FCC RF Test Report

APPLICANT	:	OnePlus Technology (Shenzhen) Co., Ltd.
EQUIPMENT	:	Smart Phone
BRAND NAME	:	ONEPLUS
MODEL NAME	:	KB2005
FCC ID	:	2ABZ2-EF009
STANDARD	:	47 CFR Part 2, 24, 27
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Jun. 15, 2020 and completely tested on Jul. 16, 2020. We, Sporton International (ShenZhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

Sporton International (ShenZhen) Inc.

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People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG061509-03G	Rev. 01	Initial issue of report	Aug. 25, 2020

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
-	§2.1046	Conducted Output Power	Reporting Only	PASS	1
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13)	ERP < 3 Watt	PASS	1
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt	PASS	1
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt	PASS	1
-	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	1
-	§2.1049	Occupied Bandwidth	Reporting Only	PASS	1
-	§2.1051 §24.238(a) §27.53(c)(2)(4) §27.53(g) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 12) (Band 13) (Band 66)	< 43+10log10(P[Watts])	PASS	1
-	§2.1051 §24.238(a) §27.53(c)(2) §27.53(g) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 12) (Band 13) (Band 66)	< 43+10log10(P[Watts])	PASS	1
-	§2.1055 §24.235 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	1
3.4	§2.1053 §24.238(a) §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 12) (Band 13) (Band 66)	< 43+10$\log_{10}$(P[Watts])	PASS	Under limit 23.14 dB at 1559.500 MHz

Remark 1 :
The test items of inter band CA were cover by LTE single carrier due to the CA power is reduced according to 3GPP MPR.

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.

1 General Description

1.1 Applicant

OnePlus Technology (Shenzhen) Co., Ltd.
18C02, 18C03, 18C04,18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen,Guangdong,China

1.2 Manufacturer

OnePlus Technology (Shenzhen) Co., Ltd.
18C02, 18C03, 18C04,18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen,Guangdong,China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Phone
Brand Name	ONEPLUS
Model Name	KB2005
FCC ID	2ABZ2-EF009
EUT supports Radios application	CDMA/GSM/WCDMA/LTE/5G NR WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ax HE20/HE40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 WLAN 5GHz 802.11ax HE20/HE40/HE80 Bluetooth BR / EDR / LE / ANT+ GNSS/NFC
IMEI Code	Radiation : 990016770042024
HW Version	13
SW Version	OXYGEN OS 11. KB05AA
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. This is a variant report for KB2005. For model change note, Please refer to the product equality declaration exhibit submitted. According to the PED, the change has no influence on the test results, all the test results are leveraged from original report FG061509G.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2: 1852.5 MHz ~ 1907.5 MHz LTE Band 4 : 1712.5 MHz ~ 1752.5 MHz LTE Band 12 : 701.5 MHz ~ 713.5 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 66 : 1712.5 MHz ~ 1777.5 MHz
Rx Frequency	LTE Band 2 : 1932.5 MHz ~ 1987.5 MHz LTE Band 4 : 2112.5 MHz ~ 2152.5 MHz LTE Band 12 : 730.5 MHz ~ 743.5 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 66 : 2112.5 MHz~ 2197.5 MHz
Bandwidth	LTE Band 2: 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 12 : 5MHz / 10MHz LTE Band 13 : 5MHz / 10MHz LTE Band 66 : 5MHz / 10MHz / 15MHz / 20MHz
Uplink CA Bands	2A-4A, 2A-12A, 2A-13A, 2A-66A, 4A-12A, 4A-13A, 12A-66A, 13A-66A
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

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

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-SZ	CN1256	421272

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan Shenzhen, 518055 People's Republic of China TEL: +86-755-33202398		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH02-SZ	CN1256	421272

1.7 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 2, 24, 27
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

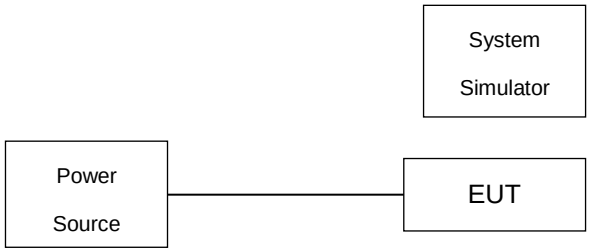
2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	Band	Bandwidth (MHz)					Modulation			RB #			Test Channel		
		-	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Radiated Spurious Emission	2A-4A	Worst Case											v	v	v
	2A-12A	Worst Case											v	v	v
	2A-13A	Worst Case											v	v	v
	2A-66A	Worst Case											v	v	v
	4A-12A	Worst Case											v	v	v
	4A-13A	Worst Case											v	v	v
	12A-66A	Worst Case											v	v	v
	13A-66A	Worst Case											v	v	v
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.														

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5

LTE Band 12 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5

LTE Band 13 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	-	23230	-
	Frequency	-	782	-
5	Channel	23205	23230	23255
	Frequency	779.5	782	784.5

LTE Band 66 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	132072	132322	132572
	Frequency	1720	1745	1770
15	Channel	132047	132322	132597
	Frequency	1717.5	1745	1772.5
10	Channel	132022	132322	132622
	Frequency	1715	1745	1775
5	Channel	131997	132322	132647
	Frequency	1712.5	1745	1777.5

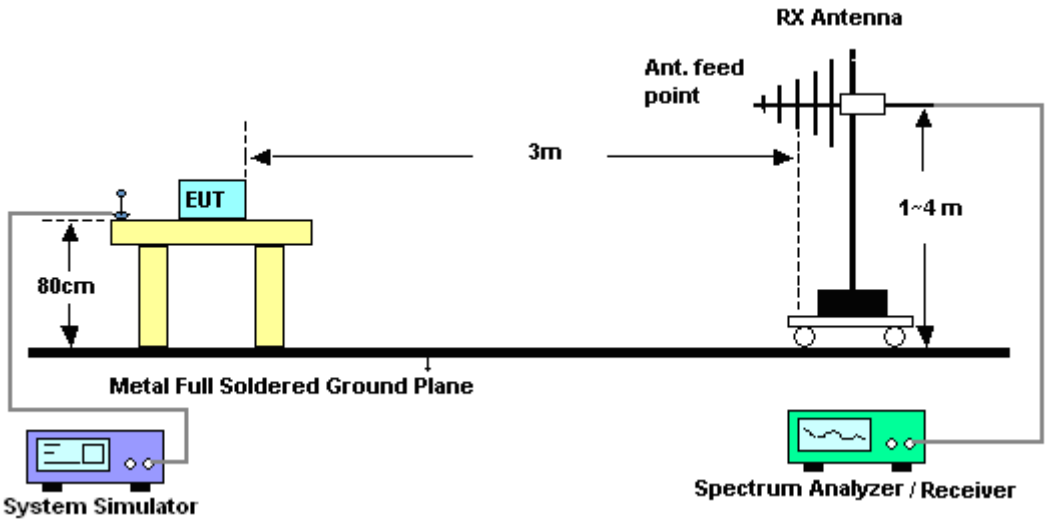
3 Radiated Test Items

3.1 Measuring Instruments

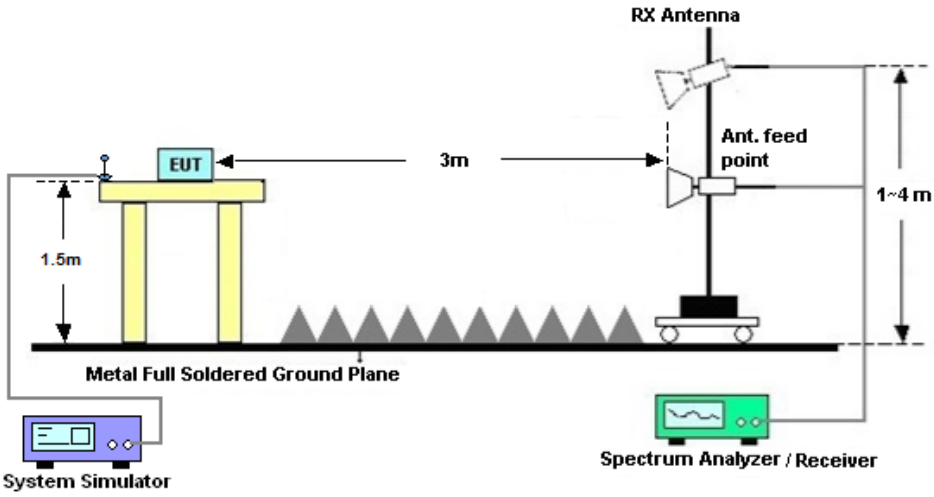
See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 For radiated test from 30MHz to 1GHz



3.2.2 For radiated test above 1GHz



3.3 Test Result of Radiated Test

Please refer to Appendix B.

