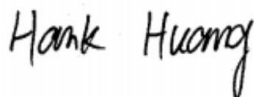


FCC SAR Test Report

APPLICANT : vivo Mobile Communication Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : vivo
MODEL NAME : V2550
FCC ID : 2AUCY-V2550
STANDARD : FCC 47 CFR Part 2 (2.1093)

We, Sporton International Inc. (Shenzhen), 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. (Shenzhen), the test report shall not be reproduced except in full.



Approved by: Hank Huang

Sporton International Inc. (Shenzhen)
1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055
People's Republic of China



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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA5O2827	Rev. 01	Initial issue of report.	Jan. 14, 2026

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **vivo Mobile Communication Co., Ltd., Mobile Phone, V2550**, are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 10mm)	Body-worn (Separation 15mm)	Highest Simultaneous Transmission
			1g SAR (W/kg)			1g SAR (W/kg)
Licensed	GSM	GSM850	0.55	0.37	0.42	1.44
		GSM1900	0.87	0.78	0.31	
	WCDMA	WCDMA II	0.62	0.65	0.37	
		WCDMA IV	0.72	0.53	0.57	
		WCDMA V	0.73	0.77	0.59	
	LTE	LTE Band 2	1.06	0.64	0.36	
		LTE Band 7	1.08	0.46	0.47	
		LTE Band 12/17	0.52	0.82	0.35	
		LTE Band 13	0.47	0.71	0.23	
		LTE Band 26/5	0.96	0.94	0.72	
		LTE Band 66/4	1.04	0.78	0.55	
		LTE Band 41/38	0.99	0.56	0.43	
		LTE Band 42	0.82	0.50	0.33	
		LTE Band 43	0.87	0.36	0.30	
	5G NR	FR1 n2	0.70	0.61	0.44	
		FR1 n7	0.96	0.50	0.61	
		FR1 n26/n5	0.93	0.79	0.80	
		FR1 n66	1.12	0.63	0.69	
		FR1 n41/n38	0.87	0.61	1.14	
FR1 n77/n78		1.11	0.68	0.42		
DTS	WLAN	2.4GHz WLAN	0.42	0.25	0.10	1.26
NII		5GHz WLAN	0.90	0.59	0.32	1.44
DSS	Bluetooth	2.4GHz Bluetooth	0.11	<0.10	<0.10	1.44

Highest 10g SAR Summary				
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)
Licensed	GSM	GSM1900	2.64	3.16
	LTE	LTE Band 12/17	2.52	
		LTE Band 26/5	2.66	
	5G NR	FR1 n7	2.45	
		FR1 n26/n5	2.36	
		FR1 n66	2.72	
		FR1 n41/38	2.61	
NII	WLAN	5GHz WLAN	2.90	3.16
Date of Testing:			2025/12/1 ~ 2025/12/31	

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 / n77 and n26 / n41/ n78. Since the supported frequency span for 5G NR n5 / n38 / n77 falls completely within the support's frequency span for n26 / n41/ n78, 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/ n78.

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. (Shenzhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Testing Laboratory			
Test Firm	Sporton International Inc. (Shenzhen)		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR02-SZ	CN1256	421272

Applicant	
Company Name	vivo Mobile Communication Co., Ltd.
Address	No.1, vivo Road, Chang'an, Dongguan, Guangdong, China

Manufacturer	
Company Name	vivo Mobile Communication Co., Ltd.
Address	No.1, vivo Road, Chang'an, Dongguan, Guangdong, China

3. Guidance Applied

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

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

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Phone
Brand Name	vivo
Model Name	V2550
FCC ID	2AUCY-V2550
IMEI Code	863765089994630/863765089994622, 863765089995751/863765089995744, 863765089995892/863765089995884, 863765089995777/863765089995769
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 43: 3700 MHz ~ 3800 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: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
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 WLAN 2.4GHz 802.11VHT20/VHT40 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	MP_0.1
SW Version	PD2539QF_EX_A_16.0.4.2.W30
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype

Remark:

1. This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5GNR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
3. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
4. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12.
5. 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 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 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 when transmit simultaneous with WWAN/BT antenna, the device WLAN power reduction will be activated to head, hotspot, body-worn and extremity exposure conditions.
8. This device supports HPUE mode for 5GNR n41/n78 with higher power, so HPUE mode was chosen to perform full SAR testing and HPUE SAR can represent power class 3 level SAR.
9. This device has NFC function and the NFC SAR report will be separately submitted.
10. This device supports 5GNR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.

<5G NR>

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

4.2 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																							
FCC ID	2AUCY-V2550																																																																						
Equipment Name	Mobile Phone																																																																						
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 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 43: 3700 MHz ~ 3800 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 43: 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	R18																																																																						
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																																																																
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256 QAM	≥ 1						≤ 5																																																																
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																																						
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																						
Power reduction applied to satisfy SAR compliance	Yes, when operating in Proximity sensors/receiver/hotspot detect mechanism, head/body-worn /hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 14.																																																																						
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 14.																																																																						
LTE Carrier Aggregation Additional Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band and inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 2 carriers in the uplink.																																																																						

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829	20525	836.5	20525	836.5
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844	20600	844	20600	844
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz		Bandwidth 25 MHz		Bandwidth 30 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510	20875	2512.5	20900	2515
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21325	2557.5	21300	2555
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704	23095	707.5	23130	711
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23105	708.5	23080	706
LTE Band 13												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782		23255		784.5	
M	23230		782		23255		784.5		23280		787	
H	23255		784.5		23280		787		23305		789.5	
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23755		706.5		23780		709		23805		711.5	
M	23790		710		23790		710		23790		710	
H	23825		713.5		23800		711		23825		713.5	
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5	26790	824
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5	26940	839

LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	38000	2595	38000	2595				
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610				
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506				
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680				
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770
LTE Band 42												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	42115	3452.5	42140	3455	42165	3457.5	42190	3460				
M	42590	3500	42590	3500	42590	3500	42590	3500				
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540				
LTE Band 43												
	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	44615	3702.5	44640	3705	44665	3707.5	44690	3710				
M	45090	3750	45090	3750	45090	3750	45090	3750				
H	45565	3797.5	45540	3795	45515	3792.5	45490	3790				

<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	Ant	Full Power	ECI 2	ECI 3	ECI 5	ECI 7	ECI 8	ECI 10
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit
LTE Band 4	Ant 14	25	19	18	22.9	25	20.5	20.5
LTE Band 66		25	18.5	18	23	25	21	21
LTE Band 4	Ant 41	25.5	25.5	25.5	24	24	21.5	21.5
LTE Band 66		25.5	25.5	25.5	23.2	23.2	21.2	21.2
LTE Band 4	Ant 12	25.7	21.9	20.8	25.4	25.4	21.8	21.8
LTE Band 66		25.7	21	20.5	23.8	23.8	22.5	22.5
LTE Band 4	Ant 24	23.2	19	17.7	23.2	23.2	21.2	21.2
LTE Band 66		23.2	17.7	17.2	22.7	22.7	20.7	20.7
LTE Band 5	Ant 11	25.3	23	21.8	24.8	24.8	21.3	21.3
LTE Band 26		25.3	23.3	22.3	24.8	24.8	21.8	21.8
LTE Band 5	Ant 25	24.5	24.5	23.5	24.5	24.5	22.5	22.5
LTE Band 26		24.5	24.5	23.5	24.5	24.5	22.5	22.5
LTE Band 12	Ant 11	25.3	25.3	25.3	25.3	25.3	22.8	22.8
LTE Band 17		25.3	25.3	24.8	25.3	25.3	23.3	23.3
LTE Band 12	Ant 25	24.5	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 17		24.5	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 38	Ant 14	25	18.5	18	23.5	25	22.5	22.5
LTE Band 41		25	18.8	17.5	23.9	25	22	22
LTE Band 38	Ant 41	25.5	25.5	25.5	24	24	22	22
LTE Band 41		25.7	25.7	25.7	24.8	24.8	22.8	22.8
LTE Band 38	Ant 12	25.7	21.2	20.2	23.2	23.2	21.2	21.2
LTE Band 41		25.7	21.8	20.9	23.5	23.5	21.4	21.4
LTE Band 38	Ant 24	23.5	20	19.5	23.5	23.5	22	22
LTE Band 41		23.2	20.1	19.2	23.2	23.2	21.2	21.2

Note: For some bands/antennas at some exposure conditions which cannot be covered were fully tested for RF exposure compliance.

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: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5GNR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B4/7/66
LTE Anchor Bands for n5	LTE B7
LTE Anchor Bands for n7	LTE B2/4/5/66
LTE Anchor Bands for n26	LTE B7
LTE Anchor Bands for n66	LTE B2/5/7
LTE Anchor Bands for n38	LTE B4/66
LTE Anchor Bands for n41	LTE B4/5/26/66
LTE Anchor Bands for n77	LTE B7
LTE Anchor Bands for n78	LTE B2/4/5/7/26/38/41/66

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band								
NR Band 2								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900

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

NR Band 7																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	504000	2520	505000	2525
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510000	2550	509000	2545

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

NR Band 38												
Bandwidth 10MHz			Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
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 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	500202	2501.01	500700	2503.5	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	505200	2526	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
H	537000	2685	536496	2682.48	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	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 <3450 MHz ~ 3550 MHz >

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	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

NR Band 78																							
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L 630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M 633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H 636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

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

Band	Duplex	SCS(KHz)	Bandwidths(BW)
FR1 n5	FDD	15	5/10/15/20
FR1 n26	FDD	15	5/10/15/20
FR1 n38	FDD	30	10/15/20/25/30/40
FR1 n41_PC2	FDD	30	10/15/20/30/40/50/60/80/90/100
FR1 n77	FDD	30	10/15/20/25/30/40/50/60/70/80/90/100
FR1 n78_PC2	FDD	30	10/15/20/25/30/40/50/60/70/80/90/100

2) NR Bands Tune up:

Band	Ant	Full Power Tune-up Limit	ECI 2 Tune-up Limit	ECI 3 Tune-up Limit	ECI 5 Tune-up Limit	ECI 7 Tune-up Limit	ECI 8 Tune-up Limit	ECI 10 Tune-up Limit
FR1 n5	Ant 11	25.5	22.5	22	25	25	21	21
FR1 n26		25.5	23	22	25.5	25.5	21.5	21.5
FR1 n5	Ant 25	24	23	22.5	24	24	21.5	21.5
FR1 n26		24.5	23.5	23	24.5	24.5	22.5	22.5
FR1 n38	Ant 14	25	16.5	15.5	22.5	25	20	20
FR1 n41_PC2		26.8	16.3	15.8	20.8	26.8	19.8	19.8
FR1 n38	Ant 41	25.7	25.7	25.7	21.7	21.7	19.7	19.7
FR1 n41_PC2		27.3	27.3	27.3	21.9	21.9	19.9	19.9
FR1 n38	Ant 12	25.7	18.2	17.2	21	21	19.2	19.2
FR1 n41_PC2		27.5	18.5	17.5	21	21	19	19
FR1 n38	Ant 24	23	17.5	16.5	21.5	21.5	20	20
FR1 n41_PC2		25.2	18.2	17.2	21.7	21.7	19.7	19.7
FR1 n77	Ant 13	24.8	14.8	14.3	17.8	17.8	15.8	15.8
FR1 n78_PC2		27.7	15.1	14.2	18.2	18.2	15.7	15.7
FR1 n77	Ant 101	24.7	18.7	17.7	19.7	19.7	18.7	18.7
FR1 n78_PC2		27.7	19.2	18.2	21.3	21.3	19.2	19.2
FR1 n77	Ant 23	22.7	16.2	14.2	20.2	20.2	18.2	18.2
FR1 n78_PC2		24.7	16.8	15.7	20	20	17.7	17.7
FR1 n77	Ant 21	23.7	19.7	18.7	20.7	20.7	19.2	19.2
FR1 n78_PC2		24.7	20.9	19.7	21.8	21.8	19.7	19.7

Note: For some bands/antennas at some exposure conditions which cannot be covered were fully tested for RF exposure compliance.

5. TA-SAR feature for RF Exposure compliance

WWAN and WLAN bands are all enabled with MediaTek TA-SAR 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 BT operations are not enabled with TA-SAR 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 and WLAN 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 algorithm. SAR char will be entered via the MediaTek's NV suggestion to enable the TA-SAR 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 algorithm to control and manage RF exposure for f < 6 GHz.

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 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	ECI 2	ECI 3	ECI 5	ECI 7	ECI 8	ECI 10	Pmax*	Total Uncertainty dB (k=2)
GSM850	Ant 11	21.5	20.5	22.0	22.0	20.5	20.5	25.0	1.0
GSM1900	Ant 14	18.0	17.0	22.0	28.4	20.2	20.2	22.0	1.0
GSM1900	Ant 41	32.5	32.5	23.0	23.5	21.0	21.0	23.0	1.0
WCDMA B2	Ant 14	17.0	16.0	23.5	28.9	21.0	21.0	24.0	1.0
WCDMA B2	Ant 41	33.8	33.8	22.5	22.5	20.5	20.5	24.0	1.0
WCDMA B4	Ant 14	17.5	17.0	21.5	27.1	20.0	20.0	24.0	1.0
WCDMA B4	Ant 41	33.2	33.2	22.0	22.0	20.5	20.5	24.0	1.0
WCDMA B5	Ant 11	21.0	20.5	22.0	22.0	20.0	20.0	24.0	1.0
WCDMA B5	Ant 25	23.0	22.5	23.5	26.4	22.0	22.0	23.5	1.0
LTE Band 2	Ant 14	18.8	17.5	24.0	29.0	22.5	22.5	24.0	1.0
LTE Band 2	Ant 41	33.4	33.4	23.0	23.0	20.8	20.8	24.5	1.0
LTE Band 2	Ant 12	18.7	17.8	20.3	20.3	19.3	19.3	23.0	1.2
LTE Band 4	Ant 14	18.0	17.0	21.9	27.2	19.5	19.5	24.0	1.0
LTE Band 4	Ant 41	33.0	33.0	23.0	23.0	20.5	20.5	24.5	1.0
LTE Band 4	Ant 12	20.7	19.6	24.2	24.2	20.6	20.6	24.5	1.2
LTE Band 4	Ant 24	17.8	16.5	22.0	30.0	20.0	20.0	22.0	1.2
LTE Band 5	Ant 11	22.0	20.8	23.8	23.8	20.3	20.3	24.3	1.0
LTE Band 5	Ant 25	24.2	22.5	23.5	27.7	21.5	21.5	23.5	1.0
LTE Band 7	Ant 14	16.6	15.5	21.7	27.9	19.0	19.0	24.0	1.0
LTE Band 7	Ant 41	30.3	30.3	22.0	22.0	19.5	19.5	24.5	1.0
LTE Band 7	Ant 12	18.0	17.0	20.5	20.5	18.5	18.5	24.5	1.2
LTE Band 7	Ant 24	19.0	18.0	20.3	20.3	18.0	18.0	22.0	1.2
LTE Band 12	Ant 11	27.7	27.7	24.3	25.3	21.8	21.8	24.3	1.0
LTE Band 12	Ant 25	34.0	34.0	23.5	35.9	23.5	31.8	23.5	1.0
LTE Band 13	Ant 11	23.3	22.3	22.8	22.8	21.8	21.8	24.3	1.0
LTE Band 13	Ant 25	27.7	27.7	23.5	31.2	23.5	27.7	23.5	1.0
LTE Band 17	Ant 11	27.7	23.8	24.3	25.1	22.3	22.3	24.3	1.0
LTE Band 17	Ant 25	34.0	34.0	23.5	35.9	23.5	31.8	23.5	1.0
LTE Band 26	Ant 11	22.3	21.3	23.8	23.8	20.8	20.8	24.3	1.0
LTE Band 26	Ant 25	24.2	22.5	23.5	27.7	21.5	21.5	23.5	1.0
LTE Band 66	Ant 14	17.5	17.0	22.0	27.2	20.0	20.0	24.0	1.0
LTE Band 66	Ant 41	33.0	33.0	22.2	22.2	20.2	20.2	24.5	1.0
LTE Band 66	Ant 12	19.8	19.3	22.6	22.6	21.3	21.3	24.5	1.2
LTE Band 66	Ant 24	16.5	16.0	21.5	21.5	19.5	19.5	22.0	1.2
LTE Band 38	Ant 14	15.5	15.0	20.5	26.5	19.5	19.5	22.0	1.0
LTE Band 38	Ant 41	30.2	30.2	21.0	21.0	19.0	19.0	22.5	1.0
LTE Band 38	Ant 12	18.0	17.0	20.0	20.0	18.0	18.0	22.5	1.2
LTE Band 38	Ant 24	16.8	16.3	20.3	27.1	18.8	18.8	20.3	1.2
LTE Band 41_PC3	Ant 14	15.8	14.5	20.9	26.5	19.0	19.0	22.0	1.0
LTE Band 41_PC3	Ant 41	30.2	30.2	21.6	21.6	19.6	19.6	22.5	1.2
LTE Band 41_PC3	Ant 12	18.6	17.7	20.3	20.3	18.2	18.2	22.5	1.2
LTE Band 41_PC3	Ant 24	16.9	16.0	20.0	26.1	18.0	18.0	20.0	1.2
LTE Band 42	Ant 13	13.5	13.0	17.0	17.0	15.0	15.0	21.5	1.0
LTE Band 42	Ant 101	18.0	17.0	19.5	19.5	17.5	17.5	21.5	1.2
LTE Band 42	Ant 23	16.5	15.5	20.5	20.5	19.0	19.0	21.0	1.2
LTE Band 42	Ant 21	24.0	24.0	21.0	30.1	21.0	27.2	21.0	1.2
LTE Band 43	Ant 13	15.0	14.0	16.5	16.5	15.0	15.0	21.5	1.0
LTE Band 43	Ant 101	19.5	18.5	18.5	18.5	16.5	16.5	21.5	1.2

LTE Band 43	Ant 23	15.5	14.5	19.5	19.5	18.0	18.0	21.0	1.2
LTE Band 43	Ant 21	23.6	20.0	21.0	28.7	20.0	20.0	21.0	1.2
FR1 n2	Ant 14	17.0	16.0	23.5	27.7	21.5	21.5	23.5	1.0
FR1 n2	Ant 41	33.0	33.0	22.2	22.2	20.2	20.2	24.0	1.0
FR1 n2	Ant 12	16.7	15.7	19.7	19.7	18.7	18.7	23.0	1.2
FR1 n5	Ant 11	21.5	21.0	24.0	24.0	20.0	20.0	24.5	1.0
FR1 n5	Ant 25	22.0	21.5	23.0	28.3	20.5	20.5	23.0	1.0
FR1 n7	Ant 14	16.0	15.0	21.5	26.3	20.0	20.0	23.5	1.0
FR1 n7	Ant 41	29.3	29.3	20.7	20.7	18.2	18.2	24.0	1.0
FR1 n7	Ant 12	17.4	16.4	20.7	20.7	18.6	18.6	24.0	1.2
FR1 n7	Ant 24	17.0	16.0	20.5	20.5	18.5	18.5	22.0	1.2
FR1 n26	Ant 11	22.0	21.0	24.5	26.1	20.5	20.5	24.5	1.0
FR1 n26	Ant 25	22.5	22.0	23.5	28.3	21.5	21.5	23.5	1.0
FR1 n66	Ant 14	17.0	16.5	22.0	26.2	20.0	20.0	24.0	1.0
FR1 n66	Ant 41	32.7	32.7	21.9	21.9	20.4	20.4	24.5	1.0
FR1 n66	Ant 12	19.0	17.5	22.9	22.9	20.4	20.4	24.5	1.2
FR1 n66	Ant 24	17.0	16.0	22.5	28.7	20.5	20.5	22.5	1.2
FR1 n38	Ant 14	15.5	14.5	21.5	24.0	19.0	19.0	24.0	1.0
FR1 n38	Ant 41	29.8	29.8	20.5	20.5	18.5	18.5	24.5	1.2
FR1 n38	Ant 12	17.0	16.0	19.8	19.8	18.0	18.0	24.5	1.2
FR1 n38	Ant 24	16.5	15.5	20.5	20.5	19.0	19.0	22.0	1.0
FR1 n41_PC2	Ant 14	15.3	14.8	19.8	25.8	18.8	18.8	25.8	1.0
FR1 n41_PC3	Ant 14							24.0	1.0
FR1 n41_PC2	Ant 41	29.8	29.8	20.9	20.9	18.9	18.9	26.3	1.0
FR1 n41_PC3	Ant 41							24.5	1.0
FR1 n41_PC2	Ant 12	17.3	16.3	19.8	19.8	17.8	17.8	26.3	1.2
FR1 n41_PC3	Ant 12							24.5	1.2
FR1 n41_PC2	Ant 24	17.0	16.0	20.5	20.5	18.5	18.5	24.0	1.2
FR1 n41_PC3	Ant 24							22.0	1.2
FR1 n77	Ant 13	13.8	13.3	16.8	16.8	14.8	14.8	23.8	1.0
FR1 n77	Ant 101	17.5	16.5	18.5	18.5	17.5	17.5	23.5	1.2
FR1 n77	Ant 23	15.0	13.0	19.0	19.0	17.0	17.0	21.5	1.2
FR1 n77	Ant 21	18.5	17.5	19.5	19.5	18.0	18.0	22.5	1.2
FR1 n78_PC2	Ant 13	13.9	13.0	17.0	17.0	14.5	14.5	26.5	1.2
FR1 n78_PC3	Ant 13							24.0	1.2
FR1 n78_PC2	Ant 101	18.0	17.0	20.1	20.1	18.0	18.0	26.5	1.2
FR1 n78_PC3	Ant 101							24.0	1.2
FR1 n78_PC2	Ant 23	15.6	14.5	18.8	18.8	16.5	16.5	23.5	1.2
FR1 n78_PC3	Ant 23							21.5	1.2
FR1 n78_PC2	Ant 21	19.7	18.5	20.6	20.6	18.5	18.5	23.5	1.2
FR1 n78_PC3	Ant 21							21.5	1.2

Band	Antenna	Head Standalone	Head Simultaneous	Body&Extremity Standalone	Body&Extremity Simultaneous	Hotshot	Pmax*	Total Uncertainty dB (k=2)
WLAN2.4GHz	Ant 22	14.5	13.5	17.0	17.0	17.0	18.0	2.0
WLAN5.2GHz	Ant 23	13.0	11.0	22.7	16.5	16.5	17.0	2.0
WLAN5.3GHz	Ant 23	12.0	11.0	22.7	16.0		17.0	2.0
WLAN5.5GHz	Ant 23	14.0	12.0	16.5	13.5		17.0	2.0
WLAN5.8GHz	Ant 23	13.5	12.5	15.5	12.0	12.0	17.0	2.0

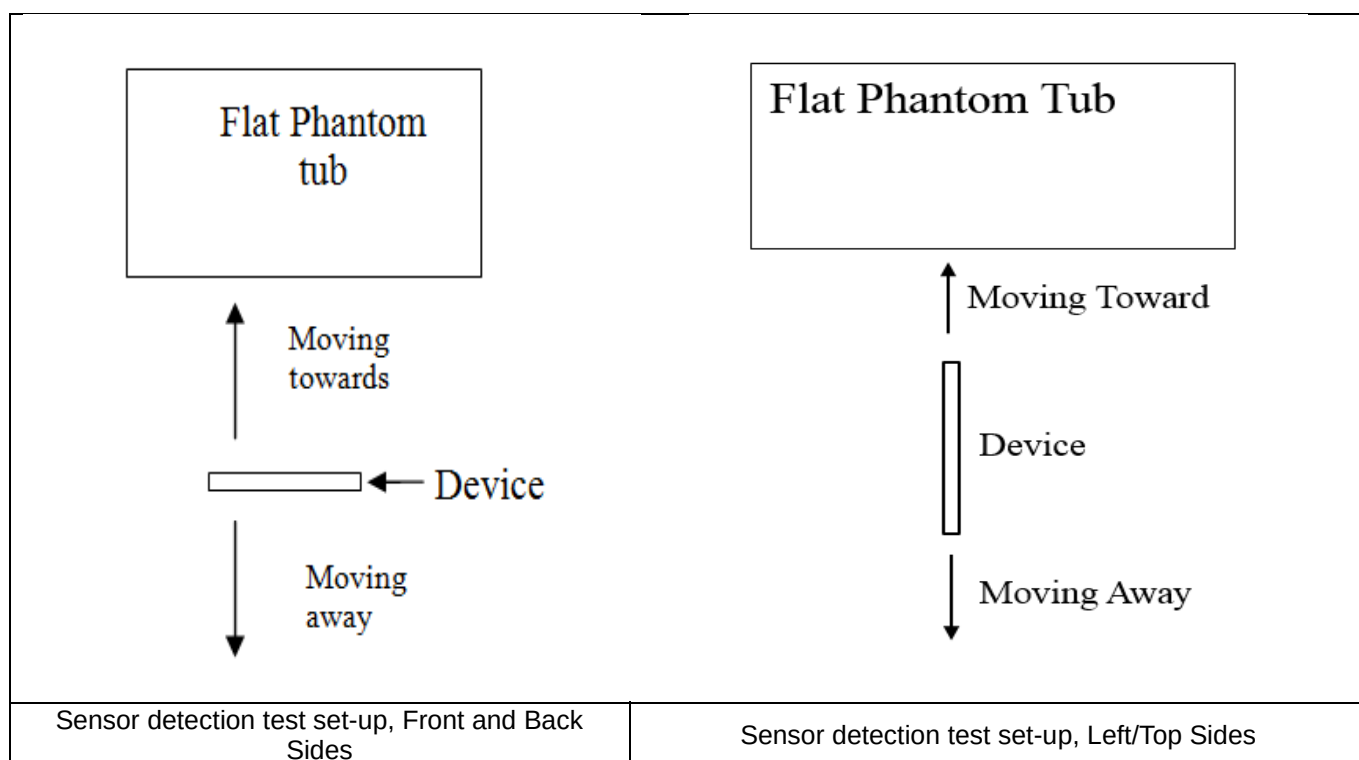
Note:

- 1) *P_{max} is used for RF tune up procedure. The maximum allowed output power is equal to P_{max} + total uncertainty.
- 2) All P_{limit} power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD).
- 3) The max allowed output power is the P_{limit} + total uncertainty, and if P_{limit} is higher than P_{max}, the device output power will be P_{max} 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 (2600MHz) and lowest (1750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top and left corners of the top ends of the phone are utilized to determine when the device comes in proximity of the user's body or finger or hand at the front or back or left or top side of the device. There is no need to do sensor coverage testing for the proximity sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the proximity sensor entirely covers the antenna.
3. The sensors can use to detect the proximity of the user's body or handheld states at the front or back or left or top side of the device use a detection threshold distance. When front/back /left/top sides of body or handheld condition is detected reduced power will be active. The trigger distance shown in the sections below.
4. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed:



<Sensor for ANT 14>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Top Side		Left Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	8	8	12	12	13	13	8	8

7. RF Exposure Limits

7.1 Uncontrolled Environment

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

7.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

8. Specific Absorption Rate (SAR)

8.1 Introduction

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

8.2 SAR Definition

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

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

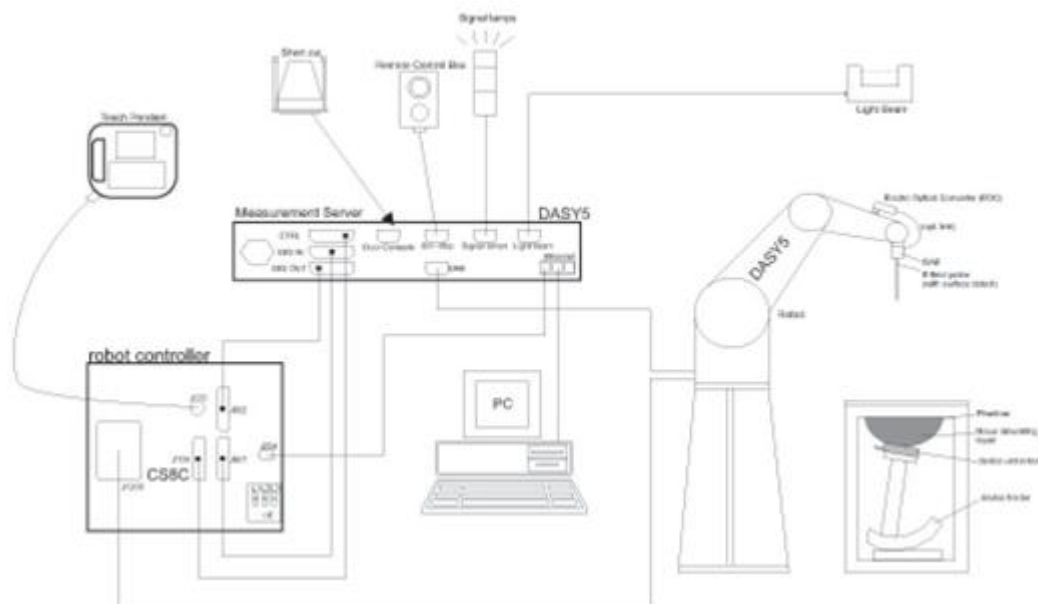
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. System Description and Setup

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



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

9.1 E-Field Probe

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

<EX3DV4 Probe>

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

9.2 Data Acquisition Electronics (DAE)

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

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



Photo of DAE

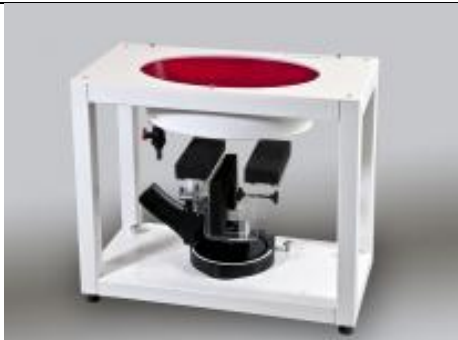
9.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

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

9.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

10. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

10.1 *Spatial Peak SAR Evaluation*

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

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

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

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

10.2 Power Reference Measurement

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

10.3 Area Scan

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

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

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

10.4 Zoom Scan

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

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

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

10.5 Volume Scan Procedures

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

10.6 Power Drift Monitoring

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

11. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1087	Mar. 12, 2025	Mar. 11, 2026
SPEAG	835MHz System Validation Kit	D835V2	4d298	Jan. 25, 2025	Jan. 24, 2026
SPEAG	1750MHz System Validation Kit	D1750V2	1090	Mar. 12, 2025	Mar. 11, 2026
SPEAG	1900MHz System Validation Kit	D1900V2	5d170	Jun. 30, 2025	Jun. 29, 2026
SPEAG	2450MHz System Validation Kit	D2450V2	1095	Feb. 07, 2025	Feb. 06, 2026
SPEAG	2600MHz System Validation Kit	D2600V2	1070	Dec. 13, 2024	Dec. 12, 2025
SPEAG	3500MHz System Validation Kit	D3500V2	1076	Apr. 16, 2025	Apr. 15, 2026
SPEAG	3700MHz System Validation Kit	D3700V2	1037	Apr. 16, 2025	Apr. 15, 2026
SPEAG	3900MHz System Validation Kit	D3900V2	1022	Aug. 13, 2025	Aug. 12, 2026
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	Sep. 17, 2025	Sep. 16, 2026
SPEAG	Data Acquisition Electronics	DAE4	1386	Sep. 15, 2025	Sep. 14, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	3819	Sep. 11, 2025	Sep. 10, 2026
SPEAG	SAM Twin Phantom	QD 000 P40 CD	1671	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio communication analyzer	MT8820C	6201300653	Jul. 03, 2025	Jul. 02, 2026
Anritsu	Radio communication analyzer	MT8821C	6262314715	Jul. 03, 2025	Jul. 02, 2026
Anritsu	Radio communication analyzer	MT8821C	6272278319	Jul. 03, 2025	Jul. 02, 2026
Keysight	Network Analyzer	E5071C	MY46523671	Oct. 15, 2025	Oct. 14, 2026
Speag	Dielectric Assessment KIT	DAK-3.5	1071	Feb. 24, 2025	Feb. 23, 2026
Agilent	Signal Generator	N5181A	MY50145381	Dec. 26, 2024	Dec. 25, 2025
Agilent	Signal Generator	N5181A	MY50145381	Dec. 25, 2025	Dec. 24, 2026
R&S	Signal Generator	SMB100A	175779	Dec. 26, 2024	Dec. 25, 2025
Anritsu	Power Sensor	MA2411B	1306099	Oct. 15, 2025	Oct. 14, 2026
Anritsu	Power Meter	ML2495A	1349001	Oct. 15, 2025	Oct. 14, 2026
R&S	Power Sensor	NRP50S	101254	Apr. 01, 2025	Mar. 31, 2026
R&S	Power Sensor	NRP50S	101548	Jan. 11, 2025	Jan. 10, 2026
R&S	Power Sensor	NRPZ51	103113	Apr. 01, 2025	Mar. 31, 2026
R&S	Power Sensor	NRP8S	109228	Apr. 01, 2025	Mar. 31, 2026
R&S	CBT BLUETOOTH TESTER	CBT	100963	Dec. 26, 2024	Dec. 25, 2025
R&S	CBT BLUETOOTH TESTER	CBT	100963	Dec. 25, 2025	Dec. 24, 2026
R&S	Spectrum Analyzer	FSP7	100818	Jul. 03, 2025	Jul. 02, 2026
TES	Hygrometer	1310	200505600	Jul. 05, 2025	Jul. 04, 2026
Anymetre	Thermo-Hygrometer	JR593	2015030903	Dec. 28, 2024	Dec. 27, 2025
Anymetre	Thermo-Hygrometer	JR593	2020062101	Jul. 05, 2025	Jul. 04, 2026
AR	Amplifier	5S1G4	0333096	Apr. 01, 2025	Mar. 31, 2026
Mini-Circuits	Amplifier	ZVE-3W-83+	599201528	Apr. 01, 2025	Mar. 31, 2026
Mini-Circuits	Amplifier	ZVA-183W-S+	726202215	Jul. 04, 2025	Jul. 03, 2026
SPEAG	Device Holder	N/A	N/A	N/A	N/A
ARRA	Power Divider	A3200-2	N/A	Note 1	
ET Industries	Dual Directional Coupler	C-058-10	N/A	Note 1	
Jinkexinhua	Attenuator	10db-8G	N/A	Note 1	

Note:

- 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.
- 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.
- 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.

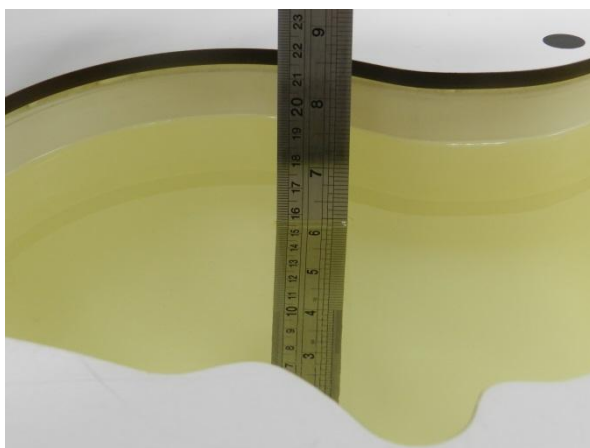


Fig 11.1 Photo of Liquid Height for Head SAR



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	22.4	0.880	40.797	0.89	41.90	-1.12	-2.63	±5	2025/12/6
750	Head	22.3	0.883	42.297	0.89	41.90	-0.79	0.95	±5	2025/12/27
835	Head	22.1	0.916	41.029	0.90	41.50	1.78	-1.13	±5	2025/12/1
835	Head	22.3	0.924	41.550	0.90	41.50	2.67	0.12	±5	2025/12/27
1750	Head	22.2	1.377	41.359	1.37	40.10	0.51	3.14	±5	2025/12/8
1750	Head	22.8	1.350	41.202	1.37	40.10	-1.46	2.75	±5	2025/12/21
1900	Head	22.6	1.407	39.644	1.40	40.00	0.50	-0.89	±5	2025/12/4
1900	Head	22.9	1.432	40.957	1.40	40.00	2.29	2.39	±5	2025/12/24
2450	Head	22.8	1.820	39.753	1.80	39.20	1.11	1.41	±5	2025/12/9
2450	Head	22.2	1.748	39.089	1.80	39.20	-2.89	-0.28	±5	2025/12/27
2600	Head	22.2	2.054	38.328	1.96	39.00	4.80	-1.72	±5	2025/12/4
2600	Head	22.3	1.912	40.036	1.96	39.00	-2.45	2.66	±5	2025/12/11
3500	Head	22.2	2.909	38.635	2.91	37.90	-0.03	1.94	±5	2025/12/11
3500	Head	22.1	2.789	38.071	2.91	37.90	-4.16	0.45	±5	2025/12/28
3700	Head	22.9	3.054	38.374	3.12	37.70	-2.12	1.79	±5	2025/12/11
3700	Head	22.2	2.969	37.718	3.12	37.70	-4.84	0.05	±5	2025/12/31
3900	Head	22.6	3.199	38.142	3.33	37.51	-3.93	1.68	±5	2025/12/8
3900	Head	22.2	3.203	37.398	3.33	37.51	-3.81	-0.30	±5	2025/12/26
5250	Head	22.8	4.626	37.038	4.71	35.95	-1.78	3.03	±5	2025/12/3
5250	Head	22.5	4.561	36.800	4.71	35.95	-3.16	2.36	±5	2025/12/28
5600	Head	22.8	5.182	36.105	5.07	35.50	2.21	1.70	±5	2025/12/11
5600	Head	22.8	4.904	36.307	5.07	35.50	-3.27	2.27	±5	2025/12/20
5800	Head	22.3	5.357	35.815	5.27	35.30	1.65	1.46	±5	2025/12/7
5800	Head	22.6	5.063	36.047	5.27	35.30	-3.93	2.12	±5	2025/12/26

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.

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 (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2025/12/6	750	Head	250	D750V3-1087	EX3DV4 - SN3819	DAE4 Sn1386	2.080	8.680	8.32	-4.15	1.350	5.610	5.4	-3.74
2025/12/27	750	Head	250	D750V3-1087	EX3DV4 - SN3819	DAE4 Sn1386	2.010	8.680	8.04	-7.37	1.320	5.610	5.28	-5.88
2025/12/1	835	Head	250	D835V2-4d298	EX3DV4 - SN3819	DAE4 Sn1386	2.280	9.890	9.12	-7.79	1.520	6.450	6.08	-5.74
2025/12/27	835	Head	250	D835V2-4d298	EX3DV4 - SN3819	DAE4 Sn1386	2.260	9.890	9.04	-8.59	1.490	6.450	5.96	-7.60
2025/12/8	1750	Head	250	D1750V2-1090	EX3DV4 - SN3819	DAE4 Sn1386	9.460	36.600	37.84	3.39	5.050	19.500	20.2	3.59
2025/12/21	1750	Head	250	D1750V2-1090	EX3DV4 - SN3819	DAE4 Sn1386	9.300	36.600	37.2	1.64	4.950	19.500	19.8	1.54
2025/12/4	1900	Head	250	D1900V2-5d170	EX3DV4 - SN3819	DAE4 Sn1386	9.860	39.600	39.44	-0.40	5.250	20.900	21	0.48
2025/12/24	1900	Head	250	D1900V2-5d170	EX3DV4 - SN3819	DAE4 Sn1386	9.880	39.600	39.52	-0.20	5.310	20.900	21.24	1.63
2025/12/9	2450	Head	250	D2450V2-1095	EX3DV4 - SN3819	DAE4 Sn1386	12.800	52.600	51.2	-2.66	5.930	24.700	23.72	-3.97
2025/12/27	2450	Head	250	D2450V2-1095	EX3DV4 - SN3819	DAE4 Sn1386	13.300	52.600	53.2	1.14	6.020	24.700	24.08	-2.51
2025/12/4	2600	Head	250	D2600V2-1070	EX3DV4 - SN3819	DAE4 Sn1386	14.400	56.500	57.6	1.95	6.220	25.200	24.88	-1.27
2025/12/11	2600	Head	250	D2600V2-1070	EX3DV4 - SN3819	DAE4 Sn1386	14.500	56.500	58	2.65	6.190	25.200	24.76	-1.75
2025/12/11	3500	Head	100	D3500V2-1076	EX3DV4 - SN3819	DAE4 Sn1386	6.390	65.800	63.9	-2.89	2.440	25.000	24.4	-2.40
2025/12/28	3500	Head	100	D3500V2-1076	EX3DV4 - SN3819	DAE4 Sn1386	6.400	65.800	64	-2.74	2.470	25.000	24.7	-1.20
2025/12/11	3700	Head	100	D3700V2-1037	EX3DV4 - SN3819	DAE4 Sn1386	6.490	67.000	64.9	-3.13	2.410	24.400	24.1	-1.23
2025/12/31	3700	Head	100	D3700V2-1037	EX3DV4 - SN3819	DAE4 Sn1386	6.500	67.000	65	-2.99	2.450	24.400	24.5	0.41
2025/12/8	3900	Head	100	D3900V2-1022	EX3DV4 - SN3819	DAE4 Sn1386	7.020	70.100	70.2	0.14	2.440	24.600	24.4	-0.81
2025/12/26	3900	Head	100	D3900V2-1022	EX3DV4 - SN3819	DAE4 Sn1386	6.910	70.100	69.1	-1.43	2.390	24.600	23.9	-2.85
2025/12/3	5250	Head	100	D5GHzV2-1113	EX3DV4 - SN3819	DAE4 Sn1386	7.750	78.100	77.5	-0.77	2.230	22.400	22.3	-0.45
2025/12/28	5250	Head	100	D5GHzV2-1113	EX3DV4 - SN3819	DAE4 Sn1386	7.670	78.100	76.7	-1.79	2.160	22.400	21.6	-3.57
2025/12/11	5600	Head	100	D5GHzV2-1113	EX3DV4 - SN3819	DAE4 Sn1386	8.070	80.000	80.7	0.88	2.340	23.000	23.4	1.74
2025/12/20	5600	Head	100	D5GHzV2-1113	EX3DV4 - SN3819	DAE4 Sn1386	7.980	80.000	79.8	-0.25	2.300	23.000	23	0.00
2025/12/7	5800	Head	100	D5GHzV2-1113	EX3DV4 - SN3819	DAE4 Sn1386	8.040	77.900	80.4	3.21	2.260	22.300	22.6	1.35
2025/12/26	5800	Head	100	D5GHzV2-1113	EX3DV4 - SN3819	DAE4 Sn1386	8.020	77.900	80.2	2.95	2.240	22.300	22.4	0.45

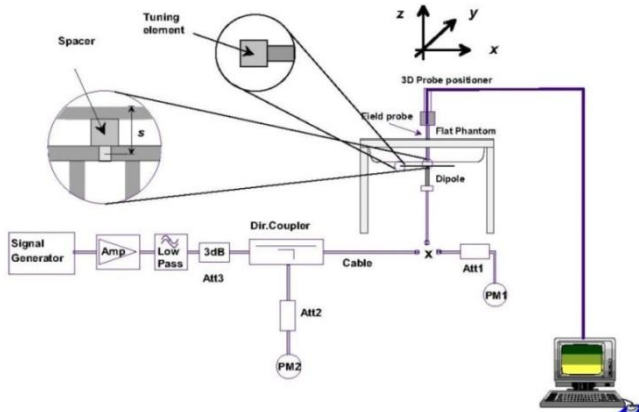


Fig 11.3.1 System Performance Check Setup



Fig 11.3.2 Setup Photo

13. RF Exposure Positions

13.1 Ear and handset reference point

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

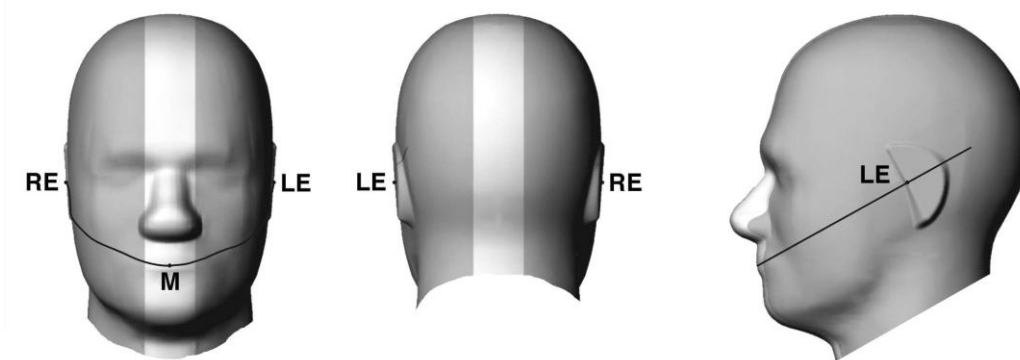


Fig 12.1.1 Front, back, and side views of SAM twin phantom

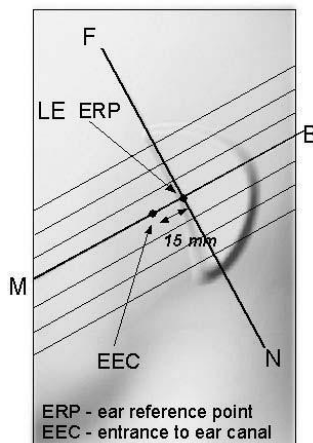


Fig 12.1.2 Close-up side view of phantom showing the ear region.

