



MEASUREMENT REPORT

FCC PART 15.231(a)

FCC ID: 2AEZB-FZJ202106-315

Applicant: Forcome (Shanghai) Co., Ltd.

Application Type: Certification

Product: WIRELESS CONTROL PWS G2

Model No.: FUS-20832000-0028

Brand Name: X-POWER

FCC Classification: FCC Part 15 Security/Remote Control Transmitter (DSC)

FCC Rule Part(s): Part15 Subpart C (Section 15.231)

Test Procedure(s): ANSI C63.10-2013

Test Date: June 09 ~ September 08, 2021

Reviewed By:

Sunny Sun

Approved By:

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2106RSU007-U1	Rev. 01	Initial Report	11-22-2021	Valid

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1. GENERAL INFORMATION

1.1. Applicant

Forcome (Shanghai) Co., Ltd.

Building 109, No. 255, South Sizhuan Road, Shanghai, 201612, China

1.2. Manufacturer

Forcome (Shanghai) Co., Ltd.

Building 109, No. 255, South Sizhuan Road, Shanghai, 201612, China

1.3. Testing Facility

☒	Test Site - MRT Suzhou Laboratory Laboratory Location (Suzhou - Wuzhong) D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China Laboratory Location (Suzhou - SIP) 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China Laboratory Accreditations A2LA: 3628.01 CNAS: L10551 FCC: CN1166 ISED: CN0001 VCCI: ☐ R-20025 ☐ G-20034 ☐ C-20020 ☐ T-20020 ☐ R-20141 ☐ G-20134 ☐ C-20103 ☐ T-20104
☐	Test Site - MRT Shenzhen Laboratory Laboratory Location (Shenzhen) 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China Laboratory Accreditations A2LA: 3628.02 CNAS: L10551 FCC: CN1284 ISED: CN0105
☐	Test Site - MRT Taiwan Laboratory Laboratory Location (Taiwan) No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) Laboratory Accreditations TAF: L3261-190725 FCC: 291082, TW3261 ISED: TW3261

1.4. Product Information

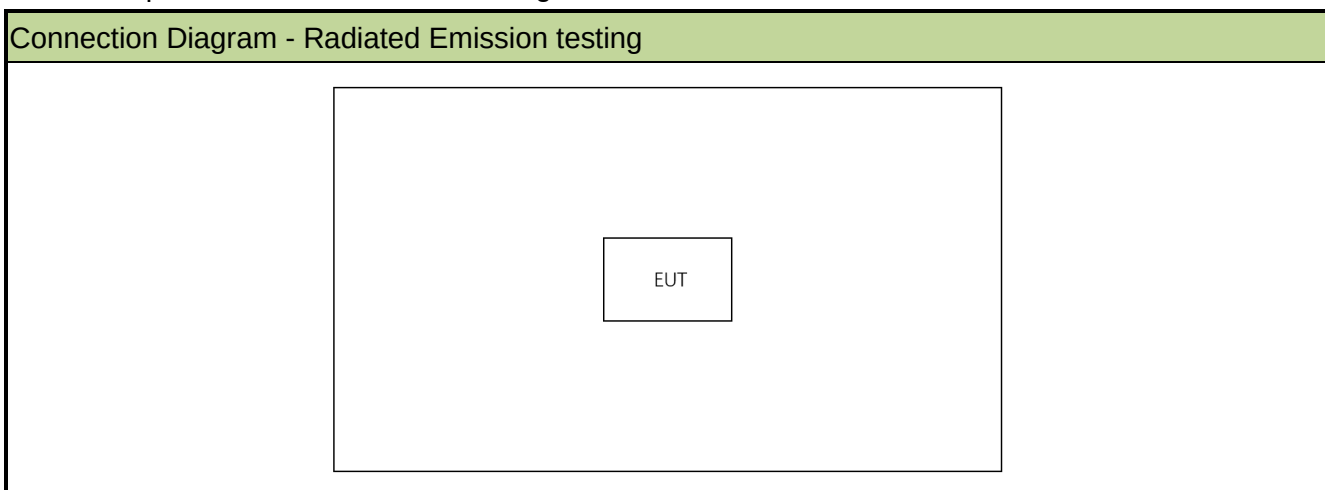
Product Name	WIRELESS CONTROL PWS G2
Model No	FUS-20832000-0028
Brand Name	X-POWER
Hardware Version	Y 1.0
Software Version	RJ 1.0
Frequency Range	315MHz
Type of modulation	ASK
Antenna Type	PCB Antenna
Antenna Gain	-1.0 dBi
Power Supply	By Two 12V Dry Batteries
Remarks: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

1.5. Test Mode

Test Mode	Mode 1: Transmit at Channel 315MHz
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1.6. Test Configuration

The device was tested per the guidance ANSI C63.10: 2013 was used to reference the appropriate EUT setup for radiated emissions testing.



1.7. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

1.8. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase.

However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

2. ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 shall be considered sufficient to comply with the provisions of this section.”

- The antenna of the unit is permanently attached.
- There are no provisions for connection to an external antenna.

Conclusion:

The unit complies with the requirement of §15.203.

3. TEST EQUIPMENT CALIBRATION DATE

Conducted Emission (WZ-SR2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2022/01/12
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2021/09/09
Thermal Hygrometer	testo	608-H1	MRTSUE06404	1 year	2022/06/28
Shielding Room	MIX-BEP	Chamber-SR2	MRTSUE06215	N/A	N/A

Conducted Test (WZ-SR5)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Thermohygrometer	testo	608-H1	MRTSUE06402	1 year	2022/6/28
Signal Analyzer	Keysight	N9010B	MRTSUE06559	1 year	2022/6/24
Shielding Room	HUAMING	WZ-SR5	MRTSUE06442	N/A	N/A

Radiated Emission (WZ-AC1)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2022/01/04
PXA Signal Analyzer	Keysight	N9030B	MRTSUE06395	1 year	2022/08/08
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2022/08/05
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2021/09/27
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2021/12/14
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2021/11/14
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2022/06/09
Thermal Hygrometer	testo	608-H1	MRTSUE06403	1 year	2022/06/28
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2022/04/29

Radiated Emission (WZ-AC2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
MXE EMI Receiver	Keysight	N9038A	MRTSUE06125	1 year	2022/06/24
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2022/05/24
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2021/10/25
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06597	1 year	2021/12/14
Broadband Coaxial Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2021/11/14
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2022/06/09
Thermal Hygrometer	Minggao	ETH529	MRTSUE06170	1 year	2021/12/08
Anechoic Chamber	RIKEN	Chamber-AC2	MRTSUE06213	1 year	2022/04/29

