



## **FCC REPORT**

**Applicant:** AQUASCAPE, INC.  
**Address of Applicant:** 901 Aqualand Way St. Charles Illinois 60174, United States  
**Manufacturer:** EIKO ELECTRIC PRODUCTS CORP. (SHEN ZHEN)  
**Address of Manufacturer:** WANG FENG INDUSTRY ZONE, GONG MING TOWN, GUANGMING NEW AREA, SHEN ZHEN CITY, GUANG DONG, P.R.C.  
Post Code: 518132

### **Equipment Under Test (EUT)**

**Product Name:** LED Color-Changing Lighting Remote Control  
**Model No.:** 84073, 84061, 84055  
**Trade Mark:** Aquascape  
**FCC ID:** 2AR9X84073  
**Applicable standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.249  
**Date of sample receipt:** December 07, 2018  
**Date of Test:** December 10-26, 2018  
**Date of report issued:** December 27, 2018  
**Test Result :** PASS \*

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

**Robinson Lo**

**Laboratory Manager**

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

## 2 Version

Version No.	Date	Description
00	December 27, 2018	Original

**Prepared By:** Bill. Yuan **Date:** December 27, 2018  
**Project Engineer**

**Check By:** Robinson **Date:** December 27, 2018  
**Reviewer**

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## 4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	N/A
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
Band edge	15.249 (d)/15.209 15.205	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

*Remarks:*

1. Pass: The EUT complies with the essential requirements in the standard.
2. Test according to ANSI C63.10:2013.

### 4.1 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9kHz ~ 30MHz	± 4.54dB	(1)
Radiated Emission	30MHz ~ 1000MHz	± 5.34dB	(1)
Radiated Emission	1GHz ~ 26.5GHz	± 5.34dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	± 3.44dB	(1)

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

## 5 General Information

### 5.1 General Description of EUT

Product Name:	LED Color-Changing Lighting Remote Control
Model No.:	84073, 84061, 84055
Test Model No:	84073
<i>Remark: All above models are identical in the same PCB layout, interior structure and electrical circuits. The only differences model name for commercial purpose.</i>	
Serial No.:	AQ-000001
Hardware version:	AQ-RF V1.0 .PCB
Software version:	067B1
Test sample(s) ID:	GTS201812000058-1
Sample(s) Status:	Engineered sample
Operation Frequency:	2404MHz~2462MHz
Channel numbers:	2
Modulation type:	GFSK
Antenna Type:	PCB Antenna
Antenna gain:	0dBi(Declared by applicant)
Power supply:	Battery: DC 3V(1.5V*2 SIZE"AA")

Operation Frequency each of channel	
Channel numbers	Frequency
1	2404MHz
2	2462MHz

## 5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode.
<i>Remark: New battery is used during all test.</i>	

### Per-test mode.

We have verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:

Axis	X	Y	Z
Field Strength(dBuV/m)	94.89	95.14	94.51

## 5.3 Description of Support Units

None.
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## 5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC —Registration No.: 381383**

Global United Technology Services Co., Ltd., Shenzhen 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 files. Registration 381383.

- **Industry Canada (IC) —Registration No.: 9079A-2**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2.

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

- **CNAS (No. CNAS L5775)**

CNAS has accredited Global United Technology Services Co., Ltd., to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

## 5.5 Test Location

All tests were performed at:
Global United Technology Services Co., Ltd. Address: No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960

## 6 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 03 2015	July. 02 2020
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 27 2018	June. 26 2019
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 27 2018	June. 26 2019
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June. 27 2018	June. 26 2019
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 27 2018	June. 26 2019
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 27 2018	June. 26 2019
9	Coaxial Cable	GTS	N/A	GTS211	June. 27 2018	June. 26 2019
10	Coaxial cable	GTS	N/A	GTS210	June. 27 2018	June. 26 2019
11	Coaxial Cable	GTS	N/A	GTS212	June. 27 2018	June. 26 2019
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 27 2018	June. 26 2019
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	June. 27 2018	June. 26 2019
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 27 2018	June. 26 2019
15	Band filter	Amindeon	82346	GTS219	June. 27 2018	June. 26 2019
16	Power Meter	Anritsu	ML2495A	GTS540	June. 27 2018	June. 26 2019
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 27 2018	June. 26 2019
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS588	June. 27 2018	June. 26 2019
19	Splitter	Agilent	11636B	GTS237	June. 27 2018	June. 26 2019
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 27 2018	June. 26 2019

