

RF Test Report

FCC ID: 2AYYO-G200CUS

Test Report No.....: RF260128007-01-001

Product(s) Name.....: LoRaWan Gateway

Model(s).....: G200C-HU915

Trade Mark.....: EasyLinkin

Applicant.....: SHENZHEN EASYLINKIN TECHNOLOGY CO., LTD

Address.....: 705, zhongdian Difu Building, Zhenghua Road, Huaqiang North
Street, Futian District, Shenzhen, China

Receipt Date.....: 2026.01.15

Test Date.....: 2026.01.16 ~ 2026.02.06

Issued Date.....: 2026.02.10

Standards.....: 47 CFR FCC Part 90 Subpart R
47 CFR FCC Part 2
ANSI C63.26-2015
ANSI/TIA/EIA-603-E-2016
FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

Prepared By:	Checked By:	Approved By:	
Jason Huang	Black Ding	Tim Zhang	
<i>Jason Huang</i>	<i>Black Ding</i>	<i>Tim Zhang</i>	

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REPORT ISSUED HISTORY

Original Report Issue Date: 2026.02.10

☒ No additional attachment

☐ Additional attachments were issued following record

Attachment No.	Issue Date	Description

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part 90 Subpart R & Part 2			
Standard(s) Section	Test Item	Judgment	Remark
2.1046 & 90.635 (b)	Effective Radiated Power	PASS	-----
90.209	Occupied Bandwidth	PASS	Note(2)
2.1051 & 90.691	Conducted Spurious Emissions	PASS	Note(2)
2.1053 & 90.691	Radiated Spurious Emissions	PASS	-----
2.1051 & 90.691	Band Edge	PASS	Note(2)
2.1055 & 90.213	Frequency Stability	PASS	Note(2)

Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) For test item: Occupied Bandwidth, Conducted Spurious Emissions, Band Edge and Frequency Stability, Please refer to module report R1806A0301-R4V1(FCC ID: XMR201808EC25AF)

1.1 TEST FACILITY

Company:	Shenzhen Haiyun Standard Technical Co., Ltd.
Address:	No. 110, 111, 112, 113, 115, 116, Block B, Jinyuan business Building, No. 302, Xixiang Avenue, Laodong Community, Xixiang Street, Bao'an District, Shenzhen P.R.C.
CNAS Registration Number:	CNAS L18252
CAB identifier:	CN0145
Company Number	30427
A2LA Certificate Number:	6823.01

1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Uncertainty	
Parameter	Uncertainty
Conducted emission(9kHz~30MHz) AC main	±2.68dB
Radiated emission(9kHz~30MHz)	±3.50dB
Radiated emission (30MHz~1GHz)	±4.20dB
Radiated emission (1GHz~18GHz)	±5.10dB
Radiated emission (18GHz~40GHz)	±5.26dB
Frequency error uncertainty	±80.66Hz
Uncertainty in power testing	±0.64dB
Phase uncertainty of transmitter	±0.35°
Uncertainty of power time relationship (-7dB~+1dB)	±0.58dB
Uncertainty of power time relationship (-20dB~-7dB)	±1.2dB
Uncertainty of power time relationship (-32dB~-20dB)	±2.3dB
Uncertainty of power time relationship (-50dB~-32dB)	±3.2dB
Uncertainty of power time relationship (-60dB~-50dB)	±3.5dB
Sensitivity	±1.24%
The transmitter conducts stray signals with uncertainty	±1.464dB

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
Conducted Output Power & ERP	22.3°C	49%	DC 12V	Lemon He
Radiated Spurious Emissions (9 kHz to 30 MHz)	22.5°C	52%	AC 120V/60Hz	Keith Huang
Radiated Spurious Emissions (30 MHz to 1000 MHz)	22.5°C	52%	AC 120V/60Hz	Keith Huang
Radiated Spurious Emissions (Above 1000 MHz)	22.5°C	52%	AC 120V/60Hz	Keith Huang

Note: Adapter supply voltage AC 120V/60Hz.

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Sample No.	POC260128007-S001	
Product Name	LoRaWan Gateway	
Trade Mark	EasyLinkin	
Test Model	G200C-HU915	
Power Source	DC 12V from adapter.	
Adapter1 information	Model name: PS120W1000U Input: 100-240V~, 50-60Hz, 0.5A Max Output: 12.0V==1.0A, 12.0W	
Adapter2 information	Model name: A938-120100W-US1 Input: 100-240V~, 50-60Hz, 0.35A Max Output: 12.0V==1.0A	
Modulation Type	QPSK,16QAM	
Operation Band	Band 14	
Frequency Range	LTE Band 14	Tx: 788MHz-798MHz Rx: 758MHz-768MHz
Channel Bandwidth	LTE Band 14	5MHz, 10MHz
Antenna Type	External Antenna	
Antenna Gain	LTE Band 14	-1.01dBi

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2.2 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Support Equipment				
No.	Equipment	Manufacturer	Model Name	Remarks
1	SIM Card	/	LTE 4G Card	/

3. TEST RESULT

3.1 CONDUCTED OUTPUT POWER MEASUREMENT

3.1.1 LIMIT

Mobile / Portable station are limited to 100 watts e.r.p.

