RF TEST REPORT

Report No.: SET2020-08590

Product: LTE Outdoor CPE

FCC ID: 2AG32EG7010CM11N

Model No. : EG7010C-M11

Applicant: Baicells Technologies Co., Ltd.

Address: 9-10F,1stBldg.,No.81BeiqingRoad,Haidian District,Beijing,China

Dates of Testing: 10/09/2019 —08/21/2020

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.

Tel：86 755 26627338 **Fax**：86 755 26627238

Test Report

Product……:	LTE Outdoor CPE
Brand Name……:	Baicells
Trade Name……:	Baicells
Applicant……:	Baicells Technologies Co., Ltd.
Applicant Address……:	9-10F,1stBldg.,No.81BeiqingRoad,Haidian District,Beijing,China
Manufacturer……:	Baicells Technologies Co., Ltd.
Manufacturer Address…:	9-10F,1stBldg.,No.81BeiqingRoad,Haidian District,Beijing,China
Test Standards……:	47 CFR FCC Part 2/96
Test Result……:	PASS

Tested by……: Vincent 2020.08.24

Vincent，Test Engineer

Reviewed by……: Chris You 2020.08.24

Chris You, Senior Engineer

Approved by……: ShuangwenZhang 2020.08.24

ShuangwenZhang，Manager

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Change History		
Issue	Date	Reason for change
1.0	2020.08.24	First edition

1. GENERAL INFORMATION

1.1 EUT Description

EUT Type	LTE Outdoor CPE
EUT supports Radios application	LTE Band 48
Frequency Range	LTE Band 48: 3550MHz-3700MHz
Support Channel Bandwidth	5MHz, 10MHz, 15MHz, 20MHz
Maximum Output Power to Antenna	25.05dBm
Type of Modulation	QPSK, 16QAM, 64QAM
Antenna Type	Internal Antenna
Antenna Gain	14dBi
Category of CBSD	Category B
Note: this report RF conduct Part test data refer to original FCC ID: 2AG32EG7010CM11, Device only change the ANT Gain to 14dBi.	

1.2 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

System	Type of Modulation	Emission Designator	Frequency Tolerance (ppm)	Maximum EIRP(W)
LTE Band48 5MHz Bandwidth	QPSK	4M49G7D	0.0112	5.200
	16QAM	4M49W7D	0.0112	4.864
LTE Band48 10MHz Bandwidth	QPSK	8M93G7D	0.0192	5.495
	16QAM	8M92W7D	0.0192	4.656
LTE Band48 15MHz Bandwidth	QPSK	13M4G7D	0.0287	6.353
	16QAM	13M4W7D	0.0287	6.607
LTE Band48 20MHz Bandwidth	QPSK	17M9G7D	0.0145	8.035
	16QAM	17M9W7D	0.0145	7.178

1.3 Test Standards and Results

1. 47 CFR Part 2, 96
2. ANSI C63.26: 2015
3. KDB 971168 D01 Power Meas License Digital Systems v03r01
4. KDB 662911 D01 Multiple Transmitter Output v02r01
5. KDB 940660 D01 Part 96 CBRS Equipment v01
6. ANSI/TIA/EIA-603-E 2016
7. KDB 484596 D01 Referencing Test Data v01

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.
3. The device is based on the original FCC ID: 2AG32EG7010CM11, only increase the antenna gain value.

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Result	Remarks
	FCC			
1	2.1046 96.41(b)	Max EIRP and maximum Spectral density	Pass	Meet the requirement of Limit
2	96.41(g)	Peak to Average Radio	Pass*	Meet the requirement of Limit
3	2.1049	Emission Bandwidth	Pass*	Meet the requirement of Limit
4	2.1055	Frequency Stability	Pass*	Meet the requirement of Limit
5	2.1051 96.41(e)	Conducted Out of Band Emissions	Pass*	Meet the requirement of Limit
6	96.41(e)	Emission Mask	Pass*	Meet the requirement of Limit
7	2.1051 96.41(e)	Radiated Spurious Emission	Pass**	Meet the requirement of Limit

Pass*: The device (FCC ID: 2AG32EG7010CM11N) is based on the original device (FCC ID: 2AG32EG7010CM11) to change the antenna gain, according to KDB484596 D01 Referencing Test Data v01, the data of these test programs can be reference, including

99% OBW and -26dB Bandwidth, Peak to Average Radio, Conducted Out of Band Emissions, Emission Mask and Frequency stability from the original report WTS19S10068893W001 V1

Pass**: The spot–check test data is in compliance with the requirements.

1.4 Test Configuration of Equipment under Test

Antenna port conducted and radiated test items were performed according to ANSI C63.26:2015, with maximum output power.