3.4 Radiated Spurious Emission

3.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For LTE Band 13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Apr. 17, 2020	Jul. 16, 2020	Apr. 16, 2021	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jul. 19, 2019	Jul. 16, 2020	Jul. 18, 2020	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Aug. 27, 2019	Jul. 16, 2020	Aug. 26, 2020	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 22, 2019	Jul. 16, 2020	Jul. 21, 2020	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 17, 2020	Jul. 16, 2020	Apr. 16, 2021	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 18, 2019	Jul. 16, 2020	Oct. 17, 2020	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18, 2019	Jul. 16, 2020	Oct. 17, 2020	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010002470	N/A	NCR	Jul. 16, 2020	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Jul. 16, 2020	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jul. 16, 2020	NCR	Radiation (03CH02-SZ)

NCR: No Calibration Required

5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.47dB**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.31dB**

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.72dB**

Appendix A. Test Results of Radiated Test

Radiated Spurious Emission

Top Antenna

ULCA_2A-4A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B2 BW 20MHz Lowest 1RB0,QPSK	3422.18	-63.44	-13	-50.44	-81.38	-70.20	5.82	12.58	H
	5133.27	-59.28	-13	-46.28	-83.17	-65.00	7.28	13.00	H
	6844.36	-56.40	-13	-43.40	-83.96	-59.56	8.32	11.48	H
	3422.18	-63.42	-13	-50.42	-81.4	-70.18	5.82	12.58	V
	5133.27	-58.03	-13	-45.03	-82.35	-63.75	7.28	13.00	V
	6844.36	-55.87	-13	-42.87	-83.66	-59.03	8.32	11.48	V
LTE B4 BW 20MHz Lowest 1RB0,QPSK	3702.18	-61.60	-13	-48.60	-81.56	-68.48	5.60	12.48	H
	5553.27	-58.87	-13	-45.87	-83.55	-64.55	7.10	12.78	H
	7404.36	-54.48	-13	-41.48	-83.76	-57.87	8.38	11.77	H
	3702.18	-61.66	-13	-48.66	-81.65	-68.54	5.60	12.48	V
	5553.27	-58.82	-13	-45.82	-83.7	-64.50	7.10	12.78	V
	7404.36	-54.75	-13	-41.75	-83.71	-58.14	8.38	11.77	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3447.18	-63.64	-13	-50.64	-81.89	-70.39	5.85	12.60	H
	5170.77	-58.07	-13	-45.07	-82.00	-63.87	7.30	13.10	H
	6894.36	-56.29	-13	-43.29	-84.06	-59.44	8.35	11.50	H
	3447.18	-63.38	-13	-50.38	-81.66	-70.13	5.85	12.60	V
	5170.77	-59.02	-13	-46.02	-83.4	-64.82	7.30	13.10	V
	6894.36	-56.34	-13	-43.34	-84.27	-59.49	8.35	11.50	V
LTE B4 BW 20MHz Middle 1RB0,QPSK	3742.18	-61.40	-13	-48.40	-81.46	-68.25	5.65	12.50	H
	5613.27	-59.04	-13	-46.04	-83.82	-64.71	7.13	12.80	H
	7484.36	-54.67	-13	-41.67	-83.58	-58.07	8.40	11.80	H
	3742.18	-61.52	-13	-48.52	-81.62	-68.37	5.65	12.50	V
	5613.27	-58.52	-13	-45.52	-83.45	-64.19	7.13	12.80	V
	7484.36	-54.96	-13	-41.96	-83.62	-58.36	8.40	11.80	V
LTE B2 BW 20MHz Highest 1RB0,QPSK	3472.18	-63.22	-13	-50.22	-81.63	-69.96	5.88	12.62	H
	5208.27	-59.49	-13	-46.49	-83.28	-65.30	7.32	13.13	H
	6944.36	-56.15	-13	-43.15	-83.77	-84.14	8.38	11.54	H
	3472.18	-63.05	-13	-50.05	-81.49	-69.79	5.88	12.62	V
	5208.27	-59.39	-13	-46.39	-83.48	-65.20	7.32	13.13	V
	6944.36	-55.80	-13	-42.80	-83.88	-58.96	8.38	11.54	V
LTE B4 BW 20MHz Highest 1RB0,QPSK	3782.18	-61.17	-13	-48.17	-81.36	-68.01	5.68	12.52	H
	5673.27	-59.13	-13	-46.13	-83.66	-64.80	7.15	12.82	H
	7564.36	-55.05	-13	-42.05	-83.62	-58.48	8.42	11.85	H
	3782.18	-61.35	-13	-48.35	-81.58	-68.19	5.68	12.52	V
	5673.27	-58.87	-13	-45.87	-83.78	-64.54	7.15	12.82	V
	7564.36	-55.15	-13	-42.15	-83.56	-58.58	8.42	11.85	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_2A-12A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B2 BW 20MHz Lowest 1RB0,QPSK	3702.18	-59.17	-13	-46.17	-79.13	-65.93	5.82	12.58	H
	5553.27	-54.71	-13	-41.71	-79.39	-60.43	7.28	13.00	H
	7404.36	-54.25	-13	-41.25	-83.53	-57.41	8.32	11.48	H
	3702.18	-59.62	-13	-46.62	-79.61	-66.38	5.82	12.58	V
	5553.27	-50.01	-13	-37.01	-74.89	-55.73	7.28	13.00	V
	7404.36	-54.83	-13	-41.83	-83.79	-57.99	8.32	11.48	V
LTE B12 BW 10MHz Lowest 1RB49,QPSK	1399	-65.88	-13	-52.88	-77.83	-69.11	3.98	9.36	H
	2098.5	-64.08	-13	-51.08	-79.59	-67.63	4.85	10.55	H
	2798	-63.76	-13	-50.76	-80.01	-68.69	5.50	12.58	H
	1399	-65.64	-13	-52.64	-77.51	-68.87	3.98	9.36	V
	2098.5	-64.58	-13	-51.58	-80.02	-68.13	4.85	10.55	V
	2798	-63.04	-13	-50.04	-80.00	-67.97	5.50	12.58	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742.18	-59.06	-13	-46.06	-79.12	-65.81	5.85	12.60	H
	5613.27	-56.09	-13	-43.09	-80.87	-61.89	7.30	13.10	H
	7484.36	-54.76	-13	-41.76	-83.67	-57.91	8.35	11.50	H
	3742.18	-57.88	-13	-44.88	-77.98	-64.63	5.85	12.60	V
	5613.27	-52.44	-13	-39.44	-77.37	-58.24	7.30	13.10	V
	7484.36	-55.20	-13	-42.20	-83.86	-58.35	8.35	11.50	V
LTE B12 BW 10MHz Middle 1RB49,QPSK	1406	-65.87	-13	-52.87	-77.86	-69.12	4.00	9.40	H
	2109	-63.77	-13	-50.77	-79.28	-67.34	4.88	10.60	H
	2812	-63.84	-13	-50.84	-80.24	-68.77	5.52	12.60	H
	1406	-66.00	-13	-53.00	-77.95	-69.25	4.00	9.40	V
	2109	-64.73	-13	-51.73	-80.17	-68.30	4.88	10.60	V
	2812	-63.18	-13	-50.18	-80.19	-68.11	5.52	12.60	V
LTE B2 BW 20MHz Highest 1RB0,QPSK	3782.18	-60.79	-13	-47.79	-80.98	-67.53	5.88	12.62	H
	5673.27	-53.85	-13	-40.85	-78.38	-59.66	7.32	13.13	H
	7564.36	-55.00	-13	-42.00	-83.57	-58.16	8.38	11.54	H
	3782.18	-60.50	-13	-47.50	-80.73	-67.24	5.88	12.62	V
	5673.27	-49.10	-13	-36.10	-74.01	-54.91	7.32	13.13	V
	7564.36	-55.48	-13	-42.48	-83.89	-58.64	8.38	11.54	V
LTE B12 BW 10MHz Highest 1RB49,QPSK	1413	-65.29	-13	-52.29	-77.28	-68.46	4.10	9.42	H
	2119.5	-63.90	-13	-50.90	-79.63	-67.48	4.90	10.63	H
	2826	-63.69	-13	-50.69	-80.11	-68.61	5.55	12.62	H
	1413	-65.52	-13	-52.52	-77.47	-68.69	4.10	9.42	V
	2119.5	-64.49	-13	-51.49	-80.13	-68.07	4.90	10.63	V
	2826	-63.29	-13	-50.29	-80.32	-68.21	5.55	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_2A-13A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B2 BW 20MHz Lowest 1RB0,QPSK	3702.18	-61.80	-13	-48.80	-81.76	-68.56	5.82	12.58	H
	5553.27	-59.30	-13	-46.30	-83.98	-65.02	7.28	13.00	H
	7404.36	-54.67	-13	-41.67	-83.95	-57.83	8.32	11.48	H
	3702.18	-61.72	-13	-48.72	-81.71	-68.48	5.82	12.58	V
	5553.27	-59.14	-13	-46.14	-84.02	-64.86	7.28	13.00	V
	7404.36	-54.83	-13	-41.83	-83.79	-57.99	8.32	11.48	V
LTE B13 BW 10MHz Lowest 1RB25,QPSK	1559.5	-66.02	-42.15	-23.87	-78.18	-69.25	3.98	9.36	H
	2339.25	-64.32	-13	-51.32	-80.52	-67.87	4.85	10.55	H