3.1.2 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 5.0.

ERP:

$EIRP = \text{Output Power} + \text{Antenan gain}$

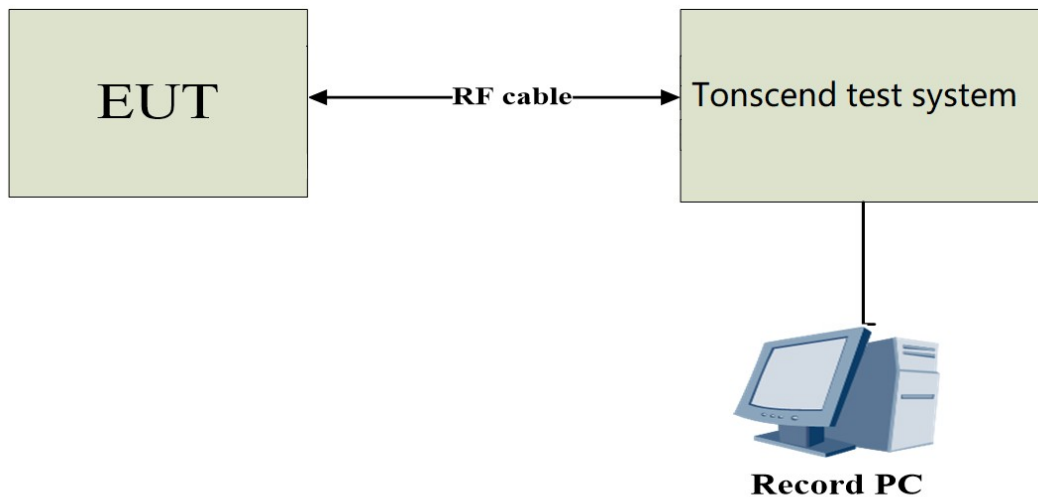
$ERP = EIPR - 2.15\text{dBi}$.

Conducted Output Power:

The EUT was set up for the maximum power with GSM, GPRS, EDGE, WCDMA, CDMA, and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

3.1.3 TESTSETUP LAYOUT

Output Power Measurement



3.1.4 TEST DEVIATION

No deviation.

3.1.5 TEST RESULTS

Please refer to the APPENDIX A.

3.2 RADIATED SPURIOUS EMISSIONS MEASUREMENT

3.2.1 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 $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

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 $60 + 10 \log(P)$ dB. The emission limit equal to -40dBm.

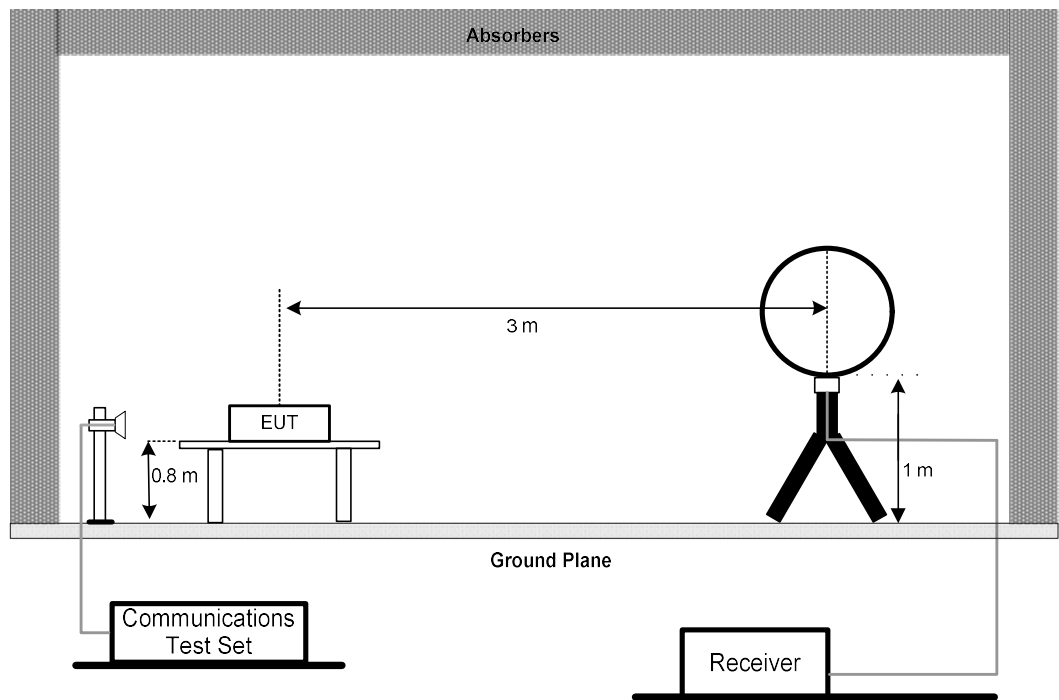
3.2.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 5.8.