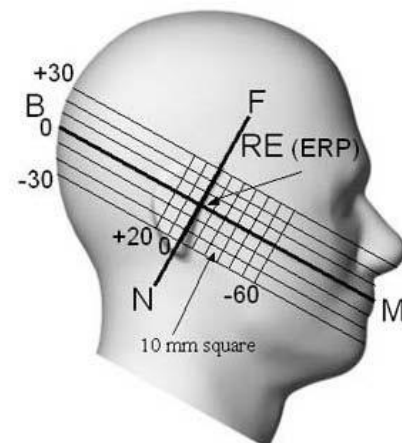


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

13.2 Definition of the cheek position

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

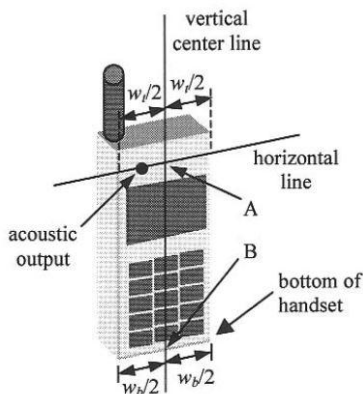


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

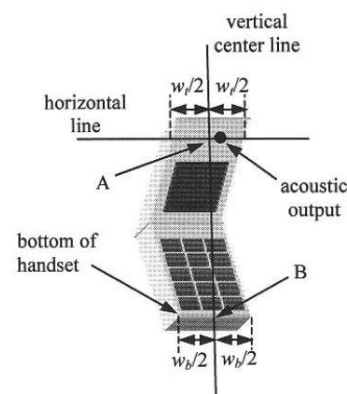


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

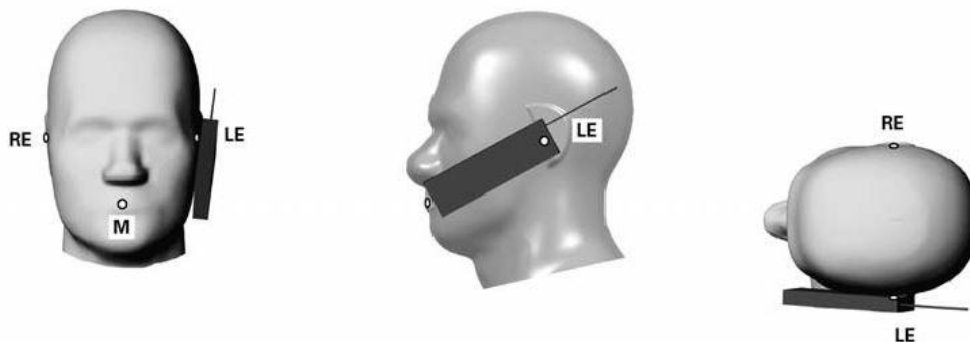


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

13.3 Definition of the tilt position

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

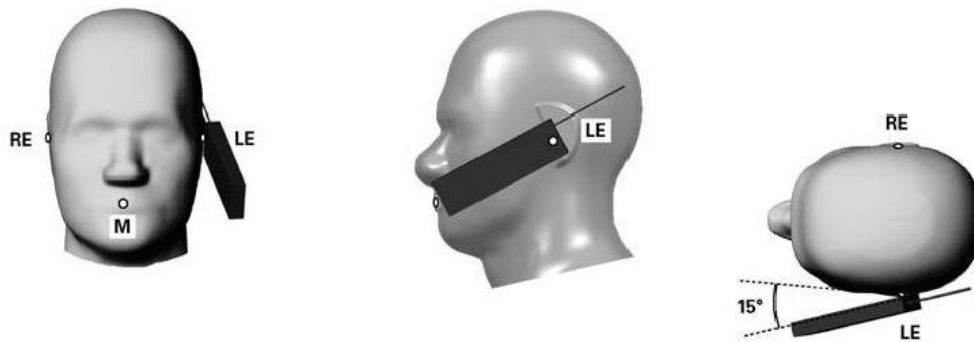


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

13.4 Body Worn Accessory

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

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

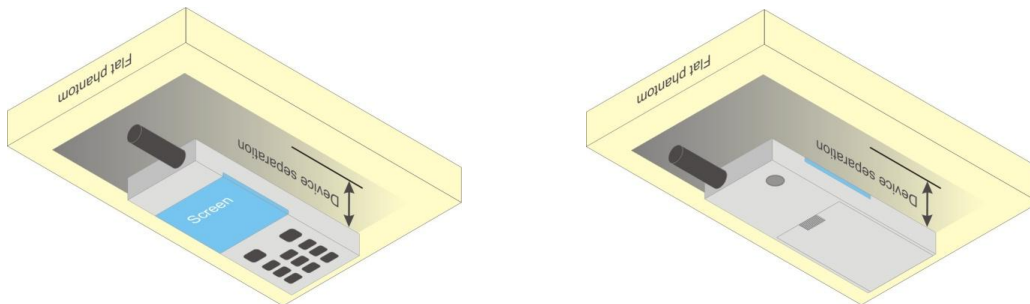


Fig 12.4 Body Worn Position

13.5 Product Specific 10g SAR Exposure

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

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

13.6 Wireless Router

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

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

14. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<GSM Conducted Power>

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

<WCDMA Conducted Power>

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

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

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

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

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

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

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

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

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

Setup Configuration

HSUPA Setup Configuration:

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

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

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

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

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

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

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

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

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

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

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

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

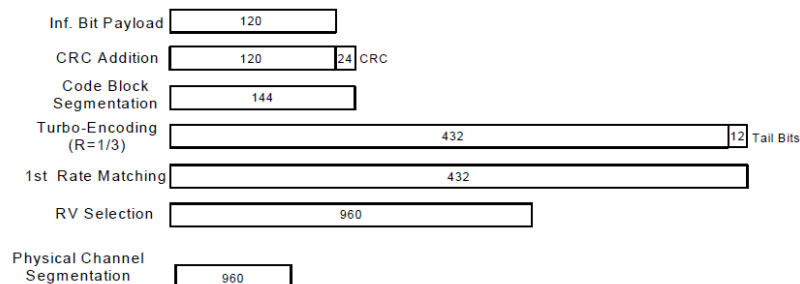


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

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

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

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

Sub-test	β_c (Note 3)	β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105

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

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

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

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

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

Setup Configuration

<WCDMA Conducted Power>

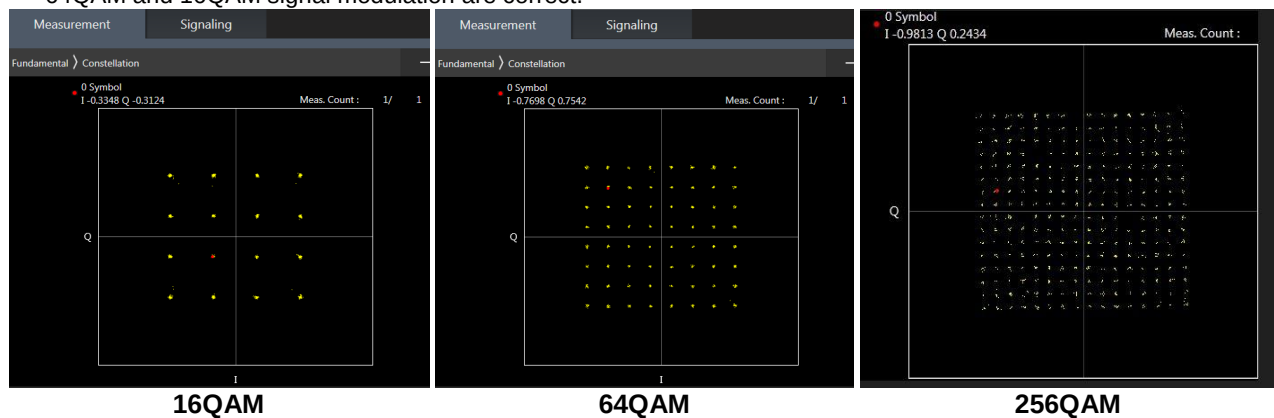
General Note:

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

<LTE Conducted Power>

General Note:

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



<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

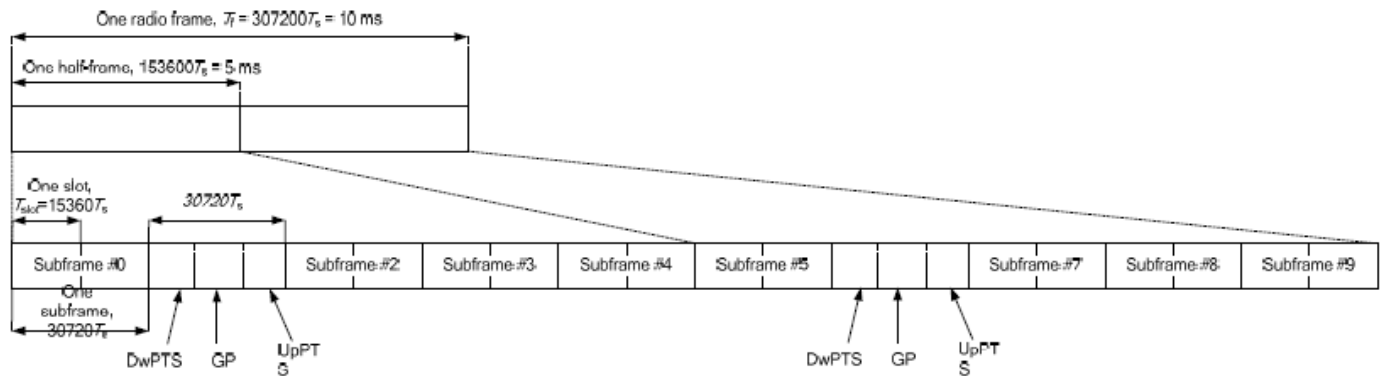


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

For LTE TDD Power class 3

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

**<LTE Carrier Aggregation>**

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

General Note:

1. Per Oct. 2024 TCB workshop, the downlink (DL) pertains to receiver functionality, thus it is not related to RF exposure compliance limits related to cumulative effects of different transmitters.
2. Per Oct. 2024 TCB workshop, equipment authorization applications shall refer to the worst-case UL powers resulting from all the possible modes of operations. Accordingly, CA-DL cases do not need to be analyzed separately, unless pertinent to establishing UL power setting.
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.
4. This device supports LTE carrier aggregation in the downlink. All 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.

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation
Intra-band	Antenna Tx
CA_7C	Ant 14/41/12/24
CA_41C	Ant 14/41/12/24
CA_42C	Ant 13/101/23/21
CA_66C	Ant 14/41/12/24

<Intra-band>
General Note:

- The device supports intra-band uplink carrier aggregation for LTE B7/66/41/42 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	LTE TX0	TX0 Ant	LTE TX1	TX1 Ant
CA_2A-4A	2A	Ant 41/12	4A	Ant 14/24
CA_2A-7A	2A	Ant 41/12	7A	Ant 14/24
CA_4A-5A	4A	Ant 14/41/12/24	5A	Ant 11/25
CA_4A-7A	4A	Ant 14/24	7A	Ant 41/12
CA_5A-7A	5A	Ant 11/25	7A	Ant 14/41/12/24

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/n5/n7/n26/n66/n38/n41/n77/n78 is SA and NSA mode.
2. 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
3. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
4. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
5. 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.
6. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
7. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
8. For NR inter-band ULCA mode, MediaTek's TA-SAR algorithm in WWAN adds directly the time-averaged RF exposure between two NR bands. TA-SAR algorithm controls the total RF exposure base on NR inter band ULCA /MIMO 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	NR TX	NR Ant	LTE TX	LTE Ant
DC_2A_n7A	n7A	Ant 14/24	2A	Ant 41/12
DC_2A_n66A	n66A	Ant 14/24	2A	Ant 41/12
DC_2A_n78A	n78A	Ant 13/101/23/21	2A	Ant 14/41
DC_4A_n2A	n2A	Ant 41/12	4A	Ant 14/24
DC_4A_n7A	n7A	Ant 14/24	4A	Ant 41/12
DC_4A_n38A	n38A	Ant 14/24	4A	Ant 41/12
DC_4A_n41A	n41A	Ant 14/24	4A	Ant 41/12
DC_4A_n78A	n78A	Ant 13/101/23/21	4A	Ant 14/41/12/24
DC_5A_n7A	n7A	Ant 14/41/12/24	5A	Ant 11/25
DC_5A_n41A	n41A	Ant 14/41	5A	Ant 11/25
DC_5A_n66A	n66A	Ant 14/41/12/24	5A	Ant 11/25
DC_5A_n78A	n78A	Ant 13/101/23/21	5A	Ant 11/25
DC_7A_n2A	n2A	Ant 41/12	7A	Ant 14/24
DC_7A_n5A	n5A	Ant 11/25	7A	Ant 14/41/12/24
DC_7A_n26A	n26A	Ant 11/25	7A	Ant 14/41/12/24
DC_7A_n66A	n66A	Ant 14/24	7A	Ant 41/12
DC_7A_n77A	n77A	Ant 13/101/23/21	7A	Ant 14/41/12/24
DC_7A_n78A	n78A	Ant 13/101/23/21	7A	Ant 14/41/12/24
DC_26A_n41A	n41A	Ant 14/41	26A	Ant 11/25
DC_26A_n78A	n78A	Ant 13/101/23/21	26A	Ant 11/25
DC_66A_n2A	n2A	Ant 41/12	66A	Ant 14/24
DC_66A_n7A	n7A	Ant 14/24	66A	Ant 41/12
DC_66A_n38A	n38A	Ant 14/24	66A	Ant 41/12
DC_66A_n41A	n41A	Ant 14/24	66A	Ant 41/12
DC_66A_n78A	n78A	Ant 13/101/23/21	66A	Ant 14/41/12/24
DC_38A_n78A	n78A	Ant 13/101/23/21	38A	Ant 14/41/12/24
DC_41A_n78A	n78A	Ant 13/101/23/21	41A	Ant 14/41/12/24

Inter-Band CA Configuration:

NR Inter CA	NR TX0	TX0 Ant	NR TX1	TX1 Ant
CA_n7A-n78A	n7A	Ant 14/41/12/24	n78A	Ant 13/101/23/21
CA_n41A-n78A	n41A	Ant 14/41/12/24	n78A	Ant 13/101/23/21

<WLAN Conducted Power>

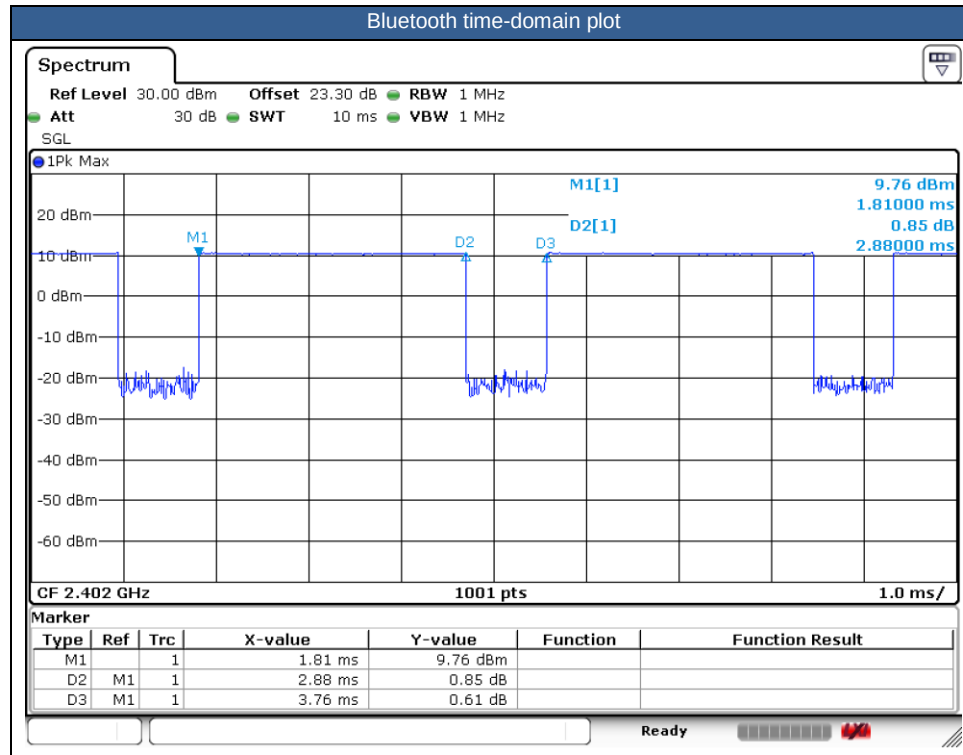
General Note:

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

<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 76.6% as following figure, according to Oct. 2016 TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for 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/Bluetooth 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 WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. For TDD LTE SAR measurement of power class 3, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = Measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements proximity 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 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 transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2 W/kg of GSM1900, LTE Band 12/17/5/26, 5G NR n5/n7/n26/n66/n38/n41, therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
 - c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
6. According to Nov. 2017 TCB workshop, when the reported 1gSAR for UL CA configuration is < 1.2 W/kg, UL CA 1gSAR is not required for all required test channels (PCC based).
7. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot SAR.
8. 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 / B17 / B26 / B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B4 / B5 / B17 / B38 SAR test was covered by B66 / B26 / B12 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

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

WLAN/Bluetooth Note:

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

ECI status description:

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

This WWAN/WLAN bands enabled with MediaTek TA-SAR 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.

ECI	Trigger Conditions	Antenna No.	Exposure conditions	
ECI2	Receiver on	All ant	Head Standalone	Head all Position
ECI3	Receiver on+WLAN	All ant	Head Simultaneous	Head all Position
ECI7	Receiver off/Sensor off	ant 14	Sensor Trigger Distance -1mm	See by section 6
	Receiver off/Sensor off		Body-worn/Extremity Standalone	No Sensor Position
	Receiver off/Sensor off	ant 11/12/13/101/21/22/23/24/25/41	Body-worn/Extremity Standalone	Body all Position
ECI5	Receiver off/Sensor on	ant 14	Body-worn/Extremity Standalone	See by section 6
ECI8	Receiver off/Sensor on +WLAN	ant 14	Body-worn/Extremity Simultaneous	See by section 6
ECI10	Receiver off/Sensor off+WLAN	ant 14	Body-worn/Extremity Simultaneous	No Sensor Position
	Receiver off/Sensor off+WLAN	ant 11/12/13/101/21/22/23/24/25/41	Body-worn/Extremity Simultaneous	Body all Position
	Hotspot on	All ant	Hotspot	Hotspot all Position

For WLAN, the following reduced power state which used at different exposure condition.

Trigger conditions	Exposure Condition
Receiver on	Head Standalone
Receiver on+ WLAN+WWAN	Head Simultaneous
Receiver off	Body-worn /Extremity Standalone
Receiver off+ WLAN+WWAN	Body-worn/Hotspot/Extremity Simultaneous



16.1 Head SAR

Plot No.	Note	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
01		LTE Band 12	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 11	ECI 2	23095	707.5	24.13	25.30	1.309	-	-	0.14	0.396	0.518
		LTE Band 12	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 11	ECI 2	23095	707.5	24.13	25.30	1.309	-	-	0.14	0.109	0.143
		LTE Band 12	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 11	ECI 2	23095	707.5	24.13	25.30	1.309	-	-	-0.11	0.351	0.460
		LTE Band 12	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 11	ECI 2	23095	707.5	24.13	25.30	1.309	-	-	-0.18	0.104	0.136
		LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 11	ECI 2	23095	707.5	23.10	24.30	1.318	-	-	0.14	0.279	0.368
		LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 11	ECI 2	23095	707.5	23.10	24.30	1.318	-	-	0.03	0.081	0.107
		LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 11	ECI 2	23095	707.5	23.10	24.30	1.318	-	-	-0.17	0.259	0.341
		LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 11	ECI 2	23095	707.5	23.10	24.30	1.318	-	-	0.17	0.078	0.103
		LTE Band 12	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 25	ECI 2	23095	707.5	23.25	24.50	1.334	-	-	-0.09	0.077	0.103
		LTE Band 12	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 25	ECI 2	23095	707.5	23.25	24.50	1.334	-	-	0.13	0.020	0.027
		LTE Band 12	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 25	ECI 2	23095	707.5	23.25	24.50	1.334	-	-	0.16	0.072	0.096
		LTE Band 12	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 25	ECI 2	23095	707.5	23.25	24.50	1.334	-	-	-0.13	0.021	0.028
		LTE Band 12	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 25	ECI 2	23095	707.5	22.10	23.50	1.380	-	-	0.13	0.058	0.080
		LTE Band 12	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 25	ECI 2	23095	707.5	22.10	23.50	1.380	-	-	0.05	0.015	0.021
		LTE Band 12	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 25	ECI 2	23095	707.5	22.10	23.50	1.380	-	-	0.02	0.055	0.076
		LTE Band 12	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 25	ECI 2	23095	707.5	22.10	23.50	1.380	-	-	0.11	0.017	0.023
		LTE Band 13	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 11	ECI 2	23230	782	22.62	24.30	1.472	-	-	0.17	0.300	0.442
		LTE Band 13	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 11	ECI 2	23230	782	22.62	24.30	1.472	-	-	0.1	0.095	0.140
		LTE Band 13	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 11	ECI 2	23230	782	22.62	24.30	1.472	-	-	0.19	0.289	0.425
		LTE Band 13	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 11	ECI 2	23230	782	22.62	24.30	1.472	-	-	0.14	0.086	0.127
02		LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 11	ECI 2	23230	782	22.60	24.30	1.479	-	-	0.11	0.318	0.470
		LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 11	ECI 2	23230	782	22.60	24.30	1.479	-	-	0.07	0.106	0.157
		LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 11	ECI 2	23230	782	22.60	24.30	1.479	-	-	-0.04	0.300	0.444
		LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 11	ECI 2	23230	782	22.60	24.30	1.479	-	-	-0.12	0.097	0.143
		LTE Band 13	10M	QPSK	1	25	-	Right Cheek	0mm	Ant 25	ECI 2	23230	782	22.93	24.50	1.435	-	-	-0.17	0.302	0.434
		LTE Band 13	10M	QPSK	1	25	-	Right Tilted	0mm	Ant 25	ECI 2	23230	782	22.93	24.50	1.435	-	-	0.05	0.078	0.112
		LTE Band 13	10M	QPSK	1	25	-	Left Cheek	0mm	Ant 25	ECI 2	23230	782	22.93	24.50	1.435	-	-	0.09	0.281	0.403
		LTE Band 13	10M	QPSK	1	25	-	Left Tilted	0mm	Ant 25	ECI 2	23230	782	22.93	24.50	1.435	-	-	0.09	0.084	0.121
		LTE Band 13	10M	QPSK	25	0	-	Right Cheek	0mm	Ant 25	ECI 2	23230	782	21.85	23.50	1.462	-	-	0.05	0.227	0.332
		LTE Band 13	10M	QPSK	25	0	-	Right Tilted	0mm	Ant 25	ECI 2	23230	782	21.85	23.50	1.462	-	-	-0.12	0.060	0.088
		LTE Band 13	10M	QPSK	25	0	-	Left Cheek	0mm	Ant 25	ECI 2	23230	782	21.85	23.50	1.462	-	-	-0.05	0.216	0.316
		LTE Band 13	10M	QPSK	25	0	-	Left Tilted	0mm	Ant 25	ECI 2	23230	782	21.85	23.50	1.462	-	-	0.08	0.066	0.097
835MHz																					
		GSM850	-	-	-	-	GPRS 2 Tx slots	Right Cheek	0mm	Ant 11	ECI 2	189	836.4	27.09	28.50	1.384	-	-	0.16	0.327	0.452
		GSM850	-	-	-	-	GPRS 2 Tx slots	Right Tilted	0mm	Ant 11	ECI 2	189	836.4	27.09	28.50	1.384	-	-	-0.14	0.091	0.126
03		GSM850	-	-	-	-	GPRS 2 Tx slots	Left Cheek	0mm	Ant 11	ECI 2	189	836.4	27.09	28.50	1.384	-	-	-0.05	0.395	0.547
		GSM850	-	-	-	-	GPRS 2 Tx slots	Left Tilted	0mm	Ant 11	ECI 2	189	836.4	27.09	28.50	1.384	-	-	0.11	0.091	0.126
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 11	ECI 2	4182	836.4	20.85	22.00	1.303	-	-	-0.17	0.452	0.589
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 11	ECI 2	4182	836.4	20.85	22.00	1.303	-	-	-0.03	0.132	0.172
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 11	ECI 2	4182	836.4	20.85	22.00	1.303	-	-	-0.13	0.490	0.639
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 11	ECI 2	4182	836.4	20.85	22.00	1.303	-	-	-0.02	0.120	0.156
04		WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 25	ECI 2	4182	836.4	22.43	24.00	1.435	-	-	0.02	0.508	0.729
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 25	ECI 2	4182	836.4	22.43	24.00	1.435	-	-	0.16	0.143	0.205
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 25	ECI 2	4182	836.4	22.43	24.00	1.435	-	-	0.03	0.460	0.660
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 25	ECI 2	4182	836.4	22.43	24.00	1.435	-	-	0.05	0.149	0.214
		LTE Band 26	15M	QPSK	1	37	-	Right Cheek	0mm	Ant 11	ECI 2	26865	831.5	21.80	23.30	1.413	-	-	0.19	0.529	0.747
		LTE Band 26	15M	QPSK	1	37	-	Right Tilted	0mm	Ant 11	ECI 2	26865	831.5	21.80	23.30	1.413	-	-	0.16	0.158	0.223



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		LTE Band 26	15M	QPSK	1	37	-	Left Cheek	0mm	Ant 11	ECI 2	26865	831.5	21.80	23.30	1.413	-	-	-0.17	0.560	0.791
		LTE Band 26	15M	QPSK	1	37	-	Left Tilted	0mm	Ant 11	ECI 2	26865	831.5	21.80	23.30	1.413	-	-	0.1	0.145	0.205
		LTE Band 26	15M	QPSK	1	37	-	Left Cheek	0mm	Ant 11	ECI 3	26865	831.5	20.81	22.30	1.409	-	-	0.06	0.472	0.665
		LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 11	ECI 2	26865	831.5	21.75	23.30	1.429	-	-	-0.05	0.479	0.684
		LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 11	ECI 2	26865	831.5	21.75	23.30	1.429	-	-	-0.01	0.143	0.204
		LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 11	ECI 2	26865	831.5	21.75	23.30	1.429	-	-	-0.09	0.528	0.754
		LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 11	ECI 2	26865	831.5	21.75	23.30	1.429	-	-	0.11	0.131	0.187
05		LTE Band 26	15M	QPSK	1	37	-	Right Cheek	0mm	Ant 25	ECI 2	26865	831.5	23.09	24.50	1.384	-	-	-0.04	0.694	0.960
		LTE Band 26	15M	QPSK	1	37	-	Right Tilted	0mm	Ant 25	ECI 2	26865	831.5	23.09	24.50	1.384	-	-	-0.06	0.194	0.268
		LTE Band 26	15M	QPSK	1	37	-	Left Cheek	0mm	Ant 25	ECI 2	26865	831.5	23.09	24.50	1.384	-	-	-0.06	0.520	0.719
		LTE Band 26	15M	QPSK	1	37	-	Left Tilted	0mm	Ant 25	ECI 2	26865	831.5	23.09	24.50	1.384	-	-	0.15	0.198	0.274
		LTE Band 26	15M	QPSK	36	0	-	Right Cheek	0mm	Ant 25	ECI 2	26865	831.5	21.96	23.50	1.426	-	-	0.02	0.559	0.797
		LTE Band 26	15M	QPSK	36	0	-	Right Tilted	0mm	Ant 25	ECI 2	26865	831.5	21.96	23.50	1.426	-	-	0.05	0.147	0.210
		LTE Band 26	15M	QPSK	36	0	-	Left Cheek	0mm	Ant 25	ECI 2	26865	831.5	21.96	23.50	1.426	-	-	-0.11	0.420	0.599
		LTE Band 26	15M	QPSK	36	0	-	Left Tilted	0mm	Ant 25	ECI 2	26865	831.5	21.96	23.50	1.426	-	-	0.08	0.150	0.214
		LTE Band 26	15M	QPSK	75	0	-	Right Cheek	0mm	Ant 25	ECI 2	26865	831.5	21.87	23.50	1.455	-	-	0.08	0.545	0.793
		FR1 n26	20M	QPSK	1	53	DFT-15	Right Cheek	0mm	Ant 11	ECI 2	166300	831.5	21.58	23.00	1.387	-	-	0	0.578	0.802
		FR1 n26	20M	QPSK	1	53	DFT-15	Right Tilted	0mm	Ant 11	ECI 2	166300	831.5	21.58	23.00	1.387	-	-	-0.12	0.174	0.241
		FR1 n26	20M	QPSK	1	53	DFT-15	Left Cheek	0mm	Ant 11	ECI 2	166300	831.5	21.58	23.00	1.387	-	-	0.13	0.647	0.897
		FR1 n26	20M	QPSK	1	53	DFT-15	Left Tilted	0mm	Ant 11	ECI 2	166300	831.5	21.58	23.00	1.387	-	-	0.19	0.148	0.205
		FR1 n26	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 11	ECI 2	166300	831.5	21.57	23.00	1.390	-	-	0.02	0.600	0.834
		FR1 n26	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 11	ECI 2	166300	831.5	21.57	23.00	1.390	-	-	-0.19	0.180	0.250
06		FR1 n26	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 11	ECI 2	166300	831.5	21.57	23.00	1.390	-	-	-0.09	0.670	0.931
		FR1 n26	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 11	ECI 2	166300	831.5	21.57	23.00	1.390	-	-	0.19	0.154	0.214
		FR1 n26	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 11	ECI 3	166300	831.5	20.64	22.00	1.368	-	-	0.02	0.530	0.725
		FR1 n26	20M	QPSK	100	0	DFT-15	Right Cheek	0mm	Ant 11	ECI 2	166300	831.5	21.52	23.00	1.406	-	-	-0.02	0.561	0.789
		FR1 n26	20M	QPSK	100	0	DFT-15	Left Cheek	0mm	Ant 11	ECI 2	166300	831.5	21.52	23.00	1.406	-	-	0.19	0.628	0.883
		FR1 n26	20M	QPSK	1	53	DFT-15	Right Cheek	0mm	Ant 25	ECI 2	166300	831.5	21.89	23.50	1.449	-	-	-0.19	0.463	0.671
		FR1 n26	20M	QPSK	1	53	DFT-15	Right Tilted	0mm	Ant 25	ECI 2	166300	831.5	21.89	23.50	1.449	-	-	0.02	0.129	0.187
		FR1 n26	20M	QPSK	1	53	DFT-15	Left Cheek	0mm	Ant 25	ECI 2	166300	831.5	21.89	23.50	1.449	-	-	-0.1	0.432	0.626
		FR1 n26	20M	QPSK	1	53	DFT-15	Left Tilted	0mm	Ant 25	ECI 2	166300	831.5	21.89	23.50	1.449	-	-	0.17	0.138	0.200
		FR1 n26	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 25	ECI 2	166300	831.5	21.87	23.50	1.455	-	-	-0.06	0.480	0.699
		FR1 n26	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 25	ECI 2	166300	831.5	21.87	23.50	1.455	-	-	-0.14	0.134	0.195
		FR1 n26	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 25	ECI 2	166300	831.5	21.87	23.50	1.455	-	-	0.13	0.448	0.652
		FR1 n26	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 25	ECI 2	166300	831.5	21.87	23.50	1.455	-	-	-0.04	0.143	0.208
1750MHz																					
07		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 14	ECI 2	1413	1732.6	17.73	18.50	1.194	-	-	0.17	0.605	0.722
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 14	ECI 2	1413	1732.6	17.73	18.50	1.194	-	-	-0.11	0.449	0.536
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 14	ECI 2	1413	1732.6	17.73	18.50	1.194	-	-	0.1	0.347	0.414
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 14	ECI 2	1413	1732.6	17.73	18.50	1.194	-	-	0.11	0.341	0.407
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 41	ECI 2	1413	1732.6	24.24	25.00	1.191	-	-	-0.1	0.115	0.137
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 41	ECI 2	1413	1732.6	24.24	25.00	1.191	-	-	-0.18	0.065	0.077
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 41	ECI 2	1413	1732.6	24.24	25.00	1.191	-	-	-0.01	0.104	0.124
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 41	ECI 2	1413	1732.6	24.24	25.00	1.191	-	-	0.17	0.055	0.066
08		LTE Band 4	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	20175	1732.5	17.95	19.00	1.274	-	-	0.06	0.671	0.855
		LTE Band 4	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	20175	1732.5	17.95	19.00	1.274	-	-	-0.13	0.548	0.698
		LTE Band 4	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 14	ECI 2	20175	1732.5	17.95	19.00	1.274	-	-	-0.02	0.385	0.490
		LTE Band 4	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 14	ECI 2	20175	1732.5	17.95	19.00	1.274	-	-	-0.16	0.415	0.529
		LTE Band 4	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	20175	1732.5	17.92	19.00	1.282	-	-	0.11	0.653	0.837
		LTE Band 4	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	20175	1732.5	17.92	19.00	1.282	-	-	-0.12	0.535	0.686
		LTE Band 4	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 14	ECI 2	20175	1732.5	17.92	19.00	1.282	-	-	0.01	0.392	0.503
		LTE Band 4	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 14	ECI 2	20175	1732.5	17.92	19.00	1.282	-	-	-0.13	0.416	0.533
		LTE Band 4	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 14	ECI 2	20175	1732.5	17.91	19.00	1.285	-	-	0.17	0.651	0.837
		LTE Band 4	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	20175	1732.5	20.42	21.90	1.406	-	-	-0.02	0.113	0.159
		LTE Band 4	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 12	ECI 2	20175	1732.5	20.42	21.90	1.406	-	-	-0.05	0.071	0.100
		LTE Band 4	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 12	ECI 2	20175	1732.5	20.42	21.90	1.406	-	-	0.03	0.112	0.157



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		LTE Band 4	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 12	ECI 2	20175	1732.5	20.42	21.90	1.406	-	-	-0.14	0.052	0.073
		LTE Band 4	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	20175	1732.5	20.39	21.90	1.416	-	-	0.02	0.115	0.163
		LTE Band 4	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 12	ECI 2	20175	1732.5	20.39	21.90	1.416	-	-	0.19	0.072	0.102
		LTE Band 4	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 12	ECI 2	20175	1732.5	20.39	21.90	1.416	-	-	0.13	0.114	0.161
		LTE Band 4	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 12	ECI 2	20175	1732.5	20.39	21.90	1.416	-	-	0.08	0.053	0.075
		LTE Band 4	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 24	ECI 2	20175	1732.5	18.60	19.00	1.096	-	-	0.06	0.149	0.163
		LTE Band 4	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 24	ECI 2	20175	1732.5	18.60	19.00	1.096	-	-	0.18	0.071	0.078
		LTE Band 4	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	20175	1732.5	18.60	19.00	1.096	-	-	-0.13	0.609	0.668
		LTE Band 4	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 24	ECI 2	20175	1732.5	18.60	19.00	1.096	-	-	-0.16	0.204	0.224
		LTE Band 4	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 24	ECI 2	20175	1732.5	18.54	19.00	1.112	-	-	-0.14	0.144	0.160
		LTE Band 4	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 24	ECI 2	20175	1732.5	18.54	19.00	1.112	-	-	-0.18	0.068	0.076
		LTE Band 4	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	20175	1732.5	18.54	19.00	1.112	-	-	0.16	0.587	0.653
		LTE Band 4	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 24	ECI 2	20175	1732.5	18.54	19.00	1.112	-	-	0.12	0.197	0.219
		LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	132322	1745	17.35	18.50	1.303	-	-	-0.1	0.703	0.916
		LTE Band 66	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	132322	1745	17.35	18.50	1.303	-	-	-0.14	0.572	0.745
		LTE Band 66	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 14	ECI 2	132322	1745	17.35	18.50	1.303	-	-	0.13	0.410	0.534
		LTE Band 66	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 14	ECI 2	132322	1745	17.35	18.50	1.303	-	-	0.06	0.431	0.562
		LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	132072	1720	17.33	18.50	1.309	-	-	-0.11	0.642	0.840
		LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	132572	1770	17.22	18.50	1.343	-	-	0.1	0.736	0.988
		LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	132322	1745	17.30	18.50	1.318	-	-	-0.14	0.749	0.987
		LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	132322	1745	17.30	18.50	1.318	-	-	-0.02	0.602	0.794
		LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 14	ECI 2	132322	1745	17.30	18.50	1.318	-	-	0.12	0.436	0.575
		LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 14	ECI 2	132322	1745	17.30	18.50	1.318	-	-	-0.01	0.458	0.604
		LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	132072	1720	17.28	18.50	1.324	-	-	-0.05	0.684	0.906
09		LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	132572	1770	17.19	18.50	1.352	-	-	-0.06	0.768	1.038
	ULCA	LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	132572 132374	1770 1750.2	17.13	18.50	1.371	-	-	0.08	0.715	0.980
		LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 3	132572	1770	16.67	18.00	1.358	-	-	0.01	0.692	0.940
		LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 14	ECI 2	132572	1770	17.28	18.50	1.324	-	-	0.02	0.727	0.963
		LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 41	ECI 2	132322	1745	24.46	25.50	1.271	-	-	-0.1	0.126	0.160
	ULCA	LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 41	ECI 2	132322 132520	1745 1764.8	24.18	25.50	1.355	-	-	0.06	0.112	0.152
		LTE Band 66	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 41	ECI 2	132322	1745	24.46	25.50	1.271	-	-	-0.12	0.063	0.080
		LTE Band 66	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 41	ECI 2	132322	1745	24.46	25.50	1.271	-	-	-0.04	0.117	0.149
		LTE Band 66	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 41	ECI 2	132322	1745	24.46	25.50	1.271	-	-	-0.03	0.069	0.088
		LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 41	ECI 2	132322	1745	23.45	24.50	1.274	-	-	-0.17	0.096	0.122
		LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 41	ECI 2	132322	1745	23.45	24.50	1.274	-	-	0.04	0.048	0.061
		LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 41	ECI 2	132322	1745	23.45	24.50	1.274	-	-	-0.03	0.089	0.113
		LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 41	ECI 2	132322	1745	23.45	24.50	1.274	-	-	-0.05	0.053	0.067
		LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	132322	1745	19.63	21.00	1.371	-	-	0.19	0.576	0.790
		LTE Band 66	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 12	ECI 2	132322	1745	19.63	21.00	1.371	-	-	0.01	0.199	0.273
		LTE Band 66	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 12	ECI 2	132322	1745	19.63	21.00	1.371	-	-	-0.08	0.173	0.237
		LTE Band 66	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 12	ECI 2	132322	1745	19.63	21.00	1.371	-	-	0.13	0.083	0.114
		LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	132322	1745	19.56	21.00	1.393	-	-	-0.05	0.586	0.816
	ULCA	LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	132322 132520	1745 1764.8	19.53	21.00	1.403	-	-	0.04	0.559	0.784
		LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 12	ECI 2	132322	1745	19.56	21.00	1.393	-	-	0.18	0.202	0.281
		LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 12	ECI 2	132322	1745	19.56	21.00	1.393	-	-	0.06	0.176	0.245
		LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 12	ECI 2	132322	1745	19.56	21.00	1.393	-	-	-0.08	0.084	0.117
		LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	132072	1720	19.46	21.00	1.426	-	-	-0.09	0.536	0.764
		LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	132572	1770	19.48	21.00	1.419	-	-	-0.12	0.554	0.786
		LTE Band 66	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 12	ECI 2	132322	1745	19.53	21.00	1.403	-	-	0.05	0.547	0.767
		LTE Band 66	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 24	ECI 2	132322	1745	17.08	17.70	1.153	-	-	0.04	0.130	0.150
		LTE Band 66	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 24	ECI 2	132322	1745	17.08	17.70	1.153	-	-	-0.01	0.062	0.072
		LTE Band 66	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	132322	1745	17.08	17.70	1.153	-	-	0.1	0.501	0.578
	ULCA	LTE Band 66	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	132322 132520	1745 1764.8	16.98	17.70	1.180	-	-	0.09	0.479	0.565
		LTE Band 66	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 24	ECI 2	132322	1745	17.08	17.70	1.153	-	-	0.15	0.173	0.200
		LTE Band 66	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 24	ECI 2	132322	1745	17.05	17.70	1.161	-	-	-0.19	0.124	0.144