	3119	-62.82	-13	-49.82	-81.23	-67.75	5.50	12.58	H
	1559.5	-66.67	-42.15	-24.52	-78.33	-69.90	3.98	9.36	V
	2339.25	-64.12	-13	-51.12	-80.37	-67.67	4.85	10.55	V
	3119	-62.70	-13	-49.70	-81.04	-67.63	5.50	12.58	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742.18	-60.43	-13	-47.43	-80.49	-67.18	5.85	12.60	H
	5613.27	-58.14	-13	-45.14	-82.92	-63.94	7.30	13.10	H
	7484.36	-53.87	-13	-40.87	-82.78	-57.02	8.35	11.50	H
	3742.18	-61.09	-13	-48.09	-81.19	-67.84	5.85	12.60	V
	5613.27	-58.20	-13	-45.20	-83.13	-64.00	7.30	13.10	V
	7484.36	-54.49	-13	-41.49	-83.15	-57.64	8.35	11.50	V
LTE B13 BW 10MHz Middle 1RB25,QPSK	1559.5	-65.36	-42.15	-23.21	-77.52	-68.61	4.00	9.40	H
	2339.25	-63.21	-13	-50.21	-79.41	-66.78	4.88	10.60	H
	3119	-62.18	-13	-49.18	-80.59	-67.11	5.52	12.60	H
	1559.5	-66.02	-42.15	-23.87	-77.68	-69.27	4.00	9.40	V
	2339.25	-63.73	-13	-50.73	-79.98	-67.30	4.88	10.60	V
	3119	-62.41	-13	-49.41	-80.75	-67.34	5.52	12.60	V
LTE B2 BW 20MHz Highest 1RB0,QPSK	3782.18	-61.85	-13	-48.85	-82.04	-68.59	5.88	12.62	H
	5673.27	-59.02	-13	-46.02	-83.55	-64.83	7.32	13.13	H
	7564.36	-55.46	-13	-42.46	-84.03	-58.62	8.38	11.54	H
	3782.18	-61.62	-13	-48.62	-81.85	-68.36	5.88	12.62	V
	5673.27	-59.09	-13	-46.09	-84	-64.90	7.32	13.13	V
	7564.36	-55.51	-13	-42.51	-83.92	-58.67	8.38	11.54	V
LTE B13 BW 10MHz Highest 1RB25,QPSK	1559.5	-66.00	-42.15	-23.85	-78.16	-69.17	4.10	9.42	H
	2339.25	-64.39	-13	-51.39	-80.59	-67.97	4.90	10.63	H
	3119	-62.95	-13	-49.95	-81.36	-67.87	5.55	12.62	H
	1559.5	-66.48	-42.15	-24.33	-78.14	-69.65	4.10	9.42	V
	2339.25	-64.24	-13	-51.24	-80.49	-67.82	4.90	10.63	V
	3119	-62.97	-13	-49.97	-81.31	-67.89	5.55	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_2A-66A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B2 BW 20MHz Lowest 1RB0,QPSK	3702.18	-61.87	-13	-48.87	-81.83	-68.63	5.82	12.58	H
	5553.27	-59.40	-13	-46.40	-84.08	-65.12	7.28	13.00	H
	7404.36	-54.74	-13	-41.74	-84.02	-57.90	8.32	11.48	H
	3702.18	-61.68	-13	-48.68	-81.67	-68.44	5.82	12.58	V
	5553.27	-59.39	-13	-46.39	-84.27	-65.11	7.28	13.00	V
	7404.36	-55.29	-13	-42.29	-84.25	-58.45	8.32	11.48	V
LTE B66 BW 20MHz Lowest 1RB0,QPSK	3422	-64.17	-13	-51.17	-82.11	-71.05	5.60	12.48	H
	5133	-59.05	-13	-46.05	-82.94	-64.73	7.10	12.78	H
	6844	-56.74	-13	-43.74	-84.30	-60.13	8.38	11.77	H
	3422	-61.69	-13	-48.69	-79.67	-68.57	5.60	12.48	V
	5133	-57.56	-13	-44.56	-81.88	-63.24	7.10	12.78	V
	6844	-56.22	-13	-43.22	-84.01	-59.61	8.38	11.77	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742.18	-60.63	-13	-47.63	-80.69	-67.38	5.85	12.60	H
	5613.27	-58.29	-13	-45.29	-83.07	-64.09	7.30	13.10	H
	7484.36	-54.73	-13	-41.73	-83.64	-57.88	8.35	11.50	H
	3742.18	-60.87	-13	-47.87	-80.97	-67.62	5.85	12.60	V
	5613.27	-58.17	-13	-45.17	-83.1	-63.97	7.30	13.10	V
	7484.36	-55.30	-13	-42.30	-83.96	-58.45	8.35	11.50	V
LTE B66 BW 20MHz Middle 1RB0,QPSK	3472	-63.77	-13	-50.77	-82.18	-70.62	5.65	12.50	H
	5208	-60.41	-13	-47.41	-84.20	-66.08	7.13	12.80	H
	6944	-56.63	-13	-43.63	-84.62	-60.03	8.40	11.80	H
	3472	-63.59	-13	-50.59	-82.03	-70.44	5.65	12.50	V
	5208	-60.08	-13	-47.08	-84.17	-65.75	7.13	12.80	V
	6944	-56.68	-13	-43.68	-84.76	-60.08	8.40	11.80	V
LTE B2 BW 20MHz Highest 1RB0,QPSK	3782.18	-61.95	-13	-48.95	-82.14	-68.69	5.88	12.62	H
	5673.27	-59.47	-13	-46.47	-84.00	-65.28	7.32	13.13	H
	7564.36	-55.58	-13	-42.58	-84.15	-58.74	8.38	11.54	H
	3782.18	-61.97	-13	-48.97	-82.2	-68.71	5.88	12.62	V
	5673.27	-58.73	-13	-45.73	-83.64	-64.54	7.32	13.13	V
	7564.36	-55.48	-13	-42.48	-83.89	-58.64	8.38	11.54	V
LTE B66 BW 20MHz Highest 1RB0,QPSK	3522	-60.86	-13	-47.86	-79.74	-67.70	5.68	12.52	H
	5283	-58.37	-13	-45.37	-82.01	-64.04	7.15	12.82	H
	7044	-55.70	-13	-42.70	-84.02	-59.13	8.42	11.85	H
	3522	-63.25	-13	-50.25	-82.16	-70.09	5.68	12.52	V
	5283	-60.01	-13	-47.01	-83.74	-65.68	7.15	12.82	V
	7044	-55.77	-13	-42.77	-84.35	-59.20	8.42	11.85	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_4A-12A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B4 BW 20MHz Lowest 1RB0,QPSK	3422.18	-63.46	-13	-50.46	-81.40	-70.22	5.82	12.58	H
	5133.27	-59.49	-13	-46.49	-83.38	-65.21	7.28	13.00	H
	6844.36	-56.59	-13	-43.59	-84.15	-59.75	8.32	11.48	H
	3422.18	-63.49	-13	-50.49	-81.47	-70.25	5.82	12.58	V
	5133.27	-58.70	-13	-45.70	-83.02	-64.42	7.28	13.00	V
	6844.36	-56.11	-13	-43.11	-83.9	-59.27	8.32	11.48	V
LTE B12 BW 10MHz Lowest 1RB49,QPSK	1399	-65.30	-13	-52.30	-77.25	-68.53	3.98	9.36	H
	2098.5	-63.61	-13	-50.61	-79.12	-67.16	4.85	10.55	H
	2798	-63.96	-13	-50.96	-80.21	-68.89	5.50	12.58	H
	1399	-65.28	-13	-52.28	-77.15	-68.51	3.98	9.36	V
	2098.5	-62.89	-13	-49.89	-78.33	-66.44	4.85	10.55	V
	2798	-62.99	-13	-49.99	-79.95	-67.92	5.50	12.58	V
LTE B4 BW 20MHz Middle 1RB0,QPSK	3447.18	-62.27	-13	-49.27	-81.87	-69.02	5.85	12.60	H
	5170.77	-56.09	-13	-43.09	-84.27	-61.89	7.30	13.10	H
	6894.36	-56.56	-13	-43.56	-83.92	-59.71	8.35	11.50	H
	3447.18	-60.09	-13	-47.09	-81.83	-66.84	5.85	12.60	V
	5170.77	-53.21	-13	-40.21	-84.15	-59.01	7.30	13.10	V
	6894.36	-56.21	-13	-43.21	-84.4	-59.36	8.35	11.50	V
LTE B12 BW 10MHz Middle 1RB49,QPSK	1406	-64.90	-13	-51.90	-77.70	-68.15	4.00	9.40	H
	2109	-63.36	-13	-50.36	-80.06	-66.93	4.88	10.60	H
	2812	-63.80	-13	-50.80	-80.28	-68.73	5.52	12.60	H
	1406	-65.15	-13	-52.15	-77.29	-68.40	4.00	9.40	V
	2109	-64.28	-13	-51.28	-78.41	-67.85	4.88	10.60	V
	2812	-63.04	-13	-50.04	-79.92	-67.97	5.52	12.60	V
LTE B4 BW 20MHz Highest 1RB0,QPSK	3472.18	-63.07	-13	-50.07	-81.48	-69.81	5.88	12.62	H
	5208.27	-60.00	-13	-47.00	-83.79	-65.81	7.32	13.13	H
	6944.36	-56.35	-13	-43.35	-84.34	-59.51	8.38	11.54	H
	3472.18	-61.17	-13	-48.17	-79.61	-67.91	5.88	12.62	V
	5208.27	-59.52	-13	-46.52	-83.61	-65.33	7.32	13.13	V
	6944.36	-56.29	-13	-43.29	-84.37	-59.45	8.38	11.54	V
LTE B12 BW 10MHz Highest 1RB49,QPSK	1413	-65.24	-13	-52.24	-77.23	-68.41	4.10	9.42	H
	2119.5	-64.29	-13	-51.29	-80.02	-67.87	4.90	10.63	H
	2826	-63.74	-13	-50.74	-80.16	-68.66	5.55	12.62	H
	1413	-65.31	-13	-52.31	-77.26	-68.48	4.10	9.42	V
	2119.5	-64.76	-13	-51.76	-80.40	-68.34	4.90	10.63	V
	2826	-63.15	-13	-50.15	-80.18	-68.07	5.55	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_4A-13A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B4 BW 20MHz Lowest 1RB0,QPSK	3422.18	-60.36	-13	-47.36	-78.30	-67.12	5.82	12.58	H
	5133.27	-56.89	-13	-43.89	-80.78	-62.61	7.28	13.00	H
	6844.36	-56.13	-13	-43.13	-83.69	-59.29	8.32	11.48	H