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

Test Items	Band	Bandwidth(MHz)						Modulation		RB#			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
EIRP	48			√	√	√	√	√	√			√	√	√	√
PSD	48			√	√	√	√	√	√			√	√	√	√
Peak to Average Ratio	48			√	√	√	√	√				√	√	√	√
Occupied Bandwidth	48			√	√	√	√	√	√			√	√	√	√
Frequency Stability	48			√	√	√	√	√				√		√	
Conducted Emission	48			√	√	√	√	√				√	√	√	√
Radiated Emission	48	Worst case											√	√	√
Note	1. The mark “√” means that this configuration is chosen for testing. 2. 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. 3.All supported modulation types were evaluated. The worst case of QPSK was selected. Therefore, the Frequency Stability, Peak to Average Ration, Conducted Emission and Radiated Emission were presented under QPSK mode only.														

1.5 Channel list

5MHz		10MHz	
Channel	Frequency	Channel	Frequency
Low	3552.5	Low	3555
Middle	3625	Middle	3625
High	3697.5	High	3695

15MHz		20MHz	
Channel	Frequency	Channel	Frequency
Low	3557.5	Low	3560
Middle	3625	Middle	3625
High	3692.5	High	3690

1.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss, duty cycle correction and attenuator factor.

1.7 Facilities and Accreditations

1.7.1 Test Facilities

NVLAP Lab Code: 201008-0

CCIC-SET is a third party testing organization accredited by NVLAP according to ISO/IEC 17025. The accreditation certificate number is 201008-0.

FCC- Designation Number: CN5031

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN5031, valid time is until December 31, 2020.

ISED Registration: 11185A-1

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until Dec. 31, 2020

1.7.2 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15℃- 35℃
Relative Humidity (%):	30% -60%
Atmospheric Pressure (kPa):	86KPa-106KPa

2. 47 CFR PART 2, PART 96 REQUIREMENTS

2.1 Max EIRP and maximum spectral density

2.1.1 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.1.2 Limit of Max EIRP and maximum spectral density

Device	EIRP (dBm/10MHz)	PSD (dBm/MHz)
☐End User Device	23	N/A
☐Category A CBSD	30	20
☒Category B CBSD	47	37

2.1.3 Test Procedures

For Maximum EIRP

1. Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
2. Set span to 2 × to 3 × the OBW.
3. Set RBW = 1% to 5% of the OBW.
4. Set VBW ≥ 3 × RBW.
5. Set number of measurement points in sweep ≥ 2 × span / RBW.
6. Sweep time:
   1) Set = auto-couple, or
   2) Set ≥ [10 × (number of points in sweep) × (transmission symbol period)] for single sweep (automation-compatible) measurement.
7. Detector = power averaging (rms).
8. Set sweep trigger to “free run.”
9. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.
10. Compute power by integrating the spectrum across the OBW(10MHz) of the signal using the instrument’s band or channel power measurement function with band/channel limits set equal to the OBW(10MHz) band edges.
11. Add 10 log (1/duty cycle) to the measured power level to compute the average power during continuous transmission.

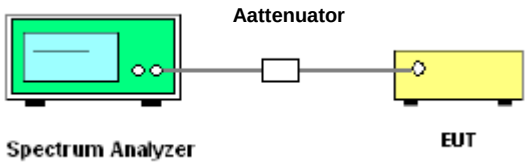
12. EIRP = PMeas + GT.

P_{Meas} measured transmitter output power or PSD.
G_T gain of the transmitting antenna.

For Maximum PSD

The PSD is measured following the same procedures described for measuring the maximum EIRP but with the RBW set to the reference bandwidth specified(eg.1MHz) by the applicable regulatory requirement, and by using the marker function to identify the maximum PSD instead of summing the power across the OBW.

2.1.4 Test Setup



2.1.5 Test Results

Remark: Refer to the original FCC ID: 2AG32EG7010CM11

EIRP:

Transmit Output power								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 Output power (dBm/10MHz)**	**Chain 1 Output power (dBm/10MHz)**	**Total Power (dBm/10MHz)**	**Antenna Gain (dBi)**	**EIRP (dBm/10MHz)**	**EIRP LIMIT (dBm/10MHz)**
5MHz	QPSK	Low	17.73	17.60	20.68	14	34.68	47
		Middle	20.29	19.30	22.83	14	36.83	
		High	20.17	20.12	23.16	14	37.16	
	16QAM	Low	17.55	17.54	20.56	14	34.56	
		Middle	19.59	19.04	22.33	14	36.33	
		High	20.03	19.68	22.87	14	36.87	
Transmit Output power								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 Output power (dBm/10MHz)**	**Chain 1 Output power (dBm/10MHz)**	**Total Power (dBm/10MHz)**	**Antenna Gain (dBi)**	**EIRP (dBm/10MHz)**	**EIRP LIMIT (dBm/10MHz)**
10MHz	QPSK	Low	17.98	17.67	20.84	14	34.84	47
		Middle	19.68	19.92	22.81	14	36.81	
		High	20.68	20.08	23.40	14	37.40	
	16QAM	Low	17.34	17.38	20.37	14	34.37	
		Middle	19.29	19.31	22.31	14	36.31	
		High	19.62	19.71	22.68	14	36.68	
Transmit Output power								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 Output power (dBm/10MHz)**	**Chain 1 Output power (dBm/10MHz)**	**Total Power (dBm/10MHz)**	**Antenna Gain (dBi)**	**EIRP (dBm/10MHz)**	**EIRP LIMIT (dBm/10MHz)**
15MHz	QPSK	Low	17.63	17.08	20.37	14	34.37	47
		Middle	19.23	19.86	22.57	14	36.57	
		High	20.04	20.09	23.08	14	37.08	
	16QAM	Low	17.17	17.39	20.29	14	34.29	
		Middle	19.61	19.53	22.58	14	36.58	
		High	19.99	20.02	23.02	14	37.02	

Full Transmit Output power								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 Output power (dBm/15MHz)**	**Chain 1 Output power (dBm/15MHz)**	**Total Power (dBm/15MHz)**	**Antenna Gain (dBi)**	**EIRP (dBm/15MHz)**	**EIRP LIMIT (dBm/10MHz)**
15MHz	QPSK	Low	18.51	18.28	21.41	14	35.41	-
		Middle	20.14	20.83	23.51	14	37.51	
		High	20.98	21.05	24.03	14	38.03	
	16QAM	Low	18.31	18.44	21.39	14	35.39	
		Middle	20.75	20.73	23.75	14	37.75	
		High	21.13	21.25	24.20	14	38.20	

Transmit Output power								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 Output power (dBm/10MHz)**	**Chain 1 Output power (dBm/10MHz)**	**Total Power (dBm/10MHz)**	**Antenna Gain (dBi)**	**EIRP (dBm/10MHz)**	**EIRP LIMIT (dBm/20MHz)**
20MHz	QPSK	Low	17.75	17.54	20.66	14	34.66	47
		Middle	19.48	19.34	22.42	14	36.42	
		High	20.08	19.65	22.88	14	36.88	
	16QAM	Low	17.16	17.05	20.12	14	34.12	
		Middle	19.14	19.08	22.12	14	36.12	
		High	19.74	19.56	22.66	14	36.66	

Full Transmit Output power								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 Output power (dBm/20MHz)**	**Chain 1 Output power (dBm/20MHz)**	**Total Power (dBm/20MHz)**	**Antenna Gain (dBi)**	**EIRP (dBm/20MHz)**	**EIRP LIMIT (dBm/20MHz)**
20MHz	QPSK	Low	19.81	19.52	22.68	14	36.68	-
		Middle	21.45	21.27	24.37	14	38.37	
		High	22.12	21.95	25.05	14	39.05	
	16QAM	Low	19.28	19.18	22.24	14	36.24	
		Middle	21.06	21.13	24.11	14	38.11	
		High	21.58	21.52	24.56	14	38.56	

PSD:

PSD								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 PSD (dBm/MHz)**	**Chain 1 PSD (dBm/MHz)**	**Total PSD (dBm/MHz)**	**Antenna Gain (dBi)**	**EIRP Density (dBm/MHz)**	**EIRP Density LIMIT (dBm/MHz)**
5MHz	QPSK	Low	12.86	12.78	15.83	14	29.83	37
		Middle	13.79	13.81	16.81	14	30.81	
		High	15.21	15.18	18.21	14	32.21	
	16QAM	Low	12.53	12.75	15.65	14	29.65	
		Middle	13.79	13.53	16.67	14	30.67	
		High	14.79	14.24	17.53	14	31.53	
PSD								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 PSD (dBm/MHz)**	**Chain 1 PSD (dBm/MHz)**	**Total PSD (dBm/MHz)**	**Antenna Gain (dBi)**	**EIRP Density (dBm/MHz)**	**EIRP Density LIMIT (dBm/MHz)**
10MHz	QPSK	Low	10.91	10.90	13.92	14	27.92	37
		Middle	11.00	11.41	14.22	14	28.22	
		High	12.22	12.36	15.30	14	29.30	
	16QAM	Low	10.34	9.91	13.14	14	27.14	
		Middle	11.45	11.55	14.51	14	28.51	
		High	11.71	11.66	14.70	14	28.70	