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		LTE Band 66	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 24	ECI 2	132322	1745	17.05	17.70	1.161	-	-	0.17	0.059	0.069
		LTE Band 66	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	132322	1745	17.05	17.70	1.161	-	-	0.01	0.478	0.555
		LTE Band 66	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 24	ECI 2	132322	1745	17.05	17.70	1.161	-	-	-0.08	0.165	0.192
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Cheek	0mm	Ant 14	ECI 2	349000	1745	17.01	18.00	1.256	-	-	-0.12	0.548	0.688
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Tilted	0mm	Ant 14	ECI 2	349000	1745	17.01	18.00	1.256	-	-	0.02	0.425	0.534
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Cheek	0mm	Ant 14	ECI 2	349000	1745	17.01	18.00	1.256	-	-	-0.07	0.328	0.412
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Tilted	0mm	Ant 14	ECI 2	349000	1745	17.01	18.00	1.256	-	-	0.17	0.327	0.411
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 14	ECI 2	349000	1745	16.94	18.00	1.276	-	-	0.08	0.566	0.722
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 14	ECI 2	349000	1745	16.94	18.00	1.276	-	-	0.02	0.439	0.560
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 14	ECI 2	349000	1745	16.94	18.00	1.276	-	-	0.14	0.339	0.433
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 14	ECI 2	349000	1745	16.94	18.00	1.276	-	-	-0.15	0.338	0.431
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Cheek	0mm	Ant 41	ECI 2	349000	1745	24.22	25.50	1.343	-	-	0.1	0.130	0.175
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Tilted	0mm	Ant 41	ECI 2	349000	1745	24.22	25.50	1.343	-	-	-0.14	0.077	0.103
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Cheek	0mm	Ant 41	ECI 2	349000	1745	24.22	25.50	1.343	-	-	0.15	0.127	0.171
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Tilted	0mm	Ant 41	ECI 2	349000	1745	24.22	25.50	1.343	-	-	-0.03	0.058	0.078
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 41	ECI 2	349000	1745	24.15	25.50	1.365	-	-	0.04	0.127	0.173
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 41	ECI 2	349000	1745	24.15	25.50	1.365	-	-	0.13	0.072	0.098
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 41	ECI 2	349000	1745	24.15	25.50	1.365	-	-	-0.09	0.122	0.166
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 41	ECI 2	349000	1745	24.15	25.50	1.365	-	-	0.11	0.057	0.078
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Cheek	0mm	Ant 12	ECI 2	349000	1745	18.80	20.20	1.380	-	-	0.02	0.776	1.071
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Tilted	0mm	Ant 12	ECI 2	349000	1745	18.80	20.20	1.380	-	-	0.17	0.252	0.348
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Cheek	0mm	Ant 12	ECI 2	349000	1745	18.80	20.20	1.380	-	-	-0.13	0.335	0.462
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Tilted	0mm	Ant 12	ECI 2	349000	1745	18.80	20.20	1.380	-	-	-0.1	0.093	0.128
10		FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 12	ECI 2	349000	1745	18.74	20.20	1.400	-	-	0.05	0.797	1.115
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 12	ECI 2	349000	1745	18.74	20.20	1.400	-	-	0.1	0.258	0.361
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 12	ECI 2	349000	1745	18.74	20.20	1.400	-	-	0	0.345	0.483
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 12	ECI 2	349000	1745	18.74	20.20	1.400	-	-	-0.1	0.095	0.133
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 12	ECI 3	349000	1745	17.22	18.70	1.406	-	-	0.1	0.581	0.817
		FR1 n66	40M	QPSK	216	0	DFT-15	Right Cheek	0mm	Ant 12	ECI 2	349000	1745	18.74	20.20	1.400	-	-	-0.09	0.773	1.082
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Cheek	0mm	Ant 24	ECI 2	349000	1745	16.98	18.20	1.324	-	-	-0.05	0.126	0.167
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Tilted	0mm	Ant 24	ECI 2	349000	1745	16.98	18.20	1.324	-	-	0.15	0.061	0.081
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Cheek	0mm	Ant 24	ECI 2	349000	1745	16.98	18.20	1.324	-	-	0.18	0.493	0.653
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Tilted	0mm	Ant 24	ECI 2	349000	1745	16.98	18.20	1.324	-	-	-0.13	0.168	0.222
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Cheek	0mm	Ant 24	ECI 2	349000	1745	16.95	18.20	1.334	-	-	0.07	0.125	0.167
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Tilted	0mm	Ant 24	ECI 2	349000	1745	16.95	18.20	1.334	-	-	0.08	0.060	0.080
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Cheek	0mm	Ant 24	ECI 2	349000	1745	16.95	18.20	1.334	-	-	-0.05	0.488	0.651
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Tilted	0mm	Ant 24	ECI 2	349000	1745	16.95	18.20	1.334	-	-	-0.03	0.166	0.221
1900MHz																					
11		GSM1900	-	-	-	-	GPRS 2 Tx slots	Right Cheek	0mm	Ant 14	ECI 2	661	1880	23.80	25.00	1.318	-	-	0.16	0.658	0.867
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Right Tilted	0mm	Ant 14	ECI 2	661	1880	23.80	25.00	1.318	-	-	-0.16	0.076	0.100
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Left Cheek	0mm	Ant 14	ECI 2	661	1880	23.80	25.00	1.318	-	-	-0.15	0.354	0.467
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Left Tilted	0mm	Ant 14	ECI 2	661	1880	23.80	25.00	1.318	-	-	-0.08	0.349	0.460
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Right Cheek	0mm	Ant 14	ECI 2	512	1850.2	23.77	25.00	1.327	-	-	0.02	0.625	0.830
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Right Cheek	0mm	Ant 14	ECI 2	810	1909.8	23.77	25.00	1.327	-	-	0.08	0.618	0.820
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Right Cheek	0mm	Ant 14	ECI 3	661	1880	22.92	24.00	1.282	-	-	0.03	0.520	0.667
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Right Cheek	0mm	Ant 41	ECI 2	661	1880	28.84	30.00	1.306	-	-	0.15	0.096	0.125
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Right Tilted	0mm	Ant 41	ECI 2	661	1880	28.84	30.00	1.306	-	-	0.03	0.073	0.095
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Left Cheek	0mm	Ant 41	ECI 2	661	1880	28.84	30.00	1.306	-	-	-0.09	0.098	0.128
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Left Tilted	0mm	Ant 41	ECI 2	661	1880	28.84	30.00	1.306	-	-	0.19	0.064	0.084
12		WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 14	ECI 2	9400	1880	17.02	18.00	1.253	-	-	-0.08	0.495	0.620
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 14	ECI 2	9400	1880	17.02	18.00	1.253	-	-	0.19	0.370	0.464
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 14	ECI 2	9400	1880	17.02	18.00	1.253	-	-	-0.07	0.276	0.346
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 14	ECI 2	9400	1880	17.02	18.00	1.253	-	-	-0.08	0.272	0.341
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 14	ECI 3	9400	1880	16.00	17.00	1.259	-	-	0.05	0.388	0.488



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		WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 41	ECI 2	9400	1880	24.16	25.00	1.213	-	-	0.16	0.101	0.123
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Tilted	0mm	Ant 41	ECI 2	9400	1880	24.16	25.00	1.213	-	-	0.03	0.056	0.068
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 41	ECI 2	9400	1880	24.16	25.00	1.213	-	-	-0.12	0.097	0.118
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Tilted	0mm	Ant 41	ECI 2	9400	1880	24.16	25.00	1.213	-	-	0.1	0.058	0.070
		LTE Band 2	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	18900	1880	18.33	19.80	1.403	-	-	-0.13	0.654	0.917
		LTE Band 2	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	18900	1880	18.33	19.80	1.403	-	-	0.13	0.516	0.724
		LTE Band 2	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 14	ECI 2	18900	1880	18.33	19.80	1.403	-	-	-0.18	0.371	0.520
		LTE Band 2	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 14	ECI 2	18900	1880	18.33	19.80	1.403	-	-	0.15	0.363	0.509
		LTE Band 2	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	18700	1860	18.20	19.80	1.445	-	-	-0.1	0.627	0.906
13		LTE Band 2	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	19100	1900	18.24	19.80	1.432	-	-	-0.09	0.742	1.063
		LTE Band 2	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 3	19100	1900	17.05	18.50	1.396	-	-	0.02	0.584	0.815
		LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	18900	1880	18.24	19.80	1.432	-	-	-0.12	0.641	0.918
		LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	18900	1880	18.24	19.80	1.432	-	-	-0.07	0.506	0.725
		LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 14	ECI 2	18900	1880	18.24	19.80	1.432	-	-	0.11	0.365	0.523
		LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 14	ECI 2	18900	1880	18.24	19.80	1.432	-	-	0.16	0.356	0.510
		LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	18700	1860	18.19	19.80	1.449	-	-	0.01	0.538	0.779
		LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	19100	1900	18.18	19.80	1.452	-	-	-0.01	0.713	1.035
		LTE Band 2	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 14	ECI 2	18900	1880	18.22	19.80	1.439	-	-	0.03	0.631	0.908
		LTE Band 2	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 41	ECI 2	18900	1880	24.06	25.50	1.393	-	-	0.11	0.106	0.148
		LTE Band 2	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 41	ECI 2	18900	1880	24.06	25.50	1.393	-	-	0.14	0.054	0.075
		LTE Band 2	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 41	ECI 2	18900	1880	24.06	25.50	1.393	-	-	0.08	0.107	0.149
		LTE Band 2	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 41	ECI 2	18900	1880	24.06	25.50	1.393	-	-	0.05	0.055	0.077
		LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 41	ECI 2	18900	1880	23.10	24.50	1.380	-	-	-0.15	0.082	0.113
		LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 41	ECI 2	18900	1880	23.10	24.50	1.380	-	-	-0.05	0.042	0.058
		LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 41	ECI 2	18900	1880	23.10	24.50	1.380	-	-	-0.14	0.083	0.115
		LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 41	ECI 2	18900	1880	23.10	24.50	1.380	-	-	0.06	0.043	0.059
		LTE Band 2	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	18900	1880	18.25	19.90	1.462	-	-	-0.07	0.125	0.183
		LTE Band 2	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 12	ECI 2	18900	1880	18.25	19.90	1.462	-	-	0.06	0.041	0.060
		LTE Band 2	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 12	ECI 2	18900	1880	18.25	19.90	1.462	-	-	0	0.001	0.001
		LTE Band 2	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 12	ECI 2	18900	1880	18.25	19.90	1.462	-	-	0	0.001	0.001
		LTE Band 2	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	18900	1880	18.20	19.90	1.479	-	-	-0.04	0.124	0.183
		LTE Band 2	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 12	ECI 2	18900	1880	18.20	19.90	1.479	-	-	-0.01	0.040	0.059
		LTE Band 2	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 12	ECI 2	18900	1880	18.20	19.90	1.479	-	-	0	0.001	0.001
		LTE Band 2	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 12	ECI 2	18900	1880	18.20	19.90	1.479	-	-	0	0.001	0.001
		FR1 n2	20M	QPSK	1	53	DFT-15	Right Cheek	0mm	Ant 14	ECI 2	376000	1880	17.05	18.00	1.245	-	-	-0.16	0.543	0.676
		FR1 n2	20M	QPSK	1	53	DFT-15	Right Tilted	0mm	Ant 14	ECI 2	376000	1880	17.05	18.00	1.245	-	-	-0.05	0.411	0.511
		FR1 n2	20M	QPSK	1	53	DFT-15	Left Cheek	0mm	Ant 14	ECI 2	376000	1880	17.05	18.00	1.245	-	-	0.12	0.291	0.362
		FR1 n2	20M	QPSK	1	53	DFT-15	Left Tilted	0mm	Ant 14	ECI 2	376000	1880	17.05	18.00	1.245	-	-	-0.09	0.332	0.413
14		FR1 n2	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 14	ECI 2	376000	1880	17.01	18.00	1.256	-	-	-0.15	0.553	0.695
		FR1 n2	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 14	ECI 2	376000	1880	17.01	18.00	1.256	-	-	0.12	0.419	0.526
		FR1 n2	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 14	ECI 2	376000	1880	17.01	18.00	1.256	-	-	-0.17	0.296	0.372
		FR1 n2	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 14	ECI 2	376000	1880	17.01	18.00	1.256	-	-	-0.1	0.338	0.425
		FR1 n2	20M	QPSK	1	53	DFT-15	Right Cheek	0mm	Ant 41	ECI 2	376000	1880	24.10	25.00	1.230	-	-	0.19	0.105	0.129
		FR1 n2	20M	QPSK	1	53	DFT-15	Right Tilted	0mm	Ant 41	ECI 2	376000	1880	24.10	25.00	1.230	-	-	-0.19	0.061	0.075
		FR1 n2	20M	QPSK	1	53	DFT-15	Left Cheek	0mm	Ant 41	ECI 2	376000	1880	24.10	25.00	1.230	-	-	-0.16	0.116	0.143
		FR1 n2	20M	QPSK	1	53	DFT-15	Left Tilted	0mm	Ant 41	ECI 2	376000	1880	24.10	25.00	1.230	-	-	0.07	0.068	0.084
		FR1 n2	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 41	ECI 2	376000	1880	23.82	25.00	1.312	-	-	-0.17	0.101	0.133
		FR1 n2	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 41	ECI 2	376000	1880	23.82	25.00	1.312	-	-	0.12	0.059	0.077
		FR1 n2	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 41	ECI 2	376000	1880	23.82	25.00	1.312	-	-	-0.08	0.112	0.147
		FR1 n2	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 41	ECI 2	376000	1880	23.82	25.00	1.312	-	-	0.04	0.066	0.087
		FR1 n2	20M	QPSK	1	53	DFT-15	Right Cheek	0mm	Ant 12	ECI 2	376000	1880	16.35	17.90	1.429	-	-	0.16	0.077	0.110
		FR1 n2	20M	QPSK	1	53	DFT-15	Right Tilted	0mm	Ant 12	ECI 2	376000	1880	16.35	17.90	1.429	-	-	0	0.001	0.001
		FR1 n2	20M	QPSK	1	53	DFT-15	Left Cheek	0mm	Ant 12	ECI 2	376000	1880	16.35	17.90	1.429	-	-	0	0.001	0.001
		FR1 n2	20M	QPSK	1	53	DFT-15	Left Tilted	0mm	Ant 12	ECI 2	376000	1880	16.35	17.90	1.429	-	-	0	0.001	0.001
		FR1 n2	20M	QPSK	50	28	DFT-15	Right Cheek	0mm	Ant 12	ECI 2	376000	1880	16.31	17.90	1.442	-	-	-0.01	0.062	0.089
		FR1 n2	20M	QPSK	50	28	DFT-15	Right Tilted	0mm	Ant 12	ECI 2	376000	1880	16.31	17.90	1.442	-	-	0	0.001	0.001



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		FR1 n2	20M	QPSK	50	28	DFT-15	Left Cheek	0mm	Ant 12	ECI 2	376000	1880	16.31	17.90	1.442	-	-	0	0.001	0.001
		FR1 n2	20M	QPSK	50	28	DFT-15	Left Tilted	0mm	Ant 12	ECI 2	376000	1880	16.31	17.90	1.442	-	-	0	0.001	0.001
2600MHz																					
		LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	21100	2535	16.37	17.60	1.327	-	-	0.04	0.796	1.057
		LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	21100	2535	16.37	17.60	1.327	-	-	-0.06	0.724	0.961
		LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 14	ECI 2	21100	2535	16.37	17.60	1.327	-	-	0.1	0.361	0.479
		LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 14	ECI 2	21100	2535	16.37	17.60	1.327	-	-	0.18	0.382	0.507
		LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	20850	2510	16.31	17.60	1.346	-	-	0.09	0.751	1.011
		LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	21350	2560	16.36	17.60	1.330	-	-	-0.04	0.793	1.055
		LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	20850	2510	16.31	17.60	1.346	-	-	0.04	0.707	0.952
		LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	21350	2560	16.36	17.60	1.330	-	-	0.09	0.731	0.973
15		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	21100	2535	16.28	17.60	1.355	-	-	0.15	0.793	1.075
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	21100 21298	2535 2554.8	16.12	17.60	1.406	-	-	0.05	0.750	1.055
		LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	21100	2535	16.28	17.60	1.355	-	-	-0.19	0.721	0.977
		LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 14	ECI 2	21100	2535	16.28	17.60	1.355	-	-	-0.05	0.359	0.487
		LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 14	ECI 2	21100	2535	16.28	17.60	1.355	-	-	0.12	0.380	0.515
		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	20850	2510	16.24	17.60	1.368	-	-	0.15	0.748	1.023
		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	21350	2560	16.27	17.60	1.358	-	-	0.04	0.780	1.059
		LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	20850	2510	16.24	17.60	1.368	-	-	0.09	0.698	0.955
		LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	21350	2560	16.27	17.60	1.358	-	-	0.01	0.729	0.990
		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 3	21100	2535	15.33	16.50	1.309	-	-	0.03	0.602	0.788
		LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 14	ECI 2	21100	2535	16.27	17.60	1.358	-	-	0.02	0.760	1.032
		LTE Band 7	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 14	ECI 2	21100	2535	16.27	17.60	1.358	-	-	0.04	0.689	0.936
		LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 41	ECI 2	21100	2535	24.98	25.50	1.127	-	-	-0.01	0.151	0.170
		LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 41	ECI 2	21100	2535	24.98	25.50	1.127	-	-	-0.04	0.133	0.150
		LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 41	ECI 2	21100	2535	24.98	25.50	1.127	-	-	0.07	0.265	0.299
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 41	ECI 2	21100 21298	2535 2554.8	24.76	25.50	1.186	-	-	0.05	0.245	0.291
		LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 41	ECI 2	21100	2535	24.98	25.50	1.127	-	-	0.14	0.058	0.065
		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 41	ECI 2	21100	2535	23.84	24.50	1.164	-	-	-0.05	0.125	0.146
		LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 41	ECI 2	21100	2535	23.84	24.50	1.164	-	-	0.03	0.110	0.128
		LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 41	ECI 2	21100	2535	23.84	24.50	1.164	-	-	0.09	0.220	0.256
		LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 41	ECI 2	21100	2535	23.84	24.50	1.164	-	-	-0.09	0.048	0.056
		LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	21100	2535	18.98	20.20	1.324	-	-	0.13	0.658	0.871
		LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 12	ECI 2	21100	2535	18.98	20.20	1.324	-	-	0.11	0.298	0.395
		LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 12	ECI 2	21100	2535	18.98	20.20	1.324	-	-	0.04	0.172	0.228
		LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 12	ECI 2	21100	2535	18.98	20.20	1.324	-	-	-0.09	0.116	0.154
		LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	20850	2510	18.87	20.20	1.358	-	-	-0.17	0.780	1.059
		LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	21350	2560	18.92	20.20	1.343	-	-	0.14	0.713	0.957
		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	21100	2535	18.94	20.20	1.337	-	-	-0.13	0.656	0.877
		LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 12	ECI 2	21100	2535	18.94	20.20	1.337	-	-	0.11	0.296	0.396
		LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 12	ECI 2	21100	2535	18.94	20.20	1.337	-	-	0.08	0.177	0.237
		LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 12	ECI 2	21100	2535	18.94	20.20	1.337	-	-	-0.14	0.120	0.160
		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	20850	2510	18.84	20.20	1.368	-	-	0.12	0.767	1.049
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	20850 21048	2510 2529.8	18.69	20.20	1.416	-	-	0.07	0.723	1.024
		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	21350	2560	18.84	20.20	1.368	-	-	0.11	0.707	0.967
		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 3	20850	2510	17.76	19.20	1.393	-	-	-0.08	0.597	0.832
		LTE Band 7	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 12	ECI 2	21100	2535	18.92	20.20	1.343	-	-	-0.16	0.649	0.871
		LTE Band 7	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 24	ECI 2	21100	2535	17.21	18.30	1.285	-	-	-0.05	0.160	0.206
		LTE Band 7	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 24	ECI 2	21100	2535	17.21	18.30	1.285	-	-	0.16	0.098	0.126
		LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	21100	2535	17.21	18.30	1.285	-	-	0.15	0.580	0.745
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	21100 21298	2535 2554.8	16.98	18.30	1.355	-	-	0.03	0.542	0.735
		LTE Band 7	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 24	ECI 2	21100	2535	17.21	18.30	1.285	-	-	-0.07	0.227	0.292
		LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	20850	2510	17.08	18.30	1.324	-	-	-0.01	0.555	0.735
		LTE Band 7	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	21350	2560	17.18	18.30	1.294	-	-	-0.16	0.560	0.725
		LTE Band 7	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 24	ECI 2	21100	2535	17.18	18.30	1.294	-	-	0.06	0.152	0.197



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		LTE Band 7	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 24	ECI 2	21100	2535	17.18	18.30	1.294	-	-	-0.09	0.097	0.126
		LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	21100	2535	17.18	18.30	1.294	-	-	0.04	0.549	0.711
		LTE Band 7	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 24	ECI 2	21100	2535	17.18	18.30	1.294	-	-	0.03	0.223	0.289
		LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	20850	2510	17.05	18.30	1.334	-	-	0.03	0.553	0.737
		LTE Band 7	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	21350	2560	17.12	18.30	1.312	-	-	0.16	0.551	0.723
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	40620	2593	18.09	18.80	1.178	62.9	1.006	0.15	0.825	0.977
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	40620	2593	18.09	18.80	1.178	62.9	1.006	-0.09	0.807	0.956
		LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 14	ECI 2	40620	2593	18.09	18.80	1.178	62.9	1.006	-0.06	0.377	0.447
		LTE Band 41	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 14	ECI 2	40620	2593	18.09	18.80	1.178	62.9	1.006	0.01	0.404	0.479
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	39750	2506	18.04	18.80	1.191	62.9	1.006	0.09	0.706	0.846
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	40185	2549.5	17.98	18.80	1.208	62.9	1.006	0.04	0.718	0.872
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	41055	2636.5	18.06	18.80	1.186	62.9	1.006	-0.03	0.780	0.930
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	41490	2680	17.96	18.80	1.213	62.9	1.006	0.06	0.635	0.775
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	39750	2506	18.04	18.80	1.191	62.9	1.006	0.02	0.688	0.824
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	40185	2549.5	17.98	18.80	1.208	62.9	1.006	0.05	0.701	0.852
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	41055	2636.5	18.06	18.80	1.186	62.9	1.006	0.01	0.724	0.864
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 14	ECI 2	41490	2680	17.96	18.80	1.213	62.9	1.006	-0.05	0.602	0.735
16		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	40620	2593	18.06	18.80	1.186	62.9	1.006	-0.1	0.833	0.994
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 14	ECI 2	40620 40818	2593 2612.8	17.92	18.80	1.225	62.9	1.006	0.05	0.790	0.973
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	40620	2593	18.06	18.80	1.186	62.9	1.006	-0.17	0.815	0.972
		LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 14	ECI 2	40620	2593	18.06	18.80	1.186	62.9	1.006	-0.16	0.380	0.453
		LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 14	ECI 2	40620	2593	18.06	18.80	1.186	62.9	1.006	-0.15	0.407	0.486
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	39750	2506	18.01	18.80	1.199	62.9	1.006	-0.03	0.712	0.859
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	40185	2549.5	17.90	18.80	1.230	62.9	1.006	0.07	0.724	0.896
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	41055	2636.5	17.97	18.80	1.211	62.9	1.006	0.04	0.788	0.960
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	41490	2680	17.93	18.80	1.222	62.9	1.006	0.14	0.641	0.788
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	39750	2506	18.01	18.80	1.199	62.9	1.006	0.01	0.692	0.835
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	40185	2549.5	17.90	18.80	1.230	62.9	1.006	0.09	0.708	0.876
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	41055	2636.5	17.97	18.80	1.211	62.9	1.006	-0.05	0.738	0.899
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 14	ECI 2	41490	2680	17.93	18.80	1.222	62.9	1.006	0.09	0.613	0.753
		LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 14	ECI 2	40620	2593	18.01	18.80	1.199	62.9	1.006	-0.16	0.808	0.975
		LTE Band 41	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 14	ECI 2	40620	2593	18.01	18.80	1.199	62.9	1.006	-0.07	0.791	0.954
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 41	ECI 2	40620	2593	24.81	25.70	1.227	62.9	1.006	-0.18	0.099	0.122
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 41	ECI 2	40620	2593	24.81	25.70	1.227	62.9	1.006	0.16	0.064	0.079
		LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 41	ECI 2	40620	2593	24.81	25.70	1.227	62.9	1.006	-0.1	0.160	0.198
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 41	ECI 2	40620 40818	2593 2612.8	24.53	25.70	1.309	62.9	1.006	0.02	0.150	0.198
		LTE Band 41	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 41	ECI 2	40620	2593	24.81	25.70	1.227	62.9	1.006	-0.09	0.049	0.061
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 41	ECI 2	40620	2593	23.85	24.70	1.216	62.9	1.006	0.18	0.085	0.104
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 41	ECI 2	40620	2593	23.85	24.70	1.216	62.9	1.006	-0.11	0.055	0.067
		LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 41	ECI 2	40620	2593	23.85	24.70	1.216	62.9	1.006	-0.1	0.137	0.168
		LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 41	ECI 2	40620	2593	23.85	24.70	1.216	62.9	1.006	0.13	0.042	0.051
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	40620	2593	20.79	21.80	1.262	62.9	1.006	0.13	0.707	0.897
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 12	ECI 2	40620	2593	20.79	21.80	1.262	62.9	1.006	-0.06	0.679	0.862
		LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 12	ECI 2	40620	2593	20.79	21.80	1.262	62.9	1.006	-0.06	0.305	0.387
		LTE Band 41	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 12	ECI 2	40620	2593	20.79	21.80	1.262	62.9	1.006	-0.11	0.334	0.424
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	39750	2506	20.76	21.80	1.271	62.9	1.006	0.09	0.587	0.750
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	40185	2549.5	20.77	21.80	1.268	62.9	1.006	0.19	0.600	0.765
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	41055	2636.5	20.72	21.80	1.282	62.9	1.006	0.01	0.703	0.907
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	41055 41253	2636.5 2656.3	20.47	21.80	1.358	62.9	1.006	0.17	0.656	0.896
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 12	ECI 2	41490	2680	20.65	21.80	1.303	62.9	1.006	-0.06	0.559	0.733
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 12	ECI 2	39750	2506	20.76	21.80	1.271	62.9	1.006	0.01	0.535	0.684
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 12	ECI 2	40185	2549.5	20.77	21.80	1.268	62.9	1.006	0.08	0.567	0.723
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 12	ECI 2	41055	2636.5	20.72	21.80	1.282	62.9	1.006	0.11	0.623	0.804
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 12	ECI 2	41490	2680	20.65	21.80	1.303	62.9	1.006	0.08	0.518	0.679
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	40620	2593	20.73	21.80	1.279	62.9	1.006	-0.19	0.679	0.874



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		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 12	ECI 2	40620	2593	20.73	21.80	1.279	62.9	1.006	0	0.652	0.839
		LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 12	ECI 2	40620	2593	20.73	21.80	1.279	62.9	1.006	-0.13	0.293	0.377
		LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 12	ECI 2	40620	2593	20.73	21.80	1.279	62.9	1.006	0	0.321	0.413
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	39750	2506	20.71	21.80	1.285	62.9	1.006	0.12	0.564	0.729
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	40185	2549.5	20.68	21.80	1.294	62.9	1.006	-0.09	0.576	0.750
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	41055	2636.5	20.68	21.80	1.294	62.9	1.006	0.08	0.675	0.879
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 12	ECI 2	41490	2680	20.62	21.80	1.312	62.9	1.006	-0.14	0.537	0.709
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 12	ECI 2	39750	2506	20.71	21.80	1.285	62.9	1.006	0.09	0.521	0.674
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 12	ECI 2	40185	2549.5	20.68	21.80	1.294	62.9	1.006	0.04	0.527	0.686
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 12	ECI 2	41055	2636.5	20.68	21.80	1.294	62.9	1.006	0.01	0.614	0.799
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 12	ECI 2	41490	2680	20.62	21.80	1.312	62.9	1.006	0.09	0.505	0.667
		LTE Band 41	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 12	ECI 2	40620	2593	20.72	21.80	1.282	62.9	1.006	0.1	0.686	0.885
		LTE Band 41	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 12	ECI 2	40620	2593	20.72	21.80	1.282	62.9	1.006	-0.04	0.659	0.850
		LTE Band 41	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 24	ECI 2	40620	2593	19.52	20.10	1.143	62.9	1.006	0.14	0.174	0.200
		LTE Band 41	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 24	ECI 2	40620	2593	19.52	20.10	1.143	62.9	1.006	0.15	0.111	0.128
		LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	40620	2593	19.52	20.10	1.143	62.9	1.006	-0.17	0.620	0.713
		LTE Band 41	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 24	ECI 2	40620	2593	19.52	20.10	1.143	62.9	1.006	-0.12	0.259	0.298
		LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	39750	2506	19.48	20.10	1.153	62.9	1.006	-0.04	0.612	0.710
		LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	40185	2549.5	19.48	20.10	1.153	62.9	1.006	-0.07	0.605	0.702
		LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	41055	2636.5	19.40	20.10	1.175	62.9	1.006	0.11	0.612	0.723
		LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	41490	2680	19.19	20.10	1.233	62.9	1.006	-0.17	0.592	0.734
		LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 24	ECI 2	40620	2593	19.45	20.10	1.161	62.9	1.006	0.18	0.179	0.209
		LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 24	ECI 2	40620	2593	19.45	20.10	1.161	62.9	1.006	-0.16	0.114	0.133
		LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	40620	2593	19.45	20.10	1.161	62.9	1.006	-0.01	0.633	0.740
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 24	ECI 2	40620 2593 40818 2612.8		19.40	20.10	1.175	62.9	1.006	0.02	0.618	0.730
		LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 24	ECI 2	40620	2593	19.45	20.10	1.161	62.9	1.006	0.07	0.266	0.311
		LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	39750	2506	19.40	20.10	1.175	62.9	1.006	-0.02	0.612	0.723
		LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	40185	2549.5	19.38	20.10	1.180	62.9	1.006	0.03	0.619	0.735
		LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	41055	2636.5	19.35	20.10	1.189	62.9	1.006	0.04	0.611	0.731
		LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 24	ECI 2	41490	2680	19.10	20.10	1.259	62.9	1.006	0.15	0.580	0.735
		LTE Band 41	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 24	ECI 2	40620	2593	19.51	20.10	1.146	62.9	1.006	-0.02	0.625	0.720
		FR1 n7	50M	QPSK	1	135	DFT-15	Right Cheek	0mm	Ant 14	ECI 2	507000	2535	16.16	17.00	1.213	-	-	0.06	0.620	0.752
		FR1 n7	50M	QPSK	1	135	DFT-15	Right Tilted	0mm	Ant 14	ECI 2	507000	2535	16.16	17.00	1.213	-	-	0.19	0.615	0.746
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Cheek	0mm	Ant 14	ECI 2	507000	2535	16.16	17.00	1.213	-	-	-0.19	0.307	0.373
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Tilted	0mm	Ant 14	ECI 2	507000	2535	16.16	17.00	1.213	-	-	-0.11	0.325	0.394
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Cheek	0mm	Ant 14	ECI 2	507000	2535	16.12	17.00	1.225	-	-	-0.04	0.643	0.787
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Tilted	0mm	Ant 14	ECI 2	507000	2535	16.12	17.00	1.225	-	-	0.18	0.629	0.770
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Cheek	0mm	Ant 14	ECI 2	507000	2535	16.12	17.00	1.225	-	-	-0.09	0.305	0.374
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Tilted	0mm	Ant 14	ECI 2	507000	2535	16.12	17.00	1.225	-	-	0.15	0.323	0.396
		FR1 n7	50M	QPSK	1	135	DFT-15	Right Cheek	0mm	Ant 41	ECI 2	507000	2535	24.42	25.00	1.143	-	-	0.05	0.153	0.175
		FR1 n7	50M	QPSK	1	135	DFT-15	Right Tilted	0mm	Ant 41	ECI 2	507000	2535	24.42	25.00	1.143	-	-	-0.03	0.115	0.131
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Cheek	0mm	Ant 41	ECI 2	507000	2535	24.42	25.00	1.143	-	-	0.16	0.263	0.301
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Tilted	0mm	Ant 41	ECI 2	507000	2535	24.42	25.00	1.143	-	-	-0.01	0.057	0.065
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Cheek	0mm	Ant 41	ECI 2	507000	2535	24.32	25.00	1.169	-	-	-0.07	0.170	0.199
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Tilted	0mm	Ant 41	ECI 2	507000	2535	24.32	25.00	1.169	-	-	0.12	0.128	0.150
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Cheek	0mm	Ant 41	ECI 2	507000	2535	24.32	25.00	1.169	-	-	-0.1	0.292	0.341
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Tilted	0mm	Ant 41	ECI 2	507000	2535	24.32	25.00	1.169	-	-	0.19	0.063	0.074
		FR1 n7	50M	QPSK	1	135	DFT-15	Right Cheek	0mm	Ant 12	ECI 2	507000	2535	17.76	18.60	1.213	-	-	0.06	0.644	0.781
		FR1 n7	50M	QPSK	1	135	DFT-15	Right Tilted	0mm	Ant 12	ECI 2	507000	2535	17.76	18.60	1.213	-	-	0.02	0.244	0.296
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Cheek	0mm	Ant 12	ECI 2	507000	2535	17.76	18.60	1.213	-	-	0.1	0.195	0.237
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Tilted	0mm	Ant 12	ECI 2	507000	2535	17.76	18.60	1.213	-	-	-0.11	0.114	0.138
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Cheek	0mm	Ant 12	ECI 2	507000	2535	17.73	18.60	1.222	-	-	0.02	0.659	0.805
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Tilted	0mm	Ant 12	ECI 2	507000	2535	17.73	18.60	1.222	-	-	-0.06	0.250	0.305
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Cheek	0mm	Ant 12	ECI 2	507000	2535	17.73	18.60	1.222	-	-	0	0.200	0.244
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Tilted	0mm	Ant 12	ECI 2	507000	2535	17.73	18.60	1.222	-	-	-0.12	0.117	0.143
		FR1 n7	50M	QPSK	270	0	DFT-15	Right Cheek	0mm	Ant 12	ECI 2	507000	2535	17.67	18.60	1.239	-	-	0.09	0.633	0.784



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		FR1 n7	50M	QPSK	1	135	DFT-15	Right Cheek	0mm	Ant 24	ECI 2	507000	2535	16.99	18.20	1.321	-	-	0.09	0.161	0.213
		FR1 n7	50M	QPSK	1	135	DFT-15	Right Tilted	0mm	Ant 24	ECI 2	507000	2535	16.99	18.20	1.321	-	-	0	0.101	0.133
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Cheek	0mm	Ant 24	ECI 2	507000	2535	16.99	18.20	1.321	-	-	-0.03	0.616	0.814
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Tilted	0mm	Ant 24	ECI 2	507000	2535	16.99	18.20	1.321	-	-	-0.06	0.243	0.321
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Cheek	0mm	Ant 24	ECI 2	507000	2535	16.95	18.20	1.334	-	-	-0.13	0.164	0.219
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Tilted	0mm	Ant 24	ECI 2	507000	2535	16.95	18.20	1.334	-	-	0.04	0.103	0.137
17		FR1 n7	50M	QPSK	135	68	DFT-15	Left Cheek	0mm	Ant 24	ECI 2	507000	2535	16.95	18.20	1.334	-	-	0.01	0.722	0.963
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Tilted	0mm	Ant 24	ECI 2	507000	2535	16.95	18.20	1.334	-	-	-0.17	0.248	0.331
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Cheek	0mm	Ant 24	ECI 2	507000	2535	15.89	17.20	1.352	-	-	0.05	0.565	0.764
		FR1 n7	50M	QPSK	270	0	DFT-15	Left Cheek	0mm	Ant 24	ECI 2	507000	2535	16.98	18.20	1.324	-	-	0.16	0.656	0.869
18		FR1 n38	40M	QPSK	1	49	DFT-30	Right Cheek	0mm	Ant 14	ECI 2	519000	2595	15.40	16.50	1.288	-	-	-0.1	0.678	0.873
		FR1 n38	40M	QPSK	1	49	DFT-30	Right Tilted	0mm	Ant 14	ECI 2	519000	2595	15.40	16.50	1.288	-	-	0.12	0.579	0.746
		FR1 n38	40M	QPSK	1	49	DFT-30	Left Cheek	0mm	Ant 14	ECI 2	519000	2595	15.40	16.50	1.288	-	-	0.03	0.277	0.357
		FR1 n38	40M	QPSK	1	49	DFT-30	Left Tilted	0mm	Ant 14	ECI 2	519000	2595	15.40	16.50	1.288	-	-	0.07	0.289	0.372
		FR1 n38	40M	QPSK	50	28	DFT-30	Right Cheek	0mm	Ant 14	ECI 2	519000	2595	15.37	16.50	1.297	-	-	0.1	0.594	0.771
		FR1 n38	40M	QPSK	50	28	DFT-30	Right Tilted	0mm	Ant 14	ECI 2	519000	2595	15.37	16.50	1.297	-	-	-0.05	0.563	0.730
		FR1 n38	40M	QPSK	50	28	DFT-30	Left Cheek	0mm	Ant 14	ECI 2	519000	2595	15.37	16.50	1.297	-	-	0.12	0.260	0.337
		FR1 n38	40M	QPSK	50	28	DFT-30	Left Tilted	0mm	Ant 14	ECI 2	519000	2595	15.37	16.50	1.297	-	-	-0.14	0.273	0.354
		FR1 n38	40M	QPSK	100	0	DFT-30	Right Cheek	0mm	Ant 14	ECI 2	519000	2595	15.38	16.50	1.294	-	-	0.12	0.575	0.744
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 14	ECI 2	518598	2592.99	15.22	16.30	1.282	-	-	0.13	0.581	0.745
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 14	ECI 2	518598	2592.99	15.22	16.30	1.282	-	-	0.01	0.553	0.709
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 14	ECI 2	518598	2592.99	15.22	16.30	1.282	-	-	-0.1	0.258	0.331
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 14	ECI 2	518598	2592.99	15.22	16.30	1.282	-	-	-0.05	0.270	0.346
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 14	ECI 2	518598	2592.99	15.21	16.30	1.285	-	-	0.07	0.615	0.790
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 14	ECI 2	518598	2592.99	15.21	16.30	1.285	-	-	0.18	0.551	0.708
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 14	ECI 2	518598	2592.99	15.21	16.30	1.285	-	-	0.15	0.257	0.330
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 14	ECI 2	518598	2592.99	15.21	16.30	1.285	-	-	0.05	0.269	0.346
	PC2	FR1 n41	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 14	ECI 2	518598	2592.99	15.18	16.30	1.294	-	-	0.01	0.575	0.744
	PC2	FR1 n41	100M	QPSK	270	0	DFT-30	Right Tilted	0mm	Ant 14	ECI 2	518598	2592.99	15.18	16.30	1.294	-	-	0.05	0.539	0.698
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 41	ECI 2	518598	2592.99	26.15	27.30	1.303	-	-	-0.13	0.210	0.274
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 41	ECI 2	518598	2592.99	26.15	27.30	1.303	-	-	0.06	0.131	0.171
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 41	ECI 2	518598	2592.99	26.15	27.30	1.303	-	-	-0.01	0.351	0.457
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 41	ECI 2	518598	2592.99	26.15	27.30	1.303	-	-	0.13	0.090	0.117
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 41	ECI 2	518598	2592.99	25.96	27.30	1.361	-	-	0.13	0.236	0.321
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 41	ECI 2	518598	2592.99	25.96	27.30	1.361	-	-	0.04	0.147	0.200
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 41	ECI 2	518598	2592.99	25.96	27.30	1.361	-	-	-0.16	0.376	0.512
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 41	ECI 2	518598	2592.99	25.96	27.30	1.361	-	-	0.12	0.101	0.138
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 12	ECI 2	518598	2592.99	17.27	18.50	1.327	-	-	-0.12	0.615	0.816
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 12	ECI 2	518598	2592.99	17.27	18.50	1.327	-	-	0.04	0.297	0.394
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 12	ECI 2	518598	2592.99	17.27	18.50	1.327	-	-	0.02	0.202	0.268
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 12	ECI 2	518598	2592.99	17.27	18.50	1.327	-	-	0.14	0.131	0.174
19	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 12	ECI 2	518598	2592.99	17.21	18.50	1.346	-	-	-0.01	0.642	0.864
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 12	ECI 2	518598	2592.99	17.21	18.50	1.346	-	-	-0.09	0.291	0.392
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 12	ECI 2	518598	2592.99	17.21	18.50	1.346	-	-	0.04	0.198	0.266
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 12	ECI 2	518598	2592.99	17.21	18.50	1.346	-	-	0.09	0.128	0.172
	PC2	FR1 n41	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 12	ECI 2	518598	2592.99	17.20	18.50	1.349	-	-	0.06	0.610	0.823
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 24	ECI 2	518598	2592.99	17.00	18.20	1.318	-	-	0.17	0.165	0.218
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 24	ECI 2	518598	2592.99	17.00	18.20	1.318	-	-	0.19	0.097	0.128
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 24	ECI 2	518598	2592.99	17.00	18.20	1.318	-	-	-0.11	0.590	0.778
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 24	ECI 2	518598	2592.99	17.00	18.20	1.318	-	-	-0.01	0.235	0.310
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 24	ECI 2	518598	2592.99	16.90	18.20	1.349	-	-	-0.08	0.166	0.224
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 24	ECI 2	518598	2592.99	16.90	18.20	1.349	-	-	-0.05	0.097	0.131
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 24	ECI 2	518598	2592.99	16.90	18.20	1.349	-	-	-0.19	0.601	0.811
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 24	ECI 2	518598	2592.99	16.90	18.20	1.349	-	-	0.05	0.236	0.318
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 24	ECI 3	518598	2592.99	16.07	17.20	1.297	-	-	-0.19	0.463	0.601
	PC2	FR1 n41	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 24	ECI 2	518598	2592.99	16.95	18.20	1.334	-	-	0.01	0.588	0.784