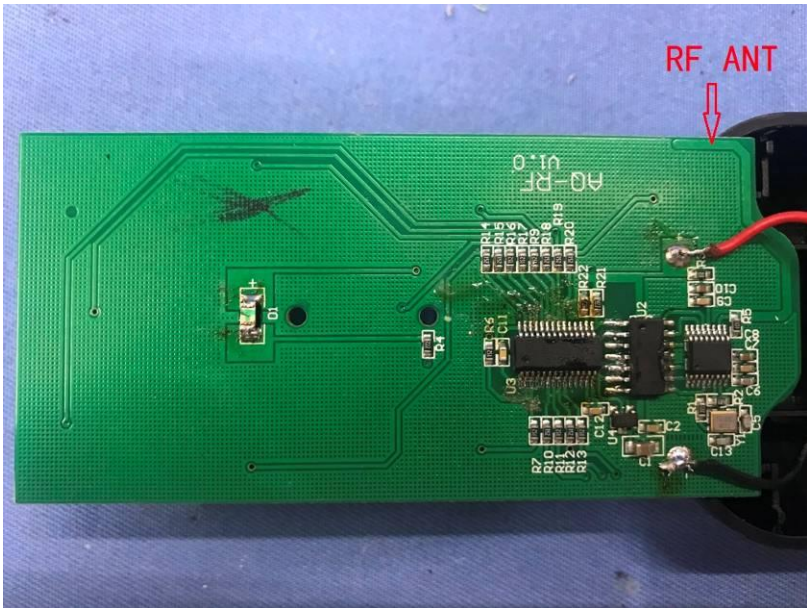
<b>RF Conducted:</b>						
<b>Item</b>	<b>Test Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal.Date (mm-dd-yy)</b>	<b>Cal.Due date (mm-dd-yy)</b>
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	June. 27 2018	June. 26 2019
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 27 2018	June. 26 2019
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 27 2018	June. 26 2019
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 27 2018	June. 26 2019
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 27 2018	June. 26 2019
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 27 2018	June. 26 2019
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 27 2018	June. 26 2019
8	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 27 2018	June. 26 2019
9	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 27 2018	June. 26 2019

<b>General used equipment:</b>						
<b>Item</b>	<b>Test Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Inventory No.</b>	<b>Cal.Date (mm-dd-yy)</b>	<b>Cal.Due date (mm-dd-yy)</b>
1	Humidity/ Temperature Indicator	Shanghai	ZJ1-2B	GTS243	June. 27 2018	June. 26 2019
2	Barometer	ChangChun	DYM3	GTS255	June. 27 2018	June. 26 2019