PSD								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 PSD (dBm/MHz)**	**Chain 1 PSD (dBm/MHz)**	**Total PSD (dBm/MHz)**	**Antenna Gain (dBi)**	**EIRP Density (dBm/MHz)**	**EIRP Density LIMIT (dBm/MHz)**
15MHz	QPSK	Low	8.96	9.23	12.11	14	26.11	37
		Middle	10.43	10.62	13.54	14	27.54	
		High	11.21	11.79	14.52	14	28.52	
	16QAM	Low	8.73	8.67	11.71	14	25.71	
		Middle	10.43	10.23	13.34	14	27.34	
		High	10.64	11.23	13.96	14	27.96	
PSD								
Bandwidth	**Modulation**	**Test Channel**	**Chain 0 PSD (dBm/MHz)**	**Chain 1 PSD (dBm/MHz)**	**Total PSD (dBm/MHz)**	**Antenna Gain (dBi)**	**EIRP Density (dBm/MHz)**	**EIRP Density LIMIT (dBm/MHz)**
20MHz	QPSK	Low	7.89	7.72	10.82	14	24.82	37
		Middle	9.64	9.34	12.50	14	26.50	
		High	10.10	10.26	13.19	14	27.19	
	16QAM	Low	7.52	7.37	10.46	14	24.46	
		Middle	9.37	8.85	12.13	14	26.13	
		High	9.64	10.18	12.93	14	26.93	

Note: EIRP/EIRP Density=Total power /PSD+ Directional gain

2.2 Peak to Average Radio

2.2.1 Definition

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

2.2.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.2.3 Test Procedures

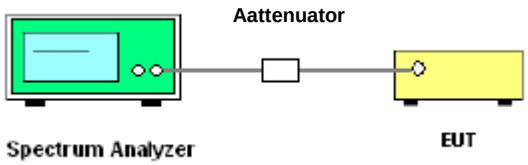
1. The EUT was connected to the spectrum analyzer .

2. Set the CCDF (Complementary Cumulative Distribution Function) option on the spectrum analyzer.

3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.

4. Record the deviation as Peak to Average Ratio.

2.2.4 Test Setup



2.2.5 Test Results

Remark: Refer to the original FCC ID: 2AG32EG7010CM11

2.3 Occupied Bandwidth

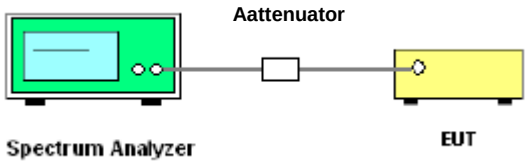
2.3.1 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.3.2 Test Procedures

1. The EUT was connected to the spectrum analyzer
2. The RF output of the EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set RBW= 1% to 5% of the occupied bandwidth, VBW= 3*RBW, peak detector, trace maximum hold.

2.3.3 Test Setup



2.3.4 Test Results

Remark: Refer to the original FCC ID: 2AG32EG7010CM11

2.4 Frequency Stability

2.4.1 Requirement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block.

2.4.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

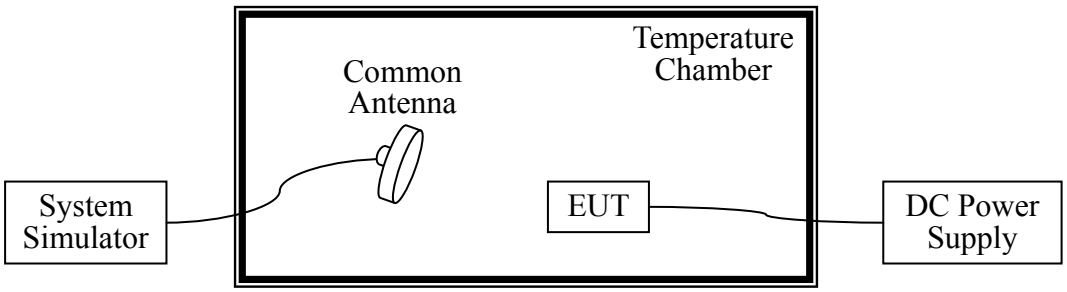
2.4.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. 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 steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

2.4.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

2.4.5 Test Setup



2.4.6 Test Results

Remark: Refer to the original FCC ID: 2AG32EG7010CM11

2.5 Conducted Out of Band Emissions

2.5.1 Requirement

According to FCC Part 96.41(e) requirement

2.5.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.5.3 Limit of Conducted Spurious Emission Measurement

