

FCC SAR Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2503-1, XT2505-3
FCC ID : IHDT56AU7
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
FA4D1311	Rev. 01	Initial issue of report.	Jan. 24, 2025
FA4D1311	Rev. 02	1. Removed the 5GNR n38/41 Ant2/9 and Ant0/1 other PA related data; 2. Updated Simultaneous SAR analysis for above bands. This report is an update version, replacing the report issued on Jan. 24, 2025.	Feb. 18, 2025



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Motorola Mobility LLC, Mobile Cellular Phone, XT2503-1, XT2505-3**, 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	0.88	1.30	1.30	1.57
		GSM1900	0.87	1.27	1.28	
	WCDMA	WCDMA II	0.88	1.29	1.27	
		WCDMA IV	0.89	1.27	1.27	
		WCDMA V	0.89	1.26	1.26	
	LTE	LTE Band 2	0.89	1.29	1.29	
		LTE Band 7	0.89	1.29	1.28	
		LTE Band 12/17	0.54	0.98	0.98	
		LTE Band 13	0.82	0.81	0.84	
		LTE Band 26/5	0.88	0.62	0.89	
		LTE Band 66/4	0.89	1.30	1.27	
		LTE Band 41/38	0.89	1.30	1.30	
		LTE Band 42	0.89	1.30	1.21	
	5G NR	FR1 n2	0.88	1.30	1.28	
		FR1 n7	0.88	1.28	1.28	
		FR1 n26/n5	0.81	0.82	0.88	
		FR1 n66	0.88	1.29	1.28	
		FR1 n41/ n38	0.89	1.28	1.29	
		FR1 n77/n78	0.89	1.28	1.29	
DTS	WLAN	2.4GHz WLAN	1.34	0.62	0.62	1.57
NII		5GHz WLAN	1.12	0.61	1.03	1.57
DSS	Bluetooth	2.4GHz Bluetooth	0.45	0.30	0.30	1.57



Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	GSM	GSM850	2.33	3.75
		GSM1900	2.91	
	WCDMA	WCDMA II	3.20	
		WCDMA IV	3.15	
		WCDMA V	2.01	
	LTE	LTE Band 2	3.17	
		LTE Band 7	3.17	
		LTE Band 26/5	1.40	
		LTE Band 66/4	3.16	
		LTE Band 41/38	3.19	
		LTE Band 42	2.46	
	5G NR	FR1 n2	3.20	
		FR1 n7	3.18	
		FR1 n26/n5	1.08	
		FR1 n66	3.17	
		FR1 n41/ n38	3.18	
		FR1 n77/n78	3.04	
NII	WLAN	WLAN5GHz	1.74	3.75
Date of Testing:			2024/12/25 ~ 2025/1/19	

Remark:

1. This device supports LTE B4 / B5 / B17 / B38 and B66 / B26 / B12 / B41. Since the supported frequency span for LTE B4 / B5 / B17 / B38 falls completely within the support's frequency span for LTE 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 B66 / B26 / B12 / B41.
2. This device supports 5G NR n5 / n38 / n78 and n26 / n41 / n77. Since the supported frequency span for 5G NR n5 / n38 / n78 falls completely within the support's frequency span for n26 / n41 / n77, both 5G NR bands have the same target power, and both 5G NR 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.
	SAR06-KS	CN1257	314309

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

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

3. Guidance Applied

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

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

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2503-1, XT2505-3
FCC ID	IHDT56AU7
IMEI Code	Sample 1 IMEI 1: 354424860017932 IMEI 2: 354424860017940 Sample 2 IMEI 1: 350623350005497 IMEI 2: 350623350005505
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 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR 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 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



	WLAN 5GHz 802.11ax HE20/HE40/HE80 Bluetooth BR/EDR/LE NFC: ASK
HW Version	DVT2
SW Version	V2VC35.13
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 5G NR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation. 2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications. 3. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only). 4. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12. 5. This device supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). 6. 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. 7. 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. 8. For some WWAN bands, sensor on power level is higher than hotspot power level, so front/back sensor on SAR can represent hotspot conservatively. 9. For 5G NR bands, using FTM to perform SAR with default 100% transmission. 10. This device has NFC function and the NFC SAR report will be separately submitted. 11. There are two samples. The difference between them could be referred to the XT2503-1, XT2505-3_Operational Description of Product Equality Declaration which is exhibited separately. According to the difference, sample 1 was chosen to perform full testing and sample 2 verified the worst case of sample 1. 12. This device supports 5G NR 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
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
	n38	FDD	15	10, 15, 20, 25, 30, 40
	n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 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, 45
	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	IHDT56AU7																																																																																	
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 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz																																																																																	
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz																																																																																	
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																																																	
LTE Voice / Data requirements	Voice and Data																																																																																	
LTE Release Version	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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QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1																																																																											
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1																																																																											
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2																																																																											
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2																																																																											
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3																																																																											
256 QAM	≥ 1						≤ 5																																																																											
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																																																	
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																																	
Power reduction applied to satisfy SAR compliance	Yes, when operating in Proximity sensors/receiver/hotspot detect mechanism, head/body-worn /hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 14.																																																																																	
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 14.																																																																																	
LTE Carrier Aggregation Additional Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band and inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 3 carriers in the downlink and 2 carriers in the uplink.																																																																																	
Transmission (H, M, L) channel numbers and frequencies in each LTE band																																																																																		
LTE Band 2																																																																																		
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz																																																																							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)																																																																						
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860																																																																						
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880																																																																						
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900																																																																						



LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829	20450	829	20450	829
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844	20600	844	20600	844
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510	20850	2510	20850	2510
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21350	2560	21350	2560
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704	23060	704	23060	704
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	23130	711	23130	711
LTE Band 13												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)					
L	23205		779.5		23230		782					
M	23230		782									
H	23255		784.5									
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)					
L	23755		706.5		23780		709					
M	23790		710		23790		710					
H	23825		713.5		23800		711					
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5	26765	821.5
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5	26965	841.5
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580	37850	2580	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610	38150	2610	38150	2610
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506	39750	2506	39750	2506
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5	40185	2549.5	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5	41055	2636.5	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680	41490	2680	41490	2680
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770



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

<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 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 ECI 2 Tune-up Limit	Body-worn ECI 3 Tune-up Limit	Hotspot ECI 7 Tune-up Limit	Extremity ECI 6 Tune-up Limit	Sensor Off ECI4 Tune-up Limit	Default Tune-up Limit
LTE Band 4	Ant 2	24	20.7	18.9	22.7	24	24
LTE Band 66	Ant 2	24	20.7	18.9	22.7	24	24
LTE Band 4	Ant 1	19.5	18.5	16.9	21.5	21.5	21.5
LTE Band 66	Ant 1	19.5	18.5	16.9	21.5	21.5	21.5
LTE Band 4 Other PA	Ant 1	20.5	19.4	18	24	24	24
LTE Band 66 Other PA	Ant 1	20.5	19.4	18	24	24	24
LTE Band 4	Ant 9	24	24	23.3	24	24	24
LTE Band 66	Ant 9	24	24	23.3	24	24	24
LTE Band 4	Ant 0	21.5	21.5	21.5	21.5	21.5	21.5
LTE Band 66	Ant 0	21.5	21.5	21.5	21.5	21.5	21.5
LTE Band 4 Other PA	Ant 0	23	23	23	23	23	23
LTE Band 66 Other PA	Ant 0	23	23	23	23	23	23
LTE Band 12	Ant 0	24	24	24	24	24	24
LTE Band 17	Ant 0	24	24	24	24	24	24
LTE Band 12	Ant 1	24	24	24	24	24	24
LTE Band 17	Ant 1	24	24	24	24	24	24
LTE Band 5	Ant 0	24	24	24	24	24	24
LTE Band 26	Ant 0	24	24	24	24	24	24
LTE Band 5	Ant 1	23.5	22.7	21.1	24	24	24
LTE Band 26	Ant 1	23.5	22.7	21.1	24	24	24
LTE Band 38	Ant 2	24	23	21.4	23.3	24	24
LTE Band 41	Ant 2	24	23	21.4	23.3	24	24
LTE Band 38	Ant 1	21.2	20.5	18.9	23	23	23
LTE Band 41	Ant 1	21.2	20.5	18.9	23	23	23
LTE Band 38 Other PA	Ant 1	21.6	21.6	20.2	24	24	24
LTE Band 41 Other PA	Ant 1	21.6	21.6	20.2	24	24	24
LTE Band 38	Ant 9	21.2	18.9	14.1	19.2	19.2	24
LTE Band 41	Ant 9	21.2	18.9	14.1	19.2	19.2	24
LTE Band 38	Ant 0	22.5	22.3	22.3	22.5	22.5	22.5
LTE Band 41	Ant 0	22.5	22.3	22.3	22.5	22.5	22.5
LTE Band 38 Other PA	Ant 0	24	22.5	22.5	24	24	24
LTE Band 41 Other PA	Ant 0	24	22.5	22.5	24	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 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 B4/5/66
LTE Anchor Bands for n7	LTE B2/4/5/66
LTE Anchor Bands for n66	LTE B2/5/7
LTE Anchor Bands for n38	LTE B2/4/66
LTE Anchor Bands for n41	LTE B4/66/71
LTE Anchor Bands for n78	LTE B2/4/5/7/38/26/66

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		Bandwidth 45MHz	
	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	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	345500	1727.5	346000	1730	346500	1732.5
M	349000	1745	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	351500	1757.5



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	ECI 4	
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	
FR1 n5	Ant 0	24	24	24	24	24	24
FR1 n26	Ant 0	24	24	24	24	24	24
FR1 n5	Ant 1	24	22.4	20.9	24	24	24
FR1 n26	Ant 1	24	22.4	20.9	24	24	24
FR1 n38	Ant 1	19.4	18.5	17	21.9	24	24
FR1 n41	Ant 1	19.4	18.5	17	21.9	24	24
FR1 n38	Ant 0	24	22.5	22.4	23.7	24	24
FR1 n41	Ant 0	24	22.5	22.4	23.7	24	24
FR1 n77	Ant 7	19	19.2	16.7	19.7	24	24
FR1 n78	Ant 7	19	19.2	16.7	19.7	24	24
FR1 n77	Ant 4	16.5	16.4	12.7	20.6	24	24
FR1 n78	Ant 4	16.5	16.4	12.7	20.6	24	24
FR1 n77	Ant 8	24	23.8	22	24	24	24
FR1 n78	Ant 8	24	23.8	22	24	24	24
FR1 n77	Ant 5	20.2	19	17	21.3	24	24
FR1 n78	Ant 5	20.2	19	17	21.3	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 & ANT5 & ANT7& ANT9

<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	Bodyworn ECI3	Hotspot ECI7	Extremity ECI6	Sensor off ECI4	Pmax*
GSM850	Ant 0	32.6	24.7	24.7	27.3	25.7	25.7
GSM850	Ant 1	22.6	22.6	21.6	25.2	25.0	25.0
GSM1900	Ant 2	31.7	20.4	20.1	22.6	22.2	22.2
GSM1900	Ant 1	17.5	16.6	15.3	21.4	20.5	20.5
WCDMA II	Ant 2	30.7	20.5	17.5	21.8	23.0	23.0
WCDMA II	Ant 1	18.0	17.2	15.6	20.4	21.0	21.0
WCDMA IV	Ant 2	30.9	20.6	17.3	22.1	23.0	23.0
WCDMA IV	Ant 1	18.9	17.8	16.3	20.9	21.0	21.0
WCDMA V	Ant 0	30.4	23.1	23.1	25.0	23.0	23.0
WCDMA V	Ant 1	22.4	21.9	20.7	26.2	23.0	23.0
LTE Band 2	Ant 2	30.9	20.1	18.7	22.6	23.0	23.0
LTE Band 2	Ant 1	17.6	16.6	15.1	20.9	20.5	20.5
LTE Band 2 Other PA	Ant 1	18.5	17.5	16.0	21.8	23.0	23.0
LTE Band 2	Ant 9	20.8	18.6	14.1	20.2	20.2	23.0
LTE Band 2	Ant 0	32.1	19.9	19.9	22.1	20.5	20.5
LTE Band 2 Other PA	Ant 0	34.2	19.2	19.2	21.3	22.0	22.0
LTE Band 66(4)	Ant 2	30.6	19.7	17.9	21.7	23.0	23.0
LTE Band 66(4)	Ant 1	18.5	17.5	15.9	22.2	20.5	20.5
LTE Band 66(4) Other PA	Ant 1	19.5	18.4	17.0	23.1	23.0	23.0
LTE Band 66(4)	Ant 9	28.7	26.2	22.3	23.0	23.0	23.0
LTE Band 66(4)	Ant 0	36.8	26.1	25.1	20.5	20.5	20.5
LTE Band 66(4) Other PA	Ant 0	40.0	23.1	22.4	22.0	22.0	22.0
LTE Band 7	Ant 2	30.5	18.7	18.0	20.6	23.0	23.0
LTE Band 7	Ant 1	18.9	16.1	15.0	20.5	22.0	22.0
LTE Band 7 Other PA	Ant 1	19.0	17.2	16.2	20.4	23.0	23.0
LTE Band 7	Ant 9	20.6	19.2	14.6	17.0	17.0	23.0
LTE Band 7	Ant 0	31.6	21.6	21.3	22.9	21.5	21.5
LTE Band 7 Other PA	Ant 0	33.6	23.3	23.0	24.7	23.0	23.0
LTE Band 12(17)	Ant 0	31.4	24.1	24.1	23.0	23.0	23.0
LTE Band 12(17)	Ant 1	24.1	24.3	22.8	22.0	22.0	22.0
LTE Band 13	Ant 0	31.9	25.0	25.0	23.0	23.0	23.0
LTE Band 13	Ant 1	22.3	22.2	21.1	22.0	22.0	22.0
LTE Band 26(5)	Ant 0	31.3	27.0	27.0	23.0	23.0	23.0
LTE Band 26(5)	Ant 1	22.5	21.7	20.1	25.5	23.0	23.0
LTE Band 41(38)	Ant 2	31.7	20.0	18.4	20.3	21.0	21.0
LTE Band 41(38)	Ant 1	18.2	17.5	15.9	20.8	20.0	20.0



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LTE Band 41(38) Other PA	Ant 1	18.6	18.6	17.2	21.4	21.0	21.0
LTE Band 41(38)	Ant 9	18.2	15.9	11.1	16.2	16.2	21.0
LTE Band 41(38)	Ant 0	30.3	19.3	19.3	23.2	19.5	19.5
LTE Band 41(38) Other PA	Ant 0	32.3	19.5	19.5	22.7	21.0	21.0
LTE Band 42	Ant 7	16.6	17.4	14.2	18.3	21.0	21.0
LTE Band 42	Ant 4	13.6	13.4	9.5	18.5	16.0	16.0
LTE Band 42	Ant 8	27.1	21.3	19.7	22.7	21.0	21.0
LTE Band 42	Ant 5	16.3	18.0	14.5	16.0	16.0	16.0
FR1 n7	Ant 2	32.0	19.9	18.8	21.0	23.0	23.0
FR1 n7	Ant 1	19.3	17.0	15.2	20.1	21.0	21.0
FR1 n7 Other PA	Ant 1	17.8	17.6	16.3	20.4	23.0	23.0
FR1 n2	Ant 2	32.1	20.9	18.9	22.4	23.0	23.0
FR1 n2	Ant 1	19.3	18.0	16.5	21.9	21.0	21.0
FR1 n2 Other PA	Ant 1	18.4	16.3	14.8	20.7	23.0	23.0
FR1 n26(5)	Ant 0	31.7	24.9	24.9	23.0	23.0	23.0
FR1 n26(5)	Ant 1	23.4	21.4	19.9	26.6	23.0	23.0
FR1 n66	Ant 2	32.1	21.1	19.2	22.6	23.0	23.0
FR1 n66	Ant 1	19.4	17.1	15.5	22.7	21.0	21.0
FR1 n66 Other PA	Ant 1	19.3	16.9	15.5	21.6	23.0	23.0
FR1 n41(38)	Ant 1	18.4	17.5	16.0	20.9	23.0	23.0
FR1 n41(38)	Ant 0	32.0	21.5	21.4	22.7	23.0	23.0
FR1 n77(78)	Ant 7	18.0	18.2	15.7	18.7	23.0	23.0
FR1 n77(78)	Ant 4	15.5	15.4	11.7	19.6	23.0	23.0
FR1 n77(78)	Ant 8	28.1	22.8	21.0	23.2	23.0	23.0
FR1 n77(78)	Ant 5	19.2	18.0	16.0	20.3	23.0	23.0

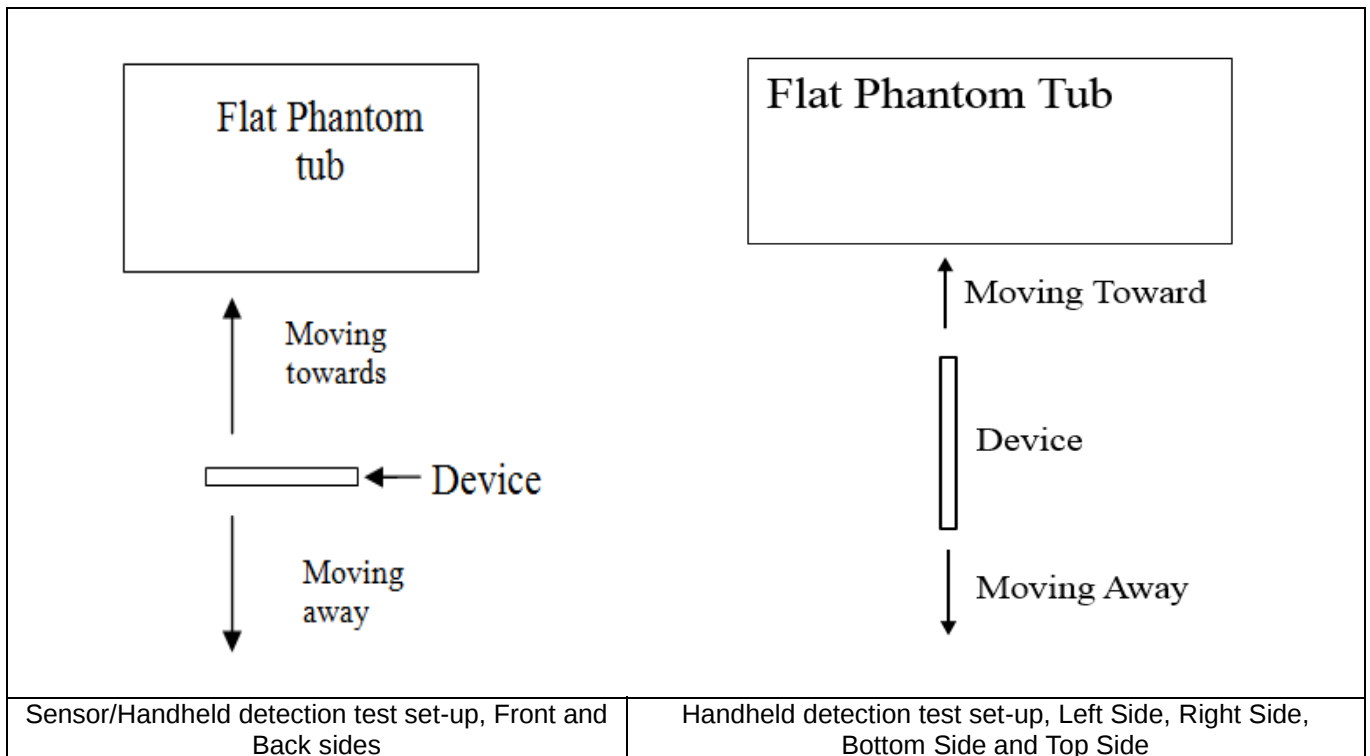
Note:

- 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 (5825MHz) and lowest (850MHz) 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	20	15	21	16

<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	14	9	18	13	16	11	17	11

<Handheld for ANT1&7>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Left Side		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	14	9	21	16	17	12	19	14

<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	12	7	12	7	18	13	

<Handheld for ANT 3&4&5>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Right Side		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	15	9	16	11	18	13	17	12

7. RF Exposure Limits

7.1 Uncontrolled Environment

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

7.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

8. Specific Absorption Rate (SAR)

8.1 Introduction

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

8.2 SAR Definition

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

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

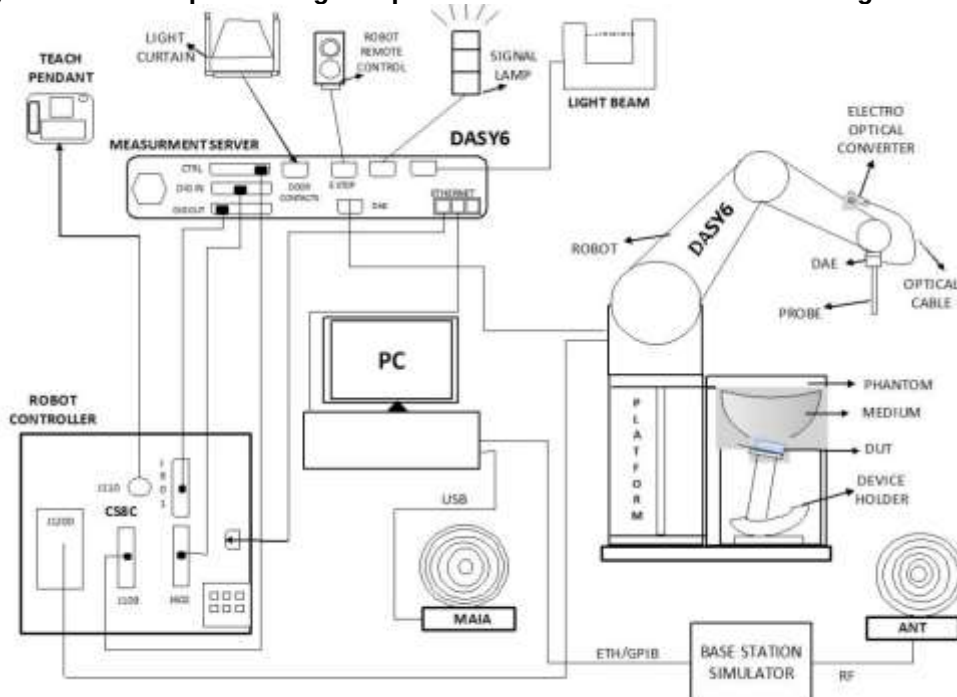
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. System Description and Setup

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



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

9.1 E-Field Probe

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

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 MHz – 10 GHz Linearity: ± 0.2 dB (30 MHz – 10 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g – >100 mW/g Linearity: ± 0.2 dB (noise: typically <1 μ W/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

9.2 Data Acquisition Electronics (DAE)

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

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



Photo of DAE

9.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

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

9.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

10. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

10.1 Spatial Peak SAR Evaluation

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

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

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

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

10.2 Power Reference Measurement

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

10.3 Area Scan

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

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

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

10.4 Zoom Scan

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

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

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm *	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.				
* When zoom scan is required and the <u>reported</u> SAR from the <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	1087	2022/2/24	2025/2/22
SPEAG	835MHz System Validation Kit	D835V2	4d298	2024/1/26	2025/1/25
SPEAG	1750MHz System Validation Kit	D1750V2	1090	2022/2/24	2025/2/22
SPEAG	1900MHz System Validation Kit	D1900V2	5d118	2022/3/30	2025/3/28
SPEAG	2450MHz System Validation Kit	D2450V2	1095	2024/2/8	2025/2/7
SPEAG	2600MHz System Validation Kit	D2600V2	1112	2023/12/18	2026/12/17
SPEAG	3500MHz System Validation Kit	D3500V2	1037	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	1358	2024/5/23	2025/5/22
SPEAG	Dosimetric E-Field Probe	EX3DV4	7774	2024/6/27	2025/6/26
SPEAG	SAM Twin Phantom	SAM Twin	TP-2022	NCR	NCR
CHIGO	Thermo-Hygrometer	HTC-1	55010	2024/1/4	2025/1/3
Testo	Thermo-Hygrometer	HTC-1	55011	2025/1/2	2026/1/1
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	2024/1/2	2025/1/1
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	2024/1/4	2025/1/3
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	22.8	0.888	42.300	0.89	41.90	-0.22	0.95	±5	2024/12/25
835	Head	22.7	0.911	41.800	0.90	41.50	1.22	0.72	±5	2024/12/27
1750	Head	22.8	1.350	40.600	1.37	40.10	-1.46	1.25	±5	2024/12/29
1900	Head	22.7	1.410	40.200	1.40	40.00	0.71	0.50	±5	2024/12/31
2600	Head	22.6	1.880	39.200	1.96	39.00	-4.08	0.51	±5	2025/1/1
3500	Head	22.9	2.820	38.500	2.91	37.90	-3.09	1.58	±5	2025/1/3
3900	Head	22.7	3.190	38.000	3.32	37.50	-3.92	1.33	±5	2025/1/4
750	Head	22.7	0.891	42.500	0.89	41.90	0.11	1.43	±5	2025/1/5
835	Head	22.8	0.912	41.900	0.90	41.50	1.33	0.96	±5	2025/1/7
1750	Head	22.6	1.320	40.300	1.37	40.10	-3.65	0.50	±5	2025/1/9
1900	Head	22.8	1.430	40.500	1.40	40.00	2.14	1.25	±5	2025/1/11
2600	Head	22.7	1.890	39.500	1.96	39.00	-3.57	1.28	±5	2025/1/13
3500	Head	22.7	2.810	38.700	2.91	37.90	-3.44	2.11	±5	2025/1/14
3900	Head	22.8	3.180	38.100	3.32	37.50	-4.22	1.60	±5	2025/1/15
2450	Head	22.6	1.850	39.100	1.80	39.20	2.78	-0.26	±5	2025/1/16
5250	Head	22.8	4.580	35.700	4.71	35.90	-2.76	-0.56	±5	2025/1/17
5600	Head	22.7	4.960	35.000	5.07	35.50	-2.17	-1.41	±5	2025/1/18
5750	Head	22.7	5.120	34.100	5.22	35.40	-1.92	-3.67	±5	2025/1/19

12.3 System Performance Check Results

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

<1g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2024/12/25	750	Head	50	1087	7774	1358	0.426	8.58	8.52	-0.70
2024/12/27	835	Head	50	4d298	7774	1358	0.503	9.89	10.06	1.72
2024/12/29	1750	Head	50	1090	7774	1358	1.830	37.00	36.6	-1.08
2024/12/31	1900	Head	50	5d118	7774	1358	1.920	39.30	38.4	-2.29
2025/1/1	2600	Head	50	1112	7774	1358	2.590	55.10	51.8	-5.99
2025/1/3	3500	Head	50	1037	7774	1358	3.240	65.40	64.8	-0.92
2025/1/4	3900	Head	50	1048	7774	1358	3.350	69.10	67	-3.04
2025/1/5	750	Head	50	1087	7774	1358	0.427	8.58	8.54	-0.47
2025/1/7	835	Head	50	4d298	7774	1358	0.507	9.89	10.14	2.53
2025/1/9	1750	Head	50	1090	7774	1358	1.830	37.00	36.6	-1.08
2025/1/11	1900	Head	50	5d118	7774	1358	1.920	39.30	38.4	-2.29
2025/1/13	2600	Head	50	1112	7774	1358	2.600	55.10	52	-5.63
2025/1/14	3500	Head	50	1037	7774	1358	3.230	65.40	64.6	-1.22
2025/1/15	3900	Head	50	1048	7774	1358	3.320	69.10	66.4	-3.91
2025/1/16	2450	Head	50	1095	7774	1358	2.770	52.60	55.4	5.32
2025/1/17	5250	Head	50	1113	7774	1358	4.380	81.50	87.6	7.48
2025/1/18	5600	Head	50	1113	7774	1358	4.460	82.60	89.2	7.99
2025/1/19	5750	Head	50	1113	7774	1358	4.330	80.80	86.6	7.18

<10g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2024/12/25	750	Head	50	1087	7774	1358	0.284	5.65	5.68	0.53
2024/12/27	835	Head	50	4d298	7774	1358	0.333	6.45	6.66	3.26
2024/12/29	1750	Head	50	1090	7774	1358	0.984	19.50	19.68	0.92
2024/12/31	1900	Head	50	5d118	7774	1358	0.980	20.40	19.6	-3.92
2025/1/1	2600	Head	50	1112	7774	1358	1.170	24.80	23.4	-5.65
2025/1/3	3500	Head	50	1037	7774	1358	1.250	24.70	25	1.21
2025/1/4	3900	Head	50	1048	7774	1358	1.200	24.10	24	-0.41
2025/1/5	750	Head	50	1087	7774	1358	0.285	5.65	5.7	0.88
2025/1/7	835	Head	50	4d298	7774	1358	0.336	6.45	6.72	4.19
2025/1/9	1750	Head	50	1090	7774	1358	0.982	19.50	19.64	0.72
2025/1/11	1900	Head	50	5d118	7774	1358	0.977	20.40	19.54	-4.22
2025/1/13	2600	Head	50	1112	7774	1358	1.170	24.80	23.4	-5.65
2025/1/14	3500	Head	50	1037	7774	1358	1.250	24.70	25	1.21
2025/1/15	3900	Head	50	1048	7774	1358	1.190	24.10	23.8	-1.24
2025/1/16	2450	Head	50	1095	7774	1358	1.290	24.70	25.8	4.45
2025/1/17	5250	Head	50	1113	7774	1358	1.250	23.30	25	7.30
2025/1/18	5600	Head	50	1113	7774	1358	1.260	23.70	25.2	6.33
2025/1/19	5750	Head	50	1113	7774	1358	1.210	23.00	24.2	5.22

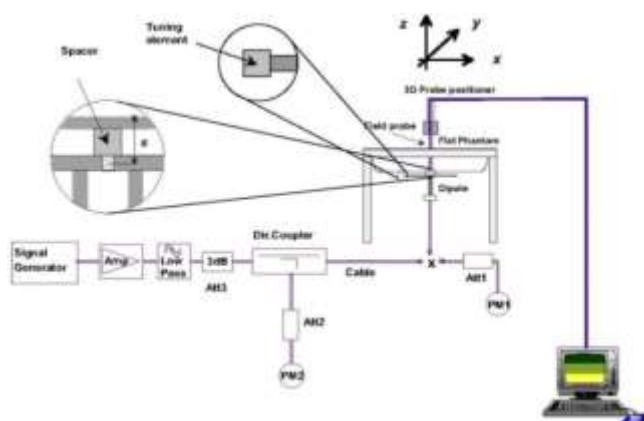


Fig 11.3.1 System Performance Check Setup



Fig 11.3.2 Setup Photo

13. RF Exposure Positions

13.1 Ear and handset reference point

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

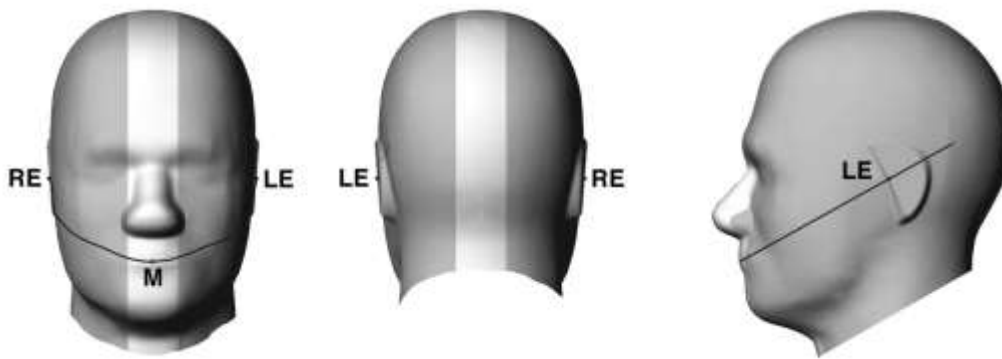


Fig 12.1.1 Front, back, and side views of SAM twin phantom

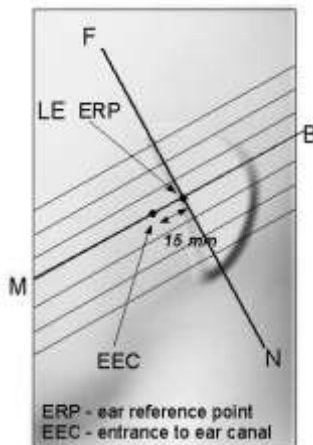


Fig 12.1.2 Close-up side view of phantom showing the ear region.

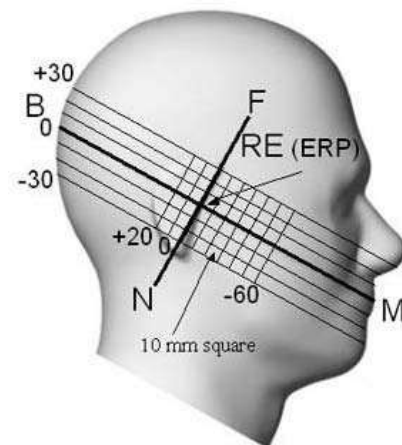


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

13.2 Definition of the cheek position

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

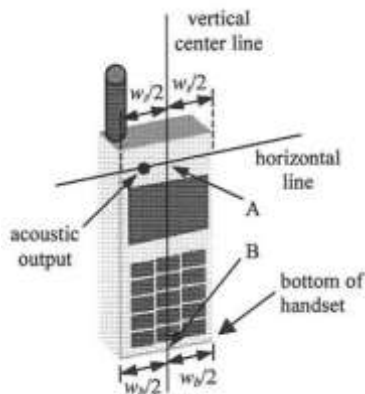


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

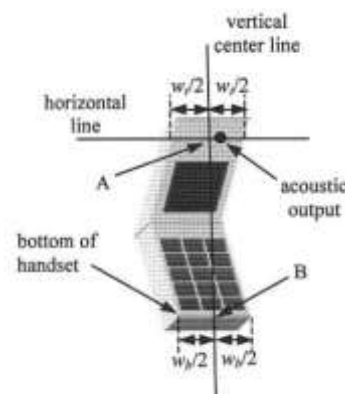


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

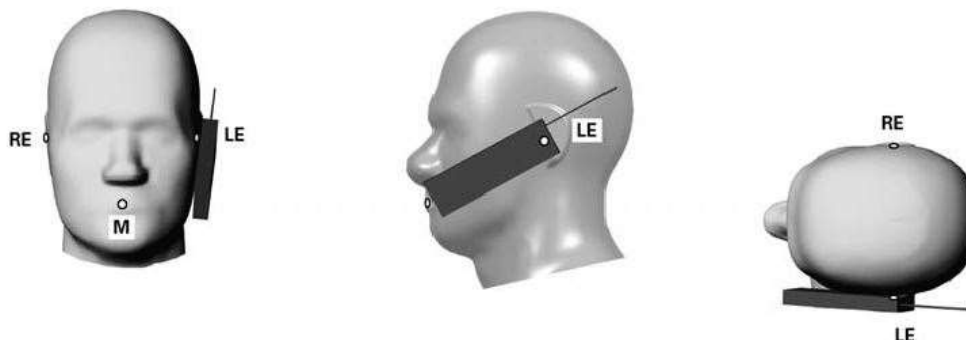


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

13.3 Definition of the tilt position

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

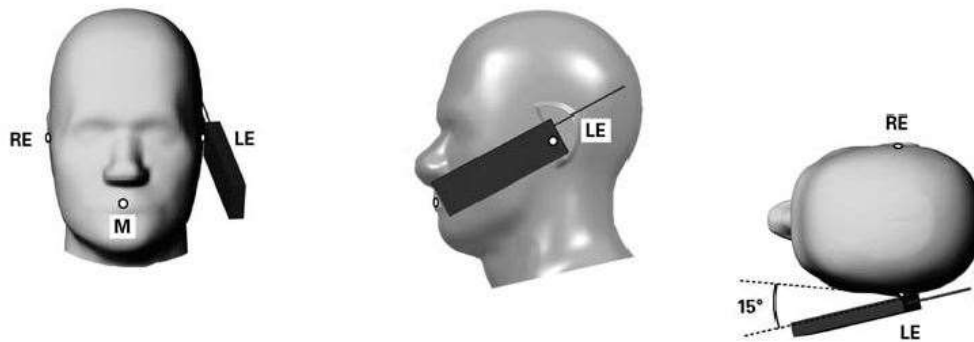


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

13.4 Body Worn Accessory

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

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

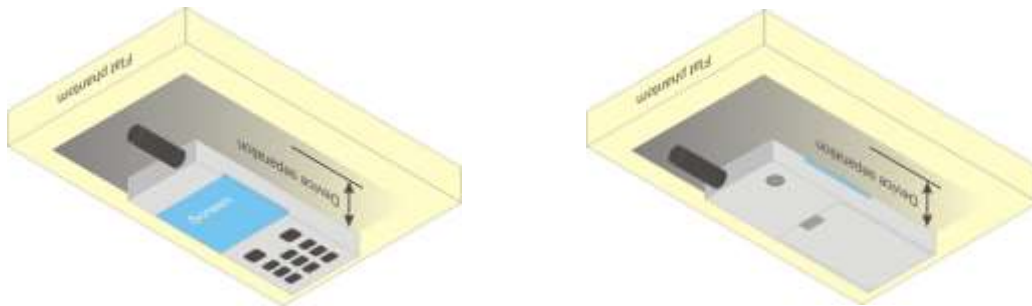


Fig 12.4 Body Worn Position

13.5 Product Specific 10g SAR Exposure

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

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

13.6 Wireless Router

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

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

14. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

<WCDMA Conducted Power>

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

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

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

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

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

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

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

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of 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:

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

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

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (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_{info})	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.		

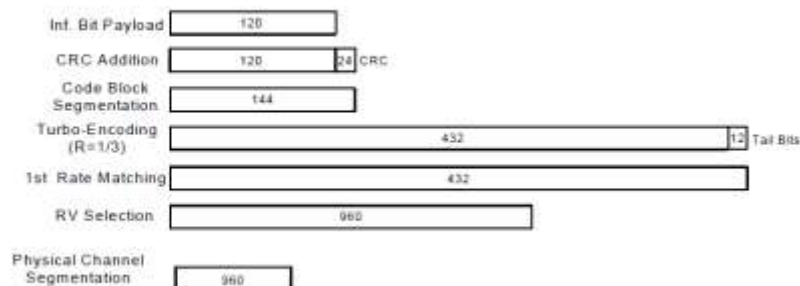


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

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

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

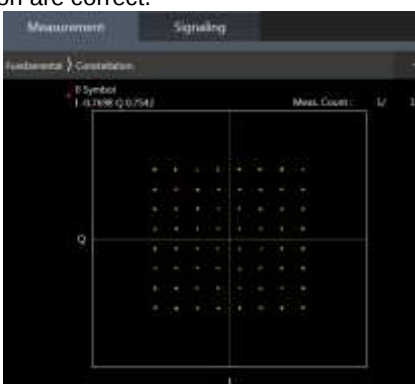
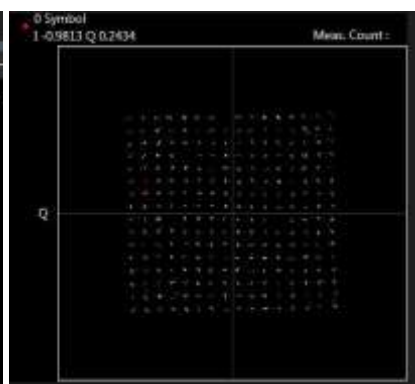
Setup Configuration
<WCDMA Conducted Power>
General Note:

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

<LTE Conducted Power>

General Note:

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


16QAM

64QAM

256QAM

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

- 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.

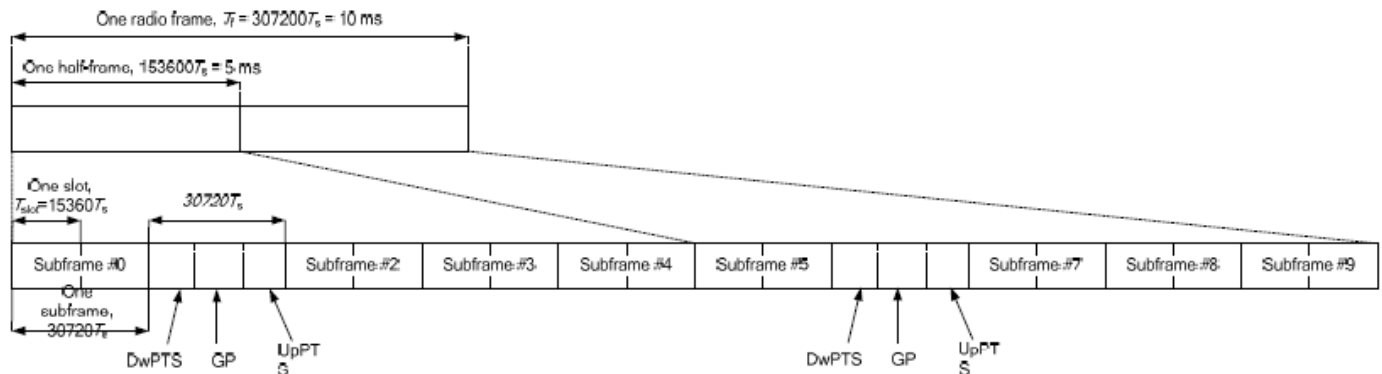


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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 3

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

<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		
Number	Combination	4X4 MIMO	Number	Combination	4X4 MIMO
1	CA_26A-41A	41A	1	CA_2A-2A-4A	2A-4A, 2A-2A, 4A, 2A
2	CA_26A-66A	66A	2	CA_2A-2A-5A	2A-2A, 2A
3	CA_2A-26A	2A	3	CA_2A-2A-66A	2A-66A, 2A-2A, 66A, 2A
4	CA_2A-2A	2A-2A, 2A	4	CA_2A-2A-7A	2A-7A, 2A-2A, 7A, 2A
5	CA_2A-38A	2A-38A, 38A, 2A	5	CA_2A-4A-4A	4A-4A, 2A-4A, 4A, 2A
6	CA_2A-4A	2A-4A, 4A, 2A	6	CA_2A-4A-5A	2A-4A, 4A, 2A
7	CA_2A-5A	2A	7	CA_2A-4A-7A	7A, 4A, 2A
8	CA_2A-66A	2A-66A, 66A, 2A	8	CA_2A-5A-66A	2A-66A, 66A, 2A
9	CA_2A-7A	2A-7A, 7A, 2A	9	CA_2A-5A-7A	2A-7A, 7A, 2A
10	CA_2A-8A	2A	10	CA_2A-66A-66A	66A-66A, 2A-66A, 66A, 2A
11	CA_2C	2C, 2A	11	CA_2A-7A-66A	7A, 66A, 2A
12	CA_38A-66A	38A-66A, 66A, 38A	12	CA_2A-7A-7A	7A-7A, 2A-7A, 7A, 2A
13	CA_38C	38C, 38A	14	CA_2A-7C	7C, 7A, 2A
14	CA_41A-41A	41A-41A, 41A	15	CA_2C-66A	2C, 66A, 2A
15	CA_41A-42A	41A-42A, 42A, 41A	16	CA_4A-4A-5A	4A-4A, 4A
16	CA_41C	41C, 41A	17	CA_4A-4A-7A	4A-7A, 4A-4A, 7A, 4A
17	CA_42A-42A	42A-42A, 42A	18	CA_4A-5A-7A	4A-7A, 7A, 4A
18	CA_42C	42C, 42A	19	CA_4A-7C	7C, 7A, 4A
19	CA_4A-28A	4A	20	d	66A
20	CA_4A-4A	4A-4A, 4A	21	CA_5A-66A-66A	66A-66A, 66A
21	CA_4A-5A	4A	22	CA_5A-66C	66C, 66A
22	CA_4A-7A	4A-7A, 7A, 4A	23	CA_5A-7A-66A	7A-66A, 7A, 66A
23	CA_4C	4C, 4A	24	CA_5A-7C	7C, 7A
24	CA_5A-5A		25	CA_7A-26A-66A	7A-66A, 7A, 66A
25	CA_5A-66A	66A	26	CA_7A-38A-66A	66A
26	CA_5A-7A	7A	27	CA_7A-66A-66A	7A-66A, 66A-66A, 7A, 66A
27	CA_66A-66A	66A-66A, 66A	28	CA_7A-7A-66A	7A-7A, 7A-66A, 7A, 66A
28	CA_66B	66B, 66A	29	CA_7C-66A	7C, 7A, 66A
29	CA_66C	66C, 66A			
30	CA_7A-26A	7A			
31	CA_7A-42A	7A-42A, 7A, 42A			
32	CA_7A-66A	7A-66A, 7A, 66A			
33	CA_7A-7A	7A-7A, 7A			
34	CA_7C	7C, 7A			

LTE Carrier Aggregation Conducted Power (Downlink)

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

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

LTE 4x4 MIMO (Downlink)

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

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

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

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation	
Intra-band	Antenna Tx	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	Ant7	Ant4/8/5

<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
CA_2A-4A	Ant 2 + Ant 1	Ant9+Ant0
CA_2A-5A	Ant 2 + Ant 1	Ant 1/9 + Ant 0 Ant0+Ant1
CA_2A-66A	Ant 2 + Ant 1	Ant9+Ant0
CA_2A-7A	Ant 2 + Ant 1	Ant9+Ant0
CA_4A-5A	Ant 2 + Ant 1	Ant 1/9 + Ant 0 Ant0+Ant1
CA_4A-7A	Ant 2 + Ant 1	Ant9+Ant0
CA_5A-66A	Ant1+Ant2	Ant0+Ant1/9 Ant1+Ant0
CA_5A-7A	Ant1+Ant2	Ant0+Ant1/9 Ant1+Ant0

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 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 algorithm in WWAN adds directly the time-averaged RF exposure between two LTE bands. TA-SAR 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 /n7 /n66/n38/n41 /n78 is NSA mode.
2. 5G NR n2/n5/n7 /n26 /n66 /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. For 5G NR bands, using FTM to perform SAR with default 100% transmission.
5. For 5G NR, the simultaneous transmission analysis is used standalone SAR at total power level to show compliance.
6. 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.
7. 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.
8. 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.
9. 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.
10. For 5G NR inter-band CA mode, MediaTek Smart Transmit 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	
	LTE TX	NR TX	LTE TX	NR TX
DC_26A_n78A	Ant 0	Ant 7	Ant 1/Ant0	Ant7/Ant4/8/5
DC_2A_n38A	Ant 2	Ant 1	Ant9	Ant0
DC_2A_n66A	Ant 2	Ant 1	/	/
DC_2A_n78A	Ant 1	Ant 7	Ant 2/9/0/Ant1	Ant7/Ant4/8/5
DC_2A_n7A	Ant 2	Ant 1	/	/
DC_38A_n78A	Ant 1	Ant 7	Ant 2/9/0/Ant1	Ant7/Ant4/8/5
DC_41A_n78A	Ant 1	Ant 7	Ant 2/9/0 Ant1	Ant7 Ant4/8/5
DC_4A_n2A	Ant 2	Ant 1	/	/
DC_4A_n38A	Ant 2	Ant 1	Ant9	Ant0
DC_4A_n41A	Ant 2	Ant 1	Ant9	Ant0
DC_4A_n78A	Ant 1	Ant 7	Ant 2/9/0/Ant1	Ant7/Ant4/8/5
DC_4A_n7A	Ant 2	Ant 1	/	/
DC_5A_n2A	Ant 1	Ant 2	Ant 0	Ant 1
DC_5A_n66A	Ant 1	Ant 2	Ant 0	Ant 1
DC_5A_n78A	Ant 0	Ant 7	Ant 1/Ant0	Ant7/Ant4/8/5
DC_5A_n7A	Ant 1	Ant 2	Ant 0	Ant 1
DC_66A_n2A	Ant2	Ant1	/	/
DC_66A_n38A	Ant 2	Ant 1	Ant9	Ant0
DC_66A_n41A	Ant 2	Ant 1	Ant9	Ant0
DC_66A_n78A	Ant 1	Ant 7	Ant 2/9/0/Ant1	Ant7/Ant4/8/5
DC_66A_n7A	Ant 2	Ant 1	/	/
DC_7A_n66A	Ant 2	Ant 1	/	/
DC_7A_n78A	Ant 1	Ant 7	Ant 2/9/0/Ant1	Ant7/Ant4/8/5

Inter-Band CA Configuration:

NR Uplink CA	2CC Uplink Carrier Aggregation	
Inter-band	Main Antenna Tx	ASDiv-1 Tx
CA_n66A-n78A	Ant1+Ant7	Ant2+Ant7 Ant1+Ant4/8/5
CA_n7A-n78A	Ant1+Ant7	Ant2/9/0+Ant7 Ant1+Ant4/8/5

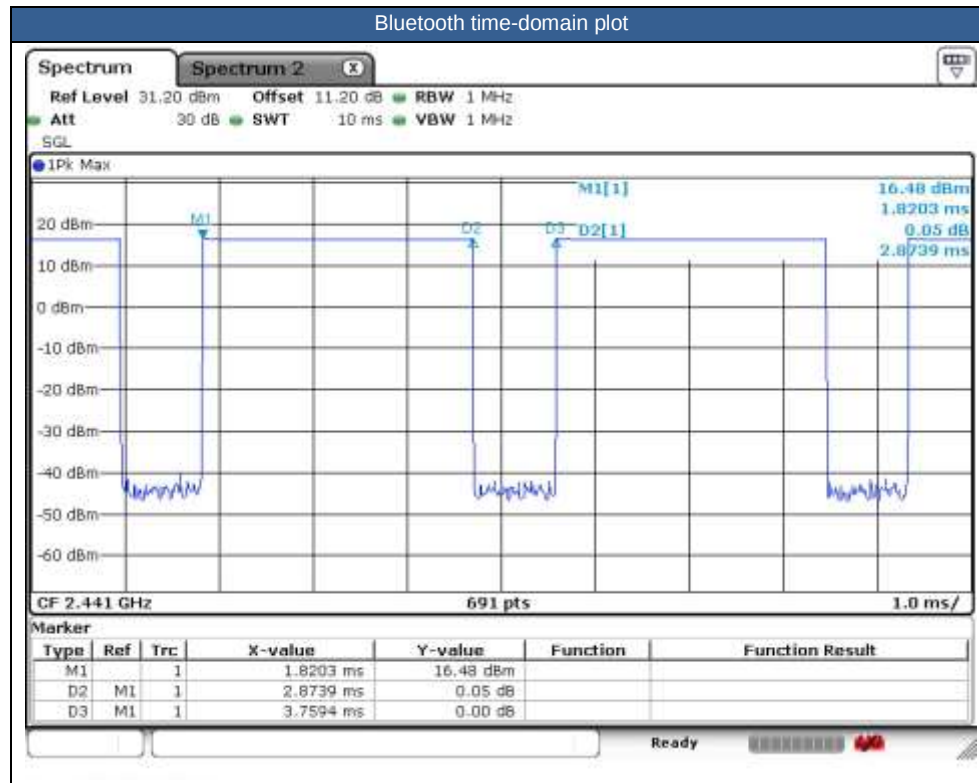
<WLAN Conducted Power>
General Note:

- 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.
- 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.
- 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).
- 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.
- 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:
 - 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.
 - 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.
 - 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.
- 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.

