FCC SAR Test Report

APPLICANT	:	TCL Communication Ltd.
EQUIPMENT	:	TCL LINKZONE Go 5G
BRAND NAME	:	TCL
MODEL NAME	:	MW501UV
FCC ID	:	2ACCJSCD006
STANDARD	:	FCC 47 CFR Part 2 (2.1093)

We, Sporton International Inc. (Shenzhen), would like to declare that the tested sample has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Shenzhen), the test report shall not be reproduced except in full.

Approved by: Hank Huang

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

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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA562417	Rev. 01	Initial issue of report	Sep. 10, 2025

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **TCL Communication Ltd., TCL LINKZONE Go 5G, MW501UV,** are as follows.

Highest 1g SAR Summary				
Equipment Class	Frequency Band		Body (Separation 10mm) 1g SAR (W/kg)	Highest Simultaneous Transmission 1g SAR (W/kg)
Licensed	LTE	LTE Band 12	0.42	1.16
		LTE Band 13	0.57	
		LTE Band 5	0.56	
		LTE Band 66/4	0.58	
		LTE Band 2	0.76	
		LTE Band 7	0.55	
		LTE Band 48	0.23	
	5G NR	FR1 n5	0.55	
		FR1 n66	0.69	
		FR1 n2	**0.93**	
		FR1 n48	0.43	
		FR1 n77/n78	0.73	
DTS	WLAN	2.4GHz WLAN	0.28	1.07
NII		5GHz WLAN	0.56	1.16
Date of Testing:		2025/8/8 ~ 2025/9/10		

Remark:
1. This device supports LTE B4 and B66. Since the supported frequency span for LTE B4 falls completely within the support's frequency span for LTE B66, 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.
2. This device supports 5GNR n78 and n77. Since the supported frequency span for 5GNR n78 falls completely within the support's frequency span for n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for 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) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

2. Administration Data

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

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

Applicant	
Company Name	TCL Communication Ltd.
Address	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong

Manufacturer	
Company Name	TCL Communication Ltd.
Address	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong

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 248227 D01 802.11 Wi-Fi SAR v02r02
- 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
- FCC KDB 616217 D04 SAR for laptop and tablets v01r02

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	TCL LINKZONE Go 5G
Brand Name	TCL
Model Name	MW501UV
FCC ID	2ACCJSCD006
IMEI Code	354431470011429, 352950940005321, 354431470000802, 354431470010108
Wireless Technology and Frequency Range	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 66: 1710 MHz ~ 1780 MHz LTE Band 48: 3550 MHz ~ 3700 MHz 5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz
Mode	LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80
HW Version	V3.0
SW Version	VZW_MW501UV_RY_01.00_42
EUT Stage	Production Unit

Remark:

1. This device does not support voice function.
2. The device implements Proximity sensors mechanism for the power management for SAR compliance at different exposure conditions (Body). The device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to appendix E. power table.
3. This device supports HPUE mode for 5GNR n77/n78 ANT5 only.
4. For 5GNR n77/n78 HPUE, 5GNR n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
5. This device supports HPUE mode for 5GNR n77/n78 with higher power. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so power class 3 was chosen to perform full SAR testing and power class 2 verified the worst case of power class 3 SAR.
6. 5GNR n48/n77/n78 supports UL MIMO.
7. 5G NR NSA EN-DC mode, standalone SAR performed for 5GNR band with the maximum power, EN-DC SAR summed 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
8. This device supports 5GNR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.
9. For 5GNR FDD/TDD supports SCS15KHz and SCS30KHz, after verification for 30KHz at FDD power level is less than 15KHz at FDD power level, also verification for 15KHz at TDD power level is less than 30KHz at TDD power level, so only show 15KHz at FDD power and 30KHz at TDD power, and chose higher power which is SCS15KHz for FDD bands and SCS30KHz for TDD bands to perform SAR testing.

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
		FDD	30	10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20, 25
		FDD	30	10, 15, 20, 25
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
		FDD	30	10, 15, 20, 25, 30, 35, 40, 45
	n77	TDD	15	10, 15, 20, 25, 30, 40, 50
		TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	15	10, 15, 20, 25, 30, 40, 50
		TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
		FDD	30	10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20, 25
		FDD	30	10, 15, 20, 25
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
		FDD	30	10, 15, 20, 25, 30, 35, 40, 45
	n48	TDD	15	10, 15, 20, 30, 40
		TDD	30	10, 15, 20, 30, 40
	n77	TDD	15	10, 15, 20, 25, 30, 40, 50
		TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	15	10, 15, 20, 25, 30, 40, 50
		TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

4.2 General LTE SAR Test and Reporting Considerations

<table>
<tr><th colspan="2">Summarized necessary items addressed in KDB 941225 D05 v02r05</th></tr>
<tr><td>FCC ID</td><td>2ACCJSCD006</td></tr>
<tr><td>Equipment Name</td><td>TCL LINKZONE Go 5G</td></tr>
<tr><td>Operating Frequency Range of each LTE transmission band</td><td>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 66: 1710 MHz ~ 1780 MHz
LTE Band 48: 3550 MHz ~ 3700 MHz</td></tr>
<tr><td>Channel Bandwidth</td><td>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 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz</td></tr>
<tr><td>Uplink Modulations used</td><td>QPSK / 16QAM / 64QAM / 256QAM</td></tr>
<tr><td>LTE Voice / Data requirements</td><td>Voice and Data</td></tr>
<tr><td>LTE Release Version</td><td>R15</td></tr>
<tr><td>CA Support</td><td>Yes, Uplink and Downlink</td></tr>
<tr><td>LTE MPR permanently built-in by design</td><td>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3
<table>
<tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th><th rowspan="2">MPR (dB)</th></tr>
<tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr>
<tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr>
<tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr>
<tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr>
<tr><td>64 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 2</td></tr>
<tr><td>64 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 3</td></tr>
<tr><td>256 QAM</td><td colspan="6">≥ 1</td><td>≤ 5</td></tr>
</table></td></tr>
<tr><td>LTE A-MPR</td><td>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)</td></tr>
<tr><td>Spectrum plots for RB configuration</td><td>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.</td></tr>
<tr><td>Power reduction applied to satisfy SAR compliance</td><td>Yes, when operating in Proximity sensors detect mechanism; body will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 13.</td></tr>
<tr><td>LTE Carrier Aggregation Combinations</td><td>Intra-Band and Inter-Band possible combinations and the detail power verification please referred to section 13.</td></tr>
<tr><td>LTE Carrier Aggregation Additional Information</td><td>(1) This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band and inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance.
(2) This device supports maximum of 2 carriers in the uplink.</td></tr>
</table>

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)
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)
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)
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 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 48								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560
LM	55810	3607	55815	3607.5	55820	3608	55830	3609
MH	56170	3643	56165	3642.5	56160	3642	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690

<For LTE Overlap Bands Description>

1) LTE Bands BW

Band	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
LTE Band 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes

2) LTE Bands Tune up:

Band	Ant	Full	Sensor on
		Tune-up Limit	Tune-up Limit
LTE Band 4	Ant.1	24	19
LTE Band 66	Ant.1	24	19
LTE Band 4	Ant.2	24	19
LTE Band 66	Ant.2	24	19

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 n66: 1710 MHz ~ 1780 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz
Channel Bandwidth	The detail please refers to section 4.1 5GNR FR1 bands table.
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B2/5/13/66
LTE Anchor Bands for n5	LTE B2/48/66
LTE Anchor Bands for n66	LTE B2/5/7/13
LTE Anchor Bands for n77	LTE B2/5/7/13/66
LTE Anchor Bands for n78	LTE B5/7

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band

NR Band 2 SCS15KHz

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

NR Band 2 SCS30KHz

	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870
M	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880
H	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378500	1892.5	378000	1890

NR Band 5 SCS15KHz

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz	
	Ch. #	Freq. (MHz)	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	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839		

NR Band 5 SCS30KHz

	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165800	829	166300	831.5	166800	834		
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	168800	844	168300	841.5	167800	839		

NR Band 66 SCS15KHz

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	345500	1727.5	346000	1730	346500	1732.5
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352500	1762.5	352000	1760	351500	1757.5

NR Band 66 SCS30KHz

	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	345500	1727.5	346000	1730	346500	1732.5
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352500	1762.5	352000	1760	351500	1757.5

NR Band 48 SCS15KHz										
	Bandwidth 10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	637000	3555	637168	3557.52	637334	3560.01	637668	3565.02	638000	3570
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H	646332	3694.98	646166	3692.49	646000	3690	645666	3684.99	645332	3679.98

NR Band 48 SCS30KHz										
	Bandwidth 10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	637000	3555	637168	3557.52	637334	3560.01	637668	3565.02	638000	3570
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H	646332	3694.98	646166	3692.49	646000	3690	645666	3684.99	645332	3679.98

NR Band 77 SCS15KHz														
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01
M	656000	3840	656000	3840	656000	3840	656000	3840.00	656000	3840.00	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.5	664332	3964.98	664000	3960	663666	3954.99

NR Band 77 SCS30KHz																						
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840.00	656000	3840.00	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.5	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930

NR Band 78 SCS15KHz														
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01
M	650000	3750	650000	3750	650000	3750	650000	3750.00	650000	3750.00	650000	3750	650000	3750
H	653000	3795	652832	3792.48	652666	3789.99	652500	3787.5	652332	3784.98	652000	3780	651666	3774.99

NR Band 78 SCS30KHz																						
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02		
M	650000	3750	650000	3750	650000	3750	650000	3750.00	650000	3750.00	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	653000	3795	652832	3792.48	652666	3789.99	652500	3787.5	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		

For <3450 MHz ~ 3550 MHz >

NR Band 77 SCS15KHz														
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525

NR Band 77 SCS30KHz																						
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

NR Band 78 SCS15KHz														
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02
M	633332	3499.98	633332	3499.98	633332	633332	3499.98	633332	3499.98	633332	633332	3499.98	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525

NR Band 78 SCS30KHz																						
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633332	3499.98	633332	3499.98	633332	633332	3499.98	633332	3499.98	633332	633332	3499.98	633332	3499.98	633332	633332	3499.98	633332	3499.98	633332	633332	3499.98	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

<For NR Overlap Bands Description>

1) NR Bands BW

Band	Duplex	SCS(KHz)	Bandwidths(BW)
n77	TDD	30	10, 15, 20, 25,30, 40, 50, 60,70, 80, 90, 100
n77	TDD	15	10, 15, 20, 25,30, 40, 50
n78	TDD	30	10, 15, 20, 25,30, 40, 50, 60,70, 80, 90, 100
n78	TDD	15	10, 15, 20, 25,30, 40, 50

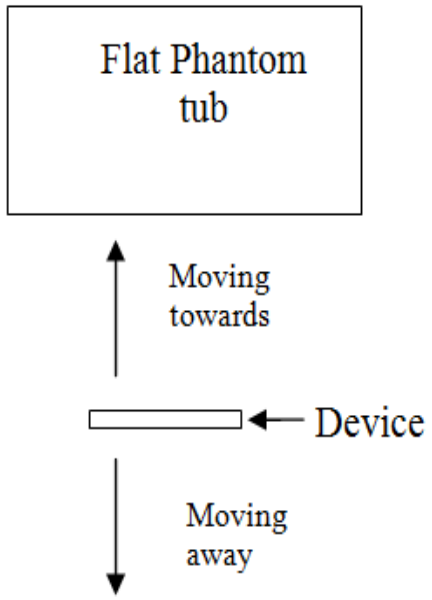
2) NR Bands Tune up:

Band	Ant	Full	Sensor on
		Tune-up Limit	Tune-up Limit
FR1 n77-PC3	Ant.5	24	18.5
FR1 n77-PC2	Ant.5	27	21.5
FR1 n78-PC3	Ant.5	24	18.5
FR1 n78-PC2	Ant.5	27	21.5
FR1 n77-PC3	Ant.6	24	18.5
FR1 n78-PC3	Ant.6	24	18.5

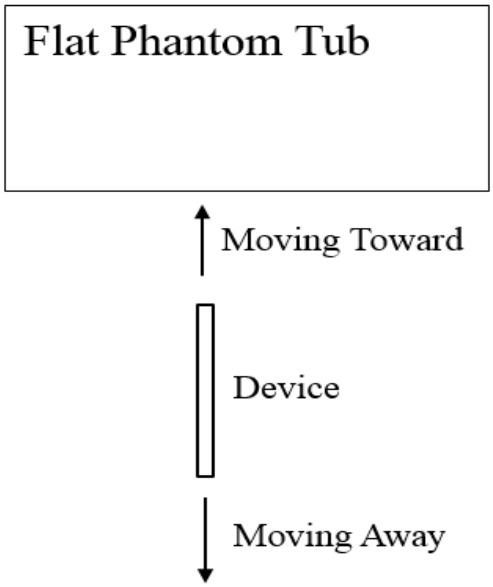
5. Proximity Sensor Triggering Test

<Proximity Sensor Triggering Distance>:

1. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (3980MHz) and lowest (750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's body or finger or hand at the front or back or bottom or left or top side of the device. There is no need to do sensor coverage testing for the proximity sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the proximity sensor entirely covers the antenna.
3. The sensors can use to detect the proximity of the user's body or handheld states at the front or back or bottom or left or right or top side of the device use a detection threshold distance. When front/back/right/left/top/bottom sides of body or handheld condition is detected reduced power will be active. The trigger distance shown in the sections below.
4. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed.



Sensor/Handheld detection test set-up, Front and Back sides



Handheld detection test set-up, Left Side, Right Side, Bottom Side and Top Side

<P-Sensor for ANT1&ANT2&ANT3&ANT5&ANT6 >

Proximity Sensor Triggering Distance (mm)												
Position	Front		Back		Left Side		Right Side		Top Side		Bottom Side	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	25	25	31	31	23	23	22	22	20	20	25	25

6. RF Exposure Limits

6.1 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.

6.2 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.

7. Specific Absorption Rate (SAR)

7.1 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.

7.2 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:

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

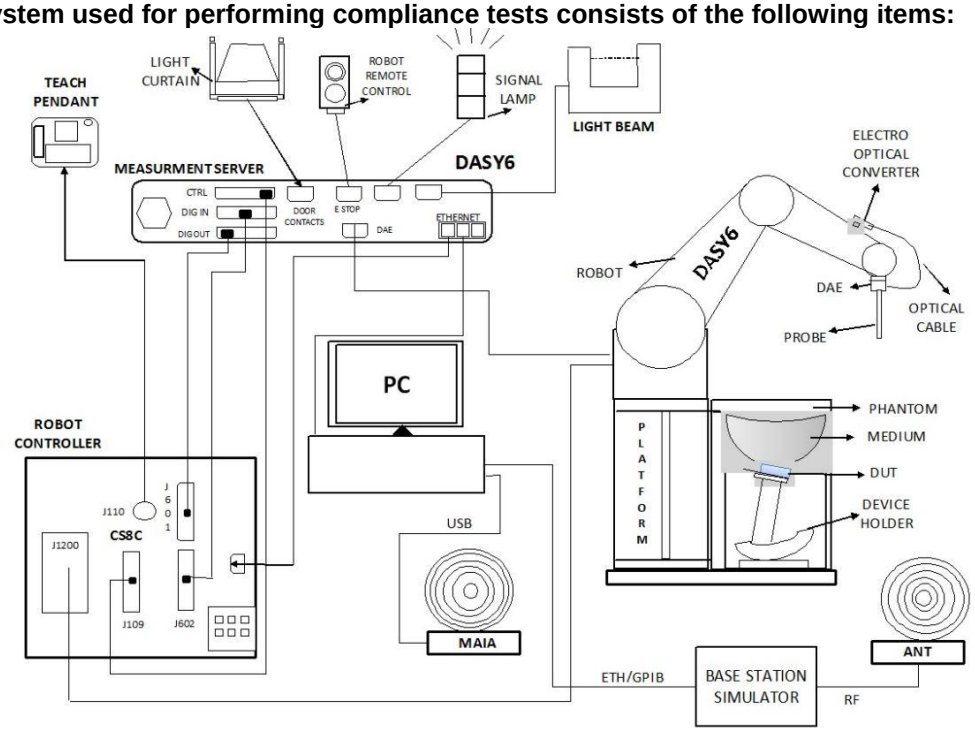
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

8. System Description and Setup

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



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

8.1 E-Field Probe

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

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Frequency	4 MHz – 10 GHz Linearity: ±0.2 dB (30 MHz – 10 GHz)
Directivity	±0.3 dB in TSL (rotation around probe axis) ±0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 µW/g – >100 mW/g Linearity: ±0.2 dB (noise: typically <1 µW/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

8.2 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.

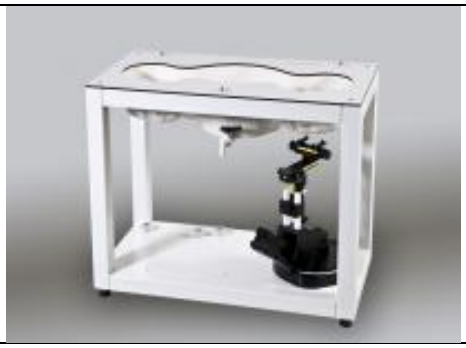
The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

Photo of DAE

8.3 Phantom

<SAM Twin Phantom>

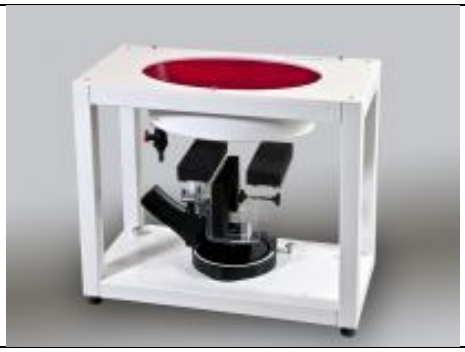
Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet
Measurement Areas	Left Hand, Right Hand, Flat Phantom



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

<ELI Phantom>

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



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

8.4 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

9. 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

9.1 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 form 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

9.2 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.