Radiated Emission (SIP-AC1)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06612	1 year	2022/06/24
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06559	1 year	2022/06/24
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB9168	MRTSUE06645	1 year	2022/08/26
Double Ridged Horn Antenna	R&S	HF907	MRTSUE06610	1 year	2022/08/05
Preamplifier	EMCI	EMC051845SE	MRTSUE06600	1 year	2021/11/12
Thermal Hygrometer	testo	608-H1	MRTSUE06620	1 year	2021/12/03
Anechoic Chamber	RIKEN	SIP-AC1	MRTSUE06554	1 year	2021/12/24

Radiated Emission (SIP-AC2)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06613	1 year	2022/06/24
MXA Signal Analyzer	Keysight	N9020B	MRTSUE06604	1 year	2021/09/26
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB9168	MRTSUE06646	1 year	2022/08/26
Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06648	1 year	2021/11/26
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06599	1 year	2021/11/26
Preamplifier	EMCI	EMC051845SE	MRTSUE06644	1 year	2021/11/12
Preamplifier	EMCI	EMC184045SE	MRTSUE06602	1 year	2021/10/13
Thermal Hygrometer	testo	608-H1	MRTSUE06624	1 year	2021/12/03
Anechoic Chamber	RIKEN	SIP-AC2	MRTSUE06781	1 year	2021/12/24

Radiated Emission (SIP-AC3)

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06612	1 year	2022/06/24
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06559	1 year	2022/06/24
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2021/11/08
Bilog Period Antenna	Schwarzbeck	VULB9168	MRTSUE06647	1 year	2022/08/05
Double Ridged Horn Antenna	R&S	HF907	MRTSUE06611	1 year	2021/09/13
Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06598	1 year	2021/11/26
Preamplifier	EMCI	EMC012645SE	MRTSUE06642	1 year	2022/01/14
Preamplifier	EMCI	EMC184045SE	MRTSUE06641	1 year	2022/01/14
Thermal Hygrometer	testo	608-H1	MRTSUE06622	1 year	2021/12/03
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2021/12/24

Software	Version	Function
EMI Software	V3	EMI Test Software

4. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

AC Conducted Emission Measurement - SR2
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 9kHz~150kHz: 3.84dB 150kHz~30MHz: 3.46dB
Radiated Emission Measurement - AC1
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): Horizontal: 30MHz~300MHz: 4.07dB 300MHz~1GHz: 3.63dB 1GHz~6GHz: 4.16dB Vertical: 30MHz~300MHz: 4.18dB 300MHz~1GHz: 3.60dB 1GHz~6GHz: 4.76dB
Radiated Emission Measurement - AC2
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): Horizontal: 30MHz~300MHz: 3.75dB 300MHz~1GHz: 3.53dB 1GHz~6GHz: 4.28dB Vertical: 30MHz~300MHz: 3.86dB 300MHz~1GHz: 3.53dB 1GHz~6GHz: 4.33dB

5. TEST RESULT

5.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Test Result	Reference
15.207	AC Conducted Emissions 150kHz - 30MHz	Line Conducted	N/A	Section 5.2
15.205, 15.231(b)	Radiated Spurious Emissions	Radiated	Pass	Section 5.3
15.231(c)	20dB & 99% Bandwidth		Pass	Section 5.4
15.231(a)(1)	Release Time		Pass	Section 5.5
15.231(b)	Duty Cycle		Pass	Section 5.6

Notes:

- 1) All modes of operation and data rates were investigated. The test results shown in the following sections represent the worst-case emissions.
- 2) The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.
- 3) "N/A" means that the test item is not applicable, and the details refer to relevant section.

5.2. Conducted Emission

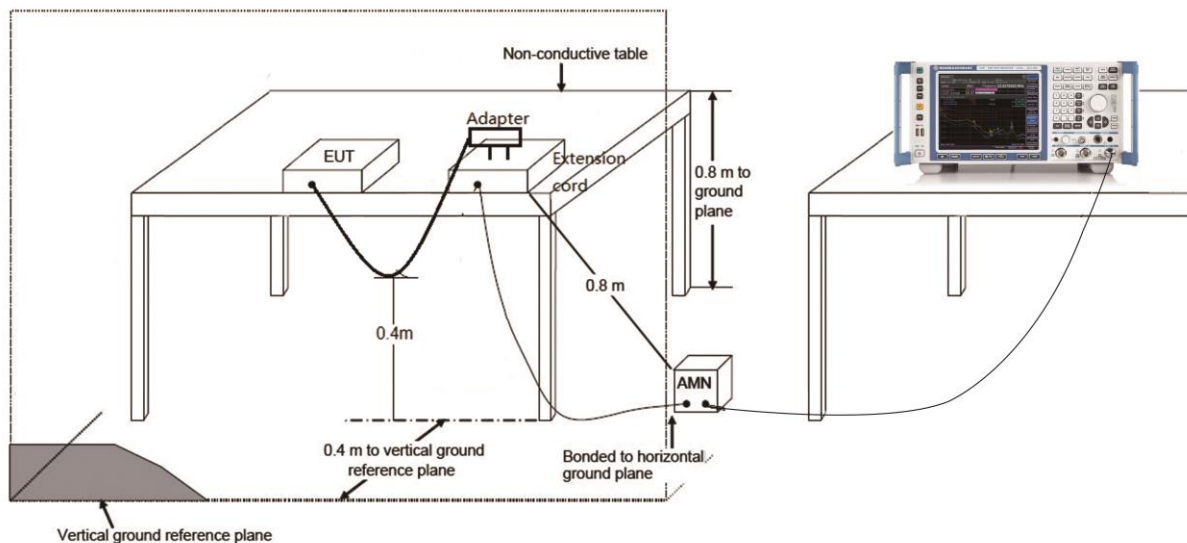
5.2.1. Test Limit

FCC Part 15.207		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 ~ 0.50	66 ~ 56	56 ~ 46
0.50 ~ 5.0	56	46
5.0 ~ 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

5.2.2. Test Setup



5.2.3. Test Result

The EUT is powered by dry batteries, so this requirement does not apply.

