

Shenzhen Toby Technology Co., Ltd.



Report No.: TBR-C-202405-0318-6

Page: 1 of 49

RF Test Report

FCC ID: 2A5OS-CQ1H

Report No.	N	TBR-C-202405-0318-6				
Applicant		Shenzhen Tino Security Corp., LTD				
Equipment Under	Tes	t (EUT)				
EUT Name		4G Battery Camera				
Model No.	: (CQ1H				
		CQ1A, CQ1B, CQ1C, CQ1D, CQ1E, CQ1F, CQ1G, CQ1I, CQ1J,				
Series Model No.	:	CQ1K, CQ1L, CQ1M, CQ1N, CQ1O, CQ1P, CQ1Q, CQ1R,				
		CQ1S, CQ1T, CQ1U, CQ1V, CQ1W, CQ1X, CQ1Y, CQ1Z				
Brand Name						
Sample ID	-	HC-C-202405-0318-01-01-1#&HC-C-202405-0318-01-01-2#				
Receipt Date		2024-07-30				
Test Date	:	2024-07-30 to 2024-08-20				
Issue Date		2024-08-21				
Standards		47 CFR Part 2, 22(H), 24(E), 27				
Test Method		ANSI C63.26 2015				
Conclusions		PASS				
	6	In the configuration tested, the EUT complied with the standards specified above.				
Tested By		: 24 show ZKN ZHOWC				
Reviewed By	BI	: Wade W Wade DV : Wan Su				
Approved By : WAW SV						

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0

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Contents

CON	NTENTS	2
1.	GENERAL INFORMATION ABOUT EUT	5
	1.1 Client Information	5
	1.2 General Description of EUT (Equipment Under Test)	5
	1.3 Block Diagram Showing the Configuration of System Tested	8
	1.4 Description of Support Units	8
	1.5 Measurement Uncertainty	9
	1.6 Test Facility	
2.	TEST SUMMARY	10
3.	TEST SOFTWARE	10
4.	TEST EQUIPMENT AND TEST SITE	11
5.	CONDUCTED RF OUTPUT POWER	13
	5.1 Test Standard	
	5.2 Test Setup	
	5.3 Test Procedure	13
	5.4 Deviation From Test Standard	13
	5.5 EUT Operating Mode	13
	5.6 Test Data	13
6.	PEAK-AVERAGE RATIO	14
	6.1 Test Standard and Limit	
	6.2 Test Setup	14
	6.3 Test Procedure	14
	6.4 Deviation From Test Standard	14
	6.5 EUT Operating Mode	14
	6.6 Test Data	14
7.	OCCUPIED BANDWIDTH	15
	7.1 Test Standard and Limit	15
	7.2 Test Setup	15
	7.3 Test Procedure	15
	7.4 Deviation From Test Standard	15
	7.5 EUT Operating Mode	15
	7.6 Test Data	15
8.	OUT OF BAND EMISSION AT ANTENNA TERMINALS	16





Report No.: TBR-C-202405-0318-6 Page: 3 of 49

	8.1 Test Standard and Limit	
	8.2 Test Setup	17
	8.3 Test Procedure	17
	8.4 Deviation From Test Standard	
	8.5 EUT Operating Mode	17
	8.6 Test Data	17
9.	BAND EDGE TEST	18
	9.1 Test Standard and Limit	18
	9.2 Test Setup	
	9.3 Test Procedure	
	9.4 Deviation From Test Standard	
	9.5 EUT Operating Mode	19
	9.6 Test Data	
10.	RADIATED OUTPUT POWER	20
	10.1 Test Standard and Limit	20
	10.2 Test Setup	20
	10.3 Test Procedure	21
	10.4 Deviation From Test Standard	21
	10.5 EUT Operating Mode	21
	10.6 Test Data	21
11.	RADIATED OUT BAND OF EMISSIONS	22
	11.1 Test Standard and Limit	22
	11.2 Test Setup	22
	11.3 Test Procedure	22
	11.4 Deviation From Test Standard	22
	11.5 EUT Operating Mode	
	11.6 Test Data	
12.	FREQUENCY STABILITY	23
	12.1 Test Standard and Limit	23
	12.2 Test Setup	
	12.3 Test Procedure	
	12.4 Deviation From Test Standard	
	12.5 EUT Operating Mode	
	12.6 Test Data	
ATT	ACHMENT ARADIATED OUTPUT POWER	
	ACHMENT BRADIATED OUT BAND OF EMISSIONS	





Report No.: TBR-C-202405-0318-6 Page: 4 of 49

Revision History

Report No.	Version	Description	Issued Date	
TBR-C-202405-0318-6	Rev.01	Initial issue of report	2024-08-21	
MODE	7		a William	
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Page: 5 of 49

1. General Information about EUT

1.1 Client Information

Applicant		Shenzhen Tino Security Corp., LTD			
Address: 201, No.7, HeDian Industry Park FuMin Community, FuCheng Street, LongHua District, Shenzhen, China					
Manufacturer : Shenzhen Tino Security Corp., LTD					
Addroce		201, No.7, HeDian Industry Park FuMin Community, FuCheng Street, LongHua District, Shenzhen, China			

1.2 General Description of EUT (Equipment Under Test)

EUT Name	•	4G Battery Camera				
Model		CQ1H, CQ1A, CQ1B, CQ1C, CQ1D, CQ1E, CQ1F, CQ1G, CQ1I, CQ1J, CQ1K, CQ1L, CQ1M, CQ1N, CQ1O, CQ1P, CQ1Q, CQ1R, CQ1S, CQ1T, CQ1U, CQ1V, CQ1W, CQ1X, CQ1Y, CQ1Z				
Model Different		All these models are identical in the same PCB, layout and electrical circuit, the only difference is appearance and model name.				
Product Description	Frequency Bands: LTE Band 2: TX: 1850MHz-1910MHz LTE Band 4: TX: 1710MHz-1755MHz LTE Band 5: TX: 824MHz-849MHz LTE Band 12: TX: 699MHz-716MHz LTE Band 13: TX: 777MHz-787MHz LTE Band 66: TX: 1710MHz-1780MHz 3.06dBi Dipole Antenna for LTE Band 2 2.28dBi Dipole Antenna for LTE Band 4 Antenna Gain: 1.99dBi Dipole Antenna for LTE Band 5 1.92dBi Dipole Antenna for LTE Band 12 1.92dBi Dipole Antenna for LTE Band 13 2.76dBi Dipole Antenna for LTE Band 66 Modulation Type: CPSK, 16QAM LTE Band 2: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MH LTE Band 4: 1.4MHz/3MHz/5MHz/10MHz LTE Band 12: 1.4MHz/3MHz/5MHz/10MHz LTE Band 13: 5MHz/10MHz LTE Band 66: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 66: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 66: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz					
Power Rating	USB Input: DC 5V/1A DC 3.7V 9000mAh 33.3Wh Rechargeable Li-ion battery					
Software Version	:	39.0.174				
Hardware Version	•	GL_I11e_MAIN_V0_3				





Page: 6 of 49

Remark:

(1) The antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.

- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) The above antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.





Report No.: TBR-C-202405-0318-6 Page: 7 of 49

(4) Channel List

Test mode:	Nominal	RF Channel		
	Bandwidth	Low (L)	Middle (M)	High (H)
N I I I	(MHz)	MHz	MHz	MHz
LTE	1.4	1850.7	1880.0	1909.3
Band 2	3	1851.5	1880.0	1908.5
	5	1852.5	1880.0	1907.5
CHULL	10	1855.0	1880.0	1905.0
	15	1857.5	1880.0	1902.5
	20	1860.0	1880.0	1900.0

Test mode:	Nominal	RF Channel		
	Bandwidth	Low (L)	Middle (M)	High (H)
	(MHz)	MHz	MHz	MHz
LTE	1.4	1710.7	1732.5	1754.3
Band 4	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
WUD?	10	1715.0	1732.5	1750.0
	15	1715.5	1732.5	1747.5
	20	1720.0	1732.5	1745.0

Test mode:	Nominal		10/13	
	Bandwidth	Low (L)	Middle (M)	High (H)
	(MHz)	MHz	MHz	MHz
LTE	1.4	824.7	836.5	848.3
Band 5	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829.0	836.5	844.0

Test mode:	Nominal		RF Channel	
1.33	Bandwidth	Low (L)	Middle (M)	High (H)
	(MHz)	MHz	MHz	MHz
LTE	1.4	699.7	707.5	715.3
Band 12	3	700.5	707.5	714.5
13 61	5	701.5	707.5	713.5
	10	704.0	707.5	711.0

Test mode:	Nominal	RF Channel		
	Bandwidth	Low (L)	Middle (M)	High (H)
	(MHz)	MHz	MHz	MHz
LTE	5	779.5	782.0	784.5
Band 13	10		782.0	

