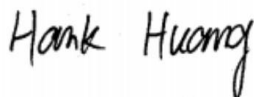


FCC SAR Test Report

APPLICANT : vivo Mobile Communication Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : vivo
MODEL NAME : V2538
FCC ID : 2AUCY-V2538
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
FA592520	Rev. 01	Initial issue of report.	Nov. 25, 2025

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **vivo Mobile Communication Co., Ltd., Mobile Phone, V2538**, are as follows.

Frequency Band		Highest SAR Summary				Highest Simultaneous Transmission 1g SAR SAR (W/kg)	Highest Simultaneous Transmission 10g SAR SAR (W/kg)
		Head (Separation 0mm)	Hotspot (Separation 10mm)	Body Worn (Separation 15mm)	Extremity (Separation 0mm)		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	10g SAR (W/kg)		
GSM	GSM850	0.56	0.93	0.69	1.10	1.42	3.46
	GSM1900	0.83	0.42	0.48			
WCDMA	WCDMA II	0.80	0.36	0.52			
	WCDMA IV	0.74	0.35	0.66			
	WCDMA V	0.75	0.70	0.70	1.95		
	WCDMA XIX	0.79	0.84	0.71	1.96		
LTE	LTE Band 7	0.93	0.41	0.63	2.05		
	LTE Band 12/17	0.64	0.65	0.43			
	LTE Band 13	0.70	0.66	0.74	2.32		
	LTE Band 18	0.87	0.76	0.63	2.31		
	LTE Band 19	0.78	0.56	0.63	2.10		
	LTE Band 25/2	1.05	0.41	1.03	1.84		
	LTE Band 26/5	0.67	0.74	0.62	2.07		
	LTE Band 41/38	0.79	0.43	0.65	2.18		
	LTE Band 66/4	1.02	0.42	0.78	1.16		
	LTE Band 42	0.77	0.48	0.51			
FR1	FR1 n5	0.84	0.95	0.66	2.18		
	FR1 n7	0.85	0.42	0.60			
	FR1 n25/n2	0.78	0.34	0.56			
	FR1 n26	0.85	0.80	0.59	2.18		
	FR1 n41/n38	0.92	0.40	0.57			
	FR1 n66	1.01	0.42	0.70			
	FR1 n77/ n78	0.91	0.32	0.69	2.94		
WLAN	2.4GHz WLAN	0.62	0.45	0.30		1.33	
	5GHz WLAN	1.00	0.38	0.19	2.03	1.42	3.46
Bluetooth	Bluetooth	0.49	0.13	<0.10		1.42	
Date of Testing:		2025/10/25 ~ 2025/11/12					

Remark:

- This device supports LTE B2 / B4 / B5 / B17 / B38 and B25 / B66 / B26 / B12 / B41. Since the supported frequency span for LTE B2 / B4 / B5 / B17 / B38 falls completely within the support's frequency span for LTE B25 / B66 / B26 / B12 / B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B12 / B41.
- This device supports 5G NR n2 / n38 / n78 and n25 / n41 / n77. Since the supported frequency span for 5G NR n2 / n38 / n78 falls completely within the support's frequency span for n25 / n41 / n77, both 5G NR bands have the same target power, and both 5G NR bands share the same transmission path; therefore, SAR was only assessed for n25 / n41 / n77.

Declaration of Conformity:

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

Comments and Explanations:

The declared 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.
	SAR05-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	V2538
FCC ID	2AUCY-V2538
IMEI Code	Sample 1: 864121089998693/864121089998685, 864121089998776/864121089998768 864121089999030/864121089999022, 864121089999337/864121089999329 864121089998834/864121089998826, 864121089998750/864121089998743 Sample 2: 864121089998651//864121089998644
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 WCDMA Band XIX: 830 MHz ~ 845 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 18: 815 MHz ~ 830 MHz LTE Band 19: 830 MHz ~ 845 MHz LTE Band 25: 1850 MHz ~ 1910 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n25: 1850 MHz ~ 1910 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/HT40 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/VHT160 WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC: ASK
HW Version	MP_0.1
SW Version	PD2529KF_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 33. 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 Qualcomm smart transmit 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. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission. 9. This device supports HPUE mode for 5GNR n41/n78/n77 with higher power, so HPUE mode was chosen to perform full SAR testing and HPUE SAR can represent power class 3 level SAR. 10. There are two samples, the difference between them is back cover: the sample 1 is with glass back cover, the sample 2 is with Glass fiber glass back cover. According to the difference, sample 1 was chosen to perform full test and sample 2 verified the worst case of sample 1. 11. This device has NFC function and the NFC SAR report will be separately submitted. 12. 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
SA	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	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
	n25	FDD	15	5, 10, 15, 20, 25, 30, 40
	n26	FDD	15	5, 10, 15, 20
	n66	FDD	15	5, 10, 15, 20, 25, 30, 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-V2538																																																																												
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 18: 815 MHz ~ 830 MHz LTE Band 19: 830 MHz ~ 845 MHz LTE Band 25: 1850 MHz ~ 1910 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 66: 1710 MHz ~ 1780 MHz																																																																												
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 18: 5MHz, 10MHz, 15MHz, LTE Band 19: 5MHz, 10MHz, 15MHz, LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz																																																																												
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																																												
LTE Voice / Data requirements	Voice and Data																																																																												
LTE Release Version	R15																																																																												
CA Support	Supported, Uplink and Downlink																																																																												
LTE MPR permanently built-in by design	<table><tr><th colspan="8">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</th></tr><tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th><th rowspan="2">MPR (dB)</th></tr><tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr><tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 3</td></tr><tr><td>256 QAM</td><td colspan="6">≥ 1</td><td>≤ 5</td></tr></table>							Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3								Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3																																																																													
Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)																																																																						
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz																																																																							
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1																																																																						
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1																																																																						
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2																																																																						
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2																																																																						
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3																																																																						
256 QAM	≥ 1						≤ 5																																																																						
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																																												
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																												
Power reduction applied to satisfy SAR compliance	Yes, when operating in Proximity sensors/receiver/hotspot detect mechanism, head/body-worn /hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 14.																																																																												
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power verification please referred to section 14.																																																																												
LTE Carrier Aggregation Additional Information	1. This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band and inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 2 carriers in the uplink.																																																																												

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829				
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				
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560				
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23155	713.5	23130	711				
LTE Band 13												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782					
M	23230		782									
H	23255		784.5									
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)		Channel #		Freq. (MHz)	
L	23755		706.5		23780		709					
M	23790		710		23790		710					
H	23825		713.5		23800		711					
LTE Band18												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23875	817.5	23900	820	23925	822.5	23950	825				
M	23925	822.5	23925	822.5	23925	822.5	23925	822.5				
H	23975	827.5	23950	825	23950	825	23950	825				
LTE Band 19												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	24025	832.5	24050	835	24075	837.5	24100	840				
M	24075	837.5	24075	837.5	24075	837.5	24075	837.5				
H	24125	842.5	24100	840	24100	840	24100	840				

LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26633	1909.3	26625	1908.5	26615	1907.5	26590	1905	26565	1902.5	26540	1900

LTE Band 26										
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5

LTE Band 38								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610

LTE Band 41								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680

LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770

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

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

Band	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
LTE Band 2	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 25	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 5	Yes	Yes	Yes	Yes		
LTE Band 26	Yes	Yes	Yes	Yes	Yes	
LTE Band 12	Yes	Yes	Yes	Yes		
LTE Band 17			Yes	Yes		
LTE Band 18			Yes	Yes	Yes	
LTE Band 19			Yes	Yes	Yes	
LTE Band 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes

2) LTE Bands tune up:

Band	Antenna	FULL	DSI 2	DSI 3	DSI 4	DSI 5	DSI 6	DSI 7
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit
LTE Band 2	Ant 13	25	17.5	15.5	25	22	19	19
LTE Band 2	Ant 41	25.5	25.5	25.5	21	21	17.5	17.5
LTE Band 2	Ant 12	24.5	15.5	14.5	21	21	18	18
LTE Band 2	Ant 25	23.5	18	14.5	21.5	21.5	18	18
LTE Band 25	Ant 13	25	17.5	15.5	25	21	18	18
LTE Band 25	Ant 41	25.5	25.5	25.5	21	21	18	18
LTE Band 25	Ant 12	24.5	16.5	15.5	21.5	21.5	18.5	18.5
LTE Band 25	Ant 25	23.5	19.5	14.5	23	23	19.5	19.5
LTE Band 4	Ant 13	25	17	15.5	25	22	19	19
LTE Band 4	Ant 41	25.5	25.5	25.5	22	22	19	19
LTE Band 4	Ant 12	24.5	16.5	15.5	21	21	18	18
LTE Band 4	Ant 25	23.5	19	14	22.5	22.5	19	19
LTE Band 66	Ant 13	25	17	16	25	22.5	19	19
LTE Band 66	Ant 41	25.5	25.5	25.5	22	22	18.5	18.5
LTE Band 66	Ant 12	24.5	16.5	15.5	21	21	17.5	17.5
LTE Band 66	Ant 25	23.5	18	14	22	22	18.5	18.5
LTE Band 5	Ant 26	25.5	24	23	25.5	25.5	22.5	22.5
LTE Band 5	Ant 11	25.7	20.7	19.2	25.7	25.7	21.7	21.7
LTE Band 26	Ant 26	25.5	24	22.5	25.5	25.5	22	22
LTE Band 26	Ant 11	25.7	20.7	19.7	25.2	25.2	21.7	21.7
LTE Band 12	Ant 26	25	22.5	21.5	25	25	22.5	22.5
LTE Band 12	Ant 11	25.5	22.5	21.5	24	24	20	20
LTE Band 17	Ant 26	25	22.5	21.5	25	25	22.5	22.5
LTE Band 17	Ant 11	25.5	22.5	21.5	24	24	20	20
LTE Band 18	Ant 26	25.5	24.5	23	25.5	25.5	23.5	23.5
LTE Band 18	Ant 11	25.7	20.7	19.2	25.7	25.7	21.7	21.7
LTE Band 19	Ant 26	25.5	24.5	23.5	25.5	25.5	22.5	22.5
LTE Band 19	Ant 11	25.7	20.7	19.7	25.7	25.7	21.7	21.7
LTE Band 38	Ant 13	25.2	15.7	14.7	24.2	19.7	16.2	16.2
LTE Band 38	Ant 41	25.7	25.7	25.7	23.2	23.2	20.2	20.2
LTE Band 38	Ant 12	24.2	17.2	16.2	24.2	24.2	21.2	21.2
LTE Band 38	Ant 25	23.2	19.7	18.7	23.2	23.2	20.2	20.2
LTE Band 41	Ant 13	25.2	15.7	14.7	24.7	19.7	16.2	16.2
LTE Band 41	Ant 41	25.7	25.7	25.7	23.2	23.2	19.7	19.7
LTE Band 41	Ant 12	24.2	17.2	16.2	24.2	24.2	20.7	20.7
LTE Band 41	Ant 25	23.2	19.7	17.2	22.7	22.7	19.7	19.7

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 n25: 1850 MHz ~ 1910 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 5G NR 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 B4/7/66/5
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 B2/4/5/66
LTE Anchor Bands for n41	LTE B2/4/26/66
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 25 SCS15KHz														
	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	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	374000	1870
M	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378000	1890

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												
Bandwidth10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	515000	2575	515500	2577.5	516000	2580	516500	2582.5	517000	2585	518000	2590
M	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595
H	523000	2615	522500	2612.5	522000	2610	521500	2607.5	521000	2605	520000	2600

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	652832	3792.48	652666	3789.99	652500	3787.5	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		

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)
n2	FDD	15	5, 10, 15, 20
n25	FDD	15	5, 10, 15, 20, 25, 30, 40
n5	FDD	15	5, 10, 15, 20
n26	FDD	15	3, 5, 10, 15, 20
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

2) NR Bands Tune up:

Band	Antenna	FULL	DSI 2	DSI 3	DSI 4	DSI 5	DSI 6	DSI 7
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit
FR1 n2	Ant 13	25	17	15.5	25	22.5	19	19
FR1 n2	Ant 41	25.5	25.5	25.5	20.5	20.5	17.5	17.5
FR1 n2	Ant 12	24.5	15.5	14.5	21	21	18	18
FR1 n2	Ant 25	23.5	17.5	13.5	21.5	21.5	17.5	17.5
FR1 n25	Ant 13	25	17	15.5	25	22.5	19	19
FR1 n25	Ant 41	25.5	25.5	25.5	20.5	20.5	17.5	17.5
FR1 n25	Ant 12	24.5	15.5	14.5	21	21	18	18
FR1 n25	Ant 25	23.5	17.5	13.5	21.5	21.5	17.5	17.5
FR1 n5	Ant 26	25.5	24.5	23	25.5	25.5	23	23
FR1 n5	Ant 11	26	20.5	19.5	25.5	25.5	22	22
FR1 n26	Ant 26	25.5	24	23	25.5	25.5	23	23
FR1 n26	Ant 11	26	21	20	25	25	21.5	21.5
FR1 n38	Ant 13	25.2	14.2	12.7	21.2	17.7	14.7	14.7
FR1 n38	Ant 41	25.7	25.7	25.7	21.2	21.2	18.2	18.2
FR1 n38	Ant 12	24.2	15.2	13.7	22.2	22.2	19.2	19.2
FR1 n38	Ant 25	23.2	18.2	14.2	21.2	21.2	18.2	18.2
FR1 n41 PC3	Ant 13	25.2	14.5	12.5	21.5	17	14	14
FR1 n41 PC3	Ant 41	25.7	25.7	25.7	20.5	20.5	17.5	17.5
FR1 n41 PC3	Ant 12	24.7	16	14.5	22	22	19.5	19.5
FR1 n41 PC3	Ant 25	23.7	18.5	14.5	20.5	20.5	17.5	17.5
FR1 n41 PC2	Ant 13	27	14.5	12.5	21.5	17	14	14
FR1 n41 PC2	Ant 41	27.5	27.5	27	20.5	20.5	17.5	17.5
FR1 n41 PC2	Ant 12	26.5	16	14.5	22	22	19.5	19.5
FR1 n41 PC2	Ant 25	25.5	18.5	14.5	20.5	20.5	17.5	17.5
FR1 n77 PC3	Ant 13	25	15.5	14	24	19	15.5	15.5
FR1 n77 PC3	Ant 25	21	16	11.5	20	20	17	17
FR1 n77 PC3	Ant 12	24.5	16.5	15	18	18	15	15
FR1 n77 PC3	Ant 22	22	14	11.5	17.5	17.5	14.5	14.5
FR1 n78 PC3	Ant 13	25	15.5	14	23.5	20	17	17
FR1 n78 PC3	Ant 25	21	16.5	12	19	19	16	16
FR1 n78 PC3	Ant 12	24.5	15	13.5	18	18	15	15
FR1 n78 PC3	Ant 22	22	14	12	17.5	17.5	14.5	14.5
FR1 n77 PC2	Ant 13	26.5	15.5	14	24	19	15.5	15.5
FR1 n77 PC2	Ant 25	22.5	16	11.5	20	20	17	17
FR1 n77 PC2	Ant 12	26	16.5	15	18	18	15	15
FR1 n77 PC2	Ant 22	23.5	14	11.5	17.5	17.5	14.5	14.5
FR1 n78 PC2	Ant 13	27.5	15.5	14	23.5	20	17	17
FR1 n78 PC2	Ant 25	23.5	16.5	12	19	19	16	16
FR1 n78 PC2	Ant 12	27	15	13.5	18	18	15	15
FR1 n78 PC2	Ant 22	24.5	14	12	17.5	17.5	14.5	14.5

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

5. Smart Transmit feature for RF Exposure compliance

The FCC RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN 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.

Note that WLAN/BT operations are not enabled with Smart Transmit.

This report describes the procedures for the SAR char generation, and the parameters obtained from SAR characterization (referred to as SAR char, respectively) will be used as input for Smart Transmit. SAR char will be entered via the Embedded File System (EFS) version 23 to enable the Smart Transmit Gen1 Feature.

<Terminologies in this report>

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

<SAR Characterization>

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

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

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

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

Band	Antenna	DSI 2	DSI 3	DSI 4	DSI 5	DSI 6	DSI 7	Total Uncertainty dB (k=2)	Pmax*
GSM850	Ant 26	24.0	23.0	27.2	27.2	22.5	22.5	1.0	24.5
GSM850	Ant 11	20.3	19.0	23.0	25.5	21.0	21.0	1.0	25.0
GSM1900	Ant 13	18.3	17.0	25.3	25.3	19.3	19.3	1.0	21.0
GSM1900	Ant 41	33.5	33.5	29.1	29.1	18.5	18.5	1.0	21.5
WCDMA II	Ant 13	16.5	15.0	27.4	21.5	18.0	18.0	1.0	24.0
WCDMA II	Ant 41	32.1	32.1	20.2	20.2	17.2	17.2	1.0	24.7
WCDMA IV	Ant 13	15.5	14.0	23.0	21.0	18.0	18.0	1.0	24.0
WCDMA IV	Ant 41	32.1	32.1	20.7	20.7	17.2	17.2	1.0	24.7
WCDMA V	Ant 26	22.5	21.0	26.3	26.3	20.5	20.5	1.0	24.0
WCDMA V	Ant 11	19.7	18.7	24.2	24.2	20.2	20.2	1.0	24.7
WCDMA XIX	Ant 26	22.5	21.0	26.2	26.2	20.5	20.5	1.0	24.0
WCDMA XIX	Ant 11	19.7	18.7	24.2	24.2	20.2	20.2	1.0	24.7
LTE Band 2	Ant 13	16.5	14.5	24.4	21.0	18.0	18.0	1.0	24.0
LTE Band 2	Ant 41	32.0	32.0	20.0	20.0	16.5	16.5	1.0	24.5
LTE Band 2	Ant 12	14.5	13.5	20.0	20.0	17.0	17.0	1.0	23.5
LTE Band 2	Ant 25	17.0	13.5	20.5	20.5	17.0	17.0	1.0	22.5
LTE Band 4	Ant 13	16.0	14.5	25.7	21.0	18.0	18.0	1.0	24.0
LTE Band 4	Ant 41	32.0	32.0	21.0	21.0	18.0	18.0	1.0	24.5
LTE Band 4	Ant 12	15.5	14.5	20.0	20.0	17.0	17.0	1.0	23.5
LTE Band 4	Ant 25	18.0	13.0	21.5	21.5	18.0	18.0	1.0	22.5
LTE Band 5	Ant 26	23.0	22.0	27.2	27.2	21.5	21.5	1.0	24.5
LTE Band 5	Ant 11	20.0	18.5	27.6	27.6	21.0	21.0	0.7	25.0
LTE Band 7	Ant 13	12.5	11.5	22.0	17.5	14.5	14.5	1.0	24.0
LTE Band 7	Ant 41	31.6	31.6	20.0	20.0	16.5	16.5	0.7	25.0
LTE Band 7	Ant 12	15.0	14.0	21.5	21.5	19.0	19.0	1.0	23.5
LTE Band 7	Ant 25	16.5	12.0	20.5	20.5	17.5	17.5	1.0	22.5
LTE Band 12	Ant 26	21.5	20.5	28.2	28.2	21.5	21.5	1.0	24.0
LTE Band 12	Ant 11	21.5	20.5	23.0	23.0	19.0	19.0	1.0	24.5
LTE Band 13	Ant 26	27.5	27.5	30.6	30.6	26.4	26.4	1.0	24.0
LTE Band 13	Ant 11	20.5	19.0	26.3	26.3	19.5	19.5	1.0	24.5
LTE Band 17	Ant 26	21.5	20.5	28.2	28.2	21.5	21.5	1.0	24.0
LTE Band 17	Ant 11	21.5	20.5	23.0	23.0	19.0	19.0	1.0	24.5
LTE Band 18	Ant 26	23.5	22.0	27.2	27.2	22.5	22.5	1.0	24.5
LTE Band 18	Ant 11	20.0	18.5	27.6	27.6	21.0	21.0	0.7	25.0
LTE Band 19	Ant 26	23.5	22.5	27.2	27.2	21.5	21.5	1.0	24.5
LTE Band 19	Ant 11	20.0	19.0	27.6	27.6	21.0	21.0	0.7	25.0
LTE Band 25	Ant 13	16.5	14.5	24.4	20.0	17.0	17.0	1.0	24.0
LTE Band 25	Ant 41	32.0	32.0	20.0	20.0	17.0	17.0	1.0	24.5
LTE Band 25	Ant 12	15.5	14.5	20.5	20.5	17.5	17.5	1.0	23.5
LTE Band 25	Ant 25	18.5	13.5	22.0	22.0	18.5	18.5	1.0	22.5
LTE Band 26	Ant 26	23.0	21.5	27.2	27.2	21.0	21.0	1.0	24.5
LTE Band 26	Ant 11	20.0	19.0	24.5	24.5	21.0	21.0	0.7	25.0



LTE Band 66	Ant 13	16.0	15.0	25.7	21.5	18.0	18.0	1.0	24.0
LTE Band 66	Ant 41	32.0	32.0	21.0	21.0	17.5	17.5	1.0	24.5
LTE Band 66	Ant 12	15.5	14.5	20.0	20.0	16.5	16.5	1.0	23.5
LTE Band 66	Ant 25	17.0	13.0	21.0	21.0	17.5	17.5	1.0	22.5
LTE Band 38	Ant 13	12.7	11.7	21.2	16.7	13.2	13.2	1.0	22.2
LTE Band 38	Ant 41	30.7	30.7	20.2	20.2	17.2	17.2	1.0	22.7
LTE Band 38	Ant 12	14.2	13.2	27.5	27.5	18.2	18.2	1.0	21.2
LTE Band 38	Ant 25	16.7	15.7	29.9	29.9	17.2	17.2	1.0	20.2
LTE Band 41	Ant 13	12.7	11.7	21.7	16.7	13.2	13.2	1.0	22.2
LTE Band 41	Ant 41	30.7	30.7	20.2	20.2	16.7	16.7	1.0	22.7
LTE Band 41	Ant 12	14.2	13.2	27.5	27.5	17.7	17.7	1.0	21.2
LTE Band 41	Ant 25	16.7	14.2	19.7	19.7	16.7	16.7	1.0	20.2
LTE Band 42	Ant 13	13.5	12.5	26.0	19.0	16.0	16.0	1.0	22.5
LTE Band 42	Ant 25	15.5	14.0	27.6	27.6	18.0	18.0	1.0	19.0
LTE Band 42	Ant 12	15.0	13.5	19.5	19.5	16.5	16.5	1.0	22.0
LTE Band 42	Ant 22	13.0	10.0	17.0	17.0	14.0	14.0	1.0	20.0
FR1 n2	Ant 13	16.0	14.5	27.1	21.5	18.0	18.0	1.0	24.0
FR1 n2	Ant 41	31.5	31.5	19.5	19.5	16.5	16.5	1.0	24.5
FR1 n2	Ant 12	14.5	13.5	20.0	20.0	17.0	17.0	1.0	23.5
FR1 n2	Ant 25	16.5	12.5	20.5	20.5	16.5	16.5	1.0	22.5
FR1 n5	Ant 26	23.5	22.0	30.2	30.2	22.0	22.0	1.0	24.5
FR1 n5	Ant 11	19.5	18.5	24.5	24.5	21.0	21.0	1.0	25.0
FR1 n7	Ant 13	13.0	12.0	21.0	17.0	14.0	14.0	1.0	24.0
FR1 n7	Ant 41	29.9	29.9	19.5	19.5	16.5	16.5	1.0	24.5
FR1 n7	Ant 12	14.0	13.0	21.5	21.5	19.0	19.0	1.0	23.5
FR1 n7	Ant 25	16.0	13.0	20.0	20.0	16.5	16.5	1.0	22.5
FR1 n25	Ant 13	16.0	14.5	27.1	21.5	18.0	18.0	1.0	24.0
FR1 n25	Ant 41	31.5	31.5	19.5	19.5	16.5	16.5	1.0	24.5
FR1 n25	Ant 12	14.5	13.5	20.0	20.0	17.0	17.0	1.0	23.5
FR1 n25	Ant 25	16.5	12.5	20.5	20.5	16.5	16.5	1.0	22.5
FR1 n26	Ant 26	23.0	22.0	30.2	30.2	22.0	22.0	1.0	24.5
FR1 n26	Ant 11	20.0	19.0	24.0	24.0	20.5	20.5	1.0	25.0
FR1 n66	Ant 13	15.0	14.0	23.0	20.5	17.5	17.5	1.0	24.0
FR1 n66	Ant 41	31.5	31.5	20.5	20.5	18.0	18.0	1.0	24.5
FR1 n66	Ant 12	15.5	14.5	20.5	20.5	17.0	17.0	1.0	23.5
FR1 n66	Ant 25	18.0	13.0	21.5	21.5	18.5	18.5	1.0	22.5
FR1 n38	Ant 13	13.2	11.7	20.2	16.7	13.7	13.7	1.0	24.2
FR1 n38	Ant 41	28.0	28.0	20.2	20.2	17.2	17.2	1.0	24.7
FR1 n38	Ant 12	14.2	12.7	21.2	21.2	18.2	18.2	1.0	23.2
FR1 n38	Ant 25	17.2	13.2	20.2	20.2	17.2	17.2	1.0	22.2
FR1 n41_PC2	Ant 13	13.5	11.5	20.5	16.0	13.0	13.0	1.0	26.0
FR1 n41_PC3	Ant 13							1.0	24.2
FR1 n41_PC2	Ant 41	28.0	24.7	19.5	19.5	16.5	16.5	1.0	26.5
FR1 n41_PC3	Ant 41							1.0	24.7
FR1 n41_PC2	Ant 12	15.0	13.5	21.0	21.0	18.5	18.5	1.0	25.5
FR1 n41_PC3	Ant 12							1.0	23.7
FR1 n41_PC2	Ant 25	17.5	13.5	19.5	19.5	16.5	16.5	1.0	24.5
FR1 n41_PC3	Ant 25							1.0	22.7
FR1 n77_PC2	Ant 13	14.5	13.0	23.0	18.0	14.5	14.5	1.0	25.5
FR1 n77_PC3	Ant 13							1.0	24.0

FR1 n77_PC2	Ant 25	15.0	10.5	19.0	19.0	16.0	16.0	1.0	21.5
FR1 n77_PC3	Ant 25							1.0	20.0
FR1 n77_PC2	Ant 12	15.5	14.0	17.0	17.0	14.0	14.0	1.0	25.0
FR1 n77_PC3	Ant 12							1.0	23.5
FR1 n77_PC2	Ant 22	13.0	10.5	16.5	16.5	13.5	13.5	1.0	22.5
FR1 n77_PC3	Ant 22							1.0	21.0
FR1 n78_PC2	Ant 13	14.5	13.0	22.5	19.0	16.0	16.0	1.0	26.5
FR1 n78_PC3	Ant 13							1.0	24.0
FR1 n78_PC2	Ant 25	15.5	11.0	18.0	18.0	15.0	15.0	1.0	22.5
FR1 n78_PC3	Ant 25							1.0	20.0
FR1 n78_PC2	Ant 12	14.0	12.5	17.0	17.0	14.0	14.0	1.0	26.0
FR1 n78_PC3	Ant 12							1.0	23.5
FR1 n78_PC2	Ant 22	13.0	11.0	16.5	16.5	13.5	13.5	1.0	23.5
FR1 n78_PC3	Ant 22							1.0	21.0

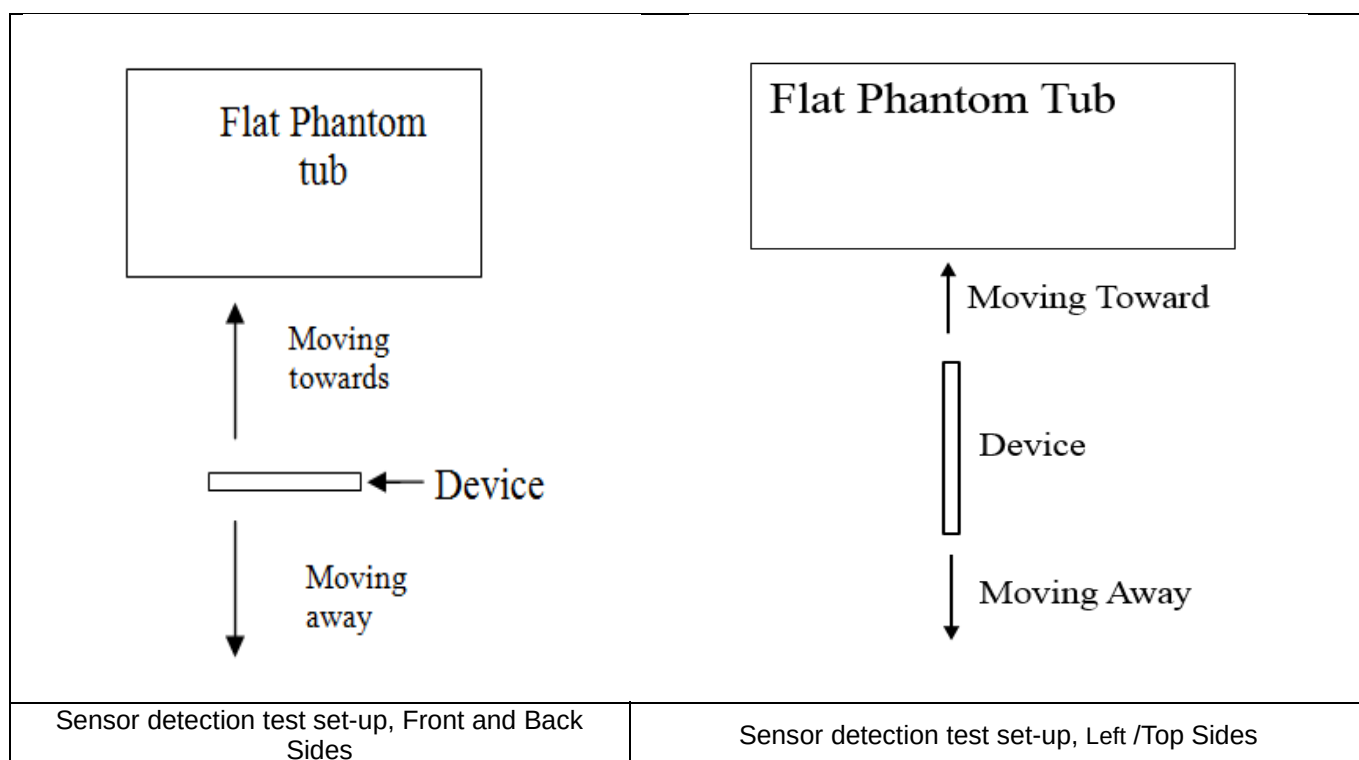
Note:

- 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 (3980MHz) 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 A for ANT 13>

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	10	10	14	14	14	14	14	14

7. RF Exposure Limits

7.1 Uncontrolled Environment

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

7.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

8. Specific Absorption Rate (SAR)

8.1 Introduction

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

8.2 SAR Definition

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

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

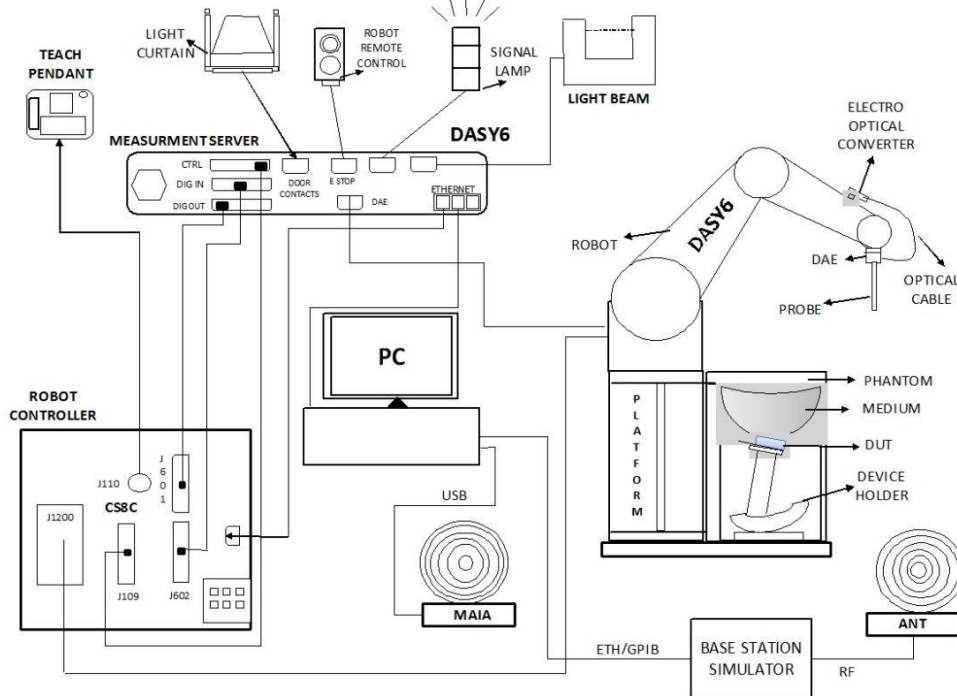
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. System Description and Setup

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



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

9.1 E-Field Probe

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

<EX3DV4 Probe>

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

9.2 Data Acquisition Electronics (DAE)

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

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



Photo of DAE

9.3 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

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

9.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

10. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

10.1 *Spatial Peak SAR Evaluation*

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

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

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

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

10.2 Power Reference Measurement

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

10.3 Area Scan

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

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

	≤ 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	1099	Dec. 13, 2024	Dec. 12, 2025
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 13, 2024	Dec. 12, 2025
SPEAG	1750MHz System Validation Kit	D1750V2	1090	Mar. 12, 2025	Mar. 11, 2026
SPEAG	1900MHz System Validation Kit	D1900V2	5d182	Dec. 16, 2024	Dec. 15, 2025
SPEAG	2450MHz System Validation Kit	D2450V2	1095	Feb. 08, 2024	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	1341	Dec. 12, 2024	Dec. 11, 2025
SPEAG	Data Acquisition Electronics	DAE4	1664	Jul. 30, 2025	Jul. 29, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7930	Jul. 21, 2025	Jul. 20, 2026
SPEAG	SAM Twin Phantom	QD 000 P40 CD	1670	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	MT8820C	6201341952	Dec. 26, 2024	Dec. 25, 2025
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. 14, 2025	Oct. 13, 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
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	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
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Mini-Circuits	Amplifier	ZVA-183W-S+	726202215	Note 1	
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:

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

12. System Verification

12.1 Tissue Simulating Liquids

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

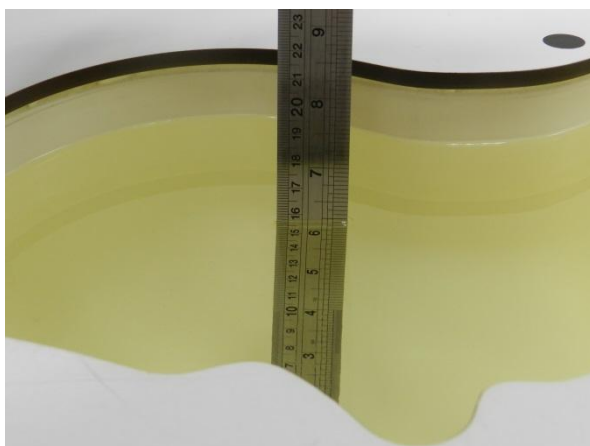


Fig 11.1 Photo of Liquid Height for Head SAR



Fig 11.2 Photo of Liquid Height for Body SAR

12.2 Tissue Verification

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

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

Simulating Liquid for 5GHz, Manufactured by SPEAG

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Tissue Type	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
750	Head	22.3	0.885	43.900	0.89	41.90	-0.56	4.77	±5	2025/10/25
750	Head	22.6	0.876	43.500	0.89	41.90	-1.57	3.82	±5	2025/11/6
835	Head	22.4	0.914	43.100	0.90	41.50	1.56	3.86	±5	2025/10/30
835	Head	22.5	0.919	43.200	0.90	41.50	2.11	4.10	±5	2025/11/11
1750	Head	22.1	1.340	41.900	1.37	40.10	-2.19	4.49	±5	2025/10/27
1750	Head	22.4	1.330	41.200	1.37	40.10	-2.92	2.74	±5	2025/11/3
1900	Head	22.2	1.440	41.700	1.40	40.00	2.86	4.25	±5	2025/10/22
1900	Head	22.2	1.410	41.600	1.40	40.00	0.71	4.00	±5	2025/11/9
2450	Head	22.5	1.820	41.000	1.80	39.20	1.11	4.59	±5	2025/10/28
2450	Head	22.7	1.850	39.900	1.80	39.20	2.78	1.79	±5	2025/11/1
2600	Head	22.2	1.940	40.700	1.96	39.00	-1.02	4.36	±5	2025/10/24
2600	Head	22.5	1.970	39.500	1.96	39.00	0.51	1.28	±5	2025/11/11
3500	Head	22.7	2.820	39.200	2.91	37.90	-3.09	3.43	±5	2025/11/2
3500	Head	22.4	2.770	39.100	2.91	37.90	-4.81	3.17	±5	2025/11/4
3700	Head	22.1	3.100	38.900	3.12	37.70	-0.64	3.18	±5	2025/10/23
3700	Head	22.6	3.120	38.500	3.12	37.70	0.00	2.12	±5	2025/11/10
3900	Head	22.4	3.200	38.600	3.33	37.51	-3.90	2.91	±5	2025/11/1
3900	Head	22.2	3.220	38.400	3.33	37.51	-3.30	2.37	±5	2025/11/5
5250	Head	22.7	4.590	36.200	4.71	35.95	-2.55	0.70	±5	2025/10/29
5250	Head	22.6	4.550	36.600	4.71	35.95	-3.40	1.81	±5	2025/11/10
5600	Head	22.3	5.000	35.600	5.07	35.50	-1.38	0.28	±5	2025/10/26
5600	Head	22.3	5.110	36.100	5.07	35.50	0.79	1.69	±5	2025/11/8
5800	Head	22.1	5.230	35.300	5.27	35.30	-0.76	0.00	±5	2025/10/31
5800	Head	22.7	5.320	35.800	5.27	35.30	0.95	1.42	±5	2025/11/12

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 (%)
2025/10/25	750	Head	250	1099	7930	1664	2.210	8.280	8.84	6.76	1.440	5.370	5.76	7.26
2025/11/6	750	Head	250	1099	7930	1664	2.140	8.280	8.56	3.38	1.370	5.370	5.48	2.05
2025/10/30	835	Head	250	4d162	7930	1664	2.380	9.080	9.52	4.85	1.490	5.850	5.96	1.88
2025/11/11	835	Head	250	4d162	7930	1664	2.420	9.080	9.68	6.61	1.540	5.850	6.16	5.30
2025/10/27	1750	Head	250	1090	7930	1664	9.440	36.600	37.76	3.17	5.060	19.500	20.24	3.79
2025/11/3	1750	Head	250	1090	7930	1664	8.520	36.600	34.08	-6.89	4.630	19.500	18.52	-5.03
2025/10/22	1900	Head	250	5d182	7930	1664	10.700	39.800	42.8	7.54	5.620	21.000	22.48	7.05
2025/11/9	1900	Head	250	5d182	7930	1664	10.300	39.800	41.2	3.52	5.420	21.000	21.68	3.24
2025/10/28	2450	Head	250	1095	7930	1664	12.700	52.600	50.8	-3.42	6.110	24.700	24.44	-1.05
2025/11/1	2450	Head	250	1095	7930	1664	13.300	52.600	53.2	1.14	6.240	24.700	24.96	1.05
2025/10/24	2600	Head	250	1070	7930	1664	14.100	56.500	56.4	-0.18	6.440	25.200	25.76	2.22
2025/11/11	2600	Head	250	1070	7930	1664	13.700	56.500	54.8	-3.01	6.250	25.200	25	-0.79
2025/11/2	3500	Head	100	1076	7930	1664	6.920	65.800	69.2	5.17	2.530	25.000	25.3	1.20
2025/11/4	3500	Head	100	1076	7930	1664	6.590	65.800	65.9	0.15	2.630	25.000	26.3	5.20
2025/10/23	3700	Head	100	1037	7930	1664	7.210	67.000	72.1	7.61	2.610	24.400	26.1	6.97
2025/11/10	3700	Head	100	1037	7930	1664	7.220	67.000	72.2	7.76	2.560	24.400	25.6	4.92
2025/11/1	3900	Head	100	1022	7930	1664	7.390	70.100	73.9	5.42	2.530	24.600	25.3	2.85
2025/11/5	3900	Head	100	1022	7930	1664	7.300	70.100	73	4.14	2.550	24.600	25.5	3.66
2025/10/29	5250	Head	100	1341	7930	1664	8.480	79.100	84.8	7.21	2.380	22.400	23.8	6.25
2025/11/10	5250	Head	100	1341	7930	1664	8.230	79.100	82.3	4.05	2.320	22.400	23.2	3.57
2025/10/26	5600	Head	100	1341	7930	1664	8.860	82.800	88.6	7.00	2.470	23.800	24.7	3.78
2025/11/8	5600	Head	100	1341	7930	1664	8.890	82.800	88.9	7.37	2.520	23.800	25.2	5.88
2025/10/31	5800	Head	100	1341	7930	1664	8.570	79.900	85.7	7.26	2.410	22.900	24.1	5.24
2025/11/12	5800	Head	100	1341	7930	1664	8.590	79.900	85.9	7.51	2.410	22.900	24.1	5.24

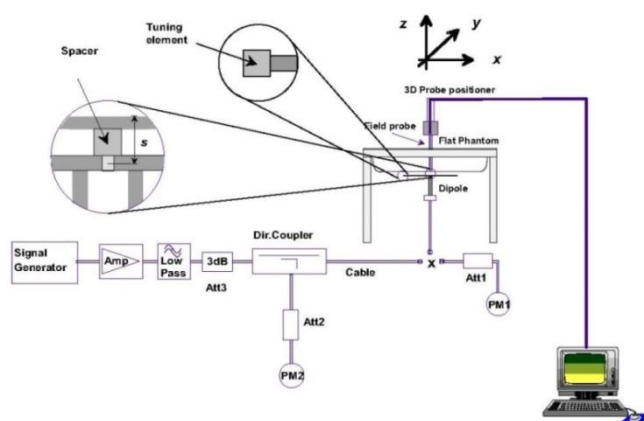


Fig 11.3.1 System Performance Check Setup



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.

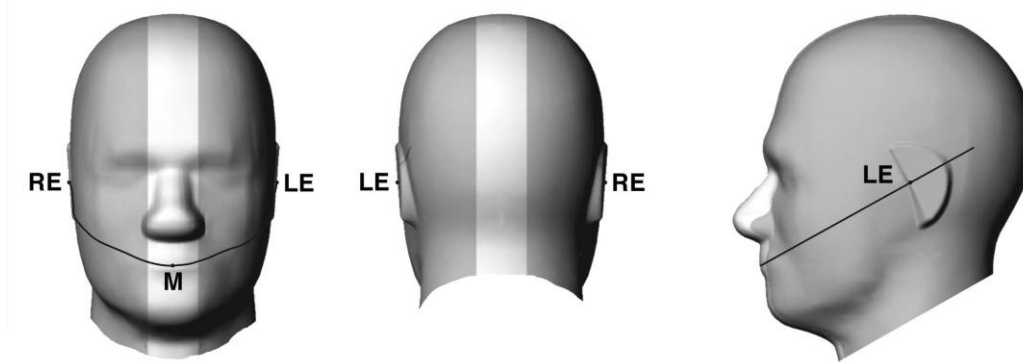


Fig 12.1.1 Front, back, and side views of SAM twin phantom

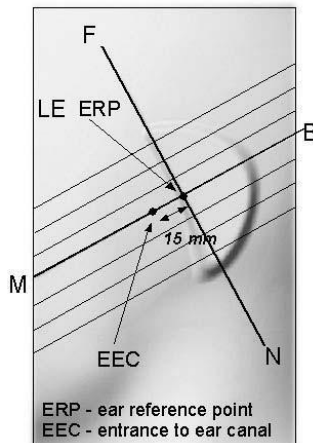


Fig 12.1.2 Close-up side view of phantom showing the ear region.

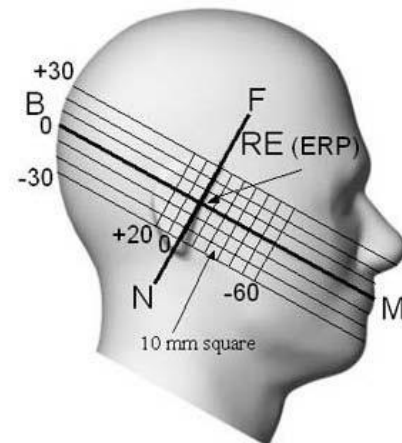


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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.

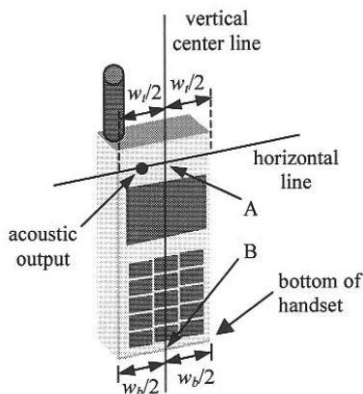


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

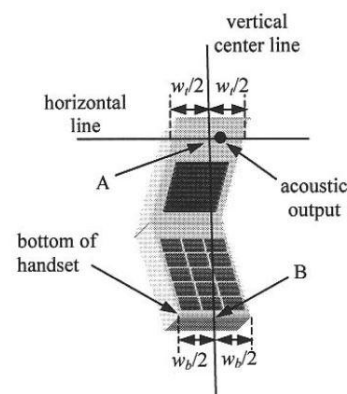


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

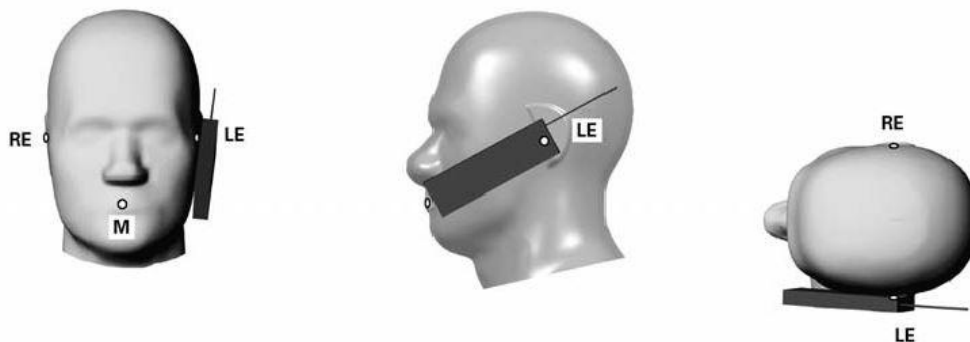


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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

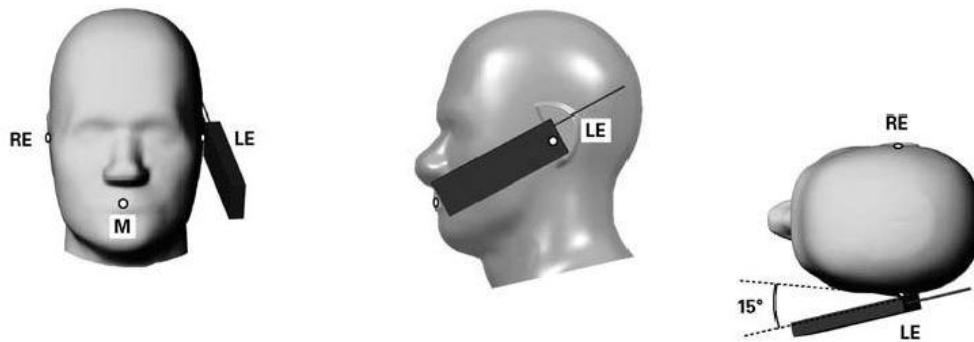


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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-chip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

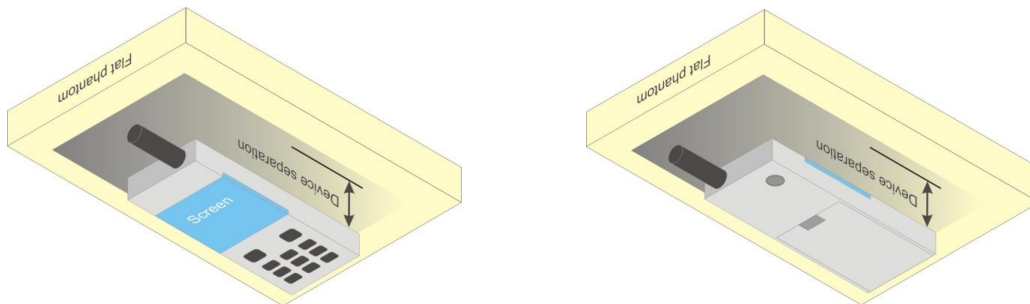


Fig 12.4 Body Worn Position

13.5 Product Specific 10g SAR Exposure

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

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

13.6 Wireless Router

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 v02r01 where SAR test considerations for handsets ($L \times W \geq 9$ 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 $\leq \frac{1}{4}$ 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.		

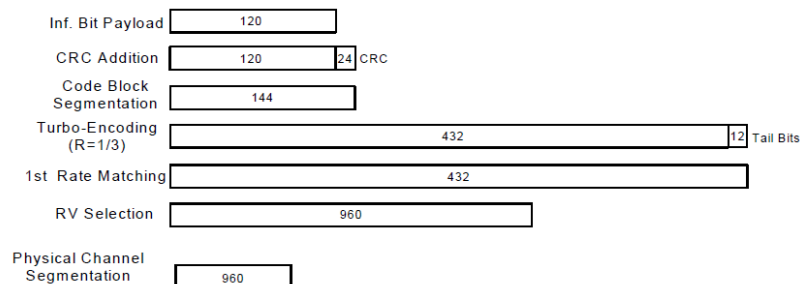


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

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>

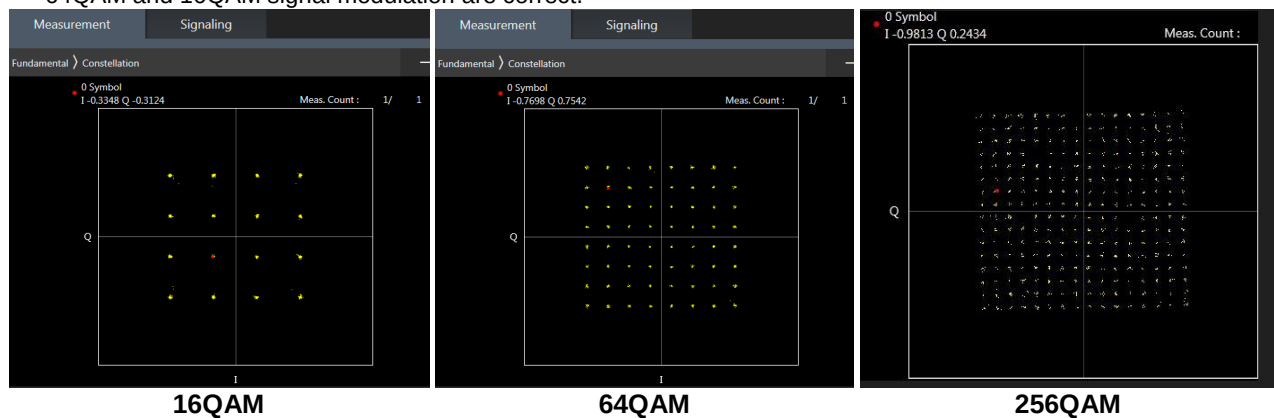
General Note:

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 B2 / B4 / B5 / B17 / B38 SAR test was covered by B25 / B66 / B26 / B12 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
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.