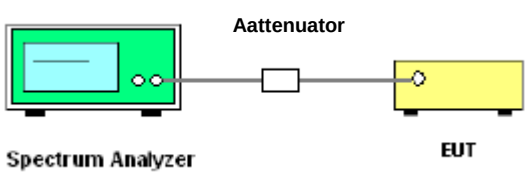
Power of any emissions outside the fundamental	Limit
With 0-10MHz above the Assigned channel	-13dBm/MHz
With 0-10MHz below the Assigned channel	
Greater than 0-10MHz above the Assigned channel	-25dBm/MHz
Greater than 0-10MHz below the Assigned channel	
Power of any emissions below 3530MHz	-40dBm/MHz
Power of any emissions above 3720MHz	

Note:
This device can be implement MIMO function, so the limit of spurious emissions need to reduced by 10log(Numbers $_{ANT}$)according to FCC KDB 662911 D01 guidance.
{The limit is adjusted to -13dBm-10log(2)=-16.01dBm}
{The limit is adjusted to -25dBm-10log(2)=-28.01dBm}
{The limit is adjusted to -40dBm-10log(2)=-43.01dBm}

2.5.4 Test Procedures

1. The EUT was connected to the spectrum analyzer , all measurements were done at low, middle and high operational frequency range
2. Measuring frequency range is from 30MHz to 37GHz.
3. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.
4. Measuring frequency and bandedge, 1% of the fundamental emission bandwidth is used for conducted emission measurement.

2.5.5 Test Setup



2.5.6 Test Results

Remark: Refer to the original FCC ID: 2AG32EG7010CM11

2.6 Emission Mask

2.6.1 Requirement

According to FCC Part 96.41(e)

2.6.2 Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

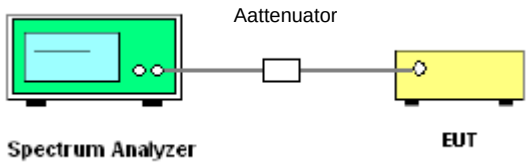
2.6.3 Limit of Conducted Spurious Emission Measurement

Power of any emissions outside the fundamental	Limit
With 0-10MHz above the Assigned channel	-13dBm/MHz
With 0-10MHz below the Assigned channel	
Greater than 0-10MHz above the Assigned channel	-25dBm/MHz
Greater than 0-10MHz below the Assigned channel	
Power of any emissions below 3530MHz	-40dBm/MHz
Power of any emissions above 3720MHz	

2.6.4 Test Procedures

1. The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
2. Measurements must be performed for low, mid, and high channels.
3. RBW=1% of fundamental for measurements within 1 MHz immediately outside the authorized channel; and 1 MHz for beyond 1 MHz outside the authorized channel.
4. Trace average at least 100 traces