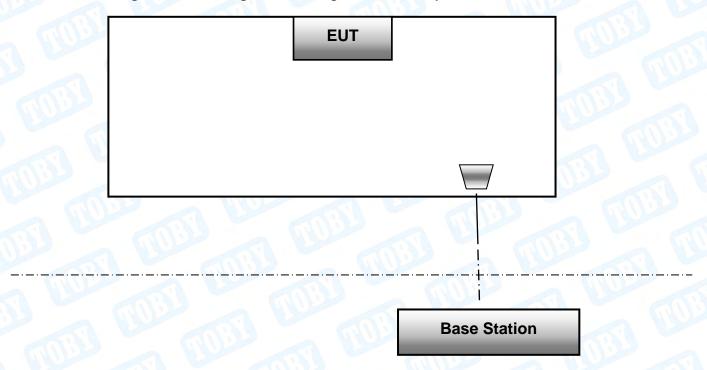
Test mode:	Nominal	RF Channel			
	Bandwidth	Low (L)	Middle (M)	High (H)	
	(MHz)	MHz	MHz	MHz	
LTE	1.4	1710.7	1745.0	1779.3	
Band 66	3	1711.5	1745.0	1778.5	
3.1	5	1712.5	1745.0	1777.5	
	10	1715.0	1745.0	1775.0	
	15	1717.5	1745.0	1772.5	
MINU	20	1720.0	1745.0	1770.0	





Page: 8 of 49

1.3 Block Diagram Showing the Configuration of System Tested



The above block diagram of setup is the normal mode. And more detail please refer to the test setup of each test item of bellow.

1.4 Description of Support Units

The EUT has been tested as an independent unit.





Page: 9 of 49

1.5 Measurement Uncertainty

Test Item	Parameters	Expanded Uncertainty (U _{Lab})
RF Power, conducted	1	±0.82 dB
Radiated Emission	Level Accuracy:	±4.60 dB
Tradiated Efficient	9kHz to 30 MHz	21.00 dB
Radiated Emission	Level Accuracy:	±4.40 dB
Tradiated Efficient	30MHz to 1000 MHz	14.40 dB
Radiated Emission	Level Accuracy:	±4.20 dB
Naulateu Ettiissiüli	Above 1000MHz	±4.20 UD

1.6 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351.

Designation Number: CN1223.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.





Page: 10 of 49

2. Test Summary

Test Item	Section in CFR 47	Result		
	Part 2.1046			
	Part 22.913(a)(2)	TI WILL		
RF Output Power	Part 24.232(c)	PASS		
Kr Output Fower	Part 27.50 (b)(10)	FASS		
	Part 27.50 (d)(4)			
	Part 27.50 (h)(2)			
Dock to Average Datio	Part 24.232(d)	PASS		
Peak-to-Average Ratio	Part 27.50(d)(5)	PASS		
	Part 2.1049			
	Part 22.917(a)			
99% & -26 dB Occupied Bandwidth	Part 24.238(b)	PASS		
	Part 27.53(h)			
	Part 27.53(m)			
	Part 2.1051			
	Part 24.238(a)			
Spurious Emissions at Antenna Terminal	Part 27.53 (h)	PASS		
	Part 27.53(m)			
	Part 2.1053			
	Part 22.917(a)			
Field Strength of Spurious Radiation	Part 24.238(a)	PASS		
Tield Otteright of Opunous Madiation	Part 27.53 (h)	1 700		
	Part 27.53(m)			
	Part 24.238(a)			
	Part 22.917(a)	11/32		
Out of band emission, Band Edge	Part 27.53 (h)	PASS		
	Part 27.53 (m)			
	Part 27.54			
	Part 24.235	1		
Frequency stability vs. temperature	Part 22.355	PASS		
	Part 2.1055(a)(1)(b)			
	Part 27.54			
	Part 24.235			
Frequency stability vs. voltage	Part 24.235	PASS		
Pass: The EUT complies with the essential require	Part 2.1055(d)(2)			

3. Test Software

Test Item	Test Software	Manufacturer	Version No.	
Radiation Emission	diation Emission EZ-EMC		FA-03A2RE+	
RF Test System	JS1120	Tonscend	V3.1.46	





Report No.: TBR-C-202405-0318-6 Page: 11 of 49

4. Test Equipment and Test Site

	Test Site											
No.	Test Site	Manufacturer	Specification	Used								
TB-EMCSR001	Shielding Chamber #1	YIHENG	7.5*4.0*3.0 (m)	X								
TB-EMCSR002	Shielding Chamber #2	YIHENG	8.0*4.0*3.0 (m)	√								
TB-EMCCA001	3m Anechoic Chamber #A	ETS	9.0*6.0*6.0 (m)	X								
TB-EMCCB002	3m Anechoic Chamber #B	YIHENG	9.0*6.0*6.0 (m)	1								

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Aug. 30, 2023	Aug. 29, 2024
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 17, 2024	Jun. 16, 2025
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 23, 2024	Feb.22, 2025
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Nov. 13, 2023	Nov. 12, 2025
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Jun. 14, 2024	Jun. 13, 2026
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Feb. 27, 2024	Feb.26, 2026
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 14, 2024	Jun. 13, 2026
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Aug. 30, 2023	Aug. 29, 2024
HF Amplifier	Tonscend	TAP051845	AP21C806141	Aug. 30, 2023	Aug. 29, 2024
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Aug. 30, 2023	Aug. 29, 2024
Highpass Filter	CD	HPM-6.4/18G		N/A	N/A
Highpass Filter	CD	HPM-2.8/18G	(1/1/1)	N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 17, 2024	Jun. 16, 2025
MXA Signal Analyzer	KEYSIGHT	N9020B	MY60110172	Aug. 30, 2023	Aug. 29, 2024
MXA Signal Analyzer	Agilent	N9020A	MY47380425	Aug. 30, 2023	Aug. 29, 2024
Vector Signal Generator	Vector Signal Generator Agilent		MY50141294	Aug. 30, 2023	Aug. 29, 2024
Analog Signal Generator	Agilent	N5181A	MY48180463	Aug. 30, 2023	Aug. 29, 2024
Vector Signal Generator	KEYSIGHT	N5182B	MY59101429	Aug. 30, 2023	Aug. 29, 2024
Analog Signal Generator	KEYSIGHT	N5173B	MY61252685	Aug. 30, 2023	Aug. 29, 2024
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Aug. 30, 2023	Aug. 29, 2024
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Aug. 30, 2023	Aug. 29, 2024
Kr Fower Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Aug. 30, 2023	Aug. 29, 2024
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Aug. 30, 2023	Aug. 29, 2024





Report No.: TBR-C-202405-0318-6 Page: 12 of 49

RF Control Unit	Tonsced	JS0806-1	21C8060380	N/A	N/A
RF Control Unit	Tonsced	JS0806-2	21F8060439	Aug. 30, 2023	Aug. 29, 2024
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A
Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Aug. 30, 2023	Aug. 29, 2024
Universal Radio Communication Tester	Rohde&Schwarz	CMW500	168796	Feb. 23, 2024	Feb.22, 2025





Page: 13 of 49

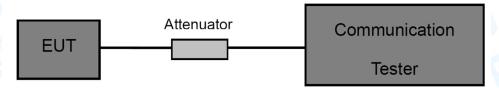
5. Conducted RF Output Power

5.1 Test Standard

5.1.1 Test Standard

FCC part 2.1046, FCC part 22.913(a)(2), FCC part 24.232(c), FCC Part 27.50(b)&(d), FCC Part 27.50 (h)

5.2 Test Setup



5.3 Test Procedure

- (1) The EUT is coupled to the Base Station with the suitable Attenuator, the path loss is calibrated to correct the reading.
- (2) A call is set up by the Base Station to the generic call set up procedure.
- (3) Set EUT at maximum power level through base station by power level command.
- (4) Then read record the power value from the Base Station in dBm.

5.4 Deviation From Test Standard

No deviation

5.5 EUT Operating Mode

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

5.6 Test Data





Page: 14 of 49

6. Peak-Average Ratio

6.1 Test Standard and Limit

6.1.1 Test Standard

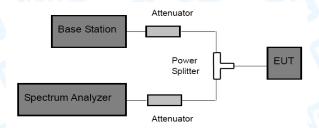
FCC part 24.232(d); FCC Part 27.50(d); FCC Part 27.50 (h)

6.1.2 Test Limit

Peak-to-Average Ratio

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

6.2 Test Setup



6.3 Test Procedure

According with KDB 971168

- (1) The signal analyzer's CCDF measurement profile is enabled.
- (2) Frequency = carrier center frequency.
- (3) Measurement BW>Emission bandwidth of signal.
- (4) The signal analyzer was set to collect one million samples to generate the CCDF curve.
- (5) Set the EUT working in highest power level, measured and recorded the 0.1% as PAPR level.
- (6) The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which of the transmitter is operating at maximum power.