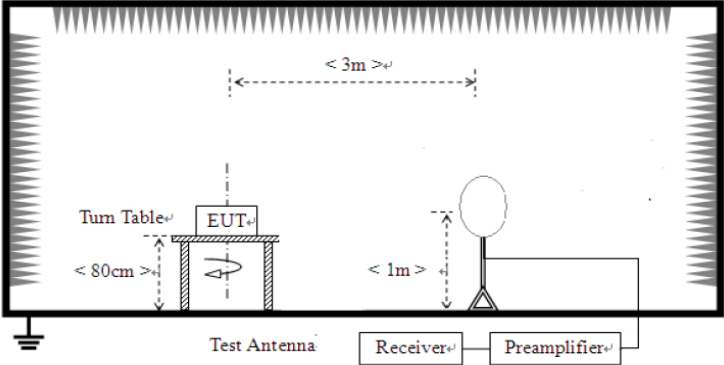


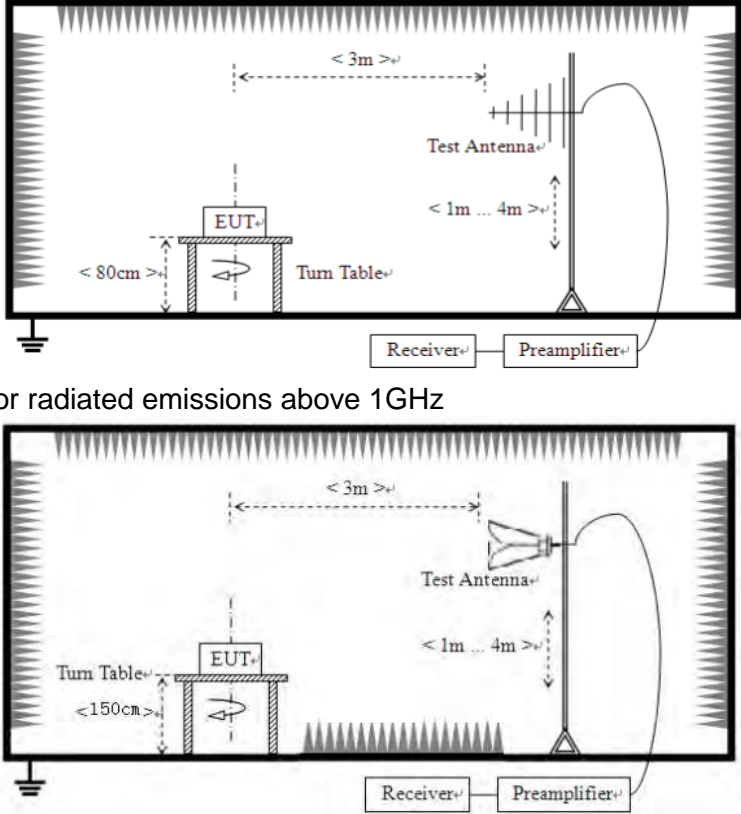
## 7 Test results and Measurement Data

### 7.1 Antenna requirement

<b>Standard requirement:</b>	FCC Part15 C Section 15.203
<p><b>15.203 requirement:</b></p> <p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p>	
<p><b>EUT Antenna:</b></p>	
<p><i>The antenna is PCB antenna, the best case gain of the is 0dBi</i></p> 	

## 7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	9kHz to 25GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	9kHz-150kHz	PK/AV	200Hz	300Hz	PK/AV
	150kHz-30MHz	PK/AV/QP	9kHz	10kHz	PK/AV/QP
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
Peak		1MHz	10Hz	Average Value	
Limit: (Field strength of the fundamental signal)	Frequency	Limit (dBuV/m @3m)		Remark	
	2400MHz-2483.5MHz	94.00		Average Value	
		114.00		Peak Value	
Limit: (Spurious Emissions)	Frequency	Limit (uV/m)		Remark	
	0.009MHz-0.490MHz	2400/F(kHz) @300m		Quasi-peak Value	
	0.490MHz-1.705MHz	24000/F(kHz) @30m		Quasi-peak Value	
	1.705MHz-30.0MHz	30 @30m		Quasi-peak Value	
	30MHz-88MHz	100 @3m		Quasi-peak Value	
	88MHz-216MHz	150 @3m		Quasi-peak Value	
	216MHz-960MHz	200 @3m		Quasi-peak Value	
	960MHz-1GHz	500 @3m		Quasi-peak Value	
	Above 1GHz	500 @3m		Average Value	
5000 @3m		Peak Value			
Limit: (band edge)	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.				
Test setup:	<p>For radiated emissions from 9kHz to 30MHz</p>  <p>For radiated emissions from 30MHz to 1GHz</p>				

	 <p>For radiated emissions above 1GHz</p>						
<p>Test Procedure:</p>	<ol style="list-style-type: none"> <li>1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li> </ol>						
<p>Test Instruments:</p>	<p>Refer to section 6.0 for details</p>						
<p>Test mode:</p>	<p>Refer to section 5.2 for details</p>						
<p>Test environment:</p>	<table border="1"> <tr> <td>Temp.:</td> <td>25 °C</td> <td>Humid.:</td> <td>52%</td> <td>Press.:</td> <td>1012mbar</td> </tr> </table>	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar		
<p>Test voltage:</p>	<p>DC 3V</p>						
<p>Test results:</p>	<p>Pass</p>						

**Measurement data:**

**7.2.1 Field Strength of The Fundamental Signal**

**Peak value:**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2404.00	92.35	27.58	5.39	30.18	95.14	114.00	-18.86	Vertical
2404.00	89.71	27.58	5.39	30.18	92.50	114.00	-21.50	Horizontal
2462.00	90.64	27.53	5.46	29.99	93.64	114.00	-20.36	Vertical
2462.00	88.70	27.53	5.46	29.99	91.70	114.00	-22.30	Horizontal