3000MHz-4000MHz

		LTE Band 42	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	ECI 2	42590	3500	16.23	16.50	1.064	62.9	1.006	-0.13	0.418	0.447
		LTE Band 42	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	ECI 2	42590	3500	16.23	16.50	1.064	62.9	1.006	0.1	0.552	0.591
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	ECI 2	42590 42788	3500 3519.8	16.18	16.50	1.076	62.9	1.006	0.06	0.533	0.577
		LTE Band 42	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	ECI 2	42590	3500	16.23	16.50	1.064	62.9	1.006	0.13	0.189	0.202
		LTE Band 42	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	ECI 2	42590	3500	16.23	16.50	1.064	62.9	1.006	-0.19	0.245	0.262
		LTE Band 42	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	ECI 3	42590	3500	15.72	16.00	1.067	62.9	1.006	0.12	0.480	0.515
		LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 13	ECI 2	42590	3500	16.20	16.50	1.072	62.9	1.006	0.17	0.357	0.385
		LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 13	ECI 2	42590	3500	16.20	16.50	1.072	62.9	1.006	0.09	0.472	0.509
		LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 13	ECI 2	42590	3500	16.20	16.50	1.072	62.9	1.006	0.05	0.162	0.175
		LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 13	ECI 2	42590	3500	16.20	16.50	1.072	62.9	1.006	-0.18	0.209	0.225
		LTE Band 42	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 101	ECI 2	42590	3500	20.19	21.20	1.262	62.9	1.006	0.18	0.520	0.660
		LTE Band 42	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 101	ECI 2	42590	3500	20.19	21.20	1.262	62.9	1.006	0.13	0.144	0.183
		LTE Band 42	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 101	ECI 2	42590	3500	20.19	21.20	1.262	62.9	1.006	-0.15	0.155	0.197
		LTE Band 42	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 101	ECI 2	42590	3500	20.19	21.20	1.262	62.9	1.006	0.18	0.062	0.079
		LTE Band 42	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 101	ECI 2	42190	3460	20.15	21.20	1.274	62.9	1.006	-0.08	0.548	0.702
		LTE Band 42	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 101	ECI 2	42990	3540	20.03	21.20	1.309	62.9	1.006	0.07	0.483	0.636
		LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 101	ECI 2	42590	3500	20.14	21.20	1.276	62.9	1.006	-0.09	0.534	0.686
		LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 101	ECI 2	42590	3500	20.14	21.20	1.276	62.9	1.006	-0.18	0.148	0.190
		LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 101	ECI 2	42590	3500	20.14	21.20	1.276	62.9	1.006	-0.15	0.159	0.204
		LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 101	ECI 2	42590	3500	20.14	21.20	1.276	62.9	1.006	-0.03	0.064	0.082
		LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 101	ECI 2	42190	3460	20.10	21.20	1.288	62.9	1.006	0.1	0.599	0.776
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 101	ECI 2	42190 42388	3460 3479.8	20.02	21.20	1.312	62.9	1.006	0.07	0.565	0.746
		LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 101	ECI 2	42990	3540	20.00	21.20	1.318	62.9	1.006	-0.14	0.496	0.658
		LTE Band 42	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 101	ECI 2	42590	3500	20.13	21.20	1.279	62.9	1.006	0.02	0.518	0.667
		LTE Band 42	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 23	ECI 2	42590	3500	18.00	19.70	1.479	62.9	1.006	0.05	0.166	0.247
		LTE Band 42	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 23	ECI 2	42590	3500	18.00	19.70	1.479	62.9	1.006	-0.13	0.178	0.265
		LTE Band 42	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 23	ECI 2	42590	3500	18.00	19.70	1.479	62.9	1.006	0.13	0.542	0.806
		LTE Band 42	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 23	ECI 2	42590	3500	18.00	19.70	1.479	62.9	1.006	0.02	0.464	0.690
20		LTE Band 42	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 23	ECI 2	42190	3460	17.95	19.70	1.496	62.9	1.006	0.03	0.544	0.819
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 23	ECI 2	42190 42388	3460 3479.8	17.86	19.70	1.528	62.9	1.006	0.09	0.512	0.787
		LTE Band 42	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 23	ECI 2	42990	3540	17.87	19.70	1.524	62.9	1.006	-0.08	0.481	0.737
		LTE Band 42	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 23	ECI 3	42190	3460	17.06	18.70	1.459	62.9	1.006	0.06	0.419	0.615
		LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 23	ECI 2	42590	3500	17.95	19.70	1.496	62.9	1.006	0.18	0.160	0.241
		LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 23	ECI 2	42590	3500	17.95	19.70	1.496	62.9	1.006	0.09	0.171	0.257
		LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 23	ECI 2	42590	3500	17.95	19.70	1.496	62.9	1.006	0.02	0.534	0.804
		LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 23	ECI 2	42590	3500	17.95	19.70	1.496	62.9	1.006	-0.07	0.446	0.671
		LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 23	ECI 2	42190	3460	17.93	19.70	1.503	62.9	1.006	0.11	0.523	0.791
		LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 23	ECI 2	42990	3540	17.86	19.70	1.528	62.9	1.006	-0.09	0.463	0.712
		LTE Band 42	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 23	ECI 2	42590	3500	17.94	19.70	1.500	62.9	1.006	0.01	0.489	0.738
		LTE Band 42	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 21	ECI 2	42590	3500	22.65	24.20	1.429	62.9	1.006	0.09	0.291	0.418
		LTE Band 42	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 21	ECI 2	42590	3500	22.65	24.20	1.429	62.9	1.006	0.18	0.333	0.479
		LTE Band 42	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 21	ECI 2	42590	3500	22.65	24.20	1.429	62.9	1.006	0.1	0.345	0.496
		LTE Band 42	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 21	ECI 2	42590	3500	22.65	24.20	1.429	62.9	1.006	-0.13	0.374	0.538
		LTE Band 42	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 21	ECI 2	42190	3460	22.62	24.20	1.439	62.9	1.006	0.16	0.402	0.582
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 21	ECI 2	42190 42388	3460 3479.8	22.42	24.20	1.507	62.9	1.006	0.05	0.379	0.574
		LTE Band 42	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 21	ECI 2	42990	3540	22.50	24.20	1.479	62.9	1.006	0.17	0.314	0.467
		LTE Band 42	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 21	ECI 2	42590	3500	21.66	23.20	1.426	62.9	1.006	-0.1	0.194	0.278
		LTE Band 42	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 21	ECI 2	42590	3500	21.66	23.20	1.426	62.9	1.006	-0.04	0.222	0.318
		LTE Band 42	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 21	ECI 2	42590	3500	21.66	23.20	1.426	62.9	1.006	0.03	0.230	0.330
		LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 21	ECI 2	42590	3500	21.66	23.20	1.426	62.9	1.006	-0.05	0.249	0.357
		LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 21	ECI 2	42190	3460	21.54	23.20	1.466	62.9	1.006	-0.16	0.268	0.395
		LTE Band 42	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 21	ECI 2	42990	3540	21.47	23.20	1.489	62.9	1.006	0.14	0.209	0.313
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 13	ECI 2	45090	3750	17.54	18.00	1.112	62.9	1.006	-0.02	0.363	0.406
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	ECI 2	45090	3750	17.54	18.00	1.112	62.9	1.006	-0.02	0.641	0.717



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	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 13	ECI 2	45090	3750	17.54	18.00	1.112	62.9	1.006	0.15	0.266	0.297
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 13	ECI 2	45090	3750	17.54	18.00	1.112	62.9	1.006	-0.16	0.322	0.360
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	ECI 2	44690	3710	17.51	18.00	1.119	62.9	1.006	0.16	0.725	0.816
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 13	ECI 2	45490	3790	17.46	18.00	1.132	62.9	1.006	0.01	0.403	0.459
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 13	ECI 2	45090	3750	17.47	18.00	1.130	62.9	1.006	-0.1	0.368	0.418
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 13	ECI 2	45090	3750	17.47	18.00	1.130	62.9	1.006	-0.13	0.621	0.706
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 13	ECI 2	45090	3750	17.47	18.00	1.130	62.9	1.006	-0.19	0.267	0.303
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 13	ECI 2	45090	3750	17.47	18.00	1.130	62.9	1.006	0.06	0.306	0.348
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 13	ECI 2	44690	3710	17.45	18.00	1.135	62.9	1.006	0.02	0.683	0.780
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 13	ECI 2	45490	3790	17.43	18.00	1.140	62.9	1.006	0.19	0.405	0.465
	Part 27O	LTE Band 43	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 13	ECI 2	45090	3750	17.46	18.00	1.132	62.9	1.006	0.07	0.615	0.701
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 101	ECI 2	45090	3750	21.76	22.70	1.242	62.9	1.006	-0.05	0.643	0.803
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 101	ECI 2	45090	3750	21.76	22.70	1.242	62.9	1.006	-0.09	0.250	0.312
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 101	ECI 2	45090	3750	21.76	22.70	1.242	62.9	1.006	0.08	0.176	0.220
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 101	ECI 2	45090	3750	21.76	22.70	1.242	62.9	1.006	-0.18	0.113	0.141
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 101	ECI 2	44690	3710	21.75	22.70	1.245	62.9	1.006	-0.05	0.589	0.737
21	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 101	ECI 2	45490	3790	21.58	22.70	1.294	62.9	1.006	0.01	0.670	0.872
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 101	ECI 2	45090	3750	21.73	22.70	1.250	62.9	1.006	-0.1	0.638	0.802
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 101	ECI 2	45090	3750	21.73	22.70	1.250	62.9	1.006	0.06	0.238	0.299
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 101	ECI 2	45090	3750	21.73	22.70	1.250	62.9	1.006	-0.19	0.166	0.209
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 101	ECI 2	45090	3750	21.73	22.70	1.250	62.9	1.006	0.18	0.108	0.136
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 101	ECI 2	44690	3710	21.65	22.70	1.274	62.9	1.006	0.1	0.585	0.749
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 101	ECI 2	45490	3790	21.54	22.70	1.306	62.9	1.006	-0.15	0.659	0.866
	Part 27O	LTE Band 43	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 101	ECI 2	45090	3750	21.72	22.70	1.253	62.9	1.006	0.09	0.622	0.784
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 23	ECI 2	45090	3750	17.20	18.70	1.413	62.9	1.006	0.14	0.135	0.192
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 23	ECI 2	45090	3750	17.20	18.70	1.413	62.9	1.006	0.03	0.145	0.206
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 23	ECI 2	45090	3750	17.20	18.70	1.413	62.9	1.006	0.04	0.360	0.512
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 23	ECI 2	45090	3750	17.20	18.70	1.413	62.9	1.006	0.14	0.354	0.503
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 23	ECI 2	44690	3710	17.01	18.70	1.476	62.9	1.006	0.07	0.372	0.552
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 23	ECI 2	45490	3790	17.11	18.70	1.442	62.9	1.006	-0.11	0.379	0.550
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 23	ECI 2	45090	3750	17.16	18.70	1.426	62.9	1.006	-0.16	0.134	0.192
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 23	ECI 2	45090	3750	17.16	18.70	1.426	62.9	1.006	0.04	0.150	0.215
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 23	ECI 2	45090	3750	17.16	18.70	1.426	62.9	1.006	0.09	0.362	0.519
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 23	ECI 2	45090	3750	17.16	18.70	1.426	62.9	1.006	0.1	0.364	0.522
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 23	ECI 2	44690	3710	16.98	18.70	1.486	62.9	1.006	-0.11	0.373	0.558
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 23	ECI 2	45490	3790	17.07	18.70	1.455	62.9	1.006	0.09	0.376	0.551
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Cheek	0mm	Ant 21	ECI 2	45090	3750	22.77	24.20	1.390	62.9	1.006	-0.12	0.437	0.611
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Right Tilted	0mm	Ant 21	ECI 2	45090	3750	22.77	24.20	1.390	62.9	1.006	-0.07	0.452	0.632
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Cheek	0mm	Ant 21	ECI 2	45090	3750	22.77	24.20	1.390	62.9	1.006	-0.12	0.447	0.625
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 21	ECI 2	45090	3750	22.77	24.20	1.390	62.9	1.006	0.16	0.459	0.642
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 21	ECI 2	44690	3710	22.54	24.20	1.466	62.9	1.006	0.15	0.439	0.647
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Left Tilted	0mm	Ant 21	ECI 2	45490	3790	22.58	24.20	1.452	62.9	1.006	0.04	0.453	0.662
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 21	ECI 2	45090	3750	21.64	23.20	1.432	62.9	1.006	0.15	0.338	0.487
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 21	ECI 2	45090	3750	21.64	23.20	1.432	62.9	1.006	0.16	0.350	0.504
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 21	ECI 2	45090	3750	21.64	23.20	1.432	62.9	1.006	-0.07	0.346	0.499
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 21	ECI 2	45090	3750	21.64	23.20	1.432	62.9	1.006	0.09	0.355	0.511
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 21	ECI 2	44690	3710	21.57	23.20	1.455	62.9	1.006	-0.14	0.340	0.498
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 21	ECI 2	45490	3790	21.62	23.20	1.439	62.9	1.006	-0.14	0.350	0.507
	Part 27O	LTE Band 43	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 21	ECI 2	45090	3750	21.60	23.20	1.445	62.9	1.006	0.02	0.322	0.468
	Part 27O	LTE Band 43	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 21	ECI 2	45090	3750	21.60	23.20	1.445	62.9	1.006	0.09	0.342	0.497
	Part 27O	LTE Band 43	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 21	ECI 2	45090	3750	21.60	23.20	1.445	62.9	1.006	0.15	0.336	0.489
	Part 27O	LTE Band 43	20M	QPSK	100	0	-	Left Tilted	0mm	Ant 21	ECI 2	45090	3750	21.60	23.20	1.445	62.9	1.006	0.08	0.350	0.509
	Part 27Q	FR1 n77	50M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 13	ECI 2	633332	3499.98	13.98	14.80	1.208	-	-	0.12	0.421	0.508
	Part 27Q	FR1 n77	50M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	633332	3499.98	13.98	14.80	1.208	-	-	0.03	0.511	0.617
	Part 27Q	FR1 n77	50M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 13	ECI 2	633332	3499.98	13.98	14.80	1.208	-	-	-0.12	0.189	0.228
	Part 27Q	FR1 n77	50M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 13	ECI 2	633332	3499.98	13.98	14.80	1.208	-	-	-0.11	0.235	0.284



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Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 13	ECI 2	633332	3499.98	13.86	14.80	1.242	-	-	-0.01	0.405	0.503
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	633332	3499.98	13.86	14.80	1.242	-	-	0.02	0.491	0.610
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 13	ECI 2	633332	3499.98	13.86	14.80	1.242	-	-	-0.14	0.182	0.226
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 13	ECI 2	633332	3499.98	13.86	14.80	1.242	-	-	0.1	0.226	0.281
Part 27Q	FR1 n77	100M	QPSK	270	0	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	633332	3499.98	13.86	14.80	1.242	-	-	-0.01	0.405	0.503
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 13	ECI 2	656000	3840	13.71	14.80	1.285	-	-	-0.01	0.229	0.294
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	656000	3840	13.71	14.80	1.285	-	-	0.11	0.294	0.378
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 13	ECI 2	656000	3840	13.71	14.80	1.285	-	-	-0.04	0.156	0.201
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 13	ECI 2	656000	3840	13.71	14.80	1.285	-	-	0	0.190	0.244
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 13	ECI 2	656000	3840	13.51	14.80	1.346	-	-	0.13	0.233	0.314
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	656000	3840	13.51	14.80	1.346	-	-	0.14	0.299	0.402
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 13	ECI 2	656000	3840	13.51	14.80	1.346	-	-	-0.09	0.159	0.214
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 13	ECI 2	656000	3840	13.51	14.80	1.346	-	-	0.19	0.193	0.260
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.25	18.70	1.396	-	-	-0.19	0.439	0.613
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 101	ECI 2	633332	3499.98	17.25	18.70	1.396	-	-	-0.01	0.119	0.166
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.25	18.70	1.396	-	-	-0.16	0.131	0.183
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 101	ECI 2	633332	3499.98	17.25	18.70	1.396	-	-	0.12	0.051	0.071
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.21	18.70	1.409	-	-	0.07	0.462	0.651
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 101	ECI 2	633332	3499.98	17.21	18.70	1.409	-	-	0.15	0.125	0.176
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.21	18.70	1.409	-	-	-0.05	0.138	0.194
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 101	ECI 2	633332	3499.98	17.21	18.70	1.409	-	-	-0.07	0.054	0.076
Part 27Q	FR1 n77	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.19	18.70	1.416	-	-	0.09	0.422	0.597
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	656000	3840	17.18	18.70	1.419	-	-	0	0.375	0.532
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 101	ECI 2	656000	3840	17.18	18.70	1.419	-	-	-0.09	0.163	0.231
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 101	ECI 2	656000	3840	17.18	18.70	1.419	-	-	0.09	0.111	0.158
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 101	ECI 2	656000	3840	17.18	18.70	1.419	-	-	-0.11	0.065	0.092
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	656000	3840	17.12	18.70	1.439	-	-	0.12	0.400	0.576
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 101	ECI 2	656000	3840	17.12	18.70	1.439	-	-	-0.07	0.179	0.258
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 101	ECI 2	656000	3840	17.12	18.70	1.439	-	-	-0.08	0.131	0.188
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 101	ECI 2	656000	3840	17.12	18.70	1.439	-	-	-0.16	0.078	0.112
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 23	ECI 2	633332	3499.98	14.98	16.20	1.324	-	-	0.14	0.227	0.301
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	ECI 2	633332	3499.98	14.98	16.20	1.324	-	-	0.04	0.228	0.302
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	633332	3499.98	14.98	16.20	1.324	-	-	0.19	0.742	0.983
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	633332	3499.98	14.98	16.20	1.324	-	-	0.12	0.657	0.870
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	ECI 2	633332	3499.98	14.95	16.20	1.334	-	-	0.06	0.224	0.299
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	ECI 2	633332	3499.98	14.95	16.20	1.334	-	-	-0.13	0.241	0.321
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	633332	3499.98	14.95	16.20	1.334	-	-	0	0.824	1.099
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	633332	3499.98	14.95	16.20	1.334	-	-	0.09	0.690	0.920
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	ECI 3	633332	3499.98	12.99	14.20	1.321	-	-	0.08	0.580	0.766
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	ECI 3	633332	3499.98	12.99	14.20	1.321	-	-	-0.14	0.535	0.707
Part 27Q	FR1 n77	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	633332	3499.98	14.86	16.20	1.361	-	-	0.17	0.735	1.001
Part 27Q	FR1 n77	100M	QPSK	270	0	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	633332	3499.98	14.86	16.20	1.361	-	-	0.02	0.645	0.878
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 23	ECI 2	656000	3840	14.86	16.20	1.361	-	-	0.01	0.154	0.210
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	ECI 2	656000	3840	14.86	16.20	1.361	-	-	0.05	0.128	0.174
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	656000	3840	14.86	16.20	1.361	-	-	0.04	0.597	0.813
Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	656000	3840	14.86	16.20	1.361	-	-	-0.19	0.357	0.486
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	ECI 2	656000	3840	14.84	16.20	1.368	-	-	0.08	0.151	0.207
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	ECI 2	656000	3840	14.84	16.20	1.368	-	-	-0.18	0.125	0.171
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	656000	3840	14.84	16.20	1.368	-	-	-0.12	0.584	0.799
Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	656000	3840	14.84	16.20	1.368	-	-	-0.14	0.349	0.477
Part 27O	FR1 n77	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	656000	3840	14.81	16.20	1.377	-	-	0.03	0.151	0.208
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	633332	3499.98	18.45	19.70	1.334	-	-	-0.09	0.271	0.361
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	633332	3499.98	18.45	19.70	1.334	-	-	-0.19	0.290	0.387
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	633332	3499.98	18.45	19.70	1.334	-	-	-0.08	0.299	0.399
Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	633332	3499.98	18.45	19.70	1.334	-	-	-0.01	0.294	0.392
Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	633332	3499.98	18.41	19.70	1.346	-	-	0.04	0.272	0.366



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	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	633332	3499.98	18.41	19.70	1.346	-	-	-0.11	0.291	0.392
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	633332	3499.98	18.41	19.70	1.346	-	-	0.09	0.300	0.404
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	633332	3499.98	18.41	19.70	1.346	-	-	-0.08	0.295	0.397
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	656000	3840	18.38	19.70	1.355	-	-	-0.17	0.545	0.739
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	656000	3840	18.38	19.70	1.355	-	-	-0.13	0.620	0.840
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	656000	3840	18.38	19.70	1.355	-	-	0.04	0.647	0.877
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	656000	3840	18.38	19.70	1.355	-	-	0.09	0.665	0.901
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	656000	3840	18.35	19.70	1.365	-	-	-0.19	0.622	0.849
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	656000	3840	18.35	19.70	1.365	-	-	0.09	0.708	0.966
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	656000	3840	18.35	19.70	1.365	-	-	0.16	0.739	1.008
22	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	656000	3840	18.35	19.70	1.365	-	-	-0.18	0.812	1.108
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	ECI 3	656000	3840	17.36	18.70	1.361	-	-	0.07	0.550	0.749
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	ECI 3	656000	3840	17.36	18.70	1.361	-	-	0.12	0.602	0.820
	Part 27O	FR1 n77	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	656000	3840	18.31	19.70	1.377	-	-	0.08	0.560	0.771
	Part 27O	FR1 n77	100M	QPSK	270	0	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	656000	3840	18.31	19.70	1.377	-	-	-0.06	0.636	0.876
	Part 27O	FR1 n77	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	656000	3840	18.31	19.70	1.377	-	-	0.02	0.656	0.903
	Part 27O	FR1 n77	100M	QPSK	270	0	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	656000	3840	18.31	19.70	1.377	-	-	0.11	0.688	0.948
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 13	ECI 2	633332	3499.98	14.06	15.10	1.271	-	-	-0.02	0.428	0.544
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	633332	3499.98	14.06	15.10	1.271	-	-	0.17	0.532	0.676
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 13	ECI 2	633332	3499.98	14.06	15.10	1.271	-	-	0.16	0.191	0.243
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 13	ECI 2	633332	3499.98	14.06	15.10	1.271	-	-	-0.16	0.244	0.310
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 13	ECI 2	633332	3499.98	14.04	15.10	1.276	-	-	-0.04	0.393	0.502
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	633332	3499.98	14.04	15.10	1.276	-	-	0.16	0.489	0.624
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 13	ECI 2	633332	3499.98	14.04	15.10	1.276	-	-	0.17	0.176	0.225
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 13	ECI 2	633332	3499.98	14.04	15.10	1.276	-	-	-0.12	0.224	0.286
	Part 27Q_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	633332	3499.98	13.99	15.10	1.291	-	-	0.17	0.477	0.616
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 13	ECI 2	650000	3750	14.03	15.10	1.279	-	-	0.07	0.304	0.389
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	650000	3750	14.03	15.10	1.279	-	-	-0.19	0.398	0.509
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 13	ECI 2	650000	3750	14.03	15.10	1.279	-	-	-0.08	0.188	0.241
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 13	ECI 2	650000	3750	14.03	15.10	1.279	-	-	-0.05	0.232	0.297
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 13	ECI 2	650000	3750	14.01	15.10	1.285	-	-	0.04	0.293	0.377
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 13	ECI 2	650000	3750	14.01	15.10	1.285	-	-	0	0.383	0.492
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 13	ECI 2	650000	3750	14.01	15.10	1.285	-	-	0.12	0.181	0.233
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 13	ECI 2	650000	3750	14.01	15.10	1.285	-	-	-0.15	0.223	0.287
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.49	19.20	1.483	-	-	-0.15	0.490	0.726
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 101	ECI 2	633332	3499.98	17.49	19.20	1.483	-	-	0.01	0.130	0.193
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.49	19.20	1.483	-	-	0.09	0.153	0.227
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 101	ECI 2	633332	3499.98	17.49	19.20	1.483	-	-	-0.17	0.057	0.085
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.35	19.20	1.531	-	-	-0.19	0.497	0.761
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 101	ECI 2	633332	3499.98	17.35	19.20	1.531	-	-	-0.17	0.132	0.202
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.35	19.20	1.531	-	-	-0.18	0.154	0.236
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 101	ECI 2	633332	3499.98	17.35	19.20	1.531	-	-	-0.11	0.058	0.089
	Part 27Q_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	633332	3499.98	17.32	19.20	1.542	-	-	0.09	0.473	0.729
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	650000	3750	17.46	19.20	1.493	-	-	-0.19	0.450	0.672
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 101	ECI 2	650000	3750	17.46	19.20	1.493	-	-	0.04	0.195	0.291
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 101	ECI 2	650000	3750	17.46	19.20	1.493	-	-	0.18	0.134	0.200
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 101	ECI 2	650000	3750	17.46	19.20	1.493	-	-	-0.17	0.077	0.115
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	650000	3750	17.33	19.20	1.538	-	-	0.19	0.463	0.712
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 101	ECI 2	650000	3750	17.33	19.20	1.538	-	-	-0.07	0.200	0.308
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 101	ECI 2	650000	3750	17.33	19.20	1.538	-	-	0.08	0.138	0.212
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 101	ECI 2	650000	3750	17.33	19.20	1.538	-	-	-0.11	0.080	0.123
	Part 27O_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 101	ECI 2	650000	3750	17.27	19.20	1.560	-	-	0.19	0.463	0.722
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 23	ECI 2	633332	3499.98	15.64	16.80	1.306	-	-	-0.02	0.195	0.255
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	ECI 2	633332	3499.98	15.64	16.80	1.306	-	-	-0.03	0.214	0.280
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	633332	3499.98	15.64	16.80	1.306	-	-	-0.19	0.611	0.798
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	633332	3499.98	15.64	16.80	1.306	-	-	-0.04	0.536	0.700



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Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	ECI 2	633332	3499.98	15.61	16.80	1.315	-	-	0.1	0.194	0.255
Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	ECI 2	633332	3499.98	15.61	16.80	1.315	-	-	-0.07	0.213	0.280
Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	633332	3499.98	15.61	16.80	1.315	-	-	-0.09	0.621	0.817
Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	633332	3499.98	15.61	16.80	1.315	-	-	-0.03	0.559	0.735
Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	ECI 3	633332	3499.98	14.47	15.70	1.327	-	-	-0.09	0.499	0.662
Part 27Q_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	633332	3499.98	15.58	16.80	1.324	-	-	0.09	0.595	0.788
Part 27Q_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	633332	3499.98	15.58	16.80	1.324	-	-	0.03	0.540	0.715
Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 23	ECI 2	650000	3750	15.62	16.80	1.312	-	-	0.19	0.138	0.181
Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 23	ECI 2	650000	3750	15.62	16.80	1.312	-	-	0.18	0.150	0.197
Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	650000	3750	15.62	16.80	1.312	-	-	0.01	0.488	0.640
Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	650000	3750	15.62	16.80	1.312	-	-	0.02	0.377	0.495
Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 23	ECI 2	650000	3750	15.58	16.80	1.324	-	-	-0.18	0.138	0.183
Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 23	ECI 2	650000	3750	15.58	16.80	1.324	-	-	0.16	0.150	0.199
Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	650000	3750	15.58	16.80	1.324	-	-	-0.09	0.488	0.646
Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 23	ECI 2	650000	3750	15.58	16.80	1.324	-	-	-0.09	0.377	0.499
Part 27O_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	650000	3750	15.56	16.80	1.330	-	-	0.01	0.472	0.628
Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	633332	3499.98	19.70	20.90	1.318	-	-	-0.14	0.386	0.509
Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	633332	3499.98	19.70	20.90	1.318	-	-	0.17	0.413	0.544
Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	633332	3499.98	19.70	20.90	1.318	-	-	0.08	0.296	0.390
Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	633332	3499.98	19.70	20.90	1.318	-	-	0.07	0.418	0.551
Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	633332	3499.98	19.63	20.90	1.340	-	-	0.13	0.388	0.520
Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	633332	3499.98	19.63	20.90	1.340	-	-	-0.1	0.415	0.556
Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	633332	3499.98	19.63	20.90	1.340	-	-	-0.03	0.297	0.398
Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	633332	3499.98	19.63	20.90	1.340	-	-	0	0.419	0.561
Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	650000	3750	19.72	20.90	1.312	-	-	0.03	0.704	0.924
Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	650000	3750	19.72	20.90	1.312	-	-	-0.12	0.744	0.976
Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	650000	3750	19.72	20.90	1.312	-	-	0.02	0.627	0.823
Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	650000	3750	19.72	20.90	1.312	-	-	-0.1	0.753	0.988
Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	650000	3750	19.66	20.90	1.330	-	-	-0.07	0.730	0.971
Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	650000	3750	19.66	20.90	1.330	-	-	-0.12	0.745	0.991
Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	650000	3750	19.66	20.90	1.330	-	-	0	0.655	0.871
23 Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	650000	3750	19.66	20.90	1.330	-	-	-0.1	0.781	1.039
Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 21	ECI 3	650000	3750	18.48	19.70	1.324	-	-	0.04	0.525	0.695
Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	ECI 3	650000	3750	18.48	19.70	1.324	-	-	0.15	0.618	0.818
Part 27O_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Right Cheek	0mm	Ant 21	ECI 2	650000	3750	19.62	20.90	1.343	-	-	-0.11	0.690	0.927
Part 27O_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Right Tilted	0mm	Ant 21	ECI 2	650000	3750	19.62	20.90	1.343	-	-	0.02	0.725	0.974
Part 27O_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Left Cheek	0mm	Ant 21	ECI 2	650000	3750	19.62	20.90	1.343	-	-	0.09	0.618	0.830
Part 27O_PC2	FR1 n78	100M	QPSK	270	0	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	650000	3750	19.62	20.90	1.343	-	-	-0.06	0.740	0.994



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN&Bluetooth																
	Bluetooth	DH5 1Mbps	Right Cheek	0mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	0.07	0.038	0.064
	Bluetooth	DH5 1Mbps	Right Tilted	0mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	-0.07	0.047	0.079
24	Bluetooth	DH5 1Mbps	Left Cheek	0mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	0.16	0.067	0.113
	Bluetooth	DH5 1Mbps	Left Tilted	0mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	0.16	0.054	0.091
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 22	Standalone	11	2462	15.90	16.50	1.148	99.47	1.005	0.04	0.194	0.224
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 22	Standalone	11	2462	15.90	16.50	1.148	99.47	1.005	0	0.235	0.271
25	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 22	Standalone	11	2462	15.90	16.50	1.148	99.47	1.005	-0.08	0.361	0.417
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 22	Standalone	11	2462	15.90	16.50	1.148	99.47	1.005	-0.07	0.327	0.377
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 22	Simultaneous	11	2462	14.90	15.50	1.148	99.47	1.005	0.12	0.149	0.172
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 22	Simultaneous	11	2462	14.90	15.50	1.148	99.47	1.005	0.05	0.180	0.208
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 22	Simultaneous	11	2462	14.90	15.50	1.148	99.47	1.005	0.1	0.295	0.340
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 22	Simultaneous	11	2462	14.90	15.50	1.148	99.47	1.005	0.06	0.257	0.297
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 23	Standalone	46	5230	13.77	15.00	1.327	93.88	1.065	-0.01	0.215	0.304
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 23	Standalone	46	5230	13.77	15.00	1.327	93.88	1.065	-0.01	0.217	0.307
26	WLAN5.2GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 23	Standalone	46	5230	13.77	15.00	1.327	93.88	1.065	-0.05	0.635	0.898
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 23	Standalone	46	5230	13.77	15.00	1.327	93.88	1.065	0.16	0.428	0.605
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 23	Standalone	38	5190	11.82	13.00	1.312	93.88	1.065	0.04	0.401	0.560
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 23	Simultaneous	54	5270	11.30	13.00	1.479	93.88	1.065	-0.07	0.115	0.181
	WLAN5.2GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 23	Simultaneous	54	5270	11.30	13.00	1.479	93.88	1.065	0.02	0.114	0.180
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 23	Simultaneous	54	5270	11.30	13.00	1.479	93.88	1.065	0.13	0.333	0.525
	WLAN5.2GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 23	Simultaneous	54	5270	11.30	13.00	1.479	93.88	1.065	0.14	0.227	0.358
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 23	Standalone	138	5690	14.14	16.00	1.535	88.04	1.136	-0.18	0.306	0.533
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 23	Standalone	138	5690	14.14	16.00	1.535	88.04	1.136	0.1	0.323	0.563
27	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 23	Standalone	138	5690	14.14	16.00	1.535	88.04	1.136	-0.14	0.495	0.863
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 23	Standalone	138	5690	14.14	16.00	1.535	88.04	1.136	0.12	0.481	0.839
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 23	Standalone	122	5610	11.37	12.50	1.298	88.04	1.136	0.08	0.245	0.361
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 23	Simultaneous	138	5690	12.15	14.00	1.531	88.04	1.136	-0.04	0.193	0.336
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 23	Simultaneous	138	5690	12.15	14.00	1.531	88.04	1.136	-0.15	0.197	0.343
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 23	Simultaneous	138	5690	12.15	14.00	1.531	88.04	1.136	-0.1	0.309	0.537
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 23	Simultaneous	138	5690	12.15	14.00	1.531	88.04	1.136	0.12	0.297	0.517
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 23	Standalone	155	5775	14.18	15.50	1.354	88.04	1.136	0.19	0.277	0.426
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 23	Standalone	155	5775	14.18	15.50	1.354	88.04	1.136	-0.01	0.286	0.440
28	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 23	Standalone	155	5775	14.18	15.50	1.354	88.04	1.136	-0.07	0.519	0.798
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 23	Standalone	155	5775	14.18	15.50	1.354	88.04	1.136	-0.09	0.442	0.680
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 23	Simultaneous	155	5775	13.61	14.50	1.227	88.04	1.136	-0.16	0.218	0.304
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 23	Simultaneous	155	5775	13.61	14.50	1.227	88.04	1.136	0.12	0.220	0.307
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 23	Simultaneous	155	5775	13.61	14.50	1.227	88.04	1.136	-0.05	0.399	0.556
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 23	Simultaneous	155	5775	13.61	14.50	1.227	88.04	1.136	0.04	0.351	0.489



16.2 Hotspot SAR

Plot No.	Note	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
		LTE Band 12	10M	QPSK	1	25	-	Front	10mm	Ant 11	ECI 10	23095	707.5	21.25	22.80	1.429	-	-	0.13	0.200	0.286
		LTE Band 12	10M	QPSK	1	25	-	Back	10mm	Ant 11	ECI 10	23095	707.5	21.25	22.80	1.429	-	-	0.15	0.250	0.357
29		LTE Band 12	10M	QPSK	1	25	-	Left Side	10mm	Ant 11	ECI 10	23095	707.5	21.25	22.80	1.429	-	-	-0.03	0.495	0.707
		LTE Band 12	10M	QPSK	1	25	-	Top Side	10mm	Ant 11	ECI 10	23095	707.5	21.25	22.80	1.429	-	-	-	n/a	n/a
		LTE Band 12	10M	QPSK	1	25	-	Bottom Side	10mm	Ant 11	ECI 10	23095	707.5	21.25	22.80	1.429	-	-	-	n/a	n/a
		LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 11	ECI 10	23095	707.5	21.23	22.80	1.435	-	-	-0.11	0.190	0.273
		LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 11	ECI 10	23095	707.5	21.23	22.80	1.435	-	-	-0.16	0.242	0.347
		LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 11	ECI 10	23095	707.5	21.23	22.80	1.435	-	-	-0.03	0.439	0.630
		LTE Band 12	10M	QPSK	25	0	-	Top Side	10mm	Ant 11	ECI 10	23095	707.5	21.23	22.80	1.435	-	-	-	n/a	n/a
		LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 11	ECI 10	23095	707.5	21.23	22.80	1.435	-	-	-	n/a	n/a
		LTE Band 12	10M	QPSK	1	25	-	Front	10mm	Ant 25	ECI 10	23095	707.5	23.25	24.50	1.334	-	-	-0.17	0.046	0.061
		LTE Band 12	10M	QPSK	1	25	-	Back	10mm	Ant 25	ECI 10	23095	707.5	23.25	24.50	1.334	-	-	-0.17	0.085	0.113
		LTE Band 12	10M	QPSK	1	25	-	Right Side	10mm	Ant 25	ECI 10	23095	707.5	23.25	24.50	1.334	-	-	-0.09	0.127	0.169
		LTE Band 12	10M	QPSK	1	25	-	Bottom Side	10mm	Ant 25	ECI 10	23095	707.5	23.25	24.50	1.334	-	-	-	n/a	n/a
		LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 25	ECI 10	23095	707.5	22.10	23.50	1.380	-	-	0.07	0.037	0.051
		LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 25	ECI 10	23095	707.5	22.10	23.50	1.380	-	-	0.16	0.066	0.091
		LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 25	ECI 10	23095	707.5	22.10	23.50	1.380	-	-	-0.06	0.098	0.135
		LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 25	ECI 10	23095	707.5	22.10	23.50	1.380	-	-	-	n/a	n/a
		LTE Band 13	10M	QPSK	1	25	-	Front	10mm	Ant 11	ECI 10	23230	782	21.05	22.80	1.496	-	-	-0.15	0.111	0.166
		LTE Band 13	10M	QPSK	1	25	-	Back	10mm	Ant 11	ECI 10	23230	782	21.05	22.80	1.496	-	-	-0.07	0.189	0.283
		LTE Band 13	10M	QPSK	1	25	-	Left Side	10mm	Ant 11	ECI 10	23230	782	21.05	22.80	1.496	-	-	0.08	0.350	0.524
		LTE Band 13	10M	QPSK	1	25	-	Top Side	10mm	Ant 11	ECI 10	23230	782	21.05	22.80	1.496	-	-	-	n/a	n/a
		LTE Band 13	10M	QPSK	1	25	-	Bottom Side	10mm	Ant 11	ECI 10	23230	782	21.05	22.80	1.496	-	-	-	n/a	n/a
		LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 11	ECI 10	23230	782	21.00	22.80	1.514	-	-	0.03	0.102	0.154
		LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 11	ECI 10	23230	782	21.00	22.80	1.514	-	-	-0.06	0.175	0.265
30		LTE Band 13	10M	QPSK	25	0	-	Left Side	10mm	Ant 11	ECI 10	23230	782	21.00	22.80	1.514	-	-	-0.16	0.470	0.711
		LTE Band 13	10M	QPSK	25	0	-	Top Side	10mm	Ant 11	ECI 10	23230	782	21.00	22.80	1.514	-	-	-	n/a	n/a
		LTE Band 13	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 11	ECI 10	23230	782	21.00	22.80	1.514	-	-	-	n/a	n/a
		LTE Band 13	10M	QPSK	1	25	-	Front	10mm	Ant 25	ECI 10	23230	782	22.93	24.50	1.435	-	-	-0.15	0.141	0.202
		LTE Band 13	10M	QPSK	1	25	-	Back	10mm	Ant 25	ECI 10	23230	782	22.93	24.50	1.435	-	-	0.07	0.243	0.349
		LTE Band 13	10M	QPSK	1	25	-	Right Side	10mm	Ant 25	ECI 10	23230	782	22.93	24.50	1.435	-	-	0.15	0.300	0.431
		LTE Band 13	10M	QPSK	1	25	-	Bottom Side	10mm	Ant 25	ECI 10	23230	782	22.93	24.50	1.435	-	-	-	n/a	n/a
		LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 25	ECI 10	23230	782	21.85	23.50	1.462	-	-	0.07	0.136	0.199
		LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 25	ECI 10	23230	782	21.85	23.50	1.462	-	-	0.14	0.235	0.344
		LTE Band 13	10M	QPSK	25	0	-	Right Side	10mm	Ant 25	ECI 10	23230	782	21.85	23.50	1.462	-	-	0.09	0.285	0.417
		LTE Band 13	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 25	ECI 10	23230	782	22.93	24.50	1.435	-	-	-	n/a	n/a
		LTE Band 17	10M	QPSK	1	25	-	Front	10mm	Ant 11	ECI 10	23790	710	21.68	23.30	1.452	-	-	0.13	0.236	0.343
		LTE Band 17	10M	QPSK	1	25	-	Back	10mm	Ant 11	ECI 10	23790	710	21.68	23.30	1.452	-	-	0.03	0.291	0.423
31		LTE Band 17	10M	QPSK	1	25	-	Left Side	10mm	Ant 11	ECI 10	23790	710	21.68	23.30	1.452	-	-	0.15	0.565	0.820
		LTE Band 17	10M	QPSK	1	25	-	Top Side	10mm	Ant 11	ECI 10	23790	710	21.68	23.30	1.452	-	-	-	n/a	n/a
		LTE Band 17	10M	QPSK	1	25	-	Bottom Side	10mm	Ant 11	ECI 10	23790	710	21.68	23.30	1.452	-	-	-	n/a	n/a
		LTE Band 17	10M	QPSK	25	0	-	Front	10mm	Ant 11	ECI 10	23790	710	21.65	23.30	1.462	-	-	-0.13	0.228	0.333
		LTE Band 17	10M	QPSK	25	0	-	Back	10mm	Ant 11	ECI 10	23790	710	21.65	23.30	1.462	-	-	0.05	0.288	0.421
		LTE Band 17	10M	QPSK	25	0	-	Left Side	10mm	Ant 11	ECI 10	23790	710	21.65	23.30	1.462	-	-	0	0.518	0.757
		LTE Band 17	10M	QPSK	25	0	-	Top Side	10mm	Ant 11	ECI 10	23790	710	21.65	23.30	1.462	-	-	-	n/a	n/a
		LTE Band 17	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 11	ECI 10	23790	710	21.65	23.30	1.462	-	-	-	n/a	n/a
		LTE Band 17	10M	QPSK	50	0	-	Left Side	10mm	Ant 11	ECI 10	23790	710	21.52	23.30	1.507	-	-	0.09	0.505	0.761
835MHz																					
		GSM850	-	-	-	-	GPRS 2 Tx slots	Front	10mm	Ant 11	ECI 10	189	836.4	26.18	27.50	1.355	-	-	0.04	0.139	0.188