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Mode

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

6.6 Test Data





Page: 15 of 49

7. Occupied Bandwidth

7.1 Test Standard and Limit

7.1.1 Test Standard

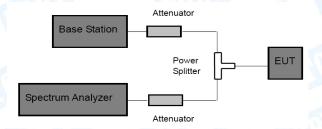
FCC Part 2: 2.1049, FCC Part 22.917(a), FCC part 24.238(b), FCC Part 27.53(h) FCC Part 27.53(m)

7.1.2 Test Limit

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Occupied bandwidth is also known as 99% power and -26dBC occupied bandwidths.

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and Base station via power splitter as show in the block diagram above.
- (2) The resolution bandwidth of the Spectrum Analyzer is set to at least 1% of the occupied bandwidth. VBW= 3 times RBW.
- (3) The low, middle and the high channels are selected to perform tests respectively.
- (4) Set the frequency range of the Spectrum Analyzer suitably to capture the waveform; search peak; make a line whose value is 26dB lower than the peak; mark two points which the line intersected the waveform at; finally record the delta of the two points as the occupied bandwidth and the plot.
- (5) Set the Spectrum Analyzer Occupied bandwidth function to measure the 99% occupied bandwidth.

7.4 Deviation From Test Standard

No deviation

7.5 EUT Operating Mode

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

7.6 Test Data





Page: 16 of 49

8. Out of Band Emission at Antenna Terminals

8.1 Test Standard and Limit

8.1.1 Test Standard

FCC Part 2: 2.1051, 2.1057; FCC Part 22.917(a), FCC part 24.238(a); FCC Part 27.53 (h), FCC Part 27.53(m)

8.1.2 Test Limit

In addition to the limit outlined in section 4.7.1 above, equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

- a) The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least:
- (i) 76 + 10 log10 p (watts), dB, for base and fixed equipment, and (ii) 65 + 10 log10 p (watts), dB, for mobile and portable equipment.
- b) The e.i.r.p. in the band 1559-1610 MHz shall not exceed -70 dBW/MHz for wideband signal and -80 dBW for discrete emission with bandwidth less than 700 Hz.

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

(i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p (watts).

(ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p (watts). If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

Equipment shall comply with the limits in (i) and (ii) below.

(i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p(watts).

(ii)After the first 1.0 MHz, theemissionpowerin any 1 MHz bandwidth shall be attenuated(in dB) below the transmitter output powerP (dBW) by at least 43+10log10p(watts). If themeasurement isperformedusing 1% of the emission bandwidth, power integration over 1.0MHz is required.

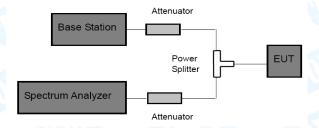
- (i) In the first 1.0 MHz bands immediately outside and adjacent to the equipment's smallest operating frequency block,2 which can contain the equipment's occupied bandwidth, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least 43 + 10 log10 p (watts) dB.
- (ii) After the first 1.0 MHz outside the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least 43 + 10 log10 p (watts) dB





Page: 17 of 49

8.2 Test Setup



8.3 Test Procedure

- 1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
- 2 The resolution bandwidth of the spectrum analyzer was set at 100 kHz when below 1GHz, 1MHz when above 1 GHz; sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.
- 3 For the out of band: Set the RBW=100 kHz, VBW=300 kHz when below 1 GHz, RBW =1 MHz, VBW=3 MHz when above 1 GHz, Start=30MHz, Stop= 10th harmonic.
- 4 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter.

8.4 Deviation From Test Standard

No deviation

8.5 EUT Operating Mode

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

8.6 Test Data





Page: 18 of 49

9. Band Edge Test

9.1 Test Standard and Limit

9.1.1 Test Standard

FCC Part 2: 2.1051, 2.1057; FCC Part 22.917(a), FCC part 24.238(a) FCC Part 27.53 (h), FCC Part 27.53(m)

9.1.2 Test Limit

In addition to the limit outlined in section 4.7.1 above, equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

- a) The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least:
- (i) 76 + 10 log10 p (watts), dB, for base and fixed equipment, and (ii) 65 + 10 log10 p (watts), dB, for mobile and portable equipment.
- b) The e.i.r.p. in the band 1559-1610 MHz shall not exceed -70 dBW/MHz for wideband signal and -80 dBW for discrete emission with bandwidth less than 700 Hz.

Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

(i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1% of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p (watts).

(ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p (watts). If the measurement is performed using 1% of the occupied bandwidth, power integration over 100 kHz is required.

Equipment shall comply with the limits in (i) and (ii) below.

(i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least 43 + 10 log10 p(watts).

(ii)After the first 1.0 MHz, theemissionpowerin any 1 MHz bandwidth shall be attenuated(in dB) below the transmitter output powerP (dBW) by at least 43+10log10p(watts). If themeasurement isperformedusing 1% of the emission bandwidth, power integration over 1.0MHz is required.

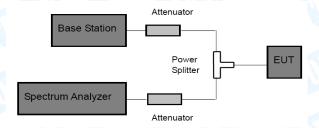
- (i) In the first 1.0 MHz bands immediately outside and adjacent to the equipment's smallest operating frequency block,2 which can contain the equipment's occupied bandwidth, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least 43 + 10 log10 p (watts) dB.
- (ii) After the first 1.0 MHz outside the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least 43 + 10 log10 p (watts) dB





Page: 19 of 49

9.2 Test Setup



9.3 Test Procedure

- 1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
- 2 The resolution bandwidth of the spectrum analyzer was set at 100 kHz when below 1GHz, 1MHz when above 1 GHz; sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.
- 3 For the out of band: Set the RBW=100 kHz, VBW=300 kHz when below 1 GHz, RBW =1 MHz, VBW=3 MHz when above 1 GHz, Start=30MHz, Stop= 10th harmonic.
- 4 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter.

9.4 Deviation From Test Standard

No deviation

9.5 EUT Operating Mode

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

9.6 Test Data





Page: 20 of 49

10. Radiated Output Power

10.1 Test Standard and Limit

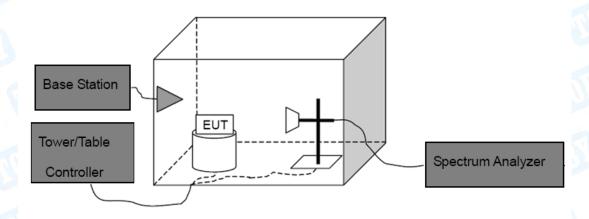
10.1.1 Test Standard

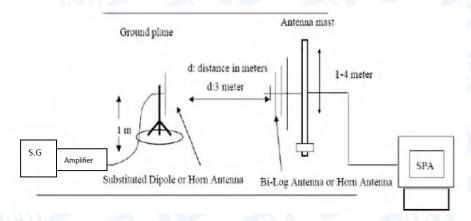
FCC Part 2.1046, FCC Part 22.913(a)(2), FCC part 24.232(c), FCC part 27.50(c), FCC part 27.50(d)

10.1.2 Test Limit

E.I.R.P	E.I.R.P	E.R.P	E.R.P
LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 12
2W(33dBm)	1W(30dBm)	7W(38.45dBm)	3W(34.77dBm)
E.R.P	E.I.R.P		
LTE Band 13	LTE Band 66		
3W(34.77dBm)	1W(30dBm)		

10.2 Test Setup





Substituted Method





Page: 21 of 49

10.3 Test Procedure

(1) The EUT was placed on an non-conductive rotating platform with 0.8 meter height in an anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RBW=3 MHz, VBW=3 MHz and peak detector settings.

- (2) During the measurement, the EUT was enforced in maximum power and linked with the Base Station. The highest was recorded from analyzer power level (LVT) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
- (3) Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to C63.26. The EUT was replaced by dipole antenna (for frequency below 1 GHz) or Horn antenna (for frequency above 1 GHz) at same location with same polarize of receiver antenna and then a known power of each measure frequency from S.G. was applied into the dipole antenna or Horn antenna through a TX cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna.

Note: In test, the S.G Connect the Pre-amplifier(Sonoma 310N Pre-amplifier for frequency below 1 GHz, HP 8449B Pre-amplifier for frequency above 1 GHz)

Then the EUT's EIRP and ERP was calculated with the correction factor:

ERP=S.G.Level +Antenna Gain Cord.(dB)-Cable Loss(dB)

EIRP=S.G.Level+Antenna Gain Cord.(dBi)-Cable Loss(dB)

10.4 Deviation From Test Standard

No deviation

10.5 EUT Operating Mode

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

10.6 Test Data

Please refer to the Attachment A.





Page: 22 of 49

11. Radiated Out Band of Emissions

11.1 Test Standard and Limit

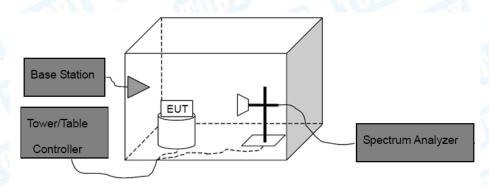
11.1.1 Test Standard

FCC Part 2: 2.1053, FCC Part 22.917(a), FCC part 24.238(a) FCC Part 27.53 (h), FCC Part 27.53(m)

11.1.2 Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power(P) by a factor of at least 43+10log(P) dB. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm.