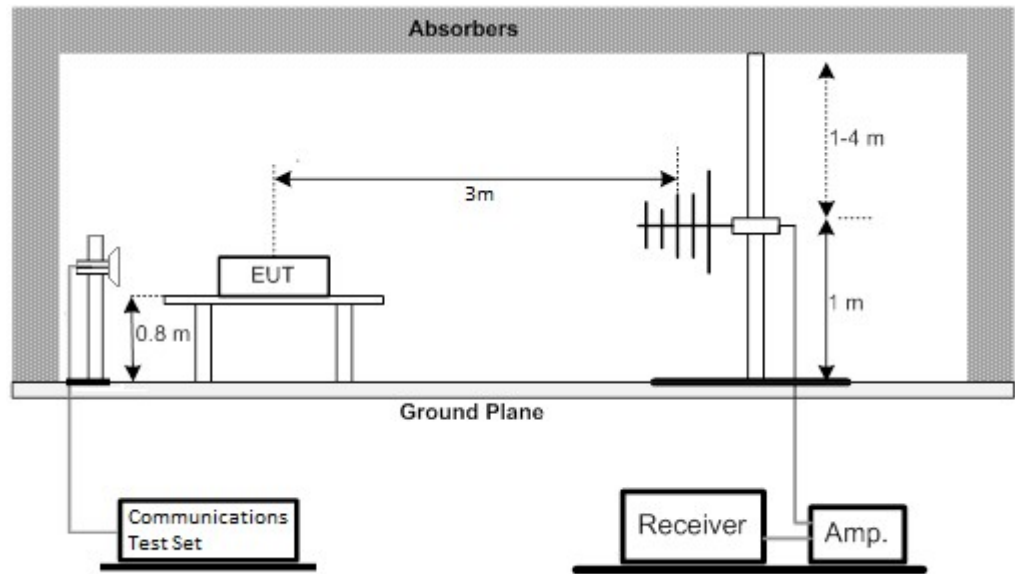
1. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
2. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value " of step a. Record the power level of S.G
3. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}.$
4. ERP can be calculated form EIRP by subtracting the gain of dipole, $ERP = EIPR - 2.15\text{dBi}.$
5. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

3.2.3 TEST SETUP LAYOUT

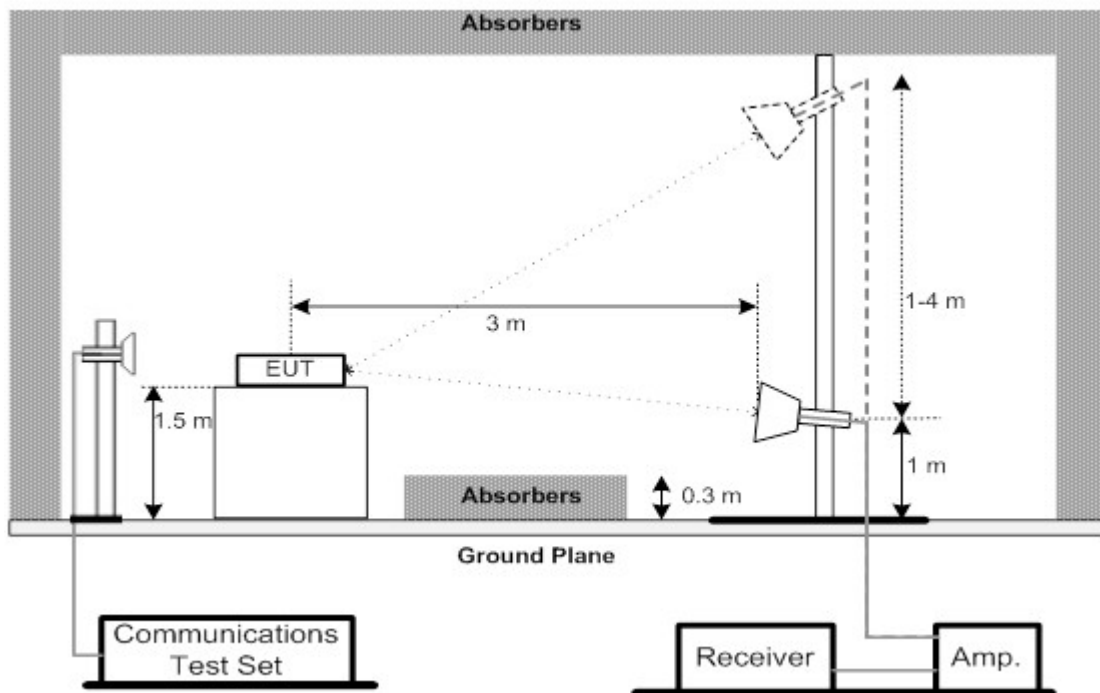
Below 30MHz



30MHz to 1000MHz



Above 1GHz



3.2.4 TESTDEVIATION

No deviation.