	3422.18	-62.64	-13	-80.62	-77.72	-69.40	5.82	12.58	V
	5133.27	-58.48	-13	-82.80	-80.15	-64.20	7.28	13.00	V
	6844.36	-56.09	-13	-83.88	-80.94	-59.25	8.32	11.48	V
LTE B13 BW 10MHz Lowest 1RB25,QPSK	1559.5	-65.56	-42.15	-23.41	-77.72	-68.79	3.98	9.36	H
	2339.25	-64.15	-13	-51.15	-80.35	-67.70	4.85	10.55	H
	3119	-62.52	-13	-49.52	-80.93	-67.45	5.50	12.58	H
	1559.5	-66.06	-42.15	-23.91	-77.72	-69.29	3.98	9.36	V
	2339.25	-63.90	-13	-50.90	-80.15	-67.45	4.85	10.55	V
	3119	-62.60	-13	-49.60	-80.94	-67.53	5.50	12.58	V
LTE B4 BW 20MHz Middle 1RB0,QPSK	3447.18	-61.18	-13	-48.18	-79.43	-67.93	5.85	12.60	H
	5170.77	-58.22	-13	-45.22	-82.15	-64.02	7.30	13.10	H
	6894.36	-56.51	-13	-43.51	-84.28	-59.66	8.35	11.50	H
	3447.18	-62.76	-13	-49.76	-81.04	-69.51	5.85	12.60	V
	5170.77	-58.59	-13	-45.59	-82.97	-64.39	7.30	13.10	V
	6894.36	-56.27	-13	-43.27	-84.2	-59.42	8.35	11.50	V
LTE B13 BW 10MHz Middle 1RB25,QPSK	1559.5	-65.63	-42.15	-23.48	-77.79	-68.88	4.00	9.40	H
	2339.25	-64.26	-13	-51.26	-80.46	-67.83	4.88	10.60	H
	3119	-62.63	-13	-49.63	-81.04	-67.56	5.52	12.60	H
	1559.5	-66.39	-42.15	-24.24	-78.05	-69.64	4.00	9.40	V
	2339.25	-64.21	-13	-51.21	-80.46	-67.78	4.88	10.60	V
	3119	-62.60	-13	-49.60	-80.94	-67.53	5.52	12.60	V
LTE B4 BW 20MHz Highest 1RB0,QPSK	3472.18	-58.83	-13	-45.83	-77.24	-65.57	5.88	12.62	H
	5208.27	-58.22	-13	-45.22	-82.01	-64.03	7.32	13.13	H
	6944.36	-56.28	-13	-43.28	-84.27	-59.44	8.38	11.54	H
	3472.18	-60.63	-13	-47.63	-79.07	-67.37	5.88	12.62	V
	5208.27	-58.01	-13	-45.01	-82.1	-63.82	7.32	13.13	V
	6944.36	-56.28	-13	-43.28	-84.36	-59.44	8.38	11.54	V
LTE B13 BW 10MHz Highest 1RB25,QPSK	1559.5	-65.90	-42.15	-23.75	-78.06	-69.07	4.10	9.42	H
	2339.25	-64.36	-13	-51.36	-80.56	-67.94	4.90	10.63	H
	3119	-62.53	-13	-49.53	-80.94	-67.45	5.55	12.62	H
	1559.5	-66.17	-42.15	-24.02	-77.83	-69.34	4.10	9.42	V
	2339.25	-63.94	-13	-50.94	-80.19	-67.52	4.90	10.63	V
	3119	-62.55	-13	-49.55	-80.89	-67.47	5.55	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_12A-66A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B12 BW 10MHz Lowest 1RB49,QPSK	1399	-65.76	-13	-52.76	-77.71	-68.99	3.98	9.36	H
	2098.5	-64.70	-13	-51.70	-80.21	-68.25	4.85	10.55	H
	2798	-64.18	-13	-51.18	-80.43	-69.11	5.50	12.58	H
	1399	-65.92	-13	-52.92	-77.79	-69.15	3.98	9.36	V
	2098.5	-64.71	-13	-51.71	-80.15	-68.26	4.85	10.55	V
	2798	-63.38	-13	-50.38	-80.34	-68.31	5.50	12.58	V
LTE B66 BW 20MHz Lowest 1RB0,QPSK	3422	-64.00	-13	-51.00	-81.94	-70.88	5.60	12.48	H
	5133	-59.61	-13	-46.61	-83.50	-65.29	7.10	12.78	H
	6844	-56.48	-13	-43.48	-84.04	-59.87	8.38	11.77	H
	3422	-64.14	-13	-51.14	-82.12	-71.02	5.60	12.48	V
	5133	-59.41	-13	-46.41	-83.73	-65.09	7.10	12.78	V
	6844	-56.48	-13	-43.48	-84.27	-59.87	8.38	11.77	V
LTE B12 BW 10MHz Middle 1RB49,QPSK	1406	-65.72	-13	-52.72	-77.71	-68.97	4.00	9.40	H
	2109	-63.80	-13	-50.8	-79.31	-67.37	4.88	10.60	H
	2812	-63.75	-13	-50.75	-80.15	-68.68	5.52	12.60	H
	1406	-66.05	-13	-53.05	-78.00	-69.30	4.00	9.40	V
	2109	-64.48	-13	-51.48	-79.92	-68.05	4.88	10.60	V
	2812	-63.64	-13	-50.64	-80.65	-68.57	5.52	12.60	V
LTE B66 BW 20MHz Middle 1RB0,QPSK	3472	-63.88	-13	-50.88	-82.29	-70.73	5.65	12.50	H
	5208	-60.41	-13	-47.41	-84.20	-66.08	7.13	12.80	H
	6944	-56.42	-13	-43.42	-84.41	-59.82	8.40	11.80	H
	3472	-63.57	-13	-50.57	-82.01	-70.42	5.65	12.50	V
	5208	-59.88	-13	-46.88	-83.97	-65.55	7.13	12.80	V
	6944	-56.28	-13	-43.28	-84.36	-59.68	8.40	11.80	V
LTE B12 BW 10MHz Highest 1RB49,QPSK	1413	-65.83	-13	-52.83	-77.82	-69.00	4.10	9.42	H
	2119.5	-64.05	-13	-51.05	-79.78	-67.63	4.90	10.63	H
	2826	-63.27	-13	-50.27	-79.69	-68.19	5.55	12.62	H
	1413	-65.78	-13	-52.78	-77.73	-68.95	4.10	9.42	V
	2119.5	-64.94	-13	-51.94	-80.58	-68.52	4.90	10.63	V
	2826	-63.43	-13	-50.43	-80.46	-68.35	5.55	12.62	V
LTE B66 BW 20MHz Highest 1RB0,QPSK	3522	-63.44	-13	-50.44	-82.32	-70.28	5.68	12.52	H
	5283	-60.93	-13	-47.93	-84.57	-66.60	7.15	12.82	H
	7044	-55.72	-13	-42.72	-84.04	-59.15	8.42	11.85	H
	3522	-63.47	-13	-50.47	-82.38	-70.31	5.68	12.52	V
	5283	-60.79	-13	-47.79	-84.52	-66.46	7.15	12.82	V
	7044	-55.50	-13	-42.50	-84.08	-58.93	8.42	11.85	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_13A-66A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B13 BW 10MHz Lowest 1RB25,QPSK	1559.5	-66.22	-42.15	-24.07	-78.38	-69.45	3.98	9.36	H
	2339.25	-64.61	-13	-51.61	-80.81	-68.16	4.85	10.55	H
	3119	-62.99	-13	-49.99	-81.40	-67.92	5.50	12.58	H
	1559.5	-66.90	-42.15	-24.75	-78.56	-70.13	3.98	9.36	V
	2339.25	-64.68	-13	-51.68	-80.93	-68.23	4.85	10.55	V
	3119	-63.07	-13	-50.07	-81.41	-68.00	5.50	12.58	V
LTE B66 BW 20MHz Lowest 1RB0,QPSK	3422	-63.90	-13	-50.90	-81.84	-70.78	5.60	12.48	H
	5133	-59.69	-13	-46.69	-83.58	-65.37	7.10	12.78	H
	6844	-56.69	-13	-43.69	-84.25	-60.08	8.38	11.77	H
	3422	-63.75	-13	-50.75	-81.73	-70.63	5.60	12.48	V
	5133	-59.37	-13	-46.37	-83.69	-65.05	7.10	12.78	V
	6844	-56.13	-13	-43.13	-83.92	-59.52	8.38	11.77	V
LTE B13 BW 10MHz Middle 1RB25,QPSK	1559.5	-65.98	-42.15	-23.83	-78.14	-69.23	4.00	9.40	H
	2339.25	-64.54	-13	-51.54	-80.74	-68.11	4.88	10.60	H
	3119	-62.76	-13	-49.76	-81.17	-67.69	5.52	12.60	H
	1559.5	-66.75	-42.15	-24.60	-78.41	-70.00	4.00	9.40	V
	2339.25	-64.08	-13	-51.08	-80.33	-67.65	4.88	10.60	V
	3119	-63.02	-13	-50.02	-81.36	-67.95	5.52	12.60	V
LTE B66 BW 20MHz Middle 1RB0,QPSK	3472	-63.65	-13	-50.65	-82.06	-70.50	5.65	12.50	H
	5208	-60.19	-13	-47.19	-83.98	-65.86	7.13	12.80	H
	6944	-56.27	-13	-43.27	-84.26	-59.67	8.40	11.80	H
	3472	-63.56	-13	-50.56	-82	-70.41	5.65	12.50	V
	5208	-60.03	-13	-47.03	-84.12	-65.70	7.13	12.80	V
	6944	-56.52	-13	-43.52	-84.6	-59.92	8.40	11.80	V
LTE B13 BW 10MHz Highest 1RB25,QPSK	1559.5	-65.84	-42.15	-23.69	-78.00	-69.01	4.10	9.42	H
	2339.25	-64.30	-13	-51.30	-80.50	-67.88	4.90	10.63	H
	3119	-62.59	-13	-49.59	-81.00	-67.51	5.55	12.62	H
	1559.5	-66.54	-42.15	-24.39	-78.20	-69.71	4.10	9.42	V
	2339.25	-64.70	-13	-51.70	-80.95	-68.28	4.90	10.63	V
	3119	-63.25	-13	-50.25	-81.59	-68.17	5.55	12.62	V
LTE B66 BW 20MHz Highest 1RB0,QPSK	3522	-62.89	-13	-49.89	-81.77	-69.73	5.68	12.52	H
	5283	-60.61	-13	-47.61	-84.25	-66.28	7.15	12.82	H
	7044	-55.76	-13	-42.76	-84.08	-59.19	8.42	11.85	H
	3522	-63.04	-13	-50.04	-81.95	-69.88	5.68	12.52	V
	5283	-60.31	-13	-47.31	-84.04	-65.98	7.15	12.82	V
	7044	-55.50	-13	-42.50	-84.08	-58.93	8.42	11.85	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Bottom Antenna

