FCC RF Test Report

APPLICANT	:	Nokia Shanghai Bell Co., Ltd.
EQUIPMENT	:	Nokia FastMile 5G Receiver
BRAND NAME	:	Nokia
MODEL NAME	:	5G16-B
FCC ID	:	2ADZR5G16B
STANDARD	:	47 CFR Part 2, 22(H), 24(E), 27(F), 27(L), 27(H), 27(M), 27(N), 27(Q), 96
CLASSIFICATION	:	PCS Licensed Transmitter (PCB)
TEST DATE(S)	:	Jun. 26, 2024

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

Jason Jia

Approved by: Jason Jia

ACCREDITED
Cert #5145.01

Sporton International Inc. (ShenZhen)

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People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG341901-02E	Rev. 01	Initial issue of report	Jul. 26, 2024

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1053 §22.917(a) §24.238(a) §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 25) (Band 12) (Band 13) (Band 71) (Band 5) (Band 26) (Band 66)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 8.88 dB at 14464.000 MHz
	§2.1053 §27.53(m)(2)(v)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)	< 43+10log$_{10}$(P[Watts])		
	§2.1051 §96.41	Radiated Spurious Emission (Band 48)	−40dBm/MHz		
	§2.1053 §27.53 (n)(2)	Radiated Spurious Emission (Band 42)	-13dBm/MHz		

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

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Nokia Shanghai Bell Co., Ltd.
388#, Ningqiao Road, China (Shanghai) Pilot Free Trade Zone, Shanghai 201206, China

1.2 Manufacturer

Nokia Solutions and Networks Oy
Karakaari 7, 02610 Espoo, Finland

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Nokia FastMile 5G Receiver
Brand Name	Nokia
Model Name	5G16-B
FCC ID	2ADZR5G16B
IMEI Code	Radiation: 358937920000248
HW Version	3TG02508Axxx(x:A~Z)
SW Version	5GReceiver-HG-2_D240200BieT0001E0643
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	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 25 : 1850 MHz - 1915 MHz LTE Band 26 : 824 MHz - 849 MHz LTE Band 38 : 2570 MHz - 2620 MHz LTE Band 41 : 2496 MHz - 2690 MHz LTE Band 42: 3450 MHz - 3550 MHz LTE Band 48 : 3550 MHz - 3700 MHz LTE Band 66 : 1710 MHz - 1755 MHz LTE Band 71: 663 MHz - 698 MHz
Rx Frequency	LTE Band 2 : 1930 MHz - 1990 MHz LTE Band 4 : 2110 MHz - 2155 MHz LTE Band 5 : 869 MHz - 894 MHz LTE Band 7 : 2620 MHz - 2690 MHz LTE Band 12 : 729 MHz - 746 MHz LTE Band 13 : 746 MHz - 756 MHz LTE Band 25 : 1930 MHz - 1995 MHz LTE Band 26 : 869 MHz - 894 MHz LTE Band 38 : 2570 MHz - 2620 MHz LTE Band 41 : 2496 MHz - 2690 MHz LTE Band 42: 3450 MHz - 3550 MHz LTE Band 48 : 3550 MHz - 3700 MHz LTE Band 66 : 2110 MHz - 2155 MHz LTE Band 71: 617 MHz - 652 MHz
Uplink CA Bands Under test	2A-4A, 2A-66A, 48A-71A, 7A-42A, 5A-38A, 41A-42A 4A-2A, 66A-2A, 71A-48A, 42A-7A, 38A-5A, 42-41A 2A-7A, 7A-26A, 2A-5A, 12A-48A, 4A-12A, 26A-41A 7A-2A, 26A-7A, 5A-2A, 48A-12A, 12A-4A, 41A-26A 2A-12A, 12A-66A, 2A-48A, 5A-48A, 4A-5A, 25A-41A 12A-2A, 66A-12A, 48A-2A, 48A-5A, 5A-4A, 41A-25A 2A-13A, 66A-71A, 48A-66A, 5A-66A, 41A-48A 13A-2A, 71A-66A, 66A-48A, 66A-5A, 48A-41A
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Note:

1. For all uplink inter-band CA combination, only the worst combination is tested and reflected in the report.
2. There are two Samples under test, Sample 1 is 1st antenna, Sample 2 is 2nd antenna and they are with the same Gain but different manufacturers. According to the difference, we choose sample 1 to full test and the sample 2 is verified the worse case for Radiation Spurious Emission among LTE WWAN Bands which can refer to FG341901-02C.

Specification of Accessory				
AC Adapter	**Brand Name**	NOKIA	**Model Name**	G1418B-540-028-2.5G

1.5 Modification of EUT

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

1.6 Testing Location

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

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
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, 22(H), 24(E), 27(F), 27(L), 27(H), 27(M), 27(N), 27(Q), 96
- 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

