

FCC SAR Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2141-2
FCC ID : IHDT56ZP2
STANDARD : FCC 47 CFR Part 2 (2.1093)

We, Sporton International (ShenZhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures 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 (ShenZhen) Inc., the test report shall not be reproduced except in full.

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Revision History

[illegible]

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Motorola Mobility LLC, Mobile Cellular Phone, XT2141-2**, are as follows.

Highest 1g SAR Summary						
Equipment Class	Frequency Band		Head (Separation 0mm)	Hotspot (Separation 5mm)	Body-worn (Separation 5mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
			1g SAR (W/kg)			
Licensed	GSM	GSM850	0.17	0.73	0.73	1.59
		GSM1900	<0.10	1.24	1.16	
	WCDMA	Band V	1.11	1.14	1.14	
		Band IV	1.24	1.15	1.24	
		Band II	1.19	1.24	1.22	
	LTE	Band 71	1.00	0.71	0.71	
		Band 12/Band 17	1.13	0.79	0.79	
		Band 13	1.10	1.25	1.25	
		Band 14	1.16	1.00	0.89	
		Band 26/Band 5	1.23	1.22	1.22	
		Band 66/ Band 4	1.22	1.19	1.22	
		Band 25/ Band 2	1.25	1.12	1.24	
		Band 30	0.11	1.17	1.20	
		Band 7	0.12	1.08	1.24	
		Band 41/ Band 38	<0.10	1.25	1.25	
		5G NR	n71	0.91	0.49	
	n5		1.23	1.00	1.11	
	n66		1.24	1.25	1.21	
	n25/ n2		1.19	1.17	1.22	
	n41		0.20	1.19	1.15	
	n77/n78		1.16	1.00	1.16	
DTS	WLAN	2.4GHz WLAN	1.16	0.38	1.16	1.52
NII		5GHz WLAN	0.72	0.35	1.16	1.59
DSS	Bluetooth	2.4GHz Bluetooth	0.25	0.13	0.13	1.59

Highest 10g SAR Summary					
Equipment Class	Frequency Band		Product Specific 10g SAR (W/kg) (Separation 0mm)	Highest Simultaneous Transmission 10g SAR (W/kg)	
Licensed	GSM	GSM1900	2.66	3.90	
		WCDMA	Band V		2.03
	Band IV		3.10		
	Band II		3.00		
	LTE	Band 13	1.78		
		Band 26/ Band 5	2.24		
		Band 66/ Band 4	3.17		
		Band 25/ Band 2	3.11		
		Band 30	3.13		
		Band 7	2.94		
		Band 41/ Band 38	2.97		
		5G NR	n66		3.13
			n25/ n2		3.07
	n41		3.17		
	n77/n78		3.12		
DTS	WLAN	2.4GHz WLAN	1.17	3.80	
NII		5GHz WLAN	2.90	3.90	
Date of Testing:			2021/5/26 ~ 2021/7/3		

Remark:

1. This device supports both LTE B4/5/17/38/2 and B66/26/12/41/25. Since the supported frequency span for LTE B4/5/17/38/2 falls completely within the supports frequency span for LTE B66/26/12/41/25, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66/26/12/41/25.
2. This device supports both 5G NR n2/ n78 and 5G NR n25/ n77. Since the supported frequency span for 5G NR n2/ n78 falls completely within the supports frequency span for 5G NR n25/ n77, both NR bands have the same target power, and both NR bands share the same transmission path; therefore, SAR was only assessed for 5G NR n25/ n77.

Declaration of Conformity:

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

Comments and Explanations:

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

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

2. Administration Data

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

Testing Laboratory		
Test Firm	Sporton International (Shenzhen) Inc.	
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.	FCC Designation No.	FCC Test Firm Registration No.
	CN1256	421272

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

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

3. Guidance Applied

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

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

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2141-2
FCC ID	IHDT56ZP2
IMEI Code	354398490013174
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 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 ~ 5700 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz WLAN 6E U-NII-5: 5925 MHz ~ 6425 MHz WLAN 6E U-NII-6: 6425 MHz ~ 6525 MHz WLAN 6E U-NII-7: 6525 MHz ~ 6875 MHz WLAN 6E U-NII-8: 6875 MHz ~ 7125 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+(16QAM uplink is not supported) LTE: QPSK, 16QAM, 64QAM 5G NR : CP-OFDM / DFT-s-OFDM, PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM WLAN 2.4GHz: 802.11b/g/n HT20 WLAN 2.4GHz: 802.11ac/ax VHT20/HE20 WLAN 5GHz: 802.11a/n HT20/HT40 WLAN 5GHz: 802.11ac VHT20/VHT40/VHT80/VHT160



	WLAN 5GHz: 802.11ax HE20/HE40/HE80/HE160 WLAN 6E : 802.11a/n HT20/HT40 WLAN 6E : 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 6E : 802.11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC:ASK
HW Version	DVT2
SW Version	RRM31.43
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: 802.11n HT40 is not supported in 2.4G WLAN. - WLAN operation in 5600 MHz ~ 5650 MHz is notched - This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation. - This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications. - This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only). - The 2.4GHz/5GHz/6GHz WLAN can transmit in MIMO antenna mode only and it has no SISO antenna mode. - This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12. - The device implements the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E. - For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head, body-worn, hotspot, extremity. - For some WWAN bands, receiver off/sensor on reduced power level is higher than hotspot reduced power level, so front/back receiver off SAR can represent hotspot conservatively. - This device implements antenna tuning techniques for several WWAN (cellular) operating modes and frequencies for the purpose of improving antenna efficiency over a broad range of frequencies. Specifically, these techniques are employed in the WCDMA, LTE and 5G NR modes. In this report SAR was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing. The detail descriptions of the antenna tuner and supplemental data for additional information can be referred to section 18 and appendix F. - LTE Band 41 supports HPUE, HPUE power and SAR testing performed separately. - For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission. 5G NR n41/ n77 supports HPUE, n41 HPUE only limit SA mode, HPUE power and SAR testing performed separately. - 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. 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. 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. - 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. - This device supports 5G NR FR1 bands as following table, including NSA mode and SA mode. - SAR Power density test report for WIFI 6E U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth, always chose higher SAR of WLAN5G U-NII-1/2A/2C/3 and U-NII-5/6/7/8.	

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20
	n5	FDD	15	5, 10, 15, 20
	n25	FDD	15	5, 10, 15, 20, 25, 30, 40
	n66	FDD	15	5, 10, 15, 20, 30, 40
	n71	FDD	15	5, 10, 15, 20
	n41	TDD	30	20, 30, 40, 50, 60, 80, 90, 100
	n77	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
SA	n78	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
	n2	FDD	15	5, 10, 15, 20
	n25	FDD	15	5, 10, 15, 20, 25, 30, 40
	n66	FDD	15	5, 10, 15, 20, 30, 40
	n71	FDD	15	5, 10, 15, 20
	n41	TDD	30	20, 30, 40, 50, 60, 80, 90, 100
	n77	TDD	30	20, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	20, 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		IHDT56ZP2							
Equipment Name		Mobile Cellular Phone							
Operating Frequency Range of each LTE transmission band		LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz							
Channel Bandwidth		LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz							
uplink modulations used		QPSK / 16QAM / 64QAM							
LTE Voice / Data requirements		Voice and Data							
LTE Release Version		R15, Cat12							
CA Support		Supported, Uplink and Downlink							
LTE MPR permanently built-in by design		Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3							
		Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})					MPR (dB)	
			1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz		20 MHz
		QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
		16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
		16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
		64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
		64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
		256 QAM					≥ 1	≤ 5	
LTE A-MPR		In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)							
Spectrum plots for RB configuration		A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.							
Power reduction applied to satisfy SAR compliance		Yes, head/body-worn/ hotspot/extremity will trigger reduced power for some LTE bands, 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 41C with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance. 2. This device supports maximum of 4 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.							

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				
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)					
L	23205		779.5		23230		782					
M	23230		782									
H	23255		784.5									
LTE Band 14												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Channel #		Channel #		Freq.(MHz)					
L	23305		790.5		23330		793					
M	23330		793									
H	23355		795.5									
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)					
L	23755		706.5		23780		709					
M	23790		710		23790		710					
H	23825		713.5		23800		711					

LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5	26790	822.5
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5	26940	838.5
LTE Band 30												
	Bandwidth 5 MHz					Bandwidth 10 MHz						
	Channel #		Freq.(MHz)			Channel #		Freq.(MHz)				
L	27685		2307.5			27710		2310				
M	27710		2310									
H	27735		2312.5									
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580	37875	2582.5	37900	2585
M	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610	38125	2607.5	38100	2605
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506	39775	2508.5	39800	2511
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5	40197	2550.7	40210	2552
M	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5	41042	2635.2	41030	2634
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680	41465	2677.5	41440	2675
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770
LTE Band 71												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133147	665.5	133172	668	133197	670.5	133222	673	133247	675.5	133272	678
M	133247	675.5	133272	678	133297	680.5	133322	683	133347	685.5	133372	688
H	133447	695.5	133422	693	133397	690.5	133372	688	133347	685.5	133322	683

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 n25 : 1850 MHz ~ 1915 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n25 : 5MHz, 10MHz, 15MHz, 20MHz, 25MHz, 30MHz, 40MHz 5G NR n41: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 30MHz, 40MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n77: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz 5G NR n78: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz
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 B5/7/12/13/71/66
LTE Anchor Bands for n5	LTE B2/7/66
LTE Anchor Bands for n25	LTE B12/66
LTE Anchor Bands for n66	LTE B2/5/7/12/13
LTE Anchor Bands for n71	LTE B2/7/66
LTE Anchor Bands for n41	LTE B2/25
LTE Anchor Bands for n77	LTE B2/5/13/66
LTE Anchor Bands for n78	LTE B2/5/7/13/66/71

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 25														
	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	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379000	1895
NR Band 66														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz			
	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	345000	1725	346000	1730		
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745		
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353000	1765	352000	1760		
NR Band 71														
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz				
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)			
L	133100	665.5		133600	668		134100	670.5		134600	673			
M	136100	680.5		136100	680.5		136100	680.5		136100	680.5			
H	139100	695.5		138600	693		138100	690.5		137600	688			

NR Band 41																
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)	
L 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	
H 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 20MHz		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)
L	647334	3710.01	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	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	664666	3969.99	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930

NR Band 78																	
Bandwidth 20MHz		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)
L 647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02		
M 650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H 652668	3789.99	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		

For Par27Q

NR Band 77																	
Bandwidth 20MHz		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)
L 630668	3460.02	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
H 636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

NR Band 78																		
	Bandwidth 20MHz		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)
L	630668	3460.02	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
H	636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

5. Smart Transmit feature for RF Exposure compliance

The RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with RF exposure limit over a defined time window, for SAR (transmit frequency ≤ 6 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.

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) to enable the Smart Transmit 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 $f < 6$ GHz.

<SAR design target and uncertainty>

	Uncertainty dB (k=2)
Total uncertainty	1.5

To account for total uncertainty, SAR_design_target should be determined as:

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

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

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

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

Band	Antenna	Head Standalone	Head Simultaneous	Body Worn Standalone	Body Worn Simultaneous	Hotspot	Extremity Standalone	Extremity Simultaneous	sensor off/full power	P _{max} *
		DSI 2	DSI 2	DSI 3	DSI 3	DSI 3	DSI 6	DSI 6	DSI 4	
GSM850(3 Tx slots)**	0	32.8	32.8	26.5	26.5	26.5	23.2	23.2	23.2	23.2
GSM1900(3 Tx slots)**	0	35.5	35.5	17.7	15.2	15.2	21.2	21.2	21.2	21.2
WCDMA V	0	32.5	32.5	25.5	25.5	25.5	24.0	24.0	24.0	24.0
	1	21.0	20.0	23.0	21.5	21.5	25.9	24.9	23.0	23.0
WCDMA IV	0	33.6	33.6	18.5	16.5	16.5	20.5	20.5	23.0	23.0
	1	15.5	14.5	16.5	14.5	14.5	20.0	19.0	21.5	21.5
WCDMA II	0	33.3	33.3	17.5	15.0	15.0	20.0	20.0	23.0	23.0
	1	20.0	19.0	19.5	18.0	18.0	21.5	20.0	21.5	21.5
LTE B71	0	32.7	32.7	27.7	27.7	27.7	23.5	23.5	23.5	23.5
	1	23.0	23.0	26.4	25.4	25.4	23.0	23.0	23.0	23.0
LTE B12/17	0	31.9	31.9	26.7	26.7	26.7	23.5	23.5	23.5	23.5
	1	22.5	21.0	25.5	24.5	24.5	23.5	23.5	22.5	22.5
LTE B13	0	30.1	30.1	24.5	24.5	24.5	27.0	27.0	23.5	23.5
	1	21.5	20.5	24.8	23.6	23.6	22.5	22.5	22.5	22.5
LTE B14	0	31.0	31.0	26.0	26.0	26.0	23.5	23.5	23.5	23.5
	1	21.0	20.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
LTE B26/5	0	32.3	32.3	24.7	24.7	24.7	26.8	26.8	23.5	23.5
	1	21.5	20.5	22.5	21.5	21.5	25.0	23.9	22.5	22.5
LTE B66/4	0	33.6	33.6	18.0	15.5	15.5	20.5	20.5	23.0	23.0
	1	15.5	14.5	16.5	14.5	14.5	21.0	20.0	21.0	21.0
LTE B25/2	0	32.8	32.8	17.0	14.0	14.0	19.0	19.0	22.0	22.0
	1	15.0	14.0	16.0	14.0	14.0	19.0	17.5	20.0	20.0
LTE B30	0	33.1	33.1	17.5	16.5	16.5	20.5	20.5	21.5	21.5
LTE B7	0	34.1	34.1	20.5	19.0	19.0	22.0	22.0	23.0	23.0
LTE B41/38(PC3)**	0	35.8	35.8	21.0	18.9	18.9	23.2	23.2	21.0	21.0
LTE B41 (PC2)**	0								22.4	22.4
N71	0	34.3	34.3	29.5	29.5	29.5	23.0	23.0	23.0	23.0
	1	25.4	24.4	28.1	27.1	27.1	23.0	23.0	23.0	23.0
N5	0	33.5	33.5	26.5	26.5	26.5	23.0	23.0	23.0	23.0
	1	22.0	21.0	24.5	22.5	22.5	23.0	23.0	23.0	23.0
N66	0	35.9	35.9	19.0	16.5	16.5	21.5	21.5	23.0	23.0
	1	16.5	15.5	16.5	15.5	15.5	22.0	21.0	23.0	23.0
N25/2	0	35.9	35.9	18.5	15.0	15.0	20.5	20.5	23.0	23.0
	1	16.0	15.0	17.5	15.5	15.5	21.0	20.0	23.0	23.0
N41(PC3)**	0	34.6	34.6	21.0	19.5	19.5	22.0	22.0	23.0	23.0
N41(PC2)**	0								26.0	26.0
N77/78(PC3)**	3	20.0	19.0	15.5	15.0	15.0	18.5	18.0	23.0	23.0
N77(PC2)**	3								26.0	26.0

*P_{max} is used for RF tune up procedure. The maximum allowed output power is equal to P_{max} + 1.0 dB uncertainty.

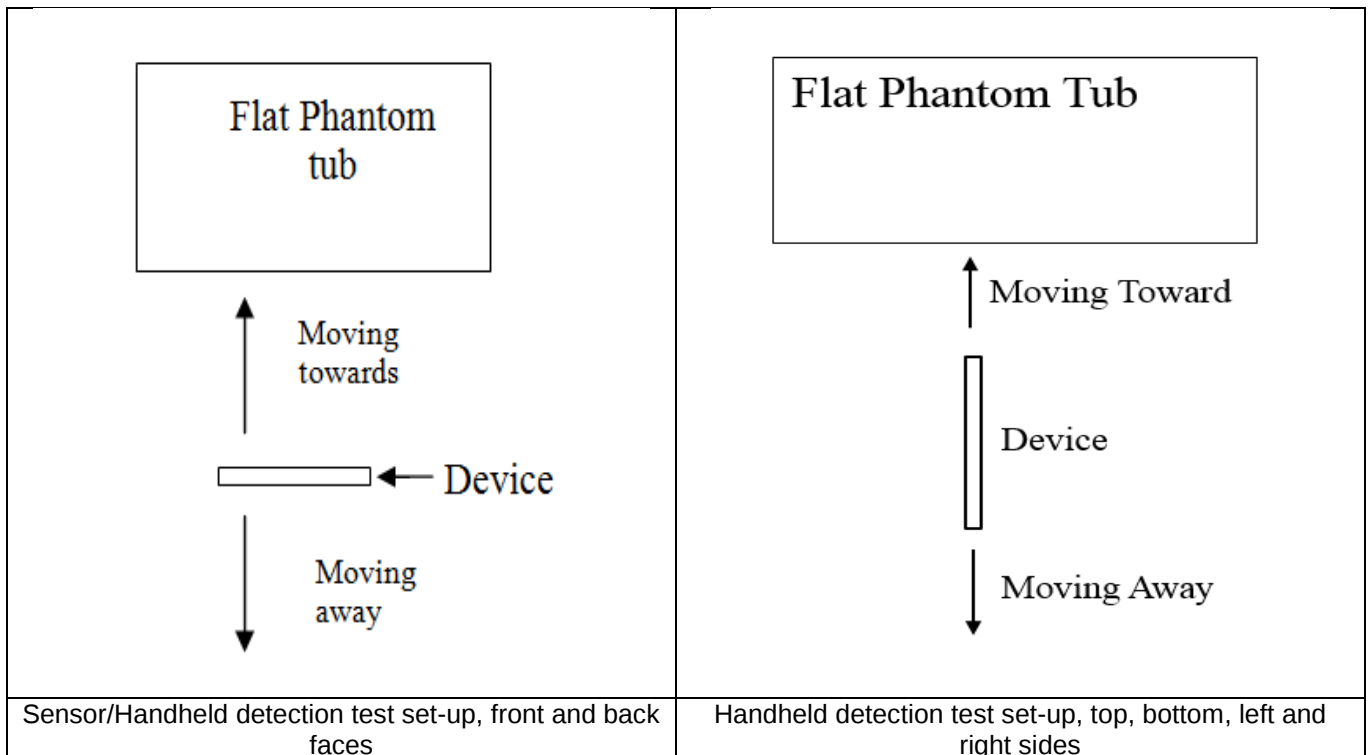
**All P_{limit} power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM).

The max allowed output power is the P_{limit} + 1.0 dB device 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.
2. In the preliminary triggering distance testing, the tissue-equivalent medium for different frequency bands were used for verification; no other frequency bands tissue-equivalent medium was found to result in shortest triggering distance than that for 1900MHz, and the tissue-equivalent medium for 1900MHz was used for formal proximity sensor triggering testing.
3. Capacitive proximity sensors placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's body at the front or back of the device.
4. The output power will reduce to body worn power level when top and bottom sensor pad be detected.
5. The sensors used to detect the proximity of the user's body at the front or back surface of the device use a detection threshold distance. The data shown in the sections below shows the distance(s). When front or back body worn condition is detected reduced power will be active.
6. The device employs proximity sensors also can detect the presence of the user's a finger or hand when handheld state at the front/back/top/bottom/left/right side of the device. When front/back/top/bottom/left/right side of handheld condition is detected reduced power will be active.
7. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed:



<P-Sensor>

Proximity Sensor Triggering Distance (mm)				
Position	Front		Back	
	Moving towards	Moving away	Moving towards	Moving away
Minimum	17	21	28	32

<Handheld for ANT0>

Proximity Sensor Triggering Distance (mm)						
Position	Front		Back		Bottom Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	7	13	9	16	12	18

<Handheld for ANT1>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Right Side		Top Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	7	11	9	18	6	8	10	18

<Handheld for ANT3>

Proximity Sensor Triggering Distance (mm)				
Position	Back		Left Side	
	Moving towards	Moving away	Moving towards	Moving away
Minimum	13	16	6	7

<Handheld for ANT4>

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

<Handheld for ANT12>

Proximity Sensor Triggering Distance (mm)		
Position	Back	
	Moving towards	Moving away
Minimum	7	9

7. RF Exposure Limits

7.1 Uncontrolled Environment

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

7.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

8. Specific Absorption Rate (SAR)

8.1 Introduction

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

8.2 SAR Definition

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

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

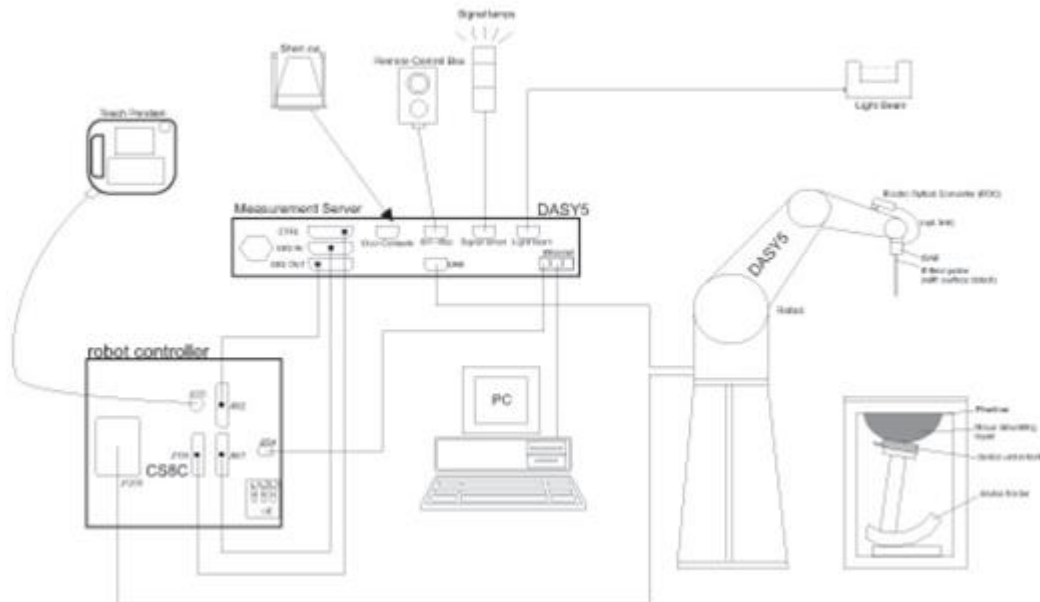
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. System Description and Setup

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



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

9.1 E-Field Probe

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

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – >6 GHz Linearity: ± 0.2 dB (30 MHz – 6 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 in the frequency range of 30 MHz to 6 GHz. ELI4 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. 06, 2018	Nov. 24, 2021
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 05, 2018	Nov. 24, 2021
SPEAG	1750MHz System Validation Kit	D1750V2	1137	Jul. 30, 2018	Jul. 22, 2021
SPEAG	1900MHz System Validation Kit	D1900V2	5d182	Dec. 07, 2018	Nov. 24, 2021
SPEAG	2300MHz System Validation Kit	D2300V2	1056	Nov. 01, 2018	Oct. 31, 2021
SPEAG	2450MHz System Validation Kit	D2450V2	924	Sep. 02, 2020	Sep. 01, 2021
SPEAG	2600MHz System Validation Kit	D2600V2	1070	Dec. 07, 2018	Nov. 24, 2021
SPEAG	3500MHz System Validation Kit	D3500V2	1076	Apr. 29, 2019	Apr. 14, 2022
SPEAG	3700MHz System Validation Kit	D3700V2	1037	Apr. 29, 2019	Apr. 14, 2022
SPEAG	3900MHz System Validation Kit	D3900V2	1022	Jul. 11, 2019	Jul. 10, 2022
SPEAG	5000MHz System Validation Kit	D5GHzV2	1167	Aug. 03, 2018	Aug. 02, 2021
SPEAG	Data Acquisition Electronics	DAE4	918	Jun. 22, 2020	Jun. 21, 2021
SPEAG	Data Acquisition Electronics	DAE3	360	Nov. 06, 2020	Nov. 05, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	7375	Dec. 21, 2020	Dec. 20, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	7577	Sep. 30, 2020	Sep. 29, 2021
SPEAG	SAM Twin Phantom	QD 000 P40 CD	1795	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio communication analyzer	MT8820C	6201300653	Jul. 21, 2020	Jul. 20, 2021
Anritsu	Radio communication analyzer	MT8821C	6201588577	Apr. 08, 2021	Apr. 07, 2022
Agilent	Wireless Communication Test Set	E5515C	MY50267224	Jul. 21, 2020	Jul. 20, 2021
Agilent	Network Analyzer	E5071C	MY46523671	Oct. 15, 2020	Oct. 14, 2021
Speag	Dielectric Assessment KIT	DAK-3.5	1071	Dec. 23, 2020	Dec. 22, 2021
Agilent	Signal Generator	N5181A	MY50145381	Dec. 25, 2020	Dec. 24, 2021
Anritsu	Power Sensor	MA2411B	1306099	Dec. 25, 2020	Dec. 24, 2021
Anritsu	Power Meter	ML2495A	1349001	Jul. 21, 2020	Jul. 20, 2021
Anritsu	Power Sensor	MA2411B	1207253	Dec. 25, 2020	Dec. 24, 2021
Anritsu	Power Meter	ML2495A	1218010	Dec. 25, 2020	Dec. 24, 2021
R&S	CBT BLUETOOTH TESTER	CBT	100963	Dec. 25, 2020	Dec. 24, 2021
R&S	Spectrum Analyzer	FSP7	100818	Jul. 21, 2020	Jul. 20, 2021
TES	Hygrometer	1310	200505600	Jul. 30, 2020	Jul. 29, 2021
Anymetre	Thermo-Hygrometer	JR593	2015030904	Jul. 21, 2020	Jul. 20, 2021
SPEAG	Device Holder	N/A	N/A	N/A	N/A
AR	Amplifier	5S1G4	0333096	Note 1	
mini-circuits	Amplifier	ZVE-3W-83+	599201528	Note 1	
ARRA	Power Divider	A3200-2	N/A	Note 1	
ET Industries	Dual Directional Coupler	C-058-10	N/A	Note 1	
Weinschel	Attenuator 2	3M-20	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.

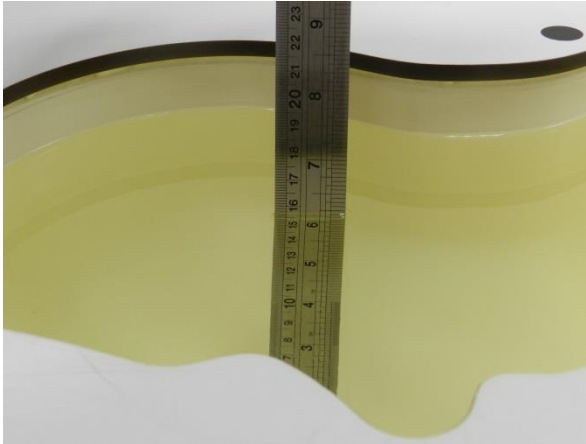


Fig 11.1 Photo of Liquid Height for Head SAR

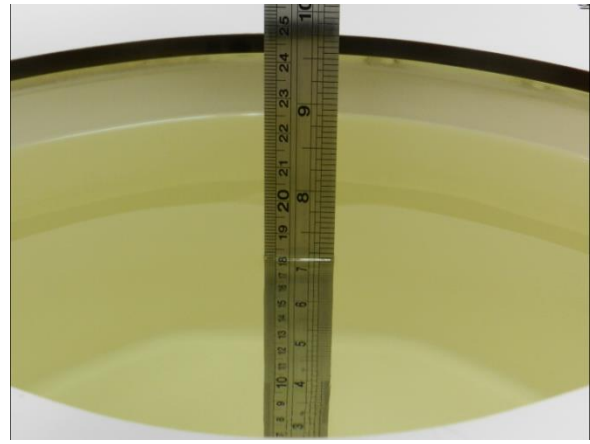


Fig 11.2 Photo of Liquid Height for Body SAR

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	22.4	0.880	40.797	0.89	41.90	-1.12	-2.63	±5	2021/5/30
750	Head	22.3	0.890	40.918	0.89	41.90	0.00	-2.34	±5	2021/6/18
835	Head	22.4	0.914	41.826	0.90	41.50	1.56	0.79	±5	2021/6/1
835	Head	22.3	0.875	40.675	0.90	41.50	-2.78	-1.99	±5	2021/6/17
835	Head	22.3	0.910	42.910	0.90	41.50	1.11	3.40	±5	2021/6/30
1750	Head	22.5	1.388	41.364	1.37	40.10	1.31	3.15	±5	2021/5/26
1750	Head	22.4	1.375	41.541	1.37	40.10	0.36	3.59	±5	2021/6/13
1750	Head	22.5	1.339	39.213	1.37	40.10	-2.26	-2.21	±5	2021/6/25
1900	Head	22.5	1.455	39.186	1.40	40.00	3.93	-2.04	±5	2021/5/28
1900	Head	22.4	1.446	39.090	1.40	40.00	3.29	-2.27	±5	2021/6/11
1900	Head	22.5	1.398	38.705	1.40	40.00	-0.14	-3.24	±5	2021/6/26
2300	Head	22.3	1.601	39.084	1.67	39.50	-4.13	-1.05	±5	2021/6/3
2300	Head	22.4	1.715	39.371	1.67	39.50	2.69	-0.33	±5	2021/6/27
2450	Head	22.5	1.850	38.466	1.80	39.20	2.78	-1.87	±5	2021/6/6
2450	Head	22.5	1.820	39.753	1.80	39.20	1.11	1.41	±5	2021/6/29
2600	Head	22.4	2.051	38.105	1.96	39.00	4.64	-2.29	±5	2021/6/4
2600	Head	22.5	1.899	39.208	1.96	39.00	-3.11	0.53	±5	2021/6/15
2600	Head	22.4	1.940	38.103	1.96	39.00	-1.02	-2.30	±5	2021/6/28
3500	Head	22.6	2.891	36.555	2.91	37.90	-0.65	-3.55	±5	2021/6/19
3500	Head	22.2	2.896	38.203	2.91	37.90	-0.48	0.80	±5	2021/7/1
3700	Head	22.6	3.041	36.281	3.12	37.70	-2.53	-3.76	±5	2021/6/20
3700	Head	22.3	3.011	36.767	3.12	37.70	-3.49	-2.47	±5	2021/7/2
3900	Head	22.7	3.198	36.062	3.33	37.51	-3.96	-3.86	±5	2021/6/21
3900	Head	22.4	3.322	39.126	3.33	37.51	-0.24	4.31	±5	2021/7/3
5250	Head	22.6	4.597	36.629	4.71	35.95	-2.40	1.89	±5	2021/6/8
5250	Head	22.6	4.565	35.648	4.71	35.95	-3.08	-0.84	±5	2021/6/22
5600	Head	22.7	5.006	36.080	5.07	35.50	-1.26	1.63	±5	2021/6/9
5600	Head	22.6	4.947	35.035	5.07	35.50	-2.43	-1.31	±5	2021/6/23
5750	Head	22.6	5.250	35.137	5.22	35.35	0.57	-0.60	±5	2021/6/10
5750	Head	22.5	5.100	34.768	5.22	35.35	-2.30	-1.65	±5	2021/6/24

12.3 System Performance Check Results

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

<1g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2021/5/30	750	Head	250	1099	7375	918	2.17	8.52	8.68	1.88
2021/6/18	750	Head	250	1099	7577	360	2.13	8.52	8.52	0.00
2021/6/1	835	Head	250	4d162	7375	918	2.47	9.61	9.88	2.81
2021/6/17	835	Head	250	4d162	7577	360	2.41	9.61	9.64	0.31
2021/6/30	835	Head	250	4d162	7577	360	2.40	9.61	9.60	-0.10
2021/5/26	1750	Head	250	1137	7375	918	9.07	36.50	36.28	-0.60
2021/6/13	1750	Head	250	1137	7577	360	8.84	36.50	35.36	-3.12
2021/6/25	1750	Head	250	1137	7577	360	9.07	36.50	36.28	-0.60
2021/5/28	1900	Head	250	5d182	7375	918	9.92	39.60	39.68	0.20
2021/6/11	1900	Head	250	5d182	7577	360	9.87	39.60	39.48	-0.30
2021/6/26	1900	Head	250	5d182	7577	360	9.55	39.60	38.20	-3.54
2021/6/3	2300	Head	250	1056	7375	918	11.50	49.90	46.00	-7.82
2021/6/27	2300	Head	250	1056	7577	360	12.10	49.90	48.40	-3.01
2021/6/6	2450	Head	250	924	7375	918	12.50	51.40	50.00	-2.72
2021/6/29	2450	Head	250	924	7577	360	12.90	51.40	51.60	0.39
2021/6/4	2600	Head	250	1070	7375	918	14.40	58.10	57.60	-0.86
2021/6/15	2600	Head	250	1070	7577	360	14.20	58.10	56.80	-2.24
2021/6/28	2600	Head	250	1070	7577	360	13.80	58.10	55.20	-4.99
2021/6/19	3500	Head	100	1076	7577	360	6.61	67.90	66.10	-2.65
2021/7/1	3500	Head	100	1076	7577	360	6.27	67.90	62.70	-7.66
2021/6/20	3700	Head	100	1037	7577	360	6.59	68.50	65.90	-3.80
2021/7/2	3700	Head	100	1037	7577	360	6.38	68.50	63.80	-6.86
2021/6/21	3900	Head	100	1022	7577	360	6.46	70.50	64.60	-8.37
2021/7/3	3900	Head	100	1022	7577	360	6.65	70.50	66.50	-5.67
2021/6/8	5250	Head	100	1167	7375	918	7.27	77.00	72.70	-5.58
2021/6/22	5250	Head	100	1167	7577	360	7.42	77.00	74.20	-3.64
2021/6/9	5600	Head	100	1167	7575	918	7.80	80.80	78.00	-3.47
2021/6/23	5600	Head	100	1167	7577	360	7.99	80.80	79.90	-1.11
2021/6/10	5750	Head	100	1167	7375	918	7.48	76.90	74.80	-2.73
2021/6/24	5750	Head	100	1167	7577	360	7.74	76.90	77.40	0.65

<10g SAR>

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2021/5/30	750	Head	250	1099	7375	918	1.47	5.64	5.88	4.26
2021/6/18	750	Head	250	1099	7577	360	1.43	5.64	5.72	1.42
2021/6/1	835	Head	250	4d162	7375	918	1.63	6.35	6.52	2.68
2021/6/17	835	Head	250	4d162	7577	360	1.60	6.35	6.40	0.79
2021/6/30	835	Head	250	4d162	7577	360	1.58	6.35	6.32	-0.47
2021/5/26	1750	Head	250	1137	7375	918	4.88	19.50	19.52	0.10
2021/6/13	1750	Head	250	1137	7577	360	4.77	19.50	19.08	-2.15
2021/6/25	1750	Head	250	1137	7577	360	4.85	19.50	19.40	-0.51
2021/5/28	1900	Head	250	5d182	7375	918	5.11	20.70	20.44	-1.26
2021/6/11	1900	Head	250	5d182	7577	360	5.09	20.70	20.36	-1.64
2021/6/26	1900	Head	250	5d182	7577	360	4.92	20.70	19.68	-4.93
2021/6/3	2300	Head	250	1056	7375	918	5.40	23.80	21.60	-9.24
2021/6/27	2300	Head	250	1056	7577	360	5.68	23.80	22.72	-4.54
2021/6/6	2450	Head	250	924	7375	918	5.63	24.00	22.52	-6.17
2021/6/29	2450	Head	250	924	7577	360	5.84	24.00	23.36	-2.67
2021/6/4	2600	Head	250	1070	7375	918	6.22	26.10	24.88	-4.67
2021/6/15	2600	Head	250	1070	7577	360	6.19	26.10	24.76	-5.13
2021/6/28	2600	Head	250	1070	7577	360	6.05	26.10	24.20	-7.28
2021/6/19	3500	Head	100	1076	7577	360	2.50	25.30	25.00	-1.19
2021/7/1	3500	Head	100	1076	7577	360	2.38	25.30	23.80	-5.93
2021/6/20	3700	Head	100	1037	7577	360	2.41	24.80	24.10	-2.82
2021/7/2	3700	Head	100	1037	7577	360	2.32	24.80	23.20	-6.45
2021/6/21	3900	Head	100	1022	7577	360	2.24	24.60	22.40	-8.94
2021/7/3	3900	Head	100	1022	7577	360	2.33	24.60	23.30	-5.28
2021/6/8	5250	Head	100	1167	7375	918	2.05	22.00	20.50	-6.82
2021/6/22	5250	Head	100	1167	7577	360	2.12	22.00	21.20	-3.64
2021/6/9	5600	Head	100	1167	7575	918	2.12	23.20	21.20	-8.62
2021/6/23	5600	Head	100	1167	7577	360	2.28	23.20	22.80	-1.72
2021/6/10	5750	Head	100	1167	7375	918	2.01	21.60	20.10	-6.94
2021/6/24	5750	Head	100	1167	7577	360	2.21	21.60	22.10	2.31

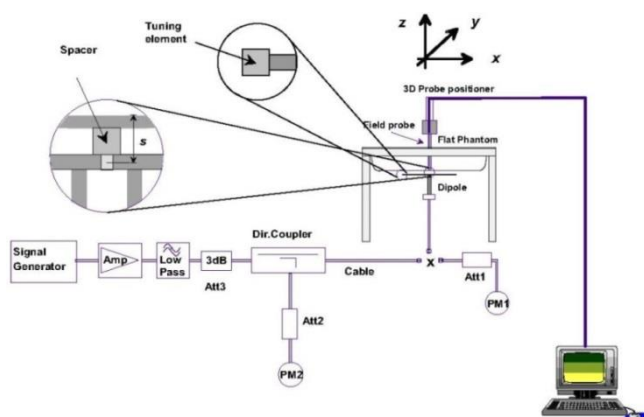


Fig 11.3.1 System Performance Check Setup



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.

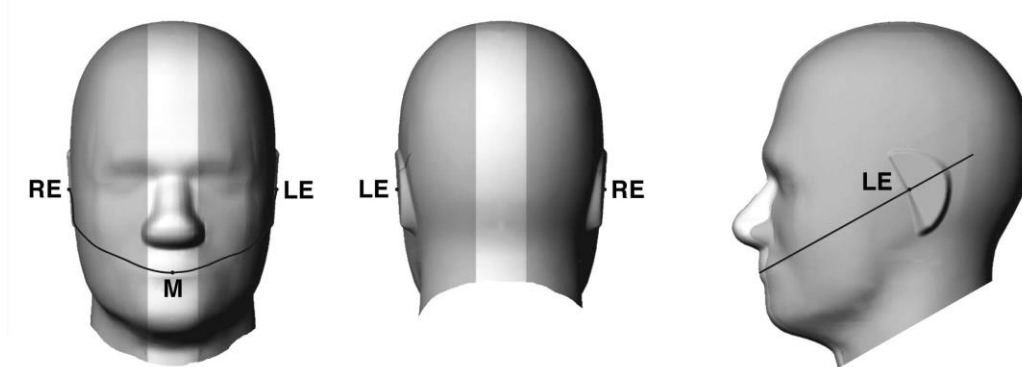


Fig 12.1.1 Front, back, and side views of SAM twin phantom

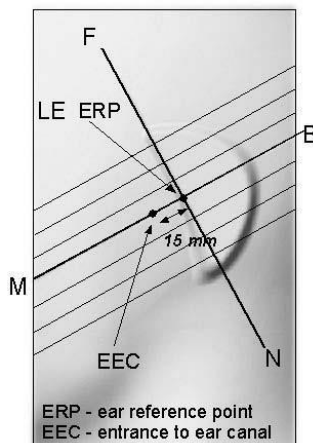


Fig 12.1.2 Close-up side view of phantom showing the ear region.

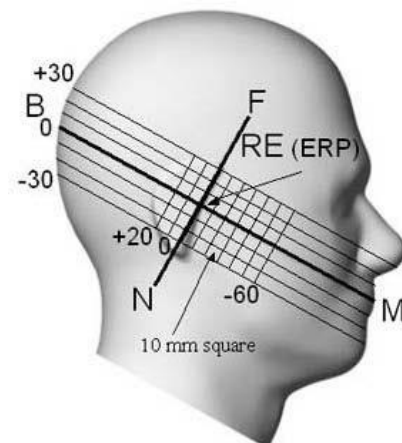


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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.

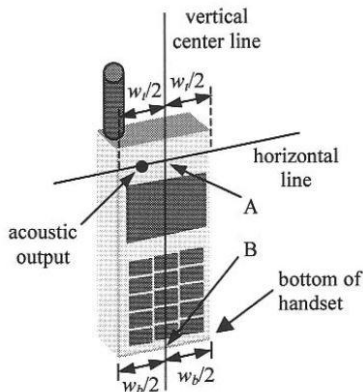


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

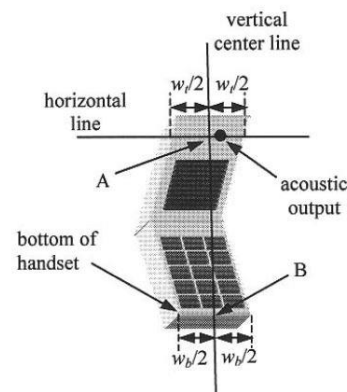


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

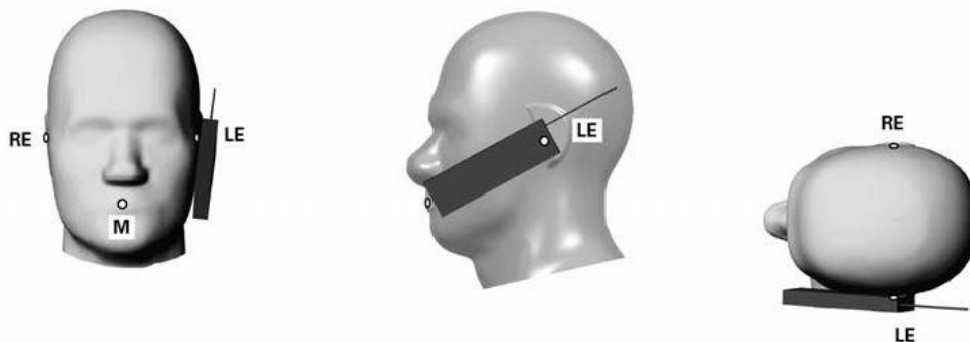


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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

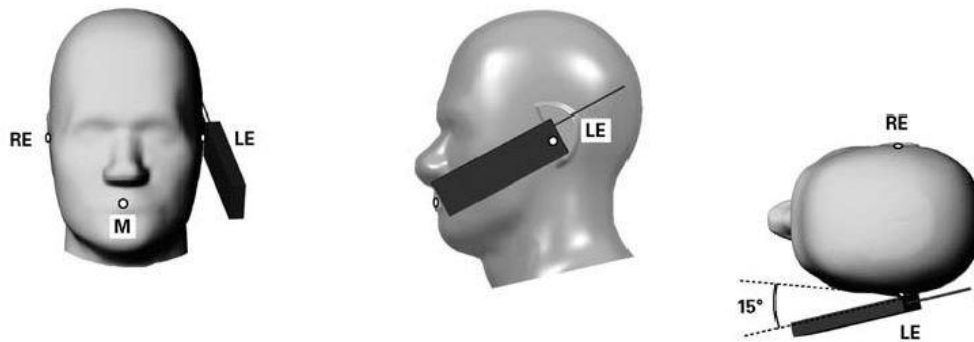


Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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

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

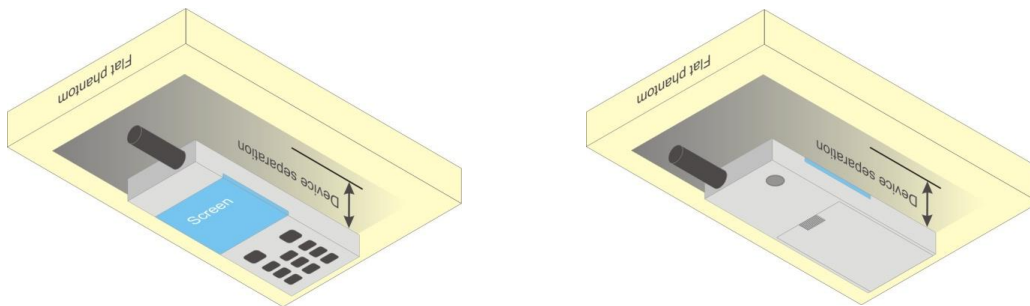


Fig 12.4 Body Worn Position

13.5 Product Specific 10g SAR Exposure

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that 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. Therefore, the GPRS 3Tx slots for GSM850 and GSM1900 are considered as the primary mode.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

<WCDMA Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
3. For 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_o/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 $\beta_o/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCH, 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_o/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.							

Setup Configuration

HSUPA Setup Configuration:

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

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

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

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

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

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

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

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

- a. The EUT was connected to Base Station referred to the Setup Configuration below
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - 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.		

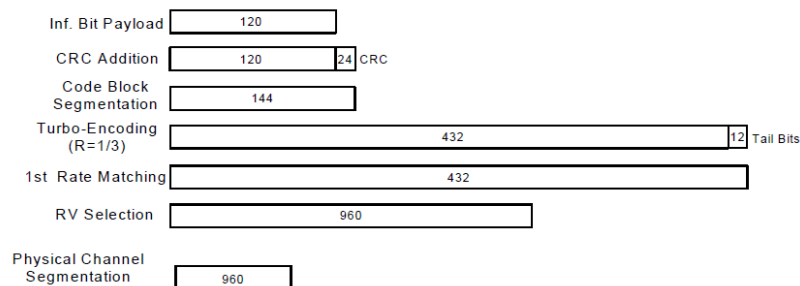


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

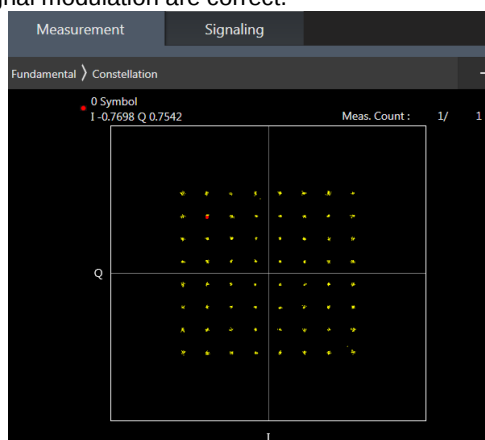
<WCDMA Conducted Power>**General Note:**

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 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 to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA

<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 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 SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 / B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B2 /B4 / B5 / B17 / B38 SAR test was covered by LTE 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 2017 TCB workshop, for 64 QAM and 16 QAM 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 64QAM and 16QAM signal modulation are correct.


64QAM

16QAM

<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.

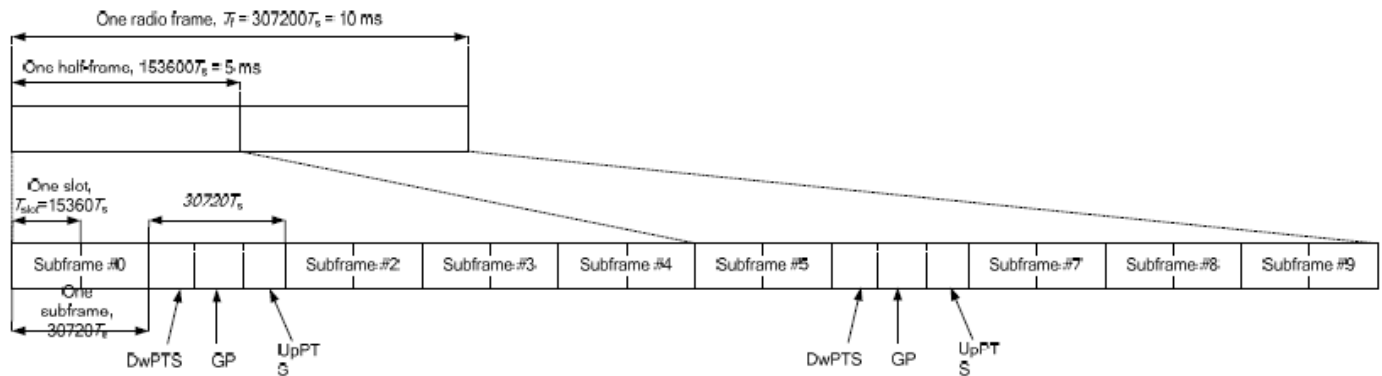


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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 Band 41 Power class 2

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

For LTE Band 41 Power class 3

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

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

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



<LTE Carrier Aggregation>

General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need combination, and for this device that all the configurations were choose to power measurement.
3. All permutations exist. No restrictions on Pcell & Scell combinations. Only LTE Band 29A is limited to Scell.
4. The gray color table is covered by other combinations and no need to verify power.

2CC Downlink Carrier Aggregation					3CC Downlink Carrier Aggregation					4CC Downlink Carrier Aggregation				
Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset	Number	Combination	4X4 MIMO	Restriction	Covered by Measurement Superset
1	CA_2A-2A	All		3CC-1	1	CA_2A-2A-4A	2A-2A,2A-4A		4CC-1	1	CA_2A-2A-4A-12A	2A-2A,2A-4A		
2	CA_2A-4A	All		3CC-1	2	CA_2A-2A-5A	2A,2A-2A		4CC-3	2	CA_2A-2A-4A-71A	2A-2A,2A-4A		
3	CA_2A-5A	2A		3CC-2	3	CA_2A-2A-12A	2A,2A-2A		4CC-4	3	CA_2A-2A-5A-66A	2A,66A,2A-2A,2A-66A		
4	CA_2A-7A	All		3CC-12	4	CA_2A-2A-13A	2A-2A			4	CA_2A-2A-12A-66A	2A-2A		
5	CA_2A-12A	2A		3CC-3	5	CA_2A-2A-14A	2A-2A		4CC-5	5	CA_2A-2A-14A-66A	2A-2A		
6	CA_2A-13A	2A		3CC-4	6	CA_2A-2A-29A	2A-2A	B29 SCC Only		6	CA_2A-2A-66A-66A	2A-2A,2A-66A,66A-66A		
7	CA_2A-14A	2A		3CC-5	7	CA_2A-2A-30A	2A,30A,2A-2A,2A-30A			7	CA_2A-2A-66A-71A			
8	CA_2A-29A	2A	B29 SCC Only	3CC-6	8	CA_2A-2A-66A	2A,66A,2A-2A,2A-66A		4CC-5	8	CA_2A-4A-4A-12A			
9	CA_2A-30A	All		3CC-7	9	CA_2A-2A-71A	2A,2A-2A		4CC-7	9	CA_2A-4A-7A-7A	2A-4A,2A-7A,4A-7A,7A-7A		
10	CA_2A-66A	All		3CC-8	10	CA_2A-4A-4A	2A,4A,2A-4A,4A-4A		4CC-8	10	CA_2A-5A-66A-66A	2A,66A,2A-66A,66A-66A		
11	CA_2A-71A	2A		3CC-9	11	CA_2A-4A-5A	2A,4A,2A-4A			11	CA_2A-7A-7A-66A	2A-7A,2A-66A,7A-7A,7A-66A		
12	CA_2C	All		3CC-34	12	CA_2A-4A-7A	2A-4A,2A-7A,4A-7A		4CC-9	12	CA_2A-12A-66A-66A			
13	CA_4A-4A	All		3CC-36	13	CA_2A-4A-12A	2A,4A,2A-4A		4CC-8	13	CA_2A-66A-66A-71A			
14	CA_4A-5A	4A		3CC-36	14	CA_2A-4A-29A	2A,4A,2A-4A	B29 SCC Only		14	CA_2A-2A-66B	2A,2A-2A,66B		
15	CA_4A-7A	All		3CC-42	15	CA_2A-4A-30A	2A,4A			15	CA_2A-2A-66C	2A,2A-2A,66C		
16	CA_4A-12A	4A		3CC-37	16	CA_2A-4A-71A	2A,4A,2A-4A		4CC-2	16	CA_2A-12A-66C	2A,66A,66C		
17	CA_4A-29A	4A	B29 SCC Only	3CC-38	17	CA_2A-5A-7A	2A-7A			17	CA_2A-66C-71A	2A,66A,66C		
18	CA_4A-30A	All		3CC-39	18	CA_2A-5A-30A	2A,30A,2A-30A			18	CA_2C-66A-66A	66A,2C,66A-66A		
19	CA_4A-71A	4A		3CC-40	19	CA_2A-5A-66A	2A,66A,2A-66A		4CC-3	19	CA_14A-66A-66A-66A	66A-66A		
20	CA_5A-7A	7A		3CC-46	20	CA_2A-7A-7A	All		4CC-11	20	CA_25A-41D			
21	CA_5A-30A	30A		3CC-47	21	CA_2A-7A-12A	2A-7A			21	CA_41A-41D	41A		
22	CA_5A-41A	41A			22	CA_2A-7A-66A	2A-7A,2A-66A,7A-66A		4CC-11	22	CA_41C-41C	41A,41C		
23	CA_5A-66A	66A		3CC-48	23	CA_2A-12A-30A	2A,30A,2A-30A			23				
24	CA_5B			3CC-31	24	CA_2A-12A-66A	2A,66A,2A-66A		4CC-12	24				
25	CA_7A-7A	All		3CC-49	25	CA_2A-14A-30A	2A,30A,2A-30A			25				
26	CA_7A-12A	7A		3CC-51	26	CA_2A-14A-66A	2A,66A,2A-66A		4CC-5	26				
27	CA_7A-13A	7A		3CC-49	27	CA_2A-29A-30A	2A,30A,2A-30A	B29 SCC Only		27				
28	CA_7A-66A	All		3CC-50	28	CA_2A-30A-66A	2A,66A			28				
29	CA_12A-30A	30A		3CC-52	29	CA_2A-66A-66A	2A,66A,2A-66A,66A-66A		4CC-10	29				
30	CA_12A-66A	66A		3CC-53	30	CA_2A-66A-71A	2A,66A,2A-66A		4CC-7	30				
31	CA_13A-66A	66A		3CC-55	31	CA_2A-5B	2A			31				
32	CA_14A-30A	30A		3CC-56	32	CA_2A-66B	All		4CC-14	32				
33	CA_14A-66A	66A		3CC-56	33	CA_2A-66C	All		4CC-15	33				
34	CA_25A-25A	All		3CC-58	34	CA_2C-12A	2C			34				
35	CA_25A-26A	25A		3CC-58	35	CA_2C-66A	All		4CC-18	35				
36	CA_25A-41A				36	CA_4A-4A-5A	4A,4A-4A			36				
37	CA_26A-41A	41A			37	CA_4A-4A-12A	4A,4A-4A		4CC-8	37				
38	CA_29A-30A	30A	B29 SCC Only	3CC-45	38	CA_4A-4A-29A	4A-4A	B29 SCC Only		38				
39	CA_29A-66A	66A	B29 SCC Only	3CC-61	39	CA_4A-4A-30A	4A-4A,4A-30A			39				
40	CA_30A-66A	All		3CC-62	40	CA_4A-4A-71A	4A,4A-4A			40				
41	CA_41A-41A	All			41	CA_4A-5A-30A	4A,30A,4A-30A			41				
42	CA_41C	All		3CC-63	42	CA_4A-7A-7A	All		4CC-9	42				



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43	CA_66A-66A	All		3CC-65	43	CA_4A-7A-12A	4A-7A			43				
44	CA_66A-71A	66A		3CC-66	44	CA_4A-12A-30A	4A,30A,4A-30A			44				
45	CA_66B	All		3CC-67	45	CA_4A-29A-30A	4A,30A,4A-30A	B29 SCC Only		45				
46	CA_66C	All		3CC-68	46	CA_5A-7A-66A	7A-66A			46				
					47	CA_5A-30A-66A	30A,66A,30A-66A			47				
					48	CA_5A-66A-66A	66A-66A		4CC-10	48				
					49	CA_7A-7A-13A	7A-7A			49				
					50	CA_7A-7A-66A	All		4CC-11	50				
					51	CA_7A-12A-66A	7A-66A			51				
					52	CA_12A-30A-66A	30A,66A,30A-66A			52				
					53	CA_12A-66A-66A	66A,66A-66A		4CC-12	53				
					54	CA_12A-66C	66A,66C		4CC-16	54				
					55	CA_13A-66A-66A	66A-66A			55				
					56	CA_14A-30A-66A				56				
					57	CA_14A-66A-66A	66A-66A		4CC-19	57				
					58	CA_25A-25A-26A	25A,25A-25A			58				
					59	CA_25A-41C				59				
					60	CA_26A-41C	41C			60				
					61	CA_29A-66A-66A	66A-66A	B29 SCC Only		60				
					62	CA_30A-66A-66A	30A,66A			60				
					63	CA_41A-41C	All			60				
					64	CA_41D	All		4CC-20	60				
					65	CA_66A-66A-66A	66A,66A-66A		4CC-19	60				
					66	CA_66A-66A-71A	66A,66A-66A		4CC-13	60				
					67	CA_66A-66B	All			60				
					68	CA_66A-66C	All			60				
					69	CA_66C-71A	6A,66C		4CC-17	60				

LTE Carrier Aggregation Conducted Power (Downlink)

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

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

LTE 4x4 MIMO (Downlink)

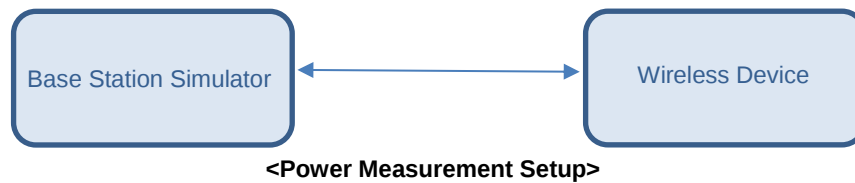
This device supports downlink 4x4 MIMO operations for LTE Bands 2/4/7/25/30/41/66 only. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

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

4X4 MIMO	WWAN Band
	LTE Band: B2 / B4/ B7 / B25 / B30 / B41 / B66

LTE Carrier Aggregation Conducted Power (Uplink)

1. This device supports uplink carrier aggregation for LTE CA_41C with a maximum of two 20MHz 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. For the non-contiguously allocated resource blocks which the MPR level is determined by various RB separation and RB sizes requirement, and the allowed MPR levels, settings and the conducted powers are permanently implemented in this device per the 3GPP 36.36.101 section 6.2.3A.1.3 requirements.
2. According to FCC guidance, the output power with uplink CA active was measured for the high / middle / low channel configuration with the highest reported SAR for each exposure condition, the power was measured with wideband signal integration over both component carriers.
3. In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs
4. Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05. The required test channel should be associated with the UL PCC. For channels at the ends of a frequency band, the SCC and subsequent CCs are added to the side within the transmission band. Otherwise, the CCs should be added alternatively to either side of the PCC.



5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2 / n5 / n25 / n66 / n71 / n41 / n77 / n78 is NSA mode.
2. 5G NR n2 / n25 / n66 / n71 / n41 / n77 / n78 is SA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT- PI/2 BPSK and the reported SAR for the DFT- PI/2 BPSK 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 QPSK/16QAM/64QMA/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the QPSK/16QAM/64QMA/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 PI/2 BPSK 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 PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure.
 - e. PI/2 BPSK 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. QPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/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. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission.
5. 5G NR n41/ n77 supports HPUE, n41 HPUE only limit SA mode, HPUE power and SAR testing performed separately.
6. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
7. 5G NR NSA mode, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time.
8. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
9. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.

<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	LTE TX	NR TX
DC_5A_n2A	Ant1/ Ant0	Ant0/ Ant1
DC_7A_n2A	Ant0	Ant1
DC_12A_n2A	Ant1/ Ant0	Ant0/ Ant1
DC_13A_n2A	Ant1/ Ant0	Ant0/ Ant1
DC_71A_n2A	Ant1/ Ant0	Ant0/ Ant1
DC_66A_n2A	Ant0/ Ant1	Ant1/ Ant0
DC_2A_n5A	Ant0/ Ant1	Ant1/ Ant0
DC_66A_n5A	Ant0/ Ant1	Ant1/ Ant0
DC_7A_n5A	Ant1	Ant0/ Ant1
DC_12A_n25A	Ant1/ Ant0	Ant0/ Ant1
DC_66A_n25A	Ant0/ Ant1	Ant1/ Ant0
DC_2A_n41A	Ant1	Ant0
DC_25A_n41A	Ant1	Ant0
DC_2A_n66A	Ant0/ Ant1	Ant1/ Ant0
DC_5A_n66A	Ant1/ Ant0	Ant0/ Ant1
DC_7A_n66A	Ant0	Ant1
DC_12A_n66A	Ant1/ Ant0	Ant0/ Ant1
DC_13A_n66A	Ant1/ Ant0	Ant0/ Ant1
DC_2A_n71A	Ant0/ Ant1	Ant1/ Ant0
DC_7A_n71A	Ant0	Ant1
DC_66A_n71A	Ant0/ Ant1	Ant1/ Ant0
DC_2A_n77A	Ant0/ Ant1	Ant3
DC_5A_n77A	Ant1/ Ant0	Ant3
DC_13A_n77A	Ant1/ Ant0	Ant3
DC_66A_n77A	Ant0/ Ant1	Ant3
DC_2A_n78A	Ant0/ Ant1	Ant3
DC_5A_n78A	Ant1/ Ant0	Ant3
DC_7A_n78A	Ant0	Ant3
DC_13A_n78A	Ant1/ Ant0	Ant3
DC_66A_n78A	Ant0/ Ant1	Ant3
DC_71A_n78A	Ant1/ Ant0	Ant3

<WLAN Conducted Power>

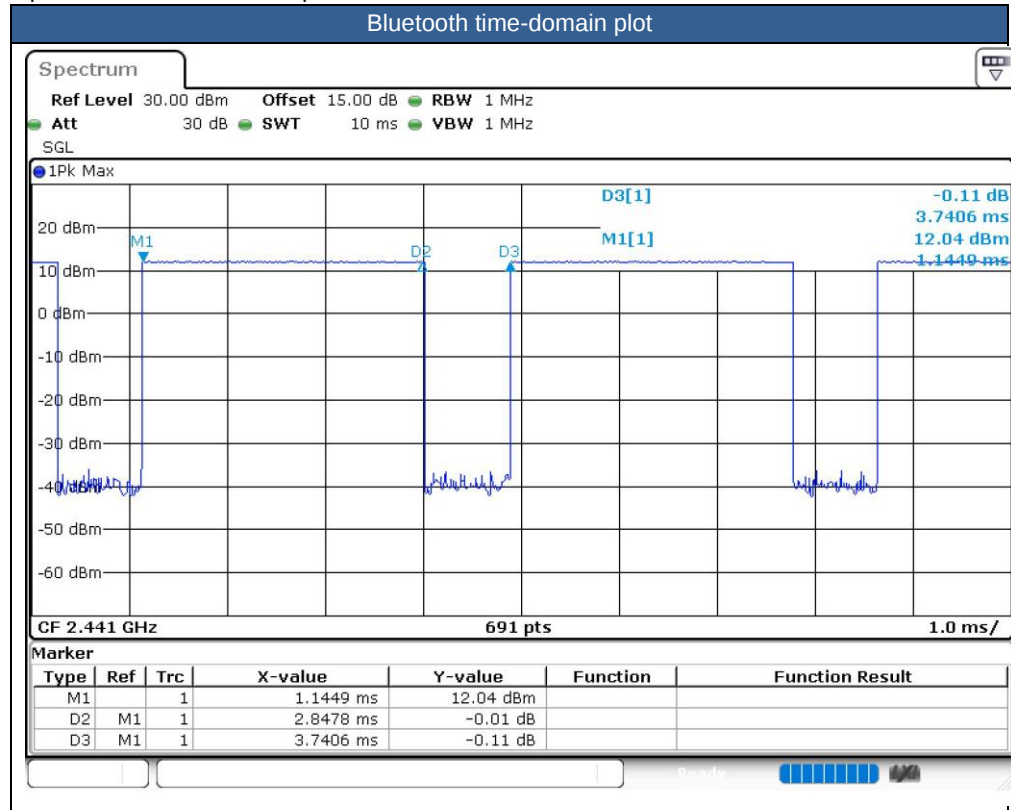
General Note:

1. 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.
2. 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).
3. 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.
4. 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.
5. 802.11ax supports full tone size and partial tone size, for full tone size with higher power level, So only chose full tone size to perform SAR testing.