9.3 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 dB0 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	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{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 ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

9.4 Zoom Scan

Zoom scans are used 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 shoes 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: Δx_{Zoom}, Δy_{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: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
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 *reported* SAR from the *area scan based 1-g SAR estimation* 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.

9.5 Volume Scan Procedures

The volume scan is used for 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.

9.6 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.

10. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1099	Dec. 13, 2024	Dec. 12, 2025
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 13, 2024	Dec. 12, 2025
SPEAG	1750MHz System Validation Kit	D1750V2	1137	Oct. 15, 2024	Oct. 14, 2025
SPEAG	1900MHz System Validation Kit	D1900V2	5d182	Dec. 16, 2024	Dec. 15, 2025
SPEAG	2450MHz System Validation Kit	D2450V2	924	Nov. 03, 2023	Nov. 01, 2025
SPEAG	2600MHz System Validation Kit	D2600V2	1070	Dec. 13, 2024	Dec. 12, 2025
SPEAG	3500MHz System Validation Kit	D3500V2	1037	Nov. 20, 2023	Nov. 18, 2025
SPEAG	3700MHz System Validation Kit	D3700V2	1008	Nov. 20, 2023	Nov. 18, 2025
SPEAG	3900MHz System Validation Kit	D3900V2	1022	Aug. 18, 2022	Aug. 17, 2025
SPEAG	3900MHz System Validation Kit	D3900V2	1048	Mar. 09, 2023	Mar. 07, 2026
SPEAG	5000MHz System Validation Kit	D5GHzV2	1341	Dec. 12, 2024	Dec. 11, 2025
SPEAG	Data Acquisition Electronics	DAE4	1386	Aug. 30, 2024	Aug. 29, 2025
SPEAG	Data Acquisition Electronics	DAE4	1664	Jul. 30, 2025	Jul. 29, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7641	Jun. 26, 2025	Jun. 25, 2026
SPEAG	SAM Twin Phantom	QD 000 P40 CD	1670	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio communication analyzer	MT8820C	6201341952	Dec. 26, 2024	Dec. 25, 2025
Anritsu	Radio communication analyzer	MT8820C	6201563813	Dec. 26, 2024	Dec. 25, 2025
Keysight	Network Analyzer	E5071C	MY46523671	Oct. 15, 2024	Oct. 14, 2025
Speag	Dielectric Assessment KIT	DAK-3.5	1071	Feb. 24, 2025	Feb. 23, 2026
Agilent	Signal Generator	N5181A	MY50145381	Dec. 26, 2024	Dec. 25, 2025
Anritsu	Power Senor	MA2411B	1306099	Oct. 15, 2024	Oct. 14, 2025
Anritsu	Power Meter	ML2495A	1349001	Oct. 15, 2024	Oct. 14, 2025
Anritsu	Power Sensor	MA2411B	1218010	Oct. 14, 2024	Oct. 13, 2025
Anritsu	Power Meter	ML2495A	1339473	Dec. 26, 2024	Dec. 25, 2025
R&S	Spectrum Analyzer	FSP7	100818	Jul. 03, 2025	Jul. 02, 2026
TES	Hygrometer	1310	200505600	Jul. 05, 2025	Jul. 04, 2026
Anymetre	Thermo-Hygrometer	JR593	2015102801	Dec. 28, 2024	Dec. 27, 2025
Mini-Circuits	Amplifier	ZVA-183W-S+	726202215	Note 1	
SPEAG	Device Holder	N/A	N/A	Note 1	
ARRA	Power Divider	A3200-2	N/A	Note 1	
ET Industries	Dual Directional Coupler	C-058-10	N/A	Note 1	
Jinkexinhua	Attenuator	10db-8G	N/A	Note 1	

Note:

1. Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.
2. The dipole calibration interval can be extended to 3 years with justification according to KDB 865664 D01. The dipoles are also not physically damaged, or repaired during the interval. The justification data in appendix C can be found which the return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration for each dipole.

11. System Verification

11.1 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 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. 10.1.

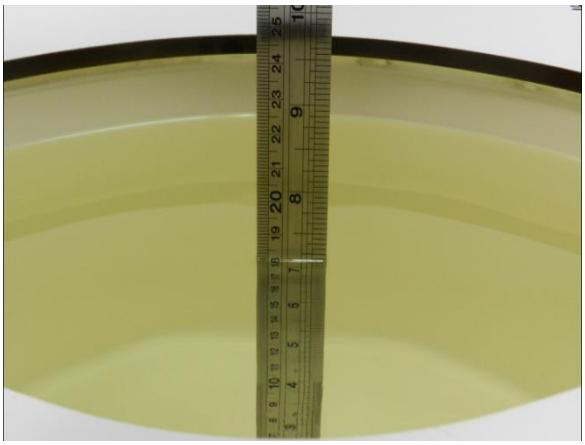


Fig 10.1 Photo of Liquid Height for Body SAR

11.2 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 (εr)
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. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
750	Head	22.3	0.912	42.200	0.89	41.90	2.47	0.72	±5	2025/8/8
835	Head	22.8	0.921	42.300	0.90	41.50	2.33	1.93	±5	2025/8/11
1750	Head	22.4	1.390	40.600	1.37	40.10	1.46	1.25	±5	2025/8/13
1900	Head	22.1	1.380	39.500	1.40	40.00	-1.43	-1.25	±5	2025/8/16
2450	Head	22.2	1.830	39.600	1.80	39.20	1.67	1.02	±5	2025/8/24
2600	Head	22.3	1.940	38.700	1.96	39.00	-1.02	-0.77	±5	2025/8/17
3500	Head	22.7	2.940	37.200	2.91	37.90	1.03	-1.85	±5	2025/8/9
3700	Head	22.9	3.080	38.200	3.12	37.70	-1.28	1.33	±5	2025/8/12
3900	Head	22.1	3.270	37.600	3.33	37.51	-1.80	0.24	±5	2025/8/14
5250	Head	22.8	4.740	36.700	4.71	35.95	0.64	2.09	±5	2025/8/25
5800	Head	22.6	5.320	34.900	5.27	35.30	0.95	-1.13	±5	2025/8/25
3500	Head	22.3	2.820	39.200	2.91	37.90	-3.09	3.43	±5	2025/9/10
3700	Head	22.3	3.100	38.900	3.12	37.70	-0.64	3.18	±5	2025/9/10
3900	Head	22.3	3.200	38.600	3.33	37.51	-3.90	2.91	±5	2025/9/10

11.3 System Performance Check Results

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

Date	Frequency (MHz)	Tissue Type	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2025/8/8	750	Head	250	1099	7641	1386	2.110	8.280	8.44	1.93
2025/8/11	835	Head	250	4d162	7641	1386	2.360	9.080	9.44	3.96
2025/8/13	1750	Head	250	1137	7641	1386	9.280	36.800	37.12	0.87
2025/8/16	1900	Head	250	5d182	7641	1386	10.300	39.800	41.2	3.52
2025/8/24	2450	Head	250	924	7641	1386	12.600	52.300	50.4	-3.63
2025/8/17	2600	Head	250	1070	7641	1386	13.900	56.500	55.6	-1.59
2025/8/9	3500	Head	100	1037	7641	1386	6.530	65.400	65.3	-0.15
2025/8/12	3700	Head	100	1008	7641	1386	6.780	67.200	67.8	0.89
2025/8/14	3900	Head	100	1022	7641	1386	6.750	66.400	67.5	1.66
2025/8/25	5250	Head	100	1341	7641	1386	7.630	79.100	76.3	-3.54
2025/8/25	5800	Head	100	1341	7641	1386	7.940	79.900	79.4	-0.63
2025/9/10	3500	Head	100	1037	7641	1664	6.410	65.400	64.1	-1.99
2025/9/10	3700	Head	100	1008	7641	1664	7.010	67.200	70.1	4.32
2025/9/10	3900	Head	100	1048	7641	1664	6.950	69.100	69.5	0.58

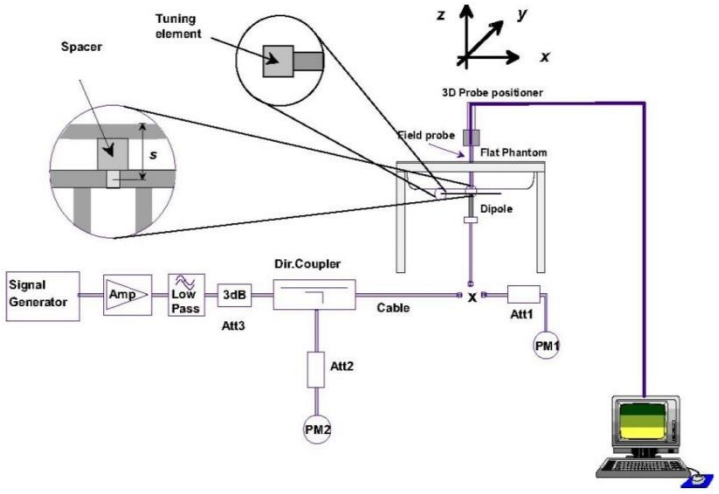


Fig 10.3.1 System Performance Check Setup

Fig 10.3.2 Setup Photo

12. RF Exposure Positions

12.1 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 x W ≥ 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 form general mixed use conditions for this type of devices.

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.

<EUT Setup Photos>

Please refer to Appendix D for the test setup photos.

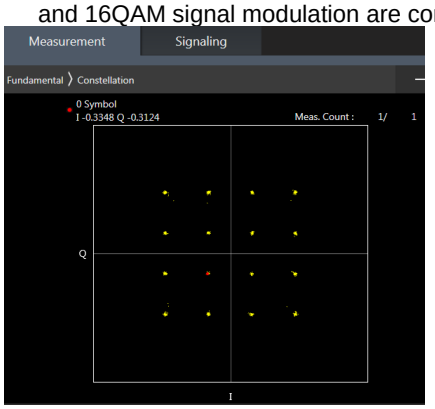
13. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

<LTE Conducted Power>

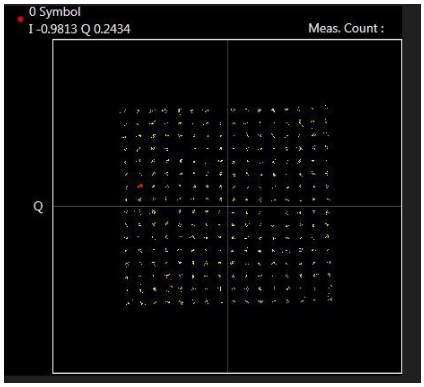
General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > not 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; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE B4 SAR test was covered by B66; 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 ≤ the larger band to qualify for the SAR test exclusion
   b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



16QAM

64QAM



256QAM

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

a. 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations

b. "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

c. 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.

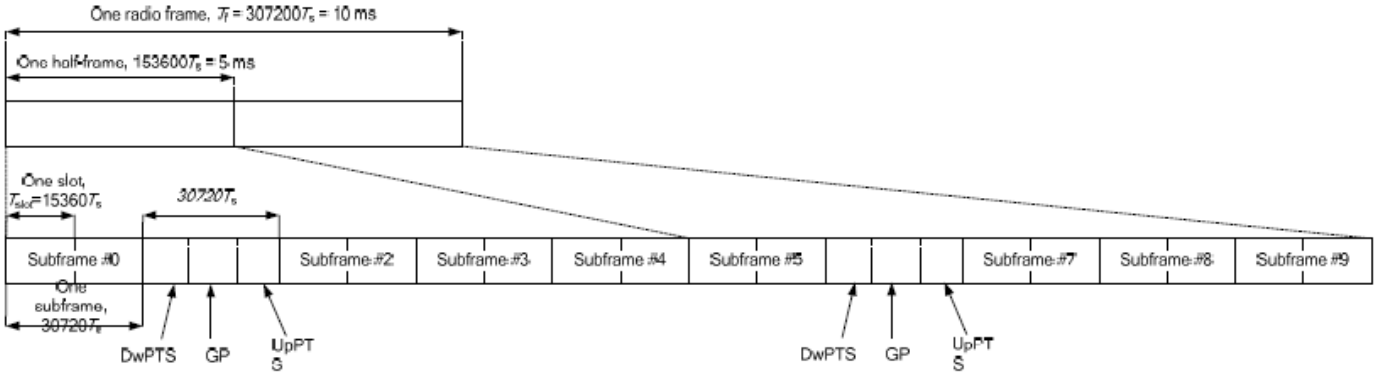


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

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	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

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

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

The highest duty factor is resulted from:

For LTE TDD Power class 3

i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subfames, uplink operation is in 3 uplink subframes and 1 special subframe.

ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink

iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.167)/5 = 63.3%

iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.143)/5 = 62.9%

v. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

<LTE Carrier Aggregation>

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

General Note:

1. Per Oct. 2024 TCB workshop, the downlink (DL) pertains to receiver functionality, thus it is not related to RF exposure compliance limits related to cumulative effects of different transmitters.
2. Per Oct. 2024 TCB workshop, equipment authorization applications shall refer to the worst-case UL powers resulting from all the possible modes of operations. Accordingly, CA-DL cases do not need to be analyzed separately, unless pertinent to establishing UL power setting.
3. Per Oct. 2024 TCB workshop, Manufacturer declares that TX power measurement for multiple DL CA configurations is deemed not required as the DL CA has no impact on the TX power according to preliminary scan. TX power measured in LTE standalone operation represents the worst case.
4. This device supports LTE carrier aggregation in the downlink. All uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation
Intra-band	Antenna Tx
CA_5B	Ant 1
CA_66B	Ant 1
CA_66C	Ant 1
CA_48C	Ant 5

<Intra-band>

General Note:

i. The device supports intra-band uplink carrier aggregation for LTE B5/66/48 with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.

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

iii. According Nov. 2017 TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.

iv. Additional SAR measurement for LTE UL CA whit other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.

v. LTE CA_66B test was covered by CA_66C; therefore, SAR was only assessed for CA_66C.

<Inter-band uplink carrier aggregation consideration>

LTE Inter CA	LTE TX0	TX0 Ant	LTE TX1	TX1 Ant
CA_2A-4A	LTE Band 2	Ant 1	LTE Band 4	Ant 2
CA_2A-5A	LTE Band 2	Ant 2	LTE Band 5	Ant 1
CA_2A-13A	LTE Band 2	Ant 2	LTE Band 13	Ant 1
CA_2A-66A	LTE Band 2	Ant 1	LTE Band 66	Ant 2
CA_4A-5A	LTE Band 4	Ant 2	LTE Band 5	Ant 1
CA_4A-13A	LTE Band 4	Ant 2	LTE Band 13	Ant 1
CA_5A-66A	LTE Band 66	Ant 2	LTE Band 5	Ant 1
CA_13A-66A	LTE Band 66	Ant 2	LTE Band 13	Ant 1
CA_2A-48A	LTE Band 2	Ant 1	LTE Band 48	Ant 5
CA_48A-66A	LTE Band 48	Ant 5	LTE Band 66	Ant 1

General Note:

1. The inter band uplink total power level is the same as standalone LTE power level.
2. For Inter-band CA co-located SAR analysis is performed using standalone SAR summed together and they are more conservatively for inter band CA.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2/n5/n66/n77/n78 is NSA mode.
2. 5G NR n2/n5/n66/n48/n77/n78 is SA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
   a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
   b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
   c. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel
   d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
   e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
   f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
   g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. This device supports HPUE mode for 5GNR n77/n78 ANT5 only.
5. For 5GNR n77/n78 HPUE, 5GNR n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
6. 5GNR n48/n77/n78 supports UL MIMO.
7. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
8. 5GNR NSA mode, the power level is the same as 5GNR SA mode, so 5GNR NSA mode and SA mode power table only show one time.
9. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
10. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
11. For 5GNR EN-DC mode, standalone SAR performed for 5GNR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.

<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	≤ 3.5[1]	≤ 1.2[1]	≤ 0.2[1]
		≤ 0.5[2]	≤ 0.5[2]	0[2]
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		
NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0 dB MPR is 26 dBm.				
NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.				