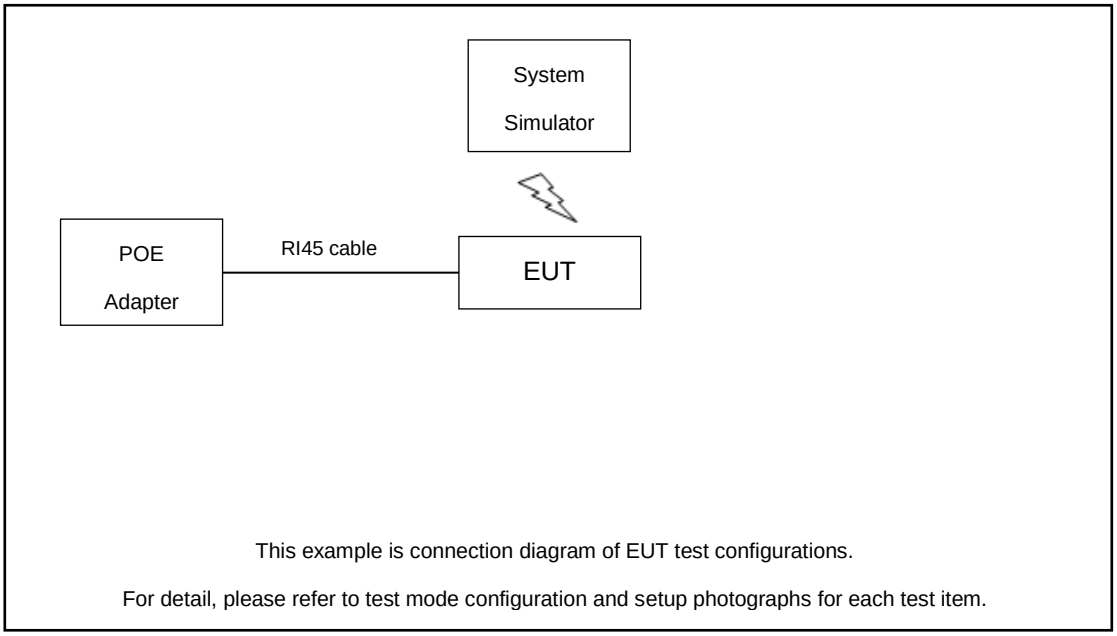
2.1 Test Mode

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. (X/Z-Plane)

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Radiated Spurious Emission	66A-71A	Worst Case														v	
	2A-7A	Worst Case														v	
	2A-66A	Worst Case														v	
	13A-2A	Worst Case														v	
	2A-4A	Worst Case														v	
	12A-2A	Worst Case														v	
	2A-5A	Worst Case														v	
	48A-2A	Worst Case														v	
	48A-71A	Worst Case														v	
	48A-66A	Worst Case														v	
	12A-66A	Worst Case														v	
	7A-26A	Worst Case														v	
	7A-42A	Worst Case														v	
	12A-48A	Worst Case														v	
	5A-48A	Worst Case														v	
	5A-66A	Worst Case														v	
	5A-38A	Worst Case														v	
	4A-12A	Worst Case														v	
	4A-5A	Worst Case														v	
	41A-48A	Worst Case														v	
	41A-42A	Worst Case														v	
	41A-26A	Worst Case														v	
	41A-25A	Worst Case														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



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Base Station	Anritsu	MT8821C	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
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

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
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3

LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 7 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

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
3	Channel	23025	23095	23165
	Frequency	700.5	707.5	714.5
1.4	Channel	23017	23095	23173
	Frequency	699.7	707.5	715.3

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 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3

LTE Band 26 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829	836.5	844
5	Channel	26815	26915	27015
	Frequency	826.5	836.5	846.5
3	Channel	26805	26915	27025
	Frequency	825.5	836.5	847.5
1.4	Channel	26797	26915	27033
	Frequency	824.7	836.5	848.3

LTE Band 38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	37850	38000	38150
	Frequency	2580	2595	2610
15	Channel	37825	38000	38175
	Frequency	2577.5	2595	2612.5
10	Channel	37800	38000	38200
	Frequency	2575	2595	2615
5	Channel	37775	38000	38225
	Frequency	2572.5	2595	2617.5

LTE Band 41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	39750	40620	41490
	Frequency	2506	2593	2680
15	Channel	39725	40620	41515
	Frequency	2503.5	2593	2682.5
10	Channel	39700	40620	41540
	Frequency	2501	2593	2685
5	Channel	39675	40620	41565
	Frequency	2498.5	2593	2687.5

LTE Band 42 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	42190	42590	42990
	Frequency	3460	3500	3540
15	Channel	42165	42590	43015
	Frequency	3457.5	3500	3542.5
10	Channel	42140	42590	43040
	Frequency	3455	3500	3545
5	Channel	42115	42590	43065
	Frequency	3452.5	3500	3547.5

LTE Band 48 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	55340	55990	56640
	Frequency	3560.0	3625.0	3690.0
15	Channel	55315	55990	56665
	Frequency	3557.5	3625.0	3692.5
10	Channel	55290	55990	56690
	Frequency	3555.0	3625.0	3695.0
5	Channel	55265	55990	56715
	Frequency	3552.5	3625.0	3697.5

LTE Band 66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	132072	132197	132322
	Frequency	1720	1732.5	1745
15	Channel	132047	132197	132347
	Frequency	1717.5	1732.5	1747.5
10	Channel	132022	132197	132372
	Frequency	1715	1732.5	1750
5	Channel	131997	132197	132397
	Frequency	1712.5	1732.5	1752.5
3	Channel	131987	132197	132407
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	131979	132197	132415
	Frequency	1710.7	1732.5	1754.3

LTE Band 71 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	133222	133322	133372
	Frequency	673.0	680.5	688.0
15	Channel	133197	133297	133397
	Frequency	670.5	680.5	690.5
10	Channel	133172	133272	133422
	Frequency	668.0	678.0	693.0
5	Channel	133147	133247	133447
	Frequency	665.5	675.5	695.5

