CTC Laboratories, Inc.

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TEST REPORT

Report No. .....:	**CTC2024200106**
FCC ID.....:	**2APPZ-I60K**
Applicant .....:	**Fanvil Technology Co., Ltd**
Address……..……..…..:	10/F Block A, Dualshine Global Science Innovation Center, Honglang North 2nd Road, Bao'an District, Shenzhen, China
Manufacturer.....:	Fanvil Technology Co., Ltd
Address.....:	10/F Block A, Dualshine Global Science Innovation Center, Honglang North 2nd Road, Bao'an District, Shenzhen, China
Product Name .....:	**Video Door Phone**
Trade Mark ..... :	Fanvil
Model/Type reference..... :	i60k
Listed Model(s) ..... :	/
Standard .....:	**FCC Rules Part 15.225**
Date of receipt of test sample……:	Aug. 27, 2024
Date of testing……..:	Aug. 27, 2024 ~ Sep. 04, 2024
Date of issue……....:	Sep. 04, 2024
Result……:	**PASS**

Compiled by: (Printed name + signature)	Lucy Lan	Lucy Lan
Supervised by: (Printed name + signature)	Eric Zhang	Eric Zhang
Approved by: (Printed name + signature)	Totti Zhao	Totti Zhao

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1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.225: Operation within the band 13.110-14.010MHz.

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.

1.2. Report Version

Revised No.	Report No.	Date of issue	Description
01	CTC2024200106	Sep. 04, 2024	Original

1.3. Test Description

FCC Part 15.225			
Test Item	**Standard Section**	**Result**	**Test Engineer**
Conducted Emission	15.207	Pass	Cary
Radiated Emissions	15.209&15.225(d)	Pass	Evan
Field Strength of the Fundamental	15.209&15.225(d)	Pass	Lucy Lan
Occupied Bandwidth	15.215	Pass	Lucy Lan
Antenna requirement	15.203	Pass	Lucy Lan
Frequency Stability	15.225(e)	Pass	Lucy Lan

Note:

N/A: Not applicable.

The measurement uncertainty is not included in the test result.

1.4. Test Facility

Address of the report laboratory

CTC Laboratories, Inc.

Add: Room 101 of Building B, Room 107, 108, 207, 208 of Building A, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China

Laboratory accreditation

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

A2LA-Lab Cert. No.: 4340.01

CTC Laboratories, Inc. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

Industry Canada (Registration No.: 9783A, CAB Identifier: CN0029)

CTC Laboratories, Inc. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

FCC (Registration No.: 951311, Designation Number CN1208)

CTC Laboratories, Inc. 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 inour files. Registration 951311, Aug 26, 2017.

1.5. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the CTC Laboratories, Inc. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Below is the best measurement capability for CTC Laboratories, Inc.

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.42 dB	(1)
Transmitter power Radiated	2.14 dB	(1)
Conducted spurious emissions 9kHz~40GHz	1.60 dB	(1)
Radiated spurious emissions 9kHz~40GHz	2.20 dB	(1)
Conducted Emissions 9kHz~30MHz	3.20 dB	(1)
Radiated Emissions 30~1000MHz	4.70 dB	(1)
Radiated Emissions 1~18GHz	5.00 dB	(1)
Radiated Emissions 18~40GHz	5.54 dB	(1)
Occupied Bandwidth	---------	(1)

Note (1): This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.6. Environmental Conditions

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

Temperature:	21°C~27°C
Relative Humidity:	40%~60%
Air Pressure:	101kPa

1.7. EUT Operation State

The EUT has been tested under typical operating condition. The applicant provides normal EUT, in the state of charge, to maintain continuous transmission mode for testing.

