

TEST REPORT

Report No.	CISRR25123043001
Project No.	CISR251230430
FCC ID	2BTYR-AMJ-101
Applicant	Xiangyang Aomei Jing Electronic Technology Co., Ltd.
Address	D2-1, Jiahai Industrial City, Shenzhen Industrial Park, Xiangyang High-Tech Development Zone, Hubei Province
Manufacturer	Xiangyang Aomei Jing Electronic Technology Co., Ltd.
Address	D2-1, Jiahai Industrial City, Shenzhen Industrial Park, Xiangyang High-Tech Development Zone, Hubei Province
Product Name	remote control
Trade mark	Ogilvy crystal
Model/Type reference	AMJ-101
Listed Model(s)	AMJ-101,AMJ-102,AMJ-103,AMJ-104,AMJ-105,AMJ-106,AMJ-107,AMJ-108,AMJ-109,AMJ-110,AMJ-111,AMJ-112,AMJ-113
Standard	47 CFR Part 15.231
Date of sample receipt	December 31, 2025
Test date	February 25, 2026 to March 1, 2026
Issue date	March 2, 2026
Test result	Complied

Lucas Huang

Reviewed by: Lucas Huang



Approved by: Hans Hu

The test results relate only to the tested samples.
The test report should not be reproduced except in full without the written approval of Shenzhen Bangce Testing Technology Co., Ltd.

Contents

1. REPORT VERSION	3
2. SUMMARY OF TEST RESULT	4
3. SUMMARY	5
3.1. Product Description	5
3.2. Radio Specification Description	5
3.3. Modification of EUT	5
3.4. Testing Site	5
4. TEST CONFIGURATION	6
4.1. Test frequency list	6
4.2. Test mode	6
4.3. Support unit used in test configuration and system	6
4.4. Test sample information	6
4.5. Testing environmental condition	6
4.6. Statement of the measurement uncertainty	6
4.7. Equipment Used during the Test	7
5. TEST CONDITIONS AND RESULTS	9
5.1. Antenna Requirement	9
5.2. 20 dB Bandwidth	10
5.3. Transmitter Deactivation Time	12
5.4. Duty Cycle Corrected Factor	14
5.5. Radiated field strength of the fundamental signal	17
5.6. Radiated Spurious Emission	18

1. REPORT VERSION

Version No.	Issue date	Description
00	March 2, 2026	Original

2. SUMMARY OF TEST RESULT

Report clause	Test Item	Standard Requirement	Result
5.1	Antenna Requirement	15.203	PASS
5.2	20 dB Bandwidth	15.231(c)	PASS
5.3	Transmitter Deactivation Time	15.231(a)(1)	PASS
5.4	Duty cycle Factor	-	PASS
5.5	Radiated field strength of the fundamental signal	15.231 (b)	PASS
5.6	Radiated Spurious Emission	15.231 (b)/15.205/15.209	PASS

Note:

- The measurement uncertainty is not included in the test result.

3. SUMMARY

3.1. Product Description

Main unit information:	
Product Name:	remote control
Trade mark:	Ogilvy crystal
Model No.:	AMJ-101
Listed Model(s):	AMJ-101,AMJ-102,AMJ-103,AMJ-104,AMJ-105,AMJ-106,AMJ-107,AMJ-108,AMJ-109,AMJ-110,AMJ-111,AMJ-112,AMJ-113
Model difference:	The internal results are all the same, only the appearance results differ.
Power supply:	DC 12V for Battery
Hardware version:	-
Software version:	-
Accessory unit (AU) information:	
Battery information:	DC 12V

3.2. Radio Specification Description

Operation frequency:	315MHz
Modulation:	ASK
Device type:	Manual transmission
Channel Number:	1
Antenna type:	Spring Antenna
Antenna gain:	0.56dBi

3.3. Modification of EUT

No modifications are made to the EUT during all test items.

3.4. Testing Site

Laboratory Name	Shenzhen Bangce Testing Technology Co., Ltd.
Laboratory Location	101, building 10, Yunli Intelligent Park, Shutianpu community, Matian Street, Guangming District, Shenzhen, Guangdong, China
Contact information	Tel: 86-755-2319 6848, email: service@cis-cn.net Website: http://www.cis-cn.net/
FCC registration number	736346
FCC designation number	CN1372

4. TEST CONFIGURATION

4.1. Test frequency list

Channel	Frequency (MHz)
CH1	315

4.2. Test mode

Test item	Test configuration
Transmitter Deactivation Time	Keep the EUT operating in normal mode.
20 dB Bandwidth Duty Cycle Corrected Factor Radiated spurious emissions Radiated field strength of the fundamental signal	Keep the EUT in continuous transmission mode.