3.2.5 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the APPENDIX B.

3.2.6 TEST RESULTS (30MHZ TO 1000MHZ)

Please refer to the APPENDIX C.

3.2.7 TEST RESULTS (ABOVE 1000MHZ)

Please refer to the APPENDIX D.

4. LIST OF MEASUREMENT EQUIPMENTS

No.	Name of Equipment	Manufacturer	Model Number	Serial Number	Inventory No.	Last Calibration	Due Calibration
Radiated Emission							
1	Test receiver	Rohde&Schwarz	ESU	100184	JLE011	2025/3/1	2026/2/28
2	Log periodic antenna	Schwarzbeck	VULB 9168	1151	JLE012	2025/4/12	2026/4/11
3	Low frequency amplifier	/	LNA 0920N	2014	JLE023	2025/3/1	2026/2/28
4	High frequency amplifier	Schwarzbeck	BBV 9718	9718-284	JLE024	2025/3/1	2026/2/28
5	Horn Antenna	SCHWARZBECK	BBHA 9120 D	02670	JLE028	2025/4/12	2026/4/11
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE021	2025/4/15	2026/4/14
7	Horn Antenna	SCHWARZBECK	BBHA 9170	9170#685	JLE029	2024/7/15	2027/7/14
8	Loop Antenna	SCHWARZBECK	FMZB1519B	00029	JLE030	2024/7/15	2027/7/14
9	Broadband preamplifier	Schwarzbeck	BBV9721	9721-019	JLE025	2025/3/1	2026/2/28
10	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				
Conducted Emission							
1	LISN	Rohde&Schwarz	ENV216	100075	JLE002	2025/3/1	2026/2/28
2	ISN	Schwarzbeck	CATE 5 8158	#171	JLE003	2025/2/21	2026/2/20
3	ISN	Schwarzbeck	CAT 3 8158	00187	JLE032	2025/2/21	2026/2/20
4	Test receiver	Rohde&Schwarz	ESCI	100718	JLE010	2025/3/1	2026/2/28
5	Pulse limiter	Rohde&Schwarz	ESH3-Z2	102299	JLE047	2025/3/1	2026/2/28
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE020	2025/4/15	2026/4/14
7	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				
RF Conducted Emissions							
1	MXA Signal Analyzer	Keysight	N9021B	MY60080169	JLE050	2025/3/1	2026/2/28
2	MXA Signal Analyzer	Keysight	N9010A	MY51440158	JLE087	2025/9/15	2026/9/14
3	RF Control Unit	dsusoft	JS0806-2	21G8060449	JLE053	2025/3/1	2026/2/28
4	power supply unit	dsusoft	JS0806-4ADC	N/A	JLE055	2025/3/1	2026/2/28
5	VXG Signal Generator	Keysight	N5182B	MY59100855	JLE068	2025/4/15	2026/4/14
6	VXG Signal Generator	Keysight	M9384B	MY61270787	JLE051	2025/6/10	2026/6/9
7	EXG Analog Signal Generator	Keysight	N5173B	MY59101282	JLE052	2025/3/1	2026/2/28
8	Wideband Radio Communication Tester	Rohde&Schwarz	CMW500	1201.0002K5 0-116064-Dt	JLE054	2025/3/1	2026/2/28
9	Test software	dsusoft	JS1120-3 Ver.3.3.10				

APPENDIX A - CONDUCTED OUTPUT POWER

Conducted Output Power (dBm)

LTE Band 14				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				23305/790.5	23330/793	23355/795.5
5MHz	QPSK	1	0	23.81	23.59	23.59
		1	13	23.64	23.84	23.75
		1	24	23.68	23.88	23.90
		12	0	22.83	22.83	22.75
		12	6	22.77	22.80	22.71
		12	13	22.82	22.85	22.77
		25	0	22.89	22.76	22.73
	16QAM	1	0	22.50	22.47	22.42
		1	13	22.38	22.61	22.54
		1	24	22.21	22.57	22.22
		12	0	21.65	21.68	21.74
		12	6	21.84	21.59	21.85
		12	13	21.67	21.50	21.65
		25	0	21.77	21.73	21.69
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)		
				/	23330/793	/
10MHz	QPSK	1	0	/	23.73	/
		1	25	/	23.85	/
		1	49	/	23.53	/
		25	0	/	22.84	/
		25	13	/	22.78	/
		25	25	/	22.82	/
		50	0	/	22.83	/
	16QAM	1	0	/	22.70	/
		1	25	/	23.38	/
		1	49	/	22.85	/
		25	0	/	21.64	/
		25	13	/	21.80	/
		25	25	/	21.76	/
		50	0	/	21.77	/