<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 76.45% 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.
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 GSM850/1900, WCDMA Band II/IV/V, LTE Band 2/4/5/7/26/66/38/41/42, 5G NR n2/n7/n5/n26/n66/n38 /n41/n77/n78, 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 B2/4/7/66/41 at Ant 0/1 and 5G NR n2/7/66 at Ant 1 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 $> \text{not } \frac{1}{2}$ 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 $> \text{not } \frac{1}{2}$ 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 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 B4 / B5 / B38 SAR test was covered by 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

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 /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)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	23095	707.5	1	22.51	24.00	1.409	-	-	-0.08	0.081	0.114
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	ECI 2	23095	707.5	1	21.50	23.00	1.413	-	-	-0.17	0.064	0.090
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	23095	707.5	1	22.51	24.00	1.409	-	-	-0.08	0.053	0.075
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	ECI 2	23095	707.5	1	21.50	23.00	1.413	-	-	-0.04	0.044	0.062
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	23095	707.5	1	22.51	24.00	1.409	-	-	-0.08	0.130	0.183
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	ECI 2	23095	707.5	1	21.50	23.00	1.413	-	-	0.17	0.098	0.138
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	23095	707.5	1	22.51	24.00	1.409	-	-	0.18	0.086	0.121
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	ECI 2	23095	707.5	1	21.50	23.00	1.413	-	-	-0.04	0.055	0.078
01	LTE Band 12	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	23095	707.5	1	21.96	23.00	1.271	-	-	0.06	0.425	0.540
	LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	ECI 2	23095	707.5	1	20.91	22.00	1.285	-	-	0.01	0.337	0.433
	LTE Band 12	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	23095	707.5	1	21.96	23.00	1.271	-	-	0.1	0.417	0.530
	LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	ECI 2	23095	707.5	1	20.91	22.00	1.285	-	-	-0.17	0.330	0.424
	LTE Band 12	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	23095	707.5	1	21.96	23.00	1.271	-	-	0.04	0.200	0.254
	LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	ECI 2	23095	707.5	1	20.91	22.00	1.285	-	-	-0.01	0.158	0.203
	LTE Band 12	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	23095	707.5	1	21.96	23.00	1.271	-	-	-0.08	0.231	0.294
	LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	ECI 2	23095	707.5	1	20.91	22.00	1.285	-	-	0.05	0.181	0.233
	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	23230	782	1	22.47	24.00	1.422	-	-	-0.08	0.075	0.107
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 0	ECI 2	23230	782	1	21.45	23.00	1.429	-	-	-0.13	0.058	0.083
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	23230	782	1	22.47	24.00	1.422	-	-	-0.13	0.044	0.063
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 0	ECI 2	23230	782	1	21.45	23.00	1.429	-	-	0.06	0.000	0.000
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	23230	782	1	22.47	24.00	1.422	-	-	-0.03	0.116	0.165
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 0	ECI 2	23230	782	1	21.45	23.00	1.429	-	-	-0.03	0.094	0.134
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	23230	782	1	22.47	24.00	1.422	-	-	0.08	0.071	0.101
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 0	ECI 2	23230	782	1	21.45	23.00	1.429	-	-	-0.07	0.046	0.066
02	LTE Band 13	10M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	23230	782	1	21.73	23.00	1.340	-	-	-0.05	0.611	0.819
	LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 1	ECI 2	23230	782	1	20.66	22.00	1.361	-	-	-0.03	0.492	0.670
	LTE Band 13	10M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	23230	782	1	20.64	22.00	1.368	-	-	0.14	0.494	0.676
	LTE Band 13	10M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	23230	782	1	21.73	23.00	1.340	-	-	0.11	0.586	0.785
	LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 1	ECI 2	23230	782	1	20.66	22.00	1.361	-	-	-0.05	0.469	0.639
	LTE Band 13	10M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	23230	782	1	21.73	23.00	1.340	-	-	0.14	0.313	0.419
	LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 1	ECI 2	23230	782	1	20.66	22.00	1.361	-	-	-0.17	0.252	0.343
	LTE Band 13	10M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	23230	782	1	21.73	23.00	1.340	-	-	0.17	0.340	0.455
	LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 1	ECI 2	23230	782	1	20.66	22.00	1.361	-	-	-0.05	0.273	0.372
835MHz																					
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 0	ECI 2	189	836.4	1	29.14	31.00	1.535	-	-	0.05	0.124	0.190
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 0	ECI 2	189	836.4	1	29.14	31.00	1.535	-	-	-0.11	0.059	0.091
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 0	ECI 2	189	836.4	1	29.14	31.00	1.535	-	-	-0.12	0.174	0.267
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant 0	ECI 2	189	836.4	1	29.14	31.00	1.535	-	-	0.03	0.102	0.157
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 1	ECI 2	189	836.4	1	25.31	26.60	1.346	-	-	0.08	0.625	0.841
03	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 1	ECI 2	128	824.2	1	25.26	26.60	1.361	-	-	0.06	0.649	0.884
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 1	ECI 2	251	848.8	1	25.27	26.60	1.358	-	-	0.01	0.495	0.672
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	189	836.4	1	25.31	26.60	1.346	-	-	0.03	0.602	0.810
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	128	824.2	1	25.26	26.60	1.361	-	-	-0.08	0.631	0.859
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	251	848.8	1	25.27	26.60	1.358	-	-	-0.08	0.499	0.678
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	ECI 2	189	836.4	1	25.31	26.60	1.346	-	-	0.1	0.341	0.459
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 1	ECI 2	189	836.4	1	25.31	26.60	1.346	-	-	0.12	0.346	0.466
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	ECI 2	4182	836.4	1	22.81	24.00	1.315	-	-	-0.16	0.109	0.143
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 0	ECI 2	4182	836.4	1	22.81	24.00	1.315	-	-	-0.02	0.061	0.080
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	ECI 2	4182	836.4	1	22.81	24.00	1.315	-	-	0.15	0.177	0.233
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 0	ECI 2	4182	836.4	1	22.81	24.00	1.315	-	-	-0.09	0.098	0.129



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04	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	4182	836.4	1	22.11	23.40	1.346	-	-	0.06	0.633	0.852
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	4132	826.4	1	22.08	23.40	1.355	-	-	0.03	0.654	0.886
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	4233	846.6	1	22.10	23.40	1.349	-	-	-0.09	0.558	0.753
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	4182	836.4	1	22.11	23.40	1.346	-	-	-0.08	0.568	0.764
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	ECI 2	4182	836.4	1	22.11	23.40	1.346	-	-	0.03	0.343	0.462
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	ECI 2	4182	836.4	1	22.11	23.40	1.346	-	-	0.18	0.343	0.462
05	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	26865	831.5	1	22.52	24.00	1.406	-	-	0.11	0.093	0.131
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 0	ECI 2	26865	831.5	1	21.51	23.00	1.409	-	-	-0.05	0.076	0.107
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	26865	831.5	1	22.52	24.00	1.406	-	-	-0.08	0.000	0.000
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 0	ECI 2	26865	831.5	1	21.51	23.00	1.409	-	-	0.16	0.000	0.000
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	26865	831.5	1	22.52	24.00	1.406	-	-	0.05	0.134	0.188
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 0	ECI 2	26865	831.5	1	21.51	23.00	1.409	-	-	0.05	0.111	0.156
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	26865	831.5	1	22.52	24.00	1.406	-	-	-0.03	0.077	0.108
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 0	ECI 2	26865	831.5	1	21.51	23.00	1.409	-	-	-0.15	0.068	0.096
	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	26865	831.5	1	22.51	23.50	1.256	-	-	0.03	0.697	0.875
	LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 1	ECI 2	26865	831.5	1	21.47	23.00	1.422	-	-	0.16	0.550	0.782
	LTE Band 26	15M	QPSK	75	0	-	Right Cheek	0mm	Ant 1	ECI 2	26865	831.5	1	21.45	23.00	1.429	-	-	-0.1	0.542	0.774
	LTE Band 26	15M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	26865	831.5	1	22.51	23.50	1.256	-	-	0.07	0.696	0.874
	LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 1	ECI 2	26865	831.5	1	21.47	23.00	1.422	-	-	0.18	0.552	0.785
	LTE Band 26	15M	QPSK	75	0	-	Right Tilted	0mm	Ant 1	ECI 2	26865	831.5	1	21.45	23.00	1.429	-	-	-0.1	0.544	0.777
	LTE Band 26	15M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	26865	831.5	1	22.51	23.50	1.256	-	-	0.01	0.372	0.467
	LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 1	ECI 2	26865	831.5	1	21.47	23.00	1.422	-	-	-0.15	0.298	0.424
	LTE Band 26	15M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	26865	831.5	1	22.51	23.50	1.256	-	-	0.19	0.401	0.504
	LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 1	ECI 2	26865	831.5	1	21.47	23.00	1.422	-	-	0.07	0.321	0.457
06	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	166300	831.5	1	22.75	24.00	1.334	-	-	0.08	0.073	0.097
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	166300	831.5	1	22.73	24.00	1.340	-	-	0.01	0.081	0.109
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	ECI 2	166300	831.5	1	22.75	24.00	1.334	-	-	0.03	0.000	0.000
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 0	ECI 2	166300	831.5	1	22.73	24.00	1.340	-	-	-0.08	0.045	0.060
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	ECI 2	166300	831.5	1	22.75	24.00	1.334	-	-	-0.08	0.107	0.143
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 0	ECI 2	166300	831.5	1	22.73	24.00	1.340	-	-	0.1	0.128	0.171
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	ECI 2	166300	831.5	1	22.75	24.00	1.334	-	-	-0.18	0.062	0.083
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 0	ECI 2	166300	831.5	1	22.73	24.00	1.340	-	-	0.1	0.069	0.092
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	166300	831.5	1	22.69	24.00	1.352	-	-	-0.04	0.598	0.809
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	166300	831.5	1	22.63	24.00	1.371	-	-	-0.18	0.563	0.772
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	166300	831.5	1	21.62	23.00	1.374	-	-	0.03	0.448	0.616
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	166300	831.5	1	22.69	24.00	1.352	-	-	-0.15	0.553	0.748
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	166300	831.5	1	22.63	24.00	1.371	-	-	-0.15	0.558	0.765
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	166300	831.5	1	22.69	24.00	1.352	-	-	-0.08	0.307	0.415
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	166300	831.5	1	22.63	24.00	1.371	-	-	-0.17	0.299	0.410
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	166300	831.5	1	22.69	24.00	1.352	-	-	-0.08	0.309	0.418
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	166300	831.5	1	22.63	24.00	1.371	-	-	-0.04	0.306	0.419
1750MHz																					
07	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	ECI 2	1413	1732.6	1	22.78	24.00	1.324	-	-	0.02	0.140	0.185
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	ECI 2	1413	1732.6	1	22.78	24.00	1.324	-	-	0.07	0.091	0.121
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	ECI 2	1413	1732.6	1	22.78	24.00	1.324	-	-	0.16	0.157	0.208
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 2	ECI 2	1413	1732.6	1	22.78	24.00	1.324	-	-	0.13	0.099	0.131
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	1413	1732.6	1	18.76	19.90	1.300	-	-	-0.08	0.660	0.858
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	1312	1712.4	1	18.73	19.90	1.309	-	-	0.17	0.491	0.643
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	1513	1752.6	1	18.75	19.90	1.303	-	-	0.18	0.649	0.846
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	1413	1732.6	1	18.76	19.90	1.300	-	-	0.07	0.687	0.893
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	1413	1732.6	2	18.76	19.90	1.300	-	-	0.02	0.623	0.810
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	1312	1712.4	1	18.73	19.90	1.309	-	-	-0.04	0.522	0.683
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	1513	1752.6	1	18.75	19.90	1.303	-	-	-0.08	0.676	0.881
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	ECI 2	1413	1732.6	1	18.76	19.90	1.300	-	-	-0.13	0.249	0.324
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	ECI 2	1413	1732.6	1	18.76	19.90	1.300	-	-	-0.13	0.359	0.467
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	132322	1745	1	22.48	24.00	1.419	-	-	-0.18	0.145	0.206



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	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	ECI 2	132322	1745	1	21.44	23.00	1.432	-	-	0.02	0.113	0.162
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	ECI 2	132322	1745	1	22.48	24.00	1.419	-	-	0.16	0.095	0.135
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	ECI 2	132322	1745	1	21.44	23.00	1.432	-	-	-0.03	0.077	0.110
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	ECI 2	132322	1745	1	22.48	24.00	1.419	-	-	0.07	0.157	0.223
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	ECI 2	132322	1745	1	21.44	23.00	1.432	-	-	-0.14	0.124	0.178
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	ECI 2	132322	1745	1	22.48	24.00	1.419	-	-	0.01	0.096	0.136
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	ECI 2	132322	1745	1	21.44	23.00	1.432	-	-	-0.01	0.078	0.112
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	132322	1745	1	18.57	19.50	1.239	-	-	-0.03	0.651	0.806
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	132072	1720	1	18.52	19.50	1.253	-	-	0.08	0.592	0.742
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	132572	1770	1	18.47	19.50	1.268	-	-	-0.07	0.619	0.785
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	132322	1745	1	18.55	19.50	1.245	-	-	0.05	0.522	0.650
	LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	ECI 2	132322	1745	1	18.53	19.50	1.250	-	-	0.03	0.513	0.641
08	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	132322	1745	1	18.57	19.50	1.239	-	-	0.05	0.717	0.888
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	132072	1720	1	18.52	19.50	1.253	-	-	-0.16	0.670	0.840
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	132572	1770	1	18.47	19.50	1.268	-	-	-0.02	0.682	0.865
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	132322	1745	1	18.55	19.50	1.245	-	-	0.15	0.576	0.717
	LTE Band 66	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	ECI 2	132322	1745	1	18.53	19.50	1.250	-	-	-0.05	0.567	0.709
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	132322	1745	1	18.57	19.50	1.239	-	-	-0.08	0.261	0.323
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	132322	1745	1	18.55	19.50	1.245	-	-	0.16	0.213	0.265
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	132322	1745	1	18.57	19.50	1.239	-	-	0.05	0.400	0.496
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	132322	1745	1	18.55	19.50	1.245	-	-	-0.15	0.320	0.398
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	132322	1745	1	19.26	20.50	1.330	-	-	-0.03	0.657	0.874
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	132322	1745	1	22.49	24.00	1.416	-	-	-0.06	0.168	0.238
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	132322	1745	1	21.45	23.00	1.429	-	-	-0.04	0.139	0.199
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 9	ECI 2	132322	1745	1	22.49	24.00	1.416	-	-	-0.09	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 9	ECI 2	132322	1745	1	21.45	23.00	1.429	-	-	-0.17	0.000	0.000
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	132322	1745	1	22.49	24.00	1.416	-	-	-0.1	0.135	0.191
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	132322	1745	1	21.45	23.00	1.429	-	-	0.18	0.112	0.160
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 9	ECI 2	132322	1745	1	22.49	24.00	1.416	-	-	-0.17	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 9	ECI 2	132322	1745	1	21.45	23.00	1.429	-	-	-0.04	0.000	0.000
	LTE Band 66	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	132322	1745	1	20.37	21.50	1.297	-	-	0.05	0.023	0.030
	LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	ECI 2	132322	1745	1	19.35	20.50	1.303	-	-	-0.03	0.018	0.023
	LTE Band 66	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	132322	1745	1	20.37	21.50	1.297	-	-	0.17	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	ECI 2	132322	1745	1	19.35	20.50	1.303	-	-	-0.15	0.000	0.000
	LTE Band 66	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	132322	1745	1	20.37	21.50	1.297	-	-	0.16	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	ECI 2	132322	1745	1	19.35	20.50	1.303	-	-	0.05	0.000	0.000
	LTE Band 66	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	132322	1745	1	20.37	21.50	1.297	-	-	-0.06	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	ECI 2	132322	1745	1	19.35	20.50	1.303	-	-	-0.13	0.000	0.000
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	132322	1745	1	21.98	23.00	1.265	-	-	-0.02	0.016	0.020
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	349000	1745	1	22.60	24.00	1.380	-	-	-0.15	0.088	0.121
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	349000	1745	1	22.59	24.00	1.384	-	-	0.19	0.097	0.134
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	349000	1745	1	22.60	24.00	1.380	-	-	0.07	0.060	0.083
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	349000	1745	1	22.59	24.00	1.384	-	-	-0.18	0.064	0.089
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	349000	1745	1	22.60	24.00	1.380	-	-	0.03	0.099	0.137
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	349000	1745	1	22.59	24.00	1.384	-	-	-0.15	0.113	0.156
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	349000	1745	1	22.60	24.00	1.380	-	-	-0.15	0.060	0.083
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	349000	1745	1	22.59	24.00	1.384	-	-	0.11	0.068	0.094
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	349000	1745	1	19.31	20.40	1.285	-	-	0.07	0.627	0.806
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	349000	1745	1	19.29	20.40	1.291	-	-	0.16	0.616	0.795
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	349000	1745	1	19.28	20.40	1.294	-	-	0.13	0.486	0.629
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	349000	1745	1	19.31	20.40	1.285	-	-	-0.18	0.680	0.874
09	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	349000	1745	1	19.29	20.40	1.291	-	-	-0.12	0.683	0.882
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	349000	1745	1	19.28	20.40	1.294	-	-	0.02	0.538	0.696
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	349000	1745	1	19.31	20.40	1.285	-	-	0.16	0.230	0.296
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	349000	1745	1	19.29	20.40	1.291	-	-	-0.03	0.251	0.324



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	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	349000	1745	1	19.31	20.40	1.285	-	-	0.07	0.322	0.414
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	349000	1745	1	19.29	20.40	1.291	-	-	0.02	0.356	0.460
	FR1 n66 Other PA	45M	QPSK	120	60	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	349000	1745	1	19.07	20.30	1.327	-	-	-0.13	0.662	0.879
1900MHz																					
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Cheek	0mm	Ant 2	ECI 2	661	1880	1	26.34	27.50	1.306	-	-	-0.05	0.112	0.146
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Right Tilted	0mm	Ant 2	ECI 2	661	1880	1	26.34	27.50	1.306	-	-	0.04	0.057	0.074
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Cheek	0mm	Ant 2	ECI 2	661	1880	1	26.34	27.50	1.306	-	-	-0.13	0.092	0.120
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Left Tilted	0mm	Ant 2	ECI 2	661	1880	1	26.34	27.50	1.306	-	-	-0.01	0.052	0.068
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 1	ECI 2	661	1880	1	20.43	21.50	1.279	-	-	0.01	0.583	0.746
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	661	1880	1	20.43	21.50	1.279	-	-	-0.04	0.653	0.835
10	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	512	1850.2	1	20.42	21.50	1.282	-	-	0.07	0.681	0.873
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Tilted	0mm	Ant 1	ECI 2	810	1909.8	1	20.41	21.50	1.285	-	-	-0.09	0.560	0.720
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 1	ECI 2	661	1880	1	20.43	21.50	1.279	-	-	-0.17	0.332	0.425
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Tilted	0mm	Ant 1	ECI 2	661	1880	1	20.43	21.50	1.279	-	-	-0.1	0.403	0.516
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 2	ECI 2	9400	1880	1	22.68	24.00	1.355	-	-	-0.09	0.161	0.218
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 2	ECI 2	9400	1880	1	22.68	24.00	1.355	-	-	0.05	0.091	0.123
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 2	ECI 2	9400	1880	1	22.68	24.00	1.355	-	-	0.02	0.128	0.173
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 2	ECI 2	9400	1880	1	22.68	24.00	1.355	-	-	-0.13	0.091	0.123
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	9400	1880	1	17.85	19.00	1.303	-	-	-0.04	0.616	0.803
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	9262	1852.4	1	17.84	19.00	1.306	-	-	-0.05	0.639	0.835
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 1	ECI 2	9538	1907.6	1	17.81	19.00	1.315	-	-	0.06	0.455	0.598
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	9400	1880	1	17.85	19.00	1.303	-	-	-0.13	0.626	0.816
11	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	9262	1852.4	1	17.84	19.00	1.306	-	-	-0.07	0.675	0.882
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 1	ECI 2	9538	1907.6	1	17.81	19.00	1.315	-	-	-0.01	0.492	0.647
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 1	ECI 2	9400	1880	1	17.85	19.00	1.303	-	-	-0.09	0.317	0.413
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 1	ECI 2	9400	1880	1	17.85	19.00	1.303	-	-	-0.13	0.456	0.594
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	18900	1880	1	22.49	24.00	1.416	-	-	0.17	0.147	0.208
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	ECI 2	18900	1880	1	21.42	23.00	1.439	-	-	0.06	0.118	0.170
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	ECI 2	18900	1880	1	22.49	24.00	1.416	-	-	0.07	0.077	0.109
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	ECI 2	18900	1880	1	21.42	23.00	1.439	-	-	-0.04	0.060	0.086
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	ECI 2	18900	1880	1	22.49	24.00	1.416	-	-	-0.15	0.091	0.129
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	ECI 2	18900	1880	1	21.42	23.00	1.439	-	-	0.11	0.071	0.102
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	ECI 2	18900	1880	1	22.49	24.00	1.416	-	-	-0.02	0.060	0.085
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	ECI 2	18900	1880	1	21.42	23.00	1.439	-	-	0.1	0.044	0.063
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	18900	1880	1	17.57	18.60	1.268	-	-	0.06	0.540	0.685
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	18900	1880	1	17.55	18.60	1.274	-	-	0.11	0.412	0.525
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	18900	1880	1	17.57	18.60	1.268	-	-	0.13	0.644	0.816
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	18700	1860	1	17.53	18.60	1.279	-	-	-0.15	0.685	0.876
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	19100	1900	1	17.48	18.60	1.294	-	-	-0.18	0.532	0.689
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	18900	1880	1	17.55	18.60	1.274	-	-	-0.11	0.621	0.791
	LTE Band 2	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	ECI 2	18900	1880	1	17.53	18.60	1.279	-	-	-0.06	0.614	0.786
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	18900	1880	1	17.57	18.60	1.268	-	-	-0.14	0.348	0.441
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	18900	1880	1	17.55	18.60	1.274	-	-	-0.19	0.319	0.406
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	18900	1880	1	17.57	18.60	1.268	-	-	0.01	0.505	0.640
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	18900	1880	1	17.55	18.60	1.274	-	-	0.12	0.385	0.490
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	18700	1860	1	18.23	19.50	1.340	-	-	0.07	0.653	0.875
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	18900	1880	1	20.88	21.80	1.236	-	-	-0.02	0.669	0.827
12	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	18700	1860	1	20.87	21.80	1.239	-	-	-0.03	0.716	0.887
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	19100	1900	1	20.85	21.80	1.245	-	-	-0.05	0.654	0.814
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	18900	1880	1	20.86	21.80	1.242	-	-	-0.13	0.509	0.632
	LTE Band 2	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 9	ECI 2	18900	1880	1	20.85	21.80	1.245	-	-	0.01	0.499	0.621
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 9	ECI 2	18900	1880	1	20.88	21.80	1.236	-	-	-0.16	0.122	0.151
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 9	ECI 2	18900	1880	1	20.86	21.80	1.242	-	-	0.1	0.092	0.114
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	18900	1880	1	20.88	21.80	1.236	-	-	-0.04	0.524	0.648
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	18900	1880	1	20.86	21.80	1.242	-	-	-0.11	0.502	0.623



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	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 9	ECI 2	18900	1880	1	20.88	21.80	1.236	-	-	-0.13	0.086	0.106
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 9	ECI 2	18900	1880	1	20.86	21.80	1.242	-	-	0.16	0.077	0.096
	LTE Band 2	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	18900	1880	1	20.37	21.50	1.297	-	-	0.04	0.068	0.088
	LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	ECI 2	18900	1880	1	19.39	20.50	1.291	-	-	0.13	0.000	0.000
	LTE Band 2	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	18900	1880	1	20.37	21.50	1.297	-	-	-0.18	0.000	0.000
	LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	ECI 2	18900	1880	1	19.39	20.50	1.291	-	-	-0.11	0.000	0.000
	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	18900	1880	1	20.37	21.50	1.297	-	-	-0.16	0.069	0.090
	LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	ECI 2	18900	1880	1	19.39	20.50	1.291	-	-	-0.15	0.000	0.000
	LTE Band 2	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	18900	1880	1	20.37	21.50	1.297	-	-	-0.06	0.062	0.080
	LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	ECI 2	18900	1880	1	19.39	20.50	1.291	-	-	-0.14	0.000	0.000
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	18900	1880	1	21.93	23.00	1.279	-	-	0.12	0.061	0.078
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	376000	1880	1	22.49	24.00	1.416	-	-	0.03	0.112	0.159
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	376000	1880	1	22.47	24.00	1.422	-	-	0.18	0.110	0.156
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	376000	1880	1	22.49	24.00	1.416	-	-	0.16	0.076	0.108
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	376000	1880	1	22.47	24.00	1.422	-	-	-0.1	0.074	0.105
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	376000	1880	1	22.49	24.00	1.416	-	-	0.07	0.108	0.153
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	376000	1880	1	22.47	24.00	1.422	-	-	0.18	0.109	0.155
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	376000	1880	1	22.49	24.00	1.416	-	-	-0.1	0.082	0.116
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	376000	1880	1	22.47	24.00	1.422	-	-	0.01	0.081	0.115
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	376000	1880	1	19.36	20.30	1.242	-	-	-0.15	0.612	0.760
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	376000	1880	1	19.34	20.30	1.247	-	-	-0.02	0.577	0.720
13	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	376000	1880	1	19.36	20.30	1.242	-	-	0.15	0.706	0.877
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	376000	1880	1	19.34	20.30	1.247	-	-	0.14	0.685	0.854
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	376000	1880	1	19.33	20.30	1.250	-	-	0.1	0.586	0.733
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	376000	1880	1	19.36	20.30	1.242	-	-	-0.09	0.381	0.473
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	376000	1880	1	19.34	20.30	1.247	-	-	0.07	0.352	0.439
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	376000	1880	1	19.36	20.30	1.242	-	-	-0.09	0.520	0.646
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	376000	1880	1	19.34	20.30	1.247	-	-	-0.16	0.482	0.601
	FR1 n2 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	376000	1880	1	18.12	19.40	1.343	-	-	0.09	0.652	0.875
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	21100	2535	1	22.67	24.00	1.358	-	-	-0.19	0.166	0.225
	LTE Band 7C	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 2	ECI 2	21100+ 21298	2535+ 2554.8	1	22.63	24.00	1.371	-	-	0.07	0.152	0.208
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	ECI 2	21100	2535	1	21.57	23.00	1.390	-	-	0.01	0.134	0.186
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	ECI 2	21100	2535	1	22.67	24.00	1.358	-	-	0.06	0.083	0.113
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	ECI 2	21100	2535	1	21.57	23.00	1.390	-	-	0.02	0.064	0.089
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	ECI 2	21100	2535	1	22.67	24.00	1.358	-	-	0.12	0.139	0.189
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	ECI 2	21100	2535	1	21.57	23.00	1.390	-	-	-0.16	0.116	0.161
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	ECI 2	21100	2535	1	22.67	24.00	1.358	-	-	-0.12	0.081	0.110
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	ECI 2	21100	2535	1	21.57	23.00	1.390	-	-	0.07	0.064	0.089
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	21100	2535	1	18.67	19.90	1.327	-	-	-0.07	0.518	0.688
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	21100	2535	1	18.64	19.90	1.337	-	-	-0.1	0.418	0.559
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	21100	2535	1	18.67	19.90	1.327	-	-	-0.08	0.664	0.881
	LTE Band 7C	20M	QPSK	1	99	-	Right Tilted	0mm	Ant 1	ECI 2	21100+ 21298	2535+ 2554.8	1	18.42	19.90	1.406	-	-	-0.01	0.623	0.876
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	20850	2510	1	18.65	19.90	1.334	-	-	-0.17	0.603	0.804
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	21350	2560	1	18.64	19.90	1.337	-	-	-0.01	0.647	0.865
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	21100	2535	1	18.64	19.90	1.337	-	-	-0.11	0.586	0.783
	LTE Band 7	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	ECI 2	21100	2535	1	18.63	19.90	1.340	-	-	0.1	0.578	0.774
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	21100	2535	1	18.67	19.90	1.327	-	-	0.16	0.430	0.571
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	21100	2535	1	18.64	19.90	1.337	-	-	-0.16	0.344	0.460
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	21100	2535	1	18.67	19.90	1.327	-	-	-0.15	0.494	0.656
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	21100	2535	1	18.64	19.90	1.337	-	-	-0.06	0.398	0.532
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	21100	2535	1	18.57	20.00	1.390	-	-	-0.07	0.633	0.880
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	21100	2535	1	20.65	21.60	1.245	-	-	0.19	0.657	0.818
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	20850	2510	1	20.61	21.60	1.256	-	-	-0.14	0.633	0.795



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14	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	21350	2560	1	20.59	21.60	1.262	-	-	0.03	0.702	0.886
	LTE Band 7C	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	21350+21152	2560+2540.2	1	20.59	21.60	1.262	-	-	-0.12	0.687	0.867
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	21100	2535	1	20.64	21.60	1.247	-	-	-0.18	0.621	0.775
	LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 9	ECI 2	21100	2535	1	20.63	21.60	1.250	-	-	0.16	0.573	0.716
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 9	ECI 2	21100	2535	1	20.65	21.60	1.245	-	-	0.01	0.106	0.132
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 9	ECI 2	21100	2535	1	20.64	21.60	1.247	-	-	-0.04	0.090	0.112
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	21100	2535	1	20.65	21.60	1.245	-	-	0.13	0.463	0.576
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	21100	2535	1	20.64	21.60	1.247	-	-	0.08	0.379	0.473
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 9	ECI 2	21100	2535	1	20.65	21.60	1.245	-	-	-0.03	0.063	0.078
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 9	ECI 2	21100	2535	1	20.64	21.60	1.247	-	-	0.07	0.052	0.065
	LTE Band 7	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	21100	2535	1	21.27	22.50	1.327	-	-	-0.02	0.060	0.080
	LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	ECI 2	21100	2535	1	20.28	21.50	1.324	-	-	-0.05	0.048	0.064
	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	21100	2535	1	21.27	22.50	1.327	-	-	-0.13	0.051	0.068
	LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	ECI 2	21100	2535	1	20.28	21.50	1.324	-	-	0.08	0.000	0.000
	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	21100	2535	1	21.27	22.50	1.327	-	-	0.16	0.095	0.126
	LTE Band 7C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 0	ECI 2	21100+21298	2535+2554.8	1	21.26	22.50	1.330	-	-	0.03	0.086	0.114
	LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	ECI 2	21100	2535	1	20.28	21.50	1.324	-	-	0.01	0.077	0.102
	LTE Band 7	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	21100	2535	1	21.27	22.50	1.327	-	-	-0.16	0.000	0.000
	LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	ECI 2	21100	2535	1	20.28	21.50	1.324	-	-	0.1	0.000	0.000
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	21100	2535	1	22.98	24.00	1.265	-	-	0.08	0.089	0.113
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 2	ECI 2	40620	2593	1	22.49	24.00	1.416	62.9	1.006	-0.04	0.078	0.111
	LTE Band 41C	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 2	ECI 2	40620+40818	2593+2612.8	1	22.47	24.00	1.422	62.9	1.006	-0.15	0.071	0.102
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 2	ECI 2	40620	2593	1	21.45	23.00	1.429	62.9	1.006	-0.01	0.063	0.091
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 2	ECI 2	40620	2593	1	22.49	24.00	1.416	62.9	1.006	0	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 2	ECI 2	40620	2593	1	21.45	23.00	1.429	62.9	1.006	-0.11	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 2	ECI 2	40620	2593	1	22.49	24.00	1.416	62.9	1.006	-0.06	0.071	0.101
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 2	ECI 2	40620	2593	1	21.45	23.00	1.429	62.9	1.006	-0.15	0.063	0.091
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 2	ECI 2	40620	2593	1	22.49	24.00	1.416	62.9	1.006	0.03	0.050	0.071
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 2	ECI 2	40620	2593	1	21.45	23.00	1.429	62.9	1.006	-0.13	0.039	0.056
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	40620	2593	1	20.26	21.20	1.242	62.9	1.006	-0.12	0.537	0.671
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	39750	2506	1	20.24	21.20	1.247	62.9	1.006	0.02	0.527	0.661
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	40185	2549.5	1	20.23	21.20	1.250	62.9	1.006	0.12	0.566	0.712
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	41055	2636.5	1	20.20	21.20	1.259	62.9	1.006	0.02	0.512	0.648
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	41490	2680	1	20.18	21.20	1.265	62.9	1.006	-0.03	0.516	0.657
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	40620	2593	1	20.25	21.20	1.245	62.9	1.006	0.01	0.465	0.582
	LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 1	ECI 2	40620	2593	1	20.22	21.20	1.253	62.9	1.006	-0.05	0.422	0.532
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	40620	2593	1	20.26	21.20	1.242	62.9	1.006	-0.08	0.675	0.843
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	39750	2506	1	20.24	21.20	1.247	62.9	1.006	-0.13	0.651	0.817
15	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	40185	2549.5	1	20.23	21.20	1.250	62.9	1.006	-0.02	0.709	0.892
	LTE Band 41C	20M	QPSK	1	99	-	Right Tilted	0mm	Ant 1	ECI 2	40185+40383	2549.5+2569.3	1	20.11	21.20	1.285	62.9	1.006	-0.17	0.688	0.890
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	41055	2636.5	1	20.20	21.20	1.259	62.9	1.006	0.01	0.634	0.803
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	41490	2680	1	20.18	21.20	1.265	62.9	1.006	-0.11	0.634	0.807
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	40620	2593	1	20.25	21.20	1.245	62.9	1.006	0.03	0.532	0.666
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	39750	2506	1	20.08	21.20	1.294	62.9	1.006	0.14	0.529	0.689
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	40185	2549.5	1	20.15	21.20	1.274	62.9	1.006	-0.01	0.572	0.733
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	41055	2636.5	1	20.19	21.20	1.262	62.9	1.006	-0.12	0.504	0.640
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	41490	2680	1	20.06	21.20	1.300	62.9	1.006	0.07	0.520	0.680
	LTE Band 41	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 1	ECI 2	40620	2593	1	20.22	21.20	1.253	62.9	1.006	0.09	0.526	0.663
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	40620	2593	1	20.26	21.20	1.242	62.9	1.006	0.04	0.445	0.556
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	40620	2593	1	20.25	21.20	1.245	62.9	1.006	-0.16	0.345	0.432
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	40620	2593	1	20.26	21.20	1.242	62.9	1.006	-0.12	0.507	0.633
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	39750	2506	1	20.24	21.20	1.247	62.9	1.006	0.08	0.521	0.654
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	40185	2549.5	1	20.23	21.20	1.250	62.9	1.006	0.01	0.550	0.692
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	41055	2636.5	1	20.20	21.20	1.259	62.9	1.006	0.02	0.475	0.602



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	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	41490	2680	1	20.18	21.20	1.265	62.9	1.006	-0.11	0.480	0.611
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	40620	2593	1	20.25	21.20	1.245	62.9	1.006	-0.01	0.405	0.507
	LTE Band 41	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 1	ECI 2	40620	2593	1	20.22	21.20	1.253	62.9	1.006	-0.16	0.399	0.503
	LTE Band 41 Other PA	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	40185	2549.5	1	20.49	21.60	1.291	62.9	1.006	-0.04	0.681	0.885
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	40620	2593	1	20.11	21.20	1.285	62.9	1.006	0.05	0.486	0.628
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	39750	2506	1	20.06	21.20	1.300	62.9	1.006	-0.18	0.357	0.467
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	40185	2549.5	1	20.07	21.20	1.297	62.9	1.006	-0.03	0.362	0.472
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	41055	2636.5	1	20.05	21.20	1.303	62.9	1.006	-0.04	0.646	0.847
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	41490	2680	1	20.09	21.20	1.291	62.9	1.006	0.07	0.686	0.891
	LTE Band 41C	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 9	ECI 2	41490+ 41292	2680+ 2660.2	1	19.97	21.20	1.327	62.9	1.006	0.03	0.657	0.877
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	40620	2593	1	20.10	21.20	1.288	62.9	1.006	-0.09	0.465	0.603
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	39750	2506	1	20.00	21.20	1.318	62.9	1.006	0.11	0.426	0.565
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	40185	2549.5	1	20.03	21.20	1.309	62.9	1.006	0.07	0.397	0.523
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	41055	2636.5	1	20.07	21.20	1.297	62.9	1.006	-0.03	0.531	0.693
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 9	ECI 2	41490	2680	1	20.06	21.20	1.300	62.9	1.006	0.09	0.544	0.712
	LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 9	ECI 2	40620	2593	1	20.07	21.20	1.297	62.9	1.006	-0.08	0.596	0.778
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 9	ECI 2	40620	2593	1	20.11	21.20	1.285	62.9	1.006	-0.05	0.093	0.120
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 9	ECI 2	40620	2593	1	20.10	21.20	1.288	62.9	1.006	-0.03	0.076	0.098
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 9	ECI 2	40620	2593	1	20.11	21.20	1.285	62.9	1.006	0.17	0.405	0.524
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 9	ECI 2	40620	2593	1	20.10	21.20	1.288	62.9	1.006	-0.16	0.393	0.509
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 9	ECI 2	40620	2593	1	20.11	21.20	1.285	62.9	1.006	-0.05	0.058	0.075
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 9	ECI 2	40620	2593	1	20.10	21.20	1.288	62.9	1.006	-0.04	0.046	0.060
	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	40620	2593	1	21.32	22.50	1.312	62.9	1.006	0.16	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 0	ECI 2	40620	2593	1	20.31	21.50	1.315	62.9	1.006	-0.15	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 0	ECI 2	40620	2593	1	21.32	22.50	1.312	62.9	1.006	-0.02	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 0	ECI 2	40620	2593	1	20.31	21.50	1.315	62.9	1.006	-0.09	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	40620	2593	1	21.32	22.50	1.312	62.9	1.006	-0.14	0.081	0.107
	LTE Band 41C	20M	QPSK	1	99	-	Left Cheek	0mm	Ant 0	ECI 2	40620+ 40818	2593+ 2612.8	1	21.29	22.50	1.321	62.9	1.006	0.05	0.072	0.096
	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 0	ECI 2	40620	2593	1	20.31	21.50	1.315	62.9	1.006	0.1	0.052	0.069
	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 0	ECI 2	40620	2593	1	21.32	22.50	1.312	62.9	1.006	-0.09	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 0	ECI 2	40620	2593	1	20.31	21.50	1.315	62.9	1.006	0.07	0.000	0.000
	LTE Band 41 Other PA	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	40620	2593	1	22.94	24.00	1.276	62.9	1.006	0.01	0.074	0.095
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	507000	2535	1	22.48	24.00	1.419	-	-	0.12	0.113	0.160
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Cheek	0mm	Ant 2	ECI 2	507000	2535	1	22.46	24.00	1.426	-	-	0.08	0.111	0.158
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	507000	2535	1	22.48	24.00	1.419	-	-	-0.17	0.071	0.101
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Tilted	0mm	Ant 2	ECI 2	507000	2535	1	22.46	24.00	1.426	-	-	-0.03	0.066	0.094
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	507000	2535	1	22.48	24.00	1.419	-	-	0.14	0.093	0.132
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Cheek	0mm	Ant 2	ECI 2	507000	2535	1	22.46	24.00	1.426	-	-	0.11	0.096	0.137
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	507000	2535	1	22.48	24.00	1.419	-	-	-0.05	0.041	0.058
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Tilted	0mm	Ant 2	ECI 2	507000	2535	1	22.46	24.00	1.426	-	-	0.18	0.039	0.056
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	507000	2535	1	19.26	20.30	1.271	-	-	-0.08	0.542	0.689
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Cheek	0mm	Ant 1	ECI 2	507000	2535	1	19.25	20.30	1.274	-	-	0.07	0.557	0.709
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	507000	2535	1	19.26	20.30	1.271	-	-	0.01	0.678	0.861
16	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	507000	2535	1	19.25	20.30	1.274	-	-	0.07	0.693	0.883
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	507000	2535	1	19.23	20.30	1.279	-	-	0.18	0.642	0.821
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	507000	2535	1	19.26	20.30	1.271	-	-	0.02	0.459	0.583
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	507000	2535	1	19.25	20.30	1.274	-	-	0.16	0.468	0.596
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	507000	2535	1	19.26	20.30	1.271	-	-	-0.02	0.507	0.644
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Tilted	0mm	Ant 1	ECI 2	507000	2535	1	19.25	20.30	1.274	-	-	0.07	0.557	0.709
	FR1 n7 Other PA	50M	QPSK	135	68	DFT-SCS-15KHz	Right Tilted	0mm	Ant 1	ECI 2	507000	2535	1	17.53	18.80	1.340	-	-	-0.06	0.654	0.876
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	ECI 2	518598	2592.99	1	18.26	19.40	1.300	-	-	0.1	0.549	0.714
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	ECI 2	518598	2592.99	1	18.22	19.40	1.312	-	-	0.08	0.524	0.688
17	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	518598	2592.99	1	18.26	19.40	1.300	-	-	-0.04	0.687	0.893
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	518598	2592.99	2	18.26	19.40	1.300	-	-	-0.09	0.611	0.794



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	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	518598	2592.99	1	18.22	19.40	1.312	-	-	-0.13	0.595	0.781
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	518598	2592.99	1	18.21	19.40	1.315	-	-	-0.1	0.576	0.758
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	ECI 2	518598	2592.99	1	18.26	19.40	1.300	-	-	-0.07	0.464	0.603
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	ECI 2	518598	2592.99	1	18.22	19.40	1.312	-	-	0.11	0.439	0.576
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	ECI 2	518598	2592.99	1	18.26	19.40	1.300	-	-	0.01	0.524	0.681
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	ECI 2	518598	2592.99	1	18.22	19.40	1.312	-	-	0.1	0.506	0.664
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 0	ECI 2	518598	2592.99	1	22.82	24.00	1.312	-	-	-0.01	0.078	0.102
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 0	ECI 2	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.08	0.083	0.110
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 0	ECI 2	518598	2592.99	1	22.82	24.00	1.312	-	-	0.05	0.071	0.093
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 0	ECI 2	518598	2592.99	1	22.78	24.00	1.324	-	-	0.06	0.083	0.110
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 0	ECI 2	518598	2592.99	1	22.82	24.00	1.312	-	-	-0.09	0.123	0.161
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 0	ECI 2	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.08	0.115	0.152
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 0	ECI 2	518598	2592.99	1	22.82	24.00	1.312	-	-	0.13	0.000	0.000
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 0	ECI 2	518598	2592.99	1	22.78	24.00	1.324	-	-	0.12	0.000	0.000
3500MHz																					
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	ECI 2	42590	3500	1	18.66	19.60	1.242	62.9	1.006	0.11	0.686	0.857
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	ECI 2	42190	3460	1	18.60	19.60	1.259	62.9	1.006	0.07	0.661	0.837
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	ECI 2	42990	3540	1	18.62	19.60	1.253	62.9	1.006	0.07	0.706	0.890
	LTE Band 42C Part 27Q	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 7	ECI 2	42990+42792	3540+3520.2	1	18.38	19.60	1.324	62.9	1.006	0.12	0.657	0.875
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 7	ECI 2	42590	3500	1	18.65	19.60	1.245	62.9	1.006	-0.04	0.547	0.685
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 7	ECI 2	42590	3500	1	18.63	19.60	1.250	62.9	1.006	-0.13	0.547	0.688
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 7	ECI 2	42590	3500	1	18.66	19.60	1.242	62.9	1.006	-0.04	0.248	0.310
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 7	ECI 2	42590	3500	1	18.65	19.60	1.245	62.9	1.006	-0.09	0.198	0.248
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 7	ECI 2	42590	3500	1	18.66	19.60	1.242	62.9	1.006	-0.12	0.166	0.207
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 7	ECI 2	42590	3500	1	18.65	19.60	1.245	62.9	1.006	0.15	0.131	0.164
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 7	ECI 2	42590	3500	1	18.66	19.60	1.242	62.9	1.006	-0.05	0.107	0.134
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 7	ECI 2	42590	3500	1	18.65	19.60	1.245	62.9	1.006	-0.07	0.084	0.105
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	ECI 2	42590	3500	1	15.51	16.60	1.285	62.9	1.006	0.1	0.308	0.398
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	ECI 2	42590	3500	1	15.49	16.60	1.291	62.9	1.006	-0.1	0.256	0.333
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	42590	3500	1	15.51	16.60	1.285	62.9	1.006	0.04	0.460	0.595
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	ECI 2	42590	3500	1	15.49	16.60	1.291	62.9	1.006	0.14	0.425	0.552
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	ECI 2	42590	3500	1	15.51	16.60	1.285	62.9	1.006	-0.06	0.360	0.465
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	ECI 2	42590	3500	1	15.49	16.60	1.291	62.9	1.006	-0.09	0.293	0.381
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	ECI 2	42590	3500	1	15.51	16.60	1.285	62.9	1.006	-0.06	0.627	0.811
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	ECI 2	42190	3460	1	15.43	16.60	1.309	62.9	1.006	-0.19	0.588	0.774
18	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	ECI 2	42990	3540	1	15.47	16.60	1.297	62.9	1.006	0.03	0.684	0.893
	LTE Band 42C Part 27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	ECI 2	42990+42792	3540+3520.2	1	15.45	16.60	1.303	62.9	1.006	0.15	0.641	0.840
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	ECI 2	42590	3500	1	15.49	16.60	1.291	62.9	1.006	0.09	0.501	0.651
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 4	ECI 2	42590	3500	1	15.46	16.60	1.300	62.9	1.006	0.08	0.443	0.579
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 8	ECI 2	42590	3500	1	22.38	24.00	1.452	62.9	1.006	-0.09	0.217	0.317
	LTE Band 42C Part 27Q	20M	QPSK	1	99	-	Right Cheek	0mm	Ant 8	ECI 2	42590+42788	3500+3519.8	1	22.32	24.00	1.472	62.9	1.006	0.11	0.195	0.289
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 8	ECI 2	42590	3500	1	21.32	23.00	1.472	62.9	1.006	-0.16	0.168	0.249
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 8	ECI 2	42590	3500	1	22.38	24.00	1.452	62.9	1.006	-0.18	0.116	0.169
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 8	ECI 2	42590	3500	1	21.32	23.00	1.472	62.9	1.006	-0.07	0.088	0.130
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 8	ECI 2	42590	3500	1	22.38	24.00	1.452	62.9	1.006	0.11	0.125	0.183
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 8	ECI 2	42590	3500	1	21.32	23.00	1.472	62.9	1.006	-0.08	0.092	0.136
	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 8	ECI 2	42590	3500	1	22.38	24.00	1.452	62.9	1.006	-0.1	0.151	0.221



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	Part 27Q																				
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 8	ECI 2	42590	3500	1	21.32	23.00	1.472	62.9	1.006	-0.01	0.120	0.178
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 5	ECI 2	42590	3500	1	17.37	19.00	1.455	62.9	1.006	-0.04	0.138	0.202
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 5	ECI 2	42590	3500	1	16.35	18.00	1.462	62.9	1.006	0.12	0.108	0.159
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 5	ECI 2	42590	3500	1	17.37	19.00	1.455	62.9	1.006	0.09	0.112	0.164
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 5	ECI 2	42590	3500	1	16.35	18.00	1.462	62.9	1.006	-0.02	0.091	0.134
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	ECI 2	42590	3500	1	17.37	19.00	1.455	62.9	1.006	-0.16	0.558	0.817
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	ECI 2	42190	3460	1	17.27	19.00	1.489	62.9	1.006	-0.03	0.492	0.737
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	ECI 2	42990	3540	1	17.34	19.00	1.466	62.9	1.006	-0.05	0.561	0.827
	LTE Band 42C Part 27Q	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 5	ECI 2	42990+ 42792	3540+ 3520.2	1	17.24	19.00	1.500	62.9	1.006	0.18	0.524	0.791
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 5	ECI 2	42590	3500	1	16.35	18.00	1.462	62.9	1.006	-0.06	0.464	0.683
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 5	ECI 2	42590	3500	1	16.29	18.00	1.483	62.9	1.006	0.08	0.471	0.702
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	ECI 2	42590	3500	1	17.37	19.00	1.455	62.9	1.006	-0.07	0.317	0.464
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 5	ECI 2	42590	3500	1	16.35	18.00	1.462	62.9	1.006	0.11	0.278	0.409
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	ECI 2	656000	3840	1	18.14	19.00	1.219	-	-	-0.13	0.645	0.786
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	ECI 2	656000	3840	1	18.09	19.00	1.233	-	-	-0.04	0.712	0.878
	FR1 n77 Part 27O	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	ECI 2	656000	3840	1	18.07	19.00	1.239	-	-	0.04	0.572	0.709
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	ECI 2	656000	3840	1	18.14	19.00	1.219	-	-	0.17	0.277	0.338
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	ECI 2	656000	3840	1	18.09	19.00	1.233	-	-	-0.1	0.312	0.385
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	ECI 2	656000	3840	1	18.14	19.00	1.219	-	-	-0.15	0.168	0.205
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	ECI 2	656000	3840	1	18.09	19.00	1.233	-	-	0.18	0.184	0.227
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	ECI 2	656000	3840	1	18.14	19.00	1.219	-	-	0.05	0.105	0.128
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	ECI 2	656000	3840	1	18.09	19.00	1.233	-	-	0.04	0.129	0.159
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	ECI 2	656000	3840	1	15.30	16.50	1.318	-	-	0.15	0.451	0.595
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	ECI 2	656000	3840	1	15.28	16.50	1.324	-	-	0.03	0.463	0.613
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	ECI 2	656000	3840	1	15.30	16.50	1.318	-	-	0.14	0.609	0.803
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	ECI 2	656000	3840	1	15.28	16.50	1.324	-	-	-0.16	0.623	0.825
	FR1 n77 Part 27O	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	ECI 2	656000	3840	1	15.27	16.50	1.327	-	-	-0.02	0.482	0.640
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	ECI 2	656000	3840	1	15.30	16.50	1.318	-	-	0.1	0.525	0.692
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	ECI 2	656000	3840	1	15.28	16.50	1.324	-	-	-0.1	0.551	0.730
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	ECI 2	656000	3840	1	15.30	16.50	1.318	-	-	-0.04	0.623	0.821
19	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	ECI 2	656000	3840	1	15.28	16.50	1.324	-	-	0.08	0.674	0.893
	FR1 n77 Part 27O	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	ECI 2	656000	3840	1	15.27	16.50	1.327	-	-	0.01	0.525	0.697
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	ECI 2	656000	3840	1	22.92	24.00	1.282	-	-	-0.09	0.311	0.399
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 8	ECI 2	656000	3840	1	22.91	24.00	1.285	-	-	-0.06	0.253	0.325
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	ECI 2	656000	3840	1	22.92	24.00	1.282	-	-	-0.17	0.129	0.165
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 8	ECI 2	656000	3840	1	22.91	24.00	1.285	-	-	-0.01	0.105	0.135
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	ECI 2	656000	3840	1	22.92	24.00	1.282	-	-	-0.11	0.213	0.273
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 8	ECI 2	656000	3840	1	22.91	24.00	1.285	-	-	0.14	0.166	0.213
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	ECI 2	656000	3840	1	22.92	24.00	1.282	-	-	0.03	0.227	0.291
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 8	ECI 2	656000	3840	1	22.91	24.00	1.285	-	-	0.1	0.172	0.221
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	ECI 2	656000	3840	1	19.13	20.20	1.279	-	-	-0.09	0.139	0.178
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	ECI 2	656000	3840	1	19.12	20.20	1.282	-	-	0.03	0.176	0.226



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	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	ECI 2	656000	3840	1	19.13	20.20	1.279	-	-	-0.11	0.124	0.159
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	ECI 2	656000	3840	1	19.12	20.20	1.282	-	-	-0.16	0.156	0.200
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	ECI 2	656000	3840	1	19.13	20.20	1.279	-	-	0.15	0.566	0.724
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	ECI 2	656000	3840	1	19.12	20.20	1.282	-	-	0.06	0.693	0.889
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	ECI 2	656000	3840	2	19.12	20.20	1.282	-	-	0.02	0.634	0.813
	FR1 n77 Part 270	100M	QPSK	270	0	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	ECI 2	656000	3840	1	19.06	20.20	1.300	-	-	0.06	0.620	0.806
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	ECI 2	656000	3840	1	19.13	20.20	1.279	-	-	-0.15	0.294	0.376
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	ECI 2	656000	3840	1	19.12	20.20	1.282	-	-	0.06	0.411	0.527

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																	
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	Standalone	1	2412	1	19.10	20.50	1.380	99.14	1.009	0.08	0.459	0.639
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	Standalone	1	2412	1	19.10	20.50	1.380	99.14	1.009	0.01	0.546	0.760
20	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	Standalone	1	2412	1	19.10	20.50	1.380	99.14	1.009	0.04	0.959	1.336
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	Standalone	1	2412	2	19.10	20.50	1.380	99.14	1.009	0.01	0.892	1.242
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	Standalone	11	2462	1	18.71	20.00	1.346	99.14	1.009	0.03	0.918	1.247
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	Standalone	6	2437	1	18.16	19.50	1.361	99.14	1.009	-0.08	0.906	1.245
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	Standalone	1	2412	1	19.10	20.50	1.380	99.14	1.009	-0.08	0.690	0.961
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	Standalone	11	2462	1	18.71	20.00	1.346	99.14	1.009	0.1	0.609	0.827
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	Standalone	6	2437	1	18.16	19.50	1.361	99.14	1.009	-0.18	0.691	0.949
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 3	Standalone	6	2437	1	18.76	20.50	1.493	96.97	1.031	0.04	0.776	1.194
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	Simultaneous	1	2412	1	13.69	15.00	1.352	99.14	1.009	-0.18	0.146	0.199
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	Simultaneous	1	2412	1	13.69	15.00	1.352	99.14	1.009	0.03	0.151	0.206
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	Simultaneous	1	2412	1	13.69	15.00	1.352	99.14	1.009	-0.15	0.283	0.386
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	Simultaneous	1	2412	1	13.69	15.00	1.352	99.14	1.009	-0.15	0.204	0.278
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	0.1	0.169	0.212
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	0.12	0.222	0.278
21	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	0.08	0.363	0.454
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	0.08	0.333	0.417
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	Simultaneous	39	2441	1	14.05	14.50	1.109	76.45	1.090	0.03	0.108	0.131
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3	Simultaneous	39	2441	1	14.05	14.50	1.109	76.45	1.090	-0.08	0.131	0.158
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	Simultaneous	39	2441	1	14.05	14.50	1.109	76.45	1.090	-0.08	0.235	0.284
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3	Simultaneous	39	2441	1	14.05	14.50	1.109	76.45	1.090	0.1	0.212	0.256
5000MHz																	
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4	Standalone	54	5270	1	15.54	17.00	1.400	93.7	1.067	-0.17	0.332	0.496
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4	Standalone	54	5270	1	15.54	17.00	1.400	93.7	1.067	0.14	0.340	0.508
22	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	Standalone	54	5270	1	15.54	17.00	1.400	93.7	1.067	0.03	0.718	1.072
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	Standalone	62	5310	1	14.00	15.50	1.414	93.7	1.067	0.02	0.455	0.687
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	Standalone	54	5270	2	15.54	17.00	1.400	93.7	1.067	0.02	0.675	1.008
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4	Standalone	54	5270	1	15.54	17.00	1.400	93.7	1.067	0.18	0.546	0.815
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4	Standalone	62	5310	1	14.00	15.50	1.414	93.7	1.067	0.03	0.318	0.480
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	Simultaneous	58	5290	1	10.59	12.00	1.384	88.19	1.134	0.11	0.121	0.190
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	Simultaneous	58	5290	1	10.59	12.00	1.384	88.19	1.134	-0.08	0.127	0.199
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	Simultaneous	58	5290	1	10.59	12.00	1.384	88.19	1.134	-0.17	0.253	0.397
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	Simultaneous	58	5290	1	10.59	12.00	1.384	88.19	1.134	-0.08	0.206	0.323
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	Standalone	106	5530	1	15.51	17.00	1.409	88.19	1.134	-0.17	0.299	0.478
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	Standalone	106	5530	1	15.51	17.00	1.409	88.19	1.134	-0.17	0.319	0.510
23	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	Standalone	106	5530	1	15.51	17.00	1.409	88.19	1.134	-0.07	0.699	1.117
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	Standalone	106	5530	2	15.51	17.00	1.409	88.19	1.134	0.02	0.634	1.013
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	Standalone	122	5610	1	15.48	17.00	1.419	88.19	1.134	-0.08	0.676	1.088
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	Standalone	106	5530	1	15.51	17.00	1.409	88.19	1.134	0.03	0.542	0.866
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	Standalone	122	5610	1	15.48	17.00	1.419	88.19	1.134	0.03	0.524	0.843



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	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	Simultaneous	106	5530	1	10.53	12.00	1.403	88.19	1.134	-0.04	0.117	0.186
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	Simultaneous	106	5530	1	10.53	12.00	1.403	88.19	1.134	-0.08	0.121	0.192
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	Simultaneous	106	5530	1	10.53	12.00	1.403	88.19	1.134	0.17	0.246	0.391
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	Simultaneous	106	5530	1	10.53	12.00	1.403	88.19	1.134	0.18	0.198	0.315
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	Standalone	155	5775	1	16.47	18.00	1.422	88.19	1.134	0.07	0.331	0.534
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	Standalone	155	5775	1	16.47	18.00	1.422	88.19	1.134	-0.1	0.381	0.615
24	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	Standalone	155	5775	1	16.47	18.00	1.422	88.19	1.134	-0.12	0.677	1.092
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	Standalone	155	5775	2	16.47	18.00	1.422	88.19	1.134	0.02	0.623	1.005
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	Standalone	155	5775	1	16.47	18.00	1.422	88.19	1.134	0.19	0.532	0.858
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	Simultaneous	155	5775	1	11.52	13.00	1.406	88.19	1.134	-0.04	0.125	0.199
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	Simultaneous	155	5775	1	11.52	13.00	1.406	88.19	1.134	-0.08	0.134	0.214
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	Simultaneous	155	5775	1	11.52	13.00	1.406	88.19	1.134	-0.13	0.248	0.395
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	Simultaneous	155	5775	1	11.52	13.00	1.406	88.19	1.134	-0.13	0.213	0.340