4.3. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Item	Equipment name	Trade Name	Model No.
1	--	--	--

4.4. Test sample information

Type	sample no.
Engineer sample	CISR251230430-S01
Normal sample	CISR251230430-S02

4.5. Testing environmental condition

Type	Requirement	Actual
Temperature:	15~35°C	25°C
Relative Humidity:	25~75%	50%
Air Pressure:	860~1060mbar	1000mbar

4.6. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty
1	AC Conducted Emission	1.63dB
2	Power Spectral Density	1.34dB
3	20dB Bandwidth	0.002%
4	Duty cycle	-

5	Conducted Band Edge and Spurious Emission	1.93dB
6	Radiated Band Edge Emission	3.76dB for 30MHz-1GHz 3.80dB for above 1GHz
7	Radiated Spurious Emission	3.76dB for 30MHz-1GHz 3.80dB for above 1GHz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

4.7. Equipment Used during the Test

Duty Cycle 20dB Bandwidth Dwell Time						
Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	Spectrum analyzer	ROHDE&SCHWARZ	FSV-40N	CIS-EE076	2026-01-06	2027-01-05
2	Notch Filter Assembly	WCS	SMU-1003	CIS-EE093	2026-01-06	2027-01-05
3	Vector Signal Generator	Agilent	N5182A	CIS-RE012	2026-01-06	2027-01-05
4	Analog Signal Generator	Agilent	N5181A	CIS-RE013	2026-01-06	2027-01-05
5	Test software	WCS	WCN-Regulator y	CIS-EE103	/	/

Field Strength of The Fundamental Signal Radiated Emission (below 1GHz) Radiated Emission (above 1GHz)						
Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	9*6*6 anechoic chamber	SKET	9.3*6.3*6	N/A	2024-09-02	2027-09-01
2	Spectrum analyzer	Agilent	N9020A	MY50530263	2026-01-06	2027-01-05
3	Spectrum analyzer	R&S	FSV-40N	102130	2026-01-06	2027-01-05
4	Bilog Antenna	Schwarzbeck	VULB 9163	1463	2026-01-06	2029-01-05
5	Horn Antenna	SCHWARZBECK	BBHA 9120 D	2487	2026-01-06	2029-01-05
6	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	/	2026-01-06	2029-01-05
7	RF Cable	Tonscend	Cable 1	/	2026-01-06	2027-01-05
8	RF Cable	Tonscend	Cable 2	/	2026-01-06	2027-01-05
9	RF Cable	SKET	Cable 3	/	2026-01-06	2027-01-05
10	L.I.S.N.#1	Schwarzbeck	NSLK812 7	/	2026-01-06	2027-01-05
11	L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	2026-01-06	2027-01-05
12	Horn Antenna	SCHWARZBECK	BBHA917 0	1130	2026-01-06	2029-01-05

13	Preamplifier	Tonscend	TAP1804 0048	AP21C806126	2026-01-06	2027-01-05
14	Variable-frequency power source	Pinhong	PH1110	/	2026-01-06	2027-01-05
15	6dB Attenuator	SKET	DC-6G	/	2026-01-06	2027-01-05
16	Antenna tower	SKT	Bk-4AT- BS	AT202104010 1-V1	2026-01-06	2027-01-05

5. TEST CONDITIONS AND RESULTS

5.1. Antenna Requirement

Standard Applicable

FCC CFR Title 47 Part 15 Subpart C Section 15.203:

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.

Description

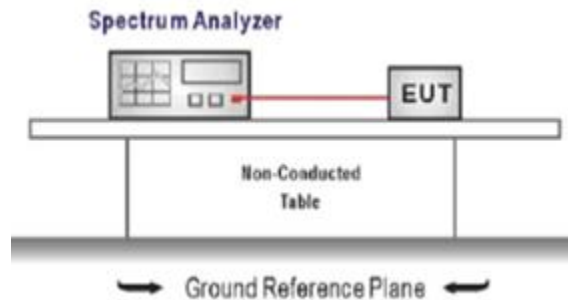
The EUT antenna is PCB antenna, It comply with the standard requirement. In case of replacement of broken antenna the same antenna type must be used. Antenna structure please refer to the EUT internal photographs antenna photo.

5.2. 20 dB Bandwidth

Limit:

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. Bandwidth is determined at the points 20 dB down from the modulated carrier.

Test configuration:



Test procedure:

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a Test channel
RBW $\geq$ 1% of the 20 dB bandwidth, VBW $\geq$ RBW
Sweep = auto, Detector function = peak, Trace = max hold
4. Measure and record the results in the test report.

Test mode:

Refer to the clause 4.2

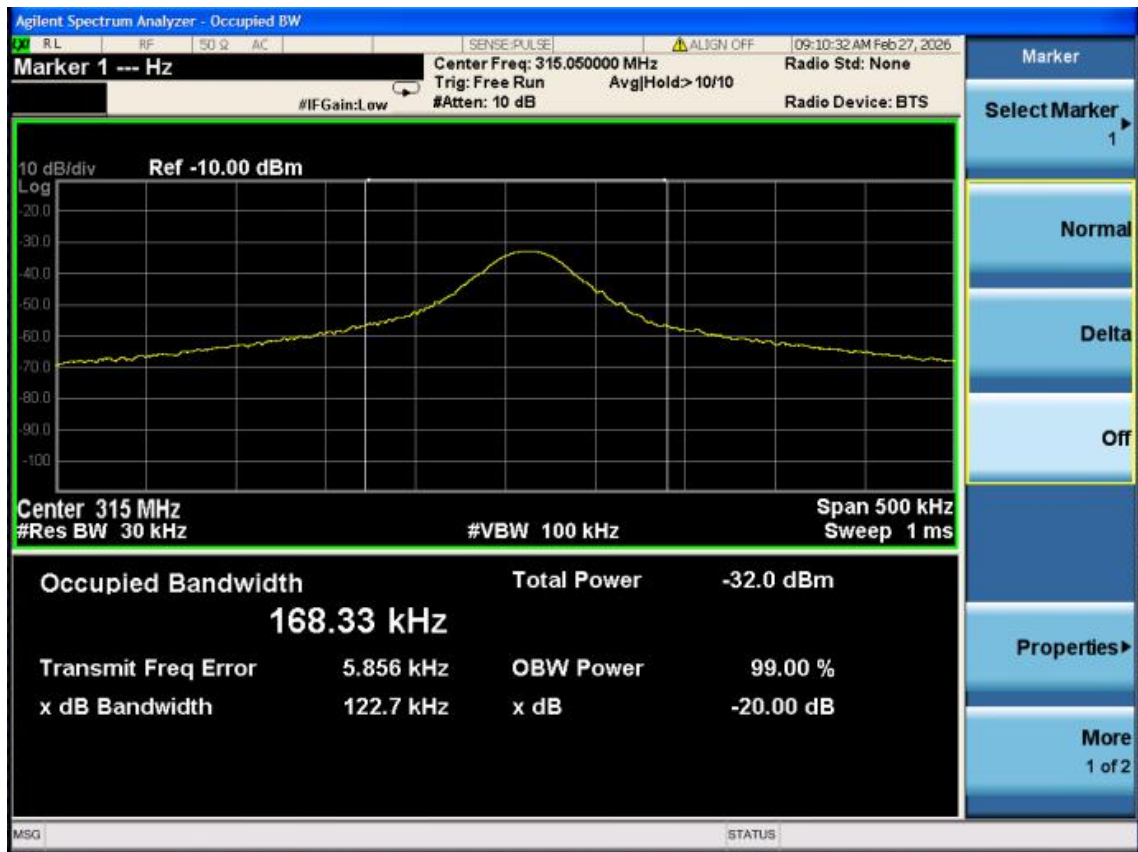
Result:

Passed

Test Data:

Test Channel	20dB Bandwidth (kHz)	Limit (kHz)	Result
CH1	122.7	1084.8	Pass

NOTE: Limit=0.25%*Center Frequency=1084.8 kHz

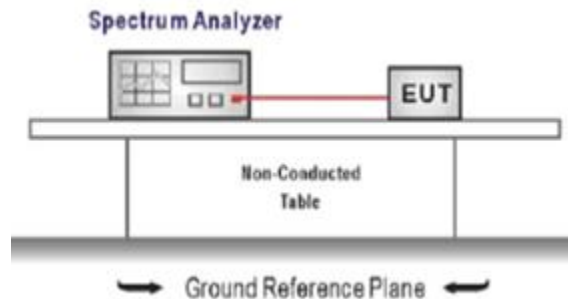


5.3. Transmitter Deactivation Time

Limit:

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

Test configuration:



Test procedure:

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
Frequency=Center carrier frequency
RBW=30kHz, VBW=100kHz, Span= zero,
Sweep time= 10second, Detector function = peak, Trace = single
4. Measure and record the results in the test report.

Test mode:

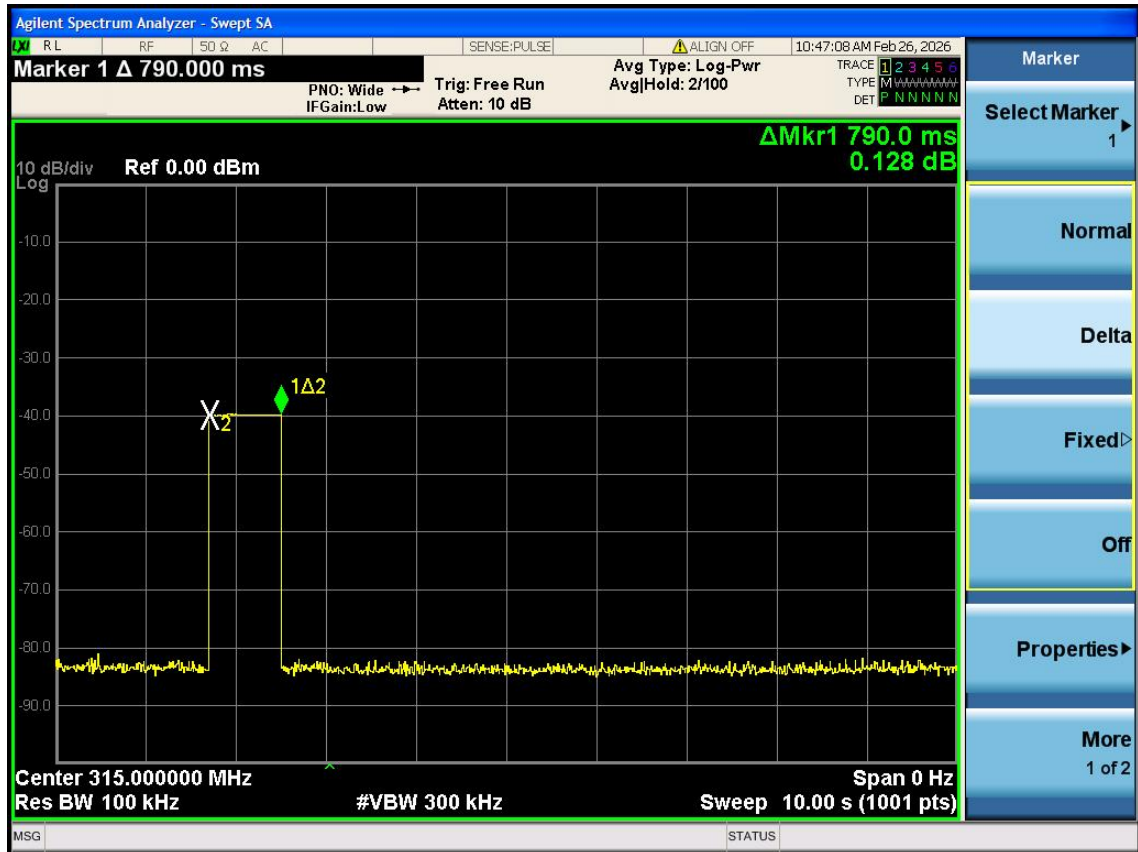
Normal operation mode

Result:

Passed

Test Data:

Transmission time (second)	Limit (second)	Result
0.128	5	Pass

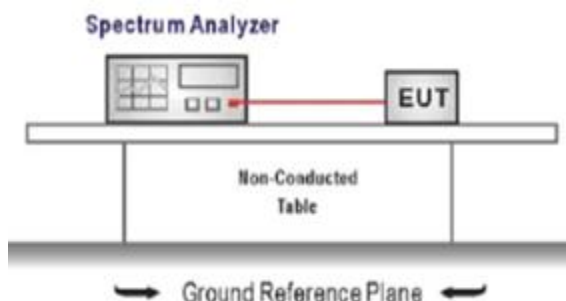


5.4. Duty Cycle Corrected Factor

Limit:

No dedicated limit specified in the Rules.

Test configuration:



Test procedure:

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
Span=zero span, Frequency=centered channel, RBW= 30kHz, VBW ≥ RBW
Sweep time=as necessary to capture the entire dwell time,
Detector function = peak, Trigger mode
4. Measure and record the duty cycle data

Test mode:

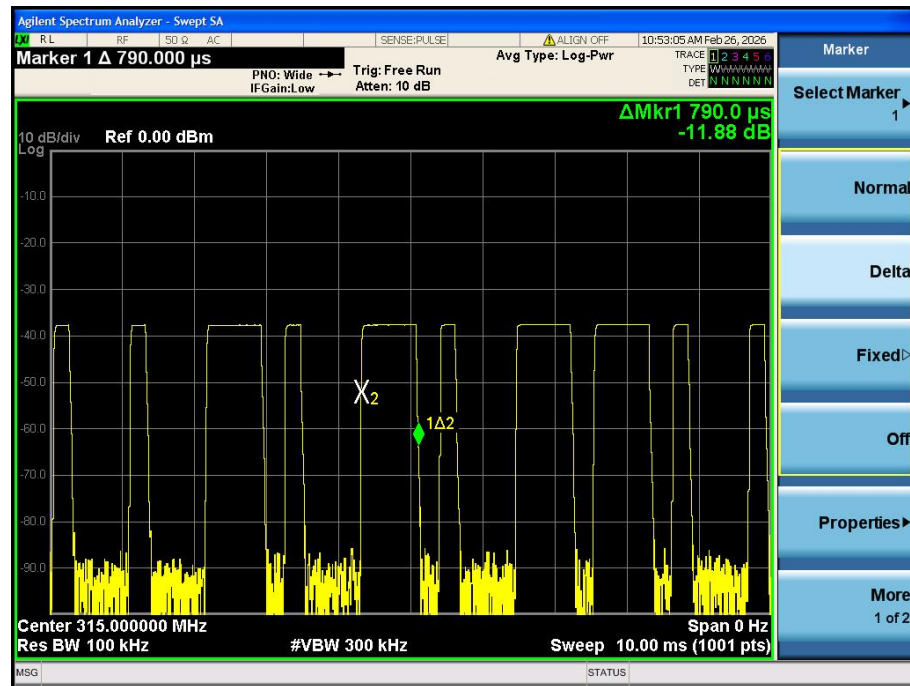
Refer to the clause 4.2

T _{ON1} (ms) :	0.79
T _{ON1} number	8
T _{ON2} (ms) :	0.25
T _{ON2} number	17
Period (ms) :	28
Duty Cycle :	$= (0.79 \times 8 + 0.25 \times 17) / 28 = 0.3775$
Duty Cycle Corrected Factor:	$= 20 \times \log(0.3775) = -8.46\text{dB}$