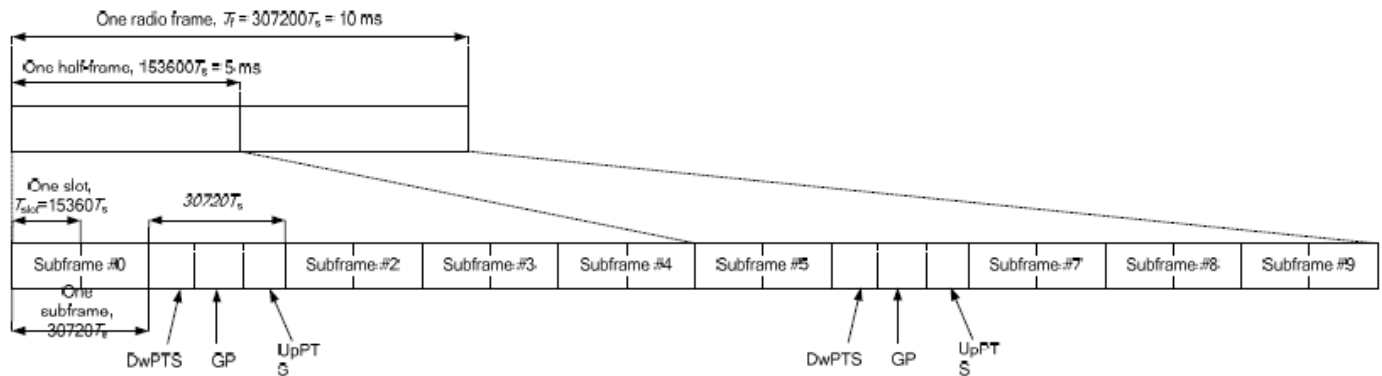


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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

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

<LTE Carrier Aggregation>

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

General Note:

1. 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 $\frac{1}{4}$ 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 Intra CA	TX Ant
CA_7C	Ant 13/41/12/25
CA_41C	Ant 13/41/12/25
CA_66C	Ant 13/41/12/25
CA_42C	Ant 13/25/12/22

<Intra-band>
General Note:

- The device supports intra-band uplink carrier aggregation for LTE B7/41/66/42 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 Inter CA	LTE TX0	TX0 Ant	LTE TX1	TX1 Ant
CA_2A-4A	B2	Ant13/41	B4	Ant12/25
CA_2A-7A	B2	Ant13/41	B7	Ant12/25
CA_4A-5A	B4	Ant13/41/12/25	B5	Ant26/11
CA_4A-7A	B4	Ant13/41	B7	Ant12/25
CA_5A-7A	B5	Ant26/11	B7	Ant13/41/12/25
CA_5A-66A	B5	Ant26/11	B66	Ant13/41/12/25

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

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n7/n25/n26/n66/n38/n41/n77/n78 is SA mode.
2. 5G NR n2/n5/n7/n26/n66/n38/n41/n77/n78 is NSA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
 - b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
 - c. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
 - d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
 - f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
 - g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
5. 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.
6. 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.
7. 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.
8. 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.

<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	LTE TX	LTE Ant	NR TX	NR Ant
DC_4A_n2A	B4	Ant13/41	n2	Ant12/25
DC_5A_n2A	B5	Ant26/11	n2	Ant13/41/12/25
DC_7A_n2A	B7	Ant13/41	n2	Ant12/25
DC_66A_n2A	B66	Ant13/41	n2	Ant12/25
DC_7A_n5A	B7	Ant13/41/12/25	n5	Ant26/11
DC_2A_n7A	B2	Ant13/41	n7	Ant12/25
DC_4A_n7A	B4	Ant13/41	n7	Ant12/25
DC_5A_n7A	B5	Ant26/11	n7	Ant13/41/12/25
DC_66A_n7A	B66	Ant13/41	n7	Ant12/25
DC_7A_n26A	B7	Ant13/41/12/25	n26	Ant26/11
DC_2A_n38A	B2	Ant13/41	n38	Ant12/25
DC_4A_n38A	B4	Ant13/41	n38	Ant12/25
DC_5A_n38A	B5	Ant26/11	n38	Ant13/41/12/25
DC_66A_n38A	B66	Ant13/41	n38	Ant12/25
DC_2A_n41A	B2	Ant13/41	n41	Ant12/25
DC_4A_n41A	B4	Ant13/41	n41	Ant12/25
DC_26A_n41A	B26	Ant26/11	n41	Ant13/41/12/25
DC_66A_n41A	B66	Ant13/41	n41	Ant12/25
DC_2A_n66A	B2	Ant13/41	n66	Ant12/25
DC_5A_n66A	B5	Ant26/11	n66	Ant13/41/12/25
DC_7A_n66A	B7	Ant13/41	n66	Ant12/25
DC_7A_n77A	B7	Ant13/41/12/25	n77	Ant13/25/12/22
DC_2A_n78A	B2	Ant13/41/12/25	n78	Ant13/25/12/22
DC_4A_n78A	B4	Ant13/41/12/25	n78	Ant13/25/12/22
DC_5A_n78A	B5	Ant26/11	n78	Ant13/25/12/22
DC_7A_n78A	B7	Ant13/41/12/25	n78	Ant13/25/12/22
DC_26A_n78A	B26	Ant26/11	n78	Ant13/25/12/22
DC_38A_n78A	B38	Ant13/41/12/25	n78	Ant13/25/12/22
DC_41A_n78A	B41	Ant13/41/12/25	n78	Ant13/25/12/22
DC_66A_n78A	B66	Ant13/41/12/25	n78	Ant13/25/12/22

Inter-Band CA Configuration:

NR Inter CA	NR TX0	TX0 Ant	NR TX1	TX1 Ant
CA_n7A-n78A	n7	Ant13/41/12/25	n78	Ant13/25/12/22

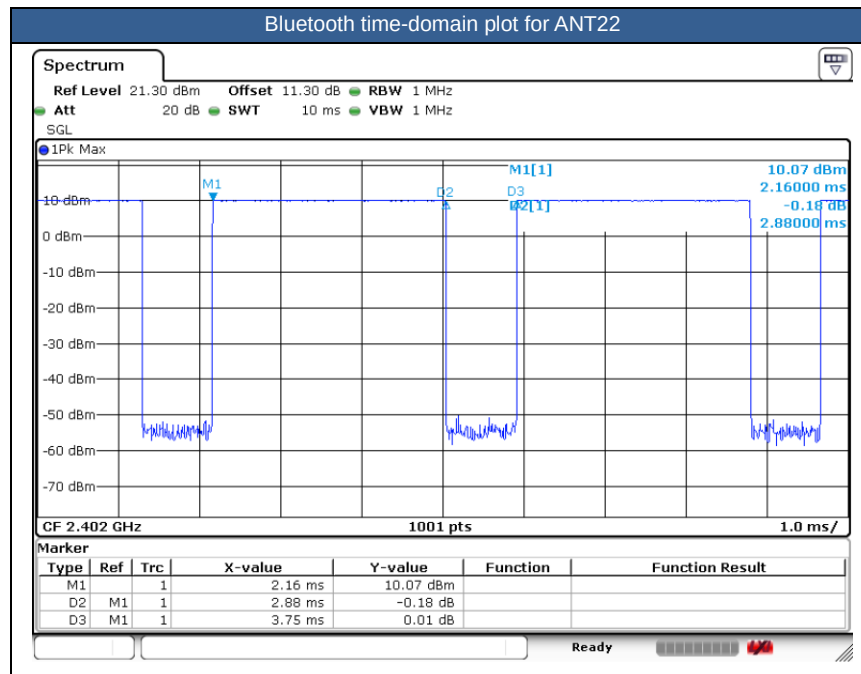
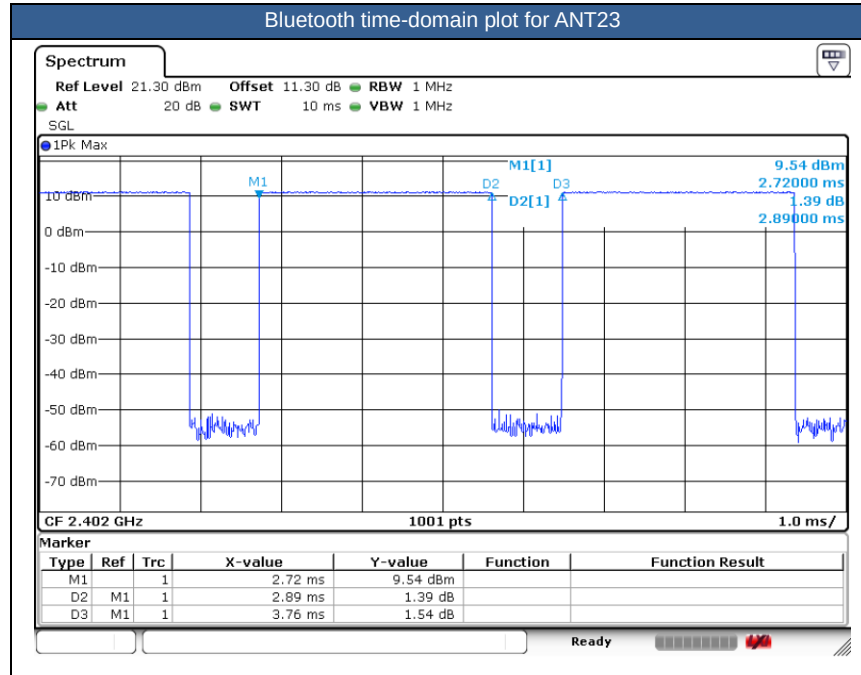
<WLAN Conducted Power>**General Note:**

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration. Additional output power measurements were not necessary.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
 - a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
 - b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
 - c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
6. 802.11 ax supports both full tone size mode and partial tone size mode, after verification on partial tone size mode that partial size tone mode power will not be higher than full tone size mode, therefore, full tone mode power was chosen to be measured in this report.
7. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing.
8. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of two antennas respectively to calculate sum of the power for MIMO mode.

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 76.86% for Ant23 and 76.8% for Ant24 as following figure, Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation





15. Antenna Location

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

16. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For SAR testing of Bluetooth signal with 83.3% theoretical duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle) *83.3%".
 - d. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - e. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - f. For TDD LTE SAR measurement of power class 3, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = Measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about 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 1.2W/kg of GSM850, WCDMA Band V/ XIX, LTE Band 5/13/7/18/19/25/26/41/66, 5G NR n5 /n26 /n77/n78, therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
 - c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
6. 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 B2 / B4 / B5 / B17 / B38 SAR test was covered by B25 / B66 / B26 / B12 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

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

DSI status description:

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

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

DSI	Trigger Conditions	Antenna No.	Exposure conditions	
DSI 2	Receiver on	All ant	Head Standalone	Head all Position
DSI 3	Receiver on+WLAN	All ant	Head Simultaneous	Head all Position
DSI 4	Receiver off/Sensor off	ant 11/12/21/22 /23/24/31/41	Body-worn/Extremity Standalone	No Sensor Position
	Receiver off/Sensor off	ant 13	Sensor Trigger Distance -1mm	See by section 6
DSI 5	Receiver off/Sensor on	ant 13	Body-worn/Extremity Standalone	See by section 6
DSI 6	Receiver off/Sensor on+WLAN	ant 13	Body-worn/Extremity Simultaneous	No Sensor Position
	Receiver off/Sensor on+WLAN	ant 11/12/21/22 /23/24/31/41	Body-worn/Extremity Simultaneous	Body all Position
	hotspot	All ant	Hotspot Simultaneous	Body all Position
DSI 7	Receiver off/Sensor off+WLAN	ant 13	Body-worn/Extremity Simultaneous	No Sensor Position
	Receiver off/Sensor off+WLAN	ant 11/12/21/22 /23/24/31/41	Body-worn/Extremity Simultaneous	Body all Position

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

Trigger conditions	Exposure Condition	Power Level state
Receiver on	Head Standalone	Power Reduce Level 1
Receiver on+ WLAN+WWAN	Head Simultaneous	Power Reduce Level 2
Receiver off	Body-worn /Extremity Standalone	Power Reduce Level 3
Receiver off+ WLAN+WWAN	Body-worn/Hotspot/Extremity Simultaneous	Power Reduce Level 4

16.1 Head SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant 11	DSI 2	189	836.4	Sample 1	23.30	24.30	1.259	-0.08	0.176	0.222
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant 11	DSI 3	189	836.4	Sample 1	22.10	23.00	1.23	0.08	0.116	0.143
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant 11	DSI 2	189	836.4	Sample 1	23.30	24.30	1.259	0.00	0.001	0.001
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant 11	DSI 3	189	836.4	Sample 1	22.10	23.00	1.23	0.00	0.001	0.001
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant 11	DSI 2	189	836.4	Sample 1	23.30	24.30	1.259	0.09	0.407	0.512
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant 11	DSI 3	189	836.4	Sample 1	22.10	23.00	1.23	-0.07	0.269	0.331
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant 11	DSI 2	189	836.4	Sample 1	23.30	24.30	1.259	0.07	0.053	0.067
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant 11	DSI 3	189	836.4	Sample 1	22.10	23.00	1.23	-0.12	0.035	0.043
01	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant 26	DSI 2	189	836.4	Sample 1	26.65	28.00	1.365	-0.12	0.410	0.560
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant 26	DSI 3	189	836.4	Sample 1	25.65	27.00	1.365	0.10	0.326	0.445
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant 26	DSI 2	189	836.4	Sample 1	26.65	28.00	1.365	0.10	0.086	0.117
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant 26	DSI 3	189	836.4	Sample 1	25.65	27.00	1.365	0.01	0.068	0.093
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant 26	DSI 2	189	836.4	Sample 1	26.65	28.00	1.365	-0.01	0.187	0.255
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant 26	DSI 3	189	836.4	Sample 1	25.65	27.00	1.365	0.02	0.149	0.204
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant 26	DSI 2	189	836.4	Sample 1	26.65	28.00	1.365	0.19	0.064	0.087
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant 26	DSI 3	189	836.4	Sample 1	25.65	27.00	1.365	-0.16	0.051	0.070
02	GSM1900	GPRS 4 Tx slots	Right Cheek	0mm	Ant 13	DSI 2	810	1909.8	Sample 1	21.08	22.30	1.324	0.18	0.630	0.834
	GSM1900	GPRS 4 Tx slots	Right Cheek	0mm	Ant 13	DSI 2	512	1850.2	Sample 1	20.80	22.30	1.413	0.05	0.550	0.777
	GSM1900	GPRS 4 Tx slots	Right Cheek	0mm	Ant 13	DSI 2	661	1880	Sample 1	21.05	22.30	1.334	0.01	0.620	0.827
	GSM1900	GPRS 4 Tx slots	Right Cheek	0mm	Ant 13	DSI 3	810	1909.8	Sample 1	19.75	21.00	1.334	-0.02	0.467	0.623
	GSM1900	GPRS 4 Tx slots	Right Tilted	0mm	Ant 13	DSI 2	810	1909.8	Sample 1	21.08	22.30	1.324	-0.07	0.431	0.571
	GSM1900	GPRS 4 Tx slots	Right Tilted	0mm	Ant 13	DSI 3	810	1909.8	Sample 1	19.75	21.00	1.334	-0.16	0.320	0.427
	GSM1900	GPRS 4 Tx slots	Left Cheek	0mm	Ant 13	DSI 2	810	1909.8	Sample 1	21.08	22.30	1.324	0.11	0.330	0.437
	GSM1900	GPRS 4 Tx slots	Left Cheek	0mm	Ant 13	DSI 3	810	1909.8	Sample 1	19.75	21.00	1.334	0.18	0.245	0.327
	GSM1900	GPRS 4 Tx slots	Left Tilted	0mm	Ant 13	DSI 2	810	1909.8	Sample 1	21.08	22.30	1.324	-0.16	0.390	0.516
	GSM1900	GPRS 4 Tx slots	Left Tilted	0mm	Ant 13	DSI 3	810	1909.8	Sample 1	19.75	21.00	1.334	0.17	0.289	0.386
	GSM1900	GPRS 2 Tx slots	Right Cheek	0mm	Ant 41	DSI 2	810	1909.8	Sample 1	28.15	29.00	1.216	-0.14	0.066	0.080
	GSM1900	GPRS 2 Tx slots	Right Tilted	0mm	Ant 41	DSI 2	810	1909.8	Sample 1	28.15	29.00	1.216	0.02	0.001	0.001
	GSM1900	GPRS 2 Tx slots	Left Cheek	0mm	Ant 41	DSI 2	810	1909.8	Sample 1	28.15	29.00	1.216	-0.16	0.058	0.071
	GSM1900	GPRS 2 Tx slots	Left Tilted	0mm	Ant 41	DSI 2	810	1909.8	Sample 1	28.15	29.00	1.216	0.11	0.001	0.001

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
03	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant 13	DSI 2	9400	1880	Sample 1	16.68	17.50	1.208	0.02	0.664	0.802
	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant 13	DSI 2	9262	1852.4	Sample 1	16.67	17.50	1.211	0.10	0.625	0.757
	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant 13	DSI 2	9538	1907.6	Sample 1	16.65	17.50	1.216	0.14	0.624	0.759
	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant 13	DSI 3	9400	1880	Sample 1	15.18	16.00	1.208	0.09	0.470	0.568
	WCDMA II	RMC 12.2Kbps	Right Tilted	0mm	Ant 13	DSI 2	9400	1880	Sample 1	16.68	17.50	1.208	0.08	0.517	0.625
	WCDMA II	RMC 12.2Kbps	Right Tilted	0mm	Ant 13	DSI 3	9400	1880	Sample 1	15.18	16.00	1.208	-0.07	0.366	0.442
	WCDMA II	RMC 12.2Kbps	Left Cheek	0mm	Ant 13	DSI 2	9400	1880	Sample 1	16.68	17.50	1.208	-0.01	0.196	0.237
	WCDMA II	RMC 12.2Kbps	Left Cheek	0mm	Ant 13	DSI 3	9400	1880	Sample 1	15.18	16.00	1.208	-0.08	0.139	0.168
	WCDMA II	RMC 12.2Kbps	Left Tilted	0mm	Ant 13	DSI 2	9400	1880	Sample 1	16.68	17.50	1.208	-0.06	0.287	0.347
	WCDMA II	RMC 12.2Kbps	Left Tilted	0mm	Ant 13	DSI 3	9400	1880	Sample 1	15.18	16.00	1.208	-0.02	0.203	0.245
	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant 41	DSI 2	9400	1880	Sample 1	25.06	25.70	1.159	-0.01	0.097	0.112
	WCDMA II	RMC 12.2Kbps	Right Tilted	0mm	Ant 41	DSI 2	9400	1880	Sample 1	25.06	25.70	1.159	0.01	0.068	0.079
	WCDMA II	RMC 12.2Kbps	Left Cheek	0mm	Ant 41	DSI 2	9400	1880	Sample 1	25.06	25.70	1.159	0.06	0.180	0.209
	WCDMA II	RMC 12.2Kbps	Left Tilted	0mm	Ant 41	DSI 2	9400	1880	Sample 1	25.06	25.70	1.159	-0.19	0.077	0.089
04	WCDMA IV	RMC 12.2Kbps	Right Cheek	0mm	Ant 13	DSI 2	1413	1732.6	Sample 1	15.70	16.50	1.202	0.03	0.615	0.739
	WCDMA IV	RMC 12.2Kbps	Right Cheek	0mm	Ant 13	DSI 3	1413	1732.6	Sample 1	14.30	15.00	1.175	-0.11	0.435	0.511
	WCDMA IV	RMC 12.2Kbps	Right Tilted	0mm	Ant 13	DSI 2	1413	1732.6	Sample 1	15.70	16.50	1.202	-0.01	0.443	0.532
	WCDMA IV	RMC 12.2Kbps	Right Tilted	0mm	Ant 13	DSI 3	1413	1732.6	Sample 1	14.30	15.00	1.175	0.02	0.314	0.369
	WCDMA IV	RMC 12.2Kbps	Left Cheek	0mm	Ant 13	DSI 2	1413	1732.6	Sample 1	15.70	16.50	1.202	0.14	0.295	0.355
	WCDMA IV	RMC 12.2Kbps	Left Cheek	0mm	Ant 13	DSI 3	1413	1732.6	Sample 1	14.30	15.00	1.175	-0.11	0.209	0.246
	WCDMA IV	RMC 12.2Kbps	Left Tilted	0mm	Ant 13	DSI 2	1413	1732.6	Sample 1	15.70	16.50	1.202	0.12	0.367	0.441
	WCDMA IV	RMC 12.2Kbps	Left Tilted	0mm	Ant 13	DSI 3	1413	1732.6	Sample 1	14.30	15.00	1.175	-0.04	0.260	0.306
	WCDMA IV	RMC 12.2Kbps	Right Cheek	0mm	Ant 41	DSI 2	1413	1732.6	Sample 1	25.05	25.70	1.161	0.07	0.180	0.209
	WCDMA IV	RMC 12.2Kbps	Right Tilted	0mm	Ant 41	DSI 2	1413	1732.6	Sample 1	25.05	25.70	1.161	-0.10	0.096	0.111
	WCDMA IV	RMC 12.2Kbps	Left Cheek	0mm	Ant 41	DSI 2	1413	1732.6	Sample 1	25.05	25.70	1.161	0.15	0.179	0.208
	WCDMA IV	RMC 12.2Kbps	Left Tilted	0mm	Ant 41	DSI 2	1413	1732.6	Sample 1	25.05	25.70	1.161	0.08	0.081	0.094
	WCDMA V	RMC 12.2Kbps	Right Cheek	0mm	Ant 11	DSI 2	4182	836.4	Sample 1	20.08	20.70	1.153	-0.03	0.314	0.362
	WCDMA V	RMC 12.2Kbps	Right Cheek	0mm	Ant 11	DSI 3	4182	836.4	Sample 1	19.12	19.70	1.143	-0.07	0.209	0.239



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	WCDMA V	RMC 12.2Kbps	Right Tilted	0mm	Ant 11	DSI 2	4182	836.4	Sample 1	20.08	20.70	1.153	0.19	0.064	0.074
	WCDMA V	RMC 12.2Kbps	Right Tilted	0mm	Ant 11	DSI 3	4182	836.4	Sample 1	19.12	19.70	1.143	-0.04	0.043	0.049
05	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant 11	DSI 2	4182	836.4	Sample 1	20.08	20.70	1.153	0.00	0.654	0.754
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant 11	DSI 3	4182	836.4	Sample 1	19.12	19.70	1.143	-0.10	0.492	0.562
	WCDMA V	RMC 12.2Kbps	Left Tilted	0mm	Ant 11	DSI 2	4182	836.4	Sample 1	20.08	20.70	1.153	0.12	0.099	0.114
	WCDMA V	RMC 12.2Kbps	Left Tilted	0mm	Ant 11	DSI 3	4182	836.4	Sample 1	19.12	19.70	1.143	-0.09	0.066	0.075
	WCDMA V	RMC 12.2Kbps	Right Cheek	0mm	Ant 26	DSI 2	4182	836.4	Sample 1	22.70	23.50	1.202	0.15	0.566	0.680
	WCDMA V	RMC 12.2Kbps	Right Cheek	0mm	Ant 26	DSI 3	4182	836.4	Sample 1	21.20	22.00	1.202	0.01	0.401	0.482
	WCDMA V	RMC 12.2Kbps	Right Tilted	0mm	Ant 26	DSI 2	4182	836.4	Sample 1	22.70	23.50	1.202	-0.10	0.107	0.129
	WCDMA V	RMC 12.2Kbps	Right Tilted	0mm	Ant 26	DSI 3	4182	836.4	Sample 1	21.20	22.00	1.202	-0.16	0.076	0.091
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant 26	DSI 2	4182	836.4	Sample 1	22.70	23.50	1.202	0.04	0.262	0.315
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant 26	DSI 3	4182	836.4	Sample 1	21.20	22.00	1.202	0.17	0.185	0.222
	WCDMA V	RMC 12.2Kbps	Left Tilted	0mm	Ant 26	DSI 2	4182	836.4	Sample 1	22.70	23.50	1.202	-0.10	0.089	0.107
	WCDMA V	RMC 12.2Kbps	Left Tilted	0mm	Ant 26	DSI 3	4182	836.4	Sample 1	21.20	22.00	1.202	-0.16	0.063	0.076
	WCDMA XIX	RMC 12.2Kbps	Right Cheek	0mm	Ant 11	DSI 2	338	837.6	Sample 1	20.03	20.70	1.167	-0.07	0.310	0.362
	WCDMA XIX	RMC 12.2Kbps	Right Cheek	0mm	Ant 11	DSI 3	338	837.6	Sample 1	19.05	19.70	1.161	-0.07	0.219	0.254
	WCDMA XIX	RMC 12.2Kbps	Right Tilted	0mm	Ant 11	DSI 2	338	837.6	Sample 1	20.03	20.70	1.167	0.01	0.064	0.075
	WCDMA XIX	RMC 12.2Kbps	Right Tilted	0mm	Ant 11	DSI 3	338	837.6	Sample 1	19.05	19.70	1.161	0.13	0.045	0.052
06	WCDMA XIX	RMC 12.2Kbps	Left Cheek	0mm	Ant 11	DSI 2	338	837.6	Sample 1	20.03	20.70	1.167	0.02	0.680	0.794
	WCDMA XIX	RMC 12.2Kbps	Left Cheek	0mm	Ant 11	DSI 3	338	837.6	Sample 1	19.05	19.70	1.161	-0.13	0.498	0.578
	WCDMA XIX	RMC 12.2Kbps	Left Tilted	0mm	Ant 11	DSI 2	338	837.6	Sample 1	20.03	20.70	1.167	0.13	0.091	0.106
	WCDMA XIX	RMC 12.2Kbps	Left Tilted	0mm	Ant 11	DSI 3	338	837.6	Sample 1	19.05	19.70	1.161	0.05	0.064	0.074
	WCDMA XIX	RMC 12.2Kbps	Right Cheek	0mm	Ant 26	DSI 2	338	837.6	Sample 1	22.61	23.50	1.227	-0.18	0.525	0.644
	WCDMA XIX	RMC 12.2Kbps	Right Cheek	0mm	Ant 26	DSI 3	338	837.6	Sample 1	21.12	22.00	1.225	-0.12	0.372	0.456
	WCDMA XIX	RMC 12.2Kbps	Right Tilted	0mm	Ant 26	DSI 2	338	837.6	Sample 1	22.61	23.50	1.227	0.08	0.103	0.126
	WCDMA XIX	RMC 12.2Kbps	Right Tilted	0mm	Ant 26	DSI 3	338	837.6	Sample 1	21.12	22.00	1.225	0.00	0.073	0.089
	WCDMA XIX	RMC 12.2Kbps	Left Cheek	0mm	Ant 26	DSI 2	338	837.6	Sample 1	22.61	23.50	1.227	-0.08	0.223	0.274
	WCDMA XIX	RMC 12.2Kbps	Left Cheek	0mm	Ant 26	DSI 3	338	837.6	Sample 1	21.12	22.00	1.225	0.12	0.158	0.194
	WCDMA XIX	RMC 12.2Kbps	Left Tilted	0mm	Ant 26	DSI 2	338	837.6	Sample 1	22.61	23.50	1.227	0.14	0.085	0.104
	WCDMA XIX	RMC 12.2Kbps	Left Tilted	0mm	Ant 26	DSI 3	338	837.6	Sample 1	21.12	22.00	1.225	-0.19	0.060	0.073

[LTE SAR]

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 4	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 2	20175	1732.5	Sample 1	17.90	19.00	1.288			0.01	0.240	0.309
	LTE Band 4	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 2	20175	1732.5	Sample 1	17.78	19.00	1.324			0.19	0.243	0.322
	LTE Band 4	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 2	20175	1732.5	Sample 1	17.90	19.00	1.288			-0.19	0.091	0.117
	LTE Band 4	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 2	20175	1732.5	Sample 1	17.78	19.00	1.324			0.09	0.092	0.122
	LTE Band 4	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	20175	1732.5	Sample 1	17.90	19.00	1.288			0.13	0.776	0.999
07	LTE Band 4	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	20175	1732.5	Sample 1	17.78	19.00	1.324			0.04	0.773	1.023
	LTE Band 4	20M	QPSK	100	0	Left Cheek	0mm	Ant 25	DSI 2	20175	1732.5	Sample 1	17.76	19.00	1.33			0.13	0.764	1.016
	LTE Band 4	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 2	20175	1732.5	Sample 1	17.90	19.00	1.288			0.01	0.184	0.237
	LTE Band 4	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 2	20175	1732.5	Sample 1	17.78	19.00	1.324			-0.15	0.192	0.254
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 2	21100	2535	Sample 1	15.44	16.00	1.138			0.05	0.502	0.571
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 2	21100	2535	Sample 1	15.37	16.00	1.156			0.18	0.519	0.600
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 3	21100	2535	Sample 1	14.45	15.00	1.135			-0.08	0.399	0.453
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 3	21100	2535	Sample 1	14.43	15.00	1.14			0.14	0.412	0.470
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 2	21100	2535	Sample 1	15.44	16.00	1.138			-0.04	0.155	0.176
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 2	21100	2535	Sample 1	15.37	16.00	1.156			0.13	0.157	0.181
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 3	21100	2535	Sample 1	14.45	15.00	1.135			-0.17	0.123	0.140
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 3	21100	2535	Sample 1	14.43	15.00	1.14			0.07	0.125	0.142
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 2	21100	2535	Sample 1	15.44	16.00	1.138			-0.17	0.125	0.142
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 2	21100	2535	Sample 1	15.37	16.00	1.156			-0.06	0.131	0.151
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 3	21100	2535	Sample 1	14.45	15.00	1.135			0.02	0.099	0.112
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 3	21100	2535	Sample 1	14.43	15.00	1.14			0.17	0.104	0.119
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 2	21100	2535	Sample 1	15.44	16.00	1.138			-0.06	0.062	0.071
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant 12	DSI 2	21100	2535	Sample 1	15.37	16.00	1.156			-0.14	0.065	0.075
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 3	21100	2535	Sample 1	14.45	15.00	1.135			-0.01	0.049	0.056
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant 12	DSI 3	21100	2535	Sample 1	14.43	15.00	1.14			-0.08	0.052	0.059
	LTE Band 7C	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 2	21100+20902	2535+2515.2	Sample 1	15.38	16.00	1.153			0.01	0.489	0.564
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	21100	2535	Sample 1	12.46	13.50	1.271			0.06	0.468	0.595
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 2	21100	2535	Sample 1	12.38	13.50	1.294			-0.19	0.474	0.613
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 3	21100	2535	Sample 1	11.50	12.50	1.259			-0.16	0.372	0.468
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 3	21100	2535	Sample 1	11.48	12.50	1.265			-0.04	0.377	0.477
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 2	21100	2535	Sample 1	12.46	13.50	1.271			0.18	0.405	0.515
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 2	21100	2535	Sample 1	12.38	13.50	1.294			0.10	0.419	0.542
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 3	21100	2535	Sample 1	11.50	12.50	1.259			-0.16	0.322	0.405
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 3	21100	2535	Sample 1	11.48	12.50	1.265			0.16	0.333	0.421
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 13	DSI 2	21100	2535	Sample 1	12.46	13.50	1.271			-0.05	0.143	0.182
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 13	DSI 2	21100	2535	Sample 1	12.38	13.50	1.294			-0.09	0.146	0.189



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	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 13	DSI 3	21100	2535	Sample 1	11.50	12.50	1.259		0.05	0.114	0.144
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 13	DSI 3	21100	2535	Sample 1	11.48	12.50	1.265		0.02	0.116	0.147
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 2	21100	2535	Sample 1	12.46	13.50	1.271		0.06	0.143	0.182
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 2	21100	2535	Sample 1	12.38	13.50	1.294		0.03	0.149	0.193
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 3	21100	2535	Sample 1	11.50	12.50	1.259		-0.01	0.114	0.144
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 3	21100	2535	Sample 1	11.48	12.50	1.265		0.09	0.118	0.149
	LTE Band 7C	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	21100+20902	2535+2515.2	Sample 1	11.74	13.50	1.5		0.02	0.388	0.582
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 2	21100	2535	Sample 1	16.60	17.50	1.23		0.11	0.198	0.244
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 2	21100	2535	Sample 1	16.58	17.50	1.236		0.04	0.203	0.251
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 3	21100	2535	Sample 1	12.10	13.00	1.23		0.10	0.061	0.075
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 3	21100	2535	Sample 1	12.08	13.00	1.236		0.16	0.064	0.079
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 2	21100	2535	Sample 1	16.60	17.50	1.23		-0.05	0.098	0.121
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 2	21100	2535	Sample 1	16.58	17.50	1.236		-0.13	0.099	0.122
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 3	21100	2535	Sample 1	12.10	13.00	1.23		0.03	0.029	0.036
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 3	21100	2535	Sample 1	12.08	13.00	1.236		-0.12	0.030	0.037
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	21100	2535	Sample 1	16.60	17.50	1.23		0.00	0.728	0.895
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	20850	2510	Sample 1	16.59	17.50	1.233		0.02	0.535	0.660
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	21350	2560	Sample 1	16.57	17.50	1.239		0.05	0.531	0.658
08	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	21100	2535	Sample 1	16.58	17.50	1.236		-0.03	0.753	0.931
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	20850	2510	Sample 1	16.57	17.50	1.239		-0.17	0.742	0.919
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	21350	2560	Sample 1	16.55	17.50	1.245		0.16	0.741	0.923
	LTE Band 7	20M	QPSK	100	0	Left Cheek	0mm	Ant 25	DSI 2	21100	2535	Sample 1	16.56	17.50	1.242		-0.01	0.740	0.919
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 3	21100	2535	Sample 1	12.10	13.00	1.23		0.17	0.227	0.279
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 3	21100	2535	Sample 1	12.08	13.00	1.236		-0.17	0.246	0.304
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 2	21100	2535	Sample 1	16.60	17.50	1.23		-0.04	0.218	0.268
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 2	21100	2535	Sample 1	16.58	17.50	1.236		0.13	0.245	0.303
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 3	21100	2535	Sample 1	12.10	13.00	1.23		-0.18	0.070	0.086
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 3	21100	2535	Sample 1	12.08	13.00	1.236		0.19	0.075	0.093
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	21100	2535	Sample 2	16.58	17.50	1.236		-0.16	0.513	0.634
	LTE Band 7C	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	21100+20902	2535+2515.2	Sample 1	16.46	17.50	1.271		-0.07	0.702	0.892
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant 41	DSI 2	21100	2535	Sample 1	25.35	25.70	1.084		0.18	0.168	0.182
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant 41	DSI 2	21100	2535	Sample 1	24.32	25.70	1.374		0.05	0.134	0.184
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant 41	DSI 2	21100	2535	Sample 1	25.35	25.70	1.084		0.17	0.059	0.064
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant 41	DSI 2	21100	2535	Sample 1	24.32	25.70	1.374		-0.19	0.046	0.063
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant 41	DSI 2	21100	2535	Sample 1	25.35	25.70	1.084		0.04	0.229	0.248
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant 41	DSI 2	21100	2535	Sample 1	24.32	25.70	1.374		0.01	0.181	0.249
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant 41	DSI 2	21100	2535	Sample 1	25.35	25.70	1.084		0.13	0.067	0.073
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant 41	DSI 2	21100	2535	Sample 1	24.32	25.70	1.374		0.18	0.045	0.062
	LTE Band 7C	20M	QPSK	1	0	Left Cheek	0mm	Ant 41	DSI 2	21100+20902	2535+2515.2	Sample 1	25.33	25.70	1.089		0.01	0.220	0.240
	LTE Band 12	10M	QPSK	1	0	Right Cheek	0mm	Ant 11	DSI 2	23095	707.5	Sample 1	21.92	22.50	1.143		0.06	0.288	0.329
	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant 11	DSI 2	23095	707.5	Sample 1	21.82	22.50	1.169		0.00	0.300	0.351
	LTE Band 12	10M	QPSK	1	0	Right Cheek	0mm	Ant 11	DSI 3	23095	707.5	Sample 1	20.98	21.50	1.127		0.11	0.237	0.267
	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant 11	DSI 3	23095	707.5	Sample 1	20.97	21.50	1.13		-0.09	0.246	0.278
	LTE Band 12	10M	QPSK	1	0	Right Tilted	0mm	Ant 11	DSI 2	23095	707.5	Sample 1	21.92	22.50	1.143		0.02	0.054	0.062
	LTE Band 12	10M	QPSK	25	0	Right Tilted	0mm	Ant 11	DSI 2	23095	707.5	Sample 1	21.82	22.50	1.169		-0.09	0.055	0.064
	LTE Band 12	10M	QPSK	1	0	Right Tilted	0mm	Ant 11	DSI 3	23095	707.5	Sample 1	20.98	21.50	1.127		0.08	0.045	0.051
	LTE Band 12	10M	QPSK	25	0	Right Tilted	0mm	Ant 11	DSI 3	23095	707.5	Sample 1	20.97	21.50	1.13		0.01	0.046	0.052
	LTE Band 12	10M	QPSK	1	0	Left Cheek	0mm	Ant 11	DSI 2	23095	707.5	Sample 1	21.92	22.50	1.143		0.08	0.539	0.616
09	LTE Band 12	10M	QPSK	25	0	Left Cheek	0mm	Ant 11	DSI 2	23095	707.5	Sample 1	21.82	22.50	1.169		-0.02	0.551	0.644
	LTE Band 12	10M	QPSK	1	0	Left Cheek	0mm	Ant 11	DSI 3	23095	707.5	Sample 1	20.98	21.50	1.127		0.06	0.480	0.541
	LTE Band 12	10M	QPSK	25	0	Left Cheek	0mm	Ant 11	DSI 3	23095	707.5	Sample 1	20.97	21.50	1.13		0.17	0.483	0.546
	LTE Band 12	10M	QPSK	1	0	Left Tilted	0mm	Ant 11	DSI 2	23095	707.5	Sample 1	21.92	22.50	1.143		-0.02	0.072	0.082
	LTE Band 12	10M	QPSK	25	0	Left Tilted	0mm	Ant 11	DSI 2	23095	707.5	Sample 1	21.82	22.50	1.169		0.05	0.075	0.088
	LTE Band 12	10M	QPSK	1	0	Left Tilted	0mm	Ant 11	DSI 3	23095	707.5	Sample 1	20.98	21.50	1.127		-0.01	0.059	0.066
	LTE Band 12	10M	QPSK	25	0	Left Tilted	0mm	Ant 11	DSI 3	23095	707.5	Sample 1	20.97	21.50	1.13		-0.14	0.062	0.070
	LTE Band 12	10M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 2	23095	707.5	Sample 1	21.61	22.50	1.227		-0.04	0.487	0.598
	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant 26	DSI 2	23095	707.5	Sample 1	21.60	22.50	1.23		-0.01	0.522	0.642
	LTE Band 12	10M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 3	23095	707.5	Sample 1	20.60	21.50	1.23		0.14	0.387	0.476
	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant 26	DSI 3	23095	707.5	Sample 1	20.58	21.50	1.236		-0.15	0.415	0.513
	LTE Band 12	10M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 2	23095	707.5	Sample 1	21.61	22.50	1.227		-0.05	0.090	0.110
	LTE Band 12	10M	QPSK	25	0	Right Tilted	0mm	Ant 26	DSI 2	23095	707.5	Sample 1	21.60	22.50	1.23		-0.05	0.094	0.116
	LTE Band 12	10M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 3	23095	707.5	Sample 1	20.60	21.50	1.23		-0.10	0.071	0.087
	LTE Band 12	10M	QPSK	25	0	Right Tilted	0mm	Ant 26	DSI 3	23095	707.5	Sample 1	20.58	21.50	1.236		0.04	0.075	0.093
	LTE Band 12	10M	QPSK	1	0	Left Cheek	0mm	Ant 26	DSI 2	23095	707.5	Sample 1	21.61	22.50	1.227		-0.03	0.269	0.330
	LTE Band 12	10M	QPSK	25	0	Left Cheek	0mm	Ant 26	DSI 2	23095	707.5	Sample 1	21.60	22.50	1.23		-0.19	0.284	0.349
	LTE Band 12	10M	QPSK	1	0	Left Cheek	0mm	Ant 26	DSI 3	23095	707.5	Sample 1	20.60	21.50	1.23		-0.09	0.214	0.263
	LTE Band 12	10M	QPSK	25	0	Left Cheek	0mm	Ant 26	DSI 3	23095	707.5	Sample 1	20.58	21.50	1.236		-0.14	0.226	0.279
	LTE Band 12	10M	QPSK	1	0	Left Tilted	0mm	Ant 26	DSI 2	23095	707.5	Sample 1	21.61	22.50	1.227		0.12	0.062	0.076
	LTE Band 12	10M	QPSK	25	0	Left Tilted	0mm	Ant 26	DSI 2	23095	707.5	Sample 1	21.60	22.50	1.23		-0.17	0.064	0.079
	LTE Band 12	10M	QPSK	1	0	Left Tilted	0mm	Ant 26	DSI 3	23095	707.5	Sample 1	20.60	21.50	1.23		0.04	0.049	0.060
	LTE Band 12	10M	QPSK	25	0	Left Tilted	0mm	Ant 26	DSI 3	23095	707.5	Sample 1	20.58	21.50	1.236		-0.11	0.051	0.063
	LTE Band 13	10M	QPSK	1	0	Right Cheek	0mm	Ant 11	DSI 2	23230	782	Sample 1	20.94	21.50	1.138		0.01	0.301	



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	LTE Band 13	10M	QPSK	1	0	Right Cheek	0mm	Ant 11	DSI 3	23230	782	Sample 1	19.48	20.00	1.127		0.10	0.220	0.248
	LTE Band 13	10M	QPSK	25	0	Right Cheek	0mm	Ant 11	DSI 3	23230	782	Sample 1	19.47	20.00	1.13		-0.07	0.225	0.254
	LTE Band 13	10M	QPSK	1	0	Right Tilted	0mm	Ant 11	DSI 2	23230	782	Sample 1	20.94	21.50	1.138		0.19	0.055	0.063
	LTE Band 13	10M	QPSK	25	0	Right Tilted	0mm	Ant 11	DSI 2	23230	782	Sample 1	20.88	21.50	1.153		0.07	0.054	0.062
	LTE Band 13	10M	QPSK	1	0	Right Tilted	0mm	Ant 11	DSI 3	23230	782	Sample 1	19.48	20.00	1.127		0.07	0.040	0.045
	LTE Band 13	10M	QPSK	25	0	Right Tilted	0mm	Ant 11	DSI 3	23230	782	Sample 1	19.47	20.00	1.13		-0.08	0.039	0.044
	LTE Band 13	10M	QPSK	1	0	Left Cheek	0mm	Ant 11	DSI 2	23230	782	Sample 1	20.94	21.50	1.138		0.17	0.605	0.688
10	LTE Band 13	10M	QPSK	25	0	Left Cheek	0mm	Ant 11	DSI 2	23230	782	Sample 1	20.88	21.50	1.153		-0.02	0.610	0.703
	LTE Band 13	10M	QPSK	1	0	Left Cheek	0mm	Ant 11	DSI 3	23230	782	Sample 1	19.48	20.00	1.127		-0.08	0.443	0.499
	LTE Band 13	10M	QPSK	25	0	Left Cheek	0mm	Ant 11	DSI 3	23230	782	Sample 1	19.47	20.00	1.13		-0.02	0.467	0.528
	LTE Band 13	10M	QPSK	1	0	Left Tilted	0mm	Ant 11	DSI 2	23230	782	Sample 1	20.94	21.50	1.138		-0.02	0.087	0.099
	LTE Band 13	10M	QPSK	25	0	Left Tilted	0mm	Ant 11	DSI 2	23230	782	Sample 1	20.88	21.50	1.153		0.10	0.088	0.101
	LTE Band 13	10M	QPSK	1	0	Left Tilted	0mm	Ant 11	DSI 3	23230	782	Sample 1	19.48	20.00	1.127		-0.06	0.064	0.072
	LTE Band 13	10M	QPSK	25	0	Left Tilted	0mm	Ant 11	DSI 3	23230	782	Sample 1	19.47	20.00	1.13		-0.18	0.064	0.072
	LTE Band 13	10M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 2	23230	782	Sample 1	24.05	25.00	1.245		-0.05	0.404	0.503
	LTE Band 13	10M	QPSK	25	0	Right Cheek	0mm	Ant 26	DSI 2	23230	782	Sample 1	23.05	24.00	1.245		-0.11	0.312	0.388
	LTE Band 13	10M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 2	23230	782	Sample 1	24.05	25.00	1.245		0.06	0.079	0.098
	LTE Band 13	10M	QPSK	25	0	Right Tilted	0mm	Ant 26	DSI 2	23230	782	Sample 1	23.05	24.00	1.245		0.11	0.060	0.075
	LTE Band 13	10M	QPSK	1	0	Left Cheek	0mm	Ant 26	DSI 2	23230	782	Sample 1	24.05	25.00	1.245		0.13	0.195	0.243
	LTE Band 13	10M	QPSK	25	0	Left Cheek	0mm	Ant 26	DSI 2	23230	782	Sample 1	23.05	24.00	1.245		0.18	0.147	0.183
	LTE Band 13	10M	QPSK	1	0	Left Tilted	0mm	Ant 26	DSI 2	23230	782	Sample 1	24.05	25.00	1.245		0.10	0.052	0.065
	LTE Band 13	10M	QPSK	25	0	Left Tilted	0mm	Ant 26	DSI 2	23230	782	Sample 1	23.05	24.00	1.245		-0.05	0.040	0.050
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 2	26340	1880	Sample 1	15.72	16.50	1.197		0.18	0.601	0.719
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 2	26340	1880	Sample 1	15.68	16.50	1.208		-0.14	0.580	0.701
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 3	26340	1880	Sample 1	14.75	15.50	1.189		0.16	0.477	0.567
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 3	26340	1880	Sample 1	14.73	15.50	1.194		-0.02	0.461	0.550
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 2	26340	1880	Sample 1	15.72	16.50	1.197		-0.17	0.107	0.128
	LTE Band 25	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 2	26340	1880	Sample 1	15.68	16.50	1.208		0.06	0.113	0.137
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 3	26340	1880	Sample 1	14.75	15.50	1.189		-0.18	0.085	0.101
	LTE Band 25	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 3	26340	1880	Sample 1	14.73	15.50	1.194		0.07	0.090	0.107
	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 2	26340	1880	Sample 1	15.72	16.50	1.197		-0.07	0.169	0.202
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 2	26340	1880	Sample 1	15.68	16.50	1.208		-0.11	0.157	0.190
	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 3	26340	1880	Sample 1	14.75	15.50	1.189		-0.18	0.134	0.159
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 3	26340	1880	Sample 1	14.73	15.50	1.194		0.05	0.125	0.149
	LTE Band 25	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 2	26340	1880	Sample 1	15.72	16.50	1.197		0.10	0.057	0.068
	LTE Band 25	20M	QPSK	50	0	Left Tilted	0mm	Ant 12	DSI 2	26340	1880	Sample 1	15.68	16.50	1.208		0.11	0.055	0.066
	LTE Band 25	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 3	26340	1880	Sample 1	14.75	15.50	1.189		-0.08	0.045	0.054
	LTE Band 25	20M	QPSK	50	0	Left Tilted	0mm	Ant 12	DSI 3	26340	1880	Sample 1	14.73	15.50	1.194		0.09	0.044	0.053
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	26340	1880	Sample 1	16.13	17.50	1.371		0.14	0.663	0.909
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	26140	1860	Sample 1	16.05	17.50	1.396		0.15	0.678	0.946
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	26540	1900	Sample 1	16.01	17.50	1.409		-0.03	0.651	0.917
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 2	26340	1880	Sample 1	16.04	17.50	1.4		0.07	0.650	0.910
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 2	26140	1860	Sample 1	15.90	17.50	1.445		0.02	0.680	0.983
	LTE Band 25	20M	QPSK	50	24	Right Cheek	0mm	Ant 13	DSI 2	26540	1900	Sample 1	15.84	17.50	1.466		0.13	0.585	0.858
	LTE Band 25	20M	QPSK	100	0	Right Cheek	0mm	Ant 13	DSI 2	26340	1880	Sample 1	15.99	17.50	1.416		-0.05	0.645	0.913
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 3	26340	1880	Sample 1	14.27	15.50	1.327		-0.11	0.367	0.487
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 3	26340	1880	Sample 1	14.25	15.50	1.334		0.16	0.349	0.466
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 2	26340	1880	Sample 1	16.13	17.50	1.371		0.07	0.513	0.703
	LTE Band 25	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 2	26340	1880	Sample 1	16.04	17.50	1.4		-0.11	0.510	0.714
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 3	26340	1880	Sample 1	14.27	15.50	1.327		-0.16	0.289	0.384
	LTE Band 25	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 3	26340	1880	Sample 1	14.25	15.50	1.334		-0.05	0.283	0.378
	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 13	DSI 2	26340	1880	Sample 1	16.13	17.50	1.371		0.08	0.405	0.555
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 13	DSI 2	26340	1880	Sample 1	16.04	17.50	1.4		0.00	0.405	0.567
	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 13	DSI 3	26340	1880	Sample 1	14.27	15.50	1.327		0.02	0.238	0.316
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 13	DSI 3	26340	1880	Sample 1	14.25	15.50	1.334		0.03	0.228	0.304
	LTE Band 25	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 2	26340	1880	Sample 1	16.13	17.50	1.371		0.16	0.459	0.629
	LTE Band 25	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 2	26340	1880	Sample 1	16.04	17.50	1.4		0.16	0.457	0.640
	LTE Band 25	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 3	26340	1880	Sample 1	14.27	15.50	1.327		-0.03	0.263	0.349
	LTE Band 25	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 3	26340	1880	Sample 1	14.25	15.50	1.334		-0.03	0.247	0.329
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 2	26340	1880	Sample 1	18.30	19.50	1.318		0.11	0.296	0.390
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 2	26340	1880	Sample 1	18.28	19.50	1.324		-0.15	0.301	0.399
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 3	26340	1880	Sample 1	13.30	14.50	1.318		0.02	0.092	0.121
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 3	26340	1880	Sample 1	13.28	14.50	1.324		-0.18	0.097	0.128
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 2	26340	1880	Sample 1	18.30	19.50	1.318		0.11	0.128	0.169
	LTE Band 25	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 2	26340	1880	Sample 1	18.28	19.50	1.324		-0.18	0.130	0.172
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 3	26340	1880	Sample 1	13.30	14.50	1.318		0.01	0.040	0.053
	LTE Band 25	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 3	26340	1880	Sample 1	13.28	14.50	1.324		0.04	0.042	0.056
	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	26340	1880	Sample 1	18.30	19.50	1.318		-0.09	0.785	1.035
	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	26140	1860	Sample 1	18.28	19.50	1.324		-0.07	0.776	1.027
	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	26540	1900	Sample 1	18.27	19.50	1.327		0.00	0.775	1.028
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	26340	1880	Sample 1	18.28	19.50	1.324		-0.14	0.788	1.043
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	26140	1860	Sample 1	18.26	19.50	1.33		0.04	0.774	1.029
	LTE Band 25	20M	QPSK	50</															