16.2 Hotspot SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	23095	707.5	1	22.51	24.00	1.409	-	-	0.08	0.366	0.516
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 0	ECI 7	23095	707.5	1	21.50	23.00	1.413	-	-	0.01	0.281	0.397
25	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	23095	707.5	1	22.51	24.00	1.409	-	-	-0.01	0.698	0.984
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 0	ECI 7	23095	707.5	1	21.50	23.00	1.413	-	-	0.03	0.534	0.754
	LTE Band 12	10M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	23095	707.5	1	21.47	23.00	1.422	-	-	-0.08	0.582	0.828
	LTE Band 12	10M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	23095	707.5	1	22.51	24.00	1.409	-	-	-0.08	0.546	0.769
	LTE Band 12	10M	QPSK	25	0	-	Left Side	5mm	Ant 0	ECI 7	23095	707.5	1	21.50	23.00	1.413	-	-	0.1	0.431	0.609
	LTE Band 12	10M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	23095	707.5	1	22.51	24.00	1.409	-	-	-0.18	0.099	0.140
	LTE Band 12	10M	QPSK	25	0	-	Right Side	5mm	Ant 0	ECI 7	23095	707.5	1	21.50	23.00	1.413	-	-	0.1	0.079	0.112
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	23095	707.5	1	22.51	24.00	1.409	-	-	0.12	0.446	0.629
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	5mm	Ant 0	ECI 7	23095	707.5	1	21.50	23.00	1.413	-	-	0.08	0.386	0.545
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	23095	707.5	1	21.96	23.00	1.271	-	-	-0.17	0.132	0.168
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 1	ECI 7	23095	707.5	1	20.91	22.00	1.285	-	-	-0.03	0.104	0.134
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	23095	707.5	1	21.96	23.00	1.271	-	-	0.02	0.406	0.516
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 1	ECI 7	23095	707.5	1	20.91	22.00	1.285	-	-	0.14	0.331	0.425
	LTE Band 12	10M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	23095	707.5	1	21.96	23.00	1.271	-	-	0.11	0.203	0.258
	LTE Band 12	10M	QPSK	25	0	-	Left Side	5mm	Ant 1	ECI 7	23095	707.5	1	20.91	22.00	1.285	-	-	-0.05	0.143	0.184
	LTE Band 12	10M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	23095	707.5	1	21.96	23.00	1.271	-	-	0.18	0.075	0.095
	LTE Band 12	10M	QPSK	25	0	-	Right Side	5mm	Ant 1	ECI 7	23095	707.5	1	20.91	22.00	1.285	-	-	0.14	0.059	0.076
	LTE Band 12	10M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	23095	707.5	1	21.96	23.00	1.271	-	-	-0.17	0.402	0.511
	LTE Band 12	10M	QPSK	25	0	-	Top Side	5mm	Ant 1	ECI 7	23095	707.5	1	20.91	22.00	1.285	-	-	0.17	0.255	0.328
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	23230	782	1	22.47	24.00	1.422	-	-	-0.05	0.273	0.388
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 0	ECI 7	23230	782	1	21.45	23.00	1.429	-	-	0.01	0.212	0.303
26	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	23230	782	1	22.47	24.00	1.422	-	-	-0.12	0.566	0.805
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 0	ECI 7	23230	782	1	21.45	23.00	1.429	-	-	0.1	0.417	0.596
	LTE Band 13	10M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	23230	782	1	21.42	23.00	1.439	-	-	0.06	0.432	0.622
	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	23230	782	1	22.47	24.00	1.422	-	-	-0.17	0.494	0.703
	LTE Band 13	10M	QPSK	25	0	-	Left Side	5mm	Ant 0	ECI 7	23230	782	1	21.45	23.00	1.429	-	-	0.04	0.380	0.543
	LTE Band 13	10M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	23230	782	1	22.47	24.00	1.422	-	-	-0.01	0.072	0.102
	LTE Band 13	10M	QPSK	25	0	-	Right Side	5mm	Ant 0	ECI 7	23230	782	1	21.45	23.00	1.429	-	-	-0.08	0.054	0.077
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	23230	782	1	22.47	24.00	1.422	-	-	0.05	0.331	0.471
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	5mm	Ant 0	ECI 7	23230	782	1	21.45	23.00	1.429	-	-	0.06	0.271	0.387
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	23230	782	1	21.02	22.10	1.282	-	-	-0.09	0.155	0.199
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 1	ECI 7	23230	782	1	20.94	22.00	1.276	-	-	-0.08	0.124	0.158
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	23230	782	1	21.02	22.10	1.282	-	-	0.05	0.482	0.618
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 1	ECI 7	23230	782	1	20.94	22.00	1.276	-	-	0.13	0.205	0.262
	LTE Band 13	10M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	23230	782	1	21.02	22.10	1.282	-	-	0.03	0.168	0.215
	LTE Band 13	10M	QPSK	25	0	-	Left Side	5mm	Ant 1	ECI 7	23230	782	1	20.94	22.00	1.276	-	-	0.18	0.132	0.168
	LTE Band 13	10M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	23230	782	1	21.02	22.10	1.282	-	-	0.16	0.059	0.076
	LTE Band 13	10M	QPSK	25	0	-	Right Side	5mm	Ant 1	ECI 7	23230	782	1	20.94	22.00	1.276	-	-	-0.1	0.048	0.061
	LTE Band 13	10M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	23230	782	1	21.02	22.10	1.282	-	-	0.07	0.452	0.580
	LTE Band 13	10M	QPSK	25	0	-	Top Side	5mm	Ant 1	ECI 7	23230	782	1	20.94	22.00	1.276	-	-	0.18	0.365	0.466
835MHz																					
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 0	ECI 7	189	836.4	1	29.14	30.00	1.219	-	-	0.01	0.421	0.513
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	ECI 7	189	836.4	1	29.14	30.00	1.219	-	-	-0.15	0.791	0.964
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	ECI 7	128	824.2	1	29.11	30.00	1.227	-	-	0.19	0.941	1.155
27	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	ECI 7	251	848.8	1	29.12	30.00	1.225	-	-	0.01	1.060	1.298
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Left Side	5mm	Ant 0	ECI 7	189	836.4	1	29.14	30.00	1.219	-	-	0.07	0.471	0.574
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Right Side	5mm	Ant 0	ECI 7	189	836.4	1	29.14	30.00	1.219	-	-	-0.18	0.049	0.060
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	5mm	Ant 0	ECI 7	189	836.4	1	29.14	30.00	1.219	-	-	0.03	0.491	0.599



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	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	ECI 7	189	836.4	1	24.35	25.60	1.334	-	-	-0.15	0.214	0.285
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	ECI 7	189	836.4	1	24.35	25.60	1.334	-	-	-0.15	0.464	0.619
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 1	ECI 7	189	836.4	1	24.35	25.60	1.334	-	-	-0.08	0.125	0.167
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 1	ECI 7	189	836.4	1	24.35	25.60	1.334	-	-	-0.17	0.041	0.055
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Top Side	5mm	Ant 1	ECI 7	189	836.4	1	24.35	25.60	1.334	-	-	-0.08	0.423	0.564
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	4182	836.4	1	22.81	24.00	1.315	-	-	-0.08	0.481	0.633
28	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4182	836.4	1	22.81	24.00	1.315	-	-	-0.1	0.959	1.261
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4132	826.4	1	22.78	24.00	1.324	-	-	-0.09	0.815	1.079
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4233	846.6	1	22.76	24.00	1.330	-	-	-0.08	0.943	1.255
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	4182	836.4	1	22.81	24.00	1.315	-	-	-0.13	0.715	0.940
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	4132	826.4	1	22.78	24.00	1.324	-	-	-0.09	0.701	0.928
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	4233	846.6	1	22.76	24.00	1.330	-	-	0.14	0.678	0.902
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	ECI 7	4182	836.4	1	22.81	24.00	1.315	-	-	-0.13	0.065	0.085
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4182	836.4	1	22.81	24.00	1.315	-	-	0.06	0.513	0.675
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	ECI 7	4182	836.4	1	20.08	21.70	1.452	-	-	0.08	0.158	0.229
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	ECI 7	4182	836.4	1	20.08	21.70	1.452	-	-	-0.07	0.425	0.617
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	ECI 7	4182	836.4	1	20.08	21.70	1.452	-	-	-0.11	0.186	0.270
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 1	ECI 7	4182	836.4	1	20.08	21.70	1.452	-	-	-0.12	0.030	0.044
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	ECI 7	4182	836.4	1	20.08	21.70	1.452	-	-	0.03	0.318	0.462
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	26865	831.5	1	22.52	24.00	1.406	-	-	-0.03	0.365	0.513
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	ECI 7	26865	831.5	1	21.51	23.00	1.409	-	-	0.18	0.231	0.326
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	26865	831.5	1	22.52	24.00	1.406	-	-	0.16	0.337	0.474
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	ECI 7	26865	831.5	1	21.51	23.00	1.409	-	-	-0.1	0.274	0.386
	LTE Band 26	15M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	26865	831.5	1	22.52	24.00	1.406	-	-	-0.05	0.268	0.377
	LTE Band 26	15M	QPSK	36	0	-	Left Side	5mm	Ant 0	ECI 7	26865	831.5	1	21.51	23.00	1.409	-	-	-0.08	0.217	0.306
	LTE Band 26	15M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	26865	831.5	1	22.52	24.00	1.406	-	-	0.16	0.000	0.000
	LTE Band 26	15M	QPSK	36	0	-	Right Side	5mm	Ant 0	ECI 7	26865	831.5	1	21.51	23.00	1.409	-	-	0.05	0.000	0.000
	LTE Band 26	15M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	26865	831.5	1	22.52	24.00	1.406	-	-	0.05	0.167	0.235
	LTE Band 26	15M	QPSK	36	0	-	Bottom Side	5mm	Ant 0	ECI 7	26865	831.5	1	21.51	23.00	1.409	-	-	-0.03	0.138	0.194
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	26865	831.5	1	19.97	21.10	1.297	-	-	-0.15	0.164	0.213
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 1	ECI 7	26865	831.5	1	19.95	21.10	1.303	-	-	0.02	0.179	0.233
29	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	26865	831.5	1	19.97	21.10	1.297	-	-	-0.09	0.481	0.624
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 1	ECI 7	26865	831.5	1	19.95	21.10	1.303	-	-	0.07	0.477	0.622
	LTE Band 26	15M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	26865	831.5	1	19.97	21.10	1.297	-	-	0.16	0.167	0.217
	LTE Band 26	15M	QPSK	36	0	-	Left Side	5mm	Ant 1	ECI 7	26865	831.5	1	19.95	21.10	1.303	-	-	0.13	0.157	0.205
	LTE Band 26	15M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	26865	831.5	1	19.97	21.10	1.297	-	-	-0.18	0.043	0.056
	LTE Band 26	15M	QPSK	36	0	-	Right Side	5mm	Ant 1	ECI 7	26865	831.5	1	19.95	21.10	1.303	-	-	0.02	0.039	0.051
	LTE Band 26	15M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	26865	831.5	1	19.97	21.10	1.297	-	-	0.16	0.338	0.438
	LTE Band 26	15M	QPSK	36	0	-	Top Side	5mm	Ant 1	ECI 7	26865	831.5	1	19.95	21.10	1.303	-	-	-0.03	0.333	0.434
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	ECI 7	166300	831.5	1	22.75	24.00	1.334	-	-	-0.18	0.302	0.403
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	ECI 7	166300	831.5	1	22.73	24.00	1.340	-	-	0.03	0.324	0.434
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	166300	831.5	1	22.75	24.00	1.334	-	-	-0.15	0.567	0.756
30	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	166300	831.5	1	22.73	24.00	1.340	-	-	-0.16	0.611	0.819
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	166300	831.5	1	21.71	23.00	1.346	-	-	0.09	0.587	0.790
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 0	ECI 7	166300	831.5	1	22.75	24.00	1.334	-	-	-0.04	0.476	0.635
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 0	ECI 7	166300	831.5	1	22.73	24.00	1.340	-	-	-0.09	0.564	0.756
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 0	ECI 7	166300	831.5	1	22.75	24.00	1.334	-	-	-0.17	0.049	0.065
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant 0	ECI 7	166300	831.5	1	22.73	24.00	1.340	-	-	-0.1	0.000	0.000
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	ECI 7	166300	831.5	1	22.75	24.00	1.334	-	-	0.18	0.329	0.439
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Bottom Side	5mm	Ant 0	ECI 7	166300	831.5	1	22.73	24.00	1.340	-	-	-0.17	0.408	0.547
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	166300	831.5	1	19.71	20.90	1.315	-	-	-0.04	0.161	0.212
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	166300	831.5	1	19.69	20.90	1.321	-	-	-0.05	0.175	0.231
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	166300	831.5	1	19.71	20.90	1.315	-	-	-0.11	0.471	0.619
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	166300	831.5	1	19.69	20.90	1.321	-	-	-0.06	0.465	0.614
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	166300	831.5	1	19.71	20.90	1.315	-	-	-0.01	0.163	0.214
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	166300	831.5	1	19.69	20.90	1.321	-	-	-0.09	0.154	0.203



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	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	166300	831.5	1	19.71	20.90	1.315	-	-	0.05	0.041	0.054
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	166300	831.5	1	19.69	20.90	1.321	-	-	0.02	0.038	0.050
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	166300	831.5	1	19.71	20.90	1.315	-	-	-0.13	0.331	0.435
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	166300	831.5	1	19.69	20.90	1.321	-	-	0.17	0.326	0.431
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	ECI 7	1413	1732.6	1	17.31	18.30	1.256	-	-	0.06	0.511	0.642
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	1413	1732.6	1	17.31	18.30	1.256	-	-	-0.15	0.689	0.865
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	1312	1712.4	1	17.28	18.30	1.265	-	-	0.11	0.648	0.820
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	1513	1752.6	1	17.30	18.30	1.259	-	-	-0.02	0.708	0.891
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 2	ECI 7	1413	1732.6	1	17.31	18.30	1.256	-	-	0.1	0.102	0.128
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 2	ECI 7	1413	1732.6	1	17.31	18.30	1.256	-	-	0.04	0.227	0.285
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	1413	1732.6	1	17.31	18.30	1.256	-	-	-0.11	0.956	1.201
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	1312	1712.4	1	17.28	18.30	1.265	-	-	-0.16	0.829	1.048
31	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	1513	1752.6	1	17.30	18.30	1.259	-	-	-0.01	1.010	1.272
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	ECI 7	1413	1732.6	1	16.27	17.30	1.268	-	-	-0.16	0.199	0.252
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	ECI 7	1413	1732.6	1	16.27	17.30	1.268	-	-	-0.05	0.491	0.622
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	ECI 7	1413	1732.6	1	16.27	17.30	1.268	-	-	-0.13	0.173	0.219
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 1	ECI 7	1413	1732.6	1	16.27	17.30	1.268	-	-	0.01	0.015	0.019
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	ECI 7	1413	1732.6	1	16.27	17.30	1.268	-	-	-0.16	0.335	0.425
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	132322	1745	1	18.04	18.90	1.219	-	-	0.03	0.564	0.688
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	132322	1745	1	18.03	18.90	1.222	-	-	-0.15	0.472	0.577
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	132322	1745	1	18.04	18.90	1.219	-	-	0.1	0.659	0.803
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	132072	1720	1	17.95	18.90	1.245	-	-	-0.09	0.656	0.816
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	132572	1770	1	17.99	18.90	1.233	-	-	0.07	0.671	0.827
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	132322	1745	1	18.03	18.90	1.222	-	-	-0.09	0.527	0.644
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 2	ECI 7	132322	1745	1	18.01	18.90	1.227	-	-	-0.07	0.560	0.687
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	ECI 7	132322	1745	1	18.04	18.90	1.219	-	-	0.11	0.123	0.150
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	ECI 7	132322	1745	1	18.03	18.90	1.222	-	-	-0.08	0.105	0.128
	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	ECI 7	132322	1745	1	18.04	18.90	1.219	-	-	-0.1	0.247	0.301
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	ECI 7	132322	1745	1	18.03	18.90	1.222	-	-	-0.06	0.193	0.236
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	132322	1745	1	18.04	18.90	1.219	-	-	-0.01	0.954	1.163
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	132072	1720	1	17.95	18.90	1.245	-	-	-0.11	0.969	1.206
32	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	132572	1770	1	17.99	18.90	1.233	-	-	-0.01	1.050	1.295
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	132322	1745	1	18.03	18.90	1.222	-	-	0.14	0.737	0.900
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	132072	1720	1	17.95	18.90	1.245	-	-	0.03	0.763	0.950
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	132572	1770	1	17.97	18.90	1.239	-	-	0.1	0.818	1.013
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	ECI 7	132322	1745	1	18.01	18.90	1.227	-	-	0.16	0.766	0.940
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	132322	1745	1	16.06	16.90	1.213	-	-	0.13	0.188	0.228
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	132322	1745	1	16.02	16.90	1.225	-	-	0.12	0.154	0.189
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	132322	1745	1	16.06	16.90	1.213	-	-	0.07	0.516	0.626
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	132322	1745	1	16.02	16.90	1.225	-	-	0.19	0.382	0.468
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	132322	1745	1	16.06	16.90	1.213	-	-	0.07	0.167	0.203
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	132322	1745	1	16.02	16.90	1.225	-	-	-0.12	0.143	0.175
	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	132322	1745	1	16.06	16.90	1.213	-	-	-0.03	0.016	0.019
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	ECI 7	132322	1745	1	16.02	16.90	1.225	-	-	0.02	0.015	0.018
	LTE Band 66	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	132322	1745	1	16.06	16.90	1.213	-	-	0.12	0.358	0.434
	LTE Band 66	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	ECI 7	132322	1745	1	16.02	16.90	1.225	-	-	-0.06	0.282	0.345
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	132322	1745	1	16.86	18.00	1.300	-	-	-0.08	0.478	0.621
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 9	ECI 7	132322	1745	1	22.49	23.30	1.205	-	-	-0.08	0.168	0.202
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 9	ECI 7	132322	1745	1	21.45	23.00	1.429	-	-	-0.08	0.149	0.213
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 9	ECI 7	132322	1745	1	22.49	23.30	1.205	-	-	-0.13	0.311	0.375
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 9	ECI 7	132322	1745	1	21.45	23.00	1.429	-	-	0.01	0.263	0.376
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	132322	1745	1	22.49	23.30	1.205	-	-	-0.06	0.511	0.616
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 9	ECI 7	132322	1745	1	21.45	23.00	1.429	-	-	-0.11	0.424	0.606
	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 9	ECI 7	132322	1745	1	22.49	23.30	1.205	-	-	0.03	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 9	ECI 7	132322	1745	1	21.45	23.00	1.429	-	-	-0.05	0.000	0.000



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	LTE Band 66	20M	QPSK	1	0	-	Top Side	5mm	Ant 9	ECI 7	132322	1745	1	22.49	23.30	1.205	-	-	0.14	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Top Side	5mm	Ant 9	ECI 7	132322	1745	1	21.45	23.00	1.429	-	-	-0.01	0.000	0.000
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	132322	1745	1	21.98	23.00	1.265	-	-	-0.12	0.476	0.602
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 0	ECI 7	132322	1745	1	20.97	22.00	1.268	-	-	0.07	0.391	0.496
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	1	21.98	23.00	1.265	-	-	0.09	0.794	1.004
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	1	21.93	23.00	1.279	-	-	0.08	0.654	0.837
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	1	21.95	23.00	1.274	-	-	0.01	0.621	0.791
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	1	20.97	22.00	1.268	-	-	0.04	0.650	0.824
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	1	20.93	22.00	1.279	-	-	0.03	0.524	0.670
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	1	20.91	22.00	1.285	-	-	-0.08	0.517	0.664
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 0	ECI 7	132322	1745	1	20.95	22.00	1.274	-	-	-0.08	0.519	0.661
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	1	21.98	23.00	1.265	-	-	0.04	0.914	1.156
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	1	21.93	23.00	1.279	-	-	0.1	0.842	1.077
	LTE Band 66	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	1	21.95	23.00	1.274	-	-	-0.18	0.794	1.011
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	1	20.97	22.00	1.268	-	-	0.11	0.817	1.036
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	1	20.93	22.00	1.279	-	-	0.1	0.714	0.913
	LTE Band 66	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	1	20.91	22.00	1.285	-	-	0.12	0.732	0.941
	LTE Band 66	20M	QPSK	100	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	1	20.95	22.00	1.274	-	-	0.08	0.728	0.927
	LTE Band 66	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	132322	1745	1	21.98	23.00	1.265	-	-	-0.13	0.000	0.000
	LTE Band 66	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	ECI 7	132322	1745	1	20.97	22.00	1.268	-	-	0.12	0.000	0.000
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	132322	1745	1	21.98	23.00	1.265	-	-	-0.11	0.411	0.520
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	132322	1745	1	20.97	22.00	1.268	-	-	0.17	0.359	0.455
	LTE Band 66 Main PA	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	132322	1745	1	20.37	21.50	1.297	-	-	-0.09	0.345	0.448
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	349000	1745	1	19.11	20.20	1.285	-	-	-0.16	0.443	0.569
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	349000	1745	1	19.09	20.20	1.291	-	-	-0.17	0.547	0.706
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	349000	1745	1	19.11	20.20	1.285	-	-	-0.05	0.565	0.726
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	349000	1745	1	19.09	20.20	1.291	-	-	-0.01	0.640	0.826
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	349000	1745	1	19.05	20.20	1.303	-	-	-0.14	0.614	0.800
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	349000	1745	1	19.11	20.20	1.285	-	-	-0.15	0.111	0.143
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	349000	1745	1	19.09	20.20	1.291	-	-	-0.12	0.101	0.130
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	349000	1745	1	19.11	20.20	1.285	-	-	-0.17	0.219	0.281
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	349000	1745	1	19.09	20.20	1.291	-	-	0.08	0.237	0.306
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	349000	1745	1	19.11	20.20	1.285	-	-	0.01	0.888	1.141
33	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	349000	1745	1	19.09	20.20	1.291	-	-	-0.12	1.000	1.291
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	349000	1745	1	19.05	20.20	1.303	-	-	0.02	0.818	1.066
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	349000	1745	1	15.30	16.50	1.318	-	-	0.05	0.172	0.227
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	349000	1745	1	15.29	16.50	1.321	-	-	0.08	0.182	0.240
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	349000	1745	1	15.30	16.50	1.318	-	-	-0.18	0.449	0.592
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	349000	1745	1	15.29	16.50	1.321	-	-	-0.15	0.472	0.624
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	349000	1745	1	15.30	16.50	1.318	-	-	-0.04	0.164	0.216
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	349000	1745	1	15.29	16.50	1.321	-	-	-0.09	0.174	0.230
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	349000	1745	1	15.30	16.50	1.318	-	-	0.18	0.000	0.000
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	349000	1745	1	15.29	16.50	1.321	-	-	0.11	0.016	0.021
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	349000	1745	1	15.30	16.50	1.318	-	-	0.07	0.317	0.418
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	349000	1745	1	15.29	16.50	1.321	-	-	-0.03	0.370	0.489
	FR1 n66 Other PA	45M	QPSK	120	60	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	349000	1745	1	15.12	16.50	1.374	-	-	-0.17	0.453	0.622
1900MHz																					
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 2	ECI 7	661	1880	1	22.88	24.10	1.324	-	-	0.17	0.516	0.683
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 2	ECI 7	661	1880	1	22.88	24.10	1.324	-	-	-0.06	0.607	0.804
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 2	ECI 7	512	1850.2	1	22.86	24.10	1.330	-	-	-0.15	0.639	0.850
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 2	ECI 7	810	1909.8	1	22.83	24.10	1.340	-	-	-0.12	0.553	0.741
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 2	ECI 7	661	1880	1	22.88	24.10	1.324	-	-	-0.16	0.095	0.126
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 2	ECI 7	661	1880	1	22.88	24.10	1.324	-	-	-0.03	0.200	0.265
34	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 2	ECI 7	661	1880	1	22.88	24.10	1.324	-	-	0.01	0.959	1.270
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 2	ECI 7	512	1850.2	1	22.86	24.10	1.330	-	-	0.17	0.895	1.191



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	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 2	ECI 7	810	1909.8	1	22.83	24.10	1.340	-	-	0.02	0.872	1.168
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	ECI 7	661	1880	1	17.98	19.30	1.355	-	-	0.01	0.157	0.213
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	ECI 7	661	1880	1	17.98	19.30	1.355	-	-	0.02	0.459	0.622
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Side	5mm	Ant 1	ECI 7	661	1880	1	17.98	19.30	1.355	-	-	0.16	0.115	0.156
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Right Side	5mm	Ant 1	ECI 7	661	1880	1	17.98	19.30	1.355	-	-	0.06	0.024	0.033
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Top Side	5mm	Ant 1	ECI 7	661	1880	1	17.98	19.30	1.355	-	-	-0.02	0.395	0.535
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	ECI 7	9400	1880	1	17.20	18.50	1.349	-	-	-0.13	0.525	0.708
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	9400	1880	1	17.20	18.50	1.349	-	-	0.11	0.628	0.847
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	9262	1852.4	1	17.18	18.50	1.355	-	-	-0.17	0.663	0.898
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	ECI 7	9538	1907.6	1	17.14	18.50	1.368	-	-	0.01	0.583	0.797
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 2	ECI 7	9400	1880	1	17.20	18.50	1.349	-	-	0.1	0.091	0.123
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 2	ECI 7	9400	1880	1	17.20	18.50	1.349	-	-	0.11	0.222	0.299
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 2	ECI 7	9262	1852.4	1	17.18	18.50	1.355	-	-	-0.07	0.229	0.310
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 2	ECI 7	9538	1907.6	1	17.14	18.50	1.368	-	-	0.18	0.209	0.286
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	9400	1880	1	17.20	18.50	1.349	-	-	0.12	0.943	1.272
35	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	9262	1852.4	1	17.18	18.50	1.355	-	-	0.02	0.953	1.291
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 2	ECI 7	9538	1907.6	1	17.14	18.50	1.368	-	-	0.07	0.889	1.216
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	ECI 7	9400	1880	1	15.34	16.60	1.337	-	-	-0.18	0.150	0.200
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	ECI 7	9400	1880	1	15.34	16.60	1.337	-	-	-0.04	0.466	0.623
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 1	ECI 7	9400	1880	1	15.34	16.60	1.337	-	-	-0.15	0.111	0.148
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 1	ECI 7	9400	1880	1	15.34	16.60	1.337	-	-	-0.09	0.025	0.033
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	ECI 7	9400	1880	1	15.34	16.60	1.337	-	-	0.05	0.433	0.579
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	ECI 7	9262	1852.4	1	15.31	16.60	1.346	-	-	0.13	0.433	0.583
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	5mm	Ant 1	ECI 7	9538	1907.6	1	15.33	16.60	1.340	-	-	-0.01	0.427	0.572
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	18900	1880	1	18.56	19.70	1.300	-	-	-0.11	0.672	0.874
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	18700	1860	1	18.49	19.70	1.321	-	-	-0.02	0.711	0.939
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	19100	1900	1	18.43	19.70	1.340	-	-	-0.1	0.585	0.784
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	18900	1880	1	18.55	19.70	1.303	-	-	0.14	0.572	0.745
	LTE Band 2	20M	QPSK	100	0	-	Front	5mm	Ant 2	ECI 7	18900	1880	1	18.53	19.70	1.309	-	-	-0.04	0.549	0.719
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	18900	1880	1	18.56	19.70	1.300	-	-	0.14	0.692	0.900
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	18700	1860	1	18.49	19.70	1.321	-	-	0.03	0.759	1.003
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	19100	1900	1	18.43	19.70	1.340	-	-	0.16	0.604	0.809
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	18900	1880	1	18.55	19.70	1.303	-	-	0.01	0.671	0.874
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	18700	1860	1	18.43	19.70	1.340	-	-	-0.06	0.624	0.836
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	19100	1900	1	18.47	19.70	1.327	-	-	0.14	0.613	0.814
	LTE Band 2	20M	QPSK	100	0	-	Back	5mm	Ant 2	ECI 7	18900	1880	1	18.53	19.70	1.309	-	-	-0.09	0.561	0.734
	LTE Band 2	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	ECI 7	18900	1880	1	18.56	19.70	1.300	-	-	-0.09	0.212	0.276
	LTE Band 2	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	ECI 7	18900	1880	1	18.55	19.70	1.303	-	-	-0.12	0.159	0.207
	LTE Band 2	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	ECI 7	18900	1880	1	18.56	19.70	1.300	-	-	-0.06	0.262	0.341
	LTE Band 2	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	ECI 7	18900	1880	1	18.55	19.70	1.303	-	-	-0.19	0.204	0.266
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	18900	1880	1	18.56	19.70	1.300	-	-	0.09	0.803	1.044
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	18700	1860	1	18.49	19.70	1.321	-	-	-0.04	0.972	1.284
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	19100	1900	1	18.43	19.70	1.340	-	-	0.13	0.663	0.888
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	18900	1880	1	18.55	19.70	1.303	-	-	-0.08	0.658	0.857
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	18700	1860	1	18.43	19.70	1.340	-	-	0.08	0.711	0.953
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	19100	1900	1	18.47	19.70	1.327	-	-	-0.04	0.513	0.681
	LTE Band 2	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	ECI 7	18900	1880	1	18.53	19.70	1.309	-	-	0.12	0.600	0.786
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	18900	1880	1	15.13	16.10	1.250	-	-	0.08	0.142	0.178
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	18900	1880	1	15.12	16.10	1.253	-	-	0.01	0.112	0.140
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	18900	1880	1	15.13	16.10	1.250	-	-	0.03	0.495	0.619
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	18900	1880	1	15.12	16.10	1.253	-	-	-0.08	0.340	0.426
	LTE Band 2	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	18900	1880	1	15.13	16.10	1.250	-	-	0.12	0.104	0.130
	LTE Band 2	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	18900	1880	1	15.12	16.10	1.253	-	-	0.08	0.085	0.107
	LTE Band 2	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	18900	1880	1	15.13	16.10	1.250	-	-	-0.17	0.025	0.031
	LTE Band 2	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	ECI 7	18900	1880	1	15.12	16.10	1.253	-	-	-0.03	0.020	0.025
	LTE Band 2	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	18900	1880	1	15.13	16.10	1.250	-	-	0.14	0.405	0.506



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	LTE Band 2	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	ECI 7	18900	1880	1	15.12	16.10	1.253	-	-	0.18	0.324	0.406
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	18900	1880	1	15.88	17.00	1.294	-	-	-0.05	0.476	0.616
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 9	ECI 7	18900	1880	1	14.23	15.10	1.222	-	-	-0.08	0.158	0.193
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 9	ECI 7	18900	1880	1	14.21	15.10	1.227	-	-	-0.09	0.129	0.158
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 9	ECI 7	18900	1880	1	14.23	15.10	1.222	-	-	0.03	0.269	0.329
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 9	ECI 7	18900	1880	1	14.21	15.10	1.227	-	-	-0.1	0.200	0.245
	LTE Band 2	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	18900	1880	1	14.23	15.10	1.222	-	-	0.01	0.510	0.623
	LTE Band 2	20M	QPSK	50	0	-	Left Side	5mm	Ant 9	ECI 7	18900	1880	1	14.21	15.10	1.227	-	-	0.19	0.354	0.435
	LTE Band 2	20M	QPSK	1	0	-	Right Side	5mm	Ant 9	ECI 7	18900	1880	1	14.23	15.10	1.222	-	-	-0.15	0.000	0.000
	LTE Band 2	20M	QPSK	50	0	-	Right Side	5mm	Ant 9	ECI 7	18900	1880	1	14.21	15.10	1.227	-	-	-0.15	0.000	0.000
	LTE Band 2	20M	QPSK	1	0	-	Top Side	5mm	Ant 9	ECI 7	18900	1880	1	14.23	15.10	1.222	-	-	0.11	0.010	0.012
	LTE Band 2	20M	QPSK	50	0	-	Top Side	5mm	Ant 9	ECI 7	18900	1880	1	14.21	15.10	1.227	-	-	-0.08	0.008	0.010
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	18900	1880	1	19.91	20.90	1.256	-	-	-0.09	0.669	0.840
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	18700	1860	1	19.89	20.90	1.262	-	-	-0.16	0.643	0.811
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	19100	1900	1	19.85	20.90	1.274	-	-	-0.18	0.654	0.833
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 0	ECI 7	18900	1880	1	19.39	20.50	1.291	-	-	-0.07	0.524	0.677
	LTE Band 2	20M	QPSK	100	0	-	Front	5mm	Ant 0	ECI 7	18900	1880	1	19.37	20.50	1.297	-	-	-0.1	0.555	0.720
36	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	18900	1880	1	19.91	20.90	1.256	-	-	-0.13	1.030	1.294
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	18700	1860	1	19.89	20.90	1.262	-	-	-0.01	0.928	1.171
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	19100	1900	1	19.85	20.90	1.274	-	-	-0.09	0.994	1.266
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	18900	1880	1	19.39	20.50	1.291	-	-	-0.06	0.781	1.008
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	18700	1860	1	19.32	20.50	1.312	-	-	-0.17	0.745	0.978
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	19100	1900	1	19.35	20.50	1.303	-	-	-0.01	0.788	1.027
	LTE Band 2	20M	QPSK	100	0	-	Back	5mm	Ant 0	ECI 7	18900	1880	1	19.37	20.50	1.297	-	-	-0.11	0.786	1.020
	LTE Band 2	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	18900	1880	1	19.91	20.90	1.256	-	-	0.16	0.878	1.103
	LTE Band 2	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	18700	1860	1	19.89	20.90	1.262	-	-	0.05	0.856	1.080
	LTE Band 2	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	19100	1900	1	19.85	20.90	1.274	-	-	0.05	0.858	1.093
	LTE Band 2	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	18900	1880	1	19.39	20.50	1.291	-	-	-0.03	0.713	0.921
	LTE Band 2	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	18700	1860	1	19.32	20.50	1.312	-	-	-0.15	0.657	0.862
	LTE Band 2	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	19100	1900	1	19.35	20.50	1.303	-	-	0.02	0.624	0.813
	LTE Band 2	20M	QPSK	100	0	-	Left Side	5mm	Ant 0	ECI 7	18900	1880	1	19.37	20.50	1.297	-	-	0.07	0.672	0.872
	LTE Band 2	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	18900	1880	1	19.91	20.90	1.256	-	-	0.16	0.055	0.069
	LTE Band 2	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	ECI 7	18900	1880	1	19.39	20.50	1.291	-	-	0.13	0.046	0.059
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	18900	1880	1	19.91	20.90	1.256	-	-	-0.18	0.525	0.659
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	18900	1880	1	19.39	20.50	1.291	-	-	0.02	0.405	0.523
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	18900	1880	1	19.02	20.20	1.312	-	-	-0.03	0.979	1.285
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	376000	1880	1	19.05	19.90	1.216	-	-	0.01	0.551	0.670
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	376000	1880	1	19.03	19.90	1.222	-	-	-0.01	0.560	0.684
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	376000	1880	1	19.05	19.90	1.216	-	-	-0.04	0.621	0.755
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	376000	1880	1	19.03	19.90	1.222	-	-	-0.09	0.588	0.718
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	376000	1880	1	19.05	19.90	1.216	-	-	-0.1	0.115	0.140
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	376000	1880	1	19.03	19.90	1.222	-	-	0.18	0.114	0.139
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	376000	1880	1	19.05	19.90	1.216	-	-	-0.17	0.221	0.269
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	376000	1880	1	19.03	19.90	1.222	-	-	-0.04	0.219	0.268
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	376000	1880	1	19.05	19.90	1.216	-	-	-0.05	1.000	1.216
37	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	376000	1880	1	19.03	19.90	1.222	-	-	-0.12	1.060	1.295
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	376000	1880	1	19.01	19.90	1.227	-	-	0.05	0.845	1.037
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	376000	1880	1	16.38	17.50	1.294	-	-	0.05	0.158	0.204
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	376000	1880	1	16.37	17.50	1.297	-	-	-0.04	0.144	0.187
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	376000	1880	1	16.38	17.50	1.294	-	-	0.08	0.478	0.619
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	376000	1880	1	16.37	17.50	1.297	-	-	-0.15	0.440	0.571
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	376000	1880	1	16.38	17.50	1.294	-	-	-0.02	0.116	0.150
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	376000	1880	1	16.37	17.50	1.297	-	-	0.1	0.094	0.122
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	376000	1880	1	16.38	17.50	1.294	-	-	0.04	0.023	0.030
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	376000	1880	1	16.37	17.50	1.297	-	-	0.13	0.021	0.027



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	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	376000	1880	1	16.38	17.50	1.294	-	-	-0.18	0.405	0.524
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	376000	1880	1	16.37	17.50	1.297	-	-	-0.11	0.405	0.525
	FR1 n2 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	376000	1880	1	14.64	15.80	1.306	-	-	0.14	0.473	0.618
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	21100	2535	1	18.16	19.00	1.213	-	-	-0.19	0.592	0.718
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	21100	2535	1	18.14	19.00	1.219	-	-	0.02	0.570	0.695
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	21100	2535	1	18.16	19.00	1.213	-	-	0.07	0.799	0.969
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	20850	2510	1	18.10	19.00	1.230	-	-	-0.02	0.817	1.005
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	21350	2560	1	18.12	19.00	1.225	-	-	-0.05	0.722	0.884
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	21100	2535	1	18.14	19.00	1.219	-	-	-0.13	0.578	0.705
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 2	ECI 7	21100	2535	1	18.11	19.00	1.227	-	-	0.01	0.627	0.770
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	ECI 7	21100	2535	1	18.16	19.00	1.213	-	-	-0.16	0.092	0.112
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	ECI 7	21100	2535	1	18.14	19.00	1.219	-	-	0.1	0.081	0.099
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	ECI 7	21100	2535	1	18.16	19.00	1.213	-	-	-0.04	0.169	0.205
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	ECI 7	21100	2535	1	18.14	19.00	1.219	-	-	-0.01	0.150	0.183
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	21100	2535	1	18.16	19.00	1.213	-	-	-0.01	1.050	1.274
	LTE Band 7C	20M	QPSK	1	99	-	Bottom Side	5mm	Ant 2	ECI 7	21100+ 21298	2535+ 2554.8	1	18.15	19.00	1.216	-	-	-0.04	0.981	1.193
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	20850	2510	1	18.10	19.00	1.230	-	-	0.06	1.010	1.243
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	21350	2560	1	18.12	19.00	1.225	-	-	-0.11	0.907	1.111
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	21100	2535	1	18.14	19.00	1.219	-	-	-0.06	0.769	0.937
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	20850	2510	1	18.06	19.00	1.242	-	-	-0.15	0.916	1.137
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	21350	2560	1	18.09	19.00	1.233	-	-	0.03	0.808	0.996
	LTE Band 7	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	ECI 7	21100	2535	1	18.11	19.00	1.227	-	-	-0.13	0.791	0.971
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	21100	2535	1	14.70	16.00	1.349	-	-	-0.11	0.146	0.197
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	21100	2535	1	14.68	16.00	1.355	-	-	0.1	0.120	0.163
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	21100	2535	1	14.70	16.00	1.349	-	-	0.13	0.464	0.626
	LTE Band 7C	20M	QPSK	1	99	-	Back	5mm	Ant 1	ECI 7	21100+ 21298	2535+ 2554.8	1	14.68	16.00	1.355	-	-	0.03	0.447	0.606
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	21100	2535	1	14.68	16.00	1.355	-	-	-0.03	0.429	0.581
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	21100	2535	1	14.70	16.00	1.349	-	-	0.05	0.063	0.085
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	21100	2535	1	14.68	16.00	1.355	-	-	-0.06	0.051	0.069
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	21100	2535	1	14.70	16.00	1.349	-	-	-0.13	0.017	0.023
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	ECI 7	21100	2535	1	14.68	16.00	1.355	-	-	-0.01	0.014	0.019
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	21100	2535	1	14.70	16.00	1.349	-	-	-0.11	0.333	0.449
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	ECI 7	21100	2535	1	14.68	16.00	1.355	-	-	-0.18	0.287	0.389
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	21100	2535	1	15.78	17.20	1.387	-	-	-0.04	0.448	0.621
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 9	ECI 7	21100	2535	1	14.75	15.60	1.216	-	-	0.02	0.152	0.185
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 9	ECI 7	21100	2535	1	14.74	15.60	1.219	-	-	-0.03	0.126	0.154
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 9	ECI 7	21100	2535	1	14.75	15.60	1.216	-	-	0	0.214	0.260
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 9	ECI 7	21100	2535	1	14.74	15.60	1.219	-	-	-0.05	0.176	0.215
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	21100	2535	1	14.75	15.60	1.216	-	-	0.19	0.514	0.625
	LTE Band 7C	20M	QPSK	1	99	-	Left Side	5mm	Ant 9	ECI 7	21100+ 21298	2535+ 2554.8	1	14.73	15.60	1.222	-	-	0.12	0.487	0.595
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 9	ECI 7	21100	2535	1	14.74	15.60	1.219	-	-	0.03	0.403	0.491
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 9	ECI 7	21100	2535	1	14.75	15.60	1.216	-	-	-0.12	0.000	0.000
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 9	ECI 7	21100	2535	1	14.74	15.60	1.219	-	-	0.07	0.000	0.000
	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 9	ECI 7	21100	2535	1	14.75	15.60	1.216	-	-	0.09	0.000	0.000
	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 9	ECI 7	21100	2535	1	14.74	15.60	1.219	-	-	0.04	0.000	0.000
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	21100	2535	1	21.27	22.30	1.268	-	-	-0.17	0.724	0.918
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	20850	2510	1	21.24	22.30	1.276	-	-	0.08	0.619	0.790
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	21350	2560	1	21.17	22.30	1.297	-	-	0.01	0.711	0.922
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	ECI 7	21100	2535	1	20.28	21.50	1.324	-	-	0.02	0.577	0.764
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 0	ECI 7	21100	2535	1	20.27	21.50	1.327	-	-	-0.11	0.588	0.781
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	21100	2535	1	21.27	22.30	1.268	-	-	-0.14	0.933	1.183
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	20850	2510	1	21.24	22.30	1.276	-	-	-0.01	0.696	0.888
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	21350	2560	1	21.17	22.30	1.297	-	-	0.09	0.903	1.171
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	21100	2535	1	20.28	21.50	1.324	-	-	0.1	0.674	0.893



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	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	20850	2510	1	20.24	21.50	1.337	-	-	-0.01	0.657	0.878
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	21350	2560	1	20.26	21.50	1.330	-	-	0.09	0.668	0.889
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 0	ECI 7	21100	2535	1	20.27	21.50	1.327	-	-	-0.04	0.730	0.969
	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	21100	2535	1	21.27	22.30	1.268	-	-	0.15	0.255	0.323
	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	21100	2535	1	20.28	21.50	1.324	-	-	0.09	0.229	0.303
	LTE Band 7	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	21100	2535	1	21.27	22.30	1.268	-	-	-0.16	0.051	0.065
	LTE Band 7	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	ECI 7	21100	2535	1	20.28	21.50	1.324	-	-	0.05	0.039	0.052
38	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	21100	2535	1	21.27	22.30	1.268	-	-	0.07	1.020	1.293
	LTE Band 7C	20M	QPSK	1	99	-	Bottom Side	5mm	Ant 0	ECI 7	21100+21298	2535+2554.8	1	21.26	22.30	1.271	-	-	0.02	0.942	1.197
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	20850	2510	1	21.24	22.30	1.276	-	-	0.08	0.789	1.007
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	21350	2560	1	21.17	22.30	1.297	-	-	-0.18	0.971	1.260
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	21100	2535	1	20.28	21.50	1.324	-	-	-0.03	0.810	1.073
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	20850	2510	1	20.24	21.50	1.337	-	-	-0.01	0.771	1.031
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	21350	2560	1	20.26	21.50	1.330	-	-	0.09	0.792	1.054
	LTE Band 7	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	ECI 7	21100	2535	1	20.27	21.50	1.327	-	-	0.18	0.927	1.230
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	21100	2535	1	22.98	24.00	1.265	-	-	-0.03	1.010	1.277
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	40620	2593	1	20.54	21.40	1.219	62.9	1.006	0.08	0.508	0.623
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	39750	2506	1	20.50	21.40	1.230	62.9	1.006	0.03	0.623	0.771
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	40185	2549.5	1	20.42	21.40	1.253	62.9	1.006	-0.08	0.546	0.688
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	41055	2636.5	1	20.48	21.40	1.236	62.9	1.006	-0.08	0.548	0.681
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	ECI 7	41490	2680	1	20.46	21.40	1.242	62.9	1.006	0.1	0.604	0.754
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	40620	2593	1	20.53	21.40	1.222	62.9	1.006	-0.18	0.563	0.692
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	39750	2506	1	20.47	21.40	1.239	62.9	1.006	0.12	0.495	0.617
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	40185	2549.5	1	20.43	21.40	1.250	62.9	1.006	0.08	0.472	0.594
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	41055	2636.5	1	20.44	21.40	1.247	62.9	1.006	-0.17	0.517	0.649
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	ECI 7	41490	2680	1	20.51	21.40	1.227	62.9	1.006	-0.03	0.496	0.612
	LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant 2	ECI 7	40620	2593	1	20.51	21.40	1.227	62.9	1.006	0.14	0.433	0.535
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	40620	2593	1	20.54	21.40	1.219	62.9	1.006	0.11	0.726	0.890
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	39750	2506	1	20.50	21.40	1.230	62.9	1.006	0.18	0.817	1.011
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	40185	2549.5	1	20.42	21.40	1.253	62.9	1.006	0.14	0.754	0.951
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	41055	2636.5	1	20.48	21.40	1.236	62.9	1.006	-0.17	0.775	0.964
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 7	41490	2680	1	20.46	21.40	1.242	62.9	1.006	0.17	0.838	1.047
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	40620	2593	1	20.53	21.40	1.222	62.9	1.006	-0.05	0.557	0.685
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	39750	2506	1	20.47	21.40	1.239	62.9	1.006	0.1	0.604	0.753
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	40185	2549.5	1	20.43	21.40	1.250	62.9	1.006	-0.17	0.567	0.713
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	41055	2636.5	1	20.44	21.40	1.247	62.9	1.006	0.04	0.598	0.750
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	ECI 7	41490	2680	1	20.51	21.40	1.227	62.9	1.006	-0.01	0.647	0.799
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 2	ECI 7	40620	2593	1	20.51	21.40	1.227	62.9	1.006	-0.08	0.602	0.743
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 2	ECI 7	40620	2593	1	20.54	21.40	1.219	62.9	1.006	0.05	0.082	0.101
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 2	ECI 7	40620	2593	1	20.53	21.40	1.222	62.9	1.006	0.06	0.066	0.081
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 2	ECI 7	40620	2593	1	20.54	21.40	1.219	62.9	1.006	-0.09	0.149	0.183
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 2	ECI 7	40620	2593	1	20.53	21.40	1.222	62.9	1.006	-0.08	0.130	0.160
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	40620	2593	1	20.54	21.40	1.219	62.9	1.006	0.13	0.852	1.045
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	39750	2506	1	20.50	21.40	1.230	62.9	1.006	0.03	1.040	1.287
	LTE Band 41C	20M	QPSK	1	99	-	Bottom Side	5mm	Ant 2	ECI 7	39750+39948	2506+2525.8	1	20.45	21.40	1.245	62.9	1.006	0.06	0.957	1.198
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	40185	2549.5	1	20.42	21.40	1.253	62.9	1.006	0.03	1.010	1.273
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	41055	2636.5	1	20.48	21.40	1.236	62.9	1.006	0.18	0.949	1.180
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	41490	2680	1	20.46	21.40	1.242	62.9	1.006	0.16	0.935	1.168
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	40620	2593	1	20.53	21.40	1.222	62.9	1.006	-0.1	0.629	0.773
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	39750	2506	1	20.47	21.40	1.239	62.9	1.006	0.18	0.810	1.009
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	40185	2549.5	1	20.43	21.40	1.250	62.9	1.006	-0.1	0.810	1.019
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	41055	2636.5	1	20.44	21.40	1.247	62.9	1.006	0.01	0.768	0.964
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 2	ECI 7	41490	2680	1	20.51	21.40	1.227	62.9	1.006	-0.15	0.761	0.940
	LTE Band 41	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 2	ECI 7	40620	2593	1	20.51	21.40	1.227	62.9	1.006	0.19	0.768	0.948
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	40620	2593	1	17.70	18.90	1.318	62.9	1.006	-0.08	0.129	0.171



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	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	40620	2593	1	17.65	18.90	1.334	62.9	1.006	-0.13	0.102	0.137
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	40620	2593	1	17.70	18.90	1.318	62.9	1.006	-0.13	0.457	0.606
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	39750	2506	1	17.62	18.90	1.343	62.9	1.006	-0.03	0.455	0.615
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	40185	2549.5	1	17.67	18.90	1.327	62.9	1.006	0.03	0.468	0.625
	LTE Band 41C	20M	QPSK	1	99	-	Back	5mm	Ant 1	ECI 7	40185+ 40383	2549.5+ 2569.3	1	17.59	18.90	1.352	62.9	1.006	0.19	0.451	0.613
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	41055	2636.5	1	17.65	18.90	1.334	62.9	1.006	-0.03	0.352	0.472
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	41490	2680	1	17.49	18.90	1.384	62.9	1.006	0.08	0.332	0.462
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	40620	2593	1	17.65	18.90	1.334	62.9	1.006	-0.07	0.381	0.511
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 1	ECI 7	40620	2593	1	17.68	18.90	1.324	62.9	1.006	-0.02	0.325	0.433
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	40620	2593	1	17.70	18.90	1.318	62.9	1.006	0.15	0.057	0.076
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	40620	2593	1	17.65	18.90	1.334	62.9	1.006	-0.09	0.045	0.060
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 1	ECI 7	40620	2593	1	17.70	18.90	1.318	62.9	1.006	0.11	0.017	0.023
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 1	ECI 7	40620	2593	1	17.65	18.90	1.334	62.9	1.006	-0.05	0.013	0.017
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 1	ECI 7	40620	2593	1	17.70	18.90	1.318	62.9	1.006	-0.08	0.315	0.418
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 1	ECI 7	40620	2593	1	17.65	18.90	1.334	62.9	1.006	0.02	0.255	0.342
	LTE Band 41 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	40185	2549.5	1	19.12	20.20	1.282	62.9	1.006	-0.08	0.483	0.623
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 9	ECI 7	40620	2593	1	13.28	14.10	1.208	62.9	1.006	-0.1	0.116	0.141
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 9	ECI 7	40620	2593	1	13.27	14.10	1.211	62.9	1.006	-0.13	0.098	0.119
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	ECI 7	40620	2593	1	13.28	14.10	1.208	62.9	1.006	0.06	0.162	0.197
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 9	ECI 7	40620	2593	1	13.27	14.10	1.211	62.9	1.006	0.1	0.138	0.168
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	40620	2593	1	13.28	14.10	1.208	62.9	1.006	-0.06	0.495	0.601
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	39750	2506	1	13.17	14.10	1.239	62.9	1.006	-0.19	0.425	0.530
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	40185	2549.5	1	13.15	14.10	1.245	62.9	1.006	0.01	0.451	0.565
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	41055	2636.5	1	13.18	14.10	1.236	62.9	1.006	0.06	0.443	0.551
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	41490	2680	1	13.26	14.10	1.213	62.9	1.006	-0.1	0.514	0.627
	LTE Band 41C	20M	QPSK	1	0	-	Left Side	5mm	Ant 9	ECI 7	41490+ 41292	2680+ 2660.2	1	13.21	14.10	1.227	62.9	1.006	0.02	0.498	0.615
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 9	ECI 7	40620	2593	1	13.27	14.10	1.211	62.9	1.006	0.02	0.434	0.529
	LTE Band 41	20M	QPSK	100	0	-	Left Side	5mm	Ant 9	ECI 7	40620	2593	1	13.25	14.10	1.215	62.9	1.006	-0.05	0.416	0.509
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 9	ECI 7	40620	2593	1	13.28	14.10	1.208	62.9	1.006	-0.13	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 9	ECI 7	40620	2593	1	13.27	14.10	1.211	62.9	1.006	0.08	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 9	ECI 7	40620	2593	1	13.28	14.10	1.208	62.9	1.006	0.16	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 9	ECI 7	40620	2593	1	13.27	14.10	1.211	62.9	1.006	0.01	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	ECI 7	40620	2593	1	21.32	22.30	1.253	62.9	1.006	-0.01	0.448	0.565
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	ECI 7	40620	2593	1	20.31	21.50	1.315	62.9	1.006	-0.09	0.356	0.471
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	40620	2593	1	21.32	22.30	1.253	62.9	1.006	0.08	0.572	0.721
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	39750	2506	1	21.23	22.30	1.279	62.9	1.006	-0.13	0.513	0.660
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	40185	2549.5	1	21.25	22.30	1.274	62.9	1.006	-0.1	0.479	0.614
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	41055	2636.5	1	21.31	22.30	1.256	62.9	1.006	-0.07	0.719	0.909
39	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	41490	2680	1	21.24	22.30	1.276	62.9	1.006	0.05	1.010	1.297
	LTE Band 41C	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	41490+ 41292	2680+ 2660.2	1	21.25	22.30	1.274	62.9	1.006	0.06	0.934	1.197
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	ECI 7	40620	2593	1	20.31	21.50	1.315	62.9	1.006	0.11	0.424	0.561
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 0	ECI 7	40620	2593	1	20.28	21.50	1.324	62.9	1.006	-0.17	0.455	0.606
	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 0	ECI 7	40620	2593	1	21.32	22.30	1.253	62.9	1.006	0.16	0.169	0.213
	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 0	ECI 7	40620	2593	1	20.31	21.50	1.315	62.9	1.006	-0.06	0.156	0.206
	LTE Band 41	20M	QPSK	1	0	-	Right Side	5mm	Ant 0	ECI 7	40620	2593	1	21.32	22.30	1.253	62.9	1.006	0.02	0.000	0.000
	LTE Band 41	20M	QPSK	50	0	-	Right Side	5mm	Ant 0	ECI 7	40620	2593	1	20.31	21.50	1.315	62.9	1.006	-0.16	0.000	0.000
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	40620	2593	1	21.32	22.30	1.253	62.9	1.006	0.05	0.598	0.754
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	39750	2506	1	21.23	22.30	1.279	62.9	1.006	0.17	0.364	0.468
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	40185	2549.5	1	21.25	22.30	1.274	62.9	1.006	-0.15	0.376	0.482
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	41055	2636.5	1	21.31	22.30	1.256	62.9	1.006	0.16	0.719	0.909
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	41490	2680	1	21.24	22.30	1.276	62.9	1.006	0.05	0.922	1.184
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 0	ECI 7	40620	2593	1	20.31	21.50	1.315	62.9	1.006	-0.06	0.451	0.597
	LTE Band 41	20M	QPSK	100	0	-	Bottom Side	5mm	Ant 0	ECI 7	40620	2593	1	20.28	21.50	1.324	62.9	1.006	-0.13	0.550	0.733
	LTE Band 41 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	41490	2680	1	21.42	22.50	1.282	62.9	1.006	0.04	0.994	1.282