ULCA_2A-4A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B2 BW 20MHz Lowest 1RB0,QPSK	3422.18	-63.78	-13	-50.78	-81.72	-70.54	5.82	12.58	H
	5133.27	-59.20	-13	-46.20	-83.09	-64.92	7.28	13.00	H
	6844.36	-56.56	-13	-43.56	-84.12	-59.72	8.32	11.48	H
	3422.18	-63.51	-13	-50.51	-81.49	-70.27	5.82	12.58	V
	5133.27	-58.68	-13	-45.68	-83	-64.40	7.28	13.00	V
	6844.36	-56.09	-13	-43.09	-83.88	-59.25	8.32	11.48	V
LTE B4 BW 20MHz Lowest 1RB0,QPSK	3702.18	-61.45	-13	-48.45	-81.41	-68.33	5.60	12.48	H
	5553.27	-58.85	-13	-45.85	-83.53	-64.53	7.10	12.78	H
	7404.36	-54.26	-13	-41.26	-83.54	-57.65	8.38	11.77	H
	3702.18	-61.57	-13	-48.57	-81.56	-68.45	5.60	12.48	V
	5553.27	-58.52	-13	-45.52	-83.4	-64.20	7.10	12.78	V
	7404.36	-54.81	-13	-41.81	-83.77	-58.20	8.38	11.77	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3447.18	-63.65	-13	-50.65	-81.90	-70.40	5.85	12.60	H
	5170.77	-59.39	-13	-46.39	-83.32	-65.19	7.30	13.10	H
	6894.36	-55.89	-13	-42.89	-83.66	-59.04	8.35	11.50	H
	3447.18	-63.07	-13	-50.07	-81.35	-69.82	5.85	12.60	V
	5170.77	-57.96	-13	-44.96	-82.34	-63.76	7.30	13.10	V
	6894.36	-56.23	-13	-43.23	-84.16	-59.38	8.35	11.50	V
LTE B4 BW 20MHz Middle 1RB0,QPSK	3742.18	-61.49	-13	-48.49	-81.55	-68.34	5.65	12.50	H
	5613.27	-58.87	-13	-45.87	-83.65	-64.54	7.13	12.80	H
	7484.36	-54.18	-13	-41.18	-83.09	-57.58	8.40	11.80	H
	3742.18	-60.25	-13	-47.25	-80.35	-67.10	5.65	12.50	V
	5613.27	-57.53	-13	-44.53	-82.46	-63.20	7.13	12.80	V
	7484.36	-54.61	-13	-41.61	-83.27	-58.01	8.40	11.80	V
LTE B2 BW 20MHz Highest 1RB0,QPSK	3472.18	-63.23	-13	-50.23	-81.64	-69.97	5.88	12.62	H
	5208.27	-59.53	-13	-46.53	-83.32	-65.34	7.32	13.13	H
	6944.36	-55.87	-13	-42.87	-83.86	-59.03	8.38	11.54	H
	3472.18	-63.36	-13	-50.36	-81.8	-70.10	5.88	12.62	V
	5208.27	-59.39	-13	-46.39	-83.48	-65.20	7.32	13.13	V
	6944.36	-55.88	-13	-42.88	-83.96	-59.04	8.38	11.54	V
LTE B4 BW 20MHz Highest 1RB0,QPSK	3782.18	-60.78	-13	-47.78	-80.97	-67.62	5.68	12.52	H
	5673.27	-59.15	-13	-46.15	-83.68	-64.82	7.15	12.82	H
	7564.36	-54.90	-13	-41.90	-83.47	-58.33	8.42	11.85	H
	3782.18	-61.27	-13	-48.27	-81.5	-68.11	5.68	12.52	V
	5673.27	-58.73	-13	-45.73	-83.64	-64.40	7.15	12.82	V
	7564.36	-55.30	-13	-42.30	-83.71	-58.73	8.42	11.85	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_2A-12A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B2 BW 20MHz Lowest 1RB0,QPSK	3702.18	-61.21	-13	-48.21	-81.17	-67.97	5.82	12.58	H
	5553.27	-58.70	-13	-45.70	-83.38	-64.42	7.28	13.00	H
	7404.36	-54.30	-13	-41.30	-83.58	-57.46	8.32	11.48	H
	3702.18	-61.19	-13	-48.19	-81.18	-67.95	5.82	12.58	V
	5553.27	-58.40	-13	-45.40	-83.28	-64.12	7.28	13.00	V
	7404.36	-54.20	-13	-41.20	-83.16	-57.36	8.32	11.48	V
LTE B12 BW 10MHz Lowest 1RB49,QPSK	1399	-65.25	-13	-52.25	-77.20	-68.48	3.98	9.36	H
	2098.5	-63.72	-13	-50.72	-79.23	-67.27	4.85	10.55	H
	2798	-63.96	-13	-50.96	-80.21	-68.89	5.50	12.58	H
	1399	-65.73	-13	-52.73	-77.60	-68.96	3.98	9.36	V
	2098.5	-64.81	-13	-51.81	-80.25	-68.36	4.85	10.55	V
	2798	-62.95	-13	-49.95	-79.91	-67.88	5.50	12.58	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742.18	-60.36	-13	-47.36	-80.42	-67.11	5.85	12.60	H
	5613.27	-57.79	-13	-44.79	-82.57	-63.59	7.30	13.10	H
	7484.36	-54.71	-13	-41.71	-83.62	-57.86	8.35	11.50	H
	3742.18	-60.17	-13	-47.17	-80.27	-66.92	5.85	12.60	V
	5613.27	-57.24	-13	-44.24	-82.17	-63.04	7.30	13.10	V
	7484.36	-54.76	-13	-41.76	-83.42	-57.91	8.35	11.50	V
LTE B12 BW 10MHz Middle 1RB49,QPSK	1406	-65.79	-13	-52.79	-77.78	-69.04	4.00	9.40	H
	2109	-63.28	-13	-50.28	-78.79	-66.85	4.88	10.60	H
	2812	-63.52	-13	-50.52	-79.92	-68.45	5.52	12.60	H
	1406	-65.63	-13	-52.63	-77.58	-68.88	4.00	9.40	V
	2109	-64.20	-13	-51.20	-79.64	-67.77	4.88	10.60	V
	2812	-63.21	-13	-50.21	-80.22	-68.14	5.52	12.60	V
LTE B2 BW 20MHz Highest 1RB0,QPSK	3782.18	-61.48	-13	-48.48	-81.67	-68.22	5.88	12.62	H
	5673.27	-59.21	-13	-46.21	-83.74	-65.02	7.32	13.13	H
	7564.36	-55.05	-13	-42.05	-83.62	-58.21	8.38	11.54	H
	3782.18	-61.30	-13	-48.30	-81.53	-68.04	5.88	12.62	V
	5673.27	-58.98	-13	-45.98	-83.89	-64.79	7.32	13.13	V
	7564.36	-55.02	-13	-42.02	-83.43	-58.18	8.38	11.54	V
LTE B12 BW 10MHz Highest 1RB49,QPSK	1413	-66.04	-13	-53.04	-78.03	-69.21	4.10	9.42	H
	2119.5	-63.25	-13	-50.25	-78.98	-66.83	4.90	10.63	H
	2826	-63.70	-13	-50.70	-80.12	-68.62	5.55	12.62	H
	1413	-65.53	-13	-52.53	-77.48	-68.70	4.10	9.42	V
	2119.5	-64.24	-13	-51.24	-79.88	-67.82	4.90	10.63	V
	2826	-63.31	-13	-50.31	-80.34	-68.23	5.55	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_2A-13A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B2 BW 20MHz Lowest 1RB0,QPSK	3702.18	-60.55	-13	-47.55	-80.54	-67.31	5.82	12.58	H
	5553.27	-44.44	-13	-31.44	-69.32	-50.16	7.28	13.00	H
	7404.36	-54.94	-13	-41.94	-83.90	-58.10	8.32	11.48	H
	3702.18	-60.57	-13	-47.57	-80.56	-67.33	5.82	12.58	V
	5553.27	-44.46	-13	-31.46	-69.34	-50.18	7.28	13.00	V
	7404.36	-54.96	-13	-41.96	-83.92	-58.12	8.32	11.48	V
LTE B13 BW 10MHz Lowest 1RB25,QPSK	1559.5	-65.72	-42.15	-23.57	-77.88	-68.95	3.98	9.36	H
	2339.25	-64.05	-13	-51.05	-80.25	-67.60	4.85	10.55	H
	3119	-62.77	-13	-49.77	-81.18	-67.70	5.50	12.58	H
	1559.5	-66.57	-42.15	-24.42	-78.23	-69.80	3.98	9.36	V
	2339.25	-64.35	-13	-51.35	-80.60	-67.90	4.85	10.55	V
