9	ECI 2	9262	1852.4	20.71	22.00	1.346	-	-	0.12	0.606	0.816
13	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 9	ECI 2	9538	1907.6	20.67	22.00	1.358	-	-	0.07	0.652	0.886
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 9	ECI 2	9400	1880	20.75	22.00	1.334	-	-	0.15	0.087	0.116
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 9	ECI 2	9400	1880	20.75	22.00	1.334	-	-	0.14	0.452	0.603
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 9	ECI 2	9400	1880	20.75	22.00	1.334	-	-	0.17	0.066	0.088
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	ECI 2	9400	1880	21.00	22.00	1.259	-	-	-0.01	0.080	0.101
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	ECI 2	9400	1880	21.00	22.00	1.259	-	-	-0.09	0.000	0.000
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	ECI 2	9400	1880	21.00	22.00	1.259	-	-	0.05	0.064	0.081
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	ECI 2	9400	1880	21.00	22.00	1.259	-	-	0.02	0.000	0.000
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	26340	1880	22.98	24.00	1.265	-	-	0.17	0.087	0.110
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	ECI 2	26340	1880	21.94	23.00	1.276	-	-	0.06	0.073	0.093
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	ECI 2	26340	1880	22.98	24.00	1.265	-	-	0	0.064	0.081
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	ECI 2	26340	1880	21.94	23.00	1.276	-	-	-0.04	0.051	0.065
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	ECI 2	26340	1880	22.98	24.00	1.265	-	-	-0.15	0.082	0.104
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	ECI 2	26340	1880	21.94	23.00	1.276	-	-	0.11	0.070	0.089
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	ECI 2	26340	1880	22.98	24.00	1.265	-	-	-0.02	0.057	0.072
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	ECI 2	26340	1880	21.94	23.00	1.276	-	-	0.1	0.051	0.065
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	18900	1880	22.95	24.00	1.274	-	-	-0.18	0.066	0.084
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	26340	1880	15.07	16.10	1.268	-	-	-0.13	0.543	0.688
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	26340	1880	15.05	16.10	1.274	-	-	-0.03	0.515	0.656
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	26340	1880	15.07	16.10	1.268	-	-	-0.11	0.658	0.834
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	26140	1860	15.03	16.10	1.279	-	-	0.05	0.693	0.887
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	26590	1905	15.04	16.10	1.276	-	-	0.03	0.647	0.826
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	26340	1880	15.05	16.10	1.274	-	-	-0.16	0.639	0.814
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	26140	1860	15.04	16.10	1.276	-	-	-0.02	0.645	0.823
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	26590	1905	14.88	16.10	1.324	-	-	0.15	0.622	0.824
	LTE Band 25	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	ECI 2	26340	1880	15.02	16.10	1.282	-	-	-0.09	0.633	0.812
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	26340	1880	15.07	16.10	1.268	-	-	0.11	0.379	0.480
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	26340	1880	15.05	16.10	1.274	-	-	0.16	0.306	0.390
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	26340	1880	15.07	16.10	1.268	-	-	-0.15	0.508	0.644
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	26340	1880	15.05	16.10	1.274	-	-	0.16	0.414	0.527
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	18900	1880	15.04	16.10	1.276	-	-	0.1	0.678	0.865
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	26340	1880	21.52	22.60	1.282	-	-	0.07	0.666	0.854
14	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	26140	1860	21.49	22.60	1.291	-	-	0.06	0.691	0.892
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	26590	1905	21.44	22.60	1.306	-	-	0.15	0.634	0.828
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	26340	1880	21.50	22.60	1.288	-	-	-0.05	0.641	0.826
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	26140	1860	21.49	22.60	1.291	-	-	-0.08	0.652	0.842
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	26590	1905	21.37	22.60	1.327	-	-	-0.08	0.636	0.844
	LTE Band 25	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 9	ECI 2	26340	1880	21.45	22.60	1.303	-	-	-0.13	0.415	0.541
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 9	ECI 2	26340	1880	21.52	22.60	1.282	-	-	0.01	0.079	0.101
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 9	ECI 2	26340	1880	21.50	22.60	1.288	-	-	-0.11	0.062	0.080
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	26340	1880	21.52	22.60	1.282	-	-	0.03	0.590	0.757
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	26340	1880	21.50	22.60	1.288	-	-	-0.01	0.522	0.672
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 9	ECI 2	26340	1880	21.52	22.60	1.282	-	-	0.04	0.064	0.082



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	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 9	ECI 2	26340	1880	21.50	22.60	1.288	-	-	0.11	0.053	0.068
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	18900	1880	21.51	22.60	1.285	-	-	0.12	0.674	0.866
	LTE Band 25	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	26340	1880	21.39	22.50	1.291	-	-	0.04	0.060	0.077
	LTE Band 25	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	ECI 2	26340	1880	20.51	21.50	1.256	-	-	0.13	0.050	0.063
	LTE Band 25	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	26340	1880	21.39	22.50	1.291	-	-	-0.18	0.000	0.000
	LTE Band 25	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	ECI 2	26340	1880	20.51	21.50	1.256	-	-	-0.11	0.000	0.000
	LTE Band 25	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	26340	1880	21.39	22.50	1.291	-	-	-0.16	0.058	0.075
	LTE Band 25	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	ECI 2	26340	1880	20.51	21.50	1.256	-	-	-0.15	0.049	0.062
	LTE Band 25	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	26340	1880	21.39	22.50	1.291	-	-	-0.06	0.000	0.000
	LTE Band 25	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	ECI 2	26340	1880	20.51	21.50	1.256	-	-	-0.14	0.000	0.000
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	18900	1880	21.24	22.50	1.337	-	-	0.08	0.054	0.072
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	376000	1880	22.98	24.00	1.265	-	-	0.01	0.095	0.120
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	376000	1880	22.93	24.00	1.279	-	-	0.06	0.092	0.118
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	376000	1880	22.98	24.00	1.265	-	-	0.02	0.057	0.072
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	376000	1880	22.93	24.00	1.279	-	-	0.12	0.056	0.072
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	376000	1880	22.98	24.00	1.265	-	-	-0.16	0.074	0.094
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	376000	1880	22.93	24.00	1.279	-	-	-0.12	0.076	0.097
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	376000	1880	22.98	24.00	1.265	-	-	0.07	0.049	0.062
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	376000	1880	22.93	24.00	1.279	-	-	-0.02	0.053	0.068
	FR1 n2 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	376000	1880	22.98	24.00	1.265	-	-	-0.17	0.078	0.099
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	376000	1880	15.29	16.30	1.262	-	-	-0.05	0.524	0.661
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	376000	1880	15.21	16.30	1.285	-	-	-0.13	0.578	0.743
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	376000	1880	15.29	16.30	1.262	-	-	0.16	0.653	0.824
15	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	376000	1880	15.21	16.30	1.285	-	-	-0.09	0.682	0.877
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	376000	1880	15.18	16.30	1.294	-	-	-0.16	0.567	0.734
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	376000	1880	15.29	16.30	1.262	-	-	0.1	0.372	0.469
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	376000	1880	15.21	16.30	1.285	-	-	-0.04	0.390	0.501
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	376000	1880	15.29	16.30	1.262	-	-	0	0.468	0.591
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	376000	1880	15.21	16.30	1.285	-	-	-0.11	0.500	0.643
	FR1 n2 Other PA	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	376000	1880	15.21	16.30	1.285	-	-	-0.03	0.663	0.852
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	21100	2535	23.14	24.00	1.219	-	-	-0.15	0.192	0.234
	LTE Band 7C	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 2	ECI 2	21100+ 21298	2535+ 2554.8	23.06	24.00	1.242	-	-	0.02	0.181	0.225
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	ECI 2	21100	2535	21.97	23.00	1.268	-	-	0.03	0.147	0.186
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	ECI 2	21100	2535	23.14	24.00	1.219	-	-	-0.13	0.070	0.085
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	ECI 2	21100	2535	21.97	23.00	1.268	-	-	0.16	0.058	0.074
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	ECI 2	21100	2535	23.14	24.00	1.219	-	-	-0.15	0.107	0.130
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	ECI 2	21100	2535	21.97	23.00	1.268	-	-	-0.02	0.082	0.104
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	ECI 2	21100	2535	23.14	24.00	1.219	-	-	-0.09	0.080	0.098
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	ECI 2	21100	2535	21.97	23.00	1.268	-	-	0.14	0.065	0.082
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	21100	2535	23.14	24.00	1.219	-	-	0.06	0.188	0.229
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	21100	2535	16.66	17.40	1.186	-	-	0.16	0.649	0.770
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	21100	2535	16.63	17.40	1.194	-	-	0	0.616	0.735
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	21100	2535	16.66	17.40	1.186	-	-	-0.04	0.734	0.870
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	20850	2510	16.62	17.40	1.197	-	-	0.01	0.740	0.886
	LTE Band 7C	20M	QPSK	1	99	-	Right Tilted	0mm	Ant 1	ECI 2	20850+ 21048	2510+ 2529.8	16.44	17.40	1.247	-	-	0.06	0.702	0.876
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	21350	2560	16.60	17.40	1.202	-	-	-0.17	0.690	0.830
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	21100	2535	16.63	17.40	1.194	-	-	-0.1	0.719	0.858
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	20850	2510	16.50	17.40	1.230	-	-	0.18	0.678	0.834
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	21350	2560	16.58	17.40	1.208	-	-	-0.17	0.640	0.773
	LTE Band 7	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	ECI 2	21100	2535	16.61	17.40	1.199	-	-	-0.04	0.660	0.792
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	21100	2535	16.66	17.40	1.186	-	-	-0.05	0.195	0.231
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	21100	2535	16.63	17.40	1.194	-	-	-0.01	0.154	0.184
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	21100	2535	16.66	17.40	1.186	-	-	0.05	0.275	0.326



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	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	21100	2535	16.63	17.40	1.194	-	-	0.17	0.215	0.257
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	20850	2510	16.62	17.40	1.197	-	-	0.14	0.687	0.822
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	21100	2535	20.73	22.10	1.371	-	-	0.12	0.613	0.840
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	20850	2510	20.70	22.10	1.380	-	-	0.07	0.580	0.801
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	21350	2560	20.65	22.10	1.396	-	-	0.08	0.576	0.804
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	21100	2535	20.71	22.10	1.377	-	-	0.19	0.604	0.832
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	20850	2510	20.65	22.10	1.396	-	-	-0.06	0.599	0.836
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	21350	2560	20.69	22.10	1.384	-	-	0	0.581	0.804
	LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 9	ECI 2	21100	2535	20.66	22.10	1.393	-	-	-0.03	0.584	0.814
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 9	ECI 2	21100	2535	20.73	22.10	1.371	-	-	0.07	0.102	0.140
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 9	ECI 2	21100	2535	20.71	22.10	1.377	-	-	-0.12	0.081	0.112
16	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	21100	2535	20.73	22.10	1.371	-	-	0.07	0.647	0.887
	LTE Band 7C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 9	ECI 2	21100+ 21298	2535+ 2554.8	20.63	22.10	1.403	-	-	0.09	0.605	0.849
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	20850	2510	20.70	22.10	1.380	-	-	0.02	0.625	0.863
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	21350	2560	20.65	22.10	1.396	-	-	0.12	0.621	0.867
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	21100	2535	20.71	22.10	1.377	-	-	0.02	0.619	0.852
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	20850	2510	20.65	22.10	1.396	-	-	-0.03	0.591	0.825
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	21350	2560	20.69	22.10	1.384	-	-	0	0.594	0.822
	LTE Band 7	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 9	ECI 2	21100	2535	20.66	22.10	1.393	-	-	-0.1	0.585	0.815
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 9	ECI 2	21100	2535	20.73	22.10	1.371	-	-	0.05	0.079	0.108
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 9	ECI 2	21100	2535	20.71	22.10	1.377	-	-	0	0.062	0.085
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	21100	2535	20.73	22.10	1.371	-	-	0.11	0.601	0.824
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	21100	2535	21.23	22.50	1.340	-	-	0.1	0.066	0.088
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	ECI 2	21100	2535	20.25	21.50	1.334	-	-	-0.09	0.053	0.071
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	21100	2535	21.23	22.50	1.340	-	-	0.07	0.036	0.048
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	ECI 2	21100	2535	20.25	21.50	1.334	-	-	-0.09	0.000	0.000
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	21100	2535	21.23	22.50	1.340	-	-	-0.16	0.100	0.134
	LTE Band 7C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 0	ECI 2	21100+ 21298	2535+ 2554.8	21.15	22.50	1.365	-	-	0.02	0.095	0.130
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	ECI 2	21100	2535	20.25	21.50	1.334	-	-	-0.18	0.081	0.108
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	21100	2535	21.23	22.50	1.340	-	-	-0.07	0.040	0.054
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	ECI 2	21100	2535	20.25	21.50	1.334	-	-	0.11	0.000	0.000
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	21100	2535	21.23	22.50	1.340	-	-	-0.05	0.079	0.106
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	40620	2593	23.05	24.00	1.245	62.9	1.006	-0.1	0.066	0.083
	LTE Band 41C	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 2	ECI 2	40620+ 40818	2593+ 2612.8	23.03	24.00	1.250	62.9	1.006	0.02	0.061	0.077
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	ECI 2	40620	2593	22.09	23.00	1.233	62.9	1.006	-0.01	0.052	0.065
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	ECI 2	40620	2593	23.05	24.00	1.245	62.9	1.006	-0.09	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	ECI 2	40620	2593	22.09	23.00	1.233	62.9	1.006	-0.06	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	ECI 2	40620	2593	23.05	24.00	1.245	62.9	1.006	-0.17	0.051	0.064
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	ECI 2	40620	2593	22.09	23.00	1.233	62.9	1.006	-0.01	0.042	0.052
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	ECI 2	40620	2593	23.05	24.00	1.245	62.9	1.006	-0.11	0.039	0.049
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	ECI 2	40620	2593	22.09	23.00	1.233	62.9	1.006	0.14	0.000	0.000
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	40620	2593	26.11	27.00	1.227	42.9	1.009	0.03	0.090	0.111
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	40620	2593	18.36	19.40	1.271	62.9	1.006	-0.15	0.378	0.483
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	40620	2593	18.32	19.40	1.282	62.9	1.006	-0.18	0.362	0.467
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	40620	2593	18.36	19.40	1.271	62.9	1.006	0.01	0.668	0.854
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	39750	2506	18.33	19.40	1.279	62.9	1.006	0.02	0.680	0.875
	LTE Band 41C	20M	QPSK	1	99	-	Right Tilted	0mm	Ant 1	ECI 2	39750+ 39948	2506+ 2525.8	18.11	19.40	1.346	62.9	1.006	0.05	0.632	0.856
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	40185	2549.5	18.32	19.40	1.282	62.9	1.006	0.12	0.649	0.837
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	41055	2636.5	18.25	19.40	1.303	62.9	1.006	-0.16	0.627	0.822
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	41490	2680	18.28	19.40	1.294	62.9	1.006	-0.12	0.636	0.828
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	40620	2593	18.32	19.40	1.282	62.9	1.006	0.07	0.604	0.779
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	39750	2506	18.24	19.40	1.306	62.9	1.006	-0.05	0.619	0.813
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	40185	2549.5	18.23	19.40	1.309	62.9	1.006	-0.13	0.589	0.776
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	41055	2636.5	18.15	19.40	1.334	62.9	1.006	0.08	0.640	0.859



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	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	41490	2680	18.25	19.40	1.303	62.9	1.006	0.16	0.581	0.762
	LTE Band 41	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	ECI 2	40620	2593	18.28	19.40	1.294	62.9	1.006	0.01	0.599	0.780
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	40620	2593	18.36	19.40	1.271	62.9	1.006	-0.16	0.104	0.133
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	40620	2593	18.32	19.40	1.282	62.9	1.006	0.1	0.081	0.104
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	40620	2593	18.36	19.40	1.271	62.9	1.006	-0.04	0.141	0.180
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	40620	2593	18.32	19.40	1.282	62.9	1.006	-0.01	0.111	0.143
17	LTE Band 41 HPUE	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	39750	2506	19.99	21.00	1.262	42.9	1.009	-0.03	0.695	0.885
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	40620	2593	23.32	24.00	1.169	62.9	1.006	-0.06	0.641	0.754
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	39750	2506	23.24	24.00	1.191	62.9	1.006	0.08	0.625	0.749
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	40185	2549.5	23.15	24.00	1.216	62.9	1.006	0.01	0.547	0.669
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	41055	2636.5	23.02	24.00	1.253	62.9	1.006	0.03	0.518	0.653
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	41490	2680	22.99	24.00	1.262	62.9	1.006	-0.08	0.526	0.668
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	40620	2593	22.27	23.00	1.183	62.9	1.006	-0.08	0.629	0.749
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	39750	2506	22.21	23.00	1.199	62.9	1.006	-0.05	0.584	0.705
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	40185	2549.5	22.18	23.00	1.208	62.9	1.006	0.18	0.561	0.682
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	41055	2636.5	22.23	23.00	1.194	62.9	1.006	0.14	0.592	0.711
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	41490	2680	22.09	23.00	1.233	62.9	1.006	-0.17	0.606	0.752
	LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 9	ECI 2	40620	2593	22.21	23.00	1.199	62.9	1.006	0.1	0.563	0.679
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 9	ECI 2	40620	2593	23.32	24.00	1.169	62.9	1.006	-0.18	0.100	0.118
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 9	ECI 2	40620	2593	22.27	23.00	1.183	62.9	1.006	0.1	0.075	0.089
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	40620	2593	23.32	24.00	1.169	62.9	1.006	0.16	0.662	0.779
	LTE Band 41C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 9	ECI 2	40620+40818	2593+2612.8	23.25	24.00	1.189	62.9	1.006	0.08	0.641	0.766
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	39750	2506	23.24	24.00	1.191	62.9	1.006	0.12	0.637	0.763
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	40185	2549.5	23.15	24.00	1.216	62.9	1.006	0.08	0.625	0.765
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	41055	2636.5	23.02	24.00	1.253	62.9	1.006	-0.17	0.571	0.720
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	41490	2680	22.99	24.00	1.262	62.9	1.006	-0.03	0.546	0.693
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	40620	2593	22.27	23.00	1.183	62.9	1.006	0.19	0.624	0.743
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	39750	2506	22.21	23.00	1.199	62.9	1.006	-0.05	0.605	0.730
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	40185	2549.5	22.18	23.00	1.208	62.9	1.006	0.01	0.611	0.742
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	41055	2636.5	22.23	23.00	1.194	62.9	1.006	0.1	0.574	0.689
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	41490	2680	22.09	23.00	1.233	62.9	1.006	-0.17	0.593	0.736
	LTE Band 41	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 9	ECI 2	40620	2593	22.21	23.00	1.199	62.9	1.006	0.14	0.566	0.683
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 9	ECI 2	40620	2593	23.32	24.00	1.169	62.9	1.006	-0.04	0.074	0.087
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 9	ECI 2	40620	2593	22.27	23.00	1.183	62.9	1.006	0.13	0.058	0.069
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	40620	2593	24.97	25.80	1.211	42.9	1.009	-0.01	0.718	0.877
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	40620	2593	21.69	22.50	1.205	62.9	1.006	0.1	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	ECI 2	40620	2593	20.53	21.50	1.250	62.9	1.006	0.16	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	40620	2593	21.69	22.50	1.205	62.9	1.006	-0.06	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	ECI 2	40620	2593	20.53	21.50	1.250	62.9	1.006	0.02	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	40620	2593	21.69	22.50	1.205	62.9	1.006	-0.16	0.035	0.042
	LTE Band 41C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 0	ECI 2	40620+40818	2593+2612.8	21.56	22.50	1.242	62.9	1.006	0.08	0.027	0.034
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	ECI 2	40620	2593	20.53	21.50	1.250	62.9	1.006	0.05	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	40620	2593	21.69	22.50	1.205	62.9	1.006	-0.03	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	ECI 2	40620	2593	20.53	21.50	1.250	62.9	1.006	0.17	0.000	0.000
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	40620	2593	24.55	25.50	1.245	42.9	1.009	-0.15	0.048	0.060
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	507000	2535	23.08	24.00	1.236	-	-	0.05	0.148	0.183
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	507000	2535	23.03	24.00	1.250	-	-	-0.06	0.168	0.210
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	507000	2535	23.08	24.00	1.236	-	-	-0.13	0.070	0.087
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	507000	2535	23.03	24.00	1.250	-	-	-0.01	0.062	0.078
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	507000	2535	23.08	24.00	1.236	-	-	-0.11	0.098	0.121
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	507000	2535	23.03	24.00	1.250	-	-	0.19	0.096	0.120
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	507000	2535	23.08	24.00	1.236	-	-	-0.14	0.066	0.082
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	507000	2535	23.03	24.00	1.250	-	-	-0.18	0.089	0.111
	FR1 n7 Other PA	50M	QPSK	135	68	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	507000	2535	23.03	24.00	1.250	-	-	-0.06	0.162	0.203



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	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	507000	2535	16.91	18.10	1.315	-	-	0.04	0.620	0.815
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	507000	2535	16.83	18.10	1.340	-	-	0.13	0.585	0.784
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	507000	2535	16.76	18.10	1.361	-	-	-0.18	0.573	0.780
18	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	507000	2535	16.91	18.10	1.315	-	-	0.08	0.671	0.883
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	507000	2535	16.83	18.10	1.340	-	-	-0.16	0.649	0.869
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	507000	2535	16.76	18.10	1.361	-	-	-0.15	0.605	0.824
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	507000	2535	16.91	18.10	1.315	-	-	-0.06	0.183	0.241
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	507000	2535	16.83	18.10	1.340	-	-	-0.14	0.178	0.238
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	507000	2535	16.91	18.10	1.315	-	-	0.01	0.243	0.320
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	507000	2535	16.83	18.10	1.340	-	-	0.06	0.242	0.324
	FR1 n7 Other PA	50M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	507000	2535	16.91	18.10	1.315	-	-	0.08	0.613	0.806
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	ECI 2	518598	2592.99	23.18	24.00	1.208	-	-	-0.06	0.150	0.181
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	ECI 2	518598	2592.99	23.15	24.00	1.216	-	-	0.02	0.120	0.146
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	ECI 2	518598	2592.99	23.18	24.00	1.208	-	-	0.16	0.054	0.065
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	ECI 2	518598	2592.99	23.15	24.00	1.216	-	-	0.01	0.050	0.061
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	ECI 2	518598	2592.99	23.18	24.00	1.208	-	-	-0.04	0.092	0.111
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	ECI 2	518598	2592.99	23.15	24.00	1.216	-	-	0.13	0.084	0.102
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	ECI 2	518598	2592.99	23.18	24.00	1.208	-	-	0.12	0.075	0.091
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	ECI 2	518598	2592.99	23.15	24.00	1.216	-	-	0.07	0.066	0.080
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	ECI 2	518598	2592.99	23.18	24.00	1.208	-	-	0.18	0.135	0.163
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	ECI 2	518598	2592.99	18.01	19.30	1.346	-	-	0.12	0.653	0.879
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	ECI 2	518598	2592.99	17.99	19.30	1.352	-	-	-0.16	0.589	0.796
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	ECI 2	518598	2592.99	17.89	19.30	1.384	-	-	-0.12	0.582	0.805
19	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	518598	2592.99	18.01	19.30	1.346	-	-	0.15	0.659	0.887
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	518598	2592.99	17.99	19.30	1.352	-	-	-0.02	0.585	0.791
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	518598	2592.99	17.89	19.30	1.384	-	-	-0.05	0.582	0.805
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	ECI 2	518598	2592.99	18.01	19.30	1.346	-	-	-0.13	0.186	0.250
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	ECI 2	518598	2592.99	17.99	19.30	1.352	-	-	0.08	0.176	0.238
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	ECI 2	518598	2592.99	18.01	19.30	1.346	-	-	0.01	0.253	0.341
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	ECI 2	518598	2592.99	17.99	19.30	1.352	-	-	-0.16	0.215	0.291
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	518598	2592.99	18.01	19.30	1.346	-	-	0.14	0.645	0.868
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	ECI 2	518598	2592.99	19.34	20.60	1.337	-	-	-0.04	0.537	0.718
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	ECI 2	518598	2592.99	19.32	20.60	1.343	-	-	-0.01	0.551	0.740
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 9	ECI 2	518598	2592.99	19.31	20.60	1.346	-	-	0	0.506	0.681
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 9	ECI 2	518598	2592.99	19.34	20.60	1.337	-	-	-0.11	0.101	0.135
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 9	ECI 2	518598	2592.99	19.32	20.60	1.343	-	-	-0.06	0.092	0.124
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 9	ECI 2	518598	2592.99	19.34	20.60	1.337	-	-	0.01	0.659	0.881
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 9	ECI 2	518598	2592.99	19.32	20.60	1.343	-	-	0.03	0.618	0.830
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 9	ECI 2	518598	2592.99	19.31	20.60	1.346	-	-	-0.13	0.614	0.826
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 9	ECI 2	518598	2592.99	19.34	20.60	1.337	-	-	0.16	0.074	0.099
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 9	ECI 2	518598	2592.99	19.32	20.60	1.343	-	-	-0.15	0.057	0.077
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 9	ECI 2	518598	2592.99	19.34	20.60	1.337	-	-	-0.17	0.634	0.847
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 0	ECI 2	518598	2592.99	22.77	24.00	1.327	-	-	0.02	0.083	0.110
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 0	ECI 2	518598	2592.99	22.68	24.00	1.355	-	-	0.12	0.047	0.064
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 0	ECI 2	518598	2592.99	22.77	24.00	1.327	-	-	0.02	0.048	0.064
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 0	ECI 2	518598	2592.99	22.68	24.00	1.355	-	-	-0.03	0.000	0.000
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 0	ECI 2	518598	2592.99	22.77	24.00	1.327	-	-	0	0.119	0.158
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 0	ECI 2	518598	2592.99	22.68	24.00	1.355	-	-	-0.1	0.074	0.100
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 0	ECI 2	518598	2592.99	22.77	24.00	1.327	-	-	0.05	0.045	0.060
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 0	ECI 2	518598	2592.99	22.68	24.00	1.355	-	-	0	0.000	0.000
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 0	ECI 2	518598	2592.99	22.77	24.00	1.327	-	-	0.17	0.105	0.139
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	ECI 2	42590	3500	17.62	18.60	1.253	62.9	1.006	0	0.624	0.787
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	ECI 2	42190	3460	17.57	18.60	1.268	62.9	1.006	-0.11	0.535	0.682
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	ECI 2	42990	3540	17.56	18.60	1.271	62.9	1.006	-0.07	0.693	0.886



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	LTE Band 42C	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	ECI 2	42990+ 42792	3540+ 3520.2	17.41	18.60	1.315	62.9	1.006	0.02	0.664	0.879
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	ECI 2	42590	3500	17.58	18.60	1.265	62.9	1.006	-0.15	0.627	0.798
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	ECI 2	42190	3460	17.40	18.60	1.318	62.9	1.006	0.03	0.541	0.717
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	ECI 2	42990	3540	17.38	18.60	1.324	62.9	1.006	-0.13	0.540	0.719
	LTE Band 42	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 7	ECI 2	42590	3500	17.56	18.60	1.271	62.9	1.006	0.16	0.634	0.810
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	ECI 2	42590	3500	17.62	18.60	1.253	62.9	1.006	-0.15	0.288	0.363
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	ECI 2	42590	3500	17.58	18.60	1.265	62.9	1.006	0.14	0.289	0.368
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	ECI 2	42590	3500	17.62	18.60	1.253	62.9	1.006	-0.09	0.225	0.284
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	ECI 2	42590	3500	17.58	18.60	1.265	62.9	1.006	-0.07	0.231	0.294
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	ECI 2	42590	3500	17.62	18.60	1.253	62.9	1.006	-0.01	0.113	0.142
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	ECI 2	42590	3500	17.58	18.60	1.265	62.9	1.006	-0.09	0.111	0.141
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	ECI 2	42590	3500	17.22	18.30	1.282	62.9	1.006	0.08	0.252	0.325
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	ECI 2	42590	3500	17.19	18.30	1.291	62.9	1.006	0.01	0.254	0.330
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	42590	3500	17.22	18.30	1.282	62.9	1.006	0.03	0.265	0.342
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	ECI 2	42590	3500	17.19	18.30	1.291	62.9	1.006	-0.08	0.266	0.346
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	ECI 2	42590	3500	17.22	18.30	1.282	62.9	1.006	-0.08	0.597	0.770
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	ECI 2	42190	3460	17.19	18.30	1.291	62.9	1.006	0.1	0.534	0.694
20	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	ECI 2	42990	3540	17.14	18.30	1.306	62.9	1.006	0.1	0.685	0.900
	LTE Band 42C	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	ECI 2	42990+ 42792	3540+ 3520.2	17.04	18.30	1.337	62.9	1.006	0.02	0.661	0.889
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	ECI 2	42590	3500	17.19	18.30	1.291	62.9	1.006	0.12	0.607	0.788
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	ECI 2	42190	3460	16.94	18.30	1.368	62.9	1.006	0.08	0.529	0.728
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	ECI 2	42990	3540	17.12	18.30	1.312	62.9	1.006	-0.17	0.676	0.892
	LTE Band 42	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 4	ECI 2	42590	3500	17.15	18.30	1.303	62.9	1.006	-0.03	0.607	0.796
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	ECI 2	42590	3500	17.22	18.30	1.282	62.9	1.006	0.14	0.445	0.574
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	ECI 2	42590	3500	17.19	18.30	1.291	62.9	1.006	0.18	0.460	0.598
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 8	ECI 2	42590	3500	22.01	23.00	1.256	62.9	1.006	0.07	0.235	0.297
	LTE Band 42C	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 8	ECI 2	42590+ 42788	3500+ 3519.8	21.83	23.00	1.309	62.9	1.006	0.02	0.211	0.278
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 8	ECI 2	42590	3500	21.09	22.00	1.233	62.9	1.006	0.15	0.211	0.262
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 8	ECI 2	42590	3500	22.01	23.00	1.256	62.9	1.006	-0.05	0.096	0.121
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 8	ECI 2	42590	3500	21.09	22.00	1.233	62.9	1.006	-0.08	0.095	0.118
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	ECI 2	42590	3500	22.01	23.00	1.256	62.9	1.006	-0.08	0.128	0.162
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	ECI 2	42590	3500	21.09	22.00	1.233	62.9	1.006	-0.13	0.135	0.167
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	ECI 2	42590	3500	22.01	23.00	1.256	62.9	1.006	0.01	0.103	0.130
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	ECI 2	42590	3500	21.09	22.00	1.233	62.9	1.006	-0.11	0.102	0.127
	LTE Band 42	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 10	ECI 2	42590	3500	21.33	22.50	1.309	62.9	1.006	-0.05	0.062	0.082
	LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 10	ECI 2	42590	3500	20.33	21.50	1.309	62.9	1.006	0.14	0.060	0.079
	LTE Band 42	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 10	ECI 2	42590	3500	21.33	22.50	1.309	62.9	1.006	-0.01	0.081	0.107
	LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 10	ECI 2	42590	3500	20.33	21.50	1.309	62.9	1.006	-0.12	0.082	0.108
	LTE Band 42	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 10	ECI 2	42590	3500	21.33	22.50	1.309	62.9	1.006	0.07	0.120	0.158
	LTE Band 42C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 10	ECI 2	42590+ 42788	3500+ 3519.8	21.23	22.50	1.340	62.9	1.006	0.05	0.106	0.143
	LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 10	ECI 2	42590	3500	20.33	21.50	1.309	62.9	1.006	0.09	0.114	0.150
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 10	ECI 2	42590	3500	21.33	22.50	1.309	62.9	1.006	0.04	0.112	0.148
	LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 10	ECI 2	42590	3500	20.33	21.50	1.309	62.9	1.006	0.11	0.118	0.155
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	ECI 2	656000	3840	17.20	18.20	1.259	-	-	-0.13	0.656	0.826
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	ECI 2	656000	3840	17.15	18.20	1.274	-	-	0.12	0.625	0.796
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	ECI 2	656000	3840	17.09	18.20	1.291	-	-	-0.09	0.683	0.882
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	ECI 2	656000	3840	17.20	18.20	1.259	-	-	-0.11	0.210	0.264
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	ECI 2	656000	3840	17.15	18.20	1.274	-	-	0.17	0.231	0.294
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	ECI 2	656000	3840	17.20	18.20	1.259	-	-	-0.17	0.227	0.286
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	ECI 2	656000	3840	17.15	18.20	1.274	-	-	0.11	0.227	0.289
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	ECI 2	656000	3840	17.20	18.20	1.259	-	-	-0.01	0.101	0.127
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	ECI 2	656000	3840	17.15	18.20	1.274	-	-	-0.14	0.094	0.120
	FR1 n77_HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	ECI 2	656000	3840	20.09	21.20	1.291	50	1.000	0.01	0.661	0.853
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	ECI 2	656000	3840	17.28	18.60	1.355	-	-	0.08	0.384	0.520
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	ECI 2	656000	3840	17.26	18.60	1.361	-	-	-0.17	0.376	0.512



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	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	ECI 2	656000	3840	17.28	18.60	1.355	-	-	0.14	0.462	0.626
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	ECI 2	656000	3840	17.26	18.60	1.361	-	-	0.11	0.460	0.626
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	ECI 2	656000	3840	17.28	18.60	1.355	-	-	0.18	0.579	0.785
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	ECI 2	656000	3840	17.26	18.60	1.361	-	-	0.14	0.544	0.741
21	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	ECI 2	656000	3840	17.28	18.60	1.355	-	-	-0.03	0.658	0.892
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	ECI 2	656000	3840	17.26	18.60	1.361	-	-	-0.05	0.623	0.848
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	ECI 2	656000	3840	17.17	18.60	1.390	-	-	0.01	0.613	0.852
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	ECI 2	656000	3840	20.37	21.60	1.327	50	1.000	0.1	0.653	0.867
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	ECI 2	656000	3840	22.85	24.50	1.462	-	-	0.09	0.451	0.659
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	ECI 2	656000	3840	22.76	24.50	1.493	-	-	-0.16	0.462	0.690
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	ECI 2	656000	3840	22.85	24.50	1.462	-	-	0.05	0.223	0.326
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	ECI 2	656000	3840	22.76	24.50	1.493	-	-	0.08	0.237	0.354
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	ECI 2	656000	3840	22.85	24.50	1.462	-	-	-0.18	0.225	0.329
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	ECI 2	656000	3840	22.76	24.50	1.493	-	-	-0.03	0.253	0.378
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	ECI 2	656000	3840	22.85	24.50	1.462	-	-	-0.04	0.114	0.167
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	ECI 2	656000	3840	22.76	24.50	1.493	-	-	-0.09	0.134	0.200
	FR1 n77_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	ECI 2	656000	3840	25.69	27.50	1.517	50	1.000	0.18	0.446	0.677
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 10	ECI 2	656000	3840	23.17	24.50	1.358	-	-	0.08	0.147	0.200
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 10	ECI 2	656000	3840	23.14	24.50	1.368	-	-	0.01	0.193	0.264
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 10	ECI 2	656000	3840	23.17	24.50	1.358	-	-	0.03	0.193	0.262
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 10	ECI 2	656000	3840	23.14	24.50	1.368	-	-	-0.08	0.260	0.356
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 10	ECI 2	656000	3840	23.17	24.50	1.358	-	-	-0.08	0.286	0.388
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 10	ECI 2	656000	3840	23.14	24.50	1.368	-	-	0.1	0.352	0.481
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 10	ECI 2	656000	3840	23.17	24.50	1.358	-	-	-0.18	0.341	0.463
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 10	ECI 2	656000	3840	23.14	24.50	1.368	-	-	0.1	0.408	0.558
	FR1 n77_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 10	ECI 2	656000	3840	25.92	27.50	1.439	50	1.000	0.12	0.386	0.555

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 6+3(3)	Standalone	6	2437	20.93	22.50	1.435	99.31	1.007	0.07	0.463	0.669
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6+3(3)	Standalone	6	2437	20.93	22.50	1.435	99.31	1.007	0.03	0.557	0.805
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6+3(3)	Standalone	11	2462	21.01	22.50	1.409	99.31	1.007	-0.15	0.510	0.724
22	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(3)	Standalone	6	2437	20.93	22.50	1.435	99.31	1.007	0.08	0.937	1.354
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 6+3(3)	Standalone	6	2437	20.88	22.50	1.452	97.47	1.026	0.16	0.742	1.105
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(3)	Standalone	11	2462	21.01	22.50	1.409	99.31	1.007	-0.15	0.880	1.249
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(6)	Standalone	1	2412	19.94	21.50	1.432	99.31	1.007	0.02	0.816	1.177
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6+3(3)	Standalone	6	2437	20.93	22.50	1.435	99.31	1.007	0.11	0.505	0.730
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(3)	DBS only	6	2437	18.56	20.00	1.393	99.31	1.007	0.02	0.531	0.745
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 6+3(3)	Simultaneous	6	2437	15.48	17.00	1.419	99.31	1.007	0.08	0.136	0.194
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6+3(3)	Simultaneous	6	2437	15.48	17.00	1.419	99.31	1.007	0.01	0.163	0.233
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(3)	Simultaneous	6	2437	15.48	17.00	1.419	99.31	1.007	0.03	0.275	0.393
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6+3(3)	Simultaneous	6	2437	15.48	17.00	1.419	99.31	1.007	-0.08	0.148	0.211
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 6+3(3)	DBS	6	2437	12.41	14.00	1.442	99.31	1.007	-0.08	0.062	0.090
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 6+3(3)	DBS	6	2437	12.41	14.00	1.442	99.31	1.007	0.1	0.085	0.123
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(3)	DBS	6	2437	12.41	14.00	1.442	99.31	1.007	-0.18	0.136	0.198
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6+3(3)	DBS	6	2437	12.41	14.00	1.442	99.31	1.007	0.1	0.077	0.112
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 6	Full power	39	2441	18.29	19.00	1.178	76.94	1.083	-0.1	0.053	0.068
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 6	Full power	39	2441	18.29	19.00	1.178	76.94	1.083	0.01	0.000	0.000
23	Bluetooth	1Mbps	Left Cheek	0mm	Ant 6	Full power	39	2441	18.29	19.00	1.178	76.94	1.083	0.04	0.214	0.273
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 6	Full power	39	2441	18.29	19.00	1.178	76.94	1.083	-0.15	0.056	0.071
5000MHz																
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 5+4(5)	Standalone	62	5310	12.96	14.00	1.271	93.67	1.068	-0.17	0.309	0.419
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 5+4(5)	Standalone	62	5310	12.96	14.00	1.271	93.67	1.068	-0.08	0.372	0.505