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	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 3	26340	1880	Sample 1	13.30	14.50	1.318			0.14	0.243	0.320
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 3	26340	1880	Sample 1	13.28	14.50	1.324			-0.01	0.241	0.319
	LTE Band 25	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 2	26340	1880	Sample 1	18.30	19.50	1.318			0.00	0.177	0.233
	LTE Band 25	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 2	26340	1880	Sample 1	18.28	19.50	1.324			0.09	0.174	0.230
	LTE Band 25	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 3	26340	1880	Sample 1	13.30	14.50	1.318			0.13	0.054	0.071
	LTE Band 25	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 3	26340	1880	Sample 1	13.28	14.50	1.324			-0.04	0.054	0.071
	LTE Band 25	20M	QPSK	100	0	Left Cheek	0mm	Ant 25	DSI 2	26340	1880	Sample 2	18.26	19.50	1.33			0.02	0.518	0.689
	LTE Band 25	20M	QPSK	1	0	Right Cheek	0mm	Ant 41	DSI 2	26340	1880	Sample 1	24.75	25.50	1.189			0.11	0.098	0.117
	LTE Band 25	20M	QPSK	50	0	Right Cheek	0mm	Ant 41	DSI 2	26340	1880	Sample 1	23.70	24.50	1.202			-0.01	0.080	0.096
	LTE Band 25	20M	QPSK	1	0	Right Tilted	0mm	Ant 41	DSI 2	26340	1880	Sample 1	24.75	25.50	1.189			0.03	0.121	0.144
	LTE Band 25	20M	QPSK	50	0	Right Tilted	0mm	Ant 41	DSI 2	26340	1880	Sample 1	23.70	24.50	1.202			-0.05	0.099	0.119
	LTE Band 25	20M	QPSK	1	0	Left Cheek	0mm	Ant 41	DSI 2	26340	1880	Sample 1	24.75	25.50	1.189			-0.14	0.171	0.203
	LTE Band 25	20M	QPSK	50	0	Left Cheek	0mm	Ant 41	DSI 2	26340	1880	Sample 1	23.70	24.50	1.202			0.01	0.138	0.166
	LTE Band 25	20M	QPSK	1	0	Left Tilted	0mm	Ant 41	DSI 2	26340	1880	Sample 1	24.75	25.50	1.189			0.12	0.122	0.145
	LTE Band 25	20M	QPSK	50	0	Left Tilted	0mm	Ant 41	DSI 2	26340	1880	Sample 1	23.70	24.50	1.202			-0.16	0.094	0.113
	LTE Band 5	20M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 3	20525	836.5	Sample 1	21.96	23	1.271			0.17	0.298	0.379
	LTE Band 5	20M	QPSK	25	0	Right Cheek	0mm	Ant 26	DSI 3	20525	836.5	Sample 1	21.95	23	1.274			-0.1	0.277	0.353
	LTE Band 5	20M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 3	20525	836.5	Sample 1	21.96	23	1.271			0.14	0.056	0.071
	LTE Band 5	20M	QPSK	25	0	Right Tilted	0mm	Ant 26	DSI 3	20525	836.5	Sample 1	21.95	23	1.274			-0.08	0.053	0.068
	LTE Band 5	20M	QPSK	1	0	Left Cheek	0mm	Ant 26	DSI 3	20525	836.5	Sample 1	21.96	23	1.271			-0.19	0.136	0.173
07	LTE Band 5	20M	QPSK	25	0	Left Cheek	0mm	Ant 26	DSI 3	20525	836.5	Sample 1	21.95	23	1.274			-0.15	0.132	0.168
	LTE Band 5	20M	QPSK	1	0	Left Tilted	0mm	Ant 26	DSI 3	20525	836.5	Sample 1	21.96	23	1.271			-0.08	0.044	0.056
	LTE Band 5	20M	QPSK	25	0	Left Tilted	0mm	Ant 26	DSI 3	20525	836.5	Sample 1	21.95	23	1.274			0.17	0.043	0.055
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant 11	DSI 2	26865	831.5	Sample 1	20.09	20.70	1.151			0.10	0.268	0.308
	LTE Band 26	15M	QPSK	36	0	Right Cheek	0mm	Ant 11	DSI 2	26865	831.5	Sample 1	20.02	20.70	1.169			-0.07	0.267	0.312
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant 11	DSI 3	26865	831.5	Sample 1	19.12	19.70	1.143			0.16	0.213	0.243
	LTE Band 26	15M	QPSK	36	0	Right Cheek	0mm	Ant 11	DSI 3	26865	831.5	Sample 1	19.10	19.70	1.148			-0.17	0.212	0.243
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant 11	DSI 2	26865	831.5	Sample 1	20.09	20.70	1.151			0.15	0.053	0.061
	LTE Band 26	15M	QPSK	36	0	Right Tilted	0mm	Ant 11	DSI 2	26865	831.5	Sample 1	20.02	20.70	1.169			0.00	0.055	0.064
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant 11	DSI 3	26865	831.5	Sample 1	19.12	19.70	1.143			0.11	0.042	0.048
	LTE Band 26	15M	QPSK	36	0	Right Tilted	0mm	Ant 11	DSI 3	26865	831.5	Sample 1	19.10	19.70	1.148			0.11	0.044	0.051
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant 11	DSI 2	26865	831.5	Sample 1	20.09	20.70	1.151			0.18	0.571	0.657
12	LTE Band 26	15M	QPSK	36	0	Left Cheek	0mm	Ant 11	DSI 2	26865	831.5	Sample 1	20.02	20.70	1.169			0.03	0.572	0.669
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant 11	DSI 3	26865	831.5	Sample 1	19.12	19.70	1.143			0.12	0.454	0.519
	LTE Band 26	15M	QPSK	36	0	Left Cheek	0mm	Ant 11	DSI 3	26865	831.5	Sample 1	19.10	19.70	1.148			0.12	0.454	0.521
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant 11	DSI 2	26865	831.5	Sample 1	20.09	20.70	1.151			-0.16	0.072	0.083
	LTE Band 26	15M	QPSK	36	0	Left Tilted	0mm	Ant 11	DSI 2	26865	831.5	Sample 1	20.02	20.70	1.169			-0.03	0.073	0.085
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant 11	DSI 3	26865	831.5	Sample 1	19.12	19.70	1.143			0.00	0.057	0.065
	LTE Band 26	15M	QPSK	36	0	Left Tilted	0mm	Ant 11	DSI 3	26865	831.5	Sample 1	19.10	19.70	1.148			0.17	0.058	0.067
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 2	26865	831.5	Sample 1	23.19	24.00	1.205			0.02	0.530	0.639
	LTE Band 26	15M	QPSK	36	0	Right Cheek	0mm	Ant 26	DSI 2	26865	831.5	Sample 1	22.90	24.00	1.288			0.14	0.493	0.635
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 3	26865	831.5	Sample 1	21.85	22.50	1.161			-0.09	0.375	0.435
	LTE Band 26	15M	QPSK	36	0	Right Cheek	0mm	Ant 26	DSI 3	26865	831.5	Sample 1	21.83	22.50	1.167			0.16	0.349	0.407
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 2	26865	831.5	Sample 1	23.19	24.00	1.205			-0.09	0.099	0.119
	LTE Band 26	15M	QPSK	36	0	Right Tilted	0mm	Ant 26	DSI 2	26865	831.5	Sample 1	22.90	24.00	1.288			-0.16	0.094	0.121
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 3	26865	831.5	Sample 1	21.85	22.50	1.161			-0.07	0.070	0.081
	LTE Band 26	15M	QPSK	36	0	Right Tilted	0mm	Ant 26	DSI 3	26865	831.5	Sample 1	21.83	22.50	1.167			-0.04	0.067	0.078
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant 26	DSI 2	26865	831.5	Sample 1	23.19	24.00	1.205			-0.01	0.242	0.292
	LTE Band 26	15M	QPSK	36	0	Left Cheek	0mm	Ant 26	DSI 2	26865	831.5	Sample 1	22.90	24.00	1.288			-0.12	0.235	0.303
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant 26	DSI 3	26865	831.5	Sample 1	21.85	22.50	1.161			-0.18	0.171	0.199
	LTE Band 26	15M	QPSK	36	0	Left Cheek	0mm	Ant 26	DSI 3	26865	831.5	Sample 1	21.83	22.50	1.167			0.12	0.166	0.194
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant 26	DSI 2	26865	831.5	Sample 1	23.19	24.00	1.205			0.02	0.078	0.094
	LTE Band 26	15M	QPSK	36	0	Left Tilted	0mm	Ant 26	DSI 2	26865	831.5	Sample 1	22.90	24.00	1.288			-0.05	0.076	0.098
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant 26	DSI 3	26865	831.5	Sample 1	21.85	22.50	1.161			0.00	0.055	0.064
	LTE Band 26	15M	QPSK	36	0	Left Tilted	0mm	Ant 26	DSI 3	26865	831.5	Sample 1	21.83	22.50	1.167			0.16	0.054	0.063
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 2	132322	1745	Sample 1	15.38	16.50	1.294			-0.16	0.481	0.622
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 2	132322	1745	Sample 1	15.36	16.50	1.3			0.02	0.510	0.663
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 3	132322	1745	Sample 1	14.40	15.50	1.288			0.09	0.382	0.492
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 3	132322	1745	Sample 1	14.38	15.50	1.294			-0.01	0.405	0.524
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 2	132322	1745	Sample 1	15.38	16.50	1.294			-0.14	0.107	0.138
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 2	132322	1745	Sample 1	15.36	16.50	1.3			-0.16	0.113	0.147
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 3	132322	1745	Sample 1	14.40	15.50	1.288			0.10	0.085	0.109
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 3	132322	1745	Sample 1	14.38	15.50	1.294			0.11	0.090	0.116
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 2	132322	1745	Sample 1	15.38	16.50	1.294			0.04	0.122	0.158
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 2	132322	1745	Sample 1	15.36	16.50	1.3			-0.02	0.130	0.169
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 3	132322	1745	Sample 1	14.40	15.50	1.288			0.14	0.097	0.125
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 3	132322	1745	Sample 1	14.38	15.50	1.294			0.04	0.103	0.133
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 2	132322	1745	Sample 1	15.38	16.50	1.294			0.03	0.049	0.063
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant 12	DSI 2	132322	1745	Sample 1	15.36	16.50	1.3			0.16	0.052	0.068
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 3	132322	1745	Sample 1	14.40	15.50	1.288			-0.14	0.039	0.050
	LTE Band 66	20M	QPSK	50	0</															



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13	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 2	132322	1745	Sample 1	15.85	17.00	1.303			-0.02	0.656	0.855
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 2	132072	1720	Sample 1	15.78	17.00	1.324			0.07	0.645	0.854
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 2	132572	1770	Sample 1	15.74	17.00	1.337			0.01	0.631	0.844
	LTE Band 66	20M	QPSK	100	0	Right Cheek	0mm	Ant 13	DSI 2	132322	1745	Sample 1	15.80	17.00	1.318			-0.06	0.646	0.851
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 3	132322	1745	Sample 1	14.95	16.00	1.274			0.19	0.500	0.637
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 3	132322	1745	Sample 1	14.93	16.00	1.279			-0.03	0.521	0.666
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 2	132322	1745	Sample 1	16.00	17.00	1.259			-0.19	0.447	0.563
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 2	132322	1745	Sample 1	15.85	17.00	1.303			0.12	0.451	0.588
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 3	132322	1745	Sample 1	14.95	16.00	1.274			0.10	0.355	0.452
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 3	132322	1745	Sample 1	14.93	16.00	1.279			-0.15	0.358	0.458
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant 13	DSI 2	132322	1745	Sample 1	16.00	17.00	1.259			-0.12	0.289	0.364
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant 13	DSI 2	132322	1745	Sample 1	15.85	17.00	1.303			-0.05	0.298	0.388
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant 13	DSI 3	132322	1745	Sample 1	14.95	16.00	1.274			-0.16	0.230	0.293
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant 13	DSI 3	132322	1745	Sample 1	14.93	16.00	1.279			0.17	0.237	0.303
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 2	132322	1745	Sample 1	16.00	17.00	1.259			-0.19	0.364	0.458
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 2	132322	1745	Sample 1	15.85	17.00	1.303			0.13	0.377	0.491
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 3	132322	1745	Sample 1	14.95	16.00	1.274			0.19	0.289	0.368
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 3	132322	1745	Sample 1	14.93	16.00	1.279			-0.17	0.299	0.382
	LTE Band 66C	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	132322+132124	1745+1725.2	Sample 1	15.74	17.00	1.337			0.03	0.588	0.786
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 2	132322	1745	Sample 1	16.95	18.00	1.274			-0.12	0.170	0.217
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 2	132322	1745	Sample 1	16.93	18.00	1.279			0.02	0.173	0.221
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 3	132322	1745	Sample 1	12.94	14.00	1.276			-0.07	0.066	0.084
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 3	132322	1745	Sample 1	12.93	14.00	1.279			-0.17	0.066	0.084
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 2	132322	1745	Sample 1	16.95	18.00	1.274			-0.05	0.060	0.076
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 2	132322	1745	Sample 1	16.93	18.00	1.279			-0.03	0.058	0.074
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 3	132322	1745	Sample 1	12.94	14.00	1.276			-0.19	0.025	0.032
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 3	132322	1745	Sample 1	12.93	14.00	1.279			-0.12	0.023	0.029
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	132322	1745	Sample 1	16.95	18.00	1.274			-0.15	0.552	0.703
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	132322	1745	Sample 1	16.93	18.00	1.279			0.04	0.568	0.726
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 3	132322	1745	Sample 1	12.94	14.00	1.276			0.17	0.226	0.288
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 3	132322	1745	Sample 1	12.93	14.00	1.279			-0.03	0.237	0.303
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 2	132322	1745	Sample 1	16.95	18.00	1.274			-0.01	0.128	0.163
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 2	132322	1745	Sample 1	16.93	18.00	1.279			-0.12	0.134	0.171
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 3	132322	1745	Sample 1	12.94	14.00	1.276			0.02	0.052	0.066
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 3	132322	1745	Sample 1	12.93	14.00	1.279			-0.08	0.054	0.069
	LTE Band 66C	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	132322+132124	1745+1725.2	Sample 1	16.81	18.00	1.315			0.03	0.533	0.701
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant 41	DSI 2	132322	1745	Sample 1	24.70	25.50	1.202			0.13	0.166	0.200
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant 41	DSI 2	132322	1745	Sample 1	23.65	24.50	1.216			0.13	0.132	0.161
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant 41	DSI 2	132322	1745	Sample 1	24.70	25.50	1.202			0.14	0.127	0.153
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant 41	DSI 2	132322	1745	Sample 1	23.65	24.50	1.216			0.01	0.100	0.122
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant 41	DSI 2	132322	1745	Sample 1	24.70	25.50	1.202			-0.19	0.170	0.204
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant 41	DSI 2	132322	1745	Sample 1	23.65	24.50	1.216			-0.18	0.138	0.168
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant 41	DSI 2	132322	1745	Sample 1	24.70	25.50	1.202			0.18	0.092	0.111
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant 41	DSI 2	132322	1745	Sample 1	23.65	24.50	1.216			0.10	0.074	0.090
	LTE Band 66C	20M	QPSK	1	0	Left Cheek	0mm	Ant 41	DSI 2	132322+132124	1745+1725.2	Sample 1	24.68	25.50	1.208			0.07	0.155	0.187
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 2	40620	2593	Sample 1	16.58	17.20	1.153	62.9	1.006	-0.08	0.498	0.578
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 2	40620	2593	Sample 1	16.56	17.20	1.159	62.9	1.006	-0.06	0.504	0.588
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 3	40620	2593	Sample 1	15.62	16.20	1.143	62.9	1.006	0.13	0.396	0.455
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 3	40620	2593	Sample 1	15.60	16.20	1.148	62.9	1.006	-0.10	0.400	0.462
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 2	40620	2593	Sample 1	16.58	17.20	1.153	62.9	1.006	-0.07	0.108	0.125
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 2	40620	2593	Sample 1	16.56	17.20	1.159	62.9	1.006	0.19	0.111	0.129
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 3	40620	2593	Sample 1	15.62	16.20	1.143	62.9	1.006	0.00	0.086	0.099
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 3	40620	2593	Sample 1	15.60	16.20	1.148	62.9	1.006	-0.04	0.088	0.102
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 2	40620	2593	Sample 1	16.58	17.20	1.153	62.9	1.006	-0.19	0.117	0.136
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 2	40620	2593	Sample 1	16.56	17.20	1.159	62.9	1.006	0.02	0.115	0.134
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 3	40620	2593	Sample 1	15.62	16.20	1.143	62.9	1.006	0.17	0.093	0.107
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 3	40620	2593	Sample 1	15.60	16.20	1.148	62.9	1.006	-0.05	0.091	0.105
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 2	40620	2593	Sample 1	16.58	17.20	1.153	62.9	1.006	0.16	0.063	0.073
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant 12	DSI 2	40620	2593	Sample 1	16.56	17.20	1.159	62.9	1.006	0.13	0.063	0.073
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 3	40620	2593	Sample 1	15.62	16.20	1.143	62.9	1.006	-0.18	0.050	0.057
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant 12	DSI 3	40620	2593	Sample 1	15.60	16.20	1.148	62.9	1.006	0.07	0.050	0.058
	LTE Band 41C	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 2	40620+40422	2593+2573.2	Sample 1	16.45	17.20	1.189	62.9	1.006	-0.10	0.449	0.537
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	40620	2593	Sample 1	14.97	15.70	1.183	62.9	1.006	0.14	0.626	0.745
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	39750	2506	Sample 1	14.83	15.70	1.222	62.9	1.006	0.02	0.543	0.668
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	40185	2549.5	Sample 1	14.86	15.70	1.213	62.9	1.006	-0.04	0.607	0.741
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	41055	2636.5	Sample 1	14.94	15.70	1.191	62.9	1.006	0.07	0.655	0.785
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	41490	2680	Sample 1	14.88	15.70	1.208	62.9	1.006	-0.01	0.609	0.740
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 2	40620	2593	Sample 1	14.95	15.70	1.189	62.9	1.006	0.14	0.632	0.756
	LTE Band 41	20M	QPSK	50	0	Right Cheek														



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	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 2	40620	2593	Sample 1	14.97	15.70	1.183	62.9	1.006	0.08	0.564	0.671
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 2	39750	2506	Sample 1	14.83	15.70	1.222	62.9	1.006	-0.01	0.387	0.476
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 2	40185	2549.5	Sample 1	14.86	15.70	1.213	62.9	1.006	0.07	0.436	0.532
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 2	41055	2636.5	Sample 1	14.94	15.70	1.191	62.9	1.006	0.05	0.469	0.562
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 2	41490	2680	Sample 1	14.88	15.70	1.208	62.9	1.006	0.04	0.439	0.533
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 2	40620	2593	Sample 1	14.95	15.70	1.189	62.9	1.006	-0.19	0.576	0.689
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 2	39750	2506	Sample 1	14.79	15.70	1.233	62.9	1.006	0.06	0.396	0.491
	LTE Band 41	20M	QPSK	50	24	Right Tilted	0mm	Ant 13	DSI 2	40185	2549.5	Sample 1	14.73	15.70	1.25	62.9	1.006	0.01	0.440	0.553
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 2	41055	2636.5	Sample 1	14.88	15.70	1.208	62.9	1.006	-0.05	0.467	0.568
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 2	41490	2680	Sample 1	14.85	15.70	1.216	62.9	1.006	0.02	0.447	0.547
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 3	40620	2593	Sample 1	13.98	14.70	1.18	62.9	1.006	0.00	0.448	0.532
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 13	DSI 3	40620	2593	Sample 1	13.96	14.70	1.186	62.9	1.006	-0.05	0.458	0.546
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant 13	DSI 2	40620	2593	Sample 1	14.97	15.70	1.183	62.9	1.006	-0.10	0.190	0.226
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant 13	DSI 2	40620	2593	Sample 1	14.95	15.70	1.189	62.9	1.006	-0.12	0.191	0.228
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant 13	DSI 3	40620	2593	Sample 1	13.98	14.70	1.18	62.9	1.006	-0.12	0.151	0.179
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant 13	DSI 3	40620	2593	Sample 1	13.96	14.70	1.186	62.9	1.006	-0.08	0.152	0.181
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 2	40620	2593	Sample 1	14.97	15.70	1.183	62.9	1.006	-0.07	0.201	0.239
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 2	40620	2593	Sample 1	14.95	15.70	1.189	62.9	1.006	-0.16	0.197	0.236
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 3	40620	2593	Sample 1	13.98	14.70	1.18	62.9	1.006	0.10	0.160	0.190
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 3	40620	2593	Sample 1	13.96	14.70	1.186	62.9	1.006	-0.04	0.156	0.186
	LTE Band 41C	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	41055+40857	2636.5+2616.7	Sample 1	14.69	15.70	1.262	62.9	1.006	0.17	0.580	0.736
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 2	40620	2593	Sample 1	19.18	19.70	1.127	62.9	1.006	-0.05	0.410	0.465
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 2	40620	2593	Sample 1	19.16	19.70	1.132	62.9	1.006	-0.09	0.422	0.481
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 3	40620	2593	Sample 1	16.68	17.20	1.127	62.9	1.006	0.15	0.223	0.253
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 3	40620	2593	Sample 1	16.66	17.20	1.132	62.9	1.006	0.07	0.235	0.268
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 2	40620	2593	Sample 1	19.18	19.70	1.127	62.9	1.006	0.19	0.066	0.075
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 2	40620	2593	Sample 1	19.16	19.70	1.132	62.9	1.006	0.03	0.067	0.076
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 3	40620	2593	Sample 1	16.68	17.20	1.127	62.9	1.006	0.13	0.036	0.041
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 3	40620	2593	Sample 1	16.66	17.20	1.132	62.9	1.006	-0.17	0.038	0.043
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	40620	2593	Sample 1	19.18	19.70	1.127	62.9	1.006	-0.15	0.475	0.539
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	40620	2593	Sample 1	19.16	19.70	1.132	62.9	1.006	0.12	0.485	0.552
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 3	40620	2593	Sample 1	16.68	17.20	1.127	62.9	1.006	-0.12	0.268	0.304
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 3	40620	2593	Sample 1	16.66	17.20	1.132	62.9	1.006	-0.11	0.280	0.319
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 2	40620	2593	Sample 1	19.18	19.70	1.127	62.9	1.006	0.14	0.186	0.211
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 2	40620	2593	Sample 1	19.16	19.70	1.132	62.9	1.006	-0.14	0.172	0.196
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 3	40620	2593	Sample 1	16.68	17.20	1.127	62.9	1.006	-0.16	0.101	0.115
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 3	40620	2593	Sample 1	16.66	17.20	1.132	62.9	1.006	0.19	0.097	0.110
	LTE Band 41C	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	40620+40422	2593+2573.2	Sample 1	19.04	19.70	1.164	62.9	1.006	-0.05	0.432	0.506
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant 41	DSI 2	40620	2593	Sample 1	25.15	25.70	1.135	62.9	1.006	-0.04	0.144	0.164
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant 41	DSI 2	40620	2593	Sample 1	24.20	24.70	1.122	62.9	1.006	0.08	0.118	0.133
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant 41	DSI 2	40620	2593	Sample 1	25.15	25.70	1.135	62.9	1.006	0.00	0.001	0.001
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant 41	DSI 2	40620	2593	Sample 1	24.20	24.70	1.122	62.9	1.006	0.00	0.001	0.001
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant 41	DSI 2	40620	2593	Sample 1	25.15	25.70	1.135	62.9	1.006	-0.07	0.156	0.178
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant 41	DSI 2	40620	2593	Sample 1	24.20	24.70	1.122	62.9	1.006	-0.18	0.123	0.139
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant 41	DSI 2	40620	2593	Sample 1	25.15	25.70	1.135	62.9	1.006	-0.13	0.050	0.057
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant 41	DSI 2	40620	2593	Sample 1	24.20	24.70	1.122	62.9	1.006	-0.11	0.050	0.056
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant 41	DSI 2	40620+40422	2593+2573.2	Sample 1	25.06	25.70	1.159	62.9	1.006	-0.10	0.139	0.162
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 2	42590	3500	Sample 1	17.20	18.00	1.202	62.9	1.006	0.11	0.262	0.317
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 2	42590	3500	Sample 1	17.18	18.00	1.208	62.9	1.006	-0.17	0.259	0.315
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 3	42590	3500	Sample 1	15.75	16.50	1.189	62.9	1.006	0.17	0.185	0.221
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant 12	DSI 3	42590	3500	Sample 1	15.73	16.50	1.194	62.9	1.006	-0.06	0.183	0.220
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 2	42590	3500	Sample 1	17.20	18.00	1.202	62.9	1.006	-0.18	0.152	0.184
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 2	42590	3500	Sample 1	17.18	18.00	1.208	62.9	1.006	-0.17	0.149	0.181
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant 12	DSI 3	42590	3500	Sample 1	15.75	16.50	1.189	62.9	1.006	0.12	0.108	0.129
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant 12	DSI 3	42590	3500	Sample 1	15.73	16.50	1.194	62.9	1.006	0.04	0.105	0.126
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 2	42590	3500	Sample 1	17.20	18.00	1.202	62.9	1.006	0.00	0.143	0.173
	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 2	42590	3500	Sample 1	17.18	18.00	1.208	62.9	1.006	0.11	0.131	0.159
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 12	DSI 3	42590	3500	Sample 1	15.75	16.50	1.189	62.9	1.006	0.11	0.101	0.121
	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant 12	DSI 3	42590	3500	Sample 1	15.73	16.50	1.194	62.9	1.006	0.09	0.093	0.112
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 2	42590	3500	Sample 1	17.20	18.00	1.202	62.9	1.006	-0.09	0.061	0.074
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 12	DSI 2	42590	3500	Sample 1	17.18	18.00	1.208	62.9	1.006	-0.15	0.060	0.073
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 12	DSI 3	42590	3500	Sample 1	15.75	16.50	1.189	62.9	1.006	0.02	0.043	0.051
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 12	DSI 3	42590	3500	Sample 1	15.73	16.50	1.194	62.9	1.006	-0.08	0.042	0.050
	LTE Band 42C	20M	QPSK	1	0	Right Cheek	0mm	Ant 12	DSI 2	42590+42392	3500+3480.2	Sample 1	17.07	18	1.239	62.9	1.006	-0.03	0.244	0.304
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant 13	DSI 2	42590	3500	Sample 1	15.69	16.50	1.205	62.9	1.006	0.03	0.511	0.619
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant 13	DSI 2	42590	3500	Sample 1	15.67	16.50	1.211	62.9	1.006	-0.		



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	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 13	DSI 3	42590	3500	Sample 1	14.71	15.50	1.199	62.9	1.006	-0.08	0.098	0.118
	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant 13	DSI 3	42590	3500	Sample 1	14.70	15.50	1.202	62.9	1.006	0.13	0.161	0.195
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 2	42590	3500	Sample 1	15.69	16.50	1.205	62.9	1.006	-0.06	0.104	0.126
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 2	42590	3500	Sample 1	15.67	16.50	1.211	62.9	1.006	0.04	0.208	0.253
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 13	DSI 3	42590	3500	Sample 1	14.71	15.50	1.199	62.9	1.006	-0.12	0.083	0.100
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 13	DSI 3	42590	3500	Sample 1	14.70	15.50	1.202	62.9	1.006	-0.17	0.165	0.200
	LTE Band 42C	20M	QPSK	1	0	Right Tilted	0mm	Ant 13	DSI 2	42590+42392	3500+3480.2	Sample 1	15.55	16.5	1.245	62.9	1.006	0.110	0.492	0.616
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant 22	DSI 2	42590	3500	Sample 1	15.26	16.00	1.186	62.9	1.006	-0.16	0.241	0.288
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant 22	DSI 2	42590	3500	Sample 1	15.25	16.00	1.189	62.9	1.006	0.06	0.244	0.292
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant 22	DSI 3	42590	3500	Sample 1	12.30	13.00	1.175	62.9	1.006	-0.02	0.107	0.126
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant 22	DSI 3	42590	3500	Sample 1	12.28	13.00	1.18	62.9	1.006	-0.17	0.111	0.132
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant 22	DSI 2	42590	3500	Sample 1	15.26	16.00	1.186	62.9	1.006	-0.12	0.520	0.620
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant 22	DSI 2	42590	3500	Sample 1	15.25	16.00	1.189	62.9	1.006	-0.17	0.532	0.636
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant 22	DSI 3	42590	3500	Sample 1	12.30	13.00	1.175	62.9	1.006	-0.19	0.228	0.270
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant 22	DSI 3	42590	3500	Sample 1	12.28	13.00	1.18	62.9	1.006	-0.13	0.246	0.292
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 22	DSI 2	42590	3500	Sample 1	15.26	16.00	1.186	62.9	1.006	0.13	0.528	0.630
	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant 22	DSI 2	42590	3500	Sample 1	15.25	16.00	1.189	62.9	1.006	0.19	0.542	0.648
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 22	DSI 3	42590	3500	Sample 1	12.30	13.00	1.175	62.9	1.006	-0.10	0.237	0.280
	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant 22	DSI 3	42590	3500	Sample 1	12.28	13.00	1.18	62.9	1.006	0.04	0.243	0.288
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 22	DSI 2	42590	3500	Sample 1	15.26	16.00	1.186	62.9	1.006	-0.01	0.626	0.747
15	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 22	DSI 2	42590	3500	Sample 1	15.25	16.00	1.189	62.9	1.006	0.04	0.642	0.768
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 22	DSI 3	42590	3500	Sample 1	12.30	13.00	1.175	62.9	1.006	-0.07	0.292	0.345
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 22	DSI 3	42590	3500	Sample 1	12.28	13.00	1.18	62.9	1.006	0.05	0.276	0.328
	LTE Band 42C	20M	QPSK	1	0	Left Tilted	0mm	Ant 22	DSI 2	42590+42392	3500+3480.2	Sample 1	15.05	16	1.245	62.9	1.006	0.04	0.607	0.76
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 2	42590	3500	Sample 1	17.77	18.50	1.183	62.9	1.006	0.00	0.298	0.355
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 2	42590	3500	Sample 1	17.78	18.50	1.18	62.9	1.006	0.01	0.306	0.363
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant 25	DSI 3	42590	3500	Sample 1	16.30	17.00	1.175	62.9	1.006	-0.03	0.211	0.249
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant 25	DSI 3	42590	3500	Sample 1	16.28	17.00	1.18	62.9	1.006	0.06	0.217	0.258
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 2	42590	3500	Sample 1	17.77	18.50	1.183	62.9	1.006	0.17	0.370	0.440
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 2	42590	3500	Sample 1	17.78	18.50	1.18	62.9	1.006	0.14	0.382	0.453
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant 25	DSI 3	42590	3500	Sample 1	16.30	17.00	1.175	62.9	1.006	-0.11	0.262	0.310
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant 25	DSI 3	42590	3500	Sample 1	16.28	17.00	1.18	62.9	1.006	0.15	0.270	0.321
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 2	42590	3500	Sample 1	17.77	18.50	1.183	62.9	1.006	0.04	0.386	0.459
	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 2	42590	3500	Sample 1	17.78	18.50	1.18	62.9	1.006	-0.03	0.198	0.235
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant 25	DSI 3	42590	3500	Sample 1	16.30	17.00	1.175	62.9	1.006	0.14	0.273	0.323
	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant 25	DSI 3	42590	3500	Sample 1	16.28	17.00	1.18	62.9	1.006	0.10	0.140	0.166
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 2	42590	3500	Sample 1	17.77	18.50	1.183	62.9	1.006	-0.06	0.422	0.502
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 2	42590	3500	Sample 1	17.78	18.50	1.18	62.9	1.006	-0.16	0.270	0.321
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 3	42590	3500	Sample 1	16.30	17.00	1.175	62.9	1.006	-0.01	0.299	0.353
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant 25	DSI 3	42590	3500	Sample 1	16.28	17.00	1.18	62.9	1.006	0.19	0.191	0.227
	LTE Band 42C	20M	QPSK	1	0	Left Tilted	0mm	Ant 25	DSI 2	42590+42392	3500+3480.2	Sample 1	17.56	18.5	1.242	62.9	1.006	0.01	0.397	0.496
16	LTE Band 18	15M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 2	23925	822.5	Sample 1	23.39	24.50	1.291			-0.01	0.676	0.873
	LTE Band 18	15M	QPSK	36	0	Right Cheek	0mm	Ant 26	DSI 2	23925	822.5	Sample 1	19.97	21.00	1.268			-0.05	0.309	0.392
	LTE Band 18	15M	QPSK	75	0	Right Cheek	0mm	Ant 26	DSI 2	23925	822.5	Sample 1	19.95	21.00	1.274			0.19	0.295	0.376
	LTE Band 18	15M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 3	23925	822.5	Sample 1	22.00	23.00	1.259			0.00	0.490	0.617
	LTE Band 18	15M	QPSK	36	0	Right Cheek	0mm	Ant 26	DSI 3	23925	822.5	Sample 1	19.87	21.00	1.297			-0.18	0.300	0.389
	LTE Band 18	15M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 2	23925	822.5	Sample 1	23.39	24.50	1.291			-0.11	0.551	0.711
	LTE Band 18	15M	QPSK	36	0	Right Tilted	0mm	Ant 26	DSI 2	23925	822.5	Sample 1	19.97	21.00	1.268			0.07	0.060	0.076
	LTE Band 18	15M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 3	23925	822.5	Sample 1	22.00	23.00	1.259			0.00	0.390	0.491
	LTE Band 18	15M	QPSK	36	0	Right Tilted	0mm	Ant 26	DSI 3	23925	822.5	Sample 1	19.87	21.00	1.297			-0.19	0.042	0.054
	LTE Band 18	15M	QPSK	1	0	Left Cheek	0mm	Ant 26	DSI 2	23925	822.5	Sample 1	23.39	24.50	1.291			-0.11	0.312	0.403
	LTE Band 18	15M	QPSK	36	0	Left Cheek	0mm	Ant 26	DSI 2	23925	822.5	Sample 1	19.97	21.00	1.268			0.00	0.141	0.179
	LTE Band 18	15M	QPSK	1	0	Left Cheek	0mm	Ant 26	DSI 3	23925	822.5	Sample 1	22.00	23.00	1.259			-0.05	0.221	0.278
	LTE Band 18	15M	QPSK	36	0	Left Cheek	0mm	Ant 26	DSI 3	23925	822.5	Sample 1	19.87	21.00	1.297			-0.10	0.100	0.130
	LTE Band 18	15M	QPSK	1	0	Left Tilted	0mm	Ant 26	DSI 2	23925	822.5	Sample 1	23.39	24.50	1.291			-0.07	0.094	0.121
	LTE Band 18	15M	QPSK	36	0	Left Tilted	0mm	Ant 26	DSI 2	23925	822.5	Sample 1	19.97	21.00	1.268			-0.12	0.024	0.030
	LTE Band 18	15M	QPSK	1	0	Left Tilted	0mm	Ant 26	DSI 3	23925	822.5	Sample 1	22.00	23.00	1.259			0.16	0.067	0.084
	LTE Band 18	15M	QPSK	36	0	Left Tilted	0mm	Ant 26	DSI 3	23925	822.5	Sample 1	19.87	21.00	1.297			0.10	0.017	0.022
	LTE Band 18	15M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 2	23925	822.5	Sample 2	23.39	24.50	1.291			0.11	0.629	0.812
	LTE Band 19	15M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 2	24075	837.5	Sample 1	23.42	24.50	1.282			-0.02	0.604	0.774
17	LTE Band 19	15M	QPSK	36	0	Right Cheek	0mm	Ant 26	DSI 2	24075	837.5	Sample 1	23.33	24.50	1.309			0.05	0.595	0.779
	LTE Band 19	15M	QPSK	1	0	Right Cheek	0mm	Ant 26	DSI 3	24075	837.5	Sample 1	22.45	23.50	1.274			-0.14	0.480	0.612
	LTE Band 19	15M	QPSK	36	0	Right Cheek	0mm	Ant 26	DSI 3	24075	837.5	Sample 1	22.43	23.50	1.279			0.18	0.473	0.605
	LTE Band 19	15M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 2	24075	837.5	Sample 1	23.42	24.50	1.282			0.16	0.125	0.160
	LTE Band 19	15M	QPSK	36	0	Right Tilted	0mm	Ant 26	DSI 2	24075	837.5	Sample 1	23.33	24.50	1.309			-0.02	0.122	0.160
	LTE Band 19	15M	QPSK	1	0	Right Tilted	0mm	Ant 26	DSI 3	24075	837.5	Sample 1	22.45	23.50	1.274			0.18	0.099	0.126
	LTE Band 19	15M	QPSK	36	0	Right Tilted	0mm	Ant 26	DSI 3	24075	837.5	Sample 1	22.43	23.50	1.279			0.07	0.097	0.124
	LTE Band 19	15M	QPSK	1	0	Left Cheek	0mm	Ant 26	DSI 2											



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	LTE Band 19	15M	QPSK	36	0	Left Tilted	0mm	Ant 26	DSI 3	24075	837.5	Sample 1	22.43	23.50	1.279			0.03	0.069	0.088
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【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
18	FR1 n5	20M	QPSK	1	1	Right Cheek	0mm	Ant 26	DSI 2	167300	836.5	Sample 1	23.25	24.50	1.334	-0.04	0.632	0.843
	FR1 n5	20M	QPSK	50	28	Right Cheek	0mm	Ant 26	DSI 2	167300	836.5	Sample 1	23.23	24.50	1.34	-0.09	0.590	0.791
	FR1 n5	20M	QPSK	100	0	Right Cheek	0mm	Ant 26	DSI 2	167300	836.5	Sample 1	23.21	24.50	1.346	0.02	0.602	0.810
	FR1 n5	20M	QPSK	1	1	Right Tilted	0mm	Ant 26	DSI 2	167300	836.5	Sample 1	23.25	24.50	1.334	-0.05	0.126	0.168
	FR1 n5	20M	QPSK	50	28	Right Tilted	0mm	Ant 26	DSI 2	167300	836.5	Sample 1	23.23	24.50	1.34	-0.15	0.115	0.154
	FR1 n5	20M	QPSK	1	1	Left Cheek	0mm	Ant 26	DSI 2	167300	836.5	Sample 1	23.25	24.50	1.334	-0.07	0.270	0.360
	FR1 n5	20M	QPSK	50	28	Left Cheek	0mm	Ant 26	DSI 2	167300	836.5	Sample 1	23.23	24.50	1.34	-0.03	0.258	0.346
	FR1 n5	20M	QPSK	1	1	Left Tilted	0mm	Ant 26	DSI 2	167300	836.5	Sample 1	23.25	24.50	1.334	0.19	0.094	0.125
	FR1 n5	20M	QPSK	50	28	Left Tilted	0mm	Ant 26	DSI 2	167300	836.5	Sample 1	23.23	24.50	1.34	0.02	0.082	0.110
	FR1 n7	50M	QPSK	1	1	Right Cheek	0mm	Ant 12	DSI 2	507000	2535	Sample 1	14.15	15.00	1.216	-0.18	0.557	0.677
	FR1 n7	50M	QPSK	135	68	Right Cheek	0mm	Ant 12	DSI 2	507000	2535	Sample 1	14.13	15.00	1.222	-0.06	0.547	0.668
	FR1 n7	50M	QPSK	1	1	Right Cheek	0mm	Ant 12	DSI 3	507000	2535	Sample 1	13.16	14.00	1.213	0.01	0.442	0.536
	FR1 n7	50M	QPSK	135	68	Right Cheek	0mm	Ant 12	DSI 3	507000	2535	Sample 1	13.15	14.00	1.216	-0.19	0.434	0.528
	FR1 n7	50M	QPSK	1	1	Right Tilted	0mm	Ant 12	DSI 2	507000	2535	Sample 1	14.15	15.00	1.216	0.03	0.144	0.175
	FR1 n7	50M	QPSK	135	68	Right Tilted	0mm	Ant 12	DSI 2	507000	2535	Sample 1	14.13	15.00	1.222	0.10	0.142	0.174
	FR1 n7	50M	QPSK	1	1	Right Tilted	0mm	Ant 12	DSI 3	507000	2535	Sample 1	13.16	14.00	1.213	0.06	0.114	0.138
	FR1 n7	50M	QPSK	135	68	Right Tilted	0mm	Ant 12	DSI 3	507000	2535	Sample 1	13.15	14.00	1.216	-0.06	0.113	0.137
	FR1 n7	50M	QPSK	1	1	Left Cheek	0mm	Ant 12	DSI 2	507000	2535	Sample 1	14.15	15.00	1.216	0.10	0.143	0.174
	FR1 n7	50M	QPSK	135	68	Left Cheek	0mm	Ant 12	DSI 2	507000	2535	Sample 1	14.13	15.00	1.222	0.18	0.141	0.172
	FR1 n7	50M	QPSK	1	1	Left Cheek	0mm	Ant 12	DSI 3	507000	2535	Sample 1	13.16	14.00	1.213	0.09	0.114	0.138
	FR1 n7	50M	QPSK	135	68	Left Cheek	0mm	Ant 12	DSI 3	507000	2535	Sample 1	13.15	14.00	1.216	-0.15	0.112	0.136
	FR1 n7	50M	QPSK	1	1	Left Tilted	0mm	Ant 12	DSI 2	507000	2535	Sample 1	14.15	15.00	1.216	0.09	0.066	0.080
	FR1 n7	50M	QPSK	135	68	Left Tilted	0mm	Ant 12	DSI 2	507000	2535	Sample 1	14.13	15.00	1.222	-0.10	0.073	0.089
	FR1 n7	50M	QPSK	1	1	Left Tilted	0mm	Ant 12	DSI 3	507000	2535	Sample 1	13.16	14.00	1.213	0.04	0.052	0.063
	FR1 n7	50M	QPSK	135	68	Left Tilted	0mm	Ant 12	DSI 3	507000	2535	Sample 1	13.15	14.00	1.216	0.05	0.058	0.071
	FR1 n7	50M	QPSK	1	1	Right Cheek	0mm	Ant 13	DSI 2	507000	2535	Sample 1	12.95	14.00	1.274	-0.13	0.623	0.794
19	FR1 n7	50M	QPSK	135	68	Right Cheek	0mm	Ant 13	DSI 2	507000	2535	Sample 1	12.93	14.00	1.279	-0.09	0.668	0.854
	FR1 n7	50M	QPSK	270	0	Right Cheek	0mm	Ant 13	DSI 2	507000	2535	Sample 1	12.91	14.00	1.285	0.02	0.650	0.835
	FR1 n7	50M	QPSK	1	1	Right Cheek	0mm	Ant 13	DSI 3	507000	2535	Sample 1	11.96	13.00	1.271	0.01	0.506	0.643
	FR1 n7	50M	QPSK	135	68	Right Cheek	0mm	Ant 13	DSI 3	507000	2535	Sample 1	11.95	13.00	1.274	0.15	0.543	0.692
	FR1 n7	50M	QPSK	1	1	Right Tilted	0mm	Ant 13	DSI 2	507000	2535	Sample 1	12.95	14.00	1.274	0.00	0.504	0.642
	FR1 n7	50M	QPSK	135	68	Right Tilted	0mm	Ant 13	DSI 2	507000	2535	Sample 1	12.93	14.00	1.279	-0.15	0.553	0.707
	FR1 n7	50M	QPSK	1	1	Right Tilted	0mm	Ant 13	DSI 3	507000	2535	Sample 1	11.96	13.00	1.271	0.07	0.400	0.508
	FR1 n7	50M	QPSK	135	68	Right Tilted	0mm	Ant 13	DSI 3	507000	2535	Sample 1	11.95	13.00	1.274	-0.11	0.439	0.559
	FR1 n7	50M	QPSK	1	1	Left Cheek	0mm	Ant 13	DSI 2	507000	2535	Sample 1	12.95	14.00	1.274	-0.09	0.189	0.241
	FR1 n7	50M	QPSK	135	68	Left Cheek	0mm	Ant 13	DSI 2	507000	2535	Sample 1	12.93	14.00	1.279	-0.05	0.203	0.260
	FR1 n7	50M	QPSK	1	1	Left Cheek	0mm	Ant 13	DSI 3	507000	2535	Sample 1	11.96	13.00	1.271	0.03	0.150	0.191
	FR1 n7	50M	QPSK	135	68	Left Cheek	0mm	Ant 13	DSI 3	507000	2535	Sample 1	11.95	13.00	1.274	-0.11	0.161	0.205
	FR1 n7	50M	QPSK	1	1	Left Tilted	0mm	Ant 13	DSI 2	507000	2535	Sample 1	12.95	14.00	1.274	-0.07	0.192	0.245
	FR1 n7	50M	QPSK	135	68	Left Tilted	0mm	Ant 13	DSI 2	507000	2535	Sample 1	12.93	14.00	1.279	0.18	0.218	0.279
	FR1 n7	50M	QPSK	1	1	Left Tilted	0mm	Ant 13	DSI 3	507000	2535	Sample 1	11.96	13.00	1.271	-0.01	0.153	0.194
	FR1 n7	50M	QPSK	135	68	Left Tilted	0mm	Ant 13	DSI 3	507000	2535	Sample 1	11.95	13.00	1.274	0.00	0.173	0.220
	FR1 n7	50M	QPSK	1	1	Right Cheek	0mm	Ant 25	DSI 2	507000	2535	Sample 1	15.65	17.00	1.365	-0.10	0.208	0.284
	FR1 n7	50M	QPSK	135	68	Right Cheek	0mm	Ant 25	DSI 2	507000	2535	Sample 1	15.63	17.00	1.371	0.01	0.265	0.363
	FR1 n7	50M	QPSK	1	1	Right Cheek	0mm	Ant 25	DSI 3	507000	2535	Sample 1	12.68	14.00	1.355	0.19	0.100	0.136
	FR1 n7	50M	QPSK	135	68	Right Cheek	0mm	Ant 25	DSI 3	507000	2535	Sample 1	12.67	14.00	1.358	-0.13	0.134	0.182
	FR1 n7	50M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 2	507000	2535	Sample 1	15.65	17.00	1.365	-0.15	0.054	0.074
	FR1 n7	50M	QPSK	135	68	Right Tilted	0mm	Ant 25	DSI 2	507000	2535	Sample 1	15.63	17.00	1.371	-0.07	0.071	0.097
	FR1 n7	50M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 3	507000	2535	Sample 1	12.68	14.00	1.355	0.10	0.027	0.037
	FR1 n7	50M	QPSK	135	68	Right Tilted	0mm	Ant 25	DSI 3	507000	2535	Sample 1	12.67	14.00	1.358	0.04	0.037	0.050
	FR1 n7	50M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 2	507000	2535	Sample 1	15.65	17.00	1.365	-0.03	0.512	0.699
	FR1 n7	50M	QPSK	135	68	Left Cheek	0mm	Ant 25	DSI 2	507000	2535	Sample 1	15.63	17.00	1.371	0.19	0.503	0.690
	FR1 n7	50M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 3	507000	2535	Sample 1	12.68	14.00	1.355	-0.05	0.243	0.329
	FR1 n7	50M	QPSK	135	68	Left Cheek	0mm	Ant 25	DSI 3	507000	2535	Sample 1	12.67	14.00	1.358	0.08	0.248	0.337
	FR1 n7	50M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 2	507000	2535	Sample 1	15.65	17.00	1.365	0.13	0.129	0.176
	FR1 n7	50M	QPSK	135	68	Left Tilted	0mm	Ant 25	DSI 2	507000	2535	Sample 1	15.63	17.00	1.371	0.16	0.157	0.215
	FR1 n7	50M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 3	507000	2535	Sample 1	12.68	14.00	1.355	-0.01	0.065	0.088
	FR1 n7	50M	QPSK	135	68	Left Tilted	0mm	Ant 25	DSI 3	507000	2535	Sample 1	12.67	14.00	1.358	0.16	0.077	0.105
	FR1 n7	50M	QPSK	1	1	Right Cheek	0mm	Ant 41	DSI 2	507000	2535	Sample 1	24.78	25.50	1.18	0.05	0.232	0.274
	FR1 n7	50M	QPSK	135	68	Right Cheek	0mm	Ant 41	DSI 2	507000	2535	Sample 1	24.75	25.50	1.189	-0.19	0.240	0.285
	FR1 n7	50M	QPSK	1	1	Right Tilted	0mm	Ant 41	DSI 2	507000	2535	Sample 1	24.78	25.50	1.18	0.03	0.111	0.131
	FR1 n7	50M	QPSK	135	68	Right Tilted	0mm	Ant 41	DSI 2	507000	2535	Sample 1	24.75	25.50	1.189	0.01	0.109	0.130
	FR1 n7	50M	QPSK	1	1	Left Cheek	0mm	Ant 41	DSI 2	507000	2535	Sample 1	24.78	25.50	1.18	-0.19	0.273	0.322
	FR1 n7	50M	QPSK	135	68	Left Cheek	0mm	Ant 41	DSI 2	507000	2535	Sample 1	24.75	25.50	1.189	0.17	0.277	0.329
	FR1 n7	50M	QPSK	1	1	Left Tilted	0mm	Ant 41	DSI 2	507000	2535	Sample 1	24.78	25.50	1.18	-0.19	0.073	0.086
	FR1 n7	50M	QPSK	135	68	Left Tilted	0mm	Ant 41	DSI 2	507000	2535	Sample 1	24.75	25.50	1.189	-0.12	0.067	0.080