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	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	507000	2535	1	18.54	19.80	1.337	-	-	-0.14	0.458	0.612
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 2	ECI 7	507000	2535	1	18.53	19.80	1.340	-	-	-0.18	0.439	0.588
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	507000	2535	1	18.54	19.80	1.337	-	-	0.02	0.596	0.797
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 2	ECI 7	507000	2535	1	18.53	19.80	1.340	-	-	0.16	0.584	0.782
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	507000	2535	1	18.54	19.80	1.337	-	-	-0.04	0.062	0.083
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Side	5mm	Ant 2	ECI 7	507000	2535	1	18.53	19.80	1.340	-	-	0.13	0.062	0.083
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	507000	2535	1	18.54	19.80	1.337	-	-	0.12	0.145	0.194
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Side	5mm	Ant 2	ECI 7	507000	2535	1	18.53	19.80	1.340	-	-	0.07	0.135	0.181
40	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	507000	2535	1	18.54	19.80	1.337	-	-	0.07	0.956	1.278
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	507000	2535	1	18.53	19.80	1.340	-	-	0.08	0.940	1.259
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	507000	2535	1	18.51	19.80	1.346	-	-	0.19	0.772	1.039
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	507000	2535	1	15.34	16.20	1.219	-	-	0.02	0.141	0.172
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI 7	507000	2535	1	15.33	16.20	1.222	-	-	-0.03	0.149	0.182
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	507000	2535	1	15.34	16.20	1.219	-	-	0.07	0.443	0.540
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	507000	2535	1	15.33	16.20	1.222	-	-	-0.02	0.508	0.621
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	507000	2535	1	15.34	16.20	1.219	-	-	0.05	0.053	0.065
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	507000	2535	1	15.33	16.20	1.222	-	-	0.07	0.063	0.077
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	507000	2535	1	15.34	16.20	1.219	-	-	0.07	0.020	0.024
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Right Side	5mm	Ant 1	ECI 7	507000	2535	1	15.33	16.20	1.222	-	-	0.15	0.019	0.023
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	507000	2535	1	15.34	16.20	1.219	-	-	-0.05	0.341	0.416
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Top Side	5mm	Ant 1	ECI 7	507000	2535	1	15.33	16.20	1.222	-	-	-0.08	0.387	0.473
	FR1 n7 Other PA	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI 7	507000	2535	1	16.15	17.30	1.303	-	-	-0.09	0.475	0.619
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 1	ECI 7	518598	2592.99	1	15.80	17.00	1.318	-	-	0.08	0.139	0.183
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 1	ECI 7	518598	2592.99	1	15.78	17.00	1.324	-	-	0.01	0.146	0.193
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 1	ECI 7	518598	2592.99	1	15.80	17.00	1.318	-	-	-0.04	0.473	0.624
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	ECI 7	518598	2592.99	1	15.78	17.00	1.324	-	-	-0.11	0.463	0.613
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 1	ECI 7	518598	2592.99	1	15.80	17.00	1.318	-	-	0.09	0.054	0.071
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 1	ECI 7	518598	2592.99	1	15.78	17.00	1.324	-	-	0.1	0.058	0.077
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 1	ECI 7	518598	2592.99	1	15.80	17.00	1.318	-	-	-0.04	0.017	0.022
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 1	ECI 7	518598	2592.99	1	15.78	17.00	1.324	-	-	0.15	0.020	0.026
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 1	ECI 7	518598	2592.99	1	15.80	17.00	1.318	-	-	0.09	0.371	0.489
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 1	ECI 7	518598	2592.99	1	15.78	17.00	1.324	-	-	-0.16	0.359	0.475
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 0	ECI 7	518598	2592.99	1	21.32	22.40	1.282	-	-	-0.11	0.566	0.726
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 0	ECI 7	518598	2592.99	1	21.31	22.40	1.285	-	-	-0.05	0.735	0.945
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 0	ECI 7	518598	2592.99	1	21.27	22.40	1.297	-	-	-0.04	0.521	0.676
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	ECI 7	518598	2592.99	1	21.32	22.40	1.282	-	-	-0.08	0.709	0.909
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	ECI 7	518598	2592.99	1	21.31	22.40	1.285	-	-	0	0.963	1.238
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 0	ECI 7	518598	2592.99	1	21.27	22.40	1.297	-	-	-0.14	0.716	0.929
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 0	ECI 7	518598	2592.99	1	21.32	22.40	1.282	-	-	0.01	0.232	0.298
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 0	ECI 7	518598	2592.99	1	21.31	22.40	1.285	-	-	0.18	0.345	0.443
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 0	ECI 7	518598	2592.99	1	21.32	22.40	1.282	-	-	0.02	0.069	0.088
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 0	ECI 7	518598	2592.99	1	21.31	22.40	1.285	-	-	0.16	0.080	0.103
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	ECI 7	518598	2592.99	1	21.32	22.40	1.282	-	-	0.06	0.846	1.085
41	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	ECI 7	518598	2592.99	1	21.31	22.40	1.285	-	-	-0.14	0.999	1.284
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Bottom Side	5mm	Ant 0	ECI 7	518598	2592.99	1	21.27	22.40	1.297	-	-	-0.02	0.696	0.903
3500MHz																					
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	5mm	Ant 7	ECI 7	42590	3500	1	15.95	17.20	1.334	62.9	1.006	0.11	0.202	0.271
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Front	5mm	Ant 7	ECI 7	42590	3500	1	15.93	17.20	1.340	62.9	1.006	0.1	0.161	0.217
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 7	ECI 7	42590	3500	1	15.95	17.20	1.334	62.9	1.006	0.12	0.376	0.504
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 7	ECI 7	42590	3500	1	15.93	17.20	1.340	62.9	1.006	0.14	0.298	0.402
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Side	5mm	Ant 7	ECI 7	42590	3500	1	15.95	17.20	1.334	62.9	1.006	0.05	0.463	0.621
	LTE Band 42C Part 27Q	20M	QPSK	1	99	-	Left Side	5mm	Ant 7	ECI 7	42590+ 42788	3500+ 3519.8	1	15.89	17.20	1.352	62.9	1.006	0.08	0.449	0.611
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Side	5mm	Ant 7	ECI 7	42590	3500	1	15.93	17.20	1.340	62.9	1.006	-0.04	0.341	0.460



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	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	5mm	Ant 7	ECI 7	42590	3500	1	15.95	17.20	1.334	62.9	1.006	0	0.000	0.000
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Side	5mm	Ant 7	ECI 7	42590	3500	1	15.93	17.20	1.340	62.9	1.006	-0.04	0.000	0.000
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Top Side	5mm	Ant 7	ECI 7	42590	3500	1	15.95	17.20	1.334	62.9	1.006	-0.15	0.030	0.040
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Top Side	5mm	Ant 7	ECI 7	42590	3500	1	15.93	17.20	1.340	62.9	1.006	-0.09	0.024	0.032
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	5mm	Ant 4	ECI 7	42590	3500	1	11.01	12.50	1.409	62.9	1.006	0.14	0.060	0.085
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Front	5mm	Ant 4	ECI 7	42590	3500	1	10.99	12.50	1.416	62.9	1.006	0.03	0.050	0.071
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 4	ECI 7	42590	3500	1	11.01	12.50	1.409	62.9	1.006	0.16	0.141	0.200
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 4	ECI 7	42590	3500	1	10.99	12.50	1.416	62.9	1.006	0.14	0.118	0.168
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Side	5mm	Ant 4	ECI 7	42590	3500	1	11.01	12.50	1.409	62.9	1.006	-0.09	0.022	0.031
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Side	5mm	Ant 4	ECI 7	42590	3500	1	10.99	12.50	1.416	62.9	1.006	-0.12	0.019	0.027
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	5mm	Ant 4	ECI 7	42590	3500	1	11.01	12.50	1.409	62.9	1.006	-0.06	0.010	0.014
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Side	5mm	Ant 4	ECI 7	42590	3500	1	10.99	12.50	1.416	62.9	1.006	-0.19	0.008	0.011
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	42590	3500	1	11.01	12.50	1.409	62.9	1.006	0.01	0.436	0.618
	LTE Band 42C Part 27Q	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	42590+ 42788	3500+ 3519.8	1	10.91	12.50	1.442	62.9	1.006	0.05	0.425	0.617
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Top Side	5mm	Ant 4	ECI 7	42590	3500	1	10.99	12.50	1.416	62.9	1.006	-0.08	0.372	0.530
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	5mm	Ant 8	ECI 7	42590	3500	1	21.93	22.70	1.194	62.9	1.006	-0.02	0.493	0.592
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Front	5mm	Ant 8	ECI 7	42590	3500	1	21.32	22.70	1.374	62.9	1.006	-0.16	0.385	0.532
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 8	ECI 7	42590	3500	1	21.93	22.70	1.194	62.9	1.006	-0.03	0.861	1.034
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 8	ECI 7	42190	3460	1	21.89	22.70	1.205	62.9	1.006	-0.06	0.749	0.908
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 8	ECI 7	42990	3540	1	21.88	22.70	1.208	62.9	1.006	0.08	0.676	0.821
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 8	ECI 7	42590	3500	1	21.32	22.70	1.374	62.9	1.006	-0.07	0.671	0.928
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 8	ECI 7	42190	3460	1	21.27	22.70	1.390	62.9	1.006	0.11	0.747	1.045
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 8	ECI 7	42990	3540	1	21.21	22.70	1.409	62.9	1.006	-0.13	0.667	0.946
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Back	5mm	Ant 8	ECI 7	42590	3500	1	21.28	22.70	1.387	62.9	1.006	0.04	0.637	0.889
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Side	5mm	Ant 8	ECI 7	42590	3500	1	21.93	22.70	1.194	62.9	1.006	0.17	0.000	0.000
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Side	5mm	Ant 8	ECI 7	42590	3500	1	21.32	22.70	1.374	62.9	1.006	-0.1	0.000	0.000
42	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	1	21.93	22.70	1.194	62.9	1.006	0.06	1.080	1.297
	LTE Band 42C Part 27Q	20M	QPSK	1	99	-	Right Side	5mm	Ant 8	ECI 7	42590+ 42788	3500+ 3519.8	1	21.89	22.70	1.205	62.9	1.006	0.01	0.968	1.173
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42190	3460	1	21.89	22.70	1.205	62.9	1.006	0.17	0.964	1.169
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42990	3540	1	21.88	22.70	1.208	62.9	1.006	-0.15	0.759	0.922
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	1	21.32	22.70	1.374	62.9	1.006	0.18	0.850	1.175
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Side	5mm	Ant 8	ECI 7	42190	3460	1	21.27	22.70	1.390	62.9	1.006	0.05	0.651	0.910
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Side	5mm	Ant 8	ECI 7	42990	3540	1	21.21	22.70	1.409	62.9	1.006	0.04	0.588	0.834
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	1	21.28	22.70	1.387	62.9	1.006	0.15	0.897	1.251
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 8	ECI 7	42590	3500	1	21.93	22.70	1.194	62.9	1.006	0.03	0.325	0.390
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 8	ECI 7	42590	3500	1	21.32	22.70	1.374	62.9	1.006	-0.1	0.261	0.361
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	5mm	Ant 5	ECI 7	42590	3500	1	16.47	17.50	1.268	62.9	1.006	0.1	0.181	0.231
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Front	5mm	Ant 5	ECI 7	42590	3500	1	16.45	17.50	1.274	62.9	1.006	-0.1	0.146	0.187
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 5	ECI 7	42590	3500	1	16.47	17.50	1.268	62.9	1.006	-0.05	0.303	0.386
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 5	ECI 7	42590	3500	1	16.45	17.50	1.274	62.9	1.006	-0.04	0.298	0.382
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Side	5mm	Ant 5	ECI 7	42590	3500	1	16.47	17.50	1.268	62.9	1.006	0.01	0.000	0.000
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Side	5mm	Ant 5	ECI 7	42590	3500	1	16.45	17.50	1.274	62.9	1.006	-0.09	0.000	0.000
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	5mm	Ant 5	ECI 7	42590	3500	1	16.47	17.50	1.268	62.9	1.006	0.04	0.492	0.627



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	LTE Band 42C Part 27Q	20M	QPSK	1	99	-	Right Side	5mm	Ant 5	ECI 7	42590+42788	3500+3519.8	1	16.42	17.50	1.282	62.9	1.006	0.08	0.471	0.608
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Side	5mm	Ant 5	ECI 7	42590	3500	1	16.45	17.50	1.274	62.9	1.006	-0.16	0.399	0.511
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Top Side	5mm	Ant 5	ECI 7	42590	3500	1	16.47	17.50	1.268	62.9	1.006	-0.15	0.078	0.099
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Top Side	5mm	Ant 5	ECI 7	42590	3500	1	16.45	17.50	1.274	62.9	1.006	0.06	0.069	0.088
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	ECI 7	656000	3840	1	15.62	16.70	1.282	-	-	0.15	0.235	0.301
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	ECI 7	656000	3840	1	15.59	16.70	1.291	-	-	-0.1	0.231	0.298
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	ECI 7	656000	3840	1	15.62	16.70	1.282	-	-	0.13	0.428	0.549
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	ECI 7	656000	3840	1	15.59	16.70	1.291	-	-	-0.02	0.432	0.558
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 7	ECI 7	656000	3840	1	15.62	16.70	1.282	-	-	0.1	0.459	0.589
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 7	ECI 7	656000	3840	1	15.59	16.70	1.291	-	-	-0.14	0.481	0.621
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 7	ECI 7	656000	3840	1	15.62	16.70	1.282	-	-	-0.04	0.011	0.014
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 7	ECI 7	656000	3840	1	15.59	16.70	1.291	-	-	-0.12	0.013	0.017
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 7	ECI 7	656000	3840	1	15.62	16.70	1.282	-	-	-0.07	0.050	0.064
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 7	ECI 7	656000	3840	1	15.59	16.70	1.291	-	-	-0.03	0.067	0.087
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	ECI 7	656000	3840	1	11.75	12.70	1.245	-	-	-0.01	0.133	0.166
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	ECI 7	656000	3840	1	11.74	12.70	1.247	-	-	-0.19	0.128	0.160
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	ECI 7	656000	3840	1	11.75	12.70	1.245	-	-	-0.08	0.323	0.402
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	ECI 7	656000	3840	1	11.74	12.70	1.247	-	-	0.1	0.318	0.397
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 4	ECI 7	656000	3840	1	11.75	12.70	1.245	-	-	0.12	0.036	0.045
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 4	ECI 7	656000	3840	1	11.74	12.70	1.247	-	-	-0.12	0.039	0.049
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 4	ECI 7	656000	3840	1	11.75	12.70	1.245	-	-	-0.15	0.017	0.021
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 4	ECI 7	656000	3840	1	11.74	12.70	1.247	-	-	-0.19	0.020	0.025
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 4	ECI 7	656000	3840	1	11.75	12.70	1.245	-	-	-0.04	0.501	0.624
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 4	ECI 7	656000	3840	1	11.74	12.70	1.247	-	-	-0.13	0.444	0.554
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 8	ECI 7	656000	3840	1	20.98	22.00	1.265	-	-	0.12	0.290	0.367
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 8	ECI 7	656000	3840	1	20.96	22.00	1.271	-	-	0.11	0.226	0.287
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	ECI 7	656000	3840	1	20.98	22.00	1.265	-	-	0.11	0.596	0.754
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 8	ECI 7	656000	3840	1	20.96	22.00	1.271	-	-	-0.06	0.522	0.663
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 8	ECI 7	656000	3840	1	20.98	22.00	1.265	-	-	0.02	0.027	0.034
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 8	ECI 7	656000	3840	1	20.96	22.00	1.271	-	-	0.12	0.028	0.036
43	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 8	ECI 7	656000	3840	1	20.98	22.00	1.265	-	-	0.03	1.010	1.277
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 8	ECI 7	656000	3840	1	20.96	22.00	1.271	-	-	0.02	0.889	1.130
	FR1 n77 Part 27O	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	5mm	Ant 8	ECI 7	656000	3840	1	20.91	22.00	1.285	-	-	-0.11	0.778	1.000
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	5mm	Ant 8	ECI 7	656000	3840	1	20.98	22.00	1.265	-	-	-0.11	0.147	0.186
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 8	ECI 7	656000	3840	1	20.96	22.00	1.271	-	-	-0.05	0.091	0.116
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 5	ECI 7	656000	3840	1	16.14	17.00	1.219	-	-	-0.17	0.124	0.151
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 5	ECI 7	656000	3840	1	16.13	17.00	1.222	-	-	0.02	0.155	0.189
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 5	ECI 7	656000	3840	1	16.14	17.00	1.219	-	-	-0.11	0.475	0.579
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	ECI 7	656000	3840	1	16.13	17.00	1.222	-	-	0.01	0.506	0.618
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 5	ECI 7	656000	3840	1	16.14	17.00	1.219	-	-	0.16	0.023	0.028
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 5	ECI 7	656000	3840	1	16.13	17.00	1.222	-	-	0.19	0.023	0.028
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	5mm	Ant 5	ECI 7	656000	3840	1	16.14	17.00	1.219	-	-	0.13	0.338	0.412
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 5	ECI 7	656000	3840	1	16.13	17.00	1.222	-	-	-0.03	0.465	0.568



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FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 5	ECI 7	656000	3840	1	16.14	17.00	1.219	-	-	0.19	0.081	0.099
FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 5	ECI 7	656000	3840	1	16.13	17.00	1.222	-	-	-0.09	0.081	0.099

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																	
44	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 3	Hotspot	1	2412	1	19.10	20.50	1.380	99.14	1.009	-0.18	0.330	0.460
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3	Hotspot	1	2412	1	19.10	20.50	1.380	99.14	1.009	-0.19	0.448	0.624
	WLAN2.4GHz	802.11b 1Mbps	Left Side	5mm	Ant 3	Hotspot	1	2412	1	19.10	20.50	1.380	99.14	1.009	0.1	0.047	0.065
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 3	Hotspot	1	2412	1	19.10	20.50	1.380	99.14	1.009	0.12	0.188	0.262
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 3	Hotspot	1	2412	1	19.10	20.50	1.380	99.14	1.009	0.08	0.438	0.610
45	Bluetooth	1Mbps	Front	5mm	Ant 3	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	-0.17	0.150	0.188
	Bluetooth	1Mbps	Back	5mm	Ant 3	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	0.06	0.243	0.304
	Bluetooth	1Mbps	Left Side	5mm	Ant 3	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	-0.03	0.000	0.000
	Bluetooth	1Mbps	Right Side	5mm	Ant 3	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	0.14	0.081	0.101
	Bluetooth	1Mbps	Top Side	5mm	Ant 3	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	0.11	0.237	0.297
5000MHz																	
46	WLAN5.2GHz	802.11n-HT40 MCS0	Front	5mm	Ant 4	Hotspot	46	5230	1	17.03	18.50	1.403	93.7	1.067	-0.05	0.222	0.332
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	5mm	Ant 4	Hotspot	46	5230	1	17.03	18.50	1.403	93.7	1.067	-0.04	0.386	0.578
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Side	5mm	Ant 4	Hotspot	46	5230	1	17.03	18.50	1.403	93.7	1.067	0.18	0.024	0.036
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	5mm	Ant 4	Hotspot	46	5230	1	17.03	18.50	1.403	93.7	1.067	0.14	0.179	0.268
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	5mm	Ant 4	Hotspot	46	5230	1	17.03	18.50	1.403	93.7	1.067	-0.17	0.368	0.551
47	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4	Hotspot	155	5775	1	16.95	18.50	1.429	88.19	1.134	0.06	0.268	0.434
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4	Hotspot	155	5775	1	16.95	18.50	1.429	88.19	1.134	0.14	0.379	0.614
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 4	Hotspot	155	5775	1	16.95	18.50	1.429	88.19	1.134	-0.09	0.041	0.066
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 4	Hotspot	155	5775	1	16.95	18.50	1.429	88.19	1.134	-0.08	0.094	0.152
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 4	Hotspot	155	5775	1	16.95	18.50	1.429	88.19	1.134	0.13	0.358	0.580



16.3 Body Worn Accessory SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																						
48	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	23095	707.5	1	22.51	24.00	1.409	-	-	0.08	0.366	0.516
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 0	-	ECI 3	23095	707.5	1	21.50	23.00	1.413	-	-	0.01	0.281	0.397
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	23095	707.5	1	22.51	24.00	1.409	-	-	-0.01	0.698	0.984
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 0	-	ECI 3	23095	707.5	1	21.50	23.00	1.413	-	-	0.03	0.534	0.754
	LTE Band 12	10M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	23095	707.5	1	21.47	23.00	1.422	-	-	-0.08	0.582	0.828
	LTE Band 12	10M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	23095	707.5	1	21.96	23.00	1.271	-	-	-0.08	0.132	0.168
	LTE Band 12	10M	QPSK	25	0	-	Front	5mm	Ant 1	-	ECI 3	23095	707.5	1	20.91	22.00	1.285	-	-	0.1	0.104	0.134
	LTE Band 12	10M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	23095	707.5	1	21.96	23.00	1.271	-	-	0.02	0.406	0.516
	LTE Band 12	10M	QPSK	25	0	-	Back	5mm	Ant 1	-	ECI 3	23095	707.5	1	20.91	22.00	1.285	-	-	-0.18	0.331	0.425
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	23230	782	1	22.47	24.00	1.422	-	-	0.1	0.273	0.388
49	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 0	-	ECI 3	23230	782	1	21.45	23.00	1.429	-	-	0.12	0.212	0.303
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	23230	782	1	22.47	24.00	1.422	-	-	-0.12	0.566	0.805
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 0	-	ECI 3	23230	782	1	21.45	23.00	1.429	-	-	0.08	0.417	0.596
	LTE Band 13	10M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	23230	782	1	21.42	23.00	1.439	-	-	0.08	0.432	0.622
	LTE Band 13	10M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	23230	782	1	21.73	23.00	1.340	-	-	-0.17	0.201	0.269
	LTE Band 13	10M	QPSK	25	0	-	Front	5mm	Ant 1	-	ECI 3	23230	782	1	20.66	22.00	1.361	-	-	-0.03	0.161	0.219
	LTE Band 13	10M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	23230	782	1	21.73	23.00	1.340	-	-	0.01	0.624	0.836
	LTE Band 13	10M	QPSK	25	0	-	Back	5mm	Ant 1	-	ECI 3	23230	782	1	20.66	22.00	1.361	-	-	0.14	0.266	0.362
	LTE Band 13	10M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	23230	782	1	20.64	22.00	1.368	-	-	0.11	0.386	0.528
	LTE Band 13	10M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	23230	782	1	20.64	22.00	1.368	-	-	0.11	0.386	0.528
835MHz																						
50	GSM850	-	-	-	-	GPRS (3 Tx slots)	Front	5mm	Ant 0	-	ECI 3	189	836.4	1	29.14	30.00	1.219	-	-	0.17	0.421	0.513
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	ECI 3	189	836.4	1	29.14	30.00	1.219	-	-	-0.05	0.791	0.964
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	ECI 3	128	824.2	1	29.11	30.00	1.227	-	-	0.01	0.941	1.155
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	ECI 3	251	848.8	1	29.12	30.00	1.225	-	-	0.01	1.060	1.298
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	-	ECI 3	251	848.8	2	29.12	30.00	1.225	-	-	-0.02	0.892	1.092
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	Headset	ECI 3	251	848.8	1	29.12	30.00	1.225	-	-	-0.05	0.982	1.203
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	-	ECI 3	189	836.4	1	25.31	26.60	1.346	-	-	0.1	0.298	0.401
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	189	836.4	1	25.31	26.60	1.346	-	-	-0.17	0.598	0.805
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	128	824.2	1	25.26	26.60	1.361	-	-	-0.04	0.648	0.882
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	251	848.8	1	25.20	26.60	1.380	-	-	-0.01	0.560	0.773
51	GSM850	-	-	-	-	GPRS (4 Tx slots)	Front	14mm	Ant 1	-	ECI 4	189	836.4	1	27.81	29.00	1.315	-	-	-0.08	0.127	0.167
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 1	-	ECI 4	189	836.4	1	27.81	29.00	1.315	-	-	0.05	0.172	0.226
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	ECI 3	4182	836.4	1	22.81	24.00	1.315	-	-	0.06	0.481	0.633
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	4182	836.4	1	22.81	24.00	1.315	-	-	-0.1	0.959	1.261
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	Headset	ECI 3	4182	836.4	1	22.81	24.00	1.315	-	-	0.06	0.943	1.240
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	4132	826.4	1	22.78	24.00	1.324	-	-	-0.09	0.815	1.079
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	4233	846.6	1	22.76	24.00	1.330	-	-	-0.08	0.943	1.255
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	ECI 3	4182	836.4	1	21.56	22.90	1.361	-	-	0.13	0.239	0.325
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	4182	836.4	1	21.56	22.90	1.361	-	-	0.12	0.596	0.811
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	4132	826.4	1	21.53	22.90	1.371	-	-	-0.12	0.638	0.875
52	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	4233	846.6	1	21.55	22.90	1.365	-	-	0.03	0.537	0.733
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	14mm	Ant 1	-	ECI 4	4182	836.4	1	22.58	24.00	1.387	-	-	0.08	0.110	0.153
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	-	ECI 4	4182	836.4	1	22.58	24.00	1.387	-	-	0.01	0.151	0.209
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	26865	831.5	1	22.52	24.00	1.406	-	-	-0.03	0.365	0.513
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 0	-	ECI 3	26865	831.5	1	21.51	23.00	1.409	-	-	0.18	0.231	0.326
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	26865	831.5	1	22.52	24.00	1.406	-	-	0.16	0.337	0.474
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 0	-	ECI 3	26865	831.5	1	21.51	23.00	1.409	-	-	-0.1	0.274	0.386
	LTE Band 26	15M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	26865	831.5	1	21.57	22.70	1.297	-	-	0.07	0.236	0.306
	LTE Band 26	15M	QPSK	36	0	-	Front	5mm	Ant 1	-	ECI 3	26865	831.5	1	21.54	22.70	1.306	-	-	0.18	0.256	0.334
	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	26865	831.5	1	21.57	22.70	1.297	-	-	-0.05	0.689	0.894



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	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	26865	831.5	2	21.57	22.70	1.297	-	-	0.02	0.611	0.793
	LTE Band 26	15M	QPSK	36	0	-	Back	5mm	Ant 1	-	ECI 3	26865	831.5	1	21.54	22.70	1.306	-	-	-0.1	0.683	0.892
	LTE Band 26	15M	QPSK	75	0	-	Back	5mm	Ant 1	-	ECI 3	26865	831.5	1	21.53	22.70	1.309	-	-	0.07	0.643	0.842
	LTE Band 26	15M	QPSK	1	0	-	Front	14mm	Ant 1	-	ECI 4	26865	831.5	1	22.51	24.00	1.409	-	-	0.01	0.098	0.138
	LTE Band 26	15M	QPSK	1	0	-	Back	15mm	Ant 1	-	ECI 4	26865	831.5	1	22.51	24.00	1.409	-	-	0.19	0.132	0.186
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 0	-	ECI 3	166300	831.5	1	22.75	24.00	1.334	-	-	-0.18	0.302	0.403
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 0	-	ECI 3	166300	831.5	1	22.73	24.00	1.340	-	-	0.03	0.324	0.434
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	166300	831.5	1	22.75	24.00	1.334	-	-	-0.15	0.567	0.756
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	166300	831.5	1	22.73	24.00	1.340	-	-	-0.16	0.611	0.819
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	166300	831.5	1	21.71	23.00	1.346	-	-	0.09	0.587	0.790
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	166300	831.5	1	21.22	22.40	1.312	-	-	-0.15	0.230	0.302
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	166300	831.5	1	21.20	22.40	1.318	-	-	0.11	0.250	0.330
53	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	166300	831.5	1	21.22	22.40	1.312	-	-	0.09	0.673	0.883
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	166300	831.5	1	21.20	22.40	1.318	-	-	-0.08	0.664	0.875
	FR1 n26	20M	QPSK	100	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	166300	831.5	1	21.19	22.40	1.321	-	-	-0.17	0.585	0.773
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Front	14mm	Ant 1	-	ECI 4	166300	831.5	1	22.69	24.00	1.352	-	-	-0.08	0.114	0.154
	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	-	ECI 4	166300	831.5	1	22.69	24.00	1.352	-	-	0.02	0.145	0.196
1750MHz																						
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	1413	1732.6	1	20.28	21.60	1.355	-	-	0.18	0.674	0.913
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	1312	1712.4	1	20.23	21.60	1.371	-	-	-0.04	0.637	0.873
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	1513	1752.6	1	20.27	21.60	1.358	-	-	-0.08	0.695	0.944
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	1413	1732.6	1	20.28	21.60	1.355	-	-	-0.13	0.909	1.232
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	1312	1712.4	1	20.23	21.60	1.371	-	-	-0.13	0.854	1.171
54	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	1513	1752.6	1	20.27	21.60	1.358	-	-	-0.03	0.934	1.269
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	Headset	ECI 3	1513	1752.6	1	20.27	21.60	1.358	-	-	0.14	0.916	1.244
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	14mm	Ant 2	-	ECI 4	1413	1732.6	1	22.78	24.00	1.324	-	-	0.06	0.417	0.552
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 2	-	ECI 4	1413	1732.6	1	22.78	24.00	1.324	-	-	-0.03	0.484	0.641
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	ECI 3	1413	1732.6	1	17.79	18.80	1.262	-	-	-0.03	0.287	0.362
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	1413	1732.6	1	17.79	18.80	1.262	-	-	-0.14	0.708	0.893
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	1312	1712.4	1	17.73	18.80	1.279	-	-	0.05	0.683	0.874
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	1513	1752.6	1	17.75	18.80	1.274	-	-	-0.11	0.690	0.879
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	14mm	Ant 1	-	ECI 4	1413	1732.6	1	20.75	22.00	1.334	-	-	-0.12	0.171	0.228
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	-	ECI 4	1413	1732.6	1	20.75	22.00	1.334	-	-	0.03	0.379	0.505
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	132322	1745	1	20.03	20.70	1.167	-	-	-0.16	0.908	1.059
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	132072	1720	1	19.96	20.70	1.186	-	-	-0.02	0.908	1.077
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	132572	1770	1	19.99	20.70	1.178	-	-	0.15	0.944	1.112
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	132322	1745	1	20.02	20.70	1.169	-	-	-0.09	0.760	0.889
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	132072	1720	1	19.96	20.70	1.186	-	-	0.11	0.665	0.789
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	132572	1770	1	19.98	20.70	1.180	-	-	-0.05	0.712	0.840
	LTE Band 66	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	ECI 3	132322	1745	1	20.01	20.70	1.172	-	-	-0.08	0.718	0.842
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	132322	1745	1	20.03	20.70	1.167	-	-	0.16	1.060	1.237
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	132072	1720	1	19.96	20.70	1.186	-	-	0.05	1.030	1.221
55	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	132572	1770	1	19.99	20.70	1.178	-	-	-0.05	1.080	1.272
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	ECI 3	132572	1770	1	19.99	20.70	1.178	-	-	0.09	1.010	1.189
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	132322	1745	1	20.02	20.70	1.169	-	-	0.05	0.849	0.993
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	132072	1720	1	19.96	20.70	1.186	-	-	-0.03	0.843	1.000
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	132572	1770	1	19.98	20.70	1.180	-	-	-0.15	0.866	1.022
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	ECI 3	132322	1745	1	20.01	20.70	1.172	-	-	0.02	0.902	1.057
	LTE Band 66	20M	QPSK	1	0	-	Front	14mm	Ant 2	-	ECI 4	132322	1745	1	22.48	24.00	1.419	-	-	-0.16	0.377	0.535
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 2	-	ECI 4	132322	1745	1	22.48	24.00	1.419	-	-	-0.02	0.078	0.111
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	132322	1745	1	17.55	18.50	1.245	-	-	0.07	0.264	0.329
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	132322	1745	1	17.53	18.50	1.250	-	-	0.16	0.216	0.270
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	132322	1745	1	17.55	18.50	1.245	-	-	0.13	0.674	0.839
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	132072	1720	1	17.47	18.50	1.268	-	-	-0.18	0.657	0.833
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	132572	1770	1	17.50	18.50	1.259	-	-	-0.01	0.708	0.891
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	132322	1745	1	17.53	18.50	1.250	-	-	0.02	0.537	0.671



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	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	132322	1745	1	17.50	18.50	1.259	-	-	0.07	0.527	0.663
	LTE Band 66 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	132572	1770	1	18.31	19.40	1.285	-	-	-0.01	0.687	0.883
	LTE Band 66	20M	QPSK	1	0	-	Front	14mm	Ant 1	-	ECI 4	132572	1770	1	20.45	21.50	1.274	-	-	-0.11	0.144	0.183
	LTE Band 66	20M	QPSK	1	0	-	Back	15mm	Ant 1	-	ECI 4	132572	1770	1	20.45	21.50	1.274	-	-	-0.12	0.334	0.425
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 9	-	ECI 3	132322	1745	1	22.49	24.00	1.416	-	-	-0.08	0.161	0.228
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 9	-	ECI 3	132322	1745	1	21.45	23.00	1.429	-	-	0.01	0.143	0.204
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	132322	1745	1	22.49	24.00	1.416	-	-	-0.08	0.298	0.422
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	132322	1745	1	21.45	23.00	1.429	-	-	-0.01	0.252	0.360
	LTE Band 66	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	132322	1745	1	21.98	23.00	1.265	-	-	-0.06	0.471	0.596
	LTE Band 66	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	ECI 3	132322	1745	1	20.97	22.00	1.268	-	-	-0.04	0.387	0.491
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	132322	1745	1	21.98	23.00	1.265	-	-	-0.12	0.786	0.994
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	132072	1720	1	21.93	23.00	1.279	-	-	0.09	0.732	0.937
	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	132572	1770	1	21.95	23.00	1.274	-	-	-0.07	0.754	0.960
	LTE Band 66	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	132322	1745	1	20.97	22.00	1.268	-	-	-0.09	0.623	0.790
	LTE Band 66	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	ECI 3	132322	1745	1	20.95	22.00	1.274	-	-	-0.07	0.653	0.832
	LTE Band 66 Main PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	132322	1745	1	20.37	21.50	1.297	-	-	-0.07	0.273	0.354
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	349000	1745	1	21.10	22.10	1.259	-	-	-0.17	0.698	0.879
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	349000	1745	1	21.08	22.10	1.265	-	-	-0.1	0.863	1.091
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	349000	1745	1	21.07	22.10	1.268	-	-	0.18	0.687	0.871
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	349000	1745	1	21.10	22.10	1.259	-	-	-0.17	0.892	1.123
56	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	349000	1745	1	21.08	22.10	1.265	-	-	-0.16	1.010	1.277
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	5mm	Ant 2	Headset	ECI 3	349000	1745	1	21.08	22.10	1.265	-	-	0.08	0.954	1.207
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	349000	1745	1	21.07	22.10	1.268	-	-	-0.04	0.811	1.028
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Front	14mm	Ant 2	-	ECI 4	349000	1745	1	22.59	24.00	1.384	-	-	0.09	0.384	0.531
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	15mm	Ant 2	-	ECI 4	349000	1745	1	22.59	24.00	1.384	-	-	0.05	0.429	0.594
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	349000	1745	1	16.82	18.10	1.343	-	-	-0.05	0.241	0.324
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	349000	1745	1	16.81	18.10	1.346	-	-	-0.04	0.255	0.343
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	349000	1745	1	16.82	18.10	1.343	-	-	-0.13	0.629	0.845
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	349000	1745	1	16.81	18.10	1.346	-	-	-0.09	0.662	0.891
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	349000	1745	1	16.77	18.10	1.358	-	-	-0.01	0.504	0.685
	FR1 n66 Other PA	45M	QPSK	120	60	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	349000	1745	1	16.51	17.90	1.377	-	-	0.1	0.643	0.886
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Front	14mm	Ant 1	-	ECI 4	349000	1745	1	20.78	22.00	1.324	-	-	0.16	0.196	0.260
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	15mm	Ant 1	-	ECI 4	349000	1745	1	20.78	22.00	1.324	-	-	0.13	0.402	0.532
1900MHz																						
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 2	-	ECI 3	661	1880	1	23.31	24.40	1.285	-	-	-0.09	0.800	1.028
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 2	-	ECI 3	512	1850.2	1	23.28	24.40	1.294	-	-	0.05	0.807	1.044
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 2	-	ECI 3	810	1909.8	1	23.35	24.40	1.274	-	-	0.02	0.670	0.853
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 2	-	ECI 3	661	1880	1	23.31	24.40	1.285	-	-	-0.13	0.941	1.209
57	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 2	-	ECI 3	512	1850.2	1	23.28	24.40	1.294	-	-	0.09	0.991	1.283
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 2	Headset	ECI 3	512	1850.2	1	23.28	24.40	1.294	-	-	-0.17	0.957	1.239
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 2	-	ECI 3	810	1909.8	1	23.35	24.40	1.274	-	-	0.17	0.857	1.091
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	14mm	Ant 2	-	ECI 4	661	1880	1	26.34	27.50	1.306	-	-	-0.04	0.271	0.354
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	15mm	Ant 2	-	ECI 4	661	1880	1	26.34	27.50	1.306	-	-	-0.13	0.336	0.439
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	5mm	Ant 1	-	ECI 3	661	1880	1	19.37	20.60	1.327	-	-	0.06	0.228	0.303
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	661	1880	1	19.37	20.60	1.327	-	-	-0.07	0.633	0.840
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	512	1850.2	1	19.34	20.60	1.337	-	-	0.02	0.667	0.892
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 1	-	ECI 3	810	1909.8	1	19.35	20.60	1.334	-	-	-0.04	0.569	0.759
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Front	14mm	Ant 1	-	ECI 4	661	1880	1	23.46	24.50	1.271	-	-	0.05	0.102	0.130
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	15mm	Ant 1	-	ECI 4	661	1880	1	23.46	24.50	1.271	-	-	0.02	0.270	0.343
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	9400	1880	1	20.18	21.50	1.355	-	-	-0.15	0.741	1.004
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	9262	1852.4	1	20.17	21.50	1.358	-	-	0.11	0.787	1.069
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 2	-	ECI 3	9538	1907.6	1	20.15	21.50	1.365	-	-	-0.02	0.682	0.931
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	9400	1880	1	20.18	21.50	1.355	-	-	0.1	0.887	1.202
58	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	9262	1852.4	1	20.17	21.50	1.358	-	-	-0.02	0.937	1.273
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	Headset	ECI 3	9262	1852.4	1	20.17	21.50	1.358	-	-	0.17	0.908	1.233



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	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 2	-	ECI 3	9538	1907.6	1	20.15	21.50	1.365	-	-	0.04	0.823	1.123
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	14mm	Ant 2	-	ECI 4	9400	1880	1	22.68	24.00	1.355	-	-	0.06	0.400	0.542
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 2	-	ECI 4	9400	1880	1	22.68	24.00	1.355	-	-	-0.07	0.487	0.660
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 1	-	ECI 3	9400	1880	1	16.89	18.20	1.352	-	-	0.13	0.210	0.284
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	9400	1880	1	16.89	18.20	1.352	-	-	-0.16	0.622	0.841
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	9262	1852.4	1	16.87	18.20	1.358	-	-	-0.09	0.648	0.880
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 1	-	ECI 3	9538	1907.6	1	16.85	18.20	1.365	-	-	-0.15	0.613	0.836
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	14mm	Ant 1	-	ECI 4	9400	1880	1	20.85	22.00	1.303	-	-	0.06	0.146	0.190
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	-	ECI 4	9400	1880	1	20.85	22.00	1.303	-	-	-0.07	0.404	0.526
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	18900	1880	1	20.04	21.10	1.276	-	-	-0.06	0.882	1.126
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	18700	1860	1	19.98	21.10	1.294	-	-	-0.14	0.923	1.195
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	19100	1900	1	20.02	21.10	1.282	-	-	-0.19	0.768	0.985
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	18900	1880	1	20.02	21.10	1.282	-	-	0.01	0.685	0.878
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	18700	1860	1	20.01	21.10	1.285	-	-	0.06	0.685	0.880
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	19100	1900	1	19.99	21.10	1.291	-	-	0.02	0.579	0.748
	LTE Band 2	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	ECI 3	18900	1880	1	19.99	21.10	1.291	-	-	0.12	0.632	0.816
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	18900	1880	1	20.04	21.10	1.276	-	-	-0.16	0.907	1.158
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	18700	1860	1	19.98	21.10	1.294	-	-	-0.19	0.996	1.289
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	18700	1860	2	19.98	21.10	1.294	-	-	0.03	0.911	1.179
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	ECI 3	18700	1860	1	19.98	21.10	1.294	-	-	-0.09	0.974	1.261
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	19100	1900	1	20.02	21.10	1.282	-	-	-0.12	0.793	1.017
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	18900	1880	1	20.02	21.10	1.282	-	-	0.07	0.749	0.960
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	18700	1860	1	20.01	21.10	1.285	-	-	-0.02	0.793	1.019
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	19100	1900	1	19.99	21.10	1.291	-	-	-0.05	0.660	0.852
	LTE Band 2	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	ECI 3	18900	1880	1	19.99	21.10	1.291	-	-	-0.13	0.736	0.950
	LTE Band 2	20M	QPSK	1	0	-	Front	14mm	Ant 2	-	ECI 4	18900	1880	1	22.49	24.00	1.416	-	-	-0.19	0.326	0.462
	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 2	-	ECI 4	18900	1880	1	22.49	24.00	1.416	-	-	0.01	0.408	0.578
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	18900	1880	1	16.58	17.60	1.265	-	-	0.08	0.199	0.252
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	18900	1880	1	16.56	17.60	1.271	-	-	0.16	0.157	0.199
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	18900	1880	1	16.58	17.60	1.265	-	-	0.01	0.642	0.812
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	18700	1860	1	16.54	17.60	1.276	-	-	-0.08	0.692	0.883
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	19100	1900	1	16.55	17.60	1.274	-	-	-0.16	0.632	0.805
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	18900	1880	1	16.56	17.60	1.271	-	-	0.1	0.478	0.607
	LTE Band 2	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	18900	1880	1	16.54	17.60	1.276	-	-	-0.09	0.489	0.624
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	18700	1860	1	17.35	18.50	1.303	-	-	0.17	0.675	0.880
	LTE Band 2	20M	QPSK	1	0	-	Front	14mm	Ant 1	-	ECI 4	18900	1880	1	20.55	21.50	1.245	-	-	-0.02	0.136	0.169
	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 1	-	ECI 4	18900	1880	1	20.55	21.50	1.245	-	-	-0.05	0.358	0.446
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 9	-	ECI 3	18900	1880	1	18.35	19.60	1.334	-	-	-0.11	0.387	0.516
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 9	-	ECI 3	18900	1880	1	18.33	19.60	1.340	-	-	0.03	0.314	0.421
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	18900	1880	1	18.35	19.60	1.334	-	-	0.15	0.656	0.875
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	18700	1860	1	18.27	19.60	1.358	-	-	-0.02	0.641	0.871
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	19100	1900	1	18.30	19.60	1.349	-	-	-0.09	0.576	0.777
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	18900	1880	1	18.33	19.60	1.340	-	-	0.14	0.589	0.789
	LTE Band 2	20M	QPSK	100	0	-	Back	5mm	Ant 9	-	ECI 3	18900	1880	1	18.32	19.60	1.343	-	-	0.07	0.554	0.744
	LTE Band 2	20M	QPSK	1	0	-	Front	14mm	Ant 9	-	ECI 4	18900	1880	1	20.08	21.20	1.294	-	-	0.16	0.226	0.292
	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 9	-	ECI 4	18900	1880	1	20.08	21.20	1.294	-	-	0.01	0.314	0.406
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	18900	1880	1	19.91	20.90	1.256	-	-	-0.09	0.669	0.840
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	18700	1860	1	19.89	20.90	1.262	-	-	-0.16	0.643	0.811
	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	19100	1900	1	19.85	20.90	1.274	-	-	-0.18	0.718	0.914
	LTE Band 2	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	ECI 3	18900	1880	1	19.39	20.50	1.291	-	-	-0.07	0.524	0.677
	LTE Band 2	20M	QPSK	100	0	-	Front	5mm	Ant 0	-	ECI 3	18900	1880	1	19.37	20.50	1.297	-	-	-0.1	0.555	0.720
59	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	18900	1880	1	19.91	20.90	1.256	-	-	-0.13	1.030	1.294
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	18900	1880	2	19.91	20.90	1.256	-	-	0.05	0.989	1.242
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	18900	1880	1	19.91	20.90	1.256	-	-	0.02	0.978	1.228
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	18700	1860	1	19.89	20.90	1.262	-	-	-0.01	0.928	1.171
	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	19100	1900	1	19.85	20.90	1.274	-	-	-0.09	0.994	1.266



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	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	18900	1880	1	19.39	20.50	1.291	-	-	-0.06	0.781	1.008
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	18700	1860	1	19.32	20.50	1.312	-	-	-0.17	0.745	0.978
	LTE Band 2	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	19100	1900	1	19.35	20.50	1.303	-	-	-0.01	0.788	1.027
	LTE Band 2	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	ECI 3	18900	1880	1	19.37	20.50	1.297	-	-	-0.11	0.786	1.020
	LTE Band 2 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	18900	1880	1	19.02	20.20	1.312	-	-	-0.03	0.979	1.285
	LTE Band 2	20M	QPSK	1	0	-	Front	14mm	Ant 0	-	ECI 4	18900	1880	1	20.37	21.50	1.297	-	-	-0.18	0.209	0.271
	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 0	-	ECI 4	18900	1880	1	20.37	21.50	1.297	-	-	-0.07	0.217	0.281
60	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	376000	1880	1	21.03	21.90	1.222	-	-	0.14	0.932	1.139
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	376000	1880	1	21.02	21.90	1.225	-	-	0.03	0.947	1.160
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	376000	1880	1	20.99	21.90	1.233	-	-	0.1	0.814	1.004
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	376000	1880	1	21.03	21.90	1.222	-	-	0.13	1.050	1.283
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	Headset	ECI 3	376000	1880	1	21.03	21.90	1.222	-	-	-0.01	0.991	1.211
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	376000	1880	1	21.02	21.90	1.225	-	-	0.16	0.995	1.218
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	376000	1880	1	20.99	21.90	1.233	-	-	-0.06	0.889	1.096
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	14mm	Ant 2	-	ECI 4	376000	1880	1	22.49	24.00	1.416	-	-	0.02	0.352	0.498
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 2	-	ECI 4	376000	1880	1	22.49	24.00	1.416	-	-	-0.01	0.413	0.585
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	376000	1880	1	17.91	19.00	1.285	-	-	0.02	0.227	0.292
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	376000	1880	1	17.89	19.00	1.291	-	-	-0.16	0.207	0.267
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	376000	1880	1	17.91	19.00	1.285	-	-	0.01	0.688	0.884
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	376000	1880	1	17.89	19.00	1.291	-	-	0.05	0.633	0.817
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	376000	1880	1	17.87	19.00	1.297	-	-	-0.03	0.612	0.794
	FR1 n2 Other PA	40M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	376000	1880	1	16.14	17.30	1.306	-	-	-0.07	0.673	0.879
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	14mm	Ant 1	-	ECI 4	376000	1880	1	20.87	22.00	1.297	-	-	0.13	0.144	0.187
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	-	ECI 4	376000	1880	1	20.87	22.00	1.297	-	-	-0.01	0.369	0.479
2600MHz																						
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	21100	2535	1	18.73	19.70	1.250	-	-	0.17	0.732	0.915
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	20850	2510	1	18.68	19.70	1.265	-	-	-0.15	0.786	0.994
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	21350	2560	1	18.70	19.70	1.259	-	-	0.16	0.673	0.847
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	21100	2535	1	18.72	19.70	1.253	-	-	0.05	0.705	0.883
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	20850	2510	1	18.65	19.70	1.274	-	-	-0.06	0.695	0.885
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	21350	2560	1	18.67	19.70	1.268	-	-	-0.13	0.556	0.705
	LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	ECI 3	21100	2535	1	18.69	19.70	1.262	-	-	-0.01	0.641	0.809
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	21100	2535	1	18.73	19.70	1.250	-	-	-0.11	0.989	1.237
61	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	20850	2510	1	18.68	19.70	1.265	-	-	-0.08	1.010	1.277
	LTE Band 7C	20M	QPSK	1	99	-	Back	5mm	Ant 2	-	ECI 3	20850+21048	2510+2529.8	1	18.61	19.70	1.285	-	-	0.07	0.925	1.189
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	ECI 3	20850	2510	1	18.68	19.70	1.265	-	-	0.02	0.975	1.233
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	21350	2560	1	18.70	19.70	1.259	-	-	0.19	0.892	1.123
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	21100	2535	1	18.72	19.70	1.253	-	-	-0.14	0.668	0.837
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	20850	2510	1	18.65	19.70	1.274	-	-	-0.18	0.770	0.981
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	21350	2560	1	18.67	19.70	1.268	-	-	-0.06	0.711	0.901
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	ECI 3	21100	2535	1	18.69	19.70	1.262	-	-	0.02	0.775	0.978
	LTE Band 7	20M	QPSK	1	0	-	Front	14mm	Ant 2	-	ECI 4	21100	2535	1	22.67	24.00	1.358	-	-	0.16	0.364	0.494
	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 2	-	ECI 4	21100	2535	1	22.67	24.00	1.358	-	-	0.05	0.462	0.628
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	21100	2535	1	16.29	17.10	1.205	-	-	0.16	0.226	0.272
	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	21100	2535	1	16.25	17.10	1.216	-	-	0.13	0.187	0.227
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	21100	2535	1	16.29	17.10	1.205	-	-	0.19	0.683	0.823
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	20850	2510	1	16.13	17.10	1.250	-	-	-0.06	0.704	0.880
	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	21350	2560	1	16.18	17.10	1.236	-	-	-0.06	0.713	0.881
	LTE Band 7C	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	21350+21152	2560+2540.2	1	16.17	17.10	1.239	-	-	0.01	0.675	0.836
	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	21100	2535	1	16.25	17.10	1.216	-	-	-0.14	0.611	0.743
	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	21100	2535	1	16.24	17.10	1.219	-	-	-0.12	0.614	0.748
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	21350	2560	1	17.06	18.20	1.300	-	-	-0.18	0.676	0.879
	LTE Band 7	20M	QPSK	1	0	-	Front	14mm	Ant 1	-	ECI 4	21100	2535	1	21.76	23.00	1.330	-	-	-0.14	0.183	0.243
	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 1	-	ECI 4	21100	2535	1	21.76	23.00	1.330	-	-	-0.18	0.340	0.452
	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 9	-	ECI 3	21100	2535	1	19.20	20.20	1.259	-	-	0.12	0.335	0.422