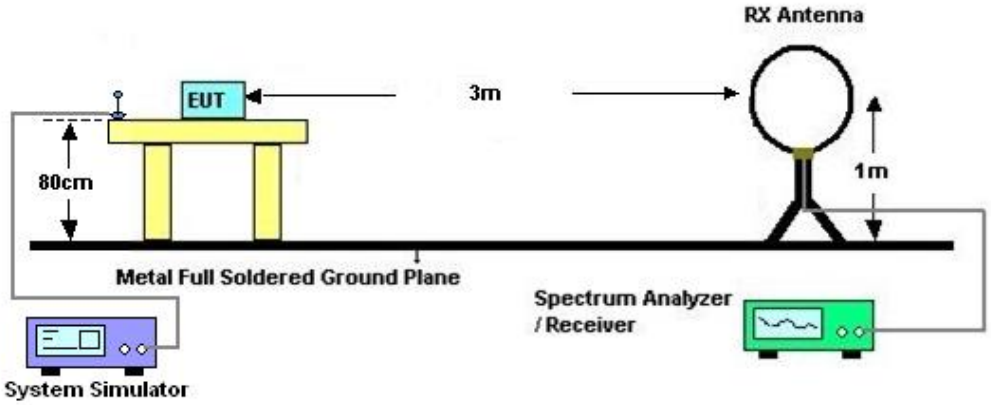
3 Radiated Test Items

3.1 Measuring Instruments

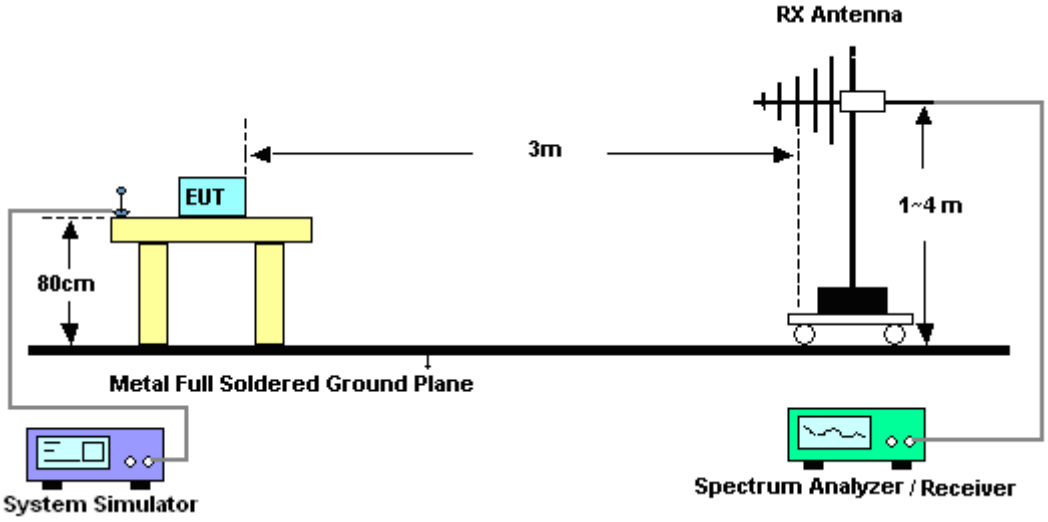
See list of measuring instruments of this test report.

3.2 Test Setup

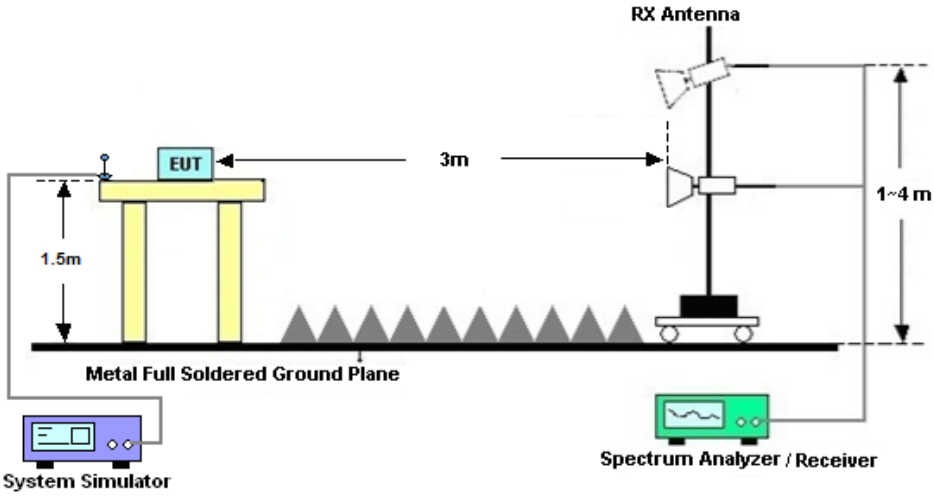
3.2.1 For radiated test below 30MHz



3.2.2 For radiated test from 30MHz to 1GHz



3.2.3 For radiated test above 1GHz



3.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix A.

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.

For LTE Band 2, 4, 5, 12, 25, 26, 66, 71, 7, 38, 41

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.

For LTE Band 42

The power of any emission outside of the authorized operating frequency ranges shall not exceed −13 dBm/MHz.

For LTE Band 48

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 -40dBm / MHz.

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.
    For Band 48:
    The limit line is −40dBm/MHz

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	Jul. 07, 2023	Jun. 26, 2024	Jul. 06, 2024	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jul. 28, 2022	Jun. 26, 2024	Jul. 27, 2024	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Jun. 26, 2024	Oct. 23, 2025	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 08, 2023	Jun. 26, 2024	Jul. 07, 2024	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 07, 2023	Jun. 26, 2024	Jul. 06, 2024	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Jun. 26, 2024	Apr. 08, 2025	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 18, 2023	Jun. 26, 2024	Oct. 17, 2024	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18, 2023	Jun. 26, 2024	Oct. 17, 2024	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010003043	N/A	Oct. 18, 2023	Jun. 26, 2024	Oct. 17, 2024	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Jun. 26, 2024	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jun. 26, 2024	NCR	Radiation (03CH02-SZ)

NCR: No Calibration Required

5 Measurement Uncertainty

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))	**2.47 dB**

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

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

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

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

Appendix A. Test Results of Radiated Test

Test Engineer :	Kuang Jia	Temperature :	22~25℃
		Relative Humidity :	48~52%

Note: Pre-scanned harmonic for the different antennas, we choose the worst antenna mode to test.