FCC SAR Test Report

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	FR1 n25	40M	QPSK	1	1	Right Cheek	Omm	Ant 12	DSI 2	376500	1882.5	Sample 1	14.70	15.50	1.202	-0.13	0.443	0.532
	FR1 n25	40M	QPSK	108	54	Right Cheek	Omm	Ant 12	DSI 2	376500	1882.5	Sample 1	14.68	15.50	1.208	-0.18	0.372	0.449
	FR1 n25	40M	QPSK	1	1	Right Cheek	Omm	Ant 12	DSI 3	376500	1882.5	Sample 1	13.70	14.50	1.202	-0.11	0.352	0.423
	FR1 n25	40M	QPSK	108	54	Right Cheek	Omm	Ant 12	DSI 3	376500	1882.5	Sample 1	13.67	14.50	1.211	-0.08	0.295	0.357
	FR1 n25	40M	QPSK	1	1	Right Tilted	Omm	Ant 12	DSI 2	376500	1882.5	Sample 1	14.70	15.50	1.202	-0.17	0.114	0.137
	FR1 n25	40M	QPSK	108	54	Right Tilted	Omm	Ant 12	DSI 2	376500	1882.5	Sample 1	14.68	15.50	1.208	0.14	0.098	0.118
	FR1 n25	40M	QPSK	1	1	Right Tilted	Omm	Ant 12	DSI 3	376500	1882.5	Sample 1	13.70	14.50	1.202	-0.14	0.091	0.109
	FR1 n25	40M	QPSK	108	54	Right Tilted	Omm	Ant 12	DSI 3	376500	1882.5	Sample 1	13.67	14.50	1.211	0.15	0.078	0.094
	FR1 n25	40M	QPSK	1	1	Left Cheek	Omm	Ant 12	DSI 2	376500	1882.5	Sample 1	14.70	15.50	1.202	0.07	0.131	0.157
	FR1 n25	40M	QPSK	108	54	Left Cheek	Omm	Ant 12	DSI 2	376500	1882.5	Sample 1	14.68	15.50	1.208	0.06	0.123	0.149
	FR1 n25	40M	QPSK	1	1	Left Cheek	Omm	Ant 12	DSI 3	376500	1882.5	Sample 1	13.70	14.50	1.202	0.01	0.104	0.125
	FR1 n25	40M	QPSK	108	54	Left Cheek	Omm	Ant 12	DSI 3	376500	1882.5	Sample 1	13.67	14.50	1.211	-0.04	0.098	0.119
	FR1 n25	40M	QPSK	1	1	Left Tilted	Omm	Ant 12	DSI 2	376500	1882.5	Sample 1	14.70	15.50	1.202	0.08	0.060	0.072
	FR1 n25	40M	QPSK	108	54	Left Tilted	Omm	Ant 12	DSI 2	376500	1882.5	Sample 1	14.68	15.50	1.208	-0.15	0.054	0.065
	FR1 n25	40M	QPSK	1	1	Left Tilted	Omm	Ant 12	DSI 3	376500	1882.5	Sample 1	13.70	14.50	1.202	-0.05	0.048	0.058
	FR1 n25	40M	QPSK	108	54	Left Tilted	Omm	Ant 12	DSI 3	376500	1882.5	Sample 1	13.67	14.50	1.211	0.14	0.043	0.052
	FR1 n25	40M	QPSK	1	1	Right Cheek	Omm	Ant 13	DSI 2	376500	1882.5	Sample 1	15.88	17.00	1.294	-0.01	0.573	0.741
	FR1 n25	40M	QPSK	108	54	Right Cheek	Omm	Ant 13	DSI 2	376500	1882.5	Sample 1	15.87	17.00	1.297	-0.14	0.535	0.694
	FR1 n25	40M	QPSK	1	1	Right Cheek	Omm	Ant 13	DSI 3	376500	1882.5	Sample 1	14.40	15.50	1.288	0.02	0.406	0.523
	FR1 n25	40M	QPSK	108	54	Right Cheek	Omm	Ant 13	DSI 3	376500	1882.5	Sample 1	14.38	15.50	1.294	0.07	0.379	0.490
	FR1 n25	40M	QPSK	1	1	Right Tilted	Omm	Ant 13	DSI 2	376500	1882.5	Sample 1	15.88	17.00	1.294	-0.19	0.430	0.556
	FR1 n25	40M	QPSK	108	54	Right Tilted	Omm	Ant 13	DSI 2	376500	1882.5	Sample 1	15.87	17.00	1.297	0.16	0.422	0.547
	FR1 n25	40M	QPSK	1	1	Right Tilted	Omm	Ant 13	DSI 3	376500	1882.5	Sample 1	14.40	15.50	1.288	0.06	0.304	0.392
	FR1 n25	40M	QPSK	108	54	Right Tilted	Omm	Ant 13	DSI 3	376500	1882.5	Sample 1	14.38	15.50	1.294	0.18	0.299	0.387
	FR1 n25	40M	QPSK	1	1	Left Cheek	Omm	Ant 13	DSI 2	376500	1882.5	Sample 1	15.88	17.00	1.294	0.05	0.155	0.201
	FR1 n25	40M	QPSK	108	54	Left Cheek	Omm	Ant 13	DSI 2	376500	1882.5	Sample 1	15.87	17.00	1.297	0.16	0.168	0.218
	FR1 n25	40M	QPSK	1	1	Left Cheek	Omm	Ant 13	DSI 3	376500	1882.5	Sample 1	14.40	15.50	1.288	0.16	0.110	0.142
	FR1 n25	40M	QPSK	108	54	Left Cheek	Omm	Ant 13	DSI 3	376500	1882.5	Sample 1	14.38	15.50	1.294	-0.05	0.119	0.154
	FR1 n25	40M	QPSK	1	1	Left Tilted	Omm	Ant 13	DSI 2	376500	1882.5	Sample 1	15.88	17.00	1.294	0.15	0.240	0.311
	FR1 n25	40M	QPSK	108	54	Left Tilted	Omm	Ant 13	DSI 2	376500	1882.5	Sample 1	15.87	17.00	1.297	0.02	0.256	0.332
	FR1 n25	40M	QPSK	1	1	Left Tilted	Omm	Ant 13	DSI 3	376500	1882.5	Sample 1	14.40	15.50	1.288	0.04	0.170	0.219
	FR1 n25	40M	QPSK	108	54	Left Tilted	Omm	Ant 13	DSI 3	376500	1882.5	Sample 1	14.38	15.50	1.294	-0.15	0.181	0.234
	FR1 n25	40M	QPSK	1	1	Right Cheek	Omm	Ant 25	DSI 2	376500	1882.5	Sample 1	16.25	17.50	1.334	-0.14	0.156	0.208
	FR1 n25	40M	QPSK	108	54	Right Cheek	Omm	Ant 25	DSI 2	376500	1882.5	Sample 1	16.23	17.50	1.34	0.01	0.165	0.221
	FR1 n25	40M	QPSK	1	1	Right Cheek	Omm	Ant 25	DSI 3	376500	1882.5	Sample 1	12.25	13.50	1.334	0.15	0.063	0.084
	FR1 n25	40M	QPSK	108	54	Right Cheek	Omm	Ant 25	DSI 3	376500	1882.5	Sample 1	12.23	13.50	1.34	0.17	0.068	0.091
	FR1 n25	40M	QPSK	1	1	Right Tilted	Omm	Ant 25	DSI 2	376500	1882.5	Sample 1	16.25	17.50	1.334	-0.16	0.058	0.077
	FR1 n25	40M	QPSK	108	54	Right Tilted	Omm	Ant 25	DSI 2	376500	1882.5	Sample 1	16.23	17.50	1.34	0.04	0.063	0.084
	FR1 n25	40M	QPSK	1	1	Right Tilted	Omm	Ant 25	DSI 3	376500	1882.5	Sample 1	12.25	13.50	1.334	-0.16	0.022	0.029
	FR1 n25	40M	QPSK	108	54	Right Tilted	Omm	Ant 25	DSI 3	376500	1882.5	Sample 1	12.23	13.50	1.34	-0.12	0.024	0.032
	FR1 n25	40M	QPSK	1	1	Left Cheek	Omm	Ant 25	DSI 2	376500	1882.5	Sample 1	16.25	17.50	1.334	-0.01	0.505	0.674
20	FR1 n25	40M	QPSK	108	54	Left Cheek	Omm	Ant 25	DSI 2	376500	1882.5	Sample 1	16.23	17.50	1.34	0.03	0.579	0.776
	FR1 n25	40M	QPSK	1	1	Left Cheek	Omm	Ant 25	DSI 3	376500	1882.5	Sample 1	12.25	13.50	1.334	-0.06	0.209	0.279
	FR1 n25	40M	QPSK	108	54	Left Cheek	Omm	Ant 25	DSI 3	376500	1882.5	Sample 1	12.23	13.50	1.34	-0.13	0.222	0.297
	FR1 n25	40M	QPSK	1	1	Left Tilted	Omm	Ant 25	DSI 2	376500	1882.5	Sample 1	16.25	17.50	1.334	0.03	0.137	0.183
	FR1 n25	40M	QPSK	108	54	Left Tilted	Omm	Ant 25	DSI 2	376500	1882.5	Sample 1	16.23	17.50	1.34	-0.16	0.128	0.172
	FR1 n25	40M	QPSK	1	1	Left Tilted	Omm	Ant 25	DSI 3	376500	1882.5	Sample 1	12.25	13.50	1.334	0.12	0.052	0.069
	FR1 n25	40M	QPSK	108	54	Left Tilted	Omm	Ant 25	DSI 3	376500	1882.5	Sample 1	12.23	13.50	1.34	0.15	0.049	0.066
	FR1 n25	40M	QPSK	1	1	Right Cheek	Omm	Ant 41	DSI 2	376500	1882.5	Sample 1	24.60	25.50	1.23	-0.13	0.103	0.127
	FR1 n25	40M	QPSK	108	54	Right Cheek	Omm	Ant 41	DSI 2	376500	1882.5	Sample 1	24.58	25.50	1.236	0.13	0.135	0.167
	FR1 n25	40M	QPSK	1	1	Right Tilted	Omm	Ant 41	DSI 2	376500	1882.5	Sample 1	24.60	25.50	1.23	-0.08	0.056	0.069
	FR1 n25	40M	QPSK	108	54	Right Tilted	Omm	Ant 41	DSI 2	376500	1882.5	Sample 1	24.58	25.50	1.236	-0.07	0.074	0.091
	FR1 n25	40M	QPSK	1	1	Left Cheek	Omm	Ant 41	DSI 2	376500	1882.5	Sample 1	24.60	25.50	1.23	-0.01	0.133	0.164
	FR1 n25	40M	QPSK	108	54	Left Cheek	Omm	Ant 41	DSI 2	376500	1882.5	Sample 1	24.58	25.50	1.236	-0.07	0.185	0.229
	FR1 n25	40M	QPSK	1	1	Left Tilted	Omm	Ant 41	DSI 2	376500	1882.5	Sample 1	24.60	25.50	1.23	-0.10	0.069	0.085
	FR1 n25	40M	QPSK	108	54	Left Tilted	Omm	Ant 41	DSI 2	376500	1882.5	Sample 1	24.58	25.50	1.236	-0.19	0.077	0.095
	FR1 n26	20M	QPSK	1	1	Right Cheek	Omm	Ant 11	DSI 2	166300	831.5	Sample 1	19.98	21.00	1.265	0.10	0.275	0.348
	FR1 n26	20M	QPSK	50	28	Right Cheek	Omm	Ant 11	DSI 2	166300	831.5	Sample 1	19.97	21.00	1.268	0.00	0.251	0.318
	FR1 n26	20M	QPSK	1	1	Right Cheek	Omm	Ant 11	DSI 3	166300	831.5	Sample 1	18.97	20.00	1.268	0.16	0.194	0.246
	FR1 n26	20M	QPSK	50	28	Right Cheek	Omm	Ant 11	DSI 3	166300	831.5	Sample 1	18.95	20.00	1.274	-0.15	0.177	0.225
	FR1 n26	20M	QPSK	1	1	Right Tilted	Omm	Ant 11	DSI 2	166300	831.5	Sample 1	19.98	21.00	1.265	0.02	0.058	0.073
	FR1 n26	20M	QPSK	50	28	Right Tilted	Omm	Ant 11	DSI 2	166300	831.5	Sample 1	19.97	21.00	1.268	0.04	0.064	0.081
	FR1 n26	20M	QPSK	1	1	Right Tilted	Omm	Ant 11	DSI 3	166300	831.5	Sample 1	18.97	20.00	1.268	0.00	0.041	0.052
	FR1 n26	20M	QPSK	50	28	Right Tilted	Omm	Ant 11	DSI 3	166300	831.5	Sample 1	18.95	20.00	1.274	-0.12	0.045	0.057
	FR1 n26	20M	QPSK	1	1	Left Cheek	Omm	Ant 11	DSI 2	166300	831.5	Sample 1	19.98	21.00	1.265	0.05	0.622	0.787
	FR1 n26	20M	QPSK	50	28	Left Cheek	Omm	Ant 11	DSI 2	166300	831.5	Sample 1	19.97	21.00	1.268	-0.01	0.614	0.779
	FR1 n26	20M	QPSK	1	1	Left Cheek	Omm	Ant 11	DSI 3	166300	831.5	Sample 1	18.97	20.00	1.268	-0.17	0.430	0.545
	FR1 n26	20M	QPSK	50	28	Left Cheek	Omm	Ant 11	DSI 3	166300	831.5	Sample 1	18.95	20.00	1.274	-0.18	0.425	0.541
	FR1 n26	20M	QPSK	1	1	Left Tilted	Omm	Ant 11	DSI 2	166300	831.5	Sample 1	19.98	21.00	1.265	0.08	0.085	0.108
	FR1 n26	20M	QPSK	50	28	Left Tilted	Omm	Ant 11	DSI 2	166300	831.5	Sample 1	19.97	21.00	1.268	0.17	0.084	0.107
	FR1 n26	20M	QPSK	1	1	Left Tilted	Omm	Ant 11	DSI 3	166300	831.5	Sample 1	18.97	20.00	1.268	-0.14	0.061	0.077
	FR1 n26	20M	QPSK	50	28	Left Tilted	Omm	Ant 11	DSI 3	166300	831.5	Sample 1	18.95	20.00	1.274	0.15	0.060	0.076
21	FR1 n26	20M	QPSK	1	1	Right Cheek	Omm	Ant 26	DSI 2	166300	831.5	Sample 1						



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	FR1 n26	20M	QPSK	50	28	Right Cheek	0mm	Ant 26	DSI 2	166300	831.5	Sample 1	22.73	24.00	1.34	0.00	0.590	0.791
	FR1 n26	20M	QPSK	100	0	Right Cheek	0mm	Ant 26	DSI 2	166300	831.5	Sample 1	22.71	24.00	1.346	-0.16	0.559	0.752
	FR1 n26	20M	QPSK	1	1	Right Cheek	0mm	Ant 26	DSI 3	166300	831.5	Sample 1	21.78	23.00	1.324	0.01	0.507	0.671
	FR1 n26	20M	QPSK	50	28	Right Cheek	0mm	Ant 26	DSI 3	166300	831.5	Sample 1	21.76	23.00	1.33	-0.16	0.469	0.624
	FR1 n26	20M	QPSK	1	1	Right Tilted	0mm	Ant 26	DSI 2	166300	831.5	Sample 1	22.75	24.00	1.334	-0.13	0.127	0.169
	FR1 n26	20M	QPSK	50	28	Right Tilted	0mm	Ant 26	DSI 2	166300	831.5	Sample 1	22.73	24.00	1.34	0.07	0.114	0.153
	FR1 n26	20M	QPSK	1	1	Right Tilted	0mm	Ant 26	DSI 3	166300	831.5	Sample 1	21.78	23.00	1.324	0.15	0.101	0.134
	FR1 n26	20M	QPSK	50	28	Right Tilted	0mm	Ant 26	DSI 3	166300	831.5	Sample 1	21.76	23.00	1.33	-0.02	0.091	0.121
	FR1 n26	20M	QPSK	1	1	Left Cheek	0mm	Ant 26	DSI 2	166300	831.5	Sample 1	22.75	24.00	1.334	0.18	0.296	0.395
	FR1 n26	20M	QPSK	50	28	Left Cheek	0mm	Ant 26	DSI 2	166300	831.5	Sample 1	22.73	24.00	1.34	-0.05	0.272	0.364
	FR1 n26	20M	QPSK	1	1	Left Cheek	0mm	Ant 26	DSI 3	166300	831.5	Sample 1	21.78	23.00	1.324	0.14	0.235	0.311
	FR1 n26	20M	QPSK	50	28	Left Cheek	0mm	Ant 26	DSI 3	166300	831.5	Sample 1	21.76	23.00	1.33	0.08	0.216	0.287
	FR1 n26	20M	QPSK	1	1	Left Tilted	0mm	Ant 26	DSI 2	166300	831.5	Sample 1	22.75	24.00	1.334	-0.18	0.098	0.131
	FR1 n26	20M	QPSK	50	28	Left Tilted	0mm	Ant 26	DSI 2	166300	831.5	Sample 1	22.73	24.00	1.34	0.12	0.084	0.113
	FR1 n26	20M	QPSK	1	1	Left Tilted	0mm	Ant 26	DSI 3	166300	831.5	Sample 1	21.78	23.00	1.324	0.07	0.078	0.103
	FR1 n26	20M	QPSK	50	28	Left Tilted	0mm	Ant 26	DSI 3	166300	831.5	Sample 1	21.76	23.00	1.33	0.04	0.067	0.089
	FR1 n66	40M	QPSK	1	1	Right Cheek	0mm	Ant 12	DSI 2	349000	1745	Sample 1	15.38	16.50	1.294	-0.03	0.439	0.568
	FR1 n66	40M	QPSK	108	54	Right Cheek	0mm	Ant 12	DSI 2	349000	1745	Sample 1	15.37	16.50	1.297	-0.01	0.410	0.532
	FR1 n66	40M	QPSK	1	1	Right Cheek	0mm	Ant 12	DSI 3	349000	1745	Sample 1	14.40	15.50	1.288	-0.07	0.349	0.450
	FR1 n66	40M	QPSK	108	54	Right Cheek	0mm	Ant 12	DSI 3	349000	1745	Sample 1	14.38	15.50	1.294	0.08	0.326	0.422
	FR1 n66	40M	QPSK	1	1	Right Tilted	0mm	Ant 12	DSI 2	349000	1745	Sample 1	15.38	16.50	1.294	0.15	0.106	0.137
	FR1 n66	40M	QPSK	108	54	Right Tilted	0mm	Ant 12	DSI 2	349000	1745	Sample 1	15.37	16.50	1.297	0.13	0.107	0.139
	FR1 n66	40M	QPSK	1	1	Right Tilted	0mm	Ant 12	DSI 3	349000	1745	Sample 1	14.40	15.50	1.288	-0.13	0.084	0.108
	FR1 n66	40M	QPSK	108	54	Right Tilted	0mm	Ant 12	DSI 3	349000	1745	Sample 1	14.38	15.50	1.294	0.01	0.085	0.110
	FR1 n66	40M	QPSK	1	1	Left Cheek	0mm	Ant 12	DSI 2	349000	1745	Sample 1	15.38	16.50	1.294	0.07	0.107	0.138
	FR1 n66	40M	QPSK	108	54	Left Cheek	0mm	Ant 12	DSI 2	349000	1745	Sample 1	15.37	16.50	1.297	0.10	0.117	0.152
	FR1 n66	40M	QPSK	1	1	Left Cheek	0mm	Ant 12	DSI 3	349000	1745	Sample 1	14.40	15.50	1.288	-0.12	0.085	0.109
	FR1 n66	40M	QPSK	108	54	Left Cheek	0mm	Ant 12	DSI 3	349000	1745	Sample 1	14.38	15.50	1.294	0.02	0.093	0.120
	FR1 n66	40M	QPSK	1	1	Left Tilted	0mm	Ant 12	DSI 2	349000	1745	Sample 1	15.38	16.50	1.294	-0.13	0.044	0.057
	FR1 n66	40M	QPSK	108	54	Left Tilted	0mm	Ant 12	DSI 2	349000	1745	Sample 1	15.37	16.50	1.297	-0.19	0.049	0.064
	FR1 n66	40M	QPSK	1	1	Left Tilted	0mm	Ant 12	DSI 3	349000	1745	Sample 1	14.40	15.50	1.288	0.16	0.035	0.045
	FR1 n66	40M	QPSK	108	54	Left Tilted	0mm	Ant 12	DSI 3	349000	1745	Sample 1	14.38	15.50	1.294	0.11	0.039	0.050
	FR1 n66	40M	QPSK	1	1	Right Cheek	0mm	Ant 13	DSI 2	349000	1745	Sample 1	14.78	16.00	1.324	0.14	0.471	0.624
	FR1 n66	40M	QPSK	108	54	Right Cheek	0mm	Ant 13	DSI 2	349000	1745	Sample 1	14.77	16.00	1.327	0.00	0.452	0.600
	FR1 n66	40M	QPSK	1	1	Right Cheek	0mm	Ant 13	DSI 3	349000	1745	Sample 1	13.78	15.00	1.324	0.00	0.374	0.495
	FR1 n66	40M	QPSK	108	54	Right Cheek	0mm	Ant 13	DSI 3	349000	1745	Sample 1	13.77	15.00	1.327	0.19	0.359	0.476
	FR1 n66	40M	QPSK	1	1	Right Tilted	0mm	Ant 13	DSI 2	349000	1745	Sample 1	14.78	16.00	1.324	-0.08	0.324	0.429
	FR1 n66	40M	QPSK	108	54	Right Tilted	0mm	Ant 13	DSI 2	349000	1745	Sample 1	14.77	16.00	1.327	-0.15	0.312	0.414
	FR1 n66	40M	QPSK	1	1	Right Tilted	0mm	Ant 13	DSI 3	349000	1745	Sample 1	13.78	15.00	1.324	0.14	0.257	0.340
	FR1 n66	40M	QPSK	108	54	Right Tilted	0mm	Ant 13	DSI 3	349000	1745	Sample 1	13.77	15.00	1.327	0.04	0.248	0.329
	FR1 n66	40M	QPSK	1	1	Left Cheek	0mm	Ant 13	DSI 2	349000	1745	Sample 1	14.78	16.00	1.324	0.05	0.222	0.294
	FR1 n66	40M	QPSK	108	54	Left Cheek	0mm	Ant 13	DSI 2	349000	1745	Sample 1	14.77	16.00	1.327	-0.07	0.215	0.285
	FR1 n66	40M	QPSK	1	1	Left Cheek	0mm	Ant 13	DSI 3	349000	1745	Sample 1	13.78	15.00	1.324	0.13	0.176	0.233
	FR1 n66	40M	QPSK	108	54	Left Cheek	0mm	Ant 13	DSI 3	349000	1745	Sample 1	13.77	15.00	1.327	-0.08	0.171	0.227
	FR1 n66	40M	QPSK	1	1	Left Tilted	0mm	Ant 13	DSI 2	349000	1745	Sample 1	14.78	16.00	1.324	-0.09	0.265	0.351
	FR1 n66	40M	QPSK	108	54	Left Tilted	0mm	Ant 13	DSI 2	349000	1745	Sample 1	14.77	16.00	1.327	0.05	0.272	0.361
	FR1 n66	40M	QPSK	1	1	Left Tilted	0mm	Ant 13	DSI 3	349000	1745	Sample 1	13.78	15.00	1.324	-0.08	0.210	0.278
	FR1 n66	40M	QPSK	108	54	Left Tilted	0mm	Ant 13	DSI 3	349000	1745	Sample 1	13.77	15.00	1.327	-0.06	0.216	0.287
	FR1 n66	40M	QPSK	1	1	Right Cheek	0mm	Ant 25	DSI 2	349000	1745	Sample 1	17.80	19.00	1.318	0.03	0.197	0.260
	FR1 n66	40M	QPSK	108	54	Right Cheek	0mm	Ant 25	DSI 2	349000	1745	Sample 1	17.78	19.00	1.324	0.15	0.221	0.293
	FR1 n66	40M	QPSK	1	1	Right Cheek	0mm	Ant 25	DSI 3	349000	1745	Sample 1	12.81	14.00	1.315	-0.08	0.055	0.072
	FR1 n66	40M	QPSK	108	54	Right Cheek	0mm	Ant 25	DSI 3	349000	1745	Sample 1	12.80	14.00	1.318	-0.08	0.064	0.084
	FR1 n66	40M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 2	349000	1745	Sample 1	17.80	19.00	1.318	-0.16	0.087	0.115
	FR1 n66	40M	QPSK	108	54	Right Tilted	0mm	Ant 25	DSI 2	349000	1745	Sample 1	17.78	19.00	1.324	0.09	0.089	0.118
	FR1 n66	40M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 3	349000	1745	Sample 1	12.81	14.00	1.315	-0.12	0.024	0.032
	FR1 n66	40M	QPSK	108	54	Right Tilted	0mm	Ant 25	DSI 3	349000	1745	Sample 1	12.80	14.00	1.318	-0.14	0.025	0.033
	FR1 n66	40M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 2	349000	1745	Sample 1	17.80	19.00	1.318	0.04	0.746	0.983
22	FR1 n66	40M	QPSK	108	54	Left Cheek	0mm	Ant 25	DSI 2	349000	1745	Sample 1	17.78	19.00	1.324	0.00	0.766	1.014
	FR1 n66	40M	QPSK	216	0	Left Cheek	0mm	Ant 25	DSI 2	349000	1745	Sample 1	17.77	19.00	1.327	0.04	0.753	0.999
	FR1 n66	40M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 3	349000	1745	Sample 1	12.81	14.00	1.315	-0.11	0.211	0.277
	FR1 n66	40M	QPSK	108	54	Left Cheek	0mm	Ant 25	DSI 3	349000	1745	Sample 1	12.80	14.00	1.318	-0.03	0.225	0.297
	FR1 n66	40M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 2	349000	1745	Sample 1	17.80	19.00	1.318	-0.02	0.195	0.257
	FR1 n66	40M	QPSK	108	54	Left Tilted	0mm	Ant 25	DSI 2	349000	1745	Sample 1	17.78	19.00	1.324	0.08	0.194	0.257
	FR1 n66	40M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 3	349000	1745	Sample 1	12.81	14.00	1.315	0.03	0.054	0.071
	FR1 n66	40M	QPSK	108	54	Left Tilted	0mm	Ant 25	DSI 3	349000	1745	Sample 1	12.80	14.00	1.318	0.16	0.054	0.071
	FR1 n66	40M	QPSK	1	1	Right Cheek	0mm	Ant 41	DSI 2	349000	1745	Sample 1	24.45	25.50	1.274	0.01	0.173	0.220
	FR1 n66	40M	QPSK	108	54	Right Cheek	0mm	Ant 41	DSI 2	349000	1745	Sample 1	24.40	25.50	1.288	-0.09	0.165	0.213
	FR1 n66	40M	QPSK	1	1	Right Tilted	0mm	Ant 41	DSI 2	349000	1745	Sample 1	24.45	25.50	1.274	-0.11	0.073	0.093
	FR1 n66	40M	QPSK	108	54	Right Tilted	0mm	Ant 41	DSI 2	349000	1745	Sample 1	24.40	25.50	1.288	-0.03	0.077	0.099
	FR1 n66	40M	QPSK	1	1	Left Cheek	0mm	Ant 41	DSI 2	349000	1745	Sample 1	24.45	25.50	1.274	-0.15	0.180	0.229
	FR1 n66	40M	QPSK	108	54	Left Cheek	0mm	Ant 41	DSI 2	349000	1745	Sample 1	24.40	25.50	1.288	-0.13	0.167	0.215
	FR1 n66	40M	QPSK	1	1	Left Tilted	0mm	Ant 41	DSI 2	349000	1745	Sample 1	24.45	25.50	1.274	-0.16	0.076	0.097
	FR1 n66	40M	QPSK	108	54	Left Tilted	0mm	Ant 41	DSI 2	349000	1745	Sample 1	24.40	25.50	1.288	0.1		



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	FR1 n38	40M	QPSK	1	1	Right Cheek	Omm	Ant 13	DSI 3	519000	2595	Sample 1	11.66	12.7	1.271	-0.11	0.355	0.451
	FR1 n38	40M	QPSK	50	28	Right Cheek	Omm	Ant 13	DSI 3	519000	2595	Sample 1	11.65	12.7	1.274	0.05	0.336	0.428
	FR1 n38	40M	QPSK	1	1	Right Tilted	Omm	Ant 13	DSI 3	519000	2595	Sample 1	11.66	12.7	1.271	0.06	0.313	0.398
	FR1 n38	40M	QPSK	50	28	Right Tilted	Omm	Ant 13	DSI 3	519000	2595	Sample 1	11.65	12.7	1.274	0.08	0.308	0.392
	FR1 n38	40M	QPSK	1	1	Left Cheek	Omm	Ant 13	DSI 3	519000	2595	Sample 1	11.66	12.7	1.271	-0.12	0.103	0.131
	FR1 n38	40M	QPSK	50	28	Left Cheek	Omm	Ant 13	DSI 3	519000	2595	Sample 1	11.65	12.7	1.274	-0.06	0.103	0.131
	FR1 n38	40M	QPSK	1	1	Left Tilted	Omm	Ant 13	DSI 3	519000	2595	Sample 1	11.66	12.7	1.271	0.17	0.111	0.141
	FR1 n38	40M	QPSK	50	28	Left Tilted	Omm	Ant 13	DSI 3	519000	2595	Sample 1	11.65	12.7	1.274	-0.14	0.112	0.143
23	FR1 n41_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 12	DSI 2	518598	2592.99	Sample 1	15.30	16.00	1.175	0.00	0.783	0.920
	FR1 n41_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 12	DSI 2	518598	2592.99	Sample 1	15.28	16.00	1.18	0.14	0.701	0.827
	FR1 n41_HPUE	100M	QPSK	270	0	Right Cheek	Omm	Ant 12	DSI 2	518598	2592.99	Sample 1	15.27	16.00	1.183	-0.02	0.663	0.784
	FR1 n41_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 12	DSI 3	518598	2592.99	Sample 1	13.85	14.50	1.161	0.04	0.567	0.658
	FR1 n41_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 12	DSI 3	518598	2592.99	Sample 1	13.83	14.50	1.167	-0.02	0.508	0.593
	FR1 n41_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 12	DSI 2	518598	2592.99	Sample 1	15.30	16.00	1.175	-0.18	0.193	0.227
	FR1 n41_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 12	DSI 2	518598	2592.99	Sample 1	15.28	16.00	1.18	-0.08	0.164	0.194
	FR1 n41_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 12	DSI 3	518598	2592.99	Sample 1	13.85	14.50	1.161	-0.01	0.137	0.159
	FR1 n41_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 12	DSI 3	518598	2592.99	Sample 1	13.83	14.50	1.167	0.11	0.116	0.135
	FR1 n41_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 12	DSI 2	518598	2592.99	Sample 1	15.30	16.00	1.175	-0.14	0.193	0.227
	FR1 n41_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 12	DSI 2	518598	2592.99	Sample 1	15.28	16.00	1.18	-0.18	0.182	0.215
	FR1 n41_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 12	DSI 3	518598	2592.99	Sample 1	13.85	14.50	1.161	0.04	0.137	0.159
	FR1 n41_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 12	DSI 3	518598	2592.99	Sample 1	13.83	14.50	1.167	0.15	0.129	0.151
	FR1 n41_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 12	DSI 2	518598	2592.99	Sample 1	15.30	16.00	1.175	0.09	0.105	0.123
	FR1 n41_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 12	DSI 2	518598	2592.99	Sample 1	15.28	16.00	1.18	0.05	0.091	0.107
	FR1 n41_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 12	DSI 3	518598	2592.99	Sample 1	13.85	14.50	1.161	-0.13	0.074	0.086
	FR1 n41_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 12	DSI 3	518598	2592.99	Sample 1	13.83	14.50	1.167	0.17	0.064	0.075
	FR1 n41_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 13	DSI 2	518598	2592.99	Sample 1	14.00	14.50	1.122	0.17	0.661	0.742
	FR1 n41_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 13	DSI 2	518598	2592.99	Sample 1	13.98	14.50	1.127	0.09	0.626	0.706
	FR1 n41_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 13	DSI 3	518598	2592.99	Sample 1	12.00	12.50	1.122	-0.18	0.417	0.468
	FR1 n41_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 13	DSI 3	518598	2592.99	Sample 1	11.98	12.50	1.127	0.17	0.395	0.445
	FR1 n41_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 13	DSI 2	518598	2592.99	Sample 1	14.00	14.50	1.122	0.12	0.583	0.654
	FR1 n41_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 13	DSI 2	518598	2592.99	Sample 1	13.98	14.50	1.127	-0.12	0.573	0.646
	FR1 n41_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 13	DSI 3	518598	2592.99	Sample 1	12.00	12.50	1.122	0.12	0.368	0.413
	FR1 n41_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 13	DSI 3	518598	2592.99	Sample 1	11.98	12.50	1.127	0.10	0.362	0.408
	FR1 n41_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 13	DSI 2	518598	2592.99	Sample 1	14.00	14.50	1.122	0.02	0.192	0.215
	FR1 n41_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 13	DSI 2	518598	2592.99	Sample 1	13.98	14.50	1.127	0.16	0.192	0.216
	FR1 n41_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 13	DSI 3	518598	2592.99	Sample 1	12.00	12.50	1.122	-0.09	0.121	0.136
	FR1 n41_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 13	DSI 3	518598	2592.99	Sample 1	11.98	12.50	1.127	0.01	0.121	0.136
	FR1 n41_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 13	DSI 2	518598	2592.99	Sample 1	14.00	14.50	1.122	0.05	0.207	0.232
	FR1 n41_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 13	DSI 2	518598	2592.99	Sample 1	13.98	14.50	1.127	0.07	0.209	0.236
	FR1 n41_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 13	DSI 3	518598	2592.99	Sample 1	12.00	12.50	1.122	-0.08	0.131	0.147
	FR1 n41_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 13	DSI 3	518598	2592.99	Sample 1	11.98	12.50	1.127	0.17	0.132	0.149
	FR1 n41_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 25	DSI 2	518598	2592.99	Sample 1	17.70	18.50	1.202	-0.17	0.383	0.460
	FR1 n41_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 25	DSI 2	518598	2592.99	Sample 1	17.68	18.50	1.208	-0.17	0.421	0.509
	FR1 n41_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 25	DSI 3	518598	2592.99	Sample 1	13.70	14.50	1.202	-0.17	0.147	0.177
	FR1 n41_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 25	DSI 3	518598	2592.99	Sample 1	13.68	14.50	1.208	0.12	0.164	0.198
	FR1 n41_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 25	DSI 2	518598	2592.99	Sample 1	17.70	18.50	1.202	0.11	0.094	0.113
	FR1 n41_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 25	DSI 2	518598	2592.99	Sample 1	17.68	18.50	1.208	-0.11	0.073	0.088
	FR1 n41_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 25	DSI 3	518598	2592.99	Sample 1	13.70	14.50	1.202	-0.10	0.036	0.043
	FR1 n41_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 25	DSI 3	518598	2592.99	Sample 1	13.68	14.50	1.208	-0.14	0.029	0.035
	FR1 n41_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 25	DSI 2	518598	2592.99	Sample 1	17.70	18.50	1.202	0.15	0.649	0.780
	FR1 n41_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 25	DSI 2	518598	2592.99	Sample 1	17.68	18.50	1.208	0.01	0.541	0.654
	FR1 n41_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 25	DSI 3	518598	2592.99	Sample 1	13.70	14.50	1.202	-0.17	0.261	0.314
	FR1 n41_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 25	DSI 3	518598	2592.99	Sample 1	13.68	14.50	1.208	-0.03	0.219	0.265
	FR1 n41_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 25	DSI 2	518598	2592.99	Sample 1	17.70	18.50	1.202	0.05	0.220	0.264
	FR1 n41_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 25	DSI 2	518598	2592.99	Sample 1	17.68	18.50	1.208	-0.13	0.194	0.234
	FR1 n41_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 25	DSI 3	518598	2592.99	Sample 1	13.70	14.50	1.202	-0.18	0.088	0.106
	FR1 n41_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 25	DSI 3	518598	2592.99	Sample 1	13.68	14.50	1.208	-0.05	0.078	0.094
	FR1 n41_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 41	DSI 2	518598	2592.99	Sample 1	26.55	27.50	1.245	-0.18	0.264	0.329
	FR1 n41_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 41	DSI 2	518598	2592.99	Sample 1	26.53	27.50	1.25	-0.03	0.248	0.310
	FR1 n41_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 41	DSI 3	518598	2592.99	Sample 1	26.07	27.00	1.239	0.02	0.228	0.282
	FR1 n41_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 41	DSI 3	518598	2592.99	Sample 1	26.04	27.00	1.247	0.03	0.231	0.288
	FR1 n41_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 41	DSI 2	518598	2592.99	Sample 1	26.55	27.50	1.245	0.05	0.137	0.171
	FR1 n41_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 41	DSI 2	518598	2592.99	Sample 1	26.53	27.50	1.25	0.14	0.116	0.145
	FR1 n41_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 41	DSI 3	518598	2592.99	Sample 1	26.07	27.00	1.239	0.08	0.119	0.147
	FR1 n41_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 41	DSI 3	518598	2592.99	Sample 1	26.04	27.00	1.247	-0.10	0.099	0.123
	FR1 n41_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 41	DSI 2	518598	2592.99	Sample 1	26.55	27.50	1.245	0.11	0.280	0.349
	FR1 n41_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 41	DSI 2	518598	2592.99	Sample 1	26.53	27.50	1.25	0.08	0.241	0.301
	FR1 n41_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 41	DSI 3	518598	2592.99	Sample 1	26.07	27.00	1.239	0.10	0.241	0.299
	FR1 n41_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 41	DSI 3	518598	2592.99	Sample 1	26.04	27.00	1.247	0.01	0.214	0.267
	FR1 n41_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 41	DSI 2	518598	2592.99	Sample 1	26.55	27.50	1.245	0.11	0.100	0.125
	FR1 n41_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 41	DSI 2	518598	2592.99	Sample 1	26.53	27.50	1.25	-0.07	0.077	0.096
	FR1 n41_HPUE	100M																



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	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 12	DSI 2	633332	3499.98	Sample 1	15.35	16.50	1.303	0.00	0.430	0.560
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 12	DSI 3	633332	3499.98	Sample 1	13.87	15.00	1.297	-0.10	0.345	0.447
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 12	DSI 3	633332	3499.98	Sample 1	13.82	15.00	1.312	0.17	0.304	0.399
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 12	DSI 2	633332	3499.98	Sample 1	15.36	16.50	1.3	-0.06	0.137	0.178
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 12	DSI 2	633332	3499.98	Sample 1	15.35	16.50	1.303	0.00	0.127	0.165
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 12	DSI 3	633332	3499.98	Sample 1	13.87	15.00	1.297	0.14	0.097	0.126
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 12	DSI 3	633332	3499.98	Sample 1	13.82	15.00	1.312	-0.18	0.090	0.118
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 12	DSI 2	633332	3499.98	Sample 1	15.36	16.50	1.3	-0.06	0.154	0.200
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 12	DSI 2	633332	3499.98	Sample 1	15.35	16.50	1.303	-0.19	0.132	0.172
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 12	DSI 3	633332	3499.98	Sample 1	13.87	15.00	1.297	-0.16	0.109	0.141
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 12	DSI 3	633332	3499.98	Sample 1	13.82	15.00	1.312	0.06	0.093	0.122
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 12	DSI 2	633332	3499.98	Sample 1	15.36	16.50	1.3	-0.14	0.058	0.075
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 12	DSI 2	633332	3499.98	Sample 1	15.35	16.50	1.303	-0.01	0.075	0.098
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 12	DSI 3	633332	3499.98	Sample 1	13.87	15.00	1.297	-0.04	0.041	0.053
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 12	DSI 3	633332	3499.98	Sample 1	13.82	15.00	1.312	0.09	0.053	0.070
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 13	DSI 2	633332	3499.98	Sample 1	14.40	15.50	1.288	-0.08	0.483	0.622
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 13	DSI 2	633332	3499.98	Sample 1	14.38	15.50	1.294	0.07	0.455	0.589
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 13	DSI 3	633332	3499.98	Sample 1	12.95	14.00	1.274	-0.09	0.342	0.436
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 13	DSI 3	633332	3499.98	Sample 1	12.93	14.00	1.279	0.08	0.322	0.412
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 13	DSI 2	633332	3499.98	Sample 1	14.40	15.50	1.288	-0.12	0.433	0.558
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 13	DSI 2	633332	3499.98	Sample 1	14.38	15.50	1.294	-0.13	0.428	0.554
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 13	DSI 3	633332	3499.98	Sample 1	12.95	14.00	1.274	0.03	0.307	0.391
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 13	DSI 3	633332	3499.98	Sample 1	12.93	14.00	1.279	-0.12	0.303	0.388
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 13	DSI 2	633332	3499.98	Sample 1	14.40	15.50	1.288	0.16	0.155	0.200
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 13	DSI 2	633332	3499.98	Sample 1	14.38	15.50	1.294	-0.14	0.149	0.193
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 13	DSI 3	633332	3499.98	Sample 1	12.95	14.00	1.274	-0.02	0.110	0.140
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 13	DSI 3	633332	3499.98	Sample 1	12.93	14.00	1.279	0.17	0.105	0.134
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 13	DSI 2	633332	3499.98	Sample 1	14.40	15.50	1.288	-0.01	0.154	0.198
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 13	DSI 2	633332	3499.98	Sample 1	14.38	15.50	1.294	-0.12	0.153	0.198
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 13	DSI 3	633332	3499.98	Sample 1	12.95	14.00	1.274	-0.05	0.109	0.139
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 13	DSI 3	633332	3499.98	Sample 1	12.93	14.00	1.279	0.00	0.108	0.138
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 22	DSI 2	633332	3499.98	Sample 1	13.35	14.00	1.161	-0.04	0.341	0.396
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 22	DSI 2	633332	3499.98	Sample 1	13.30	14.00	1.175	-0.15	0.347	0.408
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 22	DSI 3	633332	3499.98	Sample 1	10.86	11.50	1.159	0.06	0.168	0.195
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 22	DSI 3	633332	3499.98	Sample 1	10.80	11.50	1.175	0.04	0.173	0.203
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 22	DSI 2	633332	3499.98	Sample 1	13.35	14.00	1.161	0.08	0.398	0.462
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 22	DSI 2	633332	3499.98	Sample 1	13.30	14.00	1.175	-0.01	0.404	0.475
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 22	DSI 3	633332	3499.98	Sample 1	10.86	11.50	1.159	-0.09	0.197	0.228
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 22	DSI 3	633332	3499.98	Sample 1	10.80	11.50	1.175	-0.13	0.208	0.244
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 22	DSI 2	633332	3499.98	Sample 1	13.35	14.00	1.161	-0.07	0.436	0.506
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 22	DSI 2	633332	3499.98	Sample 1	13.30	14.00	1.175	-0.02	0.477	0.560
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 22	DSI 3	633332	3499.98	Sample 1	10.86	11.50	1.159	-0.16	0.228	0.264
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 22	DSI 3	633332	3499.98	Sample 1	10.80	11.50	1.175	0.06	0.246	0.289
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 22	DSI 2	633332	3499.98	Sample 1	13.35	14.00	1.161	0.11	0.508	0.590
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 22	DSI 2	633332	3499.98	Sample 1	13.30	14.00	1.175	0.05	0.538	0.632
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 22	DSI 3	633332	3499.98	Sample 1	10.86	11.50	1.159	-0.12	0.262	0.304
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 22	DSI 3	633332	3499.98	Sample 1	10.80	11.50	1.175	0.03	0.271	0.318
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 25	DSI 2	633332	3499.98	Sample 1	14.96	16.00	1.271	0.17	0.208	0.264
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 25	DSI 2	633332	3499.98	Sample 1	14.92	16.00	1.282	-0.10	0.181	0.232
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 25	DSI 3	633332	3499.98	Sample 1	10.51	11.50	1.256	-0.17	0.071	0.089
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 25	DSI 3	633332	3499.98	Sample 1	10.48	11.50	1.265	-0.06	0.062	0.078
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 25	DSI 2	633332	3499.98	Sample 1	14.96	16.00	1.271	-0.18	0.092	0.117
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 25	DSI 2	633332	3499.98	Sample 1	14.92	16.00	1.282	0.09	0.073	0.094
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 25	DSI 3	633332	3499.98	Sample 1	10.51	11.50	1.256	0.14	0.034	0.043
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 25	DSI 3	633332	3499.98	Sample 1	10.48	11.50	1.265	-0.10	0.026	0.033
24	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 25	DSI 2	633332	3499.98	Sample 1	14.96	16.00	1.271	-0.02	0.704	0.895
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 25	DSI 2	633332	3499.98	Sample 1	14.92	16.00	1.282	-0.15	0.626	0.803
	FR1 n77_HPUE	100M	QPSK	270	0	Left Cheek	Omm	Ant 25	DSI 2	633332	3499.98	Sample 1	14.87	16.00	1.297	0.00	0.661	0.857
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	Omm	Ant 25	DSI 3	633332	3499.98	Sample 1	10.51	11.50	1.256	0.05	0.241	0.303
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	Omm	Ant 25	DSI 3	633332	3499.98	Sample 1	10.48	11.50	1.265	-0.04	0.221	0.280
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 25	DSI 2	633332	3499.98	Sample 1	14.96	16.00	1.271	-0.13	0.261	0.332
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 25	DSI 2	633332	3499.98	Sample 1	14.92	16.00	1.282	-0.13	0.198	0.254
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	Omm	Ant 25	DSI 3	633332	3499.98	Sample 1	10.51	11.50	1.256	-0.13	0.093	0.117
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	Omm	Ant 25	DSI 3	633332	3499.98	Sample 1	10.48	11.50	1.265	0.04	0.072	0.091
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 12	DSI 2	656000	3840	Sample 1	15.98	16.50	1.127	0.11	0.433	0.488
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 12	DSI 2	656000	3840	Sample 1	15.90	16.50	1.148	0.16	0.390	0.448
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	Omm	Ant 12	DSI 3	656000	3840	Sample 1	14.46	15.00	1.132	0.11	0.307	0.348
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	Omm	Ant 12	DSI 3	656000	3840	Sample 1	14.42	15.00	1.143	0.12	0.276	0.315
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 12	DSI 2	656000	3840	Sample 1	15.98	16.50	1.127	-0.08	0.153	0.172
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	Omm	Ant 12	DSI 2	656000	3840	Sample 1	15.90	16.50	1.148	0.03	0.146	0.168
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	Omm	Ant 12	DSI 3	656000	3840	Sample 1	14.46	15.00	1.132	0.08	0.10	



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	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 12	DSI 3	656000	3840	Sample 1	14.46	15.00	1.132	0.10	0.135	0.153
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 12	DSI 3	656000	3840	Sample 1	14.42	15.00	1.143	0.13	0.140	0.160
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 12	DSI 2	656000	3840	Sample 1	15.98	16.50	1.127	-0.03	0.070	0.079
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 12	DSI 2	656000	3840	Sample 1	15.90	16.50	1.148	-0.05	0.062	0.071
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 12	DSI 3	656000	3840	Sample 1	14.46	15.00	1.132	0.01	0.050	0.057
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 12	DSI 3	656000	3840	Sample 1	14.42	15.00	1.143	0.05	0.044	0.050
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	0mm	Ant 13	DSI 2	656000	3840	Sample 1	14.60	15.50	1.23	-0.05	0.498	0.613
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 13	DSI 2	656000	3840	Sample 1	14.58	15.50	1.236	-0.19	0.479	0.592
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	0mm	Ant 13	DSI 3	656000	3840	Sample 1	13.08	14.00	1.236	0.19	0.353	0.436
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 13	DSI 3	656000	3840	Sample 1	13.07	14.00	1.239	-0.07	0.339	0.420
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 13	DSI 2	656000	3840	Sample 1	14.60	15.50	1.23	0.00	0.504	0.620
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 13	DSI 2	656000	3840	Sample 1	14.58	15.50	1.236	0.14	0.485	0.599
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 13	DSI 3	656000	3840	Sample 1	13.08	14.00	1.236	0.04	0.357	0.441
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 13	DSI 3	656000	3840	Sample 1	13.07	14.00	1.239	-0.09	0.343	0.425
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 13	DSI 2	656000	3840	Sample 1	14.60	15.50	1.23	0.14	0.174	0.214
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 13	DSI 2	656000	3840	Sample 1	14.58	15.50	1.236	-0.03	0.159	0.197
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 13	DSI 3	656000	3840	Sample 1	13.08	14.00	1.236	-0.08	0.123	0.152
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 13	DSI 3	656000	3840	Sample 1	13.07	14.00	1.239	-0.01	0.113	0.140
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 13	DSI 2	656000	3840	Sample 1	14.60	15.50	1.23	-0.09	0.186	0.229
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 13	DSI 2	656000	3840	Sample 1	14.58	15.50	1.236	-0.07	0.176	0.218
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 13	DSI 3	656000	3840	Sample 1	13.08	14.00	1.236	0.03	0.132	0.163
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 13	DSI 3	656000	3840	Sample 1	13.07	14.00	1.239	0.00	0.125	0.155
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	0mm	Ant 22	DSI 2	656000	3840	Sample 1	13.35	14.00	1.161	-0.03	0.192	0.223
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 22	DSI 2	656000	3840	Sample 1	13.30	14.00	1.175	0.03	0.182	0.214
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	0mm	Ant 22	DSI 3	656000	3840	Sample 1	10.85	11.50	1.161	-0.05	0.121	0.140
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 22	DSI 3	656000	3840	Sample 1	10.77	11.50	1.183	0.10	0.115	0.136
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 22	DSI 2	656000	3840	Sample 1	13.35	14.00	1.161	0.03	0.236	0.274
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 22	DSI 2	656000	3840	Sample 1	13.30	14.00	1.175	0.15	0.221	0.260
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 22	DSI 3	656000	3840	Sample 1	10.85	11.50	1.161	-0.19	0.149	0.173
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 22	DSI 3	656000	3840	Sample 1	10.77	11.50	1.183	-0.01	0.139	0.164
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 22	DSI 2	656000	3840	Sample 1	13.35	14.00	1.161	0.06	0.274	0.318
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 22	DSI 2	656000	3840	Sample 1	13.30	14.00	1.175	-0.11	0.216	0.254
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 22	DSI 3	656000	3840	Sample 1	10.85	11.50	1.161	-0.04	0.173	0.201
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 22	DSI 3	656000	3840	Sample 1	10.77	11.50	1.183	0.19	0.136	0.161
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 22	DSI 2	656000	3840	Sample 1	13.35	14.00	1.161	0.05	0.292	0.339
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 22	DSI 2	656000	3840	Sample 1	13.30	14.00	1.175	0.11	0.267	0.314
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 22	DSI 3	656000	3840	Sample 1	10.85	11.50	1.161	0.09	0.184	0.214
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 22	DSI 3	656000	3840	Sample 1	10.77	11.50	1.183	0.10	0.168	0.199
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	0mm	Ant 25	DSI 2	656000	3840	Sample 1	14.94	16.00	1.276	0.00	0.127	0.162
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 25	DSI 2	656000	3840	Sample 1	14.90	16.00	1.288	-0.16	0.117	0.151
	FR1 n77_HPUE	100M	QPSK	1	1	Right Cheek	0mm	Ant 25	DSI 3	656000	3840	Sample 1	10.44	11.50	1.276	-0.04	0.080	0.102
	FR1 n77_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 25	DSI 3	656000	3840	Sample 1	10.39	11.50	1.291	0.14	0.074	0.096
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 2	656000	3840	Sample 1	14.94	16.00	1.276	0.06	0.041	0.052
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 25	DSI 2	656000	3840	Sample 1	14.90	16.00	1.288	-0.06	0.041	0.053
	FR1 n77_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 3	656000	3840	Sample 1	10.44	11.50	1.276	0.04	0.026	0.033
	FR1 n77_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 25	DSI 3	656000	3840	Sample 1	10.39	11.50	1.291	-0.13	0.026	0.034
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 2	656000	3840	Sample 1	14.94	16.00	1.276	-0.17	0.207	0.264
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 25	DSI 2	656000	3840	Sample 1	14.90	16.00	1.288	0.07	0.225	0.290
	FR1 n77_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 3	656000	3840	Sample 1	10.44	11.50	1.276	-0.09	0.131	0.167
	FR1 n77_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 25	DSI 3	656000	3840	Sample 1	10.39	11.50	1.291	-0.14	0.142	0.183
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 2	656000	3840	Sample 1	14.94	16.00	1.276	-0.03	0.090	0.115
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 25	DSI 2	656000	3840	Sample 1	14.90	16.00	1.288	0.04	0.114	0.147
	FR1 n77_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 3	656000	3840	Sample 1	10.44	11.50	1.276	0.02	0.057	0.073
	FR1 n77_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 25	DSI 3	656000	3840	Sample 1	10.39	11.50	1.291	-0.07	0.072	0.093
	FR1 n78_HPUE	100M	QPSK	1	1	Right Cheek	0mm	Ant 25	DSI 2	633332	3499.98	Sample 1	15.70	16.50	1.202	-0.02	0.241	0.290
	FR1 n78_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 25	DSI 2	633332	3499.98	Sample 1	15.68	16.50	1.208	-0.19	0.232	0.280
	FR1 n78_HPUE	100M	QPSK	1	1	Right Cheek	0mm	Ant 25	DSI 3	633332	3499.98	Sample 1	11.20	12.00	1.202	-0.14	0.088	0.106
	FR1 n78_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 25	DSI 3	633332	3499.98	Sample 1	11.18	12.00	1.208	0.00	0.082	0.099
	FR1 n78_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 2	633332	3499.98	Sample 1	15.70	16.50	1.202	0.18	0.100	0.120
	FR1 n78_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 25	DSI 2	633332	3499.98	Sample 1	15.68	16.50	1.208	0.01	0.090	0.109
	FR1 n78_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 3	633332	3499.98	Sample 1	11.20	12.00	1.202	-0.13	0.034	0.041
	FR1 n78_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 25	DSI 3	633332	3499.98	Sample 1	11.18	12.00	1.208	-0.03	0.033	0.040
25	FR1 n78_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 2	633332	3499.98	Sample 1	15.70	16.50	1.202	-0.03	0.758	0.911
	FR1 n78_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 25	DSI 2	633332	3499.98	Sample 1	15.68	16.50	1.208	0.06	0.677	0.818
	FR1 n78_HPUE	100M	QPSK	270	0	Left Cheek	0mm	Ant 25	DSI 2	633332	3499.98	Sample 1	15.67	16.50	1.211	-0.05	0.698	0.845
	FR1 n78_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 3	633332	3499.98	Sample 1	11.20	12.00	1.202	0.12	0.280	0.337
	FR1 n78_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 25	DSI 3	633332	3499.98	Sample 1	11.18	12.00	1.208	-0.05	0.241	0.291
	FR1 n78_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 2	633332	3499.98	Sample 1	15.70	16.50	1.202	-0.19	0.268	0.322
	FR1 n78_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 25	DSI 2	633332	3499.98	Sample 1	15.68	16.50	1.208	0.01	0.226	0.273
	FR1 n78_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 3	633332	3499.98	Sample 1	11.20	12.00	1.202	-0.06	0.097	0.117
	FR1 n78_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 25	DSI 3	633332	3499.98	Sample 1	11.18	12.00	1.208	0.19	0.080	0.097
	FR1 n78_HPUE	100M	QPSK	1	1	Left Che												