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		GSM850	-	-	-	-	GPRS 2 Tx slots	Back	10mm	Ant 11	ECI 10	189	836.4	26.18	27.50	1.355	-	-	0.06	0.199	0.270
32		GSM850	-	-	-	-	GPRS 2 Tx slots	Left Side	10mm	Ant 11	ECI 10	189	836.4	26.18	27.50	1.355	-	-	0.07	0.275	0.373
		GSM850	-	-	-	-	GPRS 2 Tx slots	Top Side	10mm	Ant 11	ECI 10	189	836.4	26.18	27.50	1.355	-	-	-	n/a	n/a
		GSM850	-	-	-	-	GPRS 2 Tx slots	Bottom Side	10mm	Ant 11	ECI 10	189	836.4	26.18	27.50	1.355	-	-	-	n/a	n/a
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 11	ECI 10	4182	836.4	19.89	21.00	1.291	-	-	0.03	0.256	0.331
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 11	ECI 10	4182	836.4	19.89	21.00	1.291	-	-	-0.05	0.353	0.456
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 11	ECI 10	4182	836.4	19.89	21.00	1.291	-	-	-0.11	0.490	0.633
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 11	ECI 10	4182	836.4	19.89	21.00	1.291	-	-	-	n/a	n/a
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 11	ECI 10	4182	836.4	19.89	21.00	1.291	-	-	-	n/a	n/a
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 25	ECI 10	4182	836.4	21.41	23.00	1.442	-	-	0.17	0.257	0.371
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 25	ECI 10	4182	836.4	21.41	23.00	1.442	-	-	0	0.403	0.581
33		WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 25	ECI 10	4182	836.4	21.41	23.00	1.442	-	-	-0.07	0.536	0.773
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 25	ECI 10	4182	836.4	21.41	23.00	1.442	-	-	-	n/a	n/a
		LTE Band 26	15M	QPSK	1	37		Front	10mm	Ant 11	ECI 10	26865	831.5	20.30	21.80	1.413	-	-	-0.06	0.319	0.451
		LTE Band 26	15M	QPSK	1	37		Back	10mm	Ant 11	ECI 10	26865	831.5	20.30	21.80	1.413	-	-	-0.06	0.424	0.599
		LTE Band 26	15M	QPSK	1	37		Left Side	10mm	Ant 11	ECI 10	26865	831.5	20.30	21.80	1.413	-	-	-0.17	0.644	0.910
		LTE Band 26	15M	QPSK	1	37		Top Side	10mm	Ant 11	ECI 10	26865	831.5	20.30	21.80	1.413	-	-	-	n/a	n/a
		LTE Band 26	15M	QPSK	1	37		Bottom Side	10mm	Ant 11	ECI 10	26865	831.5	20.30	21.80	1.413	-	-	-	n/a	n/a
		LTE Band 26	15M	QPSK	36	0		Front	10mm	Ant 11	ECI 10	26865	831.5	20.28	21.80	1.419	-	-	-0.06	0.311	0.441
		LTE Band 26	15M	QPSK	36	0		Back	10mm	Ant 11	ECI 10	26865	831.5	20.28	21.80	1.419	-	-	-0.15	0.418	0.593
34		LTE Band 26	15M	QPSK	36	0		Left Side	10mm	Ant 11	ECI 10	26865	831.5	20.28	21.80	1.419	-	-	0.13	0.660	0.937
		LTE Band 26	15M	QPSK	36	0		Top Side	10mm	Ant 11	ECI 10	26865	831.5	20.28	21.80	1.419	-	-	-	n/a	n/a
		LTE Band 26	15M	QPSK	36	0		Bottom Side	10mm	Ant 11	ECI 10	26865	831.5	20.28	21.80	1.419	-	-	-	n/a	n/a
		LTE Band 26	15M	QPSK	75	0		Left Side	10mm	Ant 11	ECI 10	26865	831.5	20.25	21.80	1.429	-	-	0.01	0.628	0.897
		LTE Band 26	15M	QPSK	1	37		Front	10mm	Ant 25	ECI 10	26865	831.5	20.65	22.50	1.531	-	-	-0.06	0.236	0.361
		LTE Band 26	15M	QPSK	1	37		Back	10mm	Ant 25	ECI 10	26865	831.5	20.65	22.50	1.531	-	-	0.1	0.350	0.536
		LTE Band 26	15M	QPSK	1	37		Right Side	10mm	Ant 25	ECI 10	26865	831.5	20.65	22.50	1.531	-	-	0.12	0.434	0.664
		LTE Band 26	15M	QPSK	1	37		Bottom Side	10mm	Ant 25	ECI 10	26865	831.5	20.65	22.50	1.531	-	-	-	n/a	n/a
		LTE Band 26	15M	QPSK	36	0		Front	10mm	Ant 25	ECI 10	26865	831.5	20.62	22.50	1.542	-	-	-0.09	0.228	0.352
		LTE Band 26	15M	QPSK	36	0		Back	10mm	Ant 25	ECI 10	26865	831.5	20.62	22.50	1.542	-	-	0.15	0.342	0.527
		LTE Band 26	15M	QPSK	36	0		Right Side	10mm	Ant 25	ECI 10	26865	831.5	20.62	22.50	1.542	-	-	0.05	0.422	0.651
		LTE Band 26	15M	QPSK	36	0		Bottom Side	10mm	Ant 25	ECI 10	26865	831.5	20.62	22.50	1.542	-	-	-	n/a	n/a
		FR1 n26	20M	QPSK	1	53	DFT-15	Front	10mm	Ant 11	ECI 10	166300	831.5	20.21	21.50	1.346	-	-	-0.09	0.287	0.386
		FR1 n26	20M	QPSK	1	53	DFT-15	Back	10mm	Ant 11	ECI 10	166300	831.5	20.21	21.50	1.346	-	-	0	0.405	0.545
35		FR1 n26	20M	QPSK	1	53	DFT-15	Left Side	10mm	Ant 11	ECI 10	166300	831.5	20.21	21.50	1.346	-	-	0.16	0.583	0.785
		FR1 n26	20M	QPSK	1	53	DFT-15	Top Side	10mm	Ant 11	ECI 10	166300	831.5	20.21	21.50	1.346	-	-	-	n/a	n/a
		FR1 n26	20M	QPSK	1	53	DFT-15	Bottom Side	10mm	Ant 11	ECI 10	166300	831.5	20.21	21.50	1.346	-	-	-	n/a	n/a
		FR1 n26	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 11	ECI 10	166300	831.5	20.14	21.50	1.368	-	-	-0.07	0.271	0.371
		FR1 n26	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 11	ECI 10	166300	831.5	20.14	21.50	1.368	-	-	-0.14	0.392	0.536
		FR1 n26	20M	QPSK	50	28	DFT-15	Left Side	10mm	Ant 11	ECI 10	166300	831.5	20.14	21.50	1.368	-	-	-0.15	0.540	0.739
		FR1 n26	20M	QPSK	50	28	DFT-15	Top Side	10mm	Ant 11	ECI 10	166300	831.5	20.14	21.50	1.368	-	-	-	n/a	n/a
		FR1 n26	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Ant 11	ECI 10	166300	831.5	20.14	21.50	1.368	-	-	-	n/a	n/a
		FR1 n26	20M	QPSK	1	53	DFT-15	Front	10mm	Ant 25	ECI 10	166300	831.5	21.04	22.50	1.400	-	-	0.11	0.125	0.175
		FR1 n26	20M	QPSK	1	53	DFT-15	Back	10mm	Ant 25	ECI 10	166300	831.5	21.04	22.50	1.400	-	-	-0.14	0.186	0.260
		FR1 n26	20M	QPSK	1	53	DFT-15	Right Side	10mm	Ant 25	ECI 10	166300	831.5	21.04	22.50	1.400	-	-	0.11	0.274	0.383
		FR1 n26	20M	QPSK	1	53	DFT-15	Bottom Side	10mm	Ant 25	ECI 10	166300	831.5	21.04	22.50	1.400	-	-	-	n/a	n/a
		FR1 n26	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 25	ECI 10	166300	831.5	20.98	22.50	1.419	-	-	-0.18	0.123	0.175
		FR1 n26	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 25	ECI 10	166300	831.5	20.98	22.50	1.419	-	-	-0.1	0.183	0.260
		FR1 n26	20M	QPSK	50	28	DFT-15	Right Side	10mm	Ant 25	ECI 10	166300	831.5	20.98	22.50	1.419	-	-	0.14	0.263	0.373
		FR1 n26	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Ant 25	ECI 10	166300	831.5	20.98	22.50	1.419	-	-	-	n/a	n/a
1750MHz																					
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 14	ECI 10	1413	1732.6	20.25	21.00	1.189	-	-	-0.04	0.179	0.213
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 14	ECI 10	1413	1732.6	20.25	21.00	1.189	-	-	0.17	0.277	0.329
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 14	ECI 10	1413	1732.6	20.25	21.00	1.189	-	-	0.17	0.090	0.107
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 14	ECI 10	1413	1732.6	20.25	21.00	1.189	-	-	-0.16	0.401	0.477
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 41	ECI 10	1413	1732.6	20.58	21.50	1.236	-	-	-0.09	0.255	0.315



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		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 41	ECI 10	1413	1732.6	20.58	21.50	1.236	-	-	0.02	0.314	0.388
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 41	ECI 10	1413	1732.6	20.58	21.50	1.236	-	-	-0.07	0.084	0.104
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 41	ECI 10	1413	1732.6	20.58	21.50	1.236	-	-	0.19	0.051	0.063
36		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 41	ECI 10	1413	1732.6	20.58	21.50	1.236	-	-	0.02	0.430	0.531
		LTE Band 4	20M	QPSK	1	49		Front	10mm	Ant 41	ECI 10	20175	1732.5	20.33	21.50	1.309	-	-	0.01	0.242	0.317
		LTE Band 4	20M	QPSK	1	49		Back	10mm	Ant 41	ECI 10	20175	1732.5	20.33	21.50	1.309	-	-	-0.13	0.288	0.377
		LTE Band 4	20M	QPSK	1	49		Left Side	10mm	Ant 41	ECI 10	20175	1732.5	20.33	21.50	1.309	-	-	-0.14	0.079	0.103
		LTE Band 4	20M	QPSK	1	49		Right Side	10mm	Ant 41	ECI 10	20175	1732.5	20.33	21.50	1.309	-	-	0.18	0.053	0.069
		LTE Band 4	20M	QPSK	1	49		Bottom Side	10mm	Ant 41	ECI 10	20175	1732.5	20.33	21.50	1.309	-	-	0.07	0.377	0.494
		LTE Band 4	20M	QPSK	50	0		Front	10mm	Ant 41	ECI 10	20175	1732.5	20.30	21.50	1.318	-	-	0.02	0.236	0.311
		LTE Band 4	20M	QPSK	50	0		Back	10mm	Ant 41	ECI 10	20175	1732.5	20.30	21.50	1.318	-	-	0.04	0.276	0.364
		LTE Band 4	20M	QPSK	50	0		Left Side	10mm	Ant 41	ECI 10	20175	1732.5	20.30	21.50	1.318	-	-	-0.1	0.072	0.095
		LTE Band 4	20M	QPSK	50	0		Right Side	10mm	Ant 41	ECI 10	20175	1732.5	20.30	21.50	1.318	-	-	0.07	0.050	0.066
37		LTE Band 4	20M	QPSK	50	0		Bottom Side	10mm	Ant 41	ECI 10	20175	1732.5	20.30	21.50	1.318	-	-	0.02	0.404	0.533
		LTE Band 4	20M	QPSK	1	49		Front	10mm	Ant 24	ECI 10	20175	1732.5	20.46	21.20	1.186	-	-	-0.09	0.156	0.185
		LTE Band 4	20M	QPSK	1	49		Back	10mm	Ant 24	ECI 10	20175	1732.5	20.46	21.20	1.186	-	-	0.09	0.259	0.307
		LTE Band 4	20M	QPSK	1	49		Right Side	10mm	Ant 24	ECI 10	20175	1732.5	20.46	21.20	1.186	-	-	-0.05	0.286	0.339
		LTE Band 4	20M	QPSK	1	49		Top Side	10mm	Ant 24	ECI 10	20175	1732.5	20.46	21.20	1.186	-	-	0.14	0.068	0.081
		LTE Band 4	20M	QPSK	50	0		Front	10mm	Ant 24	ECI 10	20175	1732.5	20.40	21.20	1.202	-	-	0.13	0.150	0.180
		LTE Band 4	20M	QPSK	50	0		Back	10mm	Ant 24	ECI 10	20175	1732.5	20.40	21.20	1.202	-	-	0.07	0.245	0.295
		LTE Band 4	20M	QPSK	50	0		Right Side	10mm	Ant 24	ECI 10	20175	1732.5	20.40	21.20	1.202	-	-	-0.15	0.279	0.335
		LTE Band 4	20M	QPSK	50	0		Top Side	10mm	Ant 24	ECI 10	20175	1732.5	20.40	21.20	1.202	-	-	-0.02	0.063	0.076
		LTE Band 66	20M	QPSK	1	49		Front	10mm	Ant 14	ECI 10	132322	1745	19.78	21.00	1.324	-	-	0.18	0.207	0.274
		LTE Band 66	20M	QPSK	1	49		Back	10mm	Ant 14	ECI 10	132322	1745	19.78	21.00	1.324	-	-	0.19	0.312	0.413
		LTE Band 66	20M	QPSK	1	49		Left Side	10mm	Ant 14	ECI 10	132322	1745	19.78	21.00	1.324	-	-	-0.07	0.085	0.113
		LTE Band 66	20M	QPSK	1	49		Top Side	10mm	Ant 14	ECI 10	132322	1745	19.78	21.00	1.324	-	-	-0.03	0.347	0.460
	ULCA	LTE Band 66	20M	QPSK	1	49		Top Side	10mm	Ant 14	ECI 10	132322	1745	19.57	21.00	1.390	-	-	0.01	0.320	0.445
		LTE Band 66	20M	QPSK	50	0		Front	10mm	Ant 14	ECI 10	132322	1745	19.75	21.00	1.334	-	-	0.08	0.200	0.267
		LTE Band 66	20M	QPSK	50	0		Back	10mm	Ant 14	ECI 10	132322	1745	19.75	21.00	1.334	-	-	-0.06	0.306	0.408
		LTE Band 66	20M	QPSK	50	0		Left Side	10mm	Ant 14	ECI 10	132322	1745	19.75	21.00	1.334	-	-	-0.16	0.080	0.107
		LTE Band 66	20M	QPSK	50	0		Top Side	10mm	Ant 14	ECI 10	132322	1745	19.75	21.00	1.334	-	-	0.06	0.338	0.451
		LTE Band 66	20M	QPSK	1	49		Front	10mm	Ant 41	ECI 10	132322	1745	20.20	21.20	1.259	-	-	0.19	0.256	0.322
		LTE Band 66	20M	QPSK	1	49		Back	10mm	Ant 41	ECI 10	132322	1745	20.20	21.20	1.259	-	-	0.12	0.313	0.394
		LTE Band 66	20M	QPSK	1	49		Left Side	10mm	Ant 41	ECI 10	132322	1745	20.20	21.20	1.259	-	-	-0.06	0.074	0.093
		LTE Band 66	20M	QPSK	1	49		Right Side	10mm	Ant 41	ECI 10	132322	1745	20.20	21.20	1.259	-	-	-0.17	0.061	0.077
		LTE Band 66	20M	QPSK	1	49		Bottom Side	10mm	Ant 41	ECI 10	132322	1745	20.20	21.20	1.259	-	-	0.13	0.400	0.504
	ULCA	LTE Band 66	20M	QPSK	1	49		Bottom Side	10mm	Ant 41	ECI 10	132322	1745	20.10	21.20	1.288	-	-	0.02	0.380	0.490
		LTE Band 66	20M	QPSK	50	0		Front	10mm	Ant 41	ECI 10	132322	1745	20.18	21.20	1.265	-	-	0.08	0.250	0.316
		LTE Band 66	20M	QPSK	50	0		Back	10mm	Ant 41	ECI 10	132322	1745	20.18	21.20	1.265	-	-	-0.11	0.302	0.382
		LTE Band 66	20M	QPSK	50	0		Left Side	10mm	Ant 41	ECI 10	132322	1745	20.18	21.20	1.265	-	-	-0.11	0.069	0.087
		LTE Band 66	20M	QPSK	50	0		Right Side	10mm	Ant 41	ECI 10	132322	1745	20.18	21.20	1.265	-	-	-0.01	0.057	0.072
		LTE Band 66	20M	QPSK	50	0		Bottom Side	10mm	Ant 41	ECI 10	132322	1745	20.18	21.20	1.265	-	-	0.08	0.396	0.501
		LTE Band 66	20M	QPSK	1	49		Front	10mm	Ant 12	ECI 10	132322	1745	21.13	22.50	1.371	-	-	-0.18	0.215	0.295
		LTE Band 66	20M	QPSK	1	49		Back	10mm	Ant 12	ECI 10	132322	1745	21.13	22.50	1.371	-	-	-0.05	0.300	0.411
38		LTE Band 66	20M	QPSK	1	49		Left Side	10mm	Ant 12	ECI 10	132322	1745	21.13	22.50	1.371	-	-	0.18	0.571	0.783
	ULCA	LTE Band 66	20M	QPSK	1	49		Left Side	10mm	Ant 12	ECI 10	132322	1745	21.08	22.50	1.387	-	-	0.09	0.522	0.724
		LTE Band 66	20M	QPSK	1	49		Top Side	10mm	Ant 12	ECI 10	132322	1745	21.13	22.50	1.371	-	-	-	n/a	n/a
		LTE Band 66	20M	QPSK	50	0		Front	10mm	Ant 12	ECI 10	132322	1745	21.10	22.50	1.380	-	-	0.19	0.203	0.280
		LTE Band 66	20M	QPSK	50	0		Back	10mm	Ant 12	ECI 10	132322	1745	21.10	22.50	1.380	-	-	0.12	0.291	0.402
		LTE Band 66	20M	QPSK	50	0		Left Side	10mm	Ant 12	ECI 10	132322	1745	21.10	22.50	1.380	-	-	0.11	0.533	0.736
		LTE Band 66	20M	QPSK	50	0		Top Side	10mm	Ant 12	ECI 10	132322	1745	21.10	22.50	1.380	-	-	-	n/a	n/a
		LTE Band 66	20M	QPSK	1	49		Front	10mm	Ant 24	ECI 10	132322	1745	19.90	20.70	1.202	-	-	-0.07	0.190	0.228
		LTE Band 66	20M	QPSK	1	49		Back	10mm	Ant 24	ECI 10	132322	1745	19.90	20.70	1.202	-	-	0.02	0.300	0.361
		LTE Band 66	20M	QPSK	1	49		Right Side	10mm	Ant 24	ECI 10	132322	1745	19.90	20.70	1.202	-	-	0.17	0.333	0.400
	ULCA	LTE Band 66	20M	QPSK	1	49		Right Side	10mm	Ant 24	ECI 10	132322	1745	19.82	20.70	1.225	-	-	0.05	0.312	0.382



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		LTE Band 66	20M	QPSK	1	49		Top Side	10mm	Ant 24	ECI 10	132322	1745	19.90	20.70	1.202	-	-	0.03	0.061	0.073
		LTE Band 66	20M	QPSK	50	0		Front	10mm	Ant 24	ECI 10	132322	1745	19.85	20.70	1.216	-	-	-0.13	0.183	0.223
		LTE Band 66	20M	QPSK	50	0		Back	10mm	Ant 24	ECI 10	132322	1745	19.85	20.70	1.216	-	-	0.07	0.292	0.355
		LTE Band 66	20M	QPSK	50	0		Right Side	10mm	Ant 24	ECI 10	132322	1745	19.85	20.70	1.216	-	-	0	0.320	0.389
		LTE Band 66	20M	QPSK	50	0		Top Side	10mm	Ant 24	ECI 10	132322	1745	19.85	20.70	1.216	-	-	-0.12	0.059	0.072
		FR1 n66	40M	QPSK	1	108	DFT-15	Front	10mm	Ant 14	ECI 10	349000	1745	20.03	21.00	1.250	-	-	0.14	0.200	0.250
		FR1 n66	40M	QPSK	1	108	DFT-15	Back	10mm	Ant 14	ECI 10	349000	1745	20.03	21.00	1.250	-	-	-0.08	0.304	0.380
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Side	10mm	Ant 14	ECI 10	349000	1745	20.03	21.00	1.250	-	-	0.08	0.090	0.113
		FR1 n66	40M	QPSK	1	108	DFT-15	Top Side	10mm	Ant 14	ECI 10	349000	1745	20.03	21.00	1.250	-	-	0.11	0.423	0.529
		FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 14	ECI 10	349000	1745	19.88	21.00	1.294	-	-	0.07	0.187	0.242
		FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 14	ECI 10	349000	1745	19.88	21.00	1.294	-	-	-0.12	0.290	0.375
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 14	ECI 10	349000	1745	19.88	21.00	1.294	-	-	-0.15	0.083	0.107
		FR1 n66	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 14	ECI 10	349000	1745	19.88	21.00	1.294	-	-	-0.02	0.411	0.532
		FR1 n66	40M	QPSK	1	108	DFT-15	Front	10mm	Ant 41	ECI 10	349000	1745	20.27	21.40	1.297	-	-	-0.06	0.333	0.432
		FR1 n66	40M	QPSK	1	108	DFT-15	Back	10mm	Ant 41	ECI 10	349000	1745	20.27	21.40	1.297	-	-	0.09	0.427	0.554
		FR1 n66	40M	QPSK	1	108	DFT-15	Left Side	10mm	Ant 41	ECI 10	349000	1745	20.27	21.40	1.297	-	-	0.08	0.120	0.156
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Side	10mm	Ant 41	ECI 10	349000	1745	20.27	21.40	1.297	-	-	-	n/a	n/a
		FR1 n66	40M	QPSK	1	108	DFT-15	Bottom Side	10mm	Ant 41	ECI 10	349000	1745	20.27	21.40	1.297	-	-	-0.16	0.425	0.551
		FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 41	ECI 10	349000	1745	20.14	21.40	1.337	-	-	-0.06	0.325	0.434
		FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 41	ECI 10	349000	1745	20.14	21.40	1.337	-	-	0.19	0.406	0.543
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 41	ECI 10	349000	1745	20.14	21.40	1.337	-	-	-0.13	0.112	0.150
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 41	ECI 10	349000	1745	20.14	21.40	1.337	-	-	-	n/a	n/a
		FR1 n66	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 41	ECI 10	349000	1745	20.14	21.40	1.337	-	-	0	0.393	0.525
		FR1 n66	40M	QPSK	1	108	DFT-15	Front	10mm	Ant 12	ECI 10	349000	1745	20.29	21.60	1.352	-	-	0.13	0.155	0.210
		FR1 n66	40M	QPSK	1	108	DFT-15	Back	10mm	Ant 12	ECI 10	349000	1745	20.29	21.60	1.352	-	-	-0.18	0.261	0.353
39		FR1 n66	40M	QPSK	1	108	DFT-15	Left Side	10mm	Ant 12	ECI 10	349000	1745	20.29	21.60	1.352	-	-	-0.02	0.464	0.627
		FR1 n66	40M	QPSK	1	108	DFT-15	Top Side	10mm	Ant 12	ECI 10	349000	1745	20.29	21.60	1.352	-	-	-	n/a	n/a
		FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 12	ECI 10	349000	1745	20.17	21.60	1.390	-	-	0.06	0.143	0.199
		FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 12	ECI 10	349000	1745	20.17	21.60	1.390	-	-	-0.09	0.258	0.359
		FR1 n66	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 12	ECI 10	349000	1745	20.17	21.60	1.390	-	-	0.04	0.433	0.602
		FR1 n66	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 12	ECI 10	349000	1745	20.17	21.60	1.390	-	-	-	n/a	n/a
		FR1 n66	40M	QPSK	1	108	DFT-15	Front	10mm	Ant 24	ECI 10	349000	1745	20.65	21.70	1.274	-	-	-0.18	0.176	0.224
		FR1 n66	40M	QPSK	1	108	DFT-15	Back	10mm	Ant 24	ECI 10	349000	1745	20.65	21.70	1.274	-	-	-0.04	0.304	0.387
		FR1 n66	40M	QPSK	1	108	DFT-15	Right Side	10mm	Ant 24	ECI 10	349000	1745	20.65	21.70	1.274	-	-	0.08	0.375	0.478
		FR1 n66	40M	QPSK	1	108	DFT-15	Top Side	10mm	Ant 24	ECI 10	349000	1745	20.65	21.70	1.274	-	-	0.08	0.058	0.074
		FR1 n66	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 24	ECI 10	349000	1745	20.53	21.70	1.309	-	-	0.02	0.170	0.223
		FR1 n66	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 24	ECI 10	349000	1745	20.53	21.70	1.309	-	-	0	0.301	0.394
		FR1 n66	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 24	ECI 10	349000	1745	20.53	21.70	1.309	-	-	-0.04	0.366	0.479
		FR1 n66	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 24	ECI 10	349000	1745	20.53	21.70	1.309	-	-	0.09	0.055	0.072
1900MHz																					
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Front	10mm	Ant 14	ECI 10	661	1880	26.03	27.20	1.309	-	-	0.15	0.175	0.229
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Back	10mm	Ant 14	ECI 10	661	1880	26.03	27.20	1.309	-	-	0	0.248	0.325
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Left Side	10mm	Ant 14	ECI 10	661	1880	26.03	27.20	1.309	-	-	0.03	0.097	0.127
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Top Side	10mm	Ant 14	ECI 10	661	1880	26.03	27.20	1.309	-	-	0.08	0.362	0.474
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Front	10mm	Ant 41	ECI 10	661	1880	26.58	28.00	1.387	-	-	-0.05	0.296	0.410
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Back	10mm	Ant 41	ECI 10	661	1880	26.58	28.00	1.387	-	-	0.02	0.351	0.487
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Left Side	10mm	Ant 41	ECI 10	661	1880	26.58	28.00	1.387	-	-	0.11	0.108	0.150
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Right Side	10mm	Ant 41	ECI 10	661	1880	26.58	28.00	1.387	-	-	0.08	0.065	0.090
40		GSM1900	-	-	-	-	GPRS 2 Tx slots	Bottom Side	10mm	Ant 41	ECI 10	661	1880	26.58	28.00	1.387	-	-	0.09	0.565	0.784
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 14	ECI 10	9400	1880	21.05	22.00	1.245	-	-	0.11	0.228	0.284
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 14	ECI 10	9400	1880	21.05	22.00	1.245	-	-	0.14	0.282	0.351
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 14	ECI 10	9400	1880	21.05	22.00	1.245	-	-	-0.12	0.122	0.152
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Top Side	10mm	Ant 14	ECI 10	9400	1880	21.05	22.00	1.245	-	-	-0.18	0.402	0.500
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	10mm	Ant 41	ECI 10	9400	1880	20.41	21.50	1.285	-	-	0.16	0.250	0.321
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	10mm	Ant 41	ECI 10	9400	1880	20.41	21.50	1.285	-	-	0.01	0.299	0.384
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Side	10mm	Ant 41	ECI 10	9400	1880	20.41	21.50	1.285	-	-	0.02	0.081	0.104



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		WCDMA II	-	-	-	-	RMC 12.2Kbps	Right Side	10mm	Ant 41	ECI 10	9400	1880	20.41	21.50	1.285	-	-	0.02	0.052	0.067
41		WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	10mm	Ant 41	ECI 10	9400	1880	20.41	21.50	1.285	-	-	-0.05	0.502	0.645
		LTE Band 2	20M	QPSK	1	49	-	Front	10mm	Ant 14	ECI 10	18900	1880	22.19	23.50	1.352	-	-	-0.1	0.286	0.387
		LTE Band 2	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	18900	1880	22.19	23.50	1.352	-	-	0.07	0.366	0.495
		LTE Band 2	20M	QPSK	1	49	-	Left Side	10mm	Ant 14	ECI 10	18900	1880	22.19	23.50	1.352	-	-	0.13	0.135	0.183
42		LTE Band 2	20M	QPSK	1	49	-	Top Side	10mm	Ant 14	ECI 10	18900	1880	22.19	23.50	1.352	-	-	-0.17	0.472	0.638
		LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 14	ECI 10	18900	1880	22.18	23.50	1.355	-	-	-0.04	0.272	0.369
		LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 14	ECI 10	18900	1880	22.18	23.50	1.355	-	-	-0.19	0.352	0.477
		LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 14	ECI 10	18900	1880	22.18	23.50	1.355	-	-	-0.09	0.127	0.172
		LTE Band 2	20M	QPSK	50	0	-	Top Side	10mm	Ant 14	ECI 10	18900	1880	22.18	23.50	1.355	-	-	0.03	0.432	0.585
		LTE Band 2	20M	QPSK	1	49	-	Front	10mm	Ant 41	ECI 10	18900	1880	20.10	21.80	1.479	-	-	-0.09	0.236	0.349
		LTE Band 2	20M	QPSK	1	49	-	Back	10mm	Ant 41	ECI 10	18900	1880	20.10	21.80	1.479	-	-	-0.17	0.285	0.422
		LTE Band 2	20M	QPSK	1	49	-	Left Side	10mm	Ant 41	ECI 10	18900	1880	20.10	21.80	1.479	-	-	0.07	0.073	0.108
		LTE Band 2	20M	QPSK	1	49	-	Right Side	10mm	Ant 41	ECI 10	18900	1880	20.10	21.80	1.479	-	-	0.14	0.048	0.071
		LTE Band 2	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 41	ECI 10	18900	1880	20.10	21.80	1.479	-	-	0.19	0.375	0.555
		LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 41	ECI 10	18900	1880	20.02	21.80	1.507	-	-	0.05	0.228	0.344
		LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 41	ECI 10	18900	1880	20.02	21.80	1.507	-	-	-0.11	0.277	0.417
		LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 41	ECI 10	18900	1880	20.02	21.80	1.507	-	-	0.09	0.069	0.104
		LTE Band 2	20M	QPSK	50	0	-	Right Side	10mm	Ant 41	ECI 10	18900	1880	20.02	21.80	1.507	-	-	0	0.046	0.069
		LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 41	ECI 10	18900	1880	20.02	21.80	1.507	-	-	-0.04	0.366	0.551
		LTE Band 2	20M	QPSK	1	49	-	Front	10mm	Ant 12	ECI 10	18900	1880	19.30	20.50	1.318	-	-	-	n/a	n/a
		LTE Band 2	20M	QPSK	1	49	-	Back	10mm	Ant 12	ECI 10	18900	1880	19.30	20.50	1.318	-	-	-0.12	0.043	0.057
		LTE Band 2	20M	QPSK	1	49	-	Left Side	10mm	Ant 12	ECI 10	18900	1880	19.30	20.50	1.318	-	-	-0.08	0.045	0.059
		LTE Band 2	20M	QPSK	1	49	-	Top Side	10mm	Ant 12	ECI 10	18900	1880	19.30	20.50	1.318	-	-	-	n/a	n/a
		LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 12	ECI 10	18900	1880	19.28	20.50	1.324	-	-	-	n/a	n/a
		LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 12	ECI 10	18900	1880	19.28	20.50	1.324	-	-	-0.17	0.042	0.056
		LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 12	ECI 10	18900	1880	19.28	20.50	1.324	-	-	-0.11	0.043	0.057
		LTE Band 2	20M	QPSK	50	0	-	Top Side	10mm	Ant 12	ECI 10	18900	1880	19.28	20.50	1.324	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	1	53	DFT-15	Front	10mm	Ant 14	ECI 10	376000	1880	21.61	22.50	1.227	-	-	0.1	0.237	0.291
		FR1 n2	20M	QPSK	1	53	DFT-15	Back	10mm	Ant 14	ECI 10	376000	1880	21.61	22.50	1.227	-	-	0.16	0.316	0.388
		FR1 n2	20M	QPSK	1	53	DFT-15	Left Side	10mm	Ant 14	ECI 10	376000	1880	21.61	22.50	1.227	-	-	-0.02	0.118	0.145
		FR1 n2	20M	QPSK	1	53	DFT-15	Top Side	10mm	Ant 14	ECI 10	376000	1880	21.61	22.50	1.227	-	-	-0.05	0.316	0.388
		FR1 n2	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 14	ECI 10	376000	1880	21.55	22.50	1.245	-	-	0.06	0.225	0.280
		FR1 n2	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 14	ECI 10	376000	1880	21.55	22.50	1.245	-	-	-0.16	0.297	0.370
		FR1 n2	20M	QPSK	50	28	DFT-15	Left Side	10mm	Ant 14	ECI 10	376000	1880	21.55	22.50	1.245	-	-	-0.09	0.111	0.138
		FR1 n2	20M	QPSK	50	28	DFT-15	Top Side	10mm	Ant 14	ECI 10	376000	1880	21.55	22.50	1.245	-	-	0.05	0.300	0.373
		FR1 n2	20M	QPSK	1	53	DFT-15	Front	10mm	Ant 41	ECI 10	376000	1880	20.40	21.20	1.202	-	-	-0.07	0.286	0.344
		FR1 n2	20M	QPSK	1	53	DFT-15	Back	10mm	Ant 41	ECI 10	376000	1880	20.40	21.20	1.202	-	-	0.16	0.360	0.433
		FR1 n2	20M	QPSK	1	53	DFT-15	Left Side	10mm	Ant 41	ECI 10	376000	1880	20.40	21.20	1.202	-	-	-0.1	0.098	0.118
		FR1 n2	20M	QPSK	1	53	DFT-15	Right Side	10mm	Ant 41	ECI 10	376000	1880	20.40	21.20	1.202	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	1	53	DFT-15	Bottom Side	10mm	Ant 41	ECI 10	376000	1880	20.40	21.20	1.202	-	-	-0.04	0.485	0.583
		FR1 n2	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 41	ECI 10	376000	1880	20.35	21.20	1.216	-	-	0.06	0.264	0.321
		FR1 n2	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 41	ECI 10	376000	1880	20.35	21.20	1.216	-	-	0	0.337	0.410
		FR1 n2	20M	QPSK	50	28	DFT-15	Left Side	10mm	Ant 41	ECI 10	376000	1880	20.35	21.20	1.216	-	-	-0.05	0.092	0.112
		FR1 n2	20M	QPSK	50	28	DFT-15	Right Side	10mm	Ant 41	ECI 10	376000	1880	20.35	21.20	1.216	-	-	-	n/a	n/a
43		FR1 n2	20M	QPSK	50	28	DFT-15	Bottom Side	10mm	Ant 41	ECI 10	376000	1880	20.35	21.20	1.216	-	-	-0.12	0.502	0.611
		FR1 n2	20M	QPSK	1	53	DFT-15	Front	10mm	Ant 12	ECI 10	376000	1880	18.61	19.90	1.346	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	1	53	DFT-15	Back	10mm	Ant 12	ECI 10	376000	1880	18.61	19.90	1.346	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	1	53	DFT-15	Left Side	10mm	Ant 12	ECI 10	376000	1880	18.61	19.90	1.346	-	-	-0.08	0.039	0.052
		FR1 n2	20M	QPSK	1	53	DFT-15	Top Side	10mm	Ant 12	ECI 10	376000	1880	18.61	19.90	1.346	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	50	28	DFT-15	Front	10mm	Ant 12	ECI 10	376000	1880	18.55	19.90	1.365	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	50	28	DFT-15	Back	10mm	Ant 12	ECI 10	376000	1880	18.55	19.90	1.365	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	50	28	DFT-15	Left Side	10mm	Ant 12	ECI 10	376000	1880	18.55	19.90	1.365	-	-	-0.18	0.036	0.049
		FR1 n2	20M	QPSK	50	28	DFT-15	Top Side	10mm	Ant 12	ECI 10	376000	1880	18.55	19.90	1.365	-	-	-	n/a	n/a
2600MHz																					
		LTE Band 7	20M	QPSK	1	49	-	Front	10mm	Ant 14	ECI 10	21100	2535	18.85	20.00	1.303	-	-	0.04	0.206	0.268