Table 6.2.2-2 Maximum power reduction (MPR) for power class 2

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5	≤ 2.5	
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

<EN-DC combination>

ENDC	LTE TX	LTE Ant	NR TX	NR Ant
DC_2A_n2A	LTE Band 2	Ant 1	FR1 n2	Ant 2
DC_5A_n2A	LTE Band 5	Ant 1	FR1 n2	Ant 2
DC_13A_n2A	LTE Band 13	Ant 1	FR1 n2	Ant 2
DC_66A_n2A	LTE Band 66	Ant 1	FR1 n2	Ant 2
DC_2A_n5A	LTE Band 2	Ant 2	FR1 n5	Ant 1
DC_48A_n5A	LTE Band 48	Ant 5	FR1 n5	Ant 1
DC_66A_n5A	LTE Band 66	Ant 2	FR1 n5	Ant 1
DC_2A_n66A	LTE Band 2	Ant 1	FR1 n66	Ant 2
DC_5A_n66A	LTE Band 5	Ant 1	FR1 n66	Ant 2
DC_2A_n77A	LTE Band 2	Ant 1	FR1 n77	Ant 5
DC_5A_n77A	LTE Band 5	Ant 1	FR1 n77	Ant 5
DC_7A_n77A	LTE Band 7	Ant 3	FR1 n77	Ant 5
DC_13A_n77A	LTE Band 13	Ant 1	FR1 n77	Ant 5
DC_66A_n77A	LTE Band 66	Ant 1	FR1 n77	Ant 5
DC_5A_n78A	LTE Band 5	Ant 1	FR1 n78	Ant 5
DC_7A_n78A	LTE Band 7	Ant 3	FR1 n78	Ant 5
DC_13A_n66A	LTE Band 13	Ant 1	FR1 n66	Ant 2
DC_7A_n66A	LTE Band 7	Ant 3	FR1 n66	Ant 2

NR UL MIMO Bands Configuration:

NR UL MIMO	TX Ant
FR1 n48	Ant 5+6
FR1 n77	Ant 5+6
FR1 n78	Ant 5+6

<WLAN Conducted Power>

General Note:

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

14. Antenna Location

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

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
   c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
   d. For WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
   e. For TDD LTE SAR measurement of power class 3, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = Measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
   · ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   · ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   · ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg.
4. According to Nov. 2017 TCB workshop, when the reported 1gSAR for UL CA configuration is <1.2 W/kg, UL CA 1gSAR is not required for all required test channels (PCC based).
5. The device implements Proximity sensors mechanism for the power management for SAR compliance at different exposure conditions (Body). The device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to appendix E. power table.
6. The following table"n/a"means the measured SAR is too small to find the 1g cube SAR.
7. For WLAN 2.4GHz/5GHz distance SAR test at Front 24mm/Back 30mm/Left side 22mm /Right side 21mm /Top side 19mm /Bottom side 24mm is only for simultaneous transmission analysis with WWAN.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is > not 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; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B4 SAR test was covered by B66; 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 ≤ the larger band to qualify for the SAR test exclusion
   b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

5G NR Note:

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
   a. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
   b. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
   c. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
   d. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
   e. 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
   f. For 5G FR1 n2/n5/n66/n48/n77 the maximum bandwidth does not support three non-overlapping channels, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

WLAN 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.

15.1 Body SAR

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	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)
750MHz																				
	LTE Band 12	10M	QPSK	1	0	-	Front	10mm	Ant 1	Sensor on	23095	707.5	21.05	22.00	1.245	-	-	0.09	0.283	0.352
01	LTE Band 12	10M	QPSK	1	0	-	Back	10mm	Ant 1	Sensor on	23095	707.5	21.05	22.00	1.245	-	-	0.01	0.338	**0.421**
	LTE Band 12	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	Sensor on	23095	707.5	21.05	22.00	1.245	-	-	-0.03	0.172	0.214
	LTE Band 12	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	Sensor on	23095	707.5	21.05	22.00	1.245	-	-	-0.19	0.209	0.260
	LTE Band 12	10M	QPSK	1	0	-	Top Side	10mm	Ant 1	Sensor on	23095	707.5	21.05	22.00	1.245	-	-	0.18	0.022	0.027
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	Sensor on	23095	707.5	21.05	22.00	1.245	-	-	0.14	0.009	0.011
	LTE Band 12	10M	QPSK	1	0	-	Front	24mm	Ant 1	Full	23095	707.5	23.20	24.00	1.202	-	-	0.1	0.312	0.375
	LTE Band 12	10M	QPSK	1	0	-	Back	30mm	Ant 1	Full	23095	707.5	23.20	24.00	1.202	-	-	0.1	0.245	0.295
	LTE Band 12	10M	QPSK	1	0	-	Left Side	22mm	Ant 1	Full	23095	707.5	23.20	24.00	1.202	-	-	0.19	0.105	0.126
	LTE Band 12	10M	QPSK	1	0	-	Right Side	21mm	Ant 1	Full	23095	707.5	23.20	24.00	1.202	-	-	-0.17	0.137	0.165
	LTE Band 12	10M	QPSK	1	0	-	Top Side	19mm	Ant 1	Full	23095	707.5	23.20	24.00	1.202	-	-	-	n/a	n/a
	LTE Band 12	10M	QPSK	1	0	-	Bottom Side	24mm	Ant 1	Full	23095	707.5	23.20	24.00	1.202	-	-	-	n/a	n/a
	LTE Band 12	10M	QPSK	25	0	-	Front	10mm	Ant 1	Sensor on	23095	707.5	21.03	22.00	1.250	-	-	-0.01	0.249	0.311
	LTE Band 12	10M	QPSK	25	0	-	Back	10mm	Ant 1	Sensor on	23095	707.5	21.03	22.00	1.250	-	-	-0.1	0.267	0.334
	LTE Band 12	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	Sensor on	23095	707.5	21.03	22.00	1.250	-	-	0.14	0.144	0.180
	LTE Band 12	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	Sensor on	23095	707.5	21.03	22.00	1.250	-	-	0.14	0.174	0.218
	LTE Band 12	10M	QPSK	25	0	-	Top Side	10mm	Ant 1	Sensor on	23095	707.5	21.03	22.00	1.250	-	-	0.09	0.018	0.023
	LTE Band 12	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	Sensor on	23095	707.5	21.03	22.00	1.250	-	-	-0.12	0.008	0.010
02	LTE Band 13	10M	QPSK	1	0	-	Front	10mm	Ant 1	Sensor on	23230	782	21.44	22.00	1.138	-	-	-0.02	0.502	**0.571**
	LTE Band 13	10M	QPSK	1	0	-	Back	10mm	Ant 1	Sensor on	23230	782	21.44	22.00	1.138	-	-	-0.04	0.412	0.469
	LTE Band 13	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	Sensor on	23230	782	21.44	22.00	1.138	-	-	0.09	0.303	0.345
	LTE Band 13	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	Sensor on	23230	782	21.44	22.00	1.138	-	-	-0.13	0.315	0.358
	LTE Band 13	10M	QPSK	1	0	-	Top Side	10mm	Ant 1	Sensor on	23230	782	21.44	22.00	1.138	-	-	0.16	0.079	0.090
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	Sensor on	23230	782	21.44	22.00	1.138	-	-	-0.18	0.030	0.034
	LTE Band 13	10M	QPSK	1	0	-	Front	24mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	0.1	0.439	0.504
	LTE Band 13	10M	QPSK	1	0	-	Back	30mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	-0.03	0.306	0.351
	LTE Band 13	10M	QPSK	1	0	-	Left Side	22mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	-0.1	0.223	0.256
	LTE Band 13	10M	QPSK	1	0	-	Right Side	21mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	0.14	0.236	0.271
	LTE Band 13	10M	QPSK	1	0	-	Top Side	19mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	-	n/a	n/a
	LTE Band 13	10M	QPSK	1	0	-	Bottom Side	24mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	-	n/a	n/a
	LTE Band 13	10M	QPSK	25	0	-	Front	10mm	Ant 1	Sensor on	23230	782	21.42	22.00	1.143	-	-	-0.17	0.395	0.451
	LTE Band 13	10M	QPSK	25	0	-	Back	10mm	Ant 1	Sensor on	23230	782	21.42	22.00	1.143	-	-	0.13	0.312	0.357
	LTE Band 13	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	Sensor on	23230	782	21.42	22.00	1.143	-	-	0.13	0.240	0.274
	LTE Band 13	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	Sensor on	23230	782	21.42	22.00	1.143	-	-	-0.05	0.247	0.282
	LTE Band 13	10M	QPSK	25	0	-	Top Side	10mm	Ant 1	Sensor on	23230	782	21.42	22.00	1.143	-	-	-0.19	0.064	0.073
	LTE Band 13	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	Sensor on	23230	782	21.42	22.00	1.143	-	-	0.1	0.023	0.026
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Front	10mm	Ant 1	Sensor on	23230	782	18.45	19.00	1.135	-	-	-0.18	0.255	0.289
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Back	10mm	Ant 1	Sensor on	23230	782	18.45	19.00	1.135	-	-	0.15	0.215	0.244
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	Sensor on	23230	782	18.45	19.00	1.135	-	-	-0.16	0.142	0.161
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	Sensor on	23230	782	18.45	19.00	1.135	-	-	0.07	0.147	0.167
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Top Side	10mm	Ant 1	Sensor on	23230	782	18.45	19.00	1.135	-	-	0.04	0.050	0.057
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	Sensor on	23230	782	18.45	19.00	1.135	-	-	-	n/a	n/a
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Front	24mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	0.1	0.439	0.504
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Back	30mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	-0.03	0.306	0.351
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Left Side	22mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	-0.1	0.223	0.256
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Right Side	21mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	0.14	0.236	0.271
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Top Side	19mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	-	n/a	n/a
	LTE Band 13_ENDC	10M	QPSK	1	0	-	Bottom Side	24mm	Ant 1	Full	23230	782	23.40	24.00	1.148	-	-	-	n/a	n/a
	LTE Band 13_ENDC	10M	QPSK	25	0	-	Front	10mm	Ant 1	Sensor on	23230	782	18.43	19.00	1.140	-	-	0.19	0.249	0.284
	LTE Band 13_ENDC	10M	QPSK	25	0	-	Back	10mm	Ant 1	Sensor on	23230	782	18.43	19.00	1.140	-	-	0.02	0.210	0.239
	LTE Band 13_ENDC	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	Sensor on	23230	782	18.43	19.00	1.140	-	-	0.13	0.139	0.158

	LTE Band 13_ENDC	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	Sensor on	23230	782	18.43	19.00	1.140	-	-	-0.08	0.144	0.164
	LTE Band 13_ENDC	10M	QPSK	25	0	-	Top Side	10mm	Ant 1	Sensor on	23230	782	18.43	19.00	1.140	-	-	0.17	0.049	0.056
	LTE Band 13_ENDC	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	Sensor on	23230	782	18.43	19.00	1.140	-	-	-	n/a	n/a
835MHz																				
	LTE Band 5	10M	QPSK	1	0	-	Front	10mm	Ant 1	Sensor on	20525	836.5	21.16	22.00	1.213	-	-	-0.16	0.422	0.512
03	LTE Band 5	10M	QPSK	1	0	-	Back	10mm	Ant 1	Sensor on	20525	836.5	21.16	22.00	1.213	-	-	-0.08	0.462	**0.561**
	LTE Band 5B	10M	QPSK	1	0	-	Back	10mm	Ant 1	Sensor on	20575+ 20476	841.5+ 831.6	20.88	22.00	1.294	-	-	0.01	0.423	0.547
	LTE Band 5	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	Sensor on	20525	836.5	21.16	22.00	1.213	-	-	0.14	0.391	0.474
	LTE Band 5	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	Sensor on	20525	836.5	21.16	22.00	1.213	-	-	-0.19	0.282	0.342
	LTE Band 5	10M	QPSK	1	0	-	Top Side	10mm	Ant 1	Sensor on	20525	836.5	21.16	22.00	1.213	-	-	0.13	0.109	0.132
	LTE Band 5	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	Sensor on	20525	836.5	21.16	22.00	1.213	-	-	-0.09	0.029	0.035
	LTE Band 5	10M	QPSK	1	0	-	Front	24mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	0.05	0.418	0.505
	LTE Band 5	10M	QPSK	1	0	-	Back	30mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	0.15	0.357	0.431
	LTE Band 5	10M	QPSK	1	0	-	Left Side	22mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	-0.05	0.288	0.348
	LTE Band 5	10M	QPSK	1	0	-	Right Side	21mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	-0.09	0.209	0.252
	LTE Band 5	10M	QPSK	1	0	-	Top Side	19mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	-	n/a	n/a
	LTE Band 5	10M	QPSK	1	0	-	Bottom Side	24mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	-	n/a	n/a
	LTE Band 5	10M	QPSK	25	0	-	Front	10mm	Ant 1	Sensor on	20525	836.5	21.15	22.00	1.216	-	-	0.06	0.327	0.398
	LTE Band 5	10M	QPSK	25	0	-	Back	10mm	Ant 1	Sensor on	20525	836.5	21.15	22.00	1.216	-	-	0.04	0.350	0.426
	LTE Band 5	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	Sensor on	20525	836.5	21.15	22.00	1.216	-	-	0.17	0.309	0.376
	LTE Band 5	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	Sensor on	20525	836.5	21.15	22.00	1.216	-	-	-0.18	0.216	0.263
	LTE Band 5	10M	QPSK	25	0	-	Top Side	10mm	Ant 1	Sensor on	20525	836.5	21.15	22.00	1.216	-	-	-0.03	0.088	0.107
	LTE Band 5	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	Sensor on	20525	836.5	21.15	22.00	1.216	-	-	-0.13	0.023	0.028
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Front	10mm	Ant 1	Sensor on	20525	836.5	18.20	19.00	1.202	-	-	-0.08	0.193	0.232
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Back	10mm	Ant 1	Sensor on	20525	836.5	18.20	19.00	1.202	-	-	-0.05	0.219	0.263
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Left Side	10mm	Ant 1	Sensor on	20525	836.5	18.20	19.00	1.202	-	-	0.03	0.162	0.195
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Right Side	10mm	Ant 1	Sensor on	20525	836.5	18.20	19.00	1.202	-	-	0.14	0.108	0.130
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Top Side	10mm	Ant 1	Sensor on	20525	836.5	18.20	19.00	1.202	-	-	0.11	0.058	0.070
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	Sensor on	20525	836.5	18.20	19.00	1.202	-	-	-	n/a	n/a
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Front	24mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	0.05	0.418	0.505
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Back	30mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	0.15	0.357	0.431
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Left Side	22mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	-0.05	0.288	0.348
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Right Side	21mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	-0.09	0.209	0.252
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Top Side	19mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	-	n/a	n/a
	LTE Band 5_ENDC	10M	QPSK	1	0	-	Bottom Side	24mm	Ant 1	Full	20525	836.5	23.18	24.00	1.208	-	-	-	n/a	n/a
	LTE Band 5_ENDC	10M	QPSK	25	0	-	Front	10mm	Ant 1	Sensor on	20525	836.5	18.18	19.00	1.208	-	-	0.18	0.183	0.221
	LTE Band 5_ENDC	10M	QPSK	25	0	-	Back	10mm	Ant 1	Sensor on	20525	836.5	18.18	19.00	1.208	-	-	-0.11	0.215	0.260
	LTE Band 5_ENDC	10M	QPSK	25	0	-	Left Side	10mm	Ant 1	Sensor on	20525	836.5	18.18	19.00	1.208	-	-	-0.16	0.154	0.186
	LTE Band 5_ENDC	10M	QPSK	25	0	-	Right Side	10mm	Ant 1	Sensor on	20525	836.5	18.18	19.00	1.208	-	-	-0.16	0.104	0.126
	LTE Band 5_ENDC	10M	QPSK	25	0	-	Top Side	10mm	Ant 1	Sensor on	20525	836.5	18.18	19.00	1.208	-	-	-0.18	0.056	0.068
	LTE Band 5_ENDC	10M	QPSK	25	0	-	Bottom Side	10mm	Ant 1	Sensor on	20525	836.5	18.18	19.00	1.208	-	-	-	n/a	n/a
	FR1 n5	25M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	Sensor on	167300	836.5	20.98	22.00	1.265	-	-	-0.14	0.388	0.491
04	FR1 n5	25M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	Sensor on	167300	836.5	20.98	22.00	1.265	-	-	-0.02	0.434	**0.549**
	FR1 n5	25M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 1	Sensor on	167300	836.5	20.98	22.00	1.265	-	-	-0.15	0.318	0.402
	FR1 n5	25M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 1	Sensor on	167300	836.5	20.98	22.00	1.265	-	-	0.03	0.217	0.274
	FR1 n5	25M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 1	Sensor on	167300	836.5	20.98	22.00	1.265	-	-	-0.15	0.122	0.154
	FR1 n5	25M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 1	Sensor on	167300	836.5	20.98	22.00	1.265	-	-	-	n/a	n/a
	FR1 n5	25M	QPSK	1	1	DFT-15	Front	24mm	Ant 1	Full	167300	836.5	22.97	24.00	1.268	-	-	0.12	0.430	0.545
	FR1 n5	25M	QPSK	1	1	DFT-15	Back	30mm	Ant 1	Full	167300	836.5	22.97	24.00	1.268	-	-	-0.08	0.351	0.445
	FR1 n5	25M	QPSK	1	1	DFT-15	Left Side	22mm	Ant 1	Full	167300	836.5	22.97	24.00	1.268	-	-	0.05	0.278	0.352
	FR1 n5	25M	QPSK	1	1	DFT-15	Right Side	21mm	Ant 1	Full	167300	836.5	22.97	24.00	1.268	-	-	-0.07	0.177	0.224
	FR1 n5	25M	QPSK	1	1	DFT-15	Top Side	19mm	Ant 1	Full	167300	836.5	22.97	24.00	1.268	-	-	-	n/a	n/a
	FR1 n5	25M	QPSK	1	1	DFT-15	Bottom Side	24mm	Ant 1	Full	167300	836.5	22.97	24.00	1.268	-	-	-	n/a	n/a
	FR1 n5	25M	QPSK	64	32	DFT-15	Front	10mm	Ant 1	Sensor on	167300	836.5	20.96	22.00	1.271	-	-	0.02	0.358	0.455
	FR1 n5	25M	QPSK	64	32	DFT-15	Back	10mm	Ant 1	Sensor on	167300	836.5	20.96	22.00	1.271	-	-	-0.16	0.389	0.494
	FR1 n5	25M	QPSK	64	32	DFT-15	Left Side	10mm	Ant 1	Sensor on	167300	836.5	20.96	22.00	1.271	-	-	-0.15	0.306	0.389