ULCA_66A-71A (ANT1+0)									
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 B66 BW 20MHz Middle 1RB0,QPSK	3472	-61.43	-13	-48.43	-78.33	-68.28	5.65	12.50	H
	5208	-60.18	-13	-47.18	-81.91	-65.85	7.13	12.80	H
	6944	-55.71	-13	-42.71	-81.63	-59.11	8.40	11.80	H
	3472	-61.42	-13	-48.42	-78.34	-68.27	5.65	12.50	V
	5208	-59.75	-13	-46.75	-81.73	-65.42	7.13	12.80	V
	6944	-55.24	-13	-42.24	-81.63	-58.64	8.40	11.80	V
LTE B71 BW 20MHz Middle 1RB0,QPSK	1348	-64.75	-13	-51.75	-74.83	-68.00	4.00	9.40	H
	2022	-64.69	-13	-51.69	-76.06	-68.26	4.88	10.60	H
	2696	-61.79	-13	-48.79	-77.14	-66.72	5.52	12.60	H
	1348	-65.18	-13	-52.18	-74.89	-68.43	4.00	9.40	V
	2022	-64.89	-13	-51.89	-76.15	-68.46	4.88	10.60	V
	2696	-61.83	-13	-48.83	-77.22	-66.76	5.52	12.60	V

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

ULCA_2A-7A (ANT0+1)									
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 B7 BW 20MHz Middle 1RB0,QPSK	5052.18	-54.42	-13	-41.42	-76.43	-59.98	7.14	12.70	H
	7578.27	-52.51	-13	-39.51	-79.16	-55.81	8.30	11.60	H
	10104.36	-49.61	-13	-36.61	-81.01	-51.13	10.48	12.00	H
	5052.18	-48.56	-13	-35.56	-70.69	-54.12	7.14	12.70	V
	7578.27	-51.89	-13	-38.89	-78.5	-55.19	8.30	11.60	V
	10104.36	-51.55	-13	-38.55	-81.55	-53.07	10.48	12.00	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742.18	-60.82	-13	-47.82	-79.40	-67.57	5.85	12.60	H
	5613.27	-58.87	-13	-45.87	-81.26	-64.67	7.30	13.10	H
	7484.36	-54.40	-13	-41.40	-81.33	-57.55	8.35	11.50	H
	3742.18	-61.22	-13	-48.22	-79.72	-67.97	5.85	12.60	V
	5613.27	-58.88	-13	-45.88	-81.46	-64.68	7.30	13.10	V
	7484.36	-54.76	-13	-41.76	-81.68	-57.91	8.35	11.50	V

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

ULCA_2A-66A (ANT0+1)									
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 B66 BW 20MHz Middle 1RB0,QPSK	3472	-61.20	-13	-48.20	-78.10	-68.05	5.65	12.50	H
	5208	-60.27	-13	-47.27	-82.00	-65.94	7.13	12.80	H
	6944	-56.06	-13	-43.06	-81.98	-59.46	8.40	11.80	H
	3472	-61.44	-13	-48.44	-78.36	-68.29	5.65	12.50	V
	5208	-60.36	-13	-47.36	-82.34	-66.03	7.13	12.80	V
	6944	-55.55	-13	-42.55	-81.94	-58.95	8.40	11.80	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742	-58.93	-13	-45.93	-77.51	-65.68	5.85	12.60	H
	5613	-58.96	-13	-45.96	-81.35	-64.76	7.30	13.10	H
	7484	-53.92	-13	-40.92	-80.85	-57.07	8.35	11.50	H
	3742	-58.70	-13	-45.70	-77.2	-65.45	5.85	12.60	V
	5613	-59.17	-13	-46.17	-81.75	-64.97	7.30	13.10	V
	7484	-54.21	-13	-41.21	-81.13	-57.36	8.35	11.50	V

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

ULCA_13A-2A (ANT1+0)									
Channel	Frequency (MHz)	ERP/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 Middle 1RB0,QPSK	1555	-64.24	-13	-51.24	-74.25	-67.49	4.00	9.40	H
	2332.5	-60.91	-13	-47.91	-75.72	-64.48	4.88	10.60	H
	3110	-60.81	-13	-47.81	-77.84	-65.74	5.52	12.60	H
	1555	-64.40	-13	-51.40	-74.49	-67.65	4.00	9.40	V
	2332.5	-61.41	-13	-48.41	-76.22	-64.98	4.88	10.60	V
	3110	-60.71	-13	-47.71	-77.80	-65.64	5.52	12.60	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742	-51.06	-13	-38.06	-69.64	-57.81	5.85	12.60	H
	5613	-58.91	-13	-45.91	-81.30	-64.71	7.30	13.10	H
	7484	-54.77	-13	-41.77	-81.70	-57.92	8.35	11.50	H
	3742	-53.20	-13	-40.20	-71.7	-59.95	5.85	12.60	V
	5613	-59.18	-13	-46.18	-81.76	-64.98	7.30	13.10	V
	7484	-54.40	-13	-41.40	-81.32	-57.55	8.35	11.50	V

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

ULCA_2A-4A (ANT0+1)									
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 Middle 1RB0,QPSK	3742	-58.54	-13	-45.54	-77.12	-65.29	5.85	12.60	H
	5613	-58.77	-13	-45.77	-81.16	-64.57	7.30	13.10	H
	7484	-52.70	-13	-39.70	-79.63	-55.85	8.35	11.50	H
	3742	-57.00	-13	-44.00	-75.5	-63.75	5.85	12.60	V
	5613	-58.55	-13	-45.55	-81.13	-64.35	7.30	13.10	V
	7484	-50.12	-13	-37.12	-77.04	-53.27	8.35	11.50	V
LTE B4 BW 20MHz Middle 1RB0,QPSK	3447	-61.57	-13	-48.57	-78.34	-68.42	5.65	12.50	H
	5170.5	-59.98	-13	-46.98	-81.81	-65.65	7.13	12.80	H
	6894	-56.23	-13	-43.23	-81.80	-59.63	8.40	11.80	H
	3447	-61.31	-13	-48.31	-78.12	-68.16	5.65	12.50	V
	5170.5	-59.95	-13	-46.95	-82.05	-65.62	7.13	12.80	V
	6894	-55.74	-13	-42.74	-81.79	-59.14	8.40	11.80	V