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LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 9	-	ECI 3	21100	2535	1	19.18	20.20	1.265	-	-	0.01	0.277	0.350
LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	21100	2535	1	19.20	20.20	1.259	-	-	0.07	0.667	0.840
LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	20850	2510	1	19.15	20.20	1.274	-	-	0.15	0.640	0.815
LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	21350	2560	1	19.13	20.20	1.279	-	-	-0.12	0.687	0.879
LTE Band 7C	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	21350+21152	2560+2540.2	1	19.15	20.20	1.274	-	-	0.02	0.673	0.857
LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	21100	2535	1	19.18	20.20	1.265	-	-	-0.05	0.587	0.742
LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 9	-	ECI 3	21100	2535	1	19.17	20.20	1.268	-	-	-0.13	0.543	0.688
LTE Band 7	20M	QPSK	1	0	-	Front	14mm	Ant 9	-	ECI 4	21100	2535	1	16.84	18.00	1.306	-	-	0.19	0.167	0.218
LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 9	-	ECI 4	21100	2535	1	16.84	18.00	1.306	-	-	-0.06	0.220	0.287
LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	21100	2535	1	21.27	22.50	1.327	-	-	-0.11	0.739	0.981
LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	20850	2510	1	21.24	22.50	1.337	-	-	0.03	0.632	0.845
LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	21350	2560	1	21.17	22.50	1.358	-	-	-0.05	0.726	0.986
LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	ECI 3	21100	2535	1	20.28	21.50	1.324	-	-	0.14	0.589	0.780
LTE Band 7	20M	QPSK	100	0	-	Front	5mm	Ant 0	-	ECI 3	21100	2535	1	20.27	21.50	1.327	-	-	-0.01	0.600	0.796
LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	21100	2535	1	21.27	22.50	1.327	-	-	-0.14	0.953	1.265
LTE Band 7C	20M	QPSK	1	99	-	Back	5mm	Ant 0	-	ECI 3	21100+21298	2535+2554.8	1	21.26	22.50	1.330	-	-	0.02	0.896	1.192
LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	21100	2535	1	21.27	22.50	1.327	-	-	-0.11	0.937	1.244
LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	20850	2510	1	21.24	22.50	1.337	-	-	-0.12	0.871	1.164
LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	21350	2560	1	21.17	22.50	1.358	-	-	0.07	0.922	1.252
LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	21100	2535	1	20.28	21.50	1.324	-	-	0.09	0.789	1.045
LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	20850	2510	1	20.24	21.50	1.337	-	-	-0.12	0.771	1.031
LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	21350	2560	1	20.26	21.50	1.330	-	-	0.07	0.769	1.023
LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	ECI 3	21100	2535	1	20.27	21.50	1.327	-	-	0.04	0.745	0.989
LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	21100	2535	1	22.98	24.00	1.265	-	-	-0.1	0.944	1.194
LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	40620	2593	1	22.04	23.00	1.247	62.9	1.006	0.11	0.613	0.769
LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	39750	2506	1	21.88	23.00	1.294	62.9	1.006	0.12	0.751	0.978
LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	40185	2549.5	1	21.94	23.00	1.276	62.9	1.006	-0.11	0.658	0.845
LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	41055	2636.5	1	21.95	23.00	1.274	62.9	1.006	0.17	0.661	0.847
LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 2	-	ECI 3	41490	2680	1	21.99	23.00	1.262	62.9	1.006	-0.16	0.728	0.924
LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	40620	2593	1	22.02	23.00	1.253	62.9	1.006	-0.17	0.559	0.705
LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	39750	2506	1	21.95	23.00	1.274	62.9	1.006	-0.05	0.549	0.703
LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	40185	2549.5	1	21.96	23.00	1.271	62.9	1.006	-0.01	0.497	0.635
LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	41055	2636.5	1	21.92	23.00	1.282	62.9	1.006	-0.14	0.539	0.695
LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 2	-	ECI 3	41490	2680	1	21.97	23.00	1.268	62.9	1.006	-0.15	0.598	0.763
LTE Band 41	20M	QPSK	100	0	-	Front	5mm	Ant 2	-	ECI 3	40620	2593	1	22.00	23.00	1.259	62.9	1.006	-0.12	0.523	0.662
LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	40620	2593	1	22.04	23.00	1.247	62.9	1.006	-0.17	0.875	1.098
LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	39750	2506	1	21.88	23.00	1.294	62.9	1.006	0.01	0.975	1.269
LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	40185	2549.5	1	21.94	23.00	1.276	62.9	1.006	0.02	0.909	1.167
LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	41055	2636.5	1	21.95	23.00	1.274	62.9	1.006	-0.11	0.934	1.197
LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	41490	2680	1	21.99	23.00	1.262	62.9	1.006	0.04	1.010	1.282
LTE Band 41C	20M	QPSK	1	0	-	Back	5mm	Ant 2	-	ECI 3	41490+41292	2680+2660.2	1	21.93	23.00	1.279	62.9	1.006	0.07	0.931	1.198
LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 2	Headset	ECI 3	41490	2680	1	21.99	23.00	1.262	62.9	1.006	0.08	0.967	1.228
LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	40620	2593	1	22.02	23.00	1.253	62.9	1.006	-0.01	0.672	0.847
LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	39750	2506	1	21.95	23.00	1.274	62.9	1.006	0.1	0.729	0.934
LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	40185	2549.5	1	21.96	23.00	1.271	62.9	1.006	-0.04	0.684	0.874
LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	41055	2636.5	1	21.92	23.00	1.282	62.9	1.006	0.15	0.721	0.930
LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 2	-	ECI 3	41490	2680	1	21.97	23.00	1.268	62.9	1.006	0.09	0.780	0.995
LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 2	-	ECI 3	40620	2593	1	22.00	23.00	1.259	62.9	1.006	-0.16	0.726	0.919
LTE Band 41	20M	QPSK	1	0	-	Front	14mm	Ant 2	-	ECI 4	40620	2593	1	22.49	24.00	1.416	62.9	1.006	-0.12	0.202	0.288
LTE Band 41	20M	QPSK	1	0	-	Back	15mm	Ant 2	-	ECI 4	40620	2593	1	22.49	24.00	1.416	62.9	1.006	0.07	0.239	0.340
LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	40620	2593	1	19.27	20.50	1.327	62.9	1.006	0.05	0.182	0.243
LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	40620	2593	1	19.26	20.50	1.330	62.9	1.006	0.08	0.144	0.193
LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	1	19.27	20.50	1.327	62.9	1.006	-0.18	0.527	0.704
LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	39750	2506	1	19.22	20.50	1.343	62.9	1.006	-0.04	0.639	0.863
LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	40185	2549.5	1	19.23	20.50	1.340	62.9	1.006	-0.07	0.658	0.887
LTE Band 41C	20M	QPSK	1	99	-	Back	5mm	Ant 1	-	ECI 3	40185+40383	2549.5+2569.3	1	19.16	20.50	1.361	62.9	1.006	0.01	0.641	0.878



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	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	41055	2636.5	1	19.20	20.50	1.349	62.9	1.006	-0.09	0.495	0.672
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	41490	2680	1	19.25	20.50	1.334	62.9	1.006	0.18	0.466	0.625
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	1	19.26	20.50	1.330	62.9	1.006	0.11	0.395	0.529
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	1	19.25	20.50	1.334	62.9	1.006	-0.03	0.401	0.538
	LTE Band 41 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	40185	2549.5	1	20.51	21.60	1.285	62.9	1.006	-0.03	0.685	0.886
	LTE Band 41	20M	QPSK	1	0	-	Front	14mm	Ant 1	-	ECI 4	40620	2593	1	21.75	23.00	1.334	62.9	1.006	0.08	0.094	0.126
	LTE Band 41	20M	QPSK	1	0	-	Back	15mm	Ant 1	-	ECI 4	40620	2593	1	21.75	23.00	1.334	62.9	1.006	-0.01	0.167	0.224
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 9	-	ECI 3	40620	2593	1	17.58	18.90	1.355	62.9	1.006	0.17	0.243	0.331
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 9	-	ECI 3	40620	2593	1	17.55	18.90	1.365	62.9	1.006	-0.16	0.206	0.283
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	40620	2593	1	17.58	18.90	1.355	62.9	1.006	-0.05	0.469	0.639
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	39750	2506	1	17.43	18.90	1.403	62.9	1.006	-0.08	0.458	0.646
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	40185	2549.5	1	17.51	18.90	1.377	62.9	1.006	-0.09	0.416	0.576
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	41055	2636.5	1	17.50	18.90	1.380	62.9	1.006	-0.14	0.584	0.811
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	41490	2680	1	17.55	18.90	1.365	62.9	1.006	-0.07	0.654	0.898
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	41490	2680	2	17.55	18.90	1.365	62.9	1.006	0.07	0.587	0.806
	LTE Band 41C	20M	QPSK	1	0	-	Back	5mm	Ant 9	-	ECI 3	41490+41292	2680+2660.2	1	17.46	18.90	1.393	62.9	1.006	0.12	0.628	0.880
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 9	-	ECI 3	40620	2593	1	17.55	18.90	1.365	62.9	1.006	0.01	0.428	0.588
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 9	-	ECI 3	40620	2593	1	17.54	18.90	1.368	62.9	1.006	0.07	0.418	0.575
	LTE Band 41	20M	QPSK	1	0	-	Front	14mm	Ant 9	-	ECI 4	40620	2593	1	18.13	19.20	1.279	62.9	1.006	0.05	0.182	0.234
	LTE Band 41	20M	QPSK	1	0	-	Back	15mm	Ant 9	-	ECI 4	40620	2593	1	18.13	19.20	1.279	62.9	1.006	0.08	0.233	0.300
	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	40620	2593	1	21.32	22.30	1.253	62.9	1.006	-0.17	0.448	0.565
	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 0	-	ECI 3	40620	2593	1	20.31	21.50	1.315	62.9	1.006	0.1	0.356	0.471
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	40620	2593	1	21.32	22.30	1.253	62.9	1.006	0.08	0.572	0.721
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	39750	2506	1	21.23	22.30	1.279	62.9	1.006	-0.13	0.513	0.660
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	40185	2549.5	1	21.25	22.30	1.274	62.9	1.006	-0.1	0.479	0.614
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	41055	2636.5	1	21.31	22.30	1.256	62.9	1.006	-0.07	0.719	0.909
62	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	41490	2680	1	21.24	22.30	1.276	62.9	1.006	0.05	1.010	1.297
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	41490	2680	2	21.24	22.30	1.276	62.9	1.006	0.01	0.982	1.261
	LTE Band 41C	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	41490+41292	2680+2660.2	1	21.25	22.30	1.274	62.9	1.006	0.14	0.931	1.193
	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	41490	2680	1	21.24	22.30	1.276	62.9	1.006	0.06	0.972	1.248
	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 0	-	ECI 3	40620	2593	1	20.31	21.50	1.315	62.9	1.006	0.11	0.424	0.561
	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 0	-	ECI 3	40620	2593	1	20.28	21.50	1.324	62.9	1.006	-0.17	0.455	0.606
	LTE Band 41 Other PA	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	41490	2680	1	21.42	22.50	1.282	62.9	1.006	0.04	0.994	1.282
	LTE Band 41	20M	QPSK	1	0	-	Front	14mm	Ant 0	-	ECI 4	40620	2593	1	21.32	22.50	1.312	62.9	1.006	0.12	0.065	0.086
	LTE Band 41	20M	QPSK	1	0	-	Back	15mm	Ant 0	-	ECI 4	40620	2593	1	21.32	22.50	1.312	62.9	1.006	0.07	0.072	0.095
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	507000	2535	1	20.04	20.90	1.219	-	-	0.01	0.808	0.985
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	507000	2535	1	20.03	20.90	1.222	-	-	0.1	0.774	0.946
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Front	5mm	Ant 2	-	ECI 3	507000	2535	1	20.01	20.90	1.227	-	-	0.11	0.643	0.789
63	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	507000	2535	1	20.04	20.90	1.219	-	-	-0.06	1.050	1.280
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 2	Headset	ECI 3	507000	2535	1	20.04	20.90	1.219	-	-	0.12	1.010	1.231
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	507000	2535	1	20.03	20.90	1.222	-	-	-0.07	1.030	1.258
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant 2	-	ECI 3	507000	2535	1	20.01	20.90	1.227	-	-	0.18	0.843	1.035
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	14mm	Ant 2	-	ECI 4	507000	2535	1	22.48	24.00	1.419	-	-	-0.1	0.335	0.475
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 2	-	ECI 4	507000	2535	1	22.48	24.00	1.419	-	-	-0.07	0.410	0.582
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	507000	2535	1	16.81	18.00	1.315	-	-	0.12	0.188	0.247
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	507000	2535	1	16.80	18.00	1.318	-	-	0.07	0.198	0.261
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	1	16.81	18.00	1.315	-	-	0.15	0.591	0.777
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	1	16.80	18.00	1.318	-	-	-0.04	0.673	0.887
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	1	16.76	18.00	1.330	-	-	0.14	0.543	0.722
	FR1 n7 Other PA	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	1	17.53	18.60	1.279	-	-	-0.05	0.685	0.876
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	14mm	Ant 1	-	ECI 4	507000	2535	1	20.74	22.00	1.337	-	-	-0.06	0.177	0.237
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	15mm	Ant 1	-	ECI 4	507000	2535	1	20.74	22.00	1.337	-	-	0.12	0.339	0.453
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 1	-	ECI 3	518598	2592.99	1	17.30	18.50	1.318	-	-	-0.04	0.196	0.258
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 1	-	ECI 3	518598	2592.99	1	17.29	18.50	1.321	-	-	-0.18	0.205	0.271
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	518598	2592.99	1	17.30	18.50	1.318	-	-	-0.14	0.665	0.877



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	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	518598	2592.99	1	17.29	18.50	1.321	-	-	-0.13	0.651	0.860
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	518598	2592.99	1	17.26	18.50	1.330	-	-	-0.04	0.590	0.785
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	14mm	Ant 1	-	ECI 4	518598	2592.99	1	22.79	24.00	1.321	-	-	-0.14	0.271	0.358
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 1	-	ECI 4	518598	2592.99	1	22.79	24.00	1.321	-	-	-0.07	0.451	0.596
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 0	-	ECI 3	518598	2592.99	1	21.32	22.50	1.312	-	-	-0.04	0.674	0.884
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 0	-	ECI 3	518598	2592.99	1	21.31	22.50	1.315	-	-	-0.12	0.746	0.981
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	5mm	Ant 0	-	ECI 3	518598	2592.99	1	21.27	22.50	1.327	-	-	0.15	0.628	0.834
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 0	-	ECI 3	518598	2592.99	1	21.32	22.50	1.312	-	-	-0.05	0.720	0.945
64	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	-	ECI 3	518598	2592.99	1	21.31	22.50	1.315	-	-	0.02	0.977	1.285
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 0	Headset	ECI 3	518598	2592.99	1	21.31	22.50	1.315	-	-	-0.07	0.945	1.243
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 0	-	ECI 3	518598	2592.99	1	21.27	22.50	1.327	-	-	-0.07	0.726	0.964
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant 0	-	ECI 4	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.07	0.189	0.250
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 0	-	ECI 4	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.06	0.222	0.294
3500MHz																						
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	5mm	Ant 7	-	ECI 3	42590	3500	1	19.46	20.40	1.242	62.9	1.006	0.1	0.373	0.466
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Front	5mm	Ant 7	-	ECI 3	42590	3500	1	19.43	20.40	1.250	62.9	1.006	-0.1	0.298	0.375
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	ECI 3	42590	3500	1	19.46	20.40	1.242	62.9	1.006	-0.04	0.696	0.869
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	ECI 3	42190	3460	1	19.44	20.40	1.247	62.9	1.006	0.04	0.713	0.895
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	ECI 3	42190	3460	2	19.44	20.40	1.247	62.9	1.006	0.01	0.678	0.851
	LTE Band 42C Part 27Q	20M	QPSK	1	99	-	Back	5mm	Ant 7	-	ECI 3	42190+42388	3460+3749.8	1	19.37	20.40	1.268	62.9	1.006	0.02	0.685	0.874
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 7	-	ECI 3	42990	3540	1	19.42	20.40	1.253	62.9	1.006	0.14	0.674	0.850
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 7	-	ECI 3	42590	3500	1	19.43	20.40	1.250	62.9	1.006	0.03	0.552	0.694
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Back	5mm	Ant 7	-	ECI 3	42590	3500	1	19.39	20.40	1.262	62.9	1.006	-0.06	0.535	0.679
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	14mm	Ant 7	-	ECI 4	42590	3500	1	20.06	21.30	1.330	62.9	1.006	0.02	0.182	0.244
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	15mm	Ant 7	-	ECI 4	42590	3500	1	20.06	21.30	1.330	62.9	1.006	-0.07	0.268	0.359
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	5mm	Ant 4	-	ECI 3	42590	3500	1	15.02	16.40	1.374	62.9	1.006	0.14	0.162	0.224
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Front	5mm	Ant 4	-	ECI 3	42590	3500	1	14.98	16.40	1.387	62.9	1.006	-0.09	0.136	0.190
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	42590	3500	1	15.02	16.40	1.374	62.9	1.006	-0.09	0.582	0.804
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	42190	3460	1	14.96	16.40	1.393	62.9	1.006	-0.12	0.533	0.747
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	42990	3540	1	14.98	16.40	1.387	62.9	1.006	-0.07	0.642	0.896
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	42990	3540	2	14.98	16.40	1.387	62.9	1.006	0.05	0.587	0.819
	LTE Band 42C Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	42990+42792	3540+3520.2	1	14.93	16.40	1.403	62.9	1.006	0.07	0.624	0.881
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	42590	3500	1	14.98	16.40	1.387	62.9	1.006	-0.06	0.545	0.760
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Back	5mm	Ant 4	-	ECI 3	42590	3500	1	14.96	16.40	1.393	62.9	1.006	-0.19	0.535	0.750
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	14mm	Ant 4	-	ECI 4	42590	3500	1	17.45	19.00	1.429	62.9	1.006	0.02	0.060	0.086
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	15mm	Ant 4	-	ECI 4	42590	3500	1	17.45	19.00	1.429	62.9	1.006	-0.07	0.114	0.164
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	5mm	Ant 8	-	ECI 3	42590	3500	1	22.38	24.00	1.452	62.9	1.006	0.09	0.472	0.690
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Front	5mm	Ant 8	-	ECI 3	42590	3500	1	21.32	23.00	1.472	62.9	1.006	0.13	0.369	0.547
65	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 8	-	ECI 3	42590	3500	1	22.38	24.00	1.452	62.9	1.006	-0.13	0.825	1.205
	LTE Band 42C Part 27Q	20M	QPSK	1	99	-	Back	5mm	Ant 8	-	ECI 3	42590+42788	3500+3519.8	1	22.32	24.00	1.472	62.9	1.006	0.16	0.804	1.191
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 8	Headset	ECI 3	42590	3500	1	22.38	24.00	1.452	62.9	1.006	0.04	0.813	1.188
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 8	-	ECI 3	42190	3460	1	22.27	24.00	1.489	62.9	1.006	-0.08	0.718	1.076
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 8	-	ECI 3	42990	3540	1	22.26	24.00	1.493	62.9	1.006	0.08	0.648	0.973
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 8	-	ECI 3	42590	3500	1	21.32	23.00	1.472	62.9	1.006	-0.04	0.643	0.952
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 8	-	ECI 3	42190	3460	1	21.27	23.00	1.489	62.9	1.006	0.12	0.716	1.073
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 8	-	ECI 3	42990	3540	1	21.21	23.00	1.510	62.9	1.006	0.09	0.639	0.971
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Back	5mm	Ant 8	-	ECI 3	42590	3500	1	21.28	23.00	1.486	62.9	1.006	-0.02	0.611	0.913
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Front	5mm	Ant 5	-	ECI 3	42590	3500	1	17.37	19.00	1.455	62.9	1.006	-0.16	0.227	0.332
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Front	5mm	Ant 5	-	ECI 3	42590	3500	1	16.35	18.00	1.462	62.9	1.006	-0.03	0.183	0.269



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	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	5mm	Ant 5	-	ECI 3	42590	3500	1	17.37	19.00	1.455	62.9	1.006	0.01	0.380	0.556
	LTE Band 42C Part 27Q	20M	QPSK	1	99	-	Back	5mm	Ant 5	-	ECI 3	42590+ 42788	3500+ 3519.8	1	17.31	19.00	1.476	62.9	1.006	0.01	0.361	0.536
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	5mm	Ant 5	-	ECI 3	42590	3500	1	16.35	18.00	1.462	62.9	1.006	-0.06	0.375	0.552
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 7	-	ECI 3	656000	3840	1	18.11	19.20	1.285	-	-	0.08	0.376	0.483
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	-	ECI 3	656000	3840	1	18.10	19.20	1.288	-	-	-0.07	0.369	0.475
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	1	18.11	19.20	1.285	-	-	-0.13	0.686	0.882
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	1	18.10	19.20	1.288	-	-	-0.01	0.692	0.891
	FR1 n77 Part 27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	1	18.06	19.20	1.300	-	-	0.04	0.589	0.766
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant 7	-	ECI 4	656000	3840	1	18.59	19.70	1.291	-	-	0.08	0.149	0.192
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 7	-	ECI 4	656000	3840	1	18.59	19.70	1.291	-	-	0.13	0.208	0.269
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	-	ECI 3	656000	3840	1	15.30	16.40	1.288	-	-	0.17	0.284	0.366
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	-	ECI 3	656000	3840	1	15.27	16.40	1.297	-	-	-0.1	0.273	0.354
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	656000	3840	1	15.30	16.40	1.288	-	-	0.19	0.689	0.888
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	656000	3840	1	15.27	16.40	1.297	-	-	-0.15	0.678	0.879
	FR1 n77 Part 27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	656000	3840	1	15.23	16.40	1.309	-	-	0.18	0.627	0.821
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	14mm	Ant 4	-	ECI 4	656000	3840	1	22.74	24.00	1.337	-	-	-0.1	0.224	0.299
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 4	-	ECI 4	656000	3840	1	22.74	24.00	1.337	-	-	0.14	0.451	0.603
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 8	-	ECI 3	656000	3840	1	22.92	23.80	1.225	-	-	0.05	0.511	0.626
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 8	-	ECI 3	656000	3840	1	22.91	23.80	1.227	-	-	0.04	0.398	0.489
66	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	-	ECI 3	656000	3840	1	22.92	23.80	1.225	-	-	0.07	1.050	1.286
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	-	ECI 3	656000	3840	2	22.92	23.80	1.225	-	-	0.02	0.976	1.195
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	Headset	ECI 3	656000	3840	1	22.92	23.80	1.225	-	-	-0.07	0.987	1.209
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 8	-	ECI 3	656000	3840	1	22.91	23.80	1.227	-	-	0.15	0.919	1.128
	FR1 n77 Part 27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 8	-	ECI 3	656000	3840	1	21.87	23.00	1.297	-	-	0.03	0.848	1.100
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	14mm	Ant 8	-	ECI 4	656000	3840	1	22.92	24.00	1.282	-	-	0.04	0.134	0.172
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	15mm	Ant 8	-	ECI 4	656000	3840	1	22.91	24.00	1.285	-	-	0.08	0.194	0.249
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 5	-	ECI 3	656000	3840	1	18.09	19.00	1.233	-	-	-0.16	0.174	0.215
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 5	-	ECI 3	656000	3840	1	18.06	19.00	1.242	-	-	-0.02	0.217	0.269
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 5	-	ECI 3	656000	3840	1	18.09	19.00	1.233	-	-	0.1	0.675	0.832
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	-	ECI 3	656000	3840	1	18.06	19.00	1.242	-	-	0.08	0.708	0.879
	FR1 n77 Part 27O	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 5	-	ECI 3	656000	3840	1	18.05	19.00	1.245	-	-	-0.1	0.647	0.805
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Front	14mm	Ant 5	-	ECI 4	656000	3840	1	22.62	24.00	1.374	-	-	0.05	0.223	0.306
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 5	-	ECI 4	656000	3840	1	22.62	24.00	1.374	-	-	0.04	0.394	0.541



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
2450MHz																		
67	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 3	-	Standalone	1	2412	1	19.10	20.50	1.380	99.14	1.009	0.08	0.330	0.460
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3	-	Standalone	1	2412	1	19.10	20.50	1.380	99.14	1.009	-0.19	0.448	0.624
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 3	-	Simultaneous	1	2412	1	17.18	18.50	1.355	99.14	1.009	0.08	0.205	0.280
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3	-	Simultaneous	1	2412	1	17.18	18.50	1.355	99.14	1.009	0.01	0.286	0.391
	WLAN2.4GHz	802.11b 1Mbps	Front	14mm	Ant 3	-	Full power	1	2412	1	19.10	20.50	1.380	99.14	1.009	-0.08	0.090	0.125
	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 3	-	Full power	1	2412	1	19.10	20.50	1.380	99.14	1.009	0.03	0.074	0.103
68	Bluetooth	1Mbps	Front	5mm	Ant 3	-	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	0.01	0.150	0.188
	Bluetooth	1Mbps	Back	5mm	Ant 3	-	Full power	39	2441	1	16.40	17.00	1.148	76.45	1.090	0.06	0.243	0.304
5000MHz																		
69	WLAN5.3GHz	802.11n-HT40 MCS0	Front	5mm	Ant 4	-	Standalone	54	5270	1	18.42	20.00	1.440	93.7	1.067	-0.09	0.451	0.693
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 4	-	Standalone	54	5270	1	18.42	20.00	1.440	93.7	1.067	-0.08	0.389	0.598
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	5mm	Ant 4	-	Simultaneous	54	5270	1	16.07	17.50	1.390	93.7	1.067	0.12	0.248	0.368
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	5mm	Ant 4	-	Simultaneous	54	5270	1	16.07	17.50	1.390	93.7	1.067	0.08	0.207	0.307
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	14mm	Ant 4	-	Full power	54	5270	1	18.42	20.00	1.440	93.7	1.067	0.17	0.145	0.223
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	15mm	Ant 4	-	Full power	54	5270	1	18.42	20.00	1.440	93.7	1.067	0.18	0.104	0.160
70	WLAN5.5GHz	802.11n-HT40 MCS0	Front	5mm	Ant 4	-	Standalone	142	5710	1	18.79	20.50	1.482	93.7	1.067	-0.08	0.555	0.877
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	5mm	Ant 4	-	Standalone	102	5510	1	18.76	20.50	1.492	93.7	1.067	0.1	0.535	0.852
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	5mm	Ant 4	-	Standalone	142	5710	1	18.79	20.50	1.482	93.7	1.067	0.07	0.653	1.032
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	5mm	Ant 4	-	Standalone	102	5510	1	18.76	20.50	1.492	93.7	1.067	-0.17	0.598	0.952
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4	-	Simultaneous	106	5530	1	14.56	16.00	1.393	88.19	1.134	-0.1	0.208	0.329
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4	-	Simultaneous	106	5530	1	14.56	16.00	1.393	88.19	1.134	-0.12	0.243	0.384
71	WLAN5.5GHz	802.11n-HT40 MCS0	Front	14mm	Ant 4	-	Full power	142	5710	1	18.79	20.50	1.482	93.7	1.067	0.19	0.156	0.247
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 4	-	Full power	142	5710	1	18.79	20.50	1.482	93.7	1.067	-0.04	0.193	0.305
	WLAN5.8GHz	802.11ax-HE40 MCS0	Front	5mm	Ant 4	-	Standalone	151	5755	1	18.86	20.50	1.459	92.46	1.082	0.11	0.466	0.735
	WLAN5.8GHz	802.11ax-HE40 MCS0	Back	5mm	Ant 4	-	Standalone	151	5755	1	18.86	20.50	1.459	92.46	1.082	-0.03	0.570	0.900
	WLAN5.8GHz	802.11ax-HE40 MCS0	Back	5mm	Ant 4	-	Standalone	159	5795	1	18.81	20.50	1.476	92.46	1.082	0.18	0.531	0.848
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4	-	Simultaneous	155	5775	1	15.06	16.50	1.393	88.19	1.134	0.03	0.205	0.324
71	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4	-	Simultaneous	155	5775	1	15.06	16.50	1.393	88.19	1.134	-0.04	0.241	0.381
	WLAN5.8GHz	802.11ax-HE40 MCS0	Front	14mm	Ant 4	-	Full power	151	5755	1	18.86	20.50	1.459	92.46	1.082	0.12	0.153	0.241
	WLAN5.8GHz	802.11ax-HE40 MCS0	Back	15mm	Ant 4	-	Full power	151	5755	1	18.86	20.50	1.459	92.46	1.082	0.08	0.203	0.320



16.4 Product specific 10g SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
835MHz																					
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	0mm	Ant 0	ECI 6	189	836.4	1	29.14	31.00	1.535	-	-	0.07	1.450	2.225
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	0mm	Ant 0	ECI 6	128	824.2	1	29.11	31.00	1.545	-	-	0.05	1.320	2.040
	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	0mm	Ant 0	ECI 6	251	848.8	1	29.12	31.00	1.542	-	-	0.06	1.360	2.097
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 1	ECI 6	189	836.4	1	27.81	29.00	1.315	-	-	0.17	1.210	1.591
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Top Side	0mm	Ant 1	ECI 6	189	836.4	1	27.81	29.00	1.315	-	-	0.18	1.540	2.025
72	GSM850	-	-	-	-	GPRS (4 Tx slots)	Top Side	0mm	Ant 1	ECI 6	128	824.2	1	27.80	29.00	1.318	-	-	0.02	1.770	2.333
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Top Side	0mm	Ant 1	ECI 6	128	824.2	2	27.80	29.00	1.318	-	-	-0.06	1.640	2.162
	GSM850	-	-	-	-	GPRS (4 Tx slots)	Top Side	0mm	Ant 1	ECI 6	251	848.8	1	27.74	29.00	1.337	-	-	-0.04	1.280	1.711
73	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	4182	836.4	1	22.81	24.00	1.315	-	-	-0.01	1.530	2.012
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	4182	836.4	2	22.81	24.00	1.315	-	-	0.08	1.450	1.907
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	4132	826.4	1	22.78	24.00	1.324	-	-	-0.08	1.420	1.881
	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	4233	846.6	1	22.76	24.00	1.330	-	-	-0.17	1.460	1.942
74	LTE Band 26	15M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	26865	831.5	1	22.51	24.00	1.409	-	-	-0.05	0.991	1.397
	LTE Band 26	15M	QPSK	36	0	-	Back	0mm	Ant 1	ECI 6	26865	831.5	1	21.47	23.00	1.422	-	-	0.09	0.978	1.391
75	FR1 n26	20M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	166300	831.5	1	22.69	24.00	1.352	-	-	0.09	0.797	1.078
	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	166300	831.5	1	22.63	24.00	1.371	-	-	-0.07	0.742	1.017
1750MHz																					
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	ECI 6	1413	1732.6	1	21.79	23.10	1.352	-	-	-0.15	1.770	2.393
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	ECI 6	1312	1712.4	1	21.76	23.10	1.361	-	-	-0.06	1.680	2.287
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	ECI 6	1513	1752.6	1	21.72	23.10	1.374	-	-	-0.14	1.820	2.501
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	1413	1732.6	1	21.79	23.10	1.352	-	-	-0.19	1.990	2.691
76	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	1312	1712.4	1	21.76	23.10	1.361	-	-	-0.17	2.310	3.145
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	1513	1752.6	1	21.72	23.10	1.374	-	-	0.01	1.950	2.679
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	1413	1732.6	1	21.79	23.10	1.352	-	-	0.06	2.080	2.812
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	1312	1712.4	1	21.76	23.10	1.361	-	-	0.02	1.980	2.696
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	1513	1752.6	1	21.72	23.10	1.374	-	-	0.12	2.080	2.858
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	6mm	Ant 2	ECI 4	1413	1732.6	1	22.78	24.00	1.324	-	-	0.08	0.698	0.924
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	6mm	Ant 2	ECI 4	1413	1732.6	1	22.78	24.00	1.324	-	-	0.01	0.913	1.209
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	12mm	Ant 2	ECI 4	1413	1732.6	1	22.78	24.00	1.324	-	-	0.03	0.524	0.694
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	ECI 6	1413	1732.6	1	20.75	21.90	1.303	-	-	-0.01	1.820	2.372
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	ECI 6	1312	1712.4	1	20.67	21.90	1.327	-	-	0	1.670	2.217
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	ECI 6	1413	1732.6	1	20.75	21.90	1.303	-	-	-0.11	1.520	1.981
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	1413	1732.6	1	20.75	21.90	1.303	-	-	-0.06	1.770	2.307
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	1312	1712.4	1	20.67	21.90	1.327	-	-	-0.05	1.870	2.482
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	1312	1712.4	2	20.67	21.90	1.327	-	-	0.09	1.650	2.190
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	1513	1752.6	1	20.74	21.90	1.306	-	-	-0.15	1.780	2.325
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	ECI 4	1413	1732.6	1	20.75	22.00	1.334	-	-	-0.02	0.213	0.284
	WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	13mm	Ant 1	ECI 4	1413	1732.6	1	20.75	22.00	1.334	-	-	0.1	0.218	0.291
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 2	ECI 6	132322	1745	1	21.53	22.70	1.309	-	-	-0.06	2.130	2.789
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 2	ECI 6	132072	1720	1	21.47	22.70	1.327	-	-	0.02	2.180	2.894
	LTE Band 66	20M	QPSK	1	0	-	Front	0mm	Ant 2	ECI 6	132572	1770	1	21.49	22.70	1.321	-	-	-0.16	2.250	2.973
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 2	ECI 6	132322	1745	1	21.52	22.70	1.312	-	-	0.05	1.700	2.231
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 2	ECI 6	132072	1720	1	21.45	22.70	1.334	-	-	-0.03	1.720	2.294
	LTE Band 66	20M	QPSK	50	0	-	Front	0mm	Ant 2	ECI 6	132572	1770	1	21.46	22.70	1.330	-	-	0.17	1.750	2.328
	LTE Band 66	20M	QPSK	100	0	-	Front	0mm	Ant 2	ECI 6	132322	1745	1	21.50	22.70	1.318	-	-	-0.15	1.700	2.241
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	132322	1745	1	21.53	22.70	1.309	-	-	0.16	2.160	2.828
77	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	132072	1720	1	21.47	22.70	1.327	-	-	0.05	2.380	3.159
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	132572	1770	1	21.49	22.70	1.321	-	-	0.05	2.210	2.920
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 2	ECI 6	132322	1745	1	21.52	22.70	1.312	-	-	-0.06	1.760	2.309
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 2	ECI 6	132072	1720	1	21.45	22.70	1.334	-	-	-0.13	1.800	2.400



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	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 2	ECI 6	132572	1770	1	21.46	22.70	1.330	-	-	-0.01	1.640	2.182
	LTE Band 66	20M	QPSK	100	0	-	Back	0mm	Ant 2	ECI 6	132322	1745	1	21.50	22.70	1.318	-	-	-0.11	1.700	2.241
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	132322	1745	1	21.53	22.70	1.309	-	-	0.19	1.750	2.291
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	132072	1720	1	21.47	22.70	1.327	-	-	-0.14	1.830	2.429
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	132572	1770	1	21.49	22.70	1.321	-	-	-0.18	2.080	2.748
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	132322	1745	1	21.52	22.70	1.312	-	-	-0.06	1.520	1.995
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	132072	1720	1	21.45	22.70	1.334	-	-	0.02	1.480	1.974
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	132572	1770	1	21.46	22.70	1.330	-	-	0.16	1.590	2.115
	LTE Band 66	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 2	ECI 6	132322	1745	1	21.50	22.70	1.318	-	-	0.01	1.540	2.030
	LTE Band 66	20M	QPSK	1	0	-	Front	6mm	Ant 2	ECI 4	132322	1745	1	22.48	24.00	1.419	-	-	-0.06	0.667	0.947
	LTE Band 66	20M	QPSK	1	0	-	Back	6mm	Ant 2	ECI 4	132322	1745	1	22.48	24.00	1.419	-	-	0.02	0.853	1.210
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	12mm	Ant 2	ECI 4	132322	1745	1	22.48	24.00	1.419	-	-	-0.16	0.510	0.724
	LTE Band 66	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	132322	1745	1	22.78	24.00	1.324	-	-	0.07	1.470	1.947
	LTE Band 66	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	132322	1745	1	21.75	23.00	1.334	-	-	0.15	1.230	1.640
	LTE Band 66	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	132322	1745	1	22.78	24.00	1.324	-	-	0.06	1.800	2.384
	LTE Band 66	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	132072	1720	1	22.75	24.00	1.334	-	-	0.06	1.740	2.320
	LTE Band 66	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	132572	1770	1	22.69	24.00	1.352	-	-	0.06	1.710	2.312
	LTE Band 66	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	ECI 6	132322	1745	1	21.75	23.00	1.334	-	-	-0.05	1.470	1.960
	LTE Band 66	20M	QPSK	100	0	-	Top Side	0mm	Ant 1	ECI 6	132322	1745	1	21.73	23.00	1.340	-	-	-0.05	1.520	2.036
	LTE Band 66 Main PA	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	132322	1745	1	20.49	21.50	1.262	-	-	0.05	1.320	1.666
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 2	ECI 6	349000	1745	1	22.60	23.60	1.259	-	-	-0.11	2.040	2.568
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Front	0mm	Ant 2	ECI 6	349000	1745	1	22.59	23.60	1.262	-	-	-0.01	2.340	2.953
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Front	0mm	Ant 2	ECI 6	349000	1745	1	21.55	23.00	1.396	-	-	0.09	1.830	2.555
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	349000	1745	1	22.60	23.60	1.259	-	-	0.1	2.240	2.820
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	349000	1745	1	22.59	23.60	1.262	-	-	-0.04	2.310	2.915
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	349000	1745	1	21.55	23.00	1.396	-	-	0.15	1.800	2.513
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	349000	1745	1	22.60	23.60	1.259	-	-	0.09	2.400	3.021
78	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	349000	1745	1	22.59	23.60	1.262	-	-	-0.02	2.510	3.167
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	349000	1745	1	21.55	23.00	1.396	-	-	-0.16	2.030	2.835
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Front	6mm	Ant 2	ECI 4	349000	1745	1	22.59	24.00	1.384	-	-	-0.15	0.638	0.883
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	6mm	Ant 2	ECI 4	349000	1745	1	22.59	24.00	1.384	-	-	-0.12	0.809	1.119
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Bottom Side	12mm	Ant 2	ECI 4	349000	1745	1	22.59	24.00	1.384	-	-	-0.17	0.485	0.671
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	349000	1745	1	21.57	22.60	1.268	-	-	-0.08	1.890	2.396
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	349000	1745	1	21.56	22.60	1.271	-	-	-0.05	1.770	2.249
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	349000	1745	1	21.53	22.60	1.279	-	-	-0.15	1.710	2.188
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	349000	1745	1	21.57	22.60	1.268	-	-	-0.04	1.940	2.459
	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	349000	1745	1	21.56	22.60	1.271	-	-	-0.03	1.830	2.325
	FR1 n66	45M	QPSK	240	0	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	349000	1745	1	21.53	22.60	1.279	-	-	-0.15	1.850	2.367
	FR1 n66 Main PA	45M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	349000	1745	1	20.79	22.00	1.321	-	-	0.04	1.260	1.665
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	ECI 4	349000	1745	1	22.49	24.00	1.416	-	-	0.18	0.222	0.314
	FR1 n66	45M	QPSK	1	1	DFT-SCS-15KHz	Top Side	13mm	Ant 1	ECI 4	349000	1745	1	22.49	24.00	1.416	-	-	0.11	0.267	0.378
1900MHz																					
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	0mm	Ant 2	ECI 6	661	1880	1	26.34	27.50	1.306	-	-	0	1.980	2.586
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	0mm	Ant 2	ECI 6	512	1850.2	1	26.31	27.50	1.315	-	-	0.18	1.940	2.552
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Front	0mm	Ant 2	ECI 6	810	1909.8	1	26.25	27.50	1.334	-	-	-0.11	1.700	2.267
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	0mm	Ant 2	ECI 6	661	1880	1	26.34	27.50	1.306	-	-	-0.05	1.930	2.521
79	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	0mm	Ant 2	ECI 6	512	1850.2	1	26.31	27.50	1.315	-	-	0.03	2.210	2.907
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Back	0mm	Ant 2	ECI 6	810	1909.8	1	26.25	27.50	1.334	-	-	-0.04	1.740	2.320
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	0mm	Ant 2	ECI 6	661	1880	1	26.34	27.50	1.306	-	-	-0.08	2.110	2.756
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	0mm	Ant 2	ECI 6	512	1850.2	1	26.31	27.50	1.315	-	-	0.03	2.100	2.762
	GSM1900	-	-	-	-	GPRS (3 Tx slots)	Bottom Side	0mm	Ant 2	ECI 6	810	1909.8	1	26.25	27.50	1.334	-	-	-0.14	1.660	2.214
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 1	ECI 6	661	1880	1	23.46	24.50	1.271	-	-	0.1	1.170	1.487
	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Top Side	0mm	Ant 1	ECI 6	661	1880	1	23.46	24.50	1.271	-	-	0.08	1.560	1.982
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	ECI 6	9400	1880	1	21.67	22.80	1.297	-	-	0.15	2.270	2.945
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	ECI 6	9262	1852.4	1	21.61	22.80	1.315	-	-	0.14	2.380	3.130



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	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	0mm	Ant 2	ECI 6	9538	1907.6	1	21.66	22.80	1.300	-	-	-0.03	2.140	2.782
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	9400	1880	1	21.67	22.80	1.297	-	-	-0.14	2.230	2.893
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	9262	1852.4	1	21.61	22.80	1.315	-	-	0.17	2.410	3.170
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 2	ECI 6	9538	1907.6	1	21.66	22.80	1.300	-	-	0.11	2.110	2.743
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	9400	1880	1	21.67	22.80	1.297	-	-	0.07	2.320	3.009
80	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	9262	1852.4	1	21.61	22.80	1.315	-	-	0.02	2.430	3.196
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 2	ECI 6	9538	1907.6	1	21.66	22.80	1.300	-	-	-0.04	2.060	2.678
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	6mm	Ant 2	ECI 4	9400	1880	1	22.68	24.00	1.355	-	-	0.1	0.695	0.942
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	6mm	Ant 2	ECI 4	9400	1880	1	22.68	24.00	1.355	-	-	0.11	0.874	1.184
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	12mm	Ant 2	ECI 4	9400	1880	1	22.68	24.00	1.355	-	-	-0.07	0.605	0.820
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	ECI 6	9400	1880	1	20.32	21.40	1.282	-	-	-0.12	1.570	2.013
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	ECI 6	9262	1852.4	1	20.30	21.40	1.288	-	-	0.15	1.610	2.074
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 1	ECI 6	9538	1907.6	1	20.24	21.40	1.306	-	-	-0.05	1.610	2.103
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	9400	1880	1	20.32	21.40	1.282	-	-	-0.07	1.840	2.359
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	9262	1852.4	1	20.30	21.40	1.288	-	-	0.1	1.860	2.396
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	0mm	Ant 1	ECI 6	9538	1907.6	1	20.24	21.40	1.306	-	-	-0.02	1.870	2.443
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 1	ECI 4	9400	1880	1	20.85	22.00	1.303	-	-	-0.18	0.222	0.289
	WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	13mm	Ant 1	ECI 4	9400	1880	1	20.85	22.00	1.303	-	-	-0.04	0.290	0.378
	LTE Band 2	20M	QPSK	1	0	-	Front	0mm	Ant 2	ECI 6	18900	1880	1	22.49	23.60	1.291	-	-	0.09	2.240	2.892
81	LTE Band 2	20M	QPSK	1	0	-	Front	0mm	Ant 2	ECI 6	18700	1860	1	22.47	23.60	1.297	-	-	-0.07	2.440	3.165
	LTE Band 2	20M	QPSK	1	0	-	Front	0mm	Ant 2	ECI 6	19100	1900	1	22.45	23.60	1.303	-	-	-0.02	2.170	2.828
	LTE Band 2	20M	QPSK	50	0	-	Front	0mm	Ant 2	ECI 6	18900	1880	1	21.42	23.00	1.439	-	-	-0.16	1.790	2.575
	LTE Band 2	20M	QPSK	50	0	-	Front	0mm	Ant 2	ECI 6	18700	1860	1	21.38	23.00	1.452	-	-	-0.03	1.900	2.759
	LTE Band 2	20M	QPSK	50	0	-	Front	0mm	Ant 2	ECI 6	19100	1900	1	21.34	23.00	1.466	-	-	-0.06	1.750	2.565
	LTE Band 2	20M	QPSK	100	0	-	Front	0mm	Ant 2	ECI 6	18900	1880	1	21.39	23.00	1.449	-	-	0.08	1.720	2.492
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	18900	1880	1	22.49	23.60	1.291	-	-	-0.07	2.100	2.712
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	18700	1860	1	22.47	23.60	1.297	-	-	0.11	2.250	2.919
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	19100	1900	1	22.45	23.60	1.303	-	-	-0.13	1.900	2.476
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 2	ECI 6	18900	1880	1	21.42	23.00	1.439	-	-	0.04	1.670	2.403
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 2	ECI 6	18700	1860	1	21.38	23.00	1.452	-	-	0.17	1.650	2.396
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 2	ECI 6	19100	1900	1	21.34	23.00	1.466	-	-	-0.1	1.490	2.184
	LTE Band 2	20M	QPSK	100	0	-	Back	0mm	Ant 2	ECI 6	18900	1880	1	21.39	23.00	1.449	-	-	0.17	1.520	2.202
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	18900	1880	1	22.49	23.60	1.291	-	-	-0.15	2.180	2.815
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	18700	1860	1	22.47	23.60	1.297	-	-	0.18	1.730	2.244
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	19100	1900	1	22.45	23.60	1.303	-	-	0.05	2.020	2.632
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	18900	1880	1	21.42	23.00	1.439	-	-	0.04	1.440	2.072
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	18700	1860	1	21.38	23.00	1.452	-	-	0.15	1.270	1.844
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	19100	1900	1	21.34	23.00	1.466	-	-	0.03	1.600	2.345
	LTE Band 2	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 2	ECI 6	18900	1880	1	21.39	23.00	1.449	-	-	-0.1	1.370	1.985
	LTE Band 2	20M	QPSK	1	0	-	Front	6mm	Ant 2	ECI 4	18900	1880	1	22.49	24.00	1.416	-	-	-0.06	0.600	0.849
	LTE Band 2	20M	QPSK	1	0	-	Back	6mm	Ant 2	ECI 4	18900	1880	1	22.49	24.00	1.416	-	-	0.08	0.699	0.990
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	12mm	Ant 2	ECI 4	18900	1880	1	22.49	24.00	1.416	-	-	-0.07	0.441	0.624
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	18900	1880	1	21.86	22.80	1.242	-	-	-0.05	1.530	1.900
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	18900	1880	1	21.85	22.80	1.245	-	-	0.01	1.210	1.506
	LTE Band 2	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	18900	1880	1	21.86	22.80	1.242	-	-	0.01	1.970	2.446
	LTE Band 2	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	18700	1860	1	21.81	22.80	1.256	-	-	0.1	1.810	2.273
	LTE Band 2	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	19100	1900	1	21.79	22.80	1.262	-	-	-0.17	1.730	2.183
	LTE Band 2	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	ECI 6	18900	1880	1	21.85	22.80	1.245	-	-	0.04	1.520	1.892
	LTE Band 2	20M	QPSK	100	0	-	Top Side	0mm	Ant 1	ECI 6	18900	1880	1	21.83	22.80	1.250	-	-	-0.01	1.500	1.875
	LTE Band 2 Main PA	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	18900	1880	1	20.55	21.50	1.245	-	-	0.01	1.790	2.228
	LTE Band 2	20M	QPSK	1	0	-	Back	15mm	Ant 1	ECI 4	18900	1880	1	22.82	24.00	1.312	-	-	0.08	0.326	0.428
	LTE Band 2	20M	QPSK	1	0	-	Top Side	13mm	Ant 1	ECI 4	18900	1880	1	22.82	24.00	1.312	-	-	-0.17	0.439	0.576
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 9	ECI 4	18900	1880	1	20.08	21.20	1.294	-	-	-0.17	1.700	2.200
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 9	ECI 4	18700	1860	1	20.05	21.20	1.303	-	-	-0.08	1.810	2.359
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 9	ECI 4	19100	1900	1	20.02	21.20	1.312	-	-	-0.04	1.610	2.113
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 9	ECI 4	18900	1880	1	20.07	21.20	1.297	-	-	-0.08	1.360	1.764



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	LTE Band 2	20M	QPSK	100	0	-	Back	0mm	Ant 9	ECI 4	18900	1880	1	20.02	21.20	1.312	-	-	-0.04	1.310	1.719
	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 4	18900	1880	1	20.08	21.20	1.294	-	-	-0.08	1.740	2.252
	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 4	18700	1860	1	20.05	21.20	1.303	-	-	-0.07	1.880	2.450
	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 4	19100	1900	1	20.02	21.20	1.312	-	-	-0.13	1.570	2.060
	LTE Band 2	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 4	18900	1880	1	20.07	21.20	1.297	-	-	-0.13	1.330	1.725
	LTE Band 2	20M	QPSK	100	0	-	Left Side	0mm	Ant 9	ECI 4	18900	1880	1	20.02	21.20	1.312	-	-	-0.03	1.290	1.693
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	18900	1880	1	20.95	22.30	1.365	-	-	0.01	2.300	3.139
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	18900	1880	2	20.95	22.30	1.365	-	-	0.08	2.140	2.920
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	18700	1860	1	20.88	22.30	1.387	-	-	0.16	2.230	3.092
	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	19100	1900	1	20.92	22.30	1.374	-	-	-0.03	2.240	3.078
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	18900	1880	1	20.93	22.00	1.279	-	-	0.07	1.810	2.316
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	18700	1860	1	20.84	22.00	1.306	-	-	0.16	1.850	2.416
	LTE Band 2	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	19100	1900	1	20.84	22.00	1.306	-	-	-0.03	1.730	2.260
	LTE Band 2	20M	QPSK	100	0	-	Back	0mm	Ant 0	ECI 6	18900	1880	1	20.91	22.00	1.285	-	-	-0.04	1.800	2.314
	LTE Band 2	20M	QPSK	1	0	-	Left Side	0mm	Ant 0	ECI 6	18900	1880	1	20.95	22.30	1.365	-	-	0.01	1.460	1.992
	LTE Band 2	20M	QPSK	50	0	-	Left Side	0mm	Ant 0	ECI 6	18900	1880	1	20.93	22.00	1.279	-	-	0.07	1.410	1.804
	LTE Band 2 Main PA	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	18900	1880	1	20.37	21.50	1.297	-	-	-0.15	1.700	2.205
	LTE Band 2	20M	QPSK	1	0	-	Back	12mm	Ant 0	ECI 4	18900	1880	1	21.93	23.00	1.279	-	-	-0.03	0.271	0.347
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 0	ECI 4	18900	1880	1	21.93	23.00	1.279	-	-	0.07	0.261	0.334
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 2	ECI 6	376000	1880	1	22.49	23.40	1.233	-	-	-0.13	2.240	2.762
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	0mm	Ant 2	ECI 6	376000	1880	1	22.47	23.40	1.239	-	-	-0.01	2.450	3.035
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Front	0mm	Ant 2	ECI 6	376000	1880	1	21.46	23.00	1.426	-	-	-0.09	1.700	2.424
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	376000	1880	1	22.49	23.40	1.233	-	-	0.05	2.210	2.725
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	376000	1880	1	22.47	23.40	1.239	-	-	0.02	2.180	2.701
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	376000	1880	1	21.46	23.00	1.426	-	-	-0.13	1.700	2.424
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	1	22.49	23.40	1.233	-	-	0.17	2.570	3.169
82	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	1	22.47	23.40	1.239	-	-	-0.07	2.580	3.196
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	2	22.47	23.40	1.239	-	-	0.09	2.350	2.911
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	1	21.46	23.00	1.426	-	-	0.06	2.070	2.951
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Front	6mm	Ant 2	ECI 4	376000	1880	1	22.47	24.00	1.422	-	-	-0.09	0.637	0.906
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	6mm	Ant 2	ECI 4	376000	1880	1	22.47	24.00	1.422	-	-	-0.1	0.802	1.141
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	12mm	Ant 2	ECI 4	376000	1880	1	22.47	24.00	1.422	-	-	0.18	0.537	0.764
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	376000	1880	1	20.63	21.70	1.279	-	-	-0.15	1.690	2.162
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	376000	1880	1	20.62	21.70	1.282	-	-	-0.06	1.660	2.129
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	376000	1880	1	20.60	21.70	1.288	-	-	-0.06	1.530	1.971
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	376000	1880	1	20.63	21.70	1.279	-	-	0.05	1.930	2.469
	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	376000	1880	1	20.62	21.70	1.282	-	-	-0.14	1.900	2.436
	FR1 n2	40M	QPSK	216	0	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	376000	1880	1	20.60	21.70	1.288	-	-	-0.14	1.810	2.332
	FR1 n2 Main PA	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	376000	1880	1	20.87	22.00	1.297	-	-	0.08	1.550	2.011
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Back	15mm	Ant 1	ECI 4	376000	1880	1	22.62	24.00	1.374	-	-	-0.02	0.225	0.309
	FR1 n2	40M	QPSK	1	1	DFT-SCS-15KHz	Top Side	13mm	Ant 1	ECI 4	376000	1880	1	22.62	24.00	1.374	-	-	0.1	0.289	0.397
2600MHz																					
	LTE Band 7	20M	QPSK	1	0	-	Front	0mm	Ant 2	ECI 6	21100	2535	1	20.70	21.60	1.230	-	-	0.16	1.640	2.018
	LTE Band 7	20M	QPSK	1	0	-	Front	0mm	Ant 2	ECI 6	20850	2510	1	20.67	21.60	1.239	-	-	-0.15	1.730	2.143
	LTE Band 7	20M	QPSK	1	0	-	Front	0mm	Ant 2	ECI 6	21350	2560	1	20.64	21.60	1.247	-	-	-0.02	1.510	1.884
	LTE Band 7	20M	QPSK	50	0	-	Front	0mm	Ant 2	ECI 6	21100	2535	1	20.68	21.60	1.236	-	-	-0.09	1.460	1.804
	LTE Band 7	20M	QPSK	100	0	-	Front	0mm	Ant 2	ECI 6	21100	2535	1	20.67	21.60	1.239	-	-	-0.09	1.200	1.487
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	21100	2535	1	20.70	21.60	1.230	-	-	0.07	1.610	1.981
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 2	ECI 6	21100	2535	1	20.68	21.60	1.236	-	-	-0.18	1.300	1.607
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	21100	2535	1	20.70	21.60	1.230	-	-	-0.1	1.950	2.399
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	20850	2510	1	20.67	21.60	1.239	-	-	-0.01	2.220	2.750
83	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	21350+ 21152	2560+ 2540.2	1	20.64	21.60	1.247	-	-	0.01	2.540	3.168
	LTE Band 7C	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	21350+ 21152	2560+ 2540.2	1	20.57	21.60	1.268	-	-	0.07	2.360	2.992
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	21100	2535	1	20.68	21.60	1.236	-	-	-0.09	1.750	2.163
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	20850	2510	1	20.63	21.60	1.250	-	-	-0.06	1.690	2.113