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle is 76.13 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation





15. Antenna Location

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

16. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of BT/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 WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. 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 Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements the power management and proximity sensor /receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head, body-worn, hotspot, extremity.
6. For some WWAN bands, receiver off/sensor on reduced power level is higher than hotspot reduced power level, so front/back receiver off SAR can represent hotspot conservatively.
7. This device implements antenna tuning techniques for several WWAN (cellular) operating modes and frequencies for the purpose of improving antenna efficiency over a broad range of frequencies. Specifically, these techniques are employed in the LTE and 5G NR modes. In this report SAR was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing. The detail descriptions of the antenna tuner and supplemental data for additional information can be referred to section 18 and appendix F.
8. For 5G NR test, using FTM (Factory Test Mode) to perform SAR with default 100% transmission.
9. 5G NR n41/ n77 supports HPUE, n41 HPUE only limit SA mode, HPUE power and SAR testing performed separately.
10. 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.
11. 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.
12. 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.
13. 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.
14. This device supports 5G NR FR1 bands, including NSA mode and SA mode. NSA and SA mode performed SAR separately.
15. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. For this device SAR for WWAN/WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2 W/kg of GSM1900, WCDMA Band II/IV/V, LTE Band 2/4/5/7/13/25/26/30/66/38/41, 5G NR n2/n25/n41/n66/n77/n78, WLAN 2.4GHz/5.2GHz/5.8GHz, therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.5/6GHz 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.

16. The following table "n/a" means the measured SAR is too small to find the 1g/10g cube SAR.

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. Therefore, the GPRS 3Tx slots for GSM850 and GSM1900 are considered as the primary mode.
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 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 to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

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 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 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 / B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B2 / B4 / B5 / B17 / B38 SAR test was covered by LTE 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 PI/2 BPSK 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 PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure.
 - c. PI/2 BPSK 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. QPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK /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 n5 /n66/n71/n77/n78 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 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.
6. The 2.4GHz/5GHz/6GHz WLAN can transmit in MIMO antenna mode only and it has no SISO antenna mode.

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.

Exposure Condition	DSI
Head SAR-Standalone	DSI 2
Head SAR-Simultaneous	DSI 2
Body worn Mode SAR-Standalone	DSI 3
Body worn Mode SAR- Simultaneous	DSI 3
Hotspot Mode SAR	DSI 3
Extremity(Handheld) SAR-Standalone	DSI 6
Extremity(Handheld) SAR- Simultaneous	DSI 6
Sensor off SAR	DSI 4

16.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
01	GSM850_Ant0	GPRS(3 Tx slots)	Right Cheek	DSI2(Full)	189	836.4	27.51	28.50	1.256	-0.03	0.138	0.173
	GSM850_Ant0	GPRS(3 Tx slots)	Right Tilted	DSI2(Full)	189	836.4	27.51	28.50	1.256	0.12	0.061	0.077
	GSM850_Ant0	GPRS(3 Tx slots)	Left Cheek	DSI2(Full)	189	836.4	27.51	28.50	1.256	-0.12	0.080	0.100
	GSM850_Ant0	GPRS(3 Tx slots)	Left Tilted	DSI2(Full)	189	836.4	27.51	28.50	1.256	0.16	0.057	0.072
	GSM850_Ant0	GPRS(3 Tx slots)	Right Cheek	DSI2(Full)	128	824.2	27.50	28.50	1.259	0.11	0.108	0.136
	GSM850_Ant0	GPRS(3 Tx slots)	Right Cheek	DSI2(Full)	251	848.8	27.38	28.50	1.294	0.06	0.120	0.155
02	GSM1900_Ant0	GPRS(3 Tx slots)	Right Cheek	DSI2(Full)	810	1909.8	25.28	26.50	1.324	-0.17	0.044	0.058
	GSM1900_Ant0	GPRS(3 Tx slots)	Right Tilted	DSI2(Full)	810	1909.8	25.28	26.50	1.324	0.05	0.006	0.007
	GSM1900_Ant0	GPRS(3 Tx slots)	Left Cheek	DSI2(Full)	810	1909.8	25.28	26.50	1.324	0.02	0.019	0.025
	GSM1900_Ant0	GPRS(3 Tx slots)	Left Tilted	DSI2(Full)	810	1909.8	25.28	26.50	1.324	-0.01	0.003	0.004
	GSM1900_Ant0	GPRS(3 Tx slots)	Right Cheek	DSI2(Full)	512	1850.2	25.11	26.50	1.377	0.03	0.007	0.010
	GSM1900_Ant0	GPRS(3 Tx slots)	Right Cheek	DSI2(Full)	661	1880	25.25	26.50	1.334	0.09	0.019	0.026

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Power Reduction	Ch.	Freq. (MHz)	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 V_Ant1	RMC 12.2Kbps	Right Cheek	DSI2(Standalone)	4182	836.4	20.95	22.00	1.274	0.09	0.577	0.735
	WCDMA V_Ant1	RMC 12.2Kbps	Right Tilted	DSI2(Standalone)	4182	836.4	20.95	22.00	1.274	-0.02	0.626	0.797
03	WCDMA V_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Standalone)	4182	836.4	20.95	22.00	1.274	-0.12	0.874	1.113
	WCDMA V_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Standalone)	4182	836.4	20.95	22.00	1.274	0.07	0.812	1.034
	WCDMA V_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Standalone)	4132	826.4	20.87	22.00	1.297	0.02	0.842	1.092
	WCDMA V_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Standalone)	4233	846.6	20.91	22.00	1.285	0.12	0.861	1.107
	WCDMA V_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Standalone)	4132	826.4	20.87	22.00	1.297	-0.04	0.758	0.983
	WCDMA V_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Standalone)	4233	846.6	20.91	22.00	1.285	-0.05	0.812	1.044
	WCDMA V_Ant1	RMC 12.2Kbps	Right Cheek	DSI2(Simultaneous)	4182	836.4	19.98	21.00	1.265	-0.1	0.475	0.601
	WCDMA V_Ant1	RMC 12.2Kbps	Right Tilted	DSI2(Simultaneous)	4182	836.4	19.98	21.00	1.265	0.09	0.509	0.644
	WCDMA V_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Simultaneous)	4182	836.4	19.98	21.00	1.265	-0.12	0.701	0.887
	WCDMA V_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Simultaneous)	4182	836.4	19.98	21.00	1.265	-0.02	0.631	0.798
	WCDMA V_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Simultaneous)	4132	826.4	19.93	21.00	1.279	0.13	0.710	0.908
	WCDMA V_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Simultaneous)	4233	846.6	19.90	21.00	1.288	0.03	0.689	0.888
	WCDMA V_Ant0	RMC 12.2Kbps	Right Cheek	DSI2(Full)	4182	836.4	24.02	25.00	1.253	0.12	0.176	0.221
	WCDMA V_Ant0	RMC 12.2Kbps	Right Tilted	DSI2(Full)	4182	836.4	24.02	25.00	1.253	0.02	0.089	0.112
	WCDMA V_Ant0	RMC 12.2Kbps	Left Cheek	DSI2(Full)	4182	836.4	24.02	25.00	1.253	0.1	0.120	0.150
	WCDMA V_Ant0	RMC 12.2Kbps	Left Tilted	DSI2(Full)	4182	836.4	24.02	25.00	1.253	0.02	0.081	0.102
	WCDMA V_Ant0	RMC 12.2Kbps	Right Cheek	DSI2(Full)	4132	826.4	24.01	25.00	1.256	0.17	0.172	0.216
	WCDMA V_Ant0	RMC 12.2Kbps	Right Cheek	DSI2(Full)	4233	846.6	24.01	25.00	1.256	-0.08	0.175	0.220
	WCDMA IV_Ant1	RMC 12.2Kbps	Right Cheek	DSI2(Standalone)	1413	1732.6	15.83	16.50	1.167	-0.01	0.521	0.608
	WCDMA IV_Ant1	RMC 12.2Kbps	Right Tilted	DSI2(Standalone)	1413	1732.6	15.83	16.50	1.167	-0.03	0.631	0.736
	WCDMA IV_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Standalone)	1413	1732.6	15.83	16.50	1.167	0.09	0.823	0.960
	WCDMA IV_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Standalone)	1413	1732.6	15.83	16.50	1.167	0.11	0.972	1.134
	WCDMA IV_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Standalone)	1312	1712.4	15.73	16.50	1.194	0.02	0.885	1.057
	WCDMA IV_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Standalone)	1513	1752.6	15.62	16.50	1.225	-0.01	0.727	0.890
04	WCDMA IV_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Standalone)	1312	1712.4	15.73	16.50	1.194	0.04	1.040	1.242
	WCDMA IV_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Standalone)	1513	1752.6	15.62	16.50	1.225	-0.07	0.864	1.058
	WCDMA IV_Ant1	RMC 12.2Kbps	Right Cheek	DSI2(Simultaneous)	1413	1732.6	14.75	15.50	1.189	-0.12	0.401	0.477
	WCDMA IV_Ant1	RMC 12.2Kbps	Right Tilted	DSI2(Simultaneous)	1413	1732.6	14.75	15.50	1.189	0.1	0.461	0.548
	WCDMA IV_Ant1	RMC 12.3Kbps	Left Cheek	DSI2(Simultaneous)	1413	1732.6	14.75	15.50	1.189	0.09	0.651	0.774
	WCDMA IV_Ant1	RMC 12.4Kbps	Left Tilted	DSI2(Simultaneous)	1413	1732.6	14.75	15.50	1.189	-0.01	0.766	0.910
	WCDMA IV_Ant1	RMC 12.7Kbps	Left Tilted	DSI2(Simultaneous)	1312	1712.4	14.73	15.50	1.194	-0.05	0.836	0.998
	WCDMA IV_Ant1	RMC 12.8Kbps	Left Tilted	DSI2(Simultaneous)	1513	1752.6	14.70	15.50	1.202	0.01	0.690	0.830



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	WCDMA IV_Ant0	RMC 12.2Kbps	Right Cheek	DSI2(Full)	1413	1732.6	23.10	24.00	1.230	-0.07	0.074	0.091
	WCDMA IV_Ant0	RMC 12.2Kbps	Right Tilted	DSI2(Full)	1413	1732.6	23.10	24.00	1.230	-0.05	0.040	0.049
	WCDMA IV_Ant0	RMC 12.2Kbps	Left Cheek	DSI2(Full)	1413	1732.6	23.10	24.00	1.230	0.12	0.067	0.082
	WCDMA IV_Ant0	RMC 12.2Kbps	Left Tilted	DSI2(Full)	1413	1732.6	23.10	24.00	1.230	-0.06	0.043	0.053
	WCDMA IV_Ant0	RMC 12.2Kbps	Right Cheek	DSI2(Full)	1312	1712.4	22.88	24.00	1.294	0.13	0.105	0.136
	WCDMA IV_Ant0	RMC 12.2Kbps	Right Cheek	DSI2(Full)	1513	1752.6	22.91	24.00	1.285	0.11	0.076	0.098
	WCDMA II_Ant1	RMC 12.2Kbps	Right Cheek	DSI2(Standalone)	9400	1880	20.02	21.00	1.253	-0.1	0.465	0.583
	WCDMA II_Ant1	RMC 12.2Kbps	Right Tilted	DSI2(Standalone)	9400	1880	20.02	21.00	1.253	-0.01	0.483	0.605
	WCDMA II_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Standalone)	9400	1880	20.02	21.00	1.253	-0.06	0.677	0.848
	WCDMA II_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Standalone)	9400	1880	20.02	21.00	1.253	0.18	0.835	1.046
	WCDMA II_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Standalone)	9262	1852.4	19.99	21.00	1.262	0.15	0.792	0.999
	WCDMA II_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Standalone)	9538	1907.6	19.93	21.00	1.279	-0.06	0.608	0.778
05	WCDMA II_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Standalone)	9262	1852.4	19.99	21.00	1.262	-0.12	0.944	1.191
	WCDMA II_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Standalone)	9538	1907.6	19.93	21.00	1.279	0.02	0.853	1.091
	WCDMA II_Ant1	RMC 12.2Kbps	Right Cheek	DSI2(Simultaneous)	9400	1880	19.08	20.00	1.236	-0.01	0.360	0.445
	WCDMA II_Ant1	RMC 12.2Kbps	Right Tilted	DSI2(Simultaneous)	9400	1880	19.08	20.00	1.236	0.12	0.377	0.466
	WCDMA II_Ant1	RMC 12.2Kbps	Left Cheek	DSI2(Simultaneous)	9400	1880	19.08	20.00	1.236	0.05	0.557	0.688
	WCDMA II_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Simultaneous)	9400	1880	19.08	20.00	1.236	0.13	0.688	0.850
	WCDMA II_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Simultaneous)	9262	1852.4	19.05	20.00	1.245	0.18	0.793	0.987
	WCDMA II_Ant1	RMC 12.2Kbps	Left Tilted	DSI2(Simultaneous)	9538	1907.6	18.92	20.00	1.282	0.03	0.699	0.896
	WCDMA II_Ant0	RMC 12.2Kbps	Right Cheek	DSI2(Full)	9400	1880	22.88	24.00	1.294	-0.08	0.073	0.095
	WCDMA II_Ant0	RMC 12.2Kbps	Right Tilted	DSI2(Full)	9400	1880	22.88	24.00	1.294	-0.06	0.045	0.058
	WCDMA II_Ant0	RMC 12.2Kbps	Left Cheek	DSI2(Full)	9400	1880	22.88	24.00	1.294	0.01	0.062	0.080
	WCDMA II_Ant0	RMC 12.2Kbps	Left Tilted	DSI2(Full)	9400	1880	22.88	24.00	1.294	0.17	0.050	0.065
	WCDMA II_Ant0	RMC 12.2Kbps	Right Cheek	DSI2(Full)	9262	1852.4	22.84	24.00	1.306	0.05	0.067	0.088
	WCDMA II_Ant0	RMC 12.2Kbps	Right Cheek	DSI2(Full)	9538	1907.6	22.83	24.00	1.309	-0.07	0.112	0.147

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 71_Ant1	20M	QPSK	1	0	Right Cheek	DSI2(Full)	133322	683	22.95	24.00	1.274	0.11	0.592	0.754
	LTE Band 71_Ant1	20M	QPSK	1	0	Right Tilted	DSI2(Full)	133322	683	22.95	24.00	1.274	-0.08	0.498	0.634
06	LTE Band 71_Ant1	20M	QPSK	1	0	Left Cheek	DSI2(Full)	133322	683	22.95	24.00	1.274	-0.14	0.783	0.997
	LTE Band 71_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Full)	133322	683	22.95	24.00	1.274	-0.01	0.685	0.872
	LTE Band 71_Ant1	20M	QPSK	50	0	Right Cheek	DSI2(Full)	133322	683	21.90	23.00	1.288	0.14	0.515	0.663
	LTE Band 71_Ant1	20M	QPSK	50	0	Right Tilted	DSI2(Full)	133322	683	21.90	23.00	1.288	-0.12	0.432	0.557
	LTE Band 71_Ant1	20M	QPSK	50	0	Left Cheek	DSI2(Full)	133322	683	21.90	23.00	1.288	0.09	0.701	0.903
	LTE Band 71_Ant1	20M	QPSK	50	0	Left Tilted	DSI2(Full)	133322	683	21.90	23.00	1.288	-0.03	0.597	0.769
	LTE Band 71_Ant1	20M	QPSK	100	0	Left Cheek	DSI2(Full)	133322	683	21.88	23.00	1.294	-0.06	0.698	0.903
	LTE Band 71_Ant1	20M	QPSK	100	0	Left Tilted	DSI2(Full)	133322	683	21.88	23.00	1.294	0.01	0.588	0.761
	LTE Band 71_Ant0	20M	QPSK	1	0	Right Cheek	DSI2(Full)	133322	683	23.46	24.50	1.271	0.13	0.150	0.191
	LTE Band 71_Ant0	20M	QPSK	1	0	Right Tilted	DSI2(Full)	133322	683	23.46	24.50	1.271	-0.08	0.065	0.083
	LTE Band 71_Ant0	20M	QPSK	1	0	Left Cheek	DSI2(Full)	133322	683	23.46	24.50	1.271	-0.07	0.094	0.119
	LTE Band 71_Ant0	20M	QPSK	1	0	Left Tilted	DSI2(Full)	133322	683	23.46	24.50	1.271	0.06	0.022	0.028
	LTE Band 71_Ant0	20M	QPSK	50	0	Right Cheek	DSI2(Full)	133322	683	22.56	23.50	1.242	0.08	0.093	0.115
	LTE Band 71_Ant0	20M	QPSK	50	0	Right Tilted	DSI2(Full)	133322	683	22.56	23.50	1.242	0.09	0.033	0.041
	LTE Band 71_Ant0	20M	QPSK	50	0	Left Cheek	DSI2(Full)	133322	683	22.56	23.50	1.242	0.04	0.071	0.088
	LTE Band 71_Ant0	20M	QPSK	50	0	Left Tilted	DSI2(Full)	133322	683	22.56	23.50	1.242	0.03	0.009	0.011
	LTE Band 12_Ant1	10M	QPSK	1	25	Right Cheek	DSI2(Full)	23095	707.5	22.55	23.50	1.245	0.01	0.698	0.869
	LTE Band 12_Ant1	10M	QPSK	1	25	Right Tilted	DSI2(Full)	23095	707.5	22.55	23.50	1.245	0.09	0.596	0.742
07	LTE Band 12_Ant1	10M	QPSK	1	25	Left Cheek	DSI2(Full)	23095	707.5	22.55	23.50	1.245	0.09	0.906	1.128
	LTE Band 12_Ant1	10M	QPSK	1	25	Left Tilted	DSI2(Full)	23095	707.5	22.55	23.50	1.245	-0.08	0.823	1.024
	LTE Band 12_Ant1	10M	QPSK	25	12	Right Cheek	DSI2(Full)	23095	707.5	21.66	22.50	1.213	0.15	0.617	0.749
	LTE Band 12_Ant1	10M	QPSK	25	12	Right Tilted	DSI2(Full)	23095	707.5	21.66	22.50	1.213	-0.12	0.534	0.648
	LTE Band 12_Ant1	10M	QPSK	25	12	Left Cheek	DSI2(Full)	23095	707.5	21.66	22.50	1.213	-0.06	0.809	0.982
	LTE Band 12_Ant1	10M	QPSK	25	12	Left Tilted	DSI2(Full)	23095	707.5	21.66	22.50	1.213	0.01	0.705	0.855
	LTE Band 12_Ant1	10M	QPSK	50	0	Right Cheek	DSI2(Full)	23095	707.5	21.59	22.50	1.233	-0.12	0.567	0.699

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	LTE Band 12_Ant1	10M	QPSK	50	0	Left Cheek	DSI2(Full)	23095	707.5	21.59	22.50	1.233	0.06	0.799	0.985
	LTE Band 12_Ant1	10M	QPSK	50	0	Left Tilted	DSI2(Full)	23095	707.5	21.59	22.50	1.233	0.09	0.694	0.856
	LTE Band 12_Ant1	10M	QPSK	1	25	Right Cheek	DSI2(Simultaneous)	23095	707.5	20.87	22.00	1.297	0.07	0.494	0.641
	LTE Band 12_Ant1	10M	QPSK	1	25	Right Tilted	DSI2(Simultaneous)	23095	707.5	20.87	22.00	1.297	-0.08	0.334	0.433
	LTE Band 12_Ant1	10M	QPSK	1	25	Left Cheek	DSI2(Simultaneous)	23095	707.5	20.87	22.00	1.297	-0.07	0.657	0.852
	LTE Band 12_Ant1	10M	QPSK	1	25	Left Tilted	DSI2(Simultaneous)	23095	707.5	20.87	22.00	1.297	0.14	0.569	0.738
	LTE Band 12_Ant1	10M	QPSK	25	12	Right Cheek	DSI2(Simultaneous)	23095	707.5	20.85	22.00	1.303	-0.11	0.471	0.614
	LTE Band 12_Ant1	10M	QPSK	25	12	Right Tilted	DSI2(Simultaneous)	23095	707.5	20.85	22.00	1.303	-0.01	0.325	0.424
	LTE Band 12_Ant1	10M	QPSK	25	12	Left Cheek	DSI2(Simultaneous)	23095	707.5	20.85	22.00	1.303	-0.06	0.649	0.846
	LTE Band 12_Ant1	10M	QPSK	25	12	Left Tilted	DSI2(Simultaneous)	23095	707.5	20.85	22.00	1.303	0.12	0.554	0.722
	LTE Band 12_Ant1	10M	QPSK	50	0	Left Cheek	DSI2(Simultaneous)	23095	707.5	20.79	22.00	1.321	-0.12	0.634	0.838
	LTE Band 12_Ant0	10M	QPSK	1	25	Right Cheek	DSI2(Full)	23095	707.5	23.75	24.50	1.189	0.03	0.189	0.225
	LTE Band 12_Ant0	10M	QPSK	1	25	Right Tilted	DSI2(Full)	23095	707.5	23.75	24.50	1.189	0.17	0.072	0.086
	LTE Band 12_Ant0	10M	QPSK	1	25	Left Cheek	DSI2(Full)	23095	707.5	23.75	24.50	1.189	0.03	0.161	0.191
	LTE Band 12_Ant0	10M	QPSK	1	25	Left Tilted	DSI2(Full)	23095	707.5	23.75	24.50	1.189	0.12	0.082	0.097
	LTE Band 12_Ant0	10M	QPSK	25	12	Right Cheek	DSI2(Full)	23095	707.5	22.78	23.50	1.180	-0.08	0.087	0.103
	LTE Band 12_Ant0	10M	QPSK	25	12	Right Tilted	DSI2(Full)	23095	707.5	22.78	23.50	1.180	0.12	0.035	0.041
	LTE Band 12_Ant0	10M	QPSK	25	12	Left Cheek	DSI2(Full)	23095	707.5	22.78	23.50	1.180	0.16	0.073	0.086
	LTE Band 12_Ant0	10M	QPSK	25	12	Left Tilted	DSI2(Full)	23095	707.5	22.78	23.50	1.180	-0.01	0.044	0.052
	LTE Band 13_Ant1	10M	QPSK	1	25	Right Cheek	DSI2(Standalone)	23230	782	21.20	22.50	1.349	0.14	0.595	0.803
	LTE Band 13_Ant1	10M	QPSK	1	25	Right Tilted	DSI2(Standalone)	23230	782	21.20	22.50	1.349	-0.09	0.547	0.738
	LTE Band 13_Ant1	10M	QPSK	1	25	Left Cheek	DSI2(Standalone)	23230	782	21.20	22.50	1.349	-0.1	0.762	1.028
	LTE Band 13_Ant1	10M	QPSK	1	25	Left Tilted	DSI2(Standalone)	23230	782	21.20	22.50	1.349	0.02	0.679	0.916
	LTE Band 13_Ant1	10M	QPSK	25	12	Right Cheek	DSI2(Standalone)	23230	782	21.03	22.50	1.403	-0.12	0.603	0.846
	LTE Band 13_Ant1	10M	QPSK	25	12	Right Tilted	DSI2(Standalone)	23230	782	21.03	22.50	1.403	-0.07	0.553	0.776
08	LTE Band 13_Ant1	10M	QPSK	25	12	Left Cheek	DSI2(Standalone)	23230	782	21.03	22.50	1.403	-0.07	0.785	1.101
	LTE Band 13_Ant1	10M	QPSK	25	12	Left Tilted	DSI2(Standalone)	23230	782	21.03	22.50	1.403	0.02	0.684	0.960
	LTE Band 13_Ant1	10M	QPSK	50	0	Right Cheek	DSI2(Standalone)	23230	782	21.17	22.50	1.358	-0.08	0.582	0.791
	LTE Band 13_Ant1	10M	QPSK	50	0	Left Cheek	DSI2(Standalone)	23230	782	21.17	22.50	1.358	0.15	0.740	1.005
	LTE Band 13_Ant1	10M	QPSK	50	0	Left Tilted	DSI2(Standalone)	23230	782	21.17	22.50	1.358	-0.02	0.678	0.921
	LTE Band 13_Ant1	10M	QPSK	1	25	Right Cheek	DSI2(Simultaneous)	23230	782	20.25	21.50	1.334	0.09	0.515	0.687
	LTE Band 13_Ant1	10M	QPSK	1	25	Right Tilted	DSI2(Simultaneous)	23230	782	20.25	21.50	1.334	0.07	0.432	0.576
	LTE Band 13_Ant1	10M	QPSK	1	25	Left Cheek	DSI2(Simultaneous)	23230	782	20.25	21.50	1.334	0.12	0.638	0.851
	LTE Band 13_Ant1	10M	QPSK	1	25	Left Tilted	DSI2(Simultaneous)	23230	782	20.25	21.50	1.334	-0.12	0.520	0.693
	LTE Band 13_Ant1	10M	QPSK	25	12	Right Cheek	DSI2(Simultaneous)	23230	782	20.10	21.50	1.380	0.08	0.520	0.718
	LTE Band 13_Ant1	10M	QPSK	25	12	Right Tilted	DSI2(Simultaneous)	23230	782	20.10	21.50	1.380	-0.01	0.442	0.610
	LTE Band 13_Ant1	10M	QPSK	25	12	Left Cheek	DSI2(Simultaneous)	23230	782	20.10	21.50	1.380	-0.09	0.665	0.918
	LTE Band 13_Ant1	10M	QPSK	25	12	Left Tilted	DSI2(Simultaneous)	23230	782	20.10	21.50	1.380	0.01	0.523	0.722
	LTE Band 13_Ant1	10M	QPSK	50	0	Left Cheek	DSI2(Simultaneous)	23230	782	20.20	21.50	1.349	-0.07	0.644	0.869
	LTE Band 13_Ant0	10M	QPSK	1	25	Right Cheek	DSI2(Full)	23230	782	23.20	24.50	1.349	0.03	0.252	0.340
	LTE Band 13_Ant0	10M	QPSK	1	25	Right Tilted	DSI2(Full)	23230	782	23.20	24.50	1.349	0.17	0.118	0.159
	LTE Band 13_Ant0	10M	QPSK	1	25	Left Cheek	DSI2(Full)	23230	782	23.20	24.50	1.349	0.03	0.196	0.264
	LTE Band 13_Ant0	10M	QPSK	1	25	Left Tilted	DSI2(Full)	23230	782	23.20	24.50	1.349	0.12	0.092	0.124
	LTE Band 13_Ant0	10M	QPSK	25	12	Right Cheek	DSI2(Full)	23230	782	22.54	23.50	1.247	-0.08	0.126	0.157
	LTE Band 13_Ant0	10M	QPSK	25	12	Right Tilted	DSI2(Full)	23230	782	22.54	23.50	1.247	0.12	0.062	0.077
	LTE Band 13_Ant0	10M	QPSK	25	12	Left Cheek	DSI2(Full)	23230	782	22.54	23.50	1.247	0.16	0.099	0.123
	LTE Band 13_Ant0	10M	QPSK	25	12	Left Tilted	DSI2(Full)	23230	782	22.54	23.50	1.247	-0.01	0.051	0.064
	LTE Band 14_Ant1	10M	QPSK	1	25	Right Cheek	DSI2(Standalone)	23330	793	20.53	22.00	1.403	-0.02	0.587	0.823
	LTE Band 14_Ant1	10M	QPSK	1	25	Right Tilted	DSI2(Standalone)	23330	793	20.53	22.00	1.403	0.08	0.516	0.724
	LTE Band 14_Ant1	10M	QPSK	1	25	Left Cheek	DSI2(Standalone)	23330	793	20.53	22.00	1.403	0.04	0.781	1.096
	LTE Band 14_Ant1	10M	QPSK	1	25	Left Tilted	DSI2(Standalone)	23330	793	20.53	22.00	1.403	0.16	0.666	0.934
	LTE Band 14_Ant1	10M	QPSK	25	12	Right Cheek	DSI2(Standalone)	23330	793	20.47	22.00	1.422	0.08	0.603	0.858
	LTE Band 14_Ant1	10M	QPSK	25	12	Right Tilted	DSI2(Standalone)	23330	793	20.47	22.00	1.422	-0.1	0.543	0.772
09	LTE Band 14_Ant1	10M	QPSK	25	12	Left Cheek	DSI2(Standalone)	23330	793	20.47	22.00	1.422	0.05	0.817	1.162
	LTE Band 14_Ant1	10M	QPSK	25	12	Left Tilted	DSI2(Standalone)	23330	793	20.47	22.00	1.422	-0.11	0.691	0.983
	LTE Band 14_Ant1	10M	QPSK	50	0	Right Cheek	DSI2(Standalone)	23330	793	20.45	22.00	1.429	0.08	0.599	0.856
	LTE Band 14_Ant1	10M	QPSK	50	0	Left Cheek	DSI2(Standalone)	23330	793	20.45	22.00	1.429	-0.1	0.811	1.159
	LTE Band 14_Ant1	10M	QPSK	50	0	Left Tilted	DSI2(Standalone)	23330	793	20.45	22.00	1.429	-0.08	0.649	0.927
	LTE Band 14_Ant1	10M	QPSK	1	25	Right Cheek	DSI2(Simultaneous)	23330	793	19.80	21.00	1.318	0.09	0.457	0.602

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	LTE Band 14_Ant1	10M	QPSK	1	25	Right Tilted	DSI2(Simultaneous)	23330	793	19.80	21.00	1.318	0.04	0.408	0.538
	LTE Band 14_Ant1	10M	QPSK	1	25	Left Cheek	DSI2(Simultaneous)	23330	793	19.80	21.00	1.318	0.03	0.651	0.858
	LTE Band 14_Ant1	10M	QPSK	1	25	Left Tilted	DSI2(Simultaneous)	23330	793	19.80	21.00	1.318	0.15	0.525	0.692
	LTE Band 14_Ant1	10M	QPSK	25	12	Right Cheek	DSI2(Simultaneous)	23330	793	19.72	21.00	1.343	0.16	0.477	0.640
	LTE Band 14_Ant1	10M	QPSK	25	12	Right Tilted	DSI2(Simultaneous)	23330	793	19.72	21.00	1.343	0.17	0.419	0.563
	LTE Band 14_Ant1	10M	QPSK	25	12	Left Cheek	DSI2(Simultaneous)	23330	793	19.72	21.00	1.343	-0.01	0.678	0.910
	LTE Band 14_Ant1	10M	QPSK	25	12	Left Tilted	DSI2(Simultaneous)	23330	793	19.72	21.00	1.343	0.11	0.541	0.726
	LTE Band 14_Ant1	10M	QPSK	50	0	Left Cheek	DSI2(Simultaneous)	23330	793	19.73	21.00	1.340	0.05	0.663	0.888
	LTE Band 14_Ant0	10M	QPSK	1	25	Right Cheek	DSI2(Full)	23330	793	23.72	24.50	1.197	0.03	0.231	0.276
	LTE Band 14_Ant0	10M	QPSK	1	25	Right Tilted	DSI2(Full)	23330	793	23.72	24.50	1.197	0.17	0.119	0.142
	LTE Band 14_Ant0	10M	QPSK	1	25	Left Cheek	DSI2(Full)	23330	793	23.72	24.50	1.197	0.03	0.171	0.205
	LTE Band 14_Ant0	10M	QPSK	1	25	Left Tilted	DSI2(Full)	23330	793	23.72	24.50	1.197	0.12	0.096	0.115
	LTE Band 14_Ant0	10M	QPSK	25	12	Right Cheek	DSI2(Full)	23330	793	22.68	23.50	1.208	-0.08	0.131	0.158
	LTE Band 14_Ant0	10M	QPSK	25	12	Right Tilted	DSI2(Full)	23330	793	22.68	23.50	1.208	0.12	0.071	0.086
	LTE Band 14_Ant0	10M	QPSK	25	12	Left Cheek	DSI2(Full)	23330	793	22.68	23.50	1.208	0.16	0.101	0.122
	LTE Band 14_Ant0	10M	QPSK	25	12	Left Tilted	DSI2(Full)	23330	793	22.68	23.50	1.208	-0.01	0.061	0.074
	LTE Band 26_Ant1	15M	QPSK	1	74	Right Cheek	DSI2(Standalone)	26865	831.5	21.69	22.50	1.205	-0.03	0.809	0.975
	LTE Band 26_Ant1	15M	QPSK	1	74	Right Tilted	DSI2(Standalone)	26865	831.5	21.69	22.50	1.205	0.07	0.773	0.931
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Cheek	DSI2(Standalone)	26865	831.5	21.69	22.50	1.205	-0.07	0.970	1.169
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Tilted	DSI2(Standalone)	26865	831.5	21.69	22.50	1.205	0.13	0.904	1.089
	LTE Band 26_Ant1	15M	QPSK	1	74	Right Cheek	DSI2(Standalone)	26765	821.5	21.66	22.50	1.213	-0.06	0.787	0.955
	LTE Band 26_Ant1	15M	QPSK	1	74	Right Cheek	DSI2(Standalone)	26965	841.5	21.64	22.50	1.219	0.05	0.772	0.941
	LTE Band 26_Ant1	15M	QPSK	1	74	Right Tilted	DSI2(Standalone)	26765	821.5	21.66	22.50	1.213	0.08	0.725	0.880
	LTE Band 26_Ant1	15M	QPSK	1	74	Right Tilted	DSI2(Standalone)	26965	841.5	21.64	22.50	1.219	-0.1	0.741	0.903
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Cheek	DSI2(Standalone)	26765	821.5	21.66	22.50	1.213	0.14	0.993	1.205
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Cheek	DSI2(Standalone)	26965	841.5	21.64	22.50	1.219	0.08	0.945	1.152
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Tilted	DSI2(Standalone)	26765	821.5	21.66	22.50	1.213	0.01	0.833	1.011
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Tilted	DSI2(Standalone)	26965	841.5	21.64	22.50	1.219	0.12	0.843	1.028
	LTE Band 26_Ant1	15M	QPSK	36	39	Right Cheek	DSI2(Standalone)	26865	831.5	21.67	22.50	1.211	0.13	0.838	1.014
	LTE Band 26_Ant1	15M	QPSK	36	39	Right Tilted	DSI2(Standalone)	26865	831.5	21.67	22.50	1.211	-0.08	0.792	0.959
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Cheek	DSI2(Standalone)	26865	831.5	21.67	22.50	1.211	-0.17	1.010	1.223
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Tilted	DSI2(Standalone)	26865	831.5	21.67	22.50	1.211	-0.08	0.943	1.142
	LTE Band 26_Ant1	15M	QPSK	36	39	Right Cheek	DSI2(Standalone)	26765	821.5	21.64	22.50	1.219	0.14	0.806	0.983
	LTE Band 26_Ant1	15M	QPSK	36	39	Right Cheek	DSI2(Standalone)	26965	841.5	21.63	22.50	1.222	-0.08	0.830	1.014
	LTE Band 26_Ant1	15M	QPSK	36	39	Right Tilted	DSI2(Standalone)	26765	821.5	21.64	22.50	1.219	-0.07	0.724	0.883
	LTE Band 26_Ant1	15M	QPSK	36	39	Right Tilted	DSI2(Standalone)	26965	841.5	21.63	22.50	1.222	-0.06	0.798	0.975
10	LTE Band 26_Ant1	15M	QPSK	36	39	Left Cheek	DSI2(Standalone)	26765	821.5	21.64	22.50	1.219	-0.18	1.010	1.231
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Cheek	DSI2(Standalone)	26965	841.5	21.63	22.50	1.222	0.15	0.999	1.221
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Tilted	DSI2(Standalone)	26765	821.5	21.64	22.50	1.219	-0.1	0.861	1.050
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Tilted	DSI2(Standalone)	26965	841.5	21.63	22.50	1.222	0.12	0.900	1.100
	LTE Band 26_Ant1	15M	QPSK	75	0	Right Cheek	DSI2(Standalone)	26865	831.5	21.66	22.50	1.213	-0.07	0.912	1.107
	LTE Band 26_Ant1	15M	QPSK	75	0	Right Tilted	DSI2(Standalone)	26865	831.5	21.66	22.50	1.213	0.1	0.894	1.085
	LTE Band 26_Ant1	15M	QPSK	75	0	Left Cheek	DSI2(Standalone)	26865	831.5	21.66	22.50	1.213	0.06	0.920	1.116
	LTE Band 26_Ant1	15M	QPSK	75	0	Left Tilted	DSI2(Standalone)	26865	831.5	21.66	22.50	1.213	0.17	0.889	1.079
	LTE Band 26_Ant1	15M	QPSK	1	74	Right Cheek	DSI2(Simultaneous)	26865	831.5	20.63	21.50	1.222	0.14	0.639	0.781
	LTE Band 26_Ant1	15M	QPSK	1	74	Right Tilted	DSI2(Simultaneous)	26865	831.5	20.63	21.50	1.222	0.07	0.607	0.742
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Cheek	DSI2(Simultaneous)	26865	831.5	20.63	21.50	1.222	-0.01	0.734	0.897
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Tilted	DSI2(Simultaneous)	26865	831.5	20.63	21.50	1.222	-0.04	0.691	0.844
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Cheek	DSI2(Simultaneous)	26765	821.5	20.58	21.50	1.236	-0.06	0.723	0.894
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Cheek	DSI2(Simultaneous)	26965	841.5	20.56	21.50	1.242	0.16	0.701	0.870
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Tilted	DSI2(Simultaneous)	26765	821.5	20.58	21.50	1.236	0.01	0.662	0.818
	LTE Band 26_Ant1	15M	QPSK	1	74	Left Tilted	DSI2(Simultaneous)	26965	841.5	20.56	21.50	1.242	-0.01	0.679	0.843
	LTE Band 26_Ant1	15M	QPSK	36	39	Right Cheek	DSI2(Simultaneous)	26865	831.5	20.61	21.50	1.227	0.02	0.648	0.795
	LTE Band 26_Ant1	15M	QPSK	36	39	Right Tilted	DSI2(Simultaneous)	26865	831.5	20.61	21.50	1.227	0.07	0.616	0.756
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Cheek	DSI2(Simultaneous)	26865	831.5	20.61	21.50	1.227	0.04	0.757	0.929
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Tilted	DSI2(Simultaneous)	26865	831.5	20.61	21.50	1.227	0.14	0.717	0.880
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Cheek	DSI2(Simultaneous)	26765	821.5	20.57	21.50	1.239	0.15	0.733	0.908
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Cheek	DSI2(Simultaneous)	26965	841.5	20.54	21.50	1.247	-0.06	0.707	0.882
	LTE Band 26_Ant1	15M	QPSK	36	39	Left Tilted	DSI2(Simultaneous)	26765	821.5	20.57	21.50	1.239	0.04	0.686	0.850

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	LTE Band 26_Ant1	15M	QPSK	36	39	Left Tilted	DSI2(Simultaneous)	26965	841.5	20.54	21.50	1.247	-0.08	0.686	0.856
	LTE Band 26_Ant1	15M	QPSK	75	0	Left Cheek	DSI2(Simultaneous)	26865	831.5	20.60	21.50	1.230	0.14	0.723	0.889
	LTE Band 26_Ant1	15M	QPSK	75	0	Left Tilted	DSI2(Simultaneous)	26865	831.5	20.60	21.50	1.230	0.06	0.697	0.857
	LTE Band 26_Ant0	15M	QPSK	1	74	Right Cheek	DSI2(Full)	26865	831.5	23.63	24.50	1.222	0.04	0.152	0.186
	LTE Band 26_Ant0	15M	QPSK	1	74	Right Tilted	DSI2(Full)	26865	831.5	23.63	24.50	1.222	0.02	0.085	0.104
	LTE Band 26_Ant0	15M	QPSK	1	74	Left Cheek	DSI2(Full)	26865	831.5	23.63	24.50	1.222	0.02	0.129	0.158
	LTE Band 26_Ant0	15M	QPSK	1	74	Left Tilted	DSI2(Full)	26865	831.5	23.63	24.50	1.222	0.08	0.102	0.125
	LTE Band 26_Ant0	15M	QPSK	1	74	Right Cheek	DSI2(Full)	26765	821.5	23.60	24.50	1.230	-0.09	0.167	0.205
	LTE Band 26_Ant0	15M	QPSK	1	74	Right Cheek	DSI2(Full)	26965	841.5	23.61	24.50	1.227	-0.09	0.159	0.195
	LTE Band 26_Ant0	15M	QPSK	36	39	Right Cheek	DSI2(Full)	26865	831.5	22.72	23.50	1.197	0.05	0.105	0.126
	LTE Band 26_Ant0	15M	QPSK	36	39	Right Tilted	DSI2(Full)	26865	831.5	22.72	23.50	1.197	0.11	0.053	0.063
	LTE Band 26_Ant0	15M	QPSK	36	39	Left Cheek	DSI2(Full)	26865	831.5	22.72	23.50	1.197	-0.09	0.072	0.086
	LTE Band 26_Ant0	15M	QPSK	36	39	Left Tilted	DSI2(Full)	26865	831.5	22.72	23.50	1.197	0.16	0.056	0.067
	LTE Band 66_Ant1	20M	QPSK	1	0	Right Cheek	DSI2(Standalone)	132322	1745	15.45	16.50	1.274	-0.12	0.422	0.537
	LTE Band 66_Ant1	20M	QPSK	1	0	Right Tilted	DSI2(Standalone)	132322	1745	15.45	16.50	1.274	-0.12	0.519	0.661
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Cheek	DSI2(Standalone)	132322	1745	15.45	16.50	1.274	0.04	0.775	0.987
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Standalone)	132322	1745	15.45	16.50	1.274	0.12	0.883	1.125
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Cheek	DSI2(Standalone)	132072	1720	15.44	16.50	1.276	0.04	0.807	1.030
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Cheek	DSI2(Standalone)	132572	1770	15.33	16.50	1.309	0.03	0.603	0.789
11	LTE Band 66_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Standalone)	132072	1720	15.44	16.50	1.276	0.05	0.958	1.223
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Standalone)	132572	1770	15.33	16.50	1.309	0.01	0.757	0.991
	LTE Band 66_Ant1	20M	QPSK	50	24	Right Cheek	DSI2(Standalone)	132322	1745	15.43	16.50	1.279	0.1	0.405	0.518
	LTE Band 66_Ant1	20M	QPSK	50	24	Right Tilted	DSI2(Standalone)	132322	1745	15.43	16.50	1.279	-0.02	0.500	0.640
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Cheek	DSI2(Standalone)	132322	1745	15.43	16.50	1.279	0.15	0.742	0.949
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Standalone)	132322	1745	15.43	16.50	1.279	-0.02	0.865	1.107
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Cheek	DSI2(Standalone)	132072	1720	15.42	16.50	1.282	0.04	0.772	0.990
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Cheek	DSI2(Standalone)	132572	1770	15.32	16.50	1.312	-0.1	0.589	0.773
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Standalone)	132072	1720	15.42	16.50	1.282	0.05	0.947	1.214
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Standalone)	132572	1770	15.32	16.50	1.312	0.03	0.740	0.971
	LTE Band 66_Ant1	20M	QPSK	100	0	Left Cheek	DSI2(Standalone)	132322	1745	15.42	16.50	1.282	0.05	0.734	0.941
	LTE Band 66_Ant1	20M	QPSK	100	0	Left Tilted	DSI2(Standalone)	132322	1745	15.42	16.50	1.282	0.04	0.851	1.091
	LTE Band 66_Ant1	20M	QPSK	1	0	Right Cheek	DSI2(Simultaneous)	132322	1745	14.44	15.50	1.276	0.07	0.332	0.424
	LTE Band 66_Ant1	20M	QPSK	1	0	Right Tilted	DSI2(Simultaneous)	132322	1745	14.44	15.50	1.276	0.11	0.407	0.520
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Cheek	DSI2(Simultaneous)	132322	1745	14.44	15.50	1.276	0.07	0.609	0.777
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Simultaneous)	132322	1745	14.44	15.50	1.276	-0.1	0.706	0.901
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Simultaneous)	132072	1720	14.41	15.50	1.285	-0.04	0.759	0.976
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Simultaneous)	132572	1770	14.28	15.50	1.324	-0.12	0.604	0.800
	LTE Band 66_Ant1	20M	QPSK	50	24	Right Cheek	DSI2(Simultaneous)	132322	1745	14.42	15.50	1.282	0.09	0.318	0.408
	LTE Band 66_Ant1	20M	QPSK	50	24	Right Tilted	DSI2(Simultaneous)	132322	1745	14.42	15.50	1.282	0.08	0.382	0.490
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Cheek	DSI2(Simultaneous)	132322	1745	14.42	15.50	1.282	0.18	0.586	0.751
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Simultaneous)	132322	1745	14.42	15.50	1.282	0.03	0.690	0.885
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Simultaneous)	132072	1720	14.40	15.50	1.288	0.13	0.732	0.943
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Simultaneous)	132572	1770	14.26	15.50	1.330	0.01	0.587	0.781
	LTE Band 66_Ant1	20M	QPSK	100	0	Left Tilted	DSI2(Simultaneous)	132322	1745	14.41	15.50	1.285	0.06	0.682	0.877
	LTE Band 66_Ant0	20M	QPSK	1	0	Right Cheek	DSI2(Full)	132322	1745	22.71	24.00	1.346	0.06	0.090	0.121
	LTE Band 66_Ant0	20M	QPSK	1	0	Right Tilted	DSI2(Full)	132322	1745	22.71	24.00	1.346	0.12	0.044	0.059
	LTE Band 66_Ant0	20M	QPSK	1	0	Left Cheek	DSI2(Full)	132322	1745	22.71	24.00	1.346	-0.03	0.070	0.094
	LTE Band 66_Ant0	20M	QPSK	1	0	Left Tilted	DSI2(Full)	132322	1745	22.71	24.00	1.346	0.15	0.055	0.074
	LTE Band 66_Ant0	20M	QPSK	1	0	Right Cheek	DSI2(Full)	132072	1720	22.56	24.00	1.393	-0.16	0.098	0.137
	LTE Band 66_Ant0	20M	QPSK	1	0	Right Cheek	DSI2(Full)	132572	1770	22.42	24.00	1.439	0.08	0.091	0.131
	LTE Band 66_Ant0	20M	QPSK	50	24	Right Cheek	DSI2(Full)	132322	1745	22.14	23.00	1.219	0.03	0.052	0.063
	LTE Band 66_Ant0	20M	QPSK	50	24	Right Tilted	DSI2(Full)	132322	1745	22.14	23.00	1.219	0.06	0.028	0.034
	LTE Band 66_Ant0	20M	QPSK	50	24	Left Cheek	DSI2(Full)	132322	1745	22.14	23.00	1.219	-0.11	0.045	0.055
	LTE Band 66_Ant0	20M	QPSK	50	24	Left Tilted	DSI2(Full)	132322	1745	22.14	23.00	1.219	0.15	0.036	0.044
	LTE Band 25_Ant1	20M	QPSK	1	0	Right Cheek	DSI2(Standalone)	26340	1880	15.26	16.00	1.186	0.15	0.425	0.504
	LTE Band 25_Ant1	20M	QPSK	1	0	Right Tilted	DSI2(Standalone)	26340	1880	15.26	16.00	1.186	-0.04	0.530	0.628
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Cheek	DSI2(Standalone)	26340	1880	15.26	16.00	1.186	0.05	0.767	0.909
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Standalone)	26340	1880	15.26	16.00	1.186	0.13	0.944	1.119
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Cheek	DSI2(Standalone)	26140	1860	15.24	16.00	1.191	-0.03	0.743	0.885

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	LTE Band 25_Ant1	20M	QPSK	1	0	Left Cheek	DSI2(Standalone)	26590	1905	15.22	16.00	1.197	0.11	0.825	0.987
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Standalone)	26140	1860	15.24	16.00	1.191	-0.02	0.917	1.092
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Standalone)	26590	1905	15.22	16.00	1.197	-0.12	1.000	1.197
	LTE Band 25_Ant1	20M	QPSK	50	24	Right Cheek	DSI2(Standalone)	26340	1880	15.24	16.00	1.191	0.09	0.441	0.525
	LTE Band 25_Ant1	20M	QPSK	50	24	Right Tilted	DSI2(Standalone)	26340	1880	15.24	16.00	1.191	0.14	0.554	0.660
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Cheek	DSI2(Standalone)	26340	1880	15.24	16.00	1.191	-0.11	0.814	0.970
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Standalone)	26340	1880	15.24	16.00	1.191	0.01	0.983	1.171
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Cheek	DSI2(Standalone)	26140	1860	15.23	16.00	1.194	-0.02	0.784	0.936
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Cheek	DSI2(Standalone)	26590	1905	15.21	16.00	1.199	0.08	0.855	1.026
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Standalone)	26140	1860	15.23	16.00	1.194	-0.12	0.944	1.127
12	LTE Band 25_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Standalone)	26590	1905	15.21	16.00	1.199	0.04	1.040	1.247
	LTE Band 25_Ant1	20M	QPSK	100	0	Left Cheek	DSI2(Standalone)	26340	1880	15.22	16.00	1.197	-0.08	0.731	0.875
	LTE Band 25_Ant1	20M	QPSK	100	0	Left Tilted	DSI2(Standalone)	26340	1880	15.22	16.00	1.197	0.17	0.939	1.124
	LTE Band 25_Ant1	20M	QPSK	1	0	Right Cheek	DSI2(Simultaneous)	26340	1880	14.06	15.00	1.242	-0.1	0.330	0.410
	LTE Band 25_Ant1	20M	QPSK	1	0	Right Tilted	DSI2(Simultaneous)	26340	1880	14.06	15.00	1.242	-0.12	0.408	0.507
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Cheek	DSI2(Simultaneous)	26340	1880	14.06	15.00	1.242	-0.11	0.584	0.725
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Simultaneous)	26340	1880	14.06	15.00	1.242	0.04	0.727	0.903
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Simultaneous)	26140	1860	14.04	15.00	1.247	-0.1	0.702	0.876
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Tilted	DSI2(Simultaneous)	26590	1905	14.02	15.00	1.253	-0.04	0.764	0.957
	LTE Band 25_Ant1	20M	QPSK	50	24	Right Cheek	DSI2(Simultaneous)	26340	1880	14.04	15.00	1.247	0.1	0.349	0.435
	LTE Band 25_Ant1	20M	QPSK	50	24	Right Tilted	DSI2(Simultaneous)	26340	1880	14.04	15.00	1.247	0.13	0.437	0.545
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Cheek	DSI2(Simultaneous)	26340	1880	14.04	15.00	1.247	0.08	0.608	0.758
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Simultaneous)	26340	1880	14.04	15.00	1.247	-0.07	0.754	0.941
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Simultaneous)	26140	1860	14.02	15.00	1.253	0.07	0.726	0.910
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Tilted	DSI2(Simultaneous)	26590	1905	14.00	15.00	1.259	-0.12	0.792	0.997
	LTE Band 25_Ant1	20M	QPSK	100	0	Left Tilted	DSI2(Simultaneous)	26340	1880	14.03	15.00	1.250	0.09	0.743	0.929
	LTE Band 25_Ant0	20M	QPSK	1	0	Right Cheek	DSI2(Full)	26340	1880	21.68	23.00	1.355	0.15	0.090	0.122
	LTE Band 25_Ant0	20M	QPSK	1	0	Right Tilted	DSI2(Full)	26340	1880	21.68	23.00	1.355	0.04	0.039	0.052
	LTE Band 25_Ant0	20M	QPSK	1	0	Left Cheek	DSI2(Full)	26340	1880	21.68	23.00	1.355	0.02	0.078	0.106
	LTE Band 25_Ant0	20M	QPSK	1	0	Left Tilted	DSI2(Full)	26340	1880	21.68	23.00	1.355	0.02	0.059	0.080
	LTE Band 25_Ant0	20M	QPSK	1	0	Right Cheek	DSI2(Full)	26140	1860	21.58	23.00	1.387	0.08	0.093	0.129
	LTE Band 25_Ant0	20M	QPSK	1	0	Right Cheek	DSI2(Full)	26590	1905	21.53	23.00	1.403	-0.09	0.094	0.132
	LTE Band 25_Ant0	20M	QPSK	50	24	Right Cheek	DSI2(Full)	26340	1880	20.73	22.00	1.340	0.05	0.051	0.068
	LTE Band 25_Ant0	20M	QPSK	50	24	Right Tilted	DSI2(Full)	26340	1880	20.73	22.00	1.340	0.06	0.020	0.027
	LTE Band 25_Ant0	20M	QPSK	50	24	Left Cheek	DSI2(Full)	26340	1880	20.73	22.00	1.340	0.04	0.046	0.061
	LTE Band 25_Ant0	20M	QPSK	50	24	Left Tilted	DSI2(Full)	26340	1880	20.73	22.00	1.340	0.18	0.043	0.057
13	LTE Band 30_Ant0	10M	QPSK	1	0	Right Cheek	DSI2(Full)	27710	2310	21.11	22.50	1.377	0.04	0.078	0.107
	LTE Band 30_Ant0	10M	QPSK	1	0	Right Tilted	DSI2(Full)	27710	2310	21.11	22.50	1.377	0.13	0.066	0.091
	LTE Band 30_Ant0	10M	QPSK	1	0	Left Cheek	DSI2(Full)	27710	2310	21.11	22.50	1.377	-0.03	0.073	0.101
	LTE Band 30_Ant0	10M	QPSK	1	0	Left Tilted	DSI2(Full)	27710	2310	21.11	22.50	1.377	-0.1	0.069	0.094
	LTE Band 30_Ant0	10M	QPSK	25	12	Right Cheek	DSI2(Full)	27710	2310	20.95	22.50	1.429	0.08	0.045	0.064
	LTE Band 30_Ant0	10M	QPSK	25	12	Right Tilted	DSI2(Full)	27710	2310	20.95	22.50	1.429	-0.09	0.032	0.045
	LTE Band 30_Ant0	10M	QPSK	25	12	Left Cheek	DSI2(Full)	27710	2310	20.95	22.50	1.429	0.13	0.039	0.056
	LTE Band 30_Ant0	10M	QPSK	25	12	Left Tilted	DSI2(Full)	27710	2310	20.95	22.50	1.429	0.12	0.038	0.054
	LTE Band 7_Ant0	20M	QPSK	1	99	Right Cheek	DSI2(Full)	21350	2560	23.03	24.00	1.250	0.05	0.081	0.101
	LTE Band 7_Ant0	20M	QPSK	1	99	Right Tilted	DSI2(Full)	21350	2560	23.03	24.00	1.250	-0.03	0.067	0.084
	LTE Band 7_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	21350	2560	23.03	24.00	1.250	-0.11	0.094	0.118
	LTE Band 7_Ant0	20M	QPSK	1	99	Left Tilted	DSI2(Full)	21350	2560	23.03	24.00	1.250	0.03	0.074	0.093
	LTE Band 7_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	20850	2510	22.68	24.00	1.355	-0.11	0.078	0.106
14	LTE Band 7_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	21100	2535	22.78	24.00	1.324	0.18	0.092	0.122
	LTE Band 7_Ant0	20M	QPSK	50	24	Right Cheek	DSI2(Full)	21350	2560	22.15	23.00	1.216	-0.02	0.043	0.052
	LTE Band 7_Ant0	20M	QPSK	50	24	Right Tilted	DSI2(Full)	21350	2560	22.15	23.00	1.216	-0.05	0.038	0.047
	LTE Band 7_Ant0	20M	QPSK	50	24	Left Cheek	DSI2(Full)	21350	2560	22.15	23.00	1.216	0.1	0.053	0.065
	LTE Band 7_Ant0	20M	QPSK	50	24	Left Tilted	DSI2(Full)	21350	2560	22.15	23.00	1.216	0.11	0.038	0.046



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant0	20M	QPSK	1	99	Right Cheek	DSI2(Full)	40620	2593	22.97	24.00	1.268	62.9	1.006	0.03	0.033	0.041
	LTE Band 41_Ant0	20M	QPSK	1	99	Right Tilted	DSI2(Full)	40620	2593	22.97	24.00	1.268	62.9	1.006	0.1	0.029	0.036
	LTE Band 41_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	40620	2593	22.97	24.00	1.268	62.9	1.006	-0.1	0.041	0.053
	LTE Band 41_Ant0	20M	QPSK	1	99	Left Tilted	DSI2(Full)	40620	2593	22.97	24.00	1.268	62.9	1.006	-0.08	0.034	0.043
	LTE Band 41_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	39750	2506	22.73	24.00	1.340	62.9	1.006	0.09	0.037	0.050
	LTE Band 41_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	40185	2549.5	22.90	24.00	1.288	62.9	1.006	0.09	0.037	0.048
	LTE Band 41_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	41055	2636.5	22.84	24.00	1.306	62.9	1.006	0.13	0.034	0.045
	LTE Band 41_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	41490	2680	22.66	24.00	1.361	62.9	1.006	0.04	0.034	0.047
	LTE Band 41C_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	40620+40818	2593+2612.8	20.75	21.90	1.303	62.9	1.006	0.04	0.025	0.032
	LTE Band 41_Ant0	20M	QPSK	50	24	Right Cheek	DSI2(Full)	40620	2593	22.15	23.00	1.216	62.9	1.006	0.18	0.029	0.035
	LTE Band 41_Ant0	20M	QPSK	50	24	Right Tilted	DSI2(Full)	40620	2593	22.15	23.00	1.216	62.9	1.006	0.02	0.024	0.029
	LTE Band 41_Ant0	20M	QPSK	50	24	Left Cheek	DSI2(Full)	40620	2593	22.15	23.00	1.216	62.9	1.006	-0.01	0.034	0.042
	LTE Band 41_Ant0	20M	QPSK	50	24	Left Tilted	DSI2(Full)	40620	2593	22.15	23.00	1.216	62.9	1.006	-0.11	0.032	0.039
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Right Cheek	DSI2(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	0.06	0.052	0.064
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Right Tilted	DSI2(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	-0.07	0.043	0.053
15	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	-0.12	0.057	0.070
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Left Tilted	DSI2(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	0.09	0.052	0.064
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	39750	2506	25.91	27.00	1.285	42.9	1.009	0.17	0.048	0.062
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	40185	2549.5	26.02	27.00	1.253	42.9	1.009	0.09	0.050	0.063
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	41055	2636.5	26.10	27.00	1.230	42.9	1.009	0.08	0.047	0.058
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Left Cheek	DSI2(Full)	41490	2680	25.87	27.00	1.297	42.9	1.009	0.11	0.044	0.057
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Right Cheek	DSI2(Full)	40620	2593	24.49	26.00	1.416	42.9	1.009	0.16	0.035	0.049
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Right Tilted	DSI2(Full)	40620	2593	24.49	26.00	1.416	42.9	1.009	-0.06	0.031	0.044
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Left Cheek	DSI2(Full)	40620	2593	24.49	26.00	1.416	42.9	1.009	-0.08	0.040	0.057
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Left Tilted	DSI2(Full)	40620	2593	24.49	26.00	1.416	42.9	1.009	0.04	0.039	0.056