	FR1 n5	25M	QPSK	64	32	DFT-15	Right Side	10mm	Ant 1	Sensor on	167300	836.5	20.96	22.00	1.271	-	-	-0.02	0.187	0.238
	FR1 n5	25M	QPSK	64	32	DFT-15	Top Side	10mm	Ant 1	Sensor on	167300	836.5	20.96	22.00	1.271	-	-	-0.14	0.114	0.145
	FR1 n5	25M	QPSK	64	32	DFT-15	Bottom Side	10mm	Ant 1	Sensor on	167300	836.5	20.96	22.00	1.271	-	-	-	n/a	n/a
1750MHz																				
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 1	Sensor on	132322	1745	18.22	19.00	1.197	-	-	-0.04	0.169	0.202
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 1	Sensor on	132322	1745	18.22	19.00	1.197	-	-	-0.03	0.268	0.321
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	Sensor on	132322	1745	18.22	19.00	1.197	-	-	-0.13	0.075	0.090
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	Sensor on	132322	1745	18.22	19.00	1.197	-	-	0.07	0.089	0.107
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 1	Sensor on	132322	1745	18.22	19.00	1.197	-	-	-0.14	0.206	0.247
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	Sensor on	132322	1745	18.22	19.00	1.197	-	-	-0.16	0.009	0.011
	LTE Band 66	20M	QPSK	1	0	-	Front	24mm	Ant 1	Full	132322	1745	23.33	24.00	1.167	-	-	-0.15	0.187	0.218
	LTE Band 66	20M	QPSK	1	0	-	Back	30mm	Ant 1	Full	132322	1745	23.33	24.00	1.167	-	-	-0.15	0.145	0.169
	LTE Band 66	20M	QPSK	1	0	-	Left Side	22mm	Ant 1	Full	132322	1745	23.33	24.00	1.167	-	-	0.01	0.123	0.144
	LTE Band 66	20M	QPSK	1	0	-	Right Side	21mm	Ant 1	Full	132322	1745	23.33	24.00	1.167	-	-	0.19	0.122	0.142
	LTE Band 66	20M	QPSK	1	0	-	Top Side	19mm	Ant 1	Full	132322	1745	23.33	24.00	1.167	-	-	0.12	0.323	0.377
	LTE Band 66C	20M	QPSK	1	0	-	Top Side	19mm	Ant 1	Full	132322+ 132520	1745+ 1764.8	23.15	24.00	1.216	-	-	0.17	0.306	0.372
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	24mm	Ant 1	Full	132322	1745	23.33	24.00	1.167	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 1	Sensor on	132322	1745	18.20	19.00	1.202	-	-	-0.11	0.132	0.159
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 1	Sensor on	132322	1745	18.20	19.00	1.202	-	-	0.19	0.199	0.239
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	Sensor on	132322	1745	18.20	19.00	1.202	-	-	0.19	0.056	0.067
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	Sensor on	132322	1745	18.20	19.00	1.202	-	-	-0.08	0.071	0.085
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 1	Sensor on	132322	1745	18.20	19.00	1.202	-	-	0.06	0.168	0.202
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	Sensor on	132322	1745	18.20	19.00	1.202	-	-	-0.17	0.007	0.008
	LTE Band 66	20M	QPSK	1	0	-	Front	10mm	Ant 2	Sensor on	132322	1745	18.11	19.00	1.227	-	-	0.11	0.093	0.114
	LTE Band 66	20M	QPSK	1	0	-	Back	10mm	Ant 2	Sensor on	132322	1745	18.11	19.00	1.227	-	-	-0.19	0.075	0.092
	LTE Band 66	20M	QPSK	1	0	-	Left Side	10mm	Ant 2	Sensor on	132322	1745	18.11	19.00	1.227	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	Sensor on	132322	1745	18.11	19.00	1.227	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	1	0	-	Top Side	10mm	Ant 2	Sensor on	132322	1745	18.11	19.00	1.227	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 2	Sensor on	132322	1745	18.11	19.00	1.227	-	-	-0.08	0.181	0.222
	LTE Band 66	20M	QPSK	1	0	-	Front	24mm	Ant 2	Full	132322	1745	23.11	24.00	1.227	-	-	0	0.302	0.371
	LTE Band 66	20M	QPSK	1	0	-	Back	30mm	Ant 2	Full	132322	1745	23.11	24.00	1.227	-	-	0.09	0.193	0.237
	LTE Band 66	20M	QPSK	1	0	-	Left Side	22mm	Ant 2	Full	132322	1745	23.11	24.00	1.227	-	-	0.02	0.103	0.126
	LTE Band 66	20M	QPSK	1	0	-	Right Side	21mm	Ant 2	Full	132322	1745	23.11	24.00	1.227	-	-	-0.09	0.088	0.108
	LTE Band 66	20M	QPSK	1	0	-	Top Side	19mm	Ant 2	Full	132322	1745	23.11	24.00	1.227	-	-	-	n/a	n/a
05	LTE Band 66	20M	QPSK	1	0	-	Bottom Side	24mm	Ant 2	Full	132322	1745	23.11	24.00	1.227	-	-	0.06	0.469	**0.576**
	LTE Band 66	20M	QPSK	50	0	-	Front	10mm	Ant 2	Sensor on	132322	1745	18.10	19.00	1.230	-	-	0.03	0.121	0.149
	LTE Band 66	20M	QPSK	50	0	-	Back	10mm	Ant 2	Sensor on	132322	1745	18.10	19.00	1.230	-	-	0.08	0.092	0.113
	LTE Band 66	20M	QPSK	50	0	-	Left Side	10mm	Ant 2	Sensor on	132322	1745	18.10	19.00	1.230	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	50	0	-	Right Side	10mm	Ant 2	Sensor on	132322	1745	18.10	19.00	1.230	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	50	0	-	Top Side	10mm	Ant 2	Sensor on	132322	1745	18.10	19.00	1.230	-	-	-	n/a	n/a
	LTE Band 66	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 2	Sensor on	132322	1745	18.10	19.00	1.230	-	-	-0.1	0.173	0.213
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	Sensor on	349000	1745	17.78	19.00	1.324	-	-	0.14	0.186	0.246
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	Sensor on	349000	1745	17.78	19.00	1.324	-	-	-0.16	0.263	0.348
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 1	Sensor on	349000	1745	17.78	19.00	1.324	-	-	-0.15	0.089	0.118
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 1	Sensor on	349000	1745	17.78	19.00	1.324	-	-	-0.07	0.116	0.154
	FR1 n66	45M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 1	Sensor on	349000	1745	17.78	19.00	1.324	-	-	-0.06	0.261	0.346
	FR1 n66	45M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 1	Sensor on	349000	1745	17.78	19.00	1.324	-	-	-	n/a	n/a
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	24mm	Ant 1	Full	349000	1745	22.76	24.00	1.330	-	-	0.02	0.200	0.266
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	30mm	Ant 1	Full	349000	1745	22.76	24.00	1.330	-	-	0.18	0.147	0.196
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Side	22mm	Ant 1	Full	349000	1745	22.76	24.00	1.330	-	-	0.09	0.133	0.177
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Side	21mm	Ant 1	Full	349000	1745	22.76	24.00	1.330	-	-	0.02	0.155	0.206
	FR1 n66	45M	QPSK	1	1	DFT-15	Top Side	19mm	Ant 1	Full	349000	1745	22.76	24.00	1.330	-	-	0.05	0.327	0.435
	FR1 n66	45M	QPSK	1	1	DFT-15	Bottom Side	24mm	Ant 1	Full	349000	1745	22.76	24.00	1.330	-	-	-0.15	0.045	0.060
	FR1 n66	45M	QPSK	120	60	DFT-15	Front	10mm	Ant 1	Sensor on	349000	1745	17.77	19.00	1.327	-	-	0.01	0.185	0.246
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	10mm	Ant 1	Sensor on	349000	1745	17.77	19.00	1.327	-	-	-0.16	0.280	0.372
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Side	10mm	Ant 1	Sensor on	349000	1745	17.77	19.00	1.327	-	-	-0.01	0.088	0.117

	FR1 n66	45M	QPSK	120	60	DFT-15	Right Side	10mm	Ant 1	Sensor on	349000	1745	17.77	19.00	1.327	-	-	-0.09	0.144	0.191
	FR1 n66	45M	QPSK	120	60	DFT-15	Top Side	10mm	Ant 1	Sensor on	349000	1745	17.77	19.00	1.327	-	-	-0.02	0.281	0.373
	FR1 n66	45M	QPSK	120	60	DFT-15	Bottom Side	10mm	Ant 1	Sensor on	349000	1745	17.77	19.00	1.327	-	-	-	n/a	n/a
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	10mm	Ant 2	Sensor on	349000	1745	18.04	19.00	1.247	-	-	-0.12	0.347	0.433
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	10mm	Ant 2	Sensor on	349000	1745	18.04	19.00	1.247	-	-	0.01	0.258	0.322
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 2	Sensor on	349000	1745	18.04	19.00	1.247	-	-	-0.06	0.070	0.087
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 2	Sensor on	349000	1745	18.04	19.00	1.247	-	-	-0.05	0.056	0.070
	FR1 n66	45M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 2	Sensor on	349000	1745	18.04	19.00	1.247	-	-	-	n/a	n/a
	FR1 n66	45M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 2	Sensor on	349000	1745	18.04	19.00	1.247	-	-	-0.14	0.519	0.647
	FR1 n66	45M	QPSK	1	1	DFT-15	Front	24mm	Ant 2	Full	349000	1745	23.01	24.00	1.256	-	-	0.06	0.303	0.381
	FR1 n66	45M	QPSK	1	1	DFT-15	Back	30mm	Ant 2	Full	349000	1745	23.01	24.00	1.256	-	-	0.06	0.192	0.241
	FR1 n66	45M	QPSK	1	1	DFT-15	Left Side	22mm	Ant 2	Full	349000	1745	23.01	24.00	1.256	-	-	0.08	0.089	0.112
	FR1 n66	45M	QPSK	1	1	DFT-15	Right Side	21mm	Ant 2	Full	349000	1745	23.01	24.00	1.256	-	-	-0.09	0.086	0.108
	FR1 n66	45M	QPSK	1	1	DFT-15	Top Side	19mm	Ant 2	Full	349000	1745	23.01	24.00	1.256	-	-	-	n/a	n/a
	FR1 n66	45M	QPSK	1	1	DFT-15	Bottom Side	24mm	Ant 2	Full	349000	1745	23.01	24.00	1.256	-	-	0.13	0.453	0.569
	FR1 n66	45M	QPSK	120	60	DFT-15	Front	10mm	Ant 2	Sensor on	349000	1745	18.02	19.00	1.253	-	-	-0.09	0.350	0.439
	FR1 n66	45M	QPSK	120	60	DFT-15	Back	10mm	Ant 2	Sensor on	349000	1745	18.02	19.00	1.253	-	-	0	0.271	0.340
	FR1 n66	45M	QPSK	120	60	DFT-15	Left Side	10mm	Ant 2	Sensor on	349000	1745	18.02	19.00	1.253	-	-	-0.18	0.074	0.093
	FR1 n66	45M	QPSK	120	60	DFT-15	Right Side	10mm	Ant 2	Sensor on	349000	1745	18.02	19.00	1.253	-	-	-0.08	0.065	0.081
	FR1 n66	45M	QPSK	120	60	DFT-15	Top Side	10mm	Ant 2	Sensor on	349000	1745	18.02	19.00	1.253	-	-	-	n/a	n/a
06	FR1 n66	45M	QPSK	120	60	DFT-15	Bottom Side	10mm	Ant 2	Sensor on	349000	1745	18.02	19.00	1.253	-	-	-0.07	0.553	**0.693**
	FR1 n66_NSA	45M	QPSK	1	1	DFT-15	Front	10mm	Ant 2	Sensor on	349000	1745	15.05	16.00	1.245	-	-	-0.12	0.186	0.231
	FR1 n66_NSA	45M	QPSK	1	1	DFT-15	Back	10mm	Ant 2	Sensor on	349000	1745	15.05	16.00	1.245	-	-	0.01	0.126	0.157
	FR1 n66_NSA	45M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 2	Sensor on	349000	1745	15.05	16.00	1.245	-	-	-	n/a	n/a
	FR1 n66_NSA	45M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 2	Sensor on	349000	1745	15.05	16.00	1.245	-	-	-	n/a	n/a
	FR1 n66_NSA	45M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 2	Sensor on	349000	1745	15.05	16.00	1.245	-	-	-	n/a	n/a
	FR1 n66_NSA	45M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 2	Sensor on	349000	1745	15.05	16.00	1.245	-	-	-0.14	0.271	0.337
	FR1 n66_NSA	45M	QPSK	120	60	DFT-15	Front	10mm	Ant 2	Sensor on	349000	1745	15.03	16.00	1.250	-	-	-0.09	0.189	0.236
	FR1 n66_NSA	45M	QPSK	120	60	DFT-15	Back	10mm	Ant 2	Sensor on	349000	1745	15.03	16.00	1.250	-	-	0	0.128	0.160
	FR1 n66_NSA	45M	QPSK	120	60	DFT-15	Left Side	10mm	Ant 2	Sensor on	349000	1745	15.03	16.00	1.250	-	-	-	n/a	n/a
	FR1 n66_NSA	45M	QPSK	120	60	DFT-15	Right Side	10mm	Ant 2	Sensor on	349000	1745	15.03	16.00	1.250	-	-	-	n/a	n/a
	FR1 n66_NSA	45M	QPSK	120	60	DFT-15	Top Side	10mm	Ant 2	Sensor on	349000	1745	15.03	16.00	1.250	-	-	-	n/a	n/a
	FR1 n66_NSA	45M	QPSK	120	60	DFT-15	Bottom Side	10mm	Ant 2	Sensor on	349000	1745	15.03	16.00	1.250	-	-	-0.07	0.275	0.344
1900MHz																				
	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 1	Sensor on	18900	1880	18.22	19.00	1.197	-	-	0.17	0.248	0.297
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 1	Sensor on	18900	1880	18.22	19.00	1.197	-	-	-0.15	0.414	0.495
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	Sensor on	18900	1880	18.22	19.00	1.197	-	-	-0.16	0.046	0.055
	LTE Band 2	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	Sensor on	18900	1880	18.22	19.00	1.197	-	-	0.11	0.070	0.084
	LTE Band 2	20M	QPSK	1	0	-	Top Side	10mm	Ant 1	Sensor on	18900	1880	18.22	19.00	1.197	-	-	0.17	0.275	0.329
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	Sensor on	18900	1880	18.22	19.00	1.197	-	-	-0.03	0.005	0.006
	LTE Band 2	20M	QPSK	1	0	-	Front	24mm	Ant 1	Full	18900	1880	23.15	24.00	1.216	-	-	0.17	0.253	0.308
	LTE Band 2	20M	QPSK	1	0	-	Back	30mm	Ant 1	Full	18900	1880	23.15	24.00	1.216	-	-	-0.03	0.204	0.248
	LTE Band 2	20M	QPSK	1	0	-	Left Side	22mm	Ant 1	Full	18900	1880	23.15	24.00	1.216	-	-	0.03	0.072	0.088
	LTE Band 2	20M	QPSK	1	0	-	Right Side	21mm	Ant 1	Full	18900	1880	23.15	24.00	1.216	-	-	-0.05	0.097	0.118
	LTE Band 2	20M	QPSK	1	0	-	Top Side	19mm	Ant 1	Full	18900	1880	23.15	24.00	1.216	-	-	-0.04	0.403	0.490
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	24mm	Ant 1	Full	18900	1880	23.15	24.00	1.216	-	-	-	n/a	n/a
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 1	Sensor on	18900	1880	18.15	19.00	1.216	-	-	0	0.200	0.243
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 1	Sensor on	18900	1880	18.15	19.00	1.216	-	-	-0.11	0.336	0.409
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	Sensor on	18900	1880	18.15	19.00	1.216	-	-	-0.04	0.040	0.049
	LTE Band 2	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	Sensor on	18900	1880	18.15	19.00	1.216	-	-	0.19	0.049	0.060
	LTE Band 2	20M	QPSK	50	0	-	Top Side	10mm	Ant 1	Sensor on	18900	1880	18.15	19.00	1.216	-	-	0.06	0.232	0.282
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	Sensor on	18900	1880	18.15	19.00	1.216	-	-	-0.19	0.005	0.006
	LTE Band 2_ENDC	20M	QPSK	1	0	-	Front	10mm	Ant 1	Sensor on	18900	1880	15.25	16.00	1.189	-	-	0.01	0.136	0.162
	LTE Band 2_ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 1	Sensor on	18900	1880	15.25	16.00	1.189	-	-	0.08	0.218	0.259
	LTE Band 2_ENDC	20M	QPSK	1	0	-	Left Side	10mm	Ant 1	Sensor on	18900	1880	15.25	16.00	1.189	-	-	-	n/a	n/a
	LTE Band 2_ENDC	20M	QPSK	1	0	-	Right Side	10mm	Ant 1	Sensor on	18900	1880	15.25	16.00	1.189	-	-	0.09	0.051	0.061