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	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	21350	2560	1	20.65	21.60	1.245	-	-	-0.17	1.710	2.128
	LTE Band 7	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 2	ECI 6	21100	2535	1	20.67	21.60	1.239	-	-	-0.01	1.770	2.193
	LTE Band 7	20M	QPSK	1	0	-	Front	6mm	Ant 2	ECI 4	21100	2535	1	22.67	24.00	1.358	-	-	-0.09	0.767	1.042
	LTE Band 7	20M	QPSK	1	0	-	Back	6mm	Ant 2	ECI 4	20850	2510	1	22.57	24.00	1.390	-	-	-0.09	0.788	1.095
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	12mm	Ant 2	ECI 4	21350	2560	1	22.63	24.00	1.371	-	-	0.07	0.403	0.552
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	21100	2535	1	20.28	21.50	1.324	-	-	0.01	1.470	1.947
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	21100	2535	1	20.26	21.50	1.330	-	-	0.12	1.040	1.384
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	21100	2535	1	20.28	21.50	1.324	-	-	0.08	1.870	2.477
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	21100	2535	2	20.28	21.50	1.324	-	-	0.02	1.550	2.053
	LTE Band 7C	20M	QPSK	1	99	-	Top Side	0mm	Ant 1	ECI 6	21100+ 21298	2535+ 2554.8	1	20.25	21.50	1.334	-	-	-0.15	1.830	2.440
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	20850	2510	1	20.20	21.50	1.349	-	-	-0.06	1.580	2.131
	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	21350	2560	1	20.25	21.50	1.334	-	-	0	1.660	2.214
	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	ECI 6	21100	2535	1	20.26	21.50	1.330	-	-	-0.03	1.470	1.956
	LTE Band 7	20M	QPSK	100	0	-	Top Side	0mm	Ant 1	ECI 6	21100	2535	1	20.23	21.50	1.340	-	-	-0.03	1.400	1.876
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	21100	2535	1	20.14	21.40	1.337	-	-	0.12	1.850	2.473
	LTE Band 7	20M	QPSK	1	0	-	Back	15mm	Ant 1	ECI 4	21100	2535	1	21.76	23.00	1.330	-	-	-0.06	0.180	0.239
	LTE Band 7	20M	QPSK	1	0	-	Top Side	13mm	Ant 1	ECI 4	21100	2535	1	21.76	23.00	1.330	-	-	-0.13	0.236	0.314
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	1	21.27	22.50	1.327	-	-	-0.12	1.720	2.283
	LTE Band 7C	20M	QPSK	1	99	-	Back	0mm	Ant 0	ECI 6	21100+ 21298	2535+ 2554.8	1	21.26	22.50	1.330	-	-	0.07	1.650	2.195
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	20850	2510	1	21.24	22.50	1.337	-	-	0.06	1.450	1.938
	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	21350	2560	1	21.17	22.50	1.358	-	-	-0.14	1.510	2.051
	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	1	20.28	21.50	1.324	-	-	0.11	1.470	1.947
	LTE Band 7	20M	QPSK	100	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	1	20.27	21.50	1.327	-	-	0.11	1.430	1.898
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	21100	2535	1	21.27	22.50	1.327	-	-	0.07	1.490	1.978
	LTE Band 7 Other PA	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 0	ECI 6	21100	2535	1	20.28	21.50	1.324	-	-	-0.03	1.430	1.894
	LTE Band 7 Other PA	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	21100	2535	1	22.98	24.00	1.265	-	-	-0.09	1.700	2.150
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 2	ECI 6	40620	2593	1	22.49	23.30	1.205	62.9	1.006	0.07	1.210	1.467
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 2	ECI 6	40620	2593	1	21.45	23.00	1.429	62.9	1.006	-0.18	1.010	1.452
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	40620	2593	1	22.49	23.30	1.205	62.9	1.006	0.03	1.960	2.376
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	39750	2506	1	22.36	23.30	1.242	62.9	1.006	-0.15	2.400	2.998
84	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	40185	2549.5	1	22.42	23.30	1.225	62.9	1.006	-0.04	2.590	3.191
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	40185	2549.5	2	22.42	23.30	1.225	62.9	1.006	-0.09	2.340	2.883
	LTE Band 41C	20M	QPSK	1	99	-	Bottom Side	0mm	Ant 2	ECI 6	40185+ 40383	2549.5+ 2569.3	1	22.41	23.30	1.227	62.9	1.006	0.12	2.410	2.976
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	41055	2636.5	1	22.45	23.30	1.216	62.9	1.006	0.11	2.560	3.132
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	41490	2680	1	22.41	23.30	1.227	62.9	1.006	-0.08	2.480	3.062
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	40620	2593	1	21.45	23.00	1.429	62.9	1.006	-0.17	1.920	2.760
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	39750	2506	1	21.29	23.00	1.483	62.9	1.006	-0.04	1.670	2.491
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	40185	2549.5	1	21.39	23.00	1.449	62.9	1.006	-0.08	1.830	2.667
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	41055	2636.5	1	21.35	23.00	1.462	62.9	1.006	0.17	1.430	2.103
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 2	ECI 6	41490	2680	1	21.34	23.00	1.466	62.9	1.006	0.18	1.550	2.285
	LTE Band 41	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 2	ECI 6	40620	2593	1	21.41	23.00	1.442	62.9	1.006	-0.04	1.900	2.756
	LTE Band 41	20M	QPSK	1	0	-	Back	6mm	Ant 2	ECI 4	40620	2593	1	22.49	24.00	1.416	62.9	1.006	0.03	0.405	0.577
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	12mm	Ant 2	ECI 4	40620	2593	1	22.49	24.00	1.416	62.9	1.006	-0.15	0.234	0.333
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	40620	2593	1	23.07	24.00	1.239	62.9	1.006	-0.03	1.190	1.483
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	40620	2593	1	22.63	23.00	1.089	62.9	1.006	0.07	1.110	1.216
	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	40620	2593	1	23.07	24.00	1.239	62.9	1.006	0.03	1.840	2.293
	LTE Band 41C	20M	QPSK	1	99	-	Top Side	0mm	Ant 1	ECI 6	40620+ 40818	2593+ 2612.8	1	21.56	23.00	1.393	62.9	1.006	0.15	1.460	2.046
	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	39750	2506	1	23.02	24.00	1.253	62.9	1.006	0.01	1.650	2.080
	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	40185	2549.5	1	23.01	24.00	1.256	62.9	1.006	-0.01	1.780	2.249
	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	41055	2636.5	1	23.02	24.00	1.253	62.9	1.006	-0.06	1.380	1.740
	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	41490	2680	1	23.05	24.00	1.245	62.9	1.006	-0.04	1.070	1.340
	LTE Band 41	20M	QPSK	50	0	-	Top Side	0mm	Ant 1	ECI 6	40620	2593	1	22.63	23.00	1.089	62.9	1.006	-0.09	1.340	1.468
	LTE Band 41	20M	QPSK	100	0	-	Top Side	0mm	Ant 1	ECI 6	40620	2593	1	22.61	23.00	1.094	62.9	1.006	-0.17	1.300	1.431
	LTE Band 41 Main PA	20M	QPSK	1	0	-	Top Side	0mm	Ant 1	ECI 6	40620	2593	1	21.75	23.00	1.334	62.9	1.006	0.1	1.530	2.053



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	LTE Band 41	20M	QPSK	1	0	-	Back	15mm	Ant 1	ECI 4	40620	2593	1	23.64	24.00	1.086	62.9	1.006	-0.01	0.145	0.158
	LTE Band 41	20M	QPSK	1	0	-	Top Side	13mm	Ant 1	ECI 4	40620	2593	1	23.64	24.00	1.086	62.9	1.006	-0.06	0.193	0.211
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 4	40620	2593	1	18.13	19.20	1.279	62.9	1.006	0.16	1.940	2.497
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 4	40620	2593	2	18.13	19.20	1.279	62.9	1.006	0.04	1.670	2.149
	LTE Band 41C	20M	QPSK	1	99	-	Left Side	0mm	Ant 9	ECI 4	40620+ 40818	2593+ 2612.8	1	18.09	19.20	1.291	62.9	1.006	-0.06	1.830	2.377
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 4	39750	2506	1	18.02	19.20	1.312	62.9	1.006	0.14	1.190	1.571
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 4	40185	2549.5	1	18.07	19.20	1.297	62.9	1.006	0.1	1.670	2.179
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 4	41055	2636.5	1	18.09	19.20	1.291	62.9	1.006	-0.09	1.840	2.390
	LTE Band 41	20M	QPSK	1	0	-	Left Side	0mm	Ant 9	ECI 4	41490	2680	1	18.05	19.20	1.303	62.9	1.006	0.07	1.400	1.835
	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 4	40620	2593	1	18.11	19.20	1.285	62.9	1.006	-0.09	1.570	2.030
	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 4	39750	2506	1	18.06	19.20	1.300	62.9	1.006	-0.18	0.961	1.257
	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 4	40185	2549.5	1	18.10	19.20	1.288	62.9	1.006	-0.07	1.350	1.750
	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 4	41055	2636.5	1	18.02	19.20	1.312	62.9	1.006	0.11	1.400	1.848
	LTE Band 41	20M	QPSK	50	0	-	Left Side	0mm	Ant 9	ECI 4	41490	2680	1	18.08	19.20	1.294	62.9	1.006	-0.08	1.070	1.393
	LTE Band 41	20M	QPSK	100	0	-	Left Side	0mm	Ant 9	ECI 4	40620	2593	1	18.10	19.20	1.288	62.9	1.006	-0.1	1.540	1.996
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	40620	2593	1	22.94	24.00	1.276	62.9	1.006	0.08	1.670	2.144
	LTE Band 41C	20M	QPSK	1	99	-	Back	0mm	Ant 0	ECI 6	40620+ 40818	2593+ 2612.8	1	21.29	22.50	1.321	62.9	1.006	0.01	1.430	1.901
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	39750	2506	1	22.89	24.00	1.291	62.9	1.006	0.08	1.610	2.091
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	40185	2549.5	1	22.88	24.00	1.294	62.9	1.006	0.01	1.530	1.992
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	41055	2636.5	1	22.92	24.00	1.282	62.9	1.006	0.03	1.560	2.012
	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	41490	2680	1	22.93	24.00	1.279	62.9	1.006	-0.08	1.470	1.892
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	40620	2593	1	21.91	23.00	1.285	62.9	1.006	-0.01	1.500	1.939
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	39750	2506	1	21.84	23.00	1.306	62.9	1.006	-0.08	1.410	1.853
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	40185	2549.5	1	21.83	23.00	1.309	62.9	1.006	0.1	1.370	1.804
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	41055	2636.5	1	21.88	23.00	1.294	62.9	1.006	-0.18	1.350	1.758
	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 0	ECI 6	41490	2680	1	21.89	23.00	1.291	62.9	1.006	0.1	1.400	1.819
	LTE Band 41	20M	QPSK	100	0	-	Back	0mm	Ant 0	ECI 6	40620	2680	1	21.90	23.00	1.288	62.9	1.006	0.12	1.310	1.698
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	40620	2680	1	22.94	24.00	1.276	62.9	1.006	-0.11	1.330	1.708
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	39750	2506	1	22.89	24.00	1.291	62.9	1.006	0.08	1.260	1.637
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	40185	2549.5	1	22.88	24.00	1.294	62.9	1.006	-0.17	1.180	1.536
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	41055	2636.5	1	22.92	24.00	1.282	62.9	1.006	-0.03	1.210	1.561
	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	41490	2680	1	22.93	24.00	1.279	62.9	1.006	0.14	1.160	1.493
	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	0mm	Ant 0	ECI 6	40620	2593	1	21.91	23.00	1.285	62.9	1.006	0.19	1.120	1.448
	LTE Band 41	20M	QPSK	100	0	-	Bottom Side	0mm	Ant 0	ECI 6	40620	2680	1	21.90	23.00	1.288	62.9	1.006	0.11	1.130	1.464
	LTE Band 41 Main PA	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	40620	2593	1	21.32	22.50	1.312	62.9	1.006	-0.03	1.540	2.033
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	0mm	Ant 2	ECI 6	507000	2535	1	21.05	22.00	1.245	-	-	-0.06	1.440	1.792
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	0mm	Ant 2	ECI 6	507000	2535	1	21.03	22.00	1.250	-	-	0.07	1.440	1.800
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	507000	2535	1	21.05	22.00	1.245	-	-	0.07	1.420	1.767
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	0mm	Ant 2	ECI 6	507000	2535	1	21.03	22.00	1.250	-	-	-0.12	1.500	1.875
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	507000	2535	1	21.05	22.00	1.245	-	-	0.02	2.470	3.074
85	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	507000	2535	1	21.03	22.00	1.250	-	-	0.09	2.540	3.176
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	507000	2535	1	21.00	21.60	1.148	-	-	0.12	2.030	2.331
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	6mm	Ant 2	ECI 4	507000	2535	1	22.46	24.00	1.426	-	-	0.07	0.513	0.731
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	6mm	Ant 2	ECI 4	507000	2535	1	22.46	24.00	1.426	-	-	0.07	0.790	1.126
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	12mm	Ant 2	ECI 4	507000	2535	1	22.46	24.00	1.426	-	-	0.08	0.474	0.676
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	1	20.26	21.10	1.213	-	-	-0.13	1.700	2.063
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	1	20.23	21.10	1.222	-	-	0.01	1.660	2.028
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	1	19.73	20.10	1.089	-	-	-0.11	1.340	1.459
	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	507000	2535	1	20.26	21.10	1.213	-	-	0.03	1.950	2.366
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	507000	2535	1	20.23	21.10	1.222	-	-	-0.03	2.010	2.456
	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	507000	2535	1	19.73	20.10	1.089	-	-	-0.05	1.570	1.710
	FR1 n7 Other PA	50M	QPSK	135	68	DFT-SCS-15KHz	Top Side	0mm	Ant 1	ECI 6	507000	2535	1	20.07	21.40	1.358	-	-	-0.02	1.800	2.445
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	15mm	Ant 1	ECI 4	507000	2535	1	22.52	24.00	1.406	-	-	0.02	0.179	0.252
	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Top Side	13mm	Ant 1	ECI 4	507000	2535	1	22.52	24.00	1.406	-	-	-0.03	0.239	0.336
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 1	ECI 6	518598	2592.99	1	20.81	21.90	1.285	-	-	-0.04	1.660	2.134



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	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 1	ECI 6	518598	2592.99	1	20.78	21.90	1.294	-	-	-0.09	1.650	2.135
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 1	ECI 6	518598	2592.99	1	20.75	21.90	1.303	-	-	0.18	1.310	1.707
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 1	ECI 6	518598	2592.99	1	20.81	21.90	1.285	-	-	0.11	1.810	2.326
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 1	ECI 6	518598	2592.99	1	20.78	21.90	1.294	-	-	0.07	1.910	2.472
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	0mm	Ant 1	ECI 6	518598	2592.99	1	20.75	21.90	1.303	-	-	0.07	1.420	1.850
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	15mm	Ant 1	ECI 4	518598	2592.99	1	22.73	24.00	1.340	-	-	0.01	0.256	0.343
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	13mm	Ant 1	ECI 4	518598	2592.99	1	22.73	24.00	1.340	-	-	-0.04	0.350	0.469
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 0	ECI 6	518598	2592.99	1	22.82	23.70	1.225	-	-	0.07	1.780	2.180
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 0	ECI 6	518598	2592.99	1	22.78	23.70	1.236	-	-	-0.17	2.050	2.534
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Front	0mm	Ant 0	ECI 6	518598	2592.99	1	21.71	22.70	1.256	-	-	0.1	1.580	1.985
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 0	ECI 6	518598	2592.99	1	22.82	23.70	1.225	-	-	0.08	1.950	2.388
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 0	ECI 6	518598	2592.99	1	22.78	23.70	1.236	-	-	0	2.520	3.115
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 0	ECI 6	518598	2592.99	1	21.71	22.70	1.256	-	-	-0.13	1.750	2.198
	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Bottom Side	0mm	Ant 0	ECI 6	518598	2592.99	1	22.82	23.70	1.225	-	-	-0.1	2.230	2.731
86	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	0mm	Ant 0	ECI 6	518598	2592.99	1	22.78	23.70	1.236	-	-	-0.15	2.570	3.176
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	0mm	Ant 0	ECI 6	518598	2592.99	2	22.78	23.70	1.236	-	-	0.02	2.410	2.979
	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Bottom Side	0mm	Ant 0	ECI 6	518598	2592.99	1	21.71	22.70	1.256	-	-	-0.07	1.990	2.499
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	8mm	Ant 0	ECI 4	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.05	0.391	0.518
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	12mm	Ant 0	ECI 4	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.04	0.436	0.577
	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	10mm	Ant 0	ECI 4	518598	2592.99	1	22.78	24.00	1.324	-	-	-0.08	0.214	0.283
3500MHz																					
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	0mm	Ant 7	ECI 6	42590	3500	1	20.06	21.30	1.330	62.9	1.006	0	1.490	1.994
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	0mm	Ant 7	ECI 6	42590	3500	1	20.04	21.30	1.337	62.9	1.006	-0.05	1.200	1.614
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Side	0mm	Ant 7	ECI 6	42590	3500	1	20.06	21.30	1.330	62.9	1.006	-0.02	1.790	2.396
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Side	0mm	Ant 7	ECI 6	42190	3460	1	19.91	21.30	1.377	62.9	1.006	-0.1	1.670	2.314
87	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Side	0mm	Ant 7	ECI 6	42990	3540	1	20.04	21.30	1.337	62.9	1.006	0.07	1.830	2.461
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Side	0mm	Ant 7	ECI 6	42990	3540	2	20.04	21.30	1.337	62.9	1.006	0.02	1.550	2.084
	LTE Band 42C Part 27Q	20M	QPSK	1	0	-	Left Side	0mm	Ant 7	ECI 6	42990+42792	3540+3520.2	1	19.91	21.30	1.377	62.9	1.006	0.12	1.760	2.438
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Left Side	0mm	Ant 7	ECI 6	42590	3500	1	20.04	21.30	1.337	62.9	1.006	0.14	1.450	1.950
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Left Side	0mm	Ant 7	ECI 6	42590	3500	1	20.01	21.30	1.346	62.9	1.006	-0.04	1.450	1.963
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	15mm	Ant 7	ECI 4	42590	3500	1	22.49	24.00	1.416	62.9	1.006	-0.03	0.429	0.611
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Left Side	11mm	Ant 7	ECI 4	42990	3540	1	22.49	24.00	1.416	62.9	1.006	0.02	0.683	0.973
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	ECI 6	42590	3500	1	17.45	19.00	1.429	62.9	1.006	0.01	0.977	1.404
	LTE Band 42C Part 27Q	20M	QPSK	1	99	-	Top Side	0mm	Ant 4	ECI 6	42590+42788	3500+3519.8	1	17.41	19.00	1.442	62.9	1.006	0.08	0.964	1.399
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Top Side	0mm	Ant 4	ECI 6	42590	3500	1	16.44	18.00	1.432	62.9	1.006	0.09	0.795	1.145
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Back	0mm	Ant 8	ECI 4	42590	3500	1	22.38	24.00	1.452	62.9	1.006	0.14	0.977	1.427
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Back	0mm	Ant 8	ECI 4	42590	3500	1	21.32	23.00	1.472	62.9	1.006	-0.16	0.778	1.152
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	0mm	Ant 8	ECI 4	42590	3500	1	22.38	24.00	1.452	62.9	1.006	0.08	1.490	2.177
	LTE Band 42C Part 27Q	20M	QPSK	1	99	-	Right Side	0mm	Ant 8	ECI 4	42590+42788	3500+3519.8	1	22.32	24.00	1.472	62.9	1.006	0.08	1.410	2.088
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	0mm	Ant 8	ECI 4	42190	3460	1	22.27	24.00	1.489	62.9	1.006	0.04	1.320	1.978
	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	0mm	Ant 8	ECI 4	42990	3540	1	22.26	24.00	1.493	62.9	1.006	0.07	1.370	2.057
	LTE Band 42 Part 27Q	20M	QPSK	50	0	-	Right Side	0mm	Ant 8	ECI 4	42590	3500	1	21.32	23.00	1.472	62.9	1.006	-0.02	1.190	1.763
	LTE Band 42 Part 27Q	20M	QPSK	100	0	-	Right Side	0mm	Ant 8	ECI 4	42590	3500	1	21.28	23.00	1.486	62.9	1.006	0.07	1.170	1.749
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	0mm	Ant 7	ECI 6	656000	3840	1	18.61	19.70	1.285	-	-	-0.12	1.880	2.416
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 7	ECI 6	656000	3840	1	18.59	19.70	1.291	-	-	0.09	1.890	2.440
	FR1 n77 Part 27O	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	0mm	Ant 7	ECI 6	656000	3840	1	18.58	19.70	1.294	-	-	0.19	1.660	2.148
	FR1 n77 Part 27O	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	11mm	Ant 7	ECI 4	656000	3840	1	22.53	24.00	1.403	-	-	0.02	0.909	1.275
	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 4	ECI 6	656000	3840	1	19.75	20.60	1.216	-	-	-0.12	1.110	1.350



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	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 4	ECI 6	656000	3840	1	19.73	20.60	1.222	-	-	0.18	1.100	1.344
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 4	ECI 6	656000	3840	1	19.75	20.60	1.216	-	-	0.14	1.930	2.347
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	ECI 6	656000	3840	1	19.73	20.60	1.222	-	-	0.08	2.030	2.480
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	ECI 6	656000	3840	2	19.73	20.60	1.222	-	-	0.01	1.870	2.285
	FR1 n77 Part 270	100M	QPSK	270	0	DFT-SCS-30KHz	Top Side	0mm	Ant 4	ECI 6	656000	3840	1	19.71	20.60	1.227	-	-	0.03	1.660	2.038
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 4	ECI 4	656000	3840	1	22.72	24.00	1.343	-	-	-0.13	0.924	1.241
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	11mm	Ant 4	ECI 4	656000	3840	1	22.72	24.00	1.343	-	-	-0.18	0.965	1.296
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 8	ECI 4	656000	3840	1	22.92	24.00	1.282	-	-	0.03	0.951	1.219
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 8	ECI 4	656000	3840	1	22.91	24.00	1.285	-	-	-0.06	0.815	1.048
88	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	1	22.92	24.00	1.282	-	-	-0.12	2.370	3.039
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	2	22.92	24.00	1.282	-	-	0.05	2.110	2.706
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	1	22.91	24.00	1.285	-	-	-0.03	2.060	2.648
	FR1 n77 Part 270	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	1	21.87	23.00	1.297	-	-	0.03	1.710	2.218
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 5	ECI 6	656000	3840	1	20.14	21.30	1.306	-	-	-0.12	0.591	0.772
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 5	ECI 6	656000	3840	1	20.12	21.30	1.312	-	-	0.07	0.850	1.115
	FR1 n77 Part 270	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 5	ECI 6	656000	3840	1	20.14	21.30	1.306	-	-	-0.18	1.340	1.750
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 5	ECI 6	656000	3840	1	20.12	21.30	1.312	-	-	0.05	1.890	2.480
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 5	ECI 6	656000	3840	2	20.12	21.30	1.312	-	-	0.09	1.530	2.008
	FR1 n77 Part 270	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	0mm	Ant 5	ECI 6	656000	3840	1	20.08	21.30	1.324	-	-	0.02	1.670	2.212
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Back	10mm	Ant 5	ECI 4	656000	3840	1	22.62	24.00	1.374	-	-	0.19	0.293	0.403
	FR1 n77 Part 270	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	12mm	Ant 5	ECI 4	656000	3840	1	22.62	24.00	1.374	-	-	0.13	0.253	0.348



FCC SAR Test Report

Report No. : FA4D1311

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
5000MHz																	
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4	Standalone	54	5270	1	18.42	20.00	1.440	93.7	1.067	-0.05	0.863	1.326
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4	Standalone	54	5270	1	18.42	20.00	1.440	93.7	1.067	0.01	0.200	0.307
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4	Standalone	54	5270	1	18.42	20.00	1.440	93.7	1.067	0.1	0.034	0.052
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 4	Standalone	54	5270	1	18.42	20.00	1.440	93.7	1.067	-0.17	0.331	0.509
89	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 4	Standalone	54	5270	1	18.42	20.00	1.440	93.7	1.067	-0.01	0.926	1.423
	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 4	Standalone	54	5270	2	18.42	20.00	1.440	93.7	1.067	0.09	0.888	1.365
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4	Simultaneous	54	5270	1	16.58	18.00	1.387	93.7	1.067	0.08	0.614	0.909
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4	Simultaneous	54	5270	1	16.58	18.00	1.387	93.7	1.067	0.01	0.137	0.203
	WLAN5.3GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4	Full power	54	5270	1	18.42	20.00	1.440	93.7	1.067	0.03	0.029	0.045
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4	Simultaneous	54	5270	1	16.58	18.00	1.387	93.7	1.067	-0.08	0.232	0.344
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4	Simultaneous	54	5270	1	16.58	18.00	1.387	93.7	1.067	-0.08	0.629	0.931
	WLAN5.3GHz	802.11n-HT40 MCS0	Front	8mm	Ant 4	Full power	54	5270	1	18.42	20.00	1.440	93.7	1.067	0.1	0.097	0.149
	WLAN5.3GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	Full power	54	5270	1	18.42	20.00	1.440	93.7	1.067	-0.18	0.078	0.120
	WLAN5.3GHz	802.11n-HT40 MCS0	Right Side	12mm	Ant 4	Full power	54	5270	1	18.42	20.00	1.440	93.7	1.067	0.1	0.039	0.060
	WLAN5.3GHz	802.11n-HT40 MCS0	Top Side	11mm	Ant 4	Full power	54	5270	1	18.42	20.00	1.440	93.7	1.067	0.12	0.066	0.101
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4	Standalone	142	5710	1	18.79	20.50	1.482	93.7	1.067	0.04	0.914	1.445
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4	Standalone	142	5710	1	18.79	20.50	1.482	93.7	1.067	-0.01	0.323	0.511
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4	Standalone	142	5710	1	18.79	20.50	1.482	93.7	1.067	-0.08	0.051	0.081
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 4	Standalone	142	5710	1	18.79	20.50	1.482	93.7	1.067	0.05	0.201	0.318
90	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 4	Standalone	142	5710	1	18.79	20.50	1.482	93.7	1.067	-0.04	1.100	1.739
	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 4	Standalone	142	5710	2	18.79	20.50	1.482	93.7	1.067	0.02	0.989	1.564
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4	Simultaneous	106	5530	1	16.57	18.00	1.390	88.19	1.134	0.04	0.541	0.853
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4	Simultaneous	106	5530	1	16.57	18.00	1.390	88.19	1.134	-0.01	0.186	0.293
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4	Full power	142	5710	1	18.79	20.50	1.482	93.7	1.067	-0.08	0.035	0.055
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4	Simultaneous	106	5530	1	16.57	18.00	1.390	88.19	1.134	0.05	0.125	0.197
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4	Simultaneous	106	5530	1	16.57	18.00	1.390	88.19	1.134	-0.04	0.631	0.995
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	8mm	Ant 4	Full power	142	5710	1	18.79	20.50	1.482	93.7	1.067	0.08	0.109	0.172
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	Full power	142	5710	1	18.79	20.50	1.482	93.7	1.067	-0.17	0.121	0.191
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	12mm	Ant 4	Full power	142	5710	1	18.79	20.50	1.482	93.7	1.067	-0.03	0.037	0.058
	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	11mm	Ant 4	Full power	142	5710	1	18.79	20.50	1.482	93.7	1.067	0.14	0.122	0.193

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 3	Standalone	1	2412	19.10	20.50	1.380	99.14	1.009	0.04	0.959	1	1.336
2nd	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Left Cheek	0mm	Ant 3	Standalone	1	2412	19.10	20.50	1.380	99.14	1.009	0.04	0.934	1.027	1.301
1st	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	376000	1880	19.03	19.90	1.222	-	-	-0.12	1.060	1	1.295
2nd	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	5mm	Ant 2	ECI 7	376000	1880	19.03	19.90	1.222	-	-	-0.07	1.030	1.029	1.258
1st	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	21100	2535	18.16	19.00	1.213	-	-	-0.01	1.050	1	1.274
2nd	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 2	ECI 7	21100	2535	18.16	19.00	1.213	-	-	-0.02	0.997	1.053	1.210
1st	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	21.93	22.70	1.194	62.9	1.006	0.06	1.080	1	1.297
2nd	LTE Band 42 Part 27Q	20M	QPSK	1	0	-	Right Side	5mm	Ant 8	ECI 7	42590	3500	21.93	22.70	1.194	62.9	1.006	0.08	1.020	1.059	1.225
1st	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	ECI 3	251	848.8	29.12	30.00	1.225	-	-	0.01	1.060	1	1.298
2nd	GSM850	-	-	-	-	GPRS (3 Tx slots)	Back	5mm	Ant 0	ECI 3	251	848.8	29.12	30.00	1.225	-	-	0.02	0.993	1.067	1.216
1st	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 3	132572	1770	19.99	20.70	1.178	-	-	-0.05	1.080	1	1.272
2nd	LTE Band 66	20M	QPSK	1	0	-	Back	5mm	Ant 2	ECI 3	132572	1770	19.99	20.70	1.178	-	-	0.02	1.020	1.059	1.201
1st	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	ECI 3	656000	3840	22.92	23.80	1.225	-	-	0.07	1.050	1	1.286
2nd	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 8	ECI 3	656000	3840	22.92	23.80	1.225	-	-	-0.17	1.010	1.040	1.237

<10g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	349000	1745	22.59	23.60	1.262	-	-	-0.02	2.510	1	3.167
2nd	FR1 n66	45M	QPSK	120	60	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	349000	1745	22.59	23.60	1.262	-	-	0.19	2.460	1.020	3.104
1st	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	22.47	23.40	1.239	-	-	-0.07	2.580	1	3.196
2nd	FR1 n2	40M	QPSK	108	54	DFT-SCS-15KHz	Bottom Side	0mm	Ant 2	ECI 6	376000	1880	22.47	23.40	1.239	-	-	0.12	2.490	1.036	3.085
1st	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	40185	2549.5	22.42	23.30	1.225	62.9	1.006	-0.04	2.590	1	3.191
2nd	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 2	ECI 6	40185	2549.5	22.42	23.30	1.225	62.9	1.006	-0.18	2.510	1.032	3.092
1st	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	22.92	24.00	1.282	-	-	-0.12	2.370	1	3.039
2nd	FR1 n77 Part 27O	100M	QPSK	1	1	DFT-SCS-30KHz	Right Side	0mm	Ant 8	ECI 4	656000	3840	22.92	24.00	1.282	-	-	0.12	2.320	1.022	2.975

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.

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 + Bluetooth	Yes	Yes	Yes	Yes
4.	WLAN5GHz+ Bluetooth	Yes	Yes	Yes	Yes
5.	WWAN + WLAN5GHz+ Bluetooth	Yes	Yes	Yes	Yes
6.	WWAN + WLAN2.4GHz + NFC				Yes
7.	WWAN + WLAN5GHz + NFC				Yes
8.	WWAN + Bluetooth + NFC				Yes
9.	WLAN5GHz+ Bluetooth + NFC				Yes
10.	WWAN + WLAN5GHz+ Bluetooth + NFC				Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- For EN-DC mode, MediaTek TA-SAR algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. TA-SAR 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.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- According to the EUT characteristic, WLAN 5GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz can't transmit simultaneously.
- According to the EUT characteristic, WLAN 2.4GHz and Bluetooth cannot transmit simultaneously.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- For Headset SAR and non-Headset SAR always chose higher SAR to do co-located analysis.
- For distance SAR and non-distance SAR at extremity exposure conditions always chose higher SAR to do co-located analysis.
- 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.
- 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.
- The maximum SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, 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.
 - If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
 - The SPLSR calculated results please refer to section 17.5.

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.

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 & ANT5 & ANT7& ANT9

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.

- i) 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.
- ii) 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.
- iii) 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.
- iv) In section 17.5 SPLSR analysis only evaluation Sim-Tx SAR configuration are rounded to two decimal higher or equal to 1.6W/kg.
- v) 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 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	0.190	0.225	0.399	0.399
Right Tilted	0.110	0.135	0.169	0.169
Left Cheek	0.267	0.223	0.273	0.273
Left Tilted	0.157	0.136	0.291	0.291

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant5	Ant7	Ant9	MAX
Right Cheek	0.886	0.613	0.226	0.890	0.891	0.891
Right Tilted	0.893	0.825	0.200	0.385	0.151	0.893
Left Cheek	0.603	0.730	0.889	0.227	0.648	0.889
Left Tilted	0.709	0.893	0.527	0.159	0.112	0.893

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

NO	1	2	3	2+3	WLAN+BT worse case
Test Position	WLAN2.4GHz Ant3	WLAN5GHz Ant4	BT Ant3	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
Right Cheek	0.199	0.199	0.131	0.330	0.330
Right Tilted	0.206	0.214	0.158	0.372	0.372
Left Cheek	0.386	0.397	0.284	0.681	0.681
Left Tilted	0.278	0.340	0.256	0.596	0.596

<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	0.891	0.399	0.330	1.62
Right Tilted	0.893	0.169	0.372	1.43
Left Cheek	0.889	0.273	0.681	1.84
Left Tilted	0.893	0.291	0.596	1.78

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	0.190	0.886	0.330	1.41	-
Ant0-Ant4	0.190	0.613	0.330	1.13	-
Ant0-Ant5	0.190	0.226	0.330	0.75	-
Ant0-Ant7	0.190	0.890	0.330	1.41	-
Ant0-Ant9	0.190	0.891	0.330	1.41	-
Ant2-Ant1	0.225	0.886	0.330	1.44	-
Ant2-Ant4	0.225	0.613	0.330	1.17	-
Ant2-Ant5	0.225	0.226	0.330	0.78	-
Ant2-Ant7	0.225	0.890	0.330	1.45	-
Ant2-Ant9	0.225	0.891	0.330	1.45	-
Ant8-Ant1	0.399	0.886	0.330	1.62	Case 1
Ant8-Ant4	0.399	0.613	0.330	1.34	-
Ant8-Ant5	0.399	0.226	0.330	0.96	-
Ant8-Ant7	0.399	0.890	0.330	1.62	Case 2
Ant8-Ant9	0.399	0.891	0.330	1.62	Case 3

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	0.267	0.603	0.681	1.55	-
Ant0-Ant4	0.267	0.730	0.681	1.68	Case 4
Ant0-Ant5	0.267	0.889	0.681	1.84	Case 5
Ant0-Ant7	0.267	0.227	0.681	1.18	-
Ant0-Ant9	0.267	0.746	0.681	1.69	Case 6
Ant2-Ant1	0.223	0.603	0.681	1.51	-
Ant2-Ant4	0.223	0.730	0.681	1.63	Case 7
Ant2-Ant5	0.223	0.889	0.681	1.79	Case 8
Ant2-Ant7	0.223	0.227	0.681	1.13	-
Ant2-Ant9	0.223	0.746	0.681	1.65	Case 9
Ant8-Ant1	0.273	0.603	0.681	1.56	-
Ant8-Ant4	0.273	0.730	0.681	1.68	Case 10
Ant8-Ant5	0.273	0.889	0.681	1.84	Case 11
Ant8-Ant7	0.273	0.227	0.681	1.18	-
Ant8-Ant9	0.273	0.746	0.681	1.70	Case 12



Left Tilted					
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	0.157	0.709	0.596	1.46	-
Ant0-Ant4	0.157	0.893	0.596	1.65	Case 13
Ant0-Ant5	0.157	0.527	0.596	1.28	-
Ant0-Ant7	0.157	0.159	0.596	0.91	-
Ant0-Ant9	0.157	0.112	0.596	0.87	-
Ant2-Ant1	0.136	0.709	0.596	1.44	-
Ant2-Ant4	0.136	0.893	0.596	1.63	Case 15
Ant2-Ant5	0.136	0.527	0.596	1.26	-
Ant2-Ant7	0.136	0.159	0.596	0.89	-
Ant2-Ant9	0.136	0.112	0.596	0.84	-
Ant8-Ant1	0.291	0.709	0.596	1.60	Case 17
Ant8-Ant4	0.291	0.893	0.596	1.78	Case 16
Ant8-Ant5	0.291	0.527	0.596	1.41	-
Ant8-Ant7	0.291	0.159	0.596	1.05	-
Ant8-Ant9	0.291	0.112	0.596	1.00	-

<Simultaneous Transmission analysis of WLAN/BT only without WWAN>:

NO	1	2	1+2
Test Position	WLAN5GHz Ant4	BT Ant3	
	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)
Right Cheek	0.534	0.212	0.75
Right Tilted	0.615	0.278	0.89
Left Cheek	1.117	0.454	1.57
Left Tilted	0.866	0.417	1.28

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	0.945	0.939	0.592	0.945
Back	1.298	1.047	1.045	1.298
Left Side	1.156	0.276	0.036	1.156
Right Side	0.140	0.341	1.297	1.297
Top Side				0.000
Bottom Side	1.293	1.295	0.390	1.295

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant5	Ant7	Ant9	MAX
Front	0.285	0.166	0.231	0.301	0.213	0.301
Back	0.626	0.402	0.618	0.558	0.376	0.626
Left Side	0.270	0.049	0.028	0.621	0.627	0.627
Right Side	0.095	0.025	0.627	0.017		0.627
Top Side	0.583	0.624	0.099	0.087	0.012	0.624
Bottom Side						0.000

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

NO	1	2	3	2+3	WLAN+BT worse case
Test Position	WLAN2.4GHz Ant3 1g SAR (W/kg)	WLAN5GHz Ant4 1g SAR (W/kg)	BT Ant3 1g SAR (W/kg)		
Front	0.460	0.434	0.188	0.622	0.622
Back	0.624	0.614	0.304	0.918	0.918
Left Side	0.065	0.066		0.066	0.066
Right Side	0.262	0.268	0.101	0.369	0.369
Top Side	0.610	0.580	0.297	0.877	0.877
Bottom Side				0.000	0.000

<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	0.301	0.945	0.622	1.87
Back	0.626	1.298	0.918	2.84
Left Side	0.627	1.156	0.066	1.85
Right Side	0.627	1.297	0.369	2.29
Top Side	0.624		0.877	1.50
Bottom Side		1.295		1.30

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	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	0.945	0.285	0.622	1.85	Case 1
Ant0-Ant4	0.945	0.166	0.622	1.73	Case 2
Ant0-Ant5	0.945	0.231	0.622	1.80	Case 3
Ant0-Ant7	0.945	0.301	0.622	1.87	Case 4
Ant0-Ant9	0.945	0.213	0.622	1.78	Case 5
Ant2-Ant1	0.939	0.285	0.622	1.85	Case 6
Ant2-Ant4	0.939	0.166	0.622	1.73	Case 7
Ant2-Ant5	0.939	0.231	0.622	1.79	Case 8
Ant2-Ant7	0.939	0.301	0.622	1.86	Case 9
Ant2-Ant9	0.939	0.213	0.622	1.77	Case 10
Ant8-Ant1	0.592	0.285	0.622	1.50	-
Ant8-Ant4	0.592	0.166	0.622	1.38	-
Ant8-Ant5	0.592	0.231	0.622	1.45	-
Ant8-Ant7	0.592	0.301	0.622	1.52	-
Ant8-Ant9	0.592	0.213	0.622	1.43	-

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	1.298	0.626	0.918	2.84	Case 11
Ant0-Ant4	1.298	0.402	0.918	2.62	Case 12
Ant0-Ant5	1.298	0.618	0.918	2.83	Case 13
Ant0-Ant7	1.298	0.558	0.918	2.77	Case 14
Ant0-Ant9	1.298	0.376	0.918	2.59	Case 15
Ant2-Ant1	1.047	0.626	0.918	2.59	Case 16
Ant2-Ant4	1.047	0.402	0.918	2.37	Case 17
Ant2-Ant5	1.047	0.618	0.918	2.58	Case 18
Ant2-Ant7	1.047	0.558	0.918	2.52	Case 19
Ant2-Ant9	1.047	0.376	0.918	2.34	Case 20
Ant8-Ant1	1.045	0.626	0.918	2.59	Case 21
Ant8-Ant4	1.045	0.402	0.918	2.37	Case 22
Ant8-Ant5	1.045	0.618	0.918	2.58	Case 23
Ant8-Ant7	1.045	0.558	0.918	2.52	Case 24
Ant8-Ant9	1.045	0.376	0.918	2.34	Case 25



Left 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	1.156	0.270	0.066	1.49	-
Ant0-Ant4	1.156	0.049	0.066	1.27	-
Ant0-Ant5	1.156	0.028	0.066	1.25	-
Ant0-Ant7	1.156	0.621	0.066	1.84	Case 26
Ant0-Ant9	1.156	0.627	0.066	1.85	Case 27
Ant2-Ant1	0.276	0.270	0.066	0.61	-
Ant2-Ant4	0.276	0.049	0.066	0.39	-
Ant2-Ant5	0.276	0.028	0.066	0.37	-
Ant2-Ant7	0.276	0.621	0.066	0.96	-
Ant2-Ant9	0.276	0.627	0.066	0.97	-
Ant8-Ant1	0.036	0.270	0.066	0.37	-
Ant8-Ant4	0.036	0.049	0.066	0.15	-
Ant8-Ant5	0.036	0.028	0.066	0.13	-
Ant8-Ant7	0.036	0.621	0.066	0.72	-
Ant8-Ant9	0.036	0.627	0.066	0.73	-

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	0.140	0.095	0.369	0.60	-
Ant0-Ant4	0.140	0.025	0.369	0.53	-
Ant0-Ant5	0.140	0.627	0.369	1.14	-
Ant0-Ant7	0.140	0.017	0.369	0.53	-
Ant0-Ant9	0.140		0.369	0.51	-
Ant2-Ant1	0.341	0.095	0.369	0.81	-
Ant2-Ant4	0.341	0.025	0.369	0.74	-
Ant2-Ant5	0.341	0.627	0.369	1.34	-
Ant2-Ant7	0.341	0.017	0.369	0.73	-
Ant2-Ant9	0.341		0.369	0.71	-
Ant8-Ant1	1.297	0.095	0.369	1.76	Case 28
Ant8-Ant4	1.297	0.025	0.369	1.69	Case 29
Ant8-Ant5	1.297	0.627	0.369	2.29	Case 30
Ant8-Ant7	1.297	0.017	0.369	1.68	Case 31
Ant8-Ant9	1.297		0.369	1.67	Case 32

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	0.986	1.195	0.690	1.195
Back	1.298	1.289	1.286	1.298

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant5	Ant7	Ant9	MAX
Front	0.401	0.366	0.332	0.483	0.516	0.483
Back	0.894	0.896	0.879	0.895	0.898	0.896

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

NO	1	2	3	2+3	WLAN+BT worse case
Test Position	WLAN2.4GHz Ant3	WLAN5GHz Ant4	BT Ant3		
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.280	0.391	0.188	0.579	0.579
Back	0.391	0.384	0.304	0.688	0.688

<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	0.483	1.195	0.579	2.26
Back	0.896	1.298	0.688	2.88

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	0.986	0.401	0.579	1.97	Case 1
Ant0-Ant4	0.986	0.366	0.579	1.93	Case 2
Ant0-Ant5	0.986	0.332	0.579	1.90	Case 3
Ant0-Ant7	0.986	0.483	0.579	2.05	Case 4
Ant0-Ant9	0.986	0.516	0.579	2.08	Case 5
Ant2-Ant1	1.195	0.401	0.579	2.18	Case 6
Ant2-Ant4	1.195	0.366	0.579	2.14	Case 7
Ant2-Ant5	1.195	0.332	0.579	2.11	Case 8
Ant2-Ant7	1.195	0.483	0.579	2.26	Case 9
Ant2-Ant9	1.195	0.516	0.579	2.29	Case 10
Ant8-Ant1	0.690	0.401	0.579	1.67	Case 11
Ant8-Ant4	0.690	0.366	0.579	1.64	Case 12
Ant8-Ant5	0.690	0.332	0.579	1.60	Case 13
Ant8-Ant7	0.690	0.483	0.579	1.75	Case 14
Ant8-Ant9	0.690	0.516	0.579	1.79	Case 15



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	1.298	0.894	0.688	2.88	Case 16
Ant0-Ant4	1.298	0.896	0.688	2.88	Case 17
Ant0-Ant5	1.298	0.879	0.688	2.87	Case 18
Ant0-Ant7	1.298	0.895	0.688	2.88	Case 19
Ant0-Ant9	1.298	0.898	0.688	2.88	Case 20
Ant2-Ant1	1.289	0.894	0.688	2.87	Case 21
Ant2-Ant4	1.289	0.896	0.688	2.87	Case 22
Ant2-Ant5	1.289	0.879	0.688	2.86	Case 23
Ant2-Ant7	1.289	0.895	0.688	2.87	Case 24
Ant2-Ant9	1.289	0.898	0.688	2.88	Case 25
Ant8-Ant1	1.286	0.894	0.688	2.87	Case 26
Ant8-Ant4	1.286	0.896	0.688	2.87	Case 27
Ant8-Ant5	1.286	0.879	0.688	2.85	Case 28
Ant8-Ant7	1.286	0.895	0.688	2.87	Case 29
Ant8-Ant9	1.286	0.898	0.688	2.87	Case 30

<Simultaneous Transmission analysis of WLAN/BT only without WWAN>:

NO	1	2	1+2
Test Position	WLAN5GHz Ant4	BT Ant3	
	1g SAR (W/kg)	1g SAR (W/kg)	Summed 1g SAR (W/kg)
Front	0.877	0.188	1.07
Back	1.032	0.304	1.34

<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	0.271	0.552	0.172	0.552
Back	0.294	0.660	0.249	0.660

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant5	Ant7	Ant9	MAX
Front	0.358	0.299	0.306	0.244	0.292	0.358
Back	0.596	0.603	0.541	0.359	0.406	0.603

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

NO	1	2	WLAN/BT worse case
Test Position	WLAN2.4GHz Ant3	WLAN5GHz Ant4	
	1g SAR (W/kg)	1g SAR (W/kg)	
Front	0.125	0.247	0.247
Back	0.103	0.305	0.305

<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	0.358	0.552	0.247	1.16
Back	0.603	0.660	0.305	1.57

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	2.534	3.165		3.165
Back	3.139	3.170	1.427	3.170
Left Side	1.992			1.992
Right Side			3.039	3.039
Top Side				0.000
Bottom Side	3.176	3.196		3.196

<AG1 maximum reported SAR>:

Test Position	Ant1	Ant4	Ant5	Ant7	Ant9	MAX
Front						0.000
Back	2.396	1.350	1.115	1.994	2.359	2.396
Left Side				2.461	2.497	2.497
Right Side			2.480			2.480
Top Side	2.482	2.480				2.482
Bottom Side						0.000

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

NO	2	WLAN/BT worse case
Test Position	WLAN5GHz Ant4	
	10g SAR (W/kg)	Summed 10g SAR (W/kg)
Front	0.909	0.909
Back	0.293	0.293
Left Side	0.055	0.055
Right Side	0.344	0.344
Top Side	0.995	0.995
Bottom Side		0.000

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

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	0.000	3.165	0.909	0.001	4.08
Back	2.396	3.170	0.293	0.033	5.89
Left Side	2.497	1.992	0.055	0.001	4.55
Right Side	2.480	3.039	0.344	0.001	5.86
Top Side	2.482	0.000	0.995	0.001	3.48
Bottom Side	0.000	3.196	0.000	0.001	3.20

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 worse case	NFC	AG1+AG0+WLAN /BT worse 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	2.534		0.909	0.001	3.44	-
Ant0-Ant4	2.534		0.909	0.001	3.44	-
Ant0-Ant5	2.534		0.909	0.001	3.44	-
Ant0-Ant7	2.534		0.909	0.001	3.44	-
Ant0-Ant9	2.534		0.909	0.001	3.44	-
Ant2-Ant1	3.165		0.909	0.001	4.08	Case 1
Ant2-Ant4	3.165		0.909	0.001	4.08	Case 1
Ant2-Ant5	3.165		0.909	0.001	4.08	Case 1
Ant2-Ant7	3.165		0.909	0.001	4.08	Case 1
Ant2-Ant9	3.165		0.909	0.001	4.08	Case 1
Ant8-Ant1			0.909	0.001	0.91	-
Ant8-Ant4			0.909	0.001	0.91	-
Ant8-Ant5			0.909	0.001	0.91	-
Ant8-Ant7			0.909	0.001	0.91	-
Ant8-Ant9			0.909	0.001	0.91	-

Back						
Ant combination	AG0	AG1	WLAN/BT worse case	NFC	AG1+AG0+WLAN /BT worse 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	3.139	2.396	0.293	0.033	5.86	Case 2
Ant0-Ant4	3.139	1.350	0.293	0.033	4.82	Case 3
Ant0-Ant5	3.139	1.115	0.293	0.033	4.58	Case 4
Ant0-Ant7	3.139	1.994	0.293	0.033	5.46	Case 5
Ant0-Ant9	3.139	2.359	0.293	0.033	5.82	Case 6
Ant2-Ant1	3.170	2.396	0.293	0.033	5.89	Case 7
Ant2-Ant4	3.170	1.350	0.293	0.033	4.85	Case 8
Ant2-Ant5	3.170	1.115	0.293	0.033	4.61	Case 9
Ant2-Ant7	3.170	1.994	0.293	0.033	5.49	Case 10
Ant2-Ant9	3.170	2.359	0.293	0.033	5.86	Case 11
Ant8-Ant1	1.427	2.396	0.293	0.033	4.15	Case 12
Ant8-Ant4	1.427	1.350	0.293	0.033	3.10	-
Ant8-Ant5	1.427	1.115	0.293	0.033	2.87	-
Ant8-Ant7	1.427	1.994	0.293	0.033	3.75	-
Ant8-Ant9	1.427	2.359	0.293	0.033	4.11	Case 13



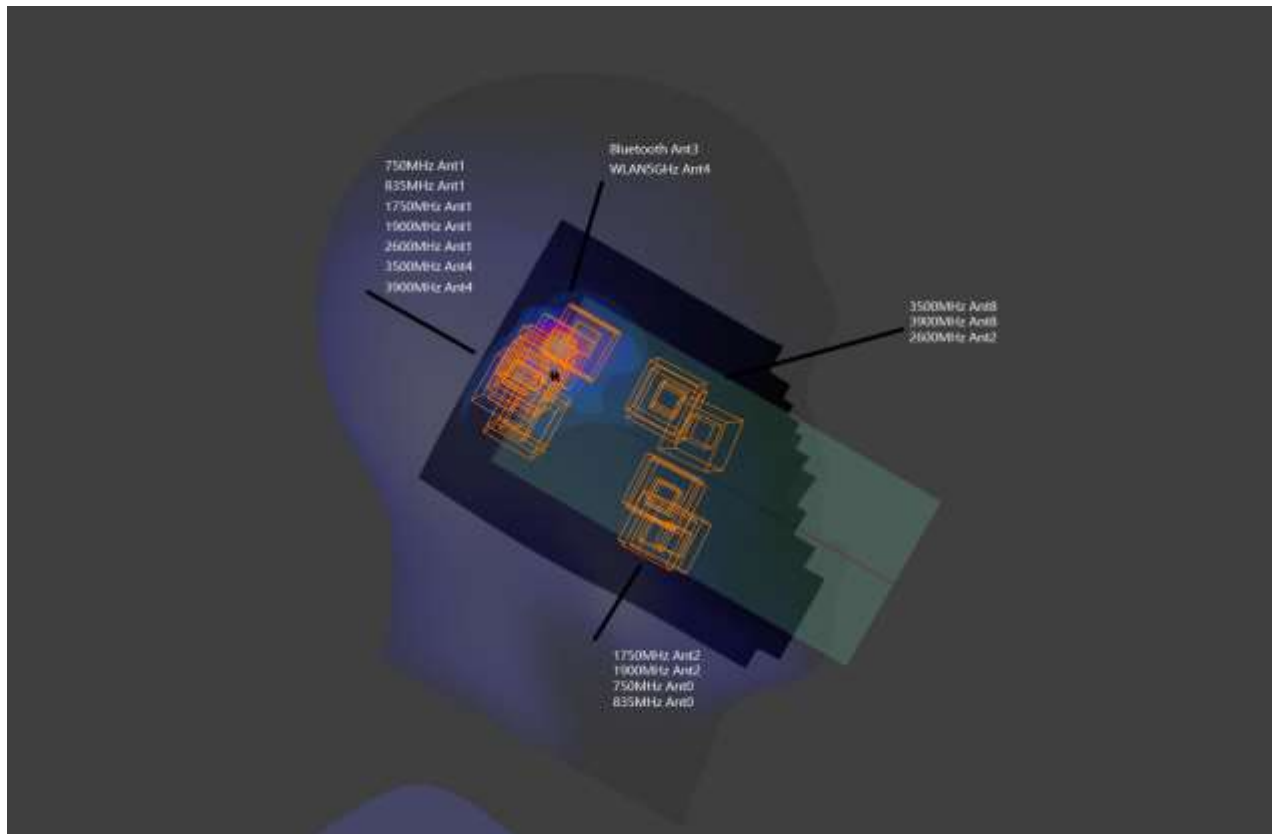
Left Side						
Ant combination	AG0	AG1	WLAN/BT worse case	NFC	AG1+AG0+WLAN /BT worse case+NFC	Note
	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
Ant0-Ant1	1.992		0.055	0.001	2.05	-
Ant0-Ant4	1.992		0.055	0.001	2.05	-
Ant0-Ant5	1.992		0.055	0.001	2.05	-
Ant0-Ant7	1.992	2.461	0.055	0.001	4.51	Case 14
Ant0-Ant9	1.992	2.497	0.055	0.001	4.55	Case 15
Ant2-Ant1			0.055	0.001	0.06	-
Ant2-Ant4			0.055	0.001	0.06	-
Ant2-Ant5			0.055	0.001	0.06	-
Ant2-Ant7		2.461	0.055	0.001	2.52	-
Ant2-Ant9		2.497	0.055	0.001	2.55	-
Ant8-Ant1			0.055	0.001	0.06	-
Ant8-Ant4			0.055	0.001	0.06	-
Ant8-Ant5			0.055	0.001	0.06	-
Ant8-Ant7		2.461	0.055	0.001	2.52	-
Ant8-Ant9		2.497	0.055	0.001	2.55	-

Right Side						
Ant combination	AG0	AG1	WLAN/BT worse case	NFC	AG1+AG0+WLAN /BT worse 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			0.344	0.001	0.35	-
Ant0-Ant4			0.344	0.001	0.35	-
Ant0-Ant5		2.480	0.344	0.001	2.83	-
Ant0-Ant7			0.344	0.001	0.35	-
Ant0-Ant9			0.344	0.001	0.35	-
Ant2-Ant1			0.344	0.001	0.35	-
Ant2-Ant4			0.344	0.001	0.35	-
Ant2-Ant5		2.480	0.344	0.001	2.83	-
Ant2-Ant7			0.344	0.001	0.35	-
Ant2-Ant9			0.344	0.001	0.35	-
Ant8-Ant1	3.039		0.344	0.001	3.38	-
Ant8-Ant4	3.039		0.344	0.001	3.38	-
Ant8-Ant5	3.039	2.480	0.344	0.001	5.86	Case 16
Ant8-Ant7	3.039		0.344	0.001	3.38	-
Ant8-Ant9	3.039		0.344	0.001	3.38	-

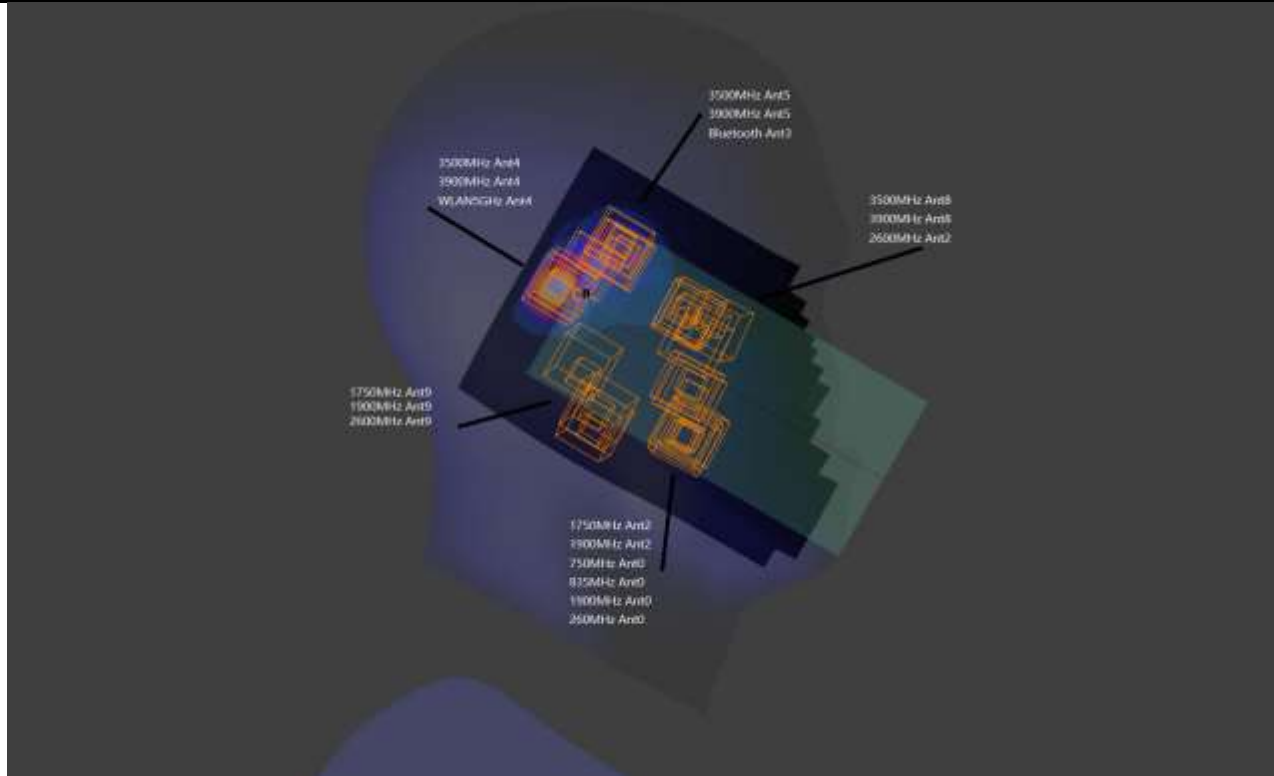
17.6 SPLSR Evaluation and Analysis

General Note:

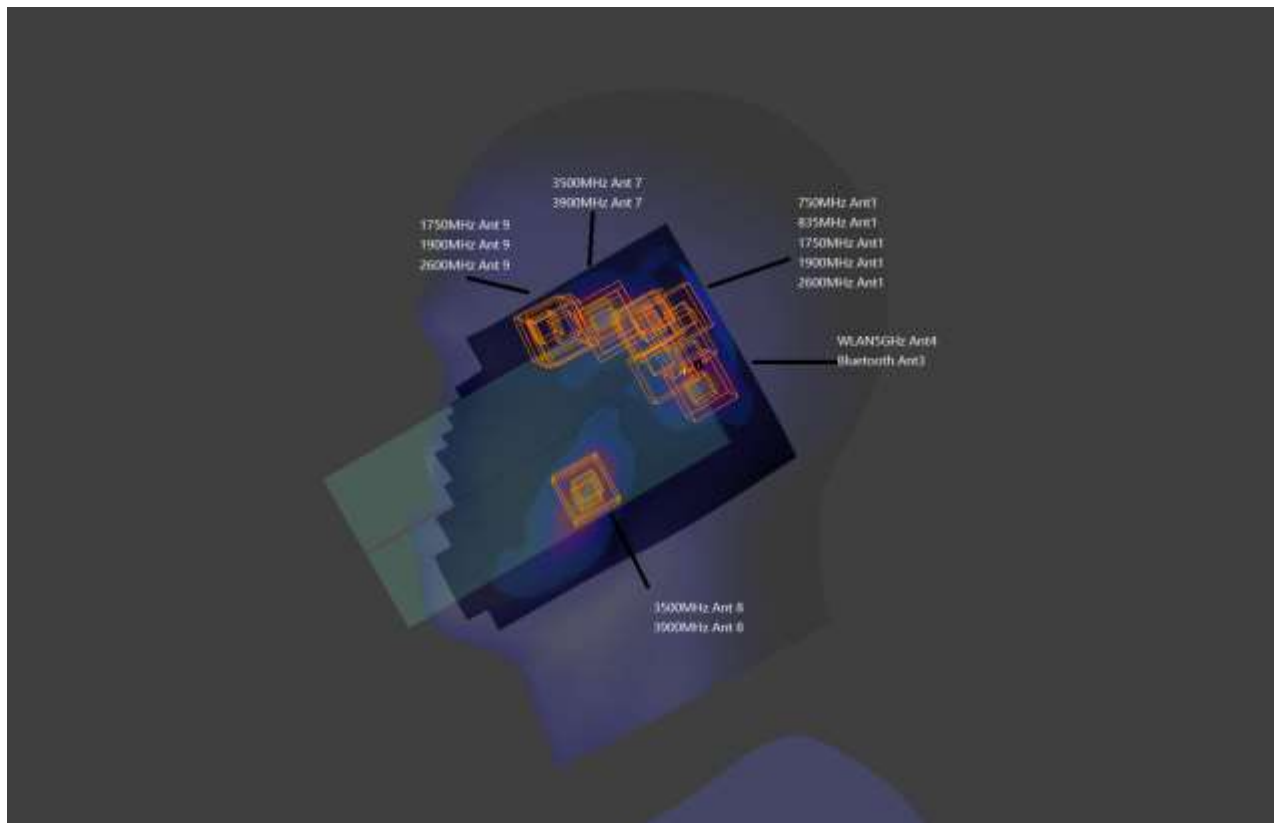
1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$, where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates in the area scans or extrapolated peak SAR locations in 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.