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

ULCA_12A-2A (ANT1+0)									
Channel	Frequency (MHz)	ERP/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 Middle 1RB0,QPSK	3742	-44.20	-13	-31.20	-62.78	-50.95	5.85	12.60	H
	5613	-58.83	-13	-45.83	-81.22	-64.63	7.30	13.10	H
	7484	-54.43	-13	-41.43	-81.36	-57.58	8.35	11.50	H
	3742	-44.64	-13	-31.64	-63.14	-51.39	5.85	12.60	V
	5613	-59.13	-13	-46.13	-81.71	-64.93	7.30	13.10	V
	7484	-52.99	-13	-39.99	-79.91	-56.14	8.35	11.50	V
LTE B12 BW 10MHz Middle 1RB0,QPSK	1406	-53.84	-13	-40.84	-64.57	-57.09	4.00	9.40	H
	2109	-61.67	-13	-48.67	-74.71	-65.24	4.88	10.60	H
	2812	-61.48	-13	-48.48	-77.50	-66.41	5.52	12.60	H
	1406	-64.68	-13	-51.68	-74.97	-67.93	4.00	9.40	V
	2109	-60.50	-13	-47.50	-73.49	-64.07	4.88	10.60	V
	2812	-61.30	-13	-48.30	-77.51	-66.23	5.52	12.60	V

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

ULCA_2A-5A (ANT1+0)									
Channel	Frequency (MHz)	ERP/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 Middle 1RB0,QPSK	3742	-55.52	-13	-42.52	-74.10	-62.27	5.85	12.60	H
	5613	-58.79	-13	-45.79	-81.18	-64.59	7.30	13.10	H
	7484	-54.37	-13	-41.37	-81.30	-57.52	8.35	11.50	H
	3742	-55.11	-13	-42.11	-73.61	-61.86	5.85	12.60	V
	5613	-59.07	-13	-46.07	-81.65	-64.87	7.30	13.10	V
	7484	-54.36	-13	-41.36	-81.28	-57.51	8.35	11.50	V
LTE B5 BW 10MHz Middle 1RB0,QPSK	1664	-65.21	-13	-52.21	-75.15	-68.46	4.00	9.40	H
	2496	-62.15	-13	-49.15	-76.59	-65.72	4.88	10.60	H
	3328	-62.09	-13	-49.09	-78.25	-67.02	5.52	12.60	H
	1664	-65.85	-13	-52.85	-75.39	-69.10	4.00	9.40	V
	2496	-62.49	-13	-49.49	-76.89	-66.06	4.88	10.60	V
	3328	-62.01	-13	-49.01	-77.93	-66.94	5.52	12.60	V

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

ULCA_48A-2A (ANT0+5)									
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 B48 BW 20MHz Middle 1RB0,QPSK	7232.00	-59.20	-40	-19.20	-65.14	-62.50	8.30	11.60	H
	10848.00	-54.56	-40	-14.56	-66.84	-56.08	10.48	12.00	H
	14464.00	-48.88	-40	-8.88	-66.62	-50.58	11.80	13.50	H
	7232.00	-58.73	-40	-18.73	-64.98	-62.03	8.30	11.60	V
	10848.00	-55.00	-40	-15.00	-66.91	-56.52	10.48	12.00	V
	14464.00	-49.73	-40	-9.73	-66.89	-51.43	11.80	13.50	V
LTE B2 BW 20MHz Middle 1RB0,QPSK	3742	-60.52	-13	-47.52	-79.10	-67.27	5.85	12.60	H
	5613	-58.39	-13	-45.39	-80.78	-64.19	7.30	13.10	H
	7484	-58.69	-13	-45.69	-64.91	-61.84	8.35	11.50	H
	3742	-60.53	-13	-47.53	-79.03	-67.28	5.85	12.60	V
	5613	-58.64	-13	-45.64	-81.22	-64.44	7.30	13.10	V
	7484	-58.64	-13	-45.64	-64.85	-61.79	8.35	11.50	V

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

ULCA_48A-71A (ANT5+0)									
Channel	Frequency (MHz)	ERP/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 B48 BW 20MHz Middle 1RB0,QPSK	7232.00	-59.25	-40	-19.25	-65.19	-62.55	8.30	11.60	H
	10848.00	-54.84	-40	-14.84	-67.12	-56.36	10.48	12.00	H
	14464.00	-49.09	-40	-9.09	-66.83	-50.79	11.80	13.50	H
	7232.00	-58.85	-40	-18.85	-65.1	-62.15	8.30	11.60	V
	10848.00	-55.23	-40	-15.23	-67.14	-56.75	10.48	12.00	V
	14464.00	-49.06	-40	-9.06	-66.22	-50.76	11.80	13.50	V
LTE B71 BW 20MHz Middle 1RB0,QPSK	1348	-64.00	-13	-51.00	-74.08	-67.25	4.00	9.40	H
	2022	-63.42	-13	-50.42	-74.79	-66.99	4.88	10.60	H
	2696	-61.31	-13	-48.31	-76.66	-66.24	5.52	12.60	H
	1348	-64.19	-13	-51.19	-73.90	-67.44	4.00	9.40	V
	2022	-63.94	-13	-50.94	-75.20	-67.51	4.88	10.60	V
	2696	-61.13	-13	-48.13	-76.52	-66.06	5.52	12.60	V

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

ULCA_48A-66A (ANT0+5)									
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 B48 BW 20MHz Middle 1RB0,QPSK	7232.00	-59.63	-40	-19.63	-65.57	-62.93	8.30	11.60	H
	10848.00	-55.55	-40	-15.55	-67.83	-57.07	10.48	12.00	H
	14464.00	-50.15	-40	-10.15	-67.89	-51.85	11.80	13.50	H
	7232.00	-59.01	-40	-19.01	-65.26	-62.31	8.30	11.60	V
	10848.00	-55.92	-40	-15.92	-67.83	-57.44	10.48	12.00	V
	14464.00	-50.91	-40	-10.91	-68.07	-52.61	11.80	13.50	V
LTE B66 BW 20MHz Middle 1RB0,QPSK	3472	-63.97	-13	-50.97	-59.48	-70.82	5.65	12.50	H
	5208	-64.90	-13	-51.90	-63.43	-70.57	7.13	12.80	H
	6944	-60.60	-13	-47.60	-65.40	-64.00	8.40	11.80	H
	3472	-61.67	-13	-48.67	-57.2	-68.52	5.65	12.50	V
	5208	-64.37	-13	-51.37	-63.15	-70.04	7.13	12.80	V
	6944	-60.00	-13	-47.00	-65.27	-63.40	8.40	11.80	V