	LTE Band 2_ENDC	20M	QPSK	1	0	-	Top Side	10mm	Ant 1	Sensor on	18900	1880	15.25	16.00	1.189	-	-	-0.12	0.172	0.204
	LTE Band 2_ENDC	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 1	Sensor on	18900	1880	15.25	16.00	1.189	-	-	-	n/a	n/a
	LTE Band 2_ENDC	20M	QPSK	50	0	-	Front	10mm	Ant 1	Sensor on	18900	1880	15.23	16.00	1.194	-	-	0.15	0.132	0.158
	LTE Band 2_ENDC	20M	QPSK	50	0	-	Back	10mm	Ant 1	Sensor on	18900	1880	15.23	16.00	1.194	-	-	-0.16	0.212	0.253
	LTE Band 2_ENDC	20M	QPSK	50	0	-	Left Side	10mm	Ant 1	Sensor on	18900	1880	15.23	16.00	1.194	-	-	-	n/a	n/a
	LTE Band 2_ENDC	20M	QPSK	50	0	-	Right Side	10mm	Ant 1	Sensor on	18900	1880	15.23	16.00	1.194	-	-	-0.01	0.050	0.060
	LTE Band 2_ENDC	20M	QPSK	50	0	-	Top Side	10mm	Ant 1	Sensor on	18900	1880	15.23	16.00	1.194	-	-	0.17	0.167	0.199
	LTE Band 2_ENDC	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 1	Sensor on	18900	1880	15.23	16.00	1.194	-	-	-	n/a	n/a
	LTE Band 2	20M	QPSK	1	0	-	Front	10mm	Ant 2	Sensor on	18900	1880	17.92	19.00	1.282	-	-	-0.13	0.127	0.163
	LTE Band 2	20M	QPSK	1	0	-	Back	10mm	Ant 2	Sensor on	18900	1880	17.92	19.00	1.282	-	-	0.1	0.123	0.158
	LTE Band 2	20M	QPSK	1	0	-	Left Side	10mm	Ant 2	Sensor on	18900	1880	17.92	19.00	1.282	-	-	-	n/a	n/a
	LTE Band 2	20M	QPSK	1	0	-	Right Side	10mm	Ant 2	Sensor on	18900	1880	17.92	19.00	1.282	-	-	-	n/a	n/a
	LTE Band 2	20M	QPSK	1	0	-	Top Side	10mm	Ant 2	Sensor on	18900	1880	17.92	19.00	1.282	-	-	-	n/a	n/a
	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 2	Sensor on	18900	1880	17.92	19.00	1.282	-	-	-0.16	0.238	0.305
	LTE Band 2	20M	QPSK	1	0	-	Front	24mm	Ant 2	Full	18900	1880	22.92	24.00	1.282	-	-	-0.19	0.304	0.390
	LTE Band 2	20M	QPSK	1	0	-	Back	30mm	Ant 2	Full	18900	1880	22.92	24.00	1.282	-	-	-0.11	0.209	0.268
	LTE Band 2	20M	QPSK	1	0	-	Left Side	22mm	Ant 2	Full	18900	1880	22.92	24.00	1.282	-	-	-	n/a	n/a
	LTE Band 2	20M	QPSK	1	0	-	Right Side	21mm	Ant 2	Full	18900	1880	22.92	24.00	1.282	-	-	-0.05	0.134	0.172
	LTE Band 2	20M	QPSK	1	0	-	Top Side	19mm	Ant 2	Full	18900	1880	22.92	24.00	1.282	-	-	-	n/a	n/a
07	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	24mm	Ant 2	Full	18900	1880	22.92	24.00	1.282	-	-	0.09	0.589	**0.755**
	LTE Band 2	20M	QPSK	50	0	-	Front	10mm	Ant 2	Sensor on	18900	1880	17.90	19.00	1.288	-	-	0.15	0.114	0.147
	LTE Band 2	20M	QPSK	50	0	-	Back	10mm	Ant 2	Sensor on	18900	1880	17.90	19.00	1.288	-	-	0.12	0.118	0.152
	LTE Band 2	20M	QPSK	50	0	-	Left Side	10mm	Ant 2	Sensor on	18900	1880	17.90	19.00	1.288	-	-	-	n/a	n/a
	LTE Band 2	20M	QPSK	50	0	-	Right Side	10mm	Ant 2	Sensor on	18900	1880	17.90	19.00	1.288	-	-	-	n/a	n/a
	LTE Band 2	20M	QPSK	50	0	-	Top Side	10mm	Ant 2	Sensor on	18900	1880	17.90	19.00	1.288	-	-	-	n/a	n/a
	LTE Band 2	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 2	Sensor on	18900	1880	17.90	19.00	1.288	-	-	0.11	0.242	0.312
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 1	Sensor on	376000	1880	17.62	19.00	1.374	-	-	0.02	0.245	0.337
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 1	Sensor on	376000	1880	17.62	19.00	1.374	-	-	-0.19	0.382	0.525
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 1	Sensor on	376000	1880	17.62	19.00	1.374	-	-	0.02	0.058	0.080
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 1	Sensor on	376000	1880	17.62	19.00	1.374	-	-	-0.16	0.069	0.095
	FR1 n2	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 1	Sensor on	376000	1880	17.62	19.00	1.374	-	-	-0.02	0.298	0.409
	FR1 n2	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 1	Sensor on	376000	1880	17.62	19.00	1.374	-	-	-	n/a	n/a
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	24mm	Ant 1	Full	376000	1880	22.60	24.00	1.380	-	-	-0.03	0.247	0.341
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	30mm	Ant 1	Full	376000	1880	22.60	24.00	1.380	-	-	0.03	0.199	0.275
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	22mm	Ant 1	Full	376000	1880	22.60	24.00	1.380	-	-	0.19	0.063	0.087
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Side	21mm	Ant 1	Full	376000	1880	22.60	24.00	1.380	-	-	0.03	0.120	0.166
	FR1 n2	40M	QPSK	1	1	DFT-15	Top Side	19mm	Ant 1	Full	376000	1880	22.60	24.00	1.380	-	-	0.03	0.379	0.523
	FR1 n2	40M	QPSK	1	1	DFT-15	Bottom Side	24mm	Ant 1	Full	376000	1880	22.60	24.00	1.380	-	-	-	n/a	n/a
	FR1 n2	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 1	Sensor on	376000	1880	17.60	19.00	1.380	-	-	0.04	0.306	0.422
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 1	Sensor on	376000	1880	17.60	19.00	1.380	-	-	-0.04	0.445	0.614
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 1	Sensor on	376000	1880	17.60	19.00	1.380	-	-	0.12	0.070	0.097
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 1	Sensor on	376000	1880	17.60	19.00	1.380	-	-	0.15	0.060	0.083
	FR1 n2	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 1	Sensor on	376000	1880	17.60	19.00	1.380	-	-	-0.12	0.327	0.451
	FR1 n2	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 1	Sensor on	376000	1880	17.60	19.00	1.380	-	-	-	n/a	n/a
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 2	Sensor on	376000	1880	17.87	19.00	1.297	-	-	-0.02	0.340	0.441
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 2	Sensor on	376000	1880	17.87	19.00	1.297	-	-	-0.16	0.358	0.464
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 2	Sensor on	376000	1880	17.87	19.00	1.297	-	-	-	n/a	n/a
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 2	Sensor on	376000	1880	17.87	19.00	1.297	-	-	-0.18	0.107	0.139
	FR1 n2	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 2	Sensor on	376000	1880	17.87	19.00	1.297	-	-	-	n/a	n/a
	FR1 n2	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 2	Sensor on	376000	1880	17.87	19.00	1.297	-	-	0	0.706	0.916
	FR1 n2	40M	QPSK	1	1	DFT-15	Front	24mm	Ant 2	Full	376000	1880	22.85	24.00	1.303	-	-	-0.05	0.321	0.418
	FR1 n2	40M	QPSK	1	1	DFT-15	Back	30mm	Ant 2	Full	376000	1880	22.85	24.00	1.303	-	-	0.09	0.211	0.275
	FR1 n2	40M	QPSK	1	1	DFT-15	Left Side	22mm	Ant 2	Full	376000	1880	22.85	24.00	1.303	-	-	0.16	0.043	0.056
	FR1 n2	40M	QPSK	1	1	DFT-15	Right Side	21mm	Ant 2	Full	376000	1880	22.85	24.00	1.303	-	-	-0.04	0.135	0.176
	FR1 n2	40M	QPSK	1	1	DFT-15	Top Side	19mm	Ant 2	Full	376000	1880	22.85	24.00	1.303	-	-	-	n/a	n/a
	FR1 n2	40M	QPSK	1	1	DFT-15	Bottom Side	24mm	Ant 2	Full	376000	1880	22.85	24.00	1.303	-	-	0.14	0.568	0.740

	FR1 n2	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 2	Sensor on	376000	1880	17.85	19.00	1.303	-	-	-0.02	0.340	0.443
	FR1 n2	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 2	Sensor on	376000	1880	17.85	19.00	1.303	-	-	-0.11	0.356	0.464
	FR1 n2	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 2	Sensor on	376000	1880	17.85	19.00	1.303	-	-	-	n/a	n/a
	FR1 n2	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 2	Sensor on	376000	1880	17.85	19.00	1.303	-	-	0.18	0.097	0.126
	FR1 n2	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 2	Sensor on	376000	1880	17.85	19.00	1.303	-	-	-	n/a	n/a
08	FR1 n2	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 2	Sensor on	376000	1880	17.85	19.00	1.303	-	-	0.05	0.713	**0.929**
	FR1 n2	40M	QPSK	216	0	DFT-15	Bottom Side	10mm	Ant 2	Sensor on	376000	1880	17.83	19.00	1.309	-	-	0.03	0.689	0.902
	FR1 n2_NSA	40M	QPSK	1	1	DFT-15	Front	10mm	Ant 2	Sensor on	376000	1880	14.90	16.00	1.288	-	-	-0.06	0.185	0.238
	FR1 n2_NSA	40M	QPSK	1	1	DFT-15	Back	10mm	Ant 2	Sensor on	376000	1880	14.90	16.00	1.288	-	-	-0.13	0.192	0.247
	FR1 n2_NSA	40M	QPSK	1	1	DFT-15	Left Side	10mm	Ant 2	Sensor on	376000	1880	14.90	16.00	1.288	-	-	-	n/a	n/a
	FR1 n2_NSA	40M	QPSK	1	1	DFT-15	Right Side	10mm	Ant 2	Sensor on	376000	1880	14.90	16.00	1.288	-	-	-	n/a	n/a
	FR1 n2_NSA	40M	QPSK	1	1	DFT-15	Top Side	10mm	Ant 2	Sensor on	376000	1880	14.90	16.00	1.288	-	-	-	n/a	n/a
	FR1 n2_NSA	40M	QPSK	1	1	DFT-15	Bottom Side	10mm	Ant 2	Sensor on	376000	1880	14.90	16.00	1.288	-	-	0.12	0.349	0.450
	FR1 n2_NSA	40M	QPSK	108	54	DFT-15	Front	10mm	Ant 2	Sensor on	376000	1880	14.88	16.00	1.294	-	-	0.08	0.201	0.260
	FR1 n2_NSA	40M	QPSK	108	54	DFT-15	Back	10mm	Ant 2	Sensor on	376000	1880	14.88	16.00	1.294	-	-	0.02	0.209	0.270
	FR1 n2_NSA	40M	QPSK	108	54	DFT-15	Left Side	10mm	Ant 2	Sensor on	376000	1880	14.88	16.00	1.294	-	-	-	n/a	n/a
	FR1 n2_NSA	40M	QPSK	108	54	DFT-15	Right Side	10mm	Ant 2	Sensor on	376000	1880	14.88	16.00	1.294	-	-	-	n/a	n/a
	FR1 n2_NSA	40M	QPSK	108	54	DFT-15	Top Side	10mm	Ant 2	Sensor on	376000	1880	14.88	16.00	1.294	-	-	-	n/a	n/a
	FR1 n2_NSA	40M	QPSK	108	54	DFT-15	Bottom Side	10mm	Ant 2	Sensor on	376000	1880	14.88	16.00	1.294	-	-	-0.01	0.379	0.491
2600MHz																				
	LTE Band 7	20M	QPSK	1	0	-	Front	10mm	Ant 3	Sensor on	21100	2535	18.00	19.00	1.259	-	-	-0.01	0.407	0.512
	LTE Band 7	20M	QPSK	1	0	-	Back	10mm	Ant 3	Sensor on	21100	2535	18.00	19.00	1.259	-	-	-0.16	0.330	0.415
09	LTE Band 7	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	Sensor on	21100	2535	18.00	19.00	1.259	-	-	-0.12	0.434	**0.546**
	LTE Band 7	20M	QPSK	1	0	-	Right Side	10mm	Ant 3	Sensor on	21100	2535	18.00	19.00	1.259	-	-	-0.17	0.011	0.014
	LTE Band 7	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Sensor on	21100	2535	18.00	19.00	1.259	-	-	-0.03	0.113	0.142
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	Sensor on	21100	2535	18.00	19.00	1.259	-	-	0.13	0.019	0.024
	LTE Band 7	20M	QPSK	1	0	-	Front	24mm	Ant 3	Full	21100	2535	21.30	22.00	1.175	-	-	0.05	0.198	0.233
	LTE Band 7	20M	QPSK	1	0	-	Back	30mm	Ant 3	Full	21100	2535	21.30	22.00	1.175	-	-	-0.18	0.138	0.162
	LTE Band 7	20M	QPSK	1	0	-	Left Side	22mm	Ant 3	Full	21100	2535	21.30	22.00	1.175	-	-	-0.19	0.373	0.438
	LTE Band 7	20M	QPSK	1	0	-	Right Side	21mm	Ant 3	Full	21100	2535	21.30	22.00	1.175	-	-	0.19	0.022	0.026
	LTE Band 7	20M	QPSK	1	0	-	Top Side	19mm	Ant 3	Full	21100	2535	21.30	22.00	1.175	-	-	0.09	0.096	0.113
	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	24mm	Ant 3	Full	21100	2535	21.30	22.00	1.175	-	-	-	n/a	n/a
	LTE Band 7	20M	QPSK	50	0	-	Front	10mm	Ant 3	Sensor on	21100	2535	17.98	19.00	1.265	-	-	-0.04	0.326	0.412
	LTE Band 7	20M	QPSK	50	0	-	Back	10mm	Ant 3	Sensor on	21100	2535	17.98	19.00	1.265	-	-	-0.13	0.268	0.339
	LTE Band 7	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	Sensor on	21100	2535	17.98	19.00	1.265	-	-	0.07	0.353	0.446
	LTE Band 7	20M	QPSK	50	0	-	Right Side	10mm	Ant 3	Sensor on	21100	2535	17.98	19.00	1.265	-	-	0.05	0.008	0.010
	LTE Band 7	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Sensor on	21100	2535	17.98	19.00	1.265	-	-	-0.13	0.093	0.118
	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 3	Sensor on	21100	2535	17.98	19.00	1.265	-	-	-0.01	0.014	0.018
	LTE Band 7_ENDC	20M	QPSK	1	0	-	Front	10mm	Ant 3	Sensor on	21100	2535	15.35	16.00	1.161	-	-	-0.19	0.220	0.256
	LTE Band 7_ENDC	20M	QPSK	1	0	-	Back	10mm	Ant 3	Sensor on	21100	2535	15.35	16.00	1.161	-	-	-0.12	0.180	0.209
	LTE Band 7_ENDC	20M	QPSK	1	0	-	Left Side	10mm	Ant 3	Sensor on	21100	2535	15.35	16.00	1.161	-	-	-0.17	0.229	0.266
	LTE Band 7_ENDC	20M	QPSK	1	0	-	Right Side	10mm	Ant 3	Sensor on	21100	2535	15.35	16.00	1.161	-	-	-	n/a	n/a
	LTE Band 7_ENDC	20M	QPSK	1	0	-	Top Side	10mm	Ant 3	Sensor on	21100	2535	15.35	16.00	1.161	-	-	-0.08	0.051	0.059
	LTE Band 7_ENDC	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 3	Sensor on	21100	2535	15.35	16.00	1.161	-	-	-	n/a	n/a
	LTE Band 7_ENDC	20M	QPSK	50	0	-	Front	10mm	Ant 3	Sensor on	21100	2535	15.33	16.00	1.167	-	-	-0.16	0.211	0.246
	LTE Band 7_ENDC	20M	QPSK	50	0	-	Back	10mm	Ant 3	Sensor on	21100	2535	15.33	16.00	1.167	-	-	-0.01	0.177	0.207
	LTE Band 7_ENDC	20M	QPSK	50	0	-	Left Side	10mm	Ant 3	Sensor on	21100	2535	15.33	16.00	1.167	-	-	-0.07	0.216	0.252
	LTE Band 7_ENDC	20M	QPSK	50	0	-	Right Side	10mm	Ant 3	Sensor on	21100	2535	15.33	16.00	1.167	-	-	-	n/a	n/a
	LTE Band 7_ENDC	20M	QPSK	50	0	-	Top Side	10mm	Ant 3	Sensor on	21100	2535	15.33	16.00	1.167	-	-	0.05	0.049	0.057
	LTE Band 7_ENDC	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 3	Sensor on	21100	2535	15.33	16.00	1.167	-	-	-	n/a	n/a
3300MHz-4100MHz																				
	LTE Band 48	20M	QPSK	1	0	-	Front	10mm	Ant 5	Sensor on	56640	3690	18.28	19.00	1.180	62.9	1.006	-0.07	0.172	0.204
	LTE Band 48	20M	QPSK	1	0	-	Back	10mm	Ant 5	Sensor on	56640	3690	18.28	19.00	1.180	62.9	1.006	0.11	0.161	0.191
	LTE Band 48	20M	QPSK	1	0	-	Left Side	10mm	Ant 5	Sensor on	56640	3690	18.28	19.00	1.180	62.9	1.006	-0.05	0.017	0.020
10	LTE Band 48	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	Sensor on	56640	3690	18.28	19.00	1.180	62.9	1.006	0.13	0.190	**0.226**
	LTE Band 48C	20M	QPSK	1	0	-	Right Side	10mm	Ant 5	Sensor on	56640+ 56442	3690+ 3670.2	18.13	19.00	1.222	62.9	1.006	0.06	0.156	0.192