LTE Band 14						
BW [MHz]	Modulation	RB Size	RB Offset	ERP(dBm)	ERP(dBm)	ERP(dBm)
Channel				23305	23330	23355
Frequency (MHz)				790.5	793	795.5
5	QPSK	1	0	20.65	20.43	20.43
5	QPSK	1	12	20.48	20.68	20.59
5	QPSK	1	24	20.52	20.72	20.74
5	QPSK	12	0	19.67	19.67	19.59
5	QPSK	12	7	19.61	19.64	19.55
5	QPSK	12	13	19.66	19.69	19.61
5	QPSK	25	0	19.73	19.6	19.57
5	16QAM	1	0	19.34	19.31	19.26
5	16QAM	1	12	19.22	19.45	19.38
5	16QAM	1	24	19.05	19.41	19.06
5	16QAM	12	0	18.49	18.52	18.58
5	16QAM	12	7	18.68	18.43	18.69
5	16QAM	12	13	18.51	18.34	18.49
5	16QAM	25	0	18.61	18.57	18.53
Channel				/	23330	/
Frequency (MHz)				/	793	/
10	QPSK	1	0	/	19.96	/
10	QPSK	1	25	/	19.96	/
10	QPSK	1	49	/	19.85	/
10	QPSK	25	0	/	19.15	/
10	QPSK	25	12	/	18.88	/
10	QPSK	25	25	/	18.77	/
10	QPSK	50	0	/	18.83	/
10	16QAM	1	0	/	19.05	/
10	16QAM	1	25	/	19.09	/
10	16QAM	1	49	/	18.92	/
10	16QAM	25	0	/	17.88	/
10	16QAM	25	12	/	17.83	/
10	16QAM	25	25	/	17.72	/
10	16QAM	50	0	/	17.95	/

APPENDIX B - RADIATED SPURIOUS EMISSIONS (9KHZ TO 30MHZ)

Radiated emission: 9KHz-30MHz

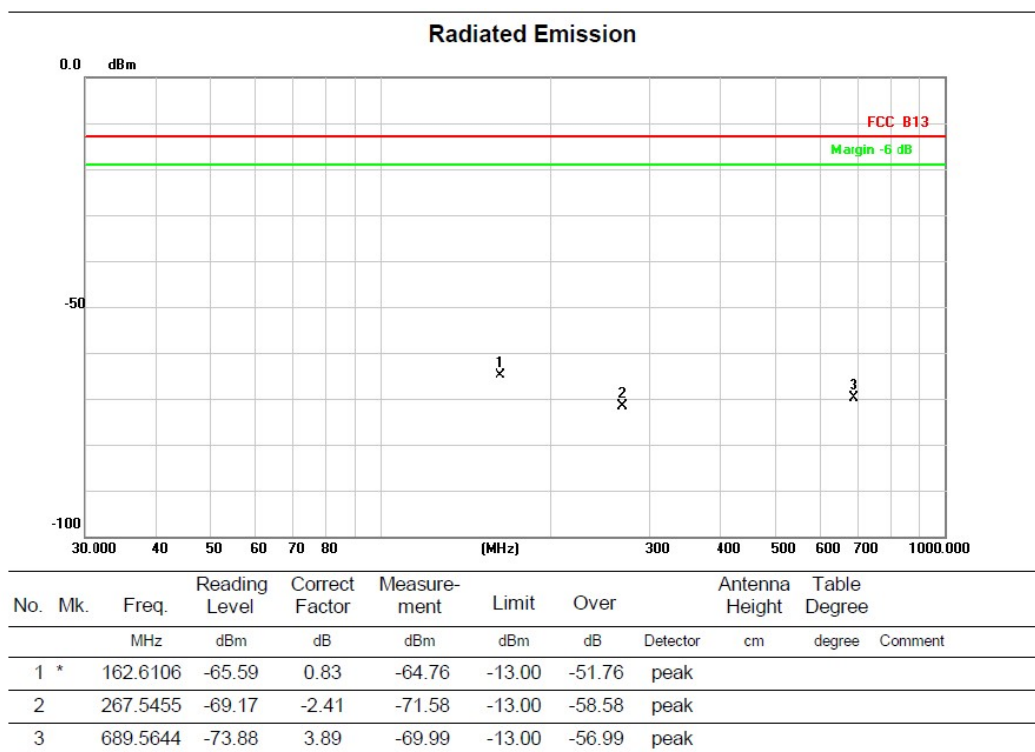
The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