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	FR1 n78_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 25	DSI 2	650000	3750	Sample 1	15.18	16.50	1.355	0.17	0.142	0.192
	FR1 n78_HPUE	100M	QPSK	1	1	Right Cheek	0mm	Ant 25	DSI 3	650000	3750	Sample 1	10.70	12.00	1.349	-0.17	0.107	0.144
	FR1 n78_HPUE	100M	QPSK	135	69	Right Cheek	0mm	Ant 25	DSI 3	650000	3750	Sample 1	10.68	12.00	1.355	0.12	0.090	0.122
	FR1 n78_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 2	650000	3750	Sample 1	15.20	16.50	1.349	-0.05	0.044	0.059
	FR1 n78_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 25	DSI 2	650000	3750	Sample 1	15.18	16.50	1.355	-0.03	0.037	0.050
	FR1 n78_HPUE	100M	QPSK	1	1	Right Tilted	0mm	Ant 25	DSI 3	650000	3750	Sample 1	10.70	12.00	1.349	-0.17	0.028	0.038
	FR1 n78_HPUE	100M	QPSK	135	69	Right Tilted	0mm	Ant 25	DSI 3	650000	3750	Sample 1	10.68	12.00	1.355	-0.02	0.023	0.031
	FR1 n78_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 2	650000	3750	Sample 1	15.20	16.50	1.349	0.19	0.291	0.393
	FR1 n78_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 25	DSI 2	650000	3750	Sample 1	15.18	16.50	1.355	0.05	0.254	0.344
	FR1 n78_HPUE	100M	QPSK	1	1	Left Cheek	0mm	Ant 25	DSI 3	650000	3750	Sample 1	10.70	12.00	1.349	-0.09	0.184	0.248
	FR1 n78_HPUE	100M	QPSK	135	69	Left Cheek	0mm	Ant 25	DSI 3	650000	3750	Sample 1	10.68	12.00	1.355	-0.05	0.160	0.217
	FR1 n78_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 2	650000	3750	Sample 1	15.20	16.50	1.349	-0.02	0.123	0.166
	FR1 n78_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 25	DSI 2	650000	3750	Sample 1	15.18	16.50	1.355	0.01	0.114	0.154
	FR1 n78_HPUE	100M	QPSK	1	1	Left Tilted	0mm	Ant 25	DSI 3	650000	3750	Sample 1	10.70	12.00	1.349	-0.11	0.078	0.105
	FR1 n78_HPUE	100M	QPSK	135	69	Left Tilted	0mm	Ant 25	DSI 3	650000	3750	Sample 1	10.68	12.00	1.355	-0.17	0.072	0.098

【WLAN 2.4GHz_5GHz SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 23+24	Power Reduce Level 1	6	2437	Sample 1	15.22	16.00	1.197	99.26	1.007	0.08	0.118	0.142
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 23+24	Power Reduce Level 2	6	2437	Sample 1	13.26	14.00	1.187	99.26	1.007	0.02	0.075	0.090
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 23+24	Power Reduce Level 1	6	2437	Sample 1	15.22	16.00	1.197	99.26	1.007	0.16	0.369	0.445
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 23+24	Power Reduce Level 2	6	2437	Sample 1	13.26	14.00	1.187	99.26	1.007	0.11	0.236	0.282
26	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 23+24	Power Reduce Level 1	6	2437	Sample 1	15.22	16.00	1.197	99.26	1.007	0.15	0.516	0.622
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 23+24	Power Reduce Level 2	6	2437	Sample 1	13.26	14.00	1.187	99.26	1.007	-0.07	0.290	0.347
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 23+24	Power Reduce Level 1	6	2437	Sample 1	15.22	16.00	1.197	99.26	1.007	-0.15	0.255	0.307
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 23+24	Power Reduce Level 2	6	2437	Sample 1	13.26	14.00	1.187	99.26	1.007	0.03	0.163	0.195
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 22+24	Power Reduce Level 1	54	5270	Sample 1	15.39	17.00	1.449	99.78	1.002	0.11	0.177	0.257
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 22+24	Power Reduce Level 2	50	5250	Sample 1	13.04	14.50	1.4	100.0	1.0	0.04	0.097	0.136
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 22+24	Power Reduce Level 1	54	5270	Sample 1	15.39	17.00	1.449	99.78	1.002	0.10	0.244	0.354
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 22+24	Power Reduce Level 2	50	5250	Sample 1	13.04	14.50	1.4	100.0	1.0	0.10	0.132	0.185
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 22+24	Power Reduce Level 1	54	5270	Sample 1	15.39	17.00	1.449	99.78	1.002	0.05	0.331	0.481
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 22+24	Power Reduce Level 2	50	5250	Sample 1	13.04	14.50	1.4	100.0	1.0	-0.06	0.186	0.260
27	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 22+24	Power Reduce Level 1	54	5270	Sample 1	15.39	17.00	1.449	99.78	1.002	0.16	0.488	0.709
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 22+24	Power Reduce Level 2	50	5250	Sample 1	13.04	14.50	1.4	100.0	1.0	0.10	0.278	0.389
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 22+24	Power Reduce Level 1	122	5610	Sample 1	15.21	17.00	1.512	99.74	1.003	0.04	0.209	0.317
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 22+24	Power Reduce Level 2	114	5570	Sample 1	12.61	14.50	1.545	100.0	1.0	-0.03	0.117	0.181
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 22+24	Power Reduce Level 1	122	5610	Sample 1	15.21	17.00	1.512	99.74	1.003	0.10	0.275	0.417
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 22+24	Power Reduce Level 2	114	5570	Sample 1	12.61	14.50	1.545	100.0	1.0	0.05	0.155	0.239
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 22+24	Power Reduce Level 1	122	5610	Sample 1	15.21	17.00	1.512	99.74	1.003	-0.19	0.452	0.685
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 22+24	Power Reduce Level 2	114	5570	Sample 1	12.61	14.50	1.545	100.0	1.0	-0.02	0.263	0.406
28	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 22+24	Power Reduce Level 1	122	5610	Sample 1	15.21	17.00	1.512	99.74	1.003	-0.19	0.656	0.995
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 22+24	Power Reduce Level 2	114	5570	Sample 1	12.61	14.50	1.545	100.0	1.0	0.05	0.381	0.589
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 22+24	Power Reduce Level 1	122	5610	Sample 2	15.21	17.00	1.512	99.74	1.003	0.13	0.469	0.711
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 22+24	Power Reduce Level 1	155	5775	Sample 1	13.72	15.50	1.507	99.74	1.003	-0.04	0.319	0.482
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 22+24	Power Reduce Level 2	155	5775	Sample 1	11.54	13.50	1.572	99.74	1.003	-0.13	0.154	0.243
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 22+24	Power Reduce Level 1	155	5775	Sample 1	13.72	15.50	1.507	99.74	1.003	0.04	0.359	0.543
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 22+24	Power Reduce Level 2	155	5775	Sample 1	11.54	13.50	1.572	99.74	1.003	-0.09	0.184	0.290
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 22+24	Power Reduce Level 1	155	5775	Sample 1	13.72	15.50	1.507	99.74	1.003	-0.14	0.572	0.865
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 22+24	Power Reduce Level 2	155	5775	Sample 1	11.54	13.50	1.572	99.74	1.003	0.00	0.328	0.517
29	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 22+24	Power Reduce Level 1	155	5775	Sample 1	13.72	15.50	1.507	99.74	1.003	0.09	0.618	0.934
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 22+24	Power Reduce Level 2	155	5775	Sample 1	11.54	13.50	1.572	99.74	1.003	0.13	0.330	0.520

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	-0.14	0.132	0.157
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	0.19	0.154	0.183
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	-0.14	0.236	0.280
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	-0.13	0.217	0.258
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	-0.13	0.129	0.150
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	0.10	0.132	0.154
30	Bluetooth	1Mbps	Left Cheek	0mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	-0.15	0.425	0.494
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	-0.11	0.371	0.432

16.2 Hotspot SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
31	GSM850	GPRS 4 Tx slots	Front	10mm	Ant 11	DSI 6	189	836.4	Sample 1	24.05	25.00	1.245	-0.16	0.410	0.510
	GSM850	GPRS 4 Tx slots	Back	10mm	Ant 11	DSI 6	189	836.4	Sample 1	24.05	25.00	1.245	-0.15	0.470	0.585
	GSM850	GPRS 4 Tx slots	Left Side	10mm	Ant 11	DSI 6	189	836.4	Sample 1	24.05	25.00	1.245	-0.19	0.743	0.925
	GSM850	GPRS 4 Tx slots	Left Side	10mm	Ant 11	DSI 6	128	824.2	Sample 1	23.41	25.00	1.442	-0.18	0.460	0.663
	GSM850	GPRS 4 Tx slots	Left Side	10mm	Ant 11	DSI 6	251	848.8	Sample 1	24.04	25.00	1.247	-0.11	0.466	0.581
	GSM850	GPRS 4 Tx slots	Front	10mm	Ant 26	DSI 6	189	836.4	Sample 1	25.18	26.50	1.355	0.05	0.308	0.417
32	GSM850	GPRS 4 Tx slots	Back	10mm	Ant 26	DSI 6	189	836.4	Sample 1	25.18	26.50	1.355	0.05	0.359	0.486
	GSM850	GPRS 4 Tx slots	Right Side	10mm	Ant 26	DSI 6	189	836.4	Sample 1	25.18	26.50	1.355	-0.19	0.384	0.520
	GSM1900	GPRS 4 Tx slots	Front	10mm	Ant 13	DSI 6	810	1909.8	Sample 1	21.95	23.30	1.365	-0.05	0.188	0.257
	GSM1900	GPRS 4 Tx slots	Back	10mm	Ant 13	DSI 6	810	1909.8	Sample 1	21.95	23.30	1.365	-0.04	0.310	0.423
	GSM1900	GPRS 4 Tx slots	Left Side	10mm	Ant 13	DSI 6	810	1909.8	Sample 1	21.95	23.30	1.365	-0.12	0.127	0.173
	GSM1900	GPRS 4 Tx slots	Top Side	10mm	Ant 13	DSI 6	810	1909.8	Sample 1	21.95	23.30	1.365	-0.12	0.259	0.354
	GSM1900	GPRS 4 Tx slots	Front	10mm	Ant 41	DSI 6	810	1909.8	Sample 1	21.53	22.50	1.25	-0.01	0.103	0.129
	GSM1900	GPRS 4 Tx slots	Back	10mm	Ant 41	DSI 6	810	1909.8	Sample 1	21.53	22.50	1.25	-0.18	0.120	0.150
	GSM1900	GPRS 4 Tx slots	Left Side	10mm	Ant 41	DSI 6	810	1909.8	Sample 1	21.53	22.50	1.25	-0.11	0.039	0.049
	GSM1900	GPRS 4 Tx slots	Bottom Side	10mm	Ant 41	DSI 6	810	1909.8	Sample 1	21.53	22.50	1.25	-0.05	0.242	0.302

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Front	10mm	Ant 13	DSI 6	9400	1880	Sample 1	18.20	19.00	1.202	0.05	0.146	0.175
	WCDMA II	RMC 12.2Kbps	Back	10mm	Ant 13	DSI 6	9400	1880	Sample 1	18.20	19.00	1.202	0.18	0.201	0.242
	WCDMA II	RMC 12.2Kbps	Left Side	10mm	Ant 13	DSI 6	9400	1880	Sample 1	18.20	19.00	1.202	0.08	0.175	0.210
	WCDMA II	RMC 12.2Kbps	Top Side	10mm	Ant 13	DSI 6	9400	1880	Sample 1	18.20	19.00	1.202	-0.16	0.182	0.219
	WCDMA II	RMC 12.2Kbps	Front	10mm	Ant 41	DSI 6	9400	1880	Sample 1	17.60	18.20	1.148	0.14	0.133	0.153
	WCDMA II	RMC 12.2Kbps	Back	10mm	Ant 41	DSI 6	9400	1880	Sample 1	17.60	18.20	1.148	0.17	0.185	0.212
33	WCDMA II	RMC 12.2Kbps	Left Side	10mm	Ant 41	DSI 6	9400	1880	Sample 1	17.60	18.20	1.148	-0.06	0.056	0.064
	WCDMA II	RMC 12.2Kbps	Bottom Side	10mm	Ant 41	DSI 6	9400	1880	Sample 1	17.60	18.20	1.148	0.01	0.315	0.362
	WCDMA IV	RMC 12.2Kbps	Front	10mm	Ant 13	DSI 6	1413	1732.6	Sample 1	18.30	19.00	1.175	0.07	0.202	0.237
	WCDMA IV	RMC 12.2Kbps	Back	10mm	Ant 13	DSI 6	1413	1732.6	Sample 1	18.30	19.00	1.175	0.08	0.261	0.307
	WCDMA IV	RMC 12.2Kbps	Left Side	10mm	Ant 13	DSI 6	1413	1732.6	Sample 1	18.30	19.00	1.175	-0.12	0.113	0.133
	WCDMA IV	RMC 12.2Kbps	Top Side	10mm	Ant 13	DSI 6	1413	1732.6	Sample 1	18.30	19.00	1.175	0.00	0.298	0.350
34	WCDMA IV	RMC 12.2Kbps	Front	10mm	Ant 41	DSI 6	1413	1732.6	Sample 1	17.60	18.20	1.148	0.14	0.162	0.186
	WCDMA IV	RMC 12.2Kbps	Back	10mm	Ant 41	DSI 6	1413	1732.6	Sample 1	17.60	18.20	1.148	-0.01	0.186	0.214
	WCDMA IV	RMC 12.2Kbps	Left Side	10mm	Ant 41	DSI 6	1413	1732.6	Sample 1	17.60	18.20	1.148	0.08	0.056	0.064
	WCDMA IV	RMC 12.2Kbps	Bottom Side	10mm	Ant 41	DSI 6	1413	1732.6	Sample 1	17.60	18.20	1.148	-0.02	0.288	0.331
	WCDMA V	RMC 12.2Kbps	Front	10mm	Ant 11	DSI 6	4182	836.4	Sample 1	20.60	21.20	1.148	-0.13	0.369	0.424
	WCDMA V	RMC 12.2Kbps	Back	10mm	Ant 11	DSI 6	4182	836.4	Sample 1	20.60	21.20	1.148	-0.10	0.389	0.447
35	WCDMA V	RMC 12.2Kbps	Left Side	10mm	Ant 11	DSI 6	4182	836.4	Sample 1	20.60	21.20	1.148	-0.06	0.610	0.700
	WCDMA V	RMC 12.2Kbps	Front	10mm	Ant 26	DSI 6	4182	836.4	Sample 1	20.71	21.50	1.199	-0.09	0.300	0.360
	WCDMA V	RMC 12.2Kbps	Back	10mm	Ant 26	DSI 6	4182	836.4	Sample 1	20.71	21.50	1.199	0.09	0.358	0.429
	WCDMA V	RMC 12.2Kbps	Right Side	10mm	Ant 26	DSI 6	4182	836.4	Sample 1	20.71	21.50	1.199	0.18	0.352	0.422
	WCDMA XIX	RMC 12.2Kbps	Front	10mm	Ant 11	DSI 6	338	837.6	Sample 1	20.50	21.20	1.175	0.02	0.370	0.435
	WCDMA XIX	RMC 12.2Kbps	Back	10mm	Ant 11	DSI 6	338	837.6	Sample 1	20.50	21.20	1.175	-0.03	0.399	0.469
36	WCDMA XIX	RMC 12.2Kbps	Left Side	10mm	Ant 11	DSI 6	338	837.6	Sample 1	20.50	21.20	1.175	0.00	0.717	0.842
	WCDMA XIX	RMC 12.2Kbps	Left Side	10mm	Ant 11	DSI 6	312	832.4	Sample 1	20.48	21.20	1.18	-0.05	0.533	0.629
	WCDMA XIX	RMC 12.2Kbps	Left Side	10mm	Ant 11	DSI 6	363	842.6	Sample 1	20.47	21.20	1.183	-0.16	0.527	0.623
	WCDMA XIX	RMC 12.2Kbps	Front	10mm	Ant 26	DSI 6	338	837.6	Sample 1	20.60	21.50	1.23	0.02	0.309	0.380
	WCDMA XIX	RMC 12.2Kbps	Back	10mm	Ant 26	DSI 6	338	837.6	Sample 1	20.60	21.50	1.23	-0.11	0.366	0.450
	WCDMA XIX	RMC 12.2Kbps	Right Side	10mm	Ant 26	DSI 6	338	837.6	Sample 1	20.60	21.50	1.23	-0.02	0.380	0.467



【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 2	20M	QPSK	1	0	Front	10mm	Ant 13	DSI 6	18900	1880	Sample 1	17.63	19.00	1.371			0.00	0.114	0.156
	LTE Band 2	20M	QPSK	50	0	Front	10mm	Ant 13	DSI 6	18900	1880	Sample 1	17.61	19.00	1.377			-0.11	0.119	0.164
	LTE Band 2	20M	QPSK	1	0	Back	10mm	Ant 13	DSI 6	18900	1880	Sample 1	17.63	19.00	1.371			0.10	0.150	0.206
	LTE Band 2	20M	QPSK	50	0	Back	10mm	Ant 13	DSI 6	18900	1880	Sample 1	17.61	19.00	1.377			0.09	0.149	0.205
	LTE Band 2	20M	QPSK	1	0	Left Side	10mm	Ant 13	DSI 6	18900	1880	Sample 1	17.63	19.00	1.371			-0.08	0.089	0.122
	LTE Band 2	20M	QPSK	50	0	Left Side	10mm	Ant 13	DSI 6	18900	1880	Sample 1	17.61	19.00	1.377			0.19	0.088	0.121
37	LTE Band 2	20M	QPSK	1	0	Top Side	10mm	Ant 13	DSI 6	18900	1880	Sample 1	17.63	19.00	1.371			0.00	0.212	0.291
	LTE Band 2	20M	QPSK	50	0	Top Side	10mm	Ant 13	DSI 6	18900	1880	Sample 1	17.61	19.00	1.377			0.00	0.209	0.288
	LTE Band 4	20M	QPSK	1	0	Front	10mm	Ant 12	DSI 6	20175	1732.5	Sample 1	16.80	18.00	1.318			-0.15	0.111	0.146
	LTE Band 4	20M	QPSK	50	0	Front	10mm	Ant 12	DSI 6	20175	1732.5	Sample 1	16.78	18.00	1.324			-0.08	0.115	0.152
	LTE Band 4	20M	QPSK	1	0	Back	10mm	Ant 12	DSI 6	20175	1732.5	Sample 1	16.80	18.00	1.318			0.02	0.138	0.182
	LTE Band 4	20M	QPSK	50	0	Back	10mm	Ant 12	DSI 6	20175	1732.5	Sample 1	16.78	18.00	1.324			0.09	0.141	0.187
	LTE Band 4	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	20175	1732.5	Sample 1	16.80	18.00	1.318			-0.18	0.205	0.270
	LTE Band 4	20M	QPSK	50	0	Left Side	10mm	Ant 12	DSI 6	20175	1732.5	Sample 1	16.78	18.00	1.324			-0.12	0.211	0.279
	LTE Band 4	20M	QPSK	1	0	Top Side	10mm	Ant 12	DSI 6	20175	1732.5	Sample 1	16.80	18.00	1.318			0.00	0.001	0.001
	LTE Band 4	20M	QPSK	50	0	Top Side	10mm	Ant 12	DSI 6	20175	1732.5	Sample 1	16.78	18.00	1.324			0.00	0.001	0.001
	LTE Band 4	20M	QPSK	1	0	Front	10mm	Ant 25	DSI 6	20175	1732.5	Sample 1	17.90	19.00	1.288			-0.05	0.114	0.147
	LTE Band 4	20M	QPSK	50	0	Front	10mm	Ant 25	DSI 6	20175	1732.5	Sample 1	17.78	19.00	1.324			-0.17	0.118	0.156
	LTE Band 4	20M	QPSK	1	0	Back	10mm	Ant 25	DSI 6	20175	1732.5	Sample 1	17.90	19.00	1.288			0.01	0.123	0.158
	LTE Band 4	20M	QPSK	50	0	Back	10mm	Ant 25	DSI 6	20175	1732.5	Sample 1	17.78	19.00	1.324			0.00	0.128	0.169
	LTE Band 4	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	20175	1732.5	Sample 1	17.90	19.00	1.288			0.09	0.193	0.249
	LTE Band 4	20M	QPSK	50	0	Right Side	10mm	Ant 25	DSI 6	20175	1732.5	Sample 1	17.78	19.00	1.324			-0.08	0.193	0.256
	LTE Band 4	20M	QPSK	1	0	Top Side	10mm	Ant 25	DSI 6	20175	1732.5	Sample 1	17.90	19.00	1.288			0.00	0.001	0.001
	LTE Band 4	20M	QPSK	50	0	Top Side	10mm	Ant 25	DSI 6	20175	1732.5	Sample 1	17.78	19.00	1.324			0.00	0.001	0.001
	LTE Band 4	20M	QPSK	1	0	Front	10mm	Ant 41	DSI 6	20175	1732.5	Sample 1	18.10	19.00	1.23			0.13	0.173	0.213
	LTE Band 4	20M	QPSK	50	0	Front	10mm	Ant 41	DSI 6	20175	1732.5	Sample 1	18.08	19.00	1.236			-0.14	0.177	0.219
	LTE Band 4	20M	QPSK	1	0	Back	10mm	Ant 41	DSI 6	20175	1732.5	Sample 1	18.10	19.00	1.23			0.07	0.213	0.262
	LTE Band 4	20M	QPSK	50	0	Back	10mm	Ant 41	DSI 6	20175	1732.5	Sample 1	18.08	19.00	1.236			0.17	0.214	0.265
	LTE Band 4	20M	QPSK	1	0	Left Side	10mm	Ant 41	DSI 6	20175	1732.5	Sample 1	18.10	19.00	1.23			0.10	0.058	0.071
	LTE Band 4	20M	QPSK	50	0	Left Side	10mm	Ant 41	DSI 6	20175	1732.5	Sample 1	18.08	19.00	1.236			-0.16	0.059	0.073
	LTE Band 4	20M	QPSK	1	0	Bottom Side	10mm	Ant 41	DSI 6	20175	1732.5	Sample 1	18.10	19.00	1.23			0.13	0.333	0.410
38	LTE Band 4	20M	QPSK	50	0	Bottom Side	10mm	Ant 41	DSI 6	20175	1732.5	Sample 1	18.08	19.00	1.236			0.02	0.337	0.417
	LTE Band 5	10M	QPSK	1	0	Front	10mm	Ant 26	DSI 6	20525	836.5	Sample 1	21.46	22.50	1.271			0.19	0.349	0.444
	LTE Band 5	10M	QPSK	25	0	Front	10mm	Ant 26	DSI 6	20525	836.5	Sample 1	21.45	22.50	1.274			-0.19	0.351	0.447
	LTE Band 5	10M	QPSK	1	0	Back	10mm	Ant 26	DSI 6	20525	836.5	Sample 1	21.46	22.50	1.271			0.02	0.394	0.501
	LTE Band 5	10M	QPSK	25	0	Back	10mm	Ant 26	DSI 6	20525	836.5	Sample 1	21.45	22.50	1.274			-0.19	0.402	0.512
	LTE Band 5	10M	QPSK	1	0	Right Side	10mm	Ant 26	DSI 6	20525	836.5	Sample 1	21.46	22.50	1.271			0.16	0.437	0.555
39	LTE Band 5	10M	QPSK	25	0	Right Side	10mm	Ant 26	DSI 6	20525	836.5	Sample 1	21.45	22.50	1.274			-0.03	0.452	0.576
	LTE Band 7	20M	QPSK	1	0	Front	10mm	Ant 12	DSI 6	21100	2535	Sample 1	19.30	20.00	1.175			0.19	0.260	0.306
	LTE Band 7	20M	QPSK	50	0	Front	10mm	Ant 12	DSI 6	21100	2535	Sample 1	19.28	20.00	1.18			0.01	0.265	0.313
	LTE Band 7	20M	QPSK	1	0	Back	10mm	Ant 12	DSI 6	21100	2535	Sample 1	19.30	20.00	1.175			-0.18	0.283	0.333
	LTE Band 7	20M	QPSK	50	0	Back	10mm	Ant 12	DSI 6	21100	2535	Sample 1	19.28	20.00	1.18			-0.07	0.291	0.343
	LTE Band 7	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	21100	2535	Sample 1	19.30	20.00	1.175			0.13	0.332	0.390
40	LTE Band 7	20M	QPSK	50	0	Left Side	10mm	Ant 12	DSI 6	21100	2535	Sample 1	19.28	20.00	1.18			-0.03	0.348	0.411
	LTE Band 7	20M	QPSK	1	0	Top Side	10mm	Ant 12	DSI 6	21100	2535	Sample 1	19.30	20.00	1.175			0.02	0.048	0.056
	LTE Band 7	20M	QPSK	50	0	Top Side	10mm	Ant 12	DSI 6	21100	2535	Sample 1	19.28	20.00	1.18			0.19	0.050	0.059
	LTE Band 7C	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	21100+20902	2535+2515.2	Sample 1	19.22	20.00	1.197			0.07	0.138	0.165
	LTE Band 7	20M	QPSK	1	0	Front	10mm	Ant 13	DSI 6	21100	2535	Sample 1	14.48	15.50	1.265			0.16	0.124	0.157
	LTE Band 7	20M	QPSK	50	0	Front	10mm	Ant 13	DSI 6	21100	2535	Sample 1	14.47	15.50	1.268			-0.13	0.126	0.160
	LTE Band 7	20M	QPSK	1	0	Back	10mm	Ant 13	DSI 6	21100	2535	Sample 1	14.48	15.50	1.265			-0.05	0.184	0.233
	LTE Band 7	20M	QPSK	50	0	Back	10mm	Ant 13	DSI 6	21100	2535	Sample 1	14.47	15.50	1.268			-0.19	0.185	0.235
	LTE Band 7	20M	QPSK	1	0	Left Side	10mm	Ant 13	DSI 6	21100	2535	Sample 1	14.48	15.50	1.265			0.12	0.170	0.215
	LTE Band 7	20M	QPSK	50	0	Left Side	10mm	Ant 13	DSI 6	21100	2535	Sample 1	14.47	15.50	1.268			0.05	0.173	0.219
	LTE Band 7	20M	QPSK	1	0	Top Side	10mm	Ant 13	DSI 6	21100	2535	Sample 1	14.48	15.50	1.265			-0.18	0.172	0.218
	LTE Band 7	20M	QPSK	50	0	Top Side	10mm	Ant 13	DSI 6	21100	2535	Sample 1	14.47	15.50	1.268			0.06	0.178	0.226
	LTE Band 7C	20M	QPSK	1	0	Back	10mm	Ant 13	DSI 6	21100+20902	2535+2515.2	Sample 1	13.72	15.50	1.507			-0.02	0.155	0.234
	LTE Band 7	20M	QPSK	1	0	Front	10mm	Ant 25	DSI 6	21100	2535	Sample 1	17.53	18.50	1.25			-0.01	0.138	0.173
	LTE Band 7	20M	QPSK	50	0	Front	10mm	Ant 25	DSI 6	21100	2535	Sample 1	17.51	18.50	1.256			0.06	0.141	0.177
	LTE Band 7	20M	QPSK	1	0	Back	10mm	Ant 25	DSI 6	21100	2535	Sample 1	17.53	18.50	1.25			0.02	0.151	0.189
	LTE Band 7	20M	QPSK	50	0	Back	10mm	Ant 25	DSI 6	21100	2535	Sample 1	17.51	18.50	1.256			-0.04	0.150	0.188
	LTE Band 7	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	21100	2535	Sample 1	17.53	18.50	1.25			-0.16	0.209	0.261
	LTE Band 7	20M	QPSK	50	0	Right Side	10mm	Ant 25	DSI 6	21100	2535	Sample 1	17.51	18.50	1.256			-0.12	0.203	0.255
	LTE Band 7	20M	QPSK	1	0	Top Side	10mm	Ant 25	DSI 6	21100	2535	Sample 1	17.53	18.50	1.25			-0.19	0.040	0.050
	LTE Band 7	20M	QPSK	50	0	Top Side	10mm	Ant 25	DSI 6	21100	2535	Sample 1	17.51	18.50	1.256			-0.09	0.038	0.048
	LTE Band 7C	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	21100+20902	2535+2515.2	Sample 1	17.52	18.50	1.253			0.18	0.186	0.233
	LTE Band 7	20M	QPSK	1	0	Front	10mm	Ant 41	DSI 6	21100	2535	Sample 1	16.65	17.20	1.135			-0.04	0.100	0.114
	LTE Band 7	20M	QPSK	50	0	Front	10mm	Ant 41	DSI 6	21100	2535	Sample 1	16.63	17.20	1.14			-0.01	0.098	0.112



FCC SAR Test Report

Report No. : FA592520

	LTE Band 7	20M	QPSK	1	0	Back	10mm	Ant 41	DSI 6	21100	2535	Sample 1	16.65	17.20	1.135			-0.07	0.139	0.158
	LTE Band 7	20M	QPSK	50	0	Back	10mm	Ant 41	DSI 6	21100	2535	Sample 1	16.63	17.20	1.14			-0.03	0.138	0.157
	LTE Band 7	20M	QPSK	1	0	Left Side	10mm	Ant 41	DSI 6	21100	2535	Sample 1	16.65	17.20	1.135			0.03	0.045	0.051
	LTE Band 7	20M	QPSK	50	0	Left Side	10mm	Ant 41	DSI 6	21100	2535	Sample 1	16.63	17.20	1.14			0.09	0.046	0.052
	LTE Band 7	20M	QPSK	1	0	Bottom Side	10mm	Ant 41	DSI 6	21100	2535	Sample 1	16.65	17.20	1.135			0.03	0.243	0.276
	LTE Band 7	20M	QPSK	50	0	Bottom Side	10mm	Ant 41	DSI 6	21100	2535	Sample 1	16.63	17.20	1.14			-0.18	0.252	0.287
	LTE Band 7C	20M	QPSK	1	0	Bottom Side	10mm	Ant 41	DSI 6	21100+20902	2535+2515.2	Sample 1	16.57	17.20	1.156			-0.08	0.225	0.260
	LTE Band 12	10M	QPSK	1	0	Front	10mm	Ant 11	DSI 6	23095	707.5	Sample 1	19.48	20.00	1.127			0.13	0.151	0.170
	LTE Band 12	10M	QPSK	25	0	Front	10mm	Ant 11	DSI 6	23095	707.5	Sample 1	19.46	20.00	1.132			-0.09	0.158	0.179
	LTE Band 12	10M	QPSK	1	0	Back	10mm	Ant 11	DSI 6	23095	707.5	Sample 1	19.48	20.00	1.127			0.14	0.169	0.190
	LTE Band 12	10M	QPSK	25	0	Back	10mm	Ant 11	DSI 6	23095	707.5	Sample 1	19.46	20.00	1.132			-0.13	0.180	0.204
	LTE Band 12	10M	QPSK	1	0	Left Side	10mm	Ant 11	DSI 6	23095	707.5	Sample 1	19.48	20.00	1.127			0.14	0.305	0.344
	LTE Band 12	10M	QPSK	25	0	Left Side	10mm	Ant 11	DSI 6	23095	707.5	Sample 1	19.46	20.00	1.132			0.18	0.317	0.359
	LTE Band 12	10M	QPSK	1	0	Front	10mm	Ant 26	DSI 6	23095	707.5	Sample 1	21.61	22.50	1.227			-0.12	0.277	0.340
	LTE Band 12	10M	QPSK	25	0	Front	10mm	Ant 26	DSI 6	23095	707.5	Sample 1	21.60	22.50	1.23			0.06	0.286	0.352
	LTE Band 12	10M	QPSK	1	0	Back	10mm	Ant 26	DSI 6	23095	707.5	Sample 1	21.61	22.50	1.227			0.12	0.333	0.409
	LTE Band 12	10M	QPSK	25	0	Back	10mm	Ant 26	DSI 6	23095	707.5	Sample 1	21.60	22.50	1.23			0.15	0.349	0.429
	LTE Band 12	10M	QPSK	1	0	Right Side	10mm	Ant 26	DSI 6	23095	707.5	Sample 1	21.61	22.50	1.227			-0.18	0.516	0.633
41	LTE Band 12	10M	QPSK	25	0	Right Side	10mm	Ant 26	DSI 6	23095	707.5	Sample 1	21.60	22.50	1.23			-0.02	0.532	0.654
	LTE Band 13	10M	QPSK	1	0	Front	10mm	Ant 11	DSI 6	23230	782	Sample 1	19.98	20.50	1.127			0.12	0.255	0.287
	LTE Band 13	10M	QPSK	25	0	Front	10mm	Ant 11	DSI 6	23230	782	Sample 1	19.97	20.50	1.13			0.00	0.261	0.295
	LTE Band 13	10M	QPSK	1	0	Back	10mm	Ant 11	DSI 6	23230	782	Sample 1	19.98	20.50	1.127			-0.02	0.286	0.322
	LTE Band 13	10M	QPSK	25	0	Back	10mm	Ant 11	DSI 6	23230	782	Sample 1	19.97	20.50	1.13			-0.08	0.289	0.327
	LTE Band 13	10M	QPSK	1	0	Left Side	10mm	Ant 11	DSI 6	23230	782	Sample 1	19.98	20.50	1.127			0.02	0.480	0.541
	LTE Band 13	10M	QPSK	25	0	Left Side	10mm	Ant 11	DSI 6	23230	782	Sample 1	19.97	20.50	1.13			-0.06	0.477	0.539
	LTE Band 13	10M	QPSK	1	0	Front	10mm	Ant 26	DSI 6	23230	782	Sample 1	24.05	25.00	1.245			-0.12	0.262	0.326
	LTE Band 13	10M	QPSK	25	0	Front	10mm	Ant 26	DSI 6	23230	782	Sample 1	23.05	24.00	1.245			-0.12	0.195	0.243
	LTE Band 13	10M	QPSK	1	0	Back	10mm	Ant 26	DSI 6	23230	782	Sample 1	24.05	25.00	1.245			0.00	0.339	0.422
	LTE Band 13	10M	QPSK	25	0	Back	10mm	Ant 26	DSI 6	23230	782	Sample 1	23.05	24.00	1.245			0.03	0.254	0.316
42	LTE Band 13	10M	QPSK	1	0	Right Side	10mm	Ant 26	DSI 6	23230	782	Sample 1	24.05	25.00	1.245			-0.02	0.529	0.659
	LTE Band 13	10M	QPSK	25	0	Right Side	10mm	Ant 26	DSI 6	23230	782	Sample 1	23.05	24.00	1.245			-0.12	0.410	0.510
	LTE Band 25	20M	QPSK	1	0	Front	10mm	Ant 12	DSI 6	26340	1880	Sample 1	17.65	18.50	1.216			-0.07	0.184	0.224
	LTE Band 25	20M	QPSK	50	0	Front	10mm	Ant 12	DSI 6	26340	1880	Sample 1	17.63	18.50	1.222			-0.14	0.170	0.208
	LTE Band 25	20M	QPSK	1	0	Back	10mm	Ant 12	DSI 6	26340	1880	Sample 1	17.65	18.50	1.216			0.03	0.221	0.269
	LTE Band 25	20M	QPSK	50	0	Back	10mm	Ant 12	DSI 6	26340	1880	Sample 1	17.63	18.50	1.222			-0.15	0.210	0.257
43	LTE Band 25	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	26340	1880	Sample 1	17.65	18.50	1.216			-0.05	0.339	0.412
	LTE Band 25	20M	QPSK	50	0	Left Side	10mm	Ant 12	DSI 6	26340	1880	Sample 1	17.63	18.50	1.222			0.12	0.322	0.393
	LTE Band 25	20M	QPSK	1	0	Top Side	10mm	Ant 12	DSI 6	26340	1880	Sample 1	17.65	18.50	1.216			0.11	0.055	0.067
	LTE Band 25	20M	QPSK	50	0	Top Side	10mm	Ant 12	DSI 6	26340	1880	Sample 1	17.63	18.50	1.222			-0.18	0.050	0.061
	LTE Band 25	20M	QPSK	1	0	Front	10mm	Ant 13	DSI 6	26340	1880	Sample 1	16.60	18.00	1.38			0.17	0.188	0.259
	LTE Band 25	20M	QPSK	50	0	Front	10mm	Ant 13	DSI 6	26340	1880	Sample 1	16.58	18.00	1.387			-0.18	0.189	0.262
	LTE Band 25	20M	QPSK	1	0	Back	10mm	Ant 13	DSI 6	26340	1880	Sample 1	16.60	18.00	1.38			-0.07	0.273	0.377
	LTE Band 25	20M	QPSK	50	0	Back	10mm	Ant 13	DSI 6	26340	1880	Sample 1	16.58	18.00	1.387			-0.19	0.274	0.380
	LTE Band 25	20M	QPSK	1	0	Left Side	10mm	Ant 13	DSI 6	26340	1880	Sample 1	16.60	18.00	1.38			0.00	0.152	0.210
	LTE Band 25	20M	QPSK	50	0	Left Side	10mm	Ant 13	DSI 6	26340	1880	Sample 1	16.58	18.00	1.387			-0.19	0.152	0.211
	LTE Band 25	20M	QPSK	1	0	Top Side	10mm	Ant 13	DSI 6	26340	1880	Sample 1	16.60	18.00	1.38			0.05	0.283	0.391
	LTE Band 25	20M	QPSK	50	0	Top Side	10mm	Ant 13	DSI 6	26340	1880	Sample 1	16.58	18.00	1.387			0.01	0.287	0.398
	LTE Band 25	20M	QPSK	1	0	Front	10mm	Ant 25	DSI 6	26340	1880	Sample 1	18.30	19.50	1.318			-0.04	0.113	0.149
	LTE Band 25	20M	QPSK	50	0	Front	10mm	Ant 25	DSI 6	26340	1880	Sample 1	18.28	19.50	1.324			-0.15	0.108	0.143
	LTE Band 25	20M	QPSK	1	0	Back	10mm	Ant 25	DSI 6	26340	1880	Sample 1	18.30	19.50	1.318			0.13	0.138	0.182
	LTE Band 25	20M	QPSK	50	0	Back	10mm	Ant 25	DSI 6	26340	1880	Sample 1	18.28	19.50	1.324			0.19	0.135	0.179
	LTE Band 25	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	26340	1880	Sample 1	18.30	19.50	1.318			-0.06	0.178	0.235
	LTE Band 25	20M	QPSK	50	0	Right Side	10mm	Ant 25	DSI 6	26340	1880	Sample 1	18.28	19.50	1.324			0.05	0.174	0.230
	LTE Band 25	20M	QPSK	1	0	Top Side	10mm	Ant 25	DSI 6	26340	1880	Sample 1	18.30	19.50	1.318			0.04	0.072	0.095
	LTE Band 25	20M	QPSK	50	0	Top Side	10mm	Ant 25	DSI 6	26340	1880	Sample 1	18.28	19.50	1.324			0.04	0.070	0.093
	LTE Band 25	20M	QPSK	1	0	Front	10mm	Ant 41	DSI 6	26340	1880	Sample 1	17.20	18.00	1.202			0.09	0.126	0.151
	LTE Band 25	20M	QPSK	50	0	Front	10mm	Ant 41	DSI 6	26340	1880	Sample 1	17.18	18.00	1.208			-0.04	0.125	0.151
	LTE Band 25	20M	QPSK	1	0	Back	10mm	Ant 41	DSI 6	26340	1880	Sample 1	17.20	18.00	1.202			-0.07	0.168	0.202
	LTE Band 25	20M	QPSK	50	0	Back	10mm	Ant 41	DSI 6	26340	1880	Sample 1	17.18	18.00	1.208			-0.11	0.170	0.205
	LTE Band 25	20M	QPSK	1	0	Left Side	10mm	Ant 41	DSI 6	26340	1880	Sample 1	17.20	18.00	1.202			-0.11	0.042	0.050
	LTE Band 25	20M	QPSK	50	0	Left Side	10mm	Ant 41	DSI 6	26340	1880	Sample 1	17.18	18.00	1.208			-0.04	0.043	0.052
	LTE Band 25	20M	QPSK	1	0	Bottom Side	10mm	Ant 41	DSI 6	26340	1880	Sample 1	17.20	18.00	1.202			-0.01	0.279	0.335
	LTE Band 25	20M	QPSK	50	0	Bottom Side	10mm	Ant 41	DSI 6	26340	1880	Sample 1	17.18	18.00	1.208			-0.06	0.275	0.332
	LTE Band 26	15M	QPSK	1	0	Front	10mm	Ant 11	DSI 6	26865	831.5	Sample 1	21.16	21.70	1.132			0.06	0.398	0.451
	LTE Band 26	15M	QPSK	36	0	Front	10mm	Ant 11	DSI 6	26865	831.5	Sample 1	21.15	21.70	1.135			0.04	0.395	0.448
	LTE Band 26	15M	QPSK	1	0	Back	10mm	Ant 11	DSI 6	26865	831.5	Sample 1	21.16	21.70	1.132			0.00	0.431	0.488
	LTE Band 26	15M	QPSK	36	0	Back	10mm	Ant 11	DSI 6	26865	831.5	Sample 1	21.15	21.70	1.135			-0.05	0.434	0.493
	LTE Band 26	15M	QPSK	1	0	Left Side	10mm	Ant 11	DSI 6	26865	831.5	Sample 1	21.16	21.70	1.132			-0.07	0.646	0.731
44	LTE Band 26	15M	QPSK	36	0	Left Side	10mm	Ant 11	DSI 6	26865	831.5	Sample 1	21.15	21.70	1.135			0.01	0.654	0.742
	LTE Band 26	15M	QPSK	1	0	Front	10mm	Ant 26	DSI 6	26865	831.5	Sample 1	21.15	22.00	1.216			0.18	0.259	0.315
	LTE Band 26	15M	QPSK	36	0	Front	10mm	Ant 26	DSI 6	26865	831.5	Sample 1	21.13	22.00						



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	LTE Band 26	15M	QPSK	1	0	Right Side	10mm	Ant 26	DSI 6	26865	831.5	Sample 1	21.15	22.00	1.216			-0.01	0.342	0.416
	LTE Band 26	15M	QPSK	36	0	Right Side	10mm	Ant 26	DSI 6	26865	831.5	Sample 1	21.13	22.00	1.222			-0.05	0.338	0.413
	LTE Band 66	20M	QPSK	1	0	Front	10mm	Ant 12	DSI 6	132322	1745	Sample 1	16.30	17.50	1.318			-0.06	0.099	0.130
	LTE Band 66	20M	QPSK	50	0	Front	10mm	Ant 12	DSI 6	132322	1745	Sample 1	16.28	17.50	1.324			0.18	0.102	0.135
	LTE Band 66	20M	QPSK	1	0	Back	10mm	Ant 12	DSI 6	132322	1745	Sample 1	16.30	17.50	1.318			0.06	0.113	0.149
	LTE Band 66	20M	QPSK	50	0	Back	10mm	Ant 12	DSI 6	132322	1745	Sample 1	16.28	17.50	1.324			-0.04	0.109	0.144
	LTE Band 66	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	132322	1745	Sample 1	16.30	17.50	1.318			-0.03	0.165	0.217
	LTE Band 66	20M	QPSK	50	0	Left Side	10mm	Ant 12	DSI 6	132322	1745	Sample 1	16.28	17.50	1.324			-0.14	0.163	0.216
	LTE Band 66	20M	QPSK	1	0	Top Side	10mm	Ant 12	DSI 6	132322	1745	Sample 1	16.30	17.50	1.318			0.02	0.045	0.059
	LTE Band 66	20M	QPSK	50	0	Top Side	10mm	Ant 12	DSI 6	132322	1745	Sample 1	16.28	17.50	1.324			-0.10	0.040	0.053
	LTE Band 66C	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	132322+132124	1745+1725.2	Sample 1	16.25	17.50	1.334			0.00	0.147	0.196
	LTE Band 66	20M	QPSK	1	0	Front	10mm	Ant 13	DSI 6	132322	1745	Sample 1	17.80	19.00	1.318			0.19	0.166	0.219
	LTE Band 66	20M	QPSK	50	0	Front	10mm	Ant 13	DSI 6	132322	1745	Sample 1	17.78	19.00	1.324			-0.18	0.170	0.225
	LTE Band 66	20M	QPSK	1	0	Back	10mm	Ant 13	DSI 6	132322	1745	Sample 1	17.80	19.00	1.318			-0.03	0.205	0.270
	LTE Band 66	20M	QPSK	50	0	Back	10mm	Ant 13	DSI 6	132322	1745	Sample 1	17.78	19.00	1.324			-0.03	0.210	0.278
	LTE Band 66	20M	QPSK	1	0	Left Side	10mm	Ant 13	DSI 6	132322	1745	Sample 1	17.80	19.00	1.318			-0.17	0.109	0.144
	LTE Band 66	20M	QPSK	50	0	Left Side	10mm	Ant 13	DSI 6	132322	1745	Sample 1	17.78	19.00	1.324			-0.16	0.110	0.146
	LTE Band 66	20M	QPSK	1	0	Top Side	10mm	Ant 13	DSI 6	132322	1745	Sample 1	17.80	19.00	1.318			0.03	0.239	0.315
	LTE Band 66	20M	QPSK	50	0	Top Side	10mm	Ant 13	DSI 6	132322	1745	Sample 1	17.78	19.00	1.324			-0.07	0.245	0.324
	LTE Band 66C	20M	QPSK	1	0	Top Side	10mm	Ant 13	DSI 6	132322+132124	1745+1725.2	Sample 1	17.69	19.00	1.352			0.09	0.218	0.295
	LTE Band 66	20M	QPSK	1	0	Front	10mm	Ant 25	DSI 6	132322	1745	Sample 1	17.35	18.50	1.303			-0.19	0.113	0.147
	LTE Band 66	20M	QPSK	50	0	Front	10mm	Ant 25	DSI 6	132322	1745	Sample 1	17.33	18.50	1.309			0.04	0.111	0.145
	LTE Band 66	20M	QPSK	1	0	Back	10mm	Ant 25	DSI 6	132322	1745	Sample 1	17.35	18.50	1.303			-0.02	0.119	0.155
	LTE Band 66	20M	QPSK	50	0	Back	10mm	Ant 25	DSI 6	132322	1745	Sample 1	17.33	18.50	1.309			-0.16	0.116	0.152
	LTE Band 66	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	132322	1745	Sample 1	17.35	18.50	1.303			-0.11	0.156	0.203
	LTE Band 66	20M	QPSK	50	0	Right Side	10mm	Ant 25	DSI 6	132322	1745	Sample 1	17.33	18.50	1.309			0.13	0.155	0.203
	LTE Band 66	20M	QPSK	1	0	Top Side	10mm	Ant 25	DSI 6	132322	1745	Sample 1	17.35	18.50	1.303			-0.08	0.040	0.052
	LTE Band 66	20M	QPSK	50	0	Top Side	10mm	Ant 25	DSI 6	132322	1745	Sample 1	17.33	18.50	1.309			-0.03	0.038	0.050
	LTE Band 66C	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	132322+132124	1745+1725.2	Sample 1	17.31	18.50	1.315			-0.08	0.138	0.181
	LTE Band 66	20M	QPSK	1	0	Front	10mm	Ant 41	DSI 6	132322	1745	Sample 1	17.60	18.50	1.23			-0.19	0.177	0.218
	LTE Band 66	20M	QPSK	50	0	Front	10mm	Ant 41	DSI 6	132322	1745	Sample 1	17.58	18.50	1.236			-0.17	0.183	0.226
	LTE Band 66	20M	QPSK	1	0	Back	10mm	Ant 41	DSI 6	132322	1745	Sample 1	17.60	18.50	1.23			0.06	0.209	0.257
	LTE Band 66	20M	QPSK	50	0	Back	10mm	Ant 41	DSI 6	132322	1745	Sample 1	17.58	18.50	1.236			0.14	0.207	0.256
	LTE Band 66	20M	QPSK	1	0	Left Side	10mm	Ant 41	DSI 6	132322	1745	Sample 1	17.60	18.50	1.23			0.02	0.062	0.076
	LTE Band 66	20M	QPSK	50	0	Left Side	10mm	Ant 41	DSI 6	132322	1745	Sample 1	17.58	18.50	1.236			0.11	0.060	0.074
	LTE Band 66	20M	QPSK	1	0	Bottom Side	10mm	Ant 41	DSI 6	132322	1745	Sample 1	17.60	18.50	1.23			-0.11	0.319	0.392
45	LTE Band 66	20M	QPSK	50	0	Bottom Side	10mm	Ant 41	DSI 6	132322	1745	Sample 1	17.58	18.50	1.236			0.00	0.323	0.399
	LTE Band 66C	20M	QPSK	1	0	Bottom Side	10mm	Ant 41	DSI 6	132322+132124	1745+1725.2	Sample 1	17.51	18.50	1.256			0.06	0.288	0.362
	LTE Band 38	20M	QPSK	1	0	Front	10mm	Ant 12	DSI 6	38000	2595	Sample 1	20.68	21.20	1.127	62.9	1.006	-0.03	0.249	0.282
	LTE Band 38	20M	QPSK	50	0	Front	10mm	Ant 12	DSI 6	38000	2595	Sample 1	20.67	21.20	1.13	62.9	1.006	0.19	0.247	0.281
	LTE Band 38	20M	QPSK	1	0	Back	10mm	Ant 12	DSI 6	38000	2595	Sample 1	20.68	21.20	1.127	62.9	1.006	0.04	0.293	0.332
	LTE Band 38	20M	QPSK	50	0	Back	10mm	Ant 12	DSI 6	38000	2595	Sample 1	20.67	21.20	1.13	62.9	1.006	-0.09	0.292	0.332
	LTE Band 38	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	38000	2595	Sample 1	20.68	21.20	1.127	62.9	1.006	-0.12	0.371	0.421
46	LTE Band 38	20M	QPSK	50	0	Left Side	10mm	Ant 12	DSI 6	38000	2595	Sample 1	20.67	21.20	1.13	62.9	1.006	-0.02	0.376	0.427
	LTE Band 38	20M	QPSK	1	0	Top Side	10mm	Ant 12	DSI 6	38000	2595	Sample 1	20.68	21.20	1.127	62.9	1.006	0.18	0.105	0.119
	LTE Band 38	20M	QPSK	50	0	Top Side	10mm	Ant 12	DSI 6	38000	2595	Sample 1	20.67	21.20	1.13	62.9	1.006	-0.14	0.101	0.115
	LTE Band 38	20M	QPSK	1	0	Front	10mm	Ant 25	DSI 6	38000	2595	Sample 1	19.65	20.20	1.135	62.9	1.006	-0.17	0.116	0.132
	LTE Band 38	20M	QPSK	50	0	Front	10mm	Ant 25	DSI 6	38000	2595	Sample 1	19.63	20.20	1.14	62.9	1.006	0.19	0.115	0.132
	LTE Band 38	20M	QPSK	1	0	Back	10mm	Ant 25	DSI 6	38000	2595	Sample 1	19.65	20.20	1.135	62.9	1.006	0.02	0.120	0.137
	LTE Band 38	20M	QPSK	50	0	Back	10mm	Ant 25	DSI 6	38000	2595	Sample 1	19.63	20.20	1.14	62.9	1.006	0.15	0.121	0.139
	LTE Band 38	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	38000	2595	Sample 1	19.65	20.20	1.135	62.9	1.006	0.16	0.214	0.244
	LTE Band 38	20M	QPSK	50	0	Right Side	10mm	Ant 25	DSI 6	38000	2595	Sample 1	19.63	20.20	1.14	62.9	1.006	-0.06	0.208	0.239
	LTE Band 38	20M	QPSK	1	0	Top Side	10mm	Ant 25	DSI 6	38000	2595	Sample 1	19.65	20.20	1.135	62.9	1.006	0.00	0.001	0.001
	LTE Band 38	20M	QPSK	50	0	Top Side	10mm	Ant 25	DSI 6	38000	2595	Sample 1	19.63	20.20	1.14	62.9	1.006	0.00	0.001	0.001
	LTE Band 38	20M	QPSK	1	0	Front	10mm	Ant 41	DSI 6	38000	2595	Sample 1	19.65	20.20	1.135	62.9	1.006	0.07	0.112	0.128
	LTE Band 38	20M	QPSK	50	0	Front	10mm	Ant 41	DSI 6	38000	2595	Sample 1	19.63	20.20	1.14	62.9	1.006	-0.15	0.113	0.130
	LTE Band 38	20M	QPSK	1	0	Back	10mm	Ant 41	DSI 6	38000	2595	Sample 1	19.65	20.20	1.135	62.9	1.006	-0.02	0.165	0.188
	LTE Band 38	20M	QPSK	50	0	Back	10mm	Ant 41	DSI 6	38000	2595	Sample 1	19.63	20.20	1.14	62.9	1.006	0.17	0.163	0.187
	LTE Band 38	20M	QPSK	1	0	Left Side	10mm	Ant 41	DSI 6	38000	2595	Sample 1	19.65	20.20	1.135	62.9	1.006	-0.06	0.041	0.047
	LTE Band 38	20M	QPSK	50	0	Left Side	10mm	Ant 41	DSI 6	38000	2595	Sample 1	19.63	20.20	1.14	62.9	1.006	-0.03	0.041	0.047
	LTE Band 38	20M	QPSK	1	0	Bottom Side	10mm	Ant 41	DSI 6	38000	2595	Sample 1	19.65	20.20	1.135	62.9	1.006	0.13	0.268	0.306
	LTE Band 38	20M	QPSK	50	0	Bottom Side	10mm	Ant 41	DSI 6	38000	2595	Sample 1	19.63	20.20	1.14	62.9	1.006	0.06	0.273	0.313
	LTE Band 41	20M	QPSK	1	0	Front	10mm	Ant 12	DSI 6	40620	2593	Sample 1	20.10	20.70	1.148	62.9	1.006	0.02	0.210	0.243
	LTE Band 41	20M	QPSK	50	0	Front	10mm	Ant 12	DSI 6	40620	2593	Sample 1	20.08	20.70	1.153	62.9	1.006	0.13	0.200	0.232
	LTE Band 41	20M	QPSK	1	0	Back	10mm	Ant 12	DSI 6	40620	2593	Sample 1	20.10	20.70	1.148	62.9	1.006	0.16	0.244	0.282
	LTE Band 41	20M	QPSK	50	0	Back	10mm	Ant 12	DSI 6	40620	2593	Sample 1	20.08	20.70	1.153	62.9	1.006	0.16	0.243	0.282
47	LTE Band 41	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	40620	2593	Sample 1	20.10	20.70	1.148	62.9	1.006	0.03	0.304	0.351
	LTE Band 41	20M	QPSK	50	0	Left Side	10mm	Ant 12	DSI 6	40620	2593	Sample 1	20.08	20.70	1.153	62.9	1.006	0.17	0.302	0.350
	LTE Band 41	20M	QPSK	1	0	Top Side	10mm													