11.2 Test Setup



11.3 Test Procedure

(1) The test system setup as show in the block diagram above.

(2) The EUT was placed on an non-conductive rotating platform in an anechoic chamber. The radiated spurious emissions from 30MHz to 10th harmonious of fundamental frequency were measured at 3 m with a test antenna and a spectrum analyzer with RBW=1 MHz, VBW=1 MHz, peak detector settings.

(3) During the measurement, the EUT was enforced in maximum power and linked with a base station. All the spurious emissions at 3m were measured by rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in

both horizontally and vertically polarized orientations.

(4) When found the maximum level of emissions from the EUT. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB=10 log(TX power in Watts/0.001)-the absolute level Spurious attenuation limit in dB=43+10 log(power out in Watts)

11.4 Deviation From Test Standard

No deviation

11.5 EUT Operating Mode

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

11.6 Test Data

Please refer to the Attachment B.





Page: 23 of 49

12. Frequency Stability

12.1 Test Standard and Limit

12.1.1 Test Standard

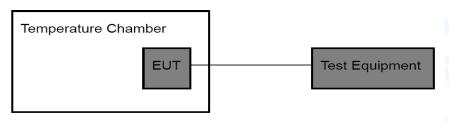
FCC Part 2.1055(a)(1)(b); FCC Part 22.355; FCC Part 24.235, Part 27.54

12.1.2 Test Limit

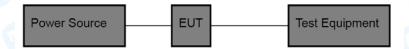
±2.5ppm

12.2 Test Setup

For Temperature Test:



For Voltage Test:



12.3 Test Procedure

Test Procedures for Temperature Variation:

- (1) The EUT was set up in the thermal chamber and connected with the base station.
- (2) With power off, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
- (3) With power off, the temperature was raised in 10 °C set up to 50 °C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
- (4) If the EUT cannot be turned on at -30° C, the testing lowest temperature will be raised in 10° C step until the EUT can be turned on.

Test Procedures for Voltage Variation:

- (1) The EUT was placed in a temperature chamber at $25\pm5^{\circ}$ C and connected with the base station.
- (2) Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
- (3) The variation in frequency was measured for the worst case.

12.4 Deviation From Test Standard

No deviation

12.5 EUT Operating Mode

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

12.6 Test Data





Report No.: TBR-C-202405-0318-6 Page: 24 of 49

Attachment A--Radiated Output Power

	Radiated Power (EIRP) for LTE Band 2 / 1.4M										
Modulation	R	RB Antenna Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)				
	Size	offset		(1147)	(ubiii)	(dBd)	(db)	(ubiii)			
	1	0	Lowest	Н	21.51	5.01	2.59	23.93			
	'	0	Lowest	V	21.01	5.01	2.59	23.43			
QPSK	1	0	Middle	Н	21.81	4.82	2.59	24.04			
QI SIN	'	1 0	Middle	V	21.61	4.82	2.59	23.84			
	1	1 0	Highest	Н	21.26	4.45	2.59	23.12			
	'	0	nignesi	V	21.40	4.45	2.59	23.26			
	1	0	Lowest	Н	21.67	5.01	2.59	24.09			
	'	0	Lowest	V	21.44	5.01	2.59	23.86			
16QAM	1	0	Middle	Н	21.65	4.82	2.59	23.88			
IUQAIVI	'		Mildule	V	21.44	4.82	2.59	23.67			
1	4	Highort	Н	21.23	4.45	2.59	23.09				
	1 0		Highest	V	21.03	4.45	2.59	22.89			
	FCC Limit (dBm)										

		F	Radiated P	ower (EIR	P) for LTE B	and 2/3M			
Modulation	R	В	Channel	Channel (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)	
	Size	offset		(IIQV)	(ubiii)	(dBd)	(db)	(ubiii)	
	1	0	Lowest	Н	21.41	5.01	2.59	23.83	
	'	0	Lowest	V	21.10	5.01	2.59	23.52	
QPSK	1	0	Middle	Н	21.73	4.82	2.59	23.96	
Qr Six	QPSK 1	0	ivildale	V	21.37	4.82	2.59	23.60	
	1	1 0	1 0	Highest	Н	21.54	4.45	2.59	23.40
	'		nignest	V	21.99	4.45	2.59	23.85	
	1	0	Lowest	Н	21.54	5.01	2.59	23.96	
	'	0	Lowest	V	21.67	5.01	2.59	24.09	
16QAM	1	0	Middle	Н	21.98	4.82	2.59	24.21	
IOQAIVI	'		Mildule	V	21.11	4.82	2.59	23.34	
	1	1 0	Highest	Н	21.81	4.45	2.59	23.67	
	1 0		riigilest	V	21.71	4.45	2.59	23.57	
			FCC	Limit (di	3m)			33	





Report No.: TBR-C-202405-0318-6 Page: 25 of 49

		F	Radiated P	ower (EIRI	P) for LTE B	and 2 / 5M			
Modulation	RB		Channel	Antenna	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)	
	Size	offset		(H&V)	(авііі)	(dBd)	(ав)	(авііі)	
	1	0	Lowest	Н	21.12	5.01	2.59	23.54	
	'	0	Lowest	V	21.44	5.01	2.59	23.86	
OBSK	QPSK 1 0	0	Middle	Н	21.38	4.82	2.59	23.61	
QFSK		0	ivildale	V	21.85	4.82	2.59	24.08	
		0	0	Highest	Н	21.18	4.45	2.59	23.04
	•		o Highest	V	21.80	4.45	2.59	23.66	
	1	0	Lowest	Н	21.72	5.01	2.59	24.14	
	'	0	Lowest	V	21.07	5.01	2.59	23.49	
16QAM	1	0	Middle	Н	21.87	4.82	2.59	24.10	
IOQAIVI	ı	U	Mildule	V	21.14	4.82	2.59	23.37	
	1	4 0	0 Highest	Highest	Н	21.15	4.45	2.59	23.01
	'		Highest	V	21.37	4.45	2.59	23.23	
			FCC	Limit (d	3m)			33	

		R	adiated Po	ower (EIRF	P) for LTE Ba	and 2 / 10M			
Modulation	R	В	Antenna Channel	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)		
	Size	offset		(H&V)	(ubiii)	(dBd)	(db)	(ubiii)	
	1	0	Lowest	Н	21.02	5.01	2.59	23.44	
	'		Lowest	V	21.55	5.01	2.59	23.97	
QPSK	1 0	0	Middle	Н	21.04	4.82	2.59	23.27	
QFSN	'		Middle	V	21.84	4.82	2.59	24.07	
	1	1 0	Highest	Н	21.93	4.45	2.59	23.79	
	'	0	riigilest	V	21.55	4.45	2.59	23.41	
	1	0	Lowest	Н	21.14	5.01	2.59	23.56	
	'	0	Lowest	V	21.31	5.01	2.59	23.73	
16QAM	1	4	0	Middle	Н	21.92	4.82	2.59	24.15
IOQAIVI	'		Mildule	V	21.22	4.82	2.59	23.45	
	1	0	Highest	Н	21.78	4.45	2.59	23.64	
		' 0	riighest	V	21.16	4.45	2.59	23.02	
			FCC	Limit (dl	3m)			33	





Report No.: TBR-C-202405-0318-6 Page: 26 of 49

		R	adiated Po	ower (EIRF) for LTE Ba	and 2 / 15M	A	
Modulation	R	B offset	Channel	Antenna (H&V)	SG Level	Antenna Factor (dBd)	Cable Loss (dB)	EIRP (dBm)
	1	0	Lowest	Н	21.60	5.01	2.59	24.02
QPSK	1	0	Lowest	V	21.45	5.01	2.59	23.87
	1	0	Middle	Н	21.56	4.82	2.59	23.79
		U	Ivildale	V	21.62	4.82	2.59	23.85
	1	0	0 Highest	Н	21.58	4.45	2.59	23.44
		0		V	21.37	4.45	2.59	23.23
	1	0	Lowest	Н	21.00	5.01	2.59	23.42
	'	0	Lowest	V	21.16	5.01	2.59	23.58
16QAM	1	0	Middle	Н	21.25	4.82	2.59	23.48
IUQAIVI			Middle	V	21.65	4.82	2.59	23.88
	1	0	Highest -	Н	21.43	4.45	2.59	23.29
	1	0		V	21.70	4.45	2.59	23.56
FCC Limit (dBm)								

	Radiated Power (EIRP) for LTE Band 2 / 20M										
Modulation	R	RB		Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)			
	Size	offset		(110.4)	(ubiii)	(dBd)	(db)	(ubiii)			
	1	0	Lowest	Н	21.14	5.01	2.59	23.56			
QPSK	'	U	Lowest	V	21.51	5.01	2.59	23.93			
	1	0	Middle	Н	21.61	4.82	2.59	23.84			
			ivildale	V	21.50	4.82	2.59	23.73			
	1	0	Highest	Н	21.87	4.45	2.59	23.73			
				V	21.74	4.45	2.59	23.60			
	1	0	Lowest	Н	21.15	5.01	2.59	23.57			
	•		Lowest	V	21.61	5.01	2.59	24.03			
16QAM	1	0	Middle	Н	21.19	4.82	2.59	23.42			
TOQAM	•		Mildule	V	21.71	4.82	2.59	23.94			
	1	1 0	Highest	Н	21.34	4.45	2.59	23.20			
	7		riignest	V	21.54	4.45	2.59	23.40			
	FCC Limit (dBm)										