**Average value:**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2404.00	81.06	27.58	5.39	30.18	83.85	94.00	-10.15	Vertical
2404.00	78.55	27.58	5.39	30.18	81.34	94.00	-12.66	Horizontal
2462.00	79.21	27.53	5.46	29.99	82.21	94.00	-11.79	Vertical
2462.00	76.29	27.53	5.46	29.99	79.29	94.00	-14.71	Horizontal

Remark:RBW 3MHz VBW 3MHz Peak detector is for PK value , RMS detector is for AV value

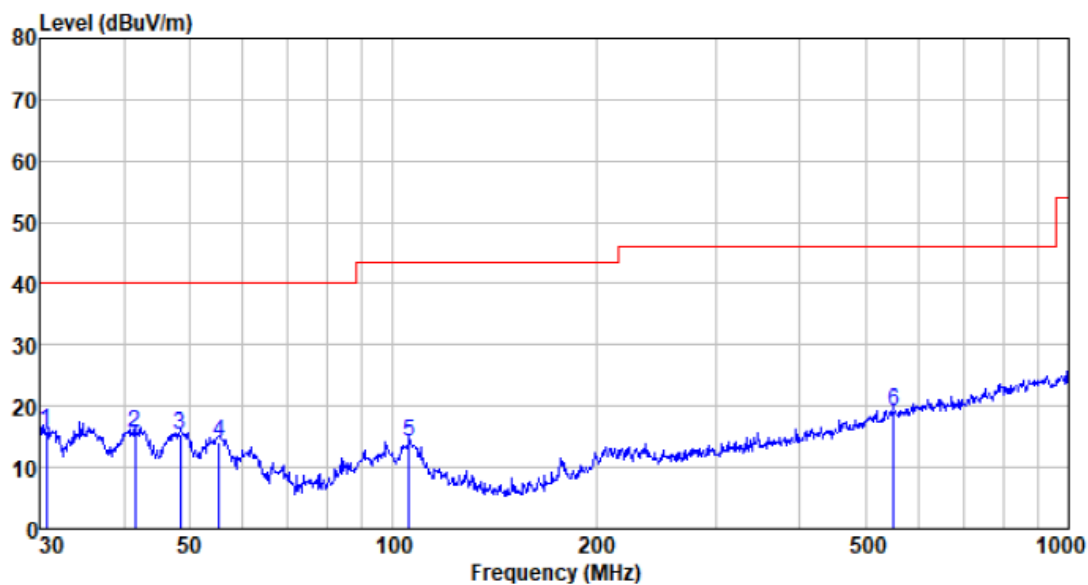
## 7.2.2 Spurious emissions

### ■ Below 30MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o), the test result no need to reported.

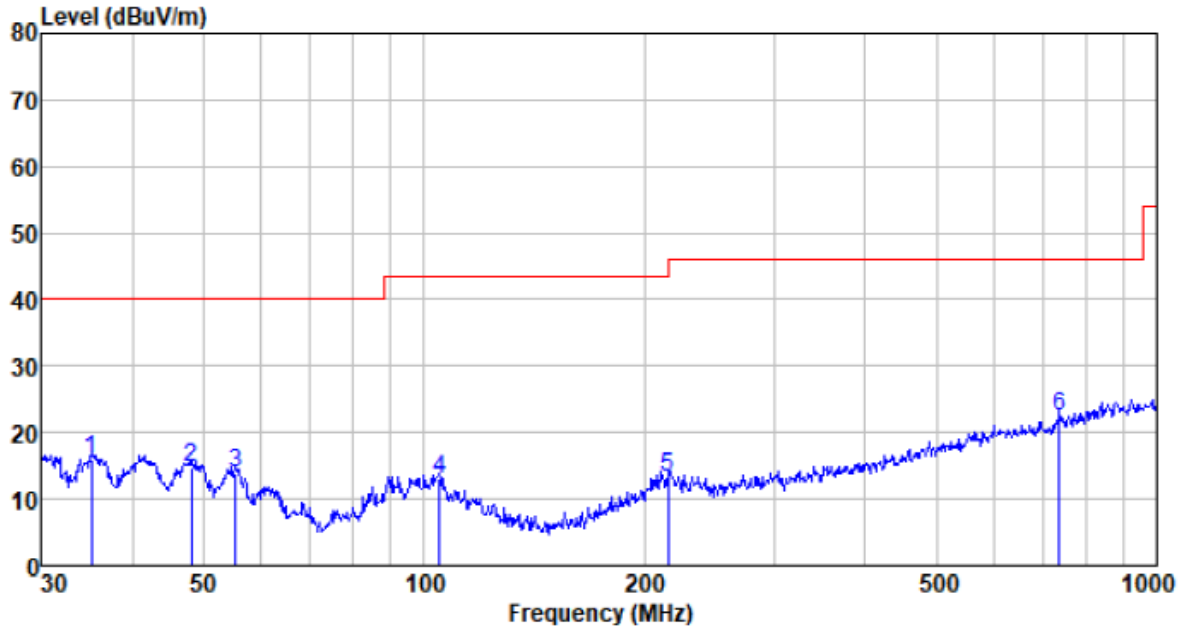
### ■ Below 1GHz

Horizontal:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
30.745	39.32	11.22	0.56	35.06	16.04	40.00	-23.96	QP
41.567	38.51	12.22	0.68	35.75	15.66	40.00	-24.34	QP
48.502	38.40	12.29	0.76	36.11	15.34	40.00	-24.66	QP
55.221	37.74	11.78	0.82	36.26	14.08	40.00	-25.92	QP
105.642	38.20	11.57	1.24	36.77	14.24	43.50	-29.26	QP
550.948	34.66	18.45	3.53	37.53	19.11	46.00	-26.89	QP

Vertical:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
35.128	34.23	11.42	0.61	30.27	15.99	40.00	-24.01	QP
48.163	31.83	12.47	0.75	30.21	14.84	40.00	-25.16	QP
55.221	31.45	11.79	0.82	30.14	13.92	40.00	-26.08	QP
104.903	29.77	11.80	1.23	29.79	13.01	43.50	-30.49	QP
215.268	30.01	10.96	1.93	29.71	13.19	43.50	-30.31	QP
737.071	27.10	20.40	4.23	29.34	22.39	46.00	-23.61	QP

■ Above 1GHz

Test Frequency:	2404MHz
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**Peak value:**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4808.00	36.33	31.78	8.60	32.09	44.62	74.00	-29.38	Vertical
7212.00	31.19	36.15	11.65	32.00	46.99	74.00	-27.01	Vertical
9616.00	30.89	37.95	14.14	31.62	51.36	74.00	-22.64	Vertical
12020.00	*					74.00		Vertical
14424.00	*					74.00		Vertical
4808.00	40.42	31.78	8.60	32.09	48.71	74.00	-25.29	Horizontal
7212.00	32.86	36.15	11.65	32.00	48.66	74.00	-25.34	Horizontal
9616.00	30.23	37.95	14.14	31.62	50.70	74.00	-23.30	Horizontal
12020.00	*					74.00		Horizontal