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	LTE Band 41	20M	QPSK	1	0	Back	10mm	Ant 13	DSI 6	40620	2593	Sample 1	15.35	16.20	1.216	62.9	1.006	-0.08	0.163	0.199
	LTE Band 41	20M	QPSK	50	0	Back	10mm	Ant 13	DSI 6	40620	2593	Sample 1	15.33	16.20	1.222	62.9	1.006	0.05	0.165	0.203
	LTE Band 41	20M	QPSK	1	0	Left Side	10mm	Ant 13	DSI 6	40620	2593	Sample 1	15.35	16.20	1.216	62.9	1.006	0.03	0.139	0.170
	LTE Band 41	20M	QPSK	50	0	Left Side	10mm	Ant 13	DSI 6	40620	2593	Sample 1	15.33	16.20	1.222	62.9	1.006	0.14	0.148	0.182
	LTE Band 41	20M	QPSK	1	0	Top Side	10mm	Ant 13	DSI 6	40620	2593	Sample 1	15.35	16.20	1.216	62.9	1.006	0.06	0.161	0.197
	LTE Band 41	20M	QPSK	50	0	Top Side	10mm	Ant 13	DSI 6	40620	2593	Sample 1	15.33	16.20	1.222	62.9	1.006	-0.18	0.160	0.197
	LTE Band 41C	20M	QPSK	1	0	Back	10mm	Ant 13	DSI 6	40620+40422	2593+2573.2	Sample 1	15.21	16.20	1.256	62.9	1.006	-0.16	0.147	0.186
	LTE Band 41	20M	QPSK	1	0	Front	10mm	Ant 25	DSI 6	40620	2593	Sample 1	19.18	19.70	1.127	62.9	1.006	-0.12	0.097	0.110
	LTE Band 41	20M	QPSK	50	0	Front	10mm	Ant 25	DSI 6	40620	2593	Sample 1	19.16	19.70	1.132	62.9	1.006	-0.11	0.095	0.108
	LTE Band 41	20M	QPSK	1	0	Back	10mm	Ant 25	DSI 6	40620	2593	Sample 1	19.18	19.70	1.127	62.9	1.006	0.08	0.121	0.137
	LTE Band 41	20M	QPSK	50	0	Back	10mm	Ant 25	DSI 6	40620	2593	Sample 1	19.16	19.70	1.132	62.9	1.006	-0.01	0.107	0.122
	LTE Band 41	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	40620	2593	Sample 1	19.18	19.70	1.127	62.9	1.006	0.00	0.188	0.213
	LTE Band 41	20M	QPSK	50	0	Right Side	10mm	Ant 25	DSI 6	40620	2593	Sample 1	19.16	19.70	1.132	62.9	1.006	0.12	0.185	0.211
	LTE Band 41	20M	QPSK	1	0	Top Side	10mm	Ant 25	DSI 6	40620	2593	Sample 1	19.18	19.70	1.127	62.9	1.006	-0.18	0.040	0.045
	LTE Band 41	20M	QPSK	50	0	Top Side	10mm	Ant 25	DSI 6	40620	2593	Sample 1	19.16	19.70	1.132	62.9	1.006	-0.05	0.038	0.043
	LTE Band 41C	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	40620+40422	2593+2573.2	Sample 1	19.04	19.70	1.164	62.9	1.006	-0.02	0.168	0.197
	LTE Band 41	20M	QPSK	1	0	Front	10mm	Ant 41	DSI 6	40620	2593	Sample 1	19.15	19.70	1.135	62.9	1.006	-0.04	0.106	0.121
	LTE Band 41	20M	QPSK	50	0	Front	10mm	Ant 41	DSI 6	40620	2593	Sample 1	19.13	19.70	1.14	62.9	1.006	0.15	0.109	0.125
	LTE Band 41	20M	QPSK	1	0	Back	10mm	Ant 41	DSI 6	40620	2593	Sample 1	19.15	19.70	1.135	62.9	1.006	0.17	0.148	0.169
	LTE Band 41	20M	QPSK	50	0	Back	10mm	Ant 41	DSI 6	40620	2593	Sample 1	19.13	19.70	1.14	62.9	1.006	0.13	0.154	0.177
	LTE Band 41	20M	QPSK	1	0	Left Side	10mm	Ant 41	DSI 6	40620	2593	Sample 1	19.15	19.70	1.135	62.9	1.006	-0.11	0.043	0.049
	LTE Band 41	20M	QPSK	50	0	Left Side	10mm	Ant 41	DSI 6	40620	2593	Sample 1	19.13	19.70	1.14	62.9	1.006	-0.14	0.038	0.044
	LTE Band 41	20M	QPSK	1	0	Bottom Side	10mm	Ant 41	DSI 6	40620	2593	Sample 1	19.15	19.70	1.135	62.9	1.006	0.00	0.254	0.290
	LTE Band 41	20M	QPSK	50	0	Bottom Side	10mm	Ant 41	DSI 6	40620	2593	Sample 1	19.13	19.70	1.14	62.9	1.006	0.08	0.252	0.289
	LTE Band 41C	20M	QPSK	1	0	Bottom Side	10mm	Ant 41	DSI 6	40620+40422	2593+2573.2	Sample 1	19.11	19.70	1.146	62.9	1.006	-0.05	0.226	0.261
	LTE Band 42	20M	QPSK	1	0	Front	10mm	Ant 12	DSI 6	42590	3500	Sample 1	18.75	19.50	1.189	62.9	1.006	-0.11	0.121	0.145
	LTE Band 42	20M	QPSK	50	0	Front	10mm	Ant 12	DSI 6	42590	3500	Sample 1	18.73	19.50	1.194	62.9	1.006	-0.06	0.114	0.137
	LTE Band 42	20M	QPSK	1	0	Back	10mm	Ant 12	DSI 6	42590	3500	Sample 1	18.75	19.50	1.189	62.9	1.006	-0.05	0.144	0.172
	LTE Band 42	20M	QPSK	50	0	Back	10mm	Ant 12	DSI 6	42590	3500	Sample 1	18.73	19.50	1.194	62.9	1.006	0.15	0.139	0.167
	LTE Band 42	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	42590	3500	Sample 1	18.75	19.50	1.189	62.9	1.006	-0.08	0.157	0.188
	LTE Band 42	20M	QPSK	50	0	Left Side	10mm	Ant 12	DSI 6	42590	3500	Sample 1	18.73	19.50	1.194	62.9	1.006	-0.10	0.155	0.186
	LTE Band 42	20M	QPSK	1	0	Top Side	10mm	Ant 12	DSI 6	42590	3500	Sample 1	18.75	19.50	1.189	62.9	1.006	0.06	0.001	0.001
	LTE Band 42	20M	QPSK	50	0	Top Side	10mm	Ant 12	DSI 6	42590	3500	Sample 1	18.73	19.50	1.194	62.9	1.006	-0.02	0.001	0.001
	LTE Band 42C	20M	QPSK	1	0	Left Side	10mm	Ant 12	DSI 6	42590+42392	3500+3480.2	Sample 1	18.58	19.5	1.236	62.9	1.006	0.08	0.144	0.179
	LTE Band 42	20M	QPSK	1	0	Front	10mm	Ant 13	DSI 6	42590	3500	Sample 1	18.18	19.00	1.208	62.9	1.006	0.08	0.138	0.168
	LTE Band 42	20M	QPSK	50	0	Front	10mm	Ant 13	DSI 6	42590	3500	Sample 1	18.16	19.00	1.213	62.9	1.006	-0.01	0.144	0.176
	LTE Band 42	20M	QPSK	1	0	Back	10mm	Ant 13	DSI 6	42590	3500	Sample 1	18.18	19.00	1.208	62.9	1.006	-0.11	0.186	0.226
	LTE Band 42	20M	QPSK	50	0	Back	10mm	Ant 13	DSI 6	42590	3500	Sample 1	18.16	19.00	1.213	62.9	1.006	0.13	0.190	0.232
	LTE Band 42	20M	QPSK	1	0	Left Side	10mm	Ant 13	DSI 6	42590	3500	Sample 1	18.18	19.00	1.208	62.9	1.006	0.05	0.129	0.157
	LTE Band 42	20M	QPSK	50	0	Left Side	10mm	Ant 13	DSI 6	42590	3500	Sample 1	18.16	19.00	1.213	62.9	1.006	0.16	0.143	0.174
	LTE Band 42	20M	QPSK	1	0	Top Side	10mm	Ant 13	DSI 6	42590	3500	Sample 1	18.18	19.00	1.208	62.9	1.006	0.07	0.139	0.169
	LTE Band 42	20M	QPSK	50	0	Top Side	10mm	Ant 13	DSI 6	42590	3500	Sample 1	18.16	19.00	1.213	62.9	1.006	0.17	0.146	0.178
	LTE Band 42C	20M	QPSK	1	0	Back	10mm	Ant 13	DSI 6	42590+42392	3500+3480.2	Sample 1	18.05	19	1.245	62.9	1.006	0.03	0.178	0.223
	LTE Band 42	20M	QPSK	1	0	Front	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.23	17.00	1.194	62.9	1.006	-0.16	0.081	0.097
	LTE Band 42	20M	QPSK	50	0	Front	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.21	17.00	1.199	62.9	1.006	0.13	0.078	0.094
	LTE Band 42	20M	QPSK	1	0	Back	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.23	17.00	1.194	62.9	1.006	-0.12	0.153	0.184
	LTE Band 42	20M	QPSK	50	0	Back	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.21	17.00	1.199	62.9	1.006	0.11	0.150	0.181
	LTE Band 42	20M	QPSK	1	0	Left Side	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.23	17.00	1.194	62.9	1.006	-0.18	0.001	0.001
	LTE Band 42	20M	QPSK	50	0	Left Side	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.21	17.00	1.199	62.9	1.006	0.05	0.001	0.001
	LTE Band 42	20M	QPSK	1	0	Right Side	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.23	17.00	1.194	62.9	1.006	-0.08	0.001	0.001
	LTE Band 42	20M	QPSK	50	0	Right Side	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.21	17.00	1.199	62.9	1.006	-0.06	0.001	0.001
	LTE Band 42	20M	QPSK	1	0	Top Side	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.23	17.00	1.194	62.9	1.006	0.07	0.240	0.288
	LTE Band 42	20M	QPSK	50	0	Top Side	10mm	Ant 22	DSI 6	42590	3500	Sample 1	16.21	17.00	1.199	62.9	1.006	0.13	0.238	0.287
	LTE Band 42C	20M	QPSK	1	0	Top Side	10mm	Ant 22	DSI 6	42590+42392	3500+3480.2	Sample 1	16.09	17	1.233	62.9	1.006	0.06	0.227	0.282
	LTE Band 42	20M	QPSK	1	0	Front	10mm	Ant 25	DSI 6	42590	3500	Sample 1	20.12	21.00	1.225	62.9	1.006	0.08	0.205	0.253
	LTE Band 42	20M	QPSK	50	0	Front	10mm	Ant 25	DSI 6	42590	3500	Sample 1	20.10	21.00	1.23	62.9	1.006	-0.15	0.193	0.239
	LTE Band 42	20M	QPSK	1	0	Back	10mm	Ant 25	DSI 6	42590	3500	Sample 1	20.12	21.00	1.225	62.9	1.006	0.17	0.212	0.261
	LTE Band 42	20M	QPSK	50	0	Back	10mm	Ant 25	DSI 6	42590	3500	Sample 1	20.10	21.00	1.23	62.9	1.006	-0.15	0.209	0.259
48	LTE Band 42	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	42590	3500	Sample 1	20.12	21.00	1.225	62.9	1.006	-0.04	0.386	0.476
	LTE Band 42	20M	QPSK	50	0	Right Side	10mm	Ant 25	DSI 6	42590	3500	Sample 1	20.10	21.00	1.23	62.9	1.006	-0.08	0.371	0.459
	LTE Band 42	20M	QPSK	1	0	Top Side	10mm	Ant 25	DSI 6	42590	3500	Sample 1	20.12	21.00	1.225	62.9	1.006	0.09	0.065	0.080
	LTE Band 42	20M	QPSK	50	0	Top Side	10mm	Ant 25	DSI 6	42590	3500	Sample 1	20.10	21.00	1.23	62.9	1.006	-0.05	0.062	0.077
	LTE Band 42	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	42590	3500	Sample 2	20.12	21.00	1.225	62.9	1.006	-0.17	0.335	0.413
	LTE Band 42C	20M	QPSK	1	0	Right Side	10mm	Ant 25	DSI 6	42590+42392	3500+3480.2	Sample 1	20.07	21	1.239	62.9	1.006	0.03	0.365	0.455
	LTE Band 18	15M	QPSK	1	0	Front	10mm	Ant 26	DSI 6	23925	822.5	Sample 1	22.40	23.50	1.288			-0.14	0.419	0.540
	LTE Band 18	15M	QPSK	36	0	Front	10mm	Ant 26	DSI 6	23925	822.5	Sample 1	19.87	21.00	1.297			-0.05	0.244	0.316
	LTE Band 18	15M	QPSK	1																



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	LTE Band 19	15M	QPSK	36	0	Back	10mm	Ant 26	DSI 6	24075	837.5	Sample 1	21.38	22.50	1.294			-0.01	0.396	0.512
	LTE Band 19	15M	QPSK	1	0	Right Side	10mm	Ant 26	DSI 6	24075	837.5	Sample 1	21.40	22.50	1.288			0.05	0.430	0.554
50	LTE Band 19	15M	QPSK	36	0	Right Side	10mm	Ant 26	DSI 6	24075	837.5	Sample 1	21.38	22.50	1.294			-0.02	0.436	0.564

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n5	20M	QPSK	1	1	Front	10mm	Ant 11	DSI 6	167300	836.5	Sample 1	20.96	22.00	1.271	0.01	0.435	0.553
	FR1 n5	20M	QPSK	50	28	Front	10mm	Ant 11	DSI 6	167300	836.5	Sample 1	20.95	22.00	1.274	-0.04	0.420	0.535
	FR1 n5	20M	QPSK	1	1	Back	10mm	Ant 11	DSI 6	167300	836.5	Sample 1	20.96	22.00	1.271	0.08	0.507	0.644
	FR1 n5	20M	QPSK	50	28	Back	10mm	Ant 11	DSI 6	167300	836.5	Sample 1	20.95	22.00	1.274	0.11	0.480	0.612
51	FR1 n5	20M	QPSK	1	1	Left Side	10mm	Ant 11	DSI 6	167300	836.5	Sample 1	20.96	22.00	1.271	-0.05	0.750	0.953
	FR1 n5	20M	QPSK	50	28	Left Side	10mm	Ant 11	DSI 6	167300	836.5	Sample 1	20.95	22.00	1.274	0.18	0.719	0.916
	FR1 n5	20M	QPSK	100	0	Left Side	10mm	Ant 11	DSI 6	167300	836.5	Sample 1	20.93	22.00	1.279	0.02	0.734	0.939
	FR1 n5	20M	QPSK	1	1	Left Side	10mm	Ant 11	DSI 6	167300	836.5	Sample 2	20.96	22.00	1.271	-0.10	0.488	0.620
	FR1 n7	50M	QPSK	1	1	Front	10mm	Ant 12	DSI 6	507000	2535	Sample 1	19.15	20.00	1.216	-0.08	0.270	0.328
	FR1 n7	50M	QPSK	135	68	Front	10mm	Ant 12	DSI 6	507000	2535	Sample 1	19.13	20.00	1.222	-0.03	0.267	0.326
	FR1 n7	50M	QPSK	1	1	Back	10mm	Ant 12	DSI 6	507000	2535	Sample 1	19.15	20.00	1.216	0.08	0.273	0.332
	FR1 n7	50M	QPSK	135	68	Back	10mm	Ant 12	DSI 6	507000	2535	Sample 1	19.13	20.00	1.222	0.15	0.291	0.356
52	FR1 n7	50M	QPSK	1	1	Left Side	10mm	Ant 12	DSI 6	507000	2535	Sample 1	19.15	20.00	1.216	-0.05	0.347	0.422
	FR1 n7	50M	QPSK	135	68	Left Side	10mm	Ant 12	DSI 6	507000	2535	Sample 1	19.13	20.00	1.222	0.09	0.332	0.406
	FR1 n7	50M	QPSK	1	1	Top Side	10mm	Ant 12	DSI 6	507000	2535	Sample 1	19.15	20.00	1.216	-0.08	0.078	0.095
	FR1 n7	50M	QPSK	135	68	Top Side	10mm	Ant 12	DSI 6	507000	2535	Sample 1	19.13	20.00	1.222	-0.10	0.077	0.094
	FR1 n7	50M	QPSK	1	1	Front	10mm	Ant 13	DSI 6	507000	2535	Sample 1	13.95	15.00	1.274	-0.04	0.110	0.140
	FR1 n7	50M	QPSK	135	68	Front	10mm	Ant 13	DSI 6	507000	2535	Sample 1	13.93	15.00	1.279	-0.10	0.117	0.150
	FR1 n7	50M	QPSK	1	1	Back	10mm	Ant 13	DSI 6	507000	2535	Sample 1	13.95	15.00	1.274	0.10	0.158	0.201
	FR1 n7	50M	QPSK	135	68	Back	10mm	Ant 13	DSI 6	507000	2535	Sample 1	13.93	15.00	1.279	0.10	0.170	0.217
	FR1 n7	50M	QPSK	1	1	Left Side	10mm	Ant 13	DSI 6	507000	2535	Sample 1	13.95	15.00	1.274	0.04	0.126	0.161
	FR1 n7	50M	QPSK	135	68	Left Side	10mm	Ant 13	DSI 6	507000	2535	Sample 1	13.93	15.00	1.279	0.01	0.154	0.197
	FR1 n7	50M	QPSK	1	1	Top Side	10mm	Ant 13	DSI 6	507000	2535	Sample 1	13.95	15.00	1.274	-0.04	0.160	0.204
	FR1 n7	50M	QPSK	135	68	Top Side	10mm	Ant 13	DSI 6	507000	2535	Sample 1	13.93	15.00	1.279	-0.07	0.164	0.210
	FR1 n7	50M	QPSK	1	1	Front	10mm	Ant 25	DSI 6	507000	2535	Sample 1	16.15	17.50	1.365	0.17	0.084	0.115
	FR1 n7	50M	QPSK	135	68	Front	10mm	Ant 25	DSI 6	507000	2535	Sample 1	16.13	17.50	1.371	0.02	0.094	0.129
	FR1 n7	50M	QPSK	1	1	Back	10mm	Ant 25	DSI 6	507000	2535	Sample 1	16.15	17.50	1.365	0.10	0.106	0.145
	FR1 n7	50M	QPSK	135	68	Back	10mm	Ant 25	DSI 6	507000	2535	Sample 1	16.13	17.50	1.371	0.08	0.124	0.170
	FR1 n7	50M	QPSK	1	1	Right Side	10mm	Ant 25	DSI 6	507000	2535	Sample 1	16.15	17.50	1.365	0.11	0.184	0.251
	FR1 n7	50M	QPSK	135	68	Right Side	10mm	Ant 25	DSI 6	507000	2535	Sample 1	16.13	17.50	1.371	0.09	0.205	0.281
	FR1 n7	50M	QPSK	1	1	Top Side	10mm	Ant 25	DSI 6	507000	2535	Sample 1	16.15	17.50	1.365	0.00	0.001	0.001
	FR1 n7	50M	QPSK	135	68	Top Side	10mm	Ant 25	DSI 6	507000	2535	Sample 1	16.13	17.50	1.371	0.00	0.001	0.001
	FR1 n7	50M	QPSK	1	1	Front	10mm	Ant 41	DSI 6	507000	2535	Sample 1	16.83	17.50	1.167	-0.06	0.143	0.167
	FR1 n7	50M	QPSK	135	68	Front	10mm	Ant 41	DSI 6	507000	2535	Sample 1	16.81	17.50	1.172	0.03	0.132	0.155
	FR1 n7	50M	QPSK	1	1	Back	10mm	Ant 41	DSI 6	507000	2535	Sample 1	16.83	17.50	1.167	0.01	0.192	0.224
	FR1 n7	50M	QPSK	135	68	Back	10mm	Ant 41	DSI 6	507000	2535	Sample 1	16.81	17.50	1.172	-0.03	0.183	0.214
	FR1 n7	50M	QPSK	1	1	Left Side	10mm	Ant 41	DSI 6	507000	2535	Sample 1	16.83	17.50	1.167	0.09	0.063	0.074
	FR1 n7	50M	QPSK	135	68	Left Side	10mm	Ant 41	DSI 6	507000	2535	Sample 1	16.81	17.50	1.172	0.15	0.058	0.068
	FR1 n7	50M	QPSK	1	1	Bottom Side	10mm	Ant 41	DSI 6	507000	2535	Sample 1	16.83	17.50	1.167	-0.07	0.309	0.361
	FR1 n7	50M	QPSK	135	68	Bottom Side	10mm	Ant 41	DSI 6	507000	2535	Sample 1	16.81	17.50	1.172	0.02	0.306	0.359
	FR1 n25	40M	QPSK	1	1	Front	10mm	Ant 12	DSI 6	376500	1882.5	Sample 1	17.26	18.00	1.186	0.13	0.124	0.147
	FR1 n25	40M	QPSK	108	54	Front	10mm	Ant 12	DSI 6	376500	1882.5	Sample 1	17.25	18.00	1.189	-0.03	0.114	0.136
	FR1 n25	40M	QPSK	1	1	Back	10mm	Ant 12	DSI 6	376500	1882.5	Sample 1	17.26	18.00	1.186	0.02	0.136	0.161
	FR1 n25	40M	QPSK	108	54	Back	10mm	Ant 12	DSI 6	376500	1882.5	Sample 1	17.25	18.00	1.189	0.09	0.123	0.146
	FR1 n25	40M	QPSK	1	1	Left Side	10mm	Ant 12	DSI 6	376500	1882.5	Sample 1	17.26	18.00	1.186	-0.17	0.227	0.269
	FR1 n25	40M	QPSK	108	54	Left Side	10mm	Ant 12	DSI 6	376500	1882.5	Sample 1	17.25	18.00	1.189	-0.05	0.202	0.240
	FR1 n25	40M	QPSK	1	1	Top Side	10mm	Ant 12	DSI 6	376500	1882.5	Sample 1	17.26	18.00	1.186	0.18	0.052	0.062
	FR1 n25	40M	QPSK	108	54	Top Side	10mm	Ant 12	DSI 6	376500	1882.5	Sample 1	17.25	18.00	1.189	-0.03	0.047	0.056
	FR1 n25	40M	QPSK	1	1	Front	10mm	Ant 13	DSI 6	376500	1882.5	Sample 1	17.90	19.00	1.288	0.11	0.146	0.188
	FR1 n25	40M	QPSK	108	54	Front	10mm	Ant 13	DSI 6	376500	1882.5	Sample 1	17.78	19.00	1.324	0.01	0.145	0.192
	FR1 n25	40M	QPSK	1	1	Back	10mm	Ant 13	DSI 6	376500	1882.5	Sample 1	17.90	19.00	1.288	0.09	0.206	0.265
	FR1 n25	40M	QPSK	108	54	Back	10mm	Ant 13	DSI 6	376500	1882.5	Sample 1	17.78	19.00	1.324	-0.15	0.203	0.269
	FR1 n25	40M	QPSK	1	1	Left Side	10mm	Ant 13	DSI 6	376500	1882.5	Sample 1	17.90	19.00	1.288	0.12	0.167	0.215
	FR1 n25	40M	QPSK	108	54	Left Side	10mm	Ant 13	DSI 6	376500	1882.5	Sample 1	17.78	19.00	1.324	0.12	0.174	0.230
	FR1 n25	40M	QPSK	1	1	Top Side	10mm	Ant 13	DSI 6	376500	1882.5	Sample 1	17.90	19.00	1.288	-0.04	0.190	0.245
	FR1 n25	40M	QPSK	108	54	Top Side	10mm	Ant 13	DSI 6	376500	1882.5	Sample 1	17.78	19.00	1.324	0.18	0.189	0.250
	FR1 n25	40M	QPSK	1	1	Front	10mm	Ant 25	DSI 6	376500	1882.5	Sample 1	16.25	17.50	1.334	-0.08	0.069	0.092
	FR1 n25	40M	QPSK	108	54	Front	10mm	Ant 25	DSI 6	376500	1882.5	Sample 1	16.23	17.50	1.34	-0.06	0.072	0.096
	FR1 n25	40M	QPSK	1	1	Back	10mm	Ant 25	DSI 6	376500	1882.5	Sample 1	16.25	17.50	1.334	-0.09	0.086	0.115
	FR1 n25	40M	QPSK	108	54	Back	10mm	Ant 25	DSI 6	376500	1882.5	Sample 1	16.23	17.50	1.34	-0.14	0.091	0.122
	FR1 n25	40M	QPSK	1	1	Right Side	10mm	Ant 25	DSI 6	376500	1882.5	Sample 1	16.25	17.50	1.334	-0.10	0.133	0.177
	FR1 n25	40M	QPSK	108	54	Right Side	10mm	Ant 25	DSI 6	376500	1882.5	Sample 1	16.23	17.50	1.34	0.04	0.133	0.178
	FR1 n25	40M	QPSK	1	1	Top Side	10mm	Ant 25	DSI 6	376500	1882.5	Sample 1	16.25	17.50	1.334	0.00	0.001	0.001



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	FR1 n25	40M	QPSK	108	54	Top Side	10mm	Ant 25	DSI 6	376500	1882.5	Sample 1	16.23	17.50	1.34	0.00	0.001	0.001
	FR1 n25	40M	QPSK	1	1	Front	10mm	Ant 41	DSI 6	376500	1882.5	Sample 1	16.65	17.50	1.216	-0.16	0.123	0.150
	FR1 n25	40M	QPSK	108	54	Front	10mm	Ant 41	DSI 6	376500	1882.5	Sample 1	16.63	17.50	1.222	-0.08	0.111	0.136
	FR1 n25	40M	QPSK	1	1	Back	10mm	Ant 41	DSI 6	376500	1882.5	Sample 1	16.65	17.50	1.216	-0.08	0.161	0.196
	FR1 n25	40M	QPSK	108	54	Back	10mm	Ant 41	DSI 6	376500	1882.5	Sample 1	16.63	17.50	1.222	-0.07	0.152	0.186
	FR1 n25	40M	QPSK	1	1	Left Side	10mm	Ant 41	DSI 6	376500	1882.5	Sample 1	16.65	17.50	1.216	0.02	0.046	0.056
	FR1 n25	40M	QPSK	108	54	Left Side	10mm	Ant 41	DSI 6	376500	1882.5	Sample 1	16.63	17.50	1.222	0.06	0.039	0.048
53	FR1 n25	40M	QPSK	1	1	Bottom Side	10mm	Ant 41	DSI 6	376500	1882.5	Sample 1	16.65	17.50	1.216	0.07	0.283	0.344
	FR1 n25	40M	QPSK	108	54	Bottom Side	10mm	Ant 41	DSI 6	376500	1882.5	Sample 1	16.63	17.50	1.222	-0.06	0.267	0.326
	FR1 n26	20M	QPSK	1	1	Front	10mm	Ant 11	DSI 6	166300	831.5	Sample 1	20.50	21.50	1.259	-0.01	0.382	0.481
	FR1 n26	20M	QPSK	50	28	Front	10mm	Ant 11	DSI 6	166300	831.5	Sample 1	20.48	21.50	1.265	-0.16	0.379	0.479
	FR1 n26	20M	QPSK	1	1	Back	10mm	Ant 11	DSI 6	166300	831.5	Sample 1	20.50	21.50	1.259	-0.07	0.416	0.524
	FR1 n26	20M	QPSK	50	28	Back	10mm	Ant 11	DSI 6	166300	831.5	Sample 1	20.48	21.50	1.265	-0.08	0.418	0.529
	FR1 n26	20M	QPSK	1	1	Left Side	10mm	Ant 11	DSI 6	166300	831.5	Sample 1	20.50	21.50	1.259	-0.05	0.627	0.789
54	FR1 n26	20M	QPSK	50	28	Left Side	10mm	Ant 11	DSI 6	166300	831.5	Sample 1	20.48	21.50	1.265	-0.01	0.630	0.797
	FR1 n26	20M	QPSK	1	1	Front	10mm	Ant 26	DSI 6	166300	831.5	Sample 1	21.78	23.00	1.324	-0.14	0.352	0.466
	FR1 n26	20M	QPSK	50	28	Front	10mm	Ant 26	DSI 6	166300	831.5	Sample 1	21.76	23.00	1.33	0.06	0.343	0.456
	FR1 n26	20M	QPSK	1	1	Back	10mm	Ant 26	DSI 6	166300	831.5	Sample 1	21.78	23.00	1.324	-0.13	0.432	0.572
	FR1 n26	20M	QPSK	50	28	Back	10mm	Ant 26	DSI 6	166300	831.5	Sample 1	21.76	23.00	1.33	-0.07	0.411	0.547
	FR1 n26	20M	QPSK	1	1	Right Side	10mm	Ant 26	DSI 6	166300	831.5	Sample 1	21.78	23.00	1.324	-0.13	0.466	0.617
	FR1 n26	20M	QPSK	50	28	Right Side	10mm	Ant 26	DSI 6	166300	831.5	Sample 1	21.76	23.00	1.33	-0.04	0.437	0.581
	FR1 n66	40M	QPSK	1	1	Front	10mm	Ant 12	DSI 6	349000	1745	Sample 1	16.89	18.00	1.291	-0.05	0.112	0.145
	FR1 n66	40M	QPSK	108	54	Front	10mm	Ant 12	DSI 6	349000	1745	Sample 1	16.88	18.00	1.294	-0.11	0.111	0.144
	FR1 n66	40M	QPSK	1	1	Back	10mm	Ant 12	DSI 6	349000	1745	Sample 1	16.89	18.00	1.291	0.04	0.118	0.152
	FR1 n66	40M	QPSK	108	54	Back	10mm	Ant 12	DSI 6	349000	1745	Sample 1	16.88	18.00	1.294	-0.12	0.116	0.150
	FR1 n66	40M	QPSK	1	1	Left Side	10mm	Ant 12	DSI 6	349000	1745	Sample 1	16.89	18.00	1.291	-0.17	0.183	0.236
	FR1 n66	40M	QPSK	108	54	Left Side	10mm	Ant 12	DSI 6	349000	1745	Sample 1	16.88	18.00	1.294	0.15	0.179	0.232
	FR1 n66	40M	QPSK	1	1	Top Side	10mm	Ant 12	DSI 6	349000	1745	Sample 1	16.89	18.00	1.291	0.00	0.001	0.001
	FR1 n66	40M	QPSK	108	54	Top Side	10mm	Ant 12	DSI 6	349000	1745	Sample 1	16.88	18.00	1.294	0.00	0.001	0.001
	FR1 n66	40M	QPSK	1	1	Front	10mm	Ant 13	DSI 6	349000	1745	Sample 1	17.30	18.50	1.318	0.04	0.180	0.237
	FR1 n66	40M	QPSK	108	54	Front	10mm	Ant 13	DSI 6	349000	1745	Sample 1	17.27	18.50	1.327	0.19	0.178	0.236
	FR1 n66	40M	QPSK	1	1	Back	10mm	Ant 13	DSI 6	349000	1745	Sample 1	17.30	18.50	1.318	0.00	0.221	0.291
	FR1 n66	40M	QPSK	108	54	Back	10mm	Ant 13	DSI 6	349000	1745	Sample 1	17.27	18.50	1.327	0.02	0.220	0.292
	FR1 n66	40M	QPSK	1	1	Left Side	10mm	Ant 13	DSI 6	349000	1745	Sample 1	17.30	18.50	1.318	0.17	0.106	0.140
	FR1 n66	40M	QPSK	108	54	Left Side	10mm	Ant 13	DSI 6	349000	1745	Sample 1	17.27	18.50	1.327	-0.11	0.092	0.122
	FR1 n66	40M	QPSK	1	1	Top Side	10mm	Ant 13	DSI 6	349000	1745	Sample 1	17.30	18.50	1.318	0.06	0.256	0.337
	FR1 n66	40M	QPSK	108	54	Top Side	10mm	Ant 13	DSI 6	349000	1745	Sample 1	17.27	18.50	1.327	-0.18	0.252	0.334
	FR1 n66	40M	QPSK	1	1	Front	10mm	Ant 25	DSI 6	349000	1745	Sample 1	18.30	19.50	1.318	-0.02	0.131	0.173
	FR1 n66	40M	QPSK	108	54	Front	10mm	Ant 25	DSI 6	349000	1745	Sample 1	18.28	19.50	1.324	0.12	0.130	0.172
	FR1 n66	40M	QPSK	1	1	Back	10mm	Ant 25	DSI 6	349000	1745	Sample 1	18.30	19.50	1.318	-0.10	0.138	0.182
	FR1 n66	40M	QPSK	108	54	Back	10mm	Ant 25	DSI 6	349000	1745	Sample 1	18.28	19.50	1.324	0.19	0.134	0.177
	FR1 n66	40M	QPSK	1	1	Right Side	10mm	Ant 25	DSI 6	349000	1745	Sample 1	18.30	19.50	1.318	-0.05	0.213	0.281
	FR1 n66	40M	QPSK	108	54	Right Side	10mm	Ant 25	DSI 6	349000	1745	Sample 1	18.28	19.50	1.324	-0.18	0.206	0.273
	FR1 n66	40M	QPSK	1	1	Top Side	10mm	Ant 25	DSI 6	349000	1745	Sample 1	18.30	19.50	1.318	-0.07	0.042	0.055
	FR1 n66	40M	QPSK	108	54	Top Side	10mm	Ant 25	DSI 6	349000	1745	Sample 1	18.28	19.50	1.324	0.19	0.042	0.056
	FR1 n66	40M	QPSK	1	1	Front	10mm	Ant 41	DSI 6	349000	1745	Sample 1	18.05	19.00	1.245	0.06	0.174	0.217
	FR1 n66	40M	QPSK	108	54	Front	10mm	Ant 41	DSI 6	349000	1745	Sample 1	18.03	19.00	1.25	0.19	0.181	0.226
	FR1 n66	40M	QPSK	1	1	Back	10mm	Ant 41	DSI 6	349000	1745	Sample 1	18.05	19.00	1.245	0.04	0.205	0.255
	FR1 n66	40M	QPSK	108	54	Back	10mm	Ant 41	DSI 6	349000	1745	Sample 1	18.03	19.00	1.25	0.15	0.213	0.266
	FR1 n66	40M	QPSK	1	1	Left Side	10mm	Ant 41	DSI 6	349000	1745	Sample 1	18.05	19.00	1.245	-0.16	0.051	0.063
	FR1 n66	40M	QPSK	108	54	Left Side	10mm	Ant 41	DSI 6	349000	1745	Sample 1	18.03	19.00	1.25	-0.06	0.059	0.074
	FR1 n66	40M	QPSK	1	1	Bottom Side	10mm	Ant 41	DSI 6	349000	1745	Sample 1	18.05	19.00	1.245	-0.19	0.336	0.418
55	FR1 n66	40M	QPSK	108	54	Bottom Side	10mm	Ant 41	DSI 6	349000	1745	Sample 1	18.03	19.00	1.25	0.00	0.339	0.424
	FR1 n66	40M	QPSK	108	54	Bottom Side	10mm	Ant 41	DSI 6	349000	1745	Sample 2	18.03	19.00	1.25	0.07	0.235	0.294
	FR1 n38	40M	QPSK	1	1	Front	10mm	Ant 13	DSI 6	519000	2595	Sample 1	13.65	14.70	1.274	0.04	0.127	0.162
	FR1 n38	40M	QPSK	50	28	Front	10mm	Ant 13	DSI 6	519000	2595	Sample 1	13.62	14.70	1.282	-0.11	0.125	0.160
	FR1 n38	40M	QPSK	1	1	Back	10mm	Ant 13	DSI 6	519000	2595	Sample 1	13.65	14.70	1.274	0.07	0.183	0.233
	FR1 n38	40M	QPSK	50	28	Back	10mm	Ant 13	DSI 6	519000	2595	Sample 1	13.62	14.70	1.282	-0.13	0.186	0.238
	FR1 n38	40M	QPSK	1	1	Left Side	10mm	Ant 13	DSI 6	519000	2595	Sample 1	13.65	14.70	1.274	0.15	0.161	0.205
	FR1 n38	40M	QPSK	50	28	Left Side	10mm	Ant 13	DSI 6	519000	2595	Sample 1	13.62	14.70	1.282	0.03	0.153	0.196
	FR1 n38	40M	QPSK	1	1	Top Side	10mm	Ant 13	DSI 6	519000	2595	Sample 1	13.65	14.70	1.274	0.01	0.183	0.233
	FR1 n38	40M	QPSK	50	28	Top Side	10mm	Ant 13	DSI 6	519000	2595	Sample 1	13.62	14.70	1.282	0.05	0.175	0.224
	FR1 n38	40M	QPSK	1	1	Front	10mm	Ant 25	DSI 6	519000	2595	Sample 1	17.20	18.20	1.259	-0.03	0.116	0.146
	FR1 n38	40M	QPSK	50	28	Front	10mm	Ant 25	DSI 6	519000	2595	Sample 1	17.18	18.20	1.265	0.10	0.089	0.113
	FR1 n38	40M	QPSK	1	1	Back	10mm	Ant 25	DSI 6	519000	2595	Sample 1	17.20	18.20	1.259	0.09	0.135	0.170
	FR1 n38	40M	QPSK	50	28	Back	10mm	Ant 25	DSI 6	519000	2595	Sample 1	17.18	18.20	1.265	-0.04	0.100	0.127
	FR1 n38	40M	QPSK	1	1	Right Side	10mm	Ant 25	DSI 6	519000	2595	Sample 1	17.20	18.20	1.259	-0.03	0.236	0.297
	FR1 n38	40M	QPSK	50	28	Right Side	10mm	Ant 25	DSI 6	519000	2595	Sample 1	17.18	18.20	1.265	-0.10	0.163	0.206
	FR1 n38	40M	QPSK	1	1	Top Side	10mm	Ant 25	DSI 6	519000	2595	Sample 1	17.20	18.20	1.259	0.00	0.001	0.001
	FR1 n38	40M	QPSK	50	28	Top Side	10mm	Ant 25	DSI 6	519000	2595	Sample 1	17.18	18.20	1.265	0.00	0.001	0.001
	FR1 n38	40M	QPSK	1	1	Front	10mm	Ant 41	DSI 6	519000	2595	Sample 1	17.26	18.20	1.242	0.02	0.122	0.152
	FR1 n38	40M	QPSK	50	28	Front	10mm	Ant 41	DSI 6	519000	2595	Sample 1	17.25	18.20	1.245	0.07	0.117	0.146
	FR1 n38	40M	QPSK	1	1	Back	10mm	Ant 41	DSI 6	519000	2595	Sample 1	17.26	18.20	1.242	-0.09	0.165	0.205



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	FR1 n38	40M	QPSK	50	28	Back	10mm	Ant 41	DSI 6	519000	2595	Sample 1	17.25	18.20	1.245	0.05	0.166	0.207
	FR1 n38	40M	QPSK	1	1	Left Side	10mm	Ant 41	DSI 6	519000	2595	Sample 1	17.26	18.20	1.242	0.13	0.051	0.063
	FR1 n38	40M	QPSK	50	28	Left Side	10mm	Ant 41	DSI 6	519000	2595	Sample 1	17.25	18.20	1.245	-0.07	0.047	0.059
56	FR1 n38	40M	QPSK	1	1	Bottom Side	10mm	Ant 41	DSI 6	519000	2595	Sample 1	17.26	18.20	1.242	-0.02	0.284	0.353
	FR1 n38	40M	QPSK	50	28	Bottom Side	10mm	Ant 41	DSI 6	519000	2595	Sample 1	17.25	18.20	1.245	-0.01	0.274	0.341
	FR1 n41_HPUE	100M	QPSK	1	1	Front	10mm	Ant 12	DSI 6	518598	2592.99	Sample 1	18.83	19.50	1.167	0.15	0.204	0.238
	FR1 n41_HPUE	100M	QPSK	135	69	Front	10mm	Ant 12	DSI 6	518598	2592.99	Sample 1	18.81	19.50	1.172	-0.13	0.258	0.302
	FR1 n41_HPUE	100M	QPSK	1	1	Back	10mm	Ant 12	DSI 6	518598	2592.99	Sample 1	18.83	19.50	1.167	0.09	0.239	0.279
	FR1 n41_HPUE	100M	QPSK	135	69	Back	10mm	Ant 12	DSI 6	518598	2592.99	Sample 1	18.81	19.50	1.172	0.00	0.274	0.321
	FR1 n41_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 12	DSI 6	518598	2592.99	Sample 1	18.83	19.50	1.167	-0.16	0.334	0.390
57	FR1 n41_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 12	DSI 6	518598	2592.99	Sample 1	18.81	19.50	1.172	0.02	0.339	0.397
	FR1 n41_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 12	DSI 6	518598	2592.99	Sample 1	18.83	19.50	1.167	-0.11	0.083	0.097
	FR1 n41_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 12	DSI 6	518598	2592.99	Sample 1	18.81	19.50	1.172	0.13	0.076	0.089
	FR1 n41_HPUE	100M	QPSK	1	1	Front	10mm	Ant 13	DSI 6	518598	2592.99	Sample 1	13.48	14.00	1.127	0.04	0.109	0.123
	FR1 n41_HPUE	100M	QPSK	135	69	Front	10mm	Ant 13	DSI 6	518598	2592.99	Sample 1	13.47	14.00	1.13	-0.19	0.118	0.133
	FR1 n41_HPUE	100M	QPSK	1	1	Back	10mm	Ant 13	DSI 6	518598	2592.99	Sample 1	13.48	14.00	1.127	-0.04	0.157	0.177
	FR1 n41_HPUE	100M	QPSK	135	69	Back	10mm	Ant 13	DSI 6	518598	2592.99	Sample 1	13.47	14.00	1.13	-0.09	0.175	0.198
	FR1 n41_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 13	DSI 6	518598	2592.99	Sample 1	13.48	14.00	1.127	0.05	0.136	0.153
	FR1 n41_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 13	DSI 6	518598	2592.99	Sample 1	13.47	14.00	1.13	0.13	0.160	0.181
	FR1 n41_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 13	DSI 6	518598	2592.99	Sample 1	13.48	14.00	1.127	-0.07	0.153	0.172
	FR1 n41_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 13	DSI 6	518598	2592.99	Sample 1	13.47	14.00	1.13	0.13	0.158	0.179
	FR1 n41_HPUE	100M	QPSK	1	1	Front	10mm	Ant 25	DSI 6	518598	2592.99	Sample 1	16.72	17.50	1.197	0.03	0.113	0.135
	FR1 n41_HPUE	100M	QPSK	135	69	Front	10mm	Ant 25	DSI 6	518598	2592.99	Sample 1	16.70	17.50	1.202	-0.10	0.086	0.103
	FR1 n41_HPUE	100M	QPSK	1	1	Back	10mm	Ant 25	DSI 6	518598	2592.99	Sample 1	16.72	17.50	1.197	0.17	0.131	0.157
	FR1 n41_HPUE	100M	QPSK	135	69	Back	10mm	Ant 25	DSI 6	518598	2592.99	Sample 1	16.70	17.50	1.202	0.18	0.097	0.117
	FR1 n41_HPUE	100M	QPSK	1	1	Right Side	10mm	Ant 25	DSI 6	518598	2592.99	Sample 1	16.72	17.50	1.197	0.01	0.229	0.274
	FR1 n41_HPUE	100M	QPSK	135	69	Right Side	10mm	Ant 25	DSI 6	518598	2592.99	Sample 1	16.70	17.50	1.202	-0.14	0.158	0.190
	FR1 n41_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 25	DSI 6	518598	2592.99	Sample 1	16.72	17.50	1.197	0.00	0.001	0.001
	FR1 n41_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 25	DSI 6	518598	2592.99	Sample 1	16.70	17.50	1.202	0.00	0.001	0.001
	FR1 n41_HPUE	100M	QPSK	1	1	Front	10mm	Ant 41	DSI 6	518598	2592.99	Sample 1	16.63	17.50	1.222	0.00	0.119	0.145
	FR1 n41_HPUE	100M	QPSK	135	69	Front	10mm	Ant 41	DSI 6	518598	2592.99	Sample 1	16.61	17.50	1.227	0.06	0.100	0.123
	FR1 n41_HPUE	100M	QPSK	1	1	Back	10mm	Ant 41	DSI 6	518598	2592.99	Sample 1	16.63	17.50	1.222	0.12	0.157	0.192
	FR1 n41_HPUE	100M	QPSK	135	69	Back	10mm	Ant 41	DSI 6	518598	2592.99	Sample 1	16.61	17.50	1.227	0.07	0.140	0.172
	FR1 n41_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 41	DSI 6	518598	2592.99	Sample 1	16.63	17.50	1.222	-0.13	0.045	0.055
	FR1 n41_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 41	DSI 6	518598	2592.99	Sample 1	16.61	17.50	1.227	0.15	0.043	0.053
	FR1 n41_HPUE	100M	QPSK	1	1	Bottom Side	10mm	Ant 41	DSI 6	518598	2592.99	Sample 1	16.63	17.50	1.222	0.03	0.267	0.326
	FR1 n41_HPUE	100M	QPSK	135	69	Bottom Side	10mm	Ant 41	DSI 6	518598	2592.99	Sample 1	16.61	17.50	1.227	-0.14	0.238	0.292
	FR1 n77_HPUE	100M	QPSK	1	1	Front	10mm	Ant 12	DSI 6	633332	3499.98	Sample 1	13.87	15.00	1.297	0.10	0.056	0.073
	FR1 n77_HPUE	100M	QPSK	135	69	Front	10mm	Ant 12	DSI 6	633332	3499.98	Sample 1	13.82	15.00	1.312	-0.03	0.048	0.063
	FR1 n77_HPUE	100M	QPSK	1	1	Back	10mm	Ant 12	DSI 6	633332	3499.98	Sample 1	13.87	15.00	1.297	-0.18	0.063	0.082
	FR1 n77_HPUE	100M	QPSK	135	69	Back	10mm	Ant 12	DSI 6	633332	3499.98	Sample 1	13.82	15.00	1.312	-0.09	0.072	0.094
	FR1 n77_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 12	DSI 6	633332	3499.98	Sample 1	13.87	15.00	1.297	-0.10	0.095	0.123
	FR1 n77_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 12	DSI 6	633332	3499.98	Sample 1	13.82	15.00	1.312	-0.06	0.094	0.123
	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 12	DSI 6	633332	3499.98	Sample 1	13.87	15.00	1.297	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 12	DSI 6	633332	3499.98	Sample 1	13.82	15.00	1.312	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	1	1	Front	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	14.40	15.50	1.288	-0.08	0.083	0.107
	FR1 n77_HPUE	100M	QPSK	135	69	Front	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	14.38	15.50	1.294	0.03	0.074	0.096
	FR1 n77_HPUE	100M	QPSK	1	1	Back	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	14.40	15.50	1.288	-0.01	0.119	0.153
	FR1 n77_HPUE	100M	QPSK	135	69	Back	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	14.38	15.50	1.294	-0.13	0.104	0.135
	FR1 n77_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	14.40	15.50	1.288	0.16	0.087	0.112
	FR1 n77_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	14.38	15.50	1.294	0.13	0.063	0.082
	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	14.40	15.50	1.288	0.04	0.124	0.160
	FR1 n77_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	14.38	15.50	1.294	0.03	0.122	0.158
	FR1 n77_HPUE	100M	QPSK	1	1	Front	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.87	14.50	1.156	0.11	0.090	0.104
	FR1 n77_HPUE	100M	QPSK	135	69	Front	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.83	14.50	1.167	0.15	0.089	0.104
	FR1 n77_HPUE	100M	QPSK	1	1	Back	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.87	14.50	1.156	-0.14	0.117	0.135
	FR1 n77_HPUE	100M	QPSK	135	69	Back	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.83	14.50	1.167	0.01	0.118	0.138
	FR1 n77_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.87	14.50	1.156	-0.04	0.039	0.045
	FR1 n77_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.83	14.50	1.167	0.01	0.036	0.042
	FR1 n77_HPUE	100M	QPSK	1	1	Right Side	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.87	14.50	1.156	0.15	0.033	0.038
	FR1 n77_HPUE	100M	QPSK	135	69	Right Side	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.83	14.50	1.167	-0.13	0.039	0.046
	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.87	14.50	1.156	-0.12	0.240	0.277
	FR1 n77_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 22	DSI 6	633332	3499.98	Sample 1	13.83	14.50	1.167	0.01	0.228	0.266
	FR1 n77_HPUE	100M	QPSK	1	1	Front	10mm	Ant 25	DSI 6	633332	3499.98	Sample 1	15.97	17.00	1.268	0.07	0.134	0.170
	FR1 n77_HPUE	100M	QPSK	135	69	Front	10mm	Ant 25	DSI 6	633332	3499.98	Sample 1	15.92	17.00	1.282	-0.14	0.107	0.137
	FR1 n77_HPUE	100M	QPSK	1	1	Back	10mm	Ant 25	DSI 6	633332	3499.98	Sample 1	15.97	17.00	1.268	-0.15	0.140	0.178
	FR1 n77_HPUE	100M	QPSK	135	69	Back	10mm	Ant 25	DSI 6	633332	3499.98	Sample 1	15.92	17.00	1.282	0.13	0.119	0.153
58	FR1 n77_HPUE	100M	QPSK	1	1	Right Side	10mm	Ant 25	DSI 6	633332	3499.98	Sample 1	15.97	17.00	1.268	0.01	0.252	0.320
	FR1 n77_HPUE	100M	QPSK	135	69	Right Side	10mm	Ant 25	DSI 6	633332	3499.98	Sample 1	15.92	17.00	1.282	-0.03	0.216	0.277
	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 25	DSI 6	633332	3499.98	Sample 1	15.97	17.00	1.268	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 25	DSI 6	633332	3499.98	Sample 1	15.92	17.00	1.282	0.00	0.00	