	3119	-62.93	-13	-49.93	-81.27	-67.86	5.50	12.58	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742.18	-61.34	-13	-48.34	-81.40	-68.09	5.85	12.60	H
	5613.27	-48.44	-13	-35.44	-73.22	-54.24	7.30	13.10	H
	7484.36	-54.93	-13	-41.93	-83.84	-58.08	8.35	11.50	H
	3742.18	-59.91	-13	-46.91	-80.01	-66.66	5.85	12.60	V
	5613.27	-44.07	-13	-31.07	-69	-49.87	7.30	13.10	V
	7484.36	-55.06	-13	-42.06	-83.72	-58.21	8.35	11.50	V
LTE B13 BW 10MHz Middle 1RB25,QPSK	1559.5	-65.29	-42.15	-23.14	-77.45	-68.54	4.00	9.40	H
	2339.25	-63.86	-13	-50.86	-80.06	-67.43	4.88	10.60	H
	3119	-62.46	-13	-49.46	-80.87	-67.39	5.52	12.60	H
	1559.5	-66.04	-42.15	-23.89	-77.70	-69.29	4.00	9.40	V
	2339.25	-64.12	-13	-51.12	-80.37	-67.69	4.88	10.60	V
	3119	-62.80	-13	-49.80	-81.14	-67.73	5.52	12.60	V
LTE B2 BW 20MHz Highest 1RB0,QPSK	3782.18	-61.66	-13	-48.66	-81.85	-68.40	5.88	12.62	H
	5673.27	-59.19	-13	-46.19	-83.72	-65.00	7.32	13.13	H
	7564.36	-55.35	-13	-42.35	-83.92	-58.51	8.38	11.54	H
	3782.18	-61.83	-13	-48.83	-82.06	-68.57	5.88	12.62	V
	5673.27	-58.40	-13	-45.40	-83.31	-64.21	7.32	13.13	V
	7564.36	-55.21	-13	-42.21	-83.62	-58.37	8.38	11.54	V
LTE B13 BW 10MHz Highest 1RB25,QPSK	1559.5	-65.85	-42.15	-23.70	-78.01	-69.02	4.10	9.42	H
	2339.25	-64.01	-13	-51.01	-80.21	-67.59	4.90	10.63	H
	3119	-62.67	-13	-49.67	-81.08	-67.59	5.55	12.62	H
	1559.5	-66.46	-42.15	-24.31	-78.12	-69.63	4.10	9.42	V
	2339.25	-64.27	-13	-51.27	-80.52	-67.85	4.90	10.63	V
	3119	-62.66	-13	-49.66	-81.00	-67.58	5.55	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_2A-66A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B2 BW 20MHz Lowest 1RB0,QPSK	3702.18	-61.59	-13	-48.59	-81.55	-68.35	5.82	12.58	H
	5553.27	-59.30	-13	-46.30	-83.98	-65.02	7.28	13.00	H
	7404.36	-54.51	-13	-41.51	-83.79	-57.67	8.32	11.48	H
	3702.18	-61.57	-13	-48.57	-81.56	-68.33	5.82	12.58	V
	5553.27	-59.17	-13	-46.17	-84.05	-64.89	7.28	13.00	V
	7404.36	-55.08	-13	-42.08	-84.04	-58.24	8.32	11.48	V
LTE B66 BW 20MHz Lowest 1RB0,QPSK	3422	-64.23	-13	-51.23	-82.17	-71.11	5.60	12.48	H
	5133	-59.72	-13	-46.72	-83.61	-65.40	7.10	12.78	H
	6844	-56.92	-13	-43.92	-84.48	-60.31	8.38	11.77	H
	3422	-63.88	-13	-50.88	-81.86	-70.76	5.60	12.48	V
	5133	-59.07	-13	-46.07	-83.39	-64.75	7.10	12.78	V
	6844	-56.48	-13	-43.48	-84.27	-59.87	8.38	11.77	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742.18	-60.81	-13	-47.81	-80.87	-67.56	5.85	12.60	H
	5613.27	-58.42	-13	-45.42	-83.20	-64.22	7.30	13.10	H
	7484.36	-55.03	-13	-42.03	-83.94	-58.18	8.35	11.50	H
	3742.18	-60.54	-13	-47.54	-80.64	-67.29	5.85	12.60	V
	5613.27	-57.99	-13	-44.99	-82.92	-63.79	7.30	13.10	V
	7484.36	-55.13	-13	-42.13	-83.79	-58.28	8.35	11.50	V
LTE B66 BW 20MHz Middle 1RB0,QPSK	3472	-63.62	-13	-50.62	-82.03	-70.47	5.65	12.50	H
	5208	-60.27	-13	-47.27	-84.06	-65.94	7.13	12.80	H
	6944	-56.58	-13	-43.58	-84.57	-59.98	8.40	11.80	H
	3472	-63.57	-13	-50.57	-82.01	-70.42	5.65	12.50	V
	5208	-59.98	-13	-46.98	-84.07	-65.65	7.13	12.80	V
	6944	-56.38	-13	-43.38	-84.46	-59.78	8.40	11.80	V
LTE B2 BW 20MHz Highest 1RB0,QPSK	3782.18	-61.72	-13	-48.72	-81.91	-68.46	5.88	12.62	H
	5673.27	-59.30	-13	-46.30	-83.83	-65.11	7.32	13.13	H
	7564.36	-55.53	-13	-42.53	-84.10	-58.69	8.38	11.54	H
	3782.18	-61.87	-13	-48.87	-82.1	-68.61	5.88	12.62	V
	5673.27	-59.04	-13	-46.04	-83.95	-64.85	7.32	13.13	V
	7564.36	-55.58	-13	-42.58	-83.99	-58.74	8.38	11.54	V
LTE B66 BW 20MHz Highest 1RB0,QPSK	3522	-63.54	-13	-50.54	-82.42	-70.38	5.68	12.52	H
	5283	-60.70	-13	-47.70	-84.34	-66.37	7.15	12.82	H
	7044	-56.08	-13	-43.08	-84.40	-59.51	8.42	11.85	H
	3522	-63.43	-13	-50.43	-82.34	-70.27	5.68	12.52	V
	5283	-60.13	-13	-47.13	-83.86	-65.80	7.15	12.82	V
	7044	-55.45	-13	-42.45	-84.03	-58.88	8.42	11.85	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_4A-12A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B4 BW 20MHz Lowest 1RB0,QPSK	3422.18	-60.57	-13	-47.57	-78.51	-67.33	5.82	12.58	H
	5133.27	-54.50	-13	-41.50	-78.39	-60.22	7.28	13.00	H
	6844.36	-56.50	-13	-43.50	-84.06	-59.66	8.32	11.48	H
	3422.18	-60.64	-13	-47.64	-78.62	-67.40	5.82	12.58	V
	5133.27	-53.77	-13	-40.77	-78.09	-59.49	7.28	13.00	V
	6844.36	-56.08	-13	-43.08	-83.87	-59.24	8.32	11.48	V
LTE B12 BW 10MHz Lowest 1RB49,QPSK	1399	-64.91	-13	-51.91	-76.86	-68.14	3.98	9.36	H
	2098.5	-62.87	-13	-49.87	-78.38	-66.42	4.85	10.55	H
	2798	-63.92	-13	-50.92	-80.17	-68.85	5.50	12.58	H
	1399	-65.58	-13	-52.58	-77.45	-68.81	3.98	9.36	V
	2098.5	-64.15	-13	-51.15	-79.59	-67.70	4.85	10.55	V
	2798	-63.56	-13	-50.56	-80.52	-68.49	5.50	12.58	V
LTE B4 BW 20MHz Middle 1RB0,QPSK	3447.18	-60.18	-13	-47.18	-78.43	-66.93	5.85	12.60	H
	5170.77	-54.31	-13	-41.31	-78.24	-60.11	7.30	13.10	H
	6894.36	-56.53	-13	-43.53	-84.30	-59.68	8.35	11.50	H
	3447.18	-61.15	-13	-48.15	-79.43	-67.90	5.85	12.60	V
	5170.77	-52.79	-13	-39.79	-77.17	-58.59	7.30	13.10	V
	6894.36	-56.14	-13	-43.14	-84.07	-59.29	8.35	11.50	V
LTE B12 BW 10MHz Middle 1RB49,QPSK	1406	-64.98	-13	-51.98	-76.97	-68.23	4.00	9.40	H
	2109	-62.59	-13	-49.59	-78.10	-66.16	4.88	10.60	H
	2812	-63.62	-13	-50.62	-80.02	-68.55	5.52	12.60	H
	1406	-65.65	-13	-52.65	-77.60	-68.90	4.00	9.40	V
	2109	-64.31	-13	-51.31	-79.75	-67.88	4.88	10.60	V