2.6.5 Test Setup



2.6.6 Test Results

Remark: Refer to the original FCC ID: 2AG32EG7010CM11

2.7 Radiated Spurious Emission

2.7.1 Requirement

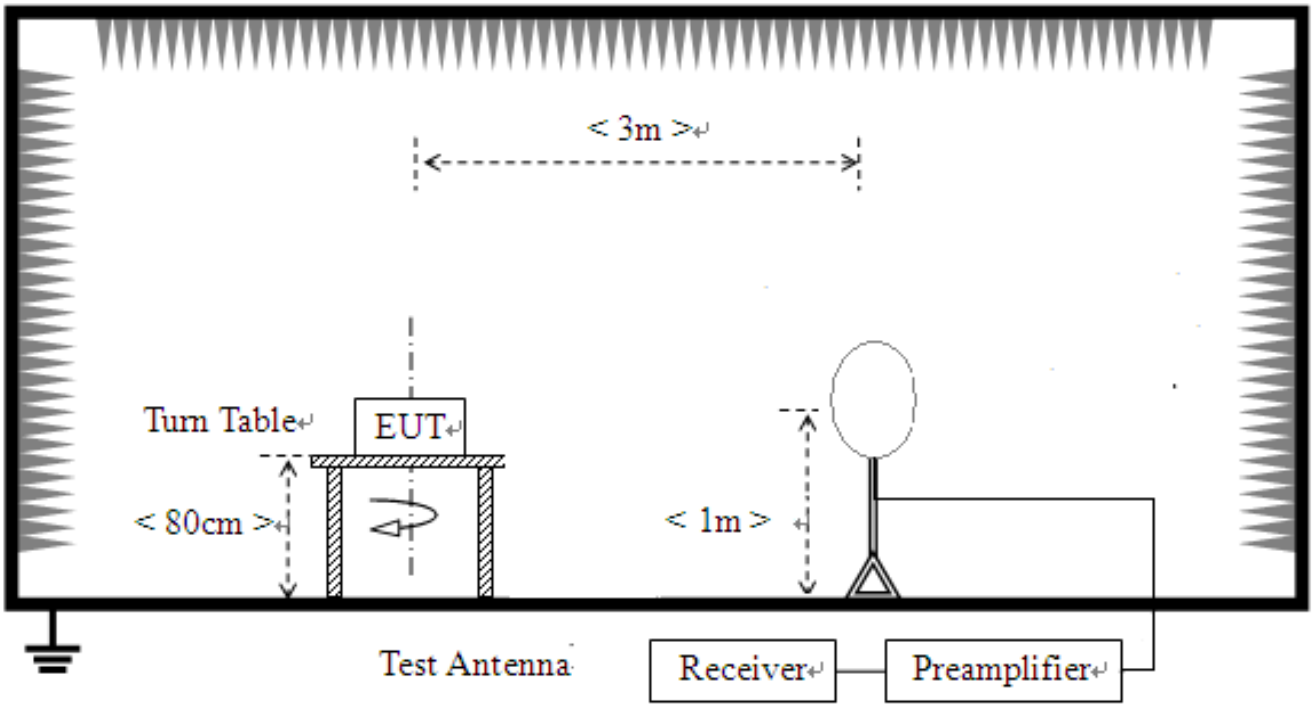
The power of any emission below 3530MHz or above 3720MHz shall not exceed -40dBm/MHz

2.7.2 Measuring Instruments

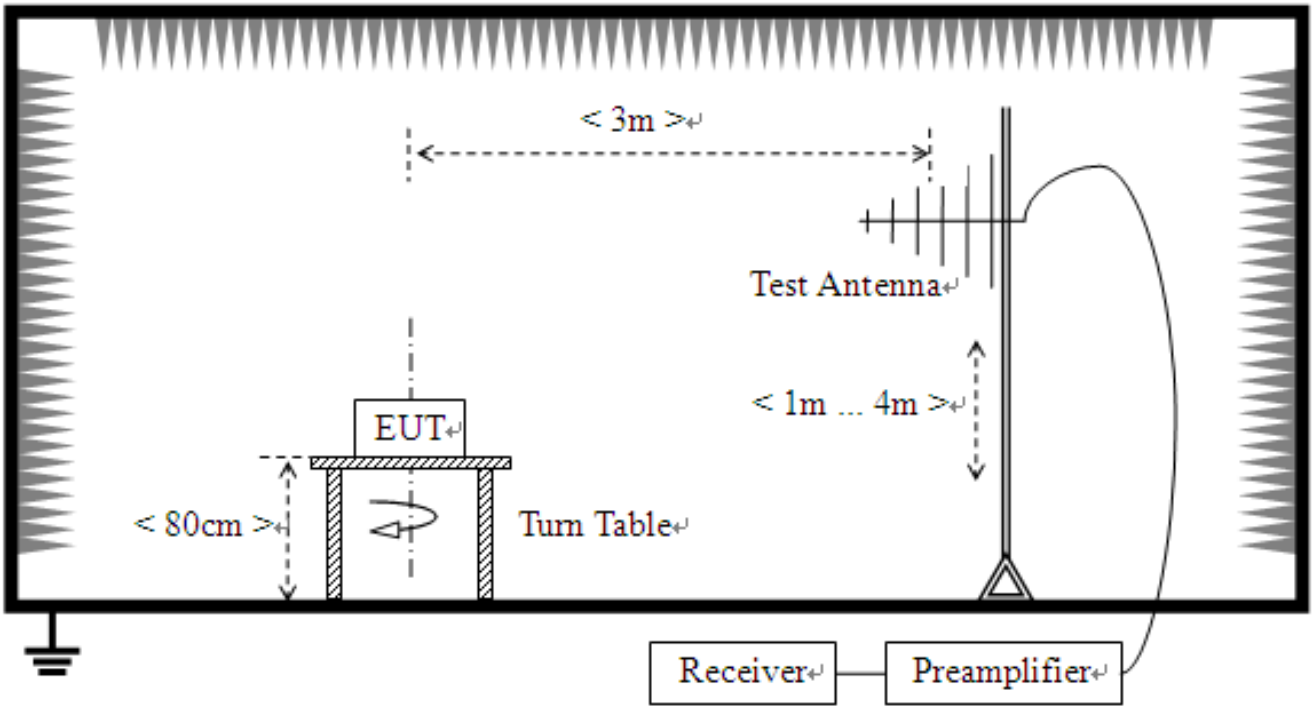
The measuring equipment is listed in the section 3 of this test report.