14424.00	*					74.00		Horizontal

**Average value:**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4808.00	25.33	31.78	8.60	32.09	33.62	54.00	-20.38	Vertical
7212.00	19.98	36.15	11.65	32.00	35.78	54.00	-18.22	Vertical
9616.00	19.12	37.95	14.14	31.62	39.59	54.00	-14.41	Vertical
12020.00	*					54.00		Vertical
14424.00	*					54.00		Vertical
4808.00	29.45	31.78	8.60	32.09	37.74	54.00	-16.26	Horizontal
7212.00	22.09	36.15	11.65	32.00	37.89	54.00	-16.11	Horizontal
9616.00	18.77	37.95	14.14	31.62	39.24	54.00	-14.76	Horizontal
12020.00	*					54.00		Horizontal
14424.00	*					54.00		Horizontal

**Remarks:**

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. “\*”, means this data is the too weak instrument of signal is unable to test.

Test Frequency:	2462MHz
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**Peak value:**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	36.52	31.90	8.70	32.15	44.97	74.00	-29.03	Vertical
7386.00	31.31	36.49	11.76	31.83	47.73	74.00	-26.27	Vertical
9848.00	31.01	38.62	14.31	31.77	52.17	74.00	-21.83	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
4924.00	40.65	31.90	8.70	32.15	49.10	74.00	-24.90	Horizontal
7386.00	33.00	36.49	11.76	31.83	49.42	74.00	-24.58	Horizontal
9848.00	30.35	38.62	14.31	31.77	51.51	74.00	-22.49	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal

**Average value:**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	25.49	31.90	8.70	32.15	33.94	54.00	-20.06	Vertical
7386.00	20.09	36.49	11.76	31.83	36.51	54.00	-17.49	Vertical
9848.00	19.22	38.62	14.31	31.77	40.38	54.00	-13.62	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
4924.00	29.63	31.90	8.70	32.15	38.08	54.00	-15.92	Horizontal
7386.00	22.21	36.49	11.76	31.83	38.63	54.00	-15.37	Horizontal
9848.00	18.88	38.62	14.31	31.77	40.04	54.00	-13.96	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal

**Remarks:**

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. “\*”, means this data is the too weak instrument of signal is unable to test.