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	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 5+4(5)	Standalone	62	5310	12.96	14.00	1.271	93.67	1.068	-0.04	0.611	0.829
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 5+4(5)	Standalone	54	5270	12.67	14.00	1.358	93.67	1.068	0.02	0.601	0.872
24	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 5+4(5)	Standalone	62	5310	12.96	14.00	1.271	93.67	1.068	0.08	0.730	0.991
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 5+4(5)	Standalone	54	5270	12.67	14.00	1.358	93.67	1.068	0.03	0.624	0.905
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 5+4(5)	DBS only	62	5310	11.99	13.00	1.262	93.67	1.068	0.01	0.577	0.778
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 5+4(4)	Simultaneous	50	5250	10.11	11.50	1.377	92.65	1.079	0.12	0.115	0.171
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 5+4(4)	Simultaneous	50	5250	10.11	11.50	1.377	92.65	1.079	0.08	0.138	0.205
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 5+4(4)	Simultaneous	50	5250	10.11	11.50	1.377	92.65	1.079	-0.17	0.227	0.337
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 5+4(4)	Simultaneous	50	5250	10.11	11.50	1.377	92.65	1.079	-0.03	0.271	0.403
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 5+4(4)	DBS	50	5250	7.03	8.50	1.403	92.65	1.079	0.14	0.053	0.080
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 5+4(4)	DBS	50	5250	7.03	8.50	1.403	92.65	1.079	0.11	0.064	0.097
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 5+4(4)	DBS	50	5250	7.03	8.50	1.403	92.65	1.079	-0.05	0.105	0.159
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 5+4(4)	DBS	50	5250	7.03	8.50	1.403	92.65	1.079	0.18	0.125	0.189
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 5+4(4)	Standalone	138	5690	12.65	14.00	1.365	88.19	1.134	-0.04	0.355	0.549
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 5+4(4)	Standalone	138	5690	12.65	14.00	1.365	88.19	1.134	-0.08	0.405	0.627
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(4)	Standalone	138	5690	12.65	14.00	1.365	88.19	1.134	-0.13	0.646	1.000
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(4)	Standalone	122	5610	12.58	14.00	1.387	88.19	1.134	0.02	0.602	0.947
25	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5+4(4)	Standalone	138	5690	12.65	14.00	1.365	88.19	1.134	0.06	0.748	1.157
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5+4(4)	Standalone	122	5610	12.58	14.00	1.387	88.19	1.134	0.09	0.714	1.123
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 5+4(4)	DBS only	114	5570	10.46	12.00	1.426	92.65	1.079	0.03	0.487	0.749
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 5+4(4)	Simultaneous	114	5570	9.99	11.50	1.416	92.65	1.079	0.14	0.130	0.199
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 5+4(4)	Simultaneous	114	5570	9.99	11.50	1.416	92.65	1.079	-0.17	0.148	0.226
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 5+4(4)	Simultaneous	114	5570	9.99	11.50	1.416	92.65	1.079	0.17	0.236	0.361
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 5+4(4)	Simultaneous	114	5570	9.99	11.50	1.416	92.65	1.079	-0.05	0.263	0.402
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 5+4(4)	DBS	114	5570	6.92	8.50	1.439	92.65	1.079	0.01	0.068	0.106
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 5+4(4)	DBS	114	5570	6.92	8.50	1.439	92.65	1.079	0.1	0.077	0.120
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 5+4(4)	DBS	114	5570	6.92	8.50	1.439	92.65	1.079	-0.17	0.124	0.193
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 5+4(4)	DBS	114	5570	6.92	8.50	1.439	92.65	1.079	0.04	0.133	0.206
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 5+4(4)	Standalone	155	5775	12.72	14.00	1.343	88.19	1.134	-0.08	0.448	0.682
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 5+4(4)	Standalone	155	5775	12.72	14.00	1.343	88.19	1.134	0.17	0.496	0.755
26	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(4)	Standalone	155	5775	12.72	14.00	1.343	88.19	1.134	0.03	0.787	1.198
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5+4(4)	Standalone	155	5775	12.72	14.00	1.343	88.19	1.134	0.18	0.782	1.191
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(4)	DBS only	155	5775	10.78	12.00	1.324	88.19	1.134	0.09	0.503	0.755
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 5+4(4)	Simultaneous	155	5775	10.25	11.50	1.334	88.19	1.134	0.08	0.166	0.251
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 5+4(4)	Simultaneous	155	5775	10.25	11.50	1.334	88.19	1.134	0.01	0.183	0.277
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(4)	Simultaneous	155	5775	10.25	11.50	1.334	88.19	1.134	0.03	0.261	0.395
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5+4(4)	Simultaneous	155	5775	10.25	11.50	1.334	88.19	1.134	-0.08	0.249	0.377
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 5+4(4)	DBS	155	5775	7.23	8.50	1.340	88.19	1.134	-0.08	0.083	0.126
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 5+4(4)	DBS	155	5775	7.23	8.50	1.340	88.19	1.134	0.1	0.092	0.140
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 5+4(4)	DBS	155	5775	7.23	8.50	1.340	88.19	1.134	-0.18	0.136	0.207
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 5+4(4)	DBS	155	5775	7.23	8.50	1.340	88.19	1.134	0.1	0.135	0.205



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)
750MHz																				
27	LTE Band 71	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	133297	680.5	22.92	24.00	1.282	-	-	-0.17	0.189	0.242
	LTE Band 71	20M	QPSK	50	0	-	Front	5mm	Ant 0	ECI 7	133297	680.5	21.89	23.00	1.291	-	-	-0.01	0.168	0.217
	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	133297	680.5	22.92	24.00	1.282	-	-	0.05	0.485	0.622
	LTE Band 71	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	133297	680.5	21.89	23.00	1.291	-	-	-0.11	0.448	0.578
	LTE Band 71	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	133297	680.5	22.92	24.00	1.282	-	-	0.14	0.394	0.505
	LTE Band 71	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	133297	680.5	21.89	23.00	1.291	-	-	0.03	0.352	0.455
	LTE Band 71	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	133297	680.5	22.92	24.00	1.282	-	-	0.1	0.136	0.174
	LTE Band 71	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	ECI 7	133297	680.5	21.89	23.00	1.291	-	-	0.16	0.116	0.150
	LTE Band 71	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	133297	680.5	22.92	24.00	1.282	-	-	-0.06	0.376	0.482
	LTE Band 71	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	133297	680.5	21.89	23.00	1.291	-	-	0.02	0.338	0.436
	LTE Band 71	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	133297	680.5	22.11	23.00	1.227	-	-	-0.16	0.071	0.087
	LTE Band 71	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	133297	680.5	21.06	22.00	1.242	-	-	-0.18	0.062	0.077
	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	133297	680.5	22.11	23.00	1.227	-	-	-0.04	0.114	0.140
	LTE Band 71	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	133297	680.5	21.06	22.00	1.242	-	-	-0.07	0.100	0.124
	LTE Band 71	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	133297	680.5	22.11	23.00	1.227	-	-	0.11	0.076	0.093
	LTE Band 71	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	133297	680.5	21.06	22.00	1.242	-	-	-0.08	0.065	0.081
	LTE Band 71	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	133297	680.5	22.11	23.00	1.227	-	-	-0.1	0.043	0.053
	LTE Band 71	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	ECI 7	133297	680.5	21.06	22.00	1.242	-	-	-0.01	0.036	0.045
	LTE Band 71	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	133297	680.5	22.11	23.00	1.227	-	-	0.06	0.163	0.200
	LTE Band 71	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	ECI 7	133297	680.5	21.06	22.00	1.242	-	-	-0.06	0.121	0.150
28	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	23095	707.5	22.59	24.00	1.384	-	-	0.08	0.318	0.440
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 0	ECI 7	23095	707.5	21.55	23.00	1.396	-	-	0.01	0.258	0.360
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	23095	707.5	22.59	24.00	1.384	-	-	0.01	0.753	1.042
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 0	ECI 7	23095	707.5	21.55	23.00	1.396	-	-	0.03	0.705	0.984
	LTE Band 12	10M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	23095	707.5	21.52	23.00	1.406	-	-	-0.08	0.674	0.948
	LTE Band 12	10M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	23095	707.5	22.59	24.00	1.384	-	-	-0.08	0.680	0.941
	LTE Band 12	10M	QPSK	25	0	-	Left Side	5mm	Ant 0	ECI 7	23095	707.5	21.55	23.00	1.396	-	-	0.1	0.530	0.740
	LTE Band 12	10M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	23095	707.5	21.52	23.00	1.406	-	-	-0.18	0.486	0.683
	LTE Band 12	10M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	23095	707.5	22.59	24.00	1.384	-	-	0.1	0.205	0.284
	LTE Band 12	10M	QPSK	25	0	-	Right Side	5mm	Ant 0	ECI 7	23095	707.5	21.55	23.00	1.396	-	-	0.12	0.166	0.232
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	23095	707.5	22.59	24.00	1.384	-	-	0.08	0.598	0.827
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	5mm	Ant 0	ECI 7	23095	707.5	21.55	23.00	1.396	-	-	-0.17	0.445	0.621
	LTE Band 12	10M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	23095	707.5	21.52	23.00	1.406	-	-	-0.03	0.449	0.631
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	23095	707.5	21.85	23.00	1.303	-	-	-0.09	0.239	0.311
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 1	ECI 7	23095	707.5	20.83	22.00	1.309	-	-	-0.08	0.191	0.250
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	23095	707.5	21.85	23.00	1.303	-	-	-0.03	0.357	0.465
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 1	ECI 7	23095	707.5	20.83	22.00	1.309	-	-	0.13	0.275	0.360
	LTE Band 12	10M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	23095	707.5	21.85	23.00	1.303	-	-	0.12	0.166	0.216
	LTE Band 12	10M	QPSK	25	0	-	Left Side	5mm	Ant 1	ECI 7	23095	707.5	20.83	22.00	1.309	-	-	0.03	0.134	0.175
	LTE Band 12	10M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	23095	707.5	21.85	23.00	1.303	-	-	0.18	0.119	0.155
	LTE Band 12	10M	QPSK	25	0	-	Right Side	5mm	Ant 1	ECI 7	23095	707.5	20.83	22.00	1.309	-	-	0.16	0.091	0.119
	LTE Band 12	10M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	23095	707.5	21.85	23.00	1.303	-	-	0.03	0.309	0.403
	LTE Band 12	10M	QPSK	25	0	-	Top Side	5mm	Ant 1	ECI 7	23095	707.5	20.83	22.00	1.309	-	-	0.07	0.306	0.401
29	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	23230	782	22.85	24.00	1.303	-	-	-0.12	0.520	0.678
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 0	ECI 7	23230	782	21.83	23.00	1.309	-	-	0.07	0.402	0.526
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	23230	782	22.85	24.00	1.303	-	-	0.02	0.980	1.277
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 0	ECI 7	23230	782	21.83	23.00	1.309	-	-	-0.02	0.908	1.189
	LTE Band 13	10M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	23230	782	21.75	23.00	1.334	-	-	-0.05	0.923	1.231
	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	23230	782	22.85	24.00	1.303	-	-	-0.13	0.561	0.731
	LTE Band 13	10M	QPSK	25	0	-	Left Side	5mm	Ant 0	ECI 7	23230	782	21.83	23.00	1.309	-	-	0.08	0.446	0.584



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	LTE Band 13	10M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	23230	782	22.85	24.00	1.303	-	-	0.16	0.134	0.175
	LTE Band 13	10M	QPSK	25	0	-	Right Side	5mm	Ant 0	ECI 7	23230	782	21.83	23.00	1.309	-	-	0.01	0.125	0.164
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	23230	782	22.85	24.00	1.303	-	-	-0.16	0.671	0.874
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	5mm	Ant 0	ECI 7	23230	782	21.83	23.00	1.309	-	-	0.1	0.499	0.653
	LTE Band 13	10M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	23230	782	21.75	23.00	1.334	-	-	-0.04	0.551	0.735
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	23230	782	22.37	24.00	1.455	-	-	0.08	0.291	0.424
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 1	ECI 7	23230	782	21.32	23.00	1.472	-	-	0.01	0.222	0.327
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	23230	782	22.37	24.00	1.455	-	-	0.19	0.394	0.573
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 1	ECI 7	23230	782	21.32	23.00	1.472	-	-	0.03	0.317	0.467
	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	23230	782	22.37	24.00	1.455	-	-	-0.08	0.144	0.210
	LTE Band 13	10M	QPSK	25	0	-	Left Side	5mm	Ant 1	ECI 7	23230	782	21.32	23.00	1.472	-	-	-0.08	0.104	0.153
	LTE Band 13	10M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	23230	782	22.37	24.00	1.455	-	-	0.1	0.000	0.000
	LTE Band 13	10M	QPSK	25	0	-	Right Side	5mm	Ant 1	ECI 7	23230	782	21.32	23.00	1.472	-	-	-0.18	0.000	0.000
	LTE Band 13	10M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	23230	782	22.37	24.00	1.455	-	-	0.1	0.330	0.480
	LTE Band 13	10M	QPSK	25	0	-	Top Side	5mm	Ant 1	ECI 7	23230	782	21.32	23.00	1.472	-	-	0.12	0.256	0.377
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	ECI 7	136100	680.5	23.14	24.00	1.219	-	-	0.08	0.128	0.156
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	ECI 7	136100	680.5	23.10	24.00	1.230	-	-	-0.17	0.152	0.187
30	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	136100	680.5	23.14	24.00	1.219	-	-	0.06	0.437	0.533
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	136100	680.5	23.10	24.00	1.230	-	-	-0.03	0.387	0.476
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 0	ECI 7	136100	680.5	23.14	24.00	1.219	-	-	0.14	0.353	0.430
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 0	ECI 7	136100	680.5	23.10	24.00	1.230	-	-	0.11	0.378	0.465
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 0	ECI 7	136100	680.5	23.14	24.00	1.219	-	-	-0.05	0.099	0.121
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant 0	ECI 7	136100	680.5	23.10	24.00	1.230	-	-	0.18	0.115	0.141
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	ECI 7	136100	680.5	23.14	24.00	1.219	-	-	0.14	0.293	0.357
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	ECI 7	136100	680.5	23.10	24.00	1.230	-	-	-0.17	0.335	0.412
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	136100	680.5	22.62	24.00	1.374	-	-	0.17	0.097	0.133
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	136100	680.5	22.58	24.00	1.387	-	-	-0.05	0.117	0.162
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	136100	680.5	22.62	24.00	1.374	-	-	0.01	0.174	0.239
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	136100	680.5	22.58	24.00	1.387	-	-	0.1	0.189	0.262
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	136100	680.5	22.62	24.00	1.374	-	-	-0.17	0.113	0.155
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	136100	680.5	22.58	24.00	1.387	-	-	0.04	0.133	0.184
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	136100	680.5	22.62	24.00	1.374	-	-	-0.01	0.066	0.091
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	136100	680.5	22.58	24.00	1.387	-	-	-0.08	0.075	0.104
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	136100	680.5	22.62	24.00	1.374	-	-	0.05	0.196	0.269
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	136100	680.5	22.58	24.00	1.387	-	-	0.06	0.187	0.259
835MHz																				
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	ECI 7	189	836.4	25.94	27.50	1.432	-	-	-0.16	0.505	0.723
31	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	ECI 7	189	836.4	25.94	27.50	1.432	-	-	0.09	0.534	0.765
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 0	ECI 7	189	836.4	25.94	27.50	1.432	-	-	0.05	0.262	0.375
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 0	ECI 7	189	836.4	25.94	27.50	1.432	-	-	-0.03	0.104	0.149
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	ECI 7	189	836.4	25.94	27.50	1.432	-	-	0.17	0.369	0.528
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	ECI 7	189	836.4	25.77	27.00	1.327	-	-	-0.06	0.263	0.349
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	ECI 7	189	836.4	25.77	27.00	1.327	-	-	0.15	0.333	0.442
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 1	ECI 7	189	836.4	25.77	27.00	1.327	-	-	-0.13	0.142	0.188
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 1	ECI 7	189	836.4	25.77	27.00	1.327	-	-	-0.01	0.057	0.076
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Top Side	5mm	Ant 1	ECI 7	189	836.4	25.77	27.00	1.327	-	-	-0.11	0.145	0.192
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	4182	836.4	22.28	23.00	1.180	-	-	-0.11	0.469	0.554
32	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4182	836.4	22.28	23.00	1.180	-	-	0.02	0.978	1.154
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4132	826.4	22.21	23.00	1.199	-	-	-0.14	0.685	0.822
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4233	846.6	22.12	23.00	1.225	-	-	-0.19	0.857	1.049
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	4182	836.4	22.28	23.00	1.180	-	-	0.01	0.442	0.522
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	ECI 7	4182	836.4	22.28	23.00	1.180	-	-	0.06	0.118	0.139
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4182	836.4	22.28	23.00	1.180	-	-	0.02	0.841	0.993
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4132	826.4	22.21	23.00	1.199	-	-	0.12	0.476	0.571
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4233	846.6	22.12	23.00	1.225	-	-	-0.16	0.747	0.915
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	ECI 7	4182	836.4	21.74	23.00	1.337	-	-	0.03	0.372	0.497



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	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	ECI 7	4182	836.4	21.74	23.00	1.337	-	-	0.18	0.493	0.659
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	ECI 7	4182	836.4	21.74	23.00	1.337	-	-	-0.16	0.127	0.170
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 1	ECI 7	4182	836.4	21.74	23.00	1.337	-	-	-0.02	0.070	0.094
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	ECI 7	4182	836.4	21.74	23.00	1.337	-	-	0.15	0.394	0.527
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	26865	831.5	22.51	24.00	1.409	-	-	-0.11	0.372	0.524
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	ECI 7	26865	831.5	21.48	23.00	1.419	-	-	-0.06	0.360	0.511
33	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	26865	831.5	22.51	24.00	1.409	-	-	0.08	0.900	1.268
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	ECI 7	26865	831.5	21.48	23.00	1.419	-	-	-0.15	0.681	0.966
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 0	ECI 7	26865	831.5	21.45	23.00	1.429	-	-	0.03	0.657	0.939
	LTE Band 26	15M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	26865	831.5	22.51	24.00	1.409	-	-	-0.13	0.417	0.588
	LTE Band 26	15M	QPSK	36	0	-	Left Side	5mm	Ant 0	ECI 7	26865	831.5	21.48	23.00	1.419	-	-	0.16	0.302	0.429
	LTE Band 26	15M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	26865	831.5	22.51	24.00	1.409	-	-	-0.15	0.109	0.154
	LTE Band 26	15M	QPSK	36	0	-	Right Side	5mm	Ant 0	ECI 7	26865	831.5	21.48	23.00	1.419	-	-	-0.02	0.097	0.138
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	26865	831.5	22.51	24.00	1.409	-	-	-0.09	0.699	0.985
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	5mm	Ant 0	ECI 7	26865	831.5	21.48	23.00	1.419	-	-	0.14	0.516	0.732
	LTE Band 26	15M	QPSK	75	0	-	Bottom Side	5mm	Ant 0	ECI 7	26865	831.5	21.45	23.00	1.429	-	-	0.1	0.504	0.720
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	26865	831.5	21.99	22.80	1.205	-	-	0.04	0.244	0.294
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 1	ECI 7	26865	831.5	20.95	21.80	1.216	-	-	-0.01	0.198	0.241
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	26865	831.5	21.99	22.80	1.205	-	-	0.18	0.512	0.617
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 1	ECI 7	26865	831.5	20.95	21.80	1.216	-	-	-0.08	0.342	0.416
	LTE Band 26	15M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	26865	831.5	21.99	22.80	1.205	-	-	0.05	0.115	0.139
	LTE Band 26	15M	QPSK	36	0	-	Left Side	5mm	Ant 1	ECI 7	26865	831.5	20.95	21.80	1.216	-	-	0.06	0.099	0.120
	LTE Band 26	15M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	26865	831.5	21.99	22.80	1.205	-	-	-0.09	0.076	0.092
	LTE Band 26	15M	QPSK	36	0	-	Right Side	5mm	Ant 1	ECI 7	26865	831.5	20.95	21.80	1.216	-	-	-0.08	0.057	0.069
	LTE Band 26	15M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	26865	831.5	21.99	22.80	1.205	-	-	0.13	0.430	0.518
	LTE Band 26	15M	QPSK	36	0	-	Top Side	5mm	Ant 1	ECI 7	26865	831.5	20.95	21.80	1.216	-	-	0.12	0.412	0.501
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	ECI 7	166300	831.5	22.80	24.00	1.318	-	-	0.01	0.393	0.518
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	ECI 7	166300	831.5	22.77	24.00	1.327	-	-	-0.15	0.418	0.555
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	166300	831.5	22.80	24.00	1.318	-	-	0.19	0.862	1.136
34	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	166300	831.5	22.77	24.00	1.327	-	-	0.03	0.915	1.215
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	166300	831.5	21.73	23.00	1.340	-	-	0.07	0.742	0.994
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 0	ECI 7	166300	831.5	22.80	24.00	1.318	-	-	-0.18	0.432	0.569
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 0	ECI 7	166300	831.5	22.77	24.00	1.327	-	-	0.03	0.444	0.589
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 0	ECI 7	166300	831.5	22.80	24.00	1.318	-	-	-0.15	0.134	0.177
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant 0	ECI 7	166300	831.5	22.77	24.00	1.327	-	-	-0.15	0.140	0.186
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	ECI 7	166300	831.5	22.80	24.00	1.318	-	-	0.11	0.538	0.709
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	ECI 7	166300	831.5	22.77	24.00	1.327	-	-	-0.08	0.589	0.782
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	166300	831.5	22.47	23.50	1.268	-	-	-0.17	0.349	0.442
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	166300	831.5	22.41	23.50	1.285	-	-	-0.08	0.338	0.434
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	166300	831.5	22.47	23.50	1.268	-	-	0.05	0.489	0.620
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	166300	831.5	22.41	23.50	1.285	-	-	-0.04	0.480	0.617
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	166300	831.5	22.47	23.50	1.268	-	-	-0.08	0.157	0.199
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	166300	831.5	22.41	23.50	1.285	-	-	0.17	0.147	0.189
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	166300	831.5	22.47	23.50	1.268	-	-	0.18	0.099	0.125
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	166300	831.5	22.41	23.50	1.285	-	-	-0.04	0.089	0.114
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	166300	831.5	22.47	23.50	1.268	-	-	-0.08	0.460	0.583
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	166300	831.5	22.41	23.50	1.285	-	-	-0.13	0.416	0.535
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	ECI 7	1413	1732.6	20.73	21.80	1.279	-	-	0.03	0.500	0.640
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	1413	1732.6	20.73	21.80	1.279	-	-	-0.1	0.633	0.810
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	1312	1712.4	20.62	21.80	1.312	-	-	0.07	0.664	0.871
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	1513	1752.6	20.61	21.80	1.315	-	-	0.18	0.538	0.708
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 2	ECI 7	1413	1732.6	20.73	21.80	1.279	-	-	-0.1	0.117	0.150
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 2	ECI 7	1413	1732.6	20.73	21.80	1.279	-	-	0.01	0.315	0.403
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	1413	1732.6	20.73	21.80	1.279	-	-	0.07	0.911	1.166
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	1312	1712.4	20.62	21.80	1.312	-	-	0.09	0.980	1.286



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	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	1513	1752.6	20.61	21.80	1.315	-	-	0.03	0.728	0.957
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	ECI 7	1413	1732.6	15.25	16.20	1.245	-	-	0.18	0.216	0.269
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	ECI 7	1413	1732.6	15.25	16.20	1.245	-	-	-0.13	0.385	0.479
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	ECI 7	1413	1732.6	15.25	16.20	1.245	-	-	-0.03	0.034	0.042
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 1	ECI 7	1413	1732.6	15.25	16.20	1.245	-	-	-0.03	0.015	0.019
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	ECI 7	1413	1732.6	15.25	16.20	1.245	-	-	0.03	0.492	0.612
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 9	ECI 7	1413	1732.6	22.33	23.00	1.167	-	-	0.05	0.165	0.193
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 9	ECI 7	1413	1732.6	22.33	23.00	1.167	-	-	-0.11	0.225	0.263
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 9	ECI 7	1413	1732.6	22.33	23.00	1.167	-	-	0.03	0.509	0.594
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 9	ECI 7	1413	1732.6	22.33	23.00	1.167	-	-	-0.02	0.000	0.000
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 9	ECI 7	1413	1732.6	22.33	23.00	1.167	-	-	0.15	0.000	0.000
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	1413	1732.6	17.74	18.70	1.247	-	-	-0.09	0.477	0.595
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	1413	1732.6	17.74	18.70	1.247	-	-	-0.08	0.809	1.009
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	1312	1712.4	17.73	18.70	1.250	-	-	0.16	0.628	0.785
35	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	1513	1752.6	17.62	18.70	1.282	-	-	0.06	1.010	1.295
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	1413	1732.6	17.74	18.70	1.247	-	-	0.05	0.536	0.669
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	ECI 7	1413	1732.6	17.74	18.70	1.247	-	-	0.02	0.019	0.024
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	1413	1732.6	17.74	18.70	1.247	-	-	0.07	0.551	0.687
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	1312	1712.4	17.73	18.70	1.250	-	-	0.16	0.424	0.530
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	1513	1752.6	17.62	18.70	1.282	-	-	0.13	0.708	0.908
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	132322	1745	21.46	22.30	1.213	-	-	-0.18	0.429	0.521
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	132322	1745	21.41	22.30	1.227	-	-	-0.03	0.337	0.414
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	132322	1745	21.46	22.30	1.213	-	-	-0.01	0.498	0.604
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	132322	1745	21.41	22.30	1.227	-	-	-0.09	0.371	0.455
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	ECI 7	132322	1745	21.46	22.30	1.213	-	-	-0.17	0.089	0.108
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	ECI 7	132322	1745	21.41	22.30	1.227	-	-	-0.04	0.073	0.090
	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	ECI 7	132322	1745	21.46	22.30	1.213	-	-	-0.05	0.267	0.324
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	ECI 7	132322	1745	21.41	22.30	1.227	-	-	-0.01	0.193	0.237
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	132322	1745	21.46	22.30	1.213	-	-	-0.13	0.932	1.131
36	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	132072	1720	21.27	22.30	1.268	-	-	0.12	1.020	1.293
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	132572	1770	21.22	22.30	1.282	-	-	0.06	0.744	0.954
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	132322	1745	21.41	22.30	1.227	-	-	0	0.706	0.867
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	132072	1720	21.27	22.30	1.268	-	-	-0.04	0.798	1.012
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	132572	1770	21.38	22.30	1.236	-	-	-0.15	0.564	0.697
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	ECI 7	132322	1745	21.36	22.30	1.242	-	-	0.11	0.675	0.838
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	132072	1720	21.27	22.30	1.268	-	-	-0.15	0.954	1.209
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	132322	1745	15.72	16.90	1.312	-	-	-0.02	0.237	0.311
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	132322	1745	15.67	16.90	1.327	-	-	0.13	0.186	0.247
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	132322	1745	15.72	16.90	1.312	-	-	-0.15	0.433	0.568
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	132322	1745	15.67	16.90	1.327	-	-	-0.19	0.343	0.455
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	132322	1745	15.72	16.90	1.312	-	-	0.12	0.036	0.047
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	132322	1745	15.67	16.90	1.327	-	-	-0.16	0.031	0.041
	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	132322	1745	15.72	16.90	1.312	-	-	-0.12	0.019	0.025
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	ECI 7	132322	1745	15.67	16.90	1.327	-	-	0.07	0.015	0.020
	LTE Band 66	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	132322	1745	15.72	16.90	1.312	-	-	0.06	0.470	0.617
	LTE Band 66	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	ECI 7	132322	1745	15.67	16.90	1.327	-	-	0.08	0.372	0.494
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	132322	1745	15.72	16.90	1.312	-	-	-0.18	0.465	0.610
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 9	ECI 7	132322	1745	18.21	19.00	1.199	-	-	0.1	0.139	0.167
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 9	ECI 7	132322	1745	18.19	19.00	1.205	-	-	-0.04	0.114	0.137
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 9	ECI 7	132322	1745	18.21	19.00	1.199	-	-	-0.01	0.189	0.227
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 9	ECI 7	132322	1745	18.19	19.00	1.205	-	-	-0.06	0.154	0.186
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	132322	1745	18.21	19.00	1.199	-	-	0.03	0.486	0.583
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 9	ECI 7	132322	1745	18.19	19.00	1.205	-	-	-0.09	0.266	0.321
	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 9	ECI 7	132322	1745	18.21	19.00	1.199	-	-	0.07	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 9	ECI 7	132322	1745	18.19	19.00	1.205	-	-	-0.09	0.000	0.000



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	LTE Band 66	20M	QPSK	1	0	-	Top Side	5mm	Ant 9	ECI 7	132322	1745	18.21	19.00	1.199	-	-	-0.16	0.018	0.022
	LTE Band 66	20M	QPSK	50	0	-	Top Side	5mm	Ant 9	ECI 7	132322	1745	18.19	19.00	1.205	-	-	-0.18	0.013	0.016
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	132322	1745	18.21	19.00	1.199	-	-	0.03	0.476	0.571
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	132322	1745	17.36	18.40	1.271	-	-	-0.07	0.650	0.826
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	132072	1720	17.21	18.40	1.315	-	-	0.11	0.579	0.762
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	132572	1770	17.29	18.40	1.291	-	-	-0.08	0.391	0.505
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 0	ECI 7	132322	1745	17.31	18.40	1.285	-	-	-0.1	0.521	0.670
	LTE Band 66	20M	QPSK	100	0	-	Front	5mm	Ant 0	ECI 7	132322	1745	17.33	18.40	1.279	-	-	-0.06	0.532	0.681
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	17.36	18.40	1.271	-	-	0.08	1.010	1.283
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	132072	1720	17.21	18.40	1.315	-	-	-0.01	0.940	1.236
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	132572	1770	17.29	18.40	1.291	-	-	-0.11	0.642	0.829
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	17.31	18.40	1.285	-	-	0.14	0.806	1.036
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	132072	1720	17.26	18.40	1.300	-	-	0.03	0.779	1.013
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	132572	1770	17.29	18.40	1.291	-	-	0.1	0.513	0.662
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	17.33	18.40	1.279	-	-	0.16	0.822	1.052
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	17.36	18.40	1.271	-	-	-0.06	0.579	0.736
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	17.31	18.40	1.285	-	-	0.05	0.458	0.589
	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	132322	1745	17.36	18.40	1.271	-	-	0.16	0.029	0.037
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	ECI 7	132322	1745	17.31	18.40	1.285	-	-	0.05	0.025	0.032
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	132322	1745	17.36	18.40	1.271	-	-	-0.06	0.853	1.084
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	132072	1720	17.21	18.40	1.315	-	-	-0.13	0.748	0.984
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	132572	1770	17.29	18.40	1.291	-	-	-0.01	0.603	0.779
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	132322	1745	17.31	18.40	1.285	-	-	-0.11	0.689	0.886
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	132072	1720	17.26	18.40	1.300	-	-	0.19	0.626	0.814
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	132572	1770	17.29	18.40	1.291	-	-	-0.14	0.485	0.626
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	ECI 7	132322	1745	17.33	18.40	1.279	-	-	-0.18	0.709	0.907
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	17.36	18.40	1.271	-	-	-0.15	0.975	1.239
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	349000	1745	20.22	21.50	1.343	-	-	-0.06	0.425	0.571
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	349000	1745	20.18	21.50	1.355	-	-	0.02	0.385	0.522
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	349000	1745	20.22	21.50	1.343	-	-	0.01	0.505	0.678
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	349000	1745	20.18	21.50	1.355	-	-	-0.04	0.449	0.608
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	349000	1745	20.22	21.50	1.343	-	-	0.12	0.079	0.106
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	349000	1745	20.18	21.50	1.355	-	-	0.07	0.074	0.100
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	349000	1745	20.22	21.50	1.343	-	-	0.08	0.251	0.337
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	349000	1745	20.18	21.50	1.355	-	-	0.19	0.256	0.347
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	349000	1745	19.96	21.50	1.426	-	-	-0.06	0.209	0.298
37	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	349000	1745	20.22	21.50	1.343	-	-	0.01	0.945	1.269
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	349000	1745	20.18	21.50	1.355	-	-	-0.03	0.854	1.157
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	349000	1745	19.96	21.50	1.426	-	-	0.07	0.692	0.987
	FR1 n66 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	349000	1745	20.22	21.50	1.343	-	-	-0.08	0.909	1.221
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	349000	1745	15.75	17.00	1.334	-	-	0	0.188	0.251
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	349000	1745	15.70	17.00	1.349	-	-	0.07	0.182	0.246
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	349000	1745	15.75	17.00	1.334	-	-	-0.05	0.354	0.472
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	349000	1745	15.70	17.00	1.349	-	-	-0.08	0.339	0.457
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	349000	1745	15.75	17.00	1.334	-	-	-0.13	0.033	0.044
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	349000	1745	15.70	17.00	1.349	-	-	0.01	0.032	0.043
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	349000	1745	15.75	17.00	1.334	-	-	-0.11	0.015	0.020
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	349000	1745	15.70	17.00	1.349	-	-	0.03	0.013	0.018
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	349000	1745	15.75	17.00	1.334	-	-	-0.05	0.442	0.589
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	349000	1745	15.70	17.00	1.349	-	-	0.03	0.457	0.616
	FR1 n66 Other PA	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	349000	1745	15.70	17.00	1.349	-	-	-0.08	0.433	0.584
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 2	ECI 7	661	1880	23.48	24.50	1.265	-	-	-0.03	0.342	0.433
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 2	ECI 7	661	1880	23.48	24.50	1.265	-	-	-0.03	0.383	0.484
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 2	ECI 7	661	1880	23.48	24.50	1.265	-	-	0.08	0.118	0.149



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	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 2	ECI 7	661	1880	23.48	24.50	1.265	-	-	-0.07	0.215	0.272
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 2	ECI 7	661	1880	23.48	24.50	1.265	-	-	0.05	0.664	0.840
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 2	ECI 7	512	1850.2	23.44	24.50	1.276	-	-	-0.11	0.572	0.730
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 2	ECI 7	810	1909.8	23.37	24.50	1.297	-	-	-0.12	0.673	0.873
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	ECI 7	661	1880	17.97	18.90	1.239	-	-	-0.12	0.353	0.437
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	ECI 7	661	1880	17.97	18.90	1.239	-	-	0.04	0.365	0.452
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 1	ECI 7	661	1880	17.97	18.90	1.239	-	-	0.12	0.063	0.078
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 1	ECI 7	661	1880	17.97	18.90	1.239	-	-	-0.11	0.017	0.021
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Top Side	5mm	Ant 1	ECI 7	661	1880	17.97	18.90	1.239	-	-	0.07	0.490	0.607
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 9	ECI 7	661	1880	18.89	20.00	1.291	-	-	-0.01	0.281	0.363
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 9	ECI 7	661	1880	18.89	20.00	1.291	-	-	-0.01	0.384	0.496
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 9	ECI 7	661	1880	18.89	20.00	1.291	-	-	0.06	0.477	0.616
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 9	ECI 7	661	1880	18.89	20.00	1.291	-	-	-0.17	0.000	0.000
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Top Side	5mm	Ant 9	ECI 7	661	1880	18.89	20.00	1.291	-	-	0.08	0.000	0.000
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	ECI 7	661	1880	21.81	23.00	1.315	-	-	0.02	0.733	0.964
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	ECI 7	512	1850.2	21.76	23.00	1.330	-	-	-0.16	0.506	0.673
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	ECI 7	810	1909.8	21.78	23.00	1.324	-	-	0.05	0.590	0.781
38	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	ECI 7	661	1880	21.81	23.00	1.315	-	-	-0.09	0.974	1.281
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	ECI 7	512	1850.2	21.76	23.00	1.330	-	-	0.17	0.757	1.007
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	ECI 7	810	1909.8	21.78	23.00	1.324	-	-	-0.15	0.869	1.151
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 0	ECI 7	661	1880	21.81	23.00	1.315	-	-	0.16	0.586	0.771
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 0	ECI 7	661	1880	21.81	23.00	1.315	-	-	0.05	0.038	0.050
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	ECI 7	661	1880	21.81	23.00	1.315	-	-	-0.06	0.620	0.815
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	ECI 7	512	1850.2	21.76	23.00	1.330	-	-	-0.13	0.479	0.637
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	ECI 7	810	1909.8	21.78	23.00	1.324	-	-	-0.01	0.633	0.838
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	ECI 7	9400	1880	19.64	20.80	1.306	-	-	0.01	0.521	0.681
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	9400	1880	19.64	20.80	1.306	-	-	-0.01	0.589	0.769
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 2	ECI 7	9400	1880	19.64	20.80	1.306	-	-	-0.04	0.110	0.144
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 2	ECI 7	9400	1880	19.64	20.80	1.306	-	-	0.15	0.299	0.391
39	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	9400	1880	19.64	20.80	1.306	-	-	0.02	0.985	1.287
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	9262	1852.4	19.61	20.80	1.315	-	-	0.08	0.719	0.946
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	9538	1907.6	19.55	20.80	1.334	-	-	-0.18	0.946	1.262
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	ECI 7	9400	1880	14.43	15.00	1.140	-	-	-0.03	0.260	0.296
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	ECI 7	9400	1880	14.43	15.00	1.140	-	-	0.18	0.455	0.519
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	ECI 7	9400	1880	14.43	15.00	1.140	-	-	-0.03	0.042	0.048
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 1	ECI 7	9400	1880	14.43	15.00	1.140	-	-	0.09	0.013	0.015
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	ECI 7	9400	1880	14.43	15.00	1.140	-	-	0.06	0.538	0.613
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 9	ECI 7	9400	1880	15.82	16.70	1.225	-	-	0.02	0.135	0.165
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 9	ECI 7	9400	1880	15.82	16.70	1.225	-	-	-0.11	0.194	0.238
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 9	ECI 7	9400	1880	15.82	16.70	1.225	-	-	0.06	0.500	0.612
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 9	ECI 7	9400	1880	15.82	16.70	1.225	-	-	0.01	0.000	0.000
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 9	ECI 7	9400	1880	15.82	16.70	1.225	-	-	0.18	0.010	0.012
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	9400	1880	17.38	18.30	1.236	-	-	0.02	0.754	0.932
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	9262	1852.4	17.20	18.30	1.288	-	-	0.16	0.456	0.587
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	9538	1907.6	17.30	18.30	1.259	-	-	0.06	0.819	1.031
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	9400	1880	17.38	18.30	1.236	-	-	-0.02	1.010	1.248
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	9262	1852.4	17.20	18.30	1.288	-	-	0.07	0.665	0.857
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	9538	1907.6	17.30	18.30	1.259	-	-	0.06	1.020	1.284
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	9400	1880	17.38	18.30	1.236	-	-	0.1	0.633	0.782
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	ECI 7	9400	1880	17.38	18.30	1.236	-	-	-0.13	0.045	0.056
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9400	1880	17.38	18.30	1.236	-	-	-0.1	0.682	0.843
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9262	1852.4	17.20	18.30	1.288	-	-	-0.07	0.436	0.562
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9538	1907.6	17.30	18.30	1.259	-	-	0.11	0.808	1.017
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	26340	1880	21.21	22.10	1.227	-	-	-0.17	0.601	0.738
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	26340	1880	21.16	22.10	1.242	-	-	0.11	0.486	0.603
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	26340	1880	21.21	22.10	1.227	-	-	0.07	0.633	0.777