2. GENERAL INFORMATION

2.1. Client Information

Applicant:	Fanvil Technology Co., Ltd
Address:	10/F Block A, Dualshine Global Science Innovation Center, Honglang North 2nd Road, Bao'an District, Shenzhen, China
Manufacturer:	Fanvil Technology Co., Ltd
Address:	10/F Block A, Dualshine Global Science Innovation Center, Honglang North 2nd Road, Bao'an District, Shenzhen, China
Factory:	Fanvil Technology Co., Ltd
Address:	10/F Block A, Dualshine Global Science Innovation Center, Honglang North 2nd Road, Bao'an District, Shenzhen, China

2.2. General Description of EUT

Product Name:	Video Door Phone
Trade Mark:	Fanvil
Model/Type reference:	i60k
Listed Model(s):	/
Power Supply:	DC 12V/1A or POE 48V/0.3A
Temperature Range:	-20℃ ~ 60℃
Hardware version:	/
Software version:	/
RF Parameter	
Modulation:	ASK
Operation frequency:	13.56MHz
Antenna Type:	FPC Antenna

2.3. Accessory Equipment Information

Equipment Information			
Name	Model	S/N	Manufacturer
Notebook	ThinkPad T460s	/	Lenovo
Adapter	YS-SKY120150B01P	---	---
POE Supply	H3C S1208-PWR	---	---
Cable Information			
Name	Shielded Type	Ferrite Core	Length
LAN Cable	Unshielded	NO	150cm
Test Software Information			
Name	Version	/	/
/	/	/	/

2.4. Measurement Instruments List

Tonscend JS0806-2 Test system					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSV40-N	101331	Mar. 21 2025
2	MXA Signal Analyzer	Keysight	N9020A	MY46471737	Dec. 12, 2024
3	RF Control Unit	Tonscend	JS0806-2	/	Aug. 21, 2025
4	High and low temperature test chamber	ESPEC	MT3035	/	Mar. 21, 2025
5	Test Software	Tonscend	JS1120-3	V3.3.38	/

Radiated emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9163	01026	Dec. 18, 2024
2	Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-647	Sep. 25, 2025
3	Test Receiver	Keysight	N9038A	MY56400071	Dec. 12, 2024
4	Broadband Amplifier	SCHWARZBECK	BBV9743B	259	Dec. 12, 2024
5	Mirowave Broadband Amplifier	SCHWARZBECK	BBV9718C	111	Dec. 12, 2024
6	Loop Antenna	ETS	6507	1446	Dec. 12, 2024
7	3m chamber 3	YIHENG	EE106	/	Aug. 28, 2026
8	Test Software	FARA	EZ-EMC	FA-03A2	/

Conducted Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	LISN	R&S	ENV216	101112	Dec. 12, 2024
2	LISN	R&S	ENV216	101113	Dec. 12, 2024
3	EMI Test Receiver	R&S	ESCS30	100353	Dec. 12, 2024
4	ISN CAT6	Schwarzbeck	NTFM 8158	CAT6-8158-0046	Dec. 12, 2024
5	ISN CAT5	Schwarzbeck	NTFM 8158	CAT5-8158-0046	Dec. 12, 2024
6	Test Software	R&S	EMC32	6.10.10	/

Note:

1. The Cal. Interval was one year.
2. The cable loss has calculated in test result which connection between each test instruments.

3. TEST ITEM AND RESULTS

3.1. Conducted Emission

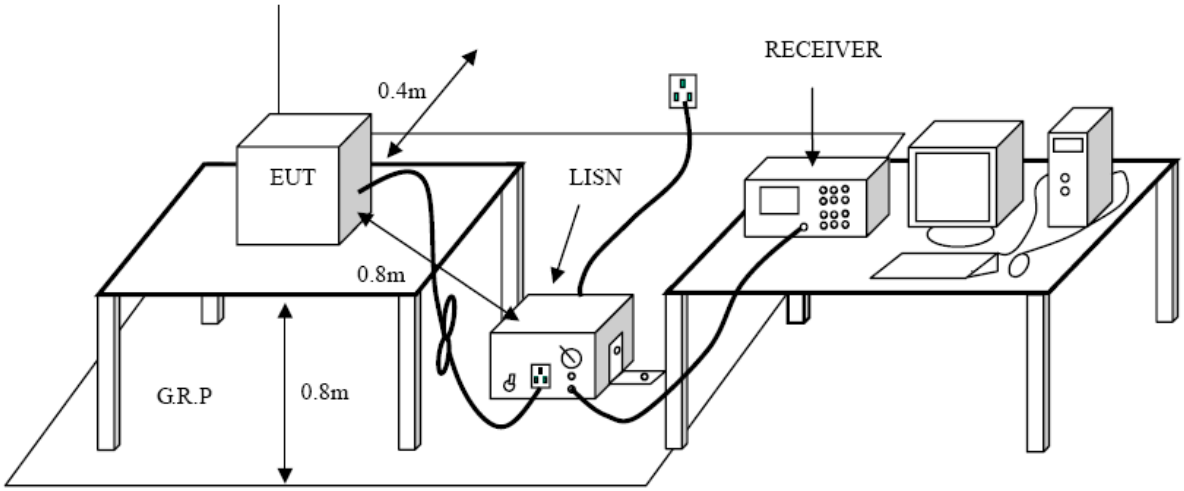
Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