	2812	-63.38	-13	-50.38	-80.39	-68.31	5.52	12.60	V
LTE B4 BW 20MHz Highest 1RB0,QPSK	3472.18	-60.25	-13	-47.25	-76.69	-66.99	5.88	12.62	H
	5208.27	-51.33	-13	-38.33	-78.63	-57.14	7.32	13.13	H
	6944.36	-56.46	-13	-43.46	-80.00	-59.62	8.38	11.54	H
	3472.18	-60.61	-13	-47.61	-77.62	-67.35	5.88	12.62	V
	5208.27	-55.24	-13	-42.24	-79.72	-61.05	7.32	13.13	V
	6944.36	-56.10	-13	-43.10	-80.52	-59.26	8.38	11.54	V
LTE B12 BW 10MHz Highest 1RB49,QPSK	1413	-64.70	-13	-51.70	-78.66	-67.87	4.10	9.42	H
	2119.5	-62.90	-13	-49.90	-75.12	-66.48	4.90	10.63	H
	2826	-63.58	-13	-50.58	-84.45	-68.50	5.55	12.62	H
	1413	-65.67	-13	-52.67	-79.05	-68.84	4.10	9.42	V
	2119.5	-64.08	-13	-51.08	-79.33	-67.66	4.90	10.63	V
	2826	-63.49	-13	-50.49	-84.18	-68.41	5.55	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_4A-13A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B4 BW 20MHz Lowest 1RB0,QPSK	3422.18	-59.99	-13	-46.99	-77.93	-66.75	5.82	12.58	H
	5133.27	-56.80	-13	-43.80	-80.69	-62.52	7.28	13.00	H
	6844.36	-55.70	-13	-42.70	-83.26	-58.86	8.32	11.48	H
	3422.18	-62.31	-13	-49.31	-80.29	-69.07	5.82	12.58	V
	5133.27	-58.94	-13	-45.94	-83.26	-64.66	7.28	13.00	V
	6844.36	-56.56	-13	-43.56	-84.35	-59.72	8.32	11.48	V
LTE B13 BW 10MHz Lowest 1RB25,QPSK	1559.5	-65.40	-42.15	-23.25	-77.56	-68.63	3.98	9.36	H
	2339.25	-63.94	-13	-50.94	-80.14	-67.49	4.85	10.55	H
	3119	-62.67	-13	-49.67	-81.08	-67.60	5.50	12.58	H
	1559.5	-65.93	-42.15	-23.78	-77.59	-69.16	3.98	9.36	V
	2339.25	-64.71	-13	-51.71	-80.96	-68.26	4.85	10.55	V
	3119	-63.04	-13	-50.04	-81.38	-67.97	5.50	12.58	V
LTE B4 BW 20MHz Middle 1RB0,QPSK	3447.18	-60.83	-13	-47.83	-79.08	-67.58	5.85	12.60	H
	5170.77	-58.13	-13	-45.13	-82.06	-63.93	7.30	13.10	H
	6894.36	-56.75	-13	-43.75	-84.52	-59.90	8.35	11.50	H
	3447.18	-61.92	-13	-48.92	-80.2	-68.67	5.85	12.60	V
	5170.77	-58.36	-13	-45.36	-82.74	-64.16	7.30	13.10	V
	6894.36	-56.04	-13	-43.04	-83.97	-59.19	8.35	11.50	V
LTE B13 BW 10MHz Middle 1RB25,QPSK	1559.5	-65.40	-42.15	-23.25	-77.56	-68.65	4.00	9.40	H
	2339.25	-64.69	-13	-51.69	-80.89	-68.26	4.88	10.60	H
	3119	-63.06	-13	-50.06	-81.47	-67.99	5.52	12.60	H
	1559.5	-66.82	-42.15	-24.67	-78.48	-70.07	4.00	9.40	V
	2339.25	-64.58	-13	-51.58	-80.83	-68.15	4.88	10.60	V
	3119	-62.96	-13	-49.96	-81.30	-67.89	5.52	12.60	V
LTE B4 BW 20MHz Highest 1RB0,QPSK	3472.18	-59.19	-13	-46.19	-77.60	-65.93	5.88	12.62	H
	5208.27	-58.22	-13	-45.22	-82.01	-64.03	7.32	13.13	H
	6944.36	-56.18	-13	-43.18	-84.17	-59.34	8.38	11.54	H
	3472.18	-60.87	-13	-47.87	-79.31	-67.61	5.88	12.62	V
	5208.27	-57.76	-13	-44.76	-81.85	-63.57	7.32	13.13	V
	6948	-55.79	-13	-42.79	-83.87	-58.95	8.38	11.54	V
LTE B13 BW 10MHz Highest 1RB25,QPSK	1559.5	-65.45	-42.15	-23.30	-77.61	-68.62	4.10	9.42	H
	2339.25	-63.77	-13	-50.77	-79.97	-67.35	4.90	10.63	H
	3119	-62.38	-13	-49.38	-80.79	-67.30	5.55	12.62	H
	1559.5	-65.80	-42.15	-23.65	-77.46	-68.97	4.10	9.42	V
	2339.25	-63.94	-13	-50.94	-80.19	-67.52	4.90	10.63	V
	3119	-62.10	-13	-49.10	-80.44	-67.02	5.55	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_12A-66A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B12 BW 10MHz Lowest 1RB49,QPSK	1399	-65.71	-13	-52.71	-77.66	-68.94	3.98	9.36	H
	2098.5	-64.45	-13	-51.45	-79.96	-68.00	4.85	10.55	H
	2798	-64.12	-13	-51.12	-80.37	-69.05	5.50	12.58	H
	1399	-65.95	-13	-52.95	-77.82	-69.18	3.98	9.36	V
	2098.5	-64.46	-13	-51.46	-79.90	-68.01	4.85	10.55	V
	2798	-63.16	-13	-50.16	-80.12	-68.09	5.50	12.58	V
LTE B66 BW 20MHz Lowest 1RB0,QPSK	3422	-63.89	-13	-50.89	-81.83	-70.77	5.60	12.48	H
	5133	-59.29	-13	-46.29	-83.18	-64.97	7.10	12.78	H
	6844	-56.62	-13	-43.62	-84.18	-60.01	8.38	11.77	H
	3422	-63.77	-13	-50.77	-81.75	-70.65	5.60	12.48	V
	5133	-59.40	-13	-46.40	-83.72	-65.08	7.10	12.78	V
	6844	-56.34	-13	-43.34	-84.13	-59.73	8.38	11.77	V
LTE B12 BW 10MHz Middle 1RB49,QPSK	1406	-65.66	-13	-52.66	-77.65	-68.91	4.00	9.40	H
	2109	-64.29	-13	-51.29	-79.80	-67.86	4.88	10.60	H
	2812	-63.81	-13	-50.81	-80.21	-68.74	5.52	12.60	H
	1406	-65.92	-13	-52.92	-77.87	-69.17	4.00	9.40	V
	2109	-64.44	-13	-51.44	-79.88	-68.01	4.88	10.60	V
	2812	-62.46	-13	-49.46	-79.47	-67.39	5.52	12.60	V
LTE B66 BW 20MHz Middle' 1RB0,QPSK	3472	-63.58	-13	-50.58	-81.99	-70.43	5.65	12.50	H
	5208	-60.42	-13	-47.42	-84.21	-66.09	7.13	12.80	H
	6944	-56.12	-13	-43.12	-84.11	-59.52	8.40	11.80	H
	3472	-63.25	-13	-50.25	-81.69	-70.10	5.65	12.50	V
	5208	-59.57	-13	-46.57	-83.66	-65.24	7.13	12.80	V
	6944	-56.20	-13	-43.20	-84.28	-59.60	8.40	11.80	V
LTE B12 BW 10MHz Highest 1RB49,QPSK	1413	-65.77	-13	-52.77	-77.76	-68.94	4.10	9.42	H
	2119.5	-64.26	-13	-51.26	-79.99	-67.84	4.90	10.63	H
	2826	-63.84	-13	-50.84	-80.26	-68.76	5.55	12.62	H
	1413	-65.87	-13	-52.87	-77.82	-69.04	4.10	9.42	V
	2119.5	-64.44	-13	-51.44	-80.08	-68.02	4.90	10.63	V
	2826	-63.48	-13	-50.48	-80.51	-68.40	5.55	12.62	V
LTE B66 BW 20MHz Highest 1RB0,QPSK	3522	-63.19	-13	-50.19	-82.07	-70.03	5.68	12.52	H
	5283	-60.62	-13	-47.62	-84.26	-66.29	7.15	12.82	H
	7044	-55.63	-13	-42.63	-83.95	-59.06	8.42	11.85	H
	3522	-63.08	-13	-50.08	-81.99	-69.92	5.68	12.52	V
	5283	-60.40	-13	-47.40	-84.13	-66.07	7.15	12.82	V
	7044	-55.45	-13	-42.45	-84.03	-58.88	8.42	11.85	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