<5GNR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Full)	136100	680.5	23.05	24.00	1.245	-0.07	0.482	0.600
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Full)	136100	680.5	23.05	24.00	1.245	0.07	0.361	0.449
16	N71_Ant 1	20M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Full)	136100	680.5	23.05	24.00	1.245	0.12	0.728	0.906
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Full)	136100	680.5	23.05	24.00	1.245	0.03	0.458	0.570
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Right Cheek	DSI2(Full)	136100	680.5	22.95	24.00	1.274	0.16	0.515	0.656
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Right Tilted	DSI2(Full)	136100	680.5	22.95	24.00	1.274	0.05	0.495	0.630
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Left Cheek	DSI2(Full)	136100	680.5	22.95	24.00	1.274	0.01	0.694	0.884
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Left Tilted	DSI2(Full)	136100	680.5	22.95	24.00	1.274	0.09	0.502	0.639
	N71_Ant 1	20M	BPSK	100	0	DFT-15	Left Cheek	DSI2(Full)	136100	680.5	22.92	24.00	1.282	-0.07	0.702	0.900
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Full)	136100	680.5	23.07	24.00	1.239	0.16	0.089	0.110
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Full)	136100	680.5	23.07	24.00	1.239	0.05	0.024	0.030
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Full)	136100	680.5	23.07	24.00	1.239	0.01	0.054	0.067
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Full)	136100	680.5	23.07	24.00	1.239	-0.01	0.022	0.027
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Right Cheek	DSI2(Full)	136100	680.5	23.05	24.00	1.245	0.16	0.093	0.115
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Right Tilted	DSI2(Full)	136100	680.5	23.05	24.00	1.245	0.06	0.022	0.027
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Left Cheek	DSI2(Full)	136100	680.5	23.05	24.00	1.245	0.04	0.055	0.068
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Left Tilted	DSI2(Full)	136100	680.5	23.05	24.00	1.245	0.08	0.026	0.032
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Standalone)	167300	836.5	22.20	23.00	1.202	-0.08	0.899	1.081
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Standalone)	167300	836.5	22.20	23.00	1.202	-0.07	0.856	1.029
17	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Standalone)	167300	836.5	22.20	23.00	1.202	0.03	1.020	1.226
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Standalone)	167300	836.5	22.20	23.00	1.202	0.11	0.960	1.154
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Right Cheek	DSI2(Standalone)	167300	836.5	22.18	23.00	1.208	0.14	0.885	1.069
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Right Tilted	DSI2(Standalone)	167300	836.5	22.18	23.00	1.208	-0.01	0.844	1.019
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Left Cheek	DSI2(Standalone)	167300	836.5	22.18	23.00	1.208	-0.12	0.960	1.160
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Left Tilted	DSI2(Standalone)	167300	836.5	22.18	23.00	1.208	-0.09	0.930	1.123
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Right Cheek	DSI2(Standalone)	167300	836.5	22.17	23.00	1.211	-0.12	0.883	1.069
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Right Tilted	DSI2(Standalone)	167300	836.5	22.17	23.00	1.211	-0.1	0.834	1.010
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Left Cheek	DSI2(Standalone)	167300	836.5	22.17	23.00	1.211	0.12	0.953	1.154
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Left Tilted	DSI2(Standalone)	167300	836.5	22.17	23.00	1.211	-0.01	0.922	1.116
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Simultaneous)	167300	836.5	21.25	22.00	1.189	0.07	0.715	0.850
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Simultaneous)	167300	836.5	21.25	22.00	1.189	0.03	0.682	0.811
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Simultaneous)	167300	836.5	21.25	22.00	1.189	-0.12	0.828	0.984
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Simultaneous)	167300	836.5	21.25	22.00	1.189	0.06	0.793	0.942
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Right Cheek	DSI2(Simultaneous)	167300	836.5	21.24	22.00	1.191	0.11	0.699	0.833
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Right Tilted	DSI2(Simultaneous)	167300	836.5	21.24	22.00	1.191	0.07	0.672	0.801
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Left Cheek	DSI2(Simultaneous)	167300	836.5	21.24	22.00	1.191	0.07	0.820	0.977
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Left Tilted	DSI2(Simultaneous)	167300	836.5	21.24	22.00	1.191	-0.11	0.782	0.932
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Right Cheek	DSI2(Simultaneous)	167300	836.5	21.22	22.00	1.197	-0.05	0.701	0.839
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Right Tilted	DSI2(Simultaneous)	167300	836.5	21.22	22.00	1.197	-0.08	0.675	0.808
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Left Cheek	DSI2(Simultaneous)	167300	836.5	21.22	22.00	1.197	0.05	0.817	0.978
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Left Tilted	DSI2(Simultaneous)	167300	836.5	21.22	22.00	1.197	-0.11	0.773	0.925
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Full)	167300	836.5	23.25	24.00	1.189	-0.04	0.132	0.157
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Full)	167300	836.5	23.25	24.00	1.189	0.09	0.059	0.070
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Full)	167300	836.5	23.25	24.00	1.189	0.04	0.069	0.082
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Full)	167300	836.5	23.25	24.00	1.189	0.05	0.067	0.080
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Right Cheek	DSI2(Full)	167300	836.5	23.20	24.00	1.202	0.09	0.143	0.172
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Right Tilted	DSI2(Full)	167300	836.5	23.20	24.00	1.202	-0.05	0.052	0.063
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Left Cheek	DSI2(Full)	167300	836.5	23.20	24.00	1.202	-0.12	0.072	0.087
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Left Tilted	DSI2(Full)	167300	836.5	23.20	24.00	1.202	-0.09	0.065	0.078
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Standalone)	349000	1745	16.65	17.50	1.216	-0.02	0.453	0.551
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Standalone)	349000	1745	16.65	17.50	1.216	0.02	0.556	0.676
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Standalone)	349000	1745	16.65	17.50	1.216	0.09	0.832	1.012
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Standalone)	349000	1745	16.65	17.50	1.216	0.08	0.956	1.163



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	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Standalone)	346000	1730	16.60	17.50	1.230	-0.05	0.888	1.092
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Standalone)	352000	1760	16.56	17.50	1.242	-0.08	0.784	0.973
18	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Standalone)	346000	1730	16.60	17.50	1.230	0.09	1.010	1.243
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Standalone)	352000	1760	16.56	17.50	1.242	-0.02	0.895	1.111
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Standalone)	349000	1745	16.63	17.50	1.222	-0.1	0.436	0.533
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Right Tilted	DSI2(Standalone)	349000	1745	16.63	17.50	1.222	-0.09	0.533	0.651
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Standalone)	349000	1745	16.63	17.50	1.222	0.06	0.782	0.955
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Standalone)	349000	1745	16.63	17.50	1.222	0.18	0.906	1.107
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Standalone)	346000	1730	16.58	17.50	1.236	0.04	0.850	1.051
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Standalone)	352000	1760	16.55	17.50	1.245	-0.02	0.731	0.910
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Standalone)	346000	1730	16.58	17.50	1.236	0.08	0.923	1.141
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Standalone)	352000	1760	16.55	17.50	1.245	0.07	0.839	1.044
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Left Cheek	DSI2(Standalone)	349000	1745	16.61	17.50	1.227	0.18	0.772	0.948
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Left Tilted	DSI2(Standalone)	349000	1745	16.61	17.50	1.227	-0.01	0.891	1.094
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Simultaneous)	349000	1745	15.65	16.50	1.216	-0.08	0.366	0.445
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Simultaneous)	349000	1745	15.65	16.50	1.216	0.08	0.443	0.539
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Simultaneous)	349000	1745	15.65	16.50	1.216	0.13	0.654	0.795
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Simultaneous)	349000	1745	15.65	16.50	1.216	0.1	0.754	0.917
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Simultaneous)	346000	1730	15.56	16.50	1.242	0.16	0.803	0.997
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Simultaneous)	352000	1760	15.57	16.50	1.239	-0.07	0.691	0.856
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Simultaneous)	349000	1745	15.63	16.50	1.222	0.16	0.343	0.419
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Right Tilted	DSI2(Simultaneous)	349000	1745	15.63	16.50	1.222	-0.06	0.411	0.502
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Simultaneous)	349000	1745	15.63	16.50	1.222	0.18	0.608	0.743
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Simultaneous)	349000	1745	15.63	16.50	1.222	0.03	0.695	0.849
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Simultaneous)	346000	1730	15.55	16.50	1.245	-0.13	0.728	0.906
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Simultaneous)	352000	1760	15.55	16.50	1.245	-0.04	0.634	0.789
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Left Tilted	DSI2(Simultaneous)	349000	1745	15.62	16.50	1.225	0.06	0.604	0.740
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Full)	349000	1745	22.84	24.00	1.306	-0.07	0.053	0.069
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Full)	349000	1745	22.84	24.00	1.306	0.06	0.015	0.020
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Full)	349000	1745	22.84	24.00	1.306	0.01	0.049	0.064
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Full)	349000	1745	22.84	24.00	1.306	0.03	0.010	0.013
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Full)	349000	1745	22.79	24.00	1.321	-0.01	0.066	0.087
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Right Tilted	DSI2(Full)	349000	1745	22.79	24.00	1.321	0.07	0.013	0.017
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Full)	349000	1745	22.79	24.00	1.321	-0.1	0.048	0.063
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Full)	349000	1745	22.79	24.00	1.321	0.02	0.008	0.011
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Full)	346000	1730	22.73	24.00	1.340	0.03	0.073	0.098
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Full)	352000	1760	22.75	24.00	1.334	0.05	0.069	0.092
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Standalone)	376500	1882.5	16.18	17.00	1.208	0.08	0.464	0.560
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Standalone)	376500	1882.5	16.18	17.00	1.208	-0.09	0.569	0.687
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Standalone)	376500	1882.5	16.18	17.00	1.208	0.15	0.787	0.951
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Standalone)	376500	1882.5	16.18	17.00	1.208	0.09	0.852	1.029
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Standalone)	374000	1870	16.16	17.00	1.213	-0.05	0.741	0.899
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Standalone)	379000	1895	16.14	17.00	1.219	0.16	0.834	1.017
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Standalone)	374000	1870	16.16	17.00	1.213	-0.04	0.801	0.972
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Standalone)	379000	1895	16.14	17.00	1.219	0.12	0.899	1.096
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Standalone)	376500	1882.5	16.17	17.00	1.211	0.01	0.506	0.613
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Right Tilted	DSI2(Standalone)	376500	1882.5	16.17	17.00	1.211	-0.04	0.614	0.743
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Standalone)	376500	1882.5	16.17	17.00	1.211	-0.01	0.841	1.018
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Standalone)	376500	1882.5	16.17	17.00	1.211	0.03	0.906	1.097
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Standalone)	374000	1870	16.15	17.00	1.216	-0.09	0.796	0.968
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Standalone)	379000	1895	16.12	17.00	1.225	-0.03	0.887	1.086
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Standalone)	374000	1870	16.15	17.00	1.216	-0.05	0.865	1.052
19	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Standalone)	379000	1895	16.12	17.00	1.225	-0.09	0.969	1.187
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Left Cheek	DSI2(Standalone)	376500	1882.5	16.16	17.00	1.213	-0.12	0.778	0.944
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Left Tilted	DSI2(Standalone)	376500	1882.5	16.16	17.00	1.213	-0.04	0.855	1.037
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Simultaneous)	376500	1882.5	15.15	16.00	1.216	0.12	0.371	0.451



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	N25_Ant 1	40M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Simultaneous)	376500	1882.5	15.15	16.00	1.216	-0.04	0.450	0.547
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Simultaneous)	376500	1882.5	15.15	16.00	1.216	-0.1	0.631	0.767
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Simultaneous)	376500	1882.5	15.15	16.00	1.216	-0.12	0.671	0.816
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Simultaneous)	374000	1870	15.10	16.00	1.230	0.04	0.630	0.775
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Simultaneous)	379000	1895	15.10	16.00	1.230	-0.06	0.717	0.882
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Simultaneous)	376500	1882.5	15.13	16.00	1.222	-0.03	0.406	0.496
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Right Tilted	DSI2(Simultaneous)	376500	1882.5	15.13	16.00	1.222	0.13	0.495	0.605
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Simultaneous)	376500	1882.5	15.13	16.00	1.222	-0.07	0.672	0.821
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Simultaneous)	376500	1882.5	15.13	16.00	1.222	-0.06	0.731	0.893
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Simultaneous)	374000	1870	15.08	16.00	1.236	0.05	0.645	0.797
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Simultaneous)	379000	1895	15.09	16.00	1.233	0.11	0.721	0.889
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Simultaneous)	374000	1870	15.08	16.00	1.236	0.14	0.707	0.874
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Simultaneous)	379000	1895	15.09	16.00	1.233	-0.1	0.787	0.970
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Left Cheek	DSI2(Simultaneous)	376500	1882.5	15.11	16.00	1.227	0.08	0.641	0.787
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Left Tilted	DSI2(Simultaneous)	376500	1882.5	15.11	16.00	1.227	-0.1	0.683	0.838
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Right Cheek	DSI2(Full)	376500	1882.5	23.25	24.00	1.189	-0.08	0.048	0.057
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Right Tilted	DSI2(Full)	376500	1882.5	23.25	24.00	1.189	0.03	0.011	0.013
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Left Cheek	DSI2(Full)	376500	1882.5	23.25	24.00	1.189	0.1	0.050	0.059
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Left Tilted	DSI2(Full)	376500	1882.5	23.25	24.00	1.189	0.02	0.012	0.014
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Full)	376500	1882.5	23.18	24.00	1.208	0.17	0.067	0.081
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Right Tilted	DSI2(Full)	376500	1882.5	23.18	24.00	1.208	0.03	0.017	0.021
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Left Cheek	DSI2(Full)	376500	1882.5	23.18	24.00	1.208	0.05	0.053	0.064
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Left Tilted	DSI2(Full)	376500	1882.5	23.18	24.00	1.208	0.06	0.014	0.017
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Full)	374000	1870	23.15	24.00	1.216	-0.1	0.055	0.067
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Right Cheek	DSI2(Full)	379000	1895	23.09	24.00	1.233	0.03	0.052	0.064
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Full)	518598	2592.99	23.04	24.00	1.247	0.06	0.064	0.080
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Full)	518598	2592.99	23.04	24.00	1.247	0.11	0.039	0.049
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Full)	518598	2592.99	23.04	24.00	1.247	0.03	0.087	0.108
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Full)	518598	2592.99	23.04	24.00	1.247	-0.07	0.048	0.060
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Full)	509202	2546.01	22.98	24.00	1.265	0.08	0.065	0.082
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Full)	528000	2640	23.02	24.00	1.253	-0.05	0.066	0.083
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Right Cheek	DSI2(Full)	518598	2592.99	23.02	24.00	1.253	0.05	0.062	0.078
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Right Tilted	DSI2(Full)	518598	2592.99	23.02	24.00	1.253	-0.03	0.038	0.048
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Left Cheek	DSI2(Full)	518598	2592.99	23.02	24.00	1.253	-0.09	0.068	0.085
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Left Tilted	DSI2(Full)	518598	2592.99	23.02	24.00	1.253	-0.07	0.046	0.058
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Full)	518598	2592.99	25.98	27.00	1.265	0.02	0.125	0.158
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Full)	518598	2592.99	25.98	27.00	1.265	0.09	0.079	0.100
20	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Full)	518598	2592.99	25.98	27.00	1.265	0.17	0.154	0.195
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Full)	518598	2592.99	25.98	27.00	1.265	0.13	0.090	0.114
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Full)	509202	2546.01	25.93	27.00	1.279	-0.08	0.130	0.166
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Full)	528000	2640	25.97	27.00	1.268	-0.01	0.092	0.117
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Right Cheek	DSI2(Full)	518598	2592.99	25.96	27.00	1.271	-0.01	0.123	0.156
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Right Tilted	DSI2(Full)	518598	2592.99	25.96	27.00	1.271	0.17	0.076	0.097
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Left Cheek	DSI2(Full)	518598	2592.99	25.96	27.00	1.271	0.16	0.146	0.186
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Left Tilted	DSI2(Full)	518598	2592.99	25.96	27.00	1.271	0.11	0.088	0.112
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Standalone)	656000	3840	19.80	21.00	1.318	-0.08	0.844	1.113
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Standalone)	656000	3840	19.80	21.00	1.318	0.06	0.393	0.518
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Standalone)	656000	3840	19.80	21.00	1.318	0.03	0.234	0.308
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Standalone)	656000	3840	19.80	21.00	1.318	0.15	0.148	0.195
21	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Cheek	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	-0.09	0.878	1.163
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Tilted	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	0.11	0.423	0.560
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Cheek	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	0.13	0.229	0.303
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Tilted	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	0.14	0.151	0.200
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Right Cheek	DSI2(Standalone)	656000	3840	19.76	21.00	1.330	0.03	0.843	1.122
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Right Tilted	DSI2(Standalone)	656000	3840	19.76	21.00	1.330	-0.05	0.419	0.557
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Simultaneous)	656000	3840	18.73	20.00	1.340	-0.04	0.676	0.906

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	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Simultaneous)	656000	3840	18.73	20.00	1.340	0.07	0.337	0.451
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Simultaneous)	656000	3840	18.73	20.00	1.340	-0.02	0.158	0.212
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Simultaneous)	656000	3840	18.73	20.00	1.340	0.09	0.129	0.173
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Cheek	DSI2(Simultaneous)	656000	3840	18.70	20.00	1.349	0.12	0.699	0.943
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Tilted	DSI2(Simultaneous)	656000	3840	18.70	20.00	1.349	0.13	0.353	0.476
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Cheek	DSI2(Simultaneous)	656000	3840	18.70	20.00	1.349	-0.11	0.169	0.228
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Tilted	DSI2(Simultaneous)	656000	3840	18.70	20.00	1.349	0.05	0.137	0.185
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Right Cheek	DSI2(Simultaneous)	656000	3840	18.68	20.00	1.355	0.11	0.668	0.905
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Right Tilted	DSI2(Simultaneous)	656000	3840	18.68	20.00	1.355	0.08	0.346	0.469
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Standalone)	633332	3499.98	19.78	21.00	1.324	0.04	0.604	0.800
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Standalone)	633332	3499.98	19.78	21.00	1.324	0.18	0.301	0.399
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Standalone)	633332	3499.98	19.78	21.00	1.324	0.03	0.214	0.283
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Standalone)	633332	3499.98	19.78	21.00	1.324	-0.02	0.145	0.192
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Cheek	DSI2(Standalone)	633332	3499.98	19.76	21.00	1.330	0.11	0.625	0.832
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Tilted	DSI2(Standalone)	633332	3499.98	19.76	21.00	1.330	0.14	0.310	0.412
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Cheek	DSI2(Standalone)	633332	3499.98	19.76	21.00	1.330	0.01	0.225	0.299
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Tilted	DSI2(Standalone)	633332	3499.98	19.76	21.00	1.330	0.07	0.153	0.204
	N77_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Right Cheek	DSI2(Standalone)	633332	3499.98	19.77	21.00	1.327	0.09	0.615	0.816
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Simultaneous)	633332	3499.98	18.75	20.00	1.334	0.12	0.393	0.524
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Simultaneous)	633332	3499.98	18.75	20.00	1.334	0.03	0.212	0.283
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Simultaneous)	633332	3499.98	18.75	20.00	1.334	0.08	0.195	0.260
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Simultaneous)	633332	3499.98	18.75	20.00	1.334	0.14	0.121	0.161
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Cheek	DSI2(Simultaneous)	633332	3499.98	18.73	20.00	1.340	0.01	0.418	0.560
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Tilted	DSI2(Simultaneous)	633332	3499.98	18.73	20.00	1.340	-0.09	0.226	0.303
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Cheek	DSI2(Simultaneous)	633332	3499.98	18.73	20.00	1.340	-0.04	0.205	0.275
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Tilted	DSI2(Simultaneous)	633332	3499.98	18.73	20.00	1.340	-0.03	0.129	0.173
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Standalone)	656000	3840	19.80	21.00	1.318	-0.08	0.844	1.113
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Standalone)	656000	3840	19.80	21.00	1.318	0.06	0.393	0.518
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Standalone)	656000	3840	19.80	21.00	1.318	0.03	0.234	0.308
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Standalone)	656000	3840	19.80	21.00	1.318	0.15	0.148	0.195
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Cheek	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	-0.09	0.878	1.163
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Tilted	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	0.11	0.423	0.560
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Cheek	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	0.13	0.229	0.303
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Tilted	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	0.14	0.151	0.200
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Right Cheek	DSI2(Standalone)	656000	3840	19.76	21.00	1.330	0.03	0.843	1.122
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Right Tilted	DSI2(Standalone)	656000	3840	19.76	21.00	1.330	-0.05	0.419	0.557
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Simultaneous)	656000	3840	18.73	20.00	1.340	-0.04	0.676	0.906
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Simultaneous)	656000	3840	18.73	20.00	1.340	0.07	0.337	0.451
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Simultaneous)	656000	3840	18.73	20.00	1.340	-0.02	0.158	0.212
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Simultaneous)	656000	3840	18.73	20.00	1.340	0.09	0.129	0.173
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Cheek	DSI2(Simultaneous)	656000	3840	18.70	20.00	1.349	0.12	0.699	0.943
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Tilted	DSI2(Simultaneous)	656000	3840	18.70	20.00	1.349	0.13	0.353	0.476
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Cheek	DSI2(Simultaneous)	656000	3840	18.70	20.00	1.349	-0.11	0.169	0.228
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Tilted	DSI2(Simultaneous)	656000	3840	18.70	20.00	1.349	0.05	0.137	0.185
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Right Cheek	DSI2(Simultaneous)	656000	3840	18.68	20.00	1.355	0.11	0.668	0.905
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Right Tilted	DSI2(Simultaneous)	656000	3840	18.68	20.00	1.355	0.08	0.346	0.469
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Standalone)	633332	3499.98	19.78	21.00	1.324	0.04	0.604	0.800
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Standalone)	633332	3499.98	19.78	21.00	1.324	0.18	0.301	0.399
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Standalone)	633332	3499.98	19.78	21.00	1.324	0.03	0.214	0.283
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Standalone)	633332	3499.98	19.78	21.00	1.324	-0.02	0.145	0.192
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Cheek	DSI2(Standalone)	633332	3499.98	19.76	21.00	1.330	0.11	0.625	0.832
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Tilted	DSI2(Standalone)	633332	3499.98	19.76	21.00	1.330	0.14	0.310	0.412
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Cheek	DSI2(Standalone)	633332	3499.98	19.76	21.00	1.330	0.01	0.225	0.299
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Tilted	DSI2(Standalone)	633332	3499.98	19.76	21.00	1.330	0.07	0.153	0.204
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Right Cheek	DSI2(Standalone)	633332	3499.98	19.77	21.00	1.327	0.09	0.615	0.816
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Cheek	DSI2(Simultaneous)	633332	3499.98	18.75	20.00	1.334	0.12	0.393	0.524

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N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Tilted	DSI2(Simultaneous)	633332	3499.98	18.75	20.00	1.334	0.03	0.212	0.283
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Cheek	DSI2(Simultaneous)	633332	3499.98	18.75	20.00	1.334	0.08	0.195	0.260
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Tilted	DSI2(Simultaneous)	633332	3499.98	18.75	20.00	1.334	0.14	0.121	0.161
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Cheek	DSI2(Simultaneous)	633332	3499.98	18.73	20.00	1.340	0.01	0.418	0.560
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Tilted	DSI2(Simultaneous)	633332	3499.98	18.73	20.00	1.340	-0.09	0.226	0.303
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Cheek	DSI2(Simultaneous)	633332	3499.98	18.73	20.00	1.340	-0.04	0.205	0.275
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Tilted	DSI2(Simultaneous)	633332	3499.98	18.73	20.00	1.340	-0.03	0.129	0.173

<WLAN2.4G SAR>

Plot No.	Band	Mode	Test Position	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 2+4	Full	1	2412	21.66	22.50	1.213	100	1.000	0.12	0.850	1.031
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 2+4	Full	1	2412	21.66	22.50	1.213	100	1.000	-0.16	0.584	0.709
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 2+4	Full	1	2412	21.66	22.50	1.213	100	1.000	-0.06	0.409	0.496
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 2+4	Full	1	2412	21.66	22.50	1.213	100	1.000	-0.03	0.439	0.533
22	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 2+4	Full	6	2437	21.56	22.50	1.242	100	1.000	-0.19	0.930	1.155
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 2+4	Full	11	2462	21.33	22.50	1.309	100	1.000	0.03	0.792	1.037
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 2+4	Simultaneous	1	2412	16.41	17.50	1.285	100	1.000	0.08	0.250	0.321
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Ant 2+4	Simultaneous	1	2412	16.41	17.50	1.285	100	1.000	-0.08	0.174	0.224
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Ant 2+4	Simultaneous	1	2412	16.41	17.50	1.285	100	1.000	0.02	0.122	0.157
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Ant 2+4	Simultaneous	1	2412	16.41	17.50	1.285	100	1.000	-0.1	0.132	0.170
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 2+4	Simultaneous	6	2437	16.31	17.50	1.315	100	1.000	0.07	0.290	0.381
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Ant 2+4	Simultaneous	11	2462	16.13	17.50	1.371	100	1.000	-0.03	0.248	0.340

<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.08	0.383	0.524
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.11	0.376	0.514
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.06	0.233	0.319
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	-0.13	0.248	0.339
23	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	52	5260	20.07	21.50	1.390	99.32	1.007	-0.09	0.512	0.717
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	56	5280	20.07	21.50	1.390	99.32	1.007	0.12	0.509	0.712
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	60	5300	20.08	21.50	1.387	99.32	1.007	0.02	0.481	0.672
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Cheek	Ant 4+12	Simultaneous	50	5250	15.45	17.00	1.429	100	1.000	0.11	0.276	0.394
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Right Tilted	Ant 4+12	Simultaneous	50	5250	15.45	17.00	1.429	100	1.000	-0.09	0.149	0.213
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Left Cheek	Ant 4+12	Simultaneous	50	5250	15.45	17.00	1.429	100	1.000	0.07	0.080	0.114
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Left Tilted	Ant 4+12	Simultaneous	50	5250	15.45	17.00	1.429	100	1.000	0.14	0.083	0.119
24	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	-0.16	0.208	0.271
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.01	0.190	0.248
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.07	0.175	0.228
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	-0.05	0.142	0.185
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	116	5580	19.93	21.50	1.435	99.32	1.007	0.11	0.111	0.160
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	132	5660	20.05	21.50	1.396	99.32	1.007	0.03	0.130	0.183
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	140	5700	20.26	21.50	1.330	99.32	1.007	-0.15	0.150	0.201
25	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	0.13	0.230	0.325
	WLAN5.8GHz	802.11a 6Mbps	Right Tilted	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.06	0.207	0.292
	WLAN5.8GHz	802.11a 6Mbps	Left Cheek	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	0.12	0.169	0.239
	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	0.03	0.147	0.208
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	149	5745	19.99	21.50	1.416	99.32	1.007	-0.11	0.160	0.228
	WLAN5.8GHz	802.11a 6Mbps	Right Cheek	Ant 4+12	Full	165	5825	19.98	21.50	1.419	99.32	1.007	-0.15	0.180	0.257

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	DH5 1Mbps	Right Cheek	Ant 2	39	2441	11.40	12.50	1.288	76.1	1.314	0.04	0.114	0.193
	Bluetooth	DH5 1Mbps	Right Tilted	Ant 2	39	2441	11.40	12.50	1.288	76.1	1.314	0.07	0.071	0.120
	Bluetooth	DH5 1Mbps	Left Cheek	Ant 2	39	2441	11.40	12.50	1.288	76.1	1.314	-0.09	0.047	0.080
	Bluetooth	DH5 1Mbps	Left Tilted	Ant 2	39	2441	11.40	12.50	1.288	76.1	1.314	0.15	0.044	0.074
	Bluetooth	DH5 1Mbps	Right Cheek	Ant 2	0	2402	11.30	12.50	1.318	76.1	1.314	0.06	0.144	0.249
27	Bluetooth	DH5 1Mbps	Right Cheek	Ant 2	78	2480	8.30	9.50	1.318	76.1	1.314	0.1	0.146	0.253

16.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	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_Ant0	GPRS(3 Tx slots)	Front	5mm	DSI3(Full)	189	836.4	27.51	28.50	1.256	0.16	0.527	0.662
	GSM850_Ant0	GPRS(3 Tx slots)	Back	5mm	DSI3(Full)	189	836.4	27.51	28.50	1.256	0.05	0.557	0.700
	GSM850_Ant0	GPRS(3 Tx slots)	Left Side	5mm	DSI3(Full)	189	836.4	27.51	28.50	1.256	0.02	0.064	0.080
	GSM850_Ant0	GPRS(3 Tx slots)	Right Side	5mm	DSI3(Full)	189	836.4	27.51	28.50	1.256	0.03	0.133	0.167
	GSM850_Ant0	GPRS(3 Tx slots)	Bottom Side	5mm	DSI3(Full)	189	836.4	27.51	28.50	1.256	-0.02	0.481	0.604
	GSM850_Ant0	GPRS(3 Tx slots)	Back	5mm	DSI3(Full)	128	824.2	27.50	28.50	1.259	0.18	0.524	0.660
28	GSM850_Ant0	GPRS(3 Tx slots)	Back	5mm	DSI3(Full)	251	848.8	27.38	28.50	1.294	-0.03	0.566	0.733
	GSM1900_Ant0	GPRS(3 Tx slots)	Front	5mm	DSI3(Simultaneous)	810	1909.8	19.14	20.50	1.368	0.17	0.369	0.505
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	5mm	DSI3(Simultaneous)	810	1909.8	19.14	20.50	1.368	-0.1	0.436	0.596
	GSM1900_Ant0	GPRS(3 Tx slots)	Left Side	5mm	DSI3(Simultaneous)	810	1909.8	19.14	20.50	1.368	-	n/a	n/a
	GSM1900_Ant0	GPRS(3 Tx slots)	Right Side	5mm	DSI3(Simultaneous)	810	1909.8	19.14	20.50	1.368	-	n/a	n/a
	GSM1900_Ant0	GPRS(3 Tx slots)	Bottom Side	5mm	DSI3(Simultaneous)	810	1909.8	19.14	20.50	1.368	-0.11	0.866	1.184
29	GSM1900_Ant0	GPRS(3 Tx slots)	Bottom Side	5mm	DSI3(Simultaneous)	512	1850.2	18.93	20.50	1.435	0.11	0.863	1.239
	GSM1900_Ant0	GPRS(3 Tx slots)	Bottom Side	5mm	DSI3(Simultaneous)	661	1880	19.12	20.50	1.374	0.07	0.852	1.171



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	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 V_Ant1	RMC 12.2Kbps	Front	5mm	DSI3(Simultaneous)	4182	836.4	21.78	22.50	1.180	-0.12	0.562	0.663
	WCDMA V_Ant1	RMC 12.2Kbps	Back	5mm	DSI3(Simultaneous)	4182	836.4	21.78	22.50	1.180	0.18	0.675	0.797
	WCDMA V_Ant1	RMC 12.2Kbps	Left Side	5mm	DSI3(Simultaneous)	4182	836.4	21.78	22.50	1.180	0.01	0.156	0.184
	WCDMA V_Ant1	RMC 12.2Kbps	Right Side	5mm	DSI3(Simultaneous)	4182	836.4	21.78	22.50	1.180	0.09	0.241	0.284
	WCDMA V_Ant1	RMC 12.2Kbps	Top Side	5mm	DSI3(Simultaneous)	4182	836.4	21.78	22.50	1.180	-0.02	0.805	0.950
	WCDMA V_Ant1	RMC 12.2Kbps	Top Side	5mm	DSI3(Simultaneous)	4132	826.4	21.71	22.50	1.199	-0.08	0.795	0.954
	WCDMA V_Ant1	RMC 12.2Kbps	Top Side	5mm	DSI3(Simultaneous)	4233	846.6	21.77	22.50	1.183	-0.06	0.839	0.993
	WCDMA V_Ant0	RMC 12.2Kbps	Front	5mm	DSI3(Full)	4182	836.4	24.02	25.00	1.253	-0.04	0.748	0.937
30	WCDMA V_Ant0	RMC 12.2Kbps	Back	5mm	DSI3(Full)	4182	836.4	24.02	25.00	1.253	0.11	0.910	1.140
	WCDMA V_Ant0	RMC 12.2Kbps	Left Side	5mm	DSI3(Full)	4182	836.4	24.02	25.00	1.253	-0.03	0.099	0.124
	WCDMA V_Ant0	RMC 12.2Kbps	Right Side	5mm	DSI3(Full)	4182	836.4	24.02	25.00	1.253	-0.11	0.166	0.208
	WCDMA V_Ant0	RMC 12.2Kbps	Bottom Side	5mm	DSI3(Full)	4182	836.4	24.02	25.00	1.253	0.07	0.712	0.892
	WCDMA V_Ant0	RMC 12.2Kbps	Bottom Side	5mm	DSI3(Full)	4132	826.4	24.01	25.00	1.256	-0.02	0.702	0.882
	WCDMA V_Ant0	RMC 12.2Kbps	Bottom Side	5mm	DSI3(Full)	4233	846.6	24.01	25.00	1.256	0.07	0.693	0.870
	WCDMA V_Ant0	RMC 12.2Kbps	Front	5mm	DSI3(Full)	4132	826.4	24.01	25.00	1.256	0.18	0.723	0.908
	WCDMA V_Ant0	RMC 12.2Kbps	Front	5mm	DSI3(Full)	4233	846.6	24.01	25.00	1.256	0.06	0.689	0.865
	WCDMA V_Ant0	RMC 12.2Kbps	Back	5mm	DSI3(Full)	4132	826.4	24.01	25.00	1.256	0.03	0.840	1.055
	WCDMA V_Ant0	RMC 12.2Kbps	Back	5mm	DSI3(Full)	4233	846.6	24.01	25.00	1.256	0.06	0.856	1.075
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	5mm	DSI3(Simultaneous)	1413	1732.6	14.55	15.50	1.245	0.06	0.445	0.554
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	5mm	DSI3(Simultaneous)	1413	1732.6	14.55	15.50	1.245	-0.11	0.611	0.760
	WCDMA IV_Ant1	RMC 12.2Kbps	Left Side	5mm	DSI3(Simultaneous)	1413	1732.6	14.55	15.50	1.245	0.07	n/a	n/a
	WCDMA IV_Ant1	RMC 12.2Kbps	Right Side	5mm	DSI3(Simultaneous)	1413	1732.6	14.55	15.50	1.245	0.02	0.058	0.072
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	5mm	DSI3(Simultaneous)	1413	1732.6	14.55	15.50	1.245	-0.15	0.762	0.948
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	5mm	DSI3(Simultaneous)	1312	1712.4	14.53	15.50	1.250	0.12	0.739	0.924
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	5mm	DSI3(Simultaneous)	1513	1752.6	14.50	15.50	1.259	0.11	0.683	0.860
	WCDMA IV_Ant0	RMC 12.2Kbps	Front	5mm	DSI3(Simultaneous)	1413	1732.6	16.30	17.50	1.318	-0.04	0.508	0.670
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	5mm	DSI3(Simultaneous)	1413	1732.6	16.30	17.50	1.318	-0.04	0.573	0.755
	WCDMA IV_Ant0	RMC 12.2Kbps	Left Side	5mm	DSI3(Simultaneous)	1413	1732.6	16.30	17.50	1.318	-	n/a	n/a
	WCDMA IV_Ant0	RMC 12.2Kbps	Right Side	5mm	DSI3(Simultaneous)	1413	1732.6	16.30	17.50	1.318	0.12	0.043	0.057
31	WCDMA IV_Ant0	RMC 12.2Kbps	Bottom Side	5mm	DSI3(Simultaneous)	1413	1732.6	16.30	17.50	1.318	-0.15	0.874	1.152
	WCDMA IV_Ant0	RMC 12.2Kbps	Bottom Side	5mm	DSI3(Simultaneous)	1312	1712.4	16.22	17.50	1.343	0.08	0.806	1.082
	WCDMA IV_Ant0	RMC 12.2Kbps	Bottom Side	5mm	DSI3(Simultaneous)	1513	1752.6	16.29	17.50	1.321	0.13	0.837	1.106
	WCDMA II_Ant1	RMC 12.2Kbps	Front	5mm	DSI3(Simultaneous)	9400	1880	18.25	19.00	1.189	-0.01	0.321	0.382
	WCDMA II_Ant1	RMC 12.2Kbps	Back	5mm	DSI3(Simultaneous)	9400	1880	18.25	19.00	1.189	-0.13	0.541	0.643
	WCDMA II_Ant1	RMC 12.2Kbps	Left Side	5mm	DSI3(Simultaneous)	9400	1880	18.25	19.00	1.189	-	n/a	n/a
	WCDMA II_Ant1	RMC 12.2Kbps	Right Side	5mm	DSI3(Simultaneous)	9400	1880	18.25	19.00	1.189	0.01	0.047	0.056
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	5mm	DSI3(Simultaneous)	9400	1880	18.25	19.00	1.189	0.06	0.773	0.919
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	5mm	DSI3(Simultaneous)	9262	1852.4	18.24	19.00	1.191	0.15	0.838	0.998
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	5mm	DSI3(Simultaneous)	9538	1907.6	18.14	19.00	1.219	0.13	0.743	0.906
	WCDMA II_Ant0	RMC 12.2Kbps	Front	5mm	DSI3(Simultaneous)	9400	1880	14.81	16.00	1.315	0.01	0.339	0.446
	WCDMA II_Ant0	RMC 12.2Kbps	Back	5mm	DSI3(Simultaneous)	9400	1880	14.81	16.00	1.315	-0.15	0.468	0.616
	WCDMA II_Ant0	RMC 12.2Kbps	Left Side	5mm	DSI3(Simultaneous)	9400	1880	14.81	16.00	1.315	-	n/a	n/a
	WCDMA II_Ant0	RMC 12.2Kbps	Right Side	5mm	DSI3(Simultaneous)	9400	1880	14.81	16.00	1.315	-	n/a	n/a
	WCDMA II_Ant0	RMC 12.2Kbps	Bottom Side	5mm	DSI3(Simultaneous)	9400	1880	14.81	16.00	1.315	-0.07	0.897	1.180
	WCDMA II_Ant0	RMC 12.2Kbps	Bottom Side	5mm	DSI3(Simultaneous)	9262	1852.4	14.68	16.00	1.355	0.03	0.849	1.151
32	WCDMA II_Ant0	RMC 12.2Kbps	Bottom Side	5mm	DSI3(Simultaneous)	9538	1907.6	14.78	16.00	1.324	-0.11	0.935	1.238



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
33	LTE Band 71_Ant1	20M	QPSK	1	0	Front	5mm	DSI3(Full)	133322	683	22.95	24.00	1.274	0.18	0.390	0.497
	LTE Band 71_Ant1	20M	QPSK	1	0	Back	5mm	DSI3(Full)	133322	683	22.95	24.00	1.274	-0.08	0.561	0.714
	LTE Band 71_Ant1	20M	QPSK	1	0	Left Side	5mm	DSI3(Full)	133322	683	22.95	24.00	1.274	0.16	0.281	0.358
	LTE Band 71_Ant1	20M	QPSK	1	0	Right Side	5mm	DSI3(Full)	133322	683	22.95	24.00	1.274	0.05	0.491	0.625
	LTE Band 71_Ant1	20M	QPSK	1	0	Top Side	5mm	DSI3(Full)	133322	683	22.95	24.00	1.274	0.02	0.412	0.525
	LTE Band 71_Ant1	20M	QPSK	50	0	Front	5mm	DSI3(Full)	133322	683	21.90	23.00	1.288	-0.02	0.233	0.300
	LTE Band 71_Ant1	20M	QPSK	50	0	Back	5mm	DSI3(Full)	133322	683	21.90	23.00	1.288	0.18	0.324	0.417
	LTE Band 71_Ant1	20M	QPSK	50	0	Left Side	5mm	DSI3(Full)	133322	683	21.90	23.00	1.288	0.1	0.158	0.204
	LTE Band 71_Ant1	20M	QPSK	50	0	Right Side	5mm	DSI3(Full)	133322	683	21.90	23.00	1.288	0.14	0.292	0.376
	LTE Band 71_Ant1	20M	QPSK	50	0	Top Side	5mm	DSI3(Full)	133322	683	21.90	23.00	1.288	0.09	0.246	0.317
	LTE Band 71_Ant0	20M	QPSK	1	0	Front	5mm	DSI3(Full)	133322	683	23.46	24.50	1.271	-0.09	0.320	0.407
	LTE Band 71_Ant0	20M	QPSK	1	0	Back	5mm	DSI3(Full)	133322	683	23.46	24.50	1.271	0.12	0.471	0.598
	LTE Band 71_Ant0	20M	QPSK	1	0	Left Side	5mm	DSI3(Full)	133322	683	23.46	24.50	1.271	0.05	0.201	0.255
	LTE Band 71_Ant0	20M	QPSK	1	0	Right Side	5mm	DSI3(Full)	133322	683	23.46	24.50	1.271	0.14	0.190	0.241
	LTE Band 71_Ant0	20M	QPSK	1	0	Bottom Side	5mm	DSI3(Full)	133322	683	23.46	24.50	1.271	0.06	0.325	0.413
	LTE Band 71_Ant0	20M	QPSK	50	0	Front	5mm	DSI3(Full)	133322	683	22.56	23.50	1.242	0.11	0.184	0.228
	LTE Band 71_Ant0	20M	QPSK	50	0	Back	5mm	DSI3(Full)	133322	683	22.56	23.50	1.242	-0.07	0.283	0.351
	LTE Band 71_Ant0	20M	QPSK	50	0	Left Side	5mm	DSI3(Full)	133322	683	22.56	23.50	1.242	0.04	0.117	0.145
	LTE Band 71_Ant0	20M	QPSK	50	0	Right Side	5mm	DSI3(Full)	133322	683	22.56	23.50	1.242	0.05	0.112	0.139
	LTE Band 71_Ant0	20M	QPSK	50	0	Bottom Side	5mm	DSI3(Full)	133322	683	22.56	23.50	1.242	0.07	0.079	0.098
34	LTE Band 12_Ant1	10M	QPSK	1	25	Front	5mm	DSI3(Full)	23095	707.5	22.55	23.50	1.245	0.03	0.531	0.661
	LTE Band 12_Ant1	10M	QPSK	1	25	Back	5mm	DSI3(Full)	23095	707.5	22.55	23.50	1.245	-0.05	0.636	0.792
	LTE Band 12_Ant1	10M	QPSK	1	25	Left Side	5mm	DSI3(Full)	23095	707.5	22.55	23.50	1.245	-0.04	0.282	0.351
	LTE Band 12_Ant1	10M	QPSK	1	25	Right Side	5mm	DSI3(Full)	23095	707.5	22.55	23.50	1.245	0.11	0.504	0.627
	LTE Band 12_Ant1	10M	QPSK	1	25	Top Side	5mm	DSI3(Full)	23095	707.5	22.55	23.50	1.245	-0.03	0.613	0.763
	LTE Band 12_Ant1	10M	QPSK	25	12	Front	5mm	DSI3(Full)	23095	707.5	21.66	22.50	1.213	0.07	0.286	0.347
	LTE Band 12_Ant1	10M	QPSK	25	12	Back	5mm	DSI3(Full)	23095	707.5	21.66	22.50	1.213	-0.02	0.375	0.455
	LTE Band 12_Ant1	10M	QPSK	25	12	Left Side	5mm	DSI3(Full)	23095	707.5	21.66	22.50	1.213	0.07	0.154	0.187
	LTE Band 12_Ant1	10M	QPSK	25	12	Right Side	5mm	DSI3(Full)	23095	707.5	21.66	22.50	1.213	0.18	0.281	0.341
	LTE Band 12_Ant1	10M	QPSK	25	12	Top Side	5mm	DSI3(Full)	23095	707.5	21.66	22.50	1.213	0.06	0.393	0.477
	LTE Band 12_Ant0	10M	QPSK	1	25	Front	5mm	DSI3(Full)	23095	707.5	23.75	24.50	1.189	0.06	0.424	0.504
	LTE Band 12_Ant0	10M	QPSK	1	25	Back	5mm	DSI3(Full)	23095	707.5	23.75	24.50	1.189	-0.01	0.625	0.743
	LTE Band 12_Ant0	10M	QPSK	1	25	Left Side	5mm	DSI3(Full)	23095	707.5	23.75	24.50	1.189	-0.04	0.221	0.263
	LTE Band 12_Ant0	10M	QPSK	1	25	Right Side	5mm	DSI3(Full)	23095	707.5	23.75	24.50	1.189	-0.13	0.192	0.228
	LTE Band 12_Ant0	10M	QPSK	1	25	Bottom Side	5mm	DSI3(Full)	23095	707.5	23.75	24.50	1.189	0.12	0.398	0.473
	LTE Band 12_Ant0	10M	QPSK	25	12	Front	5mm	DSI3(Full)	23095	707.5	22.78	23.50	1.180	0.08	0.228	0.269
	LTE Band 12_Ant0	10M	QPSK	25	12	Back	5mm	DSI3(Full)	23095	707.5	22.78	23.50	1.180	0.13	0.345	0.407
	LTE Band 12_Ant0	10M	QPSK	25	12	Left Side	5mm	DSI3(Full)	23095	707.5	22.78	23.50	1.180	0.09	0.120	0.142
	LTE Band 12_Ant0	10M	QPSK	25	12	Right Side	5mm	DSI3(Full)	23095	707.5	22.78	23.50	1.180	0.01	0.104	0.123
	LTE Band 12_Ant0	10M	QPSK	25	12	Bottom Side	5mm	DSI3(Full)	23095	707.5	22.78	23.50	1.180	-0.15	0.214	0.253
	LTE Band 13_Ant1	10M	QPSK	1	25	Front	5mm	DSI3(Full)	23230	782	22.34	23.50	1.306	0.08	0.673	0.879
	LTE Band 13_Ant1	10M	QPSK	1	25	Back	5mm	DSI3(Full)	23230	782	22.34	23.50	1.306	-0.07	0.713	0.931
	LTE Band 13_Ant1	10M	QPSK	1	25	Left Side	5mm	DSI3(Full)	23230	782	22.34	23.50	1.306	0.03	0.200	0.261
	LTE Band 13_Ant1	10M	QPSK	1	25	Right Side	5mm	DSI3(Full)	23230	782	22.34	23.50	1.306	0.02	0.593	0.775
	LTE Band 13_Ant1	10M	QPSK	1	25	Top Side	5mm	DSI3(Full)	23230	782	22.34	23.50	1.306	0.03	0.748	0.977
	LTE Band 13_Ant1	10M	QPSK	25	12	Front	5mm	DSI3(Full)	23230	782	21.82	22.50	1.169	0.18	0.408	0.477
	LTE Band 13_Ant1	10M	QPSK	25	12	Back	5mm	DSI3(Full)	23230	782	21.82	22.50	1.169	0.1	0.460	0.538
	LTE Band 13_Ant1	10M	QPSK	25	12	Left Side	5mm	DSI3(Full)	23230	782	21.82	22.50	1.169	0.14	0.147	0.172
	LTE Band 13_Ant1	10M	QPSK	25	12	Right Side	5mm	DSI3(Full)	23230	782	21.82	22.50	1.169	0.11	0.335	0.392
	LTE Band 13_Ant1	10M	QPSK	25	12	Top Side	5mm	DSI3(Full)	23230	782	21.82	22.50	1.169	0.06	0.503	0.588
	LTE Band 13_Ant1	10M	QPSK	50	0	Front	5mm	DSI3(Full)	23230	782	21.83	22.50	1.167	-0.09	0.415	0.484
	LTE Band 13_Ant1	10M	QPSK	50	0	Back	5mm	DSI3(Full)	23230	782	21.83	22.50	1.167	0.05	0.454	0.530



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	LTE Band 13_Ant1	10M	QPSK	50	0	Top Side	5mm	DSI3(Full)	23230	782	21.83	22.50	1.167	-0.09	0.521	0.608
	LTE Band 13_Ant0	10M	QPSK	1	25	Front	5mm	DSI3(Full)	23230	782	23.20	24.50	1.349	0.01	0.773	1.043
35	LTE Band 13_Ant0	10M	QPSK	1	25	Back	5mm	DSI3(Full)	23230	782	23.20	24.50	1.349	0.03	0.928	1.252
	LTE Band 13_Ant0	10M	QPSK	1	25	Left Side	5mm	DSI3(Full)	23230	782	23.20	24.50	1.349	0.14	0.249	0.336
	LTE Band 13_Ant0	10M	QPSK	1	25	Right Side	5mm	DSI3(Full)	23230	782	23.20	24.50	1.349	-0.03	0.445	0.600
	LTE Band 13_Ant0	10M	QPSK	1	25	Bottom Side	5mm	DSI3(Full)	23230	782	23.20	24.50	1.349	0.17	0.698	0.942
	LTE Band 13_Ant0	10M	QPSK	25	12	Front	5mm	DSI3(Full)	23230	782	22.54	23.50	1.247	0.13	0.461	0.575
	LTE Band 13_Ant0	10M	QPSK	25	12	Back	5mm	DSI3(Full)	23230	782	22.54	23.50	1.247	0.01	0.555	0.692
	LTE Band 13_Ant0	10M	QPSK	25	12	Left Side	5mm	DSI3(Full)	23230	782	22.54	23.50	1.247	0.04	0.134	0.167
	LTE Band 13_Ant0	10M	QPSK	25	12	Right Side	5mm	DSI3(Full)	23230	782	22.54	23.50	1.247	0.16	0.268	0.334
	LTE Band 13_Ant0	10M	QPSK	25	12	Bottom Side	5mm	DSI3(Full)	23230	782	22.54	23.50	1.247	0.04	0.409	0.510
	LTE Band 13_Ant0	10M	QPSK	50	0	Front	5mm	DSI3(Full)	23230	782	22.60	23.50	1.230	-0.02	0.471	0.579
	LTE Band 13_Ant0	10M	QPSK	50	0	Back	5mm	DSI3(Full)	23230	782	22.60	23.50	1.230	-0.08	0.561	0.690
	LTE Band 13_Ant0	10M	QPSK	50	0	Bottom Side	5mm	DSI3(Full)	23230	782	22.60	23.50	1.230	0.15	0.418	0.514
	LTE Band 14_Ant1	10M	QPSK	1	25	Front	5mm	DSI3(Full)	23330	793	22.99	24.00	1.262	0.01	0.586	0.739
	LTE Band 14_Ant1	10M	QPSK	1	25	Back	5mm	DSI3(Full)	23330	793	22.99	24.00	1.262	0.09	0.707	0.892
	LTE Band 14_Ant1	10M	QPSK	1	25	Left Side	5mm	DSI3(Full)	23330	793	22.99	24.00	1.262	-0.02	0.221	0.279
	LTE Band 14_Ant1	10M	QPSK	1	25	Right Side	5mm	DSI3(Full)	23330	793	22.99	24.00	1.262	-0.08	0.470	0.593
36	LTE Band 14_Ant1	10M	QPSK	1	25	Top Side	5mm	DSI3(Full)	23330	793	22.99	24.00	1.262	0.14	0.791	0.998
	LTE Band 14_Ant1	10M	QPSK	25	12	Front	5mm	DSI3(Full)	23330	793	21.95	23.00	1.274	-0.16	0.412	0.525
	LTE Band 14_Ant1	10M	QPSK	25	12	Back	5mm	DSI3(Full)	23330	793	21.95	23.00	1.274	0.14	0.483	0.615
	LTE Band 14_Ant1	10M	QPSK	25	12	Left Side	5mm	DSI3(Full)	23330	793	21.95	23.00	1.274	-0.04	0.155	0.197
	LTE Band 14_Ant1	10M	QPSK	25	12	Right Side	5mm	DSI3(Full)	23330	793	21.95	23.00	1.274	-0.11	0.329	0.419
	LTE Band 14_Ant1	10M	QPSK	25	12	Top Side	5mm	DSI3(Full)	23330	793	21.95	23.00	1.274	0.11	0.555	0.707
	LTE Band 14_Ant1	10M	QPSK	50	0	Back	5mm	DSI3(Full)	23330	793	21.92	23.00	1.282	0.13	0.480	0.616
	LTE Band 14_Ant1	10M	QPSK	50	0	Top Side	5mm	DSI3(Full)	23330	793	21.92	23.00	1.282	0.05	0.552	0.708
	LTE Band 14_Ant0	10M	QPSK	1	25	Front	5mm	DSI3(Full)	23330	793	23.72	24.50	1.197	0.11	0.624	0.747
	LTE Band 14_Ant0	10M	QPSK	1	25	Back	5mm	DSI3(Full)	23330	793	23.72	24.50	1.197	0.08	0.730	0.874
	LTE Band 14_Ant0	10M	QPSK	1	25	Left Side	5mm	DSI3(Full)	23330	793	23.72	24.50	1.197	0.14	0.208	0.249
	LTE Band 14_Ant0	10M	QPSK	1	25	Right Side	5mm	DSI3(Full)	23330	793	23.72	24.50	1.197	-0.11	0.370	0.443
	LTE Band 14_Ant0	10M	QPSK	1	25	Bottom Side	5mm	DSI3(Full)	23330	793	23.72	24.50	1.197	-0.11	0.442	0.529
	LTE Band 14_Ant0	10M	QPSK	25	12	Front	5mm	DSI3(Full)	23330	793	22.68	23.50	1.208	0.11	0.436	0.527
	LTE Band 14_Ant0	10M	QPSK	25	12	Back	5mm	DSI3(Full)	23330	793	22.68	23.50	1.208	0.01	0.517	0.624
	LTE Band 14_Ant0	10M	QPSK	25	12	Left Side	5mm	DSI3(Full)	23330	793	22.68	23.50	1.208	0.05	0.131	0.158
	LTE Band 14_Ant0	10M	QPSK	25	12	Right Side	5mm	DSI3(Full)	23330	793	22.68	23.50	1.208	0.09	0.246	0.297
	LTE Band 14_Ant0	10M	QPSK	25	12	Bottom Side	5mm	DSI3(Full)	23330	793	22.68	23.50	1.208	0.06	0.362	0.437
	LTE Band 14_Ant0	10M	QPSK	50	0	Back	5mm	DSI3(Full)	23330	793	22.66	23.50	1.213	0.07	0.523	0.635
	LTE Band 26_Ant1	15M	QPSK	1	0	Front	5mm	DSI3(Simultaneous)	26865	831.5	21.38	22.50	1.294	0.08	0.469	0.607
	LTE Band 26_Ant1	15M	QPSK	1	0	Back	5mm	DSI3(Simultaneous)	26865	831.5	21.38	22.50	1.294	-0.03	0.529	0.685
	LTE Band 26_Ant1	15M	QPSK	1	0	Left Side	5mm	DSI3(Simultaneous)	26865	831.5	21.38	22.50	1.294	0.09	0.143	0.185
	LTE Band 26_Ant1	15M	QPSK	1	0	Right Side	5mm	DSI3(Simultaneous)	26865	831.5	21.38	22.50	1.294	0.02	0.280	0.362
	LTE Band 26_Ant1	15M	QPSK	1	0	Top Side	5mm	DSI3(Simultaneous)	26865	831.5	21.38	22.50	1.294	0.14	0.681	0.881
	LTE Band 26_Ant1	15M	QPSK	1	0	Top Side	5mm	DSI3(Simultaneous)	26765	821.5	21.31	22.50	1.315	-0.06	0.707	0.930
	LTE Band 26_Ant1	15M	QPSK	1	0	Top Side	5mm	DSI3(Simultaneous)	26965	841.5	21.32	22.50	1.312	0.14	0.758	0.995
	LTE Band 26_Ant1	15M	QPSK	36	0	Front	5mm	DSI3(Simultaneous)	26865	831.5	21.36	22.50	1.300	-0.11	0.455	0.592
	LTE Band 26_Ant1	15M	QPSK	36	0	Back	5mm	DSI3(Simultaneous)	26865	831.5	21.36	22.50	1.300	-0.09	0.522	0.679
	LTE Band 26_Ant1	15M	QPSK	36	0	Left Side	5mm	DSI3(Simultaneous)	26865	831.5	21.36	22.50	1.300	0.05	0.133	0.173
	LTE Band 26_Ant1	15M	QPSK	36	0	Right Side	5mm	DSI3(Simultaneous)	26865	831.5	21.36	22.50	1.300	-0.09	0.268	0.348
	LTE Band 26_Ant1	15M	QPSK	36	0	Top Side	5mm	DSI3(Simultaneous)	26865	831.5	21.36	22.50	1.300	-0.05	0.652	0.848
	LTE Band 26_Ant1	15M	QPSK	36	0	Top Side	5mm	DSI3(Simultaneous)	26765	821.5	21.30	22.50	1.318	-0.02	0.690	0.910
	LTE Band 26_Ant1	15M	QPSK	36	0	Top Side	5mm	DSI3(Simultaneous)	26965	841.5	21.31	22.50	1.315	-0.03	0.752	0.989
	LTE Band 26_Ant1	15M	QPSK	75	0	Top Side	5mm	DSI3(Simultaneous)	26865	831.5	21.35	22.50	1.303	0.17	0.626	0.816
	LTE Band 26_Ant0	15M	QPSK	1	74	Front	5mm	DSI3(Full)	26865	831.5	23.63	24.50	1.222	0.05	0.787	0.962
	LTE Band 26_Ant0	15M	QPSK	1	74	Back	5mm	DSI3(Full)	26865	831.5	23.63	24.50	1.222	-0.11	0.824	1.007
	LTE Band 26_Ant0	15M	QPSK	1	74	Left Side	5mm	DSI3(Full)	26865	831.5	23.63	24.50	1.222	0.07	0.112	0.137
	LTE Band 26_Ant0	15M	QPSK	1	74	Right Side	5mm	DSI3(Full)	26865	831.5	23.63	24.50	1.222	-0.02	0.150	0.183

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	LTE Band 26_Ant0	15M	QPSK	1	74	Bottom Side	5mm	DSI3(Full)	26865	831.5	23.63	24.50	1.222	0.07	0.667	0.815
	LTE Band 26_Ant0	15M	QPSK	1	74	Bottom Side	5mm	DSI3(Full)	26765	821.5	23.60	24.50	1.230	0.01	0.822	1.011
	LTE Band 26_Ant0	15M	QPSK	1	74	Bottom Side	5mm	DSI3(Full)	26965	841.5	23.61	24.50	1.227	0.06	0.662	0.813
	LTE Band 26_Ant0	15M	QPSK	1	74	Front	5mm	DSI3(Full)	26765	821.5	23.60	24.50	1.230	0.03	0.757	0.931
	LTE Band 26_Ant0	15M	QPSK	1	74	Front	5mm	DSI3(Full)	26965	841.5	23.61	24.50	1.227	0.16	0.885	1.086
37	LTE Band 26_Ant0	15M	QPSK	1	74	Back	5mm	DSI3(Full)	26765	821.5	23.60	24.50	1.230	0.09	0.995	1.224
	LTE Band 26_Ant0	15M	QPSK	1	74	Back	5mm	DSI3(Full)	26965	841.5	23.61	24.50	1.227	-0.15	0.883	1.084
	LTE Band 26_Ant0	15M	QPSK	36	39	Front	5mm	DSI3(Full)	26865	831.5	22.72	23.50	1.197	0.11	0.452	0.541
	LTE Band 26_Ant0	15M	QPSK	36	39	Back	5mm	DSI3(Full)	26865	831.5	22.72	23.50	1.197	0.02	0.557	0.667
	LTE Band 26_Ant0	15M	QPSK	36	39	Left Side	5mm	DSI3(Full)	26865	831.5	22.72	23.50	1.197	0.05	0.072	0.086
	LTE Band 26_Ant0	15M	QPSK	36	39	Right Side	5mm	DSI3(Full)	26865	831.5	22.72	23.50	1.197	0.11	0.101	0.121
	LTE Band 26_Ant0	15M	QPSK	36	39	Bottom Side	5mm	DSI3(Full)	26865	831.5	22.72	23.50	1.197	0.09	0.457	0.547
	LTE Band 26_Ant0	15M	QPSK	75	0	Front	5mm	DSI3(Full)	26865	831.5	22.68	23.50	1.208	-0.03	0.452	0.546
	LTE Band 26_Ant0	15M	QPSK	75	0	Back	5mm	DSI3(Full)	26865	831.5	22.68	23.50	1.208	0.04	0.557	0.673
	LTE Band 26_Ant0	15M	QPSK	75	0	Bottom Side	5mm	DSI3(Full)	26865	831.5	22.68	23.50	1.208	0.01	0.473	0.571
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	5mm	DSI3(Simultaneous)	132322	1745	14.28	15.50	1.324	0.03	0.393	0.520
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	5mm	DSI3(Simultaneous)	132322	1745	14.28	15.50	1.324	-0.18	0.600	0.795
	LTE Band 66_Ant1	20M	QPSK	1	0	Left Side	5mm	DSI3(Simultaneous)	132322	1745	14.28	15.50	1.324	-	n/a	n/a
	LTE Band 66_Ant1	20M	QPSK	1	0	Right Side	5mm	DSI3(Simultaneous)	132322	1745	14.28	15.50	1.324	0.1	0.062	0.082
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	5mm	DSI3(Simultaneous)	132322	1745	14.28	15.50	1.324	-0.09	0.676	0.895
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	5mm	DSI3(Simultaneous)	132072	1720	14.22	15.50	1.343	0.02	0.688	0.924
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	5mm	DSI3(Simultaneous)	132572	1770	14.14	15.50	1.368	-0.12	0.584	0.799
	LTE Band 66_Ant1	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	132322	1745	14.26	15.50	1.330	0.07	0.381	0.507
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	132322	1745	14.26	15.50	1.330	0.17	0.587	0.781
	LTE Band 66_Ant1	20M	QPSK	50	24	Left Side	5mm	DSI3(Simultaneous)	132322	1745	14.26	15.50	1.330	-	n/a	n/a
	LTE Band 66_Ant1	20M	QPSK	50	24	Right Side	5mm	DSI3(Simultaneous)	132322	1745	14.26	15.50	1.330	-0.12	0.057	0.076
	LTE Band 66_Ant1	20M	QPSK	50	24	Top Side	5mm	DSI3(Simultaneous)	132322	1745	14.26	15.50	1.330	-0.08	0.658	0.875
	LTE Band 66_Ant1	20M	QPSK	50	24	Top Side	5mm	DSI3(Simultaneous)	132072	1720	14.21	15.50	1.346	0.12	0.686	0.923
	LTE Band 66_Ant1	20M	QPSK	50	24	Top Side	5mm	DSI3(Simultaneous)	132572	1770	14.13	15.50	1.371	-0.04	0.571	0.783
	LTE Band 66_Ant1	20M	QPSK	100	0	Top Side	5mm	DSI3(Simultaneous)	132322	1745	14.24	15.50	1.337	0.02	0.633	0.846
	LTE Band 66_Ant0	20M	QPSK	1	0	Front	5mm	DSI3(Simultaneous)	132322	1745	15.33	16.50	1.309	0.05	0.421	0.551
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	5mm	DSI3(Simultaneous)	132322	1745	15.33	16.50	1.309	0.07	0.451	0.590
	LTE Band 66_Ant0	20M	QPSK	1	0	Left Side	5mm	DSI3(Simultaneous)	132322	1745	15.33	16.50	1.309	-	n/a	n/a
	LTE Band 66_Ant0	20M	QPSK	1	0	Right Side	5mm	DSI3(Simultaneous)	132322	1745	15.33	16.50	1.309	-	n/a	n/a
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	5mm	DSI3(Simultaneous)	132322	1745	15.33	16.50	1.309	-0.06	0.795	1.041
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	5mm	DSI3(Simultaneous)	132072	1720	15.12	16.50	1.374	0.03	0.691	0.949
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	5mm	DSI3(Simultaneous)	132572	1770	14.99	16.50	1.416	0.14	0.768	1.087
	LTE Band 66_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	132322	1745	15.32	16.50	1.312	0.03	0.411	0.539
	LTE Band 66_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	132322	1745	15.32	16.50	1.312	0.05	0.446	0.585
	LTE Band 66_Ant0	20M	QPSK	50	24	Left Side	5mm	DSI3(Simultaneous)	132322	1745	15.32	16.50	1.312	-	n/a	n/a
	LTE Band 66_Ant0	20M	QPSK	50	24	Right Side	5mm	DSI3(Simultaneous)	132322	1745	15.32	16.50	1.312	-	n/a	n/a
	LTE Band 66_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	132322	1745	15.32	16.50	1.312	0.18	0.831	1.090
	LTE Band 66_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	132072	1720	15.10	16.50	1.380	0.13	0.726	1.002
38	LTE Band 66_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	132572	1770	14.97	16.50	1.422	0.17	0.833	1.185
	LTE Band 66_Ant0	20M	QPSK	100	0	Bottom Side	5mm	DSI3(Simultaneous)	132322	1745	15.30	16.50	1.318	0.02	0.816	1.076
	LTE Band 25_Ant1	20M	QPSK	1	0	Front	5mm	DSI3(Simultaneous)	26340	1880	13.86	15.00	1.300	-0.1	0.344	0.447
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	5mm	DSI3(Simultaneous)	26340	1880	13.86	15.00	1.300	-0.12	0.479	0.623
	LTE Band 25_Ant1	20M	QPSK	1	0	Left Side	5mm	DSI3(Simultaneous)	26340	1880	13.86	15.00	1.300	-	n/a	n/a
	LTE Band 25_Ant1	20M	QPSK	1	0	Right Side	5mm	DSI3(Simultaneous)	26340	1880	13.86	15.00	1.300	0.06	0.072	0.094
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	5mm	DSI3(Simultaneous)	26340	1880	13.86	15.00	1.300	-0.07	0.666	0.866
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	5mm	DSI3(Simultaneous)	26140	1860	13.82	15.00	1.312	0.15	0.480	0.630
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	5mm	DSI3(Simultaneous)	26590	1905	13.76	15.00	1.330	0.04	0.750	0.998
	LTE Band 25_Ant1	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	26340	1880	13.84	15.00	1.306	0.02	0.348	0.455
	LTE Band 25_Ant1	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	26340	1880	13.84	15.00	1.306	0.1	0.474	0.619
	LTE Band 25_Ant1	20M	QPSK	50	24	Left Side	5mm	DSI3(Simultaneous)	26340	1880	13.84	15.00	1.306	-	n/a	n/a
	LTE Band 25_Ant1	20M	QPSK	50	24	Right Side	5mm	DSI3(Simultaneous)	26340	1880	13.84	15.00	1.306	0.02	0.078	0.102