2.7.3 Test Setup

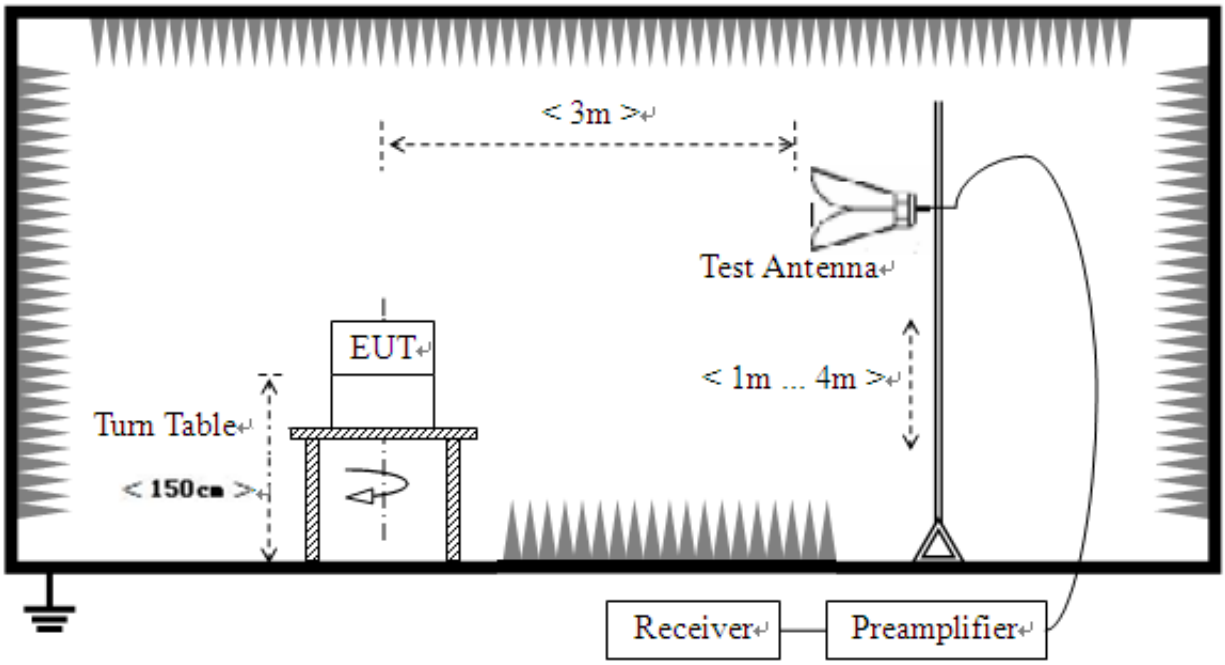
For radiated emissions from 9 kHz to 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.7.4 Test Procedures

1. The testing follows ANSI C63.26:2015
2. The EUT was placed on a rotatable wooden table 0.8m(below 1G) or 1.5m(above 1G) above the ground.
3. The EUT was set 3 meters from the receiving antenna, which was 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 one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
13. All Spurious Emission tests were performed in X, Y, Z axis direction and low, middle, high channel. And only the worst axis test condition was recorded in this test report.
14. The spectrum is measured from 9 KHz to the 10^{th} harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. The worst case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
15. For 9KHz to 30MHz: the amplitude of spurious emissions are attenuated by more than 20dB below the permissible value has no need to be reported.

2.7.5 Test Results of Radiated Spurious Emissions

Worst-Case test data provide as below:

Note: 1. within 30MHz-1GHz were found more than 20dB below limit line

Note: 2. Absolute Level=Reading Level + Factor

30MHz~20GHz:

Band 48 (Low Channel BW:10MHz)

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	35.3377	-90.16	-67.3	-40.00	27.3	22.86	Horizontal
2	159.074	-98.18	-76.32	-40.00	36.32	21.86	Horizontal
3	2102.55	-58.37	-54.94	-40.00	14.94	3.43	Horizontal
4	6309.15	-59.60	-41.74	-40.00	1.74	17.86	Horizontal
5	9678.33	-73.55	-42.44	-40.00	2.44	31.11	Horizontal
6	17669.8	-75.40	-41.15	-40.00	1.15	34.25	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	35.3377	-92.16	-71.21	-40.00	31.21	20.95	Vertical
2	1240.12	-57.20	-59.16	-40.00	19.16	-1.96	Vertical
3	2140.57	-57.87	-55.05	-40.00	15.05	2.82	Vertical
4	6376.68	-60.62	-42.06	-40.00	2.06	18.56	Vertical
5	9670.83	-72.45	-42.04	-40.00	2.04	30.41	Vertical
6	17857.4	-78.88	-44.15	-40.00	4.15	34.73	Vertical