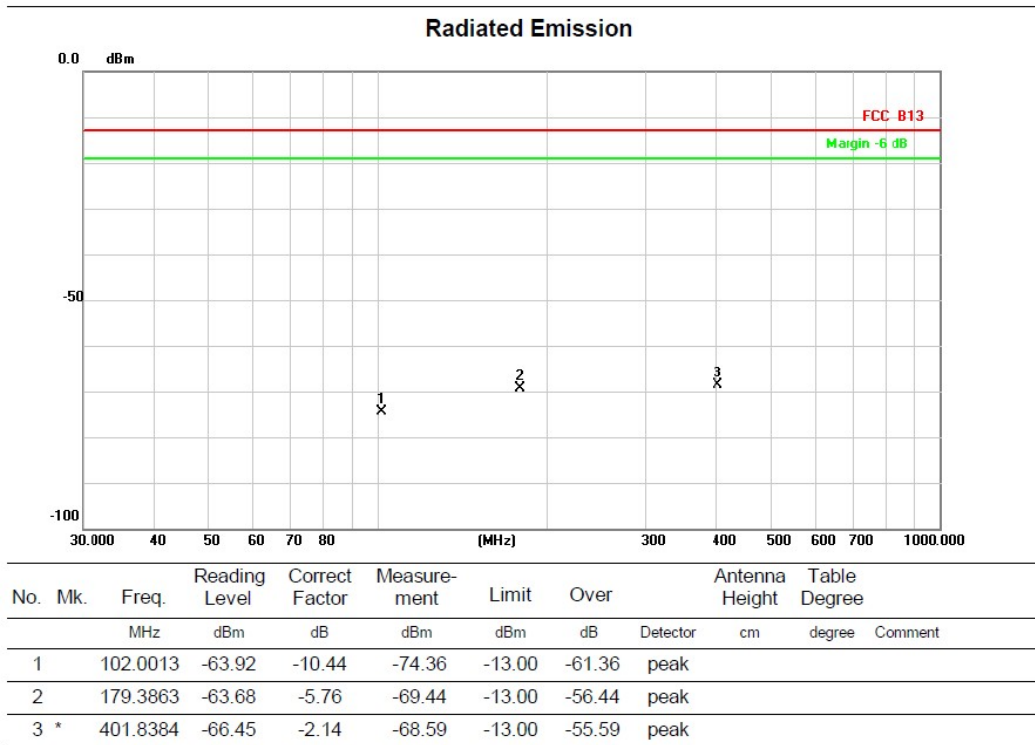
APPENDIX C - RADIATED SPURIOUS EMISSIONS (30MHZ TO 1000MHZ)

For adapter1

Test Mode	LTE Band 14_TX 793MHz	Polarization	Vertical
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Test Mode	LTE Band 14_TX 793MHz	Polarization	Horizontal
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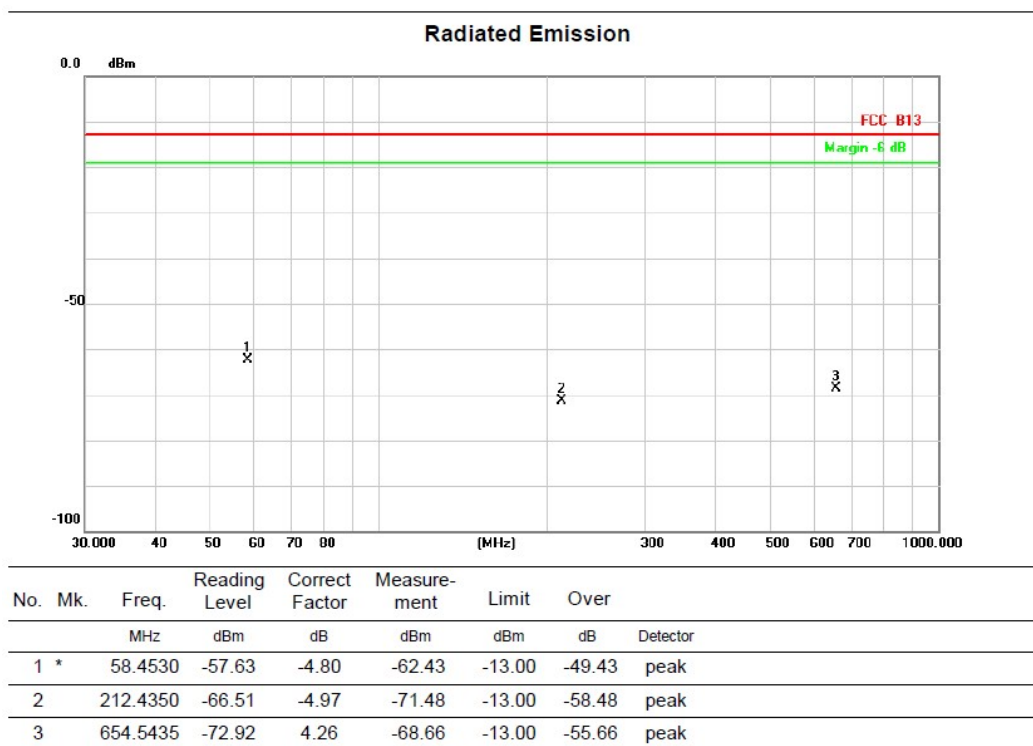
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