5.3. Radiated Emissions

5.3.1. Test Limit

According to §15.231(b), the field strength of emissions from intentional radiators operated under this section shall not exceed the following:

FCC Part 15.231(b) Limit		
Fundamental Frequency (MHz)	Field strength of fundamental (microvolts/meter)	Field strength of spurious emission (microvolts/meter)
40.66 - 40.70	2250	225
70 - 130	1250	125
130 - 174	1250 to 3750	125 to 375
174 - 260	3750	375
260 - 470	3750 to 12500	375 to 1250
Above 470	12500	1250

The limits on the field strength of the spurious emissions in the above table are based on the fundamental frequency of the intentional radiator. Spurious emissions shall be attenuated to the average (or, alternatively, CISPR quasi-peak) limits shown in this table or to the general limits shown in §15.209, whichever limit permits a higher field strength.

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements start below or at the lowest crystal frequency.

Compliance with the provisions of §15.205 shall be demonstrated using the measurement instrumentation specified in that section.

For 315 MHz fundamental Limit:

Average Limit (dBμV/m) = $20 \cdot \log \{ (41.67 \times 315 - 7083) / 10^6 \} + 120 = 75.623$ (dBμV/m).

Peak Limit (dBμV/m) = Average Limit (dBμV/m) + 20 = 95.623 (dBμV/m).

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

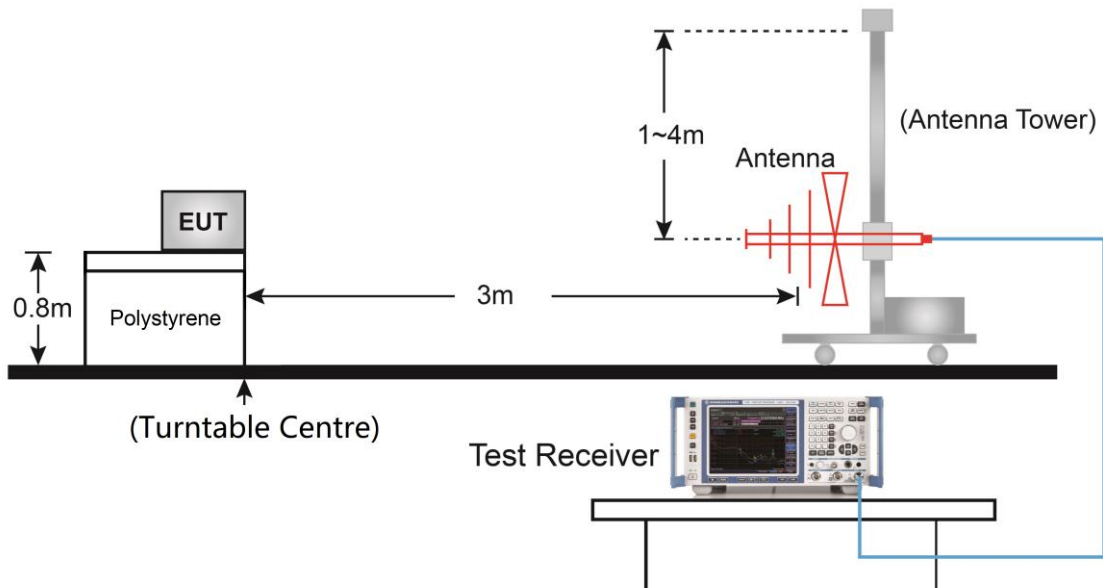
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

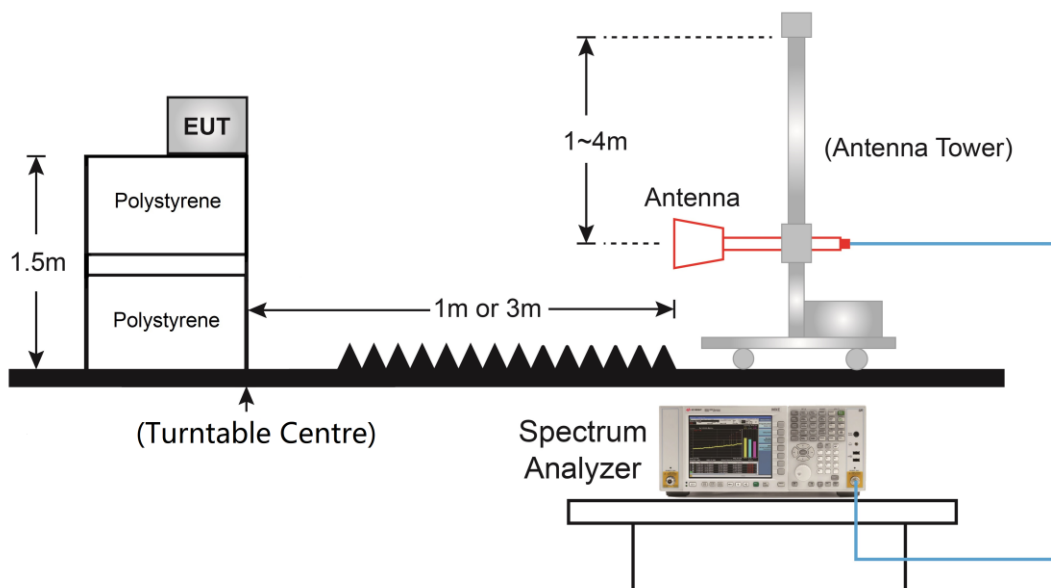
FCC Part 15.209 Limit		
Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measured Distance (m)
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

5.3.2. Test Setup

Below 1GHz Test Setup:

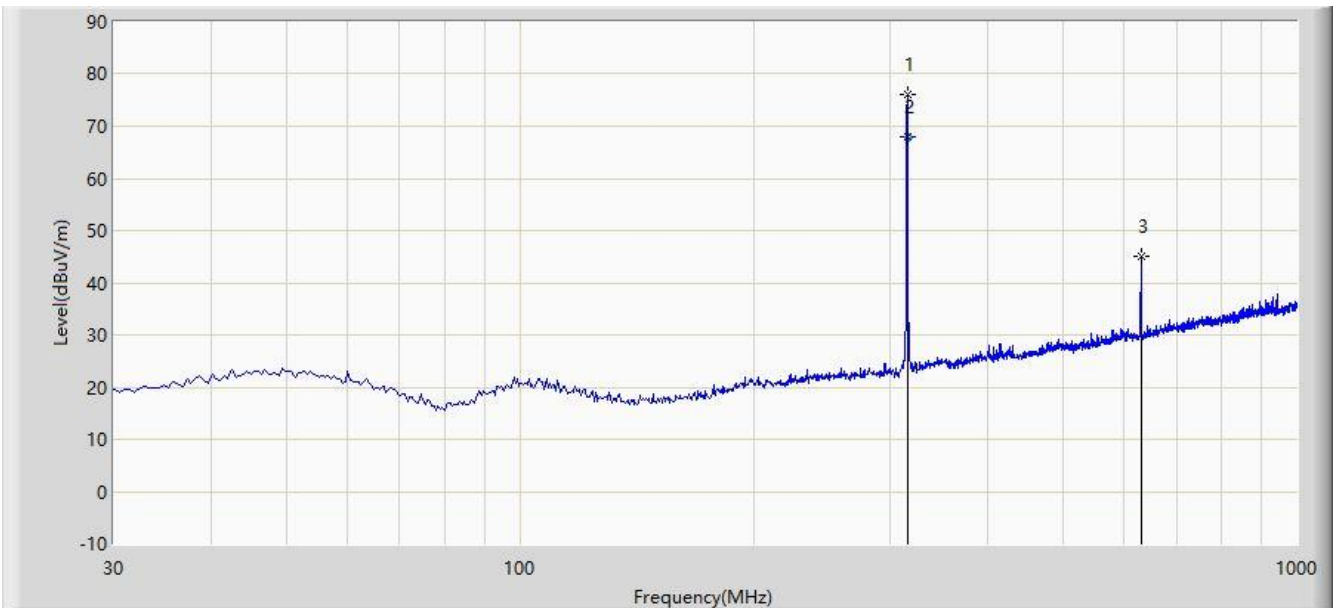


Above 1GHz Test Setup:



5.3.3. Test Results

Site: WZ-AC2	Time: 2021/06/09
Limit: FCC_Part15.231(b)_RE(3m)	Engineer: Lucas Wang
Probe: WZ-AC2_VULB9162_0.03-7GHz	Polarity: Horizontal
EUT: WIRELESS CONTROL PWS G2	Power: By Battery
Test Mode: Transmit at Channel 315MHz	



No.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Duty Cycle Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Type
1	315.180	54.979	21.174	N/A	76.153	95.623	-19.467	PK
	315.180	54.979	21.174	-8.175	67.978	75.623	-7.642	AV
2	629.945	17.760	27.298	N/A	45.058	75.623	-30.562	PK

Note 1: Testing is carried out with frequency rang 9 kHz to the tenth harmonics. There is the ambient noise within frequency range 9 kHz ~ 30 MHz, the permissible value is not shown in the report.

Note 2: The fundamental frequency is 315MHz, so the fundamental and spurious emissions radiated limit base on the operating frequency 315MHz.

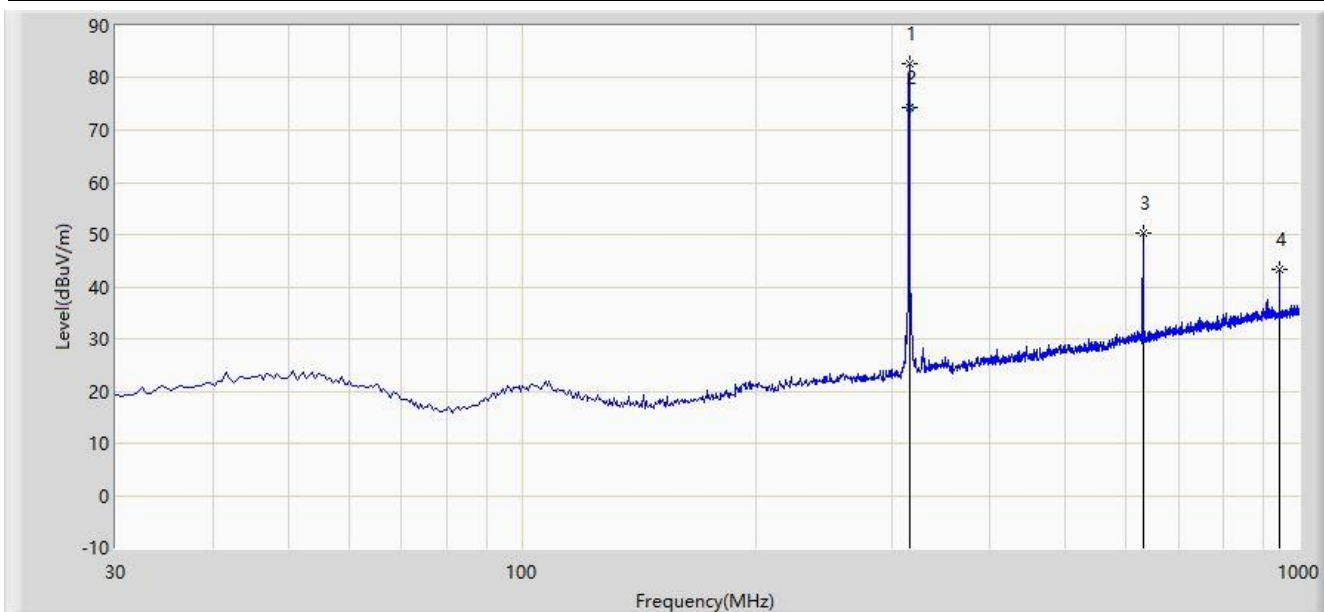
Note 3: Average measurement was not performed when the peak level lower than average limit.

Note 4: Peak Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

AV Measure Level = Peak Measure Level + Duty Cycle Factor.

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2021/06/09
Limit: FCC_Part15.231(b)_RE(3m)	Engineer: Lucas Wang
Probe: WZ-AC2_VULB9162_0.03-7GHz	Polarity: Vertical
EUT: WIRELESS CONTROL PWS G2	Power: By Battery
Test Mode: Transmit at Channel 315MHz	



No.	Frequency (MHz)	Reading Level (dBuV)	Duty Cycle Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Type
1	315.180	61.492	N/A	82.666	95.623	-12.954	21.174	PK
	315.180	61.492	-8.175	74.491	75.623	-1.129	21.174	AV
2	629.945	22.892	N/A	50.190	75.623	-25.43	27.298	PK
3	945.195	11.912	N/A	43.305	75.623	-32.315	31.393	PK

Note 1: Testing is carried out with frequency rang 9 kHz to the tenth harmonics. There is the ambient noise within frequency range 9 kHz ~ 30 MHz, the permissible value is not shown in the report.

Note 2: The fundamental frequency is 315MHz, so the fundamental and spurious emissions radiated limit base on the operating frequency 315MHz.