Report No.: TBR-C-202405-0318-6 Page: 27 of 49

		Ra	adiated Po	ower (EIRP) for LTE Ba	nd 4 / 1.4M		
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)
	Size	offset		(HQV)	(ubiii)	(dBd)	(db)	(ubiii)
	1	0	Lowest	Н	21.82	5.01	2.59	24.24
QPSK	'	U	Lowest	V	21.13	5.01	2.59	23.55
	1	0	Middle	Н	21.01	4.82	2.59	23.24
QFSK		Ů	ivildale	V	21.09	4.82	2.59	23.32
	1	0	Highest	Н	21.61	4.45	2.59	23.47
				V	21.14	4.45	2.59	23.00
	1	0	Lowest	Н	21.65	5.01	2.59	24.07
	'		Lowest	V	21.52	5.01	2.59	23.94
16QAM	1	0	Middle	Н	21.01	4.82	2.59	23.24
IOQAW			Middle	V	21.75	4.82	2.59	23.98
	1	1 0	Highest -	Н	21.85	4.45	2.59	23.71
	ı	U		V	21.48	4.45	2.59	23.34
FCC Limit (dBm)								

	Radiated Power (EIRP) for LTE Band 4 / 3M										
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)			
	Size	offset		(110.4)	(ubiii)	(dBd)	(db)	(ubiii)			
	1	0	Lowest	Н	21.82	5.01	2.59	24.24			
QPSK	'	U	Lowest	V	21.39	5.01	2.59	23.81			
	1	0	Middle	Н	21.25	4.82	2.59	23.48			
Qrok			ivildale	V	21.01	4.82	2.59	23.24			
	1	0	Highest	Н	21.93	4.45	2.59	23.79			
				V	21.02	4.45	2.59	22.88			
	1	0	Lowest	Н	21.20	5.01	2.59	23.62			
	•		Lowest	V	21.68	5.01	2.59	24.10			
16QAM	1	0	Middle	Н	21.63	4.82	2.59	23.86			
TOQAM	•		Mildule	V	21.06	4.82	2.59	23.29			
	1	1 0	Highest	Н	21.33	4.45	2.59	23.19			
	7		nignest	V	21.23	4.45	2.59	23.09			
	FCC Limit (dBm)										





Report No.: TBR-C-202405-0318-6 Page: 28 of 49

		F	Radiated P	ower (EIR	P) for LTE B	and 4 / 5M		
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)
	Size	offset		(1141)	(azııı)	(dBd)	(42)	(42)
	1	0	Lowest	Н	21.03	5.01	2.59	23.45
QPSK	'	0	Lowest	V	21.93	5.01	2.59	24.35
	1	0	Middle	Н	21.65	4.82	2.59	23.88
			ivildale	V	21.31	4.82	2.59	23.54
	1	0	0 Highest	Н	21.03	4.45	2.59	22.89
		0		V	21.94	4.45	2.59	23.80
	1	1 0	Lowest	Н	21.57	5.01	2.59	23.99
	'		Lowest	V	21.55	5.01	2.59	23.97
16QAM	1	0	Middle	Н	21.83	4.82	2.59	24.06
IOGAW			ivildate	V	21.06	4.82	2.59	23.29
	1	0	Highest	Н	21.30	4.45	2.59	23.16
	ı	U	riignest	V	21.62	4.45	2.59	23.48
FCC Limit (dBm)								30

	Radiated Power (EIRP) for LTE Band 4 / 10M										
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)			
	Size	offset		(H&V)	(авііі)	(dBd)	(ub)	(ubiii)			
	1	0	Lowest	Н	21.91	5.01	2.59	24.33			
	'	0	Lowest	V	21.61	5.01	2.59	24.03			
QPSK	1	0	Middle	Н	21.58	4.82	2.59	23.81			
QFSN		U	Ivildale	V	21.14	4.82	2.59	23.37			
	1	0	Highest	Н	21.13	4.45	2.59	22.99			
				V	21.70	4.45	2.59	23.56			
	1	0	Lowest	Н	21.06	5.01	2.59	23.48			
	'	0	Lowest	V	21.92	5.01	2.59 22.99 2.59 23.50 2.59 23.40 2.59 24.30	24.34			
16QAM	1	0	Middle	Н	21.38	4.82	2.59	23.61			
IOQAIVI	'		Mildule	V	21.48	4.82	2.59	23.71			
	1	0	Highoot	Н	21.13	4.45	2.59	22.99			
	1	U	Highest -	V	21.69	4.45	2.59	23.55			
FCC Limit (dBm)											





Report No.: TBR-C-202405-0318-6 Page: 29 of 49

		R	adiated Po	ower (EIRF) for LTE Ba	and 4 / 15M		
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)
	Size	offset				(dBd)		
	1	0	Lowest	Н	21.28	5.01	2.59	23.70
	ı	0	Lowest	V	21.53	5.01	2.59	23.95
QPSK	1	0	Middle	Н	21.58	4.82	2.59	23.81
			ivildale	V	21.60	4.82	2.59	23.83
	1	0	Highest	Н	21.47	4.45	2.59	23.33
			riigilest	V	21.01	4.45	2.59	22.87
	1	0	Lowest	Н	21.83	5.01	2.59	24.25
	'	0	Lowest	V	21.61	5.01	2.59	24.03
16QAM	1	0	Middle	Н	21.55	4.82	2.59	23.78
TOWAIN			ivildale	V	21.92	4.82	2.59	24.15
	1	1 0	Highoet	Н	21.22	4.45	2.59	23.08
	1		Highest -	V	21.19	4.45	2.59	23.05
FCC Limit (dBm)								30

	Radiated Power (EIRP) for LTE Band 4 / 20M										
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)			
	Size	offset		(110.4)	(ubiii)	(dBd)	(db)	(ubiii)			
	1	0	Lowest	Н	21.18	5.01	2.59	23.60			
QPSK	'	U	Lowest	V	21.33	5.01	2.59	23.75			
	1	0	Middle	Н	21.34	4.82	2.59	23.57			
	•		ivildale	V	21.24	4.82	2.59	23.47			
	1	0	Highest	Н	21.77	4.45	2.59	23.63			
				V	21.90	4.45	2.59	23.76			
	1	0	Lowest	Н	21.37	5.01	2.59	23.79			
	•	0	Lowest	V	21.36	5.01	2.59	23.78			
16QAM	1	0	Middle	Н	21.58	4.82	2.59	23.81			
TOQAM	•	0	Mildule	V	21.04	4.82	2.59	23.27			
	1	1 0	Highest	Н	21.79	4.45	2.59	23.65			
	1		nignest	V	21.70	4.45	2.59	23.56			
	FCC Limit (dBm)										





Report No.: TBR-C-202405-0318-6 Page: 30 of 49

		R	adiated Po	ower (ERP) for LTE Ba	nd 5 / 1.4M			
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP	
	Size	offset		(HQV)	(ubiii)	(dBd)	(db)	(ubiii)	
	1	0	Lowest	Н	21.91	5.01	2.59	24.33	
QPSK	' 	U	Lowest	V	21.89	5.01	2.59	24.31	
	1	0	Middle	Н	21.63	4.82	2.59	23.86	
		Ů	ivildale	V	21.84	4.82	2.59	24.07	
	1	0	Highest	Н	21.82	4.45	2.59	23.68	
				V	21.07	4.45	2.59	22.93	
	1	0	Lowest	Н	21.71	5.01	2.59	24.13	
	'		Lowest	V	21.23	5.01	2.59	23.65	
16QAM	1	0	Middle	Н	21.92	4.82	2.59	24.15	
IOQAW	'		Middle	V	21.18	4.82	2.59	23.41	
	1 0	0	Highest	Н	21.87	4.45	2.59	23.73	
	I	0	riigilest	V	21.62	4.45	2.59	23.48	
FCC Limit (dBm)									

	Radiated Power (ERP) for LTE Band 5 / 3M										
Modulation	R	RB		Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP			
	Size	offset		(1147)	(ubiii)	(dBd)	(db)	(ubiii)			
	1	0	Lowest	Н	21.42	5.01	2.59	23.84			
QPSK	'	U	Lowest	V	21.87	5.01	2.59	24.29			
	1	0	Middle	Н	21.75	4.82	2.59	23.98			
			ivildale	V	21.23	4.82	2.59	23.46			
	1	0	Highest	Н	21.04	4.45	2.59	22.90			
				V	21.46	4.45	2.59	23.32			
	1	0	Lowest	Н	21.28	5.01	2.59	23.70			
	'	0	Lowest	V	22.00	5.01	2.59	24.42			
16QAM	1	0	Middle	Н	21.86	4.82	2.59	24.09			
TOQAM	'	0	Mildule	V	21.87	4.82	2.59	24.10			
	1	1 0	Highest	Н	21.44	4.45	2.59	23.30			
	7		nignest	V	21.45	4.45	2.59	23.31			
	FCC Limit (dBm)										