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	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	5mm	DSI3(Simultaneous)	26340	1880	13.84	15.00	1.306	-0.05	0.643	0.840
	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	5mm	DSI3(Simultaneous)	26140	1860	13.80	15.00	1.318	0.1	0.665	0.877
	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	5mm	DSI3(Simultaneous)	26590	1905	13.74	15.00	1.337	0.09	0.724	0.968
	LTE Band 25_Ant1	20M	QPSK	100	0	Top Side	5mm	DSI3(Simultaneous)	26340	1880	13.82	15.00	1.312	0.03	0.650	0.853
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	5mm	DSI3(Simultaneous)	26340	1880	13.78	15.00	1.324	0.02	0.323	0.428
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	5mm	DSI3(Simultaneous)	26340	1880	13.78	15.00	1.324	-0.09	0.391	0.518
	LTE Band 25_Ant0	20M	QPSK	1	0	Left Side	5mm	DSI3(Simultaneous)	26340	1880	13.78	15.00	1.324	-	n/a	n/a
	LTE Band 25_Ant0	20M	QPSK	1	0	Right Side	5mm	DSI3(Simultaneous)	26340	1880	13.78	15.00	1.324	-	n/a	n/a
	LTE Band 25_Ant0	20M	QPSK	1	0	Bottom Side	5mm	DSI3(Simultaneous)	26340	1880	13.78	15.00	1.324	-0.1	0.766	1.014
	LTE Band 25_Ant0	20M	QPSK	1	0	Bottom Side	5mm	DSI3(Simultaneous)	26140	1860	13.75	15.00	1.334	-0.05	0.776	1.035
	LTE Band 25_Ant0	20M	QPSK	1	0	Bottom Side	5mm	DSI3(Simultaneous)	26590	1905	13.70	15.00	1.349	-0.06	0.812	1.095
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	26340	1880	13.76	15.00	1.330	0.03	0.339	0.451
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	26340	1880	13.76	15.00	1.330	-0.07	0.394	0.524
	LTE Band 25_Ant0	20M	QPSK	50	24	Left Side	5mm	DSI3(Simultaneous)	26340	1880	13.76	15.00	1.330	-	n/a	n/a
	LTE Band 25_Ant0	20M	QPSK	50	24	Right Side	5mm	DSI3(Simultaneous)	26340	1880	13.76	15.00	1.330	-	n/a	n/a
	LTE Band 25_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	26340	1880	13.76	15.00	1.330	-0.04	0.804	1.070
	LTE Band 25_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	26140	1860	13.72	15.00	1.343	-0.08	0.814	1.093
39	LTE Band 25_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	26590	1905	13.67	15.00	1.358	0.03	0.826	1.122
	LTE Band 25_Ant0	20M	QPSK	100	0	Bottom Side	5mm	DSI3(Simultaneous)	26340	1880	13.75	15.00	1.334	0.08	0.782	1.043
	LTE Band 30_Ant0	10M	QPSK	1	0	Front	5mm	DSI3(Simultaneous)	27710	2310	16.15	17.50	1.365	-0.1	0.494	0.674
	LTE Band 30_Ant0	10M	QPSK	1	0	Back	5mm	DSI3(Simultaneous)	27710	2310	16.15	17.50	1.365	0.12	0.669	0.913
	LTE Band 30_Ant0	10M	QPSK	1	0	Left Side	5mm	DSI3(Simultaneous)	27710	2310	16.15	17.50	1.365	-	n/a	n/a
	LTE Band 30_Ant0	10M	QPSK	1	0	Right Side	5mm	DSI3(Simultaneous)	27710	2310	16.15	17.50	1.365	-0.12	0.124	0.169
40	LTE Band 30_Ant0	10M	QPSK	1	0	Bottom Side	5mm	DSI3(Simultaneous)	27710	2310	16.15	17.50	1.365	-0.07	0.857	1.169
	LTE Band 30_Ant0	10M	QPSK	25	12	Front	5mm	DSI3(Simultaneous)	27710	2310	16.14	17.50	1.368	0.15	0.485	0.663
	LTE Band 30_Ant0	10M	QPSK	25	12	Back	5mm	DSI3(Simultaneous)	27710	2310	16.14	17.50	1.368	0.17	0.655	0.896
	LTE Band 30_Ant0	10M	QPSK	25	12	Left Side	5mm	DSI3(Simultaneous)	27710	2310	16.14	17.50	1.368	-	n/a	n/a
	LTE Band 30_Ant0	10M	QPSK	25	12	Right Side	5mm	DSI3(Simultaneous)	27710	2310	16.14	17.50	1.368	-0.08	0.122	0.167
	LTE Band 30_Ant0	10M	QPSK	25	12	Bottom Side	5mm	DSI3(Simultaneous)	27710	2310	16.14	17.50	1.368	-0.02	0.835	1.142
	LTE Band 30_Ant0	10M	QPSK	50	0	Back	5mm	DSI3(Simultaneous)	27710	2310	16.10	17.50	1.380	0.15	0.488	0.674
	LTE Band 30_Ant0	10M	QPSK	50	0	Bottom Side	5mm	DSI3(Simultaneous)	27710	2310	16.10	17.50	1.380	0.05	0.649	0.896
	LTE Band 7_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	21350	2560	19.05	20.00	1.245	0.16	0.527	0.656
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	21350	2560	19.05	20.00	1.245	0.12	0.658	0.819
	LTE Band 7_Ant0	20M	QPSK	1	99	Left Side	5mm	DSI3(Simultaneous)	21350	2560	19.05	20.00	1.245	-0.05	0.160	0.199
	LTE Band 7_Ant0	20M	QPSK	1	99	Right Side	5mm	DSI3(Simultaneous)	21350	2560	19.05	20.00	1.245	0.16	0.163	0.203
	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	21350	2560	19.05	20.00	1.245	0.17	0.839	1.044
41	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	20850	2510	18.64	20.00	1.368	-0.04	0.790	1.081
	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	21100	2535	18.72	20.00	1.343	-0.08	0.770	1.034
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	20850	2510	18.64	20.00	1.368	0.01	0.580	0.793
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	21100	2535	18.72	20.00	1.343	0.12	0.623	0.837
	LTE Band 7_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	21350	2560	18.92	20.00	1.282	-0.08	0.511	0.655
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	21350	2560	18.92	20.00	1.282	-0.01	0.635	0.814
	LTE Band 7_Ant0	20M	QPSK	50	24	Left Side	5mm	DSI3(Simultaneous)	21350	2560	18.92	20.00	1.282	0.16	0.155	0.199
	LTE Band 7_Ant0	20M	QPSK	50	24	Right Side	5mm	DSI3(Simultaneous)	21350	2560	18.92	20.00	1.282	0.13	0.160	0.205
	LTE Band 7_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	21350	2560	18.92	20.00	1.282	0.11	0.825	1.058
	LTE Band 7_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	20850	2510	18.62	20.00	1.374	0.07	0.782	1.075
	LTE Band 7_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	21100	2535	18.70	20.00	1.349	-0.09	0.758	1.023
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	20850	2510	18.62	20.00	1.374	0.17	0.579	0.796
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	21100	2535	18.70	20.00	1.349	-0.01	0.604	0.815
	LTE Band 7_Ant0	20M	QPSK	100	0	Back	5mm	DSI3(Simultaneous)	21350	2560	18.85	20.00	1.303	-0.04	0.627	0.817
	LTE Band 7_Ant0	20M	QPSK	100	0	Bottom Side	5mm	DSI3(Simultaneous)	21350	2560	18.85	20.00	1.303	0.06	0.798	1.040



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	40620	2593	21.07	21.90	1.211	62.9	1.006	-0.04	0.544	0.663
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	40620	2593	21.07	21.90	1.211	62.9	1.006	-0.06	0.654	0.796
	LTE Band 41_Ant0	20M	QPSK	1	99	Left Side	5mm	DSI3(Simultaneous)	40620	2593	21.07	21.90	1.211	62.9	1.006	0.06	0.181	0.220
	LTE Band 41_Ant0	20M	QPSK	1	99	Right Side	5mm	DSI3(Simultaneous)	40620	2593	21.07	21.90	1.211	62.9	1.006	0.15	0.170	0.207
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	40620	2593	21.07	21.90	1.211	62.9	1.006	0.1	0.865	1.053
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	39750	2506	20.84	21.90	1.276	62.9	1.006	0.07	0.932	1.197
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	40185	2549.5	21.05	21.90	1.216	62.9	1.006	-0.01	0.936	1.145
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	41055	2636.5	21.06	21.90	1.213	62.9	1.006	0.16	0.988	1.206
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	41490	2680	20.89	21.90	1.262	62.9	1.006	-0.01	0.824	1.046
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	39750	2506	20.84	21.90	1.276	62.9	1.006	0.15	0.487	0.625
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	40185	2549.5	21.05	21.90	1.216	62.9	1.006	0.18	0.534	0.653
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	41055	2636.5	21.06	21.90	1.213	62.9	1.006	0.11	0.497	0.607
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	41490	2680	20.89	21.90	1.262	62.9	1.006	0.15	0.421	0.534
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	39750	2506	20.84	21.90	1.276	62.9	1.006	0.07	0.638	0.819
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	40185	2549.5	21.05	21.90	1.216	62.9	1.006	0.07	0.692	0.847
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	41055	2636.5	21.06	21.90	1.213	62.9	1.006	0.08	0.622	0.759
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	41490	2680	20.89	21.90	1.262	62.9	1.006	-0.12	0.477	0.606
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	40620	2593	21.06	21.90	1.213	62.9	1.006	0.06	0.569	0.695
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	40620	2593	21.06	21.90	1.213	62.9	1.006	0.04	0.673	0.822
	LTE Band 41_Ant0	20M	QPSK	50	24	Left Side	5mm	DSI3(Simultaneous)	40620	2593	21.06	21.90	1.213	62.9	1.006	-0.07	0.179	0.218
	LTE Band 41_Ant0	20M	QPSK	50	24	Right Side	5mm	DSI3(Simultaneous)	40620	2593	21.06	21.90	1.213	62.9	1.006	0.11	0.163	0.199
	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	40620	2593	21.06	21.90	1.213	62.9	1.006	-0.1	0.898	1.096
	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	39750	2506	20.82	21.90	1.282	62.9	1.006	0.18	0.962	1.241
	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	40185	2549.5	21.04	21.90	1.219	62.9	1.006	0.14	0.961	1.178
42	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	41055	2636.5	21.05	21.90	1.216	62.9	1.006	0.17	1.020	1.248
	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	41490	2680	20.88	21.90	1.265	62.9	1.006	-0.02	0.856	1.089
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	39750	2506	20.82	21.90	1.282	62.9	1.006	0.05	0.490	0.632
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	40185	2549.5	21.04	21.90	1.219	62.9	1.006	0.06	0.565	0.693
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	41055	2636.5	21.05	21.90	1.216	62.9	1.006	-0.1	0.512	0.626
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	41490	2680	20.88	21.90	1.265	62.9	1.006	0.01	0.435	0.553
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	39750	2506	20.82	21.90	1.282	62.9	1.006	0.07	0.643	0.829
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	40185	2549.5	21.04	21.90	1.219	62.9	1.006	-0.1	0.716	0.878
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	41055	2636.5	21.05	21.90	1.216	62.9	1.006	0.18	0.642	0.785
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	41490	2680	20.88	21.90	1.265	62.9	1.006	0.17	0.495	0.630
	LTE Band 41C_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	41055+2636.5+41253	2656.3	20.74	21.90	1.306	62.9	1.006	0.02	0.861	1.131
	LTE Band 41_Ant0	20M	QPSK	100	0	Front	5mm	DSI3(Simultaneous)	40620	2593	21.04	21.90	1.219	62.9	1.006	0.02	0.522	0.640
	LTE Band 41_Ant0	20M	QPSK	100	0	Back	5mm	DSI3(Simultaneous)	40620	2593	21.04	21.90	1.219	62.9	1.006	-0.02	0.646	0.792
	LTE Band 41_Ant0	20M	QPSK	100	0	Bottom Side	5mm	DSI3(Simultaneous)	40620	2593	21.04	21.90	1.219	62.9	1.006	0.16	0.875	1.073
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	40620	2593	22.52	23.50	1.253	42.9	1.009	-0.09	0.517	0.654
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	40620	2593	22.52	23.50	1.253	42.9	1.009	0.05	0.589	0.745
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Left Side	5mm	DSI3(Simultaneous)	40620	2593	22.52	23.50	1.253	42.9	1.009	0.17	0.186	0.235
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Right Side	5mm	DSI3(Simultaneous)	40620	2593	22.52	23.50	1.253	42.9	1.009	-0.1	0.164	0.207
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	40620	2593	22.52	23.50	1.253	42.9	1.009	0.15	0.864	1.092
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	39750	2506	22.26	23.50	1.330	42.9	1.009	0.11	0.739	0.992
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	40185	2549.5	22.46	23.50	1.271	42.9	1.009	0.04	0.838	1.074
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	41055	2636.5	22.47	23.50	1.268	42.9	1.009	-0.02	0.948	1.213
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	5mm	DSI3(Simultaneous)	41490	2680	22.28	23.50	1.324	42.9	1.009	0.05	0.761	1.017
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	39750	2506	22.26	23.50	1.330	42.9	1.009	0.08	0.496	0.666
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	40185	2549.5	22.46	23.50	1.271	42.9	1.009	0.14	0.535	0.686
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	41055	2636.5	22.47	23.50	1.268	42.9	1.009	0.15	0.511	0.654
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	DSI3(Simultaneous)	41490	2680	22.28	23.50	1.324	42.9	1.009	-0.06	0.450	0.601
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	39750	2506	22.26	23.50	1.330	42.9	1.009	-0.18	0.539	0.724
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	40185	2549.5	22.46	23.50	1.271	42.9	1.009	0.1	0.566	0.726



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LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	41055	2636.5	22.47	23.50	1.268	42.9	1.009	-0.15	0.576	0.737
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	DSI3(Simultaneous)	41490	2680	22.28	23.50	1.324	42.9	1.009	0.12	0.459	0.613
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	40620	2593	22.50	23.50	1.259	42.9	1.009	0.16	0.510	0.648
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	40620	2593	22.50	23.50	1.259	42.9	1.009	0.13	0.582	0.739
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Left Side	5mm	DSI3(Simultaneous)	40620	2593	22.50	23.50	1.259	42.9	1.009	0.08	0.164	0.208
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Right Side	5mm	DSI3(Simultaneous)	40620	2593	22.50	23.50	1.259	42.9	1.009	-0.03	0.152	0.193
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	40620	2593	22.50	23.50	1.259	42.9	1.009	0.16	0.856	1.087
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	39750	2506	22.24	23.50	1.337	42.9	1.009	0.14	0.729	0.983
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	40185	2549.5	22.44	23.50	1.276	42.9	1.009	-0.02	0.848	1.092
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	41055	2636.5	22.45	23.50	1.274	42.9	1.009	0.1	0.895	1.150
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	5mm	DSI3(Simultaneous)	41490	2680	22.26	23.50	1.330	42.9	1.009	0.17	0.753	1.011
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	39750	2506	22.24	23.50	1.337	42.9	1.009	-0.03	0.488	0.658
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	40185	2549.5	22.44	23.50	1.276	42.9	1.009	-0.11	0.520	0.670
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	41055	2636.5	22.45	23.50	1.274	42.9	1.009	0.09	0.493	0.633
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	DSI3(Simultaneous)	41490	2680	22.26	23.50	1.330	42.9	1.009	-0.07	0.431	0.579
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	39750	2506	22.24	23.50	1.337	42.9	1.009	-0.17	0.526	0.709
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	40185	2549.5	22.44	23.50	1.276	42.9	1.009	0.02	0.540	0.695
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	41055	2636.5	22.45	23.50	1.274	42.9	1.009	0.15	0.561	0.721
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	DSI3(Simultaneous)	41490	2680	22.26	23.50	1.330	42.9	1.009	0.02	0.440	0.591
LTE Band 41(HPUE)_Ant0	20M	QPSK	100	0	Front	5mm	DSI3(Simultaneous)	40620	2593	22.48	23.50	1.265	42.9	1.009	0.03	0.502	0.641
LTE Band 41(HPUE)_Ant0	20M	QPSK	100	0	Back	5mm	DSI3(Simultaneous)	40620	2593	22.48	23.50	1.265	42.9	1.009	-0.1	0.575	0.734
LTE Band 41(HPUE)_Ant0	20M	QPSK	100	0	Bottom Side	5mm	DSI3(Simultaneous)	40620	2593	22.48	23.50	1.265	42.9	1.009	0.05	0.846	1.080

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Front	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	0.1	0.267	0.332
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Back	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	0.05	0.382	0.475
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Left Side	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	-0.09	0.166	0.207
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Right Side	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	-0.03	0.331	0.412
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Top Side	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	0.11	0.347	0.432
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Front	5mm	DSI3(Full)	136100	680.5	22.95	24.00	1.274	0.11	0.302	0.385
43	N71_Ant 1	20M	BPSK	50	28	DFT-15	Back	5mm	DSI3(Full)	136100	680.5	22.95	24.00	1.274	-0.07	0.384	0.489
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Left Side	5mm	DSI3(Full)	136100	680.5	22.95	24.00	1.274	-0.04	0.184	0.234
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Right Side	5mm	DSI3(Full)	136100	680.5	22.95	24.00	1.274	-0.1	0.352	0.448
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Top Side	5mm	DSI3(Full)	136100	680.5	22.95	24.00	1.274	-0.02	0.360	0.458
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Front	5mm	DSI3(Full)	136100	680.5	23.07	24.00	1.239	-0.02	0.170	0.211
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Back	5mm	DSI3(Full)	136100	680.5	23.07	24.00	1.239	0.02	0.256	0.317
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Left Side	5mm	DSI3(Full)	136100	680.5	23.07	24.00	1.239	0.01	0.099	0.123
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Right Side	5mm	DSI3(Full)	136100	680.5	23.07	24.00	1.239	-0.06	0.093	0.115
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Bottom Side	5mm	DSI3(Full)	136100	680.5	23.07	24.00	1.239	0.06	0.148	0.183
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Front	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	0.02	0.209	0.260
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Back	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	-0.06	0.284	0.353
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Left Side	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	0.18	0.111	0.138
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Right Side	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	-0.09	0.108	0.134
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Bottom Side	5mm	DSI3(Full)	136100	680.5	23.05	24.00	1.245	-0.04	0.176	0.219
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Front	5mm	DSI3(Simultaneous)	167300	836.5	22.80	23.50	1.175	0.04	0.710	0.834
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Back	5mm	DSI3(Simultaneous)	167300	836.5	22.80	23.50	1.175	-0.16	0.762	0.895
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Side	5mm	DSI3(Simultaneous)	167300	836.5	22.80	23.50	1.175	0.12	0.166	0.195
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Right Side	5mm	DSI3(Simultaneous)	167300	836.5	22.80	23.50	1.175	0.15	0.330	0.388
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Top Side	5mm	DSI3(Simultaneous)	167300	836.5	22.80	23.50	1.175	0.17	0.834	0.980
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Front	5mm	DSI3(Simultaneous)	167300	836.5	22.78	23.50	1.180	0.08	0.707	0.834
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Back	5mm	DSI3(Simultaneous)	167300	836.5	22.78	23.50	1.180	0.16	0.754	0.890
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Left Side	5mm	DSI3(Simultaneous)	167300	836.5	22.78	23.50	1.180	0.15	0.152	0.179
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Right Side	5mm	DSI3(Simultaneous)	167300	836.5	22.78	23.50	1.180	-0.04	0.349	0.412

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44	N5_Ant 1	20M	BPSK	50	28	DFT-15	Top Side	5mm	DSI3(Simultaneous)	167300	836.5	22.78	23.50	1.180	-0.1	0.845	0.997
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Front	5mm	DSI3(Simultaneous)	167300	836.5	22.67	23.50	1.211	0.03	0.700	0.847
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Back	5mm	DSI3(Simultaneous)	167300	836.5	22.67	23.50	1.211	0.08	0.729	0.883
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Top Side	5mm	DSI3(Simultaneous)	167300	836.5	22.67	23.50	1.211	-0.04	0.808	0.978
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Front	5mm	DSI3(Full)	167300	836.5	23.25	24.00	1.189	0.18	0.463	0.550
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Back	5mm	DSI3(Full)	167300	836.5	23.25	24.00	1.189	0.04	0.583	0.693
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Left Side	5mm	DSI3(Full)	167300	836.5	23.25	24.00	1.189	-0.04	0.064	0.076
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Right Side	5mm	DSI3(Full)	167300	836.5	23.25	24.00	1.189	-0.07	0.101	0.120
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Bottom Side	5mm	DSI3(Full)	167300	836.5	23.25	24.00	1.189	0.01	0.417	0.496
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Front	5mm	DSI3(Full)	167300	836.5	23.20	24.00	1.202	-0.09	0.456	0.548
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Back	5mm	DSI3(Full)	167300	836.5	23.20	24.00	1.202	0.15	0.556	0.668
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Left Side	5mm	DSI3(Full)	167300	836.5	23.20	24.00	1.202	-0.04	0.060	0.072
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Right Side	5mm	DSI3(Full)	167300	836.5	23.20	24.00	1.202	0.11	0.097	0.117
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Bottom Side	5mm	DSI3(Full)	167300	836.5	23.20	24.00	1.202	0.15	0.409	0.492
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	5mm	DSI3(Simultaneous)	349000	1745	15.74	16.50	1.191	0.18	0.466	0.555
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	DSI3(Simultaneous)	349000	1745	15.74	16.50	1.191	0.07	0.650	0.774
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Left Side	5mm	DSI3(Simultaneous)	349000	1745	15.74	16.50	1.191	-	n/a	n/a
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Right Side	5mm	DSI3(Simultaneous)	349000	1745	15.74	16.50	1.191	0.15	0.064	0.076
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	5mm	DSI3(Simultaneous)	349000	1745	15.74	16.50	1.191	0.02	0.783	0.933
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	5mm	DSI3(Simultaneous)	346000	1730	15.71	16.50	1.199	-0.06	0.824	0.988
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	5mm	DSI3(Simultaneous)	352000	1760	15.64	16.50	1.219	-0.02	0.756	0.922
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	5mm	DSI3(Simultaneous)	349000	1745	15.73	16.50	1.194	0.17	0.471	0.562
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	DSI3(Simultaneous)	349000	1745	15.73	16.50	1.194	0.09	0.655	0.782
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Left Side	5mm	DSI3(Simultaneous)	349000	1745	15.73	16.50	1.194	-	n/a	n/a
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Right Side	5mm	DSI3(Simultaneous)	349000	1745	15.73	16.50	1.194	0.1	0.049	0.059
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	5mm	DSI3(Simultaneous)	349000	1745	15.73	16.50	1.194	0.09	0.792	0.946
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	5mm	DSI3(Simultaneous)	346000	1730	15.71	16.50	1.199	-0.04	0.833	0.999
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	5mm	DSI3(Simultaneous)	352000	1760	15.62	16.50	1.225	0.1	0.763	0.934
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Top Side	5mm	DSI3(Simultaneous)	349000	1745	15.69	16.50	1.205	-0.04	0.660	0.795
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	DSI3(Simultaneous)	349000	1745	16.35	17.50	1.303	-0.11	0.426	0.555
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	DSI3(Simultaneous)	349000	1745	16.35	17.50	1.303	0.13	0.496	0.646
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Left Side	5mm	DSI3(Simultaneous)	349000	1745	16.35	17.50	1.303	-	n/a	n/a
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Right Side	5mm	DSI3(Simultaneous)	349000	1745	16.35	17.50	1.303	-	n/a	n/a
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	349000	1745	16.35	17.50	1.303	0.09	0.923	1.203
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	346000	1730	16.21	17.50	1.346	0.08	0.866	1.166
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	352000	1760	16.26	17.50	1.330	-0.11	0.756	1.006
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	DSI3(Simultaneous)	349000	1745	16.33	17.50	1.309	0.08	0.451	0.590
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	DSI3(Simultaneous)	349000	1745	16.33	17.50	1.309	0.12	0.511	0.669
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Left Side	5mm	DSI3(Simultaneous)	349000	1745	16.33	17.50	1.309	-	n/a	n/a
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Right Side	5mm	DSI3(Simultaneous)	349000	1745	16.33	17.50	1.309	-	n/a	n/a
45	N66_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	349000	1745	16.33	17.50	1.309	-0.1	0.957	1.253
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	346000	1730	16.20	17.50	1.349	0.04	0.899	1.213
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	352000	1760	16.24	17.50	1.337	0.12	0.783	1.047
	N66_Ant 0	40M	BPSK	216	0	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	349000	1745	16.31	17.50	1.315	-0.08	0.842	1.107
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	5mm	DSI3(Simultaneous)	376500	1882.5	15.86	16.50	1.159	-0.08	0.468	0.542
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	DSI3(Simultaneous)	376500	1882.5	15.86	16.50	1.159	0.15	0.571	0.662
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Left Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.86	16.50	1.159	-	n/a	n/a
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Right Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.86	16.50	1.159	0.18	0.080	0.093
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.86	16.50	1.159	-0.12	0.771	0.893
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	5mm	DSI3(Simultaneous)	374000	1870	15.82	16.50	1.169	-0.01	0.739	0.864
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	5mm	DSI3(Simultaneous)	379000	1895	15.82	16.50	1.169	-0.09	0.785	0.918
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	5mm	DSI3(Simultaneous)	376500	1882.5	15.84	16.50	1.164	-0.09	0.484	0.563
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	DSI3(Simultaneous)	376500	1882.5	15.84	16.50	1.164	0.1	0.595	0.693
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Left Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.84	16.50	1.164	-	n/a	n/a
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Right Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.84	16.50	1.164	0.01	0.084	0.098



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	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.84	16.50	1.164	-0.07	0.790	0.920
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	5mm	DSI3(Simultaneous)	374000	1870	15.80	16.50	1.175	0.04	0.751	0.882
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	5mm	DSI3(Simultaneous)	379000	1895	15.80	16.50	1.175	-0.03	0.806	0.947
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Top Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.85	16.50	1.161	-0.07	0.776	0.901
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	DSI3(Simultaneous)	376500	1882.5	15.10	16.00	1.230	0.02	0.371	0.456
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	DSI3(Simultaneous)	376500	1882.5	15.10	16.00	1.230	-0.06	0.432	0.531
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Left Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.10	16.00	1.230	-	n/a	n/a
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Right Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.10	16.00	1.230	-	n/a	n/a
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.10	16.00	1.230	-0.07	0.896	1.102
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	374000	1870	15.03	16.00	1.250	-0.04	0.915	1.144
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	379000	1895	14.96	16.00	1.271	0.18	0.874	1.110
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	DSI3(Simultaneous)	376500	1882.5	15.08	16.00	1.236	0.09	0.402	0.497
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	DSI3(Simultaneous)	376500	1882.5	15.08	16.00	1.236	0.01	0.452	0.559
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Left Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.08	16.00	1.236	-	n/a	n/a
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Right Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.08	16.00	1.236	-	n/a	n/a
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.08	16.00	1.236	0.14	0.928	1.147
46	N25_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	374000	1870	15.01	16.00	1.256	0.02	0.930	1.168
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	379000	1895	14.95	16.00	1.274	-0.05	0.916	1.167
	N25_Ant 0	40M	BPSK	216	0	DFT-15	Bottom Side	5mm	DSI3(Simultaneous)	376500	1882.5	15.07	16.00	1.239	0.04	0.925	1.146
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	-0.09	0.547	0.670
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	0.08	0.656	0.803
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	0.17	0.175	0.214
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Right Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	0.09	0.164	0.201
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	-0.08	0.887	1.086
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	0.05	0.910	1.130
47	N41_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	0.02	0.970	1.191
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	0.09	0.527	0.654
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	0.12	0.526	0.646
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	-0.05	0.589	0.731
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	-0.04	0.645	0.792
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.01	0.542	0.668
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.11	0.656	0.809
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Left Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.08	0.168	0.207
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Right Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.1	0.166	0.205
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.05	0.866	1.068
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.07	0.898	1.120
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	0.05	0.940	1.162
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.06	0.521	0.650
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	-0.03	0.519	0.641
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.03	0.583	0.727
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	0.1	0.712	0.880
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Front	5mm	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	0.11	0.528	0.654
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Back	5mm	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	-0.03	0.648	0.803
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	0.09	0.869	1.077
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	-0.09	0.547	0.670
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	0.08	0.656	0.803
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	0.17	0.175	0.214
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Right Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	0.09	0.164	0.201
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	-0.08	0.887	1.086
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	0.05	0.910	1.130
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	0.02	0.970	1.191
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	0.09	0.527	0.654
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	0.12	0.526	0.646
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	-0.05	0.589	0.731
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	-0.04	0.645	0.792
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.01	0.542	0.668

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FCC SAR Test Report

Report No. : FA151701-01

	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.11	0.656	0.809
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Left Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.08	0.168	0.207
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Right Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.1	0.166	0.205
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.05	0.866	1.068
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.07	0.898	1.120
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	0.05	0.940	1.162
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.06	0.521	0.650
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	DSI3(Simultaneous)	510000	2550	19.53	20.50	1.250	-0.06	0.496	0.620
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	-0.03	0.519	0.641
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.03	0.583	0.727
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	0.1	0.712	0.880
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Front	5mm	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	0.11	0.528	0.654
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Back	5mm	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	-0.03	0.648	0.803
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Bottom Side	5mm	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	0.09	0.869	1.077
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.03	0.121	0.159
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.04	0.704	0.924
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.04	0.393	0.516
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Side	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	-0.11	n/a	n/a
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Top Side	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.18	0.082	0.108
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	0.18	0.113	0.149
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	-0.1	0.674	0.891
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	-0.06	0.350	0.462
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Side	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	-0.01	n/a	n/a
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Top Side	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	0.06	0.079	0.104
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	5mm	DSI3(Simultaneous)	656000	3840	14.74	16.00	1.337	0.01	0.673	0.900
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Left Side	5mm	DSI3(Simultaneous)	656000	3840	14.74	16.00	1.337	0.01	0.350	0.468
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.11	0.082	0.107
48	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.01	0.763	0.997
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.08	0.264	0.345
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	-	n/a	n/a
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Top Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	-0.11	0.084	0.110
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.07	0.088	0.117
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.08	0.739	0.985
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.04	0.242	0.323
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-	n/a	n/a
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Top Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.09	0.081	0.108
	N77_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	5mm	DSI3(Simultaneous)	633332	3499.98	14.72	16.00	1.343	-0.11	0.730	0.980
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.03	0.121	0.159
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.04	0.704	0.924
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.04	0.393	0.516
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Right Side	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	-0.11	0.000	0.000
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Top Side	5mm	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.18	0.082	0.108
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	0.18	0.113	0.149
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	-0.1	0.674	0.891
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	-0.06	0.350	0.462
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Right Side	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	-0.01	0.000	0.000
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Top Side	5mm	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	0.06	0.079	0.104
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	5mm	DSI3(Simultaneous)	656000	3840	14.74	16.00	1.337	0.01	0.673	0.900
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Left Side	5mm	DSI3(Simultaneous)	656000	3840	14.74	16.00	1.337	0.01	0.350	0.468
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.11	0.082	0.107
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.01	0.763	0.997
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.08	0.264	0.345
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Right Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	-	n/a	n/a
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Top Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	-0.11	0.084	0.110
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.07	0.088	0.117
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.08	0.739	0.985

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FCC SAR Test Report

Report No. : FA151701-01

N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.04	0.242	0.323
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Right Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-	n/a	n/a
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Top Side	5mm	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.09	0.081	0.108
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	5mm	DSI3(Simultaneous)	633332	3499.98	14.72	16.00	1.343	-0.11	0.730	0.980



<WLAN2.4G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 2+4	Reduced	1	2412	14.86	16.00	1.300	100	1.000	0.08	0.095	0.124
49	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	Reduced	1	2412	14.86	16.00	1.300	100	1.000	0.06	0.293	0.381
	WLAN2.4GHz	802.11b 1Mbps	Left Side	5mm	Ant 2+4	Reduced	1	2412	14.86	16.00	1.300	100	1.000	-	n/a	n/a
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5mm	Ant 2+4	Reduced	1	2412	14.86	16.00	1.300	100	1.000	-	n/a	n/a
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 2+4	Reduced	1	2412	14.86	16.00	1.300	100	1.000	-0.01	0.125	0.163
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	Reduced	6	2437	14.76	16.00	1.330	100	1.000	0.11	0.243	0.323
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	Reduced	11	2462	14.58	16.00	1.387	100	1.000	-0.06	0.198	0.275

<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+12	Reduced	42	5210	12.66	14.00	1.361	100	1.000	0.03	0.006	0.008
50	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+12	Reduced	42	5210	12.66	14.00	1.361	100	1.000	-0.12	0.253	0.344
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 4+12	Reduced	42	5210	12.66	14.00	1.361	100	1.000	0.15	0.043	0.058
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 4+12	Reduced	42	5210	12.66	14.00	1.361	100	1.000	-	n/a	n/a
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 4+12	Reduced	42	5210	12.66	14.00	1.361	100	1.000	0.02	0.057	0.077
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+12	Reduced	155	5775	13.46	15.00	1.426	100	1.000	0.14	0.007	0.010
51	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+12	Reduced	155	5775	13.46	15.00	1.426	100	1.000	0.12	0.242	0.345
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Left Side	5mm	Ant 4+12	Reduced	155	5775	13.46	15.00	1.426	100	1.000	-0.05	0.083	0.119
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Right Side	5mm	Ant 4+12	Reduced	155	5775	13.46	15.00	1.426	100	1.000	0.08	0.000	0.000
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 4+12	Reduced	155	5775	13.46	15.00	1.426	100	1.000	0.12	0.059	0.085

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	DH5 1Mbps	Front	5mm	Ant 2	Full	39	2441	11.40	12.50	1.288	76.13	1.314	0.05	0.039	0.066
	Bluetooth	DH5 1Mbps	Back	5mm	Ant 2	Full	39	2441	11.40	12.50	1.288	76.13	1.314	0.01	0.051	0.086
	Bluetooth	DH5 1Mbps	Left Side	5mm	Ant 2	Full	39	2441	11.40	12.50	1.288	76.13	1.314	-	n/a	n/a
	Bluetooth	DH5 1Mbps	Right Side	5mm	Ant 2	Full	39	2441	11.40	12.50	1.288	76.13	1.314	-	n/a	n/a
	Bluetooth	DH5 1Mbps	Top Side	5mm	Ant 2	Full	39	2441	11.40	12.50	1.288	76.13	1.314	0.06	0.048	0.081
	Bluetooth	DH5 1Mbps	Back	5mm	Ant 2	Full	0	2402	11.30	12.50	1.318	76.13	1.314	0.11	0.065	0.113
52	Bluetooth	DH5 1Mbps	Back	5mm	Ant 2	Full	78	2480	8.30	9.50	1.318	76.13	1.314	-0.14	0.0721	0.125



16.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Headset	Power Reduction	Ch.	Freq. (MHz)	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_Ant0	GPRS(3 Tx slots)	Front	5mm	-	DSI4(Full)	189	836.4	27.51	28.50	1.256	0.16	0.527	0.662
	GSM850_Ant0	GPRS(3 Tx slots)	Back	5mm	-	DSI4(Full)	189	836.4	27.51	28.50	1.256	0.05	0.557	0.700
	GSM850_Ant0	GPRS(3 Tx slots)	Back	5mm	-	DSI4(Full)	128	824.2	27.50	28.50	1.259	0.18	0.524	0.660
53	GSM850_Ant0	GPRS(3 Tx slots)	Back	5mm	-	DSI4(Full)	251	848.8	27.38	28.50	1.294	-0.03	0.566	0.733
	GSM1900_Ant0	GPRS(3 Tx slots)	Front	5mm	-	DSI3(Standalone)	810	1909.8	21.51	23.00	1.409	0.1	0.692	0.975
54	GSM1900_Ant0	GPRS(3 Tx slots)	Back	5mm	-	DSI3(Standalone)	810	1909.8	21.51	23.00	1.409	0.1	0.824	1.161
	GSM1900_Ant0	GPRS(3 Tx slots)	Front	5mm	-	DSI3(Standalone)	512	1850.2	21.43	23.00	1.435	-0.03	0.647	0.929
	GSM1900_Ant0	GPRS(3 Tx slots)	Front	5mm	-	DSI3(Standalone)	661	1880	21.44	23.00	1.432	0.17	0.609	0.872
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	5mm	-	DSI3(Standalone)	512	1850.2	21.43	23.00	1.435	-0.04	0.770	1.105
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	5mm	-	DSI3(Standalone)	661	1880	21.44	23.00	1.432	0.03	0.769	1.101
	GSM1900_Ant0	GPRS(3 Tx slots)	Front	16mm	-	DSI4(Full)	810	1909.8	25.28	26.50	1.324	0.16	0.293	0.388
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	27mm	-	DSI4(Full)	810	1909.8	25.28	26.50	1.324	-0.04	0.235	0.311
	GSM1900_Ant0	GPRS(3 Tx slots)	Front	5mm	-	DSI3(Simultaneous)	810	1909.8	19.14	20.50	1.368	0.17	0.369	0.505
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	5mm	-	DSI3(Simultaneous)	810	1909.8	19.14	20.50	1.368	-0.1	0.436	0.596
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	5mm	-	DSI3(Simultaneous)	512	1850.2	18.93	20.50	1.435	-0.06	0.410	0.589
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	5mm	-	DSI3(Simultaneous)	661	1880	19.12	20.50	1.374	0.12	0.415	0.570

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Headset	Power Reduction	Ch.	Freq. (MHz)	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 V_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI4(Full)	4182	836.4	23.22	24.00	1.197	0.04	0.747	0.894
	WCDMA V_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI4(Full)	4182	836.4	23.22	24.00	1.197	-0.09	0.912	1.091
	WCDMA V_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI4(Full)	4132	826.4	23.13	24.00	1.222	0.01	0.778	0.951
	WCDMA V_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI4(Full)	4233	846.6	23.21	24.00	1.199	-0.11	0.828	0.993
	WCDMA V_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI4(Full)	4132	826.4	23.13	24.00	1.222	0.08	0.849	1.037
	WCDMA V_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI4(Full)	4233	846.6	23.21	24.00	1.199	-0.07	0.921	1.105
	WCDMA V_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI3(Simultaneous)	4182	836.4	21.78	22.50	1.180	-0.12	0.562	0.663
	WCDMA V_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	4182	836.4	21.78	22.50	1.180	0.18	0.683	0.806
	WCDMA V_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	4132	826.4	21.71	22.50	1.199	0.03	0.652	0.782
	WCDMA V_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	4233	846.6	21.77	22.50	1.183	-0.02	0.709	0.839
	WCDMA V_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI4(Full)	4182	836.4	24.02	25.00	1.253	-0.04	0.748	0.937
55	WCDMA V_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI4(Full)	4182	836.4	24.02	25.00	1.253	0.11	0.910	1.140
	WCDMA V_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI4(Full)	4132	826.4	24.01	25.00	1.256	0.18	0.723	0.908
	WCDMA V_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI4(Full)	4233	846.6	24.01	25.00	1.256	0.06	0.689	0.865
	WCDMA V_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI4(Full)	4132	826.4	24.01	25.00	1.256	0.03	0.840	1.055
	WCDMA V_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI4(Full)	4233	846.6	24.01	25.00	1.256	0.06	0.856	1.075
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	1413	1732.6	16.71	17.50	1.199	-0.02	0.761	0.913
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	1413	1732.6	16.71	17.50	1.199	-0.08	0.989	1.186
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	1312	1712.4	16.69	17.50	1.205	-0.07	0.801	0.965
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	1513	1752.6	16.58	17.50	1.236	-0.12	0.675	0.834
56	WCDMA IV_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	1312	1712.4	16.69	17.50	1.205	-0.07	1.030	1.241
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	1513	1752.6	16.58	17.50	1.236	0.16	0.943	1.165
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	5mm	Headset	DSI3(Standalone)	1312	1712.4	16.69	17.50	1.205	0.05	0.980	1.181
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	16mm	-	DSI4(Full)	1312	1712.4	21.51	22.50	1.256	0.02	0.477	0.599
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	27mm	-	DSI4(Full)	1312	1712.4	21.51	22.50	1.256	0.03	0.342	0.430
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI3(Simultaneous)	1413	1732.6	14.55	15.50	1.245	0.06	0.445	0.554
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	1413	1732.6	14.55	15.50	1.245	-0.11	0.611	0.760
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	1312	1712.4	14.53	15.50	1.250	0.01	0.617	0.771
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	1513	1752.6	14.50	15.50	1.259	0.17	0.547	0.689



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	WCDMA IV_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	1413	1732.6	18.38	19.50	1.294	0.12	0.850	1.100
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	1413	1732.6	18.38	19.50	1.294	0.08	0.953	1.233
	WCDMA IV_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	1312	1712.4	18.29	19.50	1.321	-0.07	0.802	1.060
	WCDMA IV_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	1513	1752.6	18.28	19.50	1.324	0.03	0.820	1.086
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	1312	1712.4	18.29	19.50	1.321	0.15	0.844	1.115
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	1513	1752.6	18.28	19.50	1.324	0.04	0.881	1.167
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	5mm	Headset	DSI3(Standalone)	1413	1732.6	18.38	19.50	1.303	-0.09	0.725	0.938
	WCDMA IV_Ant0	RMC 12.2Kbps	Front	16mm	-	DSI4(Full)	1413	1732.6	23.10	24.00	1.230	0.01	0.532	0.655
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	27mm	-	DSI4(Full)	1413	1732.6	23.10	24.00	1.230	-0.11	0.390	0.480
	WCDMA IV_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI3(Simultaneous)	1413	1732.6	16.30	17.50	1.318	-0.04	0.508	0.670
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	1413	1732.6	16.30	17.50	1.318	-0.04	0.573	0.755
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	1312	1712.4	16.22	17.50	1.343	0.09	0.537	0.721
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	1513	1752.6	16.29	17.50	1.321	0.01	0.560	0.740
	WCDMA II_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	9400	1880	19.35	20.50	1.303	0.1	0.398	0.519
	WCDMA II_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	9400	1880	19.35	20.50	1.303	0.08	0.681	0.887
	WCDMA II_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	9262	1852.4	19.13	20.50	1.371	0.11	0.812	1.113
	WCDMA II_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	9538	1907.6	19.25	20.50	1.334	0.06	0.629	0.839
	WCDMA II_Ant1	RMC 12.2Kbps	Front	16mm	-	DSI4(Full)	9400	1880	21.52	22.50	1.253	-0.04	0.298	0.373
	WCDMA II_Ant1	RMC 12.2Kbps	Back	27mm	-	DSI4(Full)	9262	1852.4	21.46	22.50	1.271	0.13	0.096	0.122
	WCDMA II_Ant1	RMC 12.2Kbps	Front	5mm	-	DSI3(Simultaneous)	9400	1880	18.25	19.00	1.189	-0.01	0.321	0.382
	WCDMA II_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	9400	1880	18.25	19.00	1.189	-0.13	0.541	0.643
	WCDMA II_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	9262	1852.4	18.24	19.00	1.191	-0.02	0.746	0.889
	WCDMA II_Ant1	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	9538	1907.6	18.14	19.00	1.219	0.04	0.536	0.653
	WCDMA II_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	9400	1880	17.26	18.50	1.330	0.18	0.644	0.857
	WCDMA II_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	9400	1880	17.26	18.50	1.330	0.07	0.848	1.128
	WCDMA II_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	9262	1852.4	17.15	18.50	1.365	-0.02	0.614	0.838
	WCDMA II_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI3(Standalone)	9538	1907.6	17.21	18.50	1.346	0.16	0.683	0.919
	WCDMA II_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	9262	1852.4	17.15	18.50	1.365	-0.11	0.804	1.097
57	WCDMA II_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Standalone)	9538	1907.6	17.21	18.50	1.346	0.12	0.909	1.223
	WCDMA II_Ant0	RMC 12.2Kbps	Back	5mm	Headset	DSI3(Standalone)	9538	1907.6	17.21	18.50	1.346	-0.09	0.654	0.880
	WCDMA II_Ant0	RMC 12.2Kbps	Front	16mm	-	DSI4(Full)	9538	1907.6	22.83	24.00	1.309	-0.05	0.555	0.727
	WCDMA II_Ant0	RMC 12.2Kbps	Back	27mm	-	DSI4(Full)	9538	1907.6	22.83	24.00	1.309	0.05	0.442	0.579
	WCDMA II_Ant0	RMC 12.2Kbps	Front	5mm	-	DSI3(Simultaneous)	9400	1880	14.81	16.00	1.315	0.01	0.339	0.446
	WCDMA II_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	9400	1880	14.81	16.00	1.315	-0.15	0.468	0.616
	WCDMA II_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	9262	1852.4	14.68	16.00	1.355	0.04	0.464	0.629
	WCDMA II_Ant0	RMC 12.2Kbps	Back	5mm	-	DSI3(Simultaneous)	9538	1907.6	14.78	16.00	1.324	0.11	0.486	0.644



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Headset	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
58	LTE Band 71_Ant1	20M	QPSK	1	0	Front	5mm	-	DSI4(Full)	133322	683	22.95	24.00	1.274	0.18	0.390	0.497
	LTE Band 71_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI4(Full)	133322	683	22.95	24.00	1.274	-0.08	0.561	0.714
	LTE Band 71_Ant1	20M	QPSK	50	0	Front	5mm	-	DSI4(Full)	133322	683	21.90	23.00	1.288	-0.02	0.233	0.300
	LTE Band 71_Ant1	20M	QPSK	50	0	Back	5mm	-	DSI4(Full)	133322	683	21.90	23.00	1.288	0.18	0.324	0.417
	LTE Band 71_Ant0	20M	QPSK	1	0	Front	5mm	-	DSI4(Full)	133322	683	23.46	24.50	1.271	-0.09	0.320	0.407
	LTE Band 71_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI4(Full)	133322	683	23.46	24.50	1.271	0.12	0.471	0.598
	LTE Band 71_Ant0	20M	QPSK	50	0	Front	5mm	-	DSI4(Full)	133322	683	22.56	23.50	1.242	0.11	0.184	0.228
	LTE Band 71_Ant0	20M	QPSK	50	0	Back	5mm	-	DSI4(Full)	133322	683	22.56	23.50	1.242	-0.07	0.283	0.351
59	LTE Band 12_Ant1	10M	QPSK	1	25	Front	5mm	-	DSI4(Full)	23095	707.5	22.55	23.50	1.245	0.03	0.531	0.661
	LTE Band 12_Ant1	10M	QPSK	1	25	Back	5mm	-	DSI4(Full)	23095	707.5	22.55	23.50	1.245	-0.05	0.636	0.792
	LTE Band 12_Ant1	10M	QPSK	25	12	Front	5mm	-	DSI4(Full)	23095	707.5	21.66	22.50	1.213	0.07	0.286	0.347
	LTE Band 12_Ant1	10M	QPSK	25	12	Back	5mm	-	DSI4(Full)	23095	707.5	21.66	22.50	1.213	-0.02	0.375	0.455
	LTE Band 12_Ant0	10M	QPSK	1	25	Front	5mm	-	DSI4(Full)	23095	707.5	23.75	24.50	1.189	0.06	0.424	0.504
	LTE Band 12_Ant0	10M	QPSK	1	25	Back	5mm	-	DSI4(Full)	23095	707.5	23.75	24.50	1.189	-0.01	0.625	0.743
	LTE Band 12_Ant0	10M	QPSK	25	12	Front	5mm	-	DSI4(Full)	23095	707.5	22.78	23.50	1.180	0.08	0.228	0.269
	LTE Band 12_Ant0	10M	QPSK	25	12	Back	5mm	-	DSI4(Full)	23095	707.5	22.78	23.50	1.180	0.13	0.345	0.407
	LTE Band 13_Ant1	10M	QPSK	1	25	Front	5mm	-	DSI4(Full)	23230	782	22.34	23.50	1.306	0.08	0.673	0.879
	LTE Band 13_Ant1	10M	QPSK	1	25	Back	5mm	-	DSI4(Full)	23230	782	22.34	23.50	1.306	-0.07	0.713	0.931
	LTE Band 13_Ant1	10M	QPSK	25	12	Front	5mm	-	DSI4(Full)	23230	782	21.82	22.50	1.169	0.18	0.408	0.477
	LTE Band 13_Ant1	10M	QPSK	25	12	Back	5mm	-	DSI4(Full)	23230	782	21.82	22.50	1.169	0.1	0.460	0.538
	LTE Band 13_Ant1	10M	QPSK	50	0	Front	5mm	-	DSI4(Full)	23230	782	21.83	22.50	1.167	-0.09	0.415	0.484
	LTE Band 13_Ant1	10M	QPSK	50	0	Back	5mm	-	DSI4(Full)	23230	782	21.83	22.50	1.167	0.05	0.454	0.530
60	LTE Band 13_Ant0	10M	QPSK	1	25	Front	5mm	-	DSI4(Full)	23230	782	23.20	24.50	1.349	0.01	0.773	1.043
	LTE Band 13_Ant0	10M	QPSK	1	25	Back	5mm	-	DSI4(Full)	23230	782	23.20	24.50	1.349	0.03	0.928	1.252
	LTE Band 13_Ant0	10M	QPSK	25	12	Front	5mm	-	DSI4(Full)	23230	782	22.54	23.50	1.247	0.13	0.461	0.575
	LTE Band 13_Ant0	10M	QPSK	25	12	Back	5mm	-	DSI4(Full)	23230	782	22.54	23.50	1.247	0.01	0.555	0.692
	LTE Band 13_Ant0	10M	QPSK	50	0	Front	5mm	-	DSI4(Full)	23230	782	22.60	23.50	1.230	-0.02	0.471	0.579
	LTE Band 13_Ant0	10M	QPSK	50	0	Back	5mm	-	DSI4(Full)	23230	782	22.60	23.50	1.230	-0.08	0.561	0.690
61	LTE Band 14_Ant1	10M	QPSK	1	25	Front	5mm	-	DSI4(Full)	23330	793	22.99	24.00	1.262	0.01	0.586	0.739
	LTE Band 14_Ant1	10M	QPSK	1	25	Back	5mm	-	DSI4(Full)	23330	793	22.99	24.00	1.262	0.09	0.707	0.892
	LTE Band 14_Ant1	10M	QPSK	25	12	Front	5mm	-	DSI4(Full)	23330	793	21.95	23.00	1.274	-0.16	0.412	0.525
	LTE Band 14_Ant1	10M	QPSK	25	12	Back	5mm	-	DSI4(Full)	23330	793	21.95	23.00	1.274	0.14	0.483	0.615
	LTE Band 14_Ant1	10M	QPSK	50	0	Back	5mm	-	DSI4(Full)	23330	793	21.92	23.00	1.282	0.13	0.480	0.616
	LTE Band 14_Ant0	10M	QPSK	1	25	Front	5mm	-	DSI4(Full)	23330	793	23.72	24.50	1.197	0.11	0.624	0.747
	LTE Band 14_Ant0	10M	QPSK	1	25	Back	5mm	-	DSI4(Full)	23330	793	23.72	24.50	1.197	0.08	0.730	0.874
	LTE Band 14_Ant0	10M	QPSK	25	12	Front	5mm	-	DSI4(Full)	23330	793	22.68	23.50	1.208	0.11	0.436	0.527
	LTE Band 14_Ant0	10M	QPSK	25	12	Back	5mm	-	DSI4(Full)	23330	793	22.68	23.50	1.208	0.01	0.517	0.624
	LTE Band 14_Ant0	10M	QPSK	50	0	Back	5mm	-	DSI4(Full)	23330	793	22.66	23.50	1.213	0.07	0.523	0.635
	LTE Band 26_Ant1	15M	QPSK	1	74	Front	5mm	-	DSI4(Full)	26865	831.5	22.57	23.50	1.239	0.16	0.695	0.861
	LTE Band 26_Ant1	15M	QPSK	1	74	Back	5mm	-	DSI4(Full)	26865	831.5	22.57	23.50	1.239	0.05	0.727	0.901
	LTE Band 26_Ant1	15M	QPSK	1	74	Front	5mm	-	DSI4(Full)	26765	821.5	22.54	23.50	1.247	0.02	0.635	0.792
	LTE Band 26_Ant1	15M	QPSK	1	74	Front	5mm	-	DSI4(Full)	26965	841.5	22.47	23.50	1.268	-0.02	0.758	0.961
	LTE Band 26_Ant1	15M	QPSK	1	74	Back	5mm	-	DSI4(Full)	26765	821.5	22.54	23.50	1.247	0.18	0.770	0.960
	LTE Band 26_Ant1	15M	QPSK	1	74	Back	5mm	-	DSI4(Full)	26965	841.5	22.47	23.50	1.268	0.14	0.868	1.101
	LTE Band 26_Ant1	15M	QPSK	36	39	Front	5mm	-	DSI4(Full)	26865	831.5	21.76	22.50	1.186	-0.07	0.502	0.595
	LTE Band 26_Ant1	15M	QPSK	36	39	Back	5mm	-	DSI4(Full)	26865	831.5	21.76	22.50	1.186	0.12	0.556	0.659
	LTE Band 26_Ant1	15M	QPSK	36	39	Front	5mm	-	DSI4(Full)	26765	821.5	21.70	22.50	1.202	-0.02	0.529	0.636
	LTE Band 26_Ant1	15M	QPSK	36	39	Front	5mm	-	DSI4(Full)	26965	841.5	21.69	22.50	1.205	-0.02	0.581	0.700
	LTE Band 26_Ant1	15M	QPSK	36	39	Back	5mm	-	DSI4(Full)	26765	821.5	21.70	22.50	1.202	0.17	0.568	0.683
	LTE Band 26_Ant1	15M	QPSK	36	39	Back	5mm	-	DSI4(Full)	26965	841.5	21.69	22.50	1.205	-0.02	0.660	0.795
	LTE Band 26_Ant1	15M	QPSK	75	0	Front	5mm	-	DSI4(Full)	26865	831.5	21.70	22.50	1.202	0.07	0.519	0.624
	LTE Band 26_Ant1	15M	QPSK	75	0	Back	5mm	-	DSI4(Full)	26865	831.5	21.70	22.50	1.202	-0.1	0.575	0.691



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	LTE Band 26_Ant1	15M	QPSK	1	0	Front	5mm	-	DSI3(Simultaneous)	26865	831.5	21.38	22.50	1.294	0.08	0.469	0.607
	LTE Band 26_Ant1	15M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	26865	831.5	21.38	22.50	1.294	-0.03	0.529	0.685
	LTE Band 26_Ant1	15M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	26765	821.5	21.31	22.50	1.315	0.15	0.549	0.722
	LTE Band 26_Ant1	15M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	26965	841.5	21.32	22.50	1.312	0.17	0.608	0.798
	LTE Band 26_Ant1	15M	QPSK	36	0	Front	5mm	-	DSI3(Simultaneous)	26865	831.5	21.36	22.50	1.300	-0.11	0.455	0.592
	LTE Band 26_Ant1	15M	QPSK	36	0	Back	5mm	-	DSI3(Simultaneous)	26865	831.5	21.36	22.50	1.300	-0.09	0.522	0.679
	LTE Band 26_Ant0	15M	QPSK	1	74	Front	5mm	-	DSI4(Full)	26865	831.5	23.63	24.50	1.222	0.05	0.787	0.962
	LTE Band 26_Ant0	15M	QPSK	1	74	Back	5mm	-	DSI4(Full)	26865	831.5	23.63	24.50	1.222	-0.11	0.824	1.007
	LTE Band 26_Ant0	15M	QPSK	1	74	Front	5mm	-	DSI4(Full)	26765	821.5	23.60	24.50	1.230	0.03	0.757	0.931
	LTE Band 26_Ant0	15M	QPSK	1	74	Front	5mm	-	DSI4(Full)	26965	841.5	23.61	24.50	1.227	0.16	0.885	1.086
62	LTE Band 26_Ant0	15M	QPSK	1	74	Back	5mm	-	DSI4(Full)	26765	821.5	23.60	24.50	1.230	0.09	0.995	1.224
	LTE Band 26_Ant0	15M	QPSK	1	74	Back	5mm	-	DSI4(Full)	26965	841.5	23.61	24.50	1.227	-0.15	0.883	1.084
	LTE Band 26_Ant0	15M	QPSK	1	74	Back	5mm	Headset	DSI4(Full)	26765	821.5	23.60	24.50	1.230	0.03	0.844	1.038
	LTE Band 26_Ant0	15M	QPSK	36	39	Front	5mm	-	DSI4(Full)	26865	831.5	22.72	23.50	1.197	0.11	0.452	0.541
	LTE Band 26_Ant0	15M	QPSK	36	39	Back	5mm	-	DSI4(Full)	26865	831.5	22.72	23.50	1.197	0.02	0.557	0.667
	LTE Band 26_Ant0	15M	QPSK	75	0	Front	5mm	-	DSI4(Full)	26865	831.5	22.68	23.50	1.208	-0.03	0.452	0.546
	LTE Band 26_Ant0	15M	QPSK	75	0	Back	5mm	-	DSI4(Full)	26865	831.5	22.68	23.50	1.208	0.04	0.557	0.673
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	5mm	-	DSI3(Standalone)	132322	1745	16.45	17.50	1.274	0.14	0.604	0.769
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	132322	1745	16.45	17.50	1.274	0.11	0.858	1.093
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	132072	1720	16.34	17.50	1.306	-0.1	0.899	1.174
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	132572	1770	16.32	17.50	1.312	0.18	0.783	1.027
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	16mm	-	DSI4(Full)	132322	1745	20.83	22.00	1.309	0.12	0.431	0.564
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	27mm	-	DSI4(Full)	132072	1720	20.70	22.00	1.349	-0.08	0.298	0.402
	LTE Band 66_Ant1	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	132322	1745	16.43	17.50	1.279	-0.09	0.611	0.782
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	132322	1745	16.43	17.50	1.279	-0.09	0.865	1.107
63	LTE Band 66_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	132072	1720	16.32	17.50	1.312	0.04	0.930	1.220
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	132572	1770	16.30	17.50	1.318	0.02	0.757	0.998
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	5mm	Headset	DSI3(Standalone)	132072	1720	16.32	17.50	1.312	-0.12	0.905	1.188
	LTE Band 66_Ant1	20M	QPSK	50	24	Front	16mm	-	DSI4(Full)	132322	1745	20.14	21.00	1.219	-0.03	0.283	0.345
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	27mm	-	DSI4(Full)	132072	1720	20.09	21.00	1.233	0.01	0.195	0.240
	LTE Band 66_Ant1	20M	QPSK	100	0	Back	5mm	-	DSI3(Standalone)	132322	1745	16.41	17.50	1.285	0.11	0.843	1.083
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	5mm	-	DSI3(Simultaneous)	132322	1745	14.28	15.50	1.324	0.03	0.393	0.520
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	132322	1745	14.28	15.50	1.324	-0.18	0.587	0.777
	LTE Band 66_Ant1	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	132322	1745	14.26	15.50	1.330	0.07	0.381	0.507
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	132322	1745	14.26	15.50	1.330	0.17	0.600	0.798
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	132072	1720	14.21	15.50	1.346	-0.09	0.597	0.803
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	132572	1770	14.13	15.50	1.371	-0.04	0.509	0.698
	LTE Band 66_Ant1	20M	QPSK	100	0	Back	5mm	-	DSI3(Simultaneous)	132322	1745	14.24	15.50	1.337	-0.12	0.585	0.782
	LTE Band 66_Ant0	20M	QPSK	1	0	Front	5mm	-	DSI3(Standalone)	132322	1745	17.67	19.00	1.358	-0.12	0.687	0.933
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	132322	1745	17.67	19.00	1.358	-0.05	0.793	1.077
	LTE Band 66_Ant0	20M	QPSK	1	0	Front	5mm	-	DSI3(Standalone)	132072	1720	17.59	19.00	1.384	0.16	0.607	0.840
	LTE Band 66_Ant0	20M	QPSK	1	0	Front	5mm	-	DSI3(Standalone)	132572	1770	17.47	19.00	1.422	0.06	0.663	0.943
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	132072	1720	17.59	19.00	1.384	-0.12	0.757	1.047
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	132572	1770	17.47	19.00	1.422	-0.11	0.791	1.125
	LTE Band 66_Ant0	20M	QPSK	1	0	Front	16mm	-	DSI4(Full)	132572	1770	22.42	24.00	1.439	0.04	0.482	0.694
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	27mm	-	DSI4(Full)	132572	1770	22.42	24.00	1.439	0.05	0.311	0.447
	LTE Band 66_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	132322	1745	17.65	19.00	1.365	-0.05	0.678	0.925
	LTE Band 66_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	132322	1745	17.65	19.00	1.365	-0.03	0.785	1.071
	LTE Band 66_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	132072	1720	17.55	19.00	1.396	-0.11	0.604	0.843
	LTE Band 66_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	132572	1770	17.49	19.00	1.416	-0.01	0.654	0.926
	LTE Band 66_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	132072	1720	17.55	19.00	1.396	0.05	0.748	1.044
	LTE Band 66_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	132572	1770	17.49	19.00	1.416	-0.03	0.790	1.118
	LTE Band 66_Ant0	20M	QPSK	50	24	Front	16mm	-	DSI4(Full)	132572	1770	21.87	23.00	1.297	0.04	0.295	0.383
	LTE Band 66_Ant0	20M	QPSK	50	24	Back	27mm	-	DSI4(Full)	132572	1770	21.87	23.00	1.297	-0.09	0.199	0.258
	LTE Band 66_Ant0	20M	QPSK	100	0	Front	5mm	-	DSI3(Standalone)	132322	1745	17.64	19.00	1.368	0.1	0.673	0.920
	LTE Band 66_Ant0	20M	QPSK	100	0	Back	5mm	-	DSI3(Standalone)	132322	1745	17.64	19.00	1.368	0.07	0.774	1.059