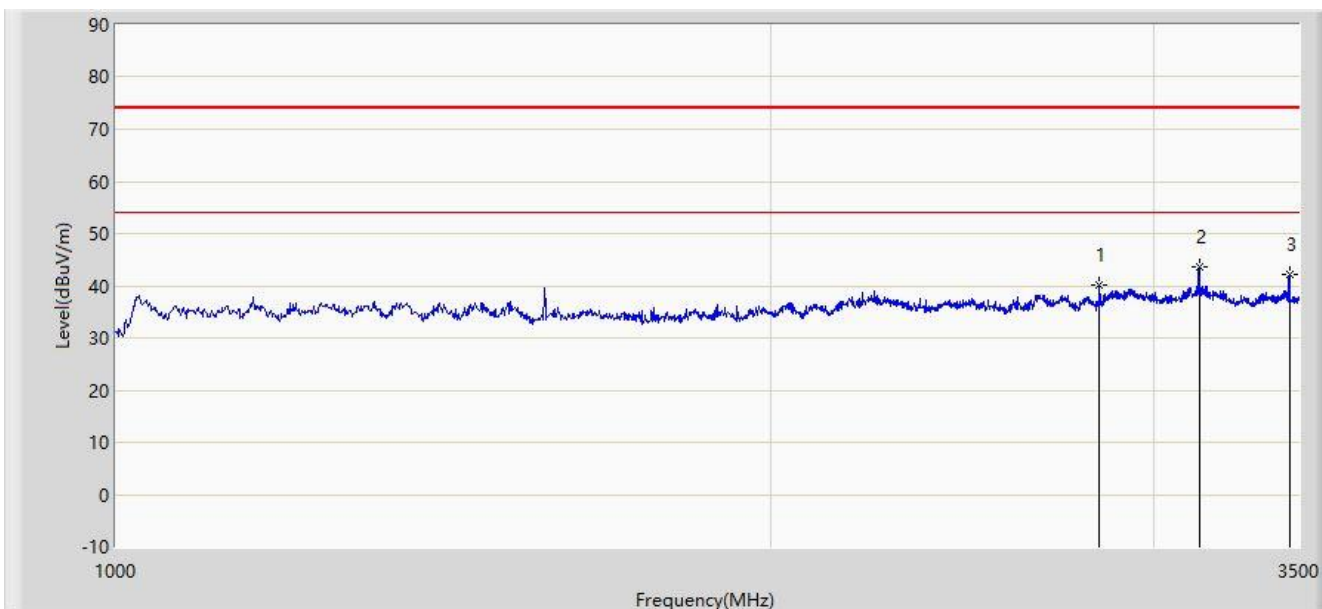
Note 3: Average measurement was not performed when the peak level lower than average limit.

Note 4: Peak Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

AV Measure Level = Peak Measure Level + Duty Cycle Factor.

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2021/06/09
Limit: FCC_Part15.209_RE(3m)	Engineer: Lucas Wang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WIRELESS CONTROL PWS G2	Power: By Battery
Test Mode: Transmit at Channel 315MHz	



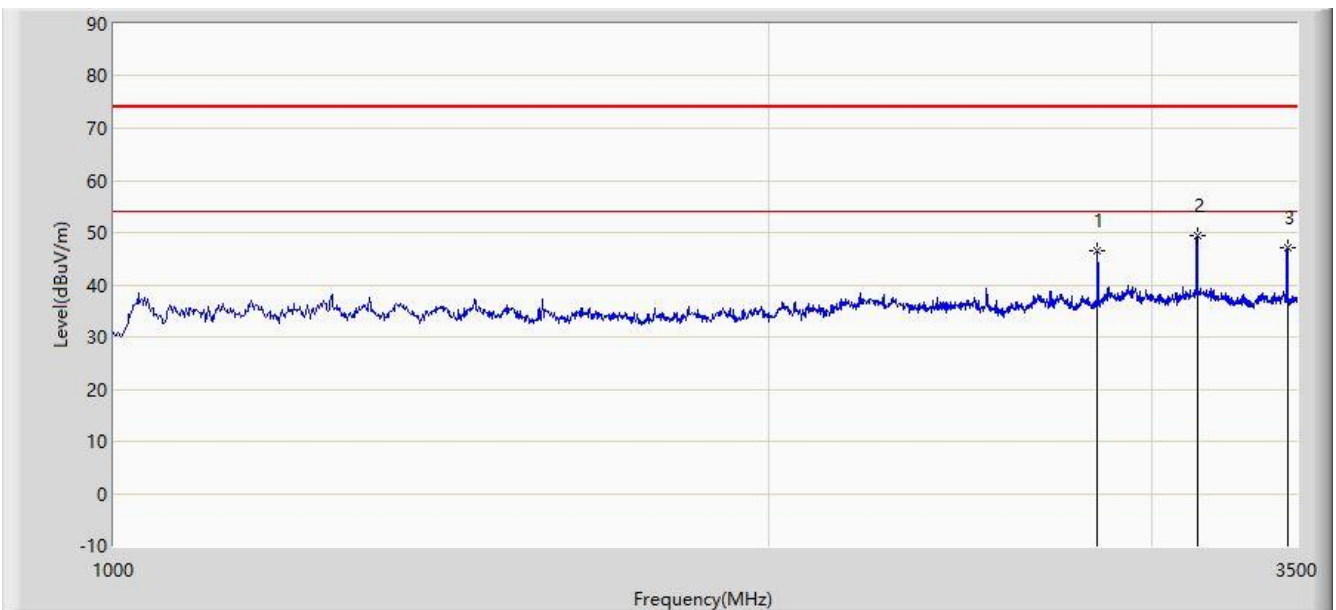
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1			2835.000	40.225	41.177	-35.398	75.623	-0.951	PK
2		*	3150.000	43.742	44.284	-31.881	75.623	-0.542	PK
3			3465.000	42.292	42.486	-33.331	75.623	-0.194	PK

Note 1: Peak Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 2: Average measurement was not performed when the peak level lower than average limit.

Site: WZ-AC2	Time: 2021/06/09
Limit: FCC_Part15.209_RE(3m)	Engineer: Lucas Wang
Probe: WZ-AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WIRELESS CONTROL PWS G2	Power: By Battery
Test Mode: Transmit at Channel 315MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1			2835.000	46.555	47.507	-29.068	75.623	-0.951	PK
2		*	3150.000	49.521	50.063	-26.102	75.623	-0.542	PK
3			3465.000	47.033	47.227	-28.590	75.623	-0.194	PK

Note 1: Peak Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Note 2: Average measurement was not performed when the peak level lower than average limit.