Report No.: TBR-C-202405-0318-6 Page: 31 of 49

		F	Radiated F	Power (ERI	P) for LTE Ba	and 5 / 5M		
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP
	Size	offset		(11.17)	(/	(dBd)	(/	()
	1	0	Lowest	Н	21.94	5.01	2.59	24.36
QPSK	'	0	Lowest	V	21.58	5.01	2.59	24.00
	1	0	Middle	Н	21.21	4.82	2.59	23.44
		Ů,	ivildale	V	21.08	4.82	2.59	23.31
	1	0	Highest	Н	21.85	4.45	2.59	23.71
		0		V	21.24	4.45	2.59	23.10
	1	0	Lowest	Н	21.19	5.01	2.59	23.61
	'	0	Lowest	V	21.93	5.01	2.59	24.35
16QAM	1	0	Middle	Н	22.00	4.82	2.59	24.23
IUQAIVI	'		Mildule	V	21.97	4.82	2.59	24.20
	1	1 0	Highest	Н	21.69	4.45	2.59	23.55
	1		nignest	V	21.44	4.45	2.59	23.30
FCC Limit (dBm)								

	Radiated Power (ERP) for LTE Band 5 / 10M										
Modulation	RB		Channel (1997)	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP			
	Size	offset		(nav)	(ubiii)	(dBd)	(db)	(ubiii)			
	1	0	Lowest	Н	21.39	5.01	2.59	23.81			
QPSK	'	U	Lowest	V	21.06	5.01	2.59	23.48			
	1	0	Middle	Н	21.89	4.82	2.59	24.12			
Qrok			ivildule	V	21.95	4.82	2.59	24.18			
	1	0	Highest	Н	21.98	4.45	2.59	23.84			
				V	21.28	4.45	2.59	23.14			
	1	0	Lowest	Н	21.97	5.01	2.59	24.39			
	'		Lowest	V	21.04	5.01	2.59	23.46			
16QAM	1	0	Middle	Н	21.48	4.82	2.59	23.71			
IOQAW	'		Mildule	V	21.86	4.82	2.59	24.09			
	1	0	Highest	Н	21.16	4.45	2.59	23.02			
		0	Highest -	V	21.38	4.45	2.59	23.24			
	FCC Limit (dBm)										





Report No.: TBR-C-202405-0318-6 Page: 32 of 49

	Radiated Power (ERP) for LTE Band 12 / 1.4M											
Modulation	R	В	Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP (dBm)				
	Size	offset				(dBd)						
	1	0	Lowest	Н	21.28	5.01	2.59	23.70				
QPSK	'		Lowest	V	21.02	5.01	2.59	23.44				
	1	0	Middle	Н	21.60	4.82	2.59	23.83				
QFSK				V	21.49	4.82	2.59	23.72				
	1	0	Highest	Н	21.64	4.45	2.59	23.50				
				V	21.18	4.45	2.59	23.04				
	á	0	Lowest	Н	21.90	5.01	2.59	24.32				
	1	0		V	21.07	5.01	2.59	23.49				
16QAM	1	0	Middle	Н	21.67	4.82	2.59	23.90				
IOQAIVI			iviluale	V	21.81	4.82	2.59	24.04				
	1	0	Highest -	Н	21.52	4.45	2.59	23.38				
				V	21.17	4.45	2.59	23.03				
			FCC	Limit (dl	3m)			34.77				

		R	adiated P	ower (ERP) for LTE Ba	nd 12 / 3M		
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP
	Size	offset		(Hav)	(ubiii)	(dBd)	(db)	(ubiii)
	1	0	Lowest	Н	21.22	5.01	2.59	23.64
	•	U	Lowest	V	21.44	5.01	2.59	23.86
QPSK	1	0	Middle	Н	21.20	4.82	2.59	23.43
QI SIN	•		Middle	V	21.51	4.82	2.59	23.74
	1	0	Highest	Н	21.89	4.45	2.59	23.75
		Ů		V	21.92	4.45	2.59	23.78
	1	0	Lowest	Н	21.07	5.01	2.59	23.49
	•			V	21.23	5.01	2.59	23.65
16QAM	1	0	Middle	Н	21.28	4.82	2.59	23.51
IUQAIVI	•		Middle	V	21.45	4.82	2.59	23.68
	1	1 0	Highest	Н	21.36	4.45	2.59	23.22
				V	21.96	4.45	2.59	23.82
			FCC	Limit (di	3m)			34.77





Report No.: TBR-C-202405-0318-6 Page: 33 of 49

	Radiated Power (ERP) for LTE Band 12 / 5M											
Modulation	R	В	Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP (dBm)				
	Size	offset				(dBd)						
	1	0	Lowest	Н	21.27	5.01	2.59	23.69				
QPSK	'		Lowest	V	21.38	5.01	2.59	23.80				
	1	0	Middle	Н	21.37	4.82	2.59	23.60				
QFSK				V	21.23	4.82	2.59	23.46				
	1	0	Highest	Н	21.18	4.45	2.59	23.04				
				V	21.90	4.45	2.59	23.76				
	1	0	Lowest	Н	21.34	5.01	2.59	23.76				
	'	U		V	21.77	5.01	2.59	24.19				
16QAM	1	0	N4: 1 II	Н	21.18	4.82	2.59	23.41				
IOQAIVI	'		Middle	V	21.35	4.82	2.59	23.58				
	1	0	Highest	Н	21.78	4.45	2.59	23.64				
				V	21.73	4.45	2.59	23.59				
			FCC	Limit (di	3m)			34.77				

		Ra	adiated Po	wer (ERP)	for LTE Bai	nd 12 / 10M		
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP
	Size	offset		(Hav)	(ubiii)	(dBd)	(db)	(ubiii)
	1	0	Lowest	Н	21.44	5.01	2.59	23.86
	•	0	Lowest	V	21.02	5.01	2.59	23.44
QPSK	1	0	Middle	Н	21.94	4.82	2.59	24.17
Qrok		Ů		V	21.63	4.82	2.59	23.86
	1	0	Highest	Н	21.80	4.45	2.59	23.66
				V	21.09	4.45	2.59	22.95
	1	0	Lowest	Н	21.74	5.01	2.59	24.16
				V	21.26	5.01	2.59	23.68
16QAM	1	0	Middle	Н	21.28	4.82	2.59	23.51
TOQAM	•		Middle	V	21.77	4.82	2.59	24.00
	1	0	Highest	Н	21.00	4.45	2.59	22.86
				V	21.80	4.45	2.59	23.66
			FCC	Limit (di	3m)			34.77





Report No.: TBR-C-202405-0318-6 Page: 34 of 49

	Radiated Power (EIRP) for LTE Band 13 / 5M											
Modulation	R	В	Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP (dBm)				
	Size	offset				(dBd)						
	1	0	Lowest	Н	21.66	5.01	2.59	24.08				
QPSK	'		Lowest	V	21.82	5.01	2.59	24.24				
	1	0	Middle	Н	21.16	4.82	2.59	23.39				
QFSK				V	21.64	4.82	2.59	23.87				
	1	0	Highest	Н	21.10	4.45	2.59	22.96				
				V	21.84	4.45	2.59	23.70				
	1	0	Lowest	Н	21.98	5.01	2.59	24.40				
	'			V	21.72	5.01	2.59	24.14				
16QAM	1	0	Middle	Н	21.79	4.82	2.59	24.02				
IOQAIVI	1	U	Milaule	V	21.51	4.82	2.59	23.74				
	1	0	Highest	Н	21.07	4.45	2.59	22.93				
				V	21.99	4.45	2.59	23.85				
			FCC	Limit (dl	3m)			34.77				

		Ra	adiated Po	wer (EIRP) for LTE Ba	nd 13 / 10M		
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	ERP
	Size	offset		(Hav)	(ubiii)	(dBd)	(db)	(ubiii)
	1	0	Lowest	Н	21.28	5.01	2.59	23.70
	•		Lowest	V	21.23	5.01	2.59	23.65
QPSK	1	0	Middle	Н	21.15	4.82	2.59	23.38
QI OIX		Ů		V	21.16	4.82	2.59	23.39
	1	0	Highest	Н	21.90	4.45	2.59	23.76
				V	21.86	4.45	2.59	23.72
	1	0	Lowest	Н	21.86	5.01	2.59	24.28
	•			V	21.90	5.01	2.59	24.32
16QAM	1	0	Middle	Н	21.30	4.82	2.59	23.53
IOQAW	'		Mildule	V	21.82	4.82	2.59	24.05
	1	0	Highest	Н	21.64	4.45	2.59	23.50
				V	21.86	4.45	2.59	23.72
			FCC	Limit (di	3m)			34.77