	LTE Band 48	20M	QPSK	1	0	-	Top Side	10mm	Ant 5	Sensor on	56640	3690	18.28	19.00	1.180	62.9	1.006	-0.16	0.037	0.044
	LTE Band 48	20M	QPSK	1	0	-	Bottom Side	10mm	Ant 5	Sensor on	56640	3690	18.28	19.00	1.180	62.9	1.006	0.08	0.044	0.052
	LTE Band 48	20M	QPSK	1	0	-	Front	24mm	Ant 5	Full	56640	3690	21.20	21.50	1.072	62.9	1.006	-0.12	0.185	0.199
	LTE Band 48	20M	QPSK	1	0	-	Back	30mm	Ant 5	Full	56640	3690	21.20	21.50	1.072	62.9	1.006	0.03	0.156	0.168
	LTE Band 48	20M	QPSK	1	0	-	Left Side	22mm	Ant 5	Full	56640	3690	21.20	21.50	1.072	62.9	1.006	-	n/a	n/a
	LTE Band 48	20M	QPSK	1	0	-	Right Side	21mm	Ant 5	Full	56640	3690	21.20	21.50	1.072	62.9	1.006	-0.07	0.048	0.052
	LTE Band 48	20M	QPSK	1	0	-	Top Side	19mm	Ant 5	Full	56640	3690	21.20	21.50	1.072	62.9	1.006	-	n/a	n/a
	LTE Band 48	20M	QPSK	1	0	-	Bottom Side	24mm	Ant 5	Full	56640	3690	21.20	21.50	1.072	62.9	1.006	-0.01	0.054	0.058
	LTE Band 48	20M	QPSK	50	0	-	Front	10mm	Ant 5	Sensor on	56640	3690	18.26	19.00	1.186	62.9	1.006	-0.1	0.133	0.159
	LTE Band 48	20M	QPSK	50	0	-	Back	10mm	Ant 5	Sensor on	56640	3690	18.26	19.00	1.186	62.9	1.006	0.01	0.124	0.148
	LTE Band 48	20M	QPSK	50	0	-	Left Side	10mm	Ant 5	Sensor on	56640	3690	18.26	19.00	1.186	62.9	1.006	-0.02	0.013	0.016
	LTE Band 48	20M	QPSK	50	0	-	Right Side	10mm	Ant 5	Sensor on	56640	3690	18.26	19.00	1.186	62.9	1.006	0.12	0.161	0.192
	LTE Band 48	20M	QPSK	50	0	-	Top Side	10mm	Ant 5	Sensor on	56640	3690	18.26	19.00	1.186	62.9	1.006	0.06	0.029	0.035
	LTE Band 48	20M	QPSK	50	0	-	Bottom Side	10mm	Ant 5	Sensor on	56640	3690	18.26	19.00	1.186	62.9	1.006	0.09	0.035	0.042
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	-0.18	0.188	0.235
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	0.14	0.262	0.328
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	-	n/a	n/a
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	0.1	0.244	0.305
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	-0.09	0.077	0.096
	FR1 n48	40M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	-0.05	0.051	0.064
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	24mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	0.15	0.171	0.191
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	30mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	0.04	0.206	0.231
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Side	22mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	0.17	0.035	0.039
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Side	21mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	-0.01	0.201	0.225
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	19mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	0.11	0.075	0.084
	FR1 n48	40M	QPSK	1	1	DFT-30	Bottom Side	24mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	-0.1	0.048	0.054
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	0.07	0.200	0.251
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	-0.04	0.244	0.306
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Side	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	-	n/a	n/a
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Side	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	-0.02	0.248	0.311
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	0.14	0.071	0.089
	FR1 n48	40M	QPSK	50	28	DFT-30	Bottom Side	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	0.08	0.057	0.072
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Front	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	-0.11	0.171	0.214
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Back	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	-0.06	0.239	0.299
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Left Side	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	-	n/a	n/a
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Right Side	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	0.11	0.223	0.279
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Top Side	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	-0.13	0.070	0.088
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Bottom Side	10mm	Ant 5	Sensor on	641666	3624.99	18.03	19.00	1.250	-	-	0.19	0.047	0.059
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Front	24mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	0.04	0.156	0.175
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Back	30mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	-0.13	0.188	0.210
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Left Side	22mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	-0.05	0.032	0.036
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Right Side	21mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	0.19	0.183	0.205
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Top Side	19mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	0.16	0.068	0.076
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Bottom Side	24mm	Ant 5	Full	641666	3624.99	21.01	21.50	1.119	-	-	0.05	0.044	0.049
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Front	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	0.05	0.182	0.229
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Back	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	0.09	0.223	0.280
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Left Side	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	-	n/a	n/a
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Right Side	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	-0.07	0.226	0.284
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Top Side	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	-0.07	0.065	0.082
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Bottom Side	10mm	Ant 5	Sensor on	641666	3624.99	18.01	19.00	1.256	-	-	-0.16	0.052	0.065
	FR1 n48	40M	QPSK	1	1	DFT-30	Front	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	-0.06	0.085	0.108
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	-0.14	0.176	0.223
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	0.15	0.045	0.057
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	0.02	0.152	0.193
11	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	-0.04	0.335	**0.425**
	FR1 n48	40M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	-	n/a	n/a

	FR1 n48	40M	QPSK	1	1	DFT-30	Front	24mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.01	0.080	0.091
	FR1 n48	40M	QPSK	1	1	DFT-30	Back	30mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.14	0.088	0.100
	FR1 n48	40M	QPSK	1	1	DFT-30	Left Side	22mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.13	0.053	0.060
	FR1 n48	40M	QPSK	1	1	DFT-30	Right Side	21mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.12	0.134	0.152
	FR1 n48	40M	QPSK	1	1	DFT-30	Top Side	19mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.11	0.226	0.257
	FR1 n48	40M	QPSK	1	1	DFT-30	Bottom Side	24mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.05	0.056	0.064
	FR1 n48	40M	QPSK	50	28	DFT-30	Front	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	-0.01	0.086	0.110
	FR1 n48	40M	QPSK	50	28	DFT-30	Back	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	-0.19	0.173	0.220
	FR1 n48	40M	QPSK	50	28	DFT-30	Left Side	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	0.03	0.044	0.056
	FR1 n48	40M	QPSK	50	28	DFT-30	Right Side	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	0.09	0.140	0.178
	FR1 n48	40M	QPSK	50	28	DFT-30	Top Side	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	-0.13	0.290	0.369
	FR1 n48	40M	QPSK	50	28	DFT-30	Bottom Side	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	-	n/a	n/a
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Front	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	-0.01	0.078	0.099
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Back	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	-0.08	0.161	0.204
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Left Side	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	0.15	0.041	0.052
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Right Side	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	-0.08	0.139	0.176
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Top Side	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	0.06	0.306	0.388
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Bottom Side	10mm	Ant 6	Sensor on	641666	3624.99	17.97	19.00	1.268	-	-	-	n/a	n/a
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Front	24mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.1	0.073	0.083
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Back	30mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	-0.07	0.080	0.091
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Left Side	22mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.09	0.048	0.054
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Right Side	21mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.05	0.122	0.138
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Top Side	19mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	-0.08	0.206	0.234
	FR1 n48_UL MIMO	40M	QPSK	1	1	CP-30	Bottom Side	24mm	Ant 6	Full	641666	3624.99	20.95	21.50	1.135	-	-	0.14	0.051	0.058
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Front	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	0.15	0.078	0.099
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Back	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	0	0.158	0.201
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Left Side	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	0.14	0.040	0.051
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Right Side	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	-0.18	0.128	0.163
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Top Side	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	0.03	0.264	0.336
	FR1 n48_UL MIMO	40M	QPSK	53	26	CP-30	Bottom Side	10mm	Ant 6	Sensor on	641666	3624.99	17.95	19.00	1.274	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	-0.05	0.303	0.325
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	0	0.374	0.401
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	0.16	0.438	0.469
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	-0.18	0.119	0.128
	FR1 n77	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	0.07	0.072	0.077
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	24mm	Ant 5	Full	633332	3499.98	23.20	24.00	1.202	-	-	0.17	0.402	0.483
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	30mm	Ant 5	Full	633332	3499.98	23.20	24.00	1.202	-	-	0.03	0.447	0.537
	FR1 n77 PC2	100M	QPSK	1	1	DFT-30	Back	30mm	Ant 5	Full	633332	3499.98	26.18	27.00	1.208	50	1.000	0.03	0.435	0.525
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	22mm	Ant 5	Full	633332	3499.98	23.20	24.00	1.202	-	-	0.08	0.059	0.071
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	21mm	Ant 5	Full	633332	3499.98	23.20	24.00	1.202	-	-	-0.04	0.438	0.527
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	19mm	Ant 5	Full	633332	3499.98	23.20	24.00	1.202	-	-	0.13	0.099	0.119
	FR1 n77	100M	QPSK	1	1	DFT-30	Bottom Side	24mm	Ant 5	Full	633332	3499.98	23.20	24.00	1.202	-	-	0.02	0.201	0.242
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	0.17	0.325	0.350
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	0.16	0.388	0.418
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	-0.18	0.423	0.455
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	-0.06	0.152	0.164
	FR1 n77	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	0.01	0.067	0.072
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Front	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	0.17	0.276	0.296
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Back	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	-0.09	0.341	0.365
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Left Side	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	-	n/a	n/a
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Right Side	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	0.12	0.399	0.428
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Top Side	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	-0.08	0.109	0.117
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Bottom Side	10mm	Ant 5	Sensor on	633332	3499.98	18.20	18.50	1.072	-	-	-0.05	0.066	0.071
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Front	24mm	Ant 5	Full	633332	3499.98	21.70	22.50	1.202	-	-	0.07	0.281	0.338

	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Back	30mm	Ant 5	Full	633332	3499.98	21.70	22.50	1.202	-	-	-0.05	0.319	0.384
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Left Side	22mm	Ant 5	Full	633332	3499.98	21.70	22.50	1.202	-	-	0.11	0.036	0.043
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Right Side	21mm	Ant 5	Full	633332	3499.98	21.70	22.50	1.202	-	-	-0.05	0.326	0.392
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Top Side	19mm	Ant 5	Full	633332	3499.98	21.70	22.50	1.202	-	-	-0.12	0.076	0.091
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Bottom Side	24mm	Ant 5	Full	633332	3499.98	21.70	22.50	1.202	-	-	-0.01	0.172	0.207
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Front	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	-0.14	0.296	0.319
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Back	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	-0.05	0.388	0.418
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Left Side	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	-	n/a	n/a
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Right Side	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	-0.12	0.386	0.416
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Top Side	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	0.04	0.139	0.150
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Bottom Side	10mm	Ant 5	Sensor on	633332	3499.98	18.18	18.50	1.076	-	-	0	0.061	0.066
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.13	0.293	0.317
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.11	0.313	0.338
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.17	0.301	0.326
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-0.02	0.048	0.052
	FR1 n77	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.08	0.107	0.116
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	24mm	Ant 5	Full	656000	3840	23.25	24.00	1.189	-	-	-0.09	0.409	0.486
	FR1 n77 PC2	100M	QPSK	1	1	DFT-30	Front	24mm	Ant 5	Full	656000	3840	26.23	27.00	1.194	50	1.000	0.05	0.385	0.460
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	30mm	Ant 5	Full	656000	3840	23.25	24.00	1.189	-	-	0.11	0.422	0.502
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	22mm	Ant 5	Full	656000	3840	23.25	24.00	1.189	-	-	-0.07	0.067	0.080
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	21mm	Ant 5	Full	656000	3840	23.25	24.00	1.189	-	-	-0.13	0.438	0.521
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	19mm	Ant 5	Full	656000	3840	23.25	24.00	1.189	-	-	-0.18	0.112	0.133
	FR1 n77	100M	QPSK	1	1	DFT-30	Bottom Side	24mm	Ant 5	Full	656000	3840	23.25	24.00	1.189	-	-	-0.1	0.209	0.248
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	-0.02	0.343	0.372
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	0	0.380	0.412
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	-0.01	0.325	0.352
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	0.03	0.058	0.063
	FR1 n77	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	-0.13	0.110	0.119
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Front	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.02	0.267	0.289
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Back	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.05	0.285	0.308
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Left Side	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-	n/a	n/a
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Right Side	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-0.06	0.275	0.297
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Top Side	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.19	0.044	0.048
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Bottom Side	10mm	Ant 5	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.15	0.098	0.106
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Front	24mm	Ant 5	Full	656000	3840	21.65	22.50	1.216	-	-	-0.12	0.339	0.412
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Back	30mm	Ant 5	Full	656000	3840	21.65	22.50	1.216	-	-	0.13	0.271	0.330
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Left Side	22mm	Ant 5	Full	656000	3840	21.65	22.50	1.216	-	-	0.06	0.039	0.047
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Right Side	21mm	Ant 5	Full	656000	3840	21.65	22.50	1.216	-	-	-0.1	0.311	0.378
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Top Side	19mm	Ant 5	Full	656000	3840	21.65	22.50	1.216	-	-	-0.15	0.065	0.079
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Bottom Side	24mm	Ant 5	Full	656000	3840	21.65	22.50	1.216	-	-	-0.17	0.139	0.169
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Front	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	0	0.313	0.339
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Back	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	0.17	0.347	0.376
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Left Side	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	-	n/a	n/a
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Right Side	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	-0.14	0.296	0.321
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Top Side	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	-0.07	0.053	0.057
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Bottom Side	10mm	Ant 5	Sensor on	656000	3840	18.15	18.50	1.084	-	-	-0.18	0.100	0.108
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	-0.02	0.131	0.146
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	0.12	0.271	0.303
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	-0.07	0.068	0.076
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	0.14	0.202	0.226
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	0.11	0.395	0.441
	FR1 n77	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	24mm	Ant 6	Full	633332	3499.98	23.00	24.00	1.259	-	-	-0.03	0.153	0.193
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	30mm	Ant 6	Full	633332	3499.98	23.00	24.00	1.259	-	-	0.14	0.165	0.208

	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	22mm	Ant 6	Full	633332	3499.98	23.00	24.00	1.259	-	-	-0.05	0.139	0.175
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	21mm	Ant 6	Full	633332	3499.98	23.00	24.00	1.259	-	-	0.09	0.441	0.555
12	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	19mm	Ant 6	Full	633332	3499.98	23.00	24.00	1.259	-	-	0.08	0.582	**0.733**
	FR1 n77	100M	QPSK	1	1	DFT-30	Bottom Side	24mm	Ant 6	Full	633332	3499.98	23.00	24.00	1.259	-	-	-0.13	0.059	0.074
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	0.07	0.153	0.172
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	0.06	0.325	0.365
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	0.1	0.074	0.083
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	-0.11	0.248	0.278
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	-0.14	0.437	0.490
	FR1 n77	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	-	n/a	n/a
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Front	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	0.11	0.119	0.133
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Back	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	0.19	0.247	0.276
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Left Side	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	-0.04	0.062	0.069
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Right Side	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	-0.01	0.184	0.206
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Top Side	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	-0.14	0.360	0.402
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Bottom Side	10mm	Ant 6	Sensor on	633332	3499.98	18.02	18.50	1.117	-	-	-	n/a	n/a
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Front	24mm	Ant 6	Full	633332	3499.98	21.50	22.50	1.259	-	-	0.02	0.109	0.137
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Back	30mm	Ant 6	Full	633332	3499.98	21.50	22.50	1.259	-	-	0.15	0.128	0.161
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Left Side	22mm	Ant 6	Full	633332	3499.98	21.50	22.50	1.259	-	-	-0.13	0.094	0.118
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Right Side	21mm	Ant 6	Full	633332	3499.98	21.50	22.50	1.259	-	-	-0.17	0.224	0.282
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Top Side	19mm	Ant 6	Full	633332	3499.98	21.50	22.50	1.259	-	-	-0.03	0.488	0.614
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Bottom Side	24mm	Ant 6	Full	633332	3499.98	21.50	22.50	1.259	-	-	-0.04	0.044	0.055
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Front	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	0.1	0.140	0.157
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Back	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	-0.17	0.296	0.332
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Left Side	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	0.17	0.067	0.075
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Right Side	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	-0.04	0.226	0.254
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Top Side	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	0.19	0.399	0.448
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Bottom Side	10mm	Ant 6	Sensor on	633332	3499.98	18.00	18.50	1.122	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.15	0.204	0.221
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-0.05	0.277	0.300
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.15	0.067	0.072
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-0.12	0.381	0.412
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-0.17	0.249	0.269
	FR1 n77	100M	QPSK	1	1	DFT-30	Bottom Side	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	1	1	DFT-30	Front	24mm	Ant 6	Full	656000	3840	23.13	24.00	1.222	-	-	0.17	0.269	0.329
	FR1 n77	100M	QPSK	1	1	DFT-30	Back	30mm	Ant 6	Full	656000	3840	23.13	24.00	1.222	-	-	0.04	0.261	0.319
	FR1 n77	100M	QPSK	1	1	DFT-30	Left Side	22mm	Ant 6	Full	656000	3840	23.13	24.00	1.222	-	-	-0.09	0.103	0.126
	FR1 n77	100M	QPSK	1	1	DFT-30	Right Side	21mm	Ant 6	Full	656000	3840	23.13	24.00	1.222	-	-	0.01	0.511	0.624
	FR1 n77	100M	QPSK	1	1	DFT-30	Top Side	19mm	Ant 6	Full	656000	3840	23.13	24.00	1.222	-	-	-0.06	0.233	0.285
	FR1 n77	100M	QPSK	1	1	DFT-30	Bottom Side	24mm	Ant 6	Full	656000	3840	23.13	24.00	1.222	-	-	-0.18	0.087	0.106
	FR1 n77	100M	QPSK	135	69	DFT-30	Front	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	-0.07	0.216	0.235
	FR1 n77	100M	QPSK	135	69	DFT-30	Back	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	0.02	0.311	0.338
	FR1 n77	100M	QPSK	135	69	DFT-30	Left Side	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	-	n/a	n/a
	FR1 n77	100M	QPSK	135	69	DFT-30	Right Side	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	0.11	0.419	0.455
	FR1 n77	100M	QPSK	135	69	DFT-30	Top Side	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	-0.12	0.192	0.209
	FR1 n77	100M	QPSK	135	69	DFT-30	Bottom Side	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	-	n/a	n/a
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Front	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-0.14	0.186	0.201
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Back	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-0.16	0.253	0.274
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Left Side	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.17	0.061	0.066
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Right Side	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-0.08	0.347	0.375
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Top Side	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	0.1	0.227	0.245
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Bottom Side	10mm	Ant 6	Sensor on	656000	3840	18.16	18.50	1.081	-	-	-	n/a	n/a
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Front	24mm	Ant 6	Full	656000	3840	21.63	22.50	1.222	-	-	-0.11	0.193	0.236
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Back	30mm	Ant 6	Full	656000	3840	21.63	22.50	1.222	-	-	-0.02	0.202	0.247
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Left Side	22mm	Ant 6	Full	656000	3840	21.63	22.50	1.222	-	-	-0.11	0.071	0.087
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Right Side	21mm	Ant 6	Full	656000	3840	21.63	22.50	1.222	-	-	-0.01	0.405	0.495