5.4. 20dB & 99% Bandwidth

5.4.1. Test Limit

According to FCC Part 15.231(c), the bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70MHz and below 900MHz. Bandwidth is determined at the points 20 dB down from the modulated carrier.

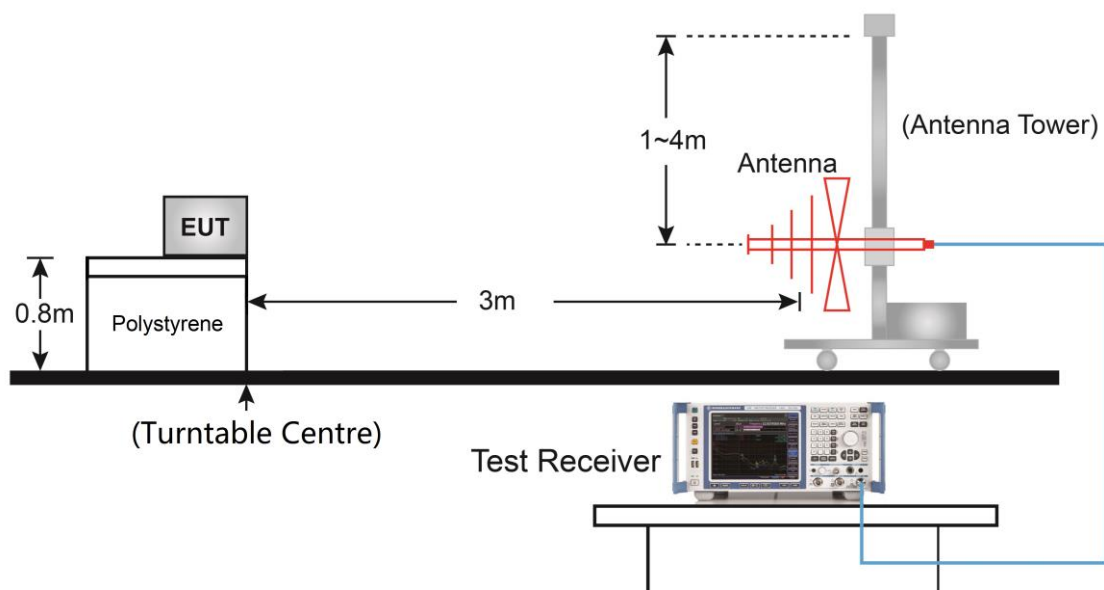
5.4.2. Test Procedure

ANSI C63.10 Clause 6.9.2

5.4.3. Test Setting

1. Set the spectrum span range to two times and five times the OBW
2. Set RBW = 1% ~ 5% of the OBW
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple

5.4.4. Test Setup

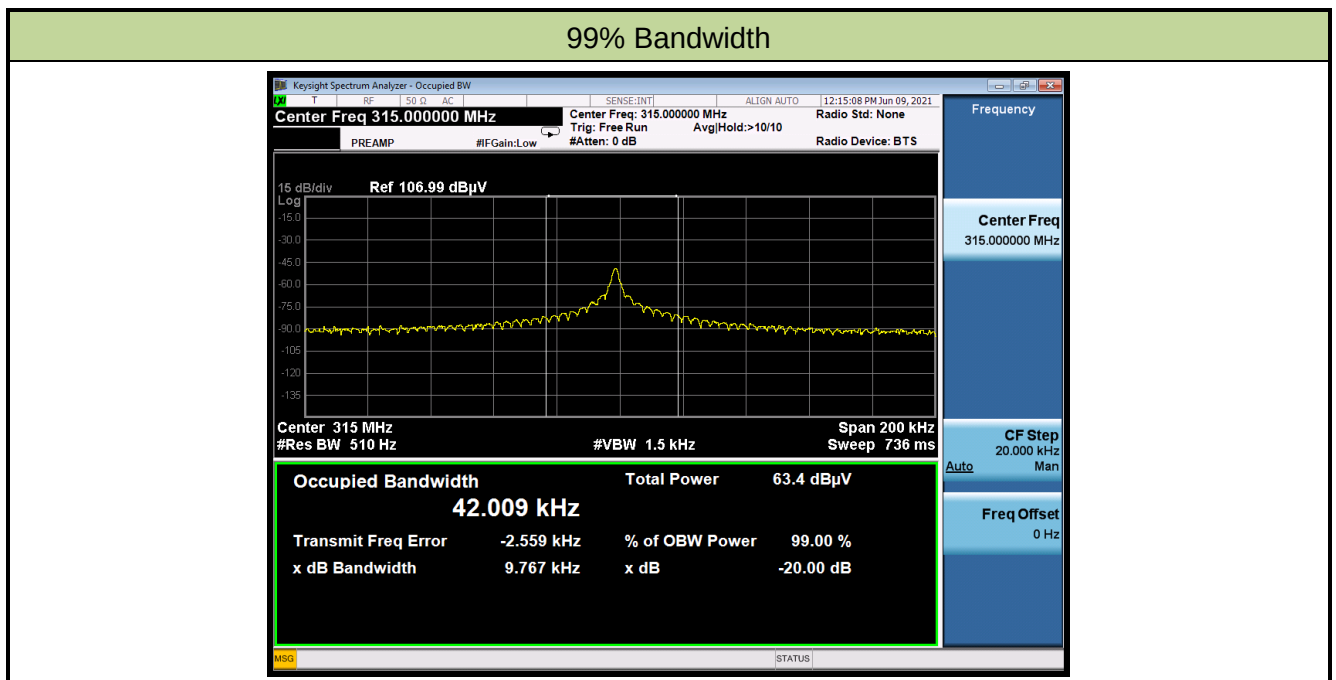


5.4.5. Test Result

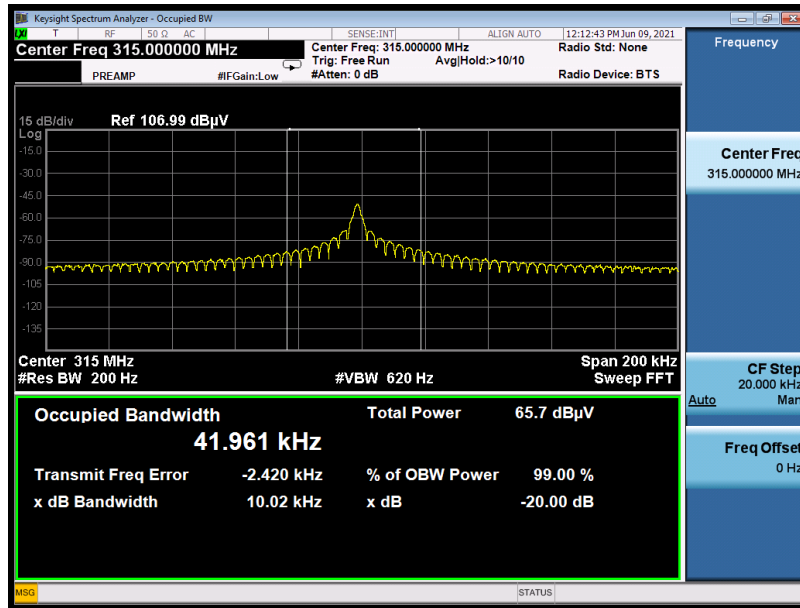
Test Site	WZ-AC2	Test Engineer	Luis Yang
Test Date	2021/06/09		

99% Bandwidth (kHz)	20dB Bandwidth (kHz)	Limit (kHz)	Result
42.01	10.02	≤ 787.5	Pass

Note: For 315MHz Limit = Fundamental Frequency * 0.25% = 315 MHz * 0.25% = 787.5 kHz



20dB Bandwidth



5.5. Release Time

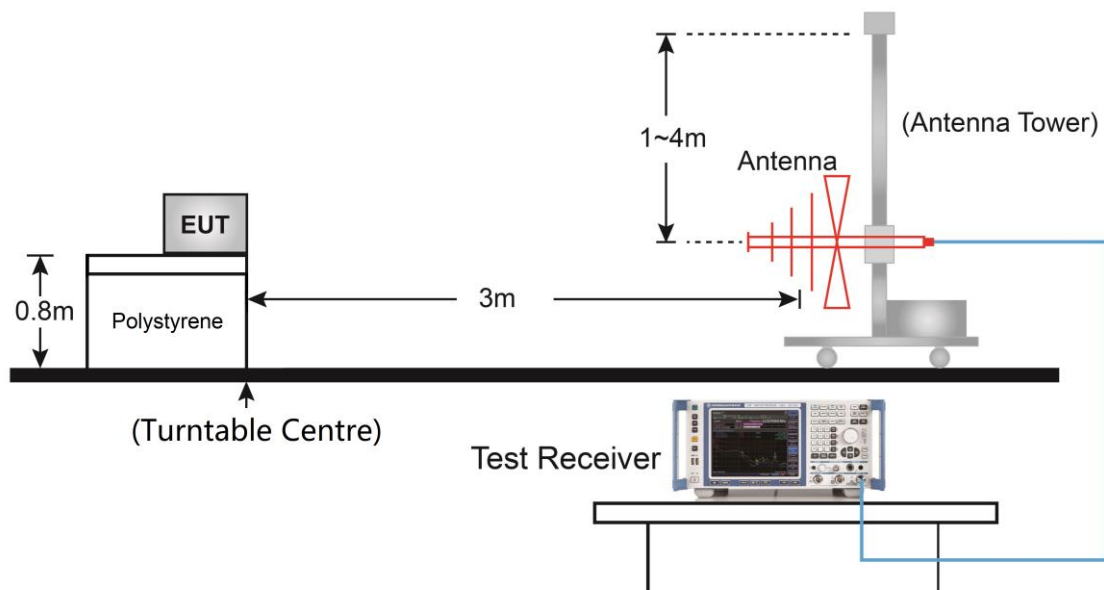
5.5.1. Test Limit

A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

5.5.2. Test Procedure

With the EUT's antenna attached, the EUT's output signal was received by the test antenna, which was connected to the spectrum analyzer. Set the center frequency to 315MHz, then set the spectrum analyzer to Zero Span for the release time reading. During the testing, the switch was released then the EUT automatically deactivated.