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	LTE Band 66_Ant0	20M	QPSK	1	0	Front	5mm	-	DSI3(Simultaneous)	132322	1745	15.33	16.50	1.309	0.05	0.421	0.551
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	132322	1745	15.33	16.50	1.309	0.07	0.451	0.590
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	132072	1720	15.12	16.50	1.374	-0.09	0.404	0.555
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	132572	1770	14.99	16.50	1.416	-0.05	0.441	0.624
	LTE Band 66_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	132322	1745	15.32	16.50	1.312	0.03	0.411	0.539
	LTE Band 66_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	132322	1745	15.32	16.50	1.312	0.05	0.446	0.585
	LTE Band 25_Ant1	20M	QPSK	1	0	Front	5mm	-	DSI3(Standalone)	26340	1880	15.78	17.00	1.324	0.11	0.548	0.726
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	26340	1880	15.78	17.00	1.324	-0.12	0.810	1.073
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	26140	1860	15.72	17.00	1.343	-0.06	0.741	0.995
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	26590	1905	15.75	17.00	1.334	-0.01	0.835	1.113
	LTE Band 25_Ant1	20M	QPSK	1	0	Front	16mm	-	DSI4(Full)	26340	1880	19.74	21.00	1.337	-0.08	0.295	0.394
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	27mm	-	DSI4(Full)	26590	1905	19.64	21.00	1.368	0.07	0.242	0.331
	LTE Band 25_Ant1	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	26340	1880	15.75	17.00	1.334	-0.03	0.538	0.717
	LTE Band 25_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	26340	1880	15.75	17.00	1.334	0.15	0.801	1.068
	LTE Band 25_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	26140	1860	15.69	17.00	1.352	0.05	0.734	0.992
	LTE Band 25_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	26590	1905	15.73	17.00	1.340	-0.09	0.811	1.086
	LTE Band 25_Ant1	20M	QPSK	50	24	Front	16mm	-	DSI4(Full)	26340	1880	18.80	20.00	1.318	-0.07	0.174	0.229
	LTE Band 25_Ant1	20M	QPSK	50	24	Back	27mm	-	DSI4(Full)	26590	1905	18.54	20.00	1.400	0.12	0.141	0.197
	LTE Band 25_Ant1	20M	QPSK	100	0	Back	5mm	-	DSI3(Standalone)	26340	1880	15.74	17.00	1.337	0.02	0.783	1.047
	LTE Band 25_Ant1	20M	QPSK	1	0	Front	5mm	-	DSI3(Simultaneous)	26340	1880	13.86	15.00	1.300	-0.1	0.344	0.447
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	26340	1880	13.86	15.00	1.300	-0.12	0.479	0.623
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	26140	1860	13.82	15.00	1.312	-0.01	0.471	0.618
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	26590	1905	13.76	15.00	1.330	0.05	0.571	0.760
	LTE Band 25_Ant1	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	26340	1880	13.84	15.00	1.306	0.02	0.348	0.455
	LTE Band 25_Ant1	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	26340	1880	13.84	15.00	1.306	0.1	0.474	0.619
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	5mm	-	DSI3(Standalone)	26340	1880	16.94	18.00	1.276	-0.11	0.691	0.882
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	26340	1880	16.94	18.00	1.276	-0.07	0.902	1.151
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	5mm	-	DSI3(Standalone)	26140	1860	16.92	18.00	1.282	0.13	0.674	0.864
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	5mm	-	DSI3(Standalone)	26590	1905	16.90	18.00	1.288	0.17	0.731	0.942
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	26140	1860	16.92	18.00	1.282	0.16	0.838	1.075
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	26590	1905	16.90	18.00	1.288	0.15	0.930	1.198
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	16mm	-	DSI4(Full)	26590	1905	21.53	23.00	1.403	0.04	0.505	0.708
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	27mm	-	DSI4(Full)	26590	1905	21.53	23.00	1.403	0.05	0.382	0.536
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	26340	1880	16.92	18.00	1.282	0.12	0.720	0.923
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	26340	1880	16.92	18.00	1.282	0.15	0.939	1.204
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	26140	1860	16.87	18.00	1.297	-0.12	0.704	0.913
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	26590	1905	16.90	18.00	1.288	0.15	0.751	0.967
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	26140	1860	16.87	18.00	1.297	0.15	0.878	1.139
64	LTE Band 25_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	26590	1905	16.90	18.00	1.288	0.09	0.960	1.237
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	5mm	Headset	DSI3(Standalone)	26590	1905	16.90	18.00	1.288	-0.02	0.797	1.027
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	16mm	-	DSI4(Full)	26590	1905	20.55	22.00	1.396	-0.06	0.296	0.413
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	27mm	-	DSI4(Full)	26590	1905	20.55	22.00	1.396	0.17	0.233	0.325
	LTE Band 25_Ant0	20M	QPSK	100	0	Front	5mm	-	DSI3(Standalone)	26340	1880	16.88	18.00	1.294	0.11	0.699	0.905
	LTE Band 25_Ant0	20M	QPSK	100	0	Back	5mm	-	DSI3(Standalone)	26340	1880	16.88	18.00	1.294	0.16	0.912	1.180
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	5mm	-	DSI3(Simultaneous)	26340	1880	13.78	15.00	1.324	0.02	0.323	0.428
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	26340	1880	13.78	15.00	1.324	-0.09	0.391	0.518
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	26340	1880	13.76	15.00	1.330	0.03	0.339	0.451
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	26340	1880	13.76	15.00	1.330	-0.07	0.394	0.524
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	26140	1860	13.72	15.00	1.343	0.12	0.422	0.567
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	26590	1905	13.67	15.00	1.358	-0.1	0.449	0.610
	LTE Band 30_Ant0	10M	QPSK	1	0	Front	5mm	-	DSI3(Standalone)	27710	2310	17.18	18.50	1.355	0.11	0.634	0.859
65	LTE Band 30_Ant0	10M	QPSK	1	0	Back	5mm	-	DSI3(Standalone)	27710	2310	17.18	18.50	1.355	0.12	0.888	1.203
	LTE Band 30_Ant0	10M	QPSK	1	0	Back	5mm	Headset	DSI3(Standalone)	27710	2310	17.18	18.50	1.355	0.01	0.875	1.186
	LTE Band 30_Ant0	10M	QPSK	1	0	Front	16mm	-	DSI4(Full)	27710	2310	21.11	22.50	1.377	-0.09	0.292	0.402
	LTE Band 30_Ant0	10M	QPSK	1	0	Back	27mm	-	DSI4(Full)	27710	2310	21.11	22.50	1.377	-0.08	0.205	0.282
	LTE Band 30_Ant0	10M	QPSK	25	12	Front	5mm	-	DSI3(Standalone)	27710	2310	17.16	18.50	1.361	0.06	0.619	0.843

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	LTE Band 30_Ant0	10M	QPSK	25	12	Back	5mm	-	DSI3(Standalone)	27710	2310	17.16	18.50	1.361	-0.02	0.874	1.190
	LTE Band 30_Ant0	10M	QPSK	25	12	Front	16mm	-	DSI4(Full)	27710	2310	20.95	22.50	1.429	-0.03	0.148	0.211
	LTE Band 30_Ant0	10M	QPSK	25	12	Back	27mm	-	DSI4(Full)	27710	2310	20.95	22.50	1.429	0.07	0.113	0.161
	LTE Band 30_Ant0	10M	QPSK	50	0	Front	5mm	-	DSI3(Standalone)	27710	2310	17.12	18.50	1.374	-0.12	0.611	0.840
	LTE Band 30_Ant0	10M	QPSK	50	0	Back	5mm	-	DSI3(Standalone)	27710	2310	17.12	18.50	1.374	-0.12	0.851	1.169
	LTE Band 30_Ant0	10M	QPSK	1	0	Front	5mm	-	DSI3(Simultaneous)	27710	2310	16.15	17.50	1.365	-0.1	0.494	0.674
	LTE Band 30_Ant0	10M	QPSK	1	0	Back	5mm	-	DSI3(Simultaneous)	27710	2310	16.15	17.50	1.365	0.12	0.669	0.913
	LTE Band 30_Ant0	10M	QPSK	25	12	Front	5mm	-	DSI3(Simultaneous)	27710	2310	16.14	17.50	1.368	0.15	0.485	0.663
	LTE Band 30_Ant0	10M	QPSK	25	12	Back	5mm	-	DSI3(Simultaneous)	27710	2310	16.14	17.50	1.368	0.17	0.655	0.896
	LTE Band 30_Ant0	10M	QPSK	50	0	Back	5mm	-	DSI3(Simultaneous)	27710	2310	16.10	17.50	1.380	0.15	0.488	0.674
	LTE Band 7_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Standalone)	21350	2560	20.41	21.50	1.285	-0.12	0.725	0.932
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Standalone)	21350	2560	20.41	21.50	1.285	-0.03	0.928	1.193
	LTE Band 7_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Standalone)	20850	2510	20.20	21.50	1.349	0.15	0.663	0.894
	LTE Band 7_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Standalone)	21100	2535	20.20	21.50	1.349	-0.06	0.686	0.925
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Standalone)	20850	2510	20.20	21.50	1.349	0.16	0.793	1.070
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Standalone)	21100	2535	20.20	21.50	1.349	-0.11	0.865	1.167
	LTE Band 7_Ant0	20M	QPSK	1	99	Front	16mm	-	DSI4(Full)	21350	2560	23.03	24.00	1.250	0.07	0.403	0.504
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	27mm	-	DSI4(Full)	21350	2560	23.03	24.00	1.250	0.09	0.255	0.319
	LTE Band 7_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	21350	2560	20.37	21.50	1.297	0.03	0.748	0.970
66	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	21350	2560	20.37	21.50	1.297	0.06	0.953	1.236
	LTE Band 7_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	20850	2510	20.15	21.50	1.365	0.05	0.670	0.914
	LTE Band 7_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Standalone)	21100	2535	20.17	21.50	1.358	0.13	0.706	0.959
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	20850	2510	20.15	21.50	1.365	-0.04	0.825	1.126
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Standalone)	21100	2535	20.17	21.50	1.358	0.02	0.891	1.210
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	Headset	DSI3(Standalone)	21350	2560	20.37	21.50	1.297	0.14	0.903	1.171
	LTE Band 7_Ant0	20M	QPSK	50	24	Front	16mm	-	DSI4(Full)	21350	2560	22.15	23.00	1.216	0.05	0.229	0.279
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	27mm	-	DSI4(Full)	21350	2560	22.15	23.00	1.216	-0.05	0.141	0.171
	LTE Band 7_Ant0	20M	QPSK	100	0	Front	5mm	-	DSI3(Standalone)	21350	2560	20.28	21.50	1.324	0.05	0.692	0.916
	LTE Band 7_Ant0	20M	QPSK	100	0	Back	5mm	-	DSI3(Standalone)	21350	2560	20.28	21.50	1.324	-0.06	0.905	1.199
	LTE Band 7_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	21350	2560	19.05	20.00	1.245	0.16	0.527	0.656
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	21350	2560	19.05	20.00	1.245	0.12	0.658	0.819
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	20850	2510	18.64	20.00	1.368	0.01	0.580	0.793
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	21100	2535	18.72	20.00	1.343	0.12	0.623	0.837
	LTE Band 7_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	21350	2560	18.92	20.00	1.282	-0.08	0.511	0.655
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	21350	2560	18.92	20.00	1.282	-0.01	0.635	0.814
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	20850	2510	18.62	20.00	1.374	0.17	0.579	0.796
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	21100	2535	18.70	20.00	1.349	-0.01	0.604	0.815
	LTE Band 7_Ant0	20M	QPSK	100	0	Back	5mm	-	DSI3(Simultaneous)	21350	2560	18.85	20.00	1.303	-0.04	0.627	0.817



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Headset	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	40620	2593	22.97	24.00	1.268	62.9	1.006	0.17	0.825	1.052
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	40620	2593	22.97	24.00	1.268	62.9	1.006	0.02	0.976	1.245
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	39750	2506	22.73	24.00	1.340	62.9	1.006	0.03	0.748	1.008
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	40185	2549.5	22.90	24.00	1.288	62.9	1.006	0.16	0.830	1.076
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	41055	2636.5	22.84	24.00	1.306	62.9	1.006	-0.03	0.837	1.100
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	41490	2680	22.66	24.00	1.361	62.9	1.006	-0.09	0.580	0.794
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	39750	2506	22.73	24.00	1.340	62.9	1.006	0.12	0.915	1.233
67	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	40185	2549.5	22.90	24.00	1.288	62.9	1.006	0.19	0.967	1.253
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	41055	2636.5	22.84	24.00	1.306	62.9	1.006	0.02	0.927	1.218
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	41490	2680	22.66	24.00	1.361	62.9	1.006	0.01	0.749	1.026
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	Headset	DSI4(Full)	40185	2549.5	22.90	24.00	1.288	62.9	1.006	0.1	0.936	1.213
	LTE Band 41C_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	40185+2549.5+40383	2549.5+2569.3	20.65	21.90	1.334	62.9	1.006	-0.03	0.750	1.006
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI4(Full)	40620	2593	22.15	23.00	1.216	62.9	1.006	-0.11	0.672	0.822
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI4(Full)	40620	2593	22.15	23.00	1.216	62.9	1.006	-0.02	0.831	1.017
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm		DSI4(Full)	39750	2506	21.91	23.00	1.285	62.9	1.006	0.02	0.623	0.806
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm		DSI4(Full)	40185	2549.5	22.13	23.00	1.222	62.9	1.006	0.09	0.685	0.842
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm		DSI4(Full)	41055	2636.5	21.98	23.00	1.265	62.9	1.006	-0.01	0.688	0.875
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm		DSI4(Full)	41490	2680	21.93	23.00	1.279	62.9	1.006	0.14	0.511	0.658
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm		DSI4(Full)	39750	2506	21.91	23.00	1.285	62.9	1.006	0.16	0.718	0.928
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm		DSI4(Full)	40185	2549.5	22.13	23.00	1.222	62.9	1.006	0.09	0.797	0.980
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm		DSI4(Full)	41055	2636.5	21.98	23.00	1.265	62.9	1.006	0.01	0.780	0.992
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm		DSI4(Full)	41490	2680	21.93	23.00	1.279	62.9	1.006	0.13	0.635	0.817
	LTE Band 41_Ant0	20M	QPSK	100	0	Front	5mm	-	DSI4(Full)	40620	2593	22.10	23.00	1.230	62.9	1.006	-0.04	0.647	0.801
	LTE Band 41_Ant0	20M	QPSK	100	0	Back	5mm	-	DSI4(Full)	40620	2593	22.10	23.00	1.230	62.9	1.006	0.1	0.840	1.040
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	40620	2593	21.07	21.90	1.211	62.9	1.006	-0.04	0.544	0.663
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	40620	2593	21.07	21.90	1.211	62.9	1.006	-0.06	0.654	0.796
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	39750	2506	20.84	21.90	1.276	62.9	1.006	0.15	0.487	0.625
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	40185	2549.5	21.05	21.90	1.216	62.9	1.006	0.18	0.534	0.653
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	41055	2636.5	21.06	21.90	1.213	62.9	1.006	0.11	0.497	0.607
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	41490	2680	20.89	21.90	1.262	62.9	1.006	0.15	0.421	0.534
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	39750	2506	20.84	21.90	1.276	62.9	1.006	0.07	0.638	0.819
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	40185	2549.5	21.05	21.90	1.216	62.9	1.006	0.07	0.692	0.847
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	41055	2636.5	21.06	21.90	1.213	62.9	1.006	0.08	0.622	0.759
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	41490	2680	20.89	21.90	1.262	62.9	1.006	-0.12	0.477	0.606
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	40620	2593	21.06	21.90	1.213	62.9	1.006	0.06	0.569	0.695
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	40620	2593	21.06	21.90	1.213	62.9	1.006	0.04	0.673	0.822
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	39750	2506	20.82	21.90	1.282	62.9	1.006	0.05	0.490	0.632
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	40185	2549.5	21.04	21.90	1.219	62.9	1.006	0.06	0.565	0.693
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	41055	2636.5	21.05	21.90	1.216	62.9	1.006	-0.1	0.512	0.626
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	41490	2680	20.88	21.90	1.265	62.9	1.006	0.01	0.435	0.553
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	39750	2506	20.82	21.90	1.282	62.9	1.006	0.07	0.643	0.829
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	40185	2549.5	21.04	21.90	1.219	62.9	1.006	-0.1	0.716	0.878
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	41055	2636.5	21.05	21.90	1.216	62.9	1.006	0.18	0.642	0.785
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	41490	2680	20.88	21.90	1.265	62.9	1.006	0.17	0.495	0.630
	LTE Band 41C_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	40185+2549.5+40383	2549.5+2569.3	20.65	21.90	1.334	62.9	1.006	-0.03	0.750	1.006
	LTE Band 41_Ant0	20M	QPSK	100	0	Front	5mm	-	DSI3(Simultaneous)	40620	2593	21.04	21.90	1.219	62.9	1.006	0.02	0.522	0.640
	LTE Band 41_Ant0	20M	QPSK	100	0	Back	5mm	-	DSI3(Simultaneous)	40620	2593	21.04	21.90	1.219	62.9	1.006	-0.02	0.646	0.792
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	0.01	0.886	1.090
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	0.02	0.976	1.200
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	39750	2506	25.91	27.00	1.285	42.9	1.009	-0.07	0.834	1.082
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	40185	2549.5	26.02	27.00	1.253	42.9	1.009	0.13	0.858	1.085
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	41055	2636.5	26.10	27.00	1.230	42.9	1.009	0.17	0.853	1.059



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LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI4(Full)	41490	2680	25.87	27.00	1.297	42.9	1.009	0.16	0.772	1.010
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	39750	2506	25.91	27.00	1.285	42.9	1.009	0.04	0.905	1.174
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	40185	2549.5	26.02	27.00	1.253	42.9	1.009	0.05	0.889	1.124
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	41055	2636.5	26.10	27.00	1.230	42.9	1.009	0.15	0.937	1.163
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI4(Full)	41490	2680	25.87	27.00	1.297	42.9	1.009	0.12	0.902	1.181
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	Headset	DSI4(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	0.15	0.958	1.178
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI4(Full)	40620	2593	24.49	26.00	1.416	42.9	1.009	0.09	0.682	0.974
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI4(Full)	40620	2593	24.49	26.00	1.416	42.9	1.009	-0.02	0.800	1.143
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI4(Full)	39750	2506	24.28	26.00	1.486	42.9	1.009	0.17	0.584	0.876
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI4(Full)	40185	2549.5	24.42	26.00	1.439	42.9	1.009	0.03	0.651	0.945
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI4(Full)	41055	2636.5	24.47	26.00	1.422	42.9	1.009	-0.03	0.663	0.951
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI4(Full)	41490	2680	24.28	26.00	1.486	42.9	1.009	-0.02	0.569	0.853
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI4(Full)	39750	2506	24.28	26.00	1.486	42.9	1.009	0.07	0.662	0.993
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI4(Full)	40185	2549.5	24.42	26.00	1.439	42.9	1.009	0.13	0.744	1.080
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI4(Full)	41055	2636.5	24.47	26.00	1.422	42.9	1.009	0.16	0.745	1.069
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI4(Full)	41490	2680	24.28	26.00	1.486	42.9	1.009	0.04	0.718	1.077
LTE Band 41(HPUE)_Ant0	20M	QPSK	100	0	Front	5mm	-	DSI4(Full)	40620	2593	24.40	26.00	1.445	42.9	1.009	0.06	0.647	0.944
LTE Band 41(HPUE)_Ant0	20M	QPSK	100	0	Back	5mm	-	DSI4(Full)	40620	2593	24.40	26.00	1.445	42.9	1.009	0.18	0.813	1.186
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	40620	2593	22.52	23.50	1.253	42.9	1.009	0.11	0.517	0.654
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	40620	2593	22.52	23.50	1.253	42.9	1.009	0.02	0.589	0.745
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	39750	2506	22.26	23.50	1.330	42.9	1.009	-0.09	0.496	0.666
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	40185	2549.5	22.46	23.50	1.271	42.9	1.009	0.02	0.535	0.686
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	41055	2636.5	22.47	23.50	1.268	42.9	1.009	0.16	0.511	0.654
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	5mm	-	DSI3(Simultaneous)	41490	2680	22.28	23.50	1.324	42.9	1.009	0.04	0.450	0.601
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	39750	2506	22.26	23.50	1.330	42.9	1.009	0.05	0.539	0.724
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	40185	2549.5	22.46	23.50	1.271	42.9	1.009	-0.09	0.566	0.726
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	41055	2636.5	22.47	23.50	1.268	42.9	1.009	-0.02	0.576	0.737
LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	5mm	-	DSI3(Simultaneous)	41490	2680	22.28	23.50	1.324	42.9	1.009	0.15	0.459	0.613
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	40620	2593	22.50	23.50	1.259	42.9	1.009	-0.04	0.510	0.648
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	40620	2593	22.50	23.50	1.259	42.9	1.009	0.11	0.582	0.739
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	39750	2506	22.24	23.50	1.337	42.9	1.009	-0.18	0.488	0.658
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	40185	2549.5	22.44	23.50	1.276	42.9	1.009	0.05	0.520	0.670
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	41055	2636.5	22.45	23.50	1.274	42.9	1.009	0.03	0.493	0.633
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	5mm	-	DSI3(Simultaneous)	41490	2680	22.26	23.50	1.330	42.9	1.009	0.02	0.431	0.579
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	39750	2506	22.24	23.50	1.337	42.9	1.009	0.16	0.526	0.709
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	40185	2549.5	22.44	23.50	1.276	42.9	1.009	0.12	0.540	0.695
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	41055	2636.5	22.45	23.50	1.274	42.9	1.009	0.17	0.561	0.721
LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	5mm	-	DSI3(Simultaneous)	41490	2680	22.26	23.50	1.330	42.9	1.009	-0.13	0.440	0.591
LTE Band 41(HPUE)_Ant0	20M	QPSK	100	0	Front	5mm	-	DSI3(Simultaneous)	40620	2593	22.48	23.50	1.265	42.9	1.009	0.16	0.502	0.641
LTE Band 41(HPUE)_Ant0	20M	QPSK	100	0	Back	5mm	-	DSI3(Simultaneous)	40620	2593	22.48	23.50	1.265	42.9	1.009	-0.18	0.575	0.734

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Headset	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI4(Full)	136100	680.5	23.05	24.00	1.245	0.1	0.267	0.332
	N71_Ant 1	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI4(Full)	136100	680.5	23.05	24.00	1.245	0.05	0.382	0.475
	N71_Ant 1	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI4(Full)	136100	680.5	22.95	24.00	1.274	0.11	0.302	0.385
68	N71_Ant 1	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI4(Full)	136100	680.5	22.95	24.00	1.274	-0.07	0.384	0.489
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI4(Full)	136100	680.5	23.07	24.00	1.239	-0.02	0.170	0.211
	N71_Ant 0	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI4(Full)	136100	680.5	23.07	24.00	1.239	0.02	0.256	0.317
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI4(Full)	136100	680.5	23.05	24.00	1.245	0.02	0.209	0.260
	N71_Ant 0	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI4(Full)	136100	680.5	23.05	24.00	1.245	-0.06	0.284	0.353
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI4(Full)	167300	836.5	23.20	24.00	1.202	0.02	0.845	1.016
69	N5_Ant 1	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI4(Full)	167300	836.5	23.20	24.00	1.202	0.08	0.922	1.108
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI4(Full)	167300	836.5	23.17	24.00	1.211	0.07	0.833	1.008

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	N5_Ant 1	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI4(Full)	167300	836.5	23.17	24.00	1.211	-0.02	0.867	1.050
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Front	5mm	-	DSI4(Full)	167300	836.5	22.80	23.50	1.175	-0.06	0.835	0.981
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Back	5mm	-	DSI4(Full)	167300	836.5	22.80	23.50	1.175	0.17	0.922	1.083
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Simultaneous)	167300	836.5	22.80	23.50	1.175	0.04	0.710	0.834
	N5_Ant 1	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Simultaneous)	167300	836.5	22.80	23.50	1.175	-0.16	0.762	0.895
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI3(Simultaneous)	167300	836.5	22.78	23.50	1.180	0.08	0.707	0.834
	N5_Ant 1	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI3(Simultaneous)	167300	836.5	22.78	23.50	1.180	0.16	0.754	0.890
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Front	5mm	-	DSI3(Simultaneous)	167300	836.5	22.67	23.50	1.211	0.03	0.700	0.847
	N5_Ant 1	20M	BPSK	100	0	DFT-15	Back	5mm	-	DSI3(Simultaneous)	167300	836.5	22.67	23.50	1.211	0.08	0.729	0.883
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Front	5mm	-	DSI4(Full)	167300	836.5	23.25	24.00	1.189	0.18	0.463	0.550
	N5_Ant 0	20M	BPSK	1	1	DFT-15	Back	5mm	-	DSI4(Full)	167300	836.5	23.25	24.00	1.189	0.04	0.583	0.693
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Front	5mm	-	DSI4(Full)	167300	836.5	23.20	24.00	1.202	-0.09	0.456	0.548
	N5_Ant 0	20M	BPSK	50	28	DFT-15	Back	5mm	-	DSI4(Full)	167300	836.5	23.20	24.00	1.202	0.15	0.556	0.668
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	349000	1745	16.64	17.50	1.219	0.08	0.590	0.719
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	349000	1745	16.64	17.50	1.219	-0.05	0.815	0.993
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	346000	1730	16.53	17.50	1.250	0.08	0.862	1.078
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	352000	1760	16.51	17.50	1.256	-0.09	0.764	0.960
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	16mm	-	DSI4(Full)	349000	1745	22.98	24.00	1.265	0.16	0.466	0.589
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	27mm	-	DSI4(Full)	346000	1730	22.88	24.00	1.294	0.1	0.354	0.458
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	349000	1745	16.52	17.50	1.253	0.14	0.607	0.761
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	349000	1745	16.52	17.50	1.253	0.05	0.825	1.034
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	346000	1730	16.36	17.50	1.300	-0.18	0.882	1.147
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	352000	1760	16.35	17.50	1.303	0.13	0.771	1.005
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	16mm	-	DSI4(Full)	349000	1745	22.95	24.00	1.274	0.08	0.479	0.610
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	27mm	-	DSI4(Full)	346000	1730	22.85	24.00	1.303	0.14	0.360	0.469
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Back	5mm	-	DSI3(Standalone)	349000	1745	16.49	17.50	1.262	0.03	0.799	1.008
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Simultaneous)	349000	1745	15.74	16.50	1.191	0.18	0.466	0.555
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Simultaneous)	349000	1745	15.74	16.50	1.191	0.07	0.650	0.774
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Simultaneous)	349000	1745	15.73	16.50	1.194	0.17	0.471	0.562
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	349000	1745	15.73	16.50	1.194	0.09	0.655	0.782
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	346000	1730	15.71	16.50	1.199	-0.1	0.712	0.854
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	352000	1760	15.62	16.50	1.225	-0.03	0.627	0.768
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	349000	1745	18.83	20.00	1.309	0.17	0.797	1.043
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	349000	1745	18.83	20.00	1.309	0.08	0.908	1.189
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	346000	1730	18.77	20.00	1.327	-0.1	0.745	0.989
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	352000	1760	18.80	20.00	1.318	0.15	0.662	0.873
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	346000	1730	18.77	20.00	1.327	0.13	0.862	1.144
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	352000	1760	18.80	20.00	1.318	-0.1	0.762	1.005
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	16mm	-	DSI4(Full)	349000	1745	22.84	24.00	1.306	0.01	0.277	0.362
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	27mm	-	DSI4(Full)	349000	1745	22.84	24.00	1.306	0.07	0.200	0.261
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	349000	1745	18.81	20.00	1.315	-0.06	0.801	1.053
70	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	349000	1745	18.81	20.00	1.315	-0.12	0.919	1.209
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	346000	1730	18.76	20.00	1.330	-0.03	0.768	1.022
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	352000	1760	18.77	20.00	1.327	0.1	0.668	0.887
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	346000	1730	18.76	20.00	1.330	0.01	0.888	1.181
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	352000	1760	18.77	20.00	1.327	0.17	0.782	1.038
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	Headset	DSI3(Standalone)	349000	1745	18.81	20.00	1.315	0.15	0.832	1.094
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Front	16mm	-	DSI4(Full)	349000	1745	22.79	24.00	1.321	0.09	0.282	0.373
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	27mm	-	DSI4(Full)	349000	1745	22.79	24.00	1.321	0.09	0.203	0.268
	N66_Ant 0	40M	BPSK	216	0	DFT-15	Front	5mm	-	DSI3(Standalone)	349000	1745	18.80	20.00	1.318	0.04	0.797	1.051
	N66_Ant 0	40M	BPSK	216	0	DFT-15	Back	5mm	-	DSI3(Standalone)	349000	1745	18.80	20.00	1.318	0.01	0.891	1.175
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Simultaneous)	349000	1745	16.35	17.50	1.303	-0.11	0.426	0.555
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Simultaneous)	349000	1745	16.35	17.50	1.303	0.13	0.496	0.646
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Simultaneous)	349000	1745	16.33	17.50	1.309	0.08	0.451	0.590
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	349000	1745	16.33	17.50	1.309	0.12	0.511	0.669
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	346000	1730	16.20	17.50	1.349	0.12	0.495	0.668

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	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	352000	1760	16.24	17.50	1.337	-0.12	0.438	0.585
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	376500	1882.5	17.70	18.50	1.202	0.09	0.679	0.816
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	376500	1882.5	17.70	18.50	1.202	-0.02	0.870	1.046
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	374000	1870	17.68	18.50	1.208	0.09	0.643	0.777
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	379000	1895	17.64	18.50	1.219	0.18	0.737	0.898
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	374000	1870	17.68	18.50	1.208	0.07	0.820	0.990
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	379000	1895	17.64	18.50	1.219	-0.09	0.935	1.140
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	16mm	-	DSI4(Full)	379000	1895	23.33	24.00	1.167	-0.02	0.258	0.301
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Back	27mm	-	DSI4(Full)	379000	1895	23.33	24.00	1.167	0.03	0.174	0.203
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	376500	1882.5	17.66	18.50	1.213	-0.11	0.713	0.865
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	376500	1882.5	17.66	18.50	1.213	-0.06	0.904	1.097
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	374000	1870	17.63	18.50	1.222	-0.03	0.693	0.847
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	379000	1895	17.60	18.50	1.230	0.1	0.777	0.956
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	374000	1870	17.63	18.50	1.222	0.08	0.867	1.059
71	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	379000	1895	17.60	18.50	1.230	0.05	0.988	1.216
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	Headset	DSI3(Standalone)	379000	1895	17.60	18.50	1.230	0.16	0.950	1.169
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	16mm	-	DSI4(Full)	379000	1895	23.30	24.00	1.175	0.11	0.266	0.313
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	27mm	-	DSI4(Full)	379000	1895	23.30	24.00	1.175	-0.01	0.182	0.214
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Front	5mm	-	DSI3(Standalone)	376500	1882.5	17.63	18.50	1.222	0.12	0.715	0.874
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Back	5mm	-	DSI3(Standalone)	376500	1882.5	17.63	18.50	1.222	0.05	0.956	1.168
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Simultaneous)	376500	1882.5	15.86	16.50	1.159	-0.08	0.468	0.542
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Simultaneous)	376500	1882.5	15.86	16.50	1.159	0.15	0.571	0.662
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Simultaneous)	376500	1882.5	15.84	16.50	1.164	-0.09	0.484	0.563
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	376500	1882.5	15.84	16.50	1.164	0.1	0.595	0.693
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	374000	1870	15.80	16.50	1.175	0.07	0.588	0.691
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	379000	1895	15.80	16.50	1.175	0.01	0.663	0.779
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	376500	1882.5	18.59	19.50	1.233	0.18	0.835	1.030
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	376500	1882.5	18.59	19.50	1.233	0.07	0.924	1.139
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	374000	1870	18.56	19.50	1.242	0.11	0.812	1.008
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Standalone)	379000	1895	18.49	19.50	1.262	0.11	0.836	1.055
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	374000	1870	18.56	19.50	1.242	0.07	0.957	1.188
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Standalone)	379000	1895	18.49	19.50	1.262	0.16	0.940	1.186
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	16mm	-	DSI4(Full)	379000	1895	23.14	24.00	1.219	0.02	0.308	0.375
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	27mm	-	DSI4(Full)	374000	1870	23.24	24.00	1.189	0.14	0.231	0.275
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	376500	1882.5	18.57	19.50	1.239	-0.09	0.859	1.064
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	376500	1882.5	18.57	19.50	1.239	-0.05	0.951	1.178
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	374000	1870	18.55	19.50	1.245	-0.03	0.828	1.030
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Standalone)	379000	1895	18.48	19.50	1.265	0.05	0.865	1.094
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	374000	1870	18.55	19.50	1.245	0.08	0.962	1.197
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Standalone)	379000	1895	18.48	19.50	1.265	0.02	0.945	1.195
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	16mm	-	DSI4(Full)	379000	1895	23.09	24.00	1.233	0.15	0.315	0.388
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	27mm	-	DSI4(Full)	374000	1870	23.15	24.00	1.208	-0.04	0.234	0.285
	N25_Ant 0	40M	BPSK	216	0	DFT-15	Front	5mm	-	DSI3(Standalone)	376500	1882.5	18.56	19.50	1.242	0.03	0.853	1.059
	N25_Ant 0	40M	BPSK	216	0	DFT-15	Back	5mm	-	DSI3(Standalone)	376500	1882.5	18.56	19.50	1.242	-0.01	0.930	1.155
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	5mm	-	DSI3(Simultaneous)	376500	1882.5	15.10	16.00	1.230	0.02	0.371	0.456
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	5mm	-	DSI3(Simultaneous)	376500	1882.5	15.10	16.00	1.230	-0.06	0.432	0.531
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	5mm	-	DSI3(Simultaneous)	376500	1882.5	15.08	16.00	1.236	0.09	0.402	0.497
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	376500	1882.5	15.08	16.00	1.236	0.01	0.452	0.559
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	374000	1870	15.01	16.00	1.256	0.05	0.457	0.574
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	5mm	-	DSI3(Simultaneous)	379000	1895	14.95	16.00	1.274	-0.05	0.441	0.562
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	518598	2592.99	21.10	22.00	1.230	0.09	0.724	0.891
72	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	518598	2592.99	21.10	22.00	1.230	0.08	0.934	1.149
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	509202	2546.01	21.07	22.00	1.239	-0.02	0.702	0.870
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	528000	2640	20.91	22.00	1.285	0.14	0.683	0.878
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	509202	2546.01	21.07	22.00	1.239	0.1	0.833	1.032
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	528000	2640	20.91	22.00	1.285	0.06	0.880	1.131

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	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI4(Full)	518598	2592.99	23.04	24.00	1.247	0.12	0.332	0.414
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI4(Full)	518598	2592.99	23.04	24.00	1.247	-0.01	0.228	0.284
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Standalone)	518598	2592.99	21.08	22.00	1.236	0.1	0.739	0.913
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Standalone)	518598	2592.99	21.08	22.00	1.236	-0.01	0.916	1.132
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Standalone)	509202	2546.01	21.05	22.00	1.245	-0.08	0.685	0.852
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Standalone)	528000	2640	20.89	22.00	1.291	0.15	0.692	0.894
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Standalone)	509202	2546.01	21.05	22.00	1.245	-0.01	0.817	1.017
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Standalone)	528000	2640	20.89	22.00	1.291	-0.04	0.876	1.131
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	16mm	-	DSI4(Full)	518598	2592.99	23.02	24.00	1.253	-0.11	0.328	0.411
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	27mm	-	DSI4(Full)	518598	2592.99	23.02	24.00	1.253	0.11	0.221	0.277
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Front	5mm	-	DSI3(Standalone)	518598	2592.99	21.05	22.00	1.245	0.16	0.734	0.913
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Standalone)	518598	2592.99	21.05	22.00	1.245	0.11	0.892	1.110
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	-0.09	0.547	0.670
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	0.08	0.656	0.803
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	0.09	0.527	0.654
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	0.12	0.526	0.646
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	-0.05	0.589	0.731
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	-0.04	0.645	0.792
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.01	0.542	0.668
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.11	0.656	0.809
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.06	0.521	0.650
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	-0.03	0.519	0.641
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.03	0.583	0.727
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	0.1	0.712	0.880
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Front	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	0.11	0.528	0.654
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	-0.03	0.648	0.803
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	518598	2592.99	21.10	22.00	1.230	0.09	0.724	0.891
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	518598	2592.99	21.10	22.00	1.230	0.08	0.934	1.149
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	509202	2546.01	21.07	22.00	1.239	-0.02	0.702	0.870
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	528000	2640	20.91	22.00	1.285	0.14	0.683	0.878
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	509202	2546.01	21.07	22.00	1.239	0.1	0.833	1.032
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	528000	2640	20.91	22.00	1.285	0.06	0.880	1.131
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI4(Full)	518598	2592.99	25.98	27.00	1.265	0.12	0.621	0.785
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI4(Full)	518598	2592.99	25.98	27.00	1.265	-0.01	0.413	0.522
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Standalone)	518598	2592.99	21.08	22.00	1.236	0.1	0.739	0.913
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Standalone)	518598	2592.99	21.08	22.00	1.236	-0.01	0.916	1.132
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Standalone)	509202	2546.01	21.05	22.00	1.245	-0.08	0.685	0.852
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Standalone)	528000	2640	20.89	22.00	1.291	0.15	0.692	0.894
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Standalone)	509202	2546.01	21.05	22.00	1.245	-0.01	0.817	1.017
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Standalone)	528000	2640	20.89	22.00	1.291	-0.04	0.876	1.131
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	16mm	-	DSI4(Full)	518598	2592.99	25.96	27.00	1.271	-0.11	0.615	0.781
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	27mm	-	DSI4(Full)	518598	2592.99	25.96	27.00	1.271	0.11	0.407	0.517
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Front	5mm	-	DSI3(Standalone)	518598	2592.99	21.05	22.00	1.245	0.16	0.734	0.913
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Standalone)	518598	2592.99	21.05	22.00	1.245	0.11	0.892	1.110
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	-0.09	0.547	0.670
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.62	20.50	1.225	0.08	0.656	0.803
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	0.09	0.527	0.654
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	0.12	0.526	0.646
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	509202	2546.01	19.56	20.50	1.242	-0.05	0.589	0.731
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	528000	2640	19.61	20.50	1.227	-0.04	0.645	0.792
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.01	0.542	0.668
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.59	20.50	1.233	0.11	0.656	0.809
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.06	0.521	0.650
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	5mm	-	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	-0.03	0.519	0.641
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	509202	2546.01	19.54	20.50	1.247	0.03	0.583	0.727
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	528000	2640	19.58	20.50	1.236	0.1	0.712	0.880

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	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Front	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	0.11	0.528	0.654
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	518598	2592.99	19.57	20.50	1.239	-0.03	0.648	0.803
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	656000	3840	15.31	16.50	1.315	0.05	0.146	0.192
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	656000	3840	15.31	16.50	1.315	-0.08	0.777	1.022
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI4(Full)	656000	3840	22.95	24.00	1.274	0.09	0.282	0.359
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI4(Full)	656000	3840	22.95	24.00	1.274	0.01	0.431	0.549
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI3(Standalone)	656000	3840	15.20	16.50	1.349	0.14	0.141	0.190
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI3(Standalone)	656000	3840	15.20	16.50	1.349	-0.11	0.721	0.973
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	16mm	-	DSI4(Full)	656000	3840	22.92	24.00	1.282	-0.12	0.267	0.342
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	27mm	-	DSI4(Full)	656000	3840	22.92	24.00	1.282	0.13	0.415	0.532
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Standalone)	656000	3840	15.17	16.50	1.358	-0.01	0.745	1.012
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.03	0.121	0.159
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.04	0.704	0.924
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	0.18	0.113	0.149
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	-0.1	0.674	0.891
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	656000	3840	14.74	16.00	1.337	0.01	0.673	0.900
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	633332	3499.98	15.31	16.50	1.315	0.12	0.085	0.112
73	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	633332	3499.98	15.31	16.50	1.315	-0.19	0.880	1.157
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI4(Full)	633332	3499.98	22.91	24.00	1.285	-0.03	0.188	0.242
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI4(Full)	633332	3499.98	22.91	24.00	1.285	-0.01	0.462	0.594
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI3(Standalone)	633332	3499.98	15.18	16.50	1.355	0.17	0.080	0.108
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI3(Standalone)	633332	3499.98	15.18	16.50	1.355	-0.04	0.834	1.130
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	16mm	-	DSI4(Full)	633332	3499.98	22.88	24.00	1.294	0.13	0.202	0.261
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	27mm	-	DSI4(Full)	633332	3499.98	22.88	24.00	1.294	-0.07	0.488	0.632
	N77_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Standalone)	633332	3499.98	15.10	16.50	1.380	-0.01	0.834	1.151
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.11	0.058	0.076
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.01	0.763	0.997
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.07	0.056	0.075
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.08	0.739	0.985
	N77_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	633332	3499.98	14.72	16.00	1.343	-0.11	0.730	0.980
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	656000	3840	15.31	16.50	1.315	0.05	0.146	0.192
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	656000	3840	15.31	16.50	1.315	-0.08	0.777	1.022
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI4(Full)	656000	3840	26.00	27.00	1.259	0.09	0.528	0.665
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI4(Full)	656000	3840	26.00	27.00	1.259	0.01	0.811	1.021
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI3(Standalone)	656000	3840	15.20	16.50	1.349	0.14	0.141	0.190
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI3(Standalone)	656000	3840	15.20	16.50	1.349	-0.11	0.721	0.973
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	16mm	-	DSI4(Full)	656000	3840	25.95	27.00	1.274	-0.12	0.502	0.639
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	27mm	-	DSI4(Full)	656000	3840	25.95	27.00	1.274	0.13	0.785	1.000
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Standalone)	656000	3840	15.17	16.50	1.358	-0.01	0.745	1.012
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.03	0.121	0.159
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	656000	3840	14.82	16.00	1.312	0.04	0.704	0.924
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	0.18	0.113	0.149
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI3(Simultaneous)	656000	3840	14.79	16.00	1.321	-0.1	0.674	0.891
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Simultaneous)	656000	3840	14.74	16.00	1.337	0.01	0.673	0.900
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Standalone)	633332	3499.98	15.31	16.50	1.315	0.12	0.085	0.112
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Standalone)	633332	3499.98	15.31	16.50	1.315	-0.19	0.880	1.157
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	16mm	-	DSI4(Full)	633332	3499.98	25.93	27.00	1.279	-0.03	0.352	0.450
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	27mm	-	DSI4(Full)	633332	3499.98	25.93	27.00	1.279	-0.01	0.769	0.984
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI3(Standalone)	633332	3499.98	15.18	16.50	1.355	0.17	0.080	0.108
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	5mm	-	DSI3(Standalone)	633332	3499.98	15.18	16.50	1.355	-0.04	0.834	1.130
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	16mm	-	DSI4(Full)	633332	3499.98	25.83	27.00	1.309	0.13	0.394	0.516
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	27mm	-	DSI4(Full)	633332	3499.98	25.83	27.00	1.309	-0.07	0.778	1.019
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	5mm	-	DSI3(Standalone)	633332	3499.98	15.10	16.50	1.380	-0.01	0.834	1.151
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	5mm	-	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.11	0.058	0.076
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	5mm	-	DSI3(Simultaneous)	633332	3499.98	14.84	16.00	1.306	0.01	0.763	0.997
	N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	5mm	-	DSI3(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.07	0.056	0.075

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N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	5mm	-	DS13(Simultaneous)	633332	3499.98	14.75	16.00	1.334	-0.08	0.739	0.985
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	5mm	-	DS13(Simultaneous)	633332	3499.98	14.72	16.00	1.343	-0.11	0.730	0.980

<WLAN2.4G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 2+4	Standalone	1	2412	20.51	21.50	1.256	100	1.000	-0.06	0.276	0.347
74	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	Standalone	1	2412	20.51	21.50	1.256	100	1.000	-0.13	0.924	1.161
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	Standalone	6	2437	20.46	21.50	1.271	100	1.000	0.05	0.743	0.944
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	Standalone	11	2462	20.37	21.50	1.297	100	1.000	0.06	0.522	0.677
	WLAN2.4GHz	802.11b 1Mbps	Front	16mm	Ant 2+4	Full	1	2412	21.66	22.50	1.213	100	1.000	0.01	0.079	0.096
	WLAN2.4GHz	802.11b 1Mbps	Back	27mm	Ant 2+4	Full	1	2412	21.66	22.50	1.213	100	1.000	0.02	0.085	0.103
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 2+4	Simultaneous	1	2412	14.86	16.00	1.300	100	1.000	0.08	0.095	0.124
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	Simultaneous	1	2412	14.86	16.00	1.300	100	1.000	0.06	0.293	0.381
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	Simultaneous	6	2437	14.76	16.00	1.330	100	1.000	0.11	0.243	0.323
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 2+4	Simultaneous	11	2462	14.58	16.00	1.387	100	1.000	-0.06	0.198	0.275

<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+12	Standalone	58	5290	18.48	20.00	1.419	100	1.000	-	n/a	n/a
75	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+12	Standalone	58	5290	18.48	20.00	1.419	100	1.000	-0.07	0.751	1.066
	WLAN5.3GHz	802.11a 6Mbps	Front	16mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	-	n/a	n/a
	WLAN5.3GHz	802.11a 6Mbps	Back	27mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	-0.12	0.193	0.264
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Front	5mm	Ant 4+12	Simultaneous	50	5250	13.09	14.50	1.384	100	1.000	0.17	0.067	0.093
	WLAN5.3GHz	802.11ac-VHT160 MCS0	Back	5mm	Ant 4+12	Simultaneous	50	5250	12.89	14.00	1.291	100	1.000	-0.12	0.255	0.329
	WLAN5.5GHz	802.11a 6Mbps	Front	5mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.05	0.083	0.108
	WLAN5.5GHz	802.11a 6Mbps	Back	5mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	-0.07	0.449	0.585
	WLAN5.5GHz	802.11a 6Mbps	Back	5mm	Ant 4+12	Full	116	5580	19.93	21.50	1.435	99.32	1.007	0.07	0.529	0.765
76	WLAN5.5GHz	802.11a 6Mbps	Back	5mm	Ant 4+12	Full	132	5660	20.05	21.50	1.396	99.32	1.007	-0.11	0.776	1.091
	WLAN5.5GHz	802.11a 6Mbps	Back	5mm	Ant 4+12	Full	140	5700	20.26	21.50	1.330	99.32	1.007	-0.09	0.696	0.932
	WLAN5.5GHz	802.11a 6Mbps	Back	27mm	Ant 4+12	Full	132	5660	20.05	21.50	1.396	99.32	1.007	0.12	0.163	0.229
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+12	Simultaneous	106	5530	16.18	17.50	1.355	100	1.000	0.05	0.033	0.045
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+12	Simultaneous	106	5530	16.18	17.50	1.355	100	1.000	0.07	0.285	0.386
	WLAN5.8GHz	802.11a 6Mbps	Front	5mm	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.1	0.092	0.129
77	WLAN5.8GHz	802.11a 6Mbps	Back	5mm	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.12	0.818	1.156
	WLAN5.8GHz	802.11a 6Mbps	Back	5mm	Ant 4+12	Full	149	5745	19.99	21.50	1.416	99.32	1.007	0.09	0.637	0.908
	WLAN5.8GHz	802.11a 6Mbps	Back	5mm	Ant 4+12	Full	165	5825	19.98	21.50	1.419	99.32	1.007	0.13	0.782	1.117
	WLAN5.8GHz	802.11a 6Mbps	Back	27mm	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.06	0.184	0.260
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Front	5mm	Ant 4+12	Simultaneous	155	5775	13.46	15.00	1.426	100	1.000	0.05	0.007	0.010
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 4+12	Simultaneous	155	5775	13.46	15.00	1.426	100	1.000	0.13	0.242	0.345

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	DH5 1Mbps	Front	5mm	Ant 2	Full	39	2441	11.40	12.50	1.288	76.13	1.314	0.05	0.039	0.066
	Bluetooth	DH5 1Mbps	Back	5mm	Ant 2	Full	39	2441	11.40	12.50	1.288	76.13	1.314	0.01	0.051	0.086
	Bluetooth	DH5 1Mbps	Back	5mm	Ant 2	Full	0	2402	11.30	12.50	1.318	76.13	1.314	0.11	0.065	0.113
79	Bluetooth	DH5 1Mbps	Back	5mm	Ant 2	Full	78	2480	8.30	9.50	1.318	76.13	1.314	-0.14	0.0721	0.125

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**16.4 Product specific 10g SAR****<GSM SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	GSM1900_Ant0	GPRS(3 Tx slots)	Front	0mm	DSI4(Full)	810	1909.8	25.28	26.50	1.324	0.04	1.860	2.463
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	0mm	DSI4(Full)	810	1909.8	25.28	26.50	1.324	0.03	1.990	2.635
	GSM1900_Ant0	GPRS(3 Tx slots)	Bottom Side	0mm	DSI4(Full)	810	1909.8	25.28	26.50	1.324	-0.18	1.740	2.304
	GSM1900_Ant0	GPRS(3 Tx slots)	Front	0mm	DSI4(Full)	512	1850.2	25.11	26.50	1.377	-0.11	1.510	2.080
	GSM1900_Ant0	GPRS(3 Tx slots)	Front	0mm	DSI4(Full)	661	1880	25.25	26.50	1.334	-0.16	1.490	1.987
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	0mm	DSI4(Full)	512	1850.2	25.11	26.50	1.377	0.14	1.680	2.314
	GSM1900_Ant0	GPRS(3 Tx slots)	Back	0mm	DSI4(Full)	661	1880	25.25	26.50	1.334	-0.19	1.630	2.174
80	GSM1900_Ant0	GPRS(3 Tx slots)	Bottom Side	0mm	DSI4(Full)	512	1850.2	25.11	26.50	1.377	-0.13	1.930	2.658
	GSM1900_Ant0	GPRS(3 Tx slots)	Bottom Side	0mm	DSI4(Full)	661	1880	25.25	26.50	1.334	0.14	1.550	2.067



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
81	WCDMA V_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI4(Full)	4182	836.4	23.22	24.00	1.197	-0.1	1.620	1.939
	WCDMA V_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI4(Full)	4132	826.4	23.13	24.00	1.222	-0.01	1.660	2.028
	WCDMA V_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI4(Full)	4233	846.6	23.21	24.00	1.199	0.05	1.650	1.979
82	WCDMA IV_Ant1	RMC 12.2Kbps	Front	0mm	DSI6(Standalone)	1413	1732.6	20.00	21.00	1.259	0.02	1.620	2.039
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	0mm	DSI6(Standalone)	1413	1732.6	20.00	21.00	1.259	0.03	1.390	1.750
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6(Standalone)	1413	1732.6	20.00	21.00	1.259	0.08	1.880	2.367
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	0mm	DSI6(Standalone)	1312	1712.4	19.96	21.00	1.271	0.03	1.750	2.224
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	0mm	DSI6(Standalone)	1513	1752.6	19.81	21.00	1.315	0.1	1.420	1.868
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6(Standalone)	1312	1712.4	19.96	21.00	1.271	-0.17	2.440	3.100
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6(Standalone)	1513	1752.6	19.81	21.00	1.315	0.02	1.640	2.157
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	6mm	DSI4(Full)	1312	1712.4	21.51	22.50	1.256	0.04	1.120	1.407
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	8mm	DSI4(Full)	1413	1732.6	21.53	22.50	1.250	0.1	1.170	1.463
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	9mm	DSI4(Full)	1312	1712.4	21.51	22.50	1.256	-0.09	1.250	1.570
	WCDMA IV_Ant1	RMC 12.2Kbps	Front	0mm	DSI6(Simultaneous)	1413	1732.6	19.02	20.00	1.253	-0.12	1.370	1.717
	WCDMA IV_Ant1	RMC 12.2Kbps	Back	0mm	DSI6(Simultaneous)	1413	1732.6	19.02	20.00	1.253	0.11	1.170	1.466
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6(Simultaneous)	1413	1732.6	19.02	20.00	1.253	0.17	1.570	1.967
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6(Simultaneous)	1312	1712.4	18.86	20.00	1.300	-0.06	1.800	2.340
	WCDMA IV_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6(Simultaneous)	1513	1752.6	18.86	20.00	1.300	-0.02	1.490	1.937
	WCDMA IV_Ant0	RMC 12.2Kbps	Front	0mm	DSI6(Standalone/Simultaneous)	1413	1732.6	20.64	21.50	1.219	-0.07	1.510	1.841
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	0mm	DSI6(Standalone/Simultaneous)	1413	1732.6	20.64	21.50	1.219	0.14	1.740	2.121
	WCDMA IV_Ant0	RMC 12.2Kbps	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	1413	1732.6	20.64	21.50	1.219	0.01	2.280	2.779
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	0mm	DSI6(Standalone/Simultaneous)	1312	1712.4	20.58	21.50	1.236	-0.09	1.630	2.015
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	0mm	DSI6(Standalone/Simultaneous)	1513	1752.6	20.53	21.50	1.250	0.06	1.720	2.150
	WCDMA IV_Ant0	RMC 12.2Kbps	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	1312	1712.4	20.58	21.50	1.236	-0.1	2.150	2.657
	WCDMA IV_Ant0	RMC 12.2Kbps	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	1513	1752.6	20.53	21.50	1.250	-0.01	2.380	2.976
	WCDMA IV_Ant0	RMC 12.2Kbps	Front	6mm	DSI4(Full)	1413	1732.6	23.10	24.00	1.230	0.05	0.961	1.182
	WCDMA IV_Ant0	RMC 12.2Kbps	Back	8mm	DSI4(Full)	1513	1752.6	22.91	24.00	1.285	0.08	1.020	1.311
	WCDMA IV_Ant0	RMC 12.2Kbps	Bottom Side	11mm	DSI4(Full)	1513	1752.6	22.91	24.00	1.285	-0.03	1.510	1.941
83	WCDMA II_Ant1	RMC 12.2Kbps	Back	0mm	DSI4(Full)	9400	1880	21.52	22.50	1.253	-0.09	0.949	1.189
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI4(Full)	9400	1880	21.52	22.50	1.253	0.01	2.000	2.506
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI4(Full)	9262	1852.4	21.46	22.50	1.271	0.01	1.310	1.664
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI4(Full)	9538	1907.6	21.45	22.50	1.274	-0.09	2.300	2.929
	WCDMA II_Ant1	RMC 12.2Kbps	Back	0mm	DSI6(Simultaneous)	9400	1880	19.93	21.00	1.279	0.11	0.593	0.759
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6(Simultaneous)	9400	1880	19.93	21.00	1.279	-0.03	1.510	1.932
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6(Simultaneous)	9262	1852.4	19.90	21.00	1.288	0.06	0.760	0.979
	WCDMA II_Ant1	RMC 12.2Kbps	Top Side	0mm	DSI6(Simultaneous)	9538	1907.6	19.83	21.00	1.309	0.07	1.840	2.409
	WCDMA II_Ant0	RMC 12.2Kbps	Front	0mm	DSI6(Standalone/Simultaneous)	9400	1880	20.12	21.00	1.225	0.15	1.610	1.972
	WCDMA II_Ant0	RMC 12.2Kbps	Back	0mm	DSI6(Standalone/Simultaneous)	9400	1880	20.12	21.00	1.225	-0.09	1.830	2.241
	WCDMA II_Ant0	RMC 12.2Kbps	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	9400	1880	20.12	21.00	1.225	-0.08	2.380	2.915
	WCDMA II_Ant0	RMC 12.2Kbps	Back	0mm	DSI6(Standalone/Simultaneous)	9262	1852.4	20.07	21.00	1.239	-0.02	1.570	1.945
	WCDMA II_Ant0	RMC 12.2Kbps	Back	0mm	DSI6(Standalone/Simultaneous)	9538	1907.6	20.10	21.00	1.230	0.17	1.830	2.251
	WCDMA II_Ant0	RMC 12.2Kbps	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	9262	1852.4	20.07	21.00	1.239	0.08	2.420	2.998
	WCDMA II_Ant0	RMC 12.2Kbps	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	9538	1907.6	20.10	21.00	1.230	0.04	2.270	2.793
	WCDMA II_Ant0	RMC 12.2Kbps	Front	6mm	DSI4(Full)	9400	1880	22.88	24.00	1.294	0.03	1.350	1.747
	WCDMA II_Ant0	RMC 12.2Kbps	Back	8mm	DSI4(Full)	9538	1907.6	22.83	24.00	1.309	-0.04	1.140	1.492
	WCDMA II_Ant0	RMC 12.2Kbps	Bottom Side	11mm	DSI4(Full)	9262	1852.4	22.84	24.00	1.306	0.05	2.070	2.704