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	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	26340	1880	21.16	22.10	1.242	-	-	-0.03	0.514	0.638
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	ECI 7	26340	1880	21.21	22.10	1.227	-	-	0.07	0.123	0.151
	LTE Band 25	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	ECI 7	26340	1880	21.16	22.10	1.242	-	-	-0.04	0.097	0.120
	LTE Band 25	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	ECI 7	26340	1880	21.21	22.10	1.227	-	-	-0.18	0.409	0.502
	LTE Band 25	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	ECI 7	26340	1880	21.16	22.10	1.242	-	-	0	0.336	0.417
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	26340	1880	21.21	22.10	1.227	-	-	-0.18	1.040	1.277
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	26140	1860	21.11	22.10	1.256	-	-	0.13	0.977	1.227
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	26590	1905	20.92	22.10	1.312	-	-	0	0.911	1.195
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	26340	1880	21.16	22.10	1.242	-	-	-0.12	0.846	1.050
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	26140	1860	21.14	22.10	1.247	-	-	0.15	0.764	0.953
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	26590	1905	20.95	22.10	1.303	-	-	-0.05	0.758	0.988
	LTE Band 25	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	ECI 7	26340	1880	21.15	22.10	1.245	-	-	-0.07	0.827	1.029
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	18900	1880	21.16	22.10	1.242	-	-	-0.08	0.978	1.214
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	26340	1880	13.68	14.70	1.265	-	-	0.08	0.192	0.243
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	26340	1880	13.65	14.70	1.274	-	-	-0.08	0.154	0.196
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	26340	1880	13.68	14.70	1.265	-	-	0.1	0.353	0.446
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	26340	1880	13.65	14.70	1.274	-	-	-0.17	0.296	0.377
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	26340	1880	13.68	14.70	1.265	-	-	-0.05	0.031	0.039
	LTE Band 25	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	26340	1880	13.65	14.70	1.274	-	-	0.18	0.024	0.031
	LTE Band 25	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	26340	1880	13.68	14.70	1.265	-	-	0.14	0.012	0.015
	LTE Band 25	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	ECI 7	26340	1880	13.65	14.70	1.274	-	-	-0.17	0.009	0.011
	LTE Band 25	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	26340	1880	13.68	14.70	1.265	-	-	0.06	0.481	0.608
	LTE Band 25	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	ECI 7	26340	1880	13.65	14.70	1.274	-	-	0.1	0.358	0.456
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	18900	1880	13.54	14.70	1.306	-	-	0.18	0.463	0.605
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 9	ECI 7	26340	1880	15.53	16.40	1.222	-	-	-0.08	0.139	0.170
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 9	ECI 7	26340	1880	15.51	16.40	1.227	-	-	-0.09	0.112	0.137
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 9	ECI 7	26340	1880	15.53	16.40	1.222	-	-	0.03	0.190	0.232
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 9	ECI 7	26340	1880	15.51	16.40	1.227	-	-	-0.1	0.151	0.185
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	26340	1880	15.53	16.40	1.222	-	-	0.05	0.510	0.623
	LTE Band 25	20M	QPSK	50	0	-	Left Side	5mm	Ant 9	ECI 7	26340	1880	15.51	16.40	1.227	-	-	0.07	0.277	0.340
	LTE Band 25	20M	QPSK	1	0	-	Right Side	5mm	Ant 9	ECI 7	26340	1880	15.53	16.40	1.222	-	-	-0.15	0.000	0.000
	LTE Band 25	20M	QPSK	50	0	-	Right Side	5mm	Ant 9	ECI 7	26340	1880	15.51	16.40	1.227	-	-	0.11	0.000	0.000
	LTE Band 25	20M	QPSK	1	0	-	Top Side	5mm	Ant 9	ECI 7	26340	1880	15.53	16.40	1.222	-	-	-0.08	0.010	0.012
	LTE Band 25	20M	QPSK	50	0	-	Top Side	5mm	Ant 9	ECI 7	26340	1880	15.51	16.40	1.227	-	-	-0.17	0.008	0.010
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	18900	1880	15.45	16.40	1.245	-	-	-0.08	0.489	0.609
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	26340	1880	17.27	18.40	1.297	-	-	0.05	0.611	0.793
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 0	ECI 7	26340	1880	17.23	18.40	1.309	-	-	0.02	0.501	0.656
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	26340	1880	17.27	18.40	1.297	-	-	-0.18	0.849	1.101
40	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	26140	1860	17.11	18.40	1.346	-	-	-0.06	0.953	1.283
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	26590	1905	17.21	18.40	1.315	-	-	0.16	0.901	1.185
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	26340	1880	17.23	18.40	1.309	-	-	-0.03	0.683	0.894
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	26140	1860	17.18	18.40	1.324	-	-	0.07	0.748	0.991
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	26590	1905	17.21	18.40	1.315	-	-	0	0.729	0.959
	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 0	ECI 7	26340	1880	17.22	18.40	1.312	-	-	0.01	0.693	0.909
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	26340	1880	17.27	18.40	1.297	-	-	-0.01	0.485	0.629
	LTE Band 25	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	26340	1880	17.23	18.40	1.309	-	-	-0.09	0.390	0.511
	LTE Band 25	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	26340	1880	17.27	18.40	1.297	-	-	-0.17	0.039	0.051
	LTE Band 25	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	ECI 7	26340	1880	17.23	18.40	1.309	-	-	-0.04	0.031	0.041
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	26340	1880	17.27	18.40	1.297	-	-	-0.05	0.667	0.865
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	26140	1860	17.11	18.40	1.346	-	-	0	0.761	1.024
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	26590	1905	17.21	18.40	1.315	-	-	-0.13	0.732	0.963
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	26340	1880	17.23	18.40	1.309	-	-	-0.01	0.550	0.720
	LTE Band 25	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	ECI 7	26340	1880	17.22	18.40	1.312	-	-	0.02	0.563	0.739
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	18900	1880	17.19	18.40	1.321	-	-	-0.13	0.921	1.217
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHZ	Front	5mm	Ant 2	ECI 7	376000	1880	20.05	21.20	1.303	-	-	-0.12	0.424	0.553



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	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	376000	1880	19.95	21.20	1.334	-	-	0.03	0.426	0.568
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	376000	1880	20.05	21.20	1.303	-	-	-0.02	0.489	0.637
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	376000	1880	19.95	21.20	1.334	-	-	-0.05	0.496	0.661
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	376000	1880	20.05	21.20	1.303	-	-	-0.09	0.094	0.122
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	376000	1880	19.95	21.20	1.334	-	-	0.11	0.091	0.121
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	376000	1880	20.05	21.20	1.303	-	-	-0.05	0.219	0.285
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	376000	1880	19.95	21.20	1.334	-	-	-0.08	0.222	0.296
41	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	376000	1880	20.05	21.20	1.303	-	-	0.07	0.987	1.286
	FR1 n2 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	376000	1880	20.05	21.20	1.303	-	-	-0.03	0.948	1.235
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	376000	1880	19.95	21.20	1.334	-	-	0.05	0.957	1.276
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	376000	1880	19.94	21.20	1.337	-	-	0.05	0.779	1.041
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	376000	1880	13.86	14.70	1.213	-	-	-0.03	0.206	0.250
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	376000	1880	13.67	14.70	1.268	-	-	-0.15	0.216	0.274
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	376000	1880	13.86	14.70	1.213	-	-	0.07	0.380	0.461
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	376000	1880	13.67	14.70	1.268	-	-	0.16	0.394	0.499
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	376000	1880	13.86	14.70	1.213	-	-	-0.18	0.034	0.041
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	376000	1880	13.67	14.70	1.268	-	-	0.02	0.036	0.046
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	376000	1880	13.86	14.70	1.213	-	-	0.16	0.012	0.015
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	376000	1880	13.67	14.70	1.268	-	-	-0.03	0.011	0.014
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	376000	1880	13.86	14.70	1.213	-	-	0.07	0.463	0.562
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	376000	1880	13.67	14.70	1.268	-	-	0.02	0.487	0.617
	FR1 n2 Other PA	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	376000	1880	13.67	14.70	1.268	-	-	0.08	0.462	0.586
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	21100	2535	21.32	22.00	1.169	-	-	-0.01	0.749	0.876
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	20850	2510	21.21	22.00	1.199	-	-	-0.06	0.698	0.837
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	21350	2560	21.23	22.00	1.194	-	-	-0.04	0.675	0.806
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	21100	2535	21.30	22.00	1.175	-	-	-0.09	0.600	0.705
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	20850	2510	21.14	22.00	1.219	-	-	-0.17	0.548	0.668
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	21350	2560	21.04	22.00	1.247	-	-	-0.1	0.528	0.659
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 2	ECI 7	21100	2535	21.27	22.00	1.183	-	-	0.18	0.595	0.704
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	21100	2535	21.32	22.00	1.169	-	-	-0.17	0.589	0.689
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	20850	2510	21.21	22.00	1.199	-	-	-0.04	0.537	0.644
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	21350	2560	21.23	22.00	1.194	-	-	-0.05	0.549	0.655
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	21100	2535	21.30	22.00	1.175	-	-	0	0.468	0.550
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 2	ECI 7	21100	2535	21.27	22.00	1.183	-	-	-0.09	0.464	0.549
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	ECI 7	21100	2535	21.32	22.00	1.169	-	-	0.05	0.154	0.180
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	ECI 7	21100	2535	21.30	22.00	1.175	-	-	0.02	0.124	0.146
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	ECI 7	21100	2535	21.32	22.00	1.169	-	-	-0.13	0.346	0.405
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	ECI 7	21100	2535	21.30	22.00	1.175	-	-	0	0.277	0.325
42	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	21100	2535	21.32	22.00	1.169	-	-	0.11	1.090	1.275
	LTE Band 7C	20M	QPSK	1	99	-	Bottom Side	5mm	Ant 2	ECI 7	21100+21298	2535+2554.8	21.22	22.00	1.197	-	-	0.02	0.991	1.186
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	20850	2510	21.21	22.00	1.199	-	-	0.1	0.986	1.183
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	21350	2560	21.23	22.00	1.194	-	-	0.04	0.889	1.061
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	21100	2535	21.30	22.00	1.175	-	-	0.13	0.915	1.075
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	20850	2510	21.14	22.00	1.219	-	-	-0.18	0.898	1.095
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	21350	2560	21.04	22.00	1.247	-	-	-0.11	0.823	1.027
	LTE Band 7	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	ECI 7	21100	2535	21.27	22.00	1.183	-	-	-0.16	0.803	0.950
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	21100	2535	21.32	22.00	1.169	-	-	0.05	0.957	1.119
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	21100	2535	14.60	15.40	1.202	-	-	-0.15	0.184	0.221
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	21100	2535	14.58	15.40	1.208	-	-	-0.19	0.145	0.175
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	21100	2535	14.60	15.40	1.202	-	-	0.12	0.400	0.481
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	21100	2535	14.58	15.40	1.208	-	-	0.07	0.318	0.384
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	21100	2535	14.60	15.40	1.202	-	-	0.08	0.206	0.248
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	21100	2535	14.58	15.40	1.208	-	-	-0.16	0.159	0.192
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	21100	2535	14.60	15.40	1.202	-	-	0	0.008	0.010



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	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	ECI 7	21100	2535	14.58	15.40	1.208	-	-	-0.11	0.000	0.000
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	21100	2535	14.60	15.40	1.202	-	-	0.06	0.495	0.595
	LTE Band 7C	20M	QPSK	1	99	-	Top Side	5mm	Ant 1	ECI 7	21100+ 21298	2535+ 2554.8	14.42	15.40	1.253	-	-	0.09	0.463	0.580
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	ECI 7	21100	2535	14.58	15.40	1.208	-	-	-0.13	0.363	0.438
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	21100	2535	14.60	15.40	1.202	-	-	-0.12	0.475	0.571
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 9	ECI 7	21100	2535	12.67	13.70	1.268	-	-	-0.09	0.160	0.203
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 9	ECI 7	21100	2535	12.62	13.70	1.282	-	-	-0.09	0.116	0.149
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 9	ECI 7	21100	2535	12.67	13.70	1.268	-	-	-0.18	0.197	0.250
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 9	ECI 7	21100	2535	12.62	13.70	1.282	-	-	-0.08	0.156	0.200
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	21100	2535	12.67	13.70	1.268	-	-	0.03	0.463	0.587
	LTE Band 7C	20M	QPSK	1	99	-	Left Side	5mm	Ant 9	ECI 7	21100+ 21298	2535+ 2554.8	12.54	13.70	1.306	-	-	0.01	0.425	0.555
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 9	ECI 7	21100	2535	12.62	13.70	1.282	-	-	-0.11	0.362	0.464
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 9	ECI 7	21100	2535	12.67	13.70	1.268	-	-	0.16	0.000	0.000
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 9	ECI 7	21100	2535	12.62	13.70	1.282	-	-	-0.06	0.000	0.000
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 9	ECI 7	21100	2535	12.67	13.70	1.268	-	-	0.02	0.007	0.009
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 9	ECI 7	21100	2535	12.62	13.70	1.282	-	-	-0.16	0.005	0.006
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	21100	2535	12.67	13.70	1.268	-	-	-0.16	0.442	0.560
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	21100	2535	18.08	19.10	1.265	-	-	0.15	0.443	0.560
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	ECI 7	21100	2535	18.06	19.10	1.271	-	-	-0.05	0.352	0.447
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	21100	2535	18.08	19.10	1.265	-	-	0.05	0.879	1.112
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	20850	2510	17.95	19.10	1.303	-	-	-0.03	0.938	1.222
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	21350	2560	18.00	19.10	1.288	-	-	0.05	0.985	1.269
	LTE Band 7C	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	21350+ 21152	2560+ 2540.2	17.83	19.10	1.340	-	-	0.02	0.891	1.194
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	21100	2535	18.06	19.10	1.271	-	-	0.02	0.706	0.897
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	20850	2510	18.05	19.10	1.274	-	-	0.07	0.730	0.930
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	21350	2560	18.05	19.10	1.274	-	-	0.16	0.781	0.995
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 0	ECI 7	21100	2535	17.99	19.10	1.291	-	-	0.13	0.718	0.927
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	21100	2535	18.08	19.10	1.265	-	-	-0.18	0.158	0.200
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	21100	2535	18.06	19.10	1.271	-	-	0.02	0.127	0.161
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	21100	2535	18.08	19.10	1.265	-	-	0.16	0.041	0.052
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	ECI 7	21100	2535	18.06	19.10	1.271	-	-	-0.03	0.031	0.039
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	21100	2535	18.08	19.10	1.265	-	-	0.07	0.593	0.750
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	21100	2535	18.06	19.10	1.271	-	-	-0.01	0.471	0.598
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	21350	2560	18.00	19.10	1.288	-	-	0.15	0.967	1.246
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	40620	2593	23.05	23.50	1.109	62.9	1.006	0.05	0.673	0.751
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	39750	2506	23.01	23.50	1.119	62.9	1.006	0.17	0.807	0.909
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	40185	2549.5	22.97	23.50	1.130	62.9	1.006	-0.15	0.758	0.862
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	41055	2636.5	22.88	23.50	1.153	62.9	1.006	0.16	0.642	0.745
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	41490	2680	22.79	23.50	1.178	62.9	1.006	0.05	0.646	0.765
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	40620	2593	22.09	22.50	1.099	62.9	1.006	-0.06	0.537	0.594
	LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant 2	ECI 7	40620	2593	22.00	22.50	1.122	62.9	1.006	-0.18	0.519	0.586
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	40620	2593	23.05	23.50	1.109	62.9	1.006	-0.06	0.529	0.590
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	40620	2593	22.09	22.50	1.099	62.9	1.006	0.12	0.456	0.504
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	ECI 7	40620	2593	23.05	23.50	1.109	62.9	1.006	0.07	0.144	0.161
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	ECI 7	40620	2593	22.09	22.50	1.099	62.9	1.006	-0.12	0.120	0.133
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	ECI 7	40620	2593	23.05	23.50	1.109	62.9	1.006	-0.03	0.315	0.351
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	ECI 7	40620	2593	22.09	22.50	1.099	62.9	1.006	0.02	0.238	0.263
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	40620	2593	23.05	23.50	1.109	62.9	1.006	0.12	0.942	1.051
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	39750	2506	23.01	23.50	1.119	62.9	1.006	-0.03	0.940	1.059
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	40185	2549.5	22.97	23.50	1.130	62.9	1.006	0	0.889	1.010
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	41055	2636.5	22.88	23.50	1.153	62.9	1.006	-0.1	0.976	1.133
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	41490	2680	22.79	23.50	1.178	62.9	1.006	0.05	1.030	1.220
	LTE Band 41C	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	41490+ 41292	2680+ 2660.2	22.72	23.50	1.197	62.9	1.006	0.01	0.985	1.186
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	40620	2593	22.09	22.50	1.099	62.9	1.006	0	0.743	0.821



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	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	39750	2506	21.97	22.50	1.130	62.9	1.006	0.15	0.757	0.860
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	40185	2549.5	21.93	22.50	1.140	62.9	1.006	-0.05	0.733	0.841
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	41055	2636.5	21.89	22.50	1.151	62.9	1.006	-0.08	0.791	0.916
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	41490	2680	22.02	22.50	1.117	62.9	1.006	-0.08	0.840	0.944
	LTE Band 41	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	ECI 7	40620	2593	22.00	22.50	1.122	62.9	1.006	-0.13	0.721	0.814
43	LTE Band 41 HPUE	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	41490	2680	24.44	25.10	1.164	42.9	1.009	0.18	1.100	1.292
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	40620	2593	17.10	17.90	1.202	62.9	1.006	0.08	0.205	0.248
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	40620	2593	17.09	17.90	1.205	62.9	1.006	-0.18	0.163	0.198
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	40620	2593	17.10	17.90	1.202	62.9	1.006	0.12	0.427	0.516
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	40620	2593	17.09	17.90	1.205	62.9	1.006	-0.05	0.339	0.411
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	40620	2593	17.10	17.90	1.202	62.9	1.006	0.1	0.209	0.253
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	40620	2593	17.09	17.90	1.205	62.9	1.006	0.06	0.169	0.205
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	40620	2593	17.10	17.90	1.202	62.9	1.006	-0.08	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	ECI 7	40620	2593	17.09	17.90	1.205	62.9	1.006	0.13	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	40620	2593	17.10	17.90	1.202	62.9	1.006	0.12	0.481	0.582
	LTE Band 41C	20M	QPSK	1	99	-	Top Side	5mm	Ant 1	ECI 7	40620+40818	2593+2612.8	17.00	17.90	1.230	62.9	1.006	0.03	0.468	0.579
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	ECI 7	40620	2593	17.09	17.90	1.205	62.9	1.006	0.18	0.379	0.459
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	40620	2593	18.55	19.50	1.245	42.9	1.009	0.03	0.488	0.613
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	39750	2506	18.45	19.50	1.274	42.9	1.009	0.1	0.462	0.594
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	40185	2549.5	18.50	19.50	1.259	42.9	1.009	-0.18	0.457	0.581
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	41055	2636.5	18.27	19.50	1.327	42.9	1.009	0.1	0.416	0.557
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	41490	2680	18.08	19.50	1.387	42.9	1.009	0.12	0.408	0.571
	LTE Band 41 HPUE	20M	QPSK	100	0	-	Top Side	5mm	Ant 1	ECI 7	40620	2593	18.52	19.50	1.253	42.9	1.009	0.08	0.441	0.558
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 9	ECI 7	40620	2593	14.22	15.30	1.282	62.9	1.006	-0.17	0.087	0.112
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 9	ECI 7	40620	2593	14.20	15.30	1.288	62.9	1.006	-0.04	0.068	0.088
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	ECI 7	40620	2593	14.22	15.30	1.282	62.9	1.006	0.08	0.119	0.154
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 9	ECI 7	40620	2593	14.20	15.30	1.288	62.9	1.006	-0.16	0.094	0.122
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	40620	2593	14.22	15.30	1.282	62.9	1.006	0.16	0.462	0.596
	LTE Band 41C	20M	QPSK	1	99	-	Left Side	5mm	Ant 9	ECI 7	40620+40818	2593+2612.8	14.09	15.30	1.321	62.9	1.006	0.08	0.433	0.576
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 9	ECI 7	40620	2593	14.20	15.30	1.288	62.9	1.006	0.07	0.427	0.553
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 9	ECI 7	40620	2593	14.22	15.30	1.282	62.9	1.006	0.07	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 9	ECI 7	40620	2593	14.20	15.30	1.288	62.9	1.006	0	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 9	ECI 7	40620	2593	14.22	15.30	1.282	62.9	1.006	0.01	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 9	ECI 7	40620	2593	14.20	15.30	1.288	62.9	1.006	-0.01	0.000	0.000
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	40620	2593	15.92	16.90	1.253	42.9	1.009	0.06	0.479	0.606
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	39750	2506	15.80	16.90	1.288	42.9	1.009	-0.17	0.412	0.536
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	40185	2549.5	15.85	16.90	1.274	42.9	1.009	-0.03	0.438	0.563
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	41055	2636.5	15.87	16.90	1.268	42.9	1.009	0.14	0.429	0.549
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	41490	2680	15.81	16.90	1.285	42.9	1.009	0.11	0.431	0.559
	LTE Band 41 HPUE	20M	QPSK	100	0	-	Left Side	5mm	Ant 9	ECI 7	40620	2593	15.85	16.90	1.274	42.9	1.009	-0.05	0.417	0.536
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	40620	2593	20.67	21.70	1.268	62.9	1.006	0.08	0.403	0.514
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	ECI 7	40620	2593	20.53	21.70	1.309	62.9	1.006	-0.18	0.318	0.419
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	40620	2593	20.67	21.70	1.268	62.9	1.006	0.12	0.855	1.090
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	39750	2506	20.58	21.70	1.294	62.9	1.006	-0.17	0.961	1.251
	LTE Band 41C	20M	QPSK	1	99	-	Back	5mm	Ant 0	ECI 7	39750+39948	2506+2525.8	20.46	21.70	1.330	62.9	1.006	0.02	0.887	1.187
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	40185	2549.5	20.47	21.70	1.327	62.9	1.006	-0.03	0.862	1.151
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	41055	2636.5	20.50	21.70	1.318	62.9	1.006	0.14	0.916	1.215
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	41490	2680	20.59	21.70	1.291	62.9	1.006	0.11	0.847	1.100
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	40620	2593	20.53	21.70	1.309	62.9	1.006	-0.05	0.763	1.005
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	39750	2506	20.33	21.70	1.371	62.9	1.006	0.14	0.801	1.105
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	40185	2549.5	20.38	21.70	1.355	62.9	1.006	-0.17	0.660	0.900



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	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	41055	2636.5	20.35	21.70	1.365	62.9	1.006	0.17	0.743	1.020
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	41490	2680	20.39	21.70	1.352	62.9	1.006	-0.05	0.794	1.080
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 0	ECI 7	40620	2593	20.49	21.70	1.321	62.9	1.006	0.01	0.747	0.993
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	40620	2593	20.67	21.70	1.268	62.9	1.006	0.1	0.157	0.200
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	40620	2593	20.53	21.70	1.309	62.9	1.006	-0.17	0.125	0.165
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	40620	2593	20.67	21.70	1.268	62.9	1.006	0.04	0.031	0.040
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	ECI 7	40620	2593	20.53	21.70	1.309	62.9	1.006	-0.01	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	40620	2593	20.67	21.70	1.268	62.9	1.006	-0.08	0.451	0.575
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	40620	2593	20.53	21.70	1.309	62.9	1.006	0.12	0.445	0.586
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	39750	2506	22.23	23.30	1.279	42.9	1.009	0.12	0.988	1.275
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	507000	2535	21.23	22.20	1.250	-	-	0.07	0.736	0.920
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	507000	2535	21.14	22.20	1.276	-	-	-0.18	0.723	0.923
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	507000	2535	21.01	22.20	1.315	-	-	0.03	0.558	0.734
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	507000	2535	21.23	22.20	1.250	-	-	-0.15	0.686	0.858
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	507000	2535	21.14	22.20	1.276	-	-	-0.15	0.628	0.802
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	507000	2535	21.01	22.20	1.315	-	-	0.11	0.489	0.643
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	507000	2535	21.23	22.20	1.250	-	-	-0.08	0.186	0.233
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	507000	2535	21.14	22.20	1.276	-	-	-0.17	0.196	0.250
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	507000	2535	21.23	22.20	1.250	-	-	-0.08	0.457	0.571
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	507000	2535	21.14	22.20	1.276	-	-	-0.04	0.366	0.467
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	507000	2535	21.23	22.20	1.250	-	-	0.17	0.987	1.234
44	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	507000	2535	21.14	22.20	1.276	-	-	0.08	1.000	1.276
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	507000	2535	21.01	22.20	1.315	-	-	-0.04	0.704	0.926
	FR1 n7 Other PA	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	507000	2535	21.14	22.20	1.276	-	-	0.11	0.947	1.209
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	507000	2535	14.81	15.80	1.256	-	-	-0.08	0.166	0.209
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	507000	2535	14.76	15.80	1.271	-	-	-0.13	0.169	0.215
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	507000	2535	14.81	15.80	1.256	-	-	0.06	0.371	0.466
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	507000	2535	14.76	15.80	1.271	-	-	-0.03	0.377	0.479
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	507000	2535	14.81	15.80	1.256	-	-	0.08	0.195	0.245
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	507000	2535	14.76	15.80	1.271	-	-	-0.07	0.193	0.245
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	507000	2535	14.81	15.80	1.256	-	-	-0.11	0.000	0.000
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	507000	2535	14.76	15.80	1.271	-	-	-0.12	0.007	0.009
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	507000	2535	14.81	15.80	1.256	-	-	0.01	0.496	0.623
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	507000	2535	14.76	15.80	1.271	-	-	-0.16	0.456	0.579
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	507000	2535	14.59	15.80	1.321	-	-	-0.02	0.371	0.490
	FR1 n7 Other PA	50M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	507000	2535	14.81	15.80	1.256	-	-	-0.08	0.476	0.598
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	ECI 7	518598	2592.99	20.75	22.20	1.396	-	-	0.15	0.605	0.845
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	ECI 7	518598	2592.99	20.74	22.20	1.400	-	-	-0.09	0.561	0.785
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 2	ECI 7	518598	2592.99	20.66	22.20	1.426	-	-	0.11	0.570	0.813
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	ECI 7	518598	2592.99	20.75	22.20	1.396	-	-	-0.05	0.522	0.729
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	ECI 7	518598	2592.99	20.74	22.20	1.400	-	-	-0.08	0.499	0.698
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 2	ECI 7	518598	2592.99	20.75	22.20	1.396	-	-	0.05	0.203	0.283
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 2	ECI 7	518598	2592.99	20.74	22.20	1.400	-	-	0.05	0.149	0.209
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 2	ECI 7	518598	2592.99	20.75	22.20	1.396	-	-	-0.03	0.308	0.430
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 2	ECI 7	518598	2592.99	20.74	22.20	1.400	-	-	-0.15	0.180	0.252
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 2	ECI 7	518598	2592.99	20.75	22.20	1.396	-	-	0.04	0.919	1.283
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 2	ECI 7	518598	2592.99	20.74	22.20	1.400	-	-	0.07	0.727	1.017
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Bottom Side	5mm	Ant 2	ECI 7	518598	2592.99	20.66	22.20	1.426	-	-	0.16	0.807	1.150
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 2	ECI 7	518598	2592.99	20.75	22.20	1.396	-	-	0.05	0.879	1.227
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 1	ECI 7	518598	2592.99	16.53	17.70	1.309	-	-	0.13	0.171	0.224
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 1	ECI 7	518598	2592.99	16.41	17.70	1.346	-	-	-0.18	0.156	0.210
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 1	ECI 7	518598	2592.99	16.53	17.70	1.309	-	-	0.16	0.374	0.490
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	ECI 7	518598	2592.99	16.41	17.70	1.346	-	-	-0.03	0.343	0.462
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 1	ECI 7	518598	2592.99	16.53	17.70	1.309	-	-	0	0.189	0.247
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 1	ECI 7	518598	2592.99	16.41	17.70	1.346	-	-	0.01	0.171	0.230



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	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 1	ECI 7	518598	2592.99	16.53	17.70	1.309	-	-	-0.06	0.009	0.012
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 1	ECI 7	518598	2592.99	16.41	17.70	1.346	-	-	-0.04	0.009	0.012
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 1	ECI 7	518598	2592.99	16.53	17.70	1.309	-	-	0.07	0.475	0.622
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 1	ECI 7	518598	2592.99	16.41	17.70	1.346	-	-	-0.17	0.350	0.471
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 1	ECI 7	518598	2592.99	16.53	17.70	1.309	-	-	-0.03	0.421	0.551
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 9	ECI 7	518598	2592.99	12.78	14.10	1.355	-	-	0.18	0.158	0.214
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 9	ECI 7	518598	2592.99	12.71	14.10	1.377	-	-	-0.17	0.141	0.194
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 9	ECI 7	518598	2592.99	12.78	14.10	1.355	-	-	-0.05	0.230	0.312
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 9	ECI 7	518598	2592.99	12.71	14.10	1.377	-	-	0	0.192	0.264
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 9	ECI 7	518598	2592.99	12.78	14.10	1.355	-	-	0.01	0.461	0.625
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 9	ECI 7	518598	2592.99	12.71	14.10	1.377	-	-	-0.09	0.440	0.606
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 9	ECI 7	518598	2592.99	12.78	14.10	1.355	-	-	0.02	0.000	0.000
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 9	ECI 7	518598	2592.99	12.71	14.10	1.377	-	-	-0.13	0.000	0.000
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 9	ECI 7	518598	2592.99	12.78	14.10	1.355	-	-	0.17	0.008	0.011
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 9	ECI 7	518598	2592.99	12.71	14.10	1.377	-	-	0.06	0.007	0.010
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 9	ECI 7	518598	2592.99	12.78	14.10	1.355	-	-	0.02	0.432	0.585
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 0	ECI 7	518598	2592.99	18.29	19.30	1.262	-	-	-0.06	0.530	0.669
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 0	ECI 7	518598	2592.99	18.27	19.30	1.268	-	-	-0.15	0.383	0.486
45	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	ECI 7	518598	2592.99	18.29	19.30	1.262	-	-	0.04	1.020	1.287
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	ECI 7	518598	2592.99	18.27	19.30	1.268	-	-	-0.03	0.814	1.032
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 0	ECI 7	518598	2592.99	18.13	19.30	1.309	-	-	0.17	0.797	1.043
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 0	ECI 7	518598	2592.99	18.29	19.30	1.262	-	-	0.02	0.188	0.237
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 0	ECI 7	518598	2592.99	18.27	19.30	1.268	-	-	0	0.150	0.190
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 0	ECI 7	518598	2592.99	18.29	19.30	1.262	-	-	0.18	0.054	0.068
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 0	ECI 7	518598	2592.99	18.27	19.30	1.268	-	-	-0.11	0.034	0.043
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	ECI 7	518598	2592.99	18.29	19.30	1.262	-	-	-0.05	0.652	0.823
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	ECI 7	518598	2592.99	18.27	19.30	1.268	-	-	-0.04	0.543	0.688
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	ECI 7	518598	2592.99	18.13	19.30	1.309	-	-	-0.08	0.552	0.723
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	ECI 7	518598	2592.99	18.29	19.30	1.262	-	-	0.16	0.859	1.084
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 7	ECI 7	42590	3500	16.17	17.20	1.268	62.9	1.006	0	0.153	0.195
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 7	ECI 7	42590	3500	16.15	17.20	1.274	62.9	1.006	0.11	0.156	0.200
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 7	ECI 7	42590	3500	16.17	17.20	1.268	62.9	1.006	0.13	0.308	0.393
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 7	ECI 7	42590	3500	16.15	17.20	1.274	62.9	1.006	-0.16	0.292	0.374
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 7	ECI 7	42590	3500	16.17	17.20	1.268	62.9	1.006	-0.19	0.477	0.608
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 7	ECI 7	42190	3460	15.89	17.20	1.352	62.9	1.006	0.01	0.445	0.605
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 7	ECI 7	42990	3540	16.11	17.20	1.285	62.9	1.006	0.07	0.482	0.623
	LTE Band 42C	20M	QPSK	1	0	-	Left Side	5mm	Ant 7	ECI 7	42990+ 42792	3540+ 3520.2	15.90	17.20	1.349	62.9	1.006	0.02	0.451	0.612
	LTE Band 42	20M	QPSK	50	0	-	Left Side	5mm	Ant 7	ECI 7	42590	3500	16.15	17.20	1.274	62.9	1.006	0.02	0.366	0.469
	LTE Band 42	20M	QPSK	100	0	-	Left Side	5mm	Ant 7	ECI 7	42590	3500	16.15	17.20	1.274	62.9	1.006	-0.12	0.340	0.436
	LTE Band 42	20M	QPSK	1	0	-	Right Side	5mm	Ant 7	ECI 7	42590	3500	16.17	17.20	1.268	62.9	1.006	0.07	0.009	0.011
	LTE Band 42	20M	QPSK	50	0	-	Right Side	5mm	Ant 7	ECI 7	42590	3500	16.15	17.20	1.274	62.9	1.006	-0.02	0.008	0.010
	LTE Band 42	20M	QPSK	1	0	-	Top Side	5mm	Ant 7	ECI 7	42590	3500	16.17	17.20	1.268	62.9	1.006	-0.05	0.069	0.088
	LTE Band 42	20M	QPSK	50	0	-	Top Side	5mm	Ant 7	ECI 7	42590	3500	16.15	17.20	1.274	62.9	1.006	-0.13	0.069	0.088
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 4	ECI 7	42590	3500	17.77	18.90	1.297	62.9	1.006	0.08	0.228	0.298
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 4	ECI 7	42590	3500	17.76	18.90	1.300	62.9	1.006	-0.16	0.185	0.242
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 4	ECI 7	42590	3500	17.77	18.90	1.297	62.9	1.006	-0.04	0.462	0.603
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 4	ECI 7	42590	3500	17.77	18.90	1.297	62.9	1.006	-0.04	0.451	0.589
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 4	ECI 7	42590	3500	17.77	18.90	1.297	62.9	1.006	-0.04	0.468	0.611
	LTE Band 42C	20M	QPSK	1	99	-	Back	5mm	Ant 4	ECI 7	42590+ 42788	3500+ 3519.8	17.55	18.90	1.365	62.9	1.006	0.08	0.441	0.605
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 4	ECI 7	42590	3500	17.76	18.90	1.300	62.9	1.006	-0.11	0.451	0.590
	LTE Band 42	20M	QPSK	100	0	-	Back	5mm	Ant 4	ECI 7	42590	3500	17.68	18.90	1.324	62.9	1.006	0.03	0.423	0.564
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 4	ECI 7	42590	3500	17.77	18.90	1.297	62.9	1.006	-0.13	0.018	0.023
	LTE Band 42	20M	QPSK	50	0	-	Left Side	5mm	Ant 4	ECI 7	42590	3500	17.76	18.90	1.300	62.9	1.006	0.16	0.019	0.025
	LTE Band 42	20M	QPSK	1	0	-	Right Side	5mm	Ant 4	ECI 7	42590	3500	17.77	18.90	1.297	62.9	1.006	-0.15	0.104	0.136