Report No.: TBR-C-202405-0318-6 Page: 35 of 49

	Radiated Power (EIRP) for LTE Band 66 / 1.4M										
Modulation	R	В	Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)			
	Size	offset				(dBd)					
	1	0	Lowest	Н	21.51	5.01	2.59	23.93			
QPSK			Lowest	V	21.33	5.01	2.59	23.75			
	1	0	Middle	Н	21.11	4.82	2.59	23.34			
QFOR				V	21.20	4.82	2.59	23.43			
	1	0	Highest	Н	21.83	4.45	2.59	23.69			
				V	21.60	4.45	2.59	23.46			
	1	0	Lowest	Н	21.55	5.01	2.59	23.97			
	'	0		V	21.62	5.01	2.59	24.04			
16QAM	1	0	Middle	Н	21.53	4.82	2.59	23.76			
IUQAW	ı		Mildule	V	21.96	4.82	2.59	24.19			
	1	0	Highest	Н	21.83	4.45	2.59	23.69			
				V	21.71	4.45	2.59	23.57			
			FCC	Limit (dl	3m)			30			

		R	adiated Po	ower (EIRF) for LTE Ba	and 66 / 3M		
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)
	Size	offset		(110.4)	(ubiii)	(dBd)	(db)	(ubiii)
	1	0	Lowest	Н	21.31	5.01	2.59	23.73
	•		Lowest	V	21.97	5.01	2.59	24.39
QPSK	1	0	Middle	Н	21.14	4.82	2.59	23.37
			ivildate	V	21.96	4.82	2.59	24.19
	1	0	Highest	Н	21.01	4.45	2.59	22.87
				V	21.63	4.45	2.59	23.49
	1	0	Lowest	Н	21.71	5.01	2.59	24.13
				V	22.00	5.01	2.59	24.42
16QAM	1	0	Middle	Н	21.60	4.82	2.59	23.83
IOQAW	'		Mildule	V	21.96	4.82	2.59	24.19
	1	0	Highest	Н	21.82	4.45	2.59	23.68
				V	21.09	4.45	2.59	22.95
			FCC	Limit (di	3m)			30





Report No.: TBR-C-202405-0318-6 Page: 36 of 49

	Radiated Power (EIRP) for LTE Band 66 / 5M										
Modulation	R	В	Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)			
	Size	offset				(dBd)		, ,			
	1	0	Lowest	Н	21.15	5.01	2.59	23.57			
QPSK	'		Lowest	V	21.02	5.01	2.59	23.44			
	1	0	Middle	Н	21.15	4.82	2.59	23.38			
QFSK				V	21.08	4.82	2.59	23.31			
	1	0	Highest	Н	21.09	4.45	2.59	22.95			
				V	21.31	4.45	2.59	23.17			
	1	0	Lowest	Н	21.37	5.01	2.59	23.79			
	'	U		V	21.22	5.01	2.59	23.64			
16QAM	1	0	Middle	Н	21.22	4.82	2.59	23.45			
IOQAIVI			ivildale	V	21.59	4.82	2.59	23.82			
	1	0	Highest	Н	21.79	4.45	2.59	23.65			
				V	21.20	4.45	2.59	23.06			
			FCC	Limit (dl	3m)			30			

	Radiated Power (EIRP) for LTE Band 66 / 10M											
Modulation	RB		Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)				
	Size	offset		(IIQV)	(ubiii)	(dBd)	(db)	(ubiii)				
	1	0	Lowest	Н	21.91	5.01	2.59	24.33				
	•		Lowest	V	21.34	5.01	2.59	23.76				
QPSK	1	0	Middle	Н	21.02	4.82	2.59	23.25				
Qrok		0		V	21.09	4.82	2.59	23.32				
	1	0	Highest	Н	21.83	4.45	2.59	23.69				
				V	21.36	4.45	2.59	23.22				
	1	0	Lowest	Н	21.09	5.01	2.59	23.51				
	•			V	21.36	5.01	2.59	23.78				
16QAM	1	0	Middle	Н	21.18	4.82	2.59	23.41				
TOQAM	•		Middle	V	21.14	4.82	2.59	23.37				
	1	0	Highest	Н	21.22	4.45	2.59	23.08				
				V	21.09	4.45	2.59	22.95				
			FCC	Limit (di	3m)			30				





Report No.: TBR-C-202405-0318-6 Page: 37 of 49

		Ra	adiated Po	wer (EIRP) for LTE Ba	nd 66 / 15M		
Modulation	R	В	Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)
	Size	offset		(1.0.1)	(авііі)	(dBd)	(db)	(ubiii)
	1	0	Lowest	Н	21.75	5.01	2.59	24.17
	'	0	Lowest	V	21.77	5.01	2.59	24.19
QPSK	1	0	Middle	Н	21.64	4.82	2.59	23.87
Qrok	'		Middle	V	21.22	4.82	2.59	23.45
	1	0	Highest	Н	21.01	4.45	2.59	22.87
	'		riigiiest	V	21.71	4.45	2.59	23.57
	1	0	Lowest	Н	21.46	5.01	2.59	23.88
	'	0	Lowest	V	21.54	5.01	2.59	23.96
16QAM	1	0	Middle	Н	21.75	4.82	2.59	23.98
IUQAW			Mildule	V	21.43	4.82	2.59	23.66
	1	0	Highest	Н	21.12	4.45	2.59	22.98
			riigilest	V	21.08	4.45	2.59	22.94
			FCC	Limit (di	3m)			30

		Ra	adiated Po	wer (EIRP) for LTE Ba	nd 66 / 20M		
Modulation	R	В	Channel	Antenna (H&V)	SG Level	Antenna Factor	Cable Loss	EIRP (dBm)
	Size	offset		(Hav)	(ubiii)	(dBd)	(db)	(ubiii)
	1	0	Lowest	Н	21.64	5.01	2.59	24.06
	'		Lowest	V	21.40	5.01	2.59	23.82
QPSK	1	0	Middle	Н	21.08	4.82	2.59	23.31
Qrok	'	0	Middle	V	21.71	4.82	2.59	23.94
	1	0	Highest	Н	21.89	4.45	2.59	23.75
	'	0	riigiiest	V	21.84	4.45	2.59	23.70
	1	0	Lowest	Н	21.80	5.01	2.59	24.22
	'	0	Lowest	V	21.31	5.01	2.59	23.73
16QAM	1	0	Middle	Н	21.65	4.82	2.59	23.88
TOQAM	'		Middle	V	21.10	4.82	2.59	23.33
	1	0	Highest	Н	21.75	4.45	2.59	23.61
			riigiiest	V	21.76	4.45	2.59	23.62
			FCC	Limit (di	3m)			30





Page: 38 of 49

Attachment B--Radiated Out Band of Emissions

Only showed the worst mode test data.

Test mode:	LTE BAND 2 20MHz (RB size 1 & RB offset 0) for QPSK
Channel:	Middle

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	167.8243	-57.54	-11.10	-68.64	-13.00	-55.64	peak	Р
2	223.7334	-58.38	-6.70	-65.08	-13.00	-52.08	peak	Р
3	280.0237	-57.78	-5.21	-62.99	-13.00	-49.99	peak	Р
4	336.0352	-59.64	-4.17	-63.81	-13.00	-50.81	peak	Р
5	400.4319	-60.27	-3.04	-63.31	-13.00	-50.31	peak	Р
6 *	480.5276	-59.43	-1.35	-60.78	-13.00	-47.78	peak	Р

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	12755.500	-61.86	22.41	-39.45	-13.00	-26.45	peak	Р
2 *	14693.500	-61.11	22.88	-38.23	-13.00	-25.23	peak	P





Page: 39 of 49

Vertical

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	51.8430	-69.21	-5.74	-74.95	-13.00	-61.95	peak	Р
2	98.4866	-69.35	-6.80	-76.15	-13.00	-63.15	peak	Р
3	167.8243	-60.57	-8.39	-68.96	-13.00	-55.96	peak	P
4 *	223.7334	-55.97	-8.30	-64.27	-13.00	-51.27	peak	P
5	336.0352	-60.69	-4.22	-64.91	-13.00	-51.91	peak	P
6	601.4265	-66.75	1.40	-65.35	-13.00	-52.35	peak	Р

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	9415.000	-59.92	17.46	-42.46	-13.00	-29.46	peak	Р
2 *	11276.500	-59.92	20.38	-39.54	-13.00	-26.54	peak	Р

Remark: 1, The testing has been conformed to 10*1880MHz=18800MHz.