**<FDD LTE SAR>**

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
84	LTE Band 13_Ant0	10M	QPSK	1	25	Back	0mm	DSI4(Full)	23230	782	23.20	24.50	1.349	0.12	1.320	1.781
	LTE Band 13_Ant0	10M	QPSK	25	12	Back	0mm	DSI4(Full)	23230	782	22.54	23.50	1.247	-0.07	0.725	0.904
	LTE Band 26_Ant1	15M	QPSK	1	74	Top Side	0mm	DSI4(Full)	26865	831.5	22.57	23.50	1.239	-0.11	1.710	2.118
	LTE Band 26_Ant1	15M	QPSK	1	74	Top Side	0mm	DSI4(Full)	26765	821.5	22.54	23.50	1.247	0.08	1.750	2.183
85	LTE Band 26_Ant1	15M	QPSK	1	74	Top Side	0mm	DSI4(Full)	26965	841.5	22.47	23.50	1.268	0.14	1.770	2.244
	LTE Band 26_Ant1	15M	QPSK	36	39	Top Side	0mm	DSI4(Full)	26865	831.5	21.76	22.50	1.186	-0.09	1.230	1.458
	LTE Band 26_Ant1	15M	QPSK	75	0	Top Side	0mm	DSI4(Full)	26865	831.5	21.70	22.50	1.202	-0.1	1.300	1.563
	LTE Band 26_Ant0	15M	QPSK	1	74	Back	0mm	DSI4(Full)	26865	831.5	23.63	24.50	1.222	0.03	1.240	1.515
	LTE Band 26_Ant0	15M	QPSK	1	74	Back	0mm	DSI4(Full)	26765	821.5	23.60	24.50	1.230	0.06	1.500	1.845
	LTE Band 26_Ant0	15M	QPSK	1	74	Back	0mm	DSI4(Full)	26965	841.5	23.61	24.50	1.227	0.11	1.250	1.534
	LTE Band 26_Ant0	15M	QPSK	36	39	Back	0mm	DSI4(Full)	26865	831.5	22.72	23.50	1.197	0.03	0.864	1.034
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	0mm	DSI4(Full)	132322	1745	20.83	22.00	1.309	0.04	1.790	2.343
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	0mm	DSI4(Full)	132322	1745	20.83	22.00	1.309	-0.09	1.640	2.147
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI4(Full)	132322	1745	20.83	22.00	1.309	0.01	2.140	2.802
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	0mm	DSI4(Full)	132072	1720	20.70	22.00	1.361	-0.11	2.090	2.819
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	0mm	DSI4(Full)	132572	1770	20.56	22.00	1.393	0.08	1.810	2.522
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	0mm	DSI4(Full)	132072	1720	20.70	22.00	1.349	-0.07	2.010	2.711
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	0mm	DSI4(Full)	132572	1770	20.56	22.00	1.393	-0.09	1.680	2.341
86	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI4(Full)	132072	1720	20.70	22.00	1.349	0.15	2.350	3.170
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI4(Full)	132572	1770	20.56	22.00	1.393	0.01	1.770	2.466
	LTE Band 66_Ant1	20M	QPSK	50	24	Front	0mm	DSI4(Full)	132322	1745	20.14	21.00	1.219	0.12	1.510	1.841
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	0mm	DSI4(Full)	132322	1745	20.14	21.00	1.219	-0.15	1.420	1.731
	LTE Band 66_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI4(Full)	132322	1745	20.14	21.00	1.219	0.08	1.890	2.304
	LTE Band 66_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI4(Full)	132072	1720	20.09	21.00	1.233	0.13	2.060	2.540
	LTE Band 66_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI4(Full)	132572	1770	19.89	21.00	1.291	0.09	1.570	2.027
	LTE Band 66_Ant1	20M	QPSK	100	0	Front	0mm	DSI4(Full)	132322	1745	20.10	21.00	1.230	-0.03	1.750	2.153
	LTE Band 66_Ant1	20M	QPSK	100	0	Back	0mm	DSI4(Full)	132322	1745	20.10	21.00	1.230	-0.12	1.600	1.968
	LTE Band 66_Ant1	20M	QPSK	100	0	Top Side	0mm	DSI4(Full)	132322	1745	20.10	21.00	1.230	0.07	2.050	2.522
	LTE Band 66_Ant1	20M	QPSK	1	0	Front	0mm	DSI6(Simultaneous)	132322	1745	19.90	21.00	1.288	-0.08	1.480	1.907
	LTE Band 66_Ant1	20M	QPSK	1	0	Back	0mm	DSI6(Simultaneous)	132322	1745	19.90	21.00	1.288	0.04	1.370	1.765
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6(Simultaneous)	132322	1745	19.90	21.00	1.288	0.17	1.790	2.306
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6(Simultaneous)	132072	1720	19.88	21.00	1.294	0.14	1.880	2.433
	LTE Band 66_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6(Simultaneous)	132572	1770	19.73	21.00	1.340	-0.03	1.470	1.969
	LTE Band 66_Ant1	20M	QPSK	50	24	Front	0mm	DSI6(Simultaneous)	132322	1745	19.88	21.00	1.294	-0.02	1.500	1.941
	LTE Band 66_Ant1	20M	QPSK	50	24	Back	0mm	DSI6(Simultaneous)	132322	1745	19.88	21.00	1.294	0.09	1.430	1.851
	LTE Band 66_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI6(Simultaneous)	132322	1745	19.88	21.00	1.294	0.12	1.810	2.342
	LTE Band 66_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI6(Simultaneous)	132072	1720	19.86	21.00	1.300	-0.04	1.920	2.496
	LTE Band 66_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI6(Simultaneous)	132572	1770	19.72	21.00	1.343	0.05	1.490	2.001
	LTE Band 66_Ant1	20M	QPSK	100	0	Top Side	0mm	DSI6(Simultaneous)	132322	1745	19.87	21.00	1.297	0.13	1.750	2.270
	LTE Band 66_Ant0	20M	QPSK	1	0	Front	0mm	DSI6(Standalone/Simultaneous)	132322	1745	20.36	21.50	1.300	0.02	1.420	1.846
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	0mm	DSI6(Standalone/Simultaneous)	132322	1745	20.36	21.50	1.300	-0.11	1.500	1.950
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	132322	1745	20.36	21.50	1.300	0.14	1.970	2.561
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	132072	1720	20.17	21.50	1.358	0.01	1.750	2.377
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	132572	1770	20.03	21.50	1.403	0.01	2.090	2.932
	LTE Band 66_Ant0	20M	QPSK	1	0	Front	6mm	DSI4(Full)	132322	1745	22.71	24.00	1.346	-0.04	1.250	1.682
	LTE Band 66_Ant0	20M	QPSK	1	0	Back	8mm	DSI4(Full)	132322	1745	22.71	24.00	1.346	-0.01	1.040	1.400
	LTE Band 66_Ant0	20M	QPSK	1	0	Bottom Side	11mm	DSI4(Full)	132572	1770	22.42	24.00	1.439	0.05	1.490	2.144
	LTE Band 66_Ant0	20M	QPSK	50	24	Front	0mm	DSI6(Standalone/Simultaneous)	132322	1745	20.34	21.50	1.306	0.06	1.400	1.829
	LTE Band 66_Ant0	20M	QPSK	50	24	Back	0mm	DSI6(Standalone/Simultaneous)	132322	1745	20.34	21.50	1.306	0.08	1.480	1.933
	LTE Band 66_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	132322	1745	20.34	21.50	1.306	0.14	1.940	2.534
	LTE Band 66_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	132072	1720	20.15	21.50	1.365	-0.07	1.720	2.347
	LTE Band 66_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	132572	1770	20.02	21.50	1.406	-0.05	2.050	2.882
	LTE Band 66_Ant0	20M	QPSK	50	24	Front	6mm	DSI4(Full)	132322	1745	22.14	23.00	1.219	0.09	0.680	0.829



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	LTE Band 66_Ant0	20M	QPSK	50	24	Back	8mm	DSI4(Full)	132322	1745	22.14	23.00	1.219	-0.06	0.631	0.769
	LTE Band 66_Ant0	20M	QPSK	50	24	Bottom Side	11mm	DSI4(Full)	132572	1770	21.87	23.00	1.297	0.02	0.839	1.088
	LTE Band 66_Ant0	20M	QPSK	100	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	132322	1745	20.30	21.50	1.318	0.15	1.850	2.439
	LTE Band 25_Ant1	20M	QPSK	1	0	Front	0mm	DSI6(Standalone)	26340	1880	19.00	20.00	1.259	0.18	1.590	2.002
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	0mm	DSI6(Standalone)	26340	1880	19.00	20.00	1.259	-0.1	1.160	1.460
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6(Standalone)	26340	1880	19.00	20.00	1.259	0.03	2.360	2.971
	LTE Band 25_Ant1	20M	QPSK	1	0	Front	0mm	DSI6(Standalone)	26140	1860	18.97	20.00	1.268	0.04	1.430	1.813
	LTE Band 25_Ant1	20M	QPSK	1	0	Front	0mm	DSI6(Standalone)	26590	1905	18.92	20.00	1.282	-0.1	1.550	1.988
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6(Standalone)	26140	1860	18.97	20.00	1.268	0.05	2.150	2.725
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6(Standalone)	26590	1905	18.92	20.00	1.282	0.04	2.370	3.039
	LTE Band 25_Ant1	20M	QPSK	1	0	Front	6mm	DSI4(Full)	26340	1880	19.74	21.00	1.337	0.16	0.735	0.982
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	8mm	DSI4(Full)	26340	1880	19.74	21.00	1.337	0.05	0.520	0.695
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	9mm	DSI4(Full)	26590	1905	19.64	21.00	1.368	-0.01	1.060	1.450
	LTE Band 25_Ant1	20M	QPSK	50	24	Front	0mm	DSI6(Standalone)	26340	1880	18.99	20.00	1.262	0.16	1.670	2.107
	LTE Band 25_Ant1	20M	QPSK	50	24	Back	0mm	DSI6(Standalone)	26340	1880	18.99	20.00	1.262	-0.07	1.250	1.577
	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI6(Standalone)	26340	1880	18.99	20.00	1.262	-0.02	2.410	3.041
	LTE Band 25_Ant1	20M	QPSK	50	24	Front	0mm	DSI6(Standalone)	26140	1860	18.95	20.00	1.274	0.01	1.540	1.961
	LTE Band 25_Ant1	20M	QPSK	50	24	Front	0mm	DSI6(Standalone)	26590	1905	18.90	20.00	1.288	-0.06	1.610	2.074
	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI6(Standalone)	26140	1860	18.95	20.00	1.274	0.03	2.280	2.904
87	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI6(Standalone)	26590	1905	18.90	20.00	1.288	0.17	2.410	3.105
	LTE Band 25_Ant1	20M	QPSK	50	24	Front	6mm	DSI4(Full)	26340	1880	18.80	20.00	1.318	0.13	0.431	0.568
	LTE Band 25_Ant1	20M	QPSK	50	24	Back	8mm	DSI4(Full)	26340	1880	18.80	20.00	1.318	-0.11	0.302	0.398
	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	9mm	DSI4(Full)	26590	1905	18.54	20.00	1.400	-0.06	0.605	0.847
	LTE Band 25_Ant1	20M	QPSK	100	0	Front	0mm	DSI6(Standalone)	26340	1880	18.97	20.00	1.268	0.03	1.640	2.079
	LTE Band 25_Ant1	20M	QPSK	100	0	Top Side	0mm	DSI6(Standalone)	26340	1880	18.97	20.00	1.268	-0.04	2.350	2.979
	LTE Band 25_Ant1	20M	QPSK	1	0	Front	0mm	DSI6(Simultaneous)	26340	1880	17.42	18.50	1.282	0.18	1.110	1.423
	LTE Band 25_Ant1	20M	QPSK	1	0	Back	0mm	DSI6(Simultaneous)	26340	1880	17.42	18.50	1.282	0.17	0.861	1.104
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6(Simultaneous)	26340	1880	17.42	18.50	1.282	0.08	1.670	2.141
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6(Simultaneous)	26140	1860	17.37	18.50	1.297	0.1	1.600	2.075
	LTE Band 25_Ant1	20M	QPSK	1	0	Top Side	0mm	DSI6(Simultaneous)	26590	1905	17.30	18.50	1.318	0.05	1.700	2.241
	LTE Band 25_Ant1	20M	QPSK	50	24	Front	0mm	DSI6(Simultaneous)	26340	1880	17.40	18.50	1.288	-0.05	1.200	1.546
	LTE Band 25_Ant1	20M	QPSK	50	24	Back	0mm	DSI6(Simultaneous)	26340	1880	17.40	18.50	1.288	0.06	0.900	1.159
	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI6(Simultaneous)	26340	1880	17.40	18.50	1.288	-0.07	1.760	2.267
	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI6(Simultaneous)	26140	1860	17.36	18.50	1.300	-0.05	1.650	2.145
	LTE Band 25_Ant1	20M	QPSK	50	24	Top Side	0mm	DSI6(Simultaneous)	26590	1905	17.28	18.50	1.324	0.17	1.780	2.357
	LTE Band 25_Ant1	20M	QPSK	100	0	Top Side	0mm	DSI6(Simultaneous)	26340	1880	17.39	18.50	1.291	0.11	1.730	2.234
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	0mm	DSI6(Standalone/Simultaneous)	26340	1880	18.88	20.00	1.294	0.06	1.640	2.122
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	0mm	DSI6(Standalone/Simultaneous)	26340	1880	18.88	20.00	1.294	0.13	1.800	2.330
	LTE Band 25_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	26340	1880	18.88	20.00	1.294	-0.03	2.190	2.834
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	0mm	DSI6(Standalone/Simultaneous)	26140	1860	18.85	20.00	1.303	0.02	1.530	1.994
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	0mm	DSI6(Standalone/Simultaneous)	26590	1905	18.72	20.00	1.343	-0.09	1.720	2.310
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	0mm	DSI6(Standalone/Simultaneous)	26140	1860	18.85	20.00	1.303	0.17	1.660	2.163
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	0mm	DSI6(Standalone/Simultaneous)	26590	1905	18.72	20.00	1.343	0.02	1.800	2.417
	LTE Band 25_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	26140	1860	18.85	20.00	1.303	0.12	2.220	2.893
	LTE Band 25_Ant0	20M	QPSK	1	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	26590	1905	18.72	20.00	1.343	0.12	2.170	2.914
	LTE Band 25_Ant0	20M	QPSK	1	0	Front	6mm	DSI4(Full)	26590	1905	21.53	23.00	1.403	0.12	1.230	1.725
	LTE Band 25_Ant0	20M	QPSK	1	0	Back	8mm	DSI4(Full)	26590	1905	21.53	23.00	1.403	-0.08	1.150	1.613
	LTE Band 25_Ant0	20M	QPSK	1	0	Bottom Side	11mm	DSI4(Full)	26590	1905	21.53	23.00	1.403	-0.1	1.950	2.735
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	0mm	DSI6(Standalone/Simultaneous)	26340	1880	18.86	20.00	1.300	-0.04	1.610	2.093
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	0mm	DSI6(Standalone/Simultaneous)	26340	1880	18.86	20.00	1.300	-0.07	1.750	2.275
	LTE Band 25_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	26340	1880	18.86	20.00	1.300	0.16	2.010	2.613
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	0mm	DSI6(Standalone/Simultaneous)	26140	1860	18.83	20.00	1.309	0.02	1.460	1.911
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	0mm	DSI6(Standalone/Simultaneous)	26590	1905	18.69	20.00	1.352	0.1	1.630	2.204
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	0mm	DSI6(Standalone/Simultaneous)	26140	1860	18.83	20.00	1.309	-0.03	1.590	2.082
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	0mm	DSI6(Standalone/Simultaneous)	26590	1905	18.69	20.00	1.352	0.06	1.710	2.312
	LTE Band 25_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	26140	1860	18.83	20.00	1.309	-0.11	2.050	2.684

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	LTE Band 25_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	26590	1905	18.69	20.00	1.352	0.08	2.040	2.758
	LTE Band 25_Ant0	20M	QPSK	50	24	Front	6mm	DSI4(Full)	26590	1905	20.55	22.00	1.396	0.05	0.683	0.954
	LTE Band 25_Ant0	20M	QPSK	50	24	Back	8mm	DSI4(Full)	26590	1905	20.55	22.00	1.396	0.06	0.605	0.845
	LTE Band 25_Ant0	20M	QPSK	50	24	Bottom Side	11mm	DSI4(Full)	26590	1905	20.55	22.00	1.396	-0.12	1.010	1.410
	LTE Band 25_Ant0	20M	QPSK	100	0	Front	0mm	DSI6(Standalone/Simultaneous)	26340	1880	18.84	20.00	1.306	-0.08	1.600	2.090
	LTE Band 25_Ant0	20M	QPSK	100	0	Back	0mm	DSI6(Standalone/Simultaneous)	26340	1880	18.84	20.00	1.306	-0.11	1.720	2.247
	LTE Band 25_Ant0	20M	QPSK	100	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	26340	1880	18.84	20.00	1.306	0.06	2.010	2.625
	LTE Band 30_Ant0	10M	QPSK	1	0	Front	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.15	21.50	1.365	0.09	1.830	2.497
88	LTE Band 30_Ant0	10M	QPSK	1	0	Back	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.15	21.50	1.365	0.05	2.290	3.125
	LTE Band 30_Ant0	10M	QPSK	1	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.15	21.50	1.365	0.05	1.560	2.129
	LTE Band 30_Ant0	10M	QPSK	1	0	Front	6mm	DSI4(Full)	27710	2310	21.11	22.50	1.377	-0.11	1.150	1.584
	LTE Band 30_Ant0	10M	QPSK	1	0	Back	8mm	DSI4(Full)	27710	2310	21.11	22.50	1.377	-0.01	0.852	1.173
	LTE Band 30_Ant0	10M	QPSK	1	0	Bottom Side	11mm	DSI4(Full)	27710	2310	21.11	22.50	1.377	0.17	0.961	1.323
	LTE Band 30_Ant0	10M	QPSK	25	12	Front	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.13	21.50	1.371	0.12	1.800	2.468
	LTE Band 30_Ant0	10M	QPSK	25	12	Back	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.13	21.50	1.371	-0.04	2.210	3.030
	LTE Band 30_Ant0	10M	QPSK	25	12	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.13	21.50	1.371	-0.03	1.520	2.084
	LTE Band 30_Ant0	10M	QPSK	25	12	Front	6mm	DSI4(Full)	27710	2310	20.95	22.50	1.429	0.13	0.615	0.879
	LTE Band 30_Ant0	10M	QPSK	25	12	Back	8mm	DSI4(Full)	27710	2310	20.95	22.50	1.429	-0.12	0.452	0.646
	LTE Band 30_Ant0	10M	QPSK	25	12	Bottom Side	11mm	DSI4(Full)	27710	2310	20.95	22.50	1.429	0.15	0.518	0.740
	LTE Band 30_Ant0	10M	QPSK	50	0	Front	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.11	21.50	1.377	0.08	1.710	2.355
	LTE Band 30_Ant0	10M	QPSK	50	0	Back	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.11	21.50	1.377	0.04	2.170	2.989
	LTE Band 30_Ant0	10M	QPSK	50	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.11	21.50	1.377	0.09	1.530	2.107
	LTE Band 7_Ant0	20M	QPSK	1	99	Front	0mm	DSI6(Standalone/Simultaneous)	21350	2560	21.99	23.00	1.262	-0.01	1.110	1.401
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	0mm	DSI6(Standalone/Simultaneous)	21350	2560	21.99	23.00	1.262	0.13	1.230	1.552
	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	21350	2560	21.99	23.00	1.262	0.1	2.290	2.890
	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	20850	2510	21.66	23.00	1.361	0.15	2.030	2.764
	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	21100	2535	21.75	23.00	1.334	0.01	2.100	2.800
	LTE Band 7_Ant0	20M	QPSK	1	99	Front	6mm	DSI4(Full)	21350	2560	23.03	24.00	1.250	0.08	0.736	0.920
	LTE Band 7_Ant0	20M	QPSK	1	99	Back	8mm	DSI4(Full)	21350	2560	23.03	24.00	1.250	0.01	0.679	0.849
	LTE Band 7_Ant0	20M	QPSK	1	99	Bottom Side	11mm	DSI4(Full)	21350	2560	23.03	24.00	1.250	-0.02	0.546	0.683
	LTE Band 7_Ant0	20M	QPSK	50	24	Front	0mm	DSI6(Standalone/Simultaneous)	21350	2560	21.96	23.00	1.271	0.14	1.150	1.461
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	0mm	DSI6(Standalone/Simultaneous)	21350	2560	21.96	23.00	1.271	0.14	1.290	1.639
89	LTE Band 7_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	21350	2560	21.96	23.00	1.271	0.06	2.310	2.935
	LTE Band 7_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	20850	2510	21.64	23.00	1.368	-0.06	2.080	2.845
	LTE Band 7_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	21100	2535	21.74	23.00	1.337	-0.05	2.170	2.900
	LTE Band 7_Ant0	20M	QPSK	50	24	Front	6mm	DSI4(Full)	21350	2560	22.15	23.00	1.216	0.06	0.418	0.508
	LTE Band 7_Ant0	20M	QPSK	50	24	Back	8mm	DSI4(Full)	21350	2560	22.15	23.00	1.216	-0.11	0.378	0.460
	LTE Band 7_Ant0	20M	QPSK	50	24	Bottom Side	11mm	DSI4(Full)	21350	2560	22.15	23.00	1.216	0.06	0.300	0.365
	LTE Band 7_Ant0	20M	QPSK	100	0	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	21350	2560	21.96	23.00	1.271	0.15	2.220	2.821



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Reduction	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)
	LTE Band 41_Ant0	20M	QPSK	1	99	Front	0mm	DSI4(Full)	40620	2593	22.97	24.00	1.268	62.9	1.006	-0.07	0.932	1.189
	LTE Band 41_Ant0	20M	QPSK	1	99	Back	0mm	DSI4(Full)	40620	2593	22.97	24.00	1.268	62.9	1.006	0.02	1.160	1.479
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	40620	2593	22.97	24.00	1.268	62.9	1.006	-0.06	1.690	2.155
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	39750	2506	22.73	24.00	1.340	62.9	1.006	0.15	1.650	2.224
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	40185	2549.5	22.90	24.00	1.288	62.9	1.006	-0.1	1.800	2.333
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	41055	2636.5	22.84	24.00	1.306	62.9	1.006	-0.05	1.830	2.405
	LTE Band 41_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	41490	2680	22.66	24.00	1.361	62.9	1.006	0.01	1.590	2.178
	LTE Band 41C_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	41055+2636.5+41253	2656.3	20.74	21.90	1.306	62.9	1.006	-0.02	1.230	1.616
	LTE Band 41_Ant0	20M	QPSK	50	24	Front	0mm	DSI4(Full)	40620	2593	22.15	23.00	1.216	62.9	1.006	-0.12	0.779	0.953
	LTE Band 41_Ant0	20M	QPSK	50	24	Back	0mm	DSI4(Full)	40620	2593	22.15	23.00	1.216	62.9	1.006	-0.12	0.968	1.184
	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	40620	2593	22.15	23.00	1.216	62.9	1.006	-0.1	1.430	1.750
	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	39750	2506	21.91	23.00	1.285	62.9	1.006	-0.02	1.400	1.810
	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	40185	2549.5	22.13	23.00	1.222	62.9	1.006	0.05	1.500	1.844
	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	41055	2636.5	21.98	23.00	1.265	62.9	1.006	0.05	1.520	1.934
	LTE Band 41_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	41490	2680	21.93	23.00	1.279	62.9	1.006	-0.11	1.350	1.738
	LTE Band 41_Ant0	20M	QPSK	100	0	Bottom Side	0mm	DSI4(Full)	40620	2593	22.10	23.00	1.230	62.9	1.006	0.09	1.480	1.832
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Front	0mm	DSI4(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	-0.08	1.070	1.316
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	0mm	DSI4(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	-0.01	1.440	1.771
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	40620	2593	26.14	27.00	1.219	42.9	1.009	-0.12	1.950	2.398
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	0mm	DSI4(Full)	39750	2506	25.91	27.00	1.285	42.9	1.009	-0.06	1.490	1.932
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	0mm	DSI4(Full)	40185	2549.5	26.02	27.00	1.253	42.9	1.009	-0.05	1.540	1.947
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	0mm	DSI4(Full)	41055	2636.5	26.10	27.00	1.230	42.9	1.009	-0.02	1.500	1.862
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Back	0mm	DSI4(Full)	41490	2680	25.87	27.00	1.297	42.9	1.009	-0.11	1.410	1.845
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	39750	2506	25.91	27.00	1.285	42.9	1.009	-0.12	2.160	2.801
90	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	40185	2549.5	26.02	27.00	1.253	42.9	1.009	-0.12	2.350	2.971
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	41055	2636.5	26.10	27.00	1.230	42.9	1.009	0.15	2.250	2.793
	LTE Band 41(HPUE)_Ant0	20M	QPSK	1	99	Bottom Side	0mm	DSI4(Full)	41490	2680	25.87	27.00	1.297	42.9	1.009	0.09	1.880	2.461
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Front	0mm	DSI4(Full)	40620	2593	24.49	26.00	1.416	42.9	1.009	-0.07	0.805	1.150
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Back	0mm	DSI4(Full)	40620	2593	24.49	26.00	1.416	42.9	1.009	0.05	1.040	1.486
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	40620	2593	24.49	26.00	1.416	42.9	1.009	0.14	1.140	1.629
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	39750	2506	24.28	26.00	1.486	42.9	1.009	-0.09	1.190	1.784
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	40185	2549.5	24.42	26.00	1.439	42.9	1.009	-0.04	1.120	1.626
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	41055	2636.5	24.47	26.00	1.422	42.9	1.009	-0.11	1.080	1.550
	LTE Band 41(HPUE)_Ant0	20M	QPSK	50	24	Bottom Side	0mm	DSI4(Full)	41490	2680	24.28	26.00	1.486	42.9	1.009	-0.04	0.971	1.456
	LTE Band 41(HPUE)_Ant0	20M	QPSK	100	0	Back	0mm	DSI4(Full)	40620	2593	24.40	26.00	1.445	42.9	1.009	0.05	1.010	1.473
	LTE Band 41(HPUE)_Ant0	20M	QPSK	100	0	Bottom Side	0mm	DSI4(Full)	40620	2593	24.40	26.00	1.445	42.9	1.009	-0.06	1.250	1.823



<5GNR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone)	349000	1745	22.14	23.00	1.219	-0.11	2.210	2.694
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Standalone)	349000	1745	22.14	23.00	1.219	0.14	1.940	2.365
91	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Standalone)	349000	1745	22.14	23.00	1.219	-0.06	2.570	3.133
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone)	346000	1730	21.98	23.00	1.265	0.16	2.350	2.972
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone)	352000	1760	22.01	23.00	1.256	-0.01	2.000	2.512
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Standalone)	346000	1730	21.98	23.00	1.265	-0.07	2.020	2.555
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Standalone)	352000	1760	22.01	23.00	1.256	-0.02	1.860	2.336
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Standalone)	346000	1730	21.98	23.00	1.265	0.07	2.410	3.048
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Standalone)	352000	1760	22.01	23.00	1.256	0.07	2.250	2.826
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	6mm	DSI4(Full)	346000	1730	22.88	24.00	1.294	-0.07	1.310	1.695
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	8mm	DSI4(Full)	346000	1730	22.88	24.00	1.294	0.12	1.340	1.734
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	9mm	DSI4(Full)	349000	1745	22.98	24.00	1.265	0.1	1.520	1.922
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Standalone)	349000	1745	22.02	23.00	1.253	0.18	2.130	2.669
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	0mm	DSI6(Standalone)	349000	1745	22.02	23.00	1.253	-0.07	1.820	2.281
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Standalone)	349000	1745	22.02	23.00	1.253	0.15	2.370	2.970
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Standalone)	346000	1730	21.96	23.00	1.271	0.05	2.140	2.719
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Standalone)	352000	1760	21.99	23.00	1.262	0.07	1.880	2.372
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	0mm	DSI6(Standalone)	346000	1730	21.96	23.00	1.271	0.18	1.950	2.478
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	0mm	DSI6(Standalone)	352000	1760	21.99	23.00	1.262	0.11	1.720	2.170
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Standalone)	346000	1730	21.96	23.00	1.271	-0.12	2.310	2.935
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Standalone)	352000	1760	21.99	23.00	1.262	-0.09	2.160	2.726
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	6mm	DSI4(Full)	346000	1730	22.85	24.00	1.303	0.1	1.210	1.577
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	8mm	DSI4(Full)	346000	1730	22.85	24.00	1.303	0.07	1.260	1.642
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	9mm	DSI4(Full)	349000	1745	22.95	24.00	1.274	0.15	1.420	1.808
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Front	0mm	DSI6(Standalone)	349000	1745	22.01	23.00	1.256	0.07	0.864	1.085
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Back	0mm	DSI6(Standalone)	349000	1745	22.01	23.00	1.256	0.07	1.200	1.507
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Top Side	0mm	DSI6(Standalone)	349000	1745	22.01	23.00	1.256	0.04	1.320	1.658
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Simultaneous)	349000	1745	21.10	22.00	1.230	-0.07	1.740	2.141
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Simultaneous)	349000	1745	21.10	22.00	1.230	0.09	1.590	1.956
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Simultaneous)	349000	1745	21.10	22.00	1.230	-0.07	1.870	2.301
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Simultaneous)	346000	1730	21.04	22.00	1.247	0.15	1.850	2.308
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Simultaneous)	352000	1760	21.04	22.00	1.247	0.1	1.600	1.996
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Simultaneous)	346000	1730	21.04	22.00	1.247	0.12	2.000	2.495
	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Simultaneous)	352000	1760	21.04	22.00	1.247	-0.08	1.730	2.158
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Simultaneous)	349000	1745	21.08	22.00	1.236	0.09	1.650	2.039
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Back	0mm	DSI6(Simultaneous)	349000	1745	21.08	22.00	1.236	-0.02	1.500	1.854
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Simultaneous)	349000	1745	21.08	22.00	1.236	-0.02	1.770	2.188
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Simultaneous)	346000	1730	21.03	22.00	1.250	0.02	1.730	2.163
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Simultaneous)	352000	1760	21.04	22.00	1.247	0.03	1.470	1.834
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Simultaneous)	346000	1730	21.03	22.00	1.250	-0.07	1.870	2.338
	N66_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Simultaneous)	352000	1760	21.04	22.00	1.247	0.14	1.650	2.058
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Front	0mm	DSI6(Simultaneous)	349000	1745	21.07	22.00	1.239	0.1	1.700	2.106
	N66_Ant 1	40M	BPSK	216	0	DFT-15	Top Side	0mm	DSI6(Simultaneous)	349000	1745	21.07	22.00	1.239	0.13	1.800	2.230
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	349000	1745	21.41	22.50	1.285	-0.07	1.720	2.211
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Standalone/Simultaneous)	349000	1745	21.41	22.50	1.285	0.11	1.850	2.378
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	349000	1745	21.41	22.50	1.285	-0.04	2.110	2.712
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	346000	1730	21.37	22.50	1.297	0.11	1.650	2.140
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	352000	1760	21.36	22.50	1.300	0.11	1.720	2.236
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Standalone/Simultaneous)	346000	1730	21.37	22.50	1.297	0.05	1.740	2.257
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Standalone/Simultaneous)	352000	1760	21.36	22.50	1.300	0.14	1.830	2.379
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	346000	1730	21.37	22.50	1.297	-0.01	2.130	2.763
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	352000	1760	21.36	22.50	1.300	0.14	2.150	2.795
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	6mm	DSI4(Full)	352000	1760	22.78	24.00	1.324	-0.06	0.608	0.805



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	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	8mm	DSI4(Full)	352000	1760	22.78	24.00	1.324	0.05	0.582	0.771
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	9mm	DSI4(Full)	352000	1760	22.78	24.00	1.324	0.1	0.885	1.172
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	349000	1745	21.39	22.50	1.291	-0.06	1.840	2.376
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	0mm	DSI6(Standalone/Simultaneous)	349000	1745	21.39	22.50	1.291	-0.03	1.970	2.544
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	349000	1745	21.39	22.50	1.291	0.05	2.250	2.905
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	346000	1730	21.35	22.50	1.303	-0.08	1.740	2.268
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	352000	1760	21.33	22.50	1.309	0.16	1.850	2.422
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	0mm	DSI6(Standalone/Simultaneous)	346000	1730	21.35	22.50	1.303	0.17	1.890	2.463
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Back	0mm	DSI6(Standalone/Simultaneous)	352000	1760	21.33	22.50	1.309	0.09	1.990	2.605
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	346000	1730	21.35	22.50	1.303	0.05	2.260	2.945
	N66_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	352000	1760	21.33	22.50	1.309	0.09	2.390	3.129
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Front	6mm	DSI4(Full)	352000	1760	22.75	24.00	1.334	-0.1	0.623	0.831
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Back	8mm	DSI4(Full)	352000	1760	22.75	24.00	1.334	-0.04	0.595	0.793
	N66_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	9mm	DSI4(Full)	352000	1760	22.75	24.00	1.334	0.11	0.902	1.203
	N66_Ant 0	40M	BPSK	216	0	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	349000	1745	21.34	22.50	1.306	0.05	1.730	2.260
	N66_Ant 0	40M	BPSK	216	0	DFT-15	Back	0mm	DSI6(Standalone/Simultaneous)	349000	1745	21.34	22.50	1.306	0.16	1.610	2.103
	N66_Ant 0	40M	BPSK	216	0	DFT-15	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	349000	1745	21.34	22.50	1.306	-0.08	1.950	2.547
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone)	376500	1882.5	21.16	22.00	1.213	0.03	1.830	2.221
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Standalone)	376500	1882.5	21.16	22.00	1.213	0.17	1.370	1.662
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Standalone)	376500	1882.5	21.16	22.00	1.213	-0.02	2.340	2.839
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone)	374000	1870	21.12	22.00	1.225	0.17	1.750	2.143
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone)	379000	1895	21.12	22.00	1.225	0.05	1.900	2.327
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Standalone)	374000	1870	21.12	22.00	1.225	0.15	2.250	2.755
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Standalone)	379000	1895	21.12	22.00	1.225	0.04	2.370	2.902
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	6mm	DSI4(Full)	379000	1895	23.25	24.00	1.189	-0.1	0.665	0.790
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Back	8mm	DSI4(Full)	376500	1882.5	23.33	24.00	1.167	0.08	0.573	0.669
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	9mm	DSI4(Full)	379000	1895	23.25	24.00	1.189	0.1	0.969	1.152
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Standalone)	376500	1882.5	21.15	22.00	1.216	0.05	1.900	2.311
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	0mm	DSI6(Standalone)	376500	1882.5	21.15	22.00	1.216	-0.02	1.460	1.776
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Standalone)	376500	1882.5	21.15	22.00	1.216	0.1	2.450	2.980
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Standalone)	374000	1870	21.09	22.00	1.233	0.03	1.880	2.318
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Standalone)	379000	1895	21.11	22.00	1.227	-0.06	1.920	2.357
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Standalone)	374000	1870	21.09	22.00	1.233	0.07	2.420	2.984
92	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Standalone)	379000	1895	21.11	22.00	1.227	0.08	2.500	3.069
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	6mm	DSI4(Full)	379000	1895	23.20	24.00	1.202	-0.01	0.672	0.808
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	8mm	DSI4(Full)	376500	1882.5	23.30	24.00	1.175	-0.03	0.584	0.686
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	9mm	DSI4(Full)	379000	1895	23.20	24.00	1.202	0.03	0.982	1.181
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Front	0mm	DSI6(Standalone)	376500	1882.5	21.13	22.00	1.222	0.05	1.930	2.358
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Top Side	0mm	DSI6(Standalone)	376500	1882.5	21.13	22.00	1.222	0.02	2.360	2.883
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Simultaneous)	376500	1882.5	20.19	21.00	1.205	-0.06	1.460	1.759
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Simultaneous)	376500	1882.5	20.19	21.00	1.205	0.13	1.060	1.277
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Simultaneous)	376500	1882.5	20.19	21.00	1.205	-0.12	1.860	2.241
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Simultaneous)	374000	1870	20.12	21.00	1.225	0.01	1.790	2.192
	N25_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Simultaneous)	379000	1895	20.14	21.00	1.219	-0.06	1.910	2.328
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Front	0mm	DSI6(Simultaneous)	376500	1882.5	20.16	21.00	1.213	0.1	1.560	1.893
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Back	0mm	DSI6(Simultaneous)	376500	1882.5	20.16	21.00	1.213	-0.08	1.160	1.408
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Simultaneous)	376500	1882.5	20.16	21.00	1.213	-0.06	1.930	2.342
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Simultaneous)	374000	1870	20.09	21.00	1.233	-0.12	1.850	2.281
	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Simultaneous)	379000	1895	20.11	21.00	1.227	0.08	1.980	2.430
	N25_Ant 1	40M	BPSK	216	0	DFT-15	Top Side	0mm	DSI6(Simultaneous)	376500	1882.5	20.16	21.00	1.213	0.15	1.920	2.330
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	376500	1882.5	20.56	21.50	1.242	0.08	1.800	2.235
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Standalone/Simultaneous)	376500	1882.5	20.56	21.50	1.242	0.12	1.830	2.272
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	376500	1882.5	20.56	21.50	1.242	0.07	2.360	2.930
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	374000	1870	20.52	21.50	1.253	-0.03	1.750	2.193
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	0mm	DSI6(Standalone/Simultaneous)	379000	1895	20.45	21.50	1.274	-0.05	1.970	2.509
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	0mm	DSI6(Standalone/Simultaneous)	374000	1870	20.52	21.50	1.253	-0.02	1.780	2.231

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	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	0mm	DSi6(Standalone/Simultaneous)	379000	1895	20.45	21.50	1.274	-0.09	2.020	2.572
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	374000	1870	20.52	21.50	1.253	0.16	2.110	2.644
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	379000	1895	20.45	21.50	1.274	-0.03	2.240	2.853
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Front	6mm	DSi4(Full)	379000	1895	23.14	24.00	1.219	-0.04	0.740	0.902
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Back	8mm	DSi4(Full)	379000	1895	23.14	24.00	1.219	-0.05	0.716	0.873
	N25_Ant 0	40M	BPSK	1	1	DFT-15	Bottom Side	11mm	DSi4(Full)	376500	1882.5	23.25	24.00	1.189	-0.02	1.160	1.379
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	0mm	DSi6(Standalone/Simultaneous)	376500	1882.5	20.51	21.50	1.256	-0.05	1.820	2.286
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	0mm	DSi6(Standalone/Simultaneous)	376500	1882.5	20.51	21.50	1.256	-0.12	1.970	2.474
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	376500	1882.5	20.51	21.50	1.256	-0.08	2.290	2.876
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	0mm	DSi6(Standalone/Simultaneous)	374000	1870	20.49	21.50	1.262	0.12	1.630	2.057
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	0mm	DSi6(Standalone/Simultaneous)	379000	1895	20.45	21.50	1.274	0.14	1.910	2.432
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	0mm	DSi6(Standalone/Simultaneous)	374000	1870	20.49	21.50	1.262	0.17	1.700	2.145
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	0mm	DSi6(Standalone/Simultaneous)	379000	1895	20.45	21.50	1.274	-0.04	1.990	2.534
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	374000	1870	20.49	21.50	1.262	0.06	2.030	2.562
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	379000	1895	20.45	21.50	1.274	0.12	2.180	2.776
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Front	6mm	DSi4(Full)	379000	1895	23.09	24.00	1.233	-0.02	0.736	0.908
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Back	8mm	DSi4(Full)	379000	1895	23.09	24.00	1.233	-0.01	0.422	0.520
	N25_Ant 0	40M	BPSK	108	54	DFT-15	Bottom Side	11mm	DSi4(Full)	376500	1882.5	23.18	24.00	1.208	-0.02	1.090	1.317
	N25_Ant 0	40M	BPSK	216	0	DFT-15	Front	0mm	DSi6(Standalone/Simultaneous)	376500	1882.5	20.52	21.50	1.253	0.07	1.810	2.268
	N25_Ant 0	40M	BPSK	216	0	DFT-15	Back	0mm	DSi6(Standalone/Simultaneous)	376500	1882.5	20.52	21.50	1.253	-0.04	1.890	2.368
	N25_Ant 0	40M	BPSK	216	0	DFT-15	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	376500	1882.5	20.52	21.50	1.253	-0.04	2.280	2.857
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.98	23.00	1.265	-0.1	1.120	1.417
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.98	23.00	1.265	0.15	1.300	1.644
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.98	23.00	1.265	-0.04	2.180	2.757
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	509202	2546.01	21.97	23.00	1.268	-0.06	1.460	1.851
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	528000	2640	21.94	23.00	1.276	0.17	1.480	1.889
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	509202	2546.01	21.97	23.00	1.268	-0.04	1.950	2.472
93	N41_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	528000	2640	21.94	23.00	1.276	-0.11	2.480	3.166
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Front	6mm	DSi4(Full)	518598	2592.99	23.04	24.00	1.247	-0.12	0.495	0.617
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Back	8mm	DSi4(Full)	528000	2640	23.02	24.00	1.253	0.02	0.502	0.629
	N41_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	11mm	DSi4(Full)	528000	2640	23.02	24.00	1.253	0.07	0.382	0.479
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.86	23.00	1.300	0.14	1.070	1.391
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.86	23.00	1.300	0.15	1.230	1.599
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.86	23.00	1.300	0.16	2.010	2.613
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	509202	2546.01	21.84	23.00	1.297	0.09	1.410	1.842
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	528000	2640	21.80	23.00	1.306	0.04	1.410	1.859
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	509202	2546.01	21.84	23.00	1.306	-0.01	1.870	2.443
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	528000	2640	21.80	23.00	1.318	0.03	2.280	3.006
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Front	6mm	DSi4(Full)	518598	2592.99	23.02	24.00	1.253	0.14	0.488	0.612
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Back	8mm	DSi4(Full)	528000	2640	22.98	24.00	1.265	0.06	0.498	0.630
	N41_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	11mm	DSi4(Full)	528000	2640	22.98	24.00	1.265	0.11	0.377	0.477
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.85	23.00	1.303	0.18	1.190	1.551
	N41_Ant 0	100M	BPSK	270	0	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.85	23.00	1.303	0.01	1.950	2.541
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.98	23.00	1.265	-0.1	1.120	1.417
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.98	23.00	1.265	0.15	1.300	1.644
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.98	23.00	1.265	-0.04	2.180	2.757
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	509202	2546.01	21.97	23.00	1.268	-0.06	1.460	1.851
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	528000	2640	21.94	23.00	1.276	0.17	1.480	1.889
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	509202	2546.01	21.97	23.00	1.268	-0.04	1.950	2.472
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	528000	2640	21.94	23.00	1.276	-0.11	2.480	3.166
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Front	6mm	DSi4(Full)	518598	2592.99	25.98	27.00	1.265	-0.12	0.495	0.626
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Back	8mm	DSi4(Full)	528000	2640	25.97	27.00	1.268	0.02	0.502	0.636
	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	11mm	DSi4(Full)	528000	2640	25.97	27.00	1.268	0.07	0.382	0.484
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.86	23.00	1.300	0.14	1.070	1.391
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.86	23.00	1.300	0.15	1.230	1.599
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	0mm	DSi6(Standalone/Simultaneous)	518598	2592.99	21.86	23.00	1.300	0.16	2.010	2.613



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	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	0mm	DSI6(Standalone/Simultaneous)	509202	2546.01	21.84	23.00	1.297	0.09	1.410	1.842
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	0mm	DSI6(Standalone/Simultaneous)	528000	2640	21.80	23.00	1.306	0.04	1.410	1.859
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	509202	2546.01	21.84	23.00	1.306	-0.01	1.870	2.443
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	528000	2640	21.80	23.00	1.318	0.03	2.280	3.006
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Front	6mm	DSI4(Full)	518598	2592.99	25.96	27.00	1.271	0.14	0.488	0.620
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Back	8mm	DSI4(Full)	528000	2640	25.94	27.00	1.276	0.06	0.498	0.636
	N41(HPUE)_Ant 0	100M	BPSK	135	0	DFT-30	Bottom Side	11mm	DSI4(Full)	528000	2640	25.94	27.00	1.276	0.11	0.377	0.481
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Standalone/Simultaneous)	518598	2592.99	21.85	23.00	1.303	0.18	1.190	1.551
	N41(HPUE)_Ant 0	100M	BPSK	270	0	DFT-30	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	518598	2592.99	21.85	23.00	1.303	0.01	1.950	2.541
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	0mm	DSI6(Standalone)	656000	3840	18.35	19.50	1.303	0.14	1.790	2.333
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI6(Standalone)	656000	3840	18.35	19.50	1.303	-0.04	1.140	1.486
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	12mm	DSI4(Full)	656000	3840	22.95	24.00	1.274	0.11	0.574	0.731
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI4(Full)	656000	3840	22.95	24.00	1.274	0.13	1.250	1.592
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	0mm	DSI6(Standalone)	656000	3840	18.29	19.50	1.321	0.09	1.710	2.259
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI6(Standalone)	656000	3840	18.29	19.50	1.321	-0.11	1.110	1.467
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	12mm	DSI4(Full)	656000	3840	22.92	24.00	1.282	0.08	0.605	0.776
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI4(Full)	656000	3840	22.92	24.00	1.282	0.01	1.310	1.680
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Standalone)	656000	3840	18.26	19.50	1.330	0.01	1.710	2.275
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Left Side	0mm	DSI6(Standalone)	656000	3840	18.26	19.50	1.330	0.08	1.140	1.517
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	0mm	DSI6(Simultaneous)	656000	3840	17.79	19.00	1.321	-0.1	1.580	2.088
	N77_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI6(Simultaneous)	656000	3840	17.79	19.00	1.321	-0.03	1.000	1.321
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	0mm	DSI6(Simultaneous)	656000	3840	17.73	19.00	1.340	0.06	1.550	2.076
	N77_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI6(Simultaneous)	656000	3840	17.73	19.00	1.340	-0.01	0.970	1.299
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Simultaneous)	656000	3840	17.55	19.00	1.396	0.06	1.530	2.136
	N77_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Left Side	0mm	DSI6(Simultaneous)	656000	3840	17.55	19.00	1.396	0.15	0.950	1.327
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	0mm	DSI6(Standalone)	633332	3499.98	18.33	19.50	1.309	-0.02	2.190	2.867
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI6(Standalone)	633332	3499.98	18.33	19.50	1.309	0.1	1.050	1.375
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	12mm	DSI4(Full)	633332	3499.98	22.91	24.00	1.285	0.18	0.687	0.883
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI4(Full)	633332	3499.98	22.91	24.00	1.285	-0.02	1.153	1.482
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	0mm	DSI6(Standalone)	633332	3499.98	18.22	19.50	1.343	0.17	2.100	2.820
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI6(Standalone)	633332	3499.98	18.22	19.50	1.343	0.1	1.010	1.356
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	12mm	DSI4(Full)	633332	3499.98	22.88	24.00	1.294	0.02	0.701	0.907
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI4(Full)	633332	3499.98	22.88	24.00	1.294	-0.07	1.211	1.567
	N77_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Standalone)	633332	3499.98	18.27	19.50	1.327	0.13	2.090	2.774
	N77_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Left Side	0mm	DSI6(Standalone)	633332	3499.98	18.27	19.50	1.327	0.06	1.020	1.354
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	0mm	DSI6(Simultaneous)	633332	3499.98	17.90	19.00	1.288	-0.05	1.940	2.499
	N77_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI6(Simultaneous)	633332	3499.98	17.90	19.00	1.288	0.17	1.110	1.430
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	0mm	DSI6(Simultaneous)	633332	3499.98	17.86	19.00	1.300	0.12	1.680	2.184
	N77_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI6(Simultaneous)	633332	3499.98	17.86	19.00	1.300	0.18	1.110	1.443
	N77_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Simultaneous)	633332	3499.98	17.84	19.00	1.306	-0.1	1.740	2.273
	N77_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Simultaneous)	633332	3499.98	17.84	19.00	1.306	-0.07	1.080	1.411
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	0mm	DSI4(Full)	656000	3840	26.00	27.00	1.259	0.11	2.220	2.795
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	0mm	DSI6(Standalone)	656000	3840	18.35	19.50	1.303	0.14	1.790	2.333
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI6(Standalone)	656000	3840	18.35	19.50	1.303	-0.04	1.140	1.486
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Top Side	0mm	DSI4(Full)	656000	3840	26.00	27.00	1.259	0.08	1.860	2.342
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	12mm	DSI4(Full)	656000	3840	26.00	27.00	1.259	0.11	1.050	1.322
	N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI4(Full)	656000	3840	26.00	27.00	1.259	0.13	2.320	2.921
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	0mm	DSI4(Full)	656000	3840	25.95	27.00	1.274	0.12	2.440	3.107
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	0mm	DSI6(Standalone)	656000	3840	18.29	19.50	1.321	0.09	1.710	2.259
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI6(Standalone)	656000	3840	18.29	19.50	1.321	-0.11	1.110	1.467
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Top Side	0mm	DSI4(Full)	656000	3840	25.95	27.00	1.274	-0.03	1.920	2.445
	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	12mm	DSI4(Full)	656000	3840	25.95	27.00	1.274	0.08	1.180	1.503
94	N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI4(Full)	656000	3840	25.95	27.00	1.274	0.01	2.450	3.120
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Front	0mm	DSI4(Full)	656000	3840	25.46	26.50	1.271	0.12	2.250	2.859
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Standalone)	656000	3840	18.26	19.50	1.330	0.01	1.710	2.275
	N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Left Side	0mm	DSI6(Standalone)	656000	3840	18.26	19.50	1.330	0.08	1.140	1.517

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FCC SAR Test Report

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N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Top Side	0mm	DSI4(Full)	656000	3840	25.46	26.50	1.271	-0.03	1.850	2.351
N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Front	0mm	DSI6(Simultaneous)	656000	3840	17.79	19.00	1.321	0.03	0.478	0.632
N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Back	0mm	DSI6(Simultaneous)	656000	3840	17.79	19.00	1.321	-0.1	1.580	2.088
N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI6(Simultaneous)	656000	3840	17.79	19.00	1.321	-0.03	1.000	1.321
N77(HPUE)_Ant 3_FCC	100M	BPSK	1	1	DFT-30	Top Side	0mm	DSI6(Simultaneous)	656000	3840	17.79	19.00	1.321	0.11	0.364	0.481
N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Front	0mm	DSI6(Simultaneous)	656000	3840	17.73	19.00	1.340	0.09	0.512	0.686
N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Back	0mm	DSI6(Simultaneous)	656000	3840	17.73	19.00	1.340	0.06	1.550	2.076
N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI6(Simultaneous)	656000	3840	17.73	19.00	1.340	-0.01	0.970	1.299
N77(HPUE)_Ant 3_FCC	100M	BPSK	135	69	DFT-30	Top Side	0mm	DSI6(Simultaneous)	656000	3840	17.73	19.00	1.340	-0.05	0.398	0.533
N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Simultaneous)	656000	3840	17.55	19.00	1.396	0.06	1.530	2.136
N77(HPUE)_Ant 3_FCC	100M	BPSK	270	0	DFT-30	Left Side	0mm	DSI6(Simultaneous)	656000	3840	17.55	19.00	1.396	0.15	0.950	1.327
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	0mm	DSI4(Full)	633332	3499.98	25.93	27.00	1.279	-0.07	1.490	1.906
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	0mm	DSI6(Standalone)	633332	3499.98	18.33	19.50	1.309	-0.02	2.190	2.867
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI6(Standalone)	633332	3499.98	18.33	19.50	1.309	0.1	1.050	1.375
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Top Side	0mm	DSI4(Full)	633332	3499.98	25.93	27.00	1.279	0.03	1.500	1.919
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	12mm	DSI4(Full)	633332	3499.98	25.93	27.00	1.279	0.18	1.330	1.702
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Side	5mm	DSI4(Full)	633332	3499.98	25.93	27.00	1.279	-0.02	2.070	2.648
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	0mm	DSI4(Full)	633332	3499.98	25.83	27.00	1.309	0.03	1.530	2.003
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	0mm	DSI6(Standalone)	633332	3499.98	18.22	19.50	1.343	0.17	2.100	2.820
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI6(Standalone)	633332	3499.98	18.22	19.50	1.343	0.1	1.010	1.356
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Top Side	0mm	DSI4(Full)	633332	3499.98	25.83	27.00	1.309	0.01	1.560	2.042
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	12mm	DSI4(Full)	633332	3499.98	25.83	27.00	1.309	0.02	1.360	1.780
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI4(Full)	633332	3499.98	25.83	27.00	1.309	-0.07	2.080	2.723
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Front	0mm	DSI4(Full)	633332	3499.98	25.22	26.50	1.343	0.05	1.470	1.974
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Standalone)	633332	3499.98	18.27	19.50	1.327	0.13	2.090	2.774
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Left Side	0mm	DSI6(Standalone)	633332	3499.98	18.27	19.50	1.327	0.06	1.020	1.354
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Top Side	0mm	DSI4(Full)	633332	3499.98	25.22	26.50	1.343	0.02	1.510	2.028
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Front	0mm	DSI6(Simultaneous)	633332	3499.98	17.90	19.00	1.288	0.04	0.242	0.312
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Back	0mm	DSI6(Simultaneous)	633332	3499.98	17.90	19.00	1.288	-0.05	1.940	2.499
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Left Side	0mm	DSI6(Simultaneous)	633332	3499.98	17.90	19.00	1.288	0.17	1.110	1.430
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	1	1	DFT-30	Top Side	0mm	DSI6(Simultaneous)	633332	3499.98	17.90	19.00	1.288	0.01	0.215	0.277
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Front	0mm	DSI6(Simultaneous)	633332	3499.98	17.86	19.00	1.300	-0.09	0.258	0.335
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Back	0mm	DSI6(Simultaneous)	633332	3499.98	17.86	19.00	1.300	0.12	1.680	2.184
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Left Side	0mm	DSI6(Simultaneous)	633332	3499.98	17.86	19.00	1.300	0.18	1.110	1.443
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	135	69	DFT-30	Top Side	0mm	DSI6(Simultaneous)	633332	3499.98	17.86	19.00	1.300	-0.02	0.247	0.321
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Simultaneous)	633332	3499.98	17.84	19.00	1.306	-0.1	1.740	2.273
N77(HPUE)_Ant 3_Part 27Q	100M	BPSK	270	0	DFT-30	Back	0mm	DSI6(Simultaneous)	633332	3499.98	17.84	19.00	1.306	-0.07	1.080	1.411

<WLAN2.4G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
95	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 2+4	Full	1	2412	21.66	22.50	1.213	100	1.000	0.17	0.961	1.166
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 2+4	Full	6	2437	21.56	22.50	1.242	100	1.000	-0.03	0.828	1.028
	WLAN2.4GHz	802.11b 1Mbps	Back	0mm	Ant 2+4	Full	11	2462	21.33	22.50	1.309	100	1.000	-0.1	0.878	1.149

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<WLAN5G SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Reduction	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)
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	44	5220	20.11	21.50	1.377	99.32	1.007	-0.09	1.350	1.872
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	36	5180	20.02	21.50	1.406	99.32	1.007	0.16	1.040	1.473
	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	40	5200	20.07	21.50	1.390	99.32	1.007	-0.05	1.160	1.624
96	WLAN5.2GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	48	5240	19.94	21.50	1.432	99.32	1.007	0.05	1.360	1.961
	WLAN5.2GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+12	Simultaneous	42	5210	17.61	19.00	1.377	100	1.000	0.12	0.825	1.136
	WLAN5.3GHz	802.11a 6Mbps	Front	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.08	0.183	0.250
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	-0.06	1.240	1.696
	WLAN5.3GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.04	0.182	0.249
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.15	0.011	0.014
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+12	Full	64	5320	20.17	21.50	1.358	99.32	1.007	0.1	0.237	0.324
97	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	52	5260	20.07	21.50	1.390	99.32	1.007	0.06	1.440	2.016
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	56	5280	20.07	21.50	1.390	99.32	1.007	-0.11	1.420	1.988
	WLAN5.3GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	60	5300	20.08	21.50	1.387	99.32	1.007	0.05	1.290	1.801
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	0.05	0.148	0.210
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	0.04	0.894	1.269
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	0.14	0.133	0.189
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	0.01	0.005	0.007
	WLAN5.3GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+12	Simultaneous	58	5290	18.48	20.00	1.419	100	1.000	0.05	0.194	0.275
	WLAN5.5GHz	802.11a 6Mbps	Front	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.05	0.106	0.138
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	0.04	0.936	1.220
	WLAN5.5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	-0.11	0.124	0.162
	WLAN5.5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	-0.09	0.007	0.009
	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+12	Full	100	5500	20.38	21.50	1.294	99.32	1.007	-0.01	0.136	0.177
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	116	5580	19.93	21.50	1.435	99.32	1.007	-0.06	0.841	1.216
	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	132	5660	20.05	21.50	1.396	99.32	1.007	0.12	1.110	1.561
98	WLAN5.5GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	140	5700	20.26	21.50	1.330	99.32	1.007	0.03	1.370	1.835
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	-0.09	0.051	0.070
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	-0.06	0.722	0.990
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	0.04	0.060	0.082
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	0.08	0.000	0.001
	WLAN5.5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+12	Simultaneous	106	5530	18.63	20.00	1.371	100	1.000	0.08	0.075	0.103
99	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.12	2.050	2.896
	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	149	5745	19.99	21.50	1.416	99.32	1.007	-0.1	1.840	2.623
	WLAN5.8GHz	802.11a 6Mbps	Back	0mm	Ant 4+12	Full	165	5825	19.98	21.50	1.419	99.32	1.007	-0.03	1.780	2.544
	WLAN5.8GHz	802.11a 6Mbps	Back	5mm	Ant 4+12	Full	157	5785	20.03	21.50	1.403	99.32	1.007	0.03	1.160	1.639
	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+12	Simultaneous	155	5775	16.36	18.00	1.459	100	1.000	0.01	0.797	1.163



16.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WCDMA IV_Ant1					RMC 12.2Kbps	Left Tilted	0mm	DSI2(Standalone)	1312	1712.4	15.73	16.50	1.194	-	-	0.04	1.040	1	1.242
2nd	WCDMA IV_Ant1					RMC 12.2Kbps	Left Tilted	0mm	DSI2(Standalone)	1312	1712.4	15.73	16.50	1.194	-	-	0.02	0.998	1.042	1.192
1st	LTE Band 25_Ant1	20M	QPSK	50	24		Left Tilted	0mm	DSI2(Standalone)	26590	1905	15.21	16.00	1.199	-	-	0.04	1.040	1	1.247
2nd	LTE Band 25_Ant1	20M	QPSK	50	24		Left Tilted	0mm	DSI2(Standalone)	26590	1905	15.21	16.00	1.199	-	-	0.09	0.995	1.045	1.194
1st	WLAN2.4GHz_Ant 2+4					802.11b 1Mbps	Right Cheek	0mm	Full	6	2437	21.56	22.50	1.242	100	1.000	-0.19	0.930	1	1.155
2nd	WLAN2.4GHz_Ant 2+4					802.11b 1Mbps	Right Cheek	0mm	Full	6	2437	21.56	22.50	1.242	100	1.000	-0.02	0.912	1.020	1.132
1st	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Cheek	0mm	DSI2(Standalone)	167300	836.5	22.20	23.00	1.202	-	-	0.03	1.020	1	1.226
2nd	N5_Ant 1	20M	BPSK	1	1	DFT-15	Left Cheek	0mm	DSI2(Standalone)	167300	836.5	22.20	23.00	1.202	-	-	0.05	1.000	1.020	1.202
1st	N77(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	-	-	-0.09	0.878	1	1.163
2nd	N77(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Right Cheek	0mm	DSI2(Standalone)	656000	3840	19.78	21.00	1.324	-	-	0.06	0.856	1.026	1.134
1st	LTE Band 41_Ant0	20M	QPSK	50	24		Bottom Side	5mm	DSI3(Simultaneous)	41055	2636.5	21.05	21.90	1.216	62.9	1.006	0.17	1.020	1	1.248
2nd	LTE Band 41_Ant0	20M	QPSK	50	24		Bottom Side	5mm	DSI3(Simultaneous)	41055	2636.5	21.05	21.90	1.216	62.9	1.006	0.12	0.987	1.033	1.208
1st	LTE Band 13_Ant0	10M	QPSK	1	25		Back	5mm	DSI 4(Full)	23230	782	23.20	24.50	1.349	-	-	0.03	0.928	1	1.252
2nd	LTE Band 13_Ant0	10M	QPSK	1	25		Back	5mm	DSI 4(Full)	23230	782	23.20	24.50	1.349	-	-	0.11	0.911	1.019	1.229
1st	LTE Band 30_Ant0	10M	QPSK	1	0		Back	5mm	DSI3(Standalone)	27710	2310	17.18	18.50	1.355	-	-	0.12	0.888	1	1.203
2nd	LTE Band 30_Ant0	10M	QPSK	1	0		Back	5mm	DSI3(Standalone)	27710	2310	17.18	18.50	1.355	-	-	0.12	0.852	1.042	1.155
1st	WLAN5GHz_Ant 4+12					802.11a 6Mbps	Back	5mm	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.12	0.818	1	1.156
2nd	WLAN5GHz_Ant 4+12					802.11a 6Mbps	Back	5mm	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.03	0.802	1.020	1.133

<10g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	LTE Band 30_Ant0	10M	QPSK	1	0		Back	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.15	21.50	1.365	-	-	0.05	2.290	1	3.125
2nd	LTE Band 30_Ant0	10M	QPSK	1	0		Back	0mm	DSI6(Standalone/Simultaneous)	27710	2310	20.15	21.50	1.365	-	-	0.01	2.150	1.065	2.934
1st	WLAN5GHz_Ant 4+12					802.11a 6Mbps	Back	0mm	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.12	2.050	1	2.896
2nd	WLAN5GHz_Ant 4+12					802.11a 6Mbps	Back	0mm	Full	157	5785	20.03	21.50	1.403	99.32	1.007	-0.05	1.970	1.041	2.783
1st	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Standalone)	349000	1745	22.14	23.00	1.219	-	-	-0.06	2.570	1	3.133
2nd	N66_Ant 1	40M	BPSK	1	1	DFT-15	Top Side	0mm	DSI6(Standalone)	349000	1745	22.14	23.00	1.219	-	-	-0.11	2.490	1.032	3.035
1st	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Standalone)	379000	1895	21.11	22.00	1.227	-	-	0.08	2.500	1	3.069
2nd	N25_Ant 1	40M	BPSK	108	54	DFT-15	Top Side	0mm	DSI6(Standalone)	379000	1895	21.11	22.00	1.227	-	-	0.09	2.420	1.033	2.970
1st	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	528000	2640	21.94	23.00	1.276	-	-	-0.11	2.480	1	3.166
2nd	N41(HPUE)_Ant 0	100M	BPSK	1	1	DFT-30	Bottom Side	0mm	DSI6(Standalone/Simultaneous)	528000	2640	21.94	23.00	1.276	-	-	-0.03	2.380	1.042	3.038
1st	N77(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI 4(Full)	656000	3840	25.95	27.00	1.274	-	-	0.01	2.450	1	3.120
2nd	N77(HPUE)_Ant 3	100M	BPSK	135	69	DFT-30	Left Side	5mm	DSI 4(Full)	656000	3840	25.95	27.00	1.274	-	-	0.03	2.330	1.052	2.967

General Note:

- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
- Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR < 1.45 W/kg, only one repeated measurement is required.
- Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
- The ratio is the difference in percentage between original and repeated *measured* SAR.
- All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

17. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + WLAN6E	Yes	Yes		Yes
4.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
5.	Bluetooth + WLAN5GHz	Yes	Yes	Yes	Yes
6.	Bluetooth + WLAN6E	Yes	Yes		Yes
7.	WWAN + Bluetooth + WLAN5GHz	Yes	Yes	Yes	Yes
8.	WWAN + Bluetooth + WLAN6E	Yes	Yes		Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands.
- 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. In Part 1 Report, simultaneous transmission compliance was evaluated individually with other Radios (WLAN or BT) using one of 4G or 5G NR.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
- WIFI 6E has no hotspot function.
- WIFI 6E can transmit simultaneously with Bluetooth.
- The 2.4GHz/5GHz/6GHz WLAN can transmit in MIMO antenna mode only and it has no SISO antenna mode.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- WLAN 2.4GHz and Bluetooth share the same antenna so can't transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz/ WLAN6E and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz /WLAN6E and WLAN 2.4GHz can't transmit simultaneously.
- The maximum SAR summation is calculated based on the same configuration and test position.
- SAR test report for WLAN6E U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth, always chose higher SAR of WLAN5G U-NII-1/2A/2C/3 and U-NII-5/6/7/8.
- 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. 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

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



17.2 Head Exposure Conditions

WWAN Band	Exposure Position	1	3	6	7	9	1+9	6+9	7+9
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Bluetooth Ant 2	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WCDMA V_Ant1	Right Cheek	0.735	1.155	0.717	0.025	0.253	0.99	0.97	0.28
	Right Tilted	0.797	0.709	0.514	0.035	0.120	0.92	0.63	0.16
	Left Cheek	1.113	0.496	0.319	0.022	0.080	1.19	0.40	0.10
	Left Tilted	1.044	0.533	0.339	0.026	0.074	1.12	0.41	0.10
WCDMA IV_Ant1	Right Cheek	0.608	1.155	0.717	0.025	0.253	0.86	0.97	0.28
	Right Tilted	0.736	0.709	0.514	0.035	0.120	0.86	0.63	0.16
	Left Cheek	1.057	0.496	0.319	0.022	0.080	1.14	0.40	0.10
	Left Tilted	1.242	0.533	0.339	0.026	0.074	1.32	0.41	0.10
WCDMA II_Ant1	Right Cheek	0.583	1.155	0.717	0.025	0.253	0.84	0.97	0.28
	Right Tilted	0.605	0.709	0.514	0.035	0.120	0.73	0.63	0.16
	Left Cheek	0.999	0.496	0.319	0.022	0.080	1.08	0.40	0.10
	Left Tilted	1.191	0.533	0.339	0.026	0.074	1.27	0.41	0.10
LTE Band 71_Ant1	Right Cheek	0.754	1.155	0.717	0.025	0.253	1.01	0.97	0.28
	Right Tilted	0.634	0.709	0.514	0.035	0.120	0.75	0.63	0.16
	Left Cheek	0.997	0.496	0.319	0.022	0.080	1.08	0.40	0.10
	Left Tilted	0.872	0.533	0.339	0.026	0.074	0.95	0.41	0.10
LTE Band 12_Ant1	Right Cheek	0.869	1.155	0.717	0.025	0.253	1.12	0.97	0.28
	Right Tilted	0.742	0.709	0.514	0.035	0.120	0.86	0.63	0.16
	Left Cheek	1.128	0.496	0.319	0.022	0.080	1.21	0.40	0.10
	Left Tilted	1.024	0.533	0.339	0.026	0.074	1.10	0.41	0.10
LTE Band 13_Ant1	Right Cheek	0.846	1.155	0.717	0.025	0.253	1.10	0.97	0.28
	Right Tilted	0.776	0.709	0.514	0.035	0.120	0.90	0.63	0.16
	Left Cheek	1.101	0.496	0.319	0.022	0.080	1.18	0.40	0.10
	Left Tilted	0.960	0.533	0.339	0.026	0.074	1.03	0.41	0.10
LTE Band 14_Ant1	Right Cheek	0.858	1.155	0.717	0.025	0.253	1.11	0.97	0.28
	Right Tilted	0.772	0.709	0.514	0.035	0.120	0.89	0.63	0.16
	Left Cheek	1.162	0.496	0.319	0.022	0.080	1.24	0.40	0.10
	Left Tilted	0.983	0.533	0.339	0.026	0.074	1.06	0.41	0.10
LTE Band 26_Ant1	Right Cheek	1.107	1.155	0.717	0.025	0.253	1.36	0.97	0.28
	Right Tilted	1.085	0.709	0.514	0.035	0.120	1.21	0.63	0.16
	Left Cheek	1.231	0.496	0.319	0.022	0.080	1.31	0.40	0.10
	Left Tilted	1.142	0.533	0.339	0.026	0.074	1.22	0.41	0.10
LTE Band 66_Ant1	Right Cheek	0.537	1.155	0.717	0.025	0.253	0.79	0.97	0.28
	Right Tilted	0.661	0.709	0.514	0.035	0.120	0.78	0.63	0.16
	Left Cheek	1.030	0.496	0.319	0.022	0.080	1.11	0.40	0.10
	Left Tilted	1.223	0.533	0.339	0.026	0.074	1.30	0.41	0.10
LTE Band 25_Ant1	Right Cheek	0.525	1.155	0.717	0.025	0.253	0.78	0.97	0.28
	Right Tilted	0.660	0.709	0.514	0.035	0.120	0.78	0.63	0.16
	Left Cheek	1.026	0.496	0.319	0.022	0.080	1.11	0.40	0.10
	Left Tilted	1.247	0.533	0.339	0.026	0.074	1.32	0.41	0.10
N71_Ant 1	Right Cheek	0.656	1.155	0.717	0.025	0.253	0.91	0.97	0.28
	Right Tilted	0.630	0.709	0.514	0.035	0.120	0.75	0.63	0.16
	Left Cheek	0.906	0.496	0.319	0.022	0.080	0.99	0.40	0.10
	Left Tilted	0.639	0.533	0.339	0.026	0.074	0.71	0.41	0.10
N5_Ant 1	Right Cheek	1.081	1.155	0.717	0.025	0.253	1.33	0.97	0.28
	Right Tilted	1.029	0.709	0.514	0.035	0.120	1.15	0.63	0.16
	Left Cheek	1.226	0.496	0.319	0.022	0.080	1.31	0.40	0.10
	Left Tilted	1.154	0.533	0.339	0.026	0.074	1.23	0.41	0.10
N66_Ant 1	Right Cheek	0.551	1.155	0.717	0.025	0.253	0.80	0.97	0.28



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	Right Tilted	0.676	0.709	0.514	0.035	0.120	0.80	0.63	0.16
	Left Cheek	1.092	0.496	0.319	0.022	0.080	1.17	0.40	0.10
	Left Tilted	1.243	0.533	0.339	0.026	0.074	1.32	0.41	0.10
N25_Ant 1	Right Cheek	0.613	1.155	0.717	0.025	0.253	0.87	0.97	0.28
	Right Tilted	0.743	0.709	0.514	0.035	0.120	0.86	0.63	0.16
	Left Cheek	1.086	0.496	0.319	0.022	0.080	1.17	0.40	0.10
	Left Tilted	1.187	0.533	0.339	0.026	0.074	1.26	0.41	0.10
N77_Ant 3_FCC	Right Cheek	1.163	1.155	0.717	0.025	0.253	1.42	0.97	0.28
	Right Tilted	0.560	0.709	0.514	0.035	0.120	0.68	0.63	0.16
	Left Cheek	0.308	0.496	0.319	0.022	0.080	0.39	0.40	0.10
	Left Tilted	0.200	0.533	0.339	0.026	0.074	0.27	0.41	0.10
N77_Ant 3_Part 27Q	Right Cheek	0.832	1.155	0.717	0.025	0.253	1.09	0.97	0.28
	Right Tilted	0.412	0.709	0.514	0.035	0.120	0.53	0.63	0.16
	Left Cheek	0.299	0.496	0.319	0.022	0.080	0.38	0.40	0.10
	Left Tilted	0.204	0.533	0.339	0.026	0.074	0.28	0.41	0.10
N77(HPUE)_Ant 3_FCC	Right Cheek	1.163	1.155	0.717	0.025	0.253	1.42	0.97	0.28
	Right Tilted	0.560	0.709	0.514	0.035	0.120	0.68	0.63	0.16
	Left Cheek	0.308	0.496	0.319	0.022	0.080	0.39	0.40	0.10
	Left Tilted	0.200	0.533	0.339	0.026	0.074	0.27	0.41	0.10
N77(HPUE)_Ant 3_Part 27Q	Right Cheek	0.832	1.155	0.717	0.025	0.253	1.09	0.97	0.28
	Right Tilted	0.412	0.709	0.514	0.035	0.120	0.53	0.63	0.16
	Left Cheek	0.299	0.496	0.319	0.022	0.080	0.38	0.40	0.10
	Left Tilted	0.204	0.533	0.339	0.026	0.074	0.28	0.41	0.10

WWAN Band	Exposure Position	1	3	6	7	9	1+3	1+6	1+7	1+6+9	1+7+9
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Bluetooth Ant 2	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Estimated 1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WCDMA V_Ant1	Right Cheek	0.601	0.381	0.394	0.025	0.253	0.98	1.00	0.63	1.25	0.88
	Right Tilted	0.644	0.224	0.292	0.035	0.120	0.87	0.94	0.68	1.06	0.80
	Left Cheek	0.908	0.157	0.239	0.022	0.080	1.07	1.15	0.93	1.23	1.01
	Left Tilted	0.798	0.170	0.208	0.026	0.074	0.97	1.01	0.82	1.08	0.90
WCDMA IV_Ant1	Right Cheek	0.477	0.381	0.394	0.025	0.253	0.86	0.87	0.50	1.12	0.76
	Right Tilted	0.548	0.224	0.292	0.035	0.120	0.77	0.84	0.58	0.96	0.70
	Left Cheek	0.774	0.157	0.239	0.022	0.080	0.93	1.01	0.80	1.09	0.88
	Left Tilted	0.998	0.170	0.208	0.026	0.074	1.17	1.21	1.02	1.28	1.10
WCDMA II_Ant1	Right Cheek	0.445	0.381	0.394	0.025	0.253	0.83	0.84	0.47	1.09	0.72
	Right Tilted	0.466	0.224	0.292	0.035	0.120	0.69	0.76	0.50	0.88	0.62
	Left Cheek	0.688	0.157	0.239	0.022	0.080	0.85	0.93	0.71	1.01	0.79
	Left Tilted	0.987	0.170	0.208	0.026	0.074	1.16	1.20	1.01	1.27	1.09
LTE Band 71_Ant1	Right Cheek	0.754	0.381	0.394	0.025	0.253	1.14	1.15	0.78	1.40	1.03
	Right Tilted	0.634	0.224	0.292	0.035	0.120	0.86	0.93	0.67	1.05	0.79
	Left Cheek	0.997	0.157	0.239	0.022	0.080	1.15	1.24	1.02	1.32	1.10
	Left Tilted	0.872	0.170	0.208	0.026	0.074	1.04	1.08	0.90	1.15	0.97
LTE Band 12_Ant1	Right Cheek	0.641	0.381	0.394	0.025	0.253	1.02	1.04	0.67	1.29	0.92
	Right Tilted	0.433	0.224	0.292	0.035	0.120	0.66	0.73	0.47	0.85	0.59
	Left Cheek	0.852	0.157	0.239	0.022	0.080	1.01	1.09	0.87	1.17	0.95
	Left Tilted	0.738	0.170	0.208	0.026	0.074	0.91	0.95	0.76	1.02	0.84
LTE Band 13_Ant1	Right Cheek	0.718	0.381	0.394	0.025	0.253	1.10	1.11	0.74	1.37	1.00
	Right Tilted	0.610	0.224	0.292	0.035	0.120	0.83	0.90	0.65	1.02	0.77
	Left Cheek	0.918	0.157	0.239	0.022	0.080	1.08	1.16	0.94	1.24	1.02
	Left Tilted	0.722	0.170	0.208	0.026	0.074	0.89	0.93	0.75	1.00	0.82
LTE Band	Right Cheek	0.640	0.381	0.394	0.025	0.253	1.02	1.03	0.67	1.29	0.92

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14_Ant1	Right Tilted	0.563	0.224	0.292	0.035	0.120	0.79	0.86	0.60	0.98	0.72
	Left Cheek	0.910	0.157	0.239	0.022	0.080	1.07	1.15	0.93	1.23	1.01
	Left Tilted	0.726	0.170	0.208	0.026	0.074	0.90	0.93	0.75	1.01	0.83
LTE Band 26_Ant1	Right Cheek	0.795	0.381	0.394	0.025	0.253	1.18	1.19	0.82	1.44	1.07
	Right Tilted	0.756	0.224	0.292	0.035	0.120	0.98	1.05	0.79	1.17	0.91
	Left Cheek	0.929	0.157	0.239	0.022	0.080	1.09	1.17	0.95	1.25	1.03
	Left Tilted	0.880	0.170	0.208	0.026	0.074	1.05	1.09	0.91	1.16	0.98
LTE Band 66_Ant1	Right Cheek	0.424	0.381	0.394	0.025	0.253	0.81	0.82	0.45	1.07	0.70
	Right Tilted	0.520	0.224	0.292	0.035	0.120	0.74	0.81	0.56	0.93	0.68
	Left Cheek	0.777	0.157	0.239	0.022	0.080	0.93	1.02	0.80	1.10	0.88
	Left Tilted	0.976	0.170	0.208	0.026	0.074	1.15	1.18	1.00	1.26	1.08
LTE Band 25_Ant1	Right Cheek	0.435	0.381	0.394	0.025	0.253	0.82	0.83	0.46	1.08	0.71
	Right Tilted	0.545	0.224	0.292	0.035	0.120	0.77	0.84	0.58	0.96	0.70
	Left Cheek	0.758	0.157	0.239	0.022	0.080	0.92	1.00	0.78	1.08	0.86
	Left Tilted	0.997	0.170	0.208	0.026	0.074	1.17	1.21	1.02	1.28	1.10
N71_Ant 1	Right Cheek	0.656	0.381	0.394	0.025	0.253	1.04	1.05	0.68	1.30	0.93
	Right Tilted	0.630	0.224	0.292	0.035	0.120	0.85	0.92	0.67	1.04	0.79
	Left Cheek	0.906	0.157	0.239	0.022	0.080	1.06	1.15	0.93	1.23	1.01
	Left Tilted	0.639	0.170	0.208	0.026	0.074	0.81	0.85	0.67	0.92	0.74
N5_Ant 1	Right Cheek	0.850	0.381	0.394	0.025	0.253	1.23	1.24	0.88	1.50	1.13
	Right Tilted	0.811	0.224	0.292	0.035	0.120	1.04	1.10	0.85	1.22	0.97
	Left Cheek	0.984	0.157	0.239	0.022	0.080	1.14	1.22	1.01	1.30	1.09
	Left Tilted	0.942	0.170	0.208	0.026	0.074	1.11	1.15	0.97	1.22	1.04
N66_Ant 1	Right Cheek	0.445	0.381	0.394	0.025	0.253	0.83	0.84	0.47	1.09	0.72
	Right Tilted	0.539	0.224	0.292	0.035	0.120	0.76	0.83	0.57	0.95	0.69
	Left Cheek	0.795	0.157	0.239	0.022	0.080	0.95	1.03	0.82	1.11	0.90
	Left Tilted	0.997	0.170	0.208	0.026	0.074	1.17	1.21	1.02	1.28	1.10
N25_Ant 1	Right Cheek	0.496	0.381	0.394	0.025	0.253	0.88	0.89	0.52	1.14	0.77
	Right Tilted	0.605	0.224	0.292	0.035	0.120	0.83	0.90	0.64	1.02	0.76
	Left Cheek	0.889	0.157	0.239	0.022	0.080	1.05	1.13	0.91	1.21	0.99
	Left Tilted	0.970	0.170	0.208	0.026	0.074	1.14	1.18	1.00	1.25	1.07
N77_Ant 3_FCC	Right Cheek	0.943	0.381	0.394	0.025	0.253	1.32	1.34	0.97	1.59	1.22
	Right Tilted	0.476	0.224	0.292	0.035	0.120	0.70	0.77	0.51	0.89	0.63
	Left Cheek	0.228	0.157	0.239	0.022	0.080	0.39	0.47	0.25	0.55	0.33
	Left Tilted	0.185	0.170	0.208	0.026	0.074	0.36	0.39	0.21	0.47	0.29
N77_Ant 3_Part 27Q	Right Cheek	0.560	0.381	0.394	0.025	0.253	0.94	0.95	0.59	1.21	0.84
	Right Tilted	0.303	0.224	0.292	0.035	0.120	0.53	0.60	0.34	0.72	0.46
	Left Cheek	0.275	0.157	0.239	0.022	0.080	0.43	0.51	0.30	0.59	0.38
	Left Tilted	0.173	0.170	0.208	0.026	0.074	0.34	0.38	0.20	0.46	0.27
N77(HPUE)_Ant 3_FCC	Right Cheek	0.943	0.381	0.394	0.025	0.253	1.32	1.34	0.97	1.59	1.22
	Right Tilted	0.476	0.224	0.292	0.035	0.120	0.70	0.77	0.51	0.89	0.63
	Left Cheek	0.228	0.157	0.239	0.022	0.080	0.39	0.47	0.25	0.55	0.33
	Left Tilted	0.185	0.170	0.208	0.026	0.074	0.36	0.39	0.21	0.47	0.29
N77(HPUE)_Ant 3_Part 27Q	Right Cheek	0.560	0.381	0.394	0.025	0.253	0.94	0.95	0.59	1.21	0.84
	Right Tilted	0.303	0.224	0.292	0.035	0.120	0.53	0.60	0.34	0.72	0.46
	Left Cheek	0.275	0.157	0.239	0.022	0.080	0.43	0.51	0.30	0.59	0.38
	Left Tilted	0.173	0.170	0.208	0.026	0.074	0.34	0.38	0.20	0.46	0.27



WWAN Band	Exposure Position	1	3	6	7	9	1+9	6+9	7+9
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Bluetooth Ant 2	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850_Ant0	Right Cheek	0.173	1.155	0.717	0.025	0.253	0.43	0.97	0.28
	Right Tilted	0.077	0.709	0.514	0.035	0.120	0.20	0.63	0.16
	Left Cheek	0.100	0.496	0.319	0.022	0.080	0.18	0.40	0.10
	Left Tilted	0.072	0.533	0.339	0.026	0.074	0.15	0.41	0.10
GSM1900_Ant0	Right Cheek	0.058	1.155	0.717	0.025	0.253	0.31	0.97	0.28
	Right Tilted	0.007	0.709	0.514	0.035	0.120	0.13	0.63	0.16
	Left Cheek	0.025	0.496	0.319	0.022	0.080	0.11	0.40	0.10
	Left Tilted	0.004	0.533	0.339	0.026	0.074	0.08	0.41	0.10
WCDMA V_Ant0	Right Cheek	0.221	1.155	0.717	0.025	0.253	0.47	0.97	0.28
	Right Tilted	0.112	0.709	0.514	0.035	0.120	0.23	0.63	0.16
	Left Cheek	0.150	0.496	0.319	0.022	0.080	0.23	0.40	0.10
	Left Tilted	0.102	0.533	0.339	0.026	0.074	0.18	0.41	0.10
WCDMA IV_Ant0	Right Cheek	0.136	1.155	0.717	0.025	0.253	0.39	0.97	0.28
	Right Tilted	0.049	0.709	0.514	0.035	0.120	0.17	0.63	0.16
	Left Cheek	0.082	0.496	0.319	0.022	0.080	0.16	0.40	0.10
	Left Tilted	0.053	0.533	0.339	0.026	0.074	0.13	0.41	0.10
WCDMA II_Ant0	Right Cheek	0.147	1.155	0.717	0.025	0.253	0.40	0.97	0.28
	Right Tilted	0.058	0.709	0.514	0.035	0.120	0.18	0.63	0.16
	Left Cheek	0.080	0.496	0.319	0.022	0.080	0.16	0.40	0.10
	Left Tilted	0.065	0.533	0.339	0.026	0.074	0.14	0.41	0.10
LTE Band 71_Ant0	Right Cheek	0.191	1.155	0.717	0.025	0.253	0.44	0.97	0.28
	Right Tilted	0.083	0.709	0.514	0.035	0.120	0.20	0.63	0.16
	Left Cheek	0.119	0.496	0.319	0.022	0.080	0.20	0.40	0.10
	Left Tilted	0.028	0.533	0.339	0.026	0.074	0.10	0.41	0.10
LTE Band 12_Ant0	Right Cheek	0.225	1.155	0.717	0.025	0.253	0.48	0.97	0.28
	Right Tilted	0.086	0.709	0.514	0.035	0.120	0.21	0.63	0.16
	Left Cheek	0.191	0.496	0.319	0.022	0.080	0.27	0.40	0.10
	Left Tilted	0.097	0.533	0.339	0.026	0.074	0.17	0.41	0.10
LTE Band 13_Ant0	Right Cheek	0.340	1.155	0.717	0.025	0.253	0.59	0.97	0.28
	Right Tilted	0.159	0.709	0.514	0.035	0.120	0.28	0.63	0.16
	Left Cheek	0.264	0.496	0.319	0.022	0.080	0.34	0.40	0.10
	Left Tilted	0.124	0.533	0.339	0.026	0.074	0.20	0.41	0.10
LTE Band 14_Ant0	Right Cheek	0.276	1.155	0.717	0.025	0.253	0.53	0.97	0.28
	Right Tilted	0.142	0.709	0.514	0.035	0.120	0.26	0.63	0.16
	Left Cheek	0.205	0.496	0.319	0.022	0.080	0.29	0.40	0.10
	Left Tilted	0.115	0.533	0.339	0.026	0.074	0.19	0.41	0.10
LTE Band 26_Ant0	Right Cheek	0.205	1.155	0.717	0.025	0.253	0.46	0.97	0.28
	Right Tilted	0.104	0.709	0.514	0.035	0.120	0.22	0.63	0.16
	Left Cheek	0.158	0.496	0.319	0.022	0.080	0.24	0.40	0.10
	Left Tilted	0.125	0.533	0.339	0.026	0.074	0.20	0.41	0.10
LTE Band 66_Ant0	Right Cheek	0.137	1.155	0.717	0.025	0.253	0.39	0.97	0.28
	Right Tilted	0.059	0.709	0.514	0.035	0.120	0.18	0.63	0.16
	Left Cheek	0.094	0.496	0.319	0.022	0.080	0.17	0.40	0.10
	Left Tilted	0.074	0.533	0.339	0.026	0.074	0.15	0.41	0.10
LTE Band 25_Ant0	Right Cheek	0.132	1.155	0.717	0.025	0.253	0.39	0.97	0.28
	Right Tilted	0.052	0.709	0.514	0.035	0.120	0.17	0.63	0.16
	Left Cheek	0.106	0.496	0.319	0.022	0.080	0.19	0.40	0.10
	Left Tilted	0.080	0.533	0.339	0.026	0.074	0.15	0.41	0.10
LTE Band 30_Ant0	Right Cheek	0.107	1.155	0.717	0.025	0.253	0.36	0.97	0.28
	Right Tilted	0.091	0.709	0.514	0.035	0.120	0.21	0.63	0.16
	Left Cheek	0.101	0.496	0.319	0.022	0.080	0.18	0.40	0.10



	Left Tilted	0.094	0.533	0.339	0.026	0.074	0.17	0.41	0.10
LTE Band 7_Ant0	Right Cheek	0.101	1.155	0.717	0.025	0.253	0.35	0.97	0.28
	Right Tilted	0.084	0.709	0.514	0.035	0.120	0.20	0.63	0.16
	Left Cheek	0.122	0.496	0.319	0.022	0.080	0.20	0.40	0.10
	Left Tilted	0.093	0.533	0.339	0.026	0.074	0.17	0.41	0.10
LTE Band 41_Ant0	Right Cheek	0.041	1.155	0.717	0.025	0.253	0.29	0.97	0.28
	Right Tilted	0.036	0.709	0.514	0.035	0.120	0.16	0.63	0.16
	Left Cheek	0.053	0.496	0.319	0.022	0.080	0.13	0.40	0.10
	Left Tilted	0.043	0.533	0.339	0.026	0.074	0.12	0.41	0.10
LTE Band 41(HPUE)_Ant0	Right Cheek	0.064	1.155	0.717	0.025	0.253	0.32	0.97	0.28
	Right Tilted	0.053	0.709	0.514	0.035	0.120	0.17	0.63	0.16
	Left Cheek	0.070	0.496	0.319	0.022	0.080	0.15	0.40	0.10
	Left Tilted	0.064	0.533	0.339	0.026	0.074	0.14	0.41	0.10
N71_Ant 0	Right Cheek	0.115	1.155	0.717	0.025	0.253	0.37	0.97	0.28
	Right Tilted	0.030	0.709	0.514	0.035	0.120	0.15	0.63	0.16
	Left Cheek	0.068	0.496	0.319	0.022	0.080	0.15	0.40	0.10
	Left Tilted	0.032	0.533	0.339	0.026	0.074	0.11	0.41	0.10
N5_Ant 0	Right Cheek	0.172	1.155	0.717	0.025	0.253	0.43	0.97	0.28
	Right Tilted	0.070	0.709	0.514	0.035	0.120	0.19	0.63	0.16
	Left Cheek	0.087	0.496	0.319	0.022	0.080	0.17	0.40	0.10
	Left Tilted	0.080	0.533	0.339	0.026	0.074	0.15	0.41	0.10
N66_Ant 0	Right Cheek	0.098	1.155	0.717	0.025	0.253	0.35	0.97	0.28
	Right Tilted	0.020	0.709	0.514	0.035	0.120	0.14	0.63	0.16
	Left Cheek	0.064	0.496	0.319	0.022	0.080	0.14	0.40	0.10
	Left Tilted	0.013	0.533	0.339	0.026	0.074	0.09	0.41	0.10
N25_Ant 0	Right Cheek	0.081	1.155	0.717	0.025	0.253	0.33	0.97	0.28
	Right Tilted	0.021	0.709	0.514	0.035	0.120	0.14	0.63	0.16
	Left Cheek	0.064	0.496	0.319	0.022	0.080	0.14	0.40	0.10
	Left Tilted	0.017	0.533	0.339	0.026	0.074	0.09	0.41	0.10
N41_Ant 0	Right Cheek	0.080	1.155	0.717	0.025	0.253	0.33	0.97	0.28
	Right Tilted	0.049	0.709	0.514	0.035	0.120	0.17	0.63	0.16
	Left Cheek	0.108	0.496	0.319	0.022	0.080	0.19	0.40	0.10
	Left Tilted	0.060	0.533	0.339	0.026	0.074	0.13	0.41	0.10
N41(HPUE)_Ant 0	Right Cheek	0.158	1.155	0.717	0.025	0.253	0.41	0.97	0.28
	Right Tilted	0.100	0.709	0.514	0.035	0.120	0.22	0.63	0.16
	Left Cheek	0.195	0.496	0.319	0.022	0.080	0.28	0.40	0.10
	Left Tilted	0.114	0.533	0.339	0.026	0.074	0.19	0.41	0.10



WWAN Band	Exposure Position	1	3	6	7	9	1+3	1+6	1+7	1+6+9	1+7+9
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Bluetooth Ant 2	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850_Ant0	Right Cheek	0.173	0.381	0.394	0.025	0.253	0.55	0.57	0.20	0.82	0.45
	Right Tilted	0.077	0.224	0.292	0.035	0.120	0.30	0.37	0.11	0.49	0.23
	Left Cheek	0.100	0.157	0.239	0.022	0.080	0.26	0.34	0.12	0.42	0.20
	Left Tilted	0.072	0.170	0.208	0.026	0.074	0.24	0.28	0.10	0.35	0.17
GSM1900_Ant0	Right Cheek	0.058	0.381	0.394	0.025	0.253	0.44	0.45	0.08	0.71	0.34
	Right Tilted	0.007	0.224	0.292	0.035	0.120	0.23	0.30	0.04	0.42	0.16
	Left Cheek	0.025	0.157	0.239	0.022	0.080	0.18	0.26	0.05	0.34	0.13
	Left Tilted	0.004	0.170	0.208	0.026	0.074	0.17	0.21	0.03	0.29	0.10
WCDMA V_Ant0	Right Cheek	0.221	0.381	0.394	0.025	0.253	0.60	0.62	0.25	0.87	0.50
	Right Tilted	0.112	0.224	0.292	0.035	0.120	0.34	0.40	0.15	0.52	0.27
	Left Cheek	0.150	0.157	0.239	0.022	0.080	0.31	0.39	0.17	0.47	0.25
	Left Tilted	0.102	0.170	0.208	0.026	0.074	0.27	0.31	0.13	0.38	0.20
WCDMA IV_Ant0	Right Cheek	0.136	0.381	0.394	0.025	0.253	0.52	0.53	0.16	0.78	0.41
	Right Tilted	0.049	0.224	0.292	0.035	0.120	0.27	0.34	0.08	0.46	0.20
	Left Cheek	0.082	0.157	0.239	0.022	0.080	0.24	0.32	0.10	0.40	0.18
	Left Tilted	0.053	0.170	0.208	0.026	0.074	0.22	0.26	0.08	0.34	0.15
WCDMA II_Ant0	Right Cheek	0.147	0.381	0.394	0.025	0.253	0.53	0.54	0.17	0.79	0.43
	Right Tilted	0.058	0.224	0.292	0.035	0.120	0.28	0.35	0.09	0.47	0.21
	Left Cheek	0.080	0.157	0.239	0.022	0.080	0.24	0.32	0.10	0.40	0.18
	Left Tilted	0.065	0.170	0.208	0.026	0.074	0.24	0.27	0.09	0.35	0.17
LTE Band 71_Ant0	Right Cheek	0.191	0.381	0.394	0.025	0.253	0.57	0.59	0.22	0.84	0.47
	Right Tilted	0.083	0.224	0.292	0.035	0.120	0.31	0.38	0.12	0.50	0.24
	Left Cheek	0.119	0.157	0.239	0.022	0.080	0.28	0.36	0.14	0.44	0.22
	Left Tilted	0.028	0.170	0.208	0.026	0.074	0.20	0.24	0.05	0.31	0.13
LTE Band 12_Ant0	Right Cheek	0.225	0.381	0.394	0.025	0.253	0.61	0.62	0.25	0.87	0.50
	Right Tilted	0.086	0.224	0.292	0.035	0.120	0.31	0.38	0.12	0.50	0.24
	Left Cheek	0.191	0.157	0.239	0.022	0.080	0.35	0.43	0.21	0.51	0.29
	Left Tilted	0.097	0.170	0.208	0.026	0.074	0.27	0.31	0.12	0.38	0.20
LTE Band 13_Ant0	Right Cheek	0.340	0.381	0.394	0.025	0.253	0.72	0.73	0.37	0.99	0.62
	Right Tilted	0.159	0.224	0.292	0.035	0.120	0.38	0.45	0.19	0.57	0.31
	Left Cheek	0.264	0.157	0.239	0.022	0.080	0.42	0.50	0.29	0.58	0.37
	Left Tilted	0.124	0.170	0.208	0.026	0.074	0.29	0.33	0.15	0.41	0.22
LTE Band 14_Ant0	Right Cheek	0.276	0.381	0.394	0.025	0.253	0.66	0.67	0.30	0.92	0.55
	Right Tilted	0.142	0.224	0.292	0.035	0.120	0.37	0.43	0.18	0.55	0.30
	Left Cheek	0.205	0.157	0.239	0.022	0.080	0.36	0.44	0.23	0.52	0.31
	Left Tilted	0.115	0.170	0.208	0.026	0.074	0.29	0.32	0.14	0.40	0.22
LTE Band 26_Ant0	Right Cheek	0.205	0.381	0.394	0.025	0.253	0.59	0.60	0.23	0.85	0.48
	Right Tilted	0.104	0.224	0.292	0.035	0.120	0.33	0.40	0.14	0.52	0.26
	Left Cheek	0.158	0.157	0.239	0.022	0.080	0.32	0.40	0.18	0.48	0.26
	Left Tilted	0.125	0.170	0.208	0.026	0.074	0.30	0.33	0.15	0.41	0.23
LTE Band 66_Ant0	Right Cheek	0.137	0.381	0.394	0.025	0.253	0.52	0.53	0.16	0.78	0.42
	Right Tilted	0.059	0.224	0.292	0.035	0.120	0.28	0.35	0.09	0.47	0.21
	Left Cheek	0.094	0.157	0.239	0.022	0.080	0.25	0.33	0.12	0.41	0.20
	Left Tilted	0.074	0.170	0.208	0.026	0.074	0.24	0.28	0.10	0.36	0.17
LTE Band 25_Ant0	Right Cheek	0.132	0.381	0.394	0.025	0.253	0.51	0.53	0.16	0.78	0.41
	Right Tilted	0.052	0.224	0.292	0.035	0.120	0.28	0.34	0.09	0.46	0.21
	Left Cheek	0.106	0.157	0.239	0.022	0.080	0.26	0.35	0.13	0.43	0.21
	Left Tilted	0.080	0.170	0.208	0.026	0.074	0.25	0.29	0.11	0.36	0.18
LTE Band 30_Ant0	Right Cheek	0.107	0.381	0.394	0.025	0.253	0.49	0.50	0.13	0.75	0.39
	Right Tilted	0.091	0.224	0.292	0.035	0.120	0.32	0.38	0.13	0.50	0.25



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	Left Cheek	0.101	0.157	0.239	0.022	0.080	0.26	0.34	0.12	0.42	0.20
	Left Tilted	0.094	0.170	0.208	0.026	0.074	0.26	0.30	0.12	0.38	0.19
LTE Band 7_Ant0	Right Cheek	0.101	0.381	0.394	0.025	0.253	0.48	0.50	0.13	0.75	0.38
	Right Tilted	0.084	0.224	0.292	0.035	0.120	0.31	0.38	0.12	0.50	0.24
	Left Cheek	0.122	0.157	0.239	0.022	0.080	0.28	0.36	0.14	0.44	0.22
	Left Tilted	0.093	0.170	0.208	0.026	0.074	0.26	0.30	0.12	0.38	0.19
LTE Band 41_Ant0	Right Cheek	0.041	0.381	0.394	0.025	0.253	0.42	0.44	0.07	0.69	0.32
	Right Tilted	0.036	0.224	0.292	0.035	0.120	0.26	0.33	0.07	0.45	0.19
	Left Cheek	0.053	0.157	0.239	0.022	0.080	0.21	0.29	0.08	0.37	0.16
	Left Tilted	0.043	0.170	0.208	0.026	0.074	0.21	0.25	0.07	0.33	0.14
LTE Band 41(HPUE)_Ant0	Right Cheek	0.064	0.381	0.394	0.025	0.253	0.45	0.46	0.09	0.71	0.34
	Right Tilted	0.053	0.224	0.292	0.035	0.120	0.28	0.35	0.09	0.47	0.21
	Left Cheek	0.070	0.157	0.239	0.022	0.080	0.23	0.31	0.09	0.39	0.17
	Left Tilted	0.064	0.170	0.208	0.026	0.074	0.23	0.27	0.09	0.35	0.16
N71_Ant 0	Right Cheek	0.115	0.381	0.394	0.025	0.253	0.50	0.51	0.14	0.76	0.39
	Right Tilted	0.030	0.224	0.292	0.035	0.120	0.25	0.32	0.07	0.44	0.19
	Left Cheek	0.068	0.157	0.239	0.022	0.080	0.23	0.31	0.09	0.39	0.17
	Left Tilted	0.032	0.170	0.208	0.026	0.074	0.20	0.24	0.06	0.31	0.13
N5_Ant 0	Right Cheek	0.172	0.381	0.394	0.025	0.253	0.55	0.57	0.20	0.82	0.45
	Right Tilted	0.070	0.224	0.292	0.035	0.120	0.29	0.36	0.11	0.48	0.23
	Left Cheek	0.087	0.157	0.239	0.022	0.080	0.24	0.33	0.11	0.41	0.19
	Left Tilted	0.080	0.170	0.208	0.026	0.074	0.25	0.29	0.11	0.36	0.18
N66_Ant 0	Right Cheek	0.098	0.381	0.394	0.025	0.253	0.48	0.49	0.12	0.75	0.38
	Right Tilted	0.020	0.224	0.292	0.035	0.120	0.24	0.31	0.06	0.43	0.18
	Left Cheek	0.064	0.157	0.239	0.022	0.080	0.22	0.30	0.09	0.38	0.17
	Left Tilted	0.013	0.170	0.208	0.026	0.074	0.18	0.22	0.04	0.30	0.11
N25_Ant 0	Right Cheek	0.081	0.381	0.394	0.025	0.253	0.46	0.48	0.11	0.73	0.36
	Right Tilted	0.021	0.224	0.292	0.035	0.120	0.25	0.31	0.06	0.43	0.18
	Left Cheek	0.064	0.157	0.239	0.022	0.080	0.22	0.30	0.09	0.38	0.17
	Left Tilted	0.017	0.170	0.208	0.026	0.074	0.19	0.23	0.04	0.30	0.12
N41_Ant 0	Right Cheek	0.080	0.381	0.394	0.025	0.253	0.46	0.47	0.11	0.73	0.36
	Right Tilted	0.049	0.224	0.292	0.035	0.120	0.27	0.34	0.08	0.46	0.20
	Left Cheek	0.108	0.157	0.239	0.022	0.080	0.27	0.35	0.13	0.43	0.21
	Left Tilted	0.060	0.170	0.208	0.026	0.074	0.23	0.27	0.09	0.34	0.16
N41(HPUE)_Ant 0	Right Cheek	0.158	0.381	0.394	0.025	0.253	0.54	0.55	0.18	0.81	0.44
	Right Tilted	0.100	0.224	0.292	0.035	0.120	0.32	0.39	0.14	0.51	0.26
	Left Cheek	0.195	0.157	0.239	0.022	0.080	0.35	0.43	0.22	0.51	0.30
	Left Tilted	0.114	0.170	0.208	0.026	0.074	0.284	0.322	0.140	0.396	0.214



17.3 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1	3	6	9	1+9	6+9
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 2+4 1g SAR (W/kg)	5GHz WLAN Ant 4+12 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
WCDMA V_Ant1	Front	0.663	0.124	0.010	0.066	0.73	0.08
	Back	0.797	0.381	0.345	0.125	0.92	0.47
	Left side	0.184		0.119		0.18	0.12
	Right side	0.284				0.28	0.00
	Top side	0.993	0.163	0.085	0.081	1.07	0.17
	Bottom side					0.00	0.00
WCDMA IV_Ant1	Front	0.554	0.124	0.010	0.066	0.62	0.08
	Back	0.760	0.381	0.345	0.125	0.89	0.47
	Left side			0.119		0.00	0.12
	Right side	0.072				0.07	0.00
	Top side	0.948	0.163	0.085	0.081	1.03	0.17
	Bottom side					0.00	0.00
WCDMA II_Ant1	Front	0.382	0.124	0.010	0.066	0.45	0.08
	Back	0.643	0.381	0.345	0.125	0.77	0.47
	Left side			0.119		0.00	0.12
	Right side	0.056				0.06	0.00
	Top side	0.998	0.163	0.085	0.081	1.08	0.17
	Bottom side					0.00	0.00
LTE Band 71_Ant1	Front	0.497	0.124	0.010	0.066	0.56	0.08
	Back	0.714	0.381	0.345	0.125	0.84	0.47
	Left side	0.358		0.119		0.36	0.12
	Right side	0.625				0.63	0.00
	Top side	0.525	0.163	0.085	0.081	0.61	0.17
	Bottom side					0.00	0.00
LTE Band 12_Ant1	Front	0.661	0.124	0.010	0.066	0.73	0.08
	Back	0.792	0.381	0.345	0.125	0.92	0.47
	Left side	0.351		0.119		0.35	0.12
	Right side	0.627				0.63	0.00
	Top side	0.763	0.163	0.085	0.081	0.84	0.17
	Bottom side					0.00	0.00
LTE Band 13_Ant1	Front	0.879	0.124	0.010	0.066	0.95	0.08
	Back	0.931	0.381	0.345	0.125	1.06	0.47
	Left side	0.261		0.119		0.26	0.12
	Right side	0.775				0.78	0.00
	Top side	0.977	0.163	0.085	0.081	1.06	0.17
	Bottom side					0.00	0.00
LTE Band 14_Ant1	Front	0.739	0.124	0.010	0.066	0.81	0.08
	Back	0.892	0.381	0.345	0.125	1.02	0.47
	Left side	0.279		0.119		0.28	0.12
	Right side	0.593				0.59	0.00
	Top side	0.998	0.163	0.085	0.081	1.08	0.17
	Bottom side					0.00	0.00
LTE Band 26_Ant1	Front	0.607	0.124	0.010	0.066	0.67	0.08
	Back	0.685	0.381	0.345	0.125	0.81	0.47
	Left side	0.185		0.119		0.19	0.12
	Right side	0.362				0.36	0.00
	Top side	0.995	0.163	0.085	0.081	1.08	0.17
	Bottom side					0.00	0.00
LTE Band 66_Ant1	Front	0.520	0.124	0.010	0.066	0.59	0.08
	Back	0.795	0.381	0.345	0.125	0.92	0.47
	Left side			0.119		0.00	0.12



	Right side	0.082				0.08	0.00
	Top side	0.924	0.163	0.085	0.081	1.01	0.17
	Bottom side					0.00	0.00
LTE Band 25_Ant1	Front	0.455	0.124	0.010	0.066	0.52	0.08
	Back	0.623	0.381	0.345	0.125	0.75	0.47
	Left side			0.119		0.00	0.12
	Right side	0.102				0.10	0.00
	Top side	0.998	0.163	0.085	0.081	1.08	0.17
	Bottom side					0.00	0.00
N71_Ant 1	Front	0.385	0.124	0.010	0.066	0.45	0.08
	Back	0.489	0.381	0.345	0.125	0.61	0.47
	Left side	0.234		0.119		0.23	0.12
	Right side	0.448				0.45	0.00
	Top side	0.458	0.163	0.085	0.081	0.54	0.17
	Bottom side					0.00	0.00
N5_Ant 1	Front	0.847	0.124	0.010	0.066	0.91	0.08
	Back	0.895	0.381	0.345	0.125	1.02	0.47
	Left side	0.195		0.119		0.20	0.12
	Right side	0.412				0.41	0.00
	Top side	0.997	0.163	0.085	0.081	1.08	0.17
	Bottom side					0.00	0.00
N66_Ant 1	Front	0.562	0.124	0.010	0.066	0.63	0.08
	Back	0.782	0.381	0.345	0.125	0.91	0.47
	Left side			0.119		0.00	0.12
	Right side	0.076				0.08	0.00
	Top side	0.999	0.163	0.085	0.081	1.08	0.17
	Bottom side					0.00	0.00
N25_Ant 1	Front	0.563	0.124	0.010	0.066	0.63	0.08
	Back	0.693	0.381	0.345	0.125	0.82	0.47
	Left side			0.119		0.00	0.12
	Right side	0.098				0.10	0.00
	Top side	0.947	0.163	0.085	0.081	1.03	0.17
	Bottom side					0.00	0.00
N77_Ant 3_FCC	Front	0.159	0.124	0.010	0.066	0.23	0.08
	Back	0.924	0.381	0.345	0.125	1.05	0.47
	Left side	0.516		0.119		0.52	0.12
	Right side					0.00	0.00
	Top side	0.108	0.163	0.085	0.081	0.19	0.17
	Bottom side					0.00	0.00
N77_Ant 3_Part 27Q	Front	0.117	0.124	0.010	0.066	0.18	0.08
	Back	0.997	0.381	0.345	0.125	1.12	0.47
	Left side	0.345		0.119		0.35	0.12
	Right side					0.00	0.00
	Top side	0.110	0.163	0.085	0.081	0.19	0.17
	Bottom side					0.00	0.00
N77(HPUE)_Ant 3_FCC	Front	0.159	0.124	0.010	0.066	0.23	0.08
	Back	0.924	0.381	0.345	0.125	1.05	0.47
	Left side	0.516		0.119		0.52	0.12
	Right side					0.00	0.00
	Top side	0.108	0.163	0.085	0.081	0.19	0.17
	Bottom side					0.00	0.00
N77(HPUE)_Ant 3_Part 27Q	Front	0.117	0.124	0.010	0.066	0.18	0.08
	Back	0.997	0.381	0.345	0.125	1.12	0.47
	Left side	0.345		0.119		0.35	0.12
	Right side					0.00	0.00
	Top side	0.110	0.163	0.085	0.081	0.19	0.17
	Bottom side					0.00	0.00



WWAN Band	Exposure Position	1	3	6	9	1+3	1+6	1+6+9
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 2+4 1g SAR (W/kg)	5GHz WLAN Ant 4+12 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
WCDMA V_Ant1	Front	0.663	0.124	0.010	0.066	0.79	0.67	0.74
	Back	0.797	0.381	0.345	0.125	1.18	1.14	1.27
	Left side	0.184		0.119		0.18	0.30	0.30
	Right side	0.284				0.28	0.28	0.28
	Top side	0.993	0.163	0.085	0.081	1.16	1.08	1.16
	Bottom side					0.00	0.00	0.00
WCDMA IV_Ant1	Front	0.554	0.124	0.010	0.066	0.68	0.56	0.63
	Back	0.760	0.381	0.345	0.125	1.14	1.11	1.23
	Left side			0.119		0.00	0.12	0.12
	Right side	0.072				0.07	0.07	0.07
	Top side	0.948	0.163	0.085	0.081	1.11	1.03	1.11
	Bottom side					0.00	0.00	0.00
WCDMA II_Ant1	Front	0.382	0.124	0.010	0.066	0.51	0.39	0.46
	Back	0.643	0.381	0.345	0.125	1.02	0.99	1.11
	Left side			0.119		0.00	0.12	0.12
	Right side	0.056				0.06	0.06	0.06
	Top side	0.998	0.163	0.085	0.081	1.16	1.08	1.16
	Bottom side					0.00	0.00	0.00
LTE Band 71_Ant1	Front	0.497	0.124	0.010	0.066	0.62	0.51	0.57
	Back	0.714	0.381	0.345	0.125	1.10	1.06	1.18
	Left side	0.358		0.119		0.36	0.48	0.48
	Right side	0.625				0.63	0.63	0.63
	Top side	0.525	0.163	0.085	0.081	0.69	0.61	0.69
	Bottom side					0.00	0.00	0.00
LTE Band 12_Ant1	Front	0.661	0.124	0.010	0.066	0.79	0.67	0.74
	Back	0.792	0.381	0.345	0.125	1.17	1.14	1.26
	Left side	0.351		0.119		0.35	0.47	0.47
	Right side	0.627				0.63	0.63	0.63
	Top side	0.763	0.163	0.085	0.081	0.93	0.85	0.93
	Bottom side					0.00	0.00	0.00
LTE Band 13_Ant1	Front	0.879	0.124	0.010	0.066	1.00	0.89	0.96
	Back	0.931	0.381	0.345	0.125	1.31	1.28	1.40
	Left side	0.261		0.119		0.26	0.38	0.38
	Right side	0.775				0.78	0.78	0.78
	Top side	0.977	0.163	0.085	0.081	1.14	1.06	1.14
	Bottom side					0.00	0.00	0.00
LTE Band 14_Ant1	Front	0.739	0.124	0.010	0.066	0.86	0.75	0.82
	Back	0.892	0.381	0.345	0.125	1.27	1.24	1.36
	Left side	0.279		0.119		0.28	0.40	0.40
	Right side	0.593				0.59	0.59	0.59
	Top side	0.998	0.163	0.085	0.081	1.16	1.08	1.16
	Bottom side					0.00	0.00	0.00
LTE Band 26_Ant1	Front	0.607	0.124	0.010	0.066	0.73	0.62	0.68
	Back	0.685	0.381	0.345	0.125	1.07	1.03	1.16
	Left side	0.185		0.119		0.19	0.30	0.30
	Right side	0.362				0.36	0.36	0.36
	Top side	0.995	0.163	0.085	0.081	1.16	1.08	1.16
	Bottom side					0.00	0.00	0.00
LTE Band 66_Ant1	Front	0.520	0.124	0.010	0.066	0.64	0.53	0.60
	Back	0.795	0.381	0.345	0.125	1.18	1.14	1.27
	Left side			0.119		0.00	0.12	0.12



	Right side	0.082				0.08	0.08	0.08
	Top side	0.924	0.163	0.085	0.081	1.09	1.01	1.09
	Bottom side					0.00	0.00	0.00
LTE Band 25_Ant1	Front	0.455	0.124	0.010	0.066	0.58	0.47	0.53
	Back	0.623	0.381	0.345	0.125	1.00	0.97	1.09
	Left side			0.119		0.00	0.12	0.12
	Right side	0.102				0.10	0.10	0.10
	Top side	0.998	0.163	0.085	0.081	1.16	1.08	1.16
	Bottom side					0.00	0.00	0.00
N71_Ant 1	Front	0.385	0.124	0.010	0.066	0.51	0.40	0.46
	Back	0.489	0.381	0.345	0.125	0.87	0.83	0.96
	Left side	0.234		0.119		0.23	0.35	0.35
	Right side	0.448				0.45	0.45	0.45
	Top side	0.458	0.163	0.085	0.081	0.62	0.54	0.62
	Bottom side					0.00	0.00	0.00
N5_Ant 1	Front	0.847	0.124	0.010	0.066	0.97	0.86	0.92
	Back	0.895	0.381	0.345	0.125	1.28	1.24	1.37
	Left side	0.195		0.119		0.20	0.31	0.31
	Right side	0.412				0.41	0.41	0.41
	Top side	0.997	0.163	0.085	0.081	1.16	1.08	1.16
	Bottom side					0.00	0.00	0.00
N66_Ant 1	Front	0.562	0.124	0.010	0.066	0.69	0.57	0.64
	Back	0.782	0.381	0.345	0.125	1.16	1.13	1.25
	Left side			0.119		0.00	0.12	0.12
	Right side	0.076				0.08	0.08	0.08
	Top side	0.999	0.163	0.085	0.081	1.16	1.08	1.17
	Bottom side					0.00	0.00	0.00
N25_Ant 1	Front	0.563	0.124	0.010	0.066	0.69	0.57	0.64
	Back	0.693	0.381	0.345	0.125	1.07	1.04	1.16
	Left side			0.119		0.00	0.12	0.12
	Right side	0.098				0.10	0.10	0.10
	Top side	0.947	0.163	0.085	0.081	1.11	1.03	1.11
	Bottom side					0.00	0.00	0.00
N77_Ant 3_FCC	Front	0.159	0.124	0.010	0.066	0.28	0.17	0.24
	Back	0.924	0.381	0.345	0.125	1.31	1.27	1.39
	Left side	0.516		0.119		0.52	0.64	0.64
	Right side					0.00	0.00	0.00
	Top side	0.108	0.163	0.085	0.081	0.27	0.19	0.27
	Bottom side					0.00	0.00	0.00
N77_Ant 3_Part 27Q	Front	0.117	0.124	0.010	0.066	0.24	0.13	0.19
	Back	0.997	0.381	0.345	0.125	1.38	1.34	1.47
	Left side	0.345		0.119		0.35	0.46	0.46
	Right side					0.00	0.00	0.00
	Top side	0.110	0.163	0.085	0.081	0.27	0.20	0.28
	Bottom side					0.00	0.00	0.00
N77(HPUE)_Ant 3_FCC	Front	0.159	0.124	0.010	0.066	0.28	0.17	0.24
	Back	0.924	0.381	0.345	0.125	1.31	1.27	1.39
	Left side	0.516		0.119		0.52	0.64	0.64
	Right side					0.00	0.00	0.00
	Top side	0.108	0.163	0.085	0.081	0.27	0.19	0.27
	Bottom side					0.00	0.00	0.00
N77(HPUE)_Ant 3_Part 27Q	Front	0.117	0.124	0.010	0.066	0.24	0.13	0.19
	Back	0.997	0.381	0.345	0.125	1.38	1.34	1.47
	Left side	0.345		0.119		0.35	0.46	0.46
	Right side					0.00	0.00	0.00
	Top side	0.110	0.163	0.085	0.081	0.27	0.20	0.28



	Bottom side					0.00	0.00	0.00
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WWAN Band	Exposure Position	1	3	6	9	1+9	6+9
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 2+4 1g SAR (W/kg)	5GHz WLAN Ant 4+12 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
GSM850_Ant0	Front	0.662	0.124	0.010	0.066	0.73	0.08
	Back	0.733	0.381	0.345	0.125	0.86	0.47
	Left side	0.080		0.119		0.08	0.12
	Right side	0.167				0.17	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	0.604				0.60	0.00
GSM1900_Ant0	Front	0.505	0.124	0.010	0.066	0.57	0.08
	Back	0.596	0.381	0.345	0.125	0.72	0.47
	Left side			0.119		0.00	0.12
	Right side					0.00	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.239				1.24	0.00
WCDMA V_Ant0	Front	0.937	0.124	0.010	0.066	1.00	0.08
	Back	1.140	0.381	0.345	0.125	1.27	0.47
	Left side	0.124		0.119		0.12	0.12
	Right side	0.208				0.21	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	0.892				0.89	0.00
WCDMA IV_Ant0	Front	0.670	0.124	0.010	0.066	0.74	0.08
	Back	0.755	0.381	0.345	0.125	0.88	0.47
	Left side			0.119		0.00	0.12
	Right side	0.057				0.06	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.152				1.15	0.00
WCDMA II_Ant0	Front	0.446	0.124	0.010	0.066	0.51	0.08
	Back	0.616	0.381	0.345	0.125	0.74	0.47
	Left side			0.119		0.00	0.12
	Right side					0.00	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.238				1.24	0.00
LTE Band 71_Ant0	Front	0.407	0.124	0.010	0.066	0.47	0.08
	Back	0.598	0.381	0.345	0.125	0.72	0.47
	Left side	0.255		0.119		0.26	0.12
	Right side	0.241				0.24	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	0.413				0.41	0.00
LTE Band 12_Ant0	Front	0.504	0.124	0.010	0.066	0.57	0.08
	Back	0.743	0.381	0.345	0.125	0.87	0.47
	Left side	0.263		0.119		0.26	0.12
	Right side	0.228				0.23	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	0.473				0.47	0.00
LTE Band 13_Ant0	Front	1.043	0.124	0.010	0.066	1.11	0.08
	Back	1.252	0.381	0.345	0.125	1.38	0.47
	Left side	0.336		0.119		0.34	0.12
	Right side	0.600				0.60	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	0.942				0.94	0.00
LTE Band 14_Ant0	Front	0.747	0.124	0.010	0.066	0.81	0.08
	Back	0.874	0.381	0.345	0.125	1.00	0.47



	Left side	0.249		0.119		0.25	0.12
	Right side	0.443				0.44	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	0.529				0.53	0.00
LTE Band 26_Ant0	Front	1.086	0.124	0.010	0.066	1.15	0.08
	Back	1.224	0.381	0.345	0.125	1.35	0.47
	Left side	0.137		0.119		0.14	0.12
	Right side	0.183				0.18	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.011				1.01	0.00
LTE Band 66_Ant0	Front	0.551	0.124	0.010	0.066	0.62	0.08
	Back	0.590	0.381	0.345	0.125	0.72	0.47
	Left side			0.119		0.00	0.12
	Right side					0.00	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.185				1.19	0.00
LTE Band 25_Ant0	Front	0.451	0.124	0.010	0.066	0.52	0.08
	Back	0.524	0.381	0.345	0.125	0.65	0.47
	Left side			0.119		0.00	0.12
	Right side					0.00	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.122				1.12	0.00
LTE Band 30_Ant0	Front	0.674	0.124	0.010	0.066	0.74	0.08
	Back	0.913	0.381	0.345	0.125	1.04	0.47
	Left side			0.119		0.00	0.12
	Right side	0.169				0.17	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.169				1.17	0.00
LTE Band 7_Ant0	Front	0.656	0.124	0.010	0.066	0.72	0.08
	Back	0.837	0.381	0.345	0.125	0.96	0.47
	Left side	0.199		0.119		0.20	0.12
	Right side	0.205				0.21	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.081				1.08	0.00
LTE Band 41_Ant0	Front	0.695	0.124	0.010	0.066	0.76	0.08
	Back	0.878	0.381	0.345	0.125	1.00	0.47
	Left side	0.220		0.119		0.22	0.12
	Right side	0.207				0.21	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.248				1.25	0.00
LTE Band 41(HPUE)_Ant0	Front	0.686	0.124	0.010	0.066	0.75	0.08
	Back	0.745	0.381	0.345	0.125	0.87	0.47
	Left side	0.235		0.119		0.24	0.12
	Right side	0.207				0.21	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.213				1.21	0.00
N71_Ant 0	Front	0.260	0.124	0.010	0.066	0.33	0.08
	Back	0.353	0.381	0.345	0.125	0.48	0.47
	Left side	0.138		0.119		0.14	0.12
	Right side	0.134				0.13	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	0.219				0.22	0.00
N5_Ant 0	Front	0.550	0.124	0.010	0.066	0.62	0.08
	Back	0.693	0.381	0.345	0.125	0.82	0.47
	Left side	0.076		0.119		0.08	0.12
	Right side	0.120				0.12	0.00

	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	0.496				0.50	0.00
N66_Ant 0	Front	0.590	0.124	0.010	0.066	0.66	0.08
	Back	0.669	0.381	0.345	0.125	0.79	0.47
	Left side			0.119		0.00	0.12
	Right side					0.00	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.253				1.25	0.00
N25_Ant 0	Front	0.497	0.124	0.010	0.066	0.56	0.08
	Back	0.559	0.381	0.345	0.125	0.68	0.47
	Left side			0.119		0.00	0.12
	Right side					0.00	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.168				1.17	0.00
N41_Ant 0	Front	0.670	0.124	0.010	0.066	0.74	0.08
	Back	0.880	0.381	0.345	0.125	1.01	0.47
	Left side	0.214		0.119		0.21	0.12
	Right side	0.205				0.21	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.191				1.19	0.00
N41(HPUE)_Ant 0	Front	0.670	0.124	0.010	0.066	0.74	0.08
	Back	0.880	0.381	0.345	0.125	1.01	0.47
	Left side	0.214		0.119		0.21	0.12
	Right side	0.205				0.21	0.00
	Top side		0.163	0.085	0.081	0.08	0.17
	Bottom side	1.191				1.19	0.00



WWAN Band	Exposure Position	1	3	6	9	1+3	1+6	1+6+9	Case No.
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 2+4 1g SAR (W/kg)	5GHz WLAN Ant 4+12 1g SAR (W/kg)	Bluetooth Ant 2 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	
GSM850_Ant0	Front	0.662	0.124	0.010	0.066	0.79	0.67	0.74	
	Back	0.733	0.381	0.345	0.125	1.11	1.08	1.20	
	Left side	0.080		0.119		0.08	0.20	0.20	
	Right side	0.167				0.17	0.17	0.17	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	0.604				0.60	0.60	0.60	
GSM1900_Ant0	Front	0.505	0.124	0.010	0.066	0.63	0.52	0.58	
	Back	0.596	0.381	0.345	0.125	0.98	0.94	1.07	
	Left side			0.119		0.00	0.12	0.12	
	Right side					0.00	0.00	0.00	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.239				1.24	1.24	1.24	
WCDMA V_Ant0	Front	0.937	0.124	0.010	0.066	1.06	0.95	1.01	
	Back	1.140	0.381	0.345	0.125	1.52	1.49	1.61	01
	Left side	0.124		0.119		0.12	0.24	0.24	
	Right side	0.208				0.21	0.21	0.21	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	0.892				0.89	0.89	0.89	
WCDMA IV_Ant0	Front	0.670	0.124	0.010	0.066	0.79	0.68	0.75	
	Back	0.755	0.381	0.345	0.125	1.14	1.10	1.23	
	Left side			0.119		0.00	0.12	0.12	
	Right side	0.057				0.06	0.06	0.06	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.152				1.15	1.15	1.15	
WCDMA II_Ant0	Front	0.446	0.124	0.010	0.066	0.57	0.46	0.52	
	Back	0.616	0.381	0.345	0.125	1.00	0.96	1.09	
	Left side			0.119		0.00	0.12	0.12	
	Right side					0.00	0.00	0.00	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.238				1.24	1.24	1.24	
LTE Band 71_Ant0	Front	0.407	0.124	0.010	0.066	0.53	0.42	0.48	
	Back	0.598	0.381	0.345	0.125	0.98	0.94	1.07	
	Left side	0.255		0.119		0.26	0.37	0.37	
	Right side	0.241				0.24	0.24	0.24	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	0.413				0.41	0.41	0.41	
LTE Band 12_Ant0	Front	0.504	0.124	0.010	0.066	0.63	0.51	0.58	
	Back	0.743	0.381	0.345	0.125	1.12	1.09	1.21	
	Left side	0.263		0.119		0.26	0.38	0.38	
	Right side	0.228				0.23	0.23	0.23	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	0.473				0.47	0.47	0.47	
LTE Band 13_Ant0	Front	1.043	0.124	0.010	0.066	1.17	1.05	1.12	
	Back	1.252	0.381	0.345	0.125	1.63	1.60	1.72	02&03
	Left side	0.336		0.119		0.34	0.46	0.46	
	Right side	0.600				0.60	0.60	0.60	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	0.942				0.94	0.94	0.94	
LTE Band 14_Ant0	Front	0.747	0.124	0.010	0.066	0.87	0.76	0.82	
	Back	0.874	0.381	0.345	0.125	1.26	1.22	1.34	
	Left side	0.249		0.119		0.25	0.37	0.37	