Notes:
(1) *Decreasing linearly with logarithm of the frequency.
(2) The lower limit shall apply at the transition frequencies.
(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Configuration



Test Procedure

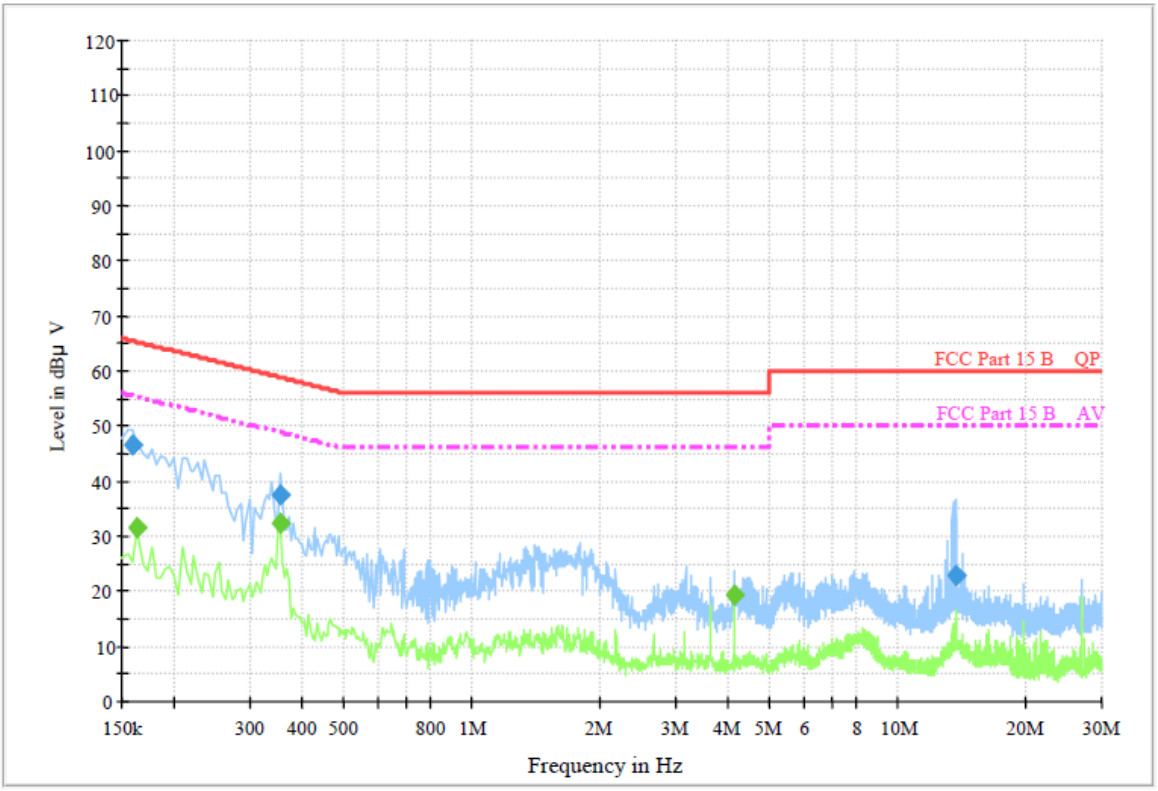
1. The EUT was setup according to ANSI C63.10:2013 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
4. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
5. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
6. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
7. During the above scans, the emissions were maximized by cable manipulation.

Test Mode

Please refer to the clause 1.7.