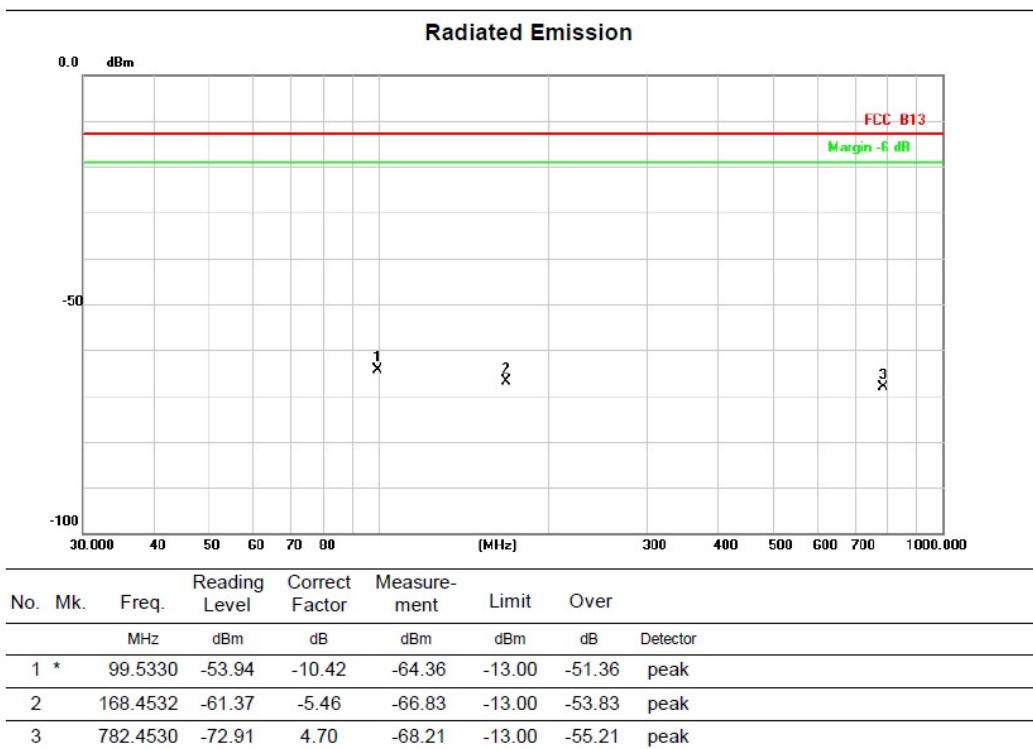
(2) Margin Level = Measurement Value - Limit Value.

For adapter2

Test Mode	LTE Band 14_TX 793MHz	Polarization	Vertical
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Test Mode	LTE Band 14_TX 793MHz	Polarization	Horizontal
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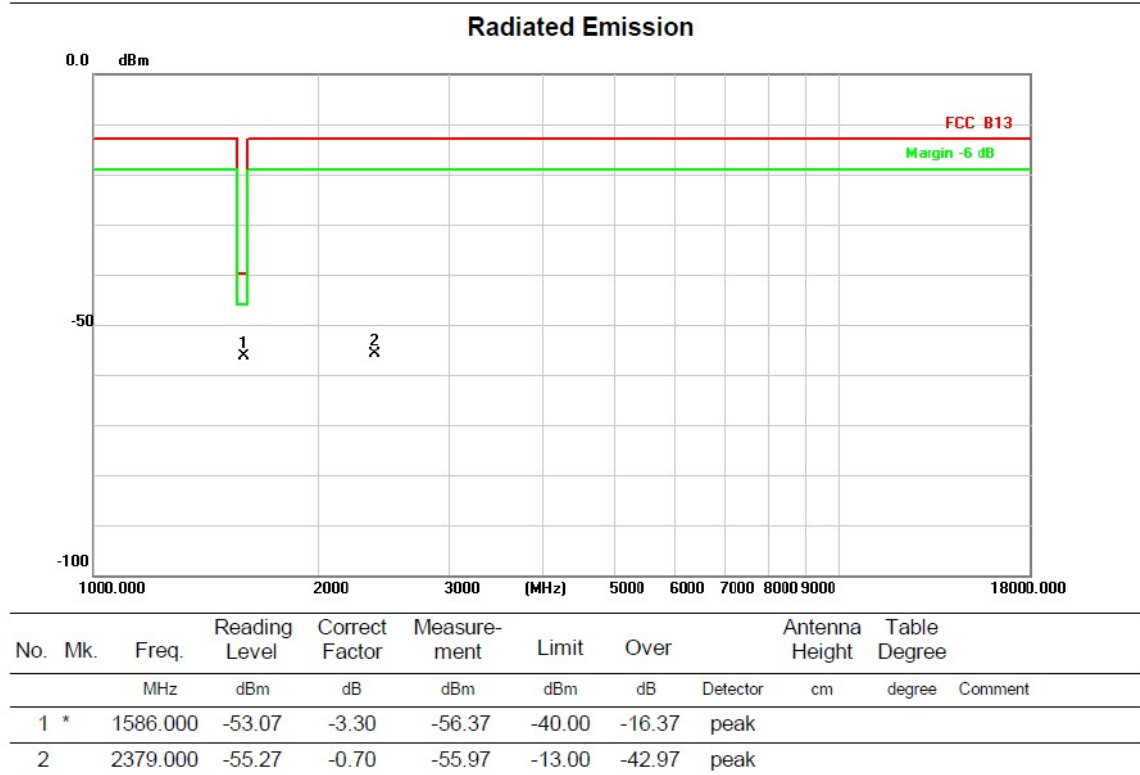