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		LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	21100	2535	18.85	20.00	1.303	-	-	0.04	0.290	0.378
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	21100 21298	2535 2554.8	18.85	20.00	1.303	-	-	0.11	0.270	0.352
		LTE Band 7	20M	QPSK	1	49	-	Left Side	10mm	Ant 14	ECI 10	21100	2535	18.85	20.00	1.303	-	-	-0.14	0.128	0.167
		LTE Band 7	20M	QPSK	1	49	-	Top Side	10mm	Ant 14	ECI 10	21100	2535	18.85	20.00	1.303	-	-	0.14	0.271	0.353
		LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 14	ECI 10	21100	2535	18.83	20.00	1.309	-	-	-0.13	0.220	0.288
		LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 14	ECI 10	21100	2535	18.83	20.00	1.309	-	-	-0.01	0.278	0.364
		LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 14	ECI 10	21100	2535	18.83	20.00	1.309	-	-	0.04	0.119	0.156
		LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 14	ECI 10	21100	2535	18.83	20.00	1.309	-	-	-0.19	0.266	0.348
		LTE Band 7	20M	QPSK	1	49	-	Front	10mm	Ant 41	ECI 10	21100	2535	19.72	20.50	1.197	-	-	0.14	0.208	0.249
		LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 41	ECI 10	21100	2535	19.72	20.50	1.197	-	-	0.02	0.247	0.296
		LTE Band 7	20M	QPSK	1	49	-	Left Side	10mm	Ant 41	ECI 10	21100	2535	19.72	20.50	1.197	-	-	-0.04	0.053	0.063
		LTE Band 7	20M	QPSK	1	49	-	Right Side	10mm	Ant 41	ECI 10	21100	2535	19.72	20.50	1.197	-	-	0.18	0.068	0.081
		LTE Band 7	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 41	ECI 10	21100	2535	19.72	20.50	1.197	-	-	0.14	0.277	0.331
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 41	ECI 10	21100 21298	2535 2554.8	19.72	20.50	1.197	-	-	0.06	0.259	0.310
		LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 41	ECI 10	21100	2535	19.70	20.50	1.202	-	-	0.11	0.198	0.238
		LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 41	ECI 10	21100	2535	19.70	20.50	1.202	-	-	0.13	0.236	0.284
		LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 41	ECI 10	21100	2535	19.70	20.50	1.202	-	-	0.03	0.050	0.060
		LTE Band 7	20M	QPSK	50	0	-	Right Side	10mm	Ant 41	ECI 10	21100	2535	19.70	20.50	1.202	-	-	-0.06	0.060	0.072
		LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 41	ECI 10	21100	2535	19.70	20.50	1.202	-	-	-0.03	0.266	0.320
		LTE Band 7	20M	QPSK	1	49	-	Front	10mm	Ant 12	ECI 10	21100	2535	18.32	19.70	1.374	-	-	-0.13	0.140	0.192
		LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 12	ECI 10	21100	2535	18.32	19.70	1.374	-	-	-0.05	0.262	0.360
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 12	ECI 10	21100 21298	2535 2554.8	18.32	19.70	1.374	-	-	0.02	0.245	0.337
		LTE Band 7	20M	QPSK	1	49	-	Left Side	10mm	Ant 12	ECI 10	21100	2535	18.32	19.70	1.374	-	-	-0.09	0.228	0.313
		LTE Band 7	20M	QPSK	1	49	-	Top Side	10mm	Ant 12	ECI 10	21100	2535	18.32	19.70	1.374	-	-	-0.19	0.044	0.060
		LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 12	ECI 10	21100	2535	18.30	19.70	1.380	-	-	-0.01	0.132	0.182
		LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 12	ECI 10	21100	2535	18.30	19.70	1.380	-	-	0.14	0.249	0.344
		LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 12	ECI 10	21100	2535	18.30	19.70	1.380	-	-	0.07	0.212	0.293
		LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 12	ECI 10	21100	2535	18.30	19.70	1.380	-	-	0.12	0.041	0.057
		LTE Band 7	20M	QPSK	1	49	-	Front	10mm	Ant 24	ECI 10	21100	2535	18.18	19.20	1.265	-	-	-0.01	0.175	0.221
		LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 24	ECI 10	21100	2535	18.18	19.20	1.265	-	-	0.04	0.340	0.430
		LTE Band 7	20M	QPSK	1	49	-	Right Side	10mm	Ant 24	ECI 10	21100	2535	18.18	19.20	1.265	-	-	-0.12	0.220	0.278
		LTE Band 7	20M	QPSK	1	49	-	Top Side	10mm	Ant 24	ECI 10	21100	2535	18.18	19.20	1.265	-	-	-0.14	0.069	0.087
		LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 24	ECI 10	21100	2535	18.15	19.20	1.274	-	-	0.16	0.166	0.211
44		LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 24	ECI 10	21100	2535	18.15	19.20	1.274	-	-	0.05	0.364	0.464
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Back	10mm	Ant 24	ECI 10	21100 21298	2535 2554.8	18.15	19.20	1.274	-	-	0.07	0.339	0.432
		LTE Band 7	20M	QPSK	50	0	-	Right Side	10mm	Ant 24	ECI 10	21100	2535	18.15	19.20	1.274	-	-	0.14	0.216	0.275
		LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 24	ECI 10	21100	2535	18.15	19.20	1.274	-	-	-0.09	0.066	0.084
		LTE Band 38	20M	QPSK	1	49	-	Front	10mm	Ant 14	ECI 10	38000	2595	21.65	22.50	1.216	62.9	1.006	-0.16	0.260	0.318
		LTE Band 38	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	38000	2595	21.65	22.50	1.216	62.9	1.006	0.02	0.439	0.537
		LTE Band 38	20M	QPSK	1	49	-	Left Side	10mm	Ant 14	ECI 10	38000	2595	21.65	22.50	1.216	62.9	1.006	-0.05	0.239	0.292
		LTE Band 38	20M	QPSK	1	49	-	Top Side	10mm	Ant 14	ECI 10	38000	2595	21.65	22.50	1.216	62.9	1.006	-0.15	0.286	0.350
		LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 14	ECI 10	38000	2595	21.62	22.50	1.225	62.9	1.006	-0.01	0.253	0.312
45		LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 14	ECI 10	38000	2595	21.62	22.50	1.225	62.9	1.006	0.1	0.451	0.556
		LTE Band 38	20M	QPSK	50	0	-	Left Side	10mm	Ant 14	ECI 10	38000	2595	21.62	22.50	1.225	62.9	1.006	-0.16	0.233	0.287
		LTE Band 38	20M	QPSK	50	0	-	Top Side	10mm	Ant 14	ECI 10	38000	2595	21.62	22.50	1.225	62.9	1.006	0.08	0.279	0.344
		LTE Band 38	20M	QPSK	1	49	-	Front	10mm	Ant 24	ECI 10	38000	2595	20.97	22.00	1.268	62.9	1.006	0.11	0.137	0.175
		LTE Band 38	20M	QPSK	1	49	-	Back	10mm	Ant 24	ECI 10	38000	2595	20.97	22.00	1.268	62.9	1.006	-0.16	0.253	0.323
		LTE Band 38	20M	QPSK	1	49	-	Right Side	10mm	Ant 24	ECI 10	38000	2595	20.97	22.00	1.268	62.9	1.006	-	n/a	n/a
		LTE Band 38	20M	QPSK	1	49	-	Top Side	10mm	Ant 24	ECI 10	38000	2595	20.97	22.00	1.268	62.9	1.006	0.08	0.060	0.077
		LTE Band 38	20M	QPSK	50	0	-	Front	10mm	Ant 24	ECI 10	38000	2595	20.90	22.00	1.288	62.9	1.006	0.19	0.129	0.167
		LTE Band 38	20M	QPSK	50	0	-	Back	10mm	Ant 24	ECI 10	38000	2595	20.90	22.00	1.288	62.9	1.006	0.18	0.245	0.318
		LTE Band 38	20M	QPSK	50	0	-	Right Side	10mm	Ant 24	ECI 10	38000	2595	20.90	22.00	1.288	62.9	1.006	-	n/a	n/a
		LTE Band 38	20M	QPSK	50	0	-	Top Side	10mm	Ant 24	ECI 10	38000	2595	20.90	22.00	1.288	62.9	1.006	-0.08	0.057	0.074
		LTE Band 41	20M	QPSK	1	49	-	Front	10mm	Ant 14	ECI 10	40620	2593	21.35	22.00	1.161	62.9	1.006	0.14	0.277	0.324
		LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	40620	2593	21.35	22.00	1.161	62.9	1.006	0.13	0.421	0.492



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		LTE Band 41	20M	QPSK	1	49	-	Left Side	10mm	Ant 14	ECI 10	40620	2593	21.35	22.00	1.161	62.9	1.006	0.18	0.255	0.298
		LTE Band 41	20M	QPSK	1	49	-	Top Side	10mm	Ant 14	ECI 10	40620	2593	21.35	22.00	1.161	62.9	1.006	0.09	0.308	0.360
		LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	39750	2506	21.25	22.00	1.189	62.9	1.006	0	0.317	0.379
		LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	40185	2549.5	21.28	22.00	1.180	62.9	1.006	0.18	0.402	0.477
		LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	41055	2636.5	21.26	22.00	1.186	62.9	1.006	0.19	0.397	0.474
		LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	41490	2680	21.30	22.00	1.175	62.9	1.006	-0.17	0.288	0.340
		LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 14	ECI 10	40620	2593	21.29	22.00	1.178	62.9	1.006	-0.15	0.270	0.320
		LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 14	ECI 10	40620	2593	21.29	22.00	1.178	62.9	1.006	-0.19	0.420	0.498
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 14	ECI 10	40620 40818	2593 2612.8	21.20	22.00	1.202	62.9	1.006	0.05	0.399	0.483
		LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 14	ECI 10	40620	2593	21.29	22.00	1.178	62.9	1.006	0.06	0.246	0.291
		LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 14	ECI 10	40620	2593	21.29	22.00	1.178	62.9	1.006	0.18	0.280	0.332
		LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 14	ECI 10	39750	2506	21.17	22.00	1.211	62.9	1.006	-0.14	0.325	0.396
		LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 14	ECI 10	40185	2549.5	21.24	22.00	1.191	62.9	1.006	0.15	0.420	0.503
		LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 14	ECI 10	41055	2636.5	21.25	22.00	1.189	62.9	1.006	0.07	0.411	0.491
		LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 14	ECI 10	41490	2680	21.28	22.00	1.180	62.9	1.006	-0.15	0.279	0.331
		LTE Band 41	20M	QPSK	1	49	-	Front	10mm	Ant 41	ECI 10	40620	2593	21.85	22.80	1.245	62.9	1.006	-0.16	0.236	0.295
		LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 41	ECI 10	40620	2593	21.85	22.80	1.245	62.9	1.006	-0.18	0.262	0.328
		LTE Band 41	20M	QPSK	1	49	-	Left Side	10mm	Ant 41	ECI 10	40620	2593	21.85	22.80	1.245	62.9	1.006	0.16	0.058	0.073
		LTE Band 41	20M	QPSK	1	49	-	Right Side	10mm	Ant 41	ECI 10	40620	2593	21.85	22.80	1.245	62.9	1.006	-0.03	0.065	0.081
		LTE Band 41	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 41	ECI 10	40620	2593	21.85	22.80	1.245	62.9	1.006	-0.18	0.288	0.361
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Bottom Side	10mm	Ant 41	ECI 10	40620 40818	2593 2612.8	21.70	22.80	1.288	62.9	1.006	0.02	0.267	0.346
		LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 41	ECI 10	40620	2593	21.82	22.80	1.253	62.9	1.006	0.13	0.229	0.289
		LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 41	ECI 10	40620	2593	21.82	22.80	1.253	62.9	1.006	0.04	0.250	0.315
		LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 41	ECI 10	40620	2593	21.82	22.80	1.253	62.9	1.006	0.01	0.053	0.067
		LTE Band 41	20M	QPSK	50	0	-	Right Side	10mm	Ant 41	ECI 10	40620	2593	21.82	22.80	1.253	62.9	1.006	0	0.061	0.077
		LTE Band 41	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 41	ECI 10	40620	2593	21.82	22.80	1.253	62.9	1.006	0.01	0.272	0.343
		LTE Band 41	20M	QPSK	1	49	-	Front	10mm	Ant 12	ECI 10	40620	2593	20.55	21.40	1.216	62.9	1.006	-0.19	0.235	0.288
46		LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 12	ECI 10	40620	2593	20.55	21.40	1.216	62.9	1.006	0.18	0.426	0.521
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 12	ECI 10	40620 40818	2593 2612.8	20.42	21.40	1.253	62.9	1.006	0.07	0.395	0.498
		LTE Band 41	20M	QPSK	1	49	-	Left Side	10mm	Ant 12	ECI 10	40620	2593	20.55	21.40	1.216	62.9	1.006	-0.17	0.229	0.280
		LTE Band 41	20M	QPSK	1	49	-	Top Side	10mm	Ant 12	ECI 10	40620	2593	20.55	21.40	1.216	62.9	1.006	0.14	0.238	0.291
		LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 12	ECI 10	40620	2593	20.51	21.40	1.227	62.9	1.006	-0.17	0.227	0.280
		LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 12	ECI 10	40620	2593	20.51	21.40	1.227	62.9	1.006	-0.08	0.417	0.515
		LTE Band 41	20M	QPSK	50	0	-	Left Side	10mm	Ant 12	ECI 10	40620	2593	20.51	21.40	1.227	62.9	1.006	0.07	0.224	0.277
		LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 12	ECI 10	40620	2593	20.51	21.40	1.227	62.9	1.006	-0.11	0.231	0.285
		LTE Band 41	20M	QPSK	1	49	-	Front	10mm	Ant 24	ECI 10	40620	2593	20.76	21.20	1.107	62.9	1.006	0.15	0.160	0.178
		LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 24	ECI 10	40620	2593	20.76	21.20	1.107	62.9	1.006	0.06	0.296	0.330
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Back	10mm	Ant 24	ECI 10	40620 40818	2593 2612.8	20.55	21.20	1.161	62.9	1.006	0.01	0.278	0.325
		LTE Band 41	20M	QPSK	1	49	-	Right Side	10mm	Ant 24	ECI 10	40620	2593	20.76	21.20	1.107	62.9	1.006	-	n/a	n/a
		LTE Band 41	20M	QPSK	1	49	-	Top Side	10mm	Ant 24	ECI 10	40620	2593	20.76	21.20	1.107	62.9	1.006	-0.01	0.055	0.061
		LTE Band 41	20M	QPSK	50	0	-	Front	10mm	Ant 24	ECI 10	40620	2593	20.72	21.20	1.117	62.9	1.006	-0.16	0.152	0.171
		LTE Band 41	20M	QPSK	50	0	-	Back	10mm	Ant 24	ECI 10	40620	2593	20.72	21.20	1.117	62.9	1.006	0.06	0.289	0.325
		LTE Band 41	20M	QPSK	50	0	-	Right Side	10mm	Ant 24	ECI 10	40620	2593	20.72	21.20	1.117	62.9	1.006	-	n/a	n/a
		LTE Band 41	20M	QPSK	50	0	-	Top Side	10mm	Ant 24	ECI 10	40620	2593	20.72	21.20	1.117	62.9	1.006	0.19	0.052	0.058
		FR1 n7	50M	QPSK	1	135	DFT-15	Front	10mm	Ant 14	ECI 10	507000	2535	20.16	21.00	1.213	-	-	-0.01	0.309	0.375
		FR1 n7	50M	QPSK	1	135	DFT-15	Back	10mm	Ant 14	ECI 10	507000	2535	20.16	21.00	1.213	-	-	0.03	0.341	0.414
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Side	10mm	Ant 14	ECI 10	507000	2535	20.16	21.00	1.213	-	-	0.05	0.158	0.192
		FR1 n7	50M	QPSK	1	135	DFT-15	Top Side	10mm	Ant 14	ECI 10	507000	2535	20.16	21.00	1.213	-	-	0.11	0.251	0.305
		FR1 n7	50M	QPSK	135	68	DFT-15	Front	10mm	Ant 14	ECI 10	507000	2535	20.09	21.00	1.233	-	-	0.19	0.303	0.374
47		FR1 n7	50M	QPSK	135	68	DFT-15	Back	10mm	Ant 14	ECI 10	507000	2535	20.09	21.00	1.233	-	-	0.17	0.409	0.504
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Side	10mm	Ant 14	ECI 10	507000	2535	20.09	21.00	1.233	-	-	-0.04	0.154	0.190
		FR1 n7	50M	QPSK	135	68	DFT-15	Top Side	10mm	Ant 14	ECI 10	507000	2535	20.09	21.00	1.233	-	-	0.16	0.244	0.301
		FR1 n7	50M	QPSK	1	135	DFT-15	Front	10mm	Ant 41	ECI 10	507000	2535	18.72	19.20	1.117	-	-	0.15	0.125	0.140
		FR1 n7	50M	QPSK	1	135	DFT-15	Back	10mm	Ant 41	ECI 10	507000	2535	18.72	19.20	1.117	-	-	-0.16	0.183	0.204
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Side	10mm	Ant 41	ECI 10	507000	2535	18.72	19.20	1.117	-	-	0.07	0.042	0.047



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		FR1 n7	50M	QPSK	1	135	DFT-15	Right Side	10mm	Ant 41	ECI 10	507000	2535	18.72	19.20	1.117	-	-	-0.14	0.039	0.044
		FR1 n7	50M	QPSK	1	135	DFT-15	Bottom Side	10mm	Ant 41	ECI 10	507000	2535	18.72	19.20	1.117	-	-	-0.01	0.218	0.243
		FR1 n7	50M	QPSK	135	68	DFT-15	Front	10mm	Ant 41	ECI 10	507000	2535	18.68	19.20	1.127	-	-	0.03	0.118	0.133
		FR1 n7	50M	QPSK	135	68	DFT-15	Back	10mm	Ant 41	ECI 10	507000	2535	18.68	19.20	1.127	-	-	0.06	0.181	0.204
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Side	10mm	Ant 41	ECI 10	507000	2535	18.68	19.20	1.127	-	-	-0.04	0.040	0.045
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Side	10mm	Ant 41	ECI 10	507000	2535	18.68	19.20	1.127	-	-	0.05	0.036	0.041
		FR1 n7	50M	QPSK	135	68	DFT-15	Bottom Side	10mm	Ant 41	ECI 10	507000	2535	18.68	19.20	1.127	-	-	-0.09	0.204	0.230
		FR1 n7	50M	QPSK	1	135	DFT-15	Front	10mm	Ant 12	ECI 10	507000	2535	19.00	19.80	1.202	-	-	0.1	0.150	0.180
		FR1 n7	50M	QPSK	1	135	DFT-15	Back	10mm	Ant 12	ECI 10	507000	2535	19.00	19.80	1.202	-	-	0.04	0.260	0.313
		FR1 n7	50M	QPSK	1	135	DFT-15	Left Side	10mm	Ant 12	ECI 10	507000	2535	19.00	19.80	1.202	-	-	0.09	0.260	0.313
		FR1 n7	50M	QPSK	1	135	DFT-15	Top Side	10mm	Ant 12	ECI 10	507000	2535	19.00	19.80	1.202	-	-	-0.06	0.044	0.053
		FR1 n7	50M	QPSK	135	68	DFT-15	Front	10mm	Ant 12	ECI 10	507000	2535	18.92	19.80	1.225	-	-	0.18	0.141	0.173
		FR1 n7	50M	QPSK	135	68	DFT-15	Back	10mm	Ant 12	ECI 10	507000	2535	18.92	19.80	1.225	-	-	0.14	0.250	0.306
		FR1 n7	50M	QPSK	135	68	DFT-15	Left Side	10mm	Ant 12	ECI 10	507000	2535	18.92	19.80	1.225	-	-	-0.13	0.242	0.296
		FR1 n7	50M	QPSK	135	68	DFT-15	Top Side	10mm	Ant 12	ECI 10	507000	2535	18.92	19.80	1.225	-	-	0.14	0.043	0.053
		FR1 n7	50M	QPSK	1	135	DFT-15	Front	10mm	Ant 24	ECI 10	507000	2535	18.63	19.70	1.279	-	-	-0.07	0.158	0.202
		FR1 n7	50M	QPSK	1	135	DFT-15	Back	10mm	Ant 24	ECI 10	507000	2535	18.63	19.70	1.279	-	-	0.06	0.332	0.425
		FR1 n7	50M	QPSK	1	135	DFT-15	Right Side	10mm	Ant 24	ECI 10	507000	2535	18.63	19.70	1.279	-	-	0.19	0.214	0.274
		FR1 n7	50M	QPSK	1	135	DFT-15	Top Side	10mm	Ant 24	ECI 10	507000	2535	18.63	19.70	1.279	-	-	-0.19	0.070	0.090
		FR1 n7	50M	QPSK	135	68	DFT-15	Front	10mm	Ant 24	ECI 10	507000	2535	18.53	19.70	1.309	-	-	0.09	0.154	0.202
		FR1 n7	50M	QPSK	135	68	DFT-15	Back	10mm	Ant 24	ECI 10	507000	2535	18.53	19.70	1.309	-	-	0.15	0.310	0.406
		FR1 n7	50M	QPSK	135	68	DFT-15	Right Side	10mm	Ant 24	ECI 10	507000	2535	18.53	19.70	1.309	-	-	-0.14	0.198	0.259
		FR1 n7	50M	QPSK	135	68	DFT-15	Top Side	10mm	Ant 24	ECI 10	507000	2535	18.53	19.70	1.309	-	-	0.07	0.067	0.088
		FR1 n38	50M	QPSK	1	53	DFT-30	Front	10mm	Ant 14	ECI 10	519000	2595	19.01	20.00	1.256	-	-	-0.19	0.333	0.418
		FR1 n38	50M	QPSK	1	53	DFT-30	Back	10mm	Ant 14	ECI 10	519000	2595	19.01	20.00	1.256	-	-	0.12	0.482	0.605
		FR1 n38	50M	QPSK	1	53	DFT-30	Left Side	10mm	Ant 14	ECI 10	519000	2595	19.01	20.00	1.256	-	-	-0.11	0.168	0.211
		FR1 n38	50M	QPSK	1	53	DFT-30	Top Side	10mm	Ant 14	ECI 10	519000	2595	19.01	20.00	1.256	-	-	-0.16	0.258	0.324
		FR1 n38	50M	QPSK	50	28	DFT-30	Front	10mm	Ant 14	ECI 10	519000	2595	18.86	20.00	1.300	-	-	0.17	0.325	0.423
48		FR1 n38	50M	QPSK	50	28	DFT-30	Back	10mm	Ant 14	ECI 10	519000	2595	18.86	20.00	1.300	-	-	0.03	0.471	0.612
		FR1 n38	50M	QPSK	50	28	DFT-30	Left Side	10mm	Ant 14	ECI 10	519000	2595	18.86	20.00	1.300	-	-	0.09	0.165	0.215
		FR1 n38	50M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 14	ECI 10	519000	2595	18.86	20.00	1.300	-	-	0.13	0.244	0.317
		FR1 n38	50M	QPSK	100	0	DFT-30	Back	10mm	Ant 14	ECI 10	519000	2595	18.84	20.00	1.306	-	-	0.06	0.452	0.590
		FR1 n38	50M	QPSK	1	53	DFT-30	Front	10mm	Ant 12	ECI 10	519000	2595	17.68	19.20	1.419	-	-	-0.08	0.191	0.271
		FR1 n38	50M	QPSK	1	53	DFT-30	Back	10mm	Ant 12	ECI 10	519000	2595	17.68	19.20	1.419	-	-	0.06	0.339	0.481
		FR1 n38	50M	QPSK	1	53	DFT-30	Left Side	10mm	Ant 12	ECI 10	519000	2595	17.68	19.20	1.419	-	-	0.02	0.330	0.468
		FR1 n38	50M	QPSK	1	53	DFT-30	Top Side	10mm	Ant 12	ECI 10	519000	2595	17.68	19.20	1.419	-	-	-0.01	0.056	0.079
		FR1 n38	50M	QPSK	50	28	DFT-30	Front	10mm	Ant 12	ECI 10	519000	2595	17.64	19.20	1.432	-	-	0	0.182	0.261
		FR1 n38	50M	QPSK	50	28	DFT-30	Back	10mm	Ant 12	ECI 10	519000	2595	17.64	19.20	1.432	-	-	0.04	0.328	0.470
		FR1 n38	50M	QPSK	50	28	DFT-30	Left Side	10mm	Ant 12	ECI 10	519000	2595	17.64	19.20	1.432	-	-	0.04	0.312	0.447
		FR1 n38	50M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 12	ECI 10	519000	2595	17.64	19.20	1.432	-	-	0.04	0.053	0.076
		FR1 n38	50M	QPSK	1	53	DFT-30	Front	10mm	Ant 24	ECI 10	519000	2595	19.31	20.00	1.172	-	-	-0.15	0.197	0.231
		FR1 n38	50M	QPSK	1	53	DFT-30	Back	10mm	Ant 24	ECI 10	519000	2595	19.31	20.00	1.172	-	-	-0.12	0.411	0.482
		FR1 n38	50M	QPSK	1	53	DFT-30	Right Side	10mm	Ant 24	ECI 10	519000	2595	19.31	20.00	1.172	-	-	0.08	0.248	0.291
		FR1 n38	50M	QPSK	1	53	DFT-30	Top Side	10mm	Ant 24	ECI 10	519000	2595	19.31	20.00	1.172	-	-	0.04	0.084	0.098
		FR1 n38	50M	QPSK	50	28	DFT-30	Front	10mm	Ant 24	ECI 10	519000	2595	19.20	20.00	1.202	-	-	-0.14	0.183	0.220
		FR1 n38	50M	QPSK	50	28	DFT-30	Back	10mm	Ant 24	ECI 10	519000	2595	19.20	20.00	1.202	-	-	0.11	0.387	0.465
		FR1 n38	50M	QPSK	50	28	DFT-30	Right Side	10mm	Ant 24	ECI 10	519000	2595	19.20	20.00	1.202	-	-	0.17	0.242	0.291
		FR1 n38	50M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 24	ECI 10	519000	2595	19.20	20.00	1.202	-	-	0.19	0.078	0.094
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 14	ECI 10	518598	2592.99	18.88	19.80	1.236	-	-	0.05	0.317	0.392
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 14	ECI 10	518598	2592.99	18.88	19.80	1.236	-	-	0.07	0.435	0.538
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Side	10mm	Ant 14	ECI 10	518598	2592.99	18.88	19.80	1.236	-	-	-0.06	0.155	0.192
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 14	ECI 10	518598	2592.99	18.88	19.80	1.236	-	-	0.14	0.240	0.297
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 14	ECI 10	518598	2592.99	18.85	19.80	1.245	-	-	-0.19	0.294	0.366
49	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 14	ECI 10	518598	2592.99	18.85	19.80	1.245	-	-	-0.07	0.454	0.565
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 14	ECI 10	518598	2592.99	18.85	19.80	1.245	-	-	0.15	0.143	0.178
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 14	ECI 10	518598	2592.99	18.85	19.80	1.245	-	-	-0.13	0.234	0.291



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	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 41	ECI 10	518598	2592.99	18.90	19.90	1.259	-	-	-0.14	0.130	0.164
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 41	ECI 10	518598	2592.99	18.90	19.90	1.259	-	-	0.15	0.197	0.248
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Side	10mm	Ant 41	ECI 10	518598	2592.99	18.90	19.90	1.259	-	-	0.1	0.045	0.057
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Side	10mm	Ant 41	ECI 10	518598	2592.99	18.90	19.90	1.259	-	-	0.01	0.042	0.053
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Bottom Side	10mm	Ant 41	ECI 10	518598	2592.99	18.90	19.90	1.259	-	-	-0.03	0.230	0.290
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 41	ECI 10	518598	2592.99	18.86	19.90	1.271	-	-	-0.13	0.126	0.160
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 41	ECI 10	518598	2592.99	18.86	19.90	1.271	-	-	0.03	0.188	0.239
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 41	ECI 10	518598	2592.99	18.86	19.90	1.271	-	-	-0.02	0.044	0.056
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 41	ECI 10	518598	2592.99	18.86	19.90	1.271	-	-	0.17	0.039	0.050
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 41	ECI 10	518598	2592.99	18.86	19.90	1.271	-	-	0.01	0.219	0.278
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 12	ECI 10	518598	2592.99	17.80	19.00	1.318	-	-	-0.08	0.177	0.233
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 12	ECI 10	518598	2592.99	17.80	19.00	1.318	-	-	-0.06	0.322	0.424
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Left Side	10mm	Ant 12	ECI 10	518598	2592.99	17.80	19.00	1.318	-	-	-0.1	0.325	0.428
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 12	ECI 10	518598	2592.99	17.80	19.00	1.318	-	-	0.05	0.053	0.070
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 12	ECI 10	518598	2592.99	17.64	19.00	1.368	-	-	-0.18	0.166	0.227
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 12	ECI 10	518598	2592.99	17.64	19.00	1.368	-	-	-0.04	0.307	0.420
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 12	ECI 10	518598	2592.99	17.64	19.00	1.368	-	-	0.09	0.311	0.425
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 12	ECI 10	518598	2592.99	17.64	19.00	1.368	-	-	-0.02	0.052	0.071
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 24	ECI 10	518598	2592.99	18.67	19.70	1.268	-	-	0.18	0.166	0.210
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 24	ECI 10	518598	2592.99	18.67	19.70	1.268	-	-	0.01	0.349	0.442
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Right Side	10mm	Ant 24	ECI 10	518598	2592.99	18.67	19.70	1.268	-	-	0.17	0.214	0.271
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 24	ECI 10	518598	2592.99	18.67	19.70	1.268	-	-	-0.19	0.072	0.091
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 24	ECI 10	518598	2592.99	18.62	19.70	1.282	-	-	0.03	0.153	0.196
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 24	ECI 10	518598	2592.99	18.62	19.70	1.282	-	-	-0.19	0.333	0.427
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 24	ECI 10	518598	2592.99	18.62	19.70	1.282	-	-	0.06	0.206	0.264
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 24	ECI 10	518598	2592.99	18.62	19.70	1.282	-	-	0.06	0.068	0.087
3000MHz-4000MHz																					
		LTE Band 42	20M	QPSK	1	49	-	Front	10mm	Ant 13	ECI 10	42590	3500	17.72	18.00	1.067	62.9	1.006	0.01	0.128	0.137
		LTE Band 42	20M	QPSK	1	49	-	Back	10mm	Ant 13	ECI 10	42590	3500	17.72	18.00	1.067	62.9	1.006	-0.09	0.407	0.437
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Back	10mm	Ant 13	ECI 10	42590 42788	3500 3519.8	17.58	18.00	1.102	62.9	1.006	0.03	0.388	0.430
		LTE Band 42	20M	QPSK	1	49	-	Left Side	10mm	Ant 13	ECI 10	42590	3500	17.72	18.00	1.067	62.9	1.006	-0.09	0.209	0.224
		LTE Band 42	20M	QPSK	1	49	-	Top Side	10mm	Ant 13	ECI 10	42590	3500	17.72	18.00	1.067	62.9	1.006	0.03	0.403	0.432
		LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 13	ECI 10	42590	3500	17.69	18.00	1.074	62.9	1.006	0.19	0.120	0.130
		LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 13	ECI 10	42590	3500	17.69	18.00	1.074	62.9	1.006	0.02	0.391	0.422
		LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 13	ECI 10	42590	3500	17.69	18.00	1.074	62.9	1.006	0.1	0.211	0.228
		LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 13	ECI 10	42590	3500	17.69	18.00	1.074	62.9	1.006	0.19	0.392	0.424
		LTE Band 42	20M	QPSK	1	49	-	Front	10mm	Ant 101	ECI 10	42590	3500	20.05	20.70	1.161	62.9	1.006	0.02	0.125	0.146
		LTE Band 42	20M	QPSK	1	49	-	Back	10mm	Ant 101	ECI 10	42590	3500	20.05	20.70	1.161	62.9	1.006	-0.13	0.282	0.329
		LTE Band 42	20M	QPSK	1	49	-	Left Side	10mm	Ant 101	ECI 10	42590	3500	20.05	20.70	1.161	62.9	1.006	0.06	0.326	0.381
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Left Side	10mm	Ant 101	ECI 10	42590 42788	3500 3519.8	19.92	20.70	1.197	62.9	1.006	0.15	0.302	0.364
		LTE Band 42	20M	QPSK	1	49	-	Top Side	10mm	Ant 101	ECI 10	42590	3500	20.05	20.70	1.161	62.9	1.006	-	n/a	n/a
		LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 101	ECI 10	42590	3500	20.04	20.70	1.164	62.9	1.006	-0.17	0.119	0.139
		LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 101	ECI 10	42590	3500	20.04	20.70	1.164	62.9	1.006	0.11	0.275	0.322
		LTE Band 42	20M	QPSK	50	0	-	Left Side	10mm	Ant 101	ECI 10	42590	3500	20.04	20.70	1.164	62.9	1.006	-0.02	0.390	0.457
		LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 101	ECI 10	42590	3500	20.04	20.70	1.164	62.9	1.006	-	n/a	n/a
		LTE Band 42	20M	QPSK	1	49	-	Front	10mm	Ant 23	ECI 10	42590	3500	20.57	22.20	1.455	62.9	1.006	0.16	0.184	0.269
		LTE Band 42	20M	QPSK	1	49	-	Back	10mm	Ant 23	ECI 10	42590	3500	20.57	22.20	1.455	62.9	1.006	0.19	0.279	0.409
		LTE Band 42	20M	QPSK	1	49	-	Right Side	10mm	Ant 23	ECI 10	42590	3500	20.57	22.20	1.455	62.9	1.006	-0.18	0.271	0.397
50		LTE Band 42	20M	QPSK	1	49	-	Top Side	10mm	Ant 23	ECI 10	42590	3500	20.57	22.20	1.455	62.9	1.006	0.16	0.342	0.501
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Top Side	10mm	Ant 23	ECI 10	42590 42788	3500 3519.8	20.28	22.20	1.556	62.9	1.006	0.01	0.319	0.499
		LTE Band 42	20M	QPSK	1	49	-	Top Side	10mm	Ant 23	ECI 10	42190	3460	20.50	22.20	1.479	62.9	1.006	-0.01	0.330	0.491
		LTE Band 42	20M	QPSK	1	49	-	Top Side	10mm	Ant 23	ECI 10	42990	3540	20.45	22.20	1.496	62.9	1.006	0.02	0.324	0.488
		LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 23	ECI 10	42590	3500	20.54	22.20	1.466	62.9	1.006	0.12	0.177	0.261
		LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 23	ECI 10	42590	3500	20.54	22.20	1.466	62.9	1.006	0.05	0.267	0.394
		LTE Band 42	20M	QPSK	50	0	-	Right Side	10mm	Ant 23	ECI 10	42590	3500	20.54	22.20	1.466	62.9	1.006	0.06	0.266	0.392



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		LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 23	ECI 10	42590	3500	20.54	22.20	1.466	62.9	1.006	0.12	0.333	0.491
		LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 23	ECI 10	42190	3460	20.45	22.20	1.496	62.9	1.006	-0.13	0.317	0.477
		LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 23	ECI 10	42990	3540	20.40	22.20	1.514	62.9	1.006	0	0.321	0.489
		LTE Band 42	20M	QPSK	1	49	-	Front	10mm	Ant 21	ECI 10	42590	3500	22.65	24.20	1.429	62.9	1.006	-0.19	0.082	0.118
		LTE Band 42	20M	QPSK	1	49	-	Back	10mm	Ant 21	ECI 10	42590	3500	22.65	24.20	1.429	62.9	1.006	0.02	0.193	0.277
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Back	10mm	Ant 21	ECI 10	42590 42788	3500 3519.8	22.55	24.20	1.462	62.9	1.006	0.05	0.175	0.257
		LTE Band 42	20M	QPSK	1	49	-	Right Side	10mm	Ant 21	ECI 10	42590	3500	22.65	24.20	1.429	62.9	1.006	0.11	0.060	0.086
		LTE Band 42	20M	QPSK	1	49	-	Top Side	10mm	Ant 21	ECI 10	42590	3500	22.65	24.20	1.429	62.9	1.006	0.14	0.156	0.224
		LTE Band 42	20M	QPSK	50	0	-	Front	10mm	Ant 21	ECI 10	42590	3500	21.66	23.20	1.426	62.9	1.006	0.04	0.066	0.095
		LTE Band 42	20M	QPSK	50	0	-	Back	10mm	Ant 21	ECI 10	42590	3500	21.66	23.20	1.426	62.9	1.006	0.11	0.158	0.227
		LTE Band 42	20M	QPSK	50	0	-	Right Side	10mm	Ant 21	ECI 10	42590	3500	21.66	23.20	1.426	62.9	1.006	0.11	0.046	0.066
		LTE Band 42	20M	QPSK	50	0	-	Top Side	10mm	Ant 21	ECI 10	42590	3500	21.66	23.20	1.426	62.9	1.006	-0.18	0.126	0.181
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Front	10mm	Ant 13	ECI 10	45090	3750	17.70	18.00	1.072	62.9	1.006	0.05	0.112	0.121
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Back	10mm	Ant 13	ECI 10	45090	3750	17.70	18.00	1.072	62.9	1.006	0.07	0.274	0.295
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Left Side	10mm	Ant 13	ECI 10	45090	3750	17.70	18.00	1.072	62.9	1.006	0.02	0.136	0.147
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Top Side	10mm	Ant 13	ECI 10	45090	3750	17.70	18.00	1.072	62.9	1.006	0.06	0.279	0.301
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Front	10mm	Ant 13	ECI 10	45090	3750	17.68	18.00	1.076	62.9	1.006	0.02	0.109	0.118
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Back	10mm	Ant 13	ECI 10	45090	3750	17.68	18.00	1.076	62.9	1.006	0.06	0.272	0.295
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Left Side	10mm	Ant 13	ECI 10	45090	3750	17.68	18.00	1.076	62.9	1.006	0.05	0.142	0.154
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Top Side	10mm	Ant 13	ECI 10	45090	3750	17.68	18.00	1.076	62.9	1.006	0.06	0.280	0.303
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Front	10mm	Ant 101	ECI 10	45090	3750	18.30	19.70	1.380	62.9	1.006	0.04	0.082	0.114
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Back	10mm	Ant 101	ECI 10	45090	3750	18.30	19.70	1.380	62.9	1.006	0.06	0.255	0.354
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Left Side	10mm	Ant 101	ECI 10	45090	3750	18.30	19.70	1.380	62.9	1.006	0.09	0.235	0.326
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Top Side	10mm	Ant 101	ECI 10	45090	3750	18.30	19.70	1.380	62.9	1.006	-	n/a	n/a
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Front	10mm	Ant 101	ECI 10	45090	3750	18.25	19.70	1.396	62.9	1.006	0.07	0.077	0.108
51	Part 270	LTE Band 43	20M	QPSK	50	0	-	Back	10mm	Ant 101	ECI 10	45090	3750	18.25	19.70	1.396	62.9	1.006	0.15	0.256	0.360
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Left Side	10mm	Ant 101	ECI 10	45090	3750	18.25	19.70	1.396	62.9	1.006	0.02	0.237	0.333
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Top Side	10mm	Ant 101	ECI 10	45090	3750	18.25	19.70	1.396	62.9	1.006	-	n/a	n/a
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Front	10mm	Ant 23	ECI 10	45090	3750	19.52	21.20	1.472	62.9	1.006	0.15	0.113	0.167
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Back	10mm	Ant 23	ECI 10	45090	3750	19.52	21.20	1.472	62.9	1.006	-0.03	0.188	0.278
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Right Side	10mm	Ant 23	ECI 10	45090	3750	19.52	21.20	1.472	62.9	1.006	-0.15	0.194	0.287
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Top Side	10mm	Ant 23	ECI 10	45090	3750	19.52	21.20	1.472	62.9	1.006	-0.05	0.223	0.330
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Front	10mm	Ant 23	ECI 10	45090	3750	19.47	21.20	1.489	62.9	1.006	0.11	0.111	0.166
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Back	10mm	Ant 23	ECI 10	45090	3750	19.47	21.20	1.489	62.9	1.006	-0.11	0.180	0.270
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Right Side	10mm	Ant 23	ECI 10	45090	3750	19.47	21.20	1.489	62.9	1.006	0.16	0.184	0.276
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Top Side	10mm	Ant 23	ECI 10	45090	3750	19.47	21.20	1.489	62.9	1.006	0.06	0.217	0.325
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Front	10mm	Ant 21	ECI 10	45090	3750	21.66	23.20	1.426	62.9	1.006	-0.08	0.098	0.141
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Back	10mm	Ant 21	ECI 10	45090	3750	21.66	23.20	1.426	62.9	1.006	0.19	0.222	0.318
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Right Side	10mm	Ant 21	ECI 10	45090	3750	21.66	23.20	1.426	62.9	1.006	-0.04	0.055	0.079
	Part 270	LTE Band 43	20M	QPSK	1	49	-	Top Side	10mm	Ant 21	ECI 10	45090	3750	21.66	23.20	1.426	62.9	1.006	0.08	0.167	0.240
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Front	10mm	Ant 21	ECI 10	45090	3750	21.64	23.20	1.432	62.9	1.006	-0.11	0.092	0.133
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Back	10mm	Ant 21	ECI 10	45090	3750	21.64	23.20	1.432	62.9	1.006	0	0.215	0.310
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Right Side	10mm	Ant 21	ECI 10	45090	3750	21.64	23.20	1.432	62.9	1.006	0	0.057	0.082
	Part 270	LTE Band 43	20M	QPSK	50	0	-	Top Side	10mm	Ant 21	ECI 10	45090	3750	21.64	23.20	1.432	62.9	1.006	-0.18	0.162	0.233
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 13	ECI 10	633332	3499.98	14.96	15.80	1.213	-	-	-0.15	0.115	0.140
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 13	ECI 10	633332	3499.98	14.96	15.80	1.213	-	-	-0.01	0.368	0.447
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Left Side	10mm	Ant 13	ECI 10	633332	3499.98	14.96	15.80	1.213	-	-	-0.06	0.211	0.256
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 13	ECI 10	633332	3499.98	14.96	15.80	1.213	-	-	0.18	0.270	0.328
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 13	ECI 10	633332	3499.98	14.89	15.80	1.233	-	-	0	0.109	0.134
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 13	ECI 10	633332	3499.98	14.89	15.80	1.233	-	-	-0.03	0.342	0.422
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 13	ECI 10	633332	3499.98	14.89	15.80	1.233	-	-	-0.18	0.198	0.244
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 13	ECI 10	633332	3499.98	14.89	15.80	1.233	-	-	-0.05	0.252	0.311
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 13	ECI 10	656000	3840	14.82	15.80	1.253	-	-	-0.1	0.056	0.070
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 13	ECI 10	656000	3840	14.82	15.80	1.253	-	-	-0.18	0.186	0.233
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Left Side	10mm	Ant 13	ECI 10	656000	3840	14.82	15.80	1.253	-	-	0.11	0.107	0.134
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 13	ECI 10	656000	3840	14.82	15.80	1.253	-	-	0.14	0.139	0.174