Test Results

Test Voltage:	AC 120V/60Hz
Terminal:	Line



Final Measurement Detector 1

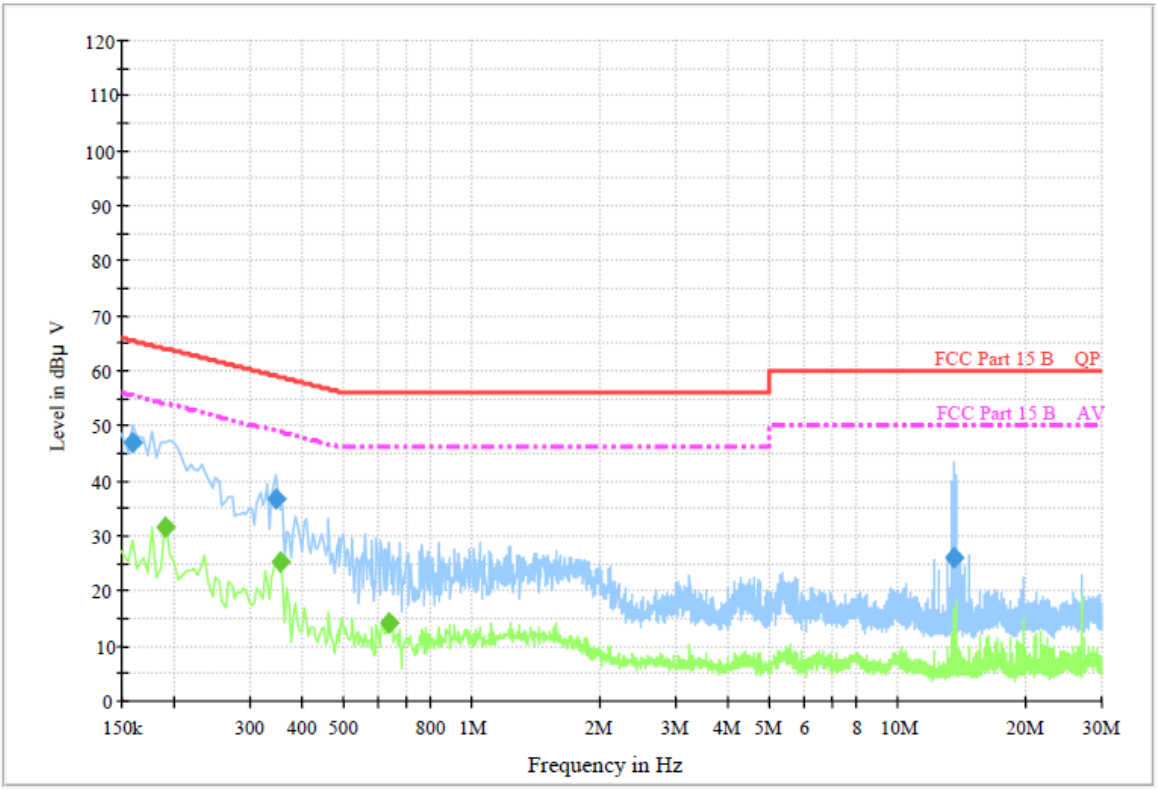
Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.159000	46.4	1000.00	9.000	On	L1	9.5	19.1	65.5	
0.352500	37.4	1000.00	9.000	On	L1	9.5	21.5	58.9	
13.614000	22.9	1000.00	9.000	On	L1	9.8	37.1	60.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.163500	31.4	1000.00	9.000	On	L1	9.5	23.9	55.3	
0.352500	32.5	1000.00	9.000	On	L1	9.5	16.4	48.9	
4.101000	19.2	1000.00	9.000	On	L1	9.5	26.8	46.0	

Emission Level = Read Level + Correct Factor

Test Voltage:	AC 120V/60Hz
Terminal:	Neutral



Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.159000	46.9	1000.00	9.000	On	N	9.5	18.6	65.5	
0.343500	36.6	1000.00	9.000	On	N	9.4	22.5	59.1	
13.546500	26.2	1000.00	9.000	On	N	9.7	33.8	60.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.190500	31.5	1000.00	9.000	On	N	9.4	22.5	54.0	
0.352500	25.1	1000.00	9.000	On	N	9.4	23.8	48.9	
0.636000	14.0	1000.00	9.000	On	N	9.4	32.0	46.0	