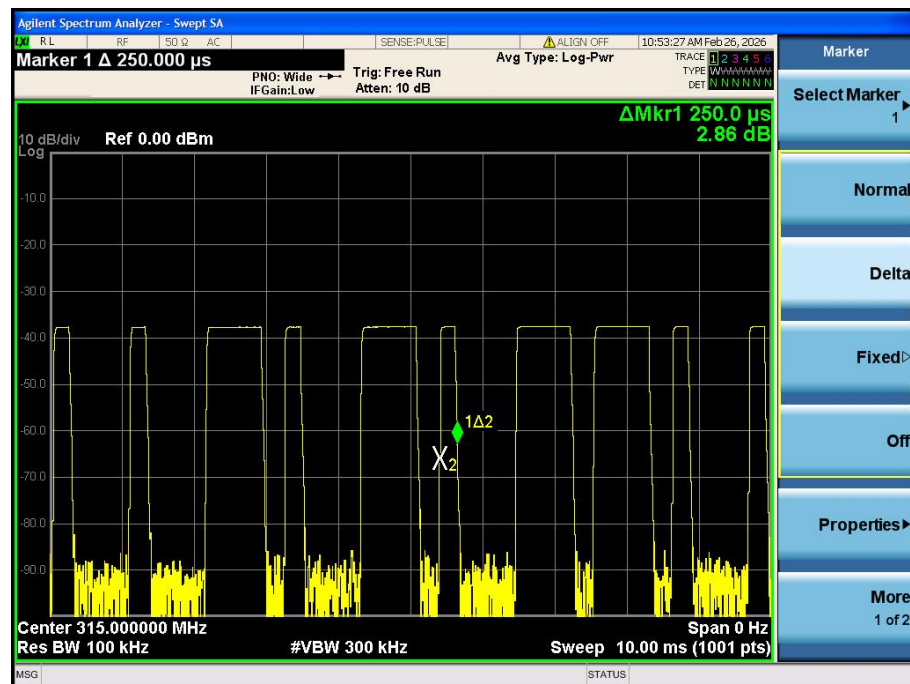
Note:

- 1) Duty cycle= Ton1* T_{ON1} number +Ton2* T_{ON2} number / T period
- 2) Duty Cycle Corrected Factor/DCCF=20*log (Duty Cycle)

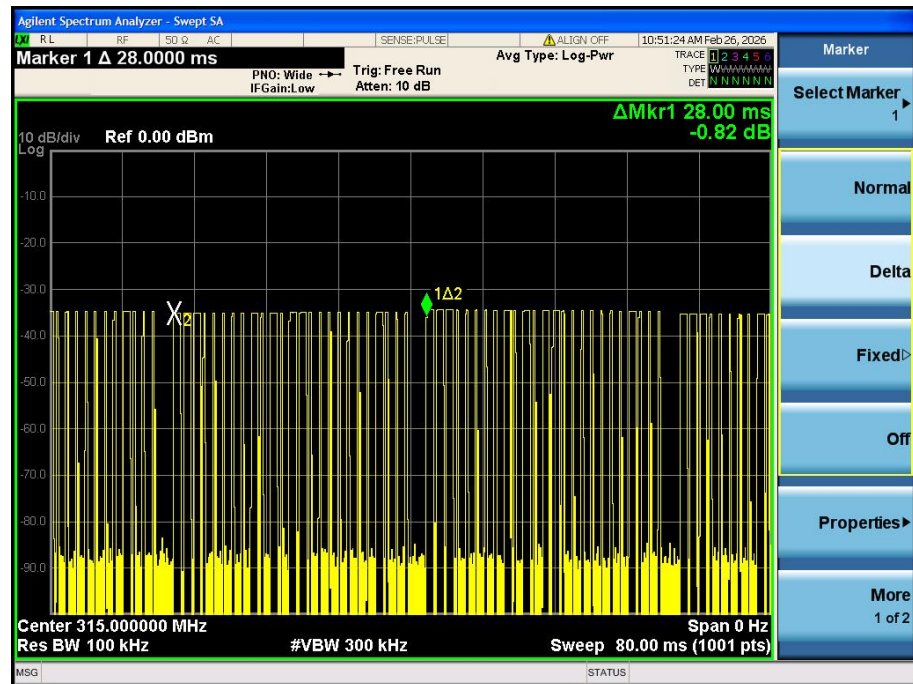
T_{ON1} (ms) :



T_{ON2} (ms) :



Period (ms) :



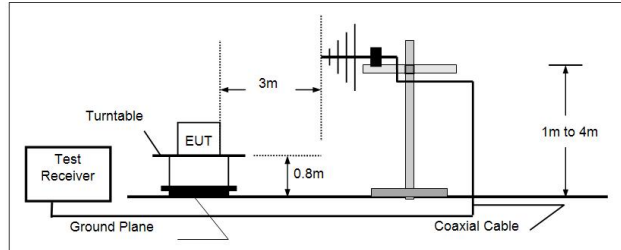
5.5. Radiated field strength of the fundamental signal

Limit:

Fundamental frequency (MHz)	Field strength of fundamental (microvolts/meter)	Field strength of spurious emissions (microvolts/meter)
40.66-40.70	2,250	225
70-130	1,250	125
130-174	¹ 1,250 to 3,750	¹ 125 to 375
174-260	3,750	375
260-470	¹ 3,750 to 12,500	¹ 375 to 1,250
Above 470	12,500	1,250

¹Linear interpolations.