Band 48 (Middle Channel BW:10MHz)

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	35.3377	-90.90	-68.04	-40.00	28.04	22.86	Horizontal
2	835.988	-103.47	-65.49	-40.00	25.49	37.98	Horizontal
3	2012.50	-57.03	-54.72	-40.00	14.72	2.31	Horizontal
4	6249.12	-59.41	-41.81	-40.00	1.81	17.60	Horizontal
5	9655.82	-73.43	-42.87	-40.00	2.87	30.56	Horizontal
6	12267.1	-72.29	-44.29	-40.00	4.29	28.00	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	35.3377	-91.53	-70.58	-40.00	30.58	20.95	Vertical
2	1199.09	-57.27	-58.75	-40.00	18.75	-1.48	Vertical
3	2072.53	-57.57	-55.24	-40.00	15.24	2.33	Vertical
4	6601.80	-59.89	-42.04	-40.00	2.04	17.85	Vertical
5	9730.86	-72.60	-42.46	-40.00	2.46	30.14	Vertical
6	12154.5	-72.53	-43.61	-40.00	3.61	28.92	Vertical

Band 48 (High Channel BW:10MHz)

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	34.8524	-91.42	-68.45	-40.00	28.45	22.97	Horizontal
2	1304.15	-57.31	-59.45	-40.00	19.45	-2.14	Horizontal
3	2107.55	-57.52	-54.14	-40.00	14.14	3.38	Horizontal
4	6429.21	-60.68	-42.64	-40.00	2.64	18.04	Horizontal
5	9715.85	-72.55	-41.41	-40.00	1.41	31.14	Horizontal
6	17962.4	-78.66	-41.24	-40.00	1.24	37.42	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	74.1571	-91.44	-69.57	-40.00	29.57	21.87	Vertical
2	1326.16	-55.75	-58.46	-40.00	18.46	-2.71	Vertical
3	3015.00	-59.31	-50.4	-40.00	10.4	8.91	Vertical
4	6429.21	-60.40	-42.22	-40.00	2.22	18.18	Vertical
5	9700.85	-73.40	-42.52	-40.00	2.52	30.88	Vertical
6	17842.4	-79.97	-41.26	-40.00	1.26	38.71	Vertical

3. LIST OF MEASURING EQUIPMENT

Description	Manufacturer	Model	Serial No.	Cal. Date	Due Date	Remark
EMI Test Receiver	R&S	ESU8	A0805559	2020.04.03	2021.04.02	Radiation
Loop Antenna	Schwarz beck	HFH2-Z2	100047	2019.04.26	2022.04.25	Radiation
Broadband antenna (30MHz~1GHz)	Schwarbeck	BBHA 9120 J	A190503537	2019.01.07	2021.01.06	Radiation
Broadband antenna (30MHz~1GHz)	R&S	HK116	A130701424	2018.01.19	2021.01.18	Radiation
Double ridge horn antenna (1GHz~18GHz)	R&S	HF906	100150	2019.04.27	2022.04.26	Radiation
Double ridge horn antenna (1GHz~18GHz)	R&S	HF906	100149	2019.04.17	2022.04.16	Radiation
Horn antenna (18GHz~26.5GHz)	AR	AT4002A	305753	2017.11.10	2020.11.09	Radiation
Horn antenna (18GHz~26.5GHz)	AR	AT4003A	0329293	2018.09.17	2020.09.16	Radiation
Amplifier 1GHz-18GHz	AR	25S1G4AM1	22018	2018.09.17	2020.09.16	Radiation
Ampilier 20M~3GHz	MILMEGA	80RF1000-250	1064573	2017.10.09	2020.10.08	Radiation
Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2020.05.18	2021.05.17	Conducted
Test Receiver	R&S	ESIB26	A0304218	2020.04.29	2021.04.28	Conducted
Temperature chamber	Tomilo	TOD-B165FXS-4K	A181003256	2019.11.21	2020.11.20	Conducted
Wideband Radio Communication tester	R&S	CMW500	A130101034	2019.07.30	2021.07.29	Conducted
Power Supply	R&S	WYJ-60100	A141102031	2020.01.16	2023.01.15	Conducted

4. UNCERTAINTY OF EVALUATION

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	2.6dB

Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	2.4dB

Uncertainty of Radiated Emission Measurement (1GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	2.8dB

** END OF REPORT **