	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Top Side	19mm	Ant 6	Full	656000	3840	21.63	22.50	1.222	-	-	-0.04	0.151	0.184
	FR1 n77_UL MIMO	100M	QPSK	1	1	CP-30	Bottom Side	24mm	Ant 6	Full	656000	3840	21.63	22.50	1.222	-	-	-0.12	0.071	0.087
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Front	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	-0.09	0.197	0.214
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Back	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	0.01	0.284	0.309
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Left Side	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	-	n/a	n/a
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Right Side	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	-0.14	0.382	0.415
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Top Side	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	-0.04	0.175	0.190
	FR1 n77_UL MIMO	100M	QPSK	137	68	CP-30	Bottom Side	10mm	Ant 6	Sensor on	656000	3840	18.14	18.50	1.086	-	-	-	n/a	n/a

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)
2450MHz																
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	-0.03	0.233	0.239
13	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	0.02	0.275	**0.283**
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	0.19	0.161	0.165
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	-	n/a	n/a
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	-	n/a	n/a
	WLAN2.4GHz	802.11b 1Mbps	Bottom Side	10mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	0.17	0.091	0.093
	WLAN2.4GHz	802.11b 1Mbps	Front	24mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	0.01	0.046	0.047
	WLAN2.4GHz	802.11b 1Mbps	Back	30mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	0.11	0.050	0.051
	WLAN2.4GHz	802.11b 1Mbps	Left Side	22mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	-0.16	0.072	0.074
	WLAN2.4GHz	802.11b 1Mbps	Right Side	21mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	0.02	0.045	0.046
	WLAN2.4GHz	802.11b 1Mbps	Top Side	19mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	-	n/a	n/a
	WLAN2.4GHz	802.11b 1Mbps	Bottom Side	24mm	WIFI Ant	Full	11	2462	17.90	18.00	1.023	99.64	1.004	0.16	0.041	0.042
5000MHz																
	WLAN5.2GHz	802.11a 6Mbps	Front	10mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	-0.18	0.261	0.333
	WLAN5.2GHz	802.11a 6Mbps	Back	10mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	0.14	0.240	0.306
14	WLAN5.2GHz	802.11a 6Mbps	Left Side	10mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	-0.11	0.442	**0.563**
	WLAN5.2GHz	802.11a 6Mbps	Right Side	10mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	-	n/a	n/a
	WLAN5.2GHz	802.11a 6Mbps	Top Side	10mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	-	n/a	n/a
	WLAN5.2GHz	802.11a 6Mbps	Bottom Side	10mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	0.18	0.112	0.143
	WLAN5.2GHz	802.11a 6Mbps	Front	24mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	-0.07	0.133	0.170
	WLAN5.2GHz	802.11a 6Mbps	Back	30mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	-0.16	0.074	0.094
	WLAN5.2GHz	802.11a 6Mbps	Left Side	22mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	-0.08	0.064	0.082
	WLAN5.2GHz	802.11a 6Mbps	Right Side	21mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	-	n/a	n/a
	WLAN5.2GHz	802.11a 6Mbps	Top Side	19mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	-	n/a	n/a
	WLAN5.2GHz	802.11a 6Mbps	Bottom Side	24mm	WIFI Ant	Full	44	5220	17.57	18.50	1.239	97.20	1.029	0.18	0.065	0.083
15	WLAN5.8GHz	802.11a 6Mbps	Front	10mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	0.09	0.317	**0.399**
	WLAN5.8GHz	802.11a 6Mbps	Back	10mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	-0.02	0.233	0.294
	WLAN5.8GHz	802.11a 6Mbps	Left Side	10mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	0.06	0.188	0.237
	WLAN5.8GHz	802.11a 6Mbps	Right Side	10mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	-	n/a	n/a
	WLAN5.8GHz	802.11a 6Mbps	Top Side	10mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	-	n/a	n/a
	WLAN5.8GHz	802.11a 6Mbps	Bottom Side	10mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	0.04	0.119	0.150
	WLAN5.8GHz	802.11a 6Mbps	Front	24mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	-0.16	0.122	0.154
	WLAN5.8GHz	802.11a 6Mbps	Back	30mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	-0.01	0.093	0.117
	WLAN5.8GHz	802.11a 6Mbps	Left Side	22mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	0.12	0.087	0.110
	WLAN5.8GHz	802.11a 6Mbps	Right Side	21mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	-	n/a	n/a
	WLAN5.8GHz	802.11a 6Mbps	Top Side	19mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	-	n/a	n/a
	WLAN5.8GHz	802.11a 6Mbps	Bottom Side	24mm	WIFI Ant	Full	165	5825	17.62	18.50	1.225	97.20	1.029	0	0.076	0.096

15.2 NR Linearity Data Analysis

General Note:
This device support Power Class 2 and Power Class 3 operations for 5GNR n77/n78. The highest available duty cycle for Power Class 2 operation is 50% for 5GNR using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg for 1g, Separate SAR testing for Power Class 2 is not required.

FR1 n77(Prat27Q)_Ant 5(HPUE)-Linearity Data				FR1 n77(Prat27O)_Ant 5(HPUE)-Linearity Data		
	FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)			FR1 n77 (Power Class 3)	FR1 n77 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.00		Maximum Tune up Power (dBm)	24.00	27.00
Reported 1g SAR (W/kg)	0.537	0.525		Reported 1g SAR (W/kg)	0.486	0.460
Duty Cycle	100.00%	50.00%		Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59		Frame Averaged (mW)	251.19	250.59
Linearity SAR (W/kg)	0.536			Linearity SAR (W/kg)	0.485	
% deviation from expected linearity		-2.00%		% deviation from expected linearity		-5.13%

16. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	TCL LINKZONE Go 5G
		Body
1.	WWAN + 2.4GHz WLAN	Yes
2.	WWAN + 5GHz WLAN	Yes

General Note:

1. EUT will choose each LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
2. WWAN above includes 5G NR bands and EN-DC combination.
3. According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz cannot transmit simultaneously.
4. The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
5. When stand-alone SAR is not required for a transmitter or antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
6. All licensed modes share the same antenna part and cannot transmit simultaneously.
7. The reported SAR summation is calculated based on the same configuration and test position.
8. For standalone WWAN, always choose the highest SAR among all WWAN bands within the selected antenna for each exposure position to perform simultaneous transmission analysis with WLAN. This is the worst co-located analysis and can represent each band. If the co-located analysis within standalone SAR is higher SAR limit (1.6W/kg for 1g SAR), always choose the highest SAR among the selected WWAN bands within the selected antenna for each exposure position to perform simultaneous transmission analysis with WLAN.
9. For inter-band ULCA SAR co-located with WLAN, chose the worst SAR among the selected LTE bands within the selected antenna per each test position to do co-located with WLAN. This is the worst co-located analysis and can represent each LTE bands.
10. For EN-DC SAR co-located with WLAN, chose the worst SAR among the selected LTE bands within the selected antenna per each test position and also the worst SAR of the selected 5GNR Bands within the selected antenna to do co-located with WLAN. This is the worst co-located analysis and can represent each LTE bands and each 5GNR bands.
11. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
    i) 1g Scalar SAR summation < 1.6W/kg.
    ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of [(x1-x2)2 + (y1-y2)2 + (z1-z2)2], where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
    iii) If SPLSR ≤ 0.04 for 1g SAR, simultaneously transmission SAR measurement is not necessary.
    iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg.

16.1 Body Exposure Conditions

<Sensor on>

WWAN Band	Exposure Position	1	3	10	1+3	1+10
		WWAN	WLAN2.4GHz wifi Ant	WLAN5GHz wifi Ant	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
All Bands Ant 1	Front	0.571	0.239	0.399	0.81	0.97
	Back	0.614	0.283	0.306	0.90	0.92
	Left side	0.474	0.165	0.563	0.64	1.04
	Right side	0.358			0.36	0.36
	Top side	0.451			0.45	0.45
	Bottom side	0.035	0.093	0.150	0.13	0.19
All Bands Ant 2	Front	0.443	0.239	0.399	0.68	0.84
	Back	0.464	0.283	0.306	0.75	0.77
	Left side	0.093	0.165	0.563	0.26	0.66
	Right side	0.139			0.14	0.14
	Top side				0.00	0.00
	Bottom side	0.929	0.093	0.150	1.02	1.08
All Bands Ant 3	Front	0.512	0.239	0.399	0.75	0.91
	Back	0.415	0.283	0.306	0.70	0.72
	Left side	0.546	0.165	0.563	0.71	1.11
	Right side	0.014			0.01	0.01
	Top side	0.142			0.14	0.14
	Bottom side	0.024	0.093	0.150	0.12	0.17
All Bands Ant 5	Front	0.372	0.239	0.399	0.61	0.77
	Back	0.418	0.283	0.306	0.70	0.72
	Left side	0.020	0.165	0.563	0.19	0.58
	Right side	0.469			0.47	0.47
	Top side	0.164			0.16	0.16
	Bottom side	0.119	0.093	0.150	0.21	0.27
All Bands Ant 6	Front	0.235	0.239	0.399	0.47	0.63
	Back	0.365	0.283	0.306	0.65	0.67
	Left side	0.083	0.165	0.563	0.25	0.65
	Right side	0.455			0.46	0.46
	Top side	0.490			0.49	0.49
	Bottom side		0.093	0.150	0.09	0.15

WWAN Band	WWAN Band	Exposure Position	1	2	3	10	1+2+3	1+2+10
			WWAN	WWAN	WLAN2.4GHz wifi Ant	WLAN5GHz wifi Ant	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)
LTE Band 2 Ant 1	LTE Band 66 Ant 2	Front	0.297	0.149	0.239	0.399	0.69	0.85
		Back	0.495	0.113	0.283	0.306	0.89	0.91
		Left side	0.055		0.165	0.563	0.22	0.62
		Right side	0.084				0.08	0.08
		Top side	0.329				0.33	0.33
		Bottom side	0.006	0.222	0.093	0.150	0.32	0.38
LTE Band 2 Ant 2	LTE Band 5 Ant 1	Front	0.163	0.512	0.239	0.399	0.91	1.07
		Back	0.158	0.561	0.283	0.306	1.00	1.03
		Left side		0.474	0.165	0.563	0.64	1.04
		Right side		0.342			0.34	0.34
		Top side		0.132			0.13	0.13
		Bottom side	0.312	0.035	0.093	0.150	0.44	0.50
LTE Band 2 Ant 2	LTE Band 13 Ant 1	Front	0.163	0.289	0.239	0.399	0.69	0.85
		Back	0.158	0.244	0.283	0.306	0.69	0.71
		Left side		0.161	0.165	0.563	0.33	0.72

		Right side		0.167			0.17	0.17
		Top side		0.057			0.06	0.06
		Bottom side	0.312		0.093	0.150	0.41	0.46
LTE Band 66 Ant 2	LTE Band 5 Ant 1	Front	0.149	0.512	0.239	0.399	0.90	1.06
		Back	0.113	0.561	0.283	0.306	0.96	0.98
		Left side		0.474	0.165	0.563	0.64	1.04
		Right side		0.342			0.34	0.34
		Top side		0.132			0.13	0.13
		Bottom side	0.222	0.035	0.093	0.150	0.35	0.41
LTE Band 66 Ant 2	LTE Band 13 Ant 1	Front	0.149	0.289	0.239	0.399	0.68	0.84
		Back	0.113	0.244	0.283	0.306	0.64	0.66
		Left side		0.161	0.165	0.563	0.33	0.72
		Right side		0.167			0.17	0.17
		Top side		0.057			0.06	0.06
		Bottom side	0.222		0.093	0.150	0.32	0.37
LTE Band 2 Ant 1	LTE Band 48 Ant 5	Front	0.297	0.204	0.239	0.399	0.74	0.90
		Back	0.495	0.191	0.283	0.306	0.97	0.99
		Left side	0.055	0.020	0.165	0.563	0.24	0.64
		Right side	0.084	0.226			0.31	0.31
		Top side	0.329	0.044			0.37	0.37
		Bottom side	0.006	0.052	0.093	0.150	0.15	0.21
LTE Band 48 Ant 5	LTE Band 66 Ant 1	Front	0.204	0.202	0.239	0.399	0.65	0.81
		Back	0.191	0.321	0.283	0.306	0.80	0.82
		Left side	0.020	0.090	0.165	0.563	0.28	0.67
		Right side	0.226	0.107			0.33	0.33
		Top side	0.044	0.247			0.29	0.29
		Bottom side	0.052	0.011	0.093	0.150	0.16	0.21

WWAN Band	FR1 Band	Exposure Position	1	2	3	10	1+2+3	1+2+10
			WWAN	FR1	WLAN2.4GHz wifi Ant	WLAN5GHz wifi Ant	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)
LTE Band 2 Ant 1	FR1 n2 Ant 2	Front	0.162	0.260	0.239	0.399	0.66	0.82
		Back	0.259	0.270	0.283	0.306	0.81	0.84
		Left side			0.165	0.563	0.17	0.56
		Right side	0.061				0.06	0.06
		Top side	0.204				0.20	0.20
		Bottom side		0.491	0.093	0.150	0.58	0.64
LTE Band 5 Ant 1	FR1 n2 Ant 2	Front	0.232	0.260	0.239	0.399	0.73	0.89
		Back	0.263	0.270	0.283	0.306	0.82	0.84
		Left side	0.195		0.165	0.563	0.36	0.76
		Right side	0.130				0.13	0.13
		Top side	0.070				0.07	0.07
		Bottom side		0.491	0.093	0.150	0.58	0.64
LTE Band 13 Ant 1	FR1 n2 Ant 2	Front	0.289	0.260	0.239	0.399	0.79	0.95
		Back	0.244	0.270	0.283	0.306	0.80	0.82
		Left side	0.161		0.165	0.563	0.33	0.72
		Right side	0.167				0.17	0.17
		Top side	0.057				0.06	0.06
		Bottom side		0.491	0.093	0.150	0.58	0.64
LTE Band 66 Ant 1	FR1 n2 Ant 2	Front	0.202	0.260	0.239	0.399	0.70	0.86
		Back	0.321	0.270	0.283	0.306	0.87	0.90
		Left side	0.090		0.165	0.563	0.26	0.65
		Right side	0.107				0.11	0.11
		Top side	0.247				0.25	0.25
		Bottom side	0.011	0.491	0.093	0.150	0.60	0.65

LTE Band 2 Ant 2	FR1 n5 Ant 1	Front	0.163	0.491	0.239	0.399	0.89	1.05
		Back	0.158	0.549	0.283	0.306	0.99	1.01
		Left side		0.402	0.165	0.563	0.57	0.97
		Right side		0.274			0.27	0.27
		Top side		0.154			0.15	0.15
		Bottom side	0.312		0.093	0.150	0.41	0.46
LTE Band 48 Ant 5	FR1 n5 Ant 1	Front	0.204	0.491	0.239	0.399	0.93	1.09
		Back	0.191	0.549	0.283	0.306	1.02	1.05
		Left side	0.020	0.402	0.165	0.563	0.59	0.99
		Right side	0.226	0.274			0.50	0.50
		Top side	0.044	0.154			0.20	0.20
		Bottom side	0.052		0.093	0.150	0.15	0.20
LTE Band 66 Ant 2	FR1 n5 Ant 1	Front	0.149	0.491	0.239	0.399	0.88	1.04
		Back	0.113	0.549	0.283	0.306	0.95	0.97
		Left side		0.402	0.165	0.563	0.57	0.97
		Right side		0.274			0.27	0.27
		Top side		0.154			0.15	0.15
		Bottom side	0.222		0.093	0.150	0.32	0.37
LTE Band 2 Ant 1	FR1 n66 Ant 2	Front	0.162	0.236	0.239	0.399	0.64	0.80
		Back	0.259	0.160	0.283	0.306	0.70	0.73
		Left side			0.165	0.563	0.17	0.56
		Right side	0.061				0.06	0.06
		Top side	0.204				0.20	0.20
		Bottom side		0.344	0.093	0.150	0.44	0.49
LTE Band 5 Ant 1	FR1 n66 Ant 2	Front	0.232	0.236	0.239	0.399	0.71	0.87
		Back	0.263	0.160	0.283	0.306	0.71	0.73
		Left side	0.195		0.165	0.563	0.36	0.76
		Right side	0.130				0.13	0.13
		Top side	0.070				0.07	0.07
		Bottom side		0.344	0.093	0.150	0.44	0.49
LTE Band 2 Ant 1	FR1 n77 Ant 5	Front	0.162	0.372	0.239	0.399	0.77	0.93
		Back	0.259	0.418	0.283	0.306	0.96	0.98
		Left side			0.165	0.563	0.17	0.56
		Right side	0.061	0.469			0.53	0.53
		Top side	0.204	0.164			0.37	0.37
		Bottom side		0.119	0.093	0.150	0.21	0.27
LTE Band 5 Ant 1	FR1 n77 Ant 5	Front	0.232	0.372	0.239	0.399	0.84	1.00
		Back	0.263	0.418	0.283	0.306	0.96	0.99
		Left side	0.195		0.165	0.563	0.36	0.76
		Right side	0.130	0.469			0.60	0.60
		Top side	0.070	0.164			0.23	0.23
		Bottom side		0.119	0.093	0.150	0.21	0.27
LTE Band 7 Ant 3	FR1 n77 Ant 5	Front	0.256	0.372	0.239	0.399	0.87	1.03
		Back	0.209	0.418	0.283	0.306	0.91	0.93
		Left side	0.266		0.165	0.563	0.43	0.83
		Right side		0.469			0.47	0.47
		Top side	0.059	0.164			0.22	0.22
		Bottom side		0.119	0.093	0.150	0.21	0.27
LTE Band 13 Ant 1	FR1 n77 Ant 5	Front	0.289	0.372	0.239	0.399	0.90	1.06
		Back	0.244	0.418	0.283	0.306	0.95	0.97
		Left side	0.161		0.165	0.563	0.33	0.72
		Right side	0.167	0.469			0.64	0.64
		Top side	0.057	0.164			0.22	0.22
		Bottom side		0.119	0.093	0.150	0.21	0.27
LTE Band 66 Ant 1	FR1 n77 Ant 5	Front	0.202	0.372	0.239	0.399	0.81	0.97
		Back	0.321	0.418	0.283	0.306	1.02	1.05