	Right side	0.443				0.44	0.44	0.44	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	0.529				0.53	0.53	0.53	
LTE Band 26_Ant0	Front	1.086	0.124	0.010	0.066	1.21	1.10	1.16	
	Back	1.224	0.381	0.345	0.125	1.61	1.57	1.69	04&05
	Left side	0.137		0.119		0.14	0.26	0.26	
	Right side	0.183				0.18	0.18	0.18	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.011				1.01	1.01	1.01	
LTE Band 66_Ant0	Front	0.551	0.124	0.010	0.066	0.68	0.56	0.63	
	Back	0.590	0.381	0.345	0.125	0.97	0.94	1.06	
	Left side			0.119		0.00	0.12	0.12	
	Right side					0.00	0.00	0.00	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.185				1.19	1.19	1.19	
LTE Band 25_Ant0	Front	0.451	0.124	0.010	0.066	0.58	0.46	0.53	
	Back	0.524	0.381	0.345	0.125	0.91	0.87	0.99	
	Left side			0.119		0.00	0.12	0.12	
	Right side					0.00	0.00	0.00	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.122				1.12	1.12	1.12	
LTE Band 30_Ant0	Front	0.674	0.124	0.010	0.066	0.80	0.68	0.75	
	Back	0.913	0.381	0.345	0.125	1.29	1.26	1.38	
	Left side			0.119		0.00	0.12	0.12	
	Right side	0.169				0.17	0.17	0.17	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.169				1.17	1.17	1.17	
LTE Band 7_Ant0	Front	0.656	0.124	0.010	0.066	0.78	0.67	0.73	
	Back	0.837	0.381	0.345	0.125	1.22	1.18	1.31	
	Left side	0.199		0.119		0.20	0.32	0.32	
	Right side	0.205				0.21	0.21	0.21	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.081				1.08	1.08	1.08	
LTE Band 41_Ant0	Front	0.695	0.124	0.010	0.066	0.82	0.71	0.77	
	Back	0.878	0.381	0.345	0.125	1.26	1.22	1.35	
	Left side	0.220		0.119		0.22	0.34	0.34	
	Right side	0.207				0.21	0.21	0.21	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.248				1.25	1.25	1.25	
LTE Band 41(HPUE)_Ant0	Front	0.686	0.124	0.010	0.066	0.81	0.70	0.76	
	Back	0.745	0.381	0.345	0.125	1.13	1.09	1.22	
	Left side	0.235		0.119		0.24	0.35	0.35	
	Right side	0.207				0.21	0.21	0.21	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.213				1.21	1.21	1.21	
N71_Ant 0	Front	0.260	0.124	0.010	0.066	0.38	0.27	0.34	
	Back	0.353	0.381	0.345	0.125	0.73	0.70	0.82	
	Left side	0.138		0.119		0.14	0.26	0.26	
	Right side	0.134				0.13	0.13	0.13	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	0.219				0.22	0.22	0.22	
N5_Ant 0	Front	0.550	0.124	0.010	0.066	0.67	0.56	0.63	
	Back	0.693	0.381	0.345	0.125	1.07	1.04	1.16	
	Left side	0.076		0.119		0.08	0.20	0.20	
	Right side	0.120				0.12	0.12	0.12	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	

	Bottom side	0.496				0.50	0.50	0.50	
N66_Ant 0	Front	0.590	0.124	0.010	0.066	0.71	0.60	0.67	
	Back	0.669	0.381	0.345	0.125	1.05	1.01	1.14	
	Left side			0.119		0.00	0.12	0.12	
	Right side					0.00	0.00	0.00	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.253				1.25	1.25	1.25	
N25_Ant 0	Front	0.497	0.124	0.010	0.066	0.62	0.51	0.57	
	Back	0.559	0.381	0.345	0.125	0.94	0.90	1.03	
	Left side			0.119		0.00	0.12	0.12	
	Right side					0.00	0.00	0.00	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.168				1.17	1.17	1.17	
N41_Ant 0	Front	0.670	0.124	0.010	0.066	0.79	0.68	0.75	
	Back	0.880	0.381	0.345	0.125	1.26	1.23	1.35	
	Left side	0.214		0.119		0.21	0.33	0.33	
	Right side	0.205				0.21	0.21	0.21	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.191				1.19	1.19	1.19	
N41(HPUE)_Ant 0	Front	0.670	0.124	0.010	0.066	0.79	0.68	0.75	
	Back	0.880	0.381	0.345	0.125	1.26	1.23	1.35	
	Left side	0.214		0.119		0.21	0.33	0.33	
	Right side	0.205				0.21	0.21	0.21	
	Top side		0.163	0.085	0.081	0.16	0.09	0.17	
	Bottom side	1.191				1.19	1.19	1.19	

17.4 Body-Worn Accessory Exposure Conditions

WWAN Band	Exposure Position	1	3	6	7	9	1+9	6+9	7+9
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Bluetooth Ant 2	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WCDMA V_Ant1	Front	0.993	0.347	0.129	0.013	0.066	1.06	0.20	0.08
	Back	1.105	1.161	1.156	1.170	0.125	1.23	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
WCDMA IV_Ant1	Front	0.965	0.347	0.129	0.013	0.066	1.03	0.20	0.08
	Back	1.241	1.161	1.156	1.170	0.125	1.37	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.181					1.18	0.00	0.00
WCDMA II_Ant1	Front	0.519	0.347	0.129	0.013	0.066	0.59	0.20	0.08
	Back	1.113	1.161	1.156	1.170	0.125	1.24	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 71_Ant1	Front	0.497	0.347	0.129	0.013	0.066	0.56	0.20	0.08
	Back	0.714	1.161	1.156	1.170	0.125	0.84	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 12_Ant1	Front	0.661	0.347	0.129	0.013	0.066	0.73	0.20	0.08
	Back	0.792	1.161	1.156	1.170	0.125	0.92	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 13_Ant1	Front	0.879	0.347	0.129	0.013	0.066	0.95	0.20	0.08
	Back	0.931	1.161	1.156	1.170	0.125	1.06	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 14_Ant1	Front	0.739	0.347	0.129	0.013	0.066	0.81	0.20	0.08
	Back	0.892	1.161	1.156	1.170	0.125	1.02	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 26_Ant1	Front	0.961	0.347	0.129	0.013	0.066	1.03	0.20	0.08
	Back	1.101	1.161	1.156	1.170	0.125	1.23	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 66_Ant1	Front	0.782	0.347	0.129	0.013	0.066	0.85	0.20	0.08
	Back	1.220	1.161	1.156	1.170	0.125	1.35	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.188					1.19	0.00	0.00
LTE Band 25_Ant1	Front	0.726	0.347	0.129	0.013	0.066	0.79	0.20	0.08
	Back	1.113	1.161	1.156	1.170	0.125	1.24	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N71_Ant 1	Front	0.385	0.347	0.129	0.013	0.066	0.45	0.20	0.08
	Back	0.489	1.161	1.156	1.170	0.125	0.61	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N5_Ant 1	Front	1.016	0.347	0.129	0.013	0.066	1.08	0.20	0.08
	Back	1.108	1.161	1.156	1.170	0.125	1.23	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N66_Ant 1	Front	0.761	0.347	0.129	0.013	0.066	0.83	0.20	0.08



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	Back	1.147	1.161	1.156	1.170	0.125	1.27	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N25_Ant 1	Front	0.956	0.347	0.129	0.013	0.066	1.02	0.20	0.08
	Back	1.216	1.161	1.156	1.170	0.125	1.34	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.169					1.17	0.00	0.00
N77_Ant 3_FCC	Front	0.192	0.347	0.129	0.013	0.066	0.26	0.20	0.08
	Back	1.022	1.161	1.156	1.170	0.125	1.15	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N77_Ant 3_Part 27Q	Front	0.112	0.347	0.129	0.013	0.066	0.18	0.20	0.08
	Back	1.157	1.161	1.156	1.170	0.125	1.28	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N77(HPUE)_Ant 3_FCC	Front	0.192	0.347	0.129	0.013	0.066	0.26	0.20	0.08
	Back	1.022	1.161	1.156	1.170	0.125	1.15	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N77(HPUE)_Ant 3_Part 27Q	Front	0.112	0.347	0.129	0.013	0.066	0.18	0.20	0.08
	Back	1.157	1.161	1.156	1.170	0.125	1.28	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00



WWAN Band	Exposure Position	1	3	6	7	9	1+3	1+6	1+7	1+6+9	1+7+9
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Bluetooth Ant 2	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
WCDMA V_Ant1	Front	0.663	0.124	0.093	0.005	0.066	0.79	0.76	0.67	0.82	0.73
	Back	0.839	0.381	0.386	0.344	0.125	1.22	1.23	1.18	1.35	1.31
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
WCDMA IV_Ant1	Front	0.554	0.124	0.093	0.005	0.066	0.68	0.65	0.56	0.71	0.63
	Back	0.771	0.381	0.386	0.344	0.125	1.15	1.16	1.12	1.28	1.24
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
WCDMA II_Ant1	Front	0.382	0.124	0.093	0.005	0.066	0.51	0.48	0.39	0.54	0.45
	Back	0.889	0.381	0.386	0.344	0.125	1.27	1.28	1.23	1.40	1.36
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
LTE Band 71_Ant1	Front	0.497	0.124	0.093	0.005	0.066	0.62	0.59	0.50	0.66	0.57
	Back	0.714	0.381	0.386	0.344	0.125	1.10	1.10	1.06	1.23	1.18
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
LTE Band 12_Ant1	Front	0.661	0.124	0.093	0.005	0.066	0.79	0.75	0.67	0.82	0.73
	Back	0.792	0.381	0.386	0.344	0.125	1.17	1.18	1.14	1.30	1.26
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
LTE Band 13_Ant1	Front	0.879	0.124	0.093	0.005	0.066	1.00	0.97	0.88	1.04	0.95
	Back	0.931	0.381	0.386	0.344	0.125	1.31	1.32	1.28	1.44	1.40
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
LTE Band 14_Ant1	Front	0.739	0.124	0.093	0.005	0.066	0.86	0.83	0.74	0.90	0.81
	Back	0.892	0.381	0.386	0.344	0.125	1.27	1.28	1.24	1.40	1.36
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
LTE Band 26_Ant1	Front	0.607	0.124	0.093	0.005	0.066	0.73	0.70	0.61	0.77	0.68
	Back	0.798	0.381	0.386	0.344	0.125	1.18	1.18	1.14	1.31	1.27
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
LTE Band 66_Ant1	Front	0.520	0.124	0.093	0.005	0.066	0.64	0.61	0.53	0.68	0.59
	Back	0.803	0.381	0.386	0.344	0.125	1.18	1.19	1.15	1.31	1.27
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
LTE Band 25_Ant1	Front	0.455	0.124	0.093	0.005	0.066	0.58	0.55	0.46	0.61	0.53
	Back	0.760	0.381	0.386	0.344	0.125	1.14	1.15	1.10	1.27	1.23
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
N71_Ant 1	Front	0.385	0.124	0.093	0.005	0.066	0.51	0.48	0.39	0.54	0.46
	Back	0.489	0.381	0.386	0.344	0.125	0.87	0.88	0.83	1.00	0.96
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
N5_Ant 1	Front	0.847	0.124	0.093	0.005	0.066	0.97	0.94	0.85	1.01	0.92
	Back	0.895	0.381	0.386	0.344	0.125	1.28	1.28	1.24	1.41	1.36
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
N66_Ant 1	Front	0.562	0.124	0.093	0.005	0.066	0.69	0.66	0.57	0.72	0.63
	Back	0.854	0.381	0.386	0.344	0.125	1.24	1.24	1.20	1.37	1.32



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	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
N25_Ant 1	Front	0.563	0.124	0.093	0.005	0.066	0.69	0.66	0.57	0.72	0.63
	Back	0.779	0.381	0.386	0.344	0.125	1.16	1.17	1.12	1.29	1.25
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
N77_Ant 3_FCC	Front	0.159	0.124	0.093	0.005	0.066	0.28	0.25	0.16	0.32	0.23
	Back	0.924	0.381	0.386	0.344	0.125	1.31	1.31	1.27	1.44	1.39
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
N77_Ant 3_Part 27Q	Front	0.076	0.124	0.093	0.005	0.066	0.20	0.17	0.08	0.24	0.15
	Back	0.997	0.381	0.386	0.344	0.125	1.38	1.38	1.34	1.51	1.47
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
N77(HPUE)_Ant 3_FCC	Front	0.159	0.124	0.093	0.005	0.066	0.28	0.25	0.16	0.32	0.23
	Back	0.924	0.381	0.386	0.344	0.125	1.31	1.31	1.27	1.44	1.39
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00
N77(HPUE)_Ant 3_Part 27Q	Front	0.076	0.124	0.093	0.005	0.066	0.20	0.17	0.08	0.24	0.15
	Back	0.997	0.381	0.386	0.344	0.125	1.38	1.38	1.34	1.51	1.47
	Front with Headset						0.00	0.00	0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00	0.00	0.00



WWAN Band	Exposure Position	1	3	6	7	9	1+9	6+9	7+9
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Bluetooth Ant 2	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850_Ant0	Front	0.662	0.347	0.129	0.013	0.066	0.73	0.20	0.08
	Back	0.733	1.161	1.156	1.170	0.125	0.86	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
GSM1900_Ant0	Front	0.975	0.347	0.129	0.013	0.066	1.04	0.20	0.08
	Back	1.161	1.161	1.156	1.170	0.125	1.29	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
WCDMA V_Ant0	Front	0.937	0.347	0.129	0.013	0.066	1.00	0.20	0.08
	Back	1.140	1.161	1.156	1.170	0.125	1.27	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
WCDMA IV_Ant0	Front	1.100	0.347	0.129	0.013	0.066	1.17	0.20	0.08
	Back	1.233	1.161	1.156	1.170	0.125	1.36	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	0.938					0.94	0.00	0.00
WCDMA II_Ant0	Front	0.919	0.347	0.129	0.013	0.066	0.99	0.20	0.08
	Back	1.223	1.161	1.156	1.170	0.125	1.35	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	0.880					0.88	0.00	0.00
LTE Band 71_Ant0	Front	0.407	0.347	0.129	0.013	0.066	0.47	0.20	0.08
	Back	0.598	1.161	1.156	1.170	0.125	0.72	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 12_Ant0	Front	0.504	0.347	0.129	0.013	0.066	0.57	0.20	0.08
	Back	0.743	1.161	1.156	1.170	0.125	0.87	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 13_Ant0	Front	1.043	0.347	0.129	0.013	0.066	1.11	0.20	0.08
	Back	1.252	1.161	1.156	1.170	0.125	1.38	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 14_Ant0	Front	0.747	0.347	0.129	0.013	0.066	0.81	0.20	0.08
	Back	0.874	1.161	1.156	1.170	0.125	1.00	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 26_Ant0	Front	1.086	0.347	0.129	0.013	0.066	1.15	0.20	0.08
	Back	1.224	1.161	1.156	1.170	0.125	1.35	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.038					1.04	0.00	0.00
LTE Band 66_Ant0	Front	0.943	0.347	0.129	0.013	0.066	1.01	0.20	0.08
	Back	1.125	1.161	1.156	1.170	0.125	1.25	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
LTE Band 25_Ant0	Front	0.967	0.347	0.129	0.013	0.066	1.03	0.20	0.08
	Back	1.237	1.161	1.156	1.170	0.125	1.36	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.027					1.03	0.00	0.00
LTE Band 30_Ant0	Front	0.859	0.347	0.129	0.013	0.066	0.93	0.20	0.08
	Back	1.203	1.161	1.156	1.170	0.125	1.33	1.28	1.30



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	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.186					1.19	0.00	0.00
LTE Band 7_Ant0	Front	0.970	0.347	0.129	0.013	0.066	1.04	0.20	0.08
	Back	1.236	1.161	1.156	1.170	0.125	1.36	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.171					1.17	0.00	0.00
LTE Band 41_Ant0	Front	1.100	0.347	0.129	0.013	0.066	1.17	0.20	0.08
	Back	1.253	1.161	1.156	1.170	0.125	1.38	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.213					1.21	0.00	0.00
LTE Band 41(HPUE)_Ant0	Front	1.090	0.347	0.129	0.013	0.066	1.16	0.20	0.08
	Back	1.200	1.161	1.156	1.170	0.125	1.33	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.178					1.18	0.00	0.00
N71_Ant 0	Front	0.260	0.347	0.129	0.013	0.066	0.33	0.20	0.08
	Back	0.353	1.161	1.156	1.170	0.125	0.48	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N5_Ant 0	Front	0.550	0.347	0.129	0.013	0.066	0.62	0.20	0.08
	Back	0.693	1.161	1.156	1.170	0.125	0.82	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N66_Ant 0	Front	1.053	0.347	0.129	0.013	0.066	1.12	0.20	0.08
	Back	1.209	1.161	1.156	1.170	0.125	1.33	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset	1.094					1.09	0.00	0.00
N25_Ant 0	Front	1.094	0.347	0.129	0.013	0.066	1.16	0.20	0.08
	Back	1.197	1.161	1.156	1.170	0.125	1.32	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N41_Ant 0	Front	0.913	0.347	0.129	0.013	0.066	0.98	0.20	0.08
	Back	1.149	1.161	1.156	1.170	0.125	1.27	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00
N41(HPUE)_Ant 0	Front	0.913	0.347	0.129	0.013	0.066	0.98	0.20	0.08
	Back	1.149	1.161	1.156	1.170	0.125	1.27	1.28	1.30
	Front with Headset						0.00	0.00	0.00
	Back with Headset						0.00	0.00	0.00



WWAN Band	Exposure Position	1	3	6	7	9	1+3	1+6	1+7	1+6+9	1+7+9	Case No
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Bluetooth Ant 2	Summed	Summed	Summed	Summed	Summed	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant0	Front	0.662	0.124	0.093	0.005	0.066	0.79	0.76	0.67	0.82	0.73	
	Back	0.733	0.381	0.386	0.344	0.125	1.11	1.12	1.08	1.24	1.20	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
GSM1900_Ant0	Front	0.505	0.124	0.093	0.005	0.066	0.63	0.60	0.51	0.66	0.58	
	Back	0.596	0.381	0.386	0.344	0.125	0.98	0.98	0.94	1.11	1.07	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
WCDMA V_Ant0	Front	0.937	0.124	0.093	0.005	0.066	1.06	1.03	0.94	1.10	1.01	
	Back	1.140	0.381	0.386	0.344	0.125	1.52	1.53	1.48	1.65	1.61	06&07
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
WCDMA IV_Ant0	Front	0.670	0.124	0.093	0.005	0.066	0.79	0.76	0.68	0.83	0.74	
	Back	0.755	0.381	0.386	0.344	0.125	1.14	1.14	1.10	1.27	1.22	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
WCDMA II_Ant0	Front	0.446	0.124	0.093	0.005	0.066	0.57	0.54	0.45	0.61	0.52	
	Back	0.644	0.381	0.386	0.344	0.125	1.03	1.03	0.99	1.16	1.11	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 71_Ant0	Front	0.407	0.124	0.093	0.005	0.066	0.53	0.50	0.41	0.57	0.48	
	Back	0.598	0.381	0.386	0.344	0.125	0.98	0.98	0.94	1.11	1.07	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 12_Ant0	Front	0.504	0.124	0.093	0.005	0.066	0.63	0.60	0.51	0.66	0.58	
	Back	0.743	0.381	0.386	0.344	0.125	1.12	1.13	1.09	1.25	1.21	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 13_Ant0	Front	1.043	0.124	0.093	0.005	0.066	1.17	1.14	1.05	1.20	1.11	
	Back	1.252	0.381	0.386	0.344	0.125	1.63	1.64 *	1.60 *	1.76	1.72	02&08&09
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 14_Ant0	Front	0.747	0.124	0.093	0.005	0.066	0.87	0.84	0.75	0.91	0.82	
	Back	0.874	0.381	0.386	0.344	0.125	1.26	1.26	1.22	1.39	1.34	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 26_Ant0	Front	1.086	0.124	0.093	0.005	0.066	1.21	1.18	1.09	1.25	1.16	
	Back	1.224	0.381	0.386	0.344	0.125	1.61	1.61 *	1.57	1.74	1.69	04&10&11
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset	1.038					1.04	1.04	1.04	1.04	1.04	
LTE Band 66_Ant0	Front	0.551	0.124	0.093	0.005	0.066	0.68	0.64	0.56	0.71	0.62	
	Back	0.624	0.381	0.386	0.344	0.125	1.01	1.01	0.97	1.14	1.09	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 25_Ant0	Front	0.451	0.124	0.093	0.005	0.066	0.58	0.54	0.46	0.61	0.52	
	Back	0.610	0.381	0.386	0.344	0.125	0.99	1.00	0.95	1.12	1.08	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 30_Ant0	Front	0.674	0.124	0.093	0.005	0.066	0.80	0.77	0.68	0.83	0.75	
	Back	0.913	0.381	0.386	0.344	0.125	1.29	1.30	1.26	1.42	1.38	



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	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 7_Ant0	Front	0.656	0.124	0.093	0.005	0.066	0.78	0.75	0.66	0.82	0.73	
	Back	0.837	0.381	0.386	0.344	0.125	1.22	1.22	1.18	1.35	1.31	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 41_Ant0	Front	0.695	0.124	0.093	0.005	0.066	0.82	0.79	0.70	0.85	0.77	
	Back	1.006	0.381	0.386	0.344	0.125	1.39	1.39	1.35	1.52	1.48	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
LTE Band 41(HPUE)_Ant0	Front	0.686	0.124	0.093	0.005	0.066	0.81	0.78	0.69	0.85	0.76	
	Back	0.745	0.381	0.386	0.344	0.125	1.13	1.13	1.09	1.26	1.21	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N71_Ant 0	Front	0.260	0.124	0.093	0.005	0.066	0.38	0.35	0.27	0.42	0.33	
	Back	0.353	0.381	0.386	0.344	0.125	0.73	0.74	0.70	0.86	0.82	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N5_Ant 0	Front	0.550	0.124	0.093	0.005	0.066	0.67	0.64	0.56	0.71	0.62	
	Back	0.693	0.381	0.386	0.344	0.125	1.07	1.08	1.04	1.20	1.16	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N66_Ant 0	Front	0.590	0.124	0.093	0.005	0.066	0.71	0.68	0.60	0.75	0.66	
	Back	0.669	0.381	0.386	0.344	0.125	1.05	1.06	1.01	1.18	1.14	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N25_Ant 0	Front	0.497	0.124	0.093	0.005	0.066	0.62	0.59	0.50	0.66	0.57	
	Back	0.574	0.381	0.386	0.344	0.125	0.96	0.96	0.92	1.09	1.04	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N41_Ant 0	Front	0.670	0.124	0.093	0.005	0.066	0.79	0.76	0.68	0.83	0.74	
	Back	0.880	0.381	0.386	0.344	0.125	1.26	1.27	1.22	1.39	1.35	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	
N41(HPUE)_Ant 0	Front	0.670	0.124	0.093	0.005	0.066	0.79	0.76	0.68	0.83	0.74	
	Back	0.880	0.381	0.386	0.344	0.125	1.26	1.27	1.22	1.39	1.35	
	Front with Headset						0.00	0.00	0.00	0.00	0.00	
	Back with Headset						0.00	0.00	0.00	0.00	0.00	

“*” means sum SAR value is higher than 1.6W/Kg for 2 transmitters at body, the multi-band analysis is included at 3 transmitters, for those bands with the same SAR value used for 3 transmitters. Due to 3 transmitters value is more conservatively than 2 transmitters, so multi-band analysis for 3 transmitters can represent 2 transmitters.

Sensor off

WWAN Band	Exposure Position	1	3	6	7	1+3	1+6	1+7
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
N77_Ant 3_FCC	Front at 16mm	0.359	0.096	0.129	0.013	0.46	0.49	0.37
	Back at 27mm	0.549	0.103	0.264	0.070	0.65	0.81	0.62
N77_Ant 3_Part 27Q	Front at 16mm	0.261	0.096	0.129	0.013	0.36	0.39	0.27
	Back at 27mm	0.632	0.103	0.264	0.070	0.74	0.90	0.70
N77(HPUE)_Ant 3_FCC	Front at 16mm	0.665	0.096	0.129	0.013	0.76	0.79	0.68
	Back at 27mm	1.021	0.103	0.264	0.070	1.12	1.29	1.09
N77(HPUE)_Ant 3_Part 27Q	Front at 16mm	0.516	0.096	0.129	0.013	0.61	0.65	0.53
	Back at 27mm	1.019	0.103	0.264	0.070	1.12	1.28	1.09

Note: We only chose higher sensor off distance SAR to do co-located analysis.

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 Band	Exposure Position	1	2	5	6	1+2	1+5	1+6
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Summed	Summed	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
WCDMA V_Ant1	Front			0.210	0.010	0.00	0.21	0.01
	Back		1.166	1.269	0.381	1.17	1.27	0.38
	Left side			0.189	0.013	0.00	0.19	0.01
	Right side			0.007		0.00	0.01	0.00
	Top side	2.028		0.275	0.022	2.03	2.30	2.05
	Bottom side					0.00	0.00	0.00
WCDMA IV_Ant1	Front	1.717		0.210	0.010	1.72	1.93	1.73
	Back	1.466	1.166	1.269	0.381	2.63	2.74	1.85
	Left side			0.189	0.013	0.00	0.19	0.01
	Right side			0.007		0.00	0.01	0.00
	Top side	2.340		0.275	0.022	2.34	2.62	2.36
	Bottom side					0.00	0.00	0.00
WCDMA II_Ant1	Front			0.210	0.010	0.00	0.21	0.01
	Back	0.759	1.166	1.269	0.381	1.93	2.03	1.14
	Left side			0.189	0.013	0.00	0.19	0.01
	Right side			0.007		0.00	0.01	0.00
	Top side	2.409		0.275	0.022	2.41	2.68	2.43
	Bottom side					0.00	0.00	0.00
LTE Band 26_Ant1	Front			0.210	0.010	0.00	0.21	0.01
	Back		1.166	1.269	0.381	1.17	1.27	0.38
	Left side			0.189	0.013	0.00	0.19	0.01
	Right side			0.007		0.00	0.01	0.00
	Top side	2.244		0.275	0.022	2.24	2.52	2.27
	Bottom side					0.00	0.00	0.00
LTE Band 66_Ant1	Front	1.941		0.210	0.010	1.94	2.15	1.95
	Back	1.851	1.166	1.269	0.381	3.02	3.12	2.23
	Left side			0.189	0.013	0.00	0.19	0.01
	Right side			0.007		0.00	0.01	0.00
	Top side	2.496		0.275	0.022	2.50	2.77	2.52
	Bottom side					0.00	0.00	0.00
LTE Band 25_Ant1	Front	1.546		0.210	0.010	1.55	1.76	1.56
	Back	1.159	1.166	1.269	0.381	2.33	2.43	1.54
	Left side			0.189	0.013	0.00	0.19	0.01
	Right side			0.007		0.00	0.01	0.00
	Top side	2.357		0.275	0.022	2.36	2.63	2.38
	Bottom side					0.00	0.00	0.00
N66_Ant 1	Front	2.308		0.210	0.010	2.31	2.52	2.32
	Back	1.956	1.166	1.269	0.381	3.12	3.23	2.34
	Left side			0.189	0.013	0.00	0.19	0.01
	Right side			0.007		0.00	0.01	0.00
	Top side	2.495		0.275	0.022	2.50	2.77	2.52
	Bottom side					0.00	0.00	0.00
N25_Ant 1	Front	1.893		0.210	0.010	1.89	2.10	1.90
	Back	1.408	1.166	1.269	0.381	2.57	2.68	1.79
	Left side			0.189	0.013	0.00	0.19	0.01
	Right side			0.007		0.00	0.01	0.00
	Top side	2.430		0.275	0.022	2.43	2.71	2.45

	Bottom side					0.00	0.00	0.00
N77_Ant 3_FCC	Front			0.210	0.010	0.00	0.21	0.01
	Back	2.136	1.166	1.269	0.381	3.30	3.41	2.52
	Left side	1.327		0.189	0.013	1.33	1.52	1.34
	Right side			0.007		0.00	0.01	0.00
	Top side			0.275	0.022	0.00	0.28	0.02
	Bottom side					0.00	0.00	0.00
N77_Ant 3_Part 27Q	Front			0.210	0.010	0.00	0.21	0.01
	Back	2.499	1.166	1.269	0.381	3.67	3.77	2.88
	Left side	1.443		0.189	0.013	1.44	1.63	1.46
	Right side			0.007		0.00	0.01	0.00
	Top side			0.275	0.022	0.00	0.28	0.02
	Bottom side					0.00	0.00	0.00
N77(HPUE)_Ant 3_FCC	Front	0.686		0.210	0.010	0.69	0.90	0.70
	Back	2.136	1.166	1.269	0.381	3.30	3.41	2.52
	Left side	1.327		0.189	0.013	1.33	1.52	1.34
	Right side			0.007		0.00	0.01	0.00
	Top side	0.533		0.275	0.022	0.53	0.81	0.56
	Bottom side					0.00	0.00	0.00
N77(HPUE)_Ant 3_Part 27Q	Front	0.335		0.210	0.010	0.34	0.55	0.35
	Back	2.499	1.166	1.269	0.381	3.67	3.77	2.88
	Left side	1.443		0.189	0.013	1.44	1.63	1.46
	Right side			0.007		0.00	0.01	0.00
	Top side	0.321		0.275	0.022	0.32	0.60	0.34
	Bottom side					0.00	0.00	0.00



WWAN Band	Exposure Position	1	2	5	6	1+2	1+5	1+6	Case No
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Summed	Summed	Summed	
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
GSM1900_Ant0	Front	2.463		0.210	0.010	2.46	2.67	2.47	
	Back	2.635	1.166	1.269	0.381	3.80	3.90	3.02	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.658				2.66	2.66	2.66	
WCDMA IV_Ant0	Front	1.841		0.210	0.010	1.84	2.05	1.85	
	Back	2.150	1.166	1.269	0.381	3.32	3.42	2.53	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.976				2.98	2.98	2.98	
WCDMA II_Ant0	Front	1.972		0.210	0.010	1.97	2.18	1.98	
	Back	2.251	1.166	1.269	0.381	3.42	3.52	2.63	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.998				3.00	3.00	3.00	
LTE Band 13_Ant0	Front			0.210	0.010	0.00	0.21	0.01	
	Back	1.781	1.166	1.269	0.381	2.95	3.05	2.16	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side					0.00	0.00	0.00	
LTE Band 26_Ant0	Front			0.210	0.010	0.00	0.21	0.01	
	Back	1.845	1.166	1.269	0.381	3.01	3.11	2.23	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side					0.00	0.00	0.00	
LTE Band 66_Ant0	Front	1.846		0.210	0.010	1.85	2.06	1.86	
	Back	1.950	1.166	1.269	0.381	3.12	3.22	2.33	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.932				2.93	2.93	2.93	
LTE Band 25_Ant0	Front	2.310		0.210	0.010	2.31	2.52	2.32	
	Back	2.417	1.166	1.269	0.381	3.58	3.69	2.80	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.914				2.91	2.91	2.91	
LTE Band 30_Ant0	Front	2.497		0.210	0.010	2.50	2.71	2.51	
	Back	3.125	1.166	1.269	0.381	4.29	4.39	3.51	12&13
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.129				2.13	2.13	2.13	
LTE Band 7_Ant0	Front	1.461		0.210	0.010	1.46	1.67	1.47	
	Back	1.639	1.166	1.269	0.381	2.81	2.91	2.02	
	Left side			0.189	0.013	0.00	0.19	0.01	



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	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.935				2.94	2.94	2.94	
LTE Band 41_Ant0	Front	1.189		0.210	0.010	1.19	1.40	1.20	
	Back	1.479	1.166	1.269	0.381	2.65	2.75	1.86	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.405				2.41	2.41	2.41	
LTE Band 41(HPUE)_Ant0	Front	1.316		0.210	0.010	1.32	1.53	1.33	
	Back	1.947	1.166	1.269	0.381	3.11	3.22	2.33	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.971				2.97	2.97	2.97	
N66_Ant 0	Front	2.422		0.210	0.010	2.42	2.63	2.43	
	Back	2.605	1.166	1.269	0.381	3.77	3.87	2.99	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	3.129				3.13	3.13	3.13	
N25_Ant 0	Front	2.509		0.210	0.010	2.51	2.72	2.52	
	Back	2.572	1.166	1.269	0.381	3.74	3.84	2.95	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	2.930				2.93	2.93	2.93	
N41_Ant 0	Front	1.417		0.210	0.010	1.42	1.63	1.43	
	Back	1.889	1.166	1.269	0.381	3.06	3.16	2.27	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	3.166				3.17	3.17	3.17	
N41(HPUE)_Ant 0	Front	1.417		0.210	0.010	1.42	1.63	1.43	
	Back	1.889	1.166	1.269	0.381	3.06	3.16	2.27	
	Left side			0.189	0.013	0.00	0.19	0.01	
	Right side			0.007		0.00	0.01	0.00	
	Top side			0.275	0.022	0.00	0.28	0.02	
	Bottom side	3.166				3.17	3.17	3.17	

Sensor off

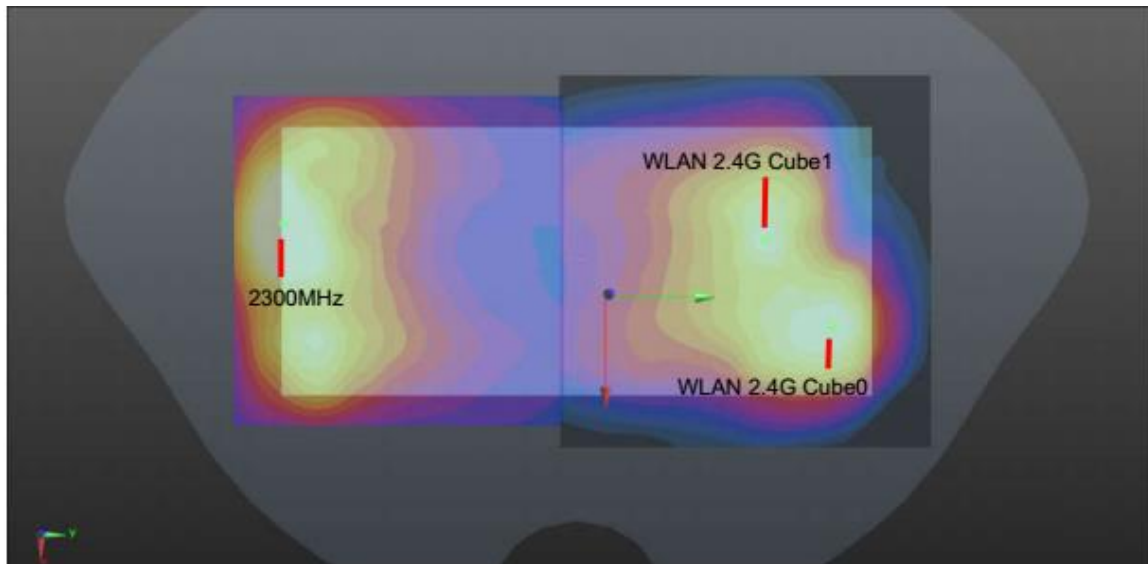
WWAN Band	Exposure Position	1	2	5	6	1+2	1+5	1+6
		WWAN	2.4GHz WLAN Ant 2+4	5GHz WLAN Ant 4+12	6GHz WLAN Ant 4+12	Summed	Summed	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
N77_Ant 3_FCC	Front					0.00	0.00	0.00
	Back	0.776	1.166	2.016	0.381	1.94	2.79	1.16
	Left side	1.680		0.249	0.013	1.68	1.93	1.69
	Right side					0.00	0.00	0.00
	Top side					0.00	0.00	0.00
	Bottom side					0.00	0.00	0.00
N77_Ant 3_Part 27Q	Front					0.00	0.00	0.00
	Back	0.907	1.166	2.016	0.381	2.07	2.92	1.29
	Left side	1.567		0.249	0.013	1.57	1.82	1.58
	Right side					0.00	0.00	0.00
	Top side					0.00	0.00	0.00
	Bottom side					0.00	0.00	0.00
N77(HPUE)_Ant 3_FCC	Front					0.00	0.00	0.00
	Back	1.503	1.166	2.016	0.381	2.67	3.52	1.88
	Left side	3.120		0.249	0.013	3.12	3.37	3.13
	Right side					0.00	0.00	0.00
	Top side					0.00	0.00	0.00
	Bottom side					0.00	0.00	0.00
N77(HPUE)_Ant 3_Part 27Q	Front					0.00	0.00	0.00
	Back	1.780	1.166	2.016	0.381	2.95	3.80	2.16
	Left side	2.723		0.249	0.013	2.72	2.97	2.74
	Right side					0.00	0.00	0.00
	Top side					0.00	0.00	0.00
	Bottom side					0.00	0.00	0.00

Note: We only chose higher sensor off distance SAR to do co-located analysis.

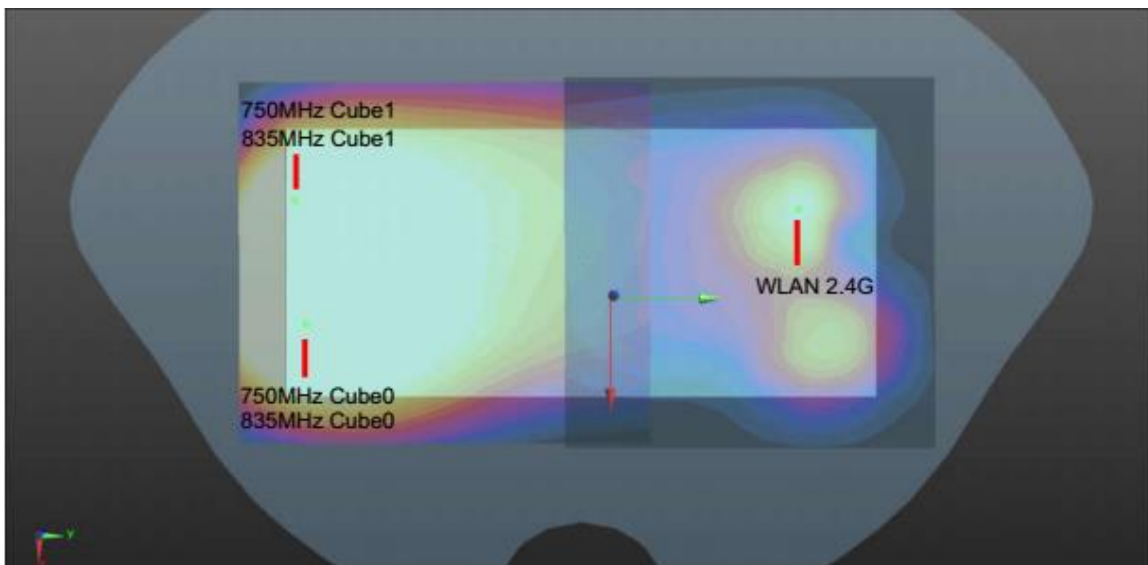
17.6 SPLSR Evaluation and Analysis

General Note:

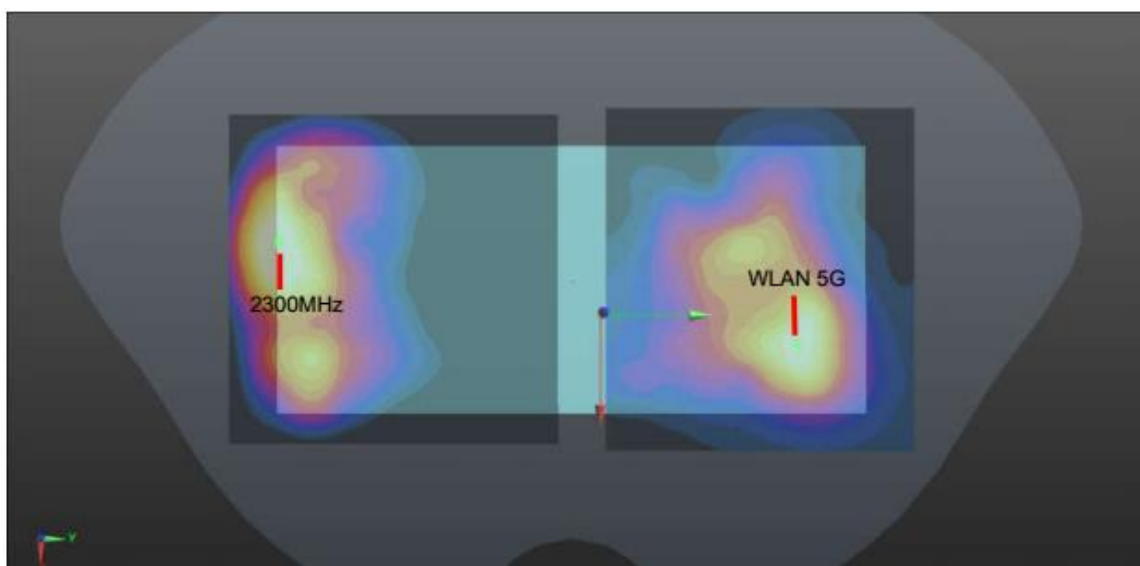
1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where $(x1, y1, z1)$ and $(x2, y2, z2)$ are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2. $SPLSR = (SAR1 + SAR2)1.5 / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.



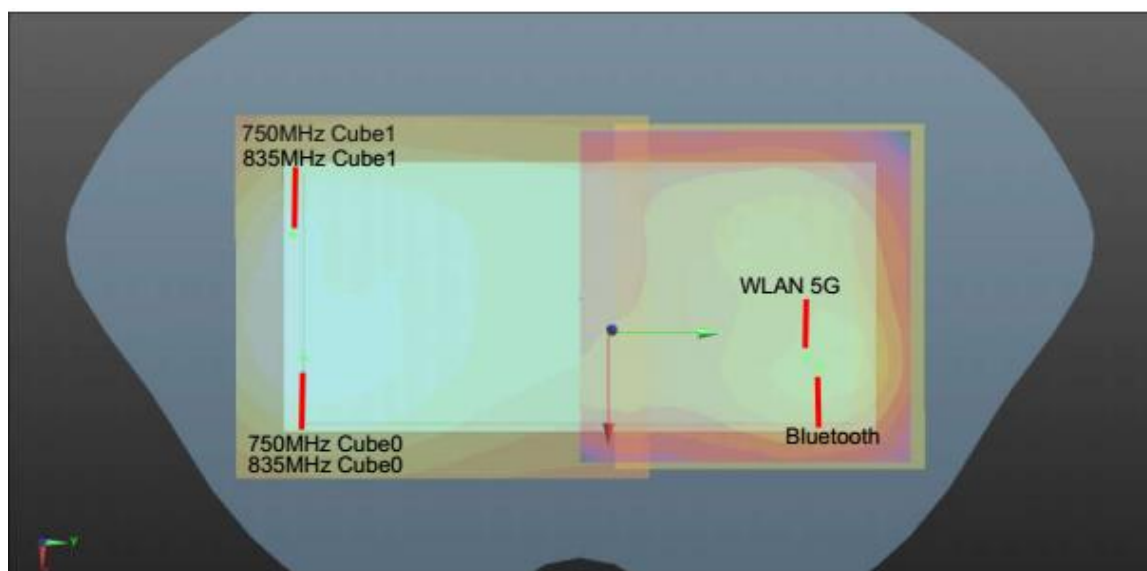
WWAN+WLAN2.4GHz_Back 0mm



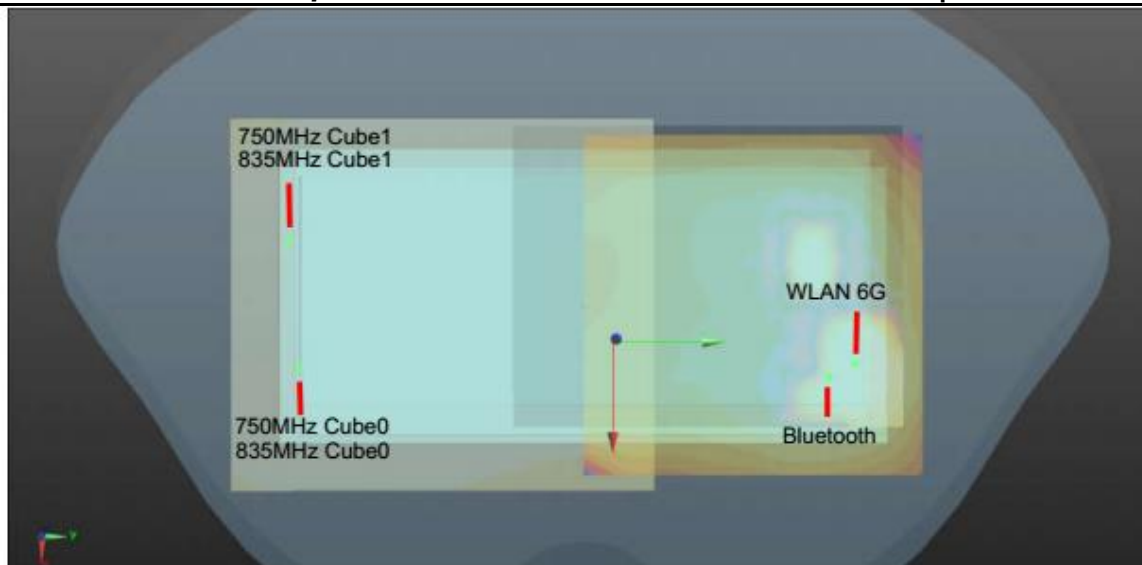
WWAN+WLAN2.4GHz_Back 5mm



WWAN+WLAN5GHz_Back 0mm



WWAN+WLAN5GHz+Bluetooth_Back 5mm


WWAN+WLAN6GHz+Bluetooth_Back 5mm

	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 01	WCDMA V_Ant0 Cube0	Back	1.107	5mm	0.004	-0.0835	-0.206	138.5	1.45	0.01	Not required
	WLAN5GHz		0.345	5mm	0.004	0.055	-0.206				
	WCDMA V_Ant0 Cube1	Back	1.14	5mm	-0.0015	-0.092	-0.206	147.1	1.49	0.01	Not required
	WLAN5GHz		0.345	5mm	0.004	0.055	-0.206				
	WCDMA V_Ant0 Cube0	Back	1.107	5mm	0.004	-0.0835	-0.206	153.1	1.23	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WCDMA V_Ant0 Cube1	Back	1.14	5mm	-0.0015	-0.092	-0.206	161.7	1.27	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WLAN5GHz	Back	0.345	5mm	0.004	0.055	-0.206	14.6	0.47	0.02	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
Case 02	LTE Band 13_Ant0 Cube0	Back	1.252	5mm	0.0025	-0.0835	-0.206	150.0	1.63	0.01	Not required
	WLAN2.4GHz		0.381	5mm	-0.0276	0.0634	-0.206				
	LTE Band 13_Ant0 Cube1	Back	1.197	5mm	0.005	-0.084	-0.206	151.0	1.58	0.01	Not required
	WLAN2.4GHz		0.381	5mm	-0.0276	0.0634	-0.206				
Case 03	LTE Band 13_Ant0 Cube0	Back	1.252	5mm	0.0025	-0.0835	-0.206	138.5	1.60	0.01	Not required
	WLAN5GHz		0.345	5mm	0.004	0.055	-0.206				
	LTE Band 13_Ant0 Cube1	Back	1.197	5mm	0.005	-0.084	-0.206	139.0	1.54	0.01	Not required
	WLAN5GHz		0.345	5mm	0.004	0.055	-0.206				
	LTE Band 13_Ant0 Cube0	Back	1.252	5mm	0.0025	-0.0835	-0.206	153.1	1.38	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	LTE Band 13_Ant0 Cube1	Back	1.197	5mm	0.005	-0.084	-0.206	153.6	1.32	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WLAN5GHz	Back	0.345	5mm	0.004	0.055	-0.206	14.6	0.47	0.02	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				



Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 04	LTE Band 26_Ant0 Cube0	Back	1.224	5mm	-0.007	-0.0885	-0.206	153.3	1.61	0.01	Not required
	WLAN2.4GHz		0.381	5mm	-0.0276	0.0634	-0.206				
	LTE Band 26_Ant0 Cube1	Back	0.957	5mm	-0.019	-0.0915	-0.206	155.1	1.34	0.01	Not required
	WLAN2.4GHz		0.381	5mm	-0.0276	0.0634	-0.206				
Case 05	LTE Band 26_Ant0 Cube0	Back	1.224	5mm	-0.007	-0.0885	-0.206	143.9	1.57	0.01	Not required
	WLAN5GHz		0.345	5mm	0.004	0.055	-0.206				
	LTE Band 26_Ant0 Cube1	Back	0.957	5mm	-0.019	-0.0915	-0.206	148.3	1.30	0.01	Not required
	WLAN5GHz		0.345	5mm	0.004	0.055	-0.206				
	LTE Band 26_Ant0 Cube0	Back	1.224	5mm	-0.007	-0.0885	-0.206	158.4	1.35	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	LTE Band 26_Ant0 Cube1	Back	0.957	5mm	-0.019	-0.0915	-0.206	162.6	1.08	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WLAN5GHz	Back	0.345	5mm	0.004	0.055	-0.206	14.6	0.47	0.02	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
Case 06	WCDMA V_Ant0 Cube0	Back	1.107	5mm	0.004	-0.0835	-0.206	141.5	1.49	0.01	Not required
	WLAN5GHz		0.386	5mm	0.005	0.058	-0.206				
	WCDMA V_Ant0 Cube1	Back	1.14	5mm	-0.0015	-0.092	-0.206	150.1	1.53	0.01	Not required
	WLAN5GHz		0.386	5mm	0.005	0.058	-0.206				
	WCDMA V_Ant0 Cube0	Back	1.107	5mm	0.004	-0.0835	-0.206	153.1	1.23	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WCDMA V_Ant0 Cube1	Back	1.14	5mm	-0.0015	-0.092	-0.206	161.7	1.27	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WLAN5GHz	Back	0.386	5mm	0.005	0.058	-0.206	11.7	0.51	0.03	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
Case 07	WCDMA V_Ant0 Cube0	Back	1.107	5mm	0.004	-0.0835	-0.206	158.8	1.45	0.01	Not required
	WLAN6GHz		0.344	5mm	-0.00205	0.0752	-0.207				
	WCDMA V_Ant0 Cube1	Back	1.14	5mm	-0.0015	-0.092	-0.206	167.2	1.48	0.01	Not required
	WLAN6GHz		0.344	5mm	-0.00205	0.0752	-0.207				
	WCDMA V_Ant0 Cube0	Back	1.107	5mm	0.004	-0.0835	-0.206	153.1	1.23	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WCDMA V_Ant0 Cube1	Back	1.14	5mm	-0.0015	-0.092	-0.206	161.7	1.27	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WLAN6GHz	Back	0.344	5mm	-0.00205	0.0752	-0.207	7.9	0.47	0.04	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
Case 08	LTE Band 13_Ant0 Cube0	Back	1.252	5mm	0.0025	-0.0835	-0.206	141.5	1.64	0.01	Not required
	WLAN5GHz		0.386	5mm	0.005	0.058	-0.206				
	LTE Band 13_Ant0 Cube1	Back	1.197	5mm	0.005	-0.084	-0.206	142.0	1.58	0.01	Not required
	WLAN5GHz		0.386	5mm	0.005	0.058	-0.206				
	LTE Band 13_Ant0 Cube0	Back	1.252	5mm	0.0025	-0.0835	-0.206	153.1	1.38	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	LTE Band 13_Ant0 Cube1	Back	1.197	5mm	0.005	-0.084	-0.206	153.6	1.32	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				



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	WLAN5GHz	Back	0.386	5mm	0.005	0.058	-0.206	11.7	0.51	0.03	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
Case 09	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 13_Ant0 Cube0	Back	1.252	5mm	0.0025	-0.0835	-0.206	158.8	1.60	0.01	Not required
	WLAN6GHz		0.344	5mm	-0.00205	0.0752	-0.207				
	LTE Band 13_Ant0 Cube1	Back	1.197	5mm	0.005	-0.084	-0.206	159.4	1.54	0.01	Not required
	WLAN6GHz		0.344	5mm	-0.00205	0.0752	-0.207				
	LTE Band 13_Ant0 Cube0	Back	1.252	5mm	0.0025	-0.0835	-0.206	153.1	1.38	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	LTE Band 13_Ant0 Cube1	Back	1.197	5mm	0.005	-0.084	-0.206	153.6	1.32	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WLAN6GHz	Back	0.344	5mm	-0.00205	0.0752	-0.207	7.9	0.47	0.04	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
Case 10	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26_Ant0 Cube0	Back	1.224	5mm	-0.007	-0.0885	-0.206	147.0	1.61	0.01	Not required
	WLAN5GHz		0.386	5mm	0.005	0.058	-0.206				
	LTE Band 26_Ant0 Cube1	Back	0.957	5mm	-0.019	-0.0915	-0.206	151.4	1.34	0.01	Not required
	WLAN5GHz		0.386	5mm	0.005	0.058	-0.206				
	LTE Band 26_Ant0 Cube0	Back	1.224	5mm	-0.007	-0.0885	-0.206	158.4	1.35	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	LTE Band 26_Ant0 Cube1	Back	0.957	5mm	-0.019	-0.0915	-0.206	162.6	1.08	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WLAN5GHz	Back	0.386	5mm	0.005	0.058	-0.206	11.7	0.51	0.03	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
Case 11	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26_Ant0 Cube0	Back	1.224	5mm	-0.007	-0.0885	-0.206	163.8	1.57	0.01	Not required
	WLAN6GHz		0.344	5mm	-0.00205	0.0752	-0.207				
	LTE Band 26_Ant0 Cube1	Back	0.957	5mm	-0.019	-0.0915	-0.206	167.6	1.30	0.01	Not required
	WLAN6GHz		0.344	5mm	-0.00205	0.0752	-0.207				
	LTE Band 26_Ant0 Cube0	Back	1.224	5mm	-0.007	-0.0885	-0.206	158.4	1.35	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	LTE Band 26_Ant0 Cube1	Back	0.957	5mm	-0.019	-0.0915	-0.206	162.6	1.08	0.01	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
	WLAN6GHz	Back	0.344	5mm	-0.00205	0.0752	-0.207	7.9	0.47	0.04	Not required
	Bluetooth		0.125	5mm	0.0034	0.0696	-0.206				
Case 12	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 30_Ant0 Cube0	Back	3.125	0mm	0.0668	-0.275	-0.175	356.5	4.29	0.02	Not required
	WLAN2.4GHz		1.166	0mm	0.0022	0.0742	-0.206				
	LTE Band 30_Ant0 Cube1	Back	3.125	0mm	0.0668	-0.275	-0.175	344.7	4.03	0.02	Not required
	WLAN2.4GHz		0.906	0mm	-0.028	0.055	-0.206				
Case 13	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (m)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 30_Ant0	Back	3.125	0mm	0.0668	-0.275	-0.175	353.6	4.39	0.03	Not required
	WLAN5GHz		1.269	0mm	0.001	0.071	-0.206				

18. Supplemental tuner tests results

General Note:

1. This device implements impedance tuner (144 status) antenna tuning techniques in the WCDMA Band II/IV/V, LTE B2/4/5/17/38/71/12/13/14/26/66/25/30/7/41/41-HPUE, n2/71/5/66/25/41/41-HPUE for ANT0.
2. This device implements impedance tuner (144 status) antenna tuning techniques in the WCDMA Band II/IV/V, LTE B2/4/5/71/12/13/14/26/66/25, n2/71/5/66/25 for ANT1.
3. LTE B2 / B4 / B5 / B17 / B38 / 5G NR n2 SAR test was covered by LTE B25 / B66 / B26 / B12 / B41/5G NR n25; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced.
4. SAR test proposal was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing and this design will provide the highest power at different user scenarios and would not influence to the antenna characteristics other than impedance matching.
5. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values.
6. To evaluate all of the tuner states, the 144 tuner states are divided evenly among band, mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single point time-sweep measurements will be performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state will be established remotely so that the device is not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe will remain stationary at the same position throughout the entire series of single point measurements for each combination.
7. According to TCBC 201904 workshop, total number tuner states divided evenly among each supported band / air interface and exposure condition combination.
8. The tuner state was established remotely through Wi-Fi so that the device is not moved for the entire series of single point SAR for the tuner states in each combination (band, mode, exposure conditions).

18.1 Supplemental Tuner Head & Body SAR Results

Please refer to Appendix F.

Test Engineer : Hank Huang, Bin He, David Dai

19. 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.

20. 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 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [8] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [9] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [10] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [11] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [12] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [13] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [14] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.

-----THE END-----



Appendix A. Plots of System Performance Check

The plots are shown as follows.

System Check_Head_750MHz

DUT: D750V3-SN:1099

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL_750_210530 Medium parameters used: $f = 750$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 40.797$; $\rho = 1000$ kg/m³

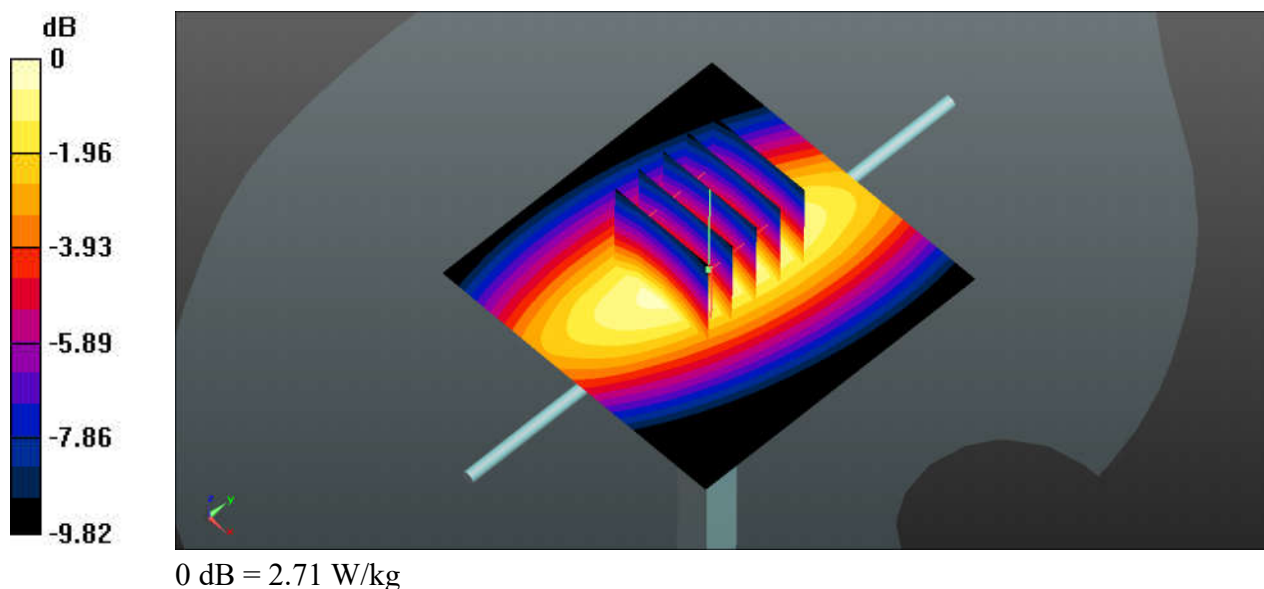
Ambient Temperature : 23.3 °C; Liquid Temperature : 22.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(10.23, 10.23, 10.23); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn918; Calibrated: 2020/6/22
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.72 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 56.81 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.14 W/kg
SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.47 W/kg
Maximum value of SAR (measured) = 2.71 W/kg



System Check_Head_750MHz

DUT: D750V3-SN:1099

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL_750_210618 Medium parameters used: $f = 750$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 40.918$; $\rho = 1000$ kg/m³

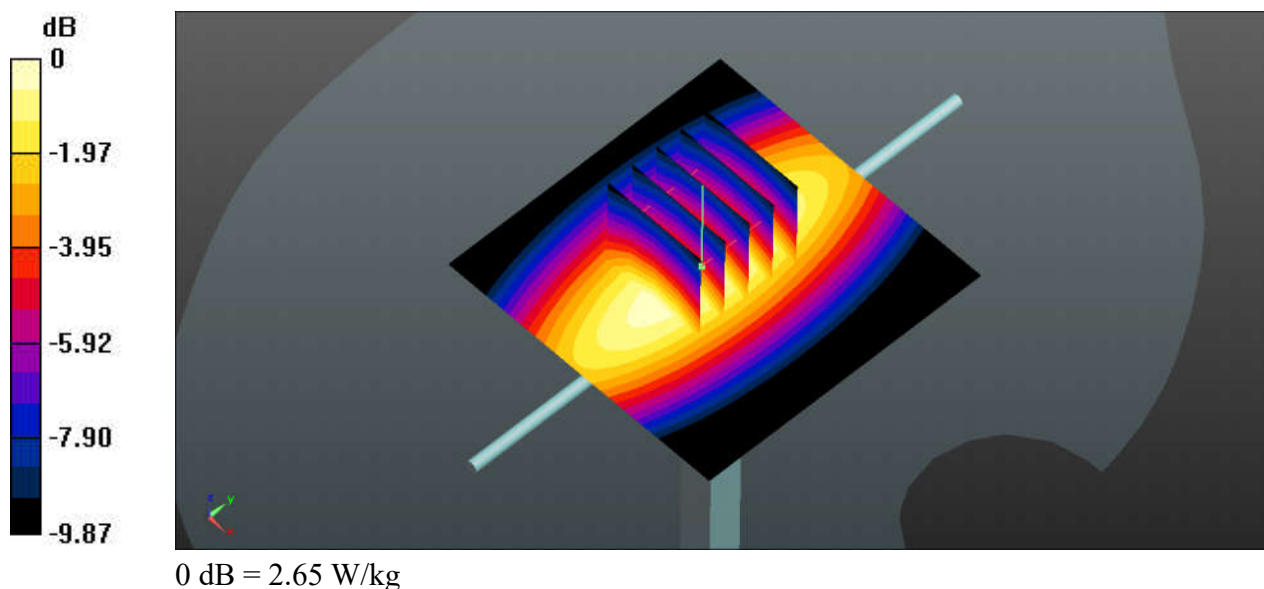
Ambient Temperature : 23.5 °C; Liquid Temperature : 22.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7577; ConvF(9.85, 9.85, 9.85); Calibrated: 2020/9/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn360; Calibrated: 2020/11/6
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.64 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 55.49 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 3.07 W/kg
SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.43 W/kg
Maximum value of SAR (measured) = 2.65 W/kg



System Check_Head_835MHz

DUT: D835V2-SN:4d162

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL_835_210601 Medium parameters used: $f = 835$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 41.826$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(9.94, 9.94, 9.94); Calibrated: 2020/12/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn918; Calibrated: 2020/6/22
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.08 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 59.22 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.61 W/kg
SAR(1 g) = 2.47 W/kg; SAR(10 g) = 1.63 W/kg
Maximum value of SAR (measured) = 3.11 W/kg