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	FR1 n77_HPUE	100M	QPSK	1	1	Back	10mm	Ant 12	DSI 6	656000	3840	Sample 1	14.46	15.00	1.132	0.02	0.103	0.117
	FR1 n77_HPUE	100M	QPSK	135	69	Back	10mm	Ant 12	DSI 6	656000	3840	Sample 1	14.42	15.00	1.143	-0.01	0.099	0.113
	FR1 n77_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 12	DSI 6	656000	3840	Sample 1	14.46	15.00	1.132	-0.16	0.135	0.153
	FR1 n77_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 12	DSI 6	656000	3840	Sample 1	14.42	15.00	1.143	0.07	0.143	0.163
	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 12	DSI 6	656000	3840	Sample 1	14.46	15.00	1.132	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 12	DSI 6	656000	3840	Sample 1	14.42	15.00	1.143	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	1	1	Front	10mm	Ant 13	DSI 6	656000	3840	Sample 1	14.60	15.50	1.23	-0.02	0.085	0.105
	FR1 n77_HPUE	100M	QPSK	135	69	Front	10mm	Ant 13	DSI 6	656000	3840	Sample 1	14.58	15.50	1.236	0.01	0.085	0.105
	FR1 n77_HPUE	100M	QPSK	1	1	Back	10mm	Ant 13	DSI 6	656000	3840	Sample 1	14.60	15.50	1.23	0.19	0.128	0.157
	FR1 n77_HPUE	100M	QPSK	135	69	Back	10mm	Ant 13	DSI 6	656000	3840	Sample 1	14.58	15.50	1.236	0.14	0.117	0.145
	FR1 n77_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 13	DSI 6	656000	3840	Sample 1	14.60	15.50	1.23	-0.08	0.089	0.109
	FR1 n77_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 13	DSI 6	656000	3840	Sample 1	14.58	15.50	1.236	0.14	0.113	0.140
	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 13	DSI 6	656000	3840	Sample 1	14.60	15.50	1.23	-0.12	0.148	0.182
	FR1 n77_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 13	DSI 6	656000	3840	Sample 1	14.58	15.50	1.236	-0.13	0.134	0.166
	FR1 n77_HPUE	100M	QPSK	1	1	Front	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.84	14.50	1.164	-0.11	0.056	0.065
	FR1 n77_HPUE	100M	QPSK	135	69	Front	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.78	14.50	1.18	0.14	0.050	0.059
	FR1 n77_HPUE	100M	QPSK	1	1	Back	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.84	14.50	1.164	0.02	0.080	0.093
	FR1 n77_HPUE	100M	QPSK	135	69	Back	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.78	14.50	1.18	0.02	0.070	0.083
	FR1 n77_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.84	14.50	1.164	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.78	14.50	1.18	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	1	1	Right Side	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.84	14.50	1.164	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	135	69	Right Side	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.78	14.50	1.18	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.84	14.50	1.164	-0.11	0.147	0.171
	FR1 n77_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 22	DSI 6	656000	3840	Sample 1	13.78	14.50	1.18	0.07	0.139	0.164
	FR1 n77_HPUE	100M	QPSK	1	1	Front	10mm	Ant 25	DSI 6	656000	3840	Sample 1	15.92	17.00	1.282	-0.16	0.048	0.062
	FR1 n77_HPUE	100M	QPSK	135	69	Front	10mm	Ant 25	DSI 6	656000	3840	Sample 1	15.90	17.00	1.288	0.15	0.042	0.054
	FR1 n77_HPUE	100M	QPSK	1	1	Back	10mm	Ant 25	DSI 6	656000	3840	Sample 1	15.92	17.00	1.282	0.19	0.068	0.087
	FR1 n77_HPUE	100M	QPSK	135	69	Back	10mm	Ant 25	DSI 6	656000	3840	Sample 1	15.90	17.00	1.288	-0.06	0.071	0.091
	FR1 n77_HPUE	100M	QPSK	1	1	Right Side	10mm	Ant 25	DSI 6	656000	3840	Sample 1	15.92	17.00	1.282	0.15	0.072	0.092
	FR1 n77_HPUE	100M	QPSK	135	69	Right Side	10mm	Ant 25	DSI 6	656000	3840	Sample 1	15.90	17.00	1.288	0.00	0.053	0.068
	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 25	DSI 6	656000	3840	Sample 1	15.92	17.00	1.282	0.00	0.001	0.001
	FR1 n77_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 25	DSI 6	656000	3840	Sample 1	15.90	17.00	1.288	0.00	0.001	0.001
	FR1 n78_HPUE	100M	QPSK	1	1	Front	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	15.60	17.00	1.38	0.02	0.103	0.142
	FR1 n78_HPUE	100M	QPSK	135	69	Front	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	15.58	17.00	1.387	0.14	0.097	0.135
	FR1 n78_HPUE	100M	QPSK	1	1	Back	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	15.60	17.00	1.38	-0.18	0.144	0.199
	FR1 n78_HPUE	100M	QPSK	135	69	Back	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	15.58	17.00	1.387	0.08	0.129	0.179
	FR1 n78_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	15.60	17.00	1.38	-0.08	0.056	0.077
	FR1 n78_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	15.58	17.00	1.387	-0.10	0.069	0.096
	FR1 n78_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	15.60	17.00	1.38	0.19	0.167	0.230
59	FR1 n78_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 13	DSI 6	633332	3499.98	Sample 1	15.58	17.00	1.387	0.01	0.179	0.248
	FR1 n78_HPUE	100M	QPSK	1	1	Front	10mm	Ant 13	DSI 6	650000	3750	Sample 1	15.93	17.00	1.279	-0.15	0.083	0.106
	FR1 n78_HPUE	100M	QPSK	135	69	Front	10mm	Ant 13	DSI 6	650000	3750	Sample 1	15.91	17.00	1.285	0.19	0.069	0.089
	FR1 n78_HPUE	100M	QPSK	1	1	Back	10mm	Ant 13	DSI 6	650000	3750	Sample 1	15.93	17.00	1.279	0.04	0.132	0.169
	FR1 n78_HPUE	100M	QPSK	135	69	Back	10mm	Ant 13	DSI 6	650000	3750	Sample 1	15.91	17.00	1.285	-0.18	0.104	0.134
	FR1 n78_HPUE	100M	QPSK	1	1	Left Side	10mm	Ant 13	DSI 6	650000	3750	Sample 1	15.93	17.00	1.279	-0.11	0.169	0.216
	FR1 n78_HPUE	100M	QPSK	135	69	Left Side	10mm	Ant 13	DSI 6	650000	3750	Sample 1	15.91	17.00	1.285	0.18	0.162	0.208
	FR1 n78_HPUE	100M	QPSK	1	1	Top Side	10mm	Ant 13	DSI 6	650000	3750	Sample 1	15.93	17.00	1.279	-0.13	0.119	0.152
	FR1 n78_HPUE	100M	QPSK	135	69	Top Side	10mm	Ant 13	DSI 6	650000	3750	Sample 1	15.91	17.00	1.285	-0.15	0.086	0.111



【WLAN 2.4GHz_5GHz SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 23+24	Power Reduce Level 4	6	2437	Sample 1	19.59	20.50	1.232	99.26	1.007	-0.10	0.233	0.289
60	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 23+24	Power Reduce Level 4	6	2437	Sample 1	19.59	20.50	1.232	99.26	1.007	0.05	0.365	0.453
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 23+24	Power Reduce Level 4	6	2437	Sample 1	19.59	20.50	1.232	99.26	1.007	-0.19	0.355	0.440
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 23+24	Power Reduce Level 4	6	2437	Sample 1	19.59	20.50	1.232	99.26	1.007	-0.13	0.129	0.160
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 23+24	Power Reduce Level 4	6	2437	Sample 2	19.59	20.50	1.232	99.26	1.007	-0.04	0.328	0.407
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 22+24	Power Reduce Level 4	54	5270	Sample 1	17.50	19.00	1.413	99.78	1.002	-0.05	0.124	0.176
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 22+24	Power Reduce Level 4	54	5270	Sample 1	17.50	19.00	1.413	99.78	1.002	-0.19	0.166	0.235
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 22+24	Power Reduce Level 4	54	5270	Sample 1	17.50	19.00	1.413	99.78	1.002	-0.03	0.087	0.123
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 22+24	Power Reduce Level 4	54	5270	Sample 1	17.50	19.00	1.413	99.78	1.002	0.17	0.207	0.293
61	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 22+24	Power Reduce Level 4	54	5270	Sample 1	17.50	19.00	1.413	99.78	1.002	0.14	0.271	0.384
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 22+24	Power Reduce Level 4	54	5270	Sample 2	17.50	19.00	1.413	99.78	1.002	-0.10	0.249	0.353
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 22+24	Power Reduce Level 4	155	5775	Sample 1	17.20	19.00	1.515	99.74	1.003	-0.18	0.118	0.179
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 22+24	Power Reduce Level 4	155	5775	Sample 1	17.20	19.00	1.515	99.74	1.003	0.17	0.101	0.153
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 22+24	Power Reduce Level 4	155	5775	Sample 1	17.20	19.00	1.515	99.74	1.003	0.13	0.082	0.125
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 22+24	Power Reduce Level 4	155	5775	Sample 1	17.20	19.00	1.515	99.74	1.003	0.02	0.103	0.157
62	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 22+24	Power Reduce Level 4	155	5775	Sample 1	17.20	19.00	1.515	99.74	1.003	0.07	0.210	0.319

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	0.19	0.042	0.050
	Bluetooth	1Mbps	Back	10mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	0.14	0.063	0.075
	Bluetooth	1Mbps	Right Side	10mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	0.00	0.001	0.001
63	Bluetooth	1Mbps	Top Side	10mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	-0.14	0.105	0.125
	Bluetooth	1Mbps	Front	10mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	0.03	0.064	0.074
	Bluetooth	1Mbps	Back	10mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	-0.08	0.073	0.085
	Bluetooth	1Mbps	Right Side	10mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	-0.19	0.078	0.091
	Bluetooth	1Mbps	Top Side	10mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	0.18	0.059	0.069



16.3 Body Worn Accessory SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	GPRS 4 Tx slots	Front	15mm	Ant 11	DSI 4	189	836.4	Sample 1	26.00	27.00	1.259	-0.06	0.314	0.395
	GSM850	GPRS 4 Tx slots	Back	15mm	Ant 11	DSI 4	189	836.4	Sample 1	26.00	27.00	1.259	0.11	0.335	0.422
	GSM850	GPRS 2 Tx slots	Front	15mm	Ant 26	DSI 4	189	836.4	Sample 1	30.74	32.00	1.337	-0.01	0.458	0.612
64	GSM850	GPRS 2 Tx slots	Back	15mm	Ant 26	DSI 4	189	836.4	Sample 1	30.74	32.00	1.337	-0.01	0.512	0.685
	GSM1900	GPRS 2 Tx slots	Front	15mm	Ant 13	DSI 4	810	1909.8	Sample 1	26.96	28.50	1.426	-0.01	0.208	0.297
65	GSM1900	GPRS 2 Tx slots	Back	15mm	Ant 13	DSI 4	810	1909.8	Sample 1	26.96	28.50	1.426	-0.01	0.336	0.479
	GSM1900	GPRS 2 Tx slots	Front	15mm	Ant 41	DSI 4	810	1909.8	Sample 1	28.15	29.00	1.216	-0.02	0.154	0.187
	GSM1900	GPRS 2 Tx slots	Back	15mm	Ant 41	DSI 4	810	1909.8	Sample 1	28.15	29.00	1.216	-0.19	0.183	0.223

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Front	15mm	Ant 13	DSI 4	9400	1880	Sample 1	24.15	25.00	1.216	-0.08	0.337	0.410
66	WCDMA II	RMC 12.2Kbps	Back	15mm	Ant 13	DSI 4	9400	1880	Sample 1	24.15	25.00	1.216	-0.05	0.429	0.522
	WCDMA II	RMC 12.2Kbps	Front	15mm	Ant 41	DSI 4	9400	1880	Sample 1	20.60	21.20	1.148	0.06	0.148	0.170
	WCDMA II	RMC 12.2Kbps	Back	15mm	Ant 41	DSI 4	9400	1880	Sample 1	20.60	21.20	1.148	0.10	0.186	0.214
	WCDMA IV	RMC 12.2Kbps	Front	15mm	Ant 13	DSI 4	1413	1732.6	Sample 1	23.30	24.00	1.175	0.17	0.412	0.484
67	WCDMA IV	RMC 12.2Kbps	Back	15mm	Ant 13	DSI 4	1413	1732.6	Sample 1	23.30	24.00	1.175	-0.02	0.564	0.663
	WCDMA IV	RMC 12.2Kbps	Front	15mm	Ant 41	DSI 4	1413	1732.6	Sample 1	21.10	21.70	1.148	-0.17	0.216	0.248
	WCDMA IV	RMC 12.2Kbps	Back	15mm	Ant 41	DSI 4	1413	1732.6	Sample 1	21.10	21.70	1.148	0.19	0.253	0.290
	WCDMA V	RMC 12.2Kbps	Front	15mm	Ant 11	DSI 4	4182	836.4	Sample 1	24.60	25.20	1.148	0.10	0.568	0.652
68	WCDMA V	RMC 12.2Kbps	Back	15mm	Ant 11	DSI 4	4182	836.4	Sample 1	24.60	25.20	1.148	-0.03	0.609	0.699
	WCDMA V	RMC 12.2Kbps	Front	15mm	Ant 26	DSI 4	4182	836.4	Sample 1	24.15	25.00	1.216	0.10	0.474	0.576
	WCDMA V	RMC 12.2Kbps	Back	15mm	Ant 26	DSI 4	4182	836.4	Sample 1	24.15	25.00	1.216	0.00	0.556	0.676
	WCDMA XIX	RMC 12.2Kbps	Front	15mm	Ant 11	DSI 4	338	837.6	Sample 1	24.50	25.20	1.175	-0.05	0.561	0.659
69	WCDMA XIX	RMC 12.2Kbps	Back	15mm	Ant 11	DSI 4	338	837.6	Sample 1	24.50	25.20	1.175	-0.06	0.605	0.711
	WCDMA XIX	RMC 12.2Kbps	Front	15mm	Ant 26	DSI 4	338	837.6	Sample 1	24.08	25.00	1.236	-0.05	0.445	0.550
	WCDMA XIX	RMC 12.2Kbps	Back	15mm	Ant 26	DSI 4	338	837.6	Sample 1	24.08	25.00	1.236	0.01	0.555	0.686

【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 4	20M	QPSK	1	0	Front	15mm	Ant 25	DSI 4	20175	1732.5	Sample 1	21.42	22.50	1.282			0.00	0.197	0.253
	LTE Band 4	20M	QPSK	50	0	Front	15mm	Ant 25	DSI 4	20175	1732.5	Sample 1	21.38	22.50	1.294			0.00	0.200	0.259
	LTE Band 4	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	20175	1732.5	Sample 1	21.42	22.50	1.282			0.09	0.207	0.265
70	LTE Band 4	20M	QPSK	50	0	Back	15mm	Ant 25	DSI 4	20175	1732.5	Sample 1	21.38	22.50	1.294			0.04	0.211	0.273
	LTE Band 5	10M	QPSK	1	0	Front	15mm	Ant 11	DSI 4	20525	836.5	Sample 1	25.15	25.70	1.135			0.09	0.498	0.565
	LTE Band 5	10M	QPSK	25	0	Front	15mm	Ant 11	DSI 4	20525	836.5	Sample 1	24.58	24.70	1.028			0.00	0.459	0.472
71	LTE Band 5	10M	QPSK	1	0	Back	15mm	Ant 11	DSI 4	20525	836.5	Sample 1	25.15	25.70	1.135			-0.05	0.548	0.622
	LTE Band 5	10M	QPSK	25	0	Back	15mm	Ant 11	DSI 4	20525	836.5	Sample 1	24.58	24.70	1.028			0.02	0.502	0.516
	LTE Band 7	20M	QPSK	1	0	Front	15mm	Ant 12	DSI 4	21100	2535	Sample 1	21.98	22.50	1.127			0.12	0.217	0.245
	LTE Band 7	20M	QPSK	50	0	Front	15mm	Ant 12	DSI 4	21100	2535	Sample 1	21.96	22.50	1.132			-0.12	0.218	0.247
	LTE Band 7	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 4	21100	2535	Sample 1	21.98	22.50	1.127			-0.05	0.251	0.283
	LTE Band 7	20M	QPSK	50	0	Back	15mm	Ant 12	DSI 4	21100	2535	Sample 1	21.96	22.50	1.132			-0.11	0.260	0.294
	LTE Band 7	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 7	21100	2535	Sample 1	19.30	20.00	1.175			0.05	0.153	0.180
	LTE Band 7C	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 4	21100+20902	2535+2515.2	Sample 1	21.90	22.50	1.148			-0.19	0.232	0.266
	LTE Band 7	20M	QPSK	1	0	Front	15mm	Ant 13	DSI 4	21100	2535	Sample 1	22.08	23.00	1.236			0.15	0.360	0.445
	LTE Band 7	20M	QPSK	50	0	Front	15mm	Ant 13	DSI 4	21100	2535	Sample 1	22.06	23.00	1.242			-0.16	0.363	0.451
	LTE Band 7	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	21100	2535	Sample 1	22.08	23.00	1.236			-0.01	0.504	0.623
72	LTE Band 7	20M	QPSK	50	0	Back	15mm	Ant 13	DSI 4	21100	2535	Sample 1	22.06	23.00	1.242			0.02	0.507	0.630
	LTE Band 7C	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	21100+20902	2535+2515.2	Sample 1	21.23	23.00	1.503			0.07	0.403	0.606
	LTE Band 7	20M	QPSK	1	0	Front	15mm	Ant 25	DSI 4	21100	2535	Sample 1	20.65	21.50	1.216			-0.18	0.127	0.154
	LTE Band 7	20M	QPSK	50	0	Front	15mm	Ant 25	DSI 4	21100	2535	Sample 1	20.63	21.50	1.222			0.17	0.130	0.159
	LTE Band 7	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	21100	2535	Sample 1	20.65	21.50	1.216			-0.08	0.143	0.174
	LTE Band 7	20M	QPSK	50	0	Back	15mm	Ant 25	DSI 4	21100	2535	Sample 1	20.63	21.50	1.222			0.02	0.149	0.182
	LTE Band 7C	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	21100+20902	2535+2515.2	Sample 1	20.47	21.50	1.268			-0.16	0.133	0.169
	LTE Band 7	20M	QPSK	1	0	Front	15mm	Ant 41	DSI 4	21100	2535	Sample 1	20.20	20.70	1.122			0.14	0.112	0.126



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	LTE Band 7	20M	QPSK	50	0	Front	15mm	Ant 41	DSI 4	21100	2535	Sample 1	20.18	20.70	1.127			-0.13	0.108	0.122
	LTE Band 7	20M	QPSK	1	0	Back	15mm	Ant 41	DSI 4	21100	2535	Sample 1	20.20	20.70	1.122			-0.08	0.139	0.156
	LTE Band 7	20M	QPSK	50	0	Back	15mm	Ant 41	DSI 4	21100	2535	Sample 1	20.18	20.70	1.127			-0.11	0.142	0.160
	LTE Band 7C	20M	QPSK	1	0	Back	15mm	Ant 41	DSI 4	21100+20902	2535+2515.2	Sample 1	20.36	20.70	1.081			-0.15	0.127	0.137
	LTE Band 12	10M	QPSK	1	0	Front	15mm	Ant 11	DSI 4	23095	707.5	Sample 1	23.50	24.00	1.122			-0.11	0.226	0.254
	LTE Band 12	10M	QPSK	25	0	Front	15mm	Ant 11	DSI 4	23095	707.5	Sample 1	23.48	24.00	1.127			0.12	0.239	0.269
	LTE Band 12	10M	QPSK	1	0	Back	15mm	Ant 11	DSI 4	23095	707.5	Sample 1	23.50	24.00	1.122			0.00	0.248	0.278
	LTE Band 12	10M	QPSK	25	0	Back	15mm	Ant 11	DSI 4	23095	707.5	Sample 1	23.48	24.00	1.127			-0.05	0.260	0.293
	LTE Band 12	10M	QPSK	1	0	Front	15mm	Ant 26	DSI 4	23095	707.5	Sample 1	24.15	25.00	1.216			-0.17	0.270	0.328
	LTE Band 12	10M	QPSK	25	0	Front	15mm	Ant 26	DSI 4	23095	707.5	Sample 1	23.13	24.00	1.222			0.16	0.227	0.277
73	LTE Band 12	10M	QPSK	1	0	Back	15mm	Ant 26	DSI 4	23095	707.5	Sample 1	24.15	25.00	1.216			0.01	0.354	0.430
	LTE Band 12	10M	QPSK	25	0	Back	15mm	Ant 26	DSI 4	23095	707.5	Sample 1	23.13	24.00	1.222			0.02	0.294	0.359
	LTE Band 13	10M	QPSK	1	0	Front	15mm	Ant 11	DSI 4	23230	782	Sample 1	24.98	25.50	1.127			-0.19	0.622	0.701
	LTE Band 13	10M	QPSK	25	0	Front	15mm	Ant 11	DSI 4	23230	782	Sample 1	23.97	24.50	1.13			0.14	0.502	0.567
74	LTE Band 13	10M	QPSK	1	0	Back	15mm	Ant 11	DSI 4	23230	782	Sample 1	24.98	25.50	1.127			-0.07	0.660	0.744
	LTE Band 13	10M	QPSK	25	0	Back	15mm	Ant 11	DSI 4	23230	782	Sample 1	23.97	24.50	1.13			0.01	0.546	0.617
	LTE Band 13	10M	QPSK	1	0	Back	15mm	Ant 11	DSI 4	23230	782	Sample 2	24.98	25.50	1.127			-0.06	0.657	0.740
	LTE Band 13	10M	QPSK	1	0	Front	15mm	Ant 26	DSI 4	23230	782	Sample 1	24.05	25.00	1.245			-0.07	0.168	0.209
	LTE Band 13	10M	QPSK	25	0	Front	15mm	Ant 26	DSI 4	23230	782	Sample 1	23.05	24.00	1.245			-0.02	0.129	0.161
	LTE Band 13	10M	QPSK	1	0	Back	15mm	Ant 26	DSI 4	23230	782	Sample 1	24.05	25.00	1.245			0.18	0.201	0.250
	LTE Band 13	10M	QPSK	25	0	Back	15mm	Ant 26	DSI 4	23230	782	Sample 1	23.05	24.00	1.245			-0.06	0.149	0.186
	LTE Band 25	20M	QPSK	1	0	Front	15mm	Ant 12	DSI 4	26340	1880	Sample 1	20.72	21.50	1.197			0.00	0.131	0.157
	LTE Band 25	20M	QPSK	50	0	Front	15mm	Ant 12	DSI 4	26340	1880	Sample 1	20.70	21.50	1.202			0.09	0.127	0.153
	LTE Band 25	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 4	26340	1880	Sample 1	20.72	21.50	1.197			-0.06	0.160	0.192
	LTE Band 25	20M	QPSK	50	0	Back	15mm	Ant 12	DSI 4	26340	1880	Sample 1	20.70	21.50	1.202			0.13	0.152	0.183
	LTE Band 25	20M	QPSK	1	0	Front	15mm	Ant 13	DSI 4	26340	1880	Sample 1	23.80	25.00	1.318			-0.02	0.473	0.623
	LTE Band 25	20M	QPSK	50	0	Front	15mm	Ant 13	DSI 4	26340	1880	Sample 1	22.75	24.00	1.334			0.13	0.373	0.498
	LTE Band 25	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	26340	1880	Sample 1	23.80	25.00	1.318			-0.16	0.686	0.904
	LTE Band 25	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	26140	1860	Sample 1	23.78	25.00	1.324			-0.13	0.649	0.859
75	LTE Band 25	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	26540	1900	Sample 1	23.77	25.00	1.327			-0.02	0.774	1.027
	LTE Band 25	20M	QPSK	50	0	Back	15mm	Ant 13	DSI 4	26340	1880	Sample 1	22.75	24.00	1.334			-0.10	0.571	0.762
	LTE Band 25	20M	QPSK	100	0	Back	15mm	Ant 13	DSI 4	26340	1880	Sample 1	22.73	24.00	1.34			-0.07	0.577	0.773
	LTE Band 25	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	26540	1900	Sample 2	23.77	25.00	1.327			0.06	0.714	0.947
	LTE Band 25	20M	QPSK	1	0	Front	15mm	Ant 25	DSI 4	26340	1880	Sample 1	22.03	23.00	1.25			-0.04	0.119	0.149
	LTE Band 25	20M	QPSK	50	0	Front	15mm	Ant 25	DSI 4	26340	1880	Sample 1	21.23	22.50	1.34			0.06	0.108	0.145
	LTE Band 25	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	26340	1880	Sample 1	22.03	23.00	1.25			-0.02	0.154	0.193
	LTE Band 25	20M	QPSK	50	0	Back	15mm	Ant 25	DSI 4	26340	1880	Sample 1	21.23	22.50	1.34			-0.17	0.137	0.184
	LTE Band 25	20M	QPSK	1	0	Front	15mm	Ant 41	DSI 4	26340	1880	Sample 1	20.28	21.00	1.18			0.11	0.135	0.159
	LTE Band 25	20M	QPSK	50	0	Front	15mm	Ant 41	DSI 4	26340	1880	Sample 1	20.26	21.00	1.186			0.06	0.133	0.158
	LTE Band 25	20M	QPSK	1	0	Back	15mm	Ant 41	DSI 4	26340	1880	Sample 1	20.28	21.00	1.18			-0.18	0.177	0.209
	LTE Band 25	20M	QPSK	50	0	Back	15mm	Ant 41	DSI 4	26340	1880	Sample 1	20.26	21.00	1.186			-0.06	0.174	0.206
	LTE Band 26	15M	QPSK	1	0	Front	15mm	Ant 11	DSI 4	26865	831.5	Sample 1	24.70	25.20	1.122			0.16	0.442	0.496
	LTE Band 26	15M	QPSK	36	0	Front	15mm	Ant 11	DSI 4	26865	831.5	Sample 1	24.15	24.70	1.135			-0.13	0.389	0.442
	LTE Band 26	15M	QPSK	1	0	Back	15mm	Ant 11	DSI 4	26865	831.5	Sample 1	24.70	25.20	1.122			-0.19	0.473	0.531
	LTE Band 26	15M	QPSK	36	0	Back	15mm	Ant 11	DSI 4	26865	831.5	Sample 1	24.15	24.70	1.135			0.15	0.420	0.477
	LTE Band 26	15M	QPSK	1	0	Front	15mm	Ant 26	DSI 4	26865	831.5	Sample 1	24.65	25.50	1.216			-0.15	0.417	0.507
	LTE Band 26	15M	QPSK	36	0	Front	15mm	Ant 26	DSI 4	26865	831.5	Sample 1	23.60	24.50	1.23			-0.13	0.333	0.410
76	LTE Band 26	15M	QPSK	1	0	Back	15mm	Ant 26	DSI 4	26865	831.5	Sample 1	24.65	25.50	1.216			-0.04	0.498	0.606
	LTE Band 26	15M	QPSK	36	0	Back	15mm	Ant 26	DSI 4	26865	831.5	Sample 1	23.60	24.50	1.23			-0.11	0.395	0.486
	LTE Band 66	20M	QPSK	1	0	Front	15mm	Ant 12	DSI 4	132322	1745	Sample 1	19.88	21.00	1.294			-0.17	0.099	0.128
	LTE Band 66	20M	QPSK	50	0	Front	15mm	Ant 12	DSI 4	132322	1745	Sample 1	19.86	21.00	1.3			0.05	0.100	0.130
	LTE Band 66	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 4	132322	1745	Sample 1	19.88	21.00	1.294			-0.15	0.114	0.148
	LTE Band 66	20M	QPSK	50	0	Back	15mm	Ant 12	DSI 4	132322	1745	Sample 1	19.86	21.00	1.3			0.00	0.108	0.140
	LTE Band 66C	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 4	132322+132124	1745+1725.2	Sample 1	19.78	21.00	1.324			0.13	0.102	0.135
	LTE Band 66	20M	QPSK	1	0	Front	15mm	Ant 13	DSI 4	132322	1745	Sample 1	23.95	25.00	1.274			0.11	0.440	0.561
	LTE Band 66	20M	QPSK	50	0	Front	15mm	Ant 13	DSI 4	132322	1745	Sample 1	22.93	24.00	1.279			-0.07	0.364	0.466
77	LTE Band 66	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	132322	1745	Sample 1	23.95	25.00	1.274			-0.02	0.609	0.776
	LTE Band 66	20M	QPSK	50	0	Back	15mm	Ant 13	DSI 4	132322	1745	Sample 1	22.93	24.00	1.279			-0.16	0.496	0.634
	LTE Band 66C	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	132322+132124	1745+1725.2	Sample 1	23.77	25.00	1.327			-0.11	0.543	0.721
	LTE Band 66	20M	QPSK	1	0	Front	15mm	Ant 25	DSI 4	132322	1745	Sample 1	21.00	22.00	1.259			-0.02	0.112	0.141
	LTE Band 66	20M	QPSK	50	0	Front	15mm	Ant 25	DSI 4	132322	1745	Sample 1	20.98	22.00	1.265			-0.13	0.113	0.143
	LTE Band 66	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	132322	1745	Sample 1	21.00	22.00	1.259			0.08	0.119	0.150
	LTE Band 66	20M	QPSK	50	0	Back	15mm	Ant 25	DSI 4	132322	1745	Sample 1	20.98	22.00	1.265			0.00	0.117	0.148
	LTE Band 66C	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	132322+132124	1745+1725.2	Sample 1	20.77	22.00	1.327			0.17	0.106	0.141
	LTE Band 66	20M	QPSK	1	0	Front	15mm	Ant 41	DSI 4	132322	1745	Sample 1	21.22	22.00	1.197			0.04	0.220	0.263
	LTE Band 66	20M	QPSK	50	0	Front	15mm	Ant 41	DSI 4	132322	1745	Sample 1	21.20	22.00	1.202			-0.19	0.221	0.266
	LTE Band 66	20M	QPSK	1	0	Back	15mm	Ant 41	DSI 4	132322	1745	Sample 1	21.22	22.00	1.197			-0.04	0.263	0.315
	LTE Band 66	20M	QPSK	50	0	Back	15mm	Ant 41	DSI 4	132322	1745	Sample 1	21.20	22.00	1.202			0.03	0.259	0.311
	LTE Band 66C	20M	QPSK	1	0	Back	15mm	Ant 41	DSI 4	132322+132124	1745+1725.2	Sample 1	21.08	22.00	1.236			0.02	0.234	0.289
	LTE Band 38	20M	QPSK	1	0	Front	15mm	Ant 25	DSI 4	38000	2595	Sample 1	22.62	23.20	1.143	62.9	1.006	-0.12	0.094	0.108
	LTE Band 38	20M	QPSK	50	0	Front	15mm	Ant												



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	LTE Band 38	20M	QPSK	50	0	Back	15mm	Ant 25	DSI 4	38000	2595	Sample 1	21.60	22.20	1.148	62.9	1.006	-0.11	0.079	0.091
	LTE Band 41	20M	QPSK	1	0	Front	15mm	Ant 12	DSI 4	40620	2593	Sample 1	23.50	24.20	1.175	62.9	1.006	0.13	0.186	0.220
	LTE Band 41	20M	QPSK	50	0	Front	15mm	Ant 12	DSI 4	40620	2593	Sample 1	22.51	23.20	1.172	62.9	1.006	0.15	0.150	0.177
	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 4	40620	2593	Sample 1	23.50	24.20	1.175	62.9	1.006	-0.11	0.227	0.268
	LTE Band 41	20M	QPSK	50	0	Back	15mm	Ant 12	DSI 4	40620	2593	Sample 1	22.51	23.20	1.172	62.9	1.006	0.04	0.183	0.216
	LTE Band 41C	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 4	40620+40422	2593+2573.2	Sample 1	23.44	24.20	1.191	62.9	1.006	-0.14	0.202	0.242
	LTE Band 41	20M	QPSK	1	0	Front	15mm	Ant 13	DSI 4	40620	2593	Sample 1	23.85	24.70	1.216	62.9	1.006	0.00	0.342	0.418
	LTE Band 41	20M	QPSK	50	0	Front	15mm	Ant 13	DSI 4	40620	2593	Sample 1	23.32	24.20	1.225	62.9	1.006	0.07	0.301	0.371
	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	40620	2593	Sample 1	23.85	24.70	1.216	62.9	1.006	0.06	0.501	0.613
	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	39750	2506	Sample 1	23.73	24.70	1.25	62.9	1.006	0.09	0.376	0.473
	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	40185	2549.5	Sample 1	23.80	24.70	1.23	62.9	1.006	0.01	0.433	0.536
79	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	41055	2636.5	Sample 1	23.75	24.70	1.245	62.9	1.006	0.02	0.522	0.654
	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	41490	2680	Sample 1	23.78	24.70	1.236	62.9	1.006	0.11	0.499	0.620
	LTE Band 41	20M	QPSK	50	0	Back	15mm	Ant 13	DSI 4	40620	2593	Sample 1	23.32	24.20	1.225	62.9	1.006	0.04	0.427	0.526
	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	41055	2636.5	Sample 2	23.75	24.70	1.245	62.9	1.006	0.12	0.498	0.624
	LTE Band 41C	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	41055+40857	2636.5+2616.7	Sample 1	23.64	24.70	1.276	62.9	1.006	-0.11	0.465	0.597
	LTE Band 41	20M	QPSK	1	0	Front	15mm	Ant 25	DSI 4	40620	2593	Sample 1	22.18	22.70	1.127	62.9	1.006	-0.06	0.092	0.104
	LTE Band 41	20M	QPSK	50	0	Front	15mm	Ant 25	DSI 4	40620	2593	Sample 1	21.60	22.20	1.148	62.9	1.006	-0.16	0.079	0.091
	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	40620	2593	Sample 1	22.18	22.70	1.127	62.9	1.006	0.01	0.107	0.121
	LTE Band 41	20M	QPSK	50	0	Back	15mm	Ant 25	DSI 4	40620	2593	Sample 1	21.60	22.20	1.148	62.9	1.006	-0.10	0.088	0.102
	LTE Band 41C	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	40620+40422	2593+2573.2	Sample 1	21.98	22.70	1.18	62.9	1.006	0.07	0.095	0.113
	LTE Band 41	20M	QPSK	1	0	Front	15mm	Ant 41	DSI 4	40620	2593	Sample 1	22.68	23.20	1.127	62.9	1.006	0.19	0.131	0.149
	LTE Band 41	20M	QPSK	50	0	Front	15mm	Ant 41	DSI 4	40620	2593	Sample 1	22.67	23.20	1.13	62.9	1.006	-0.05	0.132	0.150
	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant 41	DSI 4	40620	2593	Sample 1	22.68	23.20	1.127	62.9	1.006	-0.10	0.173	0.196
	LTE Band 41	20M	QPSK	50	0	Back	15mm	Ant 41	DSI 4	40620	2593	Sample 1	22.67	23.20	1.13	62.9	1.006	-0.13	0.172	0.196
	LTE Band 41C	20M	QPSK	1	0	Back	15mm	Ant 41	DSI 4	40620+40422	2593+2573.2	Sample 1	22.59	23.20	1.151	62.9	1.006	0.05	0.154	0.178
	LTE Band 42	20M	QPSK	1	0	Front	15mm	Ant 12	DSI 4	42590	3500	Sample 1	21.58	22.50	1.236	62.9	1.006	0.02	0.120	0.149
	LTE Band 42	20M	QPSK	50	0	Front	15mm	Ant 12	DSI 4	42590	3500	Sample 1	21.56	22.50	1.242	62.9	1.006	0.05	0.072	0.090
	LTE Band 42	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 4	42590	3500	Sample 1	21.58	22.50	1.236	62.9	1.006	0.11	0.139	0.173
	LTE Band 42	20M	QPSK	50	0	Back	15mm	Ant 12	DSI 4	42590	3500	Sample 1	21.56	22.50	1.242	62.9	1.006	0.15	0.080	0.100
	LTE Band 42C	20M	QPSK	1	0	Back	15mm	Ant 12	DSI 4	42590+42392	3500+3480.2	Sample 1	21.56	22.5	1.242	62.9	1.006	0.01	0.120	0.15
	LTE Band 42	20M	QPSK	1	0	Front	15mm	Ant 13	DSI 4	42590	3500	Sample 1	24.45	25.50	1.274	62.9	1.006	-0.10	0.311	0.399
	LTE Band 42	20M	QPSK	50	0	Front	15mm	Ant 13	DSI 4	42590	3500	Sample 1	23.45	24.50	1.274	62.9	1.006	-0.02	0.257	0.329
80	LTE Band 42	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	42590	3500	Sample 1	24.45	25.50	1.274	62.9	1.006	-0.03	0.397	0.509
	LTE Band 42	20M	QPSK	50	0	Back	15mm	Ant 13	DSI 4	42590	3500	Sample 1	23.45	24.50	1.274	62.9	1.006	0.10	0.314	0.402
	LTE Band 42C	20M	QPSK	1	0	Back	15mm	Ant 13	DSI 4	42590+42392	3500+3480.2	Sample 1	24.41	25.5	1.285	62.9	1.006	-0.07	0.378	0.489
	LTE Band 42	20M	QPSK	1	0	Front	15mm	Ant 22	DSI 4	42590	3500	Sample 1	19.18	20.00	1.208	62.9	1.006	0.06	0.080	0.097
	LTE Band 42	20M	QPSK	50	0	Front	15mm	Ant 22	DSI 4	42590	3500	Sample 1	19.16	20.00	1.213	62.9	1.006	-0.03	0.082	0.100
	LTE Band 42	20M	QPSK	1	0	Back	15mm	Ant 22	DSI 4	42590	3500	Sample 1	19.18	20.00	1.208	62.9	1.006	-0.09	0.145	0.176
	LTE Band 42	20M	QPSK	50	0	Back	15mm	Ant 22	DSI 4	42590	3500	Sample 1	19.16	20.00	1.213	62.9	1.006	0.12	0.074	0.090
	LTE Band 42C	20M	QPSK	1	0	Back	15mm	Ant 22	DSI 4	42590+42392	3500+3480.2	Sample 1	19.06	20	1.242	62.9	1.006	0.05	0.134	0.167
	LTE Band 42	20M	QPSK	1	0	Front	15mm	Ant 25	DSI 4	42590	3500	Sample 1	21.10	22.00	1.23	62.9	1.006	0.10	0.120	0.148
	LTE Band 42	20M	QPSK	50	0	Front	15mm	Ant 25	DSI 4	42590	3500	Sample 1	20.18	21.00	1.208	62.9	1.006	0.09	0.099	0.120
	LTE Band 42	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	42590	3500	Sample 1	21.10	22.00	1.23	62.9	1.006	-0.17	0.127	0.157
	LTE Band 42	20M	QPSK	50	0	Back	15mm	Ant 25	DSI 4	42590	3500	Sample 1	20.18	21.00	1.208	62.9	1.006	0.04	0.103	0.125
	LTE Band 42C	20M	QPSK	1	0	Back	15mm	Ant 25	DSI 4	42590+42392	3500+3480.2	Sample 1	21.03	22	1.250	62.9	1.006	0.01	0.115	0.145
	LTE Band 18	15M	QPSK	1	0	Front	15mm	Ant 11	DSI 4	23925	822.5	Sample 1	25.09	25.70	1.151			0.19	0.489	0.563
	LTE Band 18	15M	QPSK	36	0	Front	15mm	Ant 11	DSI 4	23925	822.5	Sample 1	20.68	21.20	1.127			-0.13	0.177	0.199
81	LTE Band 18	15M	QPSK	1	0	Back	15mm	Ant 11	DSI 4	23925	822.5	Sample 1	25.09	25.70	1.151			-0.05	0.547	0.630
	LTE Band 18	15M	QPSK	36	0	Back	15mm	Ant 11	DSI 4	23925	822.5	Sample 1	20.68	21.20	1.127			-0.04	0.197	0.222
	LTE Band 19	15M	QPSK	1	0	Front	15mm	Ant 11	DSI 4	24075	837.5	Sample 1	25.12	25.70	1.143			0.05	0.494	0.565
	LTE Band 19	15M	QPSK	36	0	Front	15mm	Ant 11	DSI 4	24075	837.5	Sample 1	24.10	24.70	1.148			-0.05	0.404	0.464
82	LTE Band 19	15M	QPSK	1	0	Back	15mm	Ant 11	DSI 4	24075	837.5	Sample 1	25.12	25.70	1.143			-0.01	0.552	0.631
	LTE Band 19	15M	QPSK	36	0	Back	15mm	Ant 11	DSI 4	24075	837.5	Sample 1	24.10	24.70	1.148			-0.11	0.431	0.495

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n5	20M	QPSK	1	1	Front	15mm	Ant 11	DSI 4	167300	836.5	Sample 1	24.47	25.50	1.268	0.01	0.440	0.558
	FR1 n5	20M	QPSK	50	28	Front	15mm	Ant 11	DSI 4	167300	836.5	Sample 1	24.45	25.50	1.274	-0.05	0.437	0.557
	FR1 n5	20M	QPSK	1	1	Back	15mm	Ant 11	DSI 4	167300	836.5	Sample 1	24.47	25.50	1.268	0.07	0.474	0.601
83	FR1 n5	20M	QPSK	50	28	Back	15mm	Ant 11	DSI 4	167300	836.5	Sample 1	24.45	25.50	1.274	0.03	0.516	0.657
	FR1 n7	50M	QPSK	1	1	Front	15mm	Ant 12	DSI 4	507000	2535	Sample 1	21.65	22.50	1.216	0.09	0.253	0.308
	FR1 n7	50M	QPSK	135	68	Front	15mm	Ant 12	DSI 4	507000	2535	Sample 1	21.63	22.50	1.222	0.13	0.248	0.303
	FR1 n7	50M	QPSK	1	1	Back	15mm	Ant 12	DSI 4	507000	2535	Sample 1	21.65	22.50	1.216	0.04	0.266	0.323
	FR1 n7	50M	QPSK	135	68	Back	15mm	Ant 12	DSI 4	507000	2535	Sample 1	21.63	22.50	1.222	0.06	0.273	0.334
	FR1 n7	50M	QPSK	1	1	Front	15mm	Ant 13	DSI 4	507000	2535	Sample 1	20.95	22.00	1.274	0.08	0.286	0.364
	FR1 n7	50M	QPSK	135	68	Front	15mm	Ant 13	DSI 4	507000	2535	Sample 1	20.93	22.00	1.279	-0.13	0.328	0.420
	FR1 n7	50M	QPSK	1	1	Back	15mm	Ant 13	DSI 4	507000	2535	Sample 1	20.95	22.00	1.274	0.07	0.405	0.516
84	FR1 n7	50M	QPSK	135	68	Back	15mm	Ant 13	DSI 4	507000	2535	Sample 1	20.93	22.00	1.279	-0.14	0.469	0.600

Sporton International Inc. (Shenzhen)

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	FR1 n7	50M	QPSK	1	1	Front	15mm	Ant 25	DSI 4	507000	2535	Sample 1	19.65	21.00	1.365	-0.06	0.091	0.124
	FR1 n7	50M	QPSK	135	68	Front	15mm	Ant 25	DSI 4	507000	2535	Sample 1	19.63	21.00	1.371	0.00	0.102	0.140
	FR1 n7	50M	QPSK	1	1	Back	15mm	Ant 25	DSI 4	507000	2535	Sample 1	19.65	21.00	1.365	0.15	0.116	0.158
	FR1 n7	50M	QPSK	135	68	Back	15mm	Ant 25	DSI 4	507000	2535	Sample 1	19.63	21.00	1.371	-0.19	0.128	0.175
	FR1 n7	50M	QPSK	1	1	Front	15mm	Ant 41	DSI 4	507000	2535	Sample 1	19.80	20.50	1.175	-0.08	0.122	0.143
	FR1 n7	50M	QPSK	135	68	Front	15mm	Ant 41	DSI 4	507000	2535	Sample 1	19.78	20.50	1.18	-0.11	0.126	0.149
	FR1 n7	50M	QPSK	1	1	Back	15mm	Ant 41	DSI 4	507000	2535	Sample 1	19.80	20.50	1.175	0.02	0.152	0.179
	FR1 n7	50M	QPSK	135	68	Back	15mm	Ant 41	DSI 4	507000	2535	Sample 1	19.78	20.50	1.18	-0.12	0.145	0.171
	FR1 n25	40M	QPSK	1	1	Front	15mm	Ant 12	DSI 4	376500	1882.5	Sample 1	20.25	21.00	1.189	-0.06	0.104	0.124
	FR1 n25	40M	QPSK	108	54	Front	15mm	Ant 12	DSI 4	376500	1882.5	Sample 1	20.23	21.00	1.194	0.19	0.089	0.106
	FR1 n25	40M	QPSK	1	1	Back	15mm	Ant 12	DSI 4	376500	1882.5	Sample 1	20.25	21.00	1.189	0.04	0.115	0.137
	FR1 n25	40M	QPSK	108	54	Back	15mm	Ant 12	DSI 4	376500	1882.5	Sample 1	20.23	21.00	1.194	-0.09	0.106	0.127
	FR1 n25	40M	QPSK	1	1	Front	15mm	Ant 13	DSI 4	376500	1882.5	Sample 1	23.85	25.00	1.303	-0.16	0.315	0.410
	FR1 n25	40M	QPSK	108	54	Front	15mm	Ant 13	DSI 4	376500	1882.5	Sample 1	23.83	25.00	1.309	0.03	0.317	0.415
	FR1 n25	40M	QPSK	1	1	Back	15mm	Ant 13	DSI 4	376500	1882.5	Sample 1	23.85	25.00	1.303	-0.12	0.430	0.560
85	FR1 n25	40M	QPSK	108	54	Back	15mm	Ant 13	DSI 4	376500	1882.5	Sample 1	23.83	25.00	1.309	-0.09	0.429	0.562
	FR1 n25	40M	QPSK	1	1	Front	15mm	Ant 25	DSI 4	376500	1882.5	Sample 1	20.23	21.50	1.34	-0.19	0.084	0.113
	FR1 n25	40M	QPSK	108	54	Front	15mm	Ant 25	DSI 4	376500	1882.5	Sample 1	20.21	21.50	1.346	-0.18	0.088	0.118
	FR1 n25	40M	QPSK	1	1	Back	15mm	Ant 25	DSI 4	376500	1882.5	Sample 1	20.23	21.50	1.34	-0.10	0.090	0.121
	FR1 n25	40M	QPSK	108	54	Back	15mm	Ant 25	DSI 4	376500	1882.5	Sample 1	20.21	21.50	1.346	0.05	0.101	0.136
	FR1 n25	40M	QPSK	1	1	Front	15mm	Ant 41	DSI 4	376500	1882.5	Sample 1	19.65	20.50	1.216	0.19	0.138	0.168
	FR1 n25	40M	QPSK	108	54	Front	15mm	Ant 41	DSI 4	376500	1882.5	Sample 1	19.63	20.50	1.222	0.19	0.125	0.153
	FR1 n25	40M	QPSK	1	1	Back	15mm	Ant 41	DSI 4	376500	1882.5	Sample 1	19.65	20.50	1.216	0.16	0.174	0.212
	FR1 n25	40M	QPSK	108	54	Back	15mm	Ant 41	DSI 4	376500	1882.5	Sample 1	19.63	20.50	1.222	0.02	0.161	0.197
	FR1 n26	20M	QPSK	1	1	Front	15mm	Ant 11	DSI 4	166300	831.5	Sample 1	23.98	25.00	1.265	0.16	0.388	0.491
	FR1 n26	20M	QPSK	50	28	Front	15mm	Ant 11	DSI 4	166300	831.5	Sample 1	23.97	25.00	1.268	-0.16	0.442	0.560
	FR1 n26	20M	QPSK	1	1	Back	15mm	Ant 11	DSI 4	166300	831.5	Sample 1	23.98	25.00	1.265	0.18	0.407	0.515
86	FR1 n26	20M	QPSK	50	28	Back	15mm	Ant 11	DSI 4	166300	831.5	Sample 1	23.97	25.00	1.268	-0.01	0.465	0.590
	FR1 n26	20M	QPSK	1	1	Front	15mm	Ant 26	DSI 4	166300	831.5	Sample 1	24.21	25.50	1.346	0.19	0.189	0.254
	FR1 n26	20M	QPSK	50	28	Front	15mm	Ant 26	DSI 4	166300	831.5	Sample 1	24.04	25.50	1.4	-0.11	0.175	0.245
	FR1 n26	20M	QPSK	1	1	Back	15mm	Ant 26	DSI 4	166300	831.5	Sample 1	24.21	25.50	1.346	0.17	0.225	0.303
	FR1 n26	20M	QPSK	50	28	Back	15mm	Ant 26	DSI 4	166300	831.5	Sample 1	24.04	25.50	1.4	0.18	0.204	0.286
	FR1 n66	40M	QPSK	1	1	Front	15mm	Ant 12	DSI 4	349000	1745	Sample 1	20.38	21.50	1.294	0.01	0.122	0.158
	FR1 n66	40M	QPSK	108	54	Front	15mm	Ant 12	DSI 4	349000	1745	Sample 1	20.37	21.50	1.297	0.00	0.119	0.154
	FR1 n66	40M	QPSK	1	1	Back	15mm	Ant 12	DSI 4	349000	1745	Sample 1	20.38	21.50	1.294	0.19	0.142	0.184
	FR1 n66	40M	QPSK	108	54	Back	15mm	Ant 12	DSI 4	349000	1745	Sample 1	20.37	21.50	1.297	-0.17	0.135	0.175
	FR1 n66	40M	QPSK	1	1	Front	15mm	Ant 13	DSI 4	349000	1745	Sample 1	22.78	24.00	1.324	0.08	0.383	0.507
	FR1 n66	40M	QPSK	108	54	Front	15mm	Ant 13	DSI 4	349000	1745	Sample 1	22.76	24.00	1.33	-0.04	0.376	0.500
	FR1 n66	40M	QPSK	1	1	Back	15mm	Ant 13	DSI 4	349000	1745	Sample 1	22.78	24.00	1.324	-0.05	0.514	0.681
87	FR1 n66	40M	QPSK	108	54	Back	15mm	Ant 13	DSI 4	349000	1745	Sample 1	22.76	24.00	1.33	-0.05	0.525	0.698
	FR1 n66	40M	QPSK	1	1	Front	15mm	Ant 25	DSI 4	349000	1745	Sample 1	21.30	22.50	1.318	0.00	0.129	0.170
	FR1 n66	40M	QPSK	108	54	Front	15mm	Ant 25	DSI 4	349000	1745	Sample 1	21.28	22.50	1.324	-0.19	0.126	0.167
	FR1 n66	40M	QPSK	1	1	Back	15mm	Ant 25	DSI 4	349000	1745	Sample 1	21.30	22.50	1.318	-0.17	0.133	0.175
	FR1 n66	40M	QPSK	108	54	Back	15mm	Ant 25	DSI 4	349000	1745	Sample 1	21.28	22.50	1.324	0.00	0.133	0.176
	FR1 n66	40M	QPSK	1	1	Front	15mm	Ant 41	DSI 4	349000	1745	Sample 1	20.50	21.50	1.259	0.12	0.225	0.283
	FR1 n66	40M	QPSK	108	54	Front	15mm	Ant 41	DSI 4	349000	1745	Sample 1	20.48	21.50	1.265	0.14	0.220	0.278
	FR1 n66	40M	QPSK	1	1	Back	15mm	Ant 41	DSI 4	349000	1745	Sample 1	20.50	21.50	1.259	0.02	0.244	0.307
	FR1 n66	40M	QPSK	108	54	Back	15mm	Ant 41	DSI 4	349000	1745	Sample 1	20.48	21.50	1.265	0.05	0.244	0.309
	FR1 n38	40M	QPSK	1	1	Front	15mm	Ant 12	DSI 4	519000	2595	Sample 1	21.27	22.20	1.239	0.06	0.192	0.238
	FR1 n38	40M	QPSK	50	28	Front	15mm	Ant 12	DSI 4	519000	2595	Sample 1	21.26	22.20	1.242	0.02	0.189	0.235
88	FR1 n38	40M	QPSK	1	1	Back	15mm	Ant 12	DSI 4	519000	2595	Sample 1	21.27	22.20	1.239	-0.01	0.261	0.323
	FR1 n38	40M	QPSK	50	28	Back	15mm	Ant 12	DSI 4	519000	2595	Sample 1	21.26	22.20	1.242	0.01	0.233	0.289
	FR1 n38	40M	QPSK	1	1	Front	15mm	Ant 25	DSI 4	519000	2595	Sample 1	20.19	21.20	1.262	-0.03	0.106	0.134
	FR1 n38	40M	QPSK	50	28	Front	15mm	Ant 25	DSI 4	519000	2595	Sample 1	20.17	21.20	1.268	0.07	0.100	0.127
	FR1 n38	40M	QPSK	1	1	Back	15mm	Ant 25	DSI 4	519000	2595	Sample 1	20.19	21.20	1.262	0.05	0.121	0.153
	FR1 n38	40M	QPSK	50	28	Back	15mm	Ant 25	DSI 4	519000	2595	Sample 1	20.17	21.20	1.268	0.02	0.106	0.134
	FR1 n38	40M	QPSK	1	1	Front	15mm	Ant 41	DSI 4	519000	2595	Sample 1	20.26	21.20	1.242	-0.06	0.130	0.161
	FR1 n38	40M	QPSK	50	28	Front	15mm	Ant 41	DSI 4	519000	2595	Sample 1	20.25	21.20	1.245	0.02	0.126	0.157
	FR1 n38	40M	QPSK	1	1	Back	15mm	Ant 41	DSI 4	519000	2595	Sample 1	20.26	21.20	1.242	0.07	0.157	0.195
	FR1 n38	40M	QPSK	50	28	Back	15mm	Ant 41	DSI 4	519000	2595	Sample 1	20.25	21.20	1.245	0.02	0.163	0.203
	FR1 n41_HPUE	100M	QPSK	1	1	Front	15mm	Ant 12	DSI 4	518598	2592.99	Sample 1	21.35	22.00	1.161	-0.09	0.226	0.262
	FR1 n41_HPUE	100M	QPSK	135	69	Front	15mm	Ant 12	DSI 4	518598	2592.99	Sample 1	21.33	22.00	1.167	0.06	0.183	0.214
	FR1 n41_HPUE	100M	QPSK	1	1	Back	15mm	Ant 12	DSI 4	518598	2592.99	Sample 1	21.35	22.00	1.161	-0.13	0.270	0.313
	FR1 n41_HPUE	100M	QPSK	135	69	Back	15mm	Ant 12	DSI 4	518598	2592.99	Sample 1	21.33	22.00	1.167	-0.13	0.220	0.257
	FR1 n41_HPUE	100M	QPSK	1	1	Front	15mm	Ant 13	DSI 4	518598	2592.99	Sample 1	20.99	21.50	1.125	0.08	0.330	0.371
	FR1 n41_HPUE	100M	QPSK	135	69	Front	15mm	Ant 13	DSI 4	518598	2592.99	Sample 1	20.98	21.50	1.127	0.03	0.349	0.393
	FR1 n41_HPUE	100M	QPSK	1	1	Back	15mm	Ant 13	DSI 4	518598	2592.99	Sample 1	20.99	21.50	1.125	0.15	0.473	0.532
89	FR1 n41_HPUE	100M	QPSK	135	69	Back	15mm	Ant 13	DSI 4	518598	2592.99	Sample 1	20.98	21.50	1.127	-0.02	0.509	0.574
	FR1 n41_HPUE	100M	QPSK	1	1	Front	15mm	Ant 25	DSI 4	518598	2592.99	Sample 1	19.70	20.50	1.202	-0.07	0.113	0.136
	FR1 n41_HPUE	100M	QPSK	135	69	Front	15mm	Ant 25	DSI 4	518598	2592.99	Sample 1	19.68	20.50	1.208	-0.06	0.085	0.103
	FR1 n41_HPUE	100M	QPSK	1	1	Back	15mm	Ant 25	DSI 4	518598	2592.99	Sample 1	19.70	20.50	1.202	0.06	0.128	0.154
	FR1 n41_HPUE	100M	QPSK	135	69	Back	15mm	Ant 25	DSI 4	518598	2592.99	Sample 1	19.68	20.50	1.208	-0.09	0.094	0.114