		Left side	0.090		0.165	0.563	0.26	0.65
		Right side	0.107	0.469			0.58	0.58
		Top side	0.247	0.164			0.41	0.41
		Bottom side	0.011	0.119	0.093	0.150	0.22	0.28
LTE Band 13 Ant 1	FR1 n66 Ant 2	Front	0.289	0.236	0.239	0.399	0.76	0.92
		Back	0.244	0.160	0.283	0.306	0.69	0.71
		Left side	0.161		0.165	0.563	0.33	0.72
		Right side	0.167				0.17	0.17
		Top side	0.057				0.06	0.06
		Bottom side		0.344	0.093	0.150	0.44	0.49
LTE Band 7 Ant 3	FR1 n66 Ant 2	Front	0.256	0.236	0.239	0.399	0.73	0.89
		Back	0.209	0.160	0.283	0.306	0.65	0.68
		Left side	0.266		0.165	0.563	0.43	0.83
		Right side					0.00	0.00
		Top side	0.059				0.06	0.06
		Bottom side		0.344	0.093	0.150	0.44	0.49

FR1 Band	FR1 Band	Exposure Position	1	2	3	10	1+2+3	1+2+10
			FR1	FR1	WLAN2.4GHz wifi Ant	WLAN5GHz wifi Ant	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)
FR1 n48 Ant 5	FR1 n48 Ant 6	Front	0.251	0.110	0.239	0.399	0.60	0.76
		Back	0.328	0.223	0.283	0.306	0.83	0.86
		Left side		0.057	0.165	0.563	0.22	0.62
		Right side	0.311	0.193			0.50	0.50
		Top side	0.096	0.425			0.52	0.52
		Bottom side	0.072		0.093	0.150	0.17	0.22
FR1 n77 Ant 5	FR1 n77 Ant 6	Front	0.339	0.235	0.239	0.399	0.81	0.97
		Back	0.418	0.365	0.283	0.306	**1.07**	1.09
		Left side		0.083	0.165	0.563	0.25	0.65
		Right side	0.428	0.455			0.88	0.88
		Top side	0.150	0.490			0.64	0.64
		Bottom side	0.108		0.093	0.150	0.20	0.26

<Sensor off>

WWAN Band	Exposure Position	1	3	10	1+3	1+10
		WWAN	WLAN2.4GHz wifi Ant	WLAN5GHz wifi Ant	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
All Bands Ant 1	Front	0.545	0.047	0.170	0.59	0.72
	Back	0.445	0.051	0.117	0.50	0.56
	Left side	0.352	0.074	0.110	0.43	0.46
	Right side	0.271	0.046		0.32	0.27
	Top side	0.523			0.52	0.52
	Bottom side	0.060	0.042	0.096	0.10	0.16
All Bands Ant 2	Front	0.418	0.047	0.170	0.47	0.59
	Back	0.275	0.051	0.117	0.33	0.39
	Left side	0.126	0.074	0.110	0.20	0.24
	Right side	0.176	0.046		0.22	0.18
	Top side				0.00	0.00
	Bottom side	0.755	0.042	0.096	0.80	0.85
All Bands Ant 3	Front	0.233	0.047	0.170	0.28	0.40
	Back	0.162	0.051	0.117	0.21	0.28
	Left side	0.438	0.074	0.110	0.51	0.55
	Right side	0.026	0.046		0.07	0.03
	Top side	0.113			0.11	0.11
	Bottom side		0.042	0.096	0.04	0.10
All Bands Ant 5	Front	0.486	0.047	0.170	0.53	0.66
	Back	0.560	0.051	0.117	0.61	0.68
	Left side	0.081	0.074	0.110	0.16	0.19
	Right side	0.527	0.046		0.57	0.53
	Top side	0.315			0.32	0.32
	Bottom side	0.251	0.042	0.096	0.29	0.35
All Bands Ant 6	Front	0.329	0.047	0.170	0.38	0.50
	Back	0.220	0.051	0.117	0.27	0.34
	Left side	0.175	0.074	0.110	0.25	0.29
	Right side	0.167	0.046		0.21	0.17
	Top side	0.733			0.73	0.73
	Bottom side	0.106	0.042	0.096	0.15	0.20

WWAN Band	WWAN Band	Exposure Position	1	2	3	10	1+2+3	1+2+10
			WWAN	WWAN	WLAN2.4GHz wifi Ant	WLAN5GHz wifi Ant	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)
LTE Band 2 Ant 1	LTE Band 66 Ant 2	Front	0.308	0.371	0.047	0.170	0.73	0.85
		Back	0.248	0.237	0.051	0.117	0.54	0.60
		Left side	0.088	0.126	0.074	0.110	0.29	0.32
		Right side	0.118	0.108	0.046		0.27	0.23
		Top side	0.490				0.49	0.49
		Bottom side		0.576	0.042	0.096	0.62	0.67
LTE Band 2 Ant 2	LTE Band 5 Ant 1	Front	0.390	0.505	0.047	0.170	0.94	1.07
		Back	0.268	0.431	0.051	0.117	0.75	0.82
		Left side		0.348	0.074	0.110	0.42	0.46
		Right side	0.172	0.252	0.046		0.47	0.42
		Top side					0.00	0.00
		Bottom side	0.755		0.042	0.096	0.80	0.85
LTE Band 2 Ant 2	LTE Band 13 Ant 1	Front	0.390	0.504	0.047	0.170	0.94	1.06
		Back	0.268	0.351	0.051	0.117	0.67	0.74
		Left side		0.256	0.074	0.110	0.33	0.37
		Right side	0.172	0.271	0.046		0.49	0.44

		Top side					0.00	0.00
		Bottom side	0.755		0.042	0.096	0.80	0.85
LTE Band 66 Ant 2	LTE Band 5 Ant 1	Front	0.371	0.505	0.047	0.170	0.92	1.05
		Back	0.237	0.431	0.051	0.117	0.72	0.79
		Left side	0.126	0.348	0.074	0.110	0.55	0.58
		Right side	0.108	0.252	0.046		0.41	0.36
		Top side					0.00	0.00
		Bottom side	0.576		0.042	0.096	0.62	0.67
LTE Band 66 Ant 2	LTE Band 13 Ant 1	Front	0.371	0.504	0.047	0.170	0.92	1.05
		Back	0.237	0.351	0.051	0.117	0.64	0.71
		Left side	0.126	0.256	0.074	0.110	0.46	0.49
		Right side	0.108	0.271	0.046		0.43	0.38
		Top side					0.00	0.00
		Bottom side	0.576		0.042	0.096	0.62	0.67
LTE Band 2 Ant 1	LTE Band 48 Ant 5	Front	0.308	0.199	0.047	0.170	0.55	0.68
		Back	0.248	0.168	0.051	0.117	0.47	0.53
		Left side	0.088		0.074	0.110	0.16	0.20
		Right side	0.118	0.052	0.046		0.22	0.17
		Top side	0.490				0.49	0.49
		Bottom side		0.058	0.042	0.096	0.10	0.15
LTE Band 48 Ant 5	LTE Band 66 Ant 1	Front	0.199	0.218	0.047	0.170	0.46	0.59
		Back	0.168	0.169	0.051	0.117	0.39	0.45
		Left side		0.144	0.074	0.110	0.22	0.25
		Right side	0.052	0.142	0.046		0.24	0.19
		Top side		0.377			0.38	0.38
		Bottom side	0.058		0.042	0.096	0.10	0.15

WWAN Band	FR1 Band	Exposure Position	1	2	3	10	1+2+3	1+2+10
			WWAN	FR1	WLAN2.4GHz wifi Ant	WLAN5GHz wifi Ant	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)
LTE Band 2 Ant 1	FR1 n2 Ant 2	Front	0.308	0.418	0.047	0.170	0.77	0.90
		Back	0.248	0.275	0.051	0.117	0.57	0.64
		Left side	0.088	0.056	0.074	0.110	0.22	0.25
		Right side	0.118	0.176	0.046		0.34	0.29
		Top side	0.490				0.49	0.49
		Bottom side		0.740	0.042	0.096	0.78	0.84
LTE Band 5 Ant 1	FR1 n2 Ant 2	Front	0.505	0.418	0.047	0.170	0.97	1.09
		Back	0.431	0.275	0.051	0.117	0.76	0.82
		Left side	0.348	0.056	0.074	0.110	0.48	0.51
		Right side	0.252	0.176	0.046		0.47	0.43
		Top side					0.00	0.00
		Bottom side		0.740	0.042	0.096	0.78	0.84
LTE Band 13 Ant 1	FR1 n2 Ant 2	Front	0.504	0.418	0.047	0.170	0.97	1.09
		Back	0.351	0.275	0.051	0.117	0.68	0.74
		Left side	0.256	0.056	0.074	0.110	0.39	0.42
		Right side	0.271	0.176	0.046		0.49	0.45
		Top side					0.00	0.00
		Bottom side		0.740	0.042	0.096	0.78	0.84
LTE Band 66 Ant 1	FR1 n2 Ant 2	Front	0.218	0.418	0.047	0.170	0.68	0.81
		Back	0.169	0.275	0.051	0.117	0.50	0.56
		Left side	0.144	0.056	0.074	0.110	0.27	0.31
		Right side	0.142	0.176	0.046		0.36	0.32
		Top side	0.377				0.38	0.38
		Bottom side		0.740	0.042	0.096	0.78	0.84
LTE Band 2 Ant 2	FR1 n5 Ant 1	Front	0.390	0.545	0.047	0.170	0.98	1.11

		Back	0.268	0.445	0.051	0.117	0.76	0.83
		Left side		0.352	0.074	0.110	0.43	0.46
		Right side	0.172	0.224	0.046		0.44	0.40
		Top side					0.00	0.00
		Bottom side	0.755		0.042	0.096	0.80	0.85
LTE Band 48 Ant 5	FR1 n5 Ant 1	Front	0.199	0.545	0.047	0.170	0.79	0.91
		Back	0.168	0.445	0.051	0.117	0.66	0.73
		Left side		0.352	0.074	0.110	0.43	0.46
		Right side	0.052	0.224	0.046		0.32	0.28
		Top side					0.00	0.00
		Bottom side	0.058		0.042	0.096	0.10	0.15
LTE Band 66 Ant 2	FR1 n5 Ant 1	Front	0.371	0.545	0.047	0.170	0.96	1.09
		Back	0.237	0.445	0.051	0.117	0.73	0.80
		Left side	0.126	0.352	0.074	0.110	0.55	0.59
		Right side	0.108	0.224	0.046		0.38	0.33
		Top side					0.00	0.00
		Bottom side	0.576		0.042	0.096	0.62	0.67
LTE Band 2 Ant 1	FR1 n66 Ant 2	Front	0.308	0.381	0.047	0.170	0.74	0.86
		Back	0.248	0.241	0.051	0.117	0.54	0.61
		Left side	0.088	0.112	0.074	0.110	0.27	0.31
		Right side	0.118	0.108	0.046		0.27	0.23
		Top side	0.490				0.49	0.49
		Bottom side		0.569	0.042	0.096	0.61	0.67
LTE Band 5 Ant 1	FR1 n66 Ant 2	Front	0.505	0.381	0.047	0.170	0.93	1.06
		Back	0.431	0.241	0.051	0.117	0.72	0.79
		Left side	0.348	0.112	0.074	0.110	0.53	0.57
		Right side	0.252	0.108	0.046		0.41	0.36
		Top side					0.00	0.00
		Bottom side		0.569	0.042	0.096	0.61	0.67
LTE Band 2 Ant 1	FR1 n77 Ant 5	Front	0.308	0.486	0.047	0.170	0.84	0.96
		Back	0.248	0.537	0.051	0.117	0.84	0.90
		Left side	0.088	0.080	0.074	0.110	0.24	0.28
		Right side	0.118	0.527	0.046		0.69	0.65
		Top side	0.490	0.315			0.81	0.81
		Bottom side		0.248	0.042	0.096	0.29	0.34
LTE Band 5 Ant 1	FR1 n77 Ant 5	Front	0.505	0.486	0.047	0.170	1.04	**1.16**
		Back	0.431	0.537	0.051	0.117	1.02	1.09
		Left side	0.348	0.080	0.074	0.110	0.50	0.54
		Right side	0.252	0.527	0.046		0.83	0.78
		Top side		0.315			0.32	0.32
		Bottom side		0.248	0.042	0.096	0.29	0.34
LTE Band 7 Ant 3	FR1 n77 Ant 5	Front	0.233	0.486	0.047	0.170	0.77	0.89
		Back	0.162	0.537	0.051	0.117	0.75	0.82
		Left side	0.438	0.080	0.074	0.110	0.59	0.63
		Right side	0.026	0.527	0.046		0.60	0.55
		Top side	0.113	0.315			0.43	0.43
		Bottom side		0.248	0.042	0.096	0.29	0.34
LTE Band 13 Ant 1	FR1 n77 Ant 5	Front	0.504	0.486	0.047	0.170	1.04	1.16
		Back	0.351	0.537	0.051	0.117	0.94	1.01
		Left side	0.256	0.080	0.074	0.110	0.41	0.45
		Right side	0.271	0.527	0.046		0.84	0.80
		Top side		0.315			0.32	0.32
		Bottom side		0.248	0.042	0.096	0.29	0.34
LTE Band 66 Ant 1	FR1 n77 Ant 5	Front	0.218	0.486	0.047	0.170	0.75	0.87
		Back	0.169	0.537	0.051	0.117	0.76	0.82
		Left side	0.144	0.080	0.074	0.110	0.30	0.33

		Right side	0.142	0.527	0.046		0.72	0.67
		Top side	0.377	0.315			0.69	0.69
		Bottom side		0.248	0.042	0.096	0.29	0.34
LTE Band 13 Ant 1	FR1 n66 Ant 2	Front	0.504	0.381	0.047	0.170	0.93	1.06
		Back	0.351	0.241	0.051	0.117	0.64	0.71
		Left side	0.256	0.112	0.074	0.110	0.44	0.48
		Right side	0.271	0.108	0.046		0.43	0.38
		Top side					0.00	0.00
		Bottom side		0.569	0.042	0.096	0.61	0.67
LTE Band 7 Ant 3	FR1 n66 Ant 2	Front	0.233	0.381	0.047	0.170	0.66	0.78
		Back	0.162	0.241	0.051	0.117	0.45	0.52
		Left side	0.438	0.112	0.074	0.110	0.62	0.66
		Right side	0.026	0.108	0.046		0.18	0.13
		Top side	0.113				0.11	0.11
		Bottom side		0.569	0.042	0.096	0.61	0.67

FR1 Band	FR1 Band	Exposure Position	1	2	3	10	1+2+3	1+2+10
			FR1	FR1	WLAN2.4GHz wifi Ant	WLAN5GHz wifi Ant	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)
FR1 n48 Ant 5	FR1 n48 Ant 6	Front	0.191	0.091	0.047	0.170	0.33	0.45
		Back	0.231	0.100	0.051	0.117	0.38	0.45
		Left side	0.039	0.060	0.074	0.110	0.17	0.21
		Right side	0.225	0.152	0.046		0.42	0.38
		Top side	0.084	0.257			0.34	0.34
		Bottom side	0.054	0.064	0.042	0.096	0.16	0.21
FR1 n77 Ant 5	FR1 n77 Ant 6	Front	0.412	0.236	0.047	0.170	0.70	0.82
		Back	0.384	0.247	0.051	0.117	0.68	0.75
		Left side	0.047	0.118	0.074	0.110	0.24	0.28
		Right side	0.392	0.495	0.046		0.93	0.89
		Top side	0.091	0.614			0.71	0.71
		Bottom side	0.207	0.087	0.042	0.096	0.34	0.39

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17. 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. The expanded SAR measurement uncertainty must be ≤ 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. Therefore, the measurement uncertainty table is not required in this report.

18. 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 248227 D01 v02r02, “SAR Guidance for IEEE 802.11 (WiFi) Transmitters”, Oct 2015.

[6] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

[7] FCC KDB 941225 D05 v02r05, “SAR Evaluation Considerations for LTE Devices”, Dec 2015

[8] FCC KDB 941225 D05A v01r02, “Rel. 10 LTE SAR Test Guidance and KDB Inquiries”, Oct 2015

[9] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.

[10] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.

[11] FCC KDB 616217 D04 v01r02, “SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers”, Oct 2015

[12] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.

Appendixes

Please refer to separated files for the following appendixes

Appendix A. Plots of System Performance Check

Appendix B. Plots of High SAR Measurement

Appendix C. DASY Calibration Certificate

Appendix D. Test Setup Photos

Appendix E. Conducted RF Output Power Table

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

Appendix G. Power reduction mechanism verification

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