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	LTE Band 42	20M	QPSK	50	0	-	Right Side	5mm	Ant 4	ECI 7	42590	3500	17.76	18.90	1.300	62.9	1.006	-0.02	0.101	0.132
	LTE Band 42	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	42590	3500	17.77	18.90	1.297	62.9	1.006	-0.09	0.192	0.251
	LTE Band 42	20M	QPSK	50	0	-	Top Side	5mm	Ant 4	ECI 7	42590	3500	17.76	18.90	1.300	62.9	1.006	0.14	0.193	0.252
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 8	ECI 7	42590	3500	22.01	23.00	1.256	62.9	1.006	0.1	0.405	0.512
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 8	ECI 7	42590	3500	21.09	22.00	1.233	62.9	1.006	-0.09	0.314	0.390
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 8	ECI 7	42590	3500	22.01	23.00	1.256	62.9	1.006	-0.18	0.551	0.696
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 8	ECI 7	42190	3460	21.96	23.00	1.271	62.9	1.006	-0.07	0.446	0.570
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 8	ECI 7	42990	3540	21.88	23.00	1.294	62.9	1.006	0.11	0.563	0.733
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 8	ECI 7	42590	3500	21.09	22.00	1.233	62.9	1.006	-0.08	0.481	0.597
	LTE Band 42	20M	QPSK	100	0	-	Back	5mm	Ant 8	ECI 7	42590	3500	21.07	22.00	1.239	62.9	1.006	-0.09	0.487	0.607
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 8	ECI 7	42590	3500	22.01	23.00	1.256	62.9	1.006	-0.06	0.000	0.000
	LTE Band 42	20M	QPSK	50	0	-	Left Side	5mm	Ant 8	ECI 7	42590	3500	21.09	22.00	1.233	62.9	1.006	-0.17	0.000	0.000
46	LTE Band 42	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	22.01	23.00	1.256	62.9	1.006	0.04	1.030	1.301
	LTE Band 42C	20M	QPSK	1	99	-	Right Side	5mm	Ant 8	ECI 7	42590+ 42788	3500+ 3519.8	21.83	23.00	1.309	62.9	1.006	0.07	0.881	1.160
	LTE Band 42	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42190	3460	21.96	23.00	1.271	62.9	1.006	-0.11	0.827	1.057
	LTE Band 42	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42990	3540	21.88	23.00	1.294	62.9	1.006	0.14	0.960	1.250
	LTE Band 42	20M	QPSK	50	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	21.09	22.00	1.233	62.9	1.006	0.03	0.796	0.987
	LTE Band 42	20M	QPSK	50	0	-	Right Side	5mm	Ant 8	ECI 7	42190	3460	20.88	22.00	1.294	62.9	1.006	0.1	0.819	1.066
	LTE Band 42	20M	QPSK	50	0	-	Right Side	5mm	Ant 8	ECI 7	42990	3540	21.01	22.00	1.256	62.9	1.006	0.16	0.983	1.242
	LTE Band 42	20M	QPSK	100	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	21.07	22.00	1.239	62.9	1.006	-0.06	0.882	1.099
	LTE Band 42	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 8	ECI 7	42590	3500	22.01	23.00	1.256	62.9	1.006	0.02	0.287	0.363
	LTE Band 42	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 8	ECI 7	42590	3500	21.09	22.00	1.233	62.9	1.006	-0.16	0.230	0.285
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 10	ECI 7	42590	3500	14.01	14.70	1.172	62.9	1.006	-0.13	0.016	0.019
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 10	ECI 7	42590	3500	13.93	14.70	1.194	62.9	1.006	-0.01	0.015	0.018
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 10	ECI 7	42590	3500	14.01	14.70	1.172	62.9	1.006	-0.11	0.510	0.601
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 10	ECI 7	42190	3460	13.72	14.70	1.253	62.9	1.006	0.19	0.462	0.582
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 10	ECI 7	42990	3540	13.88	14.70	1.208	62.9	1.006	-0.04	0.518	0.629
	LTE Band 42C	20M	QPSK	1	0	-	Back	5mm	Ant 10	ECI 7	42990+ 42792	3540+ 3520.2	13.71	14.70	1.256	62.9	1.006	0.09	0.485	0.613
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 10	ECI 7	42590	3500	13.93	14.70	1.194	62.9	1.006	-0.18	0.503	0.604
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 10	ECI 7	42190	3460	13.67	14.70	1.268	62.9	1.006	-0.06	0.469	0.598
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 10	ECI 7	42990	3540	13.83	14.70	1.222	62.9	1.006	0.02	0.505	0.621
	LTE Band 42	20M	QPSK	100	0	-	Back	5mm	Ant 10	ECI 7	42590	3500	13.90	14.70	1.202	62.9	1.006	0.16	0.505	0.611
	LTE Band 42	20M	QPSK	1	0	-	Left Side	5mm	Ant 10	ECI 7	42590	3500	14.01	14.70	1.172	62.9	1.006	0.01	0.009	0.011
	LTE Band 42	20M	QPSK	50	0	-	Left Side	5mm	Ant 10	ECI 7	42590	3500	13.93	14.70	1.194	62.9	1.006	-0.04	0.000	0.000
	LTE Band 42	20M	QPSK	1	0	-	Right Side	5mm	Ant 10	ECI 7	42590	3500	14.01	14.70	1.172	62.9	1.006	0.13	0.076	0.090
	LTE Band 42	20M	QPSK	50	0	-	Right Side	5mm	Ant 10	ECI 7	42590	3500	13.93	14.70	1.194	62.9	1.006	0.12	0.077	0.092
	LTE Band 42	20M	QPSK	1	0	-	Top Side	5mm	Ant 10	ECI 7	42590	3500	14.01	14.70	1.172	62.9	1.006	0.07	0.054	0.064
	LTE Band 42	20M	QPSK	50	0	-	Top Side	5mm	Ant 10	ECI 7	42590	3500	13.93	14.70	1.194	62.9	1.006	0.08	0.053	0.064
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	ECI 7	656000	3840	14.31	15.10	1.199	-	-	0.08	0.216	0.259
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	ECI 7	656000	3840	14.13	15.10	1.250	-	-	0.01	0.222	0.278
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	ECI 7	656000	3840	14.31	15.10	1.199	-	-	-0.08	0.414	0.497
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	ECI 7	656000	3840	14.13	15.10	1.250	-	-	-0.08	0.401	0.501
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 7	ECI 7	656000	3840	14.31	15.10	1.199	-	-	0.05	0.497	0.596
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 7	ECI 7	656000	3840	14.13	15.10	1.250	-	-	0.1	0.426	0.533
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 7	ECI 7	656000	3840	14.31	15.10	1.199	-	-	0.08	0.007	0.008
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 7	ECI 7	656000	3840	14.13	15.10	1.250	-	-	-0.17	0.007	0.009
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 7	ECI 7	656000	3840	14.31	15.10	1.199	-	-	-0.03	0.068	0.082
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 7	ECI 7	656000	3840	14.13	15.10	1.250	-	-	0.14	0.062	0.078
	FR1 n77_HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant 7	ECI 7	656000	3840	16.85	18.10	1.334	50	1.000	0.11	0.445	0.593
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	ECI 7	656000	3840	17.28	18.70	1.387	-	-	-0.05	0.145	0.201
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	ECI 7	656000	3840	17.26	18.70	1.393	-	-	0.18	0.129	0.180
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	ECI 7	656000	3840	17.28	18.70	1.387	-	-	0.01	0.436	0.605
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	ECI 7	656000	3840	17.26	18.70	1.393	-	-	0.17	0.405	0.564
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 4	ECI 7	656000	3840	17.28	18.70	1.387	-	-	0.01	0.006	0.008
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 4	ECI 7	656000	3840	17.26	18.70	1.393	-	-	0.1	0.006	0.008



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	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 4	ECI 7	656000	3840	17.28	18.70	1.387	-	-	-0.17	0.049	0.068
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 4	ECI 7	656000	3840	17.26	18.70	1.393	-	-	0.04	0.052	0.072
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 4	ECI 7	656000	3840	17.28	18.70	1.387	-	-	-0.08	0.304	0.422
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 4	ECI 7	656000	3840	17.26	18.70	1.393	-	-	0.05	0.353	0.492
	FR1 n77_HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 4	ECI 7	656000	3840	20.18	21.70	1.419	50	1.000	-0.09	0.402	0.570
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 8	ECI 7	656000	3840	17.87	18.80	1.239	-	-	-0.1	0.179	0.222
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 8	ECI 7	656000	3840	17.72	18.80	1.282	-	-	0.01	0.198	0.254
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	ECI 7	656000	3840	17.87	18.80	1.239	-	-	-0.15	0.310	0.384
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 8	ECI 7	656000	3840	17.72	18.80	1.282	-	-	0.19	0.399	0.512
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 8	ECI 7	656000	3840	17.87	18.80	1.239	-	-	-0.18	0.000	0.000
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 8	ECI 7	656000	3840	17.72	18.80	1.282	-	-	0.03	0.000	0.000
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 8	ECI 7	656000	3840	17.87	18.80	1.239	-	-	-0.15	0.736	0.912
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 8	ECI 7	656000	3840	17.72	18.80	1.282	-	-	-0.15	0.614	0.787
47	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	5mm	Ant 8	ECI 7	656000	3840	17.73	18.80	1.279	-	-	0.01	0.995	1.273
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 8	ECI 7	656000	3840	17.87	18.80	1.239	-	-	-0.08	0.071	0.088
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 8	ECI 7	656000	3840	17.72	18.80	1.282	-	-	-0.17	0.065	0.083
	FR1 n77_HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	5mm	Ant 8	ECI 7	656000	3840	20.74	21.80	1.276	50	1.000	-0.08	0.927	1.183
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 10	ECI 7	656000	3840	12.68	13.70	1.265	-	-	-0.13	0.012	0.015
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 10	ECI 7	656000	3840	12.65	13.70	1.274	-	-	0.06	0.015	0.019
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 10	ECI 7	656000	3840	12.68	13.70	1.265	-	-	-0.01	0.495	0.626
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 10	ECI 7	656000	3840	12.65	13.70	1.274	-	-	-0.03	0.412	0.525
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 10	ECI 7	656000	3840	12.68	13.70	1.265	-	-	-0.07	0.006	0.008
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 10	ECI 7	656000	3840	12.65	13.70	1.274	-	-	0.05	0.006	0.008
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 10	ECI 7	656000	3840	12.68	13.70	1.265	-	-	-0.11	0.058	0.073
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 10	ECI 7	656000	3840	12.65	13.70	1.274	-	-	-0.12	0.063	0.080
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 10	ECI 7	656000	3840	12.68	13.70	1.265	-	-	-0.16	0.069	0.087
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 10	ECI 7	656000	3840	12.65	13.70	1.274	-	-	-0.02	0.077	0.098
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 10	ECI 7	656000	3840	15.79	16.70	1.233	50	1.000	-0.09	0.493	0.608

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	5mm	Ant 6+3(3)	Hotspot	6	2437	14.95	16.50	1.429	99.31	1.007	-0.17	0.201	0.289
48	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(3)	Hotspot	6	2437	14.95	16.50	1.429	99.31	1.007	0.02	0.486	0.699
	WLAN2.4GHz	802.11b 1Mbps	Left Side	5mm	Ant 6+3(3)	Hotspot	6	2437	14.95	16.50	1.429	99.31	1.007	-0.08	0.023	0.033
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 6+3(3)	Hotspot	6	2437	14.95	16.50	1.429	99.31	1.007	0.05	0.457	0.658
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 6+3(3)	Hotspot	6	2437	14.95	16.50	1.429	99.31	1.007	-0.09	0.315	0.453
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6+3(3)	DBS	6	2437	12.15	13.50	1.365	99.31	1.007	0.12	0.091	0.125
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(3)	DBS	6	2437	12.15	13.50	1.365	99.31	1.007	0.08	0.221	0.304
	WLAN2.4GHz	802.11b 1Mbps	Left Side	5mm	Ant 6+3(3)	DBS	6	2437	12.15	13.50	1.365	99.31	1.007	-0.17	0.010	0.014
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 6+3(3)	DBS	6	2437	12.15	13.50	1.365	99.31	1.007	-0.03	0.206	0.283
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 6+3(3)	DBS	6	2437	12.15	13.50	1.365	99.31	1.007	0.14	0.142	0.195
	Bluetooth	1Mbps	Front	5mm	Ant 6	Hotspot	39	2441	14.42	15.00	1.143	76.94	1.083	0.1	0.043	0.053
	Bluetooth	1Mbps	Back	5mm	Ant 6	Hotspot	39	2441	14.42	15.00	1.143	76.94	1.083	0.04	0.156	0.193
	Bluetooth	1Mbps	Left Side	5mm	Ant 6	Hotspot	39	2441	14.42	15.00	1.143	76.94	1.083	0.13	0.001	0.001
49	Bluetooth	1Mbps	Right Side	5mm	Ant 6	Hotspot	39	2441	14.42	15.00	1.143	76.94	1.083	0.05	0.158	0.196
	Bluetooth	1Mbps	Top Side	5mm	Ant 6	Hotspot	39	2441	14.42	15.00	1.143	76.94	1.083	-0.18	0.001	0.001
5000MHz																
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 5+4(5)	Hotspot	42	5210	10.13	11.50	1.371	88.19	1.134	0.1	0.150	0.233
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(5)	Hotspot	42	5210	10.13	11.50	1.371	88.19	1.134	0.12	0.240	0.373
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 5+4(5)	Hotspot	42	5210	10.13	11.50	1.371	88.19	1.134	0.08	0.013	0.020
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 5+4(5)	Hotspot	42	5210	10.13	11.50	1.371	88.19	1.134	-0.17	0.163	0.253
50	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 5+4(5)	Hotspot	42	5210	10.13	11.50	1.371	88.19	1.134	0.05	0.373	0.580
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 5+4(4)	DBS	42	5210	7.64	9.00	1.368	88.19	1.134	0.08	0.087	0.135
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(4)	DBS	42	5210	7.64	9.00	1.368	88.19	1.134	-0.17	0.140	0.217
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 5+4(4)	DBS	42	5210	7.64	9.00	1.368	88.19	1.134	-0.03	0.008	0.012
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 5+4(4)	DBS	42	5210	7.64	9.00	1.368	88.19	1.134	0.14	0.095	0.147
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 5+4(4)	DBS	42	5210	7.64	9.00	1.368	88.19	1.134	0.11	0.207	0.321
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 5+4(4)	Hotspot	155	5775	10.64	12.00	1.368	88.19	1.134	-0.17	0.128	0.199
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(4)	Hotspot	155	5775	10.64	12.00	1.368	88.19	1.134	0.04	0.292	0.453
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 5+4(4)	Hotspot	155	5775	10.64	12.00	1.368	88.19	1.134	-0.01	0.030	0.047
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 5+4(4)	Hotspot	155	5775	10.64	12.00	1.368	88.19	1.134	-0.08	0.247	0.383
51	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 5+4(4)	Hotspot	155	5775	10.64	12.00	1.368	88.19	1.134	0.03	0.401	0.622
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 5+4(4)	DBS	155	5775	7.85	9.00	1.303	88.19	1.134	0.11	0.066	0.098
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(4)	DBS	155	5775	7.85	9.00	1.303	88.19	1.134	-0.08	0.150	0.222
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 5+4(4)	DBS	155	5775	7.85	9.00	1.303	88.19	1.134	-0.17	0.015	0.022
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 5+4(4)	DBS	155	5775	7.85	9.00	1.303	88.19	1.134	-0.08	0.127	0.188
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 5+4(4)	DBS	155	5775	7.85	9.00	1.303	88.19	1.134	-0.04	0.206	0.304



16.3 Body Worn Accessory SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
	LTE Band 71	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	133297	680.5	22.92	24.00	1.282	-	-	-0.17	0.189	0.242
	LTE Band 71	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	ECI 3	133297	680.5	21.89	23.00	1.291	-	-	-0.01	0.168	0.217
52	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	133297	680.5	22.92	24.00	1.282	-	-	0.05	0.485	0.622
	LTE Band 71	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	133297	680.5	21.89	23.00	1.291	-	-	-0.11	0.448	0.578
	LTE Band 71	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	133297	680.5	22.11	23.00	1.227	-	-	-0.16	0.071	0.087
	LTE Band 71	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	133297	680.5	21.06	22.00	1.242	-	-	-0.18	0.062	0.077
	LTE Band 71	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	133297	680.5	22.11	23.00	1.227	-	-	-0.04	0.114	0.140
	LTE Band 71	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	133297	680.5	21.06	22.00	1.242	-	-	-0.07	0.100	0.124
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	23095	707.5	22.59	24.00	1.384	-	-	0.08	0.318	0.440
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 0	-	ECI 3	23095	707.5	21.55	23.00	1.396	-	-	0.01	0.258	0.360
53	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	23095	707.5	22.59	24.00	1.384	-	-	0.01	0.753	1.042
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 0	-	ECI 3	23095	707.5	21.55	23.00	1.396	-	-	0.03	0.705	0.984
	LTE Band 12	10M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	23095	707.5	21.52	23.00	1.406	-	-	-0.08	0.674	0.948
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	23095	707.5	21.85	23.00	1.303	-	-	-0.09	0.239	0.311
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 1	-	ECI 3	23095	707.5	20.83	22.00	1.309	-	-	-0.08	0.191	0.250
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	23095	707.5	21.85	23.00	1.303	-	-	-0.03	0.357	0.465
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 1	-	ECI 3	23095	707.5	20.83	22.00	1.309	-	-	0.13	0.275	0.360
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	23230	782	22.85	24.00	1.303	-	-	-0.12	0.520	0.678
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 0	-	ECI 3	23230	782	21.83	23.00	1.309	-	-	0.07	0.402	0.526
54	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	23230	782	22.85	24.00	1.303	-	-	0.02	0.980	1.277
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 0	-	ECI 3	23230	782	21.83	23.00	1.309	-	-	-0.02	0.908	1.189
	LTE Band 13	10M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	23230	782	21.75	23.00	1.334	-	-	-0.05	0.923	1.231
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	23230	782	22.85	24.00	1.303	-	-	0.09	0.952	1.241
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	23230	782	22.37	24.00	1.455	-	-	0.08	0.291	0.424
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 1	-	ECI 3	23230	782	21.32	23.00	1.472	-	-	0.01	0.222	0.327
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	23230	782	22.37	24.00	1.455	-	-	0.19	0.394	0.573
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 1	-	ECI 3	23230	782	21.32	23.00	1.472	-	-	0.03	0.317	0.467
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	-	ECI 3	136100	680.5	23.14	24.00	1.219	-	-	0.08	0.128	0.156
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	-	ECI 3	136100	680.5	23.10	24.00	1.230	-	-	-0.17	0.152	0.187
55	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	136100	680.5	23.14	24.00	1.219	-	-	0.06	0.437	0.533
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	136100	680.5	23.10	24.00	1.230	-	-	-0.03	0.387	0.476
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	136100	680.5	22.62	24.00	1.374	-	-	0.17	0.097	0.133
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	136100	680.5	22.58	24.00	1.387	-	-	-0.05	0.117	0.162
	FR1 n71	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	136100	680.5	22.62	24.00	1.374	-	-	0.01	0.174	0.239
	FR1 n71	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	136100	680.5	22.58	24.00	1.387	-	-	0.1	0.189	0.262
835MHz																					
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	-	ECI 3	189	836.4	25.94	27.50	1.432	-	-	-0.16	0.561	0.803
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	-	ECI 3	128	824.2	25.88	27.50	1.452	-	-	0.02	0.532	0.773
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	-	ECI 3	251	848.8	25.88	27.50	1.452	-	-	-0.03	0.544	0.790
56	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	189	836.4	25.94	27.50	1.432	-	-	0.09	0.594	0.851
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	128	824.2	25.88	27.50	1.452	-	-	0	0.578	0.839
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	251	848.8	25.88	27.50	1.452	-	-	-0.1	0.583	0.847
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	-	ECI 3	189	836.4	25.77	27.00	1.327	-	-	-0.06	0.263	0.349
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	189	836.4	25.77	27.00	1.327	-	-	0.15	0.333	0.442
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	ECI 3	4182	836.4	22.28	23.00	1.180	-	-	-0.11	0.469	0.554
57	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	4182	836.4	22.28	23.00	1.180	-	-	0.02	0.978	1.154
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	4132	826.4	22.21	23.00	1.199	-	-	-0.14	0.685	0.822
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	4233	846.6	22.12	23.00	1.225	-	-	-0.19	0.857	1.049
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	ECI 3	4182	836.4	21.74	23.00	1.337	-	-	0.03	0.372	0.497
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	4182	836.4	21.74	23.00	1.337	-	-	0.18	0.493	0.659



FCC SAR Test Report

Report No. : FA510906

	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	26865	831.5	22.51	24.00	1.409	-	-	-0.11	0.372	0.524
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	-	ECI 3	26865	831.5	21.48	23.00	1.419	-	-	-0.06	0.360	0.511
58	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	26865	831.5	22.51	24.00	1.409	-	-	0.08	0.900	1.268
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	-	ECI 3	26865	831.5	21.48	23.00	1.419	-	-	-0.15	0.781	1.108
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 0	-	ECI 3	26865	831.5	21.45	23.00	1.429	-	-	0.03	0.757	1.082
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	26865	831.5	22.51	24.00	1.409	-	-	0.05	0.831	1.171
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	26865	831.5	21.99	23.00	1.262	-	-	-0.08	0.244	0.308
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 1	-	ECI 3	26865	831.5	20.95	22.00	1.274	-	-	0.17	0.198	0.252
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	26865	831.5	21.99	23.00	1.262	-	-	0.18	0.512	0.646
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 1	-	ECI 3	26865	831.5	20.95	22.00	1.274	-	-	-0.08	0.342	0.436
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	-	ECI 3	166300	831.5	22.80	24.00	1.318	-	-	0.01	0.393	0.518
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	-	ECI 3	166300	831.5	22.77	24.00	1.327	-	-	-0.15	0.418	0.555
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	166300	831.5	22.80	24.00	1.318	-	-	0.19	0.862	1.136
59	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	166300	831.5	22.77	24.00	1.327	-	-	0.03	0.915	1.215
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	166300	831.5	21.73	23.00	1.340	-	-	0.07	0.842	1.128
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	Headset	ECI 3	166300	831.5	22.77	24.00	1.327	-	-	0.09	0.902	1.197
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	166300	831.5	22.47	24.00	1.422	-	-	-0.17	0.349	0.496
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	166300	831.5	22.41	24.00	1.442	-	-	-0.08	0.338	0.487
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	166300	831.5	22.47	24.00	1.422	-	-	0.05	0.489	0.696
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	166300	831.5	22.41	24.00	1.442	-	-	-0.04	0.480	0.692
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	1413	1732.6	22.27	23.30	1.268	-	-	-0.13	0.770	0.976
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	1312	1712.4	22.22	23.30	1.282	-	-	-0.13	0.748	0.959
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	1513	1752.6	22.18	23.30	1.294	-	-	0.06	0.639	0.827
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	1413	1732.6	22.27	23.30	1.268	-	-	-0.03	0.947	1.200
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	1312	1712.4	22.22	23.30	1.282	-	-	-0.04	0.993	1.273
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	1513	1752.6	22.18	23.30	1.294	-	-	0.08	0.805	1.042
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	Headset	ECI 3	1312	1712.4	22.22	23.30	1.282	-	-	0.09	0.971	1.245
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	13mm	Ant 2	-	ECI 4	1413	1732.6	22.27	24.00	1.489	-	-	0.05	0.415	0.618
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	16mm	Ant 2	-	ECI 4	1413	1732.6	22.27	24.00	1.489	-	-	0	0.457	0.681
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	ECI 3	1413	1732.6	17.26	18.50	1.330	-	-	-0.07	0.330	0.439
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	1413	1732.6	17.26	18.50	1.330	-	-	-0.12	0.590	0.785
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	1312	1712.4	17.23	18.50	1.340	-	-	0.03	0.562	0.753
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	1513	1752.6	17.14	18.50	1.368	-	-	0.02	0.644	0.881
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	13mm	Ant 1	-	ECI 4	1413	1732.6	21.14	22.00	1.219	-	-	0.07	0.250	0.305
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	16mm	Ant 1	-	ECI 4	1413	1732.6	21.14	22.00	1.219	-	-	0.15	0.463	0.564
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 9	-	ECI 3	1413	1732.6	22.33	23.00	1.167	-	-	-0.02	0.191	0.223
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 9	-	ECI 3	1413	1732.6	22.33	23.00	1.167	-	-	-0.13	0.261	0.305
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	ECI 3	1413	1732.6	17.74	18.70	1.247	-	-	0.15	0.477	0.595
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	1413	1732.6	17.74	18.70	1.247	-	-	-0.05	0.809	1.009
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	1312	1712.4	17.73	18.70	1.250	-	-	-0.08	0.628	0.785
60	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	1513	1752.6	17.62	18.70	1.282	-	-	0.06	1.010	1.295
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	Headset	ECI 3	1513	1752.6	17.62	18.70	1.282	-	-	-0.02	0.957	1.227
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	13mm	Ant 0	-	ECI 4	1413	1732.6	20.99	22.00	1.262	-	-	-0.05	0.340	0.429
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	16mm	Ant 0	-	ECI 4	1413	1732.6	20.99	22.00	1.262	-	-	-0.08	0.495	0.625
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	132322	1745	22.07	23.30	1.327	-	-	0.05	0.718	0.953
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	132072	1720	21.95	23.30	1.365	-	-	0.05	0.808	1.103
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	132572	1770	22.03	23.30	1.340	-	-	-0.03	0.648	0.868
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	132322	1745	22.03	23.30	1.340	-	-	-0.15	0.564	0.756
	LTE Band 66	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	ECI 3	132322	1745	21.96	23.30	1.361	-	-	0.16	0.566	0.771
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	132322	1745	22.07	23.30	1.327	-	-	0.13	0.834	1.107
61	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	132072	1720	21.95	23.30	1.365	-	-	-0.09	0.949	1.295
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	132572	1770	22.03	23.30	1.340	-	-	0.02	0.757	1.014
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	132322	1745	22.03	23.30	1.340	-	-	0.16	0.621	0.832
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	132072	1720	21.84	23.30	1.400	-	-	-0.03	0.737	1.031
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	132572	1770	21.80	23.30	1.413	-	-	0.07	0.575	0.812



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	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	ECI 3	132322	1745	21.96	23.30	1.361	-	-	0	0.605	0.824
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	ECI 3	132072	1720	21.95	23.30	1.365	-	-	0.01	0.921	1.257
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	132072	1720	21.95	23.30	1.365	-	-	-0.05	0.897	1.224
	LTE Band 66	20M	QPSK	1	0	-	Front	13mm	Ant 2	-	ECI 4	132322	1745	23.17	24.00	1.211	-	-	-0.08	0.324	0.392
	LTE Band 66	20M	QPSK	1	0	-	Back	16mm	Ant 2	-	ECI 4	132322	1745	23.17	24.00	1.211	-	-	-0.13	0.430	0.521
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	132322	1745	18.72	20.30	1.439	-	-	0.01	0.335	0.482
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	132322	1745	18.69	20.30	1.449	-	-	-0.04	0.263	0.381
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	132322	1745	18.72	20.30	1.439	-	-	0.1	0.612	0.881
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	132072	1720	18.69	20.30	1.449	-	-	-0.17	0.466	0.675
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	132572	1770	18.70	20.30	1.445	-	-	-0.04	0.236	0.341
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	132322	1745	18.69	20.30	1.449	-	-	-0.05	0.485	0.703
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	132322	1745	18.66	20.30	1.459	-	-	-0.01	0.488	0.712
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	132322	1745	18.72	20.30	1.439	-	-	-0.01	0.578	0.832
	LTE Band 66	20M	QPSK	1	0	-	Front	13mm	Ant 1	-	ECI 4	132322	1745	21.65	23.00	1.365	-	-	0.01	0.290	0.396
	LTE Band 66	20M	QPSK	1	0	-	Back	16mm	Ant 1	-	ECI 4	132322	1745	21.65	23.00	1.365	-	-	-0.11	0.433	0.591
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 9	-	ECI 3	132322	1745	22.19	23.70	1.416	-	-	-0.09	0.307	0.435
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 9	-	ECI 3	132322	1745	22.16	23.70	1.426	-	-	0.05	0.250	0.356
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	132322	1745	22.19	23.70	1.416	-	-	0.02	0.588	0.832
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	132072	1720	22.15	23.70	1.429	-	-	-0.13	0.263	0.376
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	132572	1770	22.16	23.70	1.426	-	-	0.01	0.625	0.891
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	132322	1745	22.16	23.70	1.426	-	-	0.06	0.338	0.482
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 9	-	ECI 3	132322	1745	22.14	23.70	1.432	-	-	-0.15	0.345	0.494
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	132572	1770	22.16	23.70	1.426	-	-	0.01	0.589	0.840
	LTE Band 66	20M	QPSK	1	0	-	Front	13mm	Ant 9	-	ECI 4	132322	1745	23.11	24.00	1.227	-	-	0.03	0.165	0.203
	LTE Band 66	20M	QPSK	1	0	-	Back	16mm	Ant 9	-	ECI 4	132322	1745	23.11	24.00	1.227	-	-	-0.05	0.118	0.145
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	132322	1745	17.34	18.40	1.276	-	-	0.11	0.650	0.830
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	132072	1720	17.32	18.40	1.282	-	-	-0.02	0.579	0.742
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	132572	1770	17.29	18.40	1.291	-	-	0.1	0.391	0.505
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	ECI 3	132322	1745	17.31	18.40	1.285	-	-	0.04	0.521	0.670
	LTE Band 66	20M	QPSK	100	0	-	Front	5mm	Ant 0	-	ECI 3	132322	1745	17.28	18.40	1.294	-	-	-0.11	0.532	0.689
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	132322	1745	17.34	18.40	1.276	-	-	0.08	1.010	1.289
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	132072	1720	17.32	18.40	1.282	-	-	-0.15	0.940	1.205
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	132572	1770	17.29	18.40	1.291	-	-	-0.06	0.642	0.829
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	132322	1745	17.31	18.40	1.285	-	-	-0.14	0.806	1.036
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	132072	1720	17.26	18.40	1.300	-	-	-0.19	0.779	1.013
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	132572	1770	17.24	18.40	1.306	-	-	0.01	0.513	0.670
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	ECI 3	132322	1745	17.28	18.40	1.294	-	-	0.06	0.822	1.064
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	132322	1745	17.34	18.40	1.276	-	-	0.02	0.927	1.183
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	132322	1745	17.34	18.40	1.276	-	-	0.1	0.968	1.236
	LTE Band 66	20M	QPSK	1	0	-	Front	13mm	Ant 0	-	ECI 4	132322	1745	21.32	22.50	1.312	-	-	0.14	0.343	0.450
	LTE Band 66	20M	QPSK	1	0	-	Back	16mm	Ant 0	-	ECI 4	132322	1745	21.32	22.50	1.312	-	-	-0.01	0.514	0.674
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	349000	1745	22.21	23.20	1.256	-	-	0.02	0.859	1.079
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	349000	1745	22.12	23.20	1.282	-	-	0.12	0.777	0.996
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	349000	1745	21.99	23.20	1.321	-	-	-0.16	0.637	0.842
62	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	349000	1745	22.21	23.20	1.256	-	-	0.01	1.020	1.281
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	349000	1745	22.12	23.20	1.282	-	-	0.07	0.906	1.162
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	349000	1745	21.99	23.20	1.321	-	-	-0.02	0.771	1.019
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	Headset	ECI 3	349000	1745	22.21	23.20	1.256	-	-	0.08	0.933	1.172
	FR1 n66 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	349000	1745	22.21	23.20	1.256	-	-	-0.17	0.978	1.228
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	13mm	Ant 2	-	ECI 4	349000	1745	23.15	24.00	1.216	-	-	-0.12	0.423	0.514
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	16mm	Ant 2	-	ECI 4	349000	1745	23.15	24.00	1.216	-	-	0.07	0.388	0.472
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	349000	1745	18.45	19.70	1.334	-	-	-0.05	0.350	0.467
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	349000	1745	18.43	19.70	1.340	-	-	-0.13	0.339	0.454
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	349000	1745	18.45	19.70	1.334	-	-	0.15	0.659	0.879



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	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	349000	1745	18.43	19.70	1.340	-	-	0.01	0.632	0.847
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	349000	1745	18.35	19.70	1.365	-	-	-0.16	0.530	0.723
	FR1 n66 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	349000	1745	18.45	19.70	1.334	-	-	0.04	0.623	0.831
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Front	13mm	Ant 1	-	ECI 4	349000	1745	22.21	23.00	1.199	-	-	0.09	0.258	0.309
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Back	16mm	Ant 1	-	ECI 4	349000	1745	22.21	23.00	1.199	-	-	0.04	0.506	0.607
1900MHz																					
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 2	-	ECI 3	661	1880	23.48	24.50	1.265	-	-	-0.03	0.342	0.433
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 2	-	ECI 3	661	1880	23.48	24.50	1.265	-	-	-0.03	0.383	0.484
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	-	ECI 3	661	1880	20.65	22.00	1.365	-	-	0.1	0.618	0.843
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	-	ECI 3	512	1850.2	20.62	22.00	1.374	-	-	-0.04	0.532	0.731
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	-	ECI 3	810	1909.8	20.61	22.00	1.377	-	-	-0.01	0.569	0.784
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	661	1880	20.65	22.00	1.365	-	-	0.03	0.640	0.873
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	512	1850.2	20.62	22.00	1.374	-	-	-0.11	0.629	0.864
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	810	1909.8	20.61	22.00	1.377	-	-	-0.06	0.629	0.866
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	13mm	Ant 1	-	ECI 4	661	1880	24.13	25.00	1.222	-	-	0.11	0.285	0.348
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	16mm	Ant 1	-	ECI 4	661	1880	24.13	25.00	1.222	-	-	-0.13	0.281	0.343
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 9	-	ECI 3	661	1880	23.87	25.00	1.297	-	-	-0.15	0.291	0.377
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 9	-	ECI 3	661	1880	23.87	25.00	1.297	-	-	-0.01	0.398	0.516
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	-	ECI 3	661	1880	21.86	23.00	1.300	-	-	0.02	0.714	0.928
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	-	ECI 3	512	1850.2	21.72	23.00	1.343	-	-	-0.16	0.506	0.679
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 0	-	ECI 3	810	1909.8	21.84	23.00	1.306	-	-	0.05	0.590	0.771
63	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	661	1880	21.86	23.00	1.300	-	-	-0.09	0.974	1.266
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	512	1850.2	21.72	23.00	1.343	-	-	0.17	0.757	1.016
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	810	1909.8	21.84	23.00	1.306	-	-	-0.15	0.869	1.135
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	Headset	ECI 3	661	1880	21.86	23.00	1.300	-	-	0.02	0.941	1.223
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Front	13mm	Ant 0	-	ECI 4	661	1880	25.52	26.50	1.253	-	-	0.12	0.347	0.435
	GSM1900	-	-	-	-	GPRS (2 Tx slots)	Back	16mm	Ant 0	-	ECI 4	661	1880	25.52	26.50	1.253	-	-	-0.11	0.305	0.382
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	9400	1880	22.32	23.50	1.312	-	-	0.03	0.785	1.030
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	9262	1852.4	22.29	23.50	1.321	-	-	-0.13	0.598	0.790
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	9538	1907.6	22.24	23.50	1.337	-	-	0.16	0.814	1.088
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	9400	1880	22.32	23.50	1.312	-	-	-0.15	0.887	1.164
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	9262	1852.4	22.29	23.50	1.321	-	-	-0.02	0.699	0.924
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	9538	1907.6	22.24	23.50	1.337	-	-	0.08	0.967	1.292
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	Headset	ECI 3	9538	1907.6	22.24	23.50	1.337	-	-	0.02	0.954	1.275
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	13mm	Ant 2	-	ECI 4	9400	1880	22.32	24.00	1.472	-	-	0.17	0.321	0.473
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	16mm	Ant 2	-	ECI 4	9400	1880	22.32	24.00	1.472	-	-	-0.16	0.299	0.440
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	ECI 3	9400	1880	15.86	16.90	1.271	-	-	0.14	0.376	0.478
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	9400	1880	15.86	16.90	1.271	-	-	0.07	0.658	0.836
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	9262	1852.4	15.84	16.90	1.276	-	-	-0.09	0.467	0.596
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	9538	1907.6	15.81	16.90	1.285	-	-	0.06	0.687	0.883
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	13mm	Ant 1	-	ECI 4	9400	1880	21.18	22.00	1.208	-	-	-0.17	0.115	0.139
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	16mm	Ant 1	-	ECI 4	9400	1880	21.18	22.00	1.208	-	-	0.11	0.476	0.575
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 9	-	ECI 3	9400	1880	19.86	21.00	1.300	-	-	-0.18	0.399	0.519
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 9	-	ECI 3	9400	1880	19.86	21.00	1.300	-	-	-0.08	0.574	0.746
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 9	-	ECI 3	9262	1852.4	19.84	21.00	1.306	-	-	-0.1	0.337	0.440
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 9	-	ECI 3	9538	1907.6	19.81	21.00	1.315	-	-	0.06	0.665	0.875
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	13mm	Ant 9	-	ECI 4	9400	1880	22.25	23.00	1.189	-	-	-0.05	0.273	0.324
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	16mm	Ant 9	-	ECI 4	9400	1880	22.25	23.00	1.189	-	-	-0.01	0.313	0.372
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	ECI 3	9400	1880	17.38	18.40	1.265	-	-	-0.01	0.754	0.954
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	ECI 3	9262	1852.4	17.21	18.40	1.315	-	-	-0.09	0.456	0.600
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	ECI 3	9538	1907.6	17.36	18.40	1.271	-	-	-0.06	0.819	1.041
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	9400	1880	17.38	18.40	1.265	-	-	-0.17	1.010	1.277
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	9262	1852.4	17.21	18.40	1.315	-	-	-0.01	0.665	0.875
64	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	9538	1907.6	17.36	18.40	1.271	-	-	0.06	1.020	1.296
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	Headset	ECI 3	9538	1907.6	17.36	18.40	1.271	-	-	0.01	0.988	1.255
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	13mm	Ant 0	-	ECI 4	9400	1880	21.00	22.00	1.259	-	-	-0.14	0.315	0.397



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	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	16mm	Ant 0	-	ECI 4	9400	1880	21.00	22.00	1.259	-	-	-0.15	0.515	0.648
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	26340	1880	22.98	24.00	1.265	-	-	-0.11	0.913	1.155
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	26140	1860	22.96	24.00	1.271	-	-	0.14	0.927	1.178
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	26590	1905	22.78	24.00	1.324	-	-	0.03	0.901	1.193
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	26340	1880	21.94	23.00	1.276	-	-	0.1	0.758	0.968
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	26140	1860	21.79	23.00	1.321	-	-	0.16	0.731	0.966
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	26590	1905	21.81	23.00	1.315	-	-	-0.06	0.771	1.014
	LTE Band 25	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	ECI 3	26340	1880	21.90	23.00	1.288	-	-	0.02	0.759	0.978
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	26340	1880	22.98	24.00	1.265	-	-	-0.16	0.987	1.248
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	26140	1860	22.96	24.00	1.271	-	-	0.09	0.997	1.267
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	26590	1905	22.78	24.00	1.324	-	-	-0.03	0.947	1.254
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	26340	1880	21.94	23.00	1.276	-	-	0.17	0.802	1.024
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	26140	1860	21.79	23.00	1.321	-	-	-0.15	0.777	1.027
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	26590	1905	21.81	23.00	1.315	-	-	0.16	0.809	1.064
	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	ECI 3	26340	1880	21.90	23.00	1.288	-	-	0.05	0.803	1.034
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	ECI 3	26140	1860	22.96	24.00	1.271	-	-	0.01	0.957	1.216
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	18900	1880	22.95	24.00	1.274	-	-	0.02	0.988	1.258
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	26340	1880	16.08	17.30	1.324	-	-	-0.06	0.327	0.433
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	26340	1880	16.05	17.30	1.334	-	-	-0.11	0.262	0.349
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	26340	1880	16.08	17.30	1.324	-	-	-0.06	0.612	0.810
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	26140	1860	16.04	17.30	1.337	-	-	0.03	0.663	0.886
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	26590	1905	16.06	17.30	1.330	-	-	0.16	0.619	0.824
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	26340	1880	16.05	17.30	1.334	-	-	0.01	0.504	0.672
	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	26340	1880	16.01	17.30	1.346	-	-	0.12	0.508	0.684
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	18900	1880	16.04	17.30	1.337	-	-	-0.08	0.542	0.724
	LTE Band 25	20M	QPSK	1	0	-	Front	13mm	Ant 1	-	ECI 4	26340	1880	21.62	23.00	1.374	-	-	-0.12	0.214	0.294
	LTE Band 25	20M	QPSK	1	0	-	Back	16mm	Ant 1	-	ECI 4	26340	1880	21.62	23.00	1.374	-	-	-0.17	0.419	0.576
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 9	-	ECI 3	26340	1880	19.54	20.80	1.337	-	-	0.07	0.312	0.417
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 9	-	ECI 3	26340	1880	19.50	20.80	1.349	-	-	-0.06	0.251	0.339
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	26340	1880	19.54	20.80	1.337	-	-	-0.12	0.626	0.837
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	26140	1860	19.51	20.80	1.346	-	-	0.02	0.656	0.883
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	26590	1905	19.48	20.80	1.355	-	-	0.02	0.546	0.740
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	26340	1880	19.50	20.80	1.349	-	-	0.12	0.340	0.459
	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 9	-	ECI 3	26340	1880	19.46	20.80	1.361	-	-	0	0.343	0.467
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	18900	1880	19.49	20.80	1.352	-	-	0.05	0.621	0.840
	LTE Band 25	20M	QPSK	1	0	-	Front	13mm	Ant 9	-	ECI 4	26340	1880	22.94	24.00	1.276	-	-	0.08	0.285	0.364
	LTE Band 25	20M	QPSK	1	0	-	Back	16mm	Ant 9	-	ECI 4	26340	1880	22.94	24.00	1.276	-	-	0.01	0.224	0.286
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	26340	1880	17.22	18.40	1.312	-	-	0.05	0.611	0.802
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	26140	1860	17.14	18.40	1.337	-	-	-0.03	0.690	0.922
	LTE Band 25	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	26590	1905	17.16	18.40	1.330	-	-	-0.15	0.673	0.895
	LTE Band 25	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	ECI 3	26340	1880	17.19	18.40	1.321	-	-	0.02	0.501	0.662
	LTE Band 25	20M	QPSK	100	0	-	Front	5mm	Ant 0	-	ECI 3	26340	1880	17.17	18.40	1.327	-	-	0.13	0.507	0.673
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	26340	1880	17.22	18.40	1.312	-	-	-0.18	0.849	1.114
65	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	26140	1860	17.14	18.40	1.337	-	-	-0.06	0.953	1.274
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	26590	1905	17.16	18.40	1.330	-	-	0.16	0.901	1.199
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	26340	1880	17.19	18.40	1.321	-	-	-0.03	0.683	0.902
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	26140	1860	17.06	18.40	1.361	-	-	0.07	0.748	1.018
	LTE Band 25	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	26590	1905	17.01	18.40	1.377	-	-	0	0.729	1.004
	LTE Band 25	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	ECI 3	26340	1880	17.17	18.40	1.327	-	-	0.01	0.693	0.920
	LTE Band 25	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	26140	1860	17.14	18.40	1.337	-	-	0.02	0.926	1.238
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	18900	1880	17.19	18.40	1.321	-	-	0.06	0.888	1.173
	LTE Band 25	20M	QPSK	1	0	-	Front	13mm	Ant 0	-	ECI 4	26340	1880	21.39	22.50	1.291	-	-	0.02	0.315	0.407
	LTE Band 25	20M	QPSK	1	0	-	Back	16mm	Ant 0	-	ECI 4	26340	1880	21.39	22.50	1.291	-	-	-0.11	0.452	0.584
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	376000	1880	22.98	24.00	1.265	-	-	-0.1	0.929	1.175
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	376000	1880	22.93	24.00	1.279	-	-	0.05	0.933	1.194