## 7.2.3 Bandedge emissions

Test Frequency:	2404MHz
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	40.72	27.59	5.38	30.18	43.51	74.00	-30.49	Horizontal
2400.00	41.92	27.58	5.39	30.18	44.71	74.00	-29.29	Horizontal
2390.00	40.88	27.59	5.38	30.18	43.67	74.00	-30.33	Vertical
2400.00	40.51	27.58	5.39	30.18	43.30	74.00	-30.70	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	30.21	27.59	5.38	30.18	33.00	54.00	-21.00	Horizontal
2400.00	32.20	27.58	5.39	30.18	34.99	54.00	-19.01	Horizontal
2390.00	31.86	27.59	5.38	30.18	34.65	54.00	-19.35	Vertical
2400.00	31.46	27.58	5.39	30.18	34.25	54.00	-19.75	Vertical

Test Frequency:	2462MHz
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	40.33	27.53	5.47	29.93	43.40	74.00	-30.60	Horizontal
2500.00	40.30	27.55	5.49	29.93	43.41	74.00	-30.59	Horizontal
2483.50	40.48	27.53	5.47	29.93	43.55	74.00	-30.45	Vertical
2500.00	40.90	27.55	5.49	29.93	44.01	74.00	-29.99	Vertical

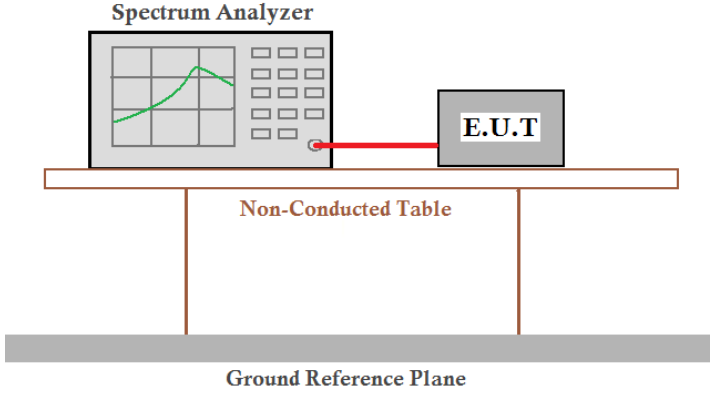
Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	31.99	27.53	5.47	29.93	35.06	54.00	-18.94	Horizontal
2500.00	31.59	27.55	5.49	29.93	34.70	54.00	-19.30	Horizontal
2483.50	33.86	27.53	5.47	29.93	36.93	54.00	-17.07	Vertical
2500.00	31.16	27.55	5.49	29.93	34.27	54.00	-19.73	Vertical

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

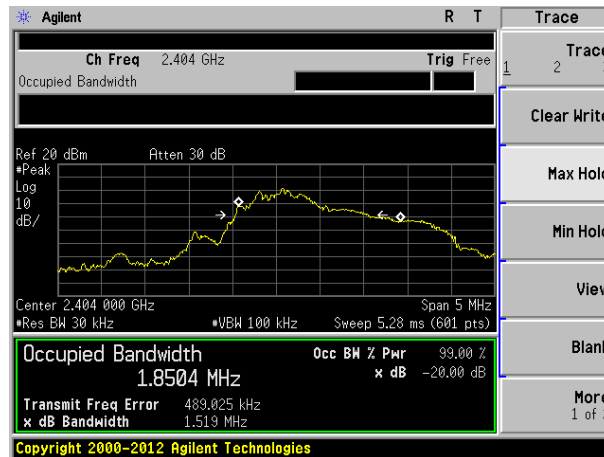
### 7.3 20dB Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.10:2013
Limit:	Operation Frequency range 2400MHz~2483.5MHz
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table, which is supported by a Ground Reference Plane.</p>
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