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

ULCA_12A-66A (ANT0+1)									
Channel	Frequency (MHz)	ERP/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 B66 BW 20MHz Middle 1RB0,QPSK	3472	-61.29	-13	-48.29	-78.19	-68.14	5.65	12.50	H
	5208	-59.99	-13	-46.99	-81.72	-65.66	7.13	12.80	H
	6944	-55.67	-13	-42.67	-81.59	-59.07	8.40	11.80	H
	3472	-61.15	-13	-48.15	-78.07	-68.00	5.65	12.50	V
	5208	-59.88	-13	-46.88	-81.86	-65.55	7.13	12.80	V
	6944	-55.10	-13	-42.10	-81.49	-58.50	8.40	11.80	V
LTE B12 BW 10MHz Middle 1RB0,QPSK	1406	-64.19	-13	-51.19	-74.92	-67.44	4.00	9.40	H
	2109	-62.63	-13	-49.63	-75.67	-66.20	4.88	10.60	H
	2812	-61.50	-13	-48.50	-77.52	-66.43	5.52	12.60	H
	1406	-64.49	-13	-51.49	-74.78	-67.74	4.00	9.40	V
	2109	-63.18	-13	-50.18	-76.17	-66.75	4.88	10.60	V
	2812	-61.20	-13	-48.20	-77.41	-66.13	5.52	12.60	V

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

ULCA_7A-26A (ANT1+0)									
Channel	Frequency (MHz)	ERP/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 B7 BW 20MHz Middle 1RB0,QPSK	5052.00	-49.17	-13	-36.17	-71.18	-54.73	7.14	12.70	H
	7578.00	-53.60	-13	-40.60	-80.25	-56.90	8.30	11.60	H
	10104.00	-50.16	-13	-37.16	-81.57	-51.68	10.48	12.00	H
	5052.00	-49.05	-13	-36.05	-71.18	-54.61	7.14	12.70	V
	7578.00	-50.46	-13	-37.46	-77.07	-53.76	8.30	11.60	V
	10104.00	-51.64	-13	-38.64	-81.65	-53.16	10.48	12.00	V
LTE B26 BW 15MHz Middle 1RB0,QPSK	1649.5	-60.51	-13	-47.51	-70.43	-63.76	4.00	9.40	H
	2474.25	-51.54	-13	-38.54	-66.01	-55.11	4.88	10.60	H
	3299	-61.82	-13	-48.82	-78.32	-66.75	5.52	12.60	H
	1649.5	-66.16	-13	-53.16	-75.82	-69.41	4.00	9.40	V
	2474.25	-54.80	-13	-41.80	-69.24	-58.37	4.88	10.60	V
	3299	-62.43	-13	-49.43	-78.74	-67.36	5.52	12.60	V

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

ULCA_7A-42A (ANT0+5)									
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 B7 BW 20MHz Middle 1RB0,QPSK	5052.00	-59.72	-13	-46.72	-81.73	-65.28	7.14	12.70	H
	7578.00	-54.88	-13	-41.88	-81.53	-58.18	8.30	11.60	H
	10104.00	-50.10	-13	-37.10	-81.51	-51.62	10.48	12.00	H
	5052.00	-59.58	-13	-46.58	-81.71	-65.14	7.14	12.70	V
	7578.00	-54.72	-13	-41.72	-81.33	-58.02	8.30	11.60	V
	10104.00	-51.89	-13	-38.89	-81.9	-53.41	10.48	12.00	V
LTE B42 BW 20MHz Middle 1RB0,QPSK	6982.00	-55.37	-13	-42.37	-81.52	-58.67	8.30	11.60	H
	10473.00	-51.35	-13	-38.35	-82.31	-52.87	10.48	12.00	H
	13964.00	-46.90	-13	-33.90	-82.04	-48.60	11.80	13.50	H
	6982.00	-54.63	-13	-41.63	-81.24	-57.93	8.30	11.60	V
	10473.00	-51.93	-13	-38.93	-82.28	-53.45	10.48	12.00	V
	13964.00	-47.18	-13	-34.18	-81.93	-48.88	11.80	13.50	V

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

ULCA_12A-48A (ANT0+5)									
Channel	Frequency (MHz)	ERP/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 B48 BW 20MHz Middle 1RB0,QPSK	7232.00	-59.05	-40	-19.05	-64.99	-62.35	8.30	11.60	H
	10848.00	-55.69	-40	-15.69	-67.97	-57.21	10.48	12.00	H
	14464.00	-49.92	-40	-9.92	-67.66	-51.62	11.80	13.50	H
	7232.00	-58.70	-40	-18.70	-64.95	-62.00	8.30	11.60	V
	10848.00	-55.85	-40	-15.85	-67.76	-57.37	10.48	12.00	V
	14464.00	-50.69	-40	-10.69	-67.85	-52.39	11.80	13.50	V
LTE B12 BW 10MHz Middle 1RB0,QPSK	1406	-62.00	-13	-49.00	-53.56	-65.25	4.00	9.40	H
	2109	-65.77	-13	-52.77	-58.84	-69.34	4.88	10.60	H
	2812	-64.43	-13	-51.43	-59.47	-69.36	5.52	12.60	H
	1406	-64.18	-13	-51.18	-55.30	-67.43	4.00	9.40	V
	2109	-65.98	-13	-52.98	-59.00	-69.55	4.88	10.60	V
	2812	-64.37	-13	-51.37	-59.60	-69.30	5.52	12.60	V