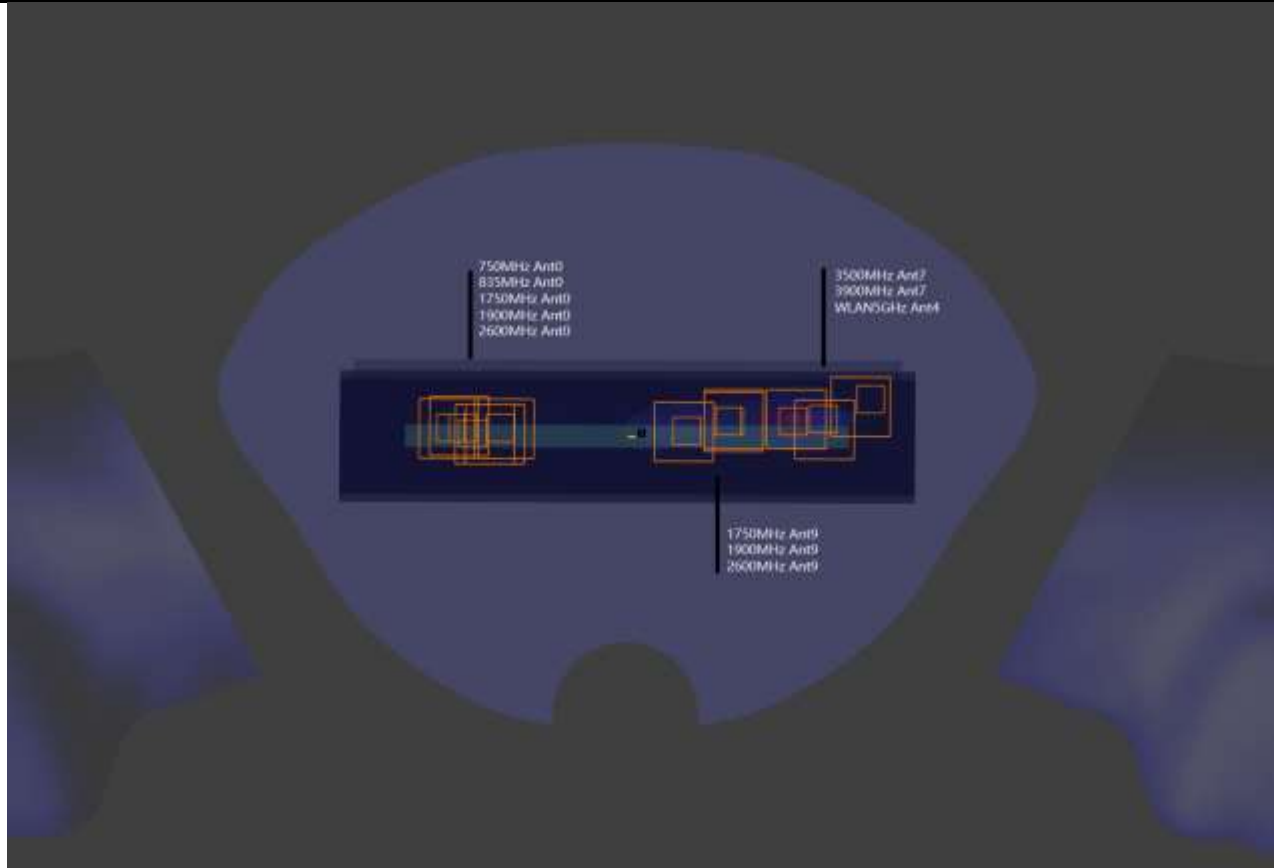
Head WWAN+WLAN+BT Left Tilted 0mm



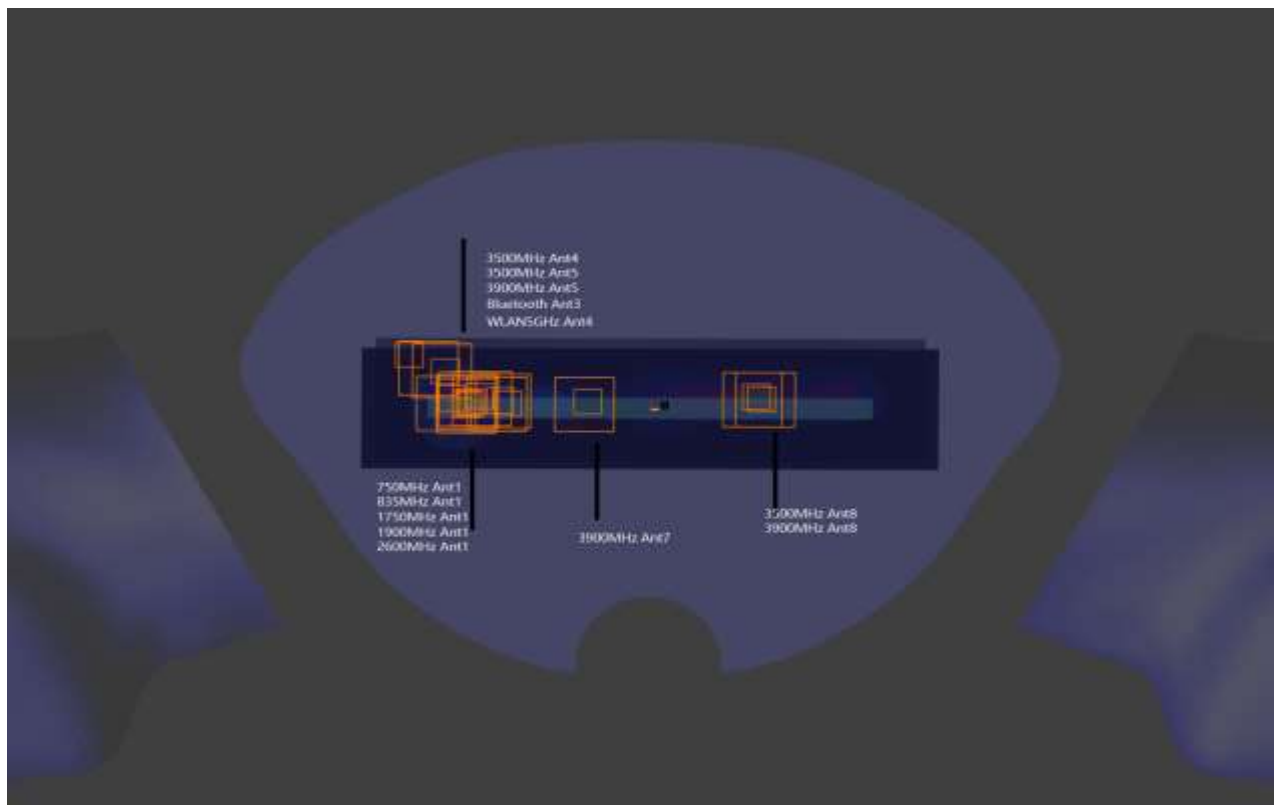
Head WWAN+WLAN+BT Left Check 0mm



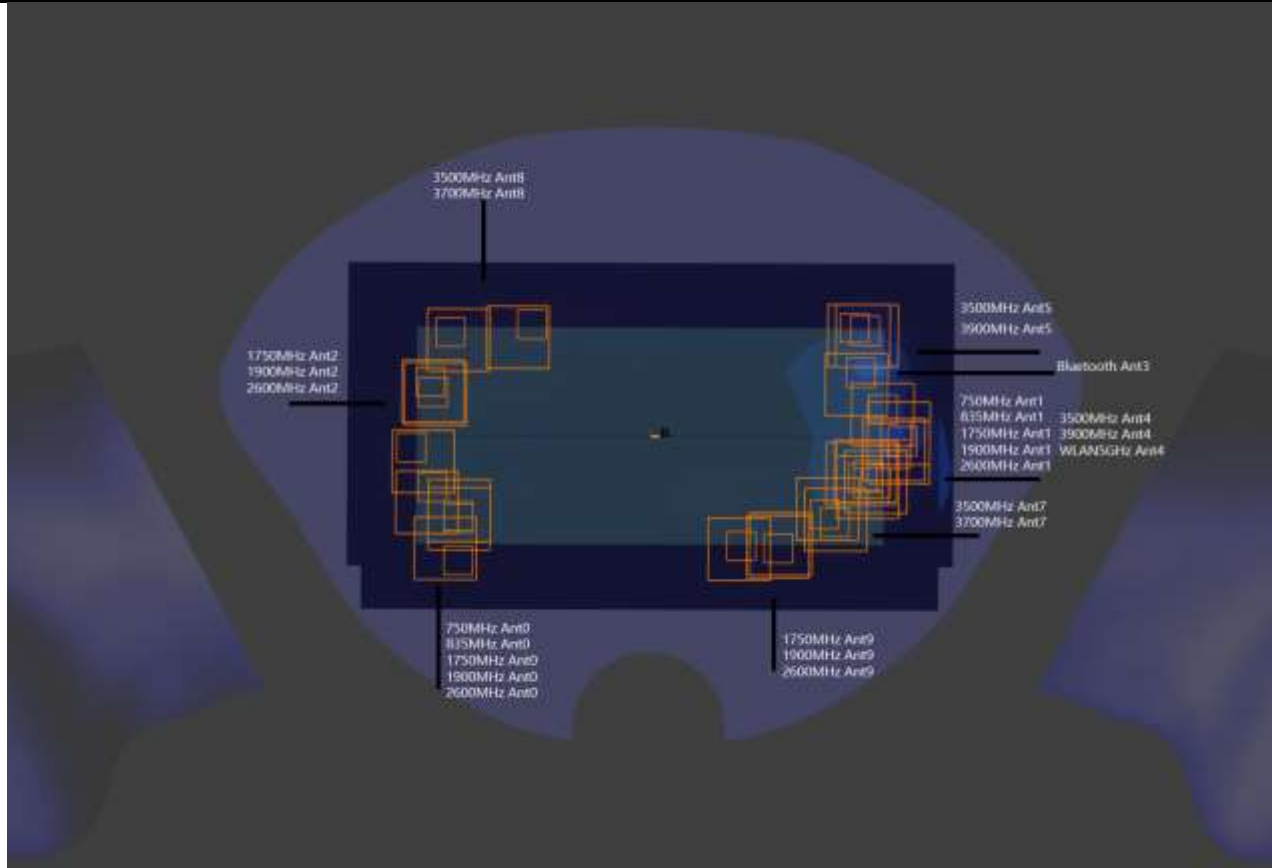
Head WWAN+WLAN+BT Right Check 0mm



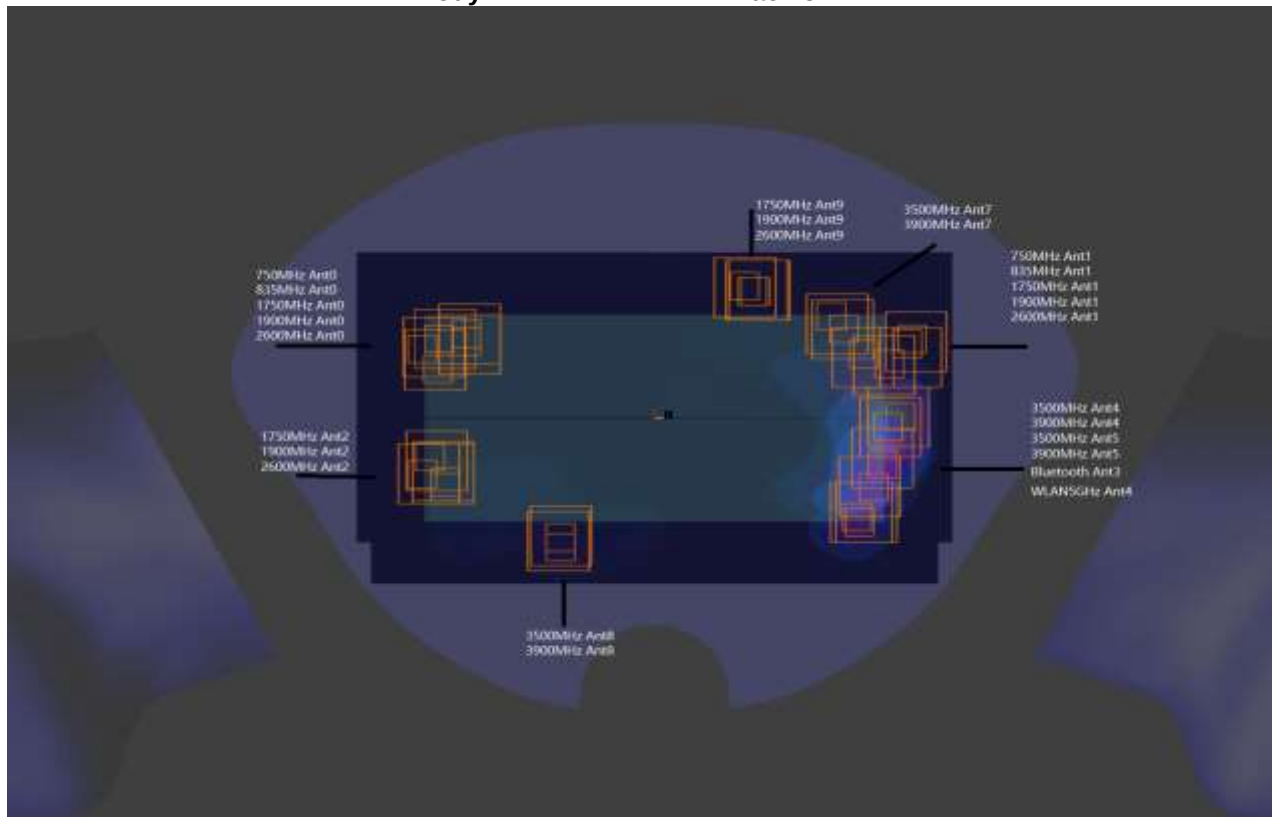
Hotspot WWAN+WLAN Left Side 5mm



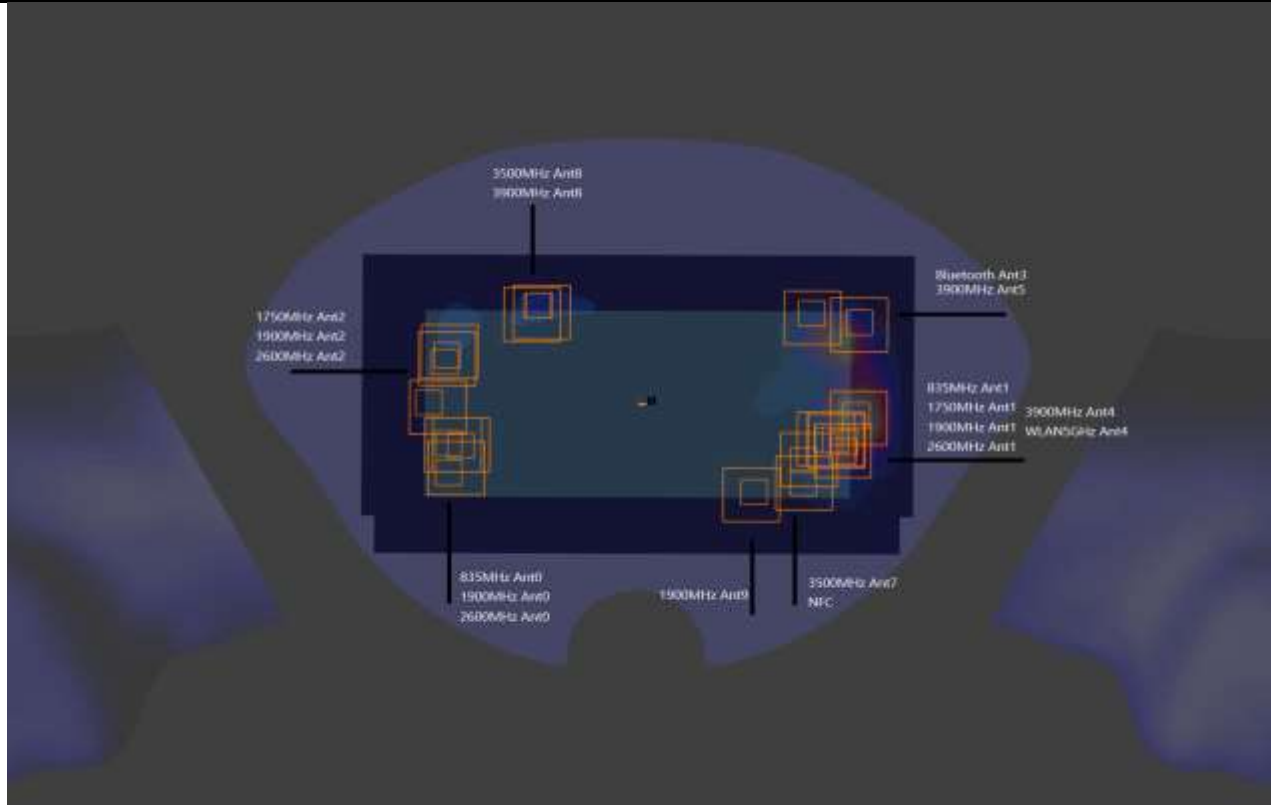
Hotspot WWAN+WLAN+BT Right Side 5mm



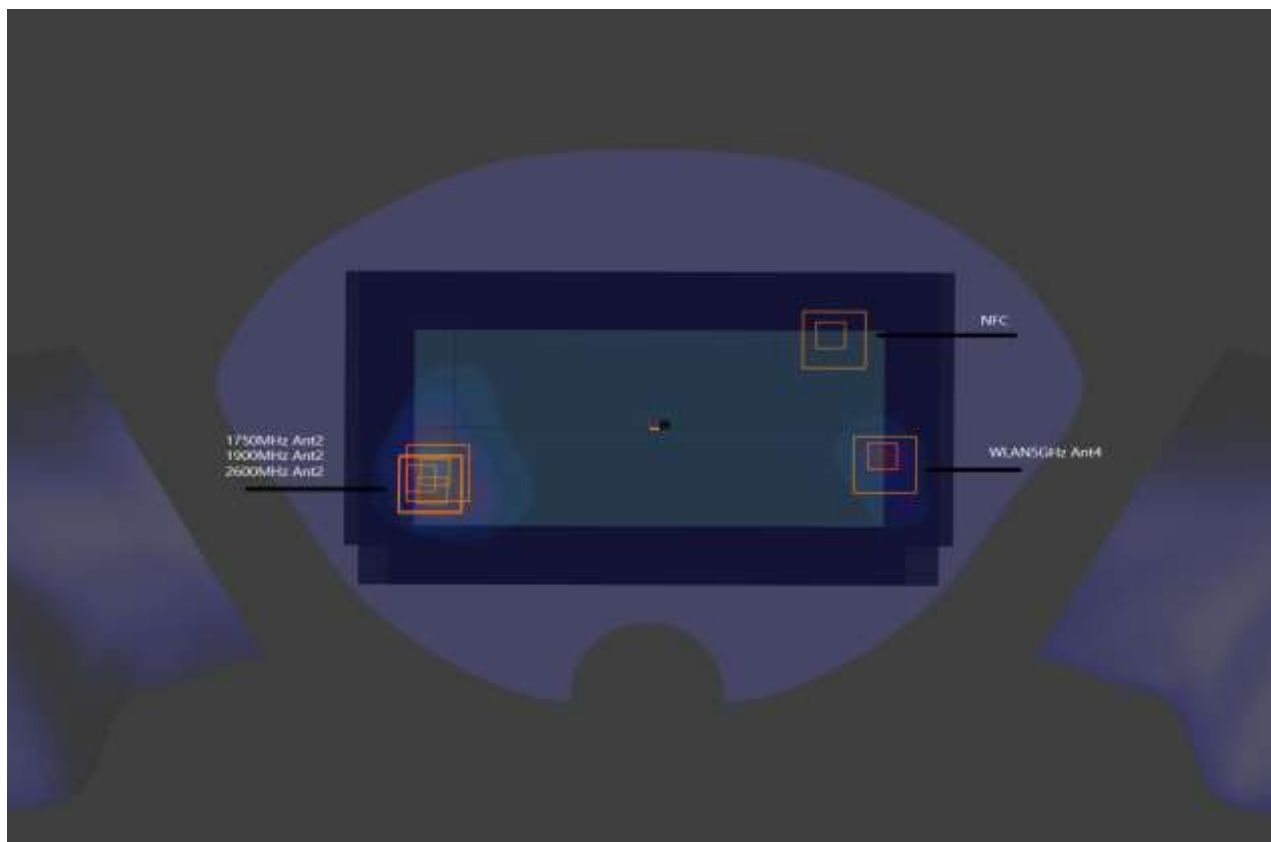
Body WWAN+WLAN+BT Back 5mm



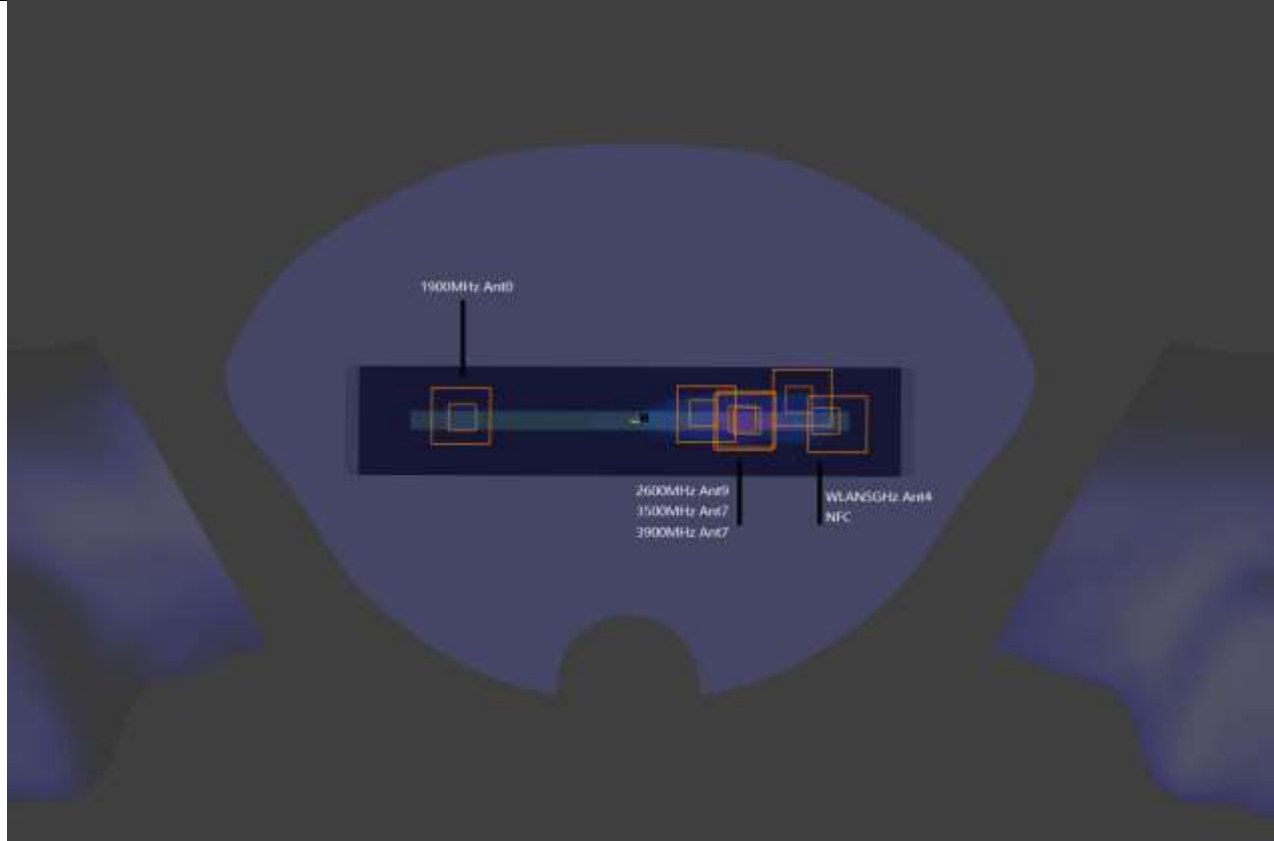
Body WWAN+WLAN+BT Front 5mm



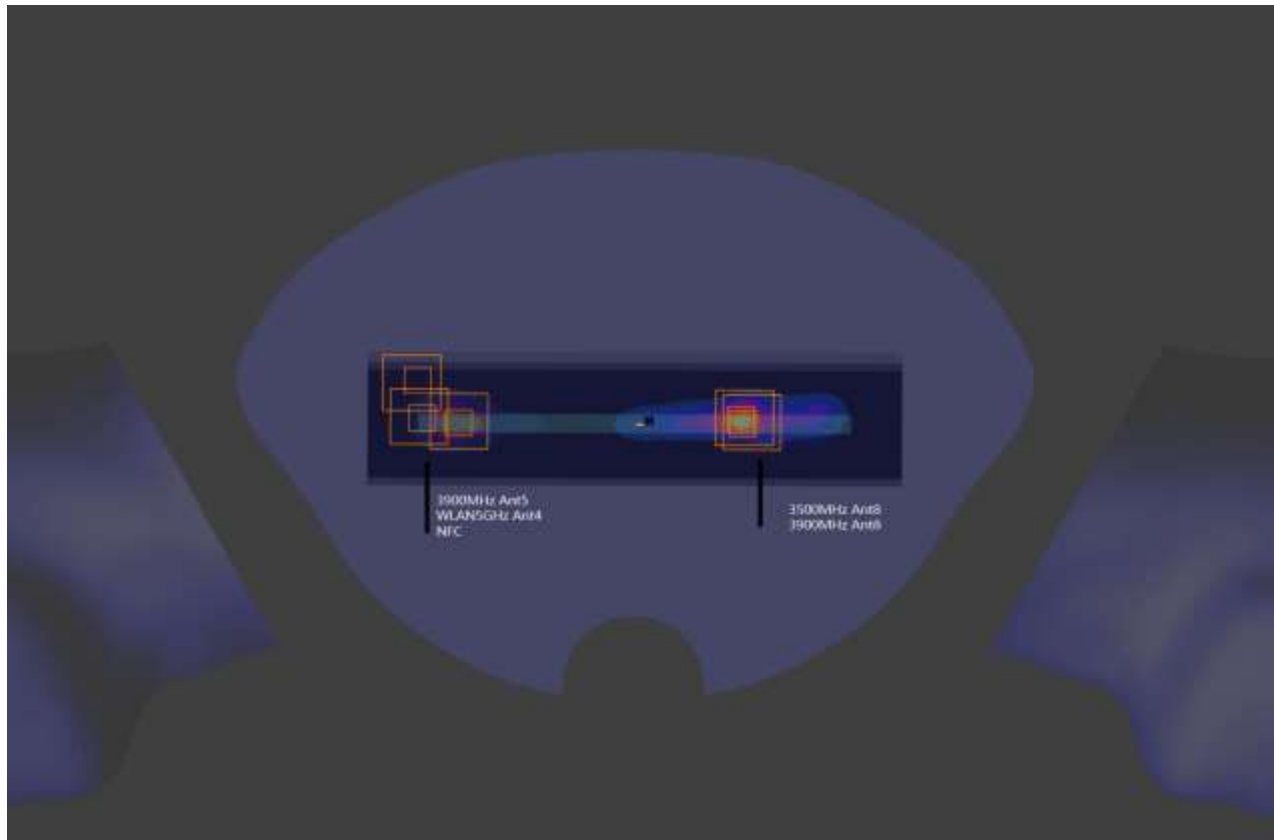
Extremity WWAN+WLAN+NFC Back 0mm



Extremity WWAN+WLAN+NFC Front 0mm



Extremity WWAN+WLAN+NFC Left Side 0mm



Extremity WWAN+WLAN+NFC Right Side 0mm



<Head>

No.1 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Right Cheek	0.399	1.216	0mm	48.5	-256.9	-172.3	71.1	1.62	0.03	Not required
Ant 1		0.886		0mm	3.7	-312.1	-169.7				
WLAN 5G		0.199		0mm							
BT		0.131		0mm							
Ant 8	Right Cheek	0.399	1.216	0mm	48.7	-253.4	-171.9	67.4	1.62	0.03	Not required
Ant 1		0.886		0mm							
WLAN 5G		0.199		0mm	0.4	-300.2	-168.3				
BT		0.131		0mm							
Ant 8	Right Cheek	0.399	1.216	0mm	48.5	-256.9	-172.3	64.0	1.62	0.03	Not required
Ant 1		0.886		0mm							
WLAN 5G		0.199		0mm							
BT		0.131		0mm	18.1	-313.2	-171.5				
No.2 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Right Cheek	0.399	1.220	0mm	48.5	-256.9	-172.3	73.1	1.62	0.03	Not required
Ant 7		0.890		0mm	41.1	-329.6	-171.6				
WLAN 5G		0.199		0mm							
BT		0.131		0mm							
Ant 8	Right Cheek	0.399	1.220	0mm	48.7	-253.4	-171.9	67.4	1.62	0.03	Not required
Ant 7		0.890		0mm							
WLAN 5G		0.199		0mm	0.4	-300.2	-168.3				
BT		0.131		0mm							
Ant 8	Right Cheek	0.399	1.220	0mm	48.5	-256.9	-172.3	64.0	1.62	0.03	Not required
Ant 7		0.890		0mm							
WLAN 5G		0.199		0mm							
BT		0.131		0mm	18.1	-313.2	-171.5				
No.3 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Right Cheek	0.399	1.221	0mm	48.5	-256.9	-172.3	67.4	1.62	0.03	Not required
Ant 9		0.891		0mm	67.1	-321.6	-169.2				
WLAN 5G		0.199		0mm							
BT		0.131		0mm							
Ant 8	Right Cheek	0.399	1.221	0mm	48.7	-253.4	-171.9	67.4	1.62	0.03	Not required
Ant 9		0.891		0mm							
WLAN 5G		0.199		0mm	0.4	-300.2	-168.3				
BT		0.131		0mm							
Ant 8	Right Cheek	0.399	1.221	0mm	48.5	-256.9	-172.3	64.0	1.62	0.03	Not required
Ant 9		0.891		0mm							
WLAN 5G		0.199		0mm							
BT		0.131		0mm	18.1	-313.2	-171.5				

No.4 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Left Cheek	0.267	1.411	0mm	54.2	268.1	-170.8	70.7	1.68	0.03	Not required
Ant 4		0.730		0mm	-0.3	313.1	-169.2				
WLAN 5G		0.397		0mm							
BT		0.284		0mm							
Ant 0	Left Cheek	0.267	1.411	0mm	54.2	268.1	-170.8	68.4	1.68	0.03	Not required
Ant 4		0.730		0mm							
WLAN 5G		0.397		0mm	15.3	324.4	-171.2				
BT		0.284		0mm							



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Ant 0	Left Cheek	0.267	0.267	0mm	54.2	268.1	-170.8	68.0	1.68	0.03	Not required
Ant 4		0.730	1.411	0mm							
WLAN 5G		0.397		0mm							
BT		0.284		0mm	22.6	328.3	-171.6				
No.5 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 0	Left Cheek	0.267	0.267	0mm	54.2	268.1	-170.8	65.8	1.84	0.04	Not required
Ant 5		0.889	1.570	0mm	27.9	328.4	-171.8				
WLAN 5G		0.397		0mm							
BT		0.284		0mm							
Ant 0	Left Cheek	0.267	0.267	0mm	54.2	268.1	-170.8	68.4	1.84	0.04	Not required
Ant 5		0.889	1.570	0mm							
WLAN 5G		0.397		0mm	15.3	324.4	-171.2				
BT		0.284		0mm							
Ant 0	Left Cheek	0.267	0.267	0mm	54.2	268.1	-170.8	68.0	1.84	0.04	Not required
Ant 5		0.889	1.570	0mm							
WLAN 5G		0.397		0mm							
BT		0.284		0mm	22.6	328.3	-171.6				
No.6 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 0	Left Cheek	0.267	0.267	0mm	57.3	262.6	-172.6	55.8	1.69	0.04	Not required
Ant 9		0.746	1.427	0mm	33.2	212.6	-167.2				
WLAN 5G		0.397		0mm							
BT		0.284		0mm							
Ant 0	Left Cheek	0.267	0.267	0mm	57.3	262.6	-172.6	74.7	1.69	0.03	Not required
Ant 9		0.746	1.427	0mm							
WLAN 5G		0.397		0mm	15.3	324.4	-171.2				
BT		0.284		0mm							
Ant 0	Left Cheek	0.267	0.267	0mm	57.3	262.6	-172.6	74.3	1.69	0.03	Not required
Ant 9		0.746	1.427	0mm							
WLAN 5G		0.397		0mm							
BT		0.284		0mm	22.6	328.3	-171.6				
No.7 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 2	Left Cheek	0.223	0.223	0mm	52.1	266.7	-170.9	70.0	1.63	0.03	Not required
Ant 4		0.730	1.411	0mm	-0.3	313.1	-169.2				
WLAN 5G		0.397		0mm							
BT		0.284		0mm							
Ant 2	Left Cheek	0.223	0.223	0mm	52.1	266.7	-170.9	68.4	1.63	0.03	Not required
Ant 4		0.730	1.411	0mm							
WLAN 5G		0.397		0mm	15.3	324.4	-171.2				
BT		0.284		0mm							
Ant 2	Left Cheek	0.223	0.223	0mm	52.1	266.7	-170.9	68.3	1.63	0.03	Not required
Ant 4		0.730	1.411	0mm							
WLAN 5G		0.397		0mm							
BT		0.284		0mm	22.6	328.3	-171.6				
No.8 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 2	Left Cheek	0.223	0.223	0mm	52.1	266.7	-170.9	66.3	1.79	0.04	Not required
Ant 5		0.889	1.570	0mm	27.9	328.4	-171.8				
WLAN 5G		0.397		0mm							
BT		0.284		0mm							
Ant 2	Left Cheek	0.223	0.223	0mm	52.1	266.7	-170.9	68.4	1.79	0.04	Not required
Ant 5		0.889	1.570	0mm							



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WLAN 5G		0.397		0mm	15.3	324.4	-171.2				
BT		0.284		0mm							
Ant 2	Left Cheek	0.223	0.223	0mm	52.1	266.7	-170.9	68.3	1.79	0.04	Not required
Ant 5		0.889	1.570	0mm							
WLAN 5G		0.397		0mm							
BT		0.284		0mm	22.6	328.3	-171.6				
No.9 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Left Cheek	0.223	0.223	0mm	56.4	264.3	-170.8	56.8	1.65	0.04	Not required
Ant 9		0.746	1.427	0mm	33.2	212.6	-167.2				
WLAN 5G		0.397		0mm							
BT		0.284		0mm							
Ant 2	Left Cheek	0.223	0.223	0mm	52.1	266.7	-170.9	68.4	1.65	0.03	Not required
Ant 9		0.746	1.427	0mm							
WLAN 5G		0.397		0mm	15.3	324.4	-171.2				
BT		0.284		0mm							
Ant 2	Left Cheek	0.223	0.223	0mm	52.1	266.7	-170.9	68.3	1.65	0.03	Not required
Ant 9		0.746	1.427	0mm							
WLAN 5G		0.397		0mm							
BT		0.284		0mm	22.6	328.3	-171.6				
No.10 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Left Cheek	0.273	0.273	0mm	53.1	273.2	-172.5	66.7	1.68	0.03	Not required
Ant 4		0.730	1.411	0mm	-0.3	313.1	-169.2				
WLAN 5G		0.397		0mm							
BT		0.284		0mm							
Ant 8	Left Cheek	0.273	0.273	0mm	55.4	275.3	-172.5	63.4	1.68	0.03	Not required
Ant 4		0.730	1.411	0mm							
WLAN 5G		0.397		0mm	15.3	324.4	-171.2				
BT		0.284		0mm							
Ant 8	Left Cheek	0.273	0.273	0mm	55.4	275.3	-172.5	62.3	1.68	0.04	Not required
Ant 4		0.730	1.411	0mm							
WLAN 5G		0.397		0mm							
BT		0.284		0mm	22.6	328.3	-171.6				
No.11 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Left Cheek	0.273	0.273	0mm	55.4	275.3	-172.5	63.1	1.84	0.04	Not required
Ant 5		0.889	1.570	0mm	27.9	332.1	-171.8				
WLAN 5G		0.397		0mm							
BT		0.284		0mm							
Ant 8	Left Cheek	0.273	0.273	0mm	55.4	275.3	-172.5	63.4	1.84	0.04	Not required
Ant 5		0.889	1.570	0mm							
WLAN 5G		0.397		0mm	15.3	324.4	-171.2				
BT		0.284		0mm							
Ant 8	Left Cheek	0.273	0.273	0mm	55.4	275.3	-172.5	65.8	1.84	0.04	Not required
Ant 5		0.889	1.570	0mm							
WLAN 5G		0.397		0mm							
BT		0.284		0mm	22.6	332.3	-171.6				
No.12 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Left Cheek	0.273	0.273	0mm	53.1	273.2	-172.5	64.0	1.70	0.03	Not required
Ant 9		0.746	1.427	0mm	33.2	212.6	-167.2				
WLAN 5G		0.397		0mm							
BT		0.284		0mm							



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Ant 8	Left Cheek	0.273	0.273	0mm	55.4	275.3	-172.5	63.4	1.70	0.04	Not required
Ant 9		0.746	1.427	0mm							
WLAN 5G		0.397		0mm	15.3	324.4	-171.2				
BT		0.284		0mm							
Ant 8	Left Cheek	0.273	0.273	0mm	55.4	275.3	-172.5	62.3	1.70	0.04	Not required
Ant 9		0.746	1.427	0mm							
WLAN 5G		0.397		0mm							
BT		0.284		0mm	22.6	328.3	-171.6				

No.13 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Left Tilted	0.157	0.157	0mm	53.7	265.1	-171.5	71.4	1.65	0.03	Not required
Ant 4		0.893	1.489	0mm	1.1	313.4	-169.4				
WLAN 5G		0.340		0mm							
BT		0.256		0mm							
Ant 0	Left Tilted	0.157	0.157	0mm	53.7	265.1	-171.5	76.9	1.65	0.03	Not required
Ant 4		0.893	1.489	0mm							
WLAN 5G		0.340		0mm	14.9	331.5	-171.2				
BT		0.256		0mm							
Ant 0	Left Tilted	0.157	0.157	0mm	53.7	265.1	-171.5	77.5	1.65	0.03	Not required
Ant 4		0.893	1.489	0mm							
WLAN 5G		0.340		0mm							
BT		0.256		0mm	22.9	336.2	-171.8				
No.15 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Left Tilted	0.136	0.136	0mm	53.4	247.6	-170.7	84.1	1.63	0.02	Not required
Ant 4		0.893	1.489	0mm	1.1	313.4	-169.4				
WLAN 5G		0.340		0mm							
BT		0.256		0mm							
Ant 2	Left Tilted	0.136	0.136	0mm	53.4	247.6	-170.7	92.3	1.63	0.02	Not required
Ant 4		0.893	1.489	0mm							
WLAN 5G		0.340		0mm	14.9	331.5	-171.2				
BT		0.256		0mm							
Ant 2	Left Tilted	0.136	0.136	0mm	53.4	247.6	-170.7	93.7	1.63	0.02	Not required
Ant 4		0.893	1.489	0mm							
WLAN 5G		0.340		0mm							
BT		0.256		0mm	22.9	336.2	-171.8				
No.16 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Left Tilted	0.291	0.291	0mm	56.9	282.1	-172.5	64.1	1.78	0.04	Not required
Ant 4		0.893	1.489	0mm	1.1	313.4	-169.4				
WLAN 5G		0.340		0mm							
BT		0.256		0mm							
Ant 8	Left Tilted	0.291	0.291	0mm	56.9	282.1	-172.5	64.9	1.78	0.04	Not required
Ant 4		0.893	1.489	0mm							
WLAN 5G		0.340		0mm	14.9	331.5	-171.2				
BT		0.256		0mm							
Ant 8	Left Tilted	0.291	0.291	0mm	56.9	282.1	-172.5	63.9	1.78	0.04	Not required
Ant 4		0.893	1.489	0mm							
WLAN 5G		0.340		0mm							
BT		0.256		0mm	22.9	336.2	-171.8				
No.17 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Left Tilted	0.291	0.291	0mm	56.9	282.1	-172.5	60.9	1.60	0.03	Not required
Ant 1		0.709	1.305	0mm	2.7	309.6	-168.7				



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WLAN 5G		0.340		0mm							
BT		0.256		0mm							
Ant 8	Left Tilted	0.291	0.291	0mm	56.9	282.1	-172.5	64.9	1.60	0.03	Not required
Ant 1		0.709	1.305	0mm							
WLAN 5G		0.340		0mm	14.9	331.5	-171.2				
BT		0.256		0mm							
Ant 8	Left Tilted	0.291	0.291	0mm	56.9	282.1	-172.5	63.9	1.60	0.03	Not required
Ant 1		0.709	1.305	0mm							
WLAN 5G		0.340		0mm							
BT		0.256		0mm	22.9	336.2	-171.8				

<Hotspot>

No.1 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Front	0.945	0.945	5mm	-15.8	-61.8	-204	139.2	1.85	0.02	Not required
Ant 1		0.285	0.907	5mm	-48.6	73.5	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 0	Front	0.945	0.945	5mm	-15.8	-61.8	-204	142.1	1.85	0.02	Not required
Ant 1		0.285	0.907	5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 0	Front	0.945	0.945	5mm	-15.8	-61.8	-204	141.8	1.85	0.02	Not required
Ant 1		0.285	0.907	5mm							
WLAN 5G		0.434		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.2 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Front	0.945	0.945	5mm	-15.8	-61.8	-204	143.0	1.73	0.02	Not required
Ant 4		0.166	0.788	5mm	-24	81	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 0	Front	0.945	0.945	5mm	-15.8	-61.8	-204	142.1	1.73	0.02	Not required
Ant 4		0.166	0.788	5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 0	Front	0.945	0.945	5mm	-15.8	-61.8	-204	141.8	1.73	0.02	Not required
Ant 4		0.166	0.788	5mm							
WLAN 5G		0.434		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.3 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Front	0.945	0.945	5mm	18.5	-61.5	-204	132.6	1.80	0.02	Not required
Ant 5		0.231	0.853	5mm	13	71	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 0	Front	0.945	0.945	5mm	-15.8	-61.8	-204	142.1	1.80	0.02	Not required
Ant 5		0.231	0.853	5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 0	Front	0.945	0.945	5mm	-15.8	-61.8	-204	141.8	1.80	0.02	Not required
Ant 5		0.231	0.853	5mm							
WLAN 5G		0.434		5mm							



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BT		0.188		5mm	-1	79.2	-204				
No.4 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Front	0.945	0.923	5mm	-35	-67.5	-204	131.5	1.87	0.02	Not required
Ant 7		0.301		5mm	-63	61	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 0	Front	0.945	0.923	5mm	-15.8	-61.8	-204	142.1	1.87	0.02	Not required
Ant 7		0.301		5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 0	Front	0.945	0.923	5mm	-15.8	-61.8	-204	141.8	1.87	0.02	Not required
Ant 7		0.301		5mm							
WLAN 5G		0.434		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.5 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Front	0.945	0.835	5mm	-35	-67.5	-204	105.0	1.78	0.02	Not required
Ant 9		0.213		5mm	-70	31.5	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 0	Front	0.945	0.835	5mm	-15.8	-61.8	-204	142.1	1.78	0.02	Not required
Ant 9		0.213		5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 0	Front	0.945	0.835	5mm	-15.8	-61.8	-204	141.8	1.78	0.02	Not required
Ant 9		0.213		5mm							
WLAN 5G		0.434		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.6 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	0.939	0.907	5mm	0.5	-73.5	-204	155.0	1.85	0.02	Not required
Ant 1		0.285		5mm	-48.6	73.5	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 2	Front	0.939	0.907	5mm	0.5	-73.5	-204	153.7	1.85	0.02	Not required
Ant 1		0.285		5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	0.939	0.907	5mm	0.5	-73.5	-204	152.7	1.85	0.02	Not required
Ant 1		0.285		5mm							
WLAN 5G		0.434		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.7 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	0.939	0.788	5mm	0.5	-73.5	-204	156.4	1.73	0.01	Not required
Ant 4		0.166		5mm	-24	81	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 2	Front	0.939	0.788	5mm	0.5	-73.5	-204	153.7	1.73	0.01	Not required
Ant 4		0.166		5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	0.939	0.939	5mm	0.5	-73.5	-204	152.7	1.73	0.01	Not required



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Ant 4		0.166		5mm							
WLAN 5G		0.434	0.788	5mm							
BT		0.188		5mm	-1	79.2	-204				
No.8 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	0.939	0.939	5mm	2	-73.5	-204	144.9	1.79	0.02	Not required
Ant 5		0.231	0.853	5mm	13	71	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 2	Front	0.939	0.939	5mm	0.5	-73.5	-204	153.7	1.79	0.02	Not required
Ant 5		0.231	0.853	5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	0.939	0.939	5mm	0.5	-73.5	-204	152.7	1.79	0.02	Not required
Ant 5		0.231	0.853	5mm							
WLAN 5G		0.434		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.9 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	0.939	0.939	5mm	0.5	-73.5	-204	148.7	1.86	0.02	Not required
Ant 7		0.301	0.923	5mm	-63	61	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 2	Front	0.939	0.939	5mm	0.5	-73.5	-204	153.7	1.86	0.02	Not required
Ant 7		0.301	0.923	5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	0.939	0.939	5mm	0.5	-73.5	-204	152.7	1.86	0.02	Not required
Ant 7		0.301	0.923	5mm							
WLAN 5G		0.434		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.10 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	0.939	0.939	5mm	0.5	-73.5	-204	126.5	1.77	0.02	Not required
Ant 9		0.213	0.835	5mm	-70	31.5	-204				
WLAN 5G		0.434		5mm							
BT		0.188		5mm							
Ant 2	Front	0.939	0.939	5mm	0.5	-73.5	-204	153.7	1.77	0.02	Not required
Ant 9		0.213	0.835	5mm							
WLAN 5G		0.434		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	0.939	0.939	5mm	0.5	-73.5	-204	152.7	1.77	0.02	Not required
Ant 9		0.213	0.835	5mm							
WLAN 5G		0.434		5mm							
BT		0.188		5mm	-1	79.2	-204				

No.11 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	137.3	2.84	0.03	Not required
Ant 1		0.626	1.544	5mm	-10.2	73.5	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.84	0.03	Not required
Ant 1		0.626	1.544	5mm							



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WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.84	0.03	Not required
Ant 1		0.626	1.544	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.12 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	149.1	2.62	0.03	Not required
Ant 4		0.402	1.320	5mm	-25	83	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.62	0.03	Not required
Ant 4		0.402	1.320	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.62	0.03	Not required
Ant 4		0.402	1.320	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.13 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	149.8	2.83	0.03	Not required
Ant 5		0.618	1.536	5mm	-64	70	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.83	0.03	Not required
Ant 5		0.618	1.536	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.83	0.03	Not required
Ant 5		0.618	1.536	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.14 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	1.298	1.298	5mm	18.5	-61.5	-204	123.2	2.77	0.04	Not required
Ant 7		0.558	1.476	5mm	5	61	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.77	0.03	Not required
Ant 7		0.558	1.476	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.77	0.03	Not required
Ant 7		0.558	1.476	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.15 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	1.298	1.298	5mm	18.5	-61.5	-204	126.5	2.59	0.03	Not required
Ant 9		0.376	1.294	5mm	15.5	65	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							



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Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.59	0.03	Not required
Ant 9		0.376	1.294	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.59	0.03	Not required
Ant 9		0.376	1.294	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.16 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	1.047	1.047	5mm	-32.8	-72.8	-204	147.8	2.59	0.03	Not required
Ant 1		0.626	1.544	5mm	-11.5	73.5	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-32.8	-72.8	-204	152.8	2.59	0.03	Not required
Ant 1		0.626	1.544	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-35	-72.8	-204	145.3	2.59	0.03	Not required
Ant 1		0.626	1.544	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.17 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	1.047	1.047	5mm	-32.8	-72.8	-204	156.0	2.37	0.02	Not required
Ant 4		0.402	1.320	5mm	-25	83	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-32.8	-72.8	-204	152.8	2.37	0.02	Not required
Ant 4		0.402	1.320	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-35	-72.8	-204	145.3	2.37	0.03	Not required
Ant 4		0.402	1.320	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.18 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	1.047	1.047	5mm	-35	-72.8	-204	145.7	2.58	0.03	Not required
Ant 5		0.618	1.536	5mm	-64	70	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-32.8	-72.8	-204	152.8	2.58	0.03	Not required
Ant 5		0.618	1.536	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-35	-72.8	-204	145.3	2.58	0.03	Not required
Ant 5		0.618	1.536	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.19 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	1.047	1.047	5mm	-32.8	-72.8	-204	137.5	2.52	0.03	Not required
Ant 7		0.558	1.476	5mm	3	60	-204				