Test configuration:



Test procedure:

1. The EUT was setup and tested according to ANSI C63.10.
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;
7. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Test mode:

Refer to the clause 4.2

Result:

Passed

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarity
315	59.48	95.62	36.14	Peak	Horizontal
315	51.02	75.62	24.60	Average	Horizontal
315	64.95	95.62	30.67	Peak	Vertical
315	56.49	75.62	19.13	Average	Vertical

Note:

- 1) Level= Reading + Factor/Transd; Factor/Transd =Antenna Factor+ Cable Loss- Preamp Factor
- 2) Margin = Limit – Level
- 3) Average Level = Peak Level+Duty cycle corrected factor
- 4) This test was performed with EUT in X, Y, Z position and the worse case was found when EUT in Y position.

5.6. Radiated Spurious Emission

Limit:

FCC CFR Title 47 Part 15 Subpart C Section 15.209

Frequency	Limit (dBuV/m)	Value
0.009 MHz ~0.49 MHz	2400/F(kHz) @300m	Quasi-peak
0.49 MHz ~ 1.705 MHz	24000/F(kHz) @30m	Quasi-peak
1.705 MHz ~30 MHz	30 @30m	Quasi-peak

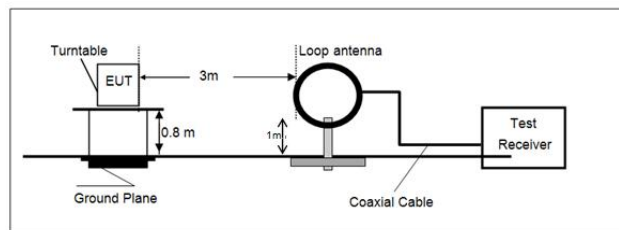
Limit dBuV/m @3m = Limit dBuV/m @300m + 40*log(300/3)

Limit dBuV/m @3m = Limit dBuV/m @30m +40*log(30/3)

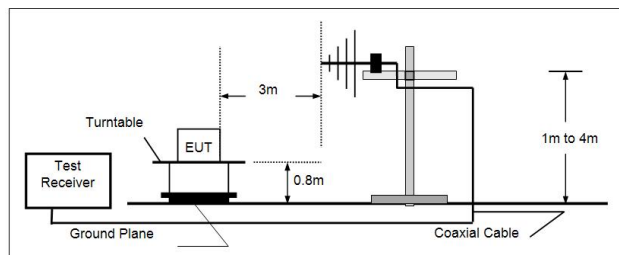
Frequency	Limit (dBuV/m @3m)	Value
30MHz~88MHz	40.00	Quasi-peak
88MHz~216MHz	43.50	Quasi-peak
216MHz~960MHz	46.00	Quasi-peak
960MHz~1GHz	54.00	Quasi-peak
Above 1GHz(Field strength of fundamental)	80.83	Average
	100.83	Peak
Above 1GHz(Field strength of harmonics)	60.83	Average
	80.83	Peak

Test configuration:

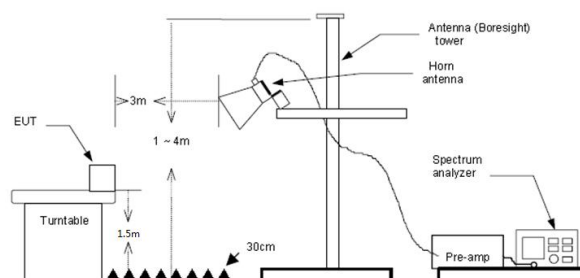
9kHz~30MHz



30 MHz ~ 1 GHz



Above 1 GHz



Test procedure:

1. The EUT was setup and tested according to ANSI C63.10.
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
 - a) Span shall wide enough to fully capture the emission being measured;
 - b) Below 1 GHz:
RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;
If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
 - c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement
 - d) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement

Test mode:

Refer to the clause 4.2

Result:**Passed**

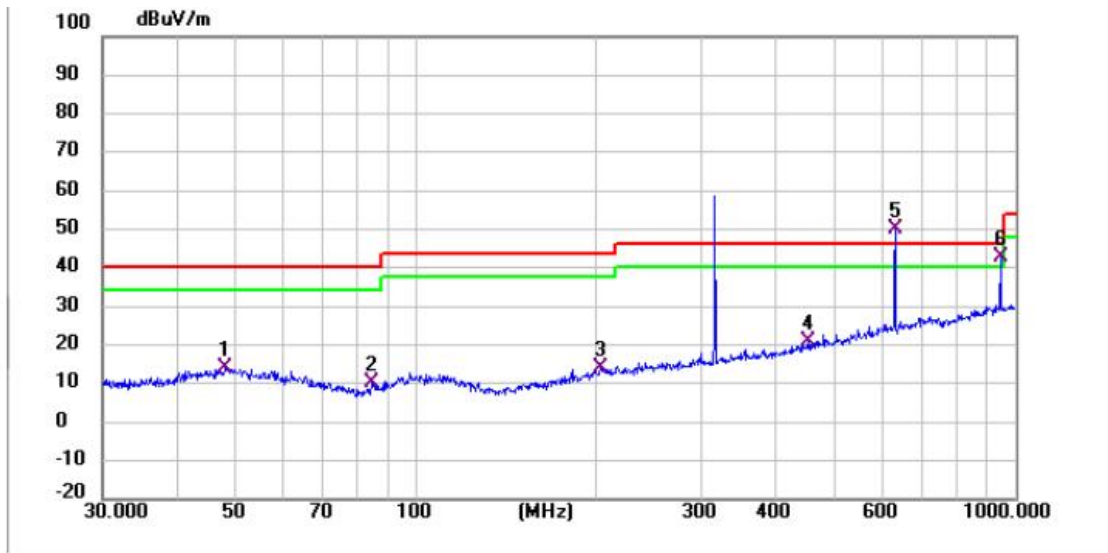
For 9 kHz ~ 30 MHz

The EUT was pre-scanned this frequency band, found the radiated level 20dB lower than the limit, so don't show data on this report.

For 30 MHz ~ 1000 MHz

Polarization:

Horizontal

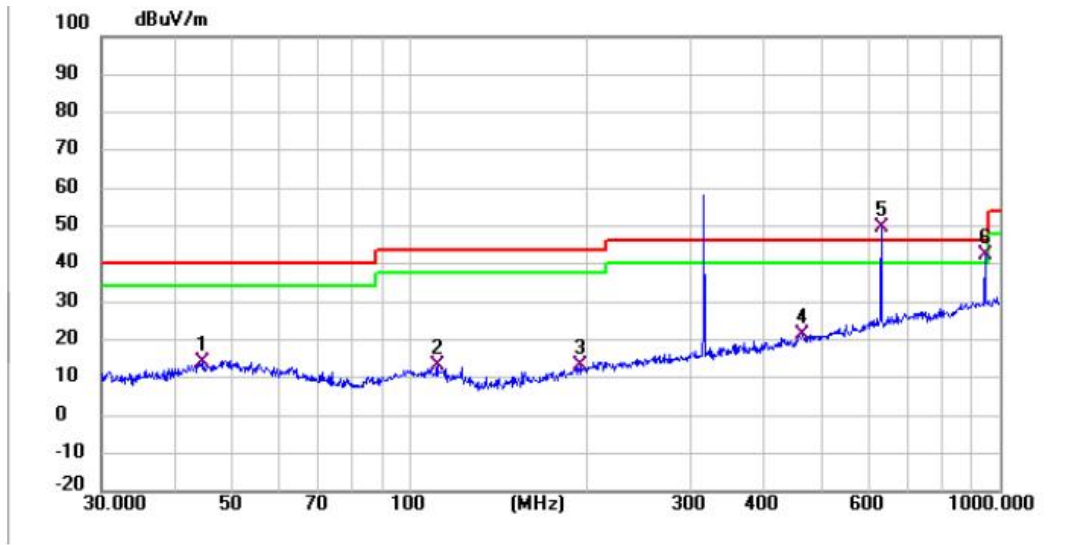


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	48.1625	43.37	-29.21	14.16	40.00	25.84	QP
2	84.7020	44.17	-33.98	10.19	40.00	29.81	QP
3	203.5226	43.78	-29.69	14.09	43.50	29.41	QP
4	452.7196	44.02	-23.23	20.79	46.00	25.21	QP
5 *	631.6883	68.59	-18.61	49.98	-	-	-
6 !	945.4400	56.84	-14.06	42.78	46.00	3.22	QP

Fundamental and Harmonics Result						
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarity	Conclusion
631.68	49.98	75.62	25.64	Peak	Horizontal	PASS
631.68	41.52	55.62	14.10	Average	Horizontal	PASS

Polarization:

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	44.5867	43.41	-29.51	13.90	40.00	26.10	QP
2	111.3468	44.14	-30.76	13.38	43.50	30.12	QP
3	195.1363	43.50	-30.29	13.21	43.50	30.29	QP
4	463.9696	44.49	-23.00	21.49	46.00	24.51	QP
5 *	631.6883	68.16	-18.61	49.55	-	-	-
6 !	945.4400	56.54	-14.06	42.48	46.00	3.52	QP