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

ULCA_5A-48A (ANT0+5)									
Channel	Frequency (MHz)	ERP/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 B48 BW 20MHz Middle 1RB0,QPSK	7232.00	-59.61	-40	-19.61	-65.55	-62.91	8.30	11.60	H
	10848.00	-55.44	-40	-15.44	-67.72	-56.96	10.48	12.00	H
	14464.00	-50.24	-40	-10.24	-67.98	-51.94	11.80	13.50	H
	7232.00	-59.10	-40	-19.10	-65.35	-62.40	8.30	11.60	V
	10848.00	-55.98	-40	-15.98	-67.89	-57.50	10.48	12.00	V
	14464.00	-50.62	-40	-10.62	-67.78	-52.32	11.80	13.50	V
LTE B5 BW 10MHz Middle 1RB0,QPSK	1664	-66.19	-13	-53.19	-56.60	-69.44	4.00	9.40	H
	2496	-65.29	-13	-52.29	-59.14	-68.86	4.88	10.60	H
	3328	-65.70	-13	-52.70	-60.53	-70.63	5.52	12.60	H
	1664	-63.12	-13	-50.12	-53.13	-66.37	4.00	9.40	V
	2496	-65.20	-13	-52.20	-59.01	-68.77	4.88	10.60	V
	3328	-66.11	-13	-53.11	-60.70	-71.04	5.52	12.60	V

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

ULCA_5A-66A (ANT0+1)									
Channel	Frequency (MHz)	ERP/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 B66 BW 20MHz Middle 1RB0,QPSK	3472	-61.15	-13	-48.15	-78.05	-68.00	5.65	12.50	H
	5208	-59.38	-13	-46.38	-81.11	-65.05	7.13	12.80	H
	6944	-55.33	-13	-42.33	-81.25	-58.73	8.40	11.80	H
	3472	-61.20	-13	-48.20	-78.12	-68.05	5.65	12.50	V
	5208	-59.54	-13	-46.54	-81.52	-65.21	7.13	12.80	V
	6944	-55.04	-13	-42.04	-81.43	-58.44	8.40	11.80	V
LTE B5 BW 10MHz Middle 1RB0,QPSK	1664	-65.25	-13	-52.25	-75.19	-68.50	4.00	9.40	H
	2496	-62.26	-13	-49.26	-76.70	-65.83	4.88	10.60	H
	3328	-62.28	-13	-49.28	-78.44	-67.21	5.52	12.60	H
	1664	-65.65	-13	-52.65	-75.19	-68.90	4.00	9.40	V
	2496	-62.90	-13	-49.90	-77.30	-66.47	4.88	10.60	V
	3328	-62.60	-13	-49.60	-78.52	-67.53	5.52	12.60	V

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

ULCA_5A-38A (ANT0+1)									
Channel	Frequency (MHz)	ERP/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 B38 BW 20MHz Middle 1RB0,QPSK	5172.00	-60.03	-13	-47.03	-81.86	-65.59	7.14	12.70	H
	7758.00	-54.30	-13	-41.30	-81.12	-57.60	8.30	11.60	H
	10344.00	-50.80	-13	-37.80	-81.92	-52.32	10.48	12.00	H
	5172.00	-59.74	-13	-46.74	-81.84	-65.30	7.14	12.70	V
	7758.00	-54.10	-13	-41.10	-80.76	-57.40	8.30	11.60	V
	10344.00	-51.45	-13	-38.45	-81.7	-52.97	10.48	12.00	V
LTE B5 BW 10MHz Middle 1RB0,QPSK	1664	-62.56	-13	-49.56	-72.50	-65.81	4.00	9.40	H
	2496	-57.79	-13	-44.79	-72.23	-61.36	4.88	10.60	H
	3328	-62.83	-13	-49.83	-78.99	-67.76	5.52	12.60	H
	1664	-63.91	-13	-50.91	-73.45	-67.16	4.00	9.40	V
	2496	-59.34	-13	-46.34	-73.74	-62.91	4.88	10.60	V
	3328	-63.21	-13	-50.21	-79.13	-68.14	5.52	12.60	V

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

ULCA_4A-12A (ANT1+0)									
Channel	Frequency (MHz)	ERP/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 Middle 1RB0,QPSK	1406	-62.53	-13	-49.53	-73.26	-65.78	4.00	9.40	H
	2109	-63.11	-13	-50.11	-76.15	-66.68	4.88	10.60	H
	2812	-61.77	-13	-48.77	-77.79	-66.70	5.52	12.60	H
	1406	-64.90	-13	-51.90	-75.19	-68.15	4.00	9.40	V
	2109	-63.60	-13	-50.60	-76.59	-67.17	4.88	10.60	V
	2812	-61.61	-13	-48.61	-77.82	-66.54	5.52	12.60	V
LTE B4 BW 20MHz Middle 1RB0,QPSK	3447	-60.96	-13	-47.96	-77.73	-67.81	5.65	12.50	H
	5170.5	-59.99	-13	-46.99	-81.82	-65.66	7.13	12.80	H
	6894	-56.56	-13	-43.56	-82.13	-59.96	8.40	11.80	H
	3447	-62.08	-13	-49.08	-78.89	-68.93	5.65	12.50	V
	5170.5	-59.87	-13	-46.87	-81.97	-65.54	7.13	12.80	V
	6894	-55.95	-13	-42.95	-82	-59.35	8.40	11.80	V

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

ULCA_4A-5A (ANT1+0)									
Channel	Frequency (MHz)	ERP/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 Middle 1RB0,QPSK	3447	-57.91	-13	-44.91	-74.68	-64.76	5.65	12.50	H
	5170.5	-59.50	-13	-46.50	-81.33	-65.17	7.13	12.80	H
	6894	-56.26	-13	-43.26	-81.83	-59.66	8.40	11.80	H
	3447	-59.04	-13	-46.04	-75.85	-65.89	5.65	12.50	V
	5170.5	-59.57	-13	-46.57	-81.67	-65.24	7.13	12.80	V
	6894	-55.98	-13	-42.98	-82.03	-59.38	8.40	11.80	V
LTE B5 BW 10MHz Middle 1RB0,QPSK	1664	-62.67	-13	-49.67	-72.61	-65.92	4.00	9.40	H
	2496	-62.08	-13	-49.08	-76.52	-65.65	4.88	10.60	H
	3328	-62.65	-13	-49.65	-78.81	-67.58	5.52	12.60	H
	1664	-65.93	-13	-52.93	-75.47	-69.18	4.00	9.40	V
	2496	-62.91	-13	-49.91	-77.31	-66.48	4.88	10.60	V
	3328	-62.79	-13	-49.79	-78.71	-67.72	5.52	12.60	V