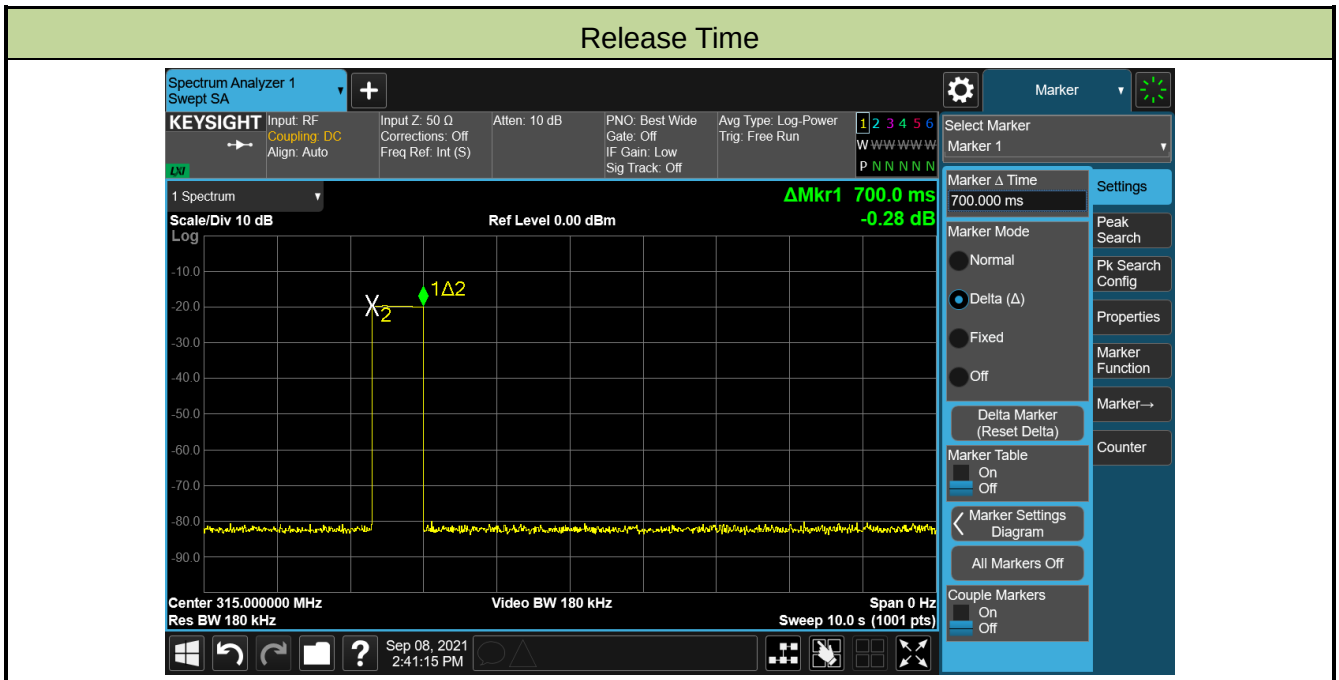
5.5.3. Test Setup



5.5.4. Test Result

Test Site	WZ-AC2	Test Engineer	Luis Yang
Test Date	2021/09/08		

Item	Measured Value	Limit	Result
Release Time	700 ms	≤ 5 s	Pass



5.6. Duty Cycle

5.6.1. Test Limit

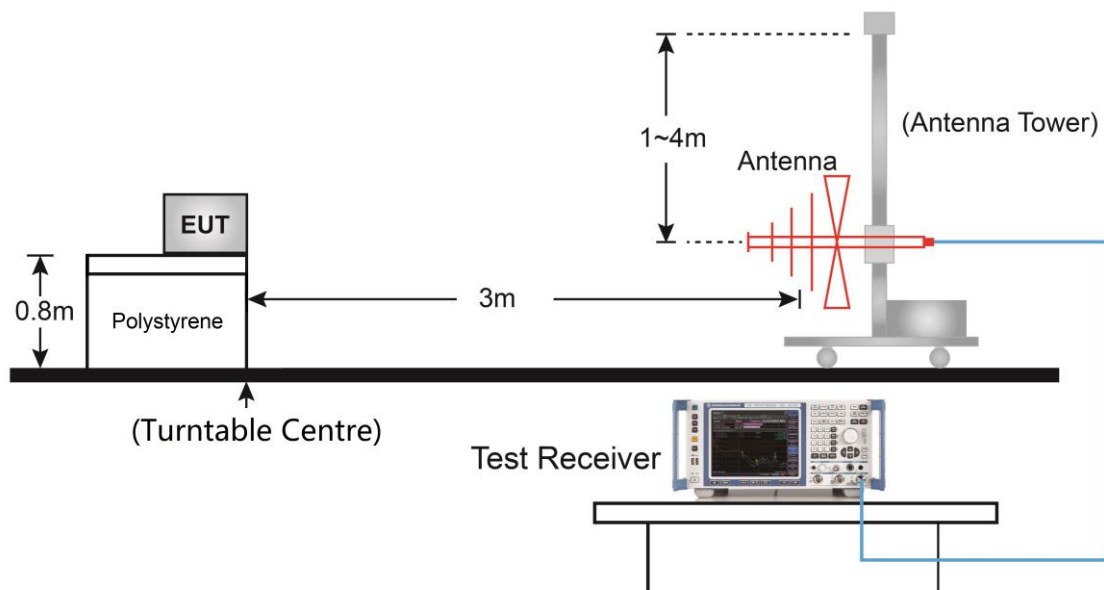
N/A

5.6.2. Test Procedure

With the EUT's antenna attached, the EUT's output signal was received by the test antenna, which was connected to the spectrum analyzer. Set the center frequency to 315MHz, then set the spectrum analyzer to Zero Span for the release time reading. During the testing, the switch was released then the EUT automatically deactivated.

According to FCC Part 15.231(b) and 15.35(b), for pulse operation transmitter, the averaging pulsed emissions are calculated by peak value of measured emission plus duty cycle factor.

5.6.3. Test Setup



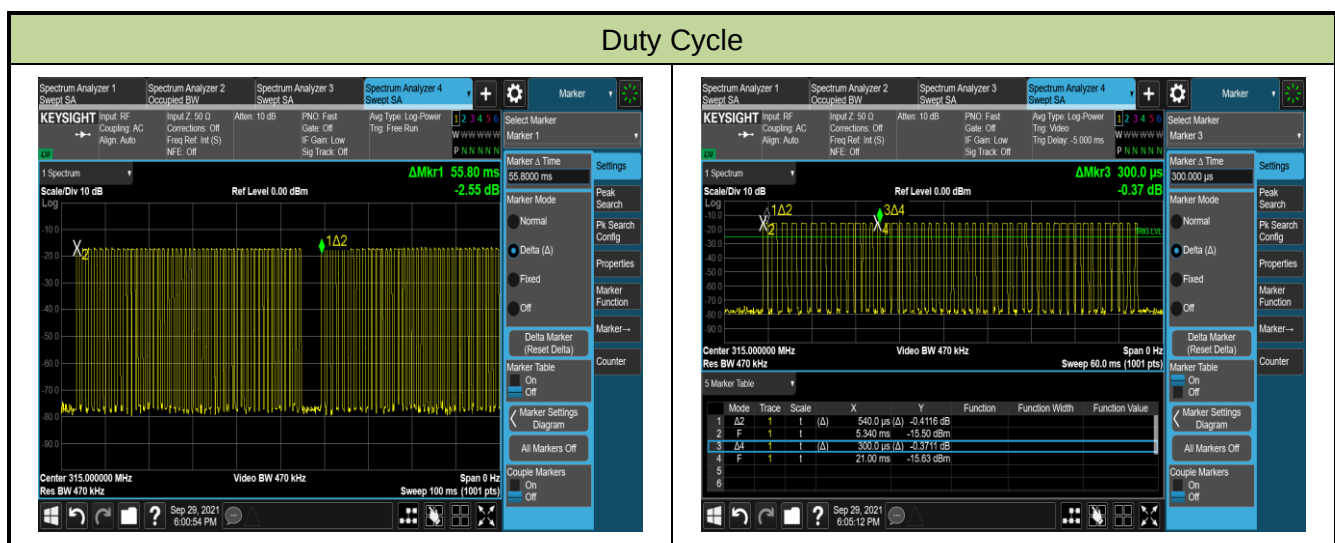
5.6.4. Test Setup

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2021/09/30		

Time On (ms)	One Period (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
20.46	55.80	36.67	-8.715

Note: Duty Cycle Factor = $20 \cdot \log(\text{Duty Cycle})$

Time On = $0.54\text{ms} \cdot 24 + 0.30\text{ms} \cdot 25 = 20.46\text{ms}$



6. CONCLUSION

The data collected relate only the item(s) tested and show that the device is compliance with FCC Rules.

The End

Appendix A - Test Setup Photograph

Refer to “2106RSU007-UT” file.

Appendix B - EUT Photograph

Refer to “2106RSU007-UE” file.