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	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	376000	1880	21.98	23.00	1.265	-	-	0	0.855	1.081
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	376000	1880	22.98	24.00	1.265	-	-	0.07	1.090	1.379
66	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	376000	1880	22.93	24.00	1.279	-	-	-0.05	1.110	1.420
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	376000	1880	21.98	23.00	1.265	-	-	0.15	0.905	1.145
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	Headset	ECI 3	376000	1880	22.93	24.00	1.279	-	-	0.01	1.030	1.318
	FR1 n2 Other PA	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	376000	1880	22.93	24.00	1.279	-	-	-0.09	0.965	1.235
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	376000	1880	16.21	17.50	1.346	-	-	-0.05	0.356	0.479
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	376000	1880	16.19	17.50	1.352	-	-	-0.08	0.341	0.461
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	376000	1880	16.21	17.50	1.346	-	-	-0.13	0.627	0.844
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	376000	1880	16.19	17.50	1.352	-	-	0.08	0.650	0.879
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	376000	1880	16.14	17.50	1.368	-	-	-0.11	0.530	0.725
	FR1 n2 Other PA	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	376000	1880	16.19	17.50	1.352	-	-	-0.08	0.612	0.827
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	13mm	Ant 1	-	ECI 4	376000	1880	22.16	23.00	1.213	-	-	-0.01	0.282	0.342
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	16mm	Ant 1	-	ECI 4	376000	1880	22.16	23.00	1.213	-	-	0.09	0.248	0.301
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	16mm	Ant 1	-	ECI 4	376000	1880	22.14	23.00	1.219	-	-	0.02	0.429	0.523
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	21100	2535	23.14	24.00	1.219	-	-	-0.16	0.957	1.167
	LTE Band 7C	20M	QPSK	1	99	-	Front	5mm	Ant 2	-	ECI 3	21100+21298	2535+2554.8	23.06	24.00	1.242	-	-	0.01	0.929	1.153
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	20850	2510	23.06	24.00	1.242	-	-	0.03	0.891	1.106
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	21350	2560	22.92	24.00	1.282	-	-	-0.05	0.862	1.105
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	21100	2535	21.97	23.00	1.268	-	-	0.14	0.767	0.972
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	20850	2510	21.89	23.00	1.291	-	-	-0.01	0.700	0.904
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	21350	2560	21.92	23.00	1.282	-	-	-0.12	0.675	0.866
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	ECI 3	21100	2535	21.93	23.00	1.279	-	-	0.07	0.760	0.972
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	21100	2535	23.14	24.00	1.219	-	-	0.09	0.752	0.917
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	20850	2510	23.06	24.00	1.242	-	-	0.04	0.687	0.853
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	21350	2560	22.92	24.00	1.282	-	-	0.11	0.702	0.900
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	21100	2535	21.97	23.00	1.268	-	-	-0.13	0.598	0.758
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	ECI 3	21100	2535	21.93	23.00	1.279	-	-	0.17	0.593	0.759
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	21100	2535	23.14	24.00	1.219	-	-	0.13	0.914	1.114
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	21100	2535	17.66	19.00	1.361	-	-	-0.16	0.292	0.398
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	21100	2535	17.63	19.00	1.371	-	-	-0.05	0.230	0.315
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	21100	2535	17.66	19.00	1.361	-	-	-0.12	0.636	0.866
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	20850	2510	17.64	19.00	1.368	-	-	0.04	0.652	0.892
	LTE Band 7C	20M	QPSK	1	99	-	Back	5mm	Ant 1	-	ECI 3	20850+21048	2510+2529.8	17.48	19.00	1.419	-	-	0.09	0.624	0.885
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	21350	2560	17.61	19.00	1.377	-	-	0.08	0.606	0.835
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	21100	2535	17.63	19.00	1.371	-	-	0.01	0.505	0.692
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	21100	2535	17.61	19.00	1.377	-	-	-0.01	0.497	0.684
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	20850	2510	17.64	19.00	1.368	-	-	0.12	0.625	0.855
	LTE Band 7	20M	QPSK	1	0	-	Front	13mm	Ant 1	-	ECI 4	21100	2535	21.85	23.00	1.303	-	-	0.1	0.167	0.218
	LTE Band 7	20M	QPSK	1	0	-	Back	16mm	Ant 1	-	ECI 4	21100	2535	21.85	23.00	1.303	-	-	-0.04	0.457	0.596
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 9	-	ECI 3	21100	2535	19.21	20.20	1.256	-	-	0.09	0.564	0.708
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 9	-	ECI 3	21100	2535	19.19	20.20	1.262	-	-	0.15	0.410	0.517
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	21100	2535	19.21	20.20	1.256	-	-	0.07	0.696	0.874
	LTE Band 7C	20M	QPSK	1	99	-	Back	5mm	Ant 9	-	ECI 3	21100+21298	2535+2554.8	19.15	20.20	1.274	-	-	0.02	0.681	0.867
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	20850	2510	19.16	20.20	1.271	-	-	-0.18	0.674	0.856
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	21350	2560	19.18	20.20	1.265	-	-	-0.03	0.684	0.865
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	21100	2535	19.19	20.20	1.262	-	-	-0.04	0.551	0.695
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 9	-	ECI 3	21100	2535	19.16	20.20	1.271	-	-	0.11	0.542	0.689
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	21100	2535	19.21	20.20	1.256	-	-	0.03	0.674	0.847
	LTE Band 7	20M	QPSK	1	0	-	Front	13mm	Ant 9	-	ECI 4	21100	2535	23.24	24.00	1.191	-	-	0.15	0.284	0.338
	LTE Band 7	20M	QPSK	1	0	-	Back	16mm	Ant 9	-	ECI 4	21100	2535	23.24	24.00	1.191	-	-	0.09	0.232	0.276
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	21100	2535	17.97	19.10	1.297	-	-	0.15	0.443	0.575
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	ECI 3	21100	2535	17.95	19.10	1.303	-	-	-0.05	0.352	0.459



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	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	21100	2535	17.97	19.10	1.297	-	-	0.05	0.879	1.140
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	20850	2510	17.84	19.10	1.337	-	-	-0.03	0.938	1.254
67	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	21350	2560	17.91	19.10	1.315	-	-	0.05	0.985	1.295
	LTE Band 7C	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	21350+ 21152	2560+ 2540.2	17.68	19.10	1.387	-	-	0.01	0.858	1.190
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	21100	2535	17.95	19.10	1.303	-	-	0.02	0.706	0.920
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	20850	2510	17.90	19.10	1.318	-	-	0.07	0.730	0.962
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	21350	2560	17.87	19.10	1.327	-	-	0.16	0.781	1.037
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	ECI 3	21100	2535	17.93	19.10	1.309	-	-	0.13	0.718	0.940
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	21350	2560	17.91	19.10	1.315	-	-	0.04	0.971	1.277
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	21350	2560	17.91	19.10	1.315	-	-	0.18	0.924	1.215
	LTE Band 7	20M	QPSK	1	0	-	Front	13mm	Ant 0	-	ECI 4	21100	2535	21.23	22.50	1.340	-	-	-0.16	0.337	0.451
	LTE Band 7	20M	QPSK	1	0	-	Back	16mm	Ant 0	-	ECI 4	21100	2535	21.23	22.50	1.340	-	-	0.05	0.359	0.481
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	40620	2593	23.05	24.00	1.245	62.9	1.006	0.07	0.659	0.825
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	39750	2506	23.01	24.00	1.256	62.9	1.006	-0.03	0.717	0.906
	LTE Band 41C	20M	QPSK	1	99	-	Front	5mm	Ant 2	-	ECI 3	39750+ 39948	2506+ 2525.8	22.77	24.00	1.327	62.9	1.006	0.05	0.671	0.896
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	40185	2549.5	22.97	24.00	1.268	62.9	1.006	0.09	0.674	0.860
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	41055	2636.5	22.88	24.00	1.294	62.9	1.006	-0.08	0.571	0.743
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	41490	2680	22.79	24.00	1.321	62.9	1.006	-0.05	0.574	0.763
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	40620	2593	22.09	23.00	1.233	62.9	1.006	-0.03	0.477	0.592
	LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	ECI 3	40620	2593	22.00	23.00	1.259	62.9	1.006	-0.15	0.462	0.585
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	40620	2593	23.05	24.00	1.245	62.9	1.006	-0.12	0.475	0.595
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	40620	2593	22.09	23.00	1.233	62.9	1.006	0	0.405	0.502
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	39750	2506	26.06	27.00	1.242	42.9	1.009	0.08	0.951	1.191
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	40620	2593	19.84	20.80	1.247	62.9	1.006	0	0.316	0.397
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	40620	2593	19.81	20.80	1.256	62.9	1.006	0.06	0.251	0.317
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	19.84	20.80	1.247	62.9	1.006	0.07	0.655	0.822
	LTE Band 41C	20M	QPSK	1	99	-	Back	5mm	Ant 1	-	ECI 3	40620+ 40818	2593+ 2612.8	19.71	20.80	1.285	62.9	1.006	0.09	0.628	0.812
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	39750	2506	19.77	20.80	1.268	62.9	1.006	0	0.602	0.768
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	40185	2549.5	19.71	20.80	1.285	62.9	1.006	-0.13	0.613	0.793
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	41055	2636.5	19.79	20.80	1.262	62.9	1.006	-0.1	0.587	0.745
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	41490	2680	19.74	20.80	1.276	62.9	1.006	-0.07	0.615	0.790
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	19.81	20.80	1.256	62.9	1.006	-0.1	0.621	0.785
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	39750	2506	19.75	20.80	1.274	62.9	1.006	0.18	0.602	0.771
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	40185	2549.5	19.74	20.80	1.276	62.9	1.006	0.12	0.583	0.749
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	41055	2636.5	19.76	20.80	1.271	62.9	1.006	0.07	0.614	0.785
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	41490	2680	19.68	20.80	1.294	62.9	1.006	0.15	0.588	0.766
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	19.77	20.80	1.268	62.9	1.006	0.11	0.621	0.792
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	21.50	22.40	1.230	42.9	1.009	-0.1	0.707	0.878
	LTE Band 41	20M	QPSK	1	0	-	Front	13mm	Ant 1	-	ECI 4	40620	2593	21.99	23.00	1.262	62.9	1.006	0.08	0.217	0.275
	LTE Band 41	20M	QPSK	1	0	-	Back	16mm	Ant 1	-	ECI 4	40620	2593	21.99	23.00	1.262	62.9	1.006	-0.18	0.153	0.194
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Front	13mm	Ant 1	-	ECI 4	40620	2593	24.87	26.00	1.297	42.9	1.009	-0.03	0.280	0.366
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 9	-	ECI 3	40620	2593	20.26	21.30	1.271	62.9	1.006	-0.11	0.461	0.589
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 9	-	ECI 3	40620	2593	20.24	21.30	1.276	62.9	1.006	0.15	0.372	0.478
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	40620	2593	20.26	21.30	1.271	62.9	1.006	0.05	0.653	0.835
	LTE Band 41C	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	40620+ 40818	2593+ 2612.8	20.23	21.30	1.279	62.9	1.006	0.03	0.638	0.821
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	39750	2506	20.24	21.30	1.276	62.9	1.006	-0.17	0.611	0.785
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	40185	2549.5	20.21	21.30	1.285	62.9	1.006	0.01	0.624	0.807
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	41055	2636.5	20.20	21.30	1.288	62.9	1.006	0.1	0.592	0.767
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	41490	2680	20.17	21.30	1.297	62.9	1.006	0.11	0.608	0.793
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	40620	2593	20.24	21.30	1.276	62.9	1.006	0.07	0.616	0.791
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	39750	2506	20.07	21.30	1.327	62.9	1.006	0.14	0.604	0.807
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	40185	2549.5	20.09	21.30	1.321	62.9	1.006	-0.03	0.592	0.787
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	41055	2636.5	20.07	21.30	1.327	62.9	1.006	-0.14	0.618	0.825
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	41490	2680	20.08	21.30	1.324	62.9	1.006	0.17	0.583	0.777



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	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 9	-	ECI 3	40620	2593	20.21	21.30	1.285	62.9	1.006	-0.07	0.615	0.795
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	40620	2593	21.96	22.90	1.242	42.9	1.009	0.01	0.701	0.878
	LTE Band 41	20M	QPSK	1	0	-	Front	13mm	Ant 9	-	ECI 4	40620	2593	23.32	24.00	1.169	62.9	1.006	-0.04	0.167	0.196
	LTE Band 41	20M	QPSK	1	0	-	Back	16mm	Ant 9	-	ECI 4	40620	2593	23.32	24.00	1.169	62.9	1.006	-0.09	0.104	0.122
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Front	13mm	Ant 9	-	ECI 4	40620	2593	26.29	27.00	1.178	42.9	1.009	0.18	0.218	0.259
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	40620	2593	20.53	21.60	1.279	62.9	1.006	-0.03	0.351	0.452
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	ECI 3	40620	2593	20.51	21.60	1.285	62.9	1.006	-0.06	0.276	0.357
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	40620	2593	20.53	21.60	1.279	62.9	1.006	-0.09	0.835	1.075
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	39750	2506	20.48	21.60	1.294	62.9	1.006	-0.17	0.902	1.174
	LTE Band 41C	20M	QPSK	1	99	-	Back	5mm	Ant 0	-	ECI 3	39750+39948	2506+2525.8	20.26	21.60	1.361	62.9	1.006	0.05	0.849	1.163
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	40185	2549.5	20.50	21.60	1.288	62.9	1.006	-0.1	0.750	0.972
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	41055	2636.5	20.44	21.60	1.306	62.9	1.006	0.18	0.796	1.046
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	41490	2680	20.49	21.60	1.291	62.9	1.006	-0.17	0.868	1.128
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	40620	2593	20.51	21.60	1.285	62.9	1.006	-0.04	0.663	0.857
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	39750	2506	20.31	21.60	1.346	62.9	1.006	-0.05	0.697	0.944
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	40185	2549.5	20.27	21.60	1.358	62.9	1.006	0	0.574	0.784
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	41055	2636.5	20.32	21.60	1.343	62.9	1.006	-0.13	0.646	0.873
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	41490	2680	20.29	21.60	1.352	62.9	1.006	-0.01	0.690	0.939
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	ECI 3	40620	2593	20.48	21.60	1.294	62.9	1.006	-0.09	0.649	0.845
68	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	39750	2506	22.15	23.20	1.274	42.9	1.009	0.12	0.988	1.270
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	39750	2506	22.15	23.20	1.274	42.9	1.009	0.02	0.974	1.252
	LTE Band 41	20M	QPSK	1	0	-	Front	13mm	Ant 0	-	ECI 4	40620	2593	21.69	22.50	1.205	62.9	1.006	0.11	0.134	0.162
	LTE Band 41	20M	QPSK	1	0	-	Back	16mm	Ant 0	-	ECI 4	40620	2593	21.69	22.50	1.205	62.9	1.006	0.07	0.194	0.235
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	16mm	Ant 0	-	ECI 4	40620	2593	24.55	25.50	1.245	42.9	1.009	-0.03	0.267	0.335
69	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	507000	2535	23.08	24.00	1.236	-	-	-0.03	1.030	1.273
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	507000	2535	23.03	24.00	1.250	-	-	0.05	1.010	1.263
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	507000	2535	22.06	23.00	1.242	-	-	0.02	0.781	0.970
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	507000	2535	23.08	24.00	1.236	-	-	-0.13	0.960	1.187
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	507000	2535	23.03	24.00	1.250	-	-	0.17	0.879	1.099
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	507000	2535	22.06	23.00	1.242	-	-	0.06	0.685	0.851
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	Headset	ECI 3	507000	2535	23.08	24.00	1.236	-	-	0.01	0.963	1.190
	FR1 n7 Other PA	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	507000	2535	23.08	24.00	1.236	-	-	0.16	0.954	1.179
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	507000	2535	18.09	19.40	1.352	-	-	0	0.293	0.396
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	507000	2535	18.08	19.40	1.355	-	-	-0.04	0.288	0.390
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	18.09	19.40	1.352	-	-	0.11	0.643	0.869
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	18.08	19.40	1.355	-	-	-0.14	0.653	0.885
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	17.98	19.40	1.387	-	-	0.1	0.495	0.686
	FR1 n7 Other PA	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	18.08	19.40	1.355	-	-	-0.1	0.612	0.829
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	13mm	Ant 1	-	ECI 4	507000	2535	22.25	23.00	1.189	-	-	0.09	0.262	0.311
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	16mm	Ant 1	-	ECI 4	507000	2535	22.25	23.00	1.189	-	-	-0.08	0.483	0.574
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	16mm	Ant 1	-	ECI 4	507000	2535	22.22	23.00	1.197	-	-	0.02	0.469	0.561
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	ECI 3	518598	2592.99	23.18	24.00	1.208	-	-	-0.14	0.857	1.035
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	ECI 3	518598	2592.99	23.15	24.00	1.216	-	-	0.04	0.794	0.966
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 2	-	ECI 3	518598	2592.99	22.21	23.00	1.199	-	-	0.13	0.807	0.968
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 2	-	ECI 3	518598	2592.99	23.18	24.00	1.208	-	-	-0.18	0.740	0.894
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	-	ECI 3	518598	2592.99	23.15	24.00	1.216	-	-	-0.11	0.707	0.860
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	ECI 3	518598	2592.99	22.21	23.00	1.199	-	-	-0.16	0.591	0.709
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 2	-	ECI 3	518598	2592.99	23.18	24.00	1.208	-	-	0.07	0.758	0.916
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 1	-	ECI 3	518598	2592.99	18.42	19.50	1.282	-	-	-0.15	0.318	0.408
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 1	-	ECI 3	518598	2592.99	18.46	19.50	1.271	-	-	-0.06	0.290	0.368
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	518598	2592.99	18.42	19.50	1.282	-	-	0.04	0.696	0.893
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	518598	2592.99	18.46	19.50	1.271	-	-	0.01	0.638	0.811
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	518598	2592.99	18.37	19.50	1.297	-	-	0.06	0.586	0.760
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	518598	2592.99	18.42	19.50	1.282	-	-	0.18	0.635	0.814



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	Other PA																				
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 1	-	ECI 4	518598	2592.99	23.45	24.00	1.135	-	-	-0.05	0.282	0.320
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	16mm	Ant 1	-	ECI 4	518598	2592.99	23.45	24.00	1.135	-	-	-0.03	0.548	0.622
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 9	-	ECI 3	518598	2592.99	18.26	19.30	1.271	-	-	0.02	0.479	0.609
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 9	-	ECI 3	518598	2592.99	18.24	19.30	1.276	-	-	0.12	0.430	0.549
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 9	-	ECI 3	518598	2592.99	18.26	19.30	1.271	-	-	0.08	0.699	0.888
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 9	-	ECI 3	518598	2592.99	18.24	19.30	1.276	-	-	0.07	0.585	0.747
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 9	-	ECI 3	518598	2592.99	18.12	19.30	1.312	-	-	-0.02	0.619	0.812
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 9	-	ECI 3	518598	2592.99	18.26	19.30	1.271	-	-	-0.1	0.664	0.844
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 9	-	ECI 4	518598	2592.99	23.71	24.00	1.069	-	-	0.17	0.150	0.160
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	16mm	Ant 9	-	ECI 4	518598	2592.99	23.71	24.00	1.069	-	-	-0.14	0.274	0.293
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 0	-	ECI 3	518598	2592.99	18.32	19.30	1.253	-	-	-0.06	0.530	0.664
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 0	-	ECI 3	518598	2592.99	18.28	19.30	1.265	-	-	-0.15	0.383	0.484
70	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	-	ECI 3	518598	2592.99	18.32	19.30	1.253	-	-	0.04	1.020	1.278
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	-	ECI 3	518598	2592.99	18.28	19.30	1.265	-	-	-0.03	0.814	1.029
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 0	-	ECI 3	518598	2592.99	18.26	19.30	1.271	-	-	0.17	0.797	1.013
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	Headset	ECI 3	518598	2592.99	18.32	19.30	1.253	-	-	0.02	0.986	1.236
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	-	ECI 3	518598	2592.99	18.32	19.30	1.253	-	-	0.01	0.948	1.188
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 0	-	ECI 4	518598	2592.99	22.77	24.00	1.327	-	-	0.06	0.378	0.502
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	16mm	Ant 0	-	ECI 4	518598	2592.99	22.77	24.00	1.327	-	-	-0.06	0.471	0.625
3500MHz																					
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 7	-	ECI 3	42590	3500	19.14	20.60	1.400	62.9	1.006	-0.05	0.297	0.418
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 7	-	ECI 3	42590	3500	19.11	20.60	1.409	62.9	1.006	0.16	0.291	0.413
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	ECI 3	42590	3500	19.14	20.60	1.400	62.9	1.006	-0.04	0.606	0.853
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	ECI 3	42190	3460	19.08	20.60	1.419	62.9	1.006	-0.01	0.579	0.827
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	ECI 3	42990	3540	19.09	20.60	1.416	62.9	1.006	-0.06	0.622	0.886
	LTE Band 42C	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	ECI 3	42990+ 42792	3540+ 3520.2	18.91	20.60	1.476	62.9	1.006	0.02	0.588	0.873
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 7	-	ECI 3	42590	3500	19.11	20.60	1.409	62.9	1.006	-0.11	0.557	0.790
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 7	-	ECI 3	42190	3460	18.93	20.60	1.469	62.9	1.006	-0.06	0.488	0.721
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 7	-	ECI 3	42990	3540	18.97	20.60	1.455	62.9	1.006	-0.06	0.592	0.867
	LTE Band 42	20M	QPSK	100	0	-	Back	5mm	Ant 7	-	ECI 3	42590	3500	19.06	20.60	1.426	62.9	1.006	0.03	0.563	0.807
	LTE Band 42	20M	QPSK	1	0	-	Front	13mm	Ant 7	-	ECI 4	42590	3500	22.86	24.00	1.300	62.9	1.006	-0.15	0.201	0.263
	LTE Band 42	20M	QPSK	1	0	-	Back	16mm	Ant 7	-	ECI 4	42590	3500	22.86	24.00	1.300	62.9	1.006	-0.12	0.306	0.400
	LTE Band 42	20M	QPSK	50	0	-	Back	16mm	Ant 7	-	ECI 4	42590	3500	21.96	23.00	1.271	62.9	1.006	0.09	0.285	0.364
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 4	-	ECI 3	42590	3500	19.22	20.40	1.312	62.9	1.006	-0.13	0.322	0.425
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 4	-	ECI 3	42590	3500	19.20	20.40	1.318	62.9	1.006	-0.02	0.263	0.349
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	42590	3500	19.22	20.40	1.312	62.9	1.006	0.14	0.630	0.832
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	42190	3460	19.19	20.40	1.321	62.9	1.006	0.1	0.621	0.825
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	42990	3540	19.21	20.40	1.315	62.9	1.006	-0.09	0.663	0.877
	LTE Band 42C	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	42990+ 42792	3540+ 3520.2	18.97	20.40	1.390	62.9	1.006	0.02	0.618	0.864
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	42590	3500	19.20	20.40	1.318	62.9	1.006	0.07	0.594	0.788
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	42190	3460	19.18	20.40	1.324	62.9	1.006	-0.09	0.555	0.739
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	42990	3540	19.16	20.40	1.330	62.9	1.006	0.08	0.651	0.871
	LTE Band 42	20M	QPSK	100	0	-	Back	5mm	Ant 4	-	ECI 3	42590	3500	19.16	20.40	1.330	62.9	1.006	-0.07	0.599	0.802
	LTE Band 42	20M	QPSK	1	0	-	Front	13mm	Ant 4	-	ECI 4	42590	3500	20.13	21.00	1.222	62.9	1.006	-0.16	0.149	0.183
	LTE Band 42	20M	QPSK	1	0	-	Back	16mm	Ant 4	-	ECI 4	42590	3500	20.13	21.00	1.222	62.9	1.006	-0.03	0.169	0.208
	LTE Band 42	20M	QPSK	50	0	-	Back	16mm	Ant 4	-	ECI 4	42590	3500	19.18	20.00	1.208	62.9	1.006	0.08	0.127	0.154
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 8	-	ECI 3	42590	3500	22.01	23.00	1.256	62.9	1.006	0.11	0.481	0.608
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 8	-	ECI 3	42190	3460	21.96	23.00	1.271	62.9	1.006	-0.08	0.363	0.464
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 8	-	ECI 3	42990	3540	21.88	23.00	1.294	62.9	1.006	-0.1	0.464	0.604
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 8	-	ECI 3	42590	3500	21.09	22.00	1.233	62.9	1.006	-0.01	0.372	0.461
	LTE Band 42	20M	QPSK	100	0	-	Front	5mm	Ant 8	-	ECI 3	42590	3500	21.07	22.00	1.239	62.9	1.006	-0.09	0.410	0.511
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 8	-	ECI 3	42590	3500	22.01	23.00	1.256	62.9	1.006	-0.06	0.654	0.826
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 8	-	ECI 3	42190	3460	21.96	23.00	1.271	62.9	1.006	-0.17	0.629	0.804
71	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 8	-	ECI 3	42990	3540	21.88	23.00	1.294	62.9	1.006	-0.01	0.681	0.887



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	LTE Band 42C	20M	QPSK	1	0	-	Back	5mm	Ant 8	-	ECI 3	42990+ 42792	3540+ 3520.2	21.82	23.00	1.312	62.9	1.006	0.09	0.647	0.854
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 8	-	ECI 3	42590	3500	21.09	22.00	1.233	62.9	1.006	-0.11	0.572	0.710
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 8	-	ECI 3	42190	3460	20.88	22.00	1.294	62.9	1.006	0.14	0.533	0.694
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 8	-	ECI 3	42990	3540	21.01	22.00	1.256	62.9	1.006	-0.07	0.675	0.853
	LTE Band 42	20M	QPSK	100	0	-	Back	5mm	Ant 8	-	ECI 3	42590	3500	21.07	22.00	1.239	62.9	1.006	0.1	0.578	0.720
	LTE Band 42	20M	QPSK	1	0	-	Front	5mm	Ant 10	-	ECI 3	42590	3500	17.03	17.90	1.222	62.9	1.006	0.16	0.022	0.027
	LTE Band 42	20M	QPSK	50	0	-	Front	5mm	Ant 10	-	ECI 3	42590	3500	17.01	17.90	1.227	62.9	1.006	-0.06	0.020	0.025
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 10	-	ECI 3	42590	3500	17.03	17.90	1.222	62.9	1.006	0.02	0.666	0.819
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 10	-	ECI 3	42190	3460	16.98	17.90	1.236	62.9	1.006	-0.16	0.631	0.785
	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 10	-	ECI 3	42990	3540	16.97	17.90	1.239	62.9	1.006	0.01	0.688	0.857
	LTE Band 42C	20M	QPSK	1	0	-	Back	5mm	Ant 10	-	ECI 3	42990+ 42792	3540+ 3520.2	16.81	17.90	1.285	62.9	1.006	0.08	0.644	0.833
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 10	-	ECI 3	42590	3500	17.01	17.90	1.227	62.9	1.006	-0.03	0.647	0.799
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 10	-	ECI 3	42190	3460	16.98	17.90	1.236	62.9	1.006	0.17	0.641	0.797
	LTE Band 42	20M	QPSK	50	0	-	Back	5mm	Ant 10	-	ECI 3	42990	3540	16.82	17.90	1.282	62.9	1.006	-0.15	0.651	0.840
	LTE Band 42	20M	QPSK	100	0	-	Back	5mm	Ant 10	-	ECI 3	42590	3500	17.00	17.90	1.230	62.9	1.006	0.16	0.629	0.778
	LTE Band 42	20M	QPSK	1	0	-	Front	13mm	Ant 10	-	ECI 4	42590	3500	21.33	22.50	1.309	62.9	1.006	0.17	0.012	0.016
	LTE Band 42	20M	QPSK	1	0	-	Back	16mm	Ant 10	-	ECI 4	42590	3500	21.33	22.50	1.309	62.9	1.006	0.02	0.466	0.614
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	-	ECI 3	656000	3840	16.86	17.80	1.242	-	-	0.05	0.372	0.462
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	-	ECI 3	656000	3840	16.80	17.80	1.259	-	-	-0.06	0.363	0.457
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	16.86	17.80	1.242	-	-	-0.04	0.696	0.864
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	16.80	17.80	1.259	-	-	-0.11	0.675	0.850
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	16.50	17.80	1.349	-	-	0.19	0.372	0.502
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	19.63	20.80	1.309	50	1.000	-0.14	0.656	0.859
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 7	-	ECI 4	656000	3840	23.75	24.50	1.189	-	-	0	0.212	0.252
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	16mm	Ant 7	-	ECI 4	656000	3840	23.75	24.50	1.189	-	-	0.18	0.469	0.557
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	13mm	Ant 7	-	ECI 4	656000	3840	26.58	27.50	1.236	50	1.000	-0.11	0.474	0.586
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	-	ECI 3	656000	3840	18.76	19.80	1.271	-	-	-0.18	0.227	0.288
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	-	ECI 3	656000	3840	18.75	19.80	1.274	-	-	-0.06	0.203	0.259
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	656000	3840	18.76	19.80	1.271	-	-	0.16	0.685	0.870
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	656000	3840	18.75	19.80	1.274	-	-	0.01	0.636	0.810
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	656000	3840	18.70	19.80	1.288	-	-	-0.09	0.629	0.810
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	656000	3840	21.98	22.80	1.208	50	1.000	0.13	0.661	0.798
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 4	-	ECI 4	656000	3840	23.76	24.50	1.186	-	-	-0.05	0.216	0.256
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	16mm	Ant 4	-	ECI 4	656000	3840	23.76	24.50	1.186	-	-	-0.04	0.501	0.594
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	16mm	Ant 4	-	ECI 4	656000	3840	26.84	27.50	1.164	50	1.000	-0.08	0.527	0.613
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 8	-	ECI 3	656000	3840	20.45	21.90	1.396	-	-	0.12	0.442	0.617
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 8	-	ECI 3	656000	3840	20.40	21.90	1.413	-	-	0.07	0.410	0.579
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	-	ECI 3	656000	3840	20.45	21.90	1.396	-	-	0.08	0.711	0.993
72	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 8	-	ECI 3	656000	3840	20.40	21.90	1.413	-	-	-0.09	0.913	1.290
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 8	-	ECI 3	656000	3840	20.36	21.90	1.426	-	-	-0.06	0.864	1.232
	FR1 n77_HPUE	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 8	-	ECI 3	656000	3840	23.23	24.90	1.469	50	1.000	0	0.831	1.221
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 8	Headset	ECI 3	656000	3840	20.40	21.90	1.413	-	-	0.02	0.894	1.263
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 8	-	ECI 4	656000	3840	17.87	19.20	1.358	-	-	0	0.287	0.390
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	16mm	Ant 8	-	ECI 4	656000	3840	17.87	19.20	1.358	-	-	-0.14	0.276	0.375
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	16mm	Ant 8	-	ECI 4	656000	3840	17.72	19.20	1.406	-	-	0.06	0.228	0.321
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 8	-	ECI 4	656000	3840	20.86	22.20	1.361	50	1.000	0.01	0.273	0.372
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 10	-	ECI 3	656000	3840	14.25	15.20	1.245	-	-	-0.03	0.027	0.034
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 10	-	ECI 3	656000	3840	14.20	15.20	1.259	-	-	0.07	0.021	0.026
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 10	-	ECI 3	656000	3840	14.25	15.20	1.245	-	-	-0.01	0.709	0.882
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 10	-	ECI 3	656000	3840	14.20	15.20	1.259	-	-	-0.03	0.590	0.743
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 10	-	ECI 3	656000	3840	14.09	15.20	1.291	-	-	0.02	0.565	0.730
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 10	-	ECI 3	656000	3840	17.14	18.20	1.276	50	1.000	0.12	0.679	0.867
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Front	13mm	Ant 10	-	ECI 4	656000	3840	22.29	22.80	1.125	-	-	0.18	0.015	0.017
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	16mm	Ant 10	-	ECI 4	656000	3840	22.29	22.80	1.125	-	-	0.02	0.530	0.596
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	16mm	Ant 10	-	ECI 4	656000	3840	24.87	25.80	1.239	50	1.000	0.16	0.487	0.603



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	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																	
73	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6+3(3)	-	Standalone	6	2437	16.84	18.50	1.466	99.31	1.007	0.18	0.384	0.567
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(3)	-	Standalone	6	2437	16.84	18.50	1.466	99.31	1.007	-0.02	0.927	1.368
	WLAN2.4GHz	802.11g 6Mbps	Back	5mm	Ant 6+3(3)	-	Standalone	6	2437	16.91	18.50	1.442	97.47	1.026	0.06	0.802	1.187
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	-	Standalone	1	2412	16.03	17.50	1.403	99.31	1.007	-0.1	0.878	1.240
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(6)	-	Standalone	11	2462	16.01	17.50	1.409	99.31	1.007	0.08	0.829	1.176
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(3)	Headset	Standalone	6	2437	16.84	18.50	1.466	99.31	1.007	0.05	0.906	1.337
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(3)	-	DBS only	6	2437	15.48	17.00	1.419	99.31	1.007	0.08	0.526	0.752
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6+3(3)	-	Simultaneous	6	2437	12.41	14.00	1.442	99.31	1.007	-0.13	0.113	0.164
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(3)	-	Simultaneous	6	2437	12.41	14.00	1.442	99.31	1.007	0.06	0.273	0.396
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6+3(3)	-	DBS	6	2437	9.46	11.00	1.426	99.31	1.007	-0.03	0.055	0.079
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6+3(3)	-	DBS	6	2437	9.46	11.00	1.426	99.31	1.007	-0.03	0.133	0.191
	WLAN2.4GHz	802.11b 1Mbps	Front	13mm	Ant 6+3(3)	-	Full Power	6	2437	22.90	24.50	1.445	99.31	1.007	0.06	0.187	0.272
	WLAN2.4GHz	802.11b 1Mbps	Back	16mm	Ant 6+3(3)	-	Full Power	6	2437	22.90	24.50	1.445	99.31	1.007	-0.02	0.383	0.557
74	Bluetooth	1Mbps	Front	5mm	Ant 6	-	Full Power	39	2441	14.42	15.00	1.143	76.94	1.083	-0.11	0.043	0.053
	Bluetooth	1Mbps	Back	5mm	Ant 6	-	Full Power	39	2441	14.42	15.00	1.143	76.94	1.083	0.01	0.154	0.191
5000MHz																	
75	WLAN5.3GHz	802.11n-HT40 MCS0	Front	5mm	Ant 5+4(5)	-	Standalone	62	5310	15.88	17.00	1.294	93.67	1.068	0.07	0.510	0.705
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 5+4(5)	-	Standalone	62	5310	15.88	17.00	1.294	93.67	1.068	0.01	0.714	0.987
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 5+4(5)	-	Standalone	54	5270	15.59	17.00	1.384	93.67	1.068	0.09	0.649	0.959
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 5+4(5)	-	DBS only	62	5310	14.96	16.00	1.271	93.67	1.068	0.03	0.564	0.765
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Front	5mm	Ant 5+4(4)	-	Simultaneous	50	5250	10.78	12.50	1.486	92.65	1.079	0.08	0.184	0.295
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Back	5mm	Ant 5+4(4)	-	Simultaneous	50	5250	10.78	12.50	1.486	92.65	1.079	-0.07	0.258	0.414
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Front	5mm	Ant 5+4(4)	-	DBS	50	5250	7.84	9.50	1.466	92.65	1.079	0.05	0.097	0.153
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Back	5mm	Ant 5+4(4)	-	DBS	50	5250	7.84	9.50	1.466	92.65	1.079	-0.11	0.136	0.215
	WLAN5.3GHz	802.11a 6Mbps	Front	13mm	Ant 5+4(4)	-	Full Power	56	5280	19.68	21.00	1.354	96.97	1.031	0.07	0.314	0.438
	WLAN5.3GHz	802.11a 6Mbps	Back	16mm	Ant 5+4(4)	-	Full Power	56	5280	19.68	21.00	1.354	96.97	1.031	-0.17	0.443	0.618
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 5+4(4)	-	Standalone	138	5690	15.18	16.50	1.355	88.19	1.134	0.18	0.326	0.501
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(4)	-	Standalone	138	5690	15.18	16.50	1.355	88.19	1.134	-0.09	0.689	1.059
76	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(4)	-	Standalone	122	5610	15.11	16.50	1.377	88.19	1.134	0.02	0.667	1.042
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Back	5mm	Ant 5+4(4)	-	DBS only	114	5570	12.46	14.00	1.426	92.65	1.079	0.02	0.471	0.725
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Front	5mm	Ant 5+4(4)	-	Simultaneous	114	5570	10.45	12.00	1.429	92.65	1.079	-0.08	0.118	0.182
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Back	5mm	Ant 5+4(4)	-	Simultaneous	114	5570	10.45	12.00	1.429	92.65	1.079	-0.08	0.249	0.384
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Front	5mm	Ant 5+4(4)	-	DBS	114	5570	7.47	9.00	1.422	92.65	1.079	0.1	0.061	0.094
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Back	5mm	Ant 5+4(4)	-	DBS	114	5570	7.47	9.00	1.422	92.65	1.079	-0.18	0.128	0.196
	WLAN5.5GHz	802.11a 6Mbps	Front	13mm	Ant 5+4(4)	-	Full Power	132	5660	19.27	21.00	1.488	96.97	1.031	0.1	0.165	0.253
	WLAN5.5GHz	802.11a 6Mbps	Back	16mm	Ant 5+4(4)	-	Full Power	132	5660	19.27	21.00	1.488	96.97	1.031	0.08	0.384	0.589
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 5+4(4)	-	Standalone	155	5775	14.72	16.00	1.343	88.19	1.134	0.19	0.295	0.449
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(4)	-	Standalone	155	5775	14.72	16.00	1.343	88.19	1.134	0.01	0.672	1.023
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(4)	-	DBS only	155	5775	12.78	14.00	1.324	88.19	1.134	0.08	0.496	0.745
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 5+4(4)	-	Simultaneous	155	5775	10.25	11.50	1.334	88.19	1.134	0.1	0.112	0.169
77	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(4)	-	Simultaneous	155	5775	10.25	11.50	1.334	88.19	1.134	0.12	0.254	0.384
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 5+4(4)	-	DBS	155	5775	7.23	8.50	1.340	88.19	1.134	0.08	0.057	0.087
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 5+4(4)	-	DBS	155	5775	7.23	8.50	1.340	88.19	1.134	-0.17	0.129	0.196
	WLAN5.8GHz	802.11a 6Mbps	Front	13mm	Ant 5+4(4)	-	Full Power	149	5745	20.46	22.00	1.424	96.97	1.031	0.06	0.168	0.247
	WLAN5.8GHz	802.11a 6Mbps	Back	16mm	Ant 5+4(4)	-	Full Power	149	5745	20.46	22.00	1.424	96.97	1.031	0.02	0.491	0.721
	WLAN5.8GHz	802.11a 6Mbps	Back	16mm	Ant 5+4(4)	-	Full Power	149	5745	20.46	22.00	1.424	96.97	1.031	0.02	0.491	0.721