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	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 13	ECI 10	656000	3840	14.65	15.80	1.303	-	-	-0.09	0.057	0.074
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 13	ECI 10	656000	3840	14.65	15.80	1.303	-	-	0.1	0.176	0.229
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 13	ECI 10	656000	3840	14.65	15.80	1.303	-	-	-0.15	0.100	0.130
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 13	ECI 10	656000	3840	14.65	15.80	1.303	-	-	-0.1	0.128	0.167
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 101	ECI 10	633332	3499.98	17.13	18.70	1.435	-	-	-0.19	0.110	0.158
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 101	ECI 10	633332	3499.98	17.13	18.70	1.435	-	-	-0.02	0.309	0.444
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Left Side	10mm	Ant 101	ECI 10	633332	3499.98	17.13	18.70	1.435	-	-	0.19	0.330	0.474
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 101	ECI 10	633332	3499.98	17.13	18.70	1.435	-	-	-	n/a	n/a
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 101	ECI 10	633332	3499.98	17.00	18.70	1.479	-	-	-0.07	0.107	0.158
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 101	ECI 10	633332	3499.98	17.00	18.70	1.479	-	-	0.06	0.294	0.435
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 101	ECI 10	633332	3499.98	17.00	18.70	1.479	-	-	-0.17	0.319	0.472
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 101	ECI 10	633332	3499.98	17.00	18.70	1.479	-	-	-	n/a	n/a
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 101	ECI 10	656000	3840	17.20	18.70	1.413	-	-	0.06	0.116	0.164
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 101	ECI 10	656000	3840	17.20	18.70	1.413	-	-	0	0.323	0.456
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Left Side	10mm	Ant 101	ECI 10	656000	3840	17.20	18.70	1.413	-	-	0.09	0.337	0.476
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 101	ECI 10	656000	3840	17.20	18.70	1.413	-	-	-	n/a	n/a
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 101	ECI 10	656000	3840	17.15	18.70	1.429	-	-	-0.01	0.113	0.161
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 101	ECI 10	656000	3840	17.15	18.70	1.429	-	-	-0.01	0.313	0.447
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 101	ECI 10	656000	3840	17.15	18.70	1.429	-	-	0.15	0.332	0.474
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 101	ECI 10	656000	3840	17.15	18.70	1.429	-	-	-	n/a	n/a
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 23	ECI 10	633332	3499.98	17.11	18.20	1.285	-	-	0.13	0.261	0.335
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 23	ECI 10	633332	3499.98	17.11	18.20	1.285	-	-	-0.09	0.372	0.478
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Right Side	10mm	Ant 23	ECI 10	633332	3499.98	17.11	18.20	1.285	-	-	0.05	0.401	0.515
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 23	ECI 10	633332	3499.98	17.11	18.20	1.285	-	-	-0.12	0.456	0.586
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 23	ECI 10	633332	3499.98	16.95	18.20	1.334	-	-	0.14	0.246	0.328
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 23	ECI 10	633332	3499.98	16.95	18.20	1.334	-	-	-0.12	0.364	0.485
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 23	ECI 10	633332	3499.98	16.95	18.20	1.334	-	-	-0.06	0.393	0.524
52	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 23	ECI 10	633332	3499.98	16.95	18.20	1.334	-	-	-0.09	0.512	0.683
	Part 27Q	FR1 n77	100M	QPSK	270	0	DFT-30	Top Side	10mm	Ant 23	ECI 10	633332	3499.98	16.85	18.20	1.365	-	-	0.03	0.466	0.636
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 23	ECI 10	656000	3840	16.97	18.20	1.327	-	-	0.06	0.161	0.214
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 23	ECI 10	656000	3840	16.97	18.20	1.327	-	-	0.05	0.230	0.305
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Side	10mm	Ant 23	ECI 10	656000	3840	16.97	18.20	1.327	-	-	0.12	0.245	0.325
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 23	ECI 10	656000	3840	16.97	18.20	1.327	-	-	-0.08	0.316	0.419
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 23	ECI 10	656000	3840	16.89	18.20	1.352	-	-	-0.01	0.157	0.212
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 23	ECI 10	656000	3840	16.89	18.20	1.352	-	-	0.03	0.237	0.320
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 23	ECI 10	656000	3840	16.89	18.20	1.352	-	-	0.13	0.248	0.335
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 23	ECI 10	656000	3840	16.89	18.20	1.352	-	-	0.13	0.296	0.400
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 21	ECI 10	633332	3499.98	17.94	19.20	1.337	-	-	-0.03	0.070	0.094
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 21	ECI 10	633332	3499.98	17.94	19.20	1.337	-	-	0.17	0.169	0.226
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Right Side	10mm	Ant 21	ECI 10	633332	3499.98	17.94	19.20	1.337	-	-	-0.07	0.050	0.067
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 21	ECI 10	633332	3499.98	17.94	19.20	1.337	-	-	-0.06	0.144	0.192
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 21	ECI 10	633332	3499.98	17.92	19.20	1.343	-	-	-0.14	0.068	0.091
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 21	ECI 10	633332	3499.98	17.92	19.20	1.343	-	-	0.1	0.159	0.213
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 21	ECI 10	633332	3499.98	17.92	19.20	1.343	-	-	0.1	0.049	0.066
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 21	ECI 10	633332	3499.98	17.92	19.20	1.343	-	-	-0.18	0.142	0.191
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 21	ECI 10	656000	3840	17.91	19.20	1.346	-	-	-0.03	0.134	0.180
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 21	ECI 10	656000	3840	17.91	19.20	1.346	-	-	-0.16	0.315	0.424
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Right Side	10mm	Ant 21	ECI 10	656000	3840	17.91	19.20	1.346	-	-	-0.18	0.090	0.121
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 21	ECI 10	656000	3840	17.91	19.20	1.346	-	-	-0.03	0.263	0.354
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 21	ECI 10	656000	3840	17.81	19.20	1.377	-	-	-0.11	0.124	0.171
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 21	ECI 10	656000	3840	17.81	19.20	1.377	-	-	0.05	0.295	0.406
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 21	ECI 10	656000	3840	17.81	19.20	1.377	-	-	-0.17	0.092	0.127
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 21	ECI 10	656000	3840	17.81	19.20	1.377	-	-	0.19	0.260	0.358
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 101	ECI 10	633332	3499.98	17.70	19.20	1.413	-	-	-0.01	0.112	0.158
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 101	ECI 10	633332	3499.98	17.70	19.20	1.413	-	-	-0.1	0.322	0.455
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Side	10mm	Ant 101	ECI 10	633332	3499.98	17.70	19.20	1.413	-	-	-0.05	0.323	0.456



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	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 101	ECI 10	633332	3499.98	17.70	19.20	1.413	-	-	-	n/a	n/a
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 101	ECI 10	633332	3499.98	17.57	19.20	1.455	-	-	0.15	0.107	0.156
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 101	ECI 10	633332	3499.98	17.57	19.20	1.455	-	-	-0.12	0.304	0.442
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 101	ECI 10	633332	3499.98	17.57	19.20	1.455	-	-	-0.02	0.326	0.474
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 101	ECI 10	633332	3499.98	17.57	19.20	1.455	-	-	-	n/a	n/a
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 101	ECI 10	650000	3750	17.65	19.20	1.429	-	-	0.04	0.104	0.149
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 101	ECI 10	650000	3750	17.65	19.20	1.429	-	-	0.18	0.292	0.417
53	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Left Side	10mm	Ant 101	ECI 10	650000	3750	17.65	19.20	1.429	-	-	0.02	0.353	0.504
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 101	ECI 10	650000	3750	17.65	19.20	1.429	-	-	-	n/a	n/a
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 101	ECI 10	650000	3750	17.58	19.20	1.452	-	-	-0.14	0.093	0.135
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 101	ECI 10	650000	3750	17.58	19.20	1.452	-	-	0.08	0.270	0.392
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 101	ECI 10	650000	3750	17.58	19.20	1.452	-	-	-0.01	0.284	0.412
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 101	ECI 10	650000	3750	17.58	19.20	1.452	-	-	-	n/a	n/a
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 21	ECI 10	633332	3499.98	18.59	19.70	1.291	-	-	-0.13	0.070	0.090
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 21	ECI 10	633332	3499.98	18.59	19.70	1.291	-	-	-0.16	0.170	0.220
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Side	10mm	Ant 21	ECI 10	633332	3499.98	18.59	19.70	1.291	-	-	-0.1	0.052	0.067
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 21	ECI 10	633332	3499.98	18.59	19.70	1.291	-	-	-0.1	0.143	0.185
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 21	ECI 10	633332	3499.98	18.49	19.70	1.321	-	-	0.14	0.069	0.091
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 21	ECI 10	633332	3499.98	18.49	19.70	1.321	-	-	-0.02	0.159	0.210
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 21	ECI 10	633332	3499.98	18.49	19.70	1.321	-	-	-0.18	0.050	0.066
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 21	ECI 10	633332	3499.98	18.49	19.70	1.321	-	-	0.09	0.136	0.180
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	10mm	Ant 21	ECI 10	650000	3750	18.63	19.70	1.279	-	-	0.09	0.111	0.142
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	10mm	Ant 21	ECI 10	650000	3750	18.63	19.70	1.279	-	-	-0.06	0.238	0.304
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Right Side	10mm	Ant 21	ECI 10	650000	3750	18.63	19.70	1.279	-	-	0.14	0.081	0.104
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Top Side	10mm	Ant 21	ECI 10	650000	3750	18.63	19.70	1.279	-	-	-0.01	0.220	0.281
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 21	ECI 10	650000	3750	18.59	19.70	1.291	-	-	0	0.112	0.145
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 21	ECI 10	650000	3750	18.59	19.70	1.291	-	-	-0.1	0.255	0.329
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 21	ECI 10	650000	3750	18.59	19.70	1.291	-	-	0.08	0.077	0.099
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 21	ECI 10	650000	3750	18.59	19.70	1.291	-	-	-0.16	0.212	0.274

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN/Bluetooth																
	Bluetooth	DH5 1Mbps	Front	10mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	0.05	0.014	0.024
54	Bluetooth	DH5 1Mbps	Back	10mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	-0.07	0.022	0.037
	Bluetooth	DH5 1Mbps	Right Side	10mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	0.14	0.007	0.012
	Bluetooth	DH5 1Mbps	Top Side	10mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	0.08	0.021	0.035
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 22	Hotspot on	11	2462	18.40	19.00	1.148	99.47	1.005	-0.1	0.136	0.157
55	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 22	Hotspot on	11	2462	18.40	19.00	1.148	99.47	1.005	-0.19	0.214	0.247
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 22	Hotspot on	11	2462	18.40	19.00	1.148	99.47	1.005	0.03	0.063	0.073
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 22	Hotspot on	11	2462	18.40	19.00	1.148	99.47	1.005	0.01	0.202	0.233
	WLAN5.2GHz	802.11n-HT40 MCS0	Front	10mm	Ant 23	Hotspot on	46	5230	17.32	18.50	1.311	93.88	1.065	0.08	0.314	0.438
	WLAN5.2GHz	802.11n-HT40 MCS0	Back	10mm	Ant 23	Hotspot on	46	5230	17.32	18.50	1.311	93.88	1.065	-0.06	0.259	0.362
56	WLAN5.2GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 23	Hotspot on	46	5230	17.32	18.50	1.311	93.88	1.065	0.08	0.424	0.592
	WLAN5.2GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 23	Hotspot on	46	5230	17.32	18.50	1.311	93.88	1.065	0.19	0.276	0.385
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 23	Hotspot on	155	5775	13.04	14.00	1.247	88.04	1.136	0.12	0.196	0.278
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 23	Hotspot on	155	5775	13.04	14.00	1.247	88.04	1.136	0	0.182	0.258
57	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 23	Hotspot on	155	5775	13.04	14.00	1.247	88.04	1.136	-0.19	0.318	0.451
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 23	Hotspot on	155	5775	13.04	14.00	1.247	88.04	1.136	0.02	0.134	0.190



16.3 Body Worn Accessory SAR

Plot No.	Note	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
750MHz																					
58		LTE Band 12	10M	QPSK	1	25	-	Front	15mm	Ant 11	ECI 7	23095	707.5	24.13	25.30	1.309	-	-	-0.08	0.209	0.274
		LTE Band 12	10M	QPSK	1	25	-	Back	15mm	Ant 11	ECI 7	23095	707.5	24.13	25.30	1.309	-	-	0.08	0.269	0.352
		LTE Band 12	10M	QPSK	25	0	-	Front	15mm	Ant 11	ECI 7	23095	707.5	23.10	24.30	1.318	-	-	-0.15	0.162	0.214
		LTE Band 12	10M	QPSK	25	0	-	Back	15mm	Ant 11	ECI 7	23095	707.5	23.10	24.30	1.318	-	-	0.18	0.219	0.289
		LTE Band 12	10M	QPSK	1	25	-	Front	15mm	Ant 25	ECI 7	23095	707.5	23.25	24.50	1.334	-	-	-	n/a	n/a
		LTE Band 12	10M	QPSK	1	25	-	Back	15mm	Ant 25	ECI 7	23095	707.5	23.25	24.50	1.334	-	-	0.19	0.049	0.065
		LTE Band 12	10M	QPSK	25	0	-	Front	15mm	Ant 25	ECI 7	23095	707.5	22.10	23.50	1.380	-	-	-	n/a	n/a
		LTE Band 12	10M	QPSK	25	0	-	Back	15mm	Ant 25	ECI 7	23095	707.5	22.10	23.50	1.380	-	-	0.05	0.035	0.048
59		LTE Band 13	10M	QPSK	1	25	-	Front	15mm	Ant 11	ECI 7	23230	782	22.23	23.80	1.435	-	-	0	0.101	0.145
		LTE Band 13	10M	QPSK	1	25	-	Back	15mm	Ant 11	ECI 7	23230	782	22.23	23.80	1.435	-	-	0.14	0.163	0.234
		LTE Band 13	10M	QPSK	25	0	-	Front	15mm	Ant 11	ECI 7	23230	782	22.20	23.80	1.445	-	-	-0.19	0.094	0.136
		LTE Band 13	10M	QPSK	25	0	-	Back	15mm	Ant 11	ECI 7	23230	782	22.20	23.80	1.445	-	-	0.07	0.157	0.227
		LTE Band 13	10M	QPSK	1	25	-	Front	15mm	Ant 25	ECI 7	23230	782	22.93	24.50	1.435	-	-	0.08	0.095	0.136
		LTE Band 13	10M	QPSK	1	25	-	Back	15mm	Ant 25	ECI 7	23230	782	22.93	24.50	1.435	-	-	-0.18	0.136	0.195
		LTE Band 13	10M	QPSK	25	0	-	Front	15mm	Ant 25	ECI 7	23230	782	21.85	23.50	1.462	-	-	-0.03	0.090	0.132
		LTE Band 13	10M	QPSK	25	0	-	Back	15mm	Ant 25	ECI 7	23230	782	21.85	23.50	1.462	-	-	0.08	0.106	0.155
835MHz																					
60		GSM850	-	-	-	-	GPRS 2 Tx slots	Front	15mm	Ant 11	ECI 7	189	836.4	27.75	29.00	1.334	-	-	-0.01	0.239	0.319
		GSM850	-	-	-	-	GPRS 2 Tx slots	Back	15mm	Ant 11	ECI 7	189	836.4	27.75	29.00	1.334	-	-	-0.17	0.314	0.419
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 11	ECI 7	4182	836.4	21.92	23.00	1.282	-	-	0.03	0.252	0.323
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 11	ECI 7	4182	836.4	21.92	23.00	1.282	-	-	0.04	0.345	0.442
61		WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 25	ECI 7	4182	836.4	22.84	24.50	1.466	-	-	-0.07	0.233	0.341
		WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 25	ECI 7	4182	836.4	22.84	24.50	1.466	-	-	0.07	0.405	0.594
		LTE Band 26	15M	QPSK	1	37	-	Front	15mm	Ant 11	ECI 7	26865	831.5	23.38	24.80	1.387	-	-	0.09	0.367	0.509
		LTE Band 26	15M	QPSK	1	37	-	Back	15mm	Ant 11	ECI 7	26865	831.5	23.38	24.80	1.387	-	-	-0.01	0.517	0.717
62		LTE Band 26	15M	QPSK	36	0	-	Front	15mm	Ant 11	ECI 7	26865	831.5	23.03	24.30	1.340	-	-	0.01	0.330	0.442
		LTE Band 26	15M	QPSK	36	0	-	Back	15mm	Ant 11	ECI 7	26865	831.5	23.03	24.30	1.340	-	-	0.04	0.466	0.624
		LTE Band 26	15M	QPSK	1	37	-	Front	15mm	Ant 25	ECI 7	26865	831.5	23.09	24.50	1.384	-	-	-0.03	0.225	0.311
		LTE Band 26	15M	QPSK	1	37	-	Back	15mm	Ant 25	ECI 7	26865	831.5	23.09	24.50	1.384	-	-	0.19	0.315	0.436
		LTE Band 26	15M	QPSK	36	0	-	Front	15mm	Ant 25	ECI 7	26865	831.5	21.96	23.50	1.426	-	-	-0.12	0.185	0.264
		LTE Band 26	15M	QPSK	36	0	-	Back	15mm	Ant 25	ECI 7	26865	831.5	21.96	23.50	1.426	-	-	-0.13	0.255	0.364
		FR1 n26	20M	QPSK	1	53	DFT-15	Front	15mm	Ant 11	ECI 7	166300	831.5	24.12	25.50	1.374	-	-	0.01	0.369	0.507
		FR1 n26	20M	QPSK	1	53	DFT-15	Back	15mm	Ant 11	ECI 7	166300	831.5	24.12	25.50	1.374	-	-	-0.04	0.580	0.797
63		FR1 n26	20M	QPSK	50	28	DFT-15	Front	15mm	Ant 11	ECI 7	166300	831.5	23.96	25.50	1.426	-	-	0.09	0.356	0.508
		FR1 n26	20M	QPSK	50	28	DFT-15	Back	15mm	Ant 11	ECI 7	166300	831.5	23.96	25.50	1.426	-	-	0.17	0.473	0.674
		FR1 n26	20M	QPSK	1	53	DFT-15	Front	15mm	Ant 25	ECI 7	166300	831.5	22.91	24.50	1.442	-	-	0.17	0.187	0.270
		FR1 n26	20M	QPSK	1	53	DFT-15	Back	15mm	Ant 25	ECI 7	166300	831.5	22.91	24.50	1.442	-	-	-0.14	0.263	0.379
		FR1 n26	20M	QPSK	50	28	DFT-15	Front	15mm	Ant 25	ECI 7	166300	831.5	22.72	24.50	1.507	-	-	-0.03	0.181	0.273
		FR1 n26	20M	QPSK	50	28	DFT-15	Back	15mm	Ant 25	ECI 7	166300	831.5	22.72	24.50	1.507	-	-	0.16	0.246	0.371
		LTE Band 4	20M	QPSK	1	49	-	Front	15mm	Ant 41	ECI 7	20175	1732.5	22.85	24.00	1.303	-	-	-0.19	0.200	0.261
		LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 41	ECI 7	20175	1732.5	22.85	24.00	1.303	-	-	0.09	0.232	0.302
64		LTE Band 4	20M	QPSK	50	0	-	Front	15mm	Ant 41	ECI 7	20175	1732.5	22.83	24.00	1.309	-	-	0.01	0.190	0.249
		LTE Band 4	20M	QPSK	50	0	-	Back	15mm	Ant 41	ECI 7	20175	1732.5	22.83	24.00	1.309	-	-	0.19	0.220	0.288
		LTE Band 4	20M	QPSK	1	49	-	Front	15mm	Ant 12	ECI 7	20175	1732.5	23.98	25.40	1.387	-	-	-0.1	0.151	0.209
		LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	20175	1732.5	23.98	25.40	1.387	-	-	-0.1	0.151	0.209
1750MHz																					
65		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 14	ECI 7	1413	1732.6	24.30	25.00	1.175	-	-	-0.08	0.280	0.329
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 14	ECI 7	1413	1732.6	24.30	25.00	1.175	-	-	-0.07	0.481	0.565
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 41	ECI 7	1413	1732.6	22.07	23.00	1.239	-	-	0.14	0.189	0.234
		WCDMA IV	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 41	ECI 7	1413	1732.6	22.07	23.00	1.239	-	-	0.03	0.223	0.276
66		LTE Band 4	20M	QPSK	1	49	-	Front	15mm	Ant 41	ECI 7	20175	1732.5	22.85	24.00	1.303	-	-	-0.19	0.200	0.261
		LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 41	ECI 7	20175	1732.5	22.85	24.00	1.303	-	-	0.09	0.232	0.302
		LTE Band 4	20M	QPSK	50	0	-	Front	15mm	Ant 41	ECI 7	20175	1732.5	22.83	24.00	1.309	-	-	0.01	0.190	0.249
		LTE Band 4	20M	QPSK	50	0	-	Back	15mm	Ant 41	ECI 7	20175	1732.5	22.83	24.00	1.309	-	-	0.19	0.220	0.288
67		LTE Band 4	20M	QPSK	1	49	-	Front	15mm	Ant 12	ECI 7	20175	1732.5	23.98	25.40	1.387	-	-	-0.1	0.151	0.209
		LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	20175	1732.5	23.98	25.40	1.387	-	-	-0.1	0.151	0.209
		LTE Band 4	20M	QPSK	50	0	-	Front	15mm	Ant 12	ECI 7	20175	1732.5	23.98	25.40	1.387	-	-	-0.1	0.151	0.209
		LTE Band 4	20M	QPSK	50	0	-	Back	15mm	Ant 12	ECI 7	20175	1732.5	23.98	25.40	1.387	-	-	-0.1	0.151	0.209



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		LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	20175	1732.5	23.98	25.40	1.387	-	-	-0.13	0.175	0.243
		LTE Band 4	20M	QPSK	50	0	-	Front	15mm	Ant 12	ECI 7	20175	1732.5	23.24	24.70	1.400	-	-	-0.08	0.140	0.196
		LTE Band 4	20M	QPSK	50	0	-	Back	15mm	Ant 12	ECI 7	20175	1732.5	23.24	24.70	1.400	-	-	-0.06	0.166	0.232
		LTE Band 4	20M	QPSK	1	49	-	Front	15mm	Ant 24	ECI 7	20175	1732.5	22.69	23.20	1.125	-	-	-0.01	0.118	0.133
		LTE Band 4	20M	QPSK	1	49	-	Back	15mm	Ant 24	ECI 7	20175	1732.5	22.69	23.20	1.125	-	-	0.07	0.162	0.182
		LTE Band 4	20M	QPSK	50	0	-	Front	15mm	Ant 24	ECI 7	20175	1732.5	21.49	22.20	1.178	-	-	-0.14	0.091	0.107
		LTE Band 4	20M	QPSK	50	0	-	Back	15mm	Ant 24	ECI 7	20175	1732.5	21.49	22.20	1.178	-	-	-0.02	0.126	0.148
		LTE Band 66	20M	QPSK	1	49	-	Front	15mm	Ant 14	ECI 7	132322	1745	24.01	25.00	1.256	-	-	0.1	0.318	0.399
66		LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 14	ECI 7	132322	1745	24.01	25.00	1.256	-	-	-0.13	0.438	0.550
	ULCA	LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 14	ECI 7	132322 132520	1745 1764.8	23.72	25.00	1.343	-	-	0.08	0.388	0.521
		LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 14	ECI 7	132322	1745	22.97	24.00	1.268	-	-	0.05	0.255	0.323
		LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 14	ECI 7	132322	1745	22.97	24.00	1.268	-	-	0	0.370	0.469
		LTE Band 66	20M	QPSK	1	49	-	Front	15mm	Ant 41	ECI 7	132322	1745	21.93	23.20	1.340	-	-	0.08	0.200	0.268
		LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 41	ECI 7	132322	1745	21.93	23.20	1.340	-	-	0.19	0.224	0.300
	ULCA	LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 41	ECI 7	132322 132520	1745 1764.8	21.88	23.20	1.355	-	-	0.13	0.209	0.283
		LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 41	ECI 7	132322	1745	21.90	23.20	1.349	-	-	-0.05	0.203	0.274
		LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 41	ECI 7	132322	1745	21.90	23.20	1.349	-	-	0.17	0.216	0.291
		LTE Band 66	20M	QPSK	1	49	-	Front	15mm	Ant 12	ECI 7	132322	1745	22.22	23.80	1.439	-	-	-0.14	0.145	0.209
		LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	132322	1745	22.22	23.80	1.439	-	-	-0.04	0.232	0.334
	ULCA	LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	132322 132520	1745 1764.8	22.18	23.80	1.452	-	-	0.12	0.219	0.318
		LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 12	ECI 7	132322	1745	22.20	23.80	1.445	-	-	0.02	0.142	0.205
		LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 12	ECI 7	132322	1745	22.20	23.80	1.445	-	-	0.04	0.225	0.325
		LTE Band 66	20M	QPSK	1	49	-	Front	15mm	Ant 24	ECI 7	132322	1745	21.90	22.70	1.202	-	-	-0.07	0.137	0.165
		LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 24	ECI 7	132322	1745	21.90	22.70	1.202	-	-	0.11	0.189	0.227
	ULCA	LTE Band 66	20M	QPSK	1	49	-	Back	15mm	Ant 24	ECI 7	132322 132520	1745 1764.8	21.82	22.70	1.225	-	-	0.05	0.172	0.211
		LTE Band 66	20M	QPSK	50	0	-	Front	15mm	Ant 24	ECI 7	132322	1745	21.71	22.20	1.119	-	-	-0.02	0.119	0.133
		LTE Band 66	20M	QPSK	50	0	-	Back	15mm	Ant 24	ECI 7	132322	1745	21.71	22.20	1.119	-	-	-0.06	0.170	0.190
		FR1 n66	40M	QPSK	1	108	DFT-15	Front	15mm	Ant 14	ECI 7	349000	1745	23.92	25.00	1.282	-	-	-0.14	0.315	0.404
67		FR1 n66	40M	QPSK	1	108	DFT-15	Back	15mm	Ant 14	ECI 7	349000	1745	23.92	25.00	1.282	-	-	-0.1	0.539	0.691
		FR1 n66	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 14	ECI 7	349000	1745	23.82	25.00	1.312	-	-	-0.07	0.297	0.390
		FR1 n66	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 14	ECI 7	349000	1745	23.82	25.00	1.312	-	-	-0.1	0.426	0.559
		FR1 n66	40M	QPSK	1	108	DFT-15	Front	15mm	Ant 41	ECI 7	349000	1745	21.72	22.90	1.312	-	-	0.12	0.292	0.383
		FR1 n66	40M	QPSK	1	108	DFT-15	Back	15mm	Ant 41	ECI 7	349000	1745	21.72	22.90	1.312	-	-	-0.04	0.305	0.400
		FR1 n66	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 41	ECI 7	349000	1745	21.65	22.90	1.334	-	-	0.06	0.280	0.373
		FR1 n66	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 41	ECI 7	349000	1745	21.65	22.90	1.334	-	-	0.04	0.301	0.401
		FR1 n66	40M	QPSK	1	108	DFT-15	Front	15mm	Ant 12	ECI 7	349000	1745	22.75	24.10	1.365	-	-	0.12	0.152	0.207
		FR1 n66	40M	QPSK	1	108	DFT-15	Back	15mm	Ant 12	ECI 7	349000	1745	22.75	24.10	1.365	-	-	0.19	0.245	0.334
		FR1 n66	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 12	ECI 7	349000	1745	22.73	24.10	1.371	-	-	0.17	0.143	0.196
		FR1 n66	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 12	ECI 7	349000	1745	22.73	24.10	1.371	-	-	-0.11	0.230	0.315
		FR1 n66	40M	QPSK	1	108	DFT-15	Front	15mm	Ant 24	ECI 7	349000	1745	22.53	23.70	1.309	-	-	0.18	0.154	0.202
		FR1 n66	40M	QPSK	1	108	DFT-15	Back	15mm	Ant 24	ECI 7	349000	1745	22.53	23.70	1.309	-	-	0.19	0.212	0.278
		FR1 n66	40M	QPSK	108	54	DFT-15	Front	15mm	Ant 24	ECI 7	349000	1745	22.39	23.70	1.352	-	-	0.03	0.149	0.201
		FR1 n66	40M	QPSK	108	54	DFT-15	Back	15mm	Ant 24	ECI 7	349000	1745	22.39	23.70	1.352	-	-	0.09	0.209	0.283
1900MHz																					
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Front	15mm	Ant 14	ECI 7	661	1880	28.21	29.00	1.199	-	-	-0.09	0.166	0.199
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Back	15mm	Ant 14	ECI 7	661	1880	28.21	29.00	1.199	-	-	-0.07	0.217	0.260
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Front	15mm	Ant 41	ECI 7	661	1880	28.84	30.00	1.306	-	-	0.09	0.215	0.281
68		GSM1900	-	-	-	-	GPRS 2 Tx slots	Back	15mm	Ant 41	ECI 7	661	1880	28.84	30.00	1.306	-	-	0.13	0.240	0.313
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 14	ECI 7	9400	1880	24.44	25.00	1.138	-	-	-0.03	0.255	0.290
69		WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 14	ECI 7	9400	1880	24.44	25.00	1.138	-	-	-0.03	0.327	0.372
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	15mm	Ant 41	ECI 7	9400	1880	22.37	23.50	1.297	-	-	-0.13	0.198	0.257
		WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	15mm	Ant 41	ECI 7	9400	1880	22.37	23.50	1.297	-	-	-0.13	0.233	0.302
		LTE Band 2	20M	QPSK	1	49	-	Front	15mm	Ant 14	ECI 7	18900	1880	23.83	25.00	1.309	-	-	0.14	0.215	0.281
70		LTE Band 2	20M	QPSK	1	49	-	Back	15mm	Ant 14	ECI 7	18900	1880	23.83	25.00	1.309	-	-	0.17	0.275	0.360
		LTE Band 2	20M	QPSK	50	0	-	Front	15mm	Ant 14	ECI 7	18900	1880	22.62	24.00	1.374	-	-	0.19	0.177	0.243



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		LTE Band 2	20M	QPSK	50	0	-	Back	15mm	Ant 14	ECI 7	18900	1880	22.62	24.00	1.374	-	-	0.06	0.239	0.328
		LTE Band 2	20M	QPSK	1	49	-	Front	15mm	Ant 41	ECI 7	18900	1880	22.23	24.00	1.503	-	-	-0.17	0.218	0.328
		LTE Band 2	20M	QPSK	1	49	-	Back	15mm	Ant 41	ECI 7	18900	1880	22.23	24.00	1.503	-	-	0.07	0.237	0.356
		LTE Band 2	20M	QPSK	50	0	-	Front	15mm	Ant 41	ECI 7	18900	1880	22.18	24.00	1.521	-	-	-0.15	0.211	0.321
		LTE Band 2	20M	QPSK	50	0	-	Back	15mm	Ant 41	ECI 7	18900	1880	22.18	24.00	1.521	-	-	-0.17	0.229	0.348
		LTE Band 2	20M	QPSK	1	49	-	Front	15mm	Ant 12	ECI 7	18900	1880	19.80	21.50	1.479	-	-	-	n/a	n/a
		LTE Band 2	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	18900	1880	19.80	21.50	1.479	-	-	-	n/a	n/a
		LTE Band 2	20M	QPSK	50	0	-	Front	15mm	Ant 12	ECI 7	18900	1880	19.78	21.50	1.486	-	-	-	n/a	n/a
		LTE Band 2	20M	QPSK	50	0	-	Back	15mm	Ant 12	ECI 7	18900	1880	19.78	21.50	1.486	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	1	53	DFT-15	Front	15mm	Ant 14	ECI 7	376000	1880	23.51	24.50	1.256	-	-	-0.19	0.219	0.275
		FR1 n2	20M	QPSK	1	53	DFT-15	Back	15mm	Ant 14	ECI 7	376000	1880	23.51	24.50	1.256	-	-	0.03	0.301	0.378
		FR1 n2	20M	QPSK	50	28	DFT-15	Front	15mm	Ant 14	ECI 7	376000	1880	23.29	24.50	1.321	-	-	0.08	0.205	0.271
71		FR1 n2	20M	QPSK	50	28	DFT-15	Back	15mm	Ant 14	ECI 7	376000	1880	23.29	24.50	1.321	-	-	0.05	0.332	0.439
		FR1 n2	20M	QPSK	1	53	DFT-15	Front	15mm	Ant 41	ECI 7	376000	1880	22.44	23.20	1.191	-	-	0.12	0.265	0.316
		FR1 n2	20M	QPSK	1	53	DFT-15	Back	15mm	Ant 41	ECI 7	376000	1880	22.44	23.20	1.191	-	-	0.16	0.271	0.323
		FR1 n2	20M	QPSK	50	28	DFT-15	Front	15mm	Ant 41	ECI 7	376000	1880	22.31	23.20	1.227	-	-	-0.13	0.252	0.309
		FR1 n2	20M	QPSK	50	28	DFT-15	Back	15mm	Ant 41	ECI 7	376000	1880	22.31	23.20	1.227	-	-	-0.03	0.262	0.322
		FR1 n2	20M	QPSK	1	53	DFT-15	Front	15mm	Ant 12	ECI 7	376000	1880	19.40	20.70	1.349	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	1	53	DFT-15	Back	15mm	Ant 12	ECI 7	376000	1880	19.40	20.70	1.349	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	50	28	DFT-15	Front	15mm	Ant 12	ECI 7	376000	1880	19.35	20.70	1.365	-	-	-	n/a	n/a
		FR1 n2	20M	QPSK	50	28	DFT-15	Back	15mm	Ant 12	ECI 7	376000	1880	19.35	20.70	1.365	-	-	-	n/a	n/a
2600MHz																					
		LTE Band 7	20M	QPSK	1	49	-	Front	15mm	Ant 14	ECI 7	21100	2535	24.03	25.00	1.250	-	-	-0.02	0.266	0.333
72		LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 14	ECI 7	21100	2535	24.03	25.00	1.250	-	-	0.06	0.372	0.465
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 14	ECI 7	21100 21298	2535 2554.8	23.80	25.00	1.318	-	-	0.01	0.350	0.461
		LTE Band 7	20M	QPSK	50	0	-	Front	15mm	Ant 14	ECI 7	21100	2535	22.88	24.00	1.294	-	-	0.12	0.205	0.265
		LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 14	ECI 7	21100	2535	22.88	24.00	1.294	-	-	0.08	0.297	0.384
		LTE Band 7	20M	QPSK	1	49	-	Front	15mm	Ant 41	ECI 7	21100	2535	22.30	23.00	1.175	-	-	0.07	0.224	0.263
		LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 41	ECI 7	21100	2535	22.30	23.00	1.175	-	-	-0.08	0.237	0.278
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 41	ECI 7	21100 21298	2535 2554.8	22.15	23.00	1.216	-	-	0.13	0.215	0.261
		LTE Band 7	20M	QPSK	50	0	-	Front	15mm	Ant 41	ECI 7	21100	2535	22.28	23.00	1.180	-	-	0.18	0.219	0.258
		LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 41	ECI 7	21100	2535	22.28	23.00	1.180	-	-	-0.11	0.233	0.275
		LTE Band 7	20M	QPSK	1	49	-	Front	15mm	Ant 12	ECI 7	21100	2535	20.33	21.70	1.371	-	-	0.18	0.108	0.148
		LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	21100	2535	20.33	21.70	1.371	-	-	0.05	0.217	0.297
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	21100 21298	2535 2554.8	20.19	21.70	1.416	-	-	0.17	0.199	0.282
		LTE Band 7	20M	QPSK	50	0	-	Front	15mm	Ant 12	ECI 7	21100	2535	20.32	21.70	1.374	-	-	0.03	0.101	0.139
		LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 12	ECI 7	21100	2535	20.32	21.70	1.374	-	-	-0.13	0.212	0.291
		LTE Band 7	20M	QPSK	1	49	-	Front	15mm	Ant 24	ECI 7	21100	2535	20.40	21.50	1.288	-	-	0.01	0.155	0.200
		LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 24	ECI 7	21100	2535	20.40	21.50	1.288	-	-	0.14	0.297	0.383
	ULCA	LTE Band 7	20M	QPSK	1	49	-	Back	15mm	Ant 24	ECI 7	21100 21298	2535 2554.8	20.30	21.50	1.318	-	-	0.06	0.272	0.359
		LTE Band 7	20M	QPSK	50	0	-	Front	15mm	Ant 24	ECI 7	21100	2535	20.37	21.50	1.297	-	-	-0.11	0.152	0.197
		LTE Band 7	20M	QPSK	50	0	-	Back	15mm	Ant 24	ECI 7	21100	2535	20.37	21.50	1.297	-	-	-0.12	0.292	0.379
		LTE Band 38	20M	QPSK	1	49	-	Front	15mm	Ant 24	ECI 7	38000	2595	22.37	23.50	1.297	62.9	1.006	0.11	0.094	0.123
73		LTE Band 38	20M	QPSK	1	49	-	Back	15mm	Ant 24	ECI 7	38000	2595	22.37	23.50	1.297	62.9	1.006	0.06	0.186	0.243
		LTE Band 38	20M	QPSK	50	0	-	Front	15mm	Ant 24	ECI 7	38000	2595	21.42	22.50	1.282	62.9	1.006	0.1	0.074	0.095
		LTE Band 38	20M	QPSK	50	0	-	Back	15mm	Ant 24	ECI 7	38000	2595	21.42	22.50	1.282	62.9	1.006	0.13	0.157	0.203
		LTE Band 41	20M	QPSK	1	49	-	Front	15mm	Ant 14	ECI 7	40620	2593	24.40	25.00	1.148	62.9	1.006	0.14	0.218	0.252
		LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 14	ECI 7	40620	2593	24.40	25.00	1.148	62.9	1.006	0.05	0.359	0.415
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 14	ECI 7	40620 40818	2593 2612.8	24.16	25.00	1.213	62.9	1.006	0.12	0.327	0.399
		LTE Band 41	20M	QPSK	50	0	-	Front	15mm	Ant 14	ECI 7	40620	2593	23.40	24.00	1.148	62.9	1.006	0.15	0.169	0.195
		LTE Band 41	20M	QPSK	50	0	-	Back	15mm	Ant 14	ECI 7	40620	2593	23.40	24.00	1.148	62.9	1.006	-0.14	0.283	0.327
		LTE Band 41	20M	QPSK	1	49	-	Front	15mm	Ant 41	ECI 7	40620	2593	23.88	24.80	1.236	62.9	1.006	0.01	0.123	0.153
		LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 41	ECI 7	40620	2593	23.88	24.80	1.236	62.9	1.006	-0.11	0.236	0.293
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 41	ECI 7	40620 40818	2593 2612.8	23.72	24.80	1.282	62.9	1.006	0.01	0.214	0.276
		LTE Band 41	20M	QPSK	50	0	-	Front	15mm	Ant 41	ECI 7	40620	2593	23.85	24.70	1.216	62.9	1.006	-0.14	0.119	0.146