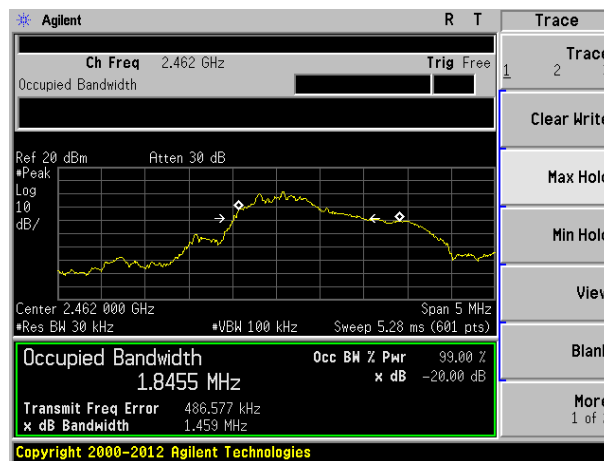
#### Measurement Data

Test Frequency	20dB bandwidth(MHz)	Result
2404MHz	1.519	Pass
2462MHz	1.459	Pass

Test plot as follows:



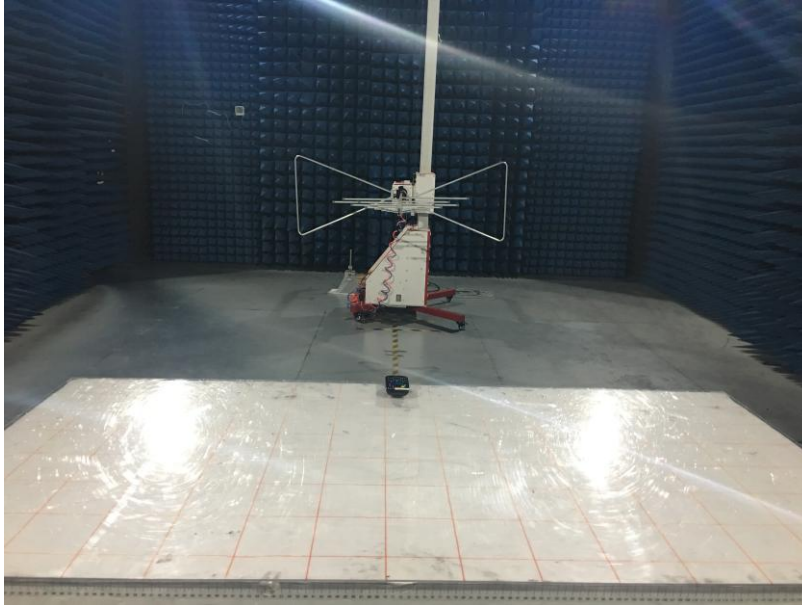
2404MHz



2462MHz

## 8 Test Setup Photo

Radiated Emission



## 9 EUT Constructional Details

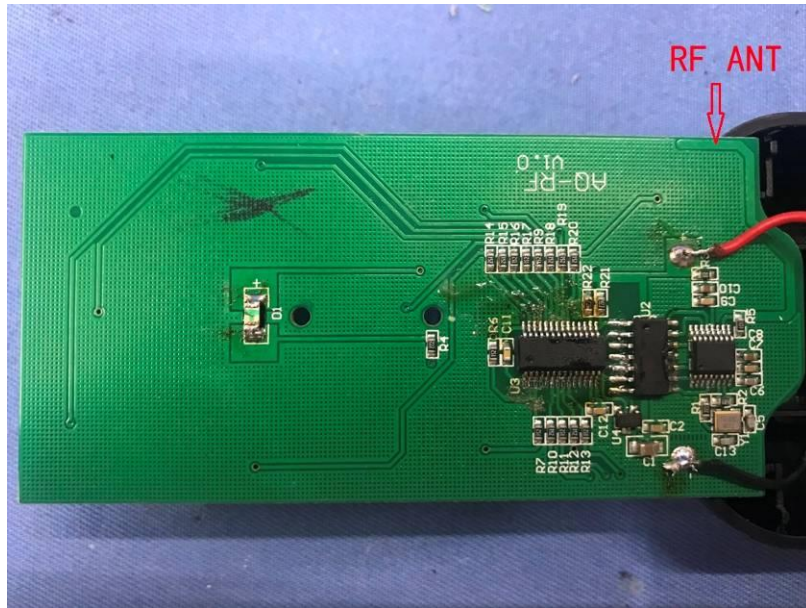












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