Emission Level = Read Level + Correct Factor

3.2. Radiated Emission

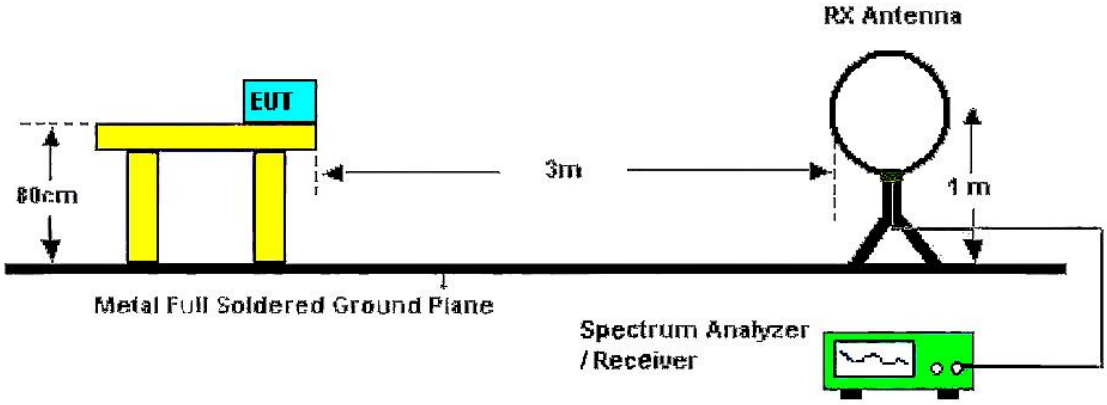
Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.209

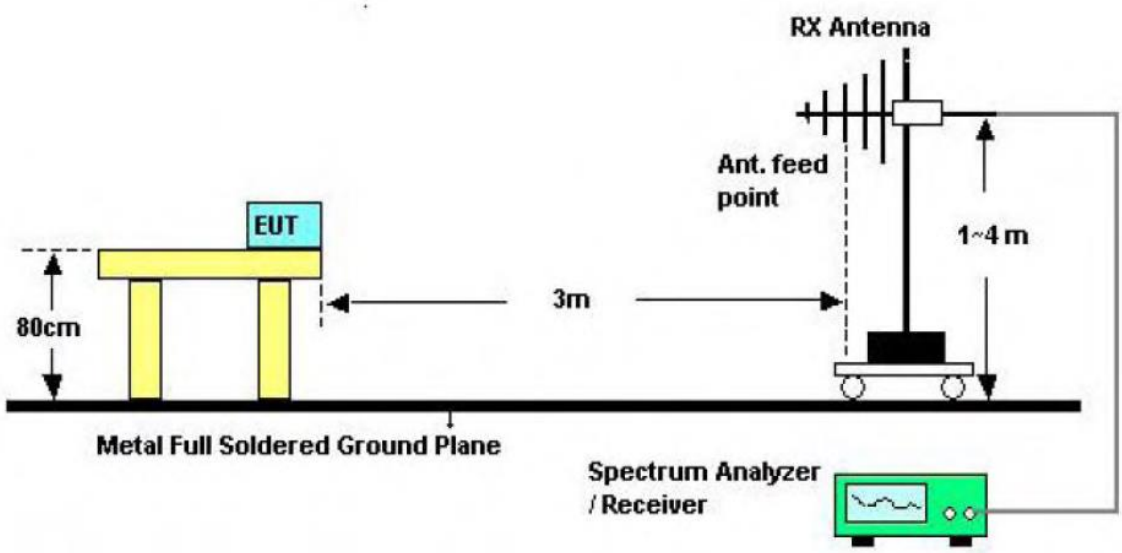
Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F (kHz)	300
0.490~1.705	24000/F (kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Frequency Range (MHz)	dBμV/m (at 3 meters)	
	Peak	Average
Above 1000	74	54