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	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
750MHz																				
78	LTE Band 13	10M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	23230	782	22.85	24.00	1.303	-	-	-0.08	1.940	2.528
	LTE Band 13	10M	QPSK	25	0	-	Back	0mm	Ant 0	ECI 6	23230	782	21.83	23.00	1.309	-	-	-0.01	1.480	1.938
	LTE Band 13	10M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	23230	782	21.75	23.00	1.334	-	-	0	1.440	1.920
835MHz																				
79	LTE Band 26	15M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	26865	831.5	22.51	24.00	1.409	-	-	-0.12	1.850	2.607
	LTE Band 26	15M	QPSK	36	0	-	Back	0mm	Ant 0	ECI 6	26865	831.5	21.48	23.00	1.419	-	-	0.18	1.410	2.001
	LTE Band 26	15M	QPSK	75	0	-	Back	0mm	Ant 0	ECI 6	26865	831.5	21.45	23.00	1.429	-	-	-0.1	1.340	1.915
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 0	ECI 6	166300	831.5	22.80	24.00	1.318	-	-	-0.13	1.520	2.004
80	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	0mm	Ant 0	ECI 6	166300	831.5	22.77	24.00	1.327	-	-	-0.01	1.580	2.097
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Back	0mm	Ant 0	ECI 6	166300	831.5	21.73	23.00	1.340	-	-	-0.01	1.490	1.996
1750MHz																				
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	1413	1732.6	22.27	23.70	1.390	-	-	-0.08	2.040	2.836
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	1312	1712.4	22.22	23.70	1.406	-	-	-0.17	2.130	2.995
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	1513	1752.6	22.18	23.70	1.419	-	-	-0.08	1.730	2.455
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	1413	1732.6	22.27	23.70	1.390	-	-	-0.04	1.810	2.516
81	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	1312	1712.4	22.22	23.70	1.406	-	-	0.04	2.260	3.178
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	1513	1752.6	22.18	23.70	1.419	-	-	0.17	1.440	2.043
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	6mm	Ant 2	ECI 4	1413	1732.6	22.27	24.00	1.489	-	-	0.06	0.792	1.180
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 2	ECI 4	1413	1732.6	22.27	24.00	1.489	-	-	-0.09	0.596	0.888
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	ECI 6	1413	1732.6	19.75	21.00	1.334	-	-	-0.01	1.020	1.360
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	1413	1732.6	19.75	21.00	1.334	-	-	0.05	1.810	2.414
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	1312	1712.4	19.64	21.00	1.368	-	-	0.08	1.670	2.284
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	1513	1752.6	19.68	21.00	1.355	-	-	0.01	1.640	2.223
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	ECI 4	1413	1732.6	21.14	22.00	1.219	-	-	-0.08	0.854	1.041
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	19mm	Ant 1	ECI 4	1413	1732.6	21.14	22.00	1.219	-	-	0.13	0.783	0.954
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	ECI 6	1413	1732.6	20.99	22.00	1.262	-	-	0.16	1.740	2.196
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	ECI 6	1312	1712.4	20.97	22.00	1.268	-	-	0.06	1.580	2.003
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	ECI 6	1513	1752.6	20.86	22.00	1.300	-	-	0.02	1.620	2.106
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	1413	1732.6	20.99	22.00	1.262	-	-	-0.09	2.190	2.763
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	1312	1712.4	20.97	22.00	1.268	-	-	0.03	2.280	2.890
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	1513	1752.6	20.86	22.00	1.300	-	-	0.1	1.960	2.548
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 0	ECI 6	1413	1732.6	20.99	22.00	1.262	-	-	-0.09	1.980	2.498
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 0	ECI 6	1312	1712.4	20.97	22.00	1.268	-	-	0.09	1.870	2.371
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 0	ECI 6	1513	1752.6	20.86	22.00	1.300	-	-	0.04	1.910	2.483
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	1413	1732.6	20.99	22.00	1.262	-	-	-0.16	1.350	1.703
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	132322	1745	23.17	24.00	1.211	-	-	0.14	2.150	2.603
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	132072	1720	23.05	24.00	1.245	-	-	0.05	2.240	2.788
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	132572	1770	23.01	24.00	1.256	-	-	0.1	1.740	2.185
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	132322	1745	21.94	23.00	1.276	-	-	0.16	1.520	1.940
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 2	ECI 6	132322	1745	21.86	23.00	1.300	-	-	-0.16	1.540	2.002
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	132072	1720	23.05	24.00	1.245	-	-	0.19	2.060	2.564
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	132322	1745	21.29	22.50	1.321	-	-	0.1	1.410	1.863
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	132322	1745	20.74	21.50	1.191	-	-	-0.17	1.130	1.346
	LTE Band 66	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	132322	1745	21.29	22.50	1.321	-	-	0.01	1.810	2.392
	LTE Band 66	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	132072	1720	21.17	22.50	1.358	-	-	0.03	1.680	2.282
	LTE Band 66	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	132572	1770	21.23	22.50	1.340	-	-	-0.08	1.720	2.304
	LTE Band 66	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	ECI 6	132322	1745	20.74	21.50	1.191	-	-	-0.17	1.300	1.549
	LTE Band 66	20M	QPSK	100	0	-	Top Side	0mm	Ant 1	ECI 6	132322	1745	20.68	21.50	1.208	-	-	0.06	1.250	1.510
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	132322	1745	21.29	22.50	1.321	-	-	0.07	1.730	2.286
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 1	ECI 4	132322	1745	21.65	23.00	1.365	-	-	0.03	0.914	1.247



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	LTE Band 66	20M	QPSK	1	0	-	Top Side	19mm	Ant 1	ECI 4	132322	1745	21.65	23.00	1.365	-	-	0.18	0.618	0.843
	LTE Band 66	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	132322	1745	22.19	23.10	1.233	-	-	0.06	1.850	2.281
	LTE Band 66	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	132072	1720	22.04	23.10	1.276	-	-	-0.08	1.750	2.234
	LTE Band 66	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	132572	1770	21.84	23.10	1.337	-	-	0.1	1.520	2.032
	LTE Band 66	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 6	132322	1745	21.98	23.10	1.294	-	-	-0.01	1.100	1.424
	LTE Band 66	20M	QPSK	100	0	-	Left Side	0mm	Ant 9	ECI 6	132322	1745	21.95	23.10	1.303	-	-	-0.18	1.100	1.433
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	132322	1745	22.19	23.10	1.233	-	-	-0.15	1.780	2.195
	LTE Band 66	20M	QPSK	1	0	-	Left Side	8mm	Ant 9	ECI 4	132322	1745	23.11	24.00	1.227	-	-	0.03	1.140	1.399
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 0	ECI 6	132322	1745	20.31	21.50	1.315	-	-	-0.09	1.500	1.973
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 0	ECI 6	132322	1745	20.29	21.50	1.321	-	-	0.12	1.220	1.612
82	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	132322	1745	20.31	21.50	1.315	-	-	-0.06	2.390	3.143
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	132072	1720	20.30	21.50	1.318	-	-	0.07	2.310	3.045
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	132572	1770	20.22	21.50	1.343	-	-	0.18	1.860	2.498
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	132322	1745	20.29	21.50	1.321	-	-	-0.1	1.510	1.995
	LTE Band 66	20M	QPSK	100	0	-	Back	0mm	Ant 0	ECI 6	132322	1745	20.27	21.50	1.327	-	-	0.19	1.860	2.469
	LTE Band 66	20M	QPSK	1	0	-	Left Side	0mm	Ant 0	ECI 6	132322	1745	20.31	21.50	1.315	-	-	0.07	1.470	1.933
	LTE Band 66	20M	QPSK	50	0	-	Left Side	0mm	Ant 0	ECI 6	132322	1745	20.29	21.50	1.321	-	-	-0.15	1.140	1.506
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	132322	1745	20.31	21.50	1.315	-	-	-0.17	1.350	1.776
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 0	ECI 6	132322	1745	20.29	21.50	1.321	-	-	-0.08	1.080	1.427
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	132322	1745	20.31	21.50	1.315	-	-	0.11	2.110	2.775
	LTE Band 66	20M	QPSK	1	0	-	Front	4mm	Ant 0	ECI 4	132322	1745	21.32	22.50	1.312	-	-	0.16	1.280	1.680
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 0	ECI 4	132322	1745	21.32	22.50	1.312	-	-	-0.1	0.750	0.984
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 4	132322	1745	21.32	22.50	1.312	-	-	0.07	0.986	1.294
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	8mm	Ant 0	ECI 4	132322	1745	21.32	22.50	1.312	-	-	0.18	0.877	1.151
83	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	349000	1745	22.18	23.80	1.452	-	-	0.03	2.190	3.180
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	349000	1745	22.14	23.80	1.466	-	-	-0.1	1.960	2.872
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	349000	1745	21.98	23.80	1.521	-	-	0.05	1.600	2.433
	FR1 n66 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	349000	1745	22.18	23.80	1.452	-	-	-0.17	2.010	2.919
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 2	ECI 4	349000	1745	23.15	24.00	1.216	-	-	0.06	0.579	0.704
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	349000	1745	21.31	22.50	1.315	-	-	0.05	1.890	2.486
	FR1 n66	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	349000	1745	21.25	22.50	1.334	-	-	0.1	1.800	2.400
	FR1 n66	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	349000	1745	21.13	22.50	1.371	-	-	0.06	1.710	2.344
	FR1 n66 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	349000	1745	21.31	22.50	1.315	-	-	-0.04	1.780	2.341
	FR1 n66	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	19mm	Ant 1	ECI 4	349000	1745	22.21	23.00	1.199	-	-	0.02	0.688	0.825
1900MHz																				
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	0mm	Ant 1	ECI 6	661	1880	22.86	24.50	1.459	-	-	0.11	0.950	1.386
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 1	ECI 6	661	1880	22.86	24.50	1.459	-	-	-0.05	1.010	1.473
84	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Top Side	0mm	Ant 1	ECI 6	661	1880	22.86	24.50	1.459	-	-	0.06	1.230	1.794
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 9	ECI 6	661	1880	23.87	25.00	1.297	-	-	0.09	1.020	1.323
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	0mm	Ant 9	ECI 6	661	1880	23.87	25.00	1.297	-	-	0.08	1.290	1.673
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	0mm	Ant 0	ECI 6	661	1880	22.71	24.00	1.346	-	-	0.11	1.100	1.480
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 0	ECI 6	661	1880	22.71	24.00	1.346	-	-	-0.11	0.919	1.237
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	ECI 6	9400	1880	22.32	24.00	1.472	-	-	0.19	1.650	2.429
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	ECI 6	9262	1852.4	22.29	24.00	1.483	-	-	0.1	1.520	2.253
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	ECI 6	9538	1907.6	22.24	24.00	1.500	-	-	0.12	1.480	2.220
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	9400	1880	22.32	24.00	1.472	-	-	-0.06	2.050	3.018
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	9262	1852.4	22.29	24.00	1.483	-	-	0.02	1.660	2.461
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	9538	1907.6	22.24	24.00	1.500	-	-	0.16	2.010	3.014
85	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	9400	1880	22.32	24.00	1.472	-	-	0.03	2.240	3.298
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	9262	1852.4	22.29	24.00	1.483	-	-	0.01	1.930	2.861
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	9538	1907.6	22.24	24.00	1.500	-	-	-0.04	2.000	2.999
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 1	ECI 6	9400	1880	20.71	22.00	1.346	-	-	0.17	1.410	1.898
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	ECI 6	9400	1880	20.71	22.00	1.346	-	-	-0.06	1.390	1.871
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	9400	1880	20.71	22.00	1.346	-	-	0.05	1.830	2.463
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	9262	1852.4	20.61	22.00	1.377	-	-	0.08	1.770	2.438



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	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	9538	1907.6	20.67	22.00	1.358	-	-	-0.17	1.690	2.296
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 9	ECI 6	9400	1880	20.86	21.50	1.159	-	-	0.01	2.090	2.422
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 9	ECI 6	9262	1852.4	20.81	21.50	1.172	-	-	-0.03	1.970	2.309
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 9	ECI 6	9538	1907.6	20.75	21.50	1.189	-	-	0.14	1.810	2.151
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	8mm	Ant 9	ECI 4	9400	1880	22.25	23.00	1.189	-	-	-0.15	1.850	2.199
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	ECI 6	9400	1880	21.00	22.00	1.259	-	-	0.01	2.530	3.185
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	ECI 6	9262	1852.4	20.88	22.00	1.294	-	-	0.01	2.420	3.132
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	ECI 6	9538	1907.6	20.98	22.00	1.265	-	-	-0.16	2.350	2.972
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	9400	1880	21.00	22.00	1.259	-	-	0.1	2.330	2.933
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	9262	1852.4	20.88	22.00	1.294	-	-	-0.04	2.150	2.783
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	9538	1907.6	20.98	22.00	1.265	-	-	-0.01	2.240	2.833
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 0	ECI 6	9400	1880	21.00	22.00	1.259	-	-	0	2.060	2.593
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 0	ECI 6	9262	1852.4	20.88	22.00	1.294	-	-	-0.11	1.630	2.110
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	0mm	Ant 0	ECI 6	9538	1907.6	20.98	22.00	1.265	-	-	-0.06	1.600	2.024
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	9400	1880	21.00	22.00	1.259	-	-	-0.15	1.280	1.611
	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	26340	1880	22.98	24.00	1.265	-	-	-0.04	1.680	2.125
	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	26140	1860	22.96	24.00	1.271	-	-	0.14	1.700	2.160
	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	26590	1905	22.78	24.00	1.324	-	-	0.03	1.640	2.172
	LTE Band 25	20M	QPSK	50	0	-	Back	0mm	Ant 2	ECI 6	26340	1880	21.94	23.00	1.276	-	-	0.16	1.330	1.698
	LTE Band 25	20M	QPSK	100	0	-	Back	0mm	Ant 2	ECI 6	26340	1880	21.90	23.00	1.288	-	-	0.14	1.310	1.688
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	26340	1880	22.98	24.00	1.265	-	-	-0.09	2.060	2.605
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	26140	1860	22.96	24.00	1.271	-	-	0.05	2.130	2.706
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	26590	1905	22.78	24.00	1.324	-	-	-0.09	1.710	2.265
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	26340	1880	21.94	23.00	1.276	-	-	-0.12	1.610	2.055
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	26140	1860	21.79	23.00	1.321	-	-	-0.06	1.640	2.167
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	26590	1905	21.81	23.00	1.315	-	-	-0.19	1.290	1.697
	LTE Band 25	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 2	ECI 6	26340	1880	21.90	23.00	1.288	-	-	0.09	1.570	2.023
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	18900	1880	22.95	24.00	1.274	-	-	0.17	1.970	2.509
	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	26340	1880	19.08	20.10	1.265	-	-	-0.07	1.110	1.404
	LTE Band 25	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	26340	1880	19.07	20.10	1.268	-	-	-0.12	0.938	1.189
	LTE Band 25	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	26340	1880	19.08	20.10	1.265	-	-	0.15	1.830	2.314
	LTE Band 25	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	26140	1860	19.00	20.10	1.288	-	-	0.04	1.910	2.461
	LTE Band 25	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	26590	1905	19.04	20.10	1.276	-	-	0.11	1.810	2.310
	LTE Band 25	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	ECI 6	26340	1880	19.07	20.10	1.268	-	-	-0.05	1.460	1.851
	LTE Band 25	20M	QPSK	100	0	-	Top Side	0mm	Ant 1	ECI 6	26340	1880	19.05	20.10	1.274	-	-	0.05	1.450	1.847
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	18900	1880	19.02	20.10	1.282	-	-	-0.04	1.870	2.398
	LTE Band 25	20M	QPSK	1	0	-	Back	15mm	Ant 1	ECI 4	26340	1880	21.62	23.00	1.374	-	-	0.07	1.030	1.415
	LTE Band 25	20M	QPSK	1	0	-	Top Side	19mm	Ant 1	ECI 4	26340	1880	21.62	23.00	1.374	-	-	-0.18	0.731	1.004
	LTE Band 25	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	26340	1880	20.65	21.60	1.245	-	-	0.06	1.610	2.004
	LTE Band 25	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	26140	1860	20.51	21.60	1.285	-	-	-0.03	1.590	2.044
	LTE Band 25	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	26590	1905	20.42	21.60	1.312	-	-	0.09	1.880	2.467
	LTE Band 25	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 6	26340	1880	20.63	21.60	1.250	-	-	0.08	1.100	1.375
	LTE Band 25	20M	QPSK	100	0	-	Left Side	0mm	Ant 9	ECI 6	26340	1880	20.60	21.60	1.259	-	-	-0.11	1.100	1.385
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	18900	1880	20.58	21.60	1.265	-	-	-0.13	1.810	2.289
	LTE Band 25	20M	QPSK	1	0	-	Left Side	8mm	Ant 9	ECI 4	26340	1880	22.94	24.00	1.276	-	-	-0.15	1.610	2.055
	LTE Band 25	20M	QPSK	1	0	-	Front	0mm	Ant 0	ECI 6	26340	1880	20.42	21.30	1.225	-	-	-0.13	1.970	2.412
	LTE Band 25	20M	QPSK	1	0	-	Front	0mm	Ant 0	ECI 6	26140	1860	20.22	21.30	1.282	-	-	0.17	2.110	2.706
	LTE Band 25	20M	QPSK	1	0	-	Front	0mm	Ant 0	ECI 6	26590	1905	20.37	21.30	1.239	-	-	0.06	2.060	2.552
	LTE Band 25	20M	QPSK	50	0	-	Front	0mm	Ant 0	ECI 6	26340	1880	20.38	21.30	1.236	-	-	0	1.590	1.965
	LTE Band 25	20M	QPSK	100	0	-	Front	0mm	Ant 0	ECI 6	26340	1880	20.35	21.30	1.245	-	-	0.11	1.630	2.029
	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	26340	1880	20.42	21.30	1.225	-	-	-0.02	2.280	2.792
86	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	26140	1860	20.22	21.30	1.282	-	-	-0.01	2.470	3.167
	LTE Band 25	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	26590	1905	20.37	21.30	1.239	-	-	0.04	2.170	2.688
	LTE Band 25	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	26340	1880	20.38	21.30	1.236	-	-	0.13	1.800	2.225
	LTE Band 25	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	26140	1860	20.30	21.30	1.259	-	-	-0.18	1.880	2.367



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	LTE Band 25	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	26590	1905	20.29	21.30	1.262	-	-	-0.11	1.690	2.132
	LTE Band 25	20M	QPSK	100	0	-	Back	0mm	Ant 0	ECI 6	26340	1880	20.35	21.30	1.245	-	-	-0.16	1.780	2.215
	LTE Band 25	20M	QPSK	1	0	-	Left Side	0mm	Ant 0	ECI 6	26340	1880	20.42	21.30	1.225	-	-	-0.15	1.560	1.910
	LTE Band 25	20M	QPSK	50	0	-	Left Side	0mm	Ant 0	ECI 6	26340	1880	20.38	21.30	1.236	-	-	-0.19	1.250	1.545
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	26340	1880	20.42	21.30	1.225	-	-	0.12	1.380	1.690
	LTE Band 25	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 0	ECI 6	26340	1880	20.38	21.30	1.236	-	-	0.07	1.120	1.384
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	18900	1880	20.24	21.30	1.276	-	-	0.06	2.220	2.834
	LTE Band 25	20M	QPSK	1	0	-	Front	4mm	Ant 0	ECI 4	26340	1880	21.39	22.50	1.291	-	-	0.11	1.070	1.382
	LTE Band 25	20M	QPSK	1	0	-	Back	10mm	Ant 0	ECI 4	26340	1880	21.39	22.50	1.291	-	-	-0.08	0.565	0.730
	LTE Band 25	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 4	26340	1880	21.39	22.50	1.291	-	-	-0.17	0.692	0.894
	LTE Band 25	20M	QPSK	1	0	-	Bottom Side	8mm	Ant 0	ECI 4	26340	1880	21.39	22.50	1.291	-	-	-0.08	0.639	0.825
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	376000	1880	22.54	23.80	1.337	-	-	-0.08	2.170	2.900
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	376000	1880	22.43	23.80	1.371	-	-	-0.08	2.030	2.783
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	376000	1880	21.98	23.30	1.355	-	-	0.1	1.630	2.209
87	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	22.54	23.80	1.337	-	-	0.08	2.360	3.154
	FR1 n2 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	22.54	23.80	1.337	-	-	-0.03	2.060	2.753
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	22.43	23.80	1.371	-	-	-0.18	2.220	3.043
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	21.98	23.30	1.355	-	-	0.1	1.860	2.521
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	6mm	Ant 2	ECI 4	376000	1880	22.98	24.00	1.265	-	-	0.06	0.679	0.859
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 2	ECI 4	376000	1880	22.98	24.00	1.265	-	-	0.03	0.649	0.821
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	376000	1880	18.75	19.70	1.245	-	-	0.09	1.130	1.406
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	376000	1880	18.68	19.70	1.265	-	-	-0.08	1.060	1.341
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	376000	1880	18.75	19.70	1.245	-	-	0.08	1.960	2.439
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	376000	1880	18.68	19.70	1.265	-	-	0.17	1.830	2.314
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	376000	1880	18.71	19.70	1.256	-	-	-0.14	1.600	2.010
	FR1 n2 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	376000	1880	18.75	19.70	1.245	-	-	-0.07	1.820	2.265
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	ECI 4	376000	1880	22.16	23.00	1.213	-	-	0.03	1.020	1.238
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	19mm	Ant 1	ECI 4	376000	1880	22.16	23.00	1.213	-	-	0.01	0.823	0.999
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	21100	2535	21.35	22.00	1.161	-	-	-0.13	2.050	2.381
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	20850	2510	21.18	22.00	1.208	-	-	0.16	2.140	2.585
88	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	21350	2560	21.05	22.00	1.245	-	-	-0.08	2.560	3.186
	LTE Band 7C	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	21350+ 21152	2560+ 2540.2	21.00	22.00	1.259	-	-	0.07	2.350	2.958
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	21100	2535	21.31	22.00	1.172	-	-	-0.02	1.660	1.946
	LTE Band 7	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 2	ECI 6	21100	2535	21.30	22.00	1.175	-	-	0.1	1.670	1.962
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	21350	2560	21.05	22.00	1.245	-	-	-0.11	2.310	2.875
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 2	ECI 4	21100	2535	23.14	24.00	1.219	-	-	0.06	0.442	0.539
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	21100	2535	21.85	22.50	1.161	-	-	0.1	2.020	2.346
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	20850	2510	21.83	22.50	1.167	-	-	-0.06	2.090	2.439
	LTE Band 7C	20M	QPSK	1	99	-	Back	0mm	Ant 1	ECI 6	20850+ 21048	2510+ 2529.8	21.71	22.50	1.199	-	-	0.02	2.010	2.411
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	21350	2560	21.72	22.50	1.197	-	-	0.08	1.880	2.250
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	21100	2535	20.88	21.50	1.153	-	-	-0.17	1.750	2.019
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	20850	2510	20.68	21.50	1.208	-	-	-0.03	1.730	2.090
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	21350	2560	20.72	21.50	1.197	-	-	0.14	1.680	2.011
	LTE Band 7	20M	QPSK	100	0	-	Back	0mm	Ant 1	ECI 6	21100	2535	20.84	21.50	1.164	-	-	0.11	1.740	2.026
	LTE Band 7	20M	QPSK	1	0	-	Left Side	0mm	Ant 1	ECI 6	21100	2535	21.85	22.50	1.161	-	-	-0.05	1.650	1.916
	LTE Band 7	20M	QPSK	50	0	-	Left Side	0mm	Ant 1	ECI 6	21100	2535	20.88	21.50	1.153	-	-	-0.17	1.280	1.476
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	21100	2535	21.85	22.50	1.161	-	-	0.1	1.620	1.882
	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	ECI 6	21100	2535	20.88	21.50	1.153	-	-	-0.01	1.290	1.488
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	20850	2510	21.83	22.50	1.167	-	-	0.03	1.980	2.310
	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 1	ECI 4	21100	2535	21.85	23.00	1.303	-	-	-0.04	1.030	1.342
	LTE Band 7	20M	QPSK	1	0	-	Left Side	8mm	Ant 1	ECI 4	21100	2535	21.85	23.00	1.303	-	-	-0.08	1.150	1.499
	LTE Band 7	20M	QPSK	1	0	-	Top Side	19mm	Ant 1	ECI 4	21100	2535	21.85	23.00	1.303	-	-	0.17	0.492	0.641
	LTE Band 7	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	21100	2535	18.15	19.20	1.274	-	-	0.07	1.830	2.331



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	LTE Band 7	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	20850	2510	18.08	19.20	1.294	-	-	0.07	1.910	2.472
	LTE Band 7C	20M	QPSK	1	99	-	Left Side	0mm	Ant 9	ECI 6	20850+21048	2510+2529.8	17.93	19.20	1.340	-	-	0.01	1.830	2.452
	LTE Band 7	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	21350	2560	17.88	19.20	1.355	-	-	0.03	1.760	2.385
	LTE Band 7	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 6	21100	2535	18.13	19.20	1.279	-	-	-0.15	1.410	1.804
	LTE Band 7	20M	QPSK	100	0	-	Left Side	0mm	Ant 9	ECI 6	21100	2535	18.10	19.20	1.288	-	-	-0.08	1.380	1.778
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	20850	2510	18.08	19.20	1.294	-	-	-0.02	1.860	2.407
	LTE Band 7	20M	QPSK	1	0	-	Left Side	8mm	Ant 9	ECI 4	21100	2535	23.24	24.00	1.191	-	-	0.02	1.730	2.061
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	20.06	20.80	1.186	-	-	-0.03	2.670	3.166
	LTE Band 7C	20M	QPSK	1	99	-	Back	0mm	Ant 0	ECI 6	21100+21298	2535+2554.8	19.93	20.80	1.222	-	-	0.05	2.390	2.920
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	20850	2510	20.02	20.80	1.197	-	-	-0.13	2.590	3.100
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	21350	2560	19.93	20.80	1.222	-	-	-0.13	2.560	3.128
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	20.03	20.80	1.194	-	-	0.06	2.100	2.507
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	20850	2510	20.00	20.80	1.202	-	-	-0.03	2.000	2.405
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	21350	2560	19.95	20.80	1.216	-	-	-0.03	2.000	2.432
	LTE Band 7	20M	QPSK	100	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	20.01	20.80	1.199	-	-	0.08	2.060	2.471
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	20.06	20.80	1.186	-	-	-0.09	2.310	2.739
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 0	ECI 4	21100	2535	21.23	22.50	1.340	-	-	0.02	0.322	0.431
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	40620	2593	23.05	23.50	1.109	62.9	1.006	-0.17	2.330	2.600
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	39750	2506	23.01	23.50	1.119	62.9	1.006	0.18	2.290	2.579
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	40185	2549.5	22.97	23.50	1.130	62.9	1.006	-0.17	2.390	2.716
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	41055	2636.5	22.88	23.50	1.153	62.9	1.006	-0.04	2.470	2.866
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	41490	2680	22.79	23.50	1.178	62.9	1.006	-0.05	2.510	2.974
	LTE Band 41C	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	41490+41292	2680+2660.2	22.72	23.50	1.197	62.9	1.006	0.09	2.380	2.865
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	40620	2593	22.09	22.50	1.099	62.9	1.006	0.08	1.750	1.935
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	39750	2506	21.97	22.50	1.130	62.9	1.006	0.01	1.890	2.148
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	40185	2549.5	21.93	22.50	1.140	62.9	1.006	0.03	1.710	1.962
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	41055	2636.5	21.89	22.50	1.151	62.9	1.006	-0.08	1.680	1.945
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	41490	2680	22.02	22.50	1.117	62.9	1.006	-0.08	1.740	1.955
	LTE Band 41	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 2	ECI 6	40620	2593	22.00	22.50	1.122	62.9	1.006	-0.13	1.920	2.167
89	LTE Band 41 HPUE	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	41490	2680	24.07	25.10	1.268	42.9	1.009	0.09	2.520	3.223
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 2	ECI 4	40620	2593	23.05	24.00	1.245	62.9	1.006	0.01	0.149	0.187
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 2	ECI 4	40620	2593	26.11	27.00	1.227	42.9	1.009	-0.03	0.219	0.271
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	40620	2593	21.99	23.00	1.262	62.9	1.006	-0.15	1.010	1.282
	LTE Band 41C	20M	QPSK	1	99	-	Back	0mm	Ant 1	ECI 6	40620+40818	2593+2612.8	21.91	23.00	1.285	62.9	1.006	0.05	0.981	1.268
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	40620	2593	21.03	22.00	1.250	62.9	1.006	-0.15	0.840	1.057
	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	40620	2593	21.99	23.00	1.262	62.9	1.006	0.11	0.748	0.950
	LTE Band 41	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	ECI 6	40620	2593	21.03	22.00	1.250	62.9	1.006	-0.08	0.594	0.747
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	40620	2593	24.87	26.00	1.297	42.9	1.009	-0.03	1.340	1.754
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	39750	2506	24.85	26.00	1.303	42.9	1.009	-0.05	1.060	1.394
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	40185	2549.5	24.84	26.00	1.306	42.9	1.009	0.01	1.180	1.555
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	41055	2636.5	24.69	26.00	1.352	42.9	1.009	0.1	1.020	1.392
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	41490	2680	24.47	26.00	1.422	42.9	1.009	-0.17	1.140	1.636
	LTE Band 41 HPUE	20M	QPSK	100	0	-	Back	0mm	Ant 1	ECI 6	40620	2593	23.83	25.00	1.309	42.9	1.009	0.04	0.985	1.301
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	40620	2593	20.79	21.80	1.262	62.9	1.006	0.17	1.500	1.904
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	39750	2506	20.68	21.80	1.294	62.9	1.006	0.17	1.820	2.370
	LTE Band 41C	20M	QPSK	1	99	-	Left Side	0mm	Ant 9	ECI 6	39750+39948	2506+2525.8	20.60	21.80	1.318	62.9	1.006	0.04	1.760	2.334
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	40185	2549.5	20.56	21.80	1.330	62.9	1.006	-0.05	1.570	2.101
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	41055	2636.5	20.51	21.80	1.346	62.9	1.006	0.01	1.590	2.153
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	41490	2680	20.49	21.80	1.352	62.9	1.006	0.1	1.420	1.931
	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 6	40620	2593	20.76	21.80	1.271	62.9	1.006	-0.02	1.450	1.853
	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 6	39750	2506	20.71	21.80	1.285	62.9	1.006	0.18	1.060	1.371



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	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 6	40185	2549.5	20.56	21.80	1.330	62.9	1.006	0.14	1.110	1.486
	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 6	41055	2636.5	20.43	21.80	1.371	62.9	1.006	-0.17	1.150	1.586
	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 6	41490	2680	20.44	21.80	1.368	62.9	1.006	0.17	1.030	1.417
	LTE Band 41	20M	QPSK	100	0	-	Left Side	0mm	Ant 9	ECI 6	40620	2593	20.73	21.80	1.279	62.9	1.006	0.17	1.410	1.815
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 6	39750	2506	22.34	23.40	1.276	42.9	1.009	-0.03	1.930	2.486
	LTE Band 41	20M	QPSK	1	0	-	Left Side	8mm	Ant 9	ECI 4	40620	2593	23.32	24.00	1.169	62.9	1.006	0.18	1.250	1.471
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Left Side	8mm	Ant 9	ECI 4	40620	2593	26.29	27.00	1.178	42.9	1.009	-0.04	1.650	1.961
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	40620	2593	21.69	22.50	1.205	62.9	1.006	0.01	1.260	1.527
	LTE Band 41C	20M	QPSK	1	99	-	Back	0mm	Ant 0	ECI 6	40620+40818	2593+2612.8	21.56	22.50	1.242	62.9	1.006	0.03	1.180	1.474
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	39750	2506	21.59	22.50	1.233	62.9	1.006	0.11	1.150	1.427
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	40185	2549.5	21.41	22.50	1.285	62.9	1.006	-0.05	1.080	1.396
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	41055	2636.5	21.33	22.50	1.309	62.9	1.006	0.18	1.120	1.475
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	41490	2680	21.22	22.50	1.343	62.9	1.006	0.14	1.070	1.445
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	40620	2593	20.53	21.50	1.250	62.9	1.006	-0.15	0.982	1.235
	LTE Band 41	20M	QPSK	100	0	-	Back	0mm	Ant 0	ECI 6	40620	2593	20.49	21.50	1.262	62.9	1.006	-0.17	1.050	1.333
	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	40620	2593	24.55	25.50	1.245	42.9	1.009	0.19	1.650	2.072
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	507000	2535	21.61	22.70	1.285	-	-	0.18	2.180	2.802
90	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	507000	2535	21.57	22.70	1.297	-	-	0.05	2.460	3.191
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	507000	2535	21.48	22.70	1.324	-	-	-0.17	1.940	2.569
	FR1 n7 Other PA	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	507000	2535	21.57	22.70	1.297	-	-	-0.05	2.190	2.841
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	10mm	Ant 2	ECI 4	507000	2535	23.08	24.00	1.236	-	-	-0.13	0.520	0.643
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	10mm	Ant 2	ECI 4	507000	2535	23.03	24.00	1.250	-	-	0.09	0.531	0.664
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	20.79	21.90	1.291	-	-	0.1	1.780	2.298
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	20.78	21.90	1.294	-	-	-0.05	1.900	2.459
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	20.66	21.90	1.330	-	-	0.04	1.540	2.049
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	507000	2535	20.79	21.90	1.291	-	-	0.06	1.330	1.717
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	507000	2535	20.78	21.90	1.294	-	-	-0.09	1.300	1.682
	FR1 n7 Other PA	50M	QPSK	135	68	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	20.78	21.90	1.294	-	-	0.16	1.860	2.407
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	ECI 4	507000	2535	22.25	23.00	1.189	-	-	0.17	1.120	1.331
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	15mm	Ant 1	ECI 4	507000	2535	22.22	23.00	1.197	-	-	0.09	1.080	1.292
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Top Side	19mm	Ant 1	ECI 4	507000	2535	22.25	23.00	1.189	-	-	0.02	0.631	0.750
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	0mm	Ant 2	ECI 6	518598	2592.99	20.77	22.20	1.390	-	-	0.07	2.170	3.016
91	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	0mm	Ant 2	ECI 6	518598	2592.99	20.65	22.20	1.429	-	-	0.01	2.210	3.158
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Bottom Side	0mm	Ant 2	ECI 6	518598	2592.99	20.63	22.20	1.435	-	-	0.03	2.110	3.029
	FR1 n41 Other PA	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	0mm	Ant 2	ECI 6	518598	2592.99	20.65	22.20	1.429	-	-	0.05	2.060	2.944
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	10mm	Ant 2	ECI 4	518598	2592.99	23.18	24.00	1.208	-	-	0.03	0.492	0.594
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 2	ECI 4	518598	2592.99	23.15	24.00	1.216	-	-	0.01	0.483	0.587
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 1	ECI 6	518598	2592.99	21.53	22.70	1.309	-	-	-0.01	1.870	2.448
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 1	ECI 6	518598	2592.99	21.47	22.70	1.327	-	-	0.17	1.250	1.659
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 1	ECI 6	518598	2592.99	21.34	22.70	1.368	-	-	0.06	1.510	2.065
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 1	ECI 6	518598	2592.99	21.53	22.70	1.309	-	-	0.11	1.210	1.584
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 1	ECI 6	518598	2592.99	21.47	22.70	1.327	-	-	-0.02	1.000	1.327
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 1	ECI 6	518598	2592.99	21.53	22.70	1.309	-	-	-0.15	1.660	2.173
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	ECI 4	518598	2592.99	23.45	24.00	1.135	-	-	-0.07	1.720	1.952
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	19mm	Ant 1	ECI 4	518598	2592.99	23.45	24.00	1.135	-	-	0.05	0.698	0.792
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 9	ECI 6	518598	2592.99	18.34	19.50	1.306	-	-	0.08	1.900	2.482
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 9	ECI 6	518598	2592.99	18.29	19.50	1.321	-	-	0.18	1.670	2.207
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 9	ECI 6	518598	2592.99	18.18	19.50	1.355	-	-	-0.1	1.660	2.250
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 9	ECI 6	518598	2592.99	18.34	19.50	1.306	-	-	0.07	1.760	2.299
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	8mm	Ant 9	ECI 4	518598	2592.99	23.71	24.00	1.069	-	-	0.08	1.680	1.796
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 0	ECI 6	518598	2592.99	21.40	22.80	1.380	-	1.000	0.07	1.770	2.443
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 0	ECI 6	518598	2592.99	21.17	22.80	1.455	-	1.000	-0.03	1.200	1.747
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 0	ECI 6	518598	2592.99	21.16	22.80	1.459	-	1.000	0.09	1.230	1.794
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 0	ECI 6	518598	2592.99	21.40	22.80	1.380	-	1.000	0.11	2.280	3.147