FCC SAR Test Report

Report No. : FA592520

	FR1 n41_HPUE	100M	QPSK	1	1	Front	15mm	Ant 41	DSI 4	518598	2592.99	Sample 1	19.60	20.50	1.23	-0.12	0.113	0.139
	FR1 n41_HPUE	100M	QPSK	135	69	Front	15mm	Ant 41	DSI 4	518598	2592.99	Sample 1	19.58	20.50	1.236	-0.15	0.101	0.125
	FR1 n41_HPUE	100M	QPSK	1	1	Back	15mm	Ant 41	DSI 4	518598	2592.99	Sample 1	19.60	20.50	1.23	0.08	0.138	0.170
	FR1 n41_HPUE	100M	QPSK	135	69	Back	15mm	Ant 41	DSI 4	518598	2592.99	Sample 1	19.58	20.50	1.236	-0.05	0.118	0.146
	FR1 n77_HPUE	100M	QPSK	1	1	Front	15mm	Ant 12	DSI 4	633332	3499.98	Sample 1	16.89	18.00	1.291	-0.15	0.060	0.077
	FR1 n77_HPUE	100M	QPSK	135	69	Front	15mm	Ant 12	DSI 4	633332	3499.98	Sample 1	16.83	18.00	1.309	0.08	0.048	0.063
	FR1 n77_HPUE	100M	QPSK	1	1	Back	15mm	Ant 12	DSI 4	633332	3499.98	Sample 1	16.89	18.00	1.291	-0.11	0.073	0.094
	FR1 n77_HPUE	100M	QPSK	135	69	Back	15mm	Ant 12	DSI 4	633332	3499.98	Sample 1	16.83	18.00	1.309	-0.07	0.063	0.082
	FR1 n77_HPUE	100M	QPSK	1	1	Front	15mm	Ant 13	DSI 4	633332	3499.98	Sample 1	22.90	24.00	1.288	0.08	0.295	0.380
	FR1 n77_HPUE	100M	QPSK	135	69	Front	15mm	Ant 13	DSI 4	633332	3499.98	Sample 1	22.88	24.00	1.294	-0.07	0.270	0.349
	FR1 n77_HPUE	100M	QPSK	1	1	Back	15mm	Ant 13	DSI 4	633332	3499.98	Sample 1	22.90	24.00	1.288	0.04	0.412	0.531
	FR1 n77_HPUE	100M	QPSK	135	69	Back	15mm	Ant 13	DSI 4	633332	3499.98	Sample 1	22.88	24.00	1.294	-0.04	0.373	0.483
	FR1 n77_HPUE	100M	QPSK	1	1	Front	15mm	Ant 22	DSI 4	633332	3499.98	Sample 1	16.87	17.50	1.156	-0.08	0.071	0.082
	FR1 n77_HPUE	100M	QPSK	135	69	Front	15mm	Ant 22	DSI 4	633332	3499.98	Sample 1	16.82	17.50	1.169	-0.14	0.074	0.087
	FR1 n77_HPUE	100M	QPSK	1	1	Back	15mm	Ant 22	DSI 4	633332	3499.98	Sample 1	16.87	17.50	1.156	0.12	0.099	0.114
	FR1 n77_HPUE	100M	QPSK	135	69	Back	15mm	Ant 22	DSI 4	633332	3499.98	Sample 1	16.82	17.50	1.169	0.07	0.106	0.124
	FR1 n77_HPUE	100M	QPSK	1	1	Front	15mm	Ant 25	DSI 4	633332	3499.98	Sample 1	18.95	20.00	1.274	0.18	0.144	0.183
	FR1 n77_HPUE	100M	QPSK	135	69	Front	15mm	Ant 25	DSI 4	633332	3499.98	Sample 1	18.92	20.00	1.282	-0.17	0.127	0.163
	FR1 n77_HPUE	100M	QPSK	1	1	Back	15mm	Ant 25	DSI 4	633332	3499.98	Sample 1	18.95	20.00	1.274	0.08	0.145	0.185
	FR1 n77_HPUE	100M	QPSK	135	69	Back	15mm	Ant 25	DSI 4	633332	3499.98	Sample 1	18.92	20.00	1.282	0.06	0.130	0.167
	FR1 n77_HPUE	100M	QPSK	1	1	Front	15mm	Ant 12	DSI 4	656000	3840	Sample 1	17.48	18.00	1.127	-0.15	0.062	0.070
	FR1 n77_HPUE	100M	QPSK	135	69	Front	15mm	Ant 12	DSI 4	656000	3840	Sample 1	17.41	18.00	1.146	-0.08	0.065	0.074
	FR1 n77_HPUE	100M	QPSK	1	1	Back	15mm	Ant 12	DSI 4	656000	3840	Sample 1	17.48	18.00	1.127	-0.06	0.082	0.092
	FR1 n77_HPUE	100M	QPSK	135	69	Back	15mm	Ant 12	DSI 4	656000	3840	Sample 1	17.41	18.00	1.146	-0.15	0.087	0.100
	FR1 n77_HPUE	100M	QPSK	1	1	Front	15mm	Ant 13	DSI 4	656000	3840	Sample 1	23.10	24.00	1.23	0.04	0.406	0.499
	FR1 n77_HPUE	100M	QPSK	135	69	Front	15mm	Ant 13	DSI 4	656000	3840	Sample 1	23.08	24.00	1.236	0.01	0.343	0.424
90	FR1 n77_HPUE	100M	QPSK	1	1	Back	15mm	Ant 13	DSI 4	656000	3840	Sample 1	23.10	24.00	1.23	-0.01	0.560	0.689
	FR1 n77_HPUE	100M	QPSK	135	69	Back	15mm	Ant 13	DSI 4	656000	3840	Sample 1	23.08	24.00	1.236	-0.14	0.488	0.603
	FR1 n77_HPUE	100M	QPSK	1	1	Back	15mm	Ant 13	DSI 4	656000	3840	Sample 2	23.10	24.00	1.23	0.02	0.553	0.680
	FR1 n77_HPUE	100M	QPSK	1	1	Front	15mm	Ant 22	DSI 4	656000	3840	Sample 1	16.85	17.50	1.161	-0.02	0.055	0.064
	FR1 n77_HPUE	100M	QPSK	135	69	Front	15mm	Ant 22	DSI 4	656000	3840	Sample 1	16.78	17.50	1.18	-0.03	0.049	0.058
	FR1 n77_HPUE	100M	QPSK	1	1	Back	15mm	Ant 22	DSI 4	656000	3840	Sample 1	16.85	17.50	1.161	0.17	0.077	0.089
	FR1 n77_HPUE	100M	QPSK	135	69	Back	15mm	Ant 22	DSI 4	656000	3840	Sample 1	16.78	17.50	1.18	-0.19	0.063	0.074
	FR1 n77_HPUE	100M	QPSK	1	1	Front	15mm	Ant 25	DSI 4	656000	3840	Sample 1	18.94	20.00	1.276	0.12	0.047	0.060
	FR1 n77_HPUE	100M	QPSK	135	69	Front	15mm	Ant 25	DSI 4	656000	3840	Sample 1	18.88	20.00	1.294	0.18	0.043	0.056
	FR1 n77_HPUE	100M	QPSK	1	1	Back	15mm	Ant 25	DSI 4	656000	3840	Sample 1	18.94	20.00	1.276	0.03	0.058	0.074
	FR1 n77_HPUE	100M	QPSK	135	69	Back	15mm	Ant 25	DSI 4	656000	3840	Sample 1	18.88	20.00	1.294	-0.06	0.062	0.080

[WLAN 2.4GHz_5GHz SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	15mm	Ant 23+24	Power Reduce Level 3	6	2437	Sample 1	21.06	22.00	1.241	99.26	1.007	0.17	0.168	0.210
91	WLAN2.4GHz	802.11b 1Mbps	Back	15mm	Ant 23+24	Power Reduce Level 3	6	2437	Sample 1	21.06	22.00	1.241	99.26	1.007	0.08	0.243	0.304
	WLAN5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 22+24	Power Reduce Level 3	54	5270	Sample 1	19.00	20.50	1.413	99.78	1.002	0.04	0.089	0.126
	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 22+24	Power Reduce Level 3	54	5270	Sample 1	19.00	20.50	1.413	99.78	1.002	0.08	0.092	0.130
92	WLAN5GHz	802.11n-HT40 MCS0	Front	15mm	Ant 22+24	Power Reduce Level 3	110	5550	Sample 1	18.73	20.50	1.502	99.78	1.002	0.15	0.100	0.151
93	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 22+24	Power Reduce Level 3	110	5550	Sample 1	18.73	20.50	1.502	99.78	1.002	-0.17	0.126	0.190
	WLAN5GHz	802.11n-HT40 MCS0	Back	15mm	Ant 22+24	Power Reduce Level 3	110	5550	Sample 2	18.73	20.50	1.502	99.78	1.002	0.02	0.119	0.179
94	WLAN5GHz	802.11ac-VHT80 MCS0	Front	15mm	Ant 22+24	Power Reduce Level 3	155	5775	Sample 1	18.68	20.50	1.522	99.74	1.003	0.13	0.098	0.150
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	15mm	Ant 22+24	Power Reduce Level 3	155	5775	Sample 1	18.68	20.50	1.522	99.74	1.003	0.19	0.092	0.140

[Bluetooth SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	15mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	0.08	0.025	0.030
95	Bluetooth	1Mbps	Back	15mm	Ant 23	Full	39	2441	Sample 1	13.10	13.50	1.096	76.86	1.084	-0.07	0.038	0.045
	Bluetooth	1Mbps	Front	15mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	0.15	0.023	0.027
	Bluetooth	1Mbps	Back	15mm	Ant 24	Full	39	2441	Sample 1	12.70	13.00	1.072	76.8	1.085	0.02	0.030	0.035



16.4 Product specific 10g SAR

[GSM SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
96	GSM850	GPRS 4 Tx slots	Front	0mm	Ant 11	DSI 4	189	836.4	Sample 1	26.00	27.00	1.259	0.02	0.848	1.068
	GSM850	GPRS 4 Tx slots	Back	0mm	Ant 11	DSI 4	189	836.4	Sample 1	26.00	27.00	1.259	0.11	0.874	1.100
	GSM850	GPRS 4 Tx slots	Left Side	0mm	Ant 11	DSI 4	189	836.4	Sample 1	26.00	27.00	1.259	0.01	0.794	1.000

[WCDMA SAR]

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
97	WCDMA V	RMC 12.2Kbps	Left Side	0mm	Ant 11	DSI 4	4182	836.4	Sample 1	24.60	25.20	1.148	-0.04	1.700	1.952
98	WCDMA XIX	RMC 12.2Kbps	Left Side	0mm	Ant 11	DSI 4	338	837.6	Sample 1	24.50	25.20	1.175	-0.02	1.670	1.962

[LTE SAR]

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
99	LTE Band 5	10M	QPSK	1	0	Left Side	0mm	Ant 11	DSI 4	20525	836.5	Sample 1	25.15	25.70	1.135			-0.03	1.820	2.066
	LTE Band 5	10M	QPSK	25	0	Left Side	0mm	Ant 11	DSI 4	20525	836.5	Sample 1	24.58	24.70	1.028			0.02	1.600	1.645
	LTE Band 5	10M	QPSK	50	0	Left Side	0mm	Ant 11	DSI 4	20525	836.5	Sample 1	24.55	24.70	1.035			0.03	1.780	1.842
	LTE Band 7	20M	QPSK	1	0	Back	0mm	Ant 13	DSI 5	21100	2535	Sample 1	17.55	18.50	1.245			0.01	1.300	1.619
	LTE Band 7	20M	QPSK	50	0	Back	0mm	Ant 13	DSI 5	21100	2535	Sample 1	17.53	18.50	1.25			-0.08	1.350	1.688
	LTE Band 7	20M	QPSK	1	0	Left Side	0mm	Ant 13	DSI 5	21100	2535	Sample 1	17.55	18.50	1.245			0.00	1.520	1.892
	LTE Band 7	20M	QPSK	50	0	Left Side	0mm	Ant 13	DSI 5	21100	2535	Sample 1	17.53	18.50	1.25			-0.02	1.600	2.000
	LTE Band 7	20M	QPSK	50	0	Left Side	0mm	Ant 13	DSI 5	20850	2510	Sample 1	17.51	18.50	1.256			-0.09	1.570	1.972
	LTE Band 7	20M	QPSK	50	0	Left Side	0mm	Ant 13	DSI 5	21350	2560	Sample 1	17.50	18.50	1.259			-0.06	1.630	2.052
	LTE Band 7	20M	QPSK	100	0	Left Side	0mm	Ant 13	DSI 5	21100	2535	Sample 1	17.50	18.50	1.259			-0.15	1.550	1.951
	LTE Band 7	20M	QPSK	1	0	Top Side	0mm	Ant 13	DSI 5	21100	2535	Sample 1	17.55	18.50	1.245			-0.17	0.706	0.879
	LTE Band 7	20M	QPSK	50	0	Top Side	0mm	Ant 13	DSI 5	21100	2535	Sample 1	17.53	18.50	1.25			-0.05	0.732	0.915
	LTE Band 7	20M	QPSK	1	0	Back	13mm	Ant 13	DSI 4	21100	2535	Sample 1	22.08	23.00	1.236			-0.02	0.239	0.295
	LTE Band 7	20M	QPSK	1	0	Left Side	13mm	Ant 13	DSI 4	21100	2535	Sample 1	22.08	23.00	1.236			-0.05	0.256	0.316
	LTE Band 7	20M	QPSK	1	0	Top Side	13mm	Ant 13	DSI 4	21100	2535	Sample 1	22.08	23.00	1.236			-0.19	0.246	0.304
	LTE Band 7C	20M	QPSK	1	0	Left Side	0mm	Ant 13	DSI 5	21350+21152	2560+2540.2	Sample 1	17.05	18.50	1.396			0.11	1.450	2.024
	LTE Band 13	10M	QPSK	1	0	Left Side	0mm	Ant 11	DSI 4	23230	782	Sample 1	24.98	25.50	1.127			-0.13	2.060	2.322
	LTE Band 13	10M	QPSK	25	0	Left Side	0mm	Ant 11	DSI 4	23230	782	Sample 1	23.97	24.50	1.13			-0.01	1.650	1.864
	LTE Band 13	10M	QPSK	50	0	Left Side	0mm	Ant 11	DSI 4	23230	782	Sample 1	23.95	24.50	1.135			-0.01	1.650	1.873
	LTE Band 13	10M	QPSK	1	0	Left Side	0mm	Ant 11	DSI 4	23230	782	Sample 2	24.98	25.50	1.127			0.13	1.930	2.175
	LTE Band 25	20M	QPSK	1	0	Front	0mm	Ant 13	DSI 5	26340	1880	Sample 1	19.75	21.00	1.334			-0.12	1.020	1.361
	LTE Band 25	20M	QPSK	50	0	Front	0mm	Ant 13	DSI 5	26340	1880	Sample 1	19.73	21.00	1.34			0.05	1.010	1.353
	LTE Band 25	20M	QPSK	1	0	Back	0mm	Ant 13	DSI 5	26340	1880	Sample 1	19.75	21.00	1.334			-0.19	1.380	1.841
102	LTE Band 25	20M	QPSK	50	0	Back	0mm	Ant 13	DSI 5	26340	1880	Sample 1	19.73	21.00	1.34			0.18	1.370	1.836
	LTE Band 25	20M	QPSK	1	0	Top Side	0mm	Ant 13	DSI 5	26340	1880	Sample 1	19.75	21.00	1.334			-0.06	0.549	0.732
	LTE Band 25	20M	QPSK	50	0	Top Side	0mm	Ant 13	DSI 5	26340	1880	Sample 1	19.73	21.00	1.34			-0.12	0.538	0.721
	LTE Band 25	20M	QPSK	1	0	Front	9mm	Ant 13	DSI 4	26340	1880	Sample 1	23.80	25.00	1.318			-0.13	0.411	0.542
	LTE Band 25	20M	QPSK	1	0	Back	13mm	Ant 13	DSI 4	26340	1880	Sample 1	23.80	25.00	1.318			0.08	0.376	0.496
	LTE Band 25	20M	QPSK	1	0	Top Side	13mm	Ant 13	DSI 4	26340	1880	Sample 1	23.80	25.00	1.318			0.17	0.392	0.517
	LTE Band 25	20M	QPSK	1	0	Back	0mm	Ant 13	DSI 5	26340	1880	Sample 2	19.75	21.00	1.334			-0.05	1.360	1.814
	LTE Band 26	15M	QPSK	1	0	Left Side	0mm	Ant 11	DSI 4	26865	831.5	Sample 1	24.70	25.20	1.122			-0.07	1.630	1.829
	LTE Band 26	15M	QPSK	36	0	Left Side	0mm	Ant 11	DSI 4	26865	831.5	Sample 1	24.15	24.70	1.135			-0.16	1.450	1.646
	LTE Band 66	20M	QPSK	1	0	Top Side	0mm	Ant 13	DSI 5	132322	1745	Sample 1	21.30	22.50	1.318			-0.17	0.864	1.139
	LTE Band 66	20M	QPSK	50	0	Top Side	0mm	Ant 13	DSI 5	132322	1745	Sample 1	21.28	22.50	1.324			-0.02	0.872	1.155
	LTE Band 66	20M	QPSK	1	0	Top Side	13mm	Ant 13	DSI 4	132322	1745	Sample 1	23.95	25.00	1.274			-0.05	0.307	0.391
104	LTE Band 66C	20M	QPSK	1	0	Top Side	0mm	Ant 13	DSI 5	132322+132124	1745+1725.2	Sample 1	21.24	22.50	1.337			0.07	0.777	1.039
	LTE Band 41	20M	QPSK	1	0	Back	0mm	Ant 13	DSI 5	40620	2593	Sample 1	18.85	19.70	1.216	62.9	1.006	0.16	1.120	1.370
	LTE Band 41	20M	QPSK	50	0	Back	0mm	Ant 13	DSI 5	40620	2593	Sample 1	18.83	19.70	1.222	62.9	1.006	-0.19	1.160	1.426
	LTE Band 41	20M	QPSK	1	0	Left Side	0mm	Ant 13	DSI 5	40620	2593	Sample 1	18.85	19.70	1.216	62.9	1.006	-0.13	1.670	2.043
	LTE Band 41	20M	QPSK	1	0	Left Side	0mm	Ant 13	DSI 5	39750	2506	Sample 1	18.75	19.70	1.245	62.9	1.006	-0.17	1.560	1.954
	LTE Band 41	20M	QPSK	1	0	Left Side	0mm	Ant 13	DSI 5	40185	2549.5	Sample 1	18.83	19.70	1.222	62.9	1.006	0.03	1.600	1.967
	LTE Band 41	20M	QPSK	1	0	Left Side	0mm	Ant 13	DSI 5	41055	2636.5	Sample 1	18.80	19.70	1.23	62.9	1.006	0.02	1.710	2.116
	LTE Band 41	20M	QPSK	1	0	Left Side	0mm	Ant 13	DSI 5	41490	2680	Sample 1	18.81	19.70	1.227	62.9	1.006	-0.07	1.670	2.061
	LTE Band 41	20M	QPSK	50	0	Left Side	0mm	Ant 13	DSI 5	40620	2593	Sample 1	18.83	19.70	1.222	62.9	1.006	0.04	1.720	2.114
	LTE Band 41	20M	QPSK	50	0	Left Side	0mm	Ant 13	DSI 5	39750	2506	Sample 1	18.73	19.70	1.25	62.9	1.006	0.07	1.600	2.012
	LTE Band 41	20M	QPSK	50	0	Left Side	0mm	Ant 13	DSI 5	40185	2549.5	Sample 1	18.81	19.70	1.227	62.9	1.006	-0.09	1.630	2.012
	LTE Band 41	20M	QPSK	50	0	Left Side	0mm	Ant 13	DSI 5	41055	2636.5	Sample 1	18.78	19.70	1.236	62.9	1.006	-0.02	1.750	2.176



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	LTE Band 41	20M	QPSK	50	0	Left Side	0mm	Ant 13	DSI 5	41490	2680	Sample 1	18.80	19.70	1.23	62.9	1.006	0.02	1.740	2.153
	LTE Band 41	20M	QPSK	100	0	Left Side	0mm	Ant 13	DSI 5	40620	2593	Sample 1	18.81	19.70	1.227	62.9	1.006	0.18	1.760	2.172
	LTE Band 41	20M	QPSK	1	0	Top Side	0mm	Ant 13	DSI 5	40620	2593	Sample 1	18.85	19.70	1.216	62.9	1.006	-0.06	0.599	0.733
	LTE Band 41	20M	QPSK	50	0	Top Side	0mm	Ant 13	DSI 5	40620	2593	Sample 1	18.83	19.70	1.222	62.9	1.006	0.13	0.602	0.740
	LTE Band 41	20M	QPSK	1	0	Back	13mm	Ant 13	DSI 4	40620	2593	Sample 1	23.85	24.70	1.216	62.9	1.006	0.04	0.259	0.317
	LTE Band 41	20M	QPSK	1	0	Left Side	13mm	Ant 13	DSI 4	40620	2593	Sample 1	23.85	24.70	1.216	62.9	1.006	-0.08	0.262	0.321
	LTE Band 41	20M	QPSK	1	0	Top Side	13mm	Ant 13	DSI 4	40620	2593	Sample 1	23.85	24.70	1.216	62.9	1.006	-0.11	0.265	0.324
	LTE Band 41	20M	QPSK	50	0	Left Side	0mm	Ant 13	DSI 5	41055	2636.5	Sample 2	18.78	19.70	1.236	62.9	1.006	-0.11	1.720	2.139
	LTE Band 41C	20M	QPSK	1	0	Left Side	0mm	Ant 13	DSI 5	41055+40857	2636.5+2616.7	Sample 1	18.66	19.70	1.271	62.9	1.006	0.11	1.560	1.995
106	LTE Band 18	15M	QPSK	1	0	Left Side	0mm	Ant 11	DSI 4	23925	822.5	Sample 1	25.09	25.70	1.151			0.16	2.010	2.314
	LTE Band 18	15M	QPSK	36	0	Left Side	0mm	Ant 11	DSI 4	23925	822.5	Sample 1	20.68	21.20	1.127			-0.09	0.689	0.777
	LTE Band 18	15M	QPSK	75	0	Left Side	0mm	Ant 11	DSI 4	23925	822.5	Sample 1	20.66	21.20	1.132			0.12	0.666	0.754
107	LTE Band 19	15M	QPSK	1	0	Left Side	0mm	Ant 11	DSI 4	24075	837.5	Sample 1	25.12	25.70	1.143			-0.03	1.840	2.103
	LTE Band 19	15M	QPSK	36	0	Left Side	0mm	Ant 11	DSI 4	24075	837.5	Sample 1	24.10	24.70	1.148			-0.10	1.440	1.653
	LTE Band 19	15M	QPSK	75	0	Left Side	0mm	Ant 11	DSI 4	24075	837.5	Sample 1	24.09	24.70	1.151			0.05	1.390	1.600

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
108	FR1 n5	20M	QPSK	1	1	Left Side	0mm	Ant 11	DSI 4	167300	836.5	Sample 1	24.47	25.50	1.268	-0.07	1.720	2.181
	FR1 n5	20M	QPSK	50	28	Left Side	0mm	Ant 11	DSI 4	167300	836.5	Sample 1	24.45	25.50	1.274	-0.15	1.600	2.038
	FR1 n5	20M	QPSK	100	0	Left Side	0mm	Ant 11	DSI 4	167300	836.5	Sample 1	24.10	25.00	1.23	0.02	1.650	2.030
109	FR1 n26	20M	QPSK	1	1	Left Side	0mm	Ant 11	DSI 4	166300	831.5	Sample 1	23.98	25.00	1.265	-0.01	1.720	2.176
	FR1 n26	20M	QPSK	50	28	Left Side	0mm	Ant 11	DSI 4	166300	831.5	Sample 1	23.97	25.00	1.268	-0.08	1.600	2.029
	FR1 n26	20M	QPSK	100	0	Left Side	0mm	Ant 11	DSI 4	166300	831.5	Sample 1	23.95	25.00	1.274	0.10	1.640	2.089
110	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	0mm	Ant 13	DSI 5	656000	3840	Sample 1	18.10	19.00	1.23	-0.02	1.170	1.439
	FR1 n77_HPUE	100M	QPSK	135	69	Top Side	0mm	Ant 13	DSI 5	656000	3840	Sample 1	18.07	19.00	1.239	0.11	1.040	1.289
	FR1 n77_HPUE	100M	QPSK	1	1	Top Side	13mm	Ant 13	DSI 4	656000	3840	Sample 1	23.10	24.00	1.23	0.08	0.276	0.339
111	FR1 n78_HPUE	100M	QPSK	1	1	Left Side	0mm	Ant 13	DSI 5	650000	3750	Sample 1	19.03	20.00	1.25	-0.04	2.350	2.938
	FR1 n78_HPUE	100M	QPSK	135	69	Left Side	0mm	Ant 13	DSI 5	650000	3750	Sample 1	19.01	20.00	1.256	0.12	2.150	2.700
	FR1 n78_HPUE	100M	QPSK	270	0	Left Side	0mm	Ant 13	DSI 5	650000	3750	Sample 1	19.00	20.00	1.259	0.09	2.190	2.757
	FR1 n78_HPUE	100M	QPSK	1	1	Left Side	0mm	Ant 13	DSI 5	650000	3750	Sample 2	19.03	20.00	1.25	0.11	2.210	2.763

【WLAN 5GHz SAR】

Plot No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 22+24	Power Reduce Level 3	54	5270	Sample 1	19.00	20.50	1.413	99.78	1.002	0.04	0.597	0.845
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 22+24	Power Reduce Level 3	54	5270	Sample 1	19.00	20.50	1.413	99.78	1.002	-0.09	0.202	0.286
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 22+24	Power Reduce Level 3	54	5270	Sample 1	19.00	20.50	1.413	99.78	1.002	0.09	0.064	0.091
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 22+24	Power Reduce Level 3	54	5270	Sample 1	19.00	20.50	1.413	99.78	1.002	-0.13	0.483	0.684
112	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 22+24	Power Reduce Level 3	54	5270	Sample 1	19.00	20.50	1.413	99.78	1.002	-0.13	1.430	2.025
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 22+24	Power Reduce Level 3	62	5310	Sample 1	14.20	16.00	1.513	99.78	1.002	0.15	0.521	0.790
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 22+24	Power Reduce Level 3	54	5270	Sample 2	19.00	20.50	1.413	99.78	1.002	0.04	1.390	1.968
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 22+24	Power Reduce Level 3	110	5550	Sample 1	18.73	20.50	1.502	99.78	1.002	0.12	0.854	1.285
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 22+24	Power Reduce Level 3	110	5550	Sample 1	18.73	20.50	1.502	99.78	1.002	0.09	0.225	0.339
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 22+24	Power Reduce Level 3	110	5550	Sample 1	18.73	20.50	1.502	99.78	1.002	-0.10	0.147	0.221
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 22+24	Power Reduce Level 3	110	5550	Sample 1	18.73	20.50	1.502	99.78	1.002	0.14	0.549	0.826
113	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 22+24	Power Reduce Level 3	110	5550	Sample 1	18.73	20.50	1.502	99.78	1.002	-0.08	1.180	1.776
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 22+24	Power Reduce Level 3	134	5670	Sample 1	17.62	19.50	1.543	99.78	1.002	-0.10	0.825	1.276

16.5 Repeated SAR Measurement

【Repeat SAR 10g - FCC】

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)	Ratio
1st	LTE Band 13	10M_QPSK_1_0	Left Side	0.0	Ant 11	DSI 4	23230	782	24.98	25.50	1.127	100.0	1.0	-0.13	2.060	2.322	-
2nd	LTE Band 13	10M_QPSK_1_0	Left Side	0.0	Ant 11	DSI 4	23230	782	24.98	25.50	1.127	100.0	1.0	0.05	1.920	2.164	1.07
1st	LTE Band 18	15M_QPSK_1_0	Left Side	0.0	Ant 11	DSI 4	23925	822.5	25.09	25.70	1.151	100.0	1.0	0.16	2.010	2.314	-
2nd	LTE Band 18	15M_QPSK_1_0	Left Side	0.0	Ant 11	DSI 4	23925	822.5	25.09	25.70	1.151	100.0	1.0	0.02	1.880	2.164	1.07
1st	FR1 n78_HPUE	100M_BPSK_1_1	Left Side	0.0	Ant 13	DSI 5	650000	3750	19.03	20.00	1.25	100.0	1.0	-0.04	2.350	2.938	-
2nd	FR1 n78_HPUE	100M_BPSK_1_1	Left Side	0.0	Ant 13	DSI 5	650000	3750	19.03	20.00	1.25	100.0	1.0	-0.11	2.230	2.788	1.05

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/kg}$.
2. 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.
3. The ratio is the difference in percentage between original and repeated *measured SAR*.
4. 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, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G NR operation is demonstrated in the Part 2 Report during algorithm validation.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
- The Bluetooth can transmit in SISO mode only and they have no MIMO mode.
- According to the EUT characteristic, WLAN 5GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz can't transmit simultaneously.
- According to the EUT characteristic, WLAN 2.4GHz and Bluetooth cannot transmit simultaneously.
- 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. This is the worst co-located analysis and can represent each band. If the co-located analysis within standalone SAR is higher SAR limit (1.6W/kg for 1g SAR, 4.0W/kg for 10g SAR), always choose the highest SAR among the selected WWAN bands within the selected antenna for each exposure position to perform simultaneous transmission analysis with WLAN/BT.
- The maximum SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
 - The SPLSR calculated results please refer to section 17.6.

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

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

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

Smart Transmit 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 (100-x)%. Thus, the compliance equation for LTE + 5G NR is

$$x\% * A + (100-x)\% * B \leq 1.0,$$

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

$$x\% * A + (100-x)\% * B + C \leq 1.0 \quad (1)$$

$$x\% * A + (100-x)\% * B \leq x\% * \max(A, B) + (100-x)\% * \max(A, B) \leq \max(A, B)$$

$$x\% * A + (100-x)\% * B + C \leq \max(A, B) + C \leq 1.0 \quad (2)$$

If $A + C \leq 1.0$ and $B + C \leq 1.0$ can be proven, then “ $x\% * A + (100-x)\% * B + C \leq 1.0$ ”. 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 $A + C > 1.0$ and/or $B + C > 1.0$, then the followings need to hold true for compliance:

i. A and C are decoupled based on the SPLSR criteria, and

ii. $(100-x)\% * B + C \leq 1.0$, and

iii. $x\% * A + (100-x)\% * B \leq 1.0$

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

Above analysis is also apply to LTE/NR inter-band uplink CA, 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 DSI 3, WLAN Power Reduce Level 2, BT Full >

WWAN1		Exposure Position	1	2	3	5	6	1+2 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+3+6 Summed 1g SAR (W/kg)	Case No.
			WWAN1	2.4GHz WLAN Ant 23+24	5GHz WLAN Ant 22+24	Bluetooth Ant 23	Bluetooth Ant 24				
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
All	Ant 13	Right Cheek	0.692	0.090	0.243	0.157	0.150	0.78	1.09	1.09	
		Right Tilted	0.559	0.282	0.290	0.183	0.154	0.84	1.03	1.00	
		Left Cheek	0.327	0.347	0.517	0.280	0.568	0.67	1.12	1.41	
		Left Tilted	0.386	0.195	0.589	0.258	0.432	0.58	1.23	1.41	
All	Ant 12	Right Cheek	0.658	0.090	0.243	0.157	0.150	0.75	1.06	1.05	
		Right Tilted	0.159	0.282	0.290	0.183	0.154	0.44	0.63	0.60	
		Left Cheek	0.160	0.347	0.517	0.280	0.568	0.51	0.96	1.25	
		Left Tilted	0.086	0.195	0.589	0.258	0.432	0.28	0.93	1.11	
All	Ant 25	Right Cheek	0.268	0.090	0.243	0.157	0.150	0.36	0.67	0.66	
		Right Tilted	0.321	0.282	0.290	0.183	0.154	0.60	0.79	0.77	
		Left Cheek	0.337	0.347	0.517	0.280	0.568	0.68	1.13	1.42	
		Left Tilted	0.353	0.195	0.589	0.258	0.432	0.55	1.20	1.37	
All	Ant 26	Right Cheek	0.671	0.090	0.243	0.157	0.150	0.76	1.07	1.06	
		Right Tilted	0.491	0.282	0.290	0.183	0.154	0.77	0.96	0.93	
		Left Cheek	0.311	0.347	0.517	0.280	0.568	0.66	1.11	1.40	
		Left Tilted	0.103	0.195	0.589	0.258	0.432	0.30	0.95	1.12	
All	Ant 22	Right Cheek	0.203	0.090	0.243	0.157	0.150	0.29	0.60	0.60	
		Right Tilted	0.292	0.282	0.290	0.183	0.154	0.57	0.76	0.74	
		Left Cheek	0.289	0.347	0.517	0.280	0.568	0.64	1.09	1.37	
		Left Tilted	0.345	0.195	0.589	0.258	0.432	0.54	1.19	1.37	
All	Ant 41	Right Cheek	0.288	0.090	0.243	0.157	0.150	0.38	0.69	0.68	
		Right Tilted	0.147	0.282	0.290	0.183	0.154	0.43	0.62	0.59	
		Left Cheek	0.299	0.347	0.517	0.280	0.568	0.65	1.10	1.38	
		Left Tilted	0.110	0.195	0.589	0.258	0.432	0.31	0.96	1.13	
GSM850	Ant 11	Right Cheek	0.143	0.090	0.243	0.157	0.150	0.23	0.54	0.54	
		Right Tilted	0.001	0.282	0.290	0.183	0.154	0.28	0.47	0.44	
		Left Cheek	0.331	0.347	0.517	0.280	0.568	0.68	1.13	1.42	
		Left Tilted	0.043	0.195	0.589	0.258	0.432	0.24	0.89	1.06	
WCDMA V	Ant 11	Right Cheek	0.239	0.090	0.243	0.157	0.150	0.33	0.64	0.63	
		Right Tilted	0.049	0.282	0.290	0.183	0.154	0.33	0.52	0.49	
		Left Cheek	0.562	0.347	0.517	0.280	0.568	0.91	1.36	1.65	Case 1
		Left Tilted	0.075	0.195	0.589	0.258	0.432	0.27	0.92	1.10	
WCDMA XIX	Ant 11	Right Cheek	0.254	0.090	0.243	0.157	0.150	0.34	0.65	0.65	
		Right Tilted	0.052	0.282	0.290	0.183	0.154	0.33	0.52	0.50	
		Left Cheek	0.578	0.347	0.517	0.280	0.568	0.92	1.38	1.66	Case 2
		Left Tilted	0.074	0.195	0.589	0.258	0.432	0.27	0.92	1.10	
LTE Band 12	Ant 11	Right Cheek	0.278	0.090	0.243	0.157	0.150	0.37	0.68	0.67	
		Right Tilted	0.052	0.282	0.290	0.183	0.154	0.33	0.52	0.50	
		Left Cheek	0.546	0.347	0.517	0.280	0.568	0.89	1.34	1.63	Case 3
		Left Tilted	0.070	0.195	0.589	0.258	0.432	0.27	0.92	1.09	
LTE Band 13	Ant 11	Right Cheek	0.254	0.090	0.243	0.157	0.150	0.34	0.65	0.65	
		Right Tilted	0.045	0.282	0.290	0.183	0.154	0.33	0.52	0.49	
		Left Cheek	0.528	0.347	0.517	0.280	0.568	0.88	1.33	1.61	Case 4
		Left Tilted	0.072	0.195	0.589	0.258	0.432	0.27	0.92	1.09	
LTE Band 26	Ant 11	Right Cheek	0.243	0.090	0.243	0.157	0.150	0.33	0.64	0.64	
		Right Tilted	0.051	0.282	0.290	0.183	0.154	0.33	0.52	0.50	
		Left Cheek	0.521	0.347	0.517	0.280	0.568	0.87	1.32	1.61	Case 5
		Left Tilted	0.067	0.195	0.589	0.258	0.432	0.26	0.91	1.09	
FR1 n26	Ant 11	Right Cheek	0.246	0.090	0.243	0.157	0.150	0.34	0.65	0.64	
		Right Tilted	0.057	0.282	0.290	0.183	0.154	0.34	0.53	0.50	
		Left Cheek	0.545	0.347	0.517	0.280	0.568	0.89	1.34	1.63	Case 6
		Left Tilted	0.077	0.195	0.589	0.258	0.432	0.27	0.92	1.10	



17.3 Hotspot Exposure Conditions

< WWAN DSI 6, WLAN Power Reduce Level 4, BT Full >

WWAN1		Exposure Position	1	2	3	5	6	1+2 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+3+6 Summed 1g SAR (W/kg)
			WWAN1 1g SAR (W/kg)	2.4GHz WLAN Ant 23+24 1g SAR (W/kg)	5GHz WLAN Ant 22+24 1g SAR (W/kg)	Bluetooth Ant 23 1g SAR (W/kg)	Bluetooth Ant 24 1g SAR (W/kg)			
All	Ant 13	Front	0.262	0.289	0.179	0.050	0.074	0.55	0.49	0.52
		Back	0.423	0.453	0.235	0.075	0.085	0.88	0.73	0.74
		Left Side	0.230		0.125			0.23	0.36	0.36
		Right Side		0.440	0.293	0.001	0.091	0.44	0.29	0.38
		Top Side	0.398	0.160	0.384	0.125	0.069	0.56	0.91	0.85
		Bottom Side						0.00	0.00	0.00
All	Ant 12	Front	0.328	0.289	0.179	0.050	0.074	0.62	0.56	0.58
		Back	0.356	0.453	0.235	0.075	0.085	0.81	0.67	0.68
		Left Side	0.427		0.125			0.43	0.55	0.55
		Right Side		0.440	0.293	0.001	0.091	0.44	0.29	0.38
		Top Side	0.119	0.160	0.384	0.125	0.069	0.28	0.63	0.57
		Bottom Side						0.00	0.00	0.00
All	Ant 25	Front	0.253	0.289	0.179	0.050	0.074	0.54	0.48	0.51
		Back	0.261	0.453	0.235	0.075	0.085	0.71	0.57	0.58
		Left Side			0.125			0.00	0.13	0.13
		Right Side	0.476	0.440	0.293	0.001	0.091	0.92	0.77	0.86
		Top Side	0.095	0.160	0.384	0.125	0.069	0.26	0.60	0.55
		Bottom Side						0.00	0.00	0.00
All	Ant 26	Front	0.540	0.289	0.179	0.050	0.074	0.83	0.77	0.79
		Back	0.616	0.453	0.235	0.075	0.085	1.07	0.93	0.94
		Left Side			0.125			0.00	0.13	0.13
		Right Side	0.762	0.440	0.293	0.001	0.091	1.20	1.06	1.15
		Top Side		0.160	0.384	0.125	0.069	0.16	0.51	0.45
		Bottom Side						0.00	0.00	0.00
All	Ant 11	Front	0.553	0.289	0.179	0.050	0.074	0.84	0.78	0.81
		Back	0.644	0.453	0.235	0.075	0.085	1.10	0.95	0.96
		Left Side	0.953		0.125			0.95	1.08	1.08
		Right Side		0.440	0.293	0.001	0.091	0.44	0.29	0.38
		Top Side		0.160	0.384	0.125	0.069	0.16	0.51	0.45
		Bottom Side						0.00	0.00	0.00
All	Ant 22	Front	0.104	0.289	0.179	0.050	0.074	0.39	0.33	0.36
		Back	0.184	0.453	0.235	0.075	0.085	0.64	0.49	0.50
		Left Side	0.045		0.125			0.05	0.17	0.17
		Right Side	0.046	0.440	0.293	0.001	0.091	0.49	0.34	0.43
		Top Side	0.288	0.160	0.384	0.125	0.069	0.45	0.80	0.74
		Bottom Side						0.00	0.00	0.00
All	Ant 41	Front	0.226	0.289	0.179	0.050	0.074	0.52	0.46	0.48
		Back	0.266	0.453	0.235	0.075	0.085	0.72	0.58	0.59
		Left Side	0.076		0.125			0.08	0.20	0.20
		Right Side		0.440	0.293	0.001	0.091	0.44	0.29	0.38
		Top Side		0.160	0.384	0.125	0.069	0.16	0.51	0.45
		Bottom Side	0.424					0.42	0.42	0.42



17.4 Body-Worn Accessory Exposure Conditions

<WWAN DSI 4/7, WLAN Power Reduce Level 3, BT Full >			1	2	3	5	6	1+2	1+3+5	1+3+6
WWAN1		Exposure Position	WWAN1	2.4GHz WLAN Ant 23+24	5GHz WLAN Ant 22+24	Bluetooth Ant 23	Bluetooth Ant 24	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	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	Ant 13	Front	0.623	0.210	0.151	0.030	0.027	0.83	0.80	0.80
		Back	1.027	0.304	0.190	0.045	0.035	1.33	1.26	1.25
All	Ant 12	Front	0.308	0.210	0.151	0.030	0.027	0.52	0.49	0.49
		Back	0.334	0.304	0.190	0.045	0.035	0.64	0.57	0.56
All	Ant 25	Front	0.259	0.210	0.151	0.030	0.027	0.47	0.44	0.44
		Back	0.273	0.304	0.190	0.045	0.035	0.58	0.51	0.50
All	Ant 26	Front	0.612	0.210	0.151	0.030	0.027	0.82	0.79	0.79
		Back	0.686	0.304	0.190	0.045	0.035	0.99	0.92	0.91
All	Ant 11	Front	0.701	0.210	0.151	0.030	0.027	0.91	0.88	0.88
		Back	0.744	0.304	0.190	0.045	0.035	1.05	0.98	0.97
All	Ant 22	Front	0.100	0.210	0.151	0.030	0.027	0.31	0.28	0.28
		Back	0.176	0.304	0.190	0.045	0.035	0.48	0.41	0.40
All	Ant 41	Front	0.283	0.210	0.151	0.030	0.027	0.49	0.46	0.46
		Back	0.315	0.304	0.190	0.045	0.035	0.62	0.55	0.54

**17.5 Product specific 10g SAR Exposure Conditions****Remark:**

1. 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.

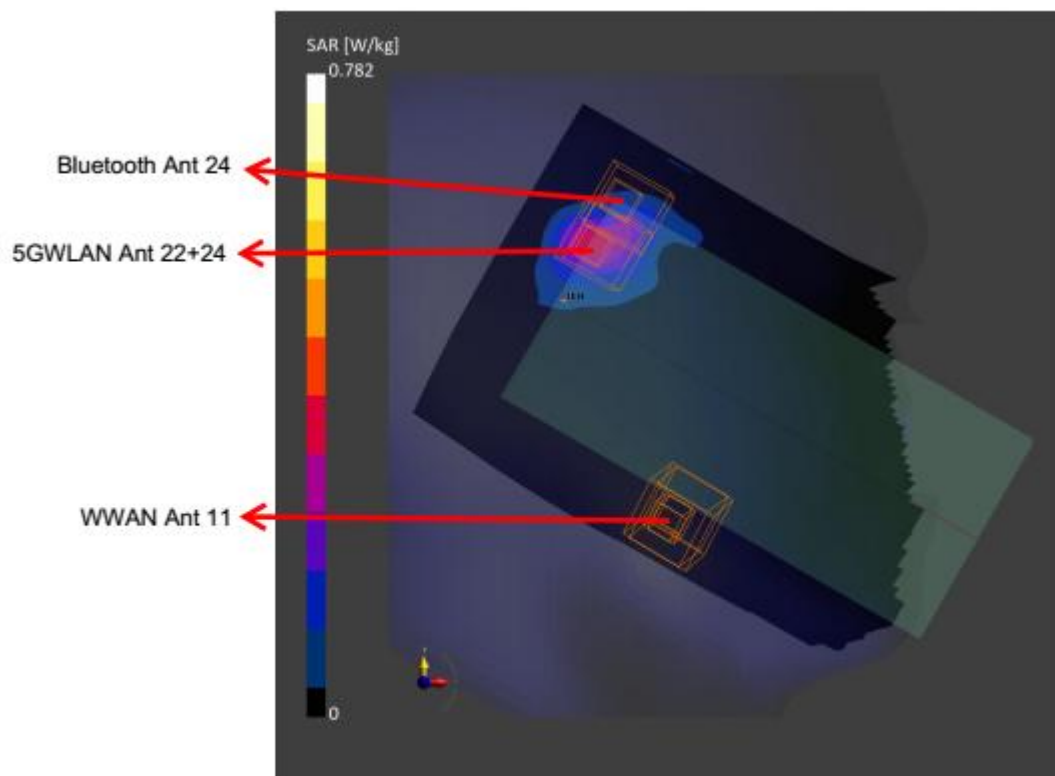
< WWAN DSI 4/5, WLAN Power Reduce Level 3 >

WWAN1		Exposure Position	1	2	3	1+2+3 Summed 10g SAR (W/kg)
			WWAN1	5GHz WLAN Ant 22+24	NFC NFC Ant	
			10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
All	Ant 13	Front at 0mm	1.361	1.285		2.65
		Front at 11mm	0.542			0.54
		Back at 0mm	1.841	0.339	0.009	2.19
		Back at 15mm	0.496			0.50
		Left Side at 0mm	2.938	0.221		3.16
		Left Side at 15mm	0.321			0.32
		Right Side at 0mm		0.826		0.83
		Top Side at 0mm	1.439	2.025		3.46
		Top Side at 15mm	0.517			0.52
All	Ant 11	Front at 0mm	1.068	1.285		2.35
		Front at 11mm				0.00
		Back at 0mm	1.100	0.339	0.009	1.45
		Back at 15mm				0.00
		Left Side at 0mm	2.322	0.221		2.54
		Left Side at 15mm				0.00
		Right Side at 0mm		0.826		0.83
		Top Side at 0mm		2.025		2.03
		Top Side at 15mm				0.00

17.6 SPLSR Evaluation and Analysis

General Note:

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



Head Left Cheek_ 0mm



Case No	Band	Position	SAR (W/kg)	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					(mm)	X	Y	Z				
Case 1	WCDMA V-Ant 11	Left Cheek	0.562	0.56	0mm	40.5	242.7	-173.0	99.4	1.65	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm	26.5	341.1	-173.8				
	5GWLAN Ant 22+24		0.568		0mm							
	WCDMA V-Ant 11	Left Cheek	0.562	0.56	0mm	40.5	242.7	-173.0	89.5	1.65	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm							
	5GWLAN Ant 22+24		0.568		0mm	13.2	327.9	-170.0				
Case 2	WCDMA XIX-Ant 11	Left Cheek	0.578	0.578	0mm	40.5	242.7	-173.0	99.4	1.66	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm	26.5	341.1	-173.8				
	5GWLAN Ant 22+24		0.568		0mm							
	WCDMA XIX-Ant 11	Left Cheek	0.578	0.578	0mm	40.5	242.7	-173.0	89.5	1.66	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm							
	5GWLAN Ant 22+24		0.568		0mm	13.2	327.9	-170.0				
Case 3	LTE Band 12-Ant 11	Left Cheek	0.546	0.546	0mm	39.8	241.9	-172.6	100.1	1.63	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm	26.5	341.1	-173.8				
	5GWLAN Ant 22+24		0.568		0mm							
	LTE Band 12-Ant 11	Left Cheek	0.546	0.546	0mm	39.8	241.9	-172.6	90.1	1.63	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm							
	5GWLAN Ant 22+24		0.568		0mm	13.2	327.9	-170.0				
Case 4	LTE Band 13-Ant 11	Left Cheek	0.528	0.528	0mm	39.8	241.9	-172.6	100.1	1.61	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm	26.5	341.1	-173.8				
	5GWLAN Ant 22+24		0.568		0mm							
	LTE Band 13-Ant 11	Left Cheek	0.528	0.528	0mm	39.8	241.9	-172.6	90.1	1.61	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm							
	5GWLAN Ant 22+24		0.568		0mm	13.2	327.9	-170.0				
Case 5	LTE Band 26-Ant 11	Left Cheek	0.545	0.55	0mm	40.5	242.7	-173.0	99.4	1.63	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm	26.5	341.1	-173.8				
	5GWLAN Ant 22+24		0.568		0mm							
	LTE Band 26-Ant 11	Left Cheek	0.545	0.55	0mm	40.5	242.7	-173.0	89.5	1.63	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm							
	5GWLAN Ant 22+24		0.568		0mm	13.2	327.9	-170.0				
Case 6	FR1 n26-Ant 11	Left Cheek	0.545	0.55	0mm	40.5	242.7	-173.0	99.4	1.63	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm	26.5	341.1	-173.8				
	5GWLAN Ant 22+24		0.568		0mm							
	FR1 n26-Ant 11	Left Cheek	0.545	0.55	0mm	40.5	242.7	-173.0	89.5	1.63	0.02	Not required
	Bluetooth 2 Ant 24		0.517	1.09	0mm							
	5GWLAN Ant 22+24		0.568		0mm	13.2	327.9	-170.0				

Test Engineer : Kevin Xu, David Dai, Bin He, Bran Yin, Seth Jin

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 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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