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		LTE Band 41	20M	QPSK	50	0	-	Back	15mm	Ant 41	ECI 7	40620	2593	23.85	24.70	1.216	62.9	1.006	0.04	0.230	0.281
		LTE Band 41	20M	QPSK	1	49	-	Front	15mm	Ant 12	ECI 7	40620	2593	22.63	23.50	1.222	62.9	1.006	-0.19	0.229	0.281
74		LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	40620	2593	22.63	23.50	1.222	62.9	1.006	0.16	0.353	0.434
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 12	ECI 7	40620 40818	2593 2612.8	22.50	23.50	1.259	62.9	1.006	-0.15	0.330	0.418
		LTE Band 41	20M	QPSK	50	0	-	Front	15mm	Ant 12	ECI 7	40620	2593	22.60	23.50	1.230	62.9	1.006	-0.17	0.222	0.275
		LTE Band 41	20M	QPSK	50	0	-	Back	15mm	Ant 12	ECI 7	40620	2593	22.60	23.50	1.230	62.9	1.006	-0.18	0.340	0.421
		LTE Band 41	20M	QPSK	1	49	-	Front	15mm	Ant 24	ECI 7	40620	2593	22.61	23.20	1.146	62.9	1.006	-0.17	0.130	0.150
		LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 24	ECI 7	40620	2593	22.61	23.20	1.146	62.9	1.006	-0.11	0.245	0.282
	ULCA	LTE Band 41	20M	QPSK	1	49	-	Back	15mm	Ant 24	ECI 7	40620 40818	2593 2612.8	22.45	23.20	1.189	62.9	1.006	0.02	0.222	0.265
		LTE Band 41	20M	QPSK	50	0	-	Front	15mm	Ant 24	ECI 7	40620	2593	21.65	22.20	1.135	62.9	1.006	-0.05	0.104	0.119
		LTE Band 41	20M	QPSK	50	0	-	Back	15mm	Ant 24	ECI 7	40620	2593	21.65	22.20	1.135	62.9	1.006	0.16	0.196	0.224
		FR1 n7	50M	QPSK	1	135	DFT-15	Front	15mm	Ant 14	ECI 7	507000	2535	23.58	24.50	1.236	-	-	-0.02	0.288	0.356
75		FR1 n7	50M	QPSK	1	135	DFT-15	Back	15mm	Ant 14	ECI 7	507000	2535	23.58	24.50	1.236	-	-	0.08	0.490	0.606
		FR1 n7	50M	QPSK	135	68	DFT-15	Front	15mm	Ant 14	ECI 7	507000	2535	23.54	24.50	1.247	-	-	-0.02	0.281	0.351
		FR1 n7	50M	QPSK	135	68	DFT-15	Back	15mm	Ant 14	ECI 7	507000	2535	23.54	24.50	1.247	-	-	0.14	0.467	0.583
		FR1 n7	50M	QPSK	1	135	DFT-15	Front	15mm	Ant 41	ECI 7	507000	2535	21.06	21.50	1.107	-	-	0.17	0.095	0.105
		FR1 n7	50M	QPSK	1	135	DFT-15	Back	15mm	Ant 41	ECI 7	507000	2535	21.06	21.50	1.107	-	-	-0.01	0.174	0.193
		FR1 n7	50M	QPSK	135	68	DFT-15	Front	15mm	Ant 41	ECI 7	507000	2535	20.94	21.50	1.138	-	-	-0.15	0.089	0.101
		FR1 n7	50M	QPSK	135	68	DFT-15	Back	15mm	Ant 41	ECI 7	507000	2535	20.94	21.50	1.138	-	-	-0.19	0.172	0.196
		FR1 n7	50M	QPSK	1	135	DFT-15	Front	15mm	Ant 12	ECI 7	507000	2535	20.83	21.70	1.222	-	-	-0.08	0.121	0.148
		FR1 n7	50M	QPSK	1	135	DFT-15	Back	15mm	Ant 12	ECI 7	507000	2535	20.83	21.70	1.222	-	-	-0.15	0.200	0.244
		FR1 n7	50M	QPSK	135	68	DFT-15	Front	15mm	Ant 12	ECI 7	507000	2535	20.76	21.70	1.242	-	-	-0.16	0.115	0.143
		FR1 n7	50M	QPSK	135	68	DFT-15	Back	15mm	Ant 12	ECI 7	507000	2535	20.76	21.70	1.242	-	-	-0.01	0.191	0.237
		FR1 n7	50M	QPSK	1	135	DFT-15	Front	15mm	Ant 24	ECI 7	507000	2535	20.58	21.70	1.294	-	-	-0.06	0.146	0.189
		FR1 n7	50M	QPSK	1	135	DFT-15	Back	15mm	Ant 24	ECI 7	507000	2535	20.58	21.70	1.294	-	-	0.06	0.283	0.366
		FR1 n7	50M	QPSK	135	68	DFT-15	Front	15mm	Ant 24	ECI 7	507000	2535	20.45	21.70	1.334	-	-	-0.15	0.144	0.192
		FR1 n7	50M	QPSK	135	68	DFT-15	Back	15mm	Ant 24	ECI 7	507000	2535	20.45	21.70	1.334	-	-	0.07	0.278	0.371
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 14	ECI 7	518598	2592.99	25.77	26.80	1.268	-	-	0.1	0.673	0.853
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 14	ECI 7	518598	2592.99	25.77	26.80	1.268	-	-	-0.18	0.876	1.110
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 14	ECI 7	518598	2592.99	25.64	26.80	1.306	-	-	0.15	0.644	0.841
76	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 14	ECI 7	518598	2592.99	25.64	26.80	1.306	-	-	0.14	0.869	1.135
	PC2	FR1 n41	100M	QPSK	270	0	DFT-30	Front	15mm	Ant 14	ECI 7	518598	2592.99	24.43	25.80	1.371	-	-	0.02	0.501	0.687
	PC2	FR1 n41	100M	QPSK	270	0	DFT-30	Back	15mm	Ant 14	ECI 7	518598	2592.99	24.43	25.80	1.371	-	-	0.09	0.688	0.943
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 41	ECI 7	518598	2592.99	20.87	21.90	1.268	-	-	0.08	0.077	0.098
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 41	ECI 7	518598	2592.99	20.87	21.90	1.268	-	-	0.17	0.146	0.185
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 41	ECI 7	518598	2592.99	20.70	21.90	1.318	-	-	0.08	0.073	0.096
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 41	ECI 7	518598	2592.99	20.70	21.90	1.318	-	-	-0.02	0.142	0.187
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 12	ECI 7	518598	2592.99	19.74	21.00	1.337	-	-	-	n/a	n/a
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 12	ECI 7	518598	2592.99	19.74	21.00	1.337	-	-	0.15	0.020	0.027
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 12	ECI 7	518598	2592.99	19.64	21.00	1.368	-	-	-	n/a	n/a
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 12	ECI 7	518598	2592.99	19.64	21.00	1.368	-	-	0.1	0.018	0.025
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 24	ECI 7	518598	2592.99	20.60	21.70	1.288	-	-	0.06	0.274	0.353
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 24	ECI 7	518598	2592.99	20.60	21.70	1.288	-	-	0.18	0.533	0.687
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 24	ECI 7	518598	2592.99	20.51	21.70	1.315	-	-	0.13	0.254	0.334
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 24	ECI 7	518598	2592.99	20.51	21.70	1.315	-	-	0.15	0.515	0.677
	PC2	FR1 n41	100M	QPSK	270	0	DFT-30	Back	15mm	Ant 24	ECI 7	518598	2592.99	20.48	21.70	1.324	-	-	0.01	0.500	0.662
3000MHz-4000MHz																					
		LTE Band 42	20M	QPSK	1	49	-	Front	15mm	Ant 13	ECI 7	42590	3500	19.77	20.00	1.054	62.9	1.006	-0.13	0.113	0.120
		LTE Band 42	20M	QPSK	1	49	-	Back	15mm	Ant 13	ECI 7	42590	3500	19.77	20.00	1.054	62.9	1.006	-0.14	0.303	0.321
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Back	15mm	Ant 13	ECI 7	42590 42788	3500 3519.8	19.57	20.00	1.104	62.9	1.006	0.02	0.280	0.311
		LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 13	ECI 7	42590	3500	19.76	20.00	1.057	62.9	1.006	-0.19	0.109	0.116
		LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 13	ECI 7	42590	3500	19.76	20.00	1.057	62.9	1.006	-0.11	0.292	0.310
		LTE Band 42	20M	QPSK	1	49	-	Front	15mm	Ant 101	ECI 7	42590	3500	22.00	22.70	1.175	62.9	1.006	0.13	0.091	0.108
		LTE Band 42	20M	QPSK	1	49	-	Back	15mm	Ant 101	ECI 7	42590	3500	22.00	22.70	1.175	62.9	1.006	-0.03	0.243	0.287
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Back	15mm	Ant 101	ECI 7	42590 42788	3500 3519.8	21.88	22.70	1.208	62.9	1.006	0.09	0.222	0.270



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		LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 101	ECI 7	42590	3500	21.95	22.70	1.189	62.9	1.006	0.09	0.094	0.112
		LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 101	ECI 7	42590	3500	21.95	22.70	1.189	62.9	1.006	0.12	0.229	0.274
		LTE Band 42	20M	QPSK	1	49	-	Front	15mm	Ant 23	ECI 7	42590	3500	21.95	23.70	1.496	62.9	1.006	-0.15	0.160	0.241
77		LTE Band 42	20M	QPSK	1	49	-	Back	15mm	Ant 23	ECI 7	42590	3500	21.95	23.70	1.496	62.9	1.006	0.13	0.218	0.328
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Back	15mm	Ant 23	ECI 7	42590 42788	3500 3519.8	21.85	23.70	1.531	62.9	1.006	0.07	0.192	0.296
		LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 23	ECI 7	42590	3500	21.65	23.20	1.429	62.9	1.006	-0.15	0.145	0.208
		LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 23	ECI 7	42590	3500	21.65	23.20	1.429	62.9	1.006	0.16	0.210	0.302
		LTE Band 42	20M	QPSK	1	49	-	Front	15mm	Ant 21	ECI 7	42590	3500	22.65	24.20	1.429	62.9	1.006	-0.11	0.039	0.056
		LTE Band 42	20M	QPSK	1	49	-	Back	15mm	Ant 21	ECI 7	42590	3500	22.65	24.20	1.429	62.9	1.006	-0.12	0.099	0.142
	ULCA	LTE Band 42	20M	QPSK	1	49	-	Back	15mm	Ant 21	ECI 7	42590 42788	3500 3519.8	22.55	24.20	1.462	62.9	1.006	0.06	0.085	0.125
		LTE Band 42	20M	QPSK	50	0	-	Front	15mm	Ant 21	ECI 7	42590	3500	21.66	23.20	1.426	62.9	1.006	0.17	0.031	0.044
		LTE Band 42	20M	QPSK	50	0	-	Back	15mm	Ant 21	ECI 7	42590	3500	21.66	23.20	1.426	62.9	1.006	-0.17	0.078	0.112
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Front	15mm	Ant 13	ECI 7	45090	3750	19.18	19.50	1.076	62.9	1.006	0.18	0.072	0.078
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Back	15mm	Ant 13	ECI 7	45090	3750	19.18	19.50	1.076	62.9	1.006	0.16	0.167	0.181
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Front	15mm	Ant 13	ECI 7	45090	3750	19.16	19.50	1.081	62.9	1.006	-0.07	0.067	0.073
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Back	15mm	Ant 13	ECI 7	45090	3750	19.16	19.50	1.081	62.9	1.006	-0.14	0.167	0.182
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Front	15mm	Ant 101	ECI 7	45090	3750	20.33	21.70	1.371	62.9	1.006	-0.03	0.080	0.110
78	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Back	15mm	Ant 101	ECI 7	45090	3750	20.33	21.70	1.371	62.9	1.006	-0.06	0.214	0.295
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Front	15mm	Ant 101	ECI 7	45090	3750	20.30	21.70	1.380	62.9	1.006	-0.17	0.083	0.115
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Back	15mm	Ant 101	ECI 7	45090	3750	20.30	21.70	1.380	62.9	1.006	-0.18	0.206	0.286
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Front	15mm	Ant 23	ECI 7	45090	3750	21.00	22.70	1.479	62.9	1.006	0.15	0.106	0.158
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Back	15mm	Ant 23	ECI 7	45090	3750	21.00	22.70	1.479	62.9	1.006	-0.09	0.148	0.220
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Front	15mm	Ant 23	ECI 7	45090	3750	20.98	22.70	1.486	62.9	1.006	-0.15	0.100	0.149
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Back	15mm	Ant 23	ECI 7	45090	3750	20.98	22.70	1.486	62.9	1.006	0.1	0.142	0.212
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Front	15mm	Ant 21	ECI 7	45090	3750	22.77	24.20	1.390	62.9	1.006	0.13	0.048	0.067
	Part 27O	LTE Band 43	20M	QPSK	1	49	-	Back	15mm	Ant 21	ECI 7	45090	3750	22.77	24.20	1.390	62.9	1.006	0.05	0.140	0.196
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Front	15mm	Ant 21	ECI 7	45090	3750	21.64	23.20	1.432	62.9	1.006	0.07	0.037	0.053
	Part 27O	LTE Band 43	20M	QPSK	50	0	-	Back	15mm	Ant 21	ECI 7	45090	3750	21.64	23.20	1.432	62.9	1.006	0.01	0.109	0.157
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 13	ECI 7	633332	3499.98	16.98	17.80	1.208	-	-	0.18	0.119	0.144
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 13	ECI 7	633332	3499.98	16.98	17.80	1.208	-	-	0.08	0.297	0.359
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 13	ECI 7	633332	3499.98	16.85	17.80	1.245	-	-	-0.04	0.117	0.146
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 13	ECI 7	633332	3499.98	16.85	17.80	1.245	-	-	0.09	0.273	0.340
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 13	ECI 7	656000	3840	16.68	17.80	1.294	-	-	-0.17	0.053	0.069
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 13	ECI 7	656000	3840	16.68	17.80	1.294	-	-	0.08	0.133	0.172
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 13	ECI 7	656000	3840	16.67	17.80	1.297	-	-	0.07	0.051	0.066
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 13	ECI 7	656000	3840	16.67	17.80	1.297	-	-	0.12	0.126	0.163
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 101	ECI 7	633332	3499.98	18.13	19.70	1.435	-	-	-0.18	0.063	0.090
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 101	ECI 7	633332	3499.98	18.13	19.70	1.435	-	-	-0.04	0.188	0.270
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 101	ECI 7	633332	3499.98	17.99	19.70	1.483	-	-	0.09	0.060	0.089
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 101	ECI 7	633332	3499.98	17.99	19.70	1.483	-	-	-0.12	0.186	0.276
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 101	ECI 7	656000	3840	18.25	19.70	1.396	-	-	-0.14	0.064	0.089
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 101	ECI 7	656000	3840	18.25	19.70	1.396	-	-	-0.04	0.196	0.274
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 101	ECI 7	656000	3840	18.19	19.70	1.416	-	-	-0.16	0.061	0.086
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 101	ECI 7	656000	3840	18.19	19.70	1.416	-	-	-0.04	0.190	0.269
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 23	ECI 7	633332	3499.98	19.00	20.20	1.318	-	-	-0.01	0.226	0.298
79	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 23	ECI 7	633332	3499.98	19.00	20.20	1.318	-	-	0.16	0.318	0.419
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 23	ECI 7	633332	3499.98	18.98	20.20	1.324	-	-	0	0.211	0.279
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 23	ECI 7	633332	3499.98	18.98	20.20	1.324	-	-	-0.11	0.312	0.413
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 23	ECI 7	656000	3840	18.91	20.20	1.346	-	-	0.12	0.110	0.148
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 23	ECI 7	656000	3840	18.91	20.20	1.346	-	-	0.17	0.168	0.226
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 23	ECI 7	656000	3840	18.86	20.20	1.361	-	-	0.16	0.103	0.140
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 23	ECI 7	656000	3840	18.86	20.20	1.361	-	-	-0.15	0.162	0.221
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 21	ECI 7	633332	3499.98	19.54	20.70	1.306	-	-	-0.12	0.049	0.064
	Part 27Q	FR1 n77	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 21	ECI 7	633332	3499.98	19.54	20.70	1.306	-	-	-0.06	0.119	0.155
	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 21	ECI 7	633332	3499.98	19.33	20.70	1.371	-	-	0.16	0.049	0.067



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	Part 27Q	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 21	ECI 7	633332	3499.98	19.33	20.70	1.371	-	-	-0.02	0.110	0.151
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 21	ECI 7	656000	3840	19.53	20.70	1.309	-	-	-0.06	0.096	0.126
	Part 27O	FR1 n77	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 21	ECI 7	656000	3840	19.53	20.70	1.309	-	-	0.17	0.238	0.312
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 21	ECI 7	656000	3840	19.34	20.70	1.368	-	-	-0.16	0.091	0.124
	Part 27O	FR1 n77	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 21	ECI 7	656000	3840	19.34	20.70	1.368	-	-	-0.09	0.229	0.313
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 13	ECI 7	633332	3499.98	17.36	18.20	1.213	-	-	0.17	0.120	0.146
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 13	ECI 7	633332	3499.98	17.36	18.20	1.213	-	-	-0.08	0.316	0.383
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 13	ECI 7	633332	3499.98	17.24	18.20	1.247	-	-	-0.15	0.113	0.141
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 13	ECI 7	633332	3499.98	17.24	18.20	1.247	-	-	-0.04	0.299	0.373
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 13	ECI 7	650000	3750	17.07	18.20	1.297	-	-	0.1	0.072	0.093
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 13	ECI 7	650000	3750	17.07	18.20	1.297	-	-	0.19	0.187	0.243
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 13	ECI 7	650000	3750	16.92	18.20	1.343	-	-	-0.13	0.071	0.095
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 13	ECI 7	650000	3750	16.92	18.20	1.343	-	-	-0.16	0.180	0.242
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 101	ECI 7	633332	3499.98	19.79	21.30	1.416	-	-	0.02	0.071	0.101
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 101	ECI 7	633332	3499.98	19.79	21.30	1.416	-	-	-0.05	0.226	0.320
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 101	ECI 7	633332	3499.98	19.65	21.30	1.462	-	-	0.11	0.070	0.102
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 101	ECI 7	633332	3499.98	19.65	21.30	1.462	-	-	-0.11	0.217	0.317
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 101	ECI 7	650000	3750	19.78	21.30	1.419	-	-	0	0.088	0.125
80	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 101	ECI 7	650000	3750	19.78	21.30	1.419	-	-	-0.04	0.290	0.412
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 101	ECI 7	650000	3750	19.62	21.30	1.472	-	-	-0.19	0.083	0.122
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 101	ECI 7	650000	3750	19.62	21.30	1.472	-	-	-0.17	0.263	0.387
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 21	ECI 7	633332	3499.98	20.68	21.80	1.294	-	-	-0.15	0.056	0.072
	Part 27Q_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 21	ECI 7	633332	3499.98	20.68	21.80	1.294	-	-	0.13	0.131	0.170
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 21	ECI 7	633332	3499.98	20.61	21.80	1.315	-	-	0.04	0.053	0.070
	Part 27Q_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 21	ECI 7	633332	3499.98	20.61	21.80	1.315	-	-	-0.17	0.128	0.168
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Front	15mm	Ant 21	ECI 7	650000	3750	20.80	21.80	1.259	-	-	0.06	0.099	0.125
	Part 27O_PC2	FR1 n78	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 21	ECI 7	650000	3750	20.80	21.80	1.259	-	-	0.02	0.237	0.298
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Front	15mm	Ant 21	ECI 7	650000	3750	20.75	21.80	1.274	-	-	-0.08	0.098	0.125
	Part 27O_PC2	FR1 n78	100M	QPSK	135	69	DFT-30	Back	15mm	Ant 21	ECI 7	650000	3750	20.75	21.80	1.274	-	-	-0.1	0.229	0.292

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN&Bluetooth																
	Bluetooth	DH5 1Mbps	Front	15mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	0.04	0.009	0.015
81	Bluetooth	DH5 1Mbps	Back	15mm	Ant 22	Full	0	2402	10.40	11.50	1.288	76.6	1.305	0.04	0.012	0.020
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 22	Standalone	11	2462	18.40	19.00	1.148	99.47	1.005	0.04	0.068	0.078
82	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 22	Standalone	11	2462	18.40	19.00	1.148	99.47	1.005	0.16	0.088	0.102
83	WLAN5.3GHz	802.11a 6Mbps	Front	15mm	Ant 23	Standalone	60	5300	17.42	19.00	1.438	97.21	1.029	0.12	0.215	0.318
	WLAN5.3GHz	802.11a 6Mbps	Back	15mm	Ant 23	Standalone	60	5300	17.42	19.00	1.438	97.21	1.029	-0.19	0.146	0.216
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 23	Standalone	110	5550	17.41	18.50	1.284	93.88	1.065	0.02	0.118	0.161
84	WLAN5.5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 23	Standalone	110	5550	17.41	18.50	1.284	93.88	1.065	-0.11	0.147	0.201
	WLAN5.8GHz	802.11n-HT40 MCS0	Front	15mm	Ant 23	Standalone	151	5755	16.15	17.50	1.365	93.88	1.065	0.08	0.123	0.179
85	WLAN5.8GHz	802.11n-HT40 MCS0	Back	15mm	Ant 23	Standalone	151	5755	16.15	17.50	1.365	93.88	1.065	0.17	0.171	0.249



16.4 Product specific 10g SAR

Plot No.	Note	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
95		LTE Band 12	10M	QPSK	1	25	-	Left Side	0mm	Ant 11	ECI 7	23095	707.5	24.13	25.30	1.309	-	-	0.03	1.800	2.357
		LTE Band 12	10M	QPSK	25	0	-	Left Side	0mm	Ant 11	ECI 7	23095	707.5	23.10	24.30	1.318	-	-	-0.04	1.410	1.859
		LTE Band 12	10M	QPSK	50	0	-	Left Side	0mm	Ant 11	ECI 7	23095	707.5	23.05	24.30	1.334	-	-	-0.08	1.450	1.934
96		LTE Band 17	10M	QPSK	1	25	-	Left Side	0mm	Ant 11	ECI 7	23790	710	24.05	25.30	1.334	-	-	0.17	1.890	2.520
		LTE Band 17	10M	QPSK	25	0	-	Left Side	0mm	Ant 11	ECI 7	23790	710	23.00	24.30	1.349	-	-	-0.02	1.450	1.956
		LTE Band 17	10M	QPSK	50	0	-	Left Side	0mm	Ant 11	ECI 7	23790	710	22.97	24.30	1.358	-	-	0.03	1.520	2.065
86		LTE Band 26	15M	QPSK	1	37	-	Left Side	0mm	Ant 11	ECI 7	26865	831.5	23.38	24.80	1.387	-	-	-0.08	1.920	2.663
		LTE Band 26	15M	QPSK	36	0	-	Left Side	0mm	Ant 11	ECI 7	26865	831.5	23.03	24.30	1.340	-	-	0.19	1.520	2.036
		LTE Band 26	15M	QPSK	75	0	-	Left Side	0mm	Ant 11	ECI 7	26865	831.5	22.92	24.30	1.374	-	-	0.05	1.470	2.020
		FR1 n26	20M	QPSK	1	53	DFT-15	Back	0mm	Ant 11	ECI 7	166300	831.5	24.12	25.50	1.374	-	-	0.04	1.190	1.635
87		FR1 n26	20M	QPSK	1	53	DFT-15	Left Side	0mm	Ant 11	ECI 7	166300	831.5	24.12	25.50	1.374	-	-	0.02	1.720	2.363
		FR1 n26	20M	QPSK	50	28	DFT-15	Back	0mm	Ant 11	ECI 7	166300	831.5	23.96	25.50	1.426	-	-	-0.17	1.110	1.582
		FR1 n26	20M	QPSK	50	28	DFT-15	Left Side	0mm	Ant 11	ECI 7	166300	831.5	23.96	25.50	1.426	-	-	0.08	1.600	2.281
		FR1 n26	20M	QPSK	100	0	DFT-15	Left Side	0mm	Ant 11	ECI 7	166300	831.5	22.95	24.50	1.429	-	-	0.17	1.260	1.800
88		FR1 n66	40M	QPSK	1	108	DFT-15	Top Side	0mm	Ant 14	ECI 5	349000	1745	22.02	23.00	1.253	-	-	0.17	2.170	2.719
		FR1 n66	40M	QPSK	1	108	DFT-15	Top Side	0mm	Ant 14	ECI 8	349000	1745	20.03	21.00	1.250	-	-	-0.08	1.330	1.663
		FR1 n66	40M	QPSK	1	108	DFT-15	Top Side	12mm	Ant 14	ECI 7	349000	1745	23.92	25.00	1.282	-	-	0.12	0.459	0.589
		FR1 n66	40M	QPSK	108	54	DFT-15	Top Side	0mm	Ant 14	ECI 5	349000	1745	21.95	23.00	1.274	-	-	-0.12	2.050	2.611
		FR1 n66	40M	QPSK	216	0	DFT-15	Top Side	0mm	Ant 14	ECI 5	349000	1745	21.92	23.00	1.282	-	-	-0.12	1.950	2.501
89		GSM1900	-	-	-	-	GPRS 2 Tx slots	Bottom Side	0mm	Ant 41	ECI 7	661	1880	28.84	30.00	1.306	-	-	0.03	2.020	2.638
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Bottom Side	0mm	Ant 41	ECI 7	512	1850.2	28.75	30.00	1.334	-	-	0.04	1.880	2.507
		GSM1900	-	-	-	-	GPRS 2 Tx slots	Bottom Side	0mm	Ant 41	ECI 7	810	1909.8	28.68	30.00	1.355	-	-	-0.18	1.640	2.223
90		FR1 n7	50M	QPSK	1	135	DFT-15	Back	0mm	Ant 14	ECI 5	507000	2535	21.67	22.50	1.211	-	-	-0.07	2.020	2.445
		FR1 n7	50M	QPSK	1	135	DFT-15	Back	11mm	Ant 14	ECI 7	507000	2535	23.58	24.50	1.236	-	-	0.01	0.419	0.518
		FR1 n7	50M	QPSK	135	68	DFT-15	Back	0mm	Ant 14	ECI 5	507000	2535	21.66	22.50	1.213	-	-	0.06	1.900	2.305
		FR1 n7	50M	QPSK	270	0	DFT-15	Back	0mm	Ant 14	ECI 5	507000	2535	21.65	22.50	1.216	-	-	0.02	1.850	2.250
		FR1 n38	50M	QPSK	1	53	DFT-30	Front	0mm	Ant 14	ECI 5	519000	2595	21.48	22.50	1.265	-	-	0.08	1.420	1.796
91		FR1 n38	50M	QPSK	1	53	DFT-30	Back	0mm	Ant 14	ECI 5	519000	2595	21.48	22.50	1.265	-	-	-0.18	2.060	2.605
		FR1 n38	50M	QPSK	1	53	DFT-30	Front	7mm	Ant 14	ECI 7	519000	2595	23.90	25.00	1.288	-	-	-0.07	0.412	0.531
		FR1 n38	50M	QPSK	1	53	DFT-30	Back	11mm	Ant 14	ECI 7	519000	2595	23.90	25.00	1.288	-	-	-0.05	0.598	0.770
		FR1 n38	50M	QPSK	50	28	DFT-30	Front	0mm	Ant 14	ECI 5	519000	2595	21.41	22.50	1.285	-	-	-0.19	1.320	1.697
		FR1 n38	50M	QPSK	50	28	DFT-30	Back	0mm	Ant 14	ECI 5	519000	2595	21.41	22.50	1.285	-	-	0.08	1.920	2.468
		FR1 n38	50M	QPSK	100	0	DFT-30	Back	0mm	Ant 14	ECI 5	519000	2595	21.39	22.50	1.291	-	-	0.14	1.880	2.427
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	0mm	Ant 14	ECI 5	518598	2592.99	19.86	20.80	1.242	-	-	0.07	0.926	1.150
92	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	0mm	Ant 14	ECI 5	518598	2592.99	19.86	20.80	1.242	-	-	0.02	1.430	1.776
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Top Side	0mm	Ant 14	ECI 5	518598	2592.99	19.86	20.80	1.242	-	-	-0.04	0.737	0.915
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Front	7mm	Ant 14	ECI 7	518598	2592.99	25.77	26.80	1.268	-	-	-0.17	0.523	0.663
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Back	11mm	Ant 14	ECI 7	518598	2592.99	25.77	26.80	1.268	-	-	-0.08	0.808	1.024
	PC2	FR1 n41	100M	QPSK	1	137	DFT-30	Top Side	12mm	Ant 14	ECI 7	518598	2592.99	25.77	26.80	1.268	-	-	0.04	0.416	0.527
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Front	0mm	Ant 14	ECI 5	518598	2592.99	19.83	20.80	1.250	-	-	-0.03	0.874	1.093
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Back	0mm	Ant 14	ECI 5	518598	2592.99	19.83	20.80	1.250	-	-	0.14	1.350	1.688
	PC2	FR1 n41	100M	QPSK	135	69	DFT-30	Top Side	0mm	Ant 14	ECI 5	518598	2592.99	19.83	20.80	1.250	-	-	0.09	0.696	0.870
	PC2	FR1 n41	100M	QPSK	270	0	DFT-30	Back	0mm	Ant 14	ECI 5	518598	2592.99	19.80	20.80	1.259	-	-	0.04	1.290	1.624

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
WLAN																
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 23	Standalone	60	5300	17.42	19.00	1.438	97.21	1.029	0.12	0.890	1.317
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 23	Standalone	60	5300	17.42	19.00	1.438	97.21	1.029	0.05	0.252	0.373
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 23	Standalone	60	5300	17.42	19.00	1.438	97.21	1.029	0.1	1.740	2.574
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 23	Standalone	60	5300	17.42	19.00	1.438	97.21	1.029	-0.05	1.010	1.494
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 23	Standalone	52	5260	17.12	19.00	1.541	97.21	1.029	0.06	1.700	2.695
93	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 23	Standalone	56	5280	17.00	19.00	1.585	97.21	1.029	-0.07	1.780	2.903
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 23	Standalone	110	5550	17.41	18.50	1.284	93.88	1.065	-0.18	0.565	0.773
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 23	Standalone	110	5550	17.41	18.50	1.284	93.88	1.065	0.12	0.344	0.470
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 23	Standalone	110	5550	17.41	18.50	1.284	93.88	1.065	-0.13	1.580	2.161
	WLAN5.5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 23	Standalone	110	5550	17.41	18.50	1.284	93.88	1.065	0.19	0.915	1.251
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 23	Standalone	126	5630	17.30	18.50	1.318	93.88	1.065	0.05	1.590	2.232
94	WLAN5.5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 23	Standalone	142	5710	16.60	18.50	1.547	93.88	1.065	-0.15	1.470	2.422



16.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	40620	2593	18.06	18.80	1.186	62.9	1.006	-0.1	0.833	1	0.994
2nd	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 14	ECI 2	40620	2593	18.06	18.80	1.186	62.9	1.006	0.08	0.796	1.046	0.950
1st	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	633332	3499.98	14.95	16.20	1.334	-	-	0	0.824	1	1.099
2nd	FR1 n77	100M	QPSK	135	69	DFT-30	Left Cheek	0mm	Ant 23	ECI 2	633332	3499.98	14.95	16.20	1.334	-	-	0.01	0.793	1.039	1.057
1st	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	656000	3840	18.35	19.70	1.365	-	-	-0.18	0.812	1	1.108
2nd	FR1 n77	100M	QPSK	135	69	DFT-30	Left Tilted	0mm	Ant 21	ECI 2	656000	3840	18.35	19.70	1.365	-	-	0.07	0.764	1.023	1.043
1st	FR1 n41	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 14	ECI 7	518598	2592.99	25.77	26.80	1.268	-	-	-0.18	0.876	1	1.110
2nd	FR1 n41	100M	QPSK	1	137	DFT-30	Back	15mm	Ant 14	ECI 7	518598	2592.99	25.77	26.80	1.268	-	-	0.09	0.851	1.029	1.079

<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	1	122	DFT-15	Top Side	0mm	Ant 14	ECI 5	349000	1745	22.02	23.00	1.253	-	-	0.17	2.170	1	2.719
2nd	FR1 n66	45M	QPSK	1	122	DFT-15	Top Side	0mm	Ant 14	ECI 5	349000	1745	22.02	23.00	1.253	-	-	0.17	2.120	1.024	2.657
1st	GSM1900	-	-	-	-	GPRS 2 Tx slots	Bottom Side	0mm	Ant 41	ECI 7	661	1880	28.84	30.00	1.306	-	-	0.03	2.020	1	2.638
2nd	GSM1900	-	-	-	-	GPRS 2 Tx slots	Bottom Side	0mm	Ant 41	ECI 7	661	1880	28.84	30.00	1.306	-	-	0.04	1.990	1.015	2.599
1st	FR1 n38	50M	QPSK	1	53	DFT-30	Back	0mm	Ant 14	ECI 5	519000	2595	21.48	22.50	1.265	-	-	-0.18	2.060	1	2.605
2nd	FR1 n38	50M	QPSK	1	53	DFT-30	Back	0mm	Ant 14	ECI 5	519000	2595	21.48	22.50	1.265	-	-	-0.18	2.040	1.010	2.580

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
2. 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.
3. 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 ratio is the difference in percentage between original and repeated *measured* SAR.
5. 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).
- According to the EUT characteristic, WLAN 5GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz cannot transmit simultaneously.
- WLAN 2.4GHz and Bluetooth share the same antenna, and they cannot transmit simultaneously.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- When stand-alone SAR is not required for a transmitter or antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- For distance SAR and non-distance SAR at extremity exposure conditions always chose higher SAR to do co-located analysis.
- 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.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - 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.

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

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

Since BT do not employ time-averaging, 1gSAR and 10gSAR measurement for 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 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.



17.2 Head Exposure Conditions

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4+5
		WWAN	WLAN2.4GHz Ant 22	WLAN5GHz Ant 23	Bluetooth Ant 22	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
All Band Ant 11	Right Cheek	0.834	0.224	0.336	0.064	1.06	1.23
	Right Tilted	0.250	0.271	0.343	0.079	0.52	0.67
	Left Cheek	0.725	0.417	0.556	0.113	1.14	1.39
	Left Tilted	0.214	0.377	0.517	0.091	0.59	0.82
All Band Ant 12	Right Cheek	0.907	0.224	0.336	0.064	1.13	1.31
	Right Tilted	0.862	0.271	0.343	0.079	1.13	1.28
	Left Cheek	0.483	0.417	0.556	0.113	0.90	1.15
	Left Tilted	0.424	0.377	0.517	0.091	0.80	1.03
All Band Ant 13	Right Cheek	0.544	0.224	0.336	0.064	0.77	0.94
	Right Tilted	0.816	0.271	0.343	0.079	1.09	1.24
	Left Cheek	0.303	0.417	0.556	0.113	0.72	0.97
	Left Tilted	0.360	0.377	0.517	0.091	0.74	0.97
All Band Ant 14	Right Cheek	0.994	0.224	0.336	0.064	1.22	1.39
	Right Tilted	0.977	0.271	0.343	0.079	1.25	1.40
	Left Cheek	0.575	0.417	0.556	0.113	0.99	1.24
	Left Tilted	0.604	0.377	0.517	0.091	0.98	1.21
All Band Ant 21	Right Cheek	0.971	0.224	0.336	0.064	1.20	1.37
	Right Tilted	0.991	0.271	0.343	0.079	1.26	1.41
	Left Cheek	0.749	0.417	0.556	0.113	1.17	1.42
	Left Tilted	0.820	0.377	0.517	0.091	1.20	1.43
All Band Ant 23	Right Cheek	0.301	0.224	0.336	0.064	0.53	0.70
	Right Tilted	0.321	0.271	0.343	0.079	0.59	0.74
	Left Cheek	0.766	0.417	0.556	0.113	1.18	1.44
	Left Tilted	0.735	0.377	0.517	0.091	1.11	1.34
All Band Ant 24	Right Cheek	0.224	0.224	0.336	0.064	0.45	0.62
	Right Tilted	0.137	0.271	0.343	0.079	0.41	0.56
	Left Cheek	0.764	0.417	0.556	0.113	1.18	1.43
	Left Tilted	0.331	0.377	0.517	0.091	0.71	0.94
All Band Ant 25	Right Cheek	0.960	0.224	0.336	0.064	1.18	1.36
	Right Tilted	0.268	0.271	0.343	0.079	0.54	0.69
	Left Cheek	0.719	0.417	0.556	0.113	1.14	1.39
	Left Tilted	0.274	0.377	0.517	0.091	0.65	0.88
All Band Ant 41	Right Cheek	0.321	0.224	0.336	0.064	0.55	0.72
	Right Tilted	0.200	0.271	0.343	0.079	0.47	0.62
	Left Cheek	0.512	0.417	0.556	0.113	0.93	1.18
	Left Tilted	0.138	0.377	0.517	0.091	0.52	0.75
All Band Ant 101	Right Cheek	0.872	0.224	0.336	0.064	1.10	1.27
	Right Tilted	0.312	0.271	0.343	0.079	0.58	0.73
	Left Cheek	0.236	0.417	0.556	0.113	0.65	0.91
	Left Tilted	0.141	0.377	0.517	0.091	0.52	0.75



17.3 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4+5
		WWAN	WLAN2.4GHz Ant 22	WLAN5GHz Ant 23	Bluetooth Ant 22	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
All Band Ant 11	Front	0.451	0.157	0.438	0.024	0.61	0.91
	Back	0.599	0.247	0.362	0.037	0.85	1.00
	Left side	0.937				0.94	0.94
	Right side		0.073	0.592	0.012	0.07	0.60
	Top side		0.233	0.385	0.035	0.23	0.42
	Bottom side					0.00	0.00
All Band Ant 12	Front	0.295	0.157	0.438	0.024	0.45	0.76
	Back	0.521	0.247	0.362	0.037	0.77	0.92
	Left side	0.783				0.78	0.78
	Right side		0.073	0.592	0.012	0.07	0.60
	Top side	0.291	0.233	0.385	0.035	0.52	0.71
	Bottom side					0.00	0.00
All Band Ant 13	Front	0.140	0.157	0.438	0.024	0.30	0.60
	Back	0.447	0.247	0.362	0.037	0.69	0.85
	Left side	0.256				0.26	0.26
	Right side		0.073	0.592	0.012	0.07	0.60
	Top side	0.432	0.233	0.385	0.035	0.67	0.85
	Bottom side					0.00	0.00
All Band Ant 14	Front	0.423	0.157	0.438	0.024	0.58	0.89
	Back	0.612	0.247	0.362	0.037	0.86	1.01
	Left side	0.298				0.30	0.30
	Right side		0.073	0.592	0.012	0.07	0.60
	Top side	0.638	0.233	0.385	0.035	0.87	1.06
	Bottom side					0.00	0.00
All Band Ant 21	Front	0.180	0.157	0.438	0.024	0.34	0.64
	Back	0.424	0.247	0.362	0.037	0.67	0.82
	Left side					0.00	0.00
	Right side	0.127	0.073	0.592	0.012	0.20	0.73
	Top side	0.358	0.233	0.385	0.035	0.59	0.78
	Bottom side					0.00	0.00
All Band Ant 23	Front	0.335	0.157	0.438	0.024	0.49	0.80
	Back	0.485	0.247	0.362	0.037	0.73	0.88
	Left side					0.00	0.00
	Right side	0.524	0.073	0.592	0.012	0.60	1.13
	Top side	0.683	0.233	0.385	0.035	0.92	1.10
	Bottom side					0.00	0.00
All Band Ant 24	Front	0.231	0.157	0.438	0.024	0.39	0.69
	Back	0.482	0.247	0.362	0.037	0.73	0.88
	Left side					0.00	0.00
	Right side	0.479	0.073	0.592	0.012	0.55	1.08
	Top side	0.098	0.233	0.385	0.035	0.33	0.52
	Bottom side					0.00	0.00
All Band Ant 25	Front	0.371	0.157	0.438	0.024	0.53	0.83
	Back	0.581	0.247	0.362	0.037	0.83	0.98
	Left side					0.00	0.00
	Right side	0.773	0.073	0.592	0.012	0.85	1.38
	Top side		0.233	0.385	0.035	0.23	0.42
	Bottom side					0.00	0.00
All Band Ant 41	Front	0.434	0.157	0.438	0.024	0.59	0.90



	Back	0.554	0.247	0.362	0.037	0.80	0.95
	Left side	0.156				0.16	0.16
	Right side	0.090	0.073	0.592	0.012	0.16	0.69
	Top side		0.233	0.385	0.035	0.23	0.42
	Bottom side	0.784				0.78	0.78
All Band Ant 101	Front	0.164	0.157	0.438	0.024	0.32	0.63
	Back	0.456	0.247	0.362	0.037	0.70	0.86
	Left side	0.504				0.50	0.50
	Right side		0.073	0.592	0.012	0.07	0.60
	Top side		0.233	0.385	0.035	0.23	0.42
	Bottom side					0.00	0.00

17.4 Body-Worn Accessory Exposure Conditions

WWAN Band	Exposure Position	1	3	4	5	1+3	1+4+5
		WWAN	WLAN2.4GHz Ant 22	WLAN5GHz Ant 23	Bluetooth Ant 22	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
All Band Ant 11	Front	0.509	0.078	0.318	0.015	0.59	0.84
	Back	0.797	0.102	0.249	0.020	0.90	1.07
All Band Ant 12	Front	0.281	0.078	0.318	0.015	0.36	0.61
	Back	0.434	0.102	0.249	0.020	0.54	0.70
All Band Ant 13	Front	0.146	0.078	0.318	0.015	0.22	0.48
	Back	0.383	0.102	0.249	0.020	0.49	0.65
All Band Ant 14	Front	0.853	0.078	0.318	0.015	0.93	1.19
	Back	1.135	0.102	0.249	0.020	1.24	1.40
All Band Ant 21	Front	0.126	0.078	0.318	0.015	0.20	0.46
	Back	0.313	0.102	0.249	0.020	0.42	0.58
All Band Ant 23	Front	0.298	0.078	0.318	0.015	0.38	0.63
	Back	0.419	0.102	0.249	0.020	0.52	0.69
All Band Ant 24	Front	0.353	0.078	0.318	0.015	0.43	0.69
	Back	0.687	0.102	0.249	0.020	0.79	0.96
All Band Ant 25	Front	0.341	0.078	0.318	0.015	0.42	0.67
	Back	0.594	0.102	0.249	0.020	0.70	0.86
All Band Ant 41	Front	0.383	0.078	0.318	0.015	0.46	0.72
	Back	0.401	0.102	0.249	0.020	0.50	0.67
All Band Ant 101	Front	0.125	0.078	0.318	0.015	0.20	0.46
	Back	0.412	0.102	0.249	0.020	0.51	0.68



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.

WWAN Band	Exposure Position	1	4	6	1+4+6
		WWAN	WLAN5GHz Ant 23	NFC	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
All Band Ant 11	Front		1.317		1.32
	Back	1.635	0.470	0.009	2.11
	Left side	2.663			2.66
	Right side		2.903		2.90
	Top side		1.494		1.49
	Bottom side				0.00
All Band Ant 12	Front		1.317		1.32
	Back		0.470	0.009	0.48
	Left side				0.00
	Right side		2.903		2.90
	Top side		1.494		1.49
	Bottom side				0.00
All Band Ant 13	Front		1.317		1.32
	Back		0.470	0.009	0.48
	Left side				0.00
	Right side		2.903		2.90
	Top side		1.494		1.49
	Bottom side				0.00
All Band Ant 14	Front	1.796	1.317		3.11
	Back	2.605	0.470	0.009	3.08
	Left side				0.00
	Right side		2.903		2.90
	Top side	1.663	1.494		3.16
	Bottom side				0.00
All Band Ant 21	Front		1.317		1.32
	Back		0.470	0.009	0.48
	Left side				0.00
	Right side		2.903		2.90
	Top side		1.494		1.49
	Bottom side				0.00
All Band Ant 23	Front		1.317		1.32
	Back		0.470	0.009	0.48
	Left side				0.00
	Right side		2.903		2.90
	Top side		1.494		1.49
	Bottom side				0.00
All Band Ant 24	Front		1.317		1.32
	Back		0.470	0.009	0.48
	Left side				0.00
	Right side		2.903		2.90
	Top side		1.494		1.49
	Bottom side				0.00
All Band Ant 25	Front		1.317		1.32
	Back		0.470	0.009	0.48
	Left side				0.00
	Right side		2.903		2.90
	Top side		1.494		1.49



	Bottom side				0.00
All Band Ant 41	Front		1.317		1.32
	Back		0.470	0.009	0.48
	Left side				0.00
	Right side		2.903		2.90
	Top side		1.494		1.49
	Bottom side	2.638			2.64
	Front		1.317		1.32
All Band Ant 101	Back		0.470	0.009	0.48
	Left side				0.00
	Right side		2.903		2.90
	Top side		1.494		1.49
	Bottom side				0.00

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18. Uncertainty Assessment

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

19. References

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

Appendixes

Please refer to separated files for the following appendixes

Appendix A. Plots of System Performance Check

Appendix B. Plots of High SAR and PD 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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