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	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 0	ECI 6	518598	2592.99	21.17	22.80	1.455	-	1.000	-0.05	1.980	2.882
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 0	ECI 6	518598	2592.99	21.16	22.80	1.459	-	1.000	-0.03	2.030	2.961
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	0mm	Ant 0	ECI 6	518598	2592.99	21.40	22.80	1.380	-	1.000	0.17	1.230	1.698
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	0mm	Ant 0	ECI 6	518598	2592.99	21.17	22.80	1.455	-	1.000	-0.14	1.080	1.572
	FR1 n41 Other PA	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 0	ECI 6	518598	2592.99	21.40	22.80	1.380	-	1.000	0.13	1.960	2.706
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	4mm	Ant 0	ECI 4	518598	2592.99	22.77	24.00	1.327	-	1.000	0.06	1.180	1.566
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	10mm	Ant 0	ECI 4	518598	2592.99	22.77	24.00	1.327	-	1.000	-0.03	0.640	0.850
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	8mm	Ant 0	ECI 4	518598	2592.99	22.77	24.00	1.327	-	1.000	-0.03	0.615	0.816
3500MHz																				
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 7	ECI 6	42590	3500	21.68	22.70	1.265	62.9	1.006	0.12	1.690	2.150
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 7	ECI 6	42190	3460	21.45	22.70	1.334	62.9	1.006	0.06	1.480	1.985
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 7	ECI 6	42990	3540	21.54	22.70	1.306	62.9	1.006	0.02	1.330	1.748
	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 7	ECI 6	42590	3500	21.65	22.70	1.274	62.9	1.006	0	1.640	2.101
	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 7	ECI 6	42190	3460	21.49	22.70	1.321	62.9	1.006	-0.1	1.450	1.927
	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 7	ECI 6	42990	3540	21.62	22.70	1.282	62.9	1.006	0.05	1.670	2.154
	LTE Band 42	20M	QPSK	100	0	-	Back	0mm	Ant 7	ECI 6	42590	3500	21.63	22.70	1.279	62.9	1.006	0	1.560	2.008
	LTE Band 42	20M	QPSK	1	0	-	Left Side	0mm	Ant 7	ECI 6	42590	3500	21.68	22.70	1.265	62.9	1.006	0.07	1.900	2.417
	LTE Band 42	20M	QPSK	1	0	-	Left Side	0mm	Ant 7	ECI 6	42190	3460	21.45	22.70	1.334	62.9	1.006	0.15	1.760	2.361
	LTE Band 42	20M	QPSK	1	0	-	Left Side	0mm	Ant 7	ECI 6	42990	3540	21.54	22.70	1.306	62.9	1.006	-0.05	1.910	2.510
	LTE Band 42C	20M	QPSK	1	0	-	Left Side	0mm	Ant 7	ECI 6	42990+ 42792	3540+ 3520.2	21.51	22.70	1.315	62.9	1.006	0.01	1.850	2.448
	LTE Band 42	20M	QPSK	50	0	-	Left Side	0mm	Ant 7	ECI 6	42590	3500	21.65	22.70	1.274	62.9	1.006	-0.08	1.870	2.396
	LTE Band 42	20M	QPSK	50	0	-	Left Side	0mm	Ant 7	ECI 6	42190	3460	21.49	22.70	1.321	62.9	1.006	-0.08	1.780	2.366
	LTE Band 42	20M	QPSK	50	0	-	Left Side	0mm	Ant 7	ECI 6	42990	3540	21.62	22.70	1.282	62.9	1.006	0.04	1.880	2.425
	LTE Band 42	20M	QPSK	100	0	-	Left Side	0mm	Ant 7	ECI 6	42590	3500	21.63	22.70	1.279	62.9	1.006	0.01	1.840	2.368
	LTE Band 42	20M	QPSK	1	0	-	Back	15mm	Ant 7	ECI 4	42590	3500	22.86	24.00	1.300	62.9	1.006	-0.16	0.775	1.014
	LTE Band 42	20M	QPSK	1	0	-	Left Side	8mm	Ant 7	ECI 4	42590	3500	22.86	24.00	1.300	62.9	1.006	-0.02	1.640	2.145
	LTE Band 42	20M	QPSK	50	0	-	Left Side	8mm	Ant 7	ECI 4	42590	3500	21.96	23.00	1.271	62.9	1.006	0.08	1.530	1.956
	LTE Band 42	20M	QPSK	1	0	-	Right Side	0mm	Ant 8	ECI 4	42590	3500	20.97	22.10	1.297	62.9	1.006	0.05	2.030	2.649
	LTE Band 42	20M	QPSK	1	0	-	Right Side	0mm	Ant 8	ECI 4	42190	3460	20.90	22.10	1.318	62.9	1.006	-0.03	2.240	2.971
92	LTE Band 42	20M	QPSK	1	0	-	Right Side	0mm	Ant 8	ECI 4	42990	3540	20.86	22.10	1.330	62.9	1.006	0.17	2.410	3.226
	LTE Band 42C	20M	QPSK	1	0	-	Right Side	0mm	Ant 8	ECI 4	42990+ 42792	3540+ 3520.2	20.77	22.10	1.358	62.9	1.006	0.02	2.160	2.952
	LTE Band 42	20M	QPSK	50	0	-	Right Side	0mm	Ant 8	ECI 4	42590	3500	20.94	22.10	1.306	62.9	1.006	-0.15	2.080	2.733
	LTE Band 42	20M	QPSK	50	0	-	Right Side	0mm	Ant 8	ECI 4	42190	3460	20.89	22.10	1.321	62.9	1.006	0.16	1.860	2.472
	LTE Band 42	20M	QPSK	50	0	-	Right Side	0mm	Ant 8	ECI 4	42990	3540	20.92	22.10	1.312	62.9	1.006	0.06	2.380	3.142
	LTE Band 42	20M	QPSK	100	0	-	Right Side	0mm	Ant 8	ECI 4	42590	3500	20.91	22.10	1.315	62.9	1.006	-0.06	2.100	2.779
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 10	ECI 4	42590	3500	21.33	22.50	1.309	62.9	1.006	0.03	1.720	2.265
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 10	ECI 4	42190	3460	21.12	22.50	1.374	62.9	1.006	0.06	1.760	2.433
	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 10	ECI 4	42990	3540	21.26	22.50	1.330	62.9	1.006	0.09	1.840	2.463
	LTE Band 42C	20M	QPSK	1	0	-	Back	0mm	Ant 10	ECI 4	42990+ 42792	3540+ 3520.2	21.21	22.50	1.346	62.9	1.006	0.01	1.770	2.396
	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 10	ECI 4	42590	3500	20.33	22.50	1.648	62.9	1.006	-0.05	1.830	3.034
	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 10	ECI 4	42190	3460	20.21	22.50	1.694	62.9	1.006	0.14	1.790	3.051
	LTE Band 42	20M	QPSK	50	0	-	Back	0mm	Ant 10	ECI 4	42990	3540	20.14	22.50	1.722	62.9	1.006	-0.08	1.780	3.083
	LTE Band 42	20M	QPSK	100	0	-	Back	0mm	Ant 10	ECI 4	42590	3500	20.31	22.50	1.656	62.9	1.006	-0.01	1.790	2.982
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 7	ECI 6	656000	3840	18.28	19.00	1.180	-	-	0.08	1.990	2.349
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 7	ECI 6	656000	3840	18.20	19.00	1.202	-	-	0.19	1.920	2.308
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 7	ECI 6	656000	3840	18.09	19.00	1.233	-	-	-0.06	1.860	2.294
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 7	ECI 6	656000	3840	18.28	19.00	1.180	-	-	0.05	2.050	2.420
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 7	ECI 6	656000	3840	18.20	19.00	1.202	-	-	-0.03	1.970	2.368
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 7	ECI 6	656000	3840	18.09	19.00	1.233	-	-	0.07	1.850	2.281
	FR1 n77_HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 7	ECI 6	656000	3840	21.10	22.00	1.230	50	1.000	-0.12	1.910	2.350
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 7	ECI 4	656000	3840	23.75	24.50	1.189	-	-	-0.09	0.927	1.102
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	8mm	Ant 7	ECI 4	656000	3840	23.75	24.50	1.189	-	-	0.11	1.680	1.997
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	8mm	Ant 7	ECI 4	656000	3840	26.58	27.50	1.236	50	1.000	-0.05	1.740	2.151
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 4	ECI 6	656000	3840	23.76	24.50	1.186	-	-	0.03	0.904	1.072
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 4	ECI 6	656000	3840	23.74	24.50	1.191	-	-	0.18	0.912	1.086



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	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 4	ECI 6	656000	3840	23.76	24.50	1.186	-	-	0.09	1.530	1.814
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	ECI 6	656000	3840	23.74	24.50	1.191	-	-	-0.1	1.330	1.584
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 4	ECI 6	656000	3840	26.84	27.50	1.164	50	1.000	0.18	1.510	1.758
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	17.87	19.20	1.358	-	-	0.17	2.200	2.988
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	17.72	19.20	1.406	-	-	0.18	2.080	2.925
93	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	17.73	19.20	1.403	-	-	0.02	2.260	3.170
	FR1 n77_HPUE	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	20.74	22.20	1.400	50	1.000	-0.13	2.110	2.953
	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 10	ECI 4	656000	3840	22.29	22.80	1.125	-	-	0.07	2.060	2.317
	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 10	ECI 4	656000	3840	22.27	22.80	1.130	-	-	-0.05	2.030	2.293
	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 10	ECI 4	656000	3840	22.23	22.80	1.140	-	-	-0.08	1.870	2.132
	FR1 n77_HPUE	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 10	ECI 4	656000	3840	24.87	25.81	1.242	50	1.000	0.16	1.830	2.272

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)
2450MHz																
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6+3(3)	Standalone	6	2437	21.66	23.00	1.361	99.31	1.007	0.03	1.460	2.002
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6+3(3)	Standalone	11	2462	21.60	23.00	1.380	99.31	1.007	-0.08	1.490	2.071
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6+3(3)	Standalone	6	2437	21.66	23.00	1.361	99.31	1.007	-0.08	2.390	3.277
94	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6+3(3)	Standalone	11	2462	21.60	23.00	1.380	99.31	1.007	0.01	2.520	3.503
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6+3(6)	Standalone	1	2412	20.53	22.00	1.403	99.31	1.007	0.08	2.350	3.320
	WLAN2.4GHz	802.11g 6Mbps	Right Side	0mm	Ant 6+3(3)	Standalone	6	2437	20.88	22.50	1.452	96.97	1.031	0.08	1.950	2.919
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 6+3(3)	Standalone	6	2437	21.66	23.00	1.361	99.31	1.007	0.1	1.860	2.550
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 6+3(3)	Standalone	11	2462	21.60	23.00	1.380	99.31	1.007	-0.18	1.690	2.349
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6+3(3)	DBS only	6	2437	18.56	20.00	1.393	99.31	1.007	0.06	1.420	1.992
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6+3(3)	Simultaneous	6	2437	15.48	17.00	1.419	99.31	1.007	0.08	0.395	0.564
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6+3(3)	Simultaneous	6	2437	15.48	17.00	1.419	99.31	1.007	0.01	0.681	0.973
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 6+3(3)	Simultaneous	6	2437	15.48	17.00	1.419	99.31	1.007	0.03	0.503	0.719
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 6+3(3)	DBS	6	2437	12.41	14.00	1.442	99.31	1.007	-0.08	0.198	0.288
	WLAN2.4GHz	802.11b 1Mbps	Right Side	0mm	Ant 6+3(3)	DBS	6	2437	12.41	14.00	1.442	99.31	1.007	-0.08	0.341	0.495
	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 6+3(3)	DBS	6	2437	12.41	14.00	1.442	99.31	1.007	0.1	0.252	0.366
	WLAN2.4GHz	802.11b 1Mbps	Back	11mm	Ant 6+3(3)	Full Power	6	2437	22.90	24.50	1.445	99.31	1.007	-0.18	0.483	0.703
	WLAN2.4GHz	802.11b 1Mbps	Right Side	14mm	Ant 6+3(3)	Full Power	6	2437	22.90	24.50	1.445	99.31	1.007	0.1	0.359	0.523
	WLAN2.4GHz	802.11b 1Mbps	Top Side	12mm	Ant 6+3(3)	Full Power	6	2437	22.90	24.50	1.445	99.31	1.007	0.12	0.150	0.218
5000MHz																
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	0mm	Ant 5+4(4)	Standalone	46	5230	18.29	19.50	1.321	93.67	1.068	-0.03	1.080	1.524
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	0mm	Ant 5+4(4)	Standalone	46	5230	18.29	19.50	1.321	93.67	1.068	0.14	0.530	0.748
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 5+4(4)	Standalone	46	5230	18.29	19.50	1.321	93.67	1.068	0.11	1.180	1.665
95	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 5+4(4)	Standalone	46	5230	18.29	19.50	1.321	93.67	1.068	-0.13	1.890	2.667
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 5+4(4)	Standalone	38	5190	17.09	18.50	1.382	93.67	1.068	0.02	1.760	2.598
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 5+4(5)	DBS only	38	5190	15.33	16.50	1.309	93.67	1.068	0.06	1.310	1.832
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	0mm	Ant 5+4(5)	Simultaneous	38	5190	12.26	13.50	1.330	93.67	1.068	-0.05	0.362	0.514
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	0mm	Ant 5+4(5)	Simultaneous	38	5190	12.26	13.50	1.330	93.67	1.068	0.18	0.178	0.253
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 5+4(5)	Simultaneous	38	5190	12.26	13.50	1.330	93.67	1.068	0.14	0.396	0.563
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 5+4(5)	Simultaneous	38	5190	12.26	13.50	1.330	93.67	1.068	-0.17	0.634	0.901
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 5+4(5)	DBS	42	5210	9.16	10.50	1.361	88.19	1.134	0.17	0.182	0.281
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 5+4(5)	DBS	42	5210	9.16	10.50	1.361	88.19	1.134	-0.05	0.089	0.137
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 5+4(5)	DBS	42	5210	9.16	10.50	1.361	88.19	1.134	0.01	0.199	0.307
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5+4(5)	DBS	42	5210	9.16	10.50	1.361	88.19	1.134	0.1	0.319	0.492
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	Ant 5+4(4)	Full Power	40	5200	19.86	21.00	1.299	96.97	1.031	-0.08	0.173	0.232
	WLAN5.2GHz	802.11a 6Mbps	Back	11mm	Ant 5+4(4)	Full Power	40	5200	19.86	21.00	1.299	96.97	1.031	0.16	0.170	0.228
	WLAN5.2GHz	802.11a 6Mbps	Right Side	14mm	Ant 5+4(4)	Full Power	40	5200	19.86	21.00	1.299	96.97	1.031	0.05	0.100	0.134
	WLAN5.2GHz	802.11a 6Mbps	Top Side	12mm	Ant 5+4(4)	Full Power	40	5200	19.86	21.00	1.299	96.97	1.031	0.05	0.305	0.409
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	0mm	Ant 5+4(5)	Standalone	54	5270	17.63	19.00	1.371	93.67	1.068	-0.05	1.050	1.537
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 5+4(5)	Standalone	54	5270	17.63	19.00	1.371	93.67	1.068	0.18	0.633	0.927
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 5+4(4)	Full Power	56	5280	19.68	21.00	1.354	96.97	1.031	0.14	0.079	0.110



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	WLAN5.3GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 5+4(5)	Standalone	54	5270	17.63	19.00	1.371	93.67	1.068	-0.17	1.260	1.845
96	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 5+4(5)	Standalone	54	5270	17.63	19.00	1.371	93.67	1.068	-0.09	1.910	2.796
	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 5+4(5)	Standalone	62	5310	16.92	18.00	1.281	93.67	1.068	0.02	1.840	2.518
	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 5+4(5)	DBS only	62	5310	15.88	17.00	1.294	93.67	1.068	-0.09	1.330	1.838
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 5+4(4)	Simultaneous	50	5250	12.21	14.00	1.510	92.65	1.079	0.18	0.344	0.560
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 5+4(4)	Simultaneous	50	5250	12.21	14.00	1.510	92.65	1.079	-0.1	0.207	0.337
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 5+4(4)	Simultaneous	50	5250	12.21	14.00	1.510	92.65	1.079	-0.15	0.413	0.673
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 5+4(4)	Simultaneous	50	5250	12.21	14.00	1.510	92.65	1.079	0.19	0.606	0.987
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 5+4(4)	DBS	50	5250	9.63	11.00	1.371	92.65	1.079	0.07	0.171	0.253
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 5+4(4)	DBS	50	5250	9.63	11.00	1.371	92.65	1.079	-0.18	0.103	0.152
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 5+4(4)	DBS	50	5250	9.63	11.00	1.371	92.65	1.079	-0.15	0.205	0.303
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 5+4(4)	DBS	50	5250	9.63	11.00	1.371	92.65	1.079	-0.15	0.311	0.460
	WLAN5.3GHz	802.11a 6Mbps	Front	10mm	Ant 5+4(4)	Full Power	56	5280	19.68	21.00	1.354	96.97	1.031	-0.03	0.233	0.325
	WLAN5.3GHz	802.11a 6Mbps	Back	11mm	Ant 5+4(4)	Full Power	56	5280	19.68	21.00	1.354	96.97	1.031	-0.15	0.224	0.313
	WLAN5.3GHz	802.11a 6Mbps	Right Side	14mm	Ant 5+4(4)	Full Power	56	5280	19.68	21.00	1.354	96.97	1.031	0.02	0.151	0.211
	WLAN5.3GHz	802.11a 6Mbps	Top Side	12mm	Ant 5+4(4)	Full Power	56	5280	19.68	21.00	1.354	96.97	1.031	0.07	0.396	0.553
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 5+4(4)	Standalone	138	5690	17.68	19.00	1.355	88.19	1.134	0.17	1.590	2.443
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 5+4(4)	Standalone	122	5610	17.08	18.50	1.388	88.19	1.134	0.03	1.260	1.983
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 5+4(4)	Standalone	138	5690	17.68	19.00	1.355	88.19	1.134	-0.05	0.969	1.489
	WLAN5.5GHz	802.11a 6Mbps	Left Side	0mm	Ant 5+4(4)	Full Power	132	5660	19.27	21.00	1.488	96.97	1.031	0.01	0.101	0.155
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 5+4(4)	Standalone	138	5690	17.68	19.00	1.355	88.19	1.134	0.1	1.780	2.735
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 5+4(4)	Standalone	122	5610	17.08	18.50	1.388	88.19	1.134	0.01	1.340	2.109
97	WLAN5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5+4(4)	Standalone	138	5690	17.68	19.00	1.355	88.19	1.134	0.03	1.960	3.012
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5+4(4)	Standalone	122	5610	17.08	18.50	1.388	88.19	1.134	0.08	1.410	2.219
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5+4(4)	DBS only	138	5690	15.18	16.50	1.355	88.19	1.134	0.03	1.170	1.798
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 5+4(4)	Simultaneous	114	5570	12.51	14.00	1.409	92.65	1.079	0.06	0.514	0.782
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 5+4(4)	Simultaneous	114	5570	12.51	14.00	1.409	92.65	1.079	-0.09	0.313	0.476
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 5+4(4)	Simultaneous	114	5570	12.51	14.00	1.409	92.65	1.079	0.13	0.576	0.876
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 5+4(4)	Simultaneous	114	5570	12.51	14.00	1.409	92.65	1.079	0.12	0.634	0.964
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 5+4(4)	DBS	114	5570	9.54	11.00	1.400	92.65	1.079	0.03	0.253	0.382
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 5+4(4)	DBS	114	5570	9.54	11.00	1.400	92.65	1.079	0.18	0.154	0.233
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 5+4(4)	DBS	114	5570	9.54	11.00	1.400	92.65	1.079	-0.1	0.283	0.427
	WLAN5.5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 5+4(4)	DBS	114	5570	9.54	11.00	1.400	92.65	1.079	0.07	0.312	0.471
	WLAN5.5GHz	802.11a 6Mbps	Front	10mm	Ant 5+4(4)	Full Power	132	5660	19.27	21.00	1.488	96.97	1.031	0.16	0.032	0.049
	WLAN5.5GHz	802.11a 6Mbps	Back	11mm	Ant 5+4(4)	Full Power	132	5660	19.27	21.00	1.488	96.97	1.031	0.13	0.264	0.405
	WLAN5.5GHz	802.11a 6Mbps	Right Side	14mm	Ant 5+4(4)	Full Power	132	5660	19.27	21.00	1.488	96.97	1.031	-0.18	0.293	0.450
	WLAN5.5GHz	802.11a 6Mbps	Top Side	12mm	Ant 5+4(4)	Full Power	132	5660	19.27	21.00	1.488	96.97	1.031	0.02	0.430	0.660
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 5+4(4)	Standalone	155	5775	17.16	18.50	1.361	88.19	1.134	0.12	0.844	1.303
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 5+4(4)	Standalone	155	5775	17.16	18.50	1.361	88.19	1.134	0.03	1.220	1.884
98	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5+4(4)	Standalone	155	5775	17.16	18.50	1.361	88.19	1.134	0.06	1.960	3.026
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5+4(4)	DBS only	155	5775	14.72	16.00	1.343	88.19	1.134	0.06	1.220	1.858
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 5+4(4)	Simultaneous	155	5775	12.24	13.50	1.337	88.19	1.134	-0.08	0.269	0.408
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 5+4(4)	Simultaneous	155	5775	12.24	13.50	1.337	88.19	1.134	0.17	0.388	0.588
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5+4(4)	Simultaneous	155	5775	12.24	13.50	1.337	88.19	1.134	0.18	0.624	0.946
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 5+4(4)	DBS	155	5775	9.19	10.50	1.352	88.19	1.134	-0.04	0.137	0.210
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 5+4(4)	DBS	155	5775	9.19	10.50	1.352	88.19	1.134	-0.08	0.198	0.304
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 5+4(4)	DBS	155	5775	9.19	10.50	1.352	88.19	1.134	-0.13	0.318	0.488
	WLAN5.8GHz	802.11a 6Mbps	Back	11mm	Ant 5+4(4)	Full Power	149	5745	20.46	22.00	1.424	96.97	1.031	0.16	0.350	0.514
	WLAN5.8GHz	802.11a 6Mbps	Right Side	14mm	Ant 5+4(4)	Full Power	149	5745	20.46	22.00	1.424	96.97	1.031	-0.03	0.328	0.482
	WLAN5.8GHz	802.11a 6Mbps	Top Side	12mm	Ant 5+4(4)	Full Power	149	5745	20.46	22.00	1.424	96.97	1.031	0.07	0.548	0.805

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	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(3)	Standalone	6	2437	20.93	22.50	1.435	99.31	1.007	0.08	0.937	1	1.354
2nd	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 6+3(3)	Standalone	6	2437	20.93	22.50	1.435	99.31	1.007	0.02	0.929	1.009	1.343
1st	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	23230	782	22.85	24.00	1.303	-	-	0.02	0.980	1	1.277
2nd	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	23230	782	22.85	24.00	1.303	-	-	0.09	0.971	1.009	1.265
1st	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4182	836.4	22.28	23.00	1.180	-	-	0.02	0.978	1	1.154
2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4182	836.4	22.28	23.00	1.180	-	-	0.06	0.964	1.015	1.138
1st	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	132072	1720	21.27	22.30	1.268	-	-	0.12	1.020	1	1.293
2nd	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	132072	1720	21.27	22.30	1.268	-	-	-0.06	0.987	1.033	1.251
1st	LTE Band 41 HPUE	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	41490	2680	24.44	25.10	1.164	42.9	1.009	0.18	1.100	1	1.292
2nd	LTE Band 41 HPUE	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	41490	2680	24.44	25.10	1.164	42.9	1.009	0.02	1.030	1.068	1.210
1st	LTE Band 42	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	22.01	23.00	1.256	62.9	1.006	0.04	1.030	1	1.301
2nd	LTE Band 42	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	22.01	23.00	1.256	62.9	1.006	0.01	0.986	1.045	1.246
1st	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	5mm	Ant 8	ECI 7	656000	3840	17.73	18.80	1.279	-	-	0.01	0.995	1	1.273
2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	5mm	Ant 8	ECI 7	656000	3840	17.73	18.80	1.279	-	-	0.06	0.986	1.009	1.261
1st	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 3	376000	1880	22.93	24.00	1.279	-	-	-0.05	1.110	1	1.420
2nd	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 3	376000	1880	22.93	24.00	1.279	-	-	0.1	1.030	1.078	1.318

<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	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	132322	1745	20.31	21.50	1.315	-	-	-0.06	2.390	1	3.143
2nd	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	132322	1745	20.31	21.50	1.315	-	-	0.01	2.310	1.035	3.038
1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	ECI 6	9400	1880	21.00	22.00	1.259	-	-	0.01	2.530	1	3.185
2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 0	ECI 6	9400	1880	21.00	22.00	1.259	-	-	0.06	2.410	1.050	3.034
1st	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	20.06	20.80	1.186	-	-	-0.03	2.670	1	3.166
2nd	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	20.06	20.80	1.186	-	-	0.05	2.540	1.051	3.012
1st	LTE Band 42	20M	QPSK	1	0	-	Right Side	0mm	Ant 8	ECI 4	42990	3540	20.86	22.10	1.330	62.9	1.006	0.17	2.410	1	3.226
2nd	LTE Band 42	20M	QPSK	1	0	-	Right Side	0mm	Ant 8	ECI 4	42990	3540	20.86	22.10	1.330	62.9	1.006	0.02	2.330	1.034	3.119
1st	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	17.73	19.20	1.403	-	-	0.02	2.260	1	3.170
2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	17.73	19.20	1.403	-	-	0.05	2.130	1.061	2.988
1st	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Right Side	0mm	Ant 6+3(3)	Standalone	11	2462	21.60	23.00	1.380	99.31	1.007	0.01	2.520	1	3.503
2nd	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Right Side	0mm	Ant 6+3(3)	Standalone	11	2462	21.60	23.00	1.380	99.31	1.007	0.05	2.460	1.024	3.420

General Note:

- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
- Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR < 1.45 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 LTE and NR Linearity Data Analysis

General Note:

This device support Power Class 2 and Power Class 3 operations for LTE Band 41/5GNR n77. The highest available duty cycle for Power Class 2 operation is 43.3% for LTE and 50% for 5GNR using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg for 1g and < 3.5 W/kg for 10g, Separate SAR testing for Power Class 2 is not required.

LTE B41-Linearity Data for Head Ant 2			LTE B41-Linearity Data for Head Ant 1		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)		LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	19.40	21.00
Reported 1g SAR (W/kg)	0.083	0.111	Reported 1g SAR (W/kg)	0.875	0.885
Duty Cycle	63.30%	43.30%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	217.01	Frame Averaged (mW)	55.13	54.51
Linearity SAR (W/kg)	0.113		Linearity SAR (W/kg)	0.865	
% deviation from expected linearity		-2.01%	% deviation from expected linearity		2.29%
LTE B41-Linearity Data for Body-worn Ant 2			LTE B41-Linearity Data for Body-worn Ant 1		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)		LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	20.80	22.40
Reported 1g SAR (W/kg)	0.906	1.191	Reported 1g SAR (W/kg)	0.822	0.878
Duty Cycle	63.30%	43.30%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	217.01	Frame Averaged (mW)	76.10	75.25
Linearity SAR (W/kg)	1.237		Linearity SAR (W/kg)	0.813	
% deviation from expected linearity		-3.68%	% deviation from expected linearity		8.03%
LTE B41-Linearity Data for Hotspot Ant 2			LTE B41-Linearity Data for Hotspot Ant 1		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)		LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	23.50	25.10	Maximum Tune up Power (dBm)	17.90	19.50
Reported 1g SAR (W/kg)	1.220	1.292	Reported 1g SAR (W/kg)	0.582	0.613
Duty Cycle	63.30%	43.30%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	141.71	140.12	Frame Averaged (mW)	39.03	38.59
Linearity SAR (W/kg)	1.206		Linearity SAR (W/kg)	0.575	
% deviation from expected linearity		7.11%	% deviation from expected linearity		6.53%
LTE B41-Linearity Data for Extremity Ant 2			LTE B41-Linearity Data for Extremity Ant 1		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)		LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	23.50	25.10	Maximum Tune up Power (dBm)	23.00	26.00
Reported 10g SAR (W/kg)	2.974	3.223	Reported 10g SAR (W/kg)	1.282	1.754
Duty Cycle	63.30%	43.30%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	141.71	140.12	Frame Averaged (mW)	126.30	172.38
Linearity SAR (W/kg)	2.941		Linearity SAR (W/kg)	1.750	
% deviation from expected linearity		9.61%	% deviation from expected linearity		0.24%
LTE B41-Linearity Data for Head Ant 9			LTE B41-Linearity Data for Head Ant 0		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)		LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	25.80	Maximum Tune up Power (dBm)	22.50	25.50
Reported 1g SAR (W/kg)	0.779	0.877	Reported 1g SAR (W/kg)	0.042	0.060
Duty Cycle	63.30%	43.30%	Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	164.62	Frame Averaged (mW)	112.57	153.63
Linearity SAR (W/kg)	0.807		Linearity SAR (W/kg)	0.057	
% deviation from expected linearity		8.74%	% deviation from expected linearity		4.67%
LTE B41-Linearity Data for Body-worn Ant 9			LTE B41-Linearity Data for Body-worn Ant 0		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)		LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	21.30	22.90	Maximum Tune up Power (dBm)	21.60	23.20
Reported 1g SAR (W/kg)	0.835	0.878	Reported 1g SAR (W/kg)	1.174	1.270



Duty Cycle	63.30%	43.30%		Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	85.39	84.43		Frame Averaged (mW)	91.50	90.47
Linearity SAR (W/kg)	0.826			Linearity SAR (W/kg)	1.161	
% deviation from expected linearity		6.35%		% deviation from expected linearity		9.41%
LTE B41-Linearity Data for Hotspot Ant 9				LTE B41-Linearity Data for Hotspot Ant 0		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)			LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	15.30	16.90		Maximum Tune up Power (dBm)	21.70	23.30
Reported 1g SAR (W/kg)	0.596	0.606		Reported 1g SAR (W/kg)	1.251	1.275
Duty Cycle	63.30%	43.30%		Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	21.45	21.21		Frame Averaged (mW)	93.63	92.57
Linearity SAR (W/kg)	0.589			Linearity SAR (W/kg)	1.237	
% deviation from expected linearity		2.84%		% deviation from expected linearity		3.08%
LTE B41-Linearity Data for Extremity Ant 9				LTE B41-Linearity Data for Extremity Ant 0		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)			LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	21.80	23.40		Maximum Tune up Power (dBm)	22.50	25.50
Reported 10g SAR (W/kg)	2.370	2.486		Reported 10g SAR (W/kg)	1.527	2.072
Duty Cycle	63.30%	43.30%		Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	95.81	94.73		Frame Averaged (mW)	112.57	153.63
Linearity SAR (W/kg)	2.343			Linearity SAR (W/kg)	2.084	
% deviation from expected linearity		6.09%		% deviation from expected linearity		-0.58%

<Sensor Off>

LTE B41-Linearity Data for Extremity Ant 2				LTE B41-Linearity Data for ExtremityAnt 9		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)			LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00		Maximum Tune up Power (dBm)	24.00	27.00
Reported 10g SAR (W/kg)	0.187	0.271		Reported 10g SAR (W/kg)	1.471	1.961
Duty Cycle	63.30%	43.30%		Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	217.01		Frame Averaged (mW)	159.00	217.01
Linearity SAR (W/kg)	0.255			Linearity SAR (W/kg)	2.008	
% deviation from expected linearity		6.18%		% deviation from expected linearity		-2.33%

LTE B41-Linearity Data for Body-worn Ant 1				LTE B41-Linearity Data for Body-worn Ant 9		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)			LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00		Maximum Tune up Power (dBm)	24.00	27.00
Reported 1g SAR (W/kg)	0.275	0.366		Reported 1g SAR (W/kg)	0.196	0.259
Duty Cycle	63.30%	43.30%		Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	126.30	172.38		Frame Averaged (mW)	159.00	217.01
Linearity SAR (W/kg)	0.375			Linearity SAR (W/kg)	0.268	
% deviation from expected linearity		-2.49%		% deviation from expected linearity		-3.18%

LTE B41-Linearity Data for Body-worn Ant 0		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	25.50
Reported 1g SAR (W/kg)	0.235	0.335
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	112.57	153.63
Linearity SAR (W/kg)	0.321	
% deviation from expected linearity		4.45%

FR1 n77 Part 270(HPUE)-Linearity Data for Head Ant 7			FR1 n77 Part 270(HPUE)-Linearity Data for Head Ant 4		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)		FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	18.20	21.21	Maximum Tune up Power (dBm)	18.60	21.61
Reported 1g SAR (W/kg)	0.882	0.856	Reported 1g SAR (W/kg)	0.892	0.869
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	66.07	66.07	Frame Averaged (mW)	72.44	72.44
Linearity SAR (W/kg)	0.882		Linearity SAR (W/kg)	0.892	
% deviation from expected linearity		-2.95%	% deviation from expected linearity		-2.58%
FR1 n77 Part 270(HPUE)-Linearity Data for Body-worn Ant 7			FR1 n77 Part 270(HPUE)-Linearity Data for Body-worn Ant 4		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)		FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	17.80	20.80	Maximum Tune up Power (dBm)	19.80	22.80
Reported 1g SAR (W/kg)	0.864	0.859	Reported 1g SAR (W/kg)	0.870	0.798
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	60.26	60.11	Frame Averaged (mW)	95.50	95.27
Linearity SAR (W/kg)	0.862		Linearity SAR (W/kg)	0.868	
% deviation from expected linearity		-0.34%	% deviation from expected linearity		-8.06%
FR1 n77 Part 270(HPUE)-Linearity Data for Hotspot Ant 7			FR1 n77 Part 270(HPUE)-Linearity Data for Hotspot Ant 4		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)		FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	15.10	18.10	Maximum Tune up Power (dBm)	18.70	21.70
Reported 1g SAR (W/kg)	0.596	0.593	Reported 1g SAR (W/kg)	0.605	0.570
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	32.36	32.28	Frame Averaged (mW)	74.13	73.96
Linearity SAR (W/kg)	0.595		Linearity SAR (W/kg)	0.604	
% deviation from expected linearity		-0.27%	% deviation from expected linearity		-5.56%
FR1 n77 Part 270(HPUE)-Linearity Data for Extremity Ant 7			FR1 n77 Part 270(HPUE)-Linearity Data for Extremity Ant 4		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)		FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	19.00	22.00	Maximum Tune up Power (dBm)	24.00	27.00
Reported 10g SAR (W/kg)	2.420	2.350	Reported 10g SAR (W/kg)	1.814	1.758
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	79.43	79.24	Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	2.414		Linearity SAR (W/kg)	1.810	
% deviation from expected linearity		-2.66%	% deviation from expected linearity		-2.86%
FR1 n77 Part 270(HPUE)-Linearity Data for Head Ant 8			FR1 n77 Part 270(HPUE)-Linearity Data for Head Ant 10		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)		FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00	Maximum Tune up Power (dBm)	24.00	27.00
Reported 1g SAR (W/kg)	0.690	0.677	Reported 1g SAR (W/kg)	0.558	0.555
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59	Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	0.688		Linearity SAR (W/kg)	0.557	
% deviation from expected linearity		-1.65%	% deviation from expected linearity		-0.30%
FR1 n77 Part 270(HPUE)-Linearity Data for Body-worn Ant 8			FR1 n77 Part 270(HPUE)-Linearity Data for Body-worn Ant 10		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)		FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	21.90	24.90	Maximum Tune up Power (dBm)	15.20	18.20
Reported 1g SAR (W/kg)	1.290	1.221	Reported 1g SAR (W/kg)	0.882	0.867
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	154.88	154.51	Frame Averaged (mW)	33.11	33.03
Linearity SAR (W/kg)	1.287		Linearity SAR (W/kg)	0.880	
% deviation from expected linearity		-5.12%	% deviation from expected linearity		-1.47%
FR1 n77 Part 270(HPUE)-Linearity Data for Hotspot Ant 8			FR1 n77 Part 270(HPUE)-Linearity Data for Hotspot Ant 10		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)		FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	18.80	21.80	Maximum Tune up Power (dBm)	13.70	16.70
Reported 1g SAR (W/kg)	1.273	1.183	Reported 1g SAR (W/kg)	0.626	0.608
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%



Frame Averaged (mW)	75.86	75.68		Frame Averaged (mW)	23.44	23.39
Linearity SAR (W/kg)	1.270			Linearity SAR (W/kg)	0.625	
% deviation from expected linearity		-6.85%		% deviation from expected linearity		-2.64%
FR1 n77 Part 270(HPUE)-Linearity Data for Extremity Ant 8				FR1 n77 Part 270(HPUE)-Linearity Data for Extremity Ant 10		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)			FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	19.20	22.20		Maximum Tune up Power (dBm)	22.80	25.81
Reported 10g SAR (W/kg)	3.170	2.953		Reported 10g SAR (W/kg)	2.317	2.272
Duty Cycle	100.00%	50.00%		Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	83.18	82.98		Frame Averaged (mW)	190.55	190.53
Linearity SAR (W/kg)	3.162			Linearity SAR (W/kg)	2.317	
% deviation from expected linearity		-6.62%		% deviation from expected linearity		-1.94%

<Sensor Off>

FR1 n77 Part 270(HPUE)-Linearity Data for Extremity Ant 7				FR1 n77 Part 270(HPUE)-Linearity Data for Body-worn Ant 4		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)			FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	24.50	27.50		Maximum Tune up Power (dBm)	24.50	27.50
Reported 10g SAR (W/kg)	1.997	2.151		Reported 1g SAR (W/kg)	0.594	0.613
Duty Cycle	100.00%	50.00%		Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	281.84	281.17		Frame Averaged (mW)	281.84	281.17
Linearity SAR (W/kg)	1.992			Linearity SAR (W/kg)	0.593	
% deviation from expected linearity		7.97%		% deviation from expected linearity		3.44%
FR1 n77 Part 270(HPUE)-Linearity Data for Body-worn Ant 7				FR1 n77 Part 270(HPUE)-Linearity Data for Body-worn Ant 10		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)			FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	24.50	27.50		Maximum Tune up Power (dBm)	22.80	25.81
Reported 1g SAR (W/kg)	0.557	0.586		Reported 1g SAR (W/kg)	0.596	0.642
Duty Cycle	100.00%	50.00%		Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	281.84	281.17		Frame Averaged (mW)	190.55	190.53
Linearity SAR (W/kg)	0.556			Linearity SAR (W/kg)	0.596	
% deviation from expected linearity		5.46%		% deviation from expected linearity		7.73%

FR1 n77 Part 270(HPUE)-Linearity Data for Body-worn Ant 8				FR1 n77 Part 270(HPUE)-Linearity Data for Body-worn Ant 10		
	FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)			FR1 n77 Part 270 (Power Class 3)	FR1 n77 Part 270 (Power Class 2)
Maximum Tune up Power (dBm)	19.20	22.20		Maximum Tune up Power (dBm)	22.80	25.81
Reported 1g SAR (W/kg)	0.390	0.372		Reported 1g SAR (W/kg)	0.596	0.642
Duty Cycle	100.00%	50.00%		Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	83.18	82.98		Frame Averaged (mW)	190.55	190.53
Linearity SAR (W/kg)	0.389			Linearity SAR (W/kg)	0.596	
% deviation from expected linearity		-4.39%		% deviation from expected linearity		7.73%

17. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + WLAN6GHz	Yes	Yes		Yes
4.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
5.	WLAN2.4GHz + Bluetooth	Yes	Yes	Yes	Yes
6.	WLAN5GHz + Bluetooth	Yes	Yes	Yes	Yes
7.	WLAN6GHz + Bluetooth	Yes	Yes		Yes
8.	WLAN2.4GHz + WLAN5GHz	Yes	Yes	Yes	Yes
9.	WLAN2.4GHz + WLAN6GHz	Yes	Yes		Yes
10.	WWAN + WLAN2.4GHz + Bluetooth	Yes	Yes	Yes	Yes
11.	WWAN + WLAN5GHz + Bluetooth	Yes	Yes	Yes	Yes
12.	WWAN + WLAN6GHz + Bluetooth	Yes	Yes		Yes
13.	WWAN + WLAN2.4GHz + WLAN5GHz	Yes	Yes	Yes	Yes
14.	WWAN + WLAN2.4GHz + WLAN6GHz	Yes	Yes		Yes
15.	WWAN + WLAN2.4GHz + NFC				Yes
16.	WWAN + WLAN5GHz/6GHz + NFC				Yes
17.	WWAN + Bluetooth + NFC				Yes
18.	WLAN2.4GHz + Bluetooth + NFC				Yes
19.	WLAN5GHz/6GHz + Bluetooth + NFC				Yes
20.	WLAN2.4GHz + WLAN5GHz/6GHz + NFC				Yes
21.	WWAN + WLAN2.4GHz + Bluetooth + NFC				Yes
22.	WWAN + WLAN5GHz/6GHz + Bluetooth + NFC				Yes
23.	WWAN + WLAN2.4GHz + WLAN5GHz/6GHz + NFC				Yes

General Note:

1. This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. WWAN above includes 5G NR bands and EN-DC combination.
3. EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
4. For EN-DC mode, MediaTek TA-SAR Gen2 algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. TA-SAR Gen2 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 NR operation is demonstrated in the Part 2 Report during algorithm validation. In this Report, simultaneous transmission compliance was evaluated individually with other Radios (WLAN or BT) using one of 4G or 5G NR.
5. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
6. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only). WLAN 6GHz has no hotspot function.
7. The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
8. According to the EUT characteristic, WLAN 5GHz/6GHz and Bluetooth can transmit simultaneously.
9. According to the EUT characteristic, WLAN 5GHz/6GHz and WLAN 2.4GHz can transmit simultaneously.
10. According to the EUT characteristic, when WLAN 2.4GHz and Bluetooth share the same antenna path and cannot transmit simultaneously; when WLAN2.4GHz and Bluetooth are located on different antennas, they can transmit simultaneously.
11. The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO/MIMO antenna mode and MIMO SAR can represent SISO SAR.
12. According to the EUT characteristic, WLAN 5GHz and WLAN 6GHz can't transmit simultaneously.
13. NFC can transmit simultaneously with other Radios in extremity exposure condition.
14. For Headset SAR and non-Headset SAR always chose higher SAR to do co-located analysis.
15. For distance SAR and non-distance SAR at extremity exposure conditions always chose higher SAR to do co-located analysis.