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WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-32.8	-72.8	-204	152.8	2.52	0.03	Not required
Ant 7		0.558	1.476	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-35	-72.8	-204	145.3	2.52	0.03	Not required
Ant 7		0.558	1.476	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.20 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	1.047	1.047	5mm	-32.8	-72.8	-204	145.9	2.34	0.02	Not required
Ant 9		0.376	1.294	5mm	12.2	66	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-32.8	-72.8	-204	152.8	2.34	0.02	Not required
Ant 9		0.376	1.294	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.047	1.047	5mm	-35	-72.8	-204	145.3	2.34	0.02	Not required
Ant 9		0.376	1.294	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.21 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	135.1	2.59	0.03	Not required
Ant 1		0.626	1.544	5mm	-11.5	73.5	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	134.6	2.59	0.03	Not required
Ant 1		0.626	1.544	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	124.2	2.59	0.03	Not required
Ant 1		0.626	1.544	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.22 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	139.6	2.37	0.03	Not required
Ant 4		0.402	1.320	5mm	-25	83	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	134.6	2.37	0.03	Not required
Ant 4		0.402	1.320	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	124.2	2.37	0.03	Not required
Ant 4		0.402	1.320	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.23 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				



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Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	121.0	2.58	0.03	Not required
Ant 5		0.618	1.536	5mm	-64	70	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	134.6	2.58	0.03	Not required
Ant 5		0.618	1.536	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	124.2	2.58	0.03	Not required
Ant 5		0.618	1.536	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.24 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	129.7	2.52	0.03	Not required
Ant 7		0.558	1.476	5mm	3	60	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	134.6	2.52	0.03	Not required
Ant 7		0.558	1.476	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	124.2	2.52	0.03	Not required
Ant 7		0.558	1.476	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.25 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	139.6	2.34	0.03	Not required
Ant 9		0.376	1.294	5mm	12.2	66	-204				
WLAN 5G		0.614		5mm							
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	134.6	2.34	0.03	Not required
Ant 9		0.376	1.294	5mm							
WLAN 5G		0.614		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 8	Back	1.045	1.045	5mm	-64	-51	-204	124.2	2.34	0.03	Not required
Ant 9		0.376	1.294	5mm							
WLAN 5G		0.614		5mm							
BT		0.304		5mm	-46.6	72	-204				

No.26 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Left Side	1.156	1.156	5mm	-27.1	-46.8	-204	106.9	1.84	0.02	Not required
Ant 7		0.621	0.687	5mm	-31.3	60	-204				
WLAN 5G		0.066		5mm							
Ant 0	Left Side	1.156	1.156	5mm	-27.1	-46.8	-204	136.3	1.84	0.02	Not required
Ant 7		0.621	0.687	5mm							
WLAN 5G		0.066		5mm	-39	89	-204				
No.27 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Left Side	1.156	1.156	5mm	-27.1	-46.8	-204	69.6	1.85	0.04	Not required
Ant 9		0.627	0.693	5mm	-26.4	22.8	-204				
WLAN 5G		0.066		5mm							



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Ant 0	Left Side	1.156	1.156	5mm	-27.1	-46.8	-204	136.3	1.85	0.02	Not required
Ant 9		0.627	0.693	5mm							
WLAN 5G		0.066		5mm	-39	89	-204				

No.28 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	62.6	1.76	0.04	Not required
Ant 1		0.095		5mm	-27.4	-22.5	-204				
WLAN 5G		0.268		5mm							
BT		0.101		5mm							
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	106.0	1.76	0.02	Not required
Ant 1		0.095		5mm							
WLAN 5G		0.268		5mm	-30.6	-66	-204				
BT		0.101		5mm							
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	94.0	1.76	0.02	Not required
Ant 1		0.095		5mm							
WLAN 5G		0.268		5mm							
BT		0.101		5mm	-27.8	-54	-204				
No.29 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	112.0	1.69	0.02	Not required
Ant 4		0.025		5mm	-29.2	-72	-204				
WLAN 5G		0.268		5mm							
BT		0.101		5mm							
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	106.0	1.69	0.02	Not required
Ant 4		0.025		5mm							
WLAN 5G		0.268		5mm	-30.6	-66	-204				
BT		0.101		5mm							
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	94.0	1.69	0.02	Not required
Ant 4		0.025		5mm							
WLAN 5G		0.268		5mm							
BT		0.101		5mm	-27.8	-54	-204				
No.30 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	106.1	2.29	0.03	Not required
Ant 5		0.627		5mm	-27.1	-66	-204				
WLAN 5G		0.268		5mm							
BT		0.101		5mm							
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	106.0	2.29	0.03	Not required
Ant 5		0.627		5mm							
WLAN 5G		0.268		5mm	-30.6	-66	-204				
BT		0.101		5mm							
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	94.0	2.29	0.04	Not required
Ant 5		0.627		5mm							
WLAN 5G		0.268		5mm							
BT		0.101		5mm	-27.8	-54	-204				
No.31 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Right Side	1.297	1.297	5mm	-31	40	-204	129.9	1.68	0.02	Not required
Ant 7		0.017		5mm	-46	-89	-204				
WLAN 5G		0.268		5mm							
BT		0.101		5mm							
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	106.0	1.68	0.02	Not required
Ant 7		0.017		5mm							
WLAN 5G		0.268		5mm	-30.6	-66	-204				
BT		0.101		5mm							



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Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	94.0	1.68	0.02	Not required
Ant 7		0.017	0.386	5mm							
WLAN 5G		0.268		5mm							
BT		0.101		5mm	-27.8	-54	-204				
No.32 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	106.0	1.67	0.02	Not required
Ant 9			0.369	5mm							
WLAN 5G		0.268		5mm	-30.6	-66	-204				
BT		0.101		5mm							
Ant 8	Right Side	1.297	1.297	5mm	-30.6	40	-204	94.0	1.67	0.02	Not required
Ant 9			0.369	5mm							
WLAN 5G		0.268		5mm							
BT		0.101		5mm	-27.8	-54	-204				

<Body-worn>

No.1 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	139.2	1.97	0.02	Not required
Ant 1		0.401	0.980	5mm	-48.6	73.5	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	142.1	1.97	0.02	Not required
Ant 1		0.401	0.980	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	141.8	1.97	0.02	Not required
Ant 1		0.401	0.980	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.2 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	143.0	1.93	0.02	Not required
Ant 4		0.366	0.945	5mm	-24	81	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	142.1	1.93	0.02	Not required
Ant 4		0.366	0.945	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	141.8	1.93	0.02	Not required
Ant 4		0.366	0.945	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.3 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 0	Front	0.986	0.986	5mm	18.5	-61.5	-204	132.6	1.90	0.02	Not required
Ant 5		0.332	0.911	5mm	13	71	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	142.1	1.90	0.02	Not required
Ant 5		0.332	0.911	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							



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Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	141.8	1.90	0.02	Not required
Ant 5		0.332	0.911	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.4 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Front	0.986	0.986	5mm	-35	-67.5	-204	131.5	2.05	0.02	Not required
Ant 7		0.483	1.062	5mm	-63	61	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	142.1	2.05	0.02	Not required
Ant 7		0.483	1.062	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	141.8	2.05	0.02	Not required
Ant 7		0.483	1.062	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.5 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Front	0.986	0.986	5mm	-35	-67.5	-204	105.0	2.08	0.03	Not required
Ant 9		0.516	1.095	5mm	-70	31.5	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	142.1	2.08	0.02	Not required
Ant 9		0.516	1.095	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 0	Front	0.986	0.986	5mm	-15.8	-61.8	-204	141.8	2.08	0.02	Not required
Ant 9		0.516	1.095	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.6 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	155.0	2.18	0.02	Not required
Ant 1		0.401	0.980	5mm	-48.6	73.5	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	153.7	2.18	0.02	Not required
Ant 1		0.401	0.980	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	152.7	2.18	0.02	Not required
Ant 1		0.401	0.980	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.7 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	156.4	2.14	0.02	Not required
Ant 4		0.366	0.945	5mm	-24	81	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	153.7	2.14	0.02	Not required
Ant 4		0.366	0.945	5mm							



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WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	152.7	2.14	0.02	Not required
Ant 4		0.366	0.945	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.8 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	1.195	1.195	5mm	2	-73.5	-204	144.9	2.11	0.02	Not required
Ant 5		0.332	0.911	5mm	13	71	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	153.7	2.11	0.02	Not required
Ant 5		0.332	0.911	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	152.7	2.11	0.02	Not required
Ant 5		0.332	0.911	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.9 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	148.7	2.26	0.02	Not required
Ant 7		0.483	1.062	5mm	-63	61	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	153.7	2.26	0.02	Not required
Ant 7		0.483	1.062	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	152.7	2.26	0.02	Not required
Ant 7		0.483	1.062	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.10 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	126.5	2.29	0.03	Not required
Ant 9		0.516	1.095	5mm	-70	31.5	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	153.7	2.29	0.02	Not required
Ant 9		0.516	1.095	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 2	Front	1.195	1.195	5mm	0.5	-73.5	-204	152.7	2.29	0.02	Not required
Ant 9		0.516	1.095	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.11 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	124.5	1.67	0.02	Not required
Ant 1		0.401	0.980	5mm	-24.3	84.2	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							



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Ant 8	Front	0.690	0.690	5mm	23	-31	-204	115.0	1.67	0.02	Not required
Ant 1		0.401	0.980	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	112.8	1.67	0.02	Not required
Ant 1		0.401	0.980	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.12 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Front	0.690	0.690	5mm	19	-33	-204	127.8	1.64	0.02	Not required
Ant 4		0.366	0.945	5mm	-25	87	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	115.0	1.64	0.02	Not required
Ant 4		0.366	0.945	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	112.8	1.64	0.02	Not required
Ant 4		0.366	0.945	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.13 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	102.4	1.60	0.02	Not required
Ant 5		0.332	0.911	5mm	14	71	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	115.0	1.60	0.02	Not required
Ant 5		0.332	0.911	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	112.8	1.60	0.02	Not required
Ant 5		0.332	0.911	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.14 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Front	0.690	0.690	5mm	19	-33	-204	124.7	1.75	0.02	Not required
Ant 7		0.483	1.062	5mm	-63	61	-204				
WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	115.0	1.75	0.02	Not required
Ant 7		0.483	1.062	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	112.8	1.75	0.02	Not required
Ant 7		0.483	1.062	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				
No.15 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Front	0.690	0.690	5mm	19	-33	-204	109.9	1.79	0.02	Not required
Ant 9		0.516	1.095	5mm	-70	31.5	-204				



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WLAN 5G		0.391		5mm							
BT		0.188		5mm							
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	115.0	1.79	0.02	Not required
Ant 9		0.516	1.095	5mm							
WLAN 5G		0.391		5mm	-7	80	-204				
BT		0.188		5mm							
Ant 8	Front	0.690	0.690	5mm	23	-31	-204	112.8	1.79	0.02	Not required
Ant 9		0.516	1.095	5mm							
WLAN 5G		0.391		5mm							
BT		0.188		5mm	-1	79.2	-204				

No.16 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	137.3	2.88	0.04	Not required
Ant 1		0.894	1.582	5mm	-10.2	73.5	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.88	0.03	Not required
Ant 1		0.894	1.582	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.88	0.03	Not required
Ant 1		0.894	1.582	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.17 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	149.1	2.88	0.03	Not required
Ant 4		0.896	1.584	5mm	-25	83	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.88	0.03	Not required
Ant 4		0.896	1.584	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.88	0.03	Not required
Ant 4		0.896	1.584	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.18 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	149.8	2.87	0.03	Not required
Ant 5		0.879	1.567	5mm	-64	70	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.87	0.03	Not required
Ant 5		0.879	1.567	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.87	0.03	Not required
Ant 5		0.879	1.567	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.19 Band	Position	SAR 1g	Summed	Gap	SAR peak location (mm)			3D	Summed	SPLSR	Simultaneous



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		SAR (W/kg)			X	Y	Z	distance (mm)	SAR (W/kg)		
Ant 0	Back	1.298	1.298	5mm	18.5	-61.5	-204	123.2	2.88	0.04	Not required
Ant 7		0.895	1.583	5mm	5	61	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.88	0.03	Not required
Ant 7		0.895	1.583	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.88	0.03	Not required
Ant 7		0.895	1.583	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.20 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 0	Back	1.298	1.298	5mm	18.5	-61.5	-204	126.5	2.88	0.04	Not required
Ant 9		0.898	1.586	5mm	15.5	65	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	148.0	2.88	0.03	Not required
Ant 9		0.898	1.586	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 0	Back	1.298	1.298	5mm	5	-63	-204	144.5	2.88	0.03	Not required
Ant 9		0.898	1.586	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.21 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 2	Back	1.289	1.289	5mm	-32.8	-72.8	-204	147.8	2.87	0.03	Not required
Ant 1		0.894	1.582	5mm	-11.5	73.5	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-32.8	-72.8	-204	152.8	2.87	0.03	Not required
Ant 1		0.894	1.582	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-35	-72.8	-204	145.3	2.87	0.03	Not required
Ant 1		0.894	1.582	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.22 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 2	Back	1.289	1.289	5mm	-32.8	-72.8	-204	156.0	2.87	0.03	Not required
Ant 4		0.896	1.584	5mm	-25	83	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-32.8	-72.8	-204	152.8	2.87	0.03	Not required
Ant 4		0.896	1.584	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-35	-72.8	-204	145.3	2.87	0.03	Not required
Ant 4		0.896	1.584	5mm							



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WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.23 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	1.289	1.289	5mm	-35	-72.8	-204	145.7	2.86	0.03	Not required
Ant 5		0.879	1.567	5mm	-64	70	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-32.8	-72.8	-204	152.8	2.86	0.03	Not required
Ant 5		0.879	1.567	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-35	-72.8	-204	145.3	2.86	0.03	Not required
Ant 5		0.879	1.567	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.24 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	1.289	1.289	5mm	-32.8	-72.8	-204	137.5	2.87	0.04	Not required
Ant 7		0.895	1.583	5mm	3	60	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-32.8	-72.8	-204	152.8	2.87	0.03	Not required
Ant 7		0.895	1.583	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-35	-72.8	-204	145.3	2.87	0.03	Not required
Ant 7		0.895	1.583	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.25 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	1.289	1.289	5mm	-32.8	-72.8	-204	145.9	2.88	0.03	Not required
Ant 9		0.898	1.586	5mm	12.2	66	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-32.8	-72.8	-204	152.8	2.88	0.03	Not required
Ant 9		0.898	1.586	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 2	Back	1.289	1.289	5mm	-35	-72.8	-204	145.3	2.88	0.03	Not required
Ant 9		0.898	1.586	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.26 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	135.1	2.87	0.04	Not required
Ant 1		0.894	1.582	5mm	-11.5	73.5	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	134.6	2.87	0.04	Not required
Ant 1		0.894	1.582	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							



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Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	124.2	2.87	0.04	Not required
Ant 1		0.894	1.582	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.27 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	139.6	2.87	0.03	Not required
Ant 4		0.896	1.584	5mm	-25	83	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	134.6	2.87	0.04	Not required
Ant 4		0.896	1.584	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	124.2	2.87	0.04	Not required
Ant 4		0.896	1.584	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.28 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	121.0	2.85	0.04	Not required
Ant 5		0.879	1.567	5mm	-64	70	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	134.6	2.85	0.04	Not required
Ant 5		0.879	1.567	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	124.2	2.85	0.04	Not required
Ant 5		0.879	1.567	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.29 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	129.7	2.87	0.04	Not required
Ant 7		0.895	1.583	5mm	3	60	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	134.6	2.87	0.04	Not required
Ant 7		0.895	1.583	5mm							
WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	124.2	2.87	0.04	Not required
Ant 7		0.895	1.583	5mm							
WLAN 5G		0.384		5mm							
BT		0.304		5mm	-46.6	72	-204				
No.30 Band	Position	SAR 1g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	139.6	2.87	0.03	Not required
Ant 9		0.898	1.586	5mm	12.2	66	-204				
WLAN 5G		0.384		5mm							
BT		0.304		5mm							
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	134.6	2.87	0.04	Not required
Ant 9		0.898	1.586	5mm							



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WLAN 5G		0.384		5mm	-33	80	-204				
BT		0.304		5mm							
Ant 8	Back	1.286	1.286	5mm	-64	-51	-204	124.2	2.87	0.04	Not required
Ant 9		0.898		5mm							
WLAN 5G		0.384	1.586	5mm							
BT		0.304		5mm	-46.6	72	-204				

<Extremity>

No.1 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Front	3.165	3.165	0mm	0.5	-75	-204	156.7	4.08	0.05	Not required
WLAN 5G		0.909	0.910	0mm	-11.2	81.2	-207				
NFC		0.001		0mm							
Ant 2	Front	3.165	3.165	0mm	-40	-73.5	-204	135.5	4.08	0.06	Not required
WLAN 5G		0.909	0.910	0mm							
NFC		0.001		0mm	-63	60	-204				

No.2 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	144.5	5.86	0.10	Not required
Ant 1		2.396	2.722	0mm	-10	73.5	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	165.2	5.86	0.09	Not required
Ant 1		2.396	2.722	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	146.1	5.86	0.10	Not required
Ant 1		2.396	2.722	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.3 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	153.6	4.82	0.07	Not required
Ant 4		1.350	1.676	0mm	-23	82	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	165.2	4.82	0.06	Not required
Ant 4		1.350	1.676	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	146.1	4.82	0.07	Not required
Ant 4		1.350	1.676	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.4 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	144.1	4.58	0.07	Not required
Ant 5		1.115	1.441	0mm	-63	63	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	165.2	4.58	0.06	Not required
Ant 5		1.115	1.441	0mm							



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WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	146.1	4.58	0.07	Not required
Ant 5		1.115	1.441	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.5 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	137.8	5.46	0.09	Not required
Ant 7		1.994	2.320	0mm	5	66	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	165.2	5.46	0.08	Not required
Ant 7		1.994	2.320	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	146.1	5.46	0.09	Not required
Ant 7		1.994	2.320	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.6 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	141.2	5.82	0.10	Not required
Ant 9		2.359	2.685	0mm	8	69	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	165.2	5.82	0.09	Not required
Ant 9		2.359	2.685	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 0	Back	3.139	3.139	0mm	-10	-71	-204	146.1	5.82	0.10	Not required
Ant 9		2.359	2.685	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.7 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	3.170	3.170	0mm	-10	-73.5	-204	147.0	5.89	0.10	Not required
Ant 1		2.396	2.722	0mm	-10	73.5	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 2	Back	3.170	3.170	0mm	-41.5	-73.5	-204	162.1	5.89	0.09	Not required
Ant 1		2.396	2.722	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 2	Back	3.170	3.170	0mm	-10	-73.5	-204	148.6	5.89	0.10	Not required
Ant 1		2.396	2.722	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.8 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	3.170	3.170	0mm	-10	-73.5	-204	156.0	4.85	0.07	Not required
Ant 4		1.350	1.676	0mm	-23	82	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							



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Ant 2	Back	3.170	3.170	0mm	-41.5	-73.5	-204	162.1	4.85	0.07	Not required
Ant 4		1.350	1.676	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 2	Back	3.170	3.170	0mm	-10	-73.5	-204	148.6	4.85	0.07	Not required
Ant 4		1.350	1.676	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.9 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	3.170	3.170	0mm	-41.5	-73.5	-204	138.2	4.61	0.07	Not required
Ant 5		1.115	1.441	0mm	-63	63	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 2	Back	3.170	3.170	0mm	-41.5	-73.5	-204	162.1	4.61	0.06	Not required
Ant 5		1.115	1.441	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 2	Back	3.170	3.170	0mm	-10	-73.5	-204	148.6	4.61	0.07	Not required
Ant 5		1.115	1.441	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.10 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	3.170	3.170	0mm	-10	-73.5	-204	140.3	5.49	0.09	Not required
Ant 7		1.994	2.320	0mm	5	66	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 2	Back	3.170	3.170	0mm	-41.5	-73.5	-204	162.1	5.49	0.08	Not required
Ant 7		1.994	2.320	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 2	Back	3.170	3.170	0mm	-10	-73.5	-204	148.6	5.49	0.09	Not required
Ant 7		1.994	2.320	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.11 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 2	Back	3.170	3.170	0mm	-10	-73.5	-204	143.6	5.86	0.10	Not required
Ant 9		2.359	2.685	0mm	8	69	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 2	Back	3.170	3.170	0mm	-41.5	-73.5	-204	162.1	5.86	0.09	Not required
Ant 9		2.359	2.685	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 2	Back	3.170	3.170	0mm	-10	-73.5	-204	148.6	5.86	0.10	Not required
Ant 9		2.359	2.685	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.12 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Back	1.427	1.427	0mm	-64	-40	-204	125.7	4.15	0.07	Not required
Ant 1		2.396	2.722	0mm	-10	73.5	-204				



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WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 8	Back	1.427	1.427	0mm	-64	-40	-204	128.3	4.15	0.07	Not required
Ant 1		2.396	2.722	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 8	Back	1.427	1.427	0mm	-64	-40	-204	125.0	4.15	0.07	Not required
Ant 1		2.396	2.722	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				
No.13 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Back	1.427	1.427	0mm	-64	-40	-204	130.6	4.11	0.06	Not required
Ant 9		2.359	2.685	0mm	8	69	-204				
WLAN 5G		0.293		0mm							
NFC		0.033		0mm							
Ant 8	Back	1.427	1.427	0mm	-64	-40	-204	128.3	4.11	0.07	Not required
Ant 9		2.359	2.685	0mm							
WLAN 5G		0.293		0mm	-55	88	-204				
NFC		0.033		0mm							
Ant 8	Back	1.427	1.427	0mm	-64	-40	-204	125.0	4.11	0.07	Not required
Ant 9		2.359	2.685	0mm							
WLAN 5G		0.293		0mm							
NFC		0.033		0mm	-15	75	-204				

No.14 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Left Side	1.992	1.992	0mm	-26.4	-61.5	-204	102.5	4.51	0.09	Not required
Ant 7		2.461	2.517	0mm	-25.7	41	-204				
WLAN 5G		0.055		0mm							
NFC		0.001		0mm							
Ant 0	Left Side	1.992	1.992	0mm	-26.4	-61.5	-204	132.5	4.51	0.07	Not required
Ant 7		2.461	2.517	0mm							
WLAN 5G		0.055		0mm	-25	71	-204				
NFC		0.001		0mm							
Ant 0	Left Side	1.992	1.992	0mm	-26.4	-61.5	-204	123.7	4.51	0.08	Not required
Ant 7		2.461	2.517	0mm							
WLAN 5G		0.055		0mm							
NFC		0.001		0mm	-33.4	62	-204				
No.15 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 0	Left Side	1.992	1.992	0mm	-26.4	-61.5	-204	97.4	4.55	0.10	Not required
Ant 9		2.497	2.553	0mm	-26.8	35.9	-204				
WLAN 5G		0.055		0mm							
NFC		0.001		0mm							
Ant 0	Left Side	1.992	1.992	0mm	-26.4	-61.5	-204	132.5	4.55	0.07	Not required
Ant 9		2.497	2.553	0mm							
WLAN 5G		0.055		0mm	-25	71	-204				
NFC		0.001		0mm							
Ant 0	Left Side	1.992	1.992	0mm	-26.4	-61.5	-204	123.7	4.55	0.08	Not required
Ant 9		2.497	2.553	0mm							
WLAN 5G		0.055		0mm							
NFC		0.001		0mm	-33.4	62	-204				



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No.14 Band	Position	SAR 10g SAR (W/kg)	Summed	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Ant 8	Right Side	3.039	3.039	0mm	-26.6	60	-204	143.0	5.86	0.10	Not required
Ant 5		2.480	2.825	0mm	-25	-83	-204				
WLAN 5G		0.344		0mm							
NFC		0.001		0mm							
Ant 8	Right Side	3.039	3.039	0mm	-26.6	60	-204	145.0	5.86	0.10	Not required
Ant 5		2.480	2.825	0mm							
WLAN 5G		0.344		0mm	-26.4	-85	-204				
NFC		0.001		0mm							
Ant 8	Right Side	3.039	3.039	0mm	-26.6	60	-204	145.4	5.86	0.10	Not required
Ant 5		2.480	2.825	0mm							
WLAN 5G		0.344		0mm							
NFC		0.001		0mm	-46.7	-84	-204				



17.7 Maximum Reported SAR and SAR Peak Locations

General Note:

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

<Head>

Right Cheek											
Band		Ant1			Ant8			Ant7			Ant9
GSM850	SAR (W/kg)	0.884									
	Axis	13.6	-333.5	-173.8							
GSM1900	SAR (W/kg)	0.746									
	Axis	6.8	-328.6	-170.4							
WCDMA II	SAR (W/kg)	0.835									
	Axis	6.5	-329.7	-170.9							
WCDMA IV	SAR (W/kg)	0.858									
	Axis	12.5	-332	-171.1							
WCDMA V	SAR (W/kg)	0.886									
	Axis	16.8	-332	-170.9							
LTE Band 12	SAR (W/kg)	0.54									
	Axis	15	-334.8	-170.7							
LTE Band 13	SAR (W/kg)	0.819									
	Axis	23.3	-328.2	-171.5							
LTE Band 2	SAR (W/kg)	0.685								0.887	
	Axis	7.5	-331.1	-170.9						56.3	-325.4 -173.6
LTE Band 26	SAR (W/kg)	0.875									
	Axis	12.7	-334.3	-173.7							
LTE Band 66	SAR (W/kg)	0.888								0.238	
	Axis	11.2	-337	-170.4						57.8	-326.5 -169.8
LTE Band 7	SAR (W/kg)	0.688								0.886	
	Axis	2.7	-312.7	-169.6						61.2	-323.2 -168.6
LTE Band 41	SAR (W/kg)	0.712								0.891	
	Axis	3.4	-314.1	-170.1						66.4	-326.9 -167.7
LTE Band 42	SAR (W/kg)				0.317			0.89			
	Axis				48.5	-256.9	-172.3	41.1	-329.6	-171.6	
FR1 n2	SAR (W/kg)	0.76									
	Axis	6.8	-329.4	-170.3							
FR1 n26	SAR (W/kg)	0.809									
	Axis	23.3	-328.2	-171.5							
FR1 n66	SAR (W/kg)	0.882									
	Axis	11.2	-337	-170.4							
FR1 n7	SAR (W/kg)	0.883									
	Axis	3.7	-312.1	-169.7							
FR1 n41	SAR (W/kg)	0.714									
	Axis	4.3	-313.1	-169.8							
FR1 n77	SAR (W/kg)				0.399			0.878			
	Axis				48.7	-253.4	-171.9	41.6	-332.6	-171.6	



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WLAN5GHz Ant4	SAR (W/kg)	0.199		
	Axis	0.4	-300.2	-168.3
BT Ant3	SAR (W/kg)	0.131		
	Axis	18.1	-313.2	-171.5

Left Cheek																			
Band		Ant0			Ant2			Ant8			Ant4			Ant5			Ant9		
GSM850	SAR (W/kg)	0.267																	
	Axis	55.9	267.9	-172.4															
GSM1900	SAR (W/kg)				0.12														
	Axis				52.8	261.9	-171.3												
WCDMA II	SAR (W/kg)				0.173														
	Axis				52.3	261.7	-171.3												
WCDMA IV	SAR (W/kg)				0.208														
	Axis				53.6	265.5	-171												
WCDMA V	SAR (W/kg)	0.233																	
	Axis	55.3	268.3	-172.5															
LTE Band 12	SAR (W/kg)	0.183																	
	Axis	56.5	267.5	-172.4															
LTE Band 13	SAR (W/kg)	0.165																	
	Axis	56.5	267.5	-172.4															
LTE Band 2	SAR (W/kg)	0.09			0.129											0.648			
	Axis	57.3	265.6	-172.6	64.8	265.2	-170.6									29.6	211.4	-167.1	
LTE Band 26	SAR (W/kg)	0.467																	
	Axis	56.2	266.9	-172.5															
LTE Band 66	SAR (W/kg)				0.223											0.191			
	Axis				54.3	261.8	-171.1									28.6	213.2	-166.8	
LTE Band 7	SAR (W/kg)	0.126			0.189											0.576			
	Axis	54.2	268.1	-170.8	52.8	265.3	-171.3									31.2	212.1	-167.3	
LTE Band 41	SAR (W/kg)	0.107			0.101											0.524			
	Axis	56.4	264.3	-170.8	52.8	265.3	-171.3									32.8	212.4	-166.8	
LTE Band 42	SAR (W/kg)							0.183			0.893			0.791					
	Axis							55.4	275.3	-172.5	-0.3	313.1	-169.2	27.9	332.3	-171.8			
FR1 n2	SAR (W/kg)				0.129														
	Axis				53.6	265.5	-171												
FR1 n26	SAR (W/kg)	0.171																	
	Axis	55.8	266.3	-172.5															
FR1 n66	SAR (W/kg)				0.156														
	Axis				53.6	263.5	-171												
FR1 n7	SAR (W/kg)				0.137														
	Axis				51.5	265.6	-170.8												
FR1 n41	SAR (W/kg)	0.161																	
	Axis	57.3	268.6	-172.2															
FR1 n77	SAR (W/kg)							0.273			0.73			0.889					
	Axis							53.1	273.2	-172.5	0.2	313.9	-169.2	25.5	332.1	-171.5			



WLAN5GHz Ant4	SAR (W/kg)	0.397		
	Axis	15.3	324.4	-171.2
BT Ant3	SAR (W/kg)	0.284		
	Axis	22.6	332.3	-171.6

Left Tilted																
Band		Ant0			Ant2			Ant8			Ant4			Ant1		
GSM850	SAR (W/kg)	0.157											0.466			
	Axis	53.7	265.1	-171.5									-3.1	294.5	-167.8	
GSM1900	SAR (W/kg)				0.068								0.516			
	Axis				69.3	287.7	-170.6						-5	305.7	-169.8	
WCDMA II	SAR (W/kg)				0.123								0.594			
	Axis				68.9	285.4	-171.2						-3.6	308.5	167.8	
WCDMA IV	SAR (W/kg)				0.131								0.467			
	Axis				56.7	251.4	-170.7						-6.7	305.6	-168.1	
WCDMA V	SAR (W/kg)	0.129											0.462			
	Axis	53.7	264.7	-171.5									-3.2	295.1	168.7	
LTE Band 12	SAR (W/kg)	0.121											0.294			
	Axis	56.3	264.2	-172.2									-5	290.6	-165.7	
LTE Band 13	SAR (W/kg)	0.101											0.455			
	Axis	55.8	261.2	-172.2									-4.7	292.1	-166.8	
LTE Band 2	SAR (W/kg)	0.08			0.085								0.64			
	Axis	55	253.1	-171.1	71.2	287.9	-169.4						-0.9	310.1	-168.8	
LTE Band 26	SAR (W/kg)	0.108											0.504			
	Axis	55	265.4	-172.6									-2.9	294.4	-166.8	
LTE Band 66	SAR (W/kg)				0.136								0.888			
	Axis				53.4	247.6	-170.7						-7.2	301.9	-167	
LTE Band 7	SAR (W/kg)				0.078								0.656			
	Axis				52.1	246.7	-170.9						3.2	311.2	-169.6	
LTE Band 41	SAR (W/kg)				0.071								0.892			
	Axis				51.1	247.2	-171.1						3.5	308.9	-170.2	
LTE Band 42	SAR (W/kg)							0.221			0.893					
	Axis							56	286.4	-172.7	1.1	313.4	-169.4			
FR1 n2	SAR (W/kg)				0.116								0.646			
	Axis				70.5	287.1	169.4						-1.2	302.8	-166.8	
FR1 n26	SAR (W/kg)	0.092											0.419			
	Axis	53	263.4	-171.6									-3.1	294.5	-167.1	
FR1 n66	SAR (W/kg)				0.094								0.094			
	Axis				54.2	248.7	-170.7						-5.2	304.7	-168.7	
FR1 n7	SAR (W/kg)				0.058								0.709			
	Axis				51.6	248.5	-170.9						2.7	309.6	-168.7	
FR1 n41	SAR (W/kg)												0.681			
	Axis												2.1	307.5	-170.3	
FR1 n77	SAR (W/kg)							0.291			0.893					
	Axis							56.9	282.1	-172.5	1.1	313.6	-169.4			

WLAN5GHz	SAR	0.34
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Ant4	(W/kg)			
	Axis	14.9	331.5	-171.2

BT Ant3	SAR (W/kg)	0.256		
	Axis	22.9	336.2	-171.8

<Hotspot>

		Front																				
Band		Ant0			Ant1			Ant2			Ant4			Ant5			Ant7			Ant9		
GSM850	SAR (W/kg)	0.513			0.285																	
	Axis	-15.8	-61.8	-204	-44.8	84.2	-204															
GSM1900	SAR (W/kg)				0.213			0.683														
	Axis				-52.8	88.3	-204	1.6	-74.1	-204												
WCDMA II	SAR (W/kg)				0.2			0.708														
	Axis				-53.5	88.5	-204	2.3	-73.7	-204												
WCDMA IV	SAR (W/kg)				0.252			0.642														
	Axis				-53.5	88.5	-204	6.5	-75.4	-204												
WCDMA V	SAR (W/kg)	0.633			0.229																	
	Axis	16.7	-62.3	-204	-44.5	84	-204															
LTE Band 12	SAR (W/kg)	0.516			0.168																	
	Axis	3.5	-73.5	-204	-49	73.5	-204															
LTE Band 13	SAR (W/kg)	0.388			0.199																	
	Axis	4.7	-71.2	-204	-48.6	73.5	-204															
LTE Band 2	SAR (W/kg)	0.914			0.178			0.939											0.195			
	Axis	-33.5	-69	-204	-52	90	-204	0.5	-73.5	-204									-70	31.5	-204	
LTE Band 26	SAR (W/kg)	0.513			0.233																	
	Axis	18.1	-61.7	-204	-44.5	84.6	-204															
LTE Band 66	SAR (W/kg)	0.602			0.228			0.688											0.213			
	Axis	-35	-67.5	-204	-53.5	90	-204	2	-73.5	-204									-70	31.5	-204	
LTE Band 7	SAR (W/kg)	0.922			0.197			0.718											0.185			
	Axis	-29	-82.8	-204	-25	84	-204	13	-80.4	-204									-71.8	34.8	-204	
LTE Band 41	SAR (W/kg)	0.565			0.171			0.771											0.141			
	Axis	-25	-81.5	-204	-25.6	85.6	-204	12	-78.9	-204									-72.5	33.7	-204	
LTE Band 42	SAR (W/kg)										0.085			0.231			0.271					
	Axis										-25	87	-204	14	71	-204	-55	69	-204			
FR1 n2	SAR (W/kg)				0.204			0.684														
	Axis				-53.1	88.6	-204	5.5	-74.8	-204												
FR1 n26	SAR (W/kg)	0.231			0.434																	
	Axis	18.5	-61.5	-204	-44.6	84.3	-204															
FR1 n66	SAR (W/kg)				0.24			0.706														
	Axis				-53.5	88.6	-204	4.7	-76.4	-204												
FR1 n7	SAR (W/kg)				0.182			0.612														
	Axis				-24.3	84.2	-204	11.6	-78.4	-204												
FR1 n41	SAR (W/kg)	0.945			0.193																	
	Axis	-27.8	-78.6	-204	-26.1	86.7	-204															
FR1 n77	SAR (W/kg)										0.166			0.189			0.301					
	Axis										-24	81	-204	13	71	-204	-63	61	-204			



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WLAN5GHz Ant4	SAR (W/kg)	0.434		
	Axis	-7	80	-204

BT Ant3	SAR (W/kg)	0.188		
	Axis	-1	79.2	-204

Back																									
Band		Ant0			Ant1			Ant2			Ant4			Ant5			Ant7			Ant8			Ant9		
GSM850	SAR (W/kg)	1.298			0.619																				
	Axis	18.6	-61.6	-204	-10.8	74.1	-204																		
GSM1900	SAR (W/kg)				0.622			0.85																	
	Axis				-8.9	74.5	-204	-32.4	-74.1	-204															
WCDMA II	SAR (W/kg)				0.623			0.898																	
	Axis				-9.1	74.7	-204	-32.8	-72.8	-204															
WCDMA IV	SAR (W/kg)				0.622			0.891																	
	Axis				-10	81.7	-204	-35	-72.8	-204															
WCDMA V	SAR (W/kg)	1.261			0.617																				
	Axis	-8.3	-76	-204	-10.2	73.5	-204																		
LTE Band 12	SAR (W/kg)	0.984			0.516																				
	Axis	18.5	-61.5	-204	-11.5	73.5	-204																		
LTE Band 13	SAR (W/kg)	0.805			0.618																				
	Axis	18.5	-61.5	-204	-11.5	75	-204																		
LTE Band 2	SAR (W/kg)	1.294			0.619			1.003													0.329				
	Axis	2	-66	-204	-10	75	-204	-38.5	-73.5	-204											15.5	45	-204		
LTE Band 26	SAR (W/kg)	0.474			0.624																				
	Axis	-8.5	-75	-204	-11.5	73.5	-204																		
LTE Band 66	SAR (W/kg)	1.004			0.626			0.827														0.376			
	Axis	5	-63	-204	-10	76.5	-204	-37	-73.5	-204											15.5	45	-204		
LTE Band 7	SAR (W/kg)	1.183			0.626			1.005														0.26			
	Axis	-3.4	-81.6	-204	-13	80.4	-204	-23.8	-82.8	-204											13.4	36.7	-204		
LTE Band 41	SAR (W/kg)	1.297			0.625			1.011														0.197			
	Axis	-3.5	-79.5	-204	-11.8	82.8	-204	-31.5	-79.5	-204											12.2	36	-204		
LTE Band 42	SAR (W/kg)										0.2			0.386			0.504			1.045					
	Axis										-25	83	-204	-64	70	-204	5	61	-204	-64	-41	-204			
FR1 n2	SAR (W/kg)				0.619			0.755																	
	Axis				-9.5	75.4	-204	-41.2	-75.5	-204															
FR1 n26	SAR (W/kg)	0.619			0.619																				
	Axis	-8.2	-75.3	-204	-10.8	74.1	-204																		
FR1 n66	SAR (W/kg)				0.624			0.826																	
	Axis				-10	76.8	-204	-32.6	-74.3	-204															
FR1 n7	SAR (W/kg)				0.621			0.797																	
	Axis				-11	78.6	-204	-30.2	-78.5	-204															
FR1 n41	SAR (W/kg)	1.238			0.624																				
	Axis	-4.2	-80.2	-204	-12	78.9	-204																		
FR1 n77	SAR (W/kg)										0.402			0.618			0.558			0.754					
	Axis										-19	86	-204	-64	72	-204	3	60	-204	-63	-69	-204			

WLAN5GHz Ant4	SAR (W/kg)	0.614		
	Axis	-33	80	-204

BT Ant3	SAR (W/kg)	0.304		
	Axis	-46.6	72	-204



Left Side									
Band		Ant0			Ant7			Ant9	
GSM850	SAR (W/kg)	0.574							
	Axis	-26.8	-59.6	-204					
WCDMA V	SAR (W/kg)	0.27							
	Axis	-26.3	-57.4	-204					
LTE Band 12	SAR (W/kg)	0.769							
	Axis	-25.8	-58.5	-204					
LTE Band 13	SAR (W/kg)	0.703							
	Axis	-24.5	-61.2	-204					
LTE Band 2	SAR (W/kg)	1.103						0.623	
	Axis	-27.8	-64.5	-204				-31.3	31.5 -204
LTE Band 26	SAR (W/kg)	0.377							
	Axis	-25.8	-58.2	-204					
LTE Band 66	SAR (W/kg)	1.156						0.616	
	Axis	-27.8	-60	-204				-31.3	31.5 -204
LTE Band 7	SAR (W/kg)	0.323						0.625	
	Axis	-27.1	-46.8	-204				-28.4	30.8 -204
LTE Band 41	SAR (W/kg)	0.213						0.627	
	Axis	-27.5	-48.6	-204				-26.4	22.8 -204
LTE Band 42	SAR (W/kg)				0.621				
	Axis				-31.3	60	-204		
FR1 n26	SAR (W/kg)	0.756							
	Axis	-25.8	-61.1	-204					
FR1 n41	SAR (W/kg)	0.443							
	Axis	-27.5	-47.6	-204					
FR1 n77	SAR (W/kg)				0.621				
	Axis				-32	70	-204		

WLAN5GHz Ant4	SAR (W/kg)	0.066		
	Axis	-39	89	-204

Right Side									
Band		Ant1			Ant4			Ant5	
GSM850	SAR (W/kg)	0.055							
	Axis	-27.1	-64.2	-204					
GSM1900	SAR (W/kg)	0.033							
	Axis	-26.4	-63.7	-204					
WCDMA II	SAR (W/kg)	0.033							
	Axis	-268	-63.1	-204					
WCDMA IV	SAR (W/kg)	0.019							
	Axis	-25.8	-60.7	-204					
WCDMA V	SAR (W/kg)	0.044							
	Axis	-26.3	-61.8	-204					
LTE Band 12	SAR (W/kg)	0.14							
	Axis	-27.4	-22.5	-204					
LTE Band 13	SAR (W/kg)	0.102							
	Axis	-27.1	-23.7	204					
LTE Band 2	SAR (W/kg)	0.069							
	Axis	-26.6	-64.5	-204					
LTE Band 26	SAR (W/kg)	0.056							
	Axis	-27.4	-64.5	-204					
LTE Band 66	SAR	0.019							



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	(W/kg)																
	Axis	-26.6	-61	-204													
LTE Band 7	SAR (W/kg)	0.023															
	Axis	-40.2	-74.4	-204													
LTE Band 41	SAR (W/kg)	0.023															
	Axis	-38.2	-71.4	-204													
LTE Band 42	SAR (W/kg)				0.014			0.627						1.297			
	Axis				-29.2	-72	-204	-26.4	-66	-204				-30.6	40	-204	
FR1 n2	SAR (W/kg)	0.03															
	Axis	-26.8	-66.7	-204													
FR1 n26	SAR (W/kg)	0.054															
	Axis	-25.8	-62.3	-204													
FR1 n66	SAR (W/kg)	0.021															
	Axis	-31.2	-60.2	-204													
FR1 n7	SAR (W/kg)	0.024															
	Axis	-36.7	-68.5	-204													
FR1 n41	SAR (W/kg)	0.026															
	Axis	-37.1	-69.2	-204													
FR1 n77	SAR (W/kg)							0.627			0.017			1.277			
	Axis							-27.1	-66	-204	-46	-89	-204	-31	40	-204	

WLAN5GHz Ant4	SAR (W/kg)	0.268		
	Axis	-30.6	-66	-204

BT Ant3	SAR (W/kg)	0.101		
	Axis	-27.8	-54	-204

<Body-worn>

Front																									
Band		Ant0			Ant1			Ant2			Ant4			Ant5			Ant7			Ant8			Ant9		
GSM850	SAR (W/kg)	0.513			0.401																				
	Axis	-15.8	-61.8	-204	-44.8	84.2	-204																		
GSM1900	SAR (W/kg)				0.303			1.044																	
	Axis				-52.8	88.3	-204	1.6	-74.1	-204															
WCDMA II	SAR (W/kg)				0.284			1.069																	
	Axis				-53.5	88.5	-204	2.3	-73.7	-204															
WCDMA IV	SAR (W/kg)				0.893			0.944																	
	Axis				-53.5	88.5	-204	6.5	-75.4	-204															
WCDMA V	SAR (W/kg)	0.633			0.325																				
	Axis	16.7	-62.3	-204	-44.5	84	-204																		
LTE Band 12	SAR (W/kg)	0.516			0.168																				
	Axis	3.5	-73.5	-204	-49	73.5	-204																		
LTE Band 13	SAR (W/kg)	0.388			0.836																				
	Axis	4.7	-71.2	-204	-48.6	73.5	-204																		
LTE Band 2	SAR (W/kg)	0.914			0.252			1.195													0.516				
	Axis	-33.5	-69	-204	-52	90	-204	0.5	-73.5	-204											-70	31.5	-204		
LTE Band 26	SAR (W/kg)	0.513			0.334																				
	Axis	18.1	-61.7	-204	-44.5	84.6	-204																		
LTE Band 66	SAR (W/kg)	0.596			0.329			1.112													0.228				
	Axis	-35	-67.5	-204	-53.5	90	-204	2	-73.5	-204											-70	31.5	-204		
LTE Band 7	SAR (W/kg)	0.986			0.272			0.994													0.422				
	Axis	-29	-82.8	-204	-25	84	-204	13	-80.4	-204											-71.8	34.8	-204		



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LTE Band 41	SAR (W/kg)	0.565			0.243			0.978													0.331					
	Axis	-25	-81.5	-204	-25.6	85.6	-204	12	-78.9	-204											-72.5	33.7	-204			
LTE Band 42	SAR (W/kg)										0.224			0.332			0.466			0.69						
	Axis										-25	87	-204	14	71	-204	-55	69	-204	19	-33	-204				
FR1 n2	SAR (W/kg)				0.292			1.16																		
	Axis				-53.1	88.6	-204	5.5	-74.8	-204																
FR1 n26	SAR (W/kg)	0.434			0.33																					
	Axis	18.5	-61.5	-204	-44.6	84.3	-204																			
FR1 n66	SAR (W/kg)				0.343			1.091																		
	Axis				-53.5	88.6	-204	4.7	-76.4	-204																
FR1 n7	SAR (W/kg)				0.261			0.985																		
	Axis				-24.3	84.2	-204	11.6	-78.4	-204																
FR1 n41	SAR (W/kg)	0.981			0.271																					
	Axis	-27.8	-78.6	-204	-26.1	86.7	-204																			
FR1 n77	SAR (W/kg)										0.366			0.269			0.483			0.626						
	Axis										-24	81	-204	13	71	-204	-63	61	-204	23	-31	-204				

WLAN5GHz Ant4	SAR (W/kg)	0.391		
	Axis	-7	80	-204

BT Ant3	SAR (W/kg)	0.188		
	Axis	-1	79.2	-204

Back																									
Band		Ant0			Ant1			Ant2			Ant4			Ant5			Ant7			Ant8			Ant9		
GSM850	SAR (W/kg)	1.298			0.882																				
	Axis	18.6	-61.6	-204	-10.8	74.1	-204																		
GSM1900	SAR (W/kg)				0.892			1.283																	
	Axis				-8.9	74.5	-204	-32.4	-74.1	-204															
WCDMA II	SAR (W/kg)				0.88			1.273																	
	Axis				-9.1	74.7	-204	-32.8	-72.8	-204															
WCDMA IV	SAR (W/kg)				0.893			1.269																	
	Axis				-10	81.7	-204	-35	-72.8	-204															
WCDMA V	SAR (W/kg)	1.261			0.875																				
	Axis	-8.3	-76	-204	-10.2	73.5	-204																		
LTE Band 12	SAR (W/kg)	0.984			0.516																				
	Axis	18.5	-61.5	-204	-11.5	74.5	-204																		
LTE Band 13	SAR (W/kg)	0.805			0.836																				
	Axis	18.5	-61.5	-204	-11.5	75	-204																		
LTE Band 2	SAR (W/kg)	1.294			0.883			1.289													0.875				
	Axis	2	-66	-204	-10	75.2	-204	-38.5	-73.5	-204											15.5	65	-204		
LTE Band 26	SAR (W/kg)	0.474			0.894																				
	Axis	-8.5	-75	-204	-11.5	73.5	-204																		
LTE Band 66	SAR (W/kg)	0.994			0.891			1.272													0.422				
	Axis	5	-63	-204	-10	76.5	-204	-37	-73.5	-204											15.5	65.5	-204		
LTE Band 7	SAR (W/kg)	1.265			0.881			1.277													0.879				
	Axis	-3.4	-81.6	-204	-13	80.4	-204	-23.8	-82.8	-204											13.4	66.7	-204		
LTE Band 41	SAR (W/kg)	1.297			0.887			1.282													0.898				
	Axis	-3.5	-79.5	-204	-11.8	82.8	-204	-31.5	-79.5	-204											12.2	66	-204		
LTE Band 42	SAR (W/kg)										0.896			0.556			0.895			1.205					
	Axis										-25	83	-204	-64	70	-204	5	61	-204	-64	-51	-204			
FR1 n2	SAR (W/kg)				0.884			1.283																	
	Axis				-9.5	75.4	-204	-41.2	-75.5	-204															
FR1 n26	SAR (W/kg)	0.819			0.883																				
	Axis	-8.2	-75.3	-204	-10.8	74.1	-204																		
FR1 n66	SAR (W/kg)				0.891			1.277																	

[illegible]

BT Ant3	SAR (W/kg)	0.304		
	Axis	-46.6	72	-204

Front				
Band	Ant2			
GSM850	SAR (W/kg)			
	Axis			
GSM1900	SAR (W/kg)	2.586		
	Axis	-40	-73.5	-204
WCDMA II	SAR (W/kg)	3.13		
	Axis	-40	-73.5	-204
WCDMA IV	SAR (W/kg)	2.501		
	Axis	0.5	-75	-204
WCDMA V	SAR (W/kg)			
	Axis			
LTE Band 12	SAR (W/kg)			
	Axis			
LTE Band 13	SAR (W/kg)			
	Axis			
LTE Band 2	SAR (W/kg)	3.165		
	Axis	-40	-73.5	-204
LTE Band 26	SAR (W/kg)			
	Axis			
LTE Band 66	SAR (W/kg)	2.973		
	Axis	0.5	-75	-204
LTE Band 7	SAR (W/kg)	2.143		
	Axis	-5	-79	-204
LTE Band 41	SAR (W/kg)			
	Axis			
LTE Band 42	SAR (W/kg)			
	Axis			
FR1 n2	SAR (W/kg)	3.035		
	Axis	-40	-73.5	-204
FR1 n26	SAR (W/kg)			
	Axis			
FR1 n66	SAR (W/kg)	2.953		
	Axis	0.5	-75	-204
FR1 n7	SAR (W/kg)	1.8		
	Axis	-5	-79	-204
FR1 n77	SAR (W/kg)			
	Axis			

WLAN5GHz	Ant4	SAR (W/kg)	0.909		
		Axis	-11.2	81.2	-207



NFC	SAR (W/kg)			0.001		
	Axis			-63	60	-204

Back																									
Band		Ant0			Ant1			Ant2			Ant4			Ant5			Ant7			Ant8			Ant9		
GSM850	SAR (W/kg)	2.225			1.591																				
	Axis	3.5	-72	-204	-10	73.5	-204																		
GSM1900	SAR (W/kg)				1.487			2.907																	
	Axis				-11.5	75	-204	-10	-73.5	-204															
WCDMA II	SAR (W/kg)				2.103			3.17																	
	Axis				-11.5	75	-204	-10	-73.5	-204															
WCDMA IV	SAR (W/kg)				2.372			3.145																	
	Axis				-8.5	76.5	-204	-40	-73.5	-204															
WCDMA V	SAR (W/kg)	2.012																							
	Axis	3.5	-72	-204																					
LTE Band 2	SAR (W/kg)	3.139			1.9			2.919													2.359				
	Axis	-10	-71	-204	-11.5	75	-204	-10	-73.5	-204											8	69	-204		
LTE Band 26	SAR (W/kg)				1.397																				
	Axis				-10	73.5	-204																		
LTE Band 66	SAR (W/kg)				1.947			3.159																	
	Axis				-8.5	76.5	-204	-41.5	-73.5	-204															
LTE Band 7	SAR (W/kg)	2.283			1.947			1.981																	
	Axis	-11.8	-72	-204	-14	79	-204	-25	-79	-204															
LTE Band 41	SAR (W/kg)	2.144			1.483			1.467																	
	Axis	-11.8	-72	-204	-14	79	-204	-25	-79	-204															
LTE Band 42	SAR (W/kg)															1.994		1.427							
	Axis															5	66	-204	-64	-40	-204				
FR1 n2	SAR (W/kg)				2.162			2.725																	
	Axis				-11.5	75	-204	-10	-73.5	-204															
FR1 n26	SAR (W/kg)				1.078																				
	Axis				2	73.5	-204																		
FR1 n66	SAR (W/kg)				2.396			2.915																	
	Axis				-8.5	76.5	-204	-41.5	-73.5	-204															
FR1 n7	SAR (W/kg)				2.063			1.875																	
	Axis				-14	79	-204	-25	-79	-204															
FR1 n41	SAR (W/kg)	3.115			2.135																				
	Axis	-10.6	-71.6	-204	-14	79	-204																		
FR1 n77	SAR (W/kg)										1.35			1.115						1.219					
	Axis										-23	82	-204	-63	63	-204				-64	-40	-204			

WLAN5GHz Ant4	SAR (W/kg)	0.293		
	Axis	-55	88	-204

NFC	SAR (W/kg)	0.033		
	Axis	-15	75	-204



Left Side								
Band		Ant0			Ant7			Ant9
LTE Band 2	SAR (W/kg)	1.992						
	Axis	-26.4	-61.5	-204				
LTE Band 41	SAR (W/kg)							2.497
	Axis						-27.8	36.4 -204
LTE Band 42	SAR (W/kg)				2.461			
	Axis				-25.7	41	-204	
FR1 n41	SAR (W/kg)							
	Axis							
FR1 n77	SAR (W/kg)				2.44			
	Axis				-25	49	-204	

WLAN5GHz Ant4	SAR (W/kg)	0.055		
	Axis	-25	71	-204

NFC	SAR (W/kg)	0.001		
	Axis	-33.4	62	-204

Right Side								
Band		Ant5			Ant8			
LTE Band 42	SAR (W/kg)				1.49			
	Axis				-26.6	60	-204	
FR1 n77	SAR (W/kg)	2.48			3.039			
	Axis	-25	-83	-204	-25	61	-204	

WLAN5GHz Ant4	SAR (W/kg)	0.344		
	Axis	-26.4	-85	-204

NFC	SAR (W/kg)	0.001		
	Axis	-46.7	-84	-204

Test Engineer : Martin Li, Varus Wang, Light Wang

18. Uncertainty Assessment

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

19. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
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- [10] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
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- [13] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [14] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015

Appendixes

Please refer to separated files for the following appendixes

Appendix A. Plots of System Performance Check

Appendix B. Plots of High SAR Measurement

Appendix C. DASY Calibration Certificate

Appendix D. Test Setup Photos

Appendix E. Conducted RF Output Power Table

Appendix F. Power measurement connection diagram and CA Conducted RF Output Power Table

Appendix G. Power reduction mechanism verification

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