REMARKS:

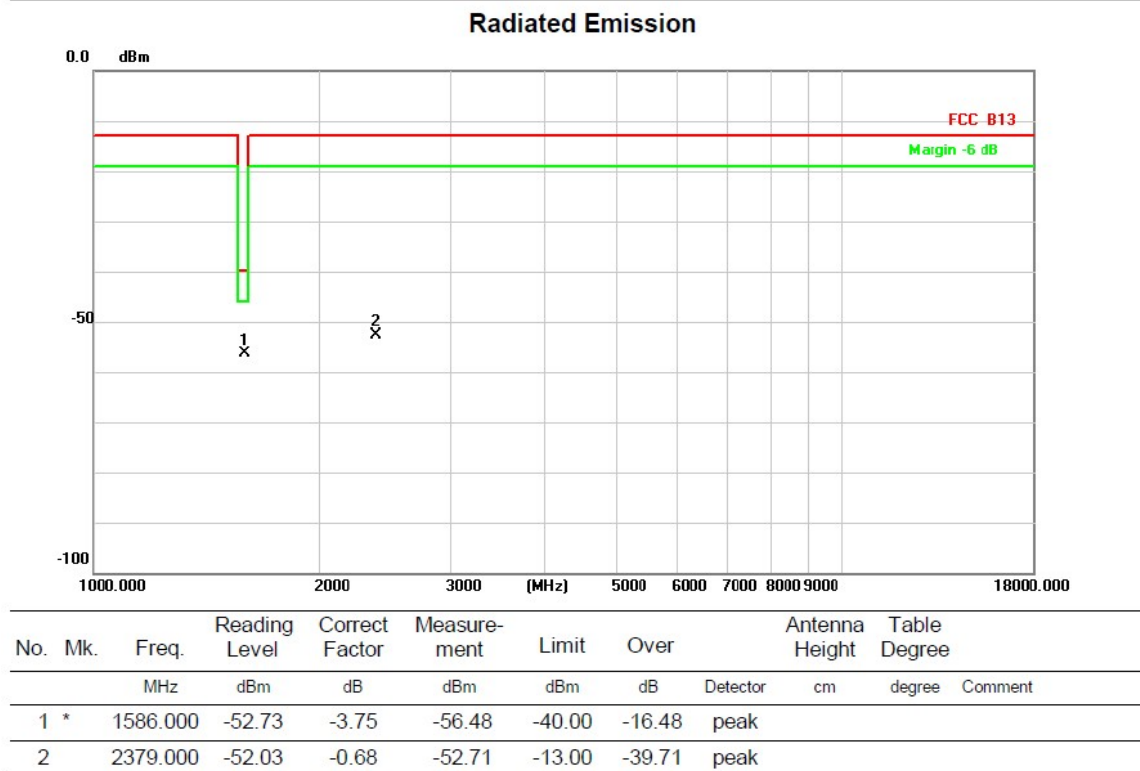
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED SPURIOUS EMISSIONS (ABOVE 1000MHZ)

Test Mode	LTE Band 14_TX 793MHz	Polarization	Vertical
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Test Mode	LTE Band 14_TX 793MHz	Polarization	Horizontal
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REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technical Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

Shenzhen Haiyun Standard Technical Co., Ltd.

Address: Room 110, 111, 112, 113, 115, 116, Block B, Jinyuan Business Building, No. 302, Xixiang Avenue, Labor Community, Xixiang Street, Baoan District, Shenzhen, China

End of Test Report