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

ULCA_41A-48A (ANT0+5)									
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 B48 BW 20MHz Middle 1RB0,QPSK	7232.00	-59.18	-40	-19.18	-65.12	-62.48	8.30	11.60	H
	10848.00	-55.35	-40	-15.35	-67.63	-56.87	10.48	12.00	H
	14464.00	-50.09	-40	-10.09	-67.83	-51.79	11.80	13.50	H
	7232.00	-59.02	-40	-19.02	-65.27	-62.32	8.30	11.60	V
	10848.00	-56.07	-40	-16.07	-67.98	-57.59	10.48	12.00	V
	14464.00	-50.78	-40	-10.78	-67.94	-52.48	11.80	13.50	V
LTE B41 BW 20MHz Middle 1RB0,QPSK	5168.00	-64.58	-13	-51.58	-63.27	-70.14	7.14	12.70	H
	7752.00	-58.64	-13	-45.64	-64.83	-61.94	8.30	11.60	H
	10336.00	-56.10	-13	-43.10	-67.30	-57.62	10.48	12.00	H
	5168.00	-64.39	-13	-51.39	-63.35	-69.95	7.14	12.70	V
	7752.00	-58.70	-13	-45.70	-64.74	-62.00	8.30	11.60	V
	10336.00	-57.20	-13	-44.20	-67.49	-58.72	10.48	12.00	V

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

ULCA_41A-42A (ANT0+5)									
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 B41 BW 20MHz Middle 1RB0,QPSK	5168.00	-59.28	-13	-46.28	-81.10	-64.84	7.14	12.70	H
	7752.00	-54.08	-13	-41.08	-80.87	-57.38	8.30	11.60	H
	10336.00	-50.57	-13	-37.57	-81.70	-52.09	10.48	12.00	H
	5168.00	-59.25	-13	-46.25	-81.34	-64.81	7.14	12.70	V
	7752.00	-54.14	-13	-41.14	-80.78	-57.44	8.30	11.60	V
	10336.00	-51.56	-13	-38.56	-81.78	-53.08	10.48	12.00	V
LTE B42 BW 20MHz Middle 1RB0,QPSK	7752.00	-54.08	-13	-41.08	-80.87	-57.38	8.30	11.60	H
	10473.00	-51.12	-13	-38.12	-82.08	-52.64	10.48	12.00	H
	13964.00	-46.90	-13	-33.90	-82.04	-48.60	11.80	13.50	H
	6982.00	-54.59	-13	-41.59	-81.2	-57.89	8.30	11.60	V
	10473.00	-51.36	-13	-38.36	-81.71	-52.88	10.48	12.00	V
	13964.00	-46.87	-13	-33.87	-81.62	-48.57	11.80	13.50	V

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

ULCA_41A-26A (ANT0+1)									
Channel	Frequency (MHz)	ERP/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 B41 BW 20MHz Middle 1RB0,QPSK	5168.00	-51.79	-13	-38.79	-73.61	-57.35	7.14	12.70	H
	7752.00	-54.26	-13	-41.26	-81.05	-57.56	8.30	11.60	H
	10336.00	-50.26	-13	-37.26	-81.39	-51.78	10.48	12.00	H
	5168.00	-46.84	-13	-33.84	-68.93	-52.40	7.14	12.70	V
	7752.00	-53.69	-13	-40.69	-80.33	-56.99	8.30	11.60	V
	10336.00	-51.22	-13	-38.22	-81.44	-52.74	10.48	12.00	V
LTE B26 BW 15MHz Middle 1RB0,QPSK	1649.5	-60.16	-13	-47.16	-70.08	-63.41	4.00	9.40	H
	2474.25	-58.32	-13	-45.32	-72.79	-61.89	4.88	10.60	H
	3299	-61.38	-13	-48.38	-77.88	-66.31	5.52	12.60	H
	1649.5	-61.75	-13	-48.75	-71.41	-65.00	4.00	9.40	V
	2474.25	-57.83	-13	-44.83	-72.27	-61.40	4.88	10.60	V
	3299	-61.61	-13	-48.61	-77.92	-66.54	5.52	12.60	V

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

ULCA_41A-25A (ANT0+1)									
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 B41 BW 20MHz Middle 1RB0,QPSK	5168.00	-57.48	-13	-44.48	-79.30	-63.04	7.14	12.70	H
	7752.00	-53.93	-13	-40.93	-80.72	-57.23	8.30	11.60	H
	10336.00	-50.21	-13	-37.21	-81.34	-51.73	10.48	12.00	H
	5168.00	-52.67	-13	-39.67	-74.76	-58.23	7.14	12.70	V
	7752.00	-54.15	-13	-41.15	-80.79	-57.45	8.30	11.60	V
	10336.00	-51.11	-13	-38.11	-81.33	-52.63	10.48	12.00	V
LTE B25 BW 20MHz Middle 1RB0,QPSK	3747	-58.47	-13	-45.47	-77.09	-65.22	5.85	12.60	H
	5620.5	-58.21	-13	-45.21	-81.04	-64.01	7.30	13.10	H
	7494	-53.93	-13	-40.93	-80.83	-57.08	8.35	11.50	H
	3747	-60.27	-13	-47.27	-78.82	-67.02	5.85	12.60	V
	5620.5	-58.51	-13	-45.51	-81.06	-64.31	7.30	13.10	V
	7494	-52.82	-13	-39.82	-79.71	-55.97	8.35	11.50	V

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