ULCA_13A-66A									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B13 BW 10MHz Lowest 1RB25,QPSK	1559.5	-65.96	-42.15	-23.81	-78.12	-69.19	3.98	9.36	H
	2339.25	-64.68	-13	-51.68	-80.88	-68.23	4.85	10.55	H
	3119	-62.94	-13	-49.94	-81.35	-67.87	5.50	12.58	H
	1559.5	-66.74	-42.15	-24.59	-78.40	-69.97	3.98	9.36	V
	2339.25	-64.57	-13	-51.57	-80.82	-68.12	4.85	10.55	V
	3119	-63.29	-13	-50.29	-81.63	-68.22	5.50	12.58	V
LTE B66 BW 20MHz Lowest 1RB0,QPSK	3422	-63.90	-13	-50.90	-81.84	-70.78	5.60	12.48	H
	5133	-59.72	-13	-46.72	-83.61	-65.40	7.10	12.78	H
	6844	-56.09	-13	-43.09	-83.65	-59.48	8.38	11.77	H
	3422	-63.94	-13	-50.94	-81.92	-70.82	5.60	12.48	V
	5133	-59.54	-13	-46.54	-83.86	-65.22	7.10	12.78	V
	6844	-56.36	-13	-43.36	-84.15	-59.75	8.38	11.77	V
LTE B13 BW 10MHz Middle 1RB25,QPSK	1559.5	-65.74	-13	-52.74	-77.90	-68.99	4.00	9.40	H
	2339.25	-64.51	-13	-51.51	-80.71	-68.08	4.88	10.60	H
	3119	-62.76	-13	-49.76	-81.17	-67.69	5.52	12.60	H
	1559.5	-66.88	-13	-53.88	-78.54	-70.13	4.00	9.40	V
	2339.25	-64.73	-13	-51.73	-80.98	-68.30	4.88	10.60	V
	3119	-63.19	-13	-50.19	-81.53	-68.12	5.52	12.60	V
LTE B66 BW 20MHz Middle 1RB0,QPSK	3472	-63.51	-13	-50.51	-81.92	-70.36	5.65	12.50	H
	5208	-60.40	-13	-47.40	-84.19	-66.07	7.13	12.80	H
	6944	-56.63	-13	-43.63	-84.62	-60.03	8.40	11.80	H
	3472	-63.19	-13	-50.19	-81.63	-70.04	5.65	12.50	V
	5208	-59.93	-13	-46.93	-84.02	-65.60	7.13	12.80	V
	6944	-56.22	-13	-43.22	-84.3	-59.62	8.40	11.80	V
LTE B13 BW 10MHz Highest 1RB25,QPSK	1559.5	-66.29	-42.15	-24.14	-78.45	-69.46	4.10	9.42	H
	2339.25	-64.61	-13	-51.61	-80.81	-68.19	4.90	10.63	H
	3119	-62.96	-13	-49.96	-81.37	-67.88	5.55	12.62	H
	1559.5	-66.83	-42.15	-24.68	-78.49	-70.00	4.10	9.42	V
	2339.25	-64.32	-13	-51.32	-80.57	-67.90	4.90	10.63	V
	3119	-62.98	-13	-49.98	-81.32	-67.90	5.55	12.62	V
LTE B66 BW 20MHz Highest 1RB0,QPSK	3522	-62.98	-13	-49.98	-81.86	-69.82	5.68	12.52	H
	5283	-60.67	-13	-47.67	-84.31	-66.34	7.15	12.82	H
	7044	-55.58	-13	-42.58	-83.90	-59.01	8.42	11.85	H
	3522	-63.04	-13	-50.04	-81.95	-69.88	5.68	12.52	V
	5283	-60.47	-13	-47.47	-84.2	-66.14	7.15	12.82	V
	7044	-55.39	-13	-42.39	-83.97	-58.82	8.42	11.85	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.