- 2, All other emissions more than 30 dB below the limit.
- 3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss





Page: 40 of 49

Test mode: LTE BAND 4 20MHz (RB size 1 & RB offset 0) for QPSK

Channel: Middle

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	53.3179	-69.41	-4.95	-74.36	-13.00	-61.36	peak	P
2	167.8243	-56.46	-11.10	-67.56	-13.00	-54.56	peak	P
3	223.7334	-57.97	-6.70	-64.67	-13.00	-51.67	peak	Р
4	280.0237	-57.65	-5.21	-62.86	-13.00	-49.86	peak	P
5	336.0352	-61.11	-4.17	-65.28	-13.00	-52.28	peak	Р
6 *	480.5276	-59.52	-1.35	-60.87	-13.00	-47.87	peak	P

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	10894.000	-64.04	20.45	-43.59	-13.00	-30.59	peak	Р
2 *	12857.500	-63.53	22.93	-40.60	-13.00	-27.60	peak	Р





Page: 41 of 49

Vertical

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	66.7325	-65.85	-9.29	-75.14	-13.00	-62.14	peak	Р
2	167.8242	-60.88	-8.39	-69.27	-13.00	-56.27	peak	Р
3 *	223.7333	-54.98	-8.30	-63.28	-13.00	-50.28	peak	P
4	280.0237	-61.79	-5.23	-67.02	-13.00	-54.02	peak	Р
5	336.0351	-61.60	-4.22	-65.82	-13.00	-52.82	peak	Р
6	601.4265	-65.33	1.40	-63.93	-13.00	-50.93	peak	Р

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	11429.500	-65.40	20.87	-44.53	-13.00	-31.53	peak	Р
2 *	12857.500	-65.01	23.13	-41.88	-13.00	-28.88	peak	Р

Remark: 1, The testing has been conformed to 10*1732.5MHz=17325MHz.

- 2, All other emissions more than 30 dB below the limit.
- 3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss





Report No.: TBR-C-202405-0318-6 Page: 42 of 49

LTE BAND 5 10MHz (RB size 1 & RB offset 0) for QPSK Test mode: Channel: Middle

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	55.4147	-69.19	-5.47	-74.66	-13.00	-61.66	peak	Р
2	167.8242	-53.05	-11.10	-64.15	-13.00	-51.15	peak	Р
3 *	223.7333	-47.98	-6.70	-54.68	-13.00	-41.68	peak	Р
4	280.0237	-51.91	-5.21	-57.12	-13.00	-44.12	peak	Р
5	336.0351	-53.41	-4.17	-57.58	-13.00	-44.58	peak	P
6	480.5276	-62.70	-1.35	-64.05	-13.00	-51.05	peak	Р

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	1688.500	-35.05	-2.09	-37.14	-13.00	-24.14	peak	Р
2 *	2504.500	-35.31	1.21	-34.10	-13.00	-21.10	peak	Р





Page: 43 of 49

Vertical

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	40.1347	-67.07	-6.76	-73.83	-13.00	-60.83	peak	Р
2	167.8242	-60.66	-8.39	-69.05	-13.00	-56.05	peak	Р
3	223.7333	-50.00	-8.30	-58.30	-13.00	-45.30	peak	P
4 *	400.4318	-49.78	-2.47	-52.25	-13.00	-39.25	peak	P
5	480.5276	-55.16	-1.87	-57.03	-13.00	-44.03	peak	Р
6	601.4265	-61.79	1.40	-60.39	-13.00	-47.39	peak	Р

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	1663.000	-35.10	-1.93	-37.03	-13.00	-24.03	peak	P
2 *	2504.500	-32.57	1.44	-31.13	-13.00	-18.13	peak	Р

Remark: 1, The testing has been conformed to 10*836.5MHz=8365MHz.

- 2, All other emissions more than 30 dB below the limit.
- 3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss





Report No.: TBR-C-202405-0318-6 Page: 44 of 49

Test mode:	LTE BAND 12 10MHz (RB size 1 & RB offset 0) for QPSK
Channel:	Middle

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	167.8242	-51.83	-11.10	-62.93	-13.00	-49.93	peak	P
2 *	223.7333	-44.05	-6.70	-50.75	-13.00	-37.75	peak	P
3	252.0627	-53.37	-5.24	-58.61	-13.00	-45.61	peak	P
4	280.0237	-50.28	-5.21	-55.49	-13.00	-42.49	peak	P
5	336.0351	-50.35	-4.17	-54.52	-13.00	-41.52	peak	P
6	480.5276	-57.15	-1.35	-58.50	-13.00	-45.50	peak	P

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1 *	1408.000	-38.82	-2.44	-41.26	-13.00	-28.26	peak	Р
2	2122.000	-47.32	0.78	-46.54	-13.00	-33.54	peak	Р





Page: 45 of 49

Vertical

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	53.6931	-67.75	-5.92	-73.67	-13.00	-60.67	peak	P
2	167.8242	-60.57	-8.39	-68.96	-13.00	-55.96	peak	P
3	223.7333	-49.54	-8.30	-57.84	-13.00	-44.84	peak	Р
4 *	400.4318	-50.08	-2.47	-52.55	-13.00	-39.55	peak	P
5	480.5276	-51.48	-1.87	-53.35	-13.00	-40.35	peak	P
6	938.8326	-64.71	5.23	-59.48	-13.00	-46.48	peak	P

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	1408.000	-37.09	-2.87	-39.96	-13.00	-26.96	peak	P
2 *	2122.000	-39.47	0.65	-38.82	-13.00	-25.82	peak	P

Remark: 1, The testing has been conformed to 10*707.5MHz=7075MHz.

2, All other emissions more than 30 dB below the limit.

3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss





Report No.: TBR-C-202405-0318-6 Page: 46 of 49

LTE BAND 13 10MHz (RB size 1 & RB offset 0) for QPSK Test mode: Channel: Middle

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	43.9658	-67.16	-4.47	-71.63	-13.00	-58.63	peak	Р
2	167.8242	-51.78	-11.10	-62.88	-13.00	-49.88	peak	Р
3 *	223.7333	-44.22	-6.70	-50.92	-13.00	-37.92	peak	Р
4	280.0237	-50.05	-5.21	-55.26	-13.00	-42.26	peak	Р
5	336.0351	-52.02	-4.17	-56.19	-13.00	-43.19	peak	Р
6	480.5276	-54.96	-1.35	-56.31	-13.00	-43.31	peak	P

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	1561.000	-31.92	-3.20	-35.12	-13.00	-22.12	peak	Р
2 *	2351.500	-30.54	0.25	-30.29	-13.00	-17.29	peak	Р





Page: 47 of 49

Vertical

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	50.9420	-66.76	-5.64	-72.40	-13.00	-59.40	peak	Р
2	167.8243	-60.16	-8.39	-68.55	-13.00	-55.55	peak	Р
3	223.7334	-49.60	-8.30	-57.90	-13.00	-44.90	peak	Р
4 *	400.4319	-49.84	-2.47	-52.31	-13.00	-39.31	peak	Р
5	480.5276	-57.26	-1.87	-59.13	-13.00	-46.13	peak	Р
6	601.4265	-60.09	1.40	-58.69	-13.00	-45.69	peak	Р
								1

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	10945.000	-61.71	19.83	-41.88	-13.00	-28.88	peak	P
2 *	13520.500	-61.93	22.87	-39.06	-13.00	-26.06	peak	P

Remark: 1, The testing has been conformed to 10*782MHz=7820MHz.

- 2, All other emissions more than 30 dB below the limit.
- 3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss





Report No.: TBR-C-202405-0318-6 Page: 48 of 49

LTE BAND 66 20MHz (RB size 1 & RB offset 0) for QPSK Test mode: Channel: Middle

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	58.2030	-67.62	-6.14	-73.76	-13.00	-60.76	peak	P
2	167.8243	-56.03	-11.10	-67.13	-13.00	-54.13	peak	Р
3	223.7334	-62.20	-6.70	-68.90	-13.00	-55.90	peak	Р
4	280.0237	-58.27	-5.21	-63.48	-13.00	-50.48	peak	P
5	336.0352	-60.94	-4.17	-65.11	-13.00	-52.11	peak	Р
6 *	480.5276	-60.63	-1.35	-61.98	-13.00	-48.98	peak	P

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	12220.000	-65.32	21.82	-43.50	-13.00	-30.50	peak	Р
2 *	13699.000	-63.93	22.77	-41.16	-13.00	-28.16	peak	Р





Page: 49 of 49

Vertical

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	60.4919	-66.92	-6.77	-73.69	-13.00	-60.69	peak	Р
2	167.8243	-61.13	-8.39	-69.52	-13.00	-56.52	peak	Р
3	223.7334	-49.29	-8.30	-57.59	-13.00	-44.59	peak	Р
4	336.0352	-57.88	-4.22	-62.10	-13.00	-49.10	peak	Р
5 *	480.5276	-54.86	-1.87	-56.73	-13.00	-43.73	peak	P
6	601.4265	-59.88	1.40	-58.48	-13.00	-45.48	peak	Р

No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector	P/F
1	11455.000	-65.28	20.65	-44.63	-13.00	-31.63	peak	Р
2 *	13928.500	-62.84	22.03	-40.81	-13.00	-27.81	peak	Р

Remark: 1, The testing has been conformed to 10*1745MHz=17450MHz.

- 2, All other emissions more than 30 dB below the limit.
- 3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss

----END OF THE REPORT-----