16. 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.
17. For standalone WWAN, always choose the highest SAR among all WWAN bands within the selected antenna for each exposure position to perform simultaneous transmission analysis with WLAN/BT together. This is the worst co-located analysis and can represent each band.
18. The maximum SAR summation is calculated based on the same configuration and test position.
19. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, 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 17.6.

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

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

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

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

$$\begin{aligned} x \cdot A + y \cdot B + m &\leq 1 \\ x + y &= g \leq 1 \\ g + m &\leq 1 \end{aligned}$$

Where, A is normalized reported time-averaged SAR exposure ratio from LTE, and $A \leq 1.0$; B is normalized reported time-averaged exposure ratio from 5G NR (i.e., PD exposure for 5G FR2 or SAR exposure for 5G FR1), and $B \leq 1.0$.

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

$$x \cdot A + y \cdot B + m \leq 1.0 \quad (1)$$

$$x \cdot A + y \cdot B \leq x \cdot \max(A, B) + (g-x) \cdot \max(A, B) \leq \max(A, B)$$

$$x \cdot A + (g-x) \cdot B + m \leq \max(A, B) + m \leq 1.0 \quad (2)$$

If $A + m \leq 1.0$ and $B + m \leq 1.0$ can be proven, then " $x \cdot A + y \cdot B + m \leq 1.0$ ". Therefore simultaneous transmission analysis for 5G NR + LTE + WLAN + BT can be performed in two steps

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

Else, if $A + m > 1.0$ and/or $B + m > 1.0$, then the followings need to hold true for compliance:

- i. A and m are decoupled based on the SPLSR criteria, and
- ii. $y \cdot B + m \leq 1.0$, and
- iii. $x \cdot A + y \cdot B \leq 1.0$

Note iii. is covered in Part 2 report; i. and ii. should be addressed in Part 1 report.

Above analysis is also apply to LTE/NR inter-band uplink, LTE(NR)1 + LTE(NR)2 + WLAN + BT simultaneous transmission, so inter-band uplink CA no need to do additional simultaneously analysis again. Only required comply with total exposure ratio (TER) of LTE/NR + WLAN + BT < 1.

Above analysis is also apply to NR band UL MIMO, NR(SISO1) + NR(SISO2) + WLAN + BT simultaneous transmission, So UL MIMO no need to do additional simultaneously analysis again. Only required comply with total exposure ratio (TER) of NR + WLAN + BT < 1.

The device also enabled Mediatek's TA-SAR Gen2 algorithm to improve antenna performance by applying separate SAR budgets to each predefined antenna group. There are two predefined antenna groups of AG0, AG1, more detail as following table. Each antenna group is spatially separated to others. Simultaneous transmission analysis is performed per antenna group. Below analysis demonstrates the spatially separation of AG0, AG1, and the compliance between AG0 and BT/WLAN/NFC and between AG1 and BT/WLAN/NFC.

Thus, the concept was to split the SAR/TER on the transmitting RATs even they are transmitting on different antennas. Such approach is considered as a worst-case scenario in terms of transmitting power. Thus, to enhance the performance of the transmission power of RATs, consider the spatial properties of each antenna and the correlations between the antenna's transmissions.

SPLSR_Group (Antenna Group):

Antenna Group 0 (AG0)	ANT0 & ANT2& ANT8
Antenna Group 1 (AG1)	ANT1 & ANT4 & ANT7 & ANT9 & ANT10

Note that WLAN/BT operations are not enabled with TA-SAR Gen2 feature.

The verification of spatial separation of the antenna groups is demonstrated through the following steps, together with WIF/BT simultaneous transmission analysis results.

- The highest reported SAR at Plimit (or Pmax when Plimit > Pmax) for each antenna should be obtained out of all supported technologies and frequency bands for each power index. Demonstrate that the sum of reported SAR of one antenna from each of the antenna groups and the sum of RF exposure from all supported radios outside of TAS feature should be less than the regulatory limit as given below for each power index.
- If the sum of SAR from step i) is over 1.6 W/kg for 1g, demonstrate for a given power index that every antenna from one antenna group meets SPLSR criteria with every antenna in another antenna group for all frequency bands. SPLSR criteria must be demonstrated for all antenna pair combinations irrespective of supported simultaneous transmission scenarios, SPLSR Hotspot combination procedure (Hybrid SPLSR) also be considered for simultaneous transmission analysis.
- If SPLSR evaluation and analysis is needed to determine compliance for a certain power index configuration, SPLSR is performed by taking the highest summation SAR for each of the supported technologies and bands per antenna, along with the minimum of peak SAR location distance. The minimum of peak location distance is documented in the Highest Report SAR and Hotspot Location below for each power index configuration.
- In section 17.6 SPLSR analysis only evaluation Sim-Tx SAR configuration are rounded to two decimal higher or equal to 1.6W/kg.
- The analysis addresses the simultaneous transmission and the transition among non-simultaneous transmission radios

For summed SAR results and SPLSR detailed analysis, please refer to section 17.2/17.3 / 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.

17.2 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	Ant0	Ant2	Ant8	MAX
Right Cheek	0.240	0.234	0.690	0.690
Right Tilted	0.118	0.136	0.354	0.354
Left Cheek	0.289	0.158	0.378	0.378
Left Tilted	0.168	0.168	0.200	0.200

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant7	Ant9	Ant10	MAX
Right Cheek	0.888	0.520	0.886	0.892	0.264	0.892
Right Tilted	0.891	0.626	0.368	0.140	0.356	0.891
Left Cheek	0.573	0.900	0.294	0.887	0.481	0.900
Left Tilted	0.689	0.892	0.142	0.108	0.558	0.892

<WLAN2.4GHz/5GHz/6GHz +BT Worse-case SAR>:

WLAN2.4GHz+5GHz+6GHz+BT Worst-case SAR?														
NO	1	2	3	4	5	6	7	1+7	3+7	5+7	2+4	2+6	WLAN+BT worse case	
Test Position	WLAN2.4GHz Simultaneous Ant6+3	WLAN2.4GHz DBS Ant6+3	WLAN5GHz Simultaneous Ant5+4	WLAN5GHz DBS Ant5+4	WLAN6GHz Simultaneous Ant5+4	WLAN6GHz DBS Ant5+4	BT Ant6							
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	
Right Cheek	0.194	0.090	0.251	0.126	0.186	0.098	0.068	0.262	0.319	0.254	0.216	0.188	0.319	
Right Tilted	0.233	0.123	0.277	0.140	0.181	0.095	0.000	0.233	0.277	0.181	0.263	0.218	0.277	
Left Cheek	0.393	0.198	0.395	0.207	0.354	0.185	0.273	0.666	0.668	0.627	0.405	0.383	0.668	
Left Tilted	0.211	0.112	0.403	0.206	0.390	0.203	0.071	0.282	0.474	0.461	0.318	0.315	0.474	

<Simultaneous Transmission analysis of AG0 + AG1 + WLAN+BT Worse-case>:

Test Position	AG1	AG0	WLAN/BT worst case	AG1+AG0+WLAN +BT worse case
	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Right Cheek	0.892	0.690	0.319	1.90
Right Tilted	0.891	0.354	0.277	1.52
Left Cheek	0.900	0.378	0.668	1.95
Left Tilted	0.892	0.200	0.474	1.57

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

Right Cheek					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worst case	Note
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant1	0.240	0.888	0.319	1.45	
Ant0-Ant4	0.240	0.520	0.319	1.08	
Ant0-Ant7	0.240	0.886	0.319	1.45	
Ant0-Ant9	0.240	0.892	0.319	1.45	
Ant0-Ant10	0.240	0.264	0.319	0.82	
Ant2-Ant1	0.234	0.888	0.319	1.44	
Ant2-Ant4	0.234	0.520	0.319	1.07	
Ant2-Ant7	0.234	0.886	0.319	1.44	
Ant2-Ant9	0.234	0.892	0.319	1.45	
Ant2-Ant10	0.234	0.264	0.319	0.82	
Ant8-Ant1	0.690	0.888	0.319	1.90	1
Ant8-Ant4	0.690	0.520	0.319	1.53	
Ant8-Ant7	0.690	0.886	0.319	1.90	2
Ant8-Ant9	0.690	0.892	0.319	1.90	3
Ant8-Ant10	0.690	0.264	0.319	1.27	

Left Cheek					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worst case	Note
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant1	0.289	0.573	0.668	1.53	
Ant0-Ant4	0.289	0.900	0.668	1.86	4
Ant0-Ant7	0.289	0.294	0.668	1.25	
Ant0-Ant9	0.289	0.887	0.668	1.84	5
Ant0-Ant10	0.289	0.481	0.668	1.44	
Ant2-Ant1	0.158	0.573	0.668	1.40	
Ant2-Ant4	0.158	0.900	0.668	1.73	6
Ant2-Ant7	0.158	0.294	0.668	1.12	
Ant2-Ant9	0.158	0.887	0.668	1.71	7
Ant2-Ant10	0.158	0.481	0.668	1.31	
Ant8-Ant1	0.378	0.573	0.668	1.62	8
Ant8-Ant4	0.378	0.900	0.668	1.95	9
Ant8-Ant7	0.378	0.294	0.668	1.34	
Ant8-Ant9	0.378	0.887	0.668	1.93	10
Ant8-Ant10	0.378	0.481	0.668	1.53	

<Simultaneous Transmission analysis of WLAN DBS only without WWAN>:

Head DBS only					
NO	1	2	3	1+2	1+3
Test Position	WLAN2.4GHz DBS only Ant6+3	WLAN5GHz DBS only Ant5+4	WLAN6GHz DBS only Ant5+4		
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Right Cheek	0.745	0.778	0.372	1.52	1.12
Right Tilted	0.745	0.778	0.362	1.52	1.11
Left Cheek	0.745	0.778	0.709	1.52	1.45
Left Tilted	0.745	0.778	0.820	1.52	1.57

17.3 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	Ant0	Ant2	Ant8	MAX
Front	0.819	0.807	0.405	0.819
Back	1.020	0.686	0.563	1.020
Left Side	0.680	0.203		0.680
Right Side	0.205	0.457	1.030	1.030
Top Side				
Bottom Side	0.853	1.100	0.287	1.100

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant7	Ant9	Ant10	MAX
Front	0.372	0.228	0.222	0.281	0.016	0.372
Back	0.512	0.468	0.414	0.384	0.518	0.518
Left Side	0.209	0.019	0.497	0.510	0.009	0.510
Right Side	0.119	0.104	0.009		0.077	0.119
Top Side	0.538	0.353	0.069	0.018	0.077	0.538
Bottom Side						

<WLAN2.4GHz/5GHz +BT Worse-case SAR>:

NO	1	2	3	4	5				
Test Position	WLAN2.4GHz Hotspot Ant6+3	WLAN2.4GHz DBS Ant6+3	WLAN5GHz Hotspot Ant5+4	WLAN5GHz DBS Ant5+4	BT Ant6	1+5	3+5	2+4	WLAN+BT worse case
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.289	0.125	0.233	0.135	0.053	0.342	0.286	0.260	0.342
Back	0.699	0.304	0.453	0.222	0.193	0.892	0.646	0.526	0.892
Left Side	0.033	0.014	0.047	0.022	0.001	0.034	0.048	0.036	0.048
Right Side	0.658	0.283	0.383	0.188	0.196	0.854	0.579	0.471	0.854
Top Side	0.453	0.195	0.622	0.321	0.001	0.454	0.623	0.516	0.623
Bottom Side									

<Simultaneous Transmission analysis of AG0 + AG1 + WLAN+BT Worse-case>:

Test Position	AG1	AG0	WLAN/BT worst case	AG1+AG0+WLAN +BT worse case
	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.372	0.819	0.342	1.53
Back	0.518	1.020	0.892	2.43
Left Side	0.510	0.680	0.048	1.24
Right Side	0.119	1.030	0.854	2.00
Top Side	0.538		0.623	1.16
Bottom Side		1.100		1.10

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

Back					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worst case	Note
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant1	1.020	0.512	0.892	2.42	1
Ant0-Ant4	1.020	0.468	0.892	2.38	2
Ant0-Ant7	1.020	0.414	0.892	2.33	3
Ant0-Ant9	1.020	0.384	0.892	2.30	4
Ant0-Ant10	1.020	0.518	0.892	2.43	5
Ant2-Ant1	0.686	0.512	0.892	2.09	6
Ant2-Ant4	0.686	0.468	0.892	2.05	7
Ant2-Ant7	0.686	0.414	0.892	1.99	8
Ant2-Ant9	0.686	0.384	0.892	1.96	9
Ant2-Ant10	0.686	0.518	0.892	2.10	10
Ant8-Ant1	0.563	0.512	0.892	1.97	11
Ant8-Ant4	0.563	0.468	0.892	1.92	12
Ant8-Ant7	0.563	0.414	0.892	1.87	13
Ant8-Ant9	0.563	0.384	0.892	1.84	14
Ant8-Ant10	0.563	0.518	0.892	1.97	15

Right Side					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worst case	Note
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant1	0.205	0.119	0.854	1.18	
Ant0-Ant4	0.205	0.104	0.854	1.16	
Ant0-Ant7	0.205	0.009	0.854	1.07	
Ant0-Ant9	0.205		0.854	1.06	
Ant0-Ant10	0.205	0.077	0.854	1.14	
Ant2-Ant1	0.457	0.119	0.854	1.43	
Ant2-Ant4	0.457	0.104	0.854	1.42	
Ant2-Ant7	0.457	0.009	0.854	1.32	
Ant2-Ant9	0.457		0.854	1.31	
Ant2-Ant10	0.457	0.077	0.854	1.39	
Ant8-Ant1	1.030	0.119	0.854	2.00	16
Ant8-Ant4	1.030	0.104	0.854	1.99	17
Ant8-Ant7	1.030	0.009	0.854	1.89	18
Ant8-Ant9	1.030		0.854	1.88	19
Ant8-Ant10	1.030	0.077	0.854	1.96	20

<Simultaneous Transmission analysis of WLAN DBS only without WWAN>:

Hotspot DBS only			
NO	1	2	1+2
Test Position	WLAN2.4GHz DBS only Ant6+3	WLAN5GHz DBS only Ant5+4	
	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front 5mm	0.289	0.233	0.52
Back 5mm	0.699	0.453	1.15
Left Side 5mm	0.033	0.047	0.08
Right Side 5mm	0.658	0.383	1.04
Top Side 5mm	0.453	0.622	1.08
Bottom Side 5mm			

17.4 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	Ant0	Ant2	Ant8	MAX
Front	1.041	1.273	0.617	1.273
Back	1.296	1.420	1.290	1.420

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant7	Ant9	Ant10	MAX
Front	0.843	0.425	0.462	0.708	0.034	0.843
Back	0.893	0.877	0.886	0.891	0.882	0.893

<WLAN2.4GHz/5GHz/6GHz +BT Worse-case SAR>:

NO	1	2	3	4	5	6	7	1+7	3+7	5+7	2+4	2+6	WLAN+BT worse case
Test Position	WLAN2.4GHz Simultaneous Ant6+3	WLAN2.4GHz DBS Ant6+3	WLAN5GHz Simultaneous Ant5+4	WLAN5GHz DBS Ant5+4	WLAN6GHz Simultaneous Ant5+4	WLAN6GHz DBS Ant5+4	BT Ant6	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.164	0.079	0.295	0.153	0.080	0.050	0.053	0.217	0.348	0.133	0.232	0.129	0.348
Back	0.396	0.191	0.414	0.215	0.333	0.195	0.191	0.587	0.605	0.524	0.406	0.386	0.605

<Simultaneous Transmission analysis of AG0 + AG1 + WLAN+BT Worse-case>:

Test Position	AG1	AG0	WLAN/BT worst case	AG1+AG0+WLAN +BT worse case
	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.843	1.273	0.348	2.46
Back	0.893	1.420	0.605	2.92

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

Front					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worst case	Note
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant1	1.041	0.843	0.348	2.23	1
Ant0-Ant4	1.041	0.425	0.348	1.81	2
Ant0-Ant7	1.041	0.462	0.348	1.85	3
Ant0-Ant9	1.041	0.708	0.348	2.10	4
Ant0-Ant10	1.041	0.034	0.348	1.42	
Ant2-Ant1	1.273	0.843	0.348	2.46	5
Ant2-Ant4	1.273	0.425	0.348	2.05	6
Ant2-Ant7	1.273	0.462	0.348	2.08	7
Ant2-Ant9	1.273	0.708	0.348	2.33	8
Ant2-Ant10	1.273	0.034	0.348	1.66	9
Ant8-Ant1	0.617	0.843	0.348	1.81	10
Ant8-Ant4	0.617	0.425	0.348	1.39	
Ant8-Ant7	0.617	0.462	0.348	1.43	
Ant8-Ant9	0.617	0.708	0.348	1.67	11
Ant8-Ant10	0.617	0.034	0.348	1.00	

Back					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worst case	Note
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant1	1.296	0.893	0.605	2.79	12
Ant0-Ant4	1.296	0.877	0.605	2.78	13
Ant0-Ant7	1.296	0.886	0.605	2.79	14
Ant0-Ant9	1.296	0.891	0.605	2.79	15
Ant0-Ant10	1.296	0.882	0.605	2.78	16
Ant2-Ant1	1.420	0.893	0.605	2.92	17
Ant2-Ant4	1.420	0.877	0.605	2.90	18
Ant2-Ant7	1.420	0.886	0.605	2.91	19
Ant2-Ant9	1.420	0.891	0.605	2.92	20
Ant2-Ant10	1.420	0.882	0.605	2.91	21
Ant8-Ant1	1.290	0.893	0.605	2.79	22
Ant8-Ant4	1.290	0.877	0.605	2.77	23
Ant8-Ant7	1.290	0.886	0.605	2.78	24
Ant8-Ant9	1.290	0.891	0.605	2.79	25
Ant8-Ant10	1.290	0.882	0.605	2.78	26

<Simultaneous Transmission analysis of WLAN DBS only without WWAN>:

Body worn DBS only					
NO	1	2	3	1+2	1+3
Test Position	WLAN2.4GHz DBS only Ant6+3	WLAN5GHz DBS only Ant5+4	WLAN6GHz DBS only Ant5+4		
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.752	0.765	0.080	1.52	0.83
Back	0.752	0.765	0.333	1.52	1.09

<Sensor off>

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

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

<AG0 maximum reported SAR>:

Test Position	Ant0	Ant2	Ant8	MAX
Front	0.502	0.618	0.390	0.618
Back	0.674	0.681	0.375	0.681

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant7	Ant9	Ant10	MAX
Front	0.396	0.256	0.263	0.364	0.017	0.396
Back	0.622	0.613	0.557	0.372	0.614	0.622

<WLAN2.4GHz/5GHz/6GHz /BT Worse-case SAR

NO	1	2	3	4						
Test Position	WLAN2.4GHz Ant6+3	WLAN5GHz Ant5+4	WLAN6GHz Ant5+4	BT Ant6	1+4	2+4	3+4	1+2	1+3	WLAN+BT worse case
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.272	0.438	0.027		0.272	0.438	0.027	0.710	0.299	0.710
Back	0.557	0.721	0.163		0.557	0.721	0.163	1.278	0.720	1.278

<Simultaneous Transmission analysis of AG0 + AG1 + WLAN/BT Worse-case>:

Test Position	AG1	AG0	WLAN/BT worst case	AG1+AG0+WLAN/BT worse case
	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.396	0.618	0.710	1.72
Back	0.622	0.681	1.278	2.58

Front					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worst case	Note
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant1	0.502	0.396	0.710	1.61	1
Ant0-Ant4	0.502	0.256	0.710	1.47	
Ant0-Ant7	0.502	0.263	0.710	1.48	
Ant0-Ant9	0.502	0.364	0.710	1.58	
Ant0-Ant10	0.502	0.017	0.710	1.23	
Ant2-Ant1	0.618	0.396	0.710	1.72	2
Ant2-Ant4	0.618	0.256	0.710	1.58	
Ant2-Ant7	0.618	0.263	0.710	1.59	
Ant2-Ant9	0.618	0.364	0.710	1.69	3
Ant2-Ant10	0.618	0.017	0.710	1.35	
Ant8-Ant1	0.390	0.396	0.710	1.50	
Ant8-Ant4	0.390	0.256	0.710	1.36	
Ant8-Ant7	0.390	0.263	0.710	1.36	
Ant8-Ant9	0.390	0.364	0.710	1.46	
Ant8-Ant10	0.390	0.017	0.710	1.12	

Back					
Ant combination	AG0	AG1	WLAN/BT worst case	AG1+AG0+WLAN +BT worst case	Note
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
Ant0-Ant1	0.674	0.622	1.278	2.57	4
Ant0-Ant4	0.674	0.613	1.278	2.57	5
Ant0-Ant7	0.674	0.557	1.278	2.51	6
Ant0-Ant9	0.674	0.372	1.278	2.32	7
Ant0-Ant10	0.674	0.614	1.278	2.57	8



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Ant2-Ant1	0.681	0.622	1.278	2.58	9
Ant2-Ant4	0.681	0.613	1.278	2.57	10
Ant2-Ant7	0.681	0.557	1.278	2.52	11
Ant2-Ant9	0.681	0.372	1.278	2.33	12
Ant2-Ant10	0.681	0.614	1.278	2.57	13
Ant8-Ant1	0.375	0.622	1.278	2.28	14
Ant8-Ant4	0.375	0.613	1.278	2.27	15
Ant8-Ant7	0.375	0.557	1.278	2.21	16
Ant8-Ant9	0.375	0.372	1.278	2.03	17
Ant8-Ant10	0.375	0.614	1.278	2.27	18

17.5 Product specific 10g SAR Exposure Conditions

Remark:

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

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

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

<AG0 maximum reported SAR>:

Test Position	Ant0	Ant2	Ant8	MAX
Front	3.185	2.429		3.185
Back	3.167	3.018		3.167
Left Side	2.593			2.593
Right Side			3.226	3.226
Top Side				
Bottom Side	1.776	3.298		3.298

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant7	Ant9	Ant10	MAX
Front	1.898					1.898
Back	2.459	1.086	2.349	1.323	2.463	2.463
Left Side	1.916		2.510	2.486		2.510
Right Side						
Top Side	2.486	1.814				2.486
Bottom Side						

<WLAN2.4GHz/5GHz/6GHz /BT Worse-case SAR>

WLAN2.4GHz+5GHz+6GHz BT Worst case SAR														
NO	1	2	3	4	5	6	7	1+7	3+7	5+7	2+4	2+6	WLAN+BT worse case	
Test Position	WLAN2.4GHz Simultaneous Ant6+3	WLAN2.4GHz DBS Ant6+3	WLAN5GHz Simultaneous Ant5+4	WLAN5GHz DBS Ant5+4	WLAN6GHz Simultaneous Ant5+4	WLAN6GHz DBS Ant5+4	BT Ant6							
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)	
Front			0.782	0.382	0.198	0.198			0.782	0.198	0.382	0.198	0.782	
Back	0.564	0.288	0.476	0.233	0.194	0.194		0.564	0.476	0.194	0.521	0.482	0.564	
Left Side			0.155	0.155	0.006	0.006			0.155	0.006	0.155	0.006	0.155	
Right Side	0.973	0.495	0.876	0.427	0.346	0.346		0.973	0.876	0.346	0.922	0.841	0.973	
Top Side	0.719	0.366	0.987	0.492	0.382	0.382		0.719	0.987	0.382	0.858	0.748	0.987	
Bottom Side														

<Simultaneous Transmission analysis of AG0 + AG1 + WLAN/BT Worse-case+NFC>:

Test Position	AG1	AG0	WLAN/BT worse case Summed 10g SAR (W/kg)	NFC	AG1+AG0+WLAN /BT worse case+NFC Summed 10g SAR (W/kg)
	10g SAR (W/kg)	10g SAR (W/kg)		10g SAR (W/kg)	
Front	1.898	3.185	0.782	0.001	5.87
Back	2.463	3.167	0.564	0.017	6.21
Left Side	2.510	2.593	0.155	0.001	5.26
Right Side		3.226	0.973	0.001	4.20
Top Side	2.486		0.987	0.001	3.47
Bottom Side		3.298		0.001	3.30

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

Front						
Ant combination	AG0	AG1	WLAN/BT worst case	NFC	AG1+AG0+WLAN +BT worst case+NFC	Note
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
Ant0-Ant1	3.185	1.898	0.782	0.001	5.87	1
Ant0-Ant4	3.185	0.000	0.782	0.001	3.97	
Ant0-Ant7	3.185	0.000	0.782	0.001	3.97	
Ant0-Ant9	3.185	0.000	0.782	0.001	3.97	
Ant0-Ant10	3.185	0.000	0.782	0.001	3.97	
Ant2-Ant1	2.429	1.898	0.782	0.001	5.11	2
Ant2-Ant4	2.429	0.000	0.782	0.001	3.21	
Ant2-Ant7	2.429	0.000	0.782	0.001	3.21	
Ant2-Ant9	2.429	0.000	0.782	0.001	3.21	
Ant2-Ant10	2.429	0.000	0.782	0.001	3.21	
Ant8-Ant1	0.000	1.898	0.782	0.001	2.68	
Ant8-Ant4	0.000	0.000	0.782	0.001	0.78	
Ant8-Ant7	0.000	0.000	0.782	0.001	0.78	
Ant8-Ant9	0.000	0.000	0.782	0.001	0.78	
Ant8-Ant10	0.000	0.000	0.782	0.001	0.78	

Back						
Ant combination	AG0	AG1	WLAN/BT worst case	NFC	AG1+AG0+WLAN +BT worst case+NFC	Note
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
Ant0-Ant1	3.167	2.459	0.564	0.017	6.21	3
Ant0-Ant4	3.167	1.086	0.564	0.017	4.83	4
Ant0-Ant7	3.167	2.349	0.564	0.017	6.10	5
Ant0-Ant9	3.167	1.323	0.564	0.017	5.07	6
Ant0-Ant10	3.167	2.463	0.564	0.017	6.21	7
Ant2-Ant1	3.018	2.459	0.564	0.017	6.06	8
Ant2-Ant4	3.018	1.086	0.564	0.017	4.69	9
Ant2-Ant7	3.018	2.349	0.564	0.017	5.95	10
Ant2-Ant9	3.018	1.323	0.564	0.017	4.92	11
Ant2-Ant10	3.018	2.463	0.564	0.017	6.06	12
Ant8-Ant1	0.000	2.459	0.564	0.017	3.04	
Ant8-Ant4	0.000	1.086	0.564	0.017	1.67	
Ant8-Ant7	0.000	2.349	0.564	0.017	2.93	
Ant8-Ant9	0.000	1.323	0.564	0.017	1.90	
Ant8-Ant10	0.000	2.463	0.564	0.017	3.04	

Left Side						
Ant combination	AG0	AG1	WLAN/BT worst case	NFC	AG1+AG0+WLAN+BT worst case+NFC	Note
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
Ant0-Ant1	2.593	1.916	0.155	0.001	4.67	13
Ant0-Ant4	2.593	0.000	0.155	0.001	2.75	
Ant0-Ant7	2.593	2.510	0.155	0.001	5.26	14
Ant0-Ant9	2.593	2.486	0.155	0.001	5.24	15
Ant0-Ant10	2.593	0.000	0.155	0.001	2.75	
Ant2-Ant1	0.000	1.916	0.155	0.001	2.07	
Ant2-Ant4	0.000	0.000	0.155	0.001	0.16	
Ant2-Ant7	0.000	2.510	0.155	0.001	2.67	
Ant2-Ant9	0.000	2.486	0.155	0.001	2.64	
Ant2-Ant10	0.000	0.000	0.155	0.001	0.16	
Ant8-Ant1	0.000	1.916	0.155	0.001	2.07	
Ant8-Ant4	0.000	0.000	0.155	0.001	0.16	
Ant8-Ant7	0.000	2.510	0.155	0.001	2.67	
Ant8-Ant9	0.000	2.486	0.155	0.001	2.64	
Ant8-Ant10	0.000	0.000	0.155	0.001	0.16	

Right Side						
Ant combination	AG0	AG1	WLAN/BT worst case	NFC	AG1+AG0+WLAN+BT worst case+NFC	Note
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
Ant0-Ant1	0.000	0.000	0.973	0.001	0.97	
Ant0-Ant4	0.000	0.000	0.973	0.001	0.97	
Ant0-Ant7	0.000	0.000	0.973	0.001	0.97	
Ant0-Ant9	0.000	0.000	0.973	0.001	0.97	
Ant0-Ant10	0.000	0.000	0.973	0.001	0.97	
Ant2-Ant1	0.000	0.000	0.973	0.001	0.97	
Ant2-Ant4	0.000	0.000	0.973	0.001	0.97	
Ant2-Ant7	0.000	0.000	0.973	0.001	0.97	
Ant2-Ant9	0.000	0.000	0.973	0.001	0.97	
Ant2-Ant10	0.000	0.000	0.973	0.001	0.97	
Ant8-Ant1	3.226	0.000	0.973	0.001	4.20	16
Ant8-Ant4	3.226	0.000	0.973	0.001	4.20	16
Ant8-Ant7	3.226	0.000	0.973	0.001	4.20	16
Ant8-Ant9	3.226	0.000	0.973	0.001	4.20	16
Ant8-Ant10	3.226	0.000	0.973	0.001	4.20	16

<Simultaneous Transmission analysis of WLAN DBS only without WWAN>:

Extremity worn DBS only					
NO	1	2	3	1+2	1+3
Test Position	WLAN2.4GHz DBS only Ant6+3	WLAN5GHz DBS only Ant5+4	WLAN6GHz DBS only Ant5+4		
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
Front	1.832	1.858	0.198	3.69	2.03
Back	1.832	1.858	0.194	3.69	2.03
Left Side	1.832	1.858	0.006	3.69	1.84
Right Side	1.832	1.858	0.346	3.69	2.18
Top Side	1.832	1.858	0.382	3.69	2.21
Bottom Side					

<Sensor off>

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

Simultaneous Transmission Evaluation of WWAN+WLAN+BT:

<AG0 maximum reported SAR>:

Test Position	Ant0	Ant2	Ant8	MAX
Front	1.680			1.680
Back	0.984	1.180		1.180
Left Side	1.294			1.294
Right Side				
Top Side				
Bottom Side	1.151	0.888		1.151

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant7	Ant9	Ant10	MAX
Front						
Back	1.498		1.102			1.498
Left Side	1.499		2.151	2.199		2.199
Right Side						
Top Side	1.004					1.004
Bottom Side						

<WLAN2.4GHz/5GHz/6GHz /BT Worse-case SAR

NO	1	2	3	4						
Test Position	WLAN2.4GHz Ant6+3	WLAN5GHz Ant5+4	WLAN6GHz Ant5+4	BT Ant6	1+4	2+4	3+4	1+2	1+3	WLAN+BT worse case
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)	Summed 10g SAR (W/kg)
Front		0.325	0.112			0.325	0.112	0.325	0.112	0.325
Back	0.703	0.514	0.108		0.703	0.514	0.108	1.217	0.811	1.217
Left Side										
Right Side	0.523	0.482	0.195		0.523	0.482	0.195	1.005	0.718	1.005
Top Side	0.218	0.805	0.222		0.218	0.805	0.222	1.023	0.440	1.023
Bottom Side										

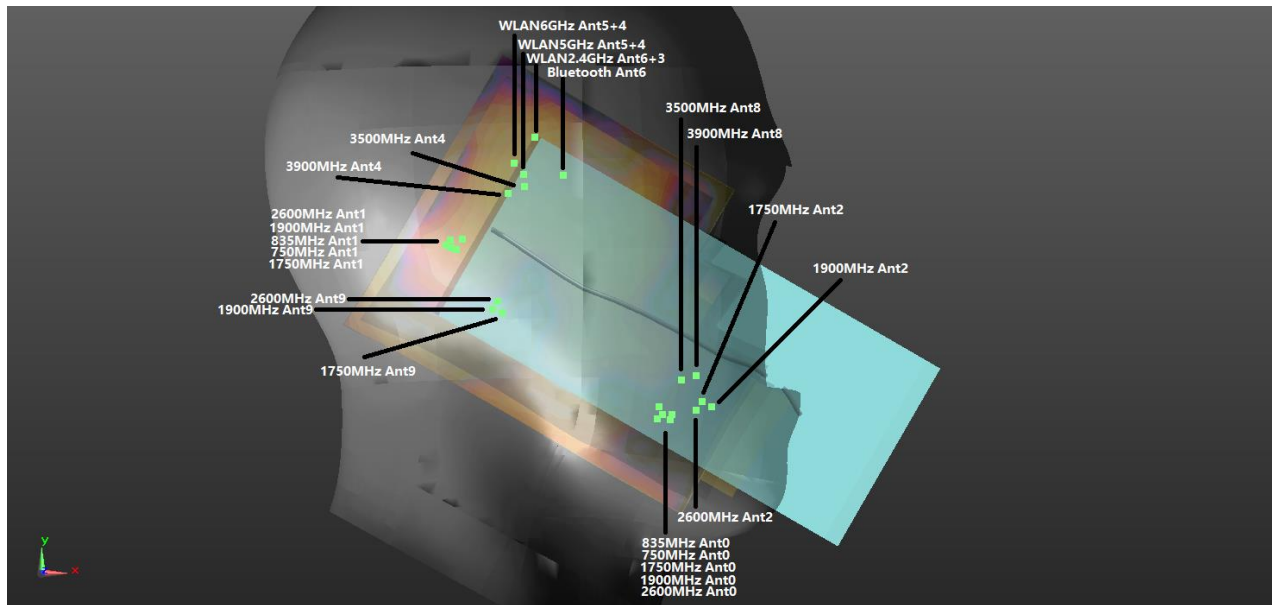
<Simultaneous Transmission analysis of AG0 + AG1 + WLAN/BT Worse-case>:

Test Position	AG1	AG0	WLAN/BT worse case	NFC	AG1+AG0+WLAN /BT worse case+NFC
	10g SAR (W/kg)	10g SAR (W/kg)	Summed 10g SAR (W/kg)	10g SAR (W/kg)	Summed 10g SAR (W/kg)
Front		1.680	0.325		2.01
Back	1.498	1.180	1.217		3.90
Left Side	2.199	1.294			3.49
Right Side			1.005		1.01
Top Side	1.004		1.023		2.03
Bottom Side		1.151			1.15

17.6 SPLSR Evaluation and Analysis

General Note:

1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$, 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 and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
3. Per April 2022 TCB Workshop Notes, WLAN /BT/ NFC was summed algebraically with the AG1 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 17.7.



Head WWAN+WWAN+WLAN+BT Left Cheek 0mm