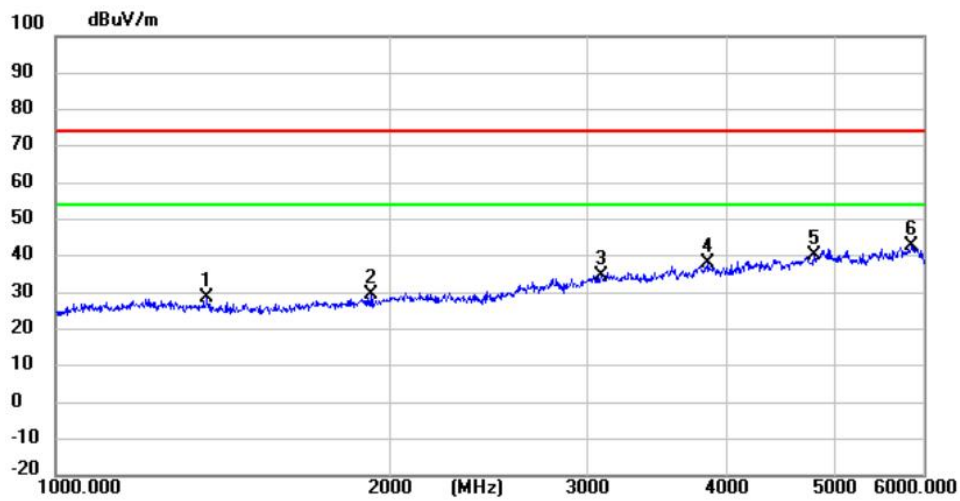
Fundamental and Harmonics Result

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarity	Conclusion
631.68	49.55	75.62	26.07	Peak	Vertical	PASS
631.68	41.09	55.62	14.53	Average	Vertical	PASS

For 1000MHz ~ 6000 MHz

Polarization:

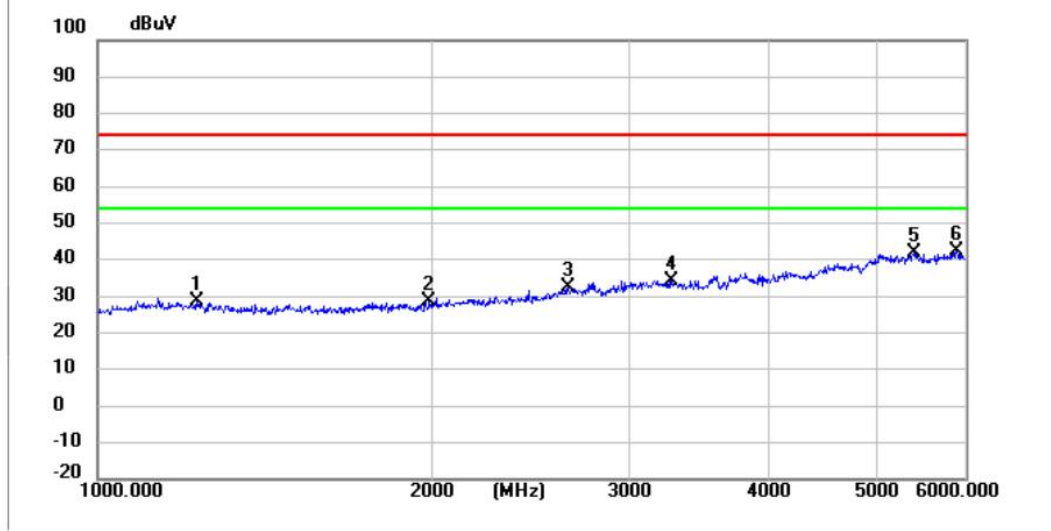
Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1369.5000	49.69	-21.16	28.53	74.00	45.47	peak
2	1916.5000	48.88	-19.20	29.68	74.00	44.32	peak
3	3087.0000	49.04	-14.46	34.58	74.00	39.42	peak
4	3852.0000	50.74	-12.69	38.05	74.00	35.95	peak
5	4801.5000	50.16	-9.84	40.32	74.00	33.68	peak
6 *	5868.0000	48.86	-6.13	42.73	74.00	31.27	peak

Polarization:

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	1227.5000	49.95	-21.41	28.54	74.00	45.46	peak
2	1984.5000	47.45	-18.68	28.77	74.00	45.23	peak
3	2641.0000	48.29	-15.98	32.31	74.00	41.69	peak
4	3272.5000	48.36	-13.95	34.41	74.00	39.59	peak
5	5402.0000	48.15	-6.35	41.80	74.00	32.20	peak
6 *	5898.5000	48.28	-6.01	42.27	74.00	31.73	peak

Note:

- 1) $\text{Level} = \text{Reading} + \text{Factor/Transd}$; $\text{Factor/Transd} = \text{Antenna Factor} + \text{Cable Loss} - \text{Preamp Factor}$
- 2) $\text{Margin} = \text{Limit} - \text{Level}$
- 3) Average measurement was not performed if peak level is lower than average limit (54 dBuV/m) for above 1GHz.
- 4) The other emission levels were very low against the limit.
- 5) This test was performed with EUT in X, Y, Z position and the worse case was found when EUT in Y position.

-----End of the report-----