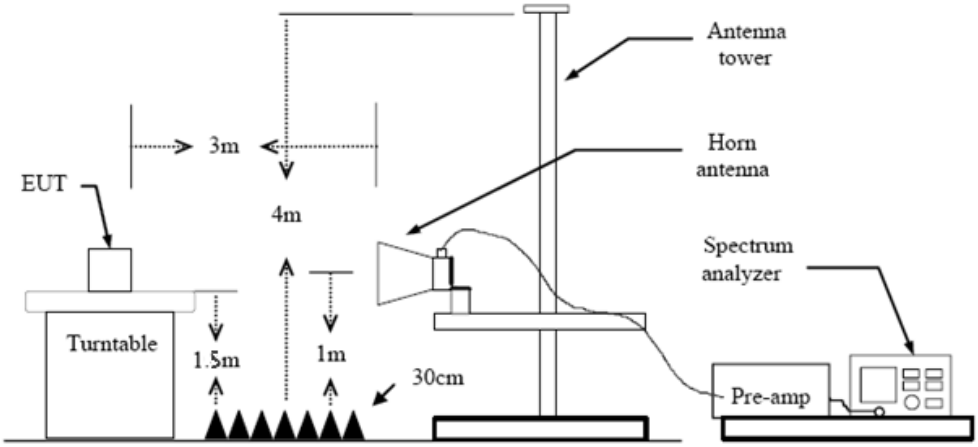
Test Configuration



Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013
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

(1) Span shall wide enough to fully capture the emission being measured;

(2) 9Hz - 150kHz:

RBW=300 Hz, VBW=1 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.

(3) 150kHz - 30MHz:

RBW=10 kHz, VBW=30 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.

(4) 30MHz - 1GHz:

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.

(5) From 1 GHz to 10th harmonic:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.

RBW=1MHz, VBW=3MHz RMS detector for Average value.

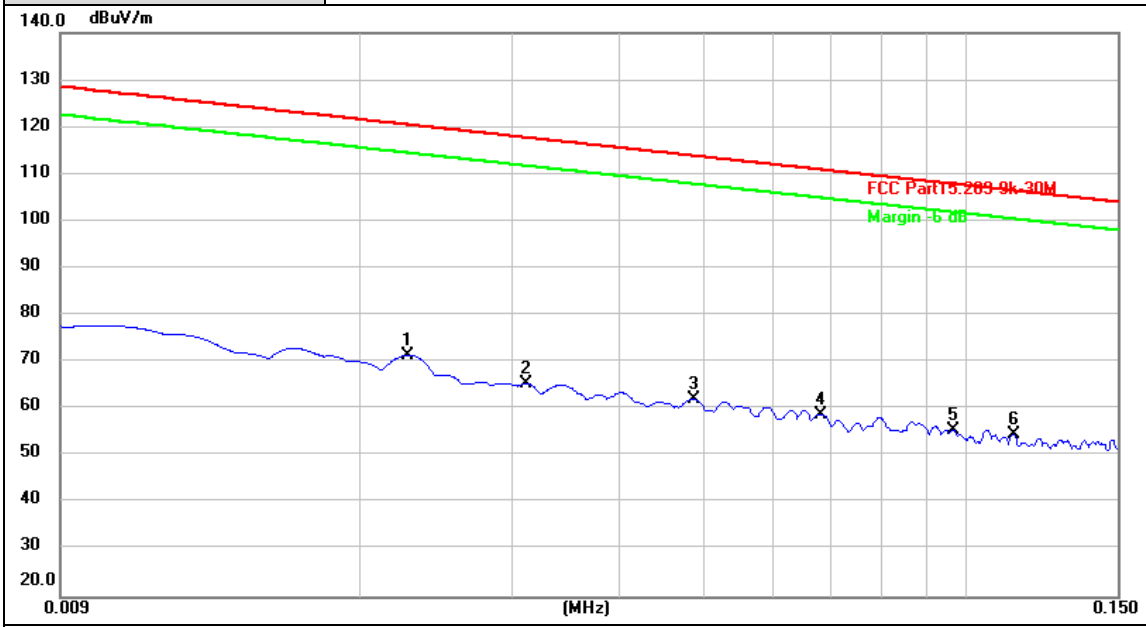
Test Mode

Please refer to the clause 1.7.

Test Result

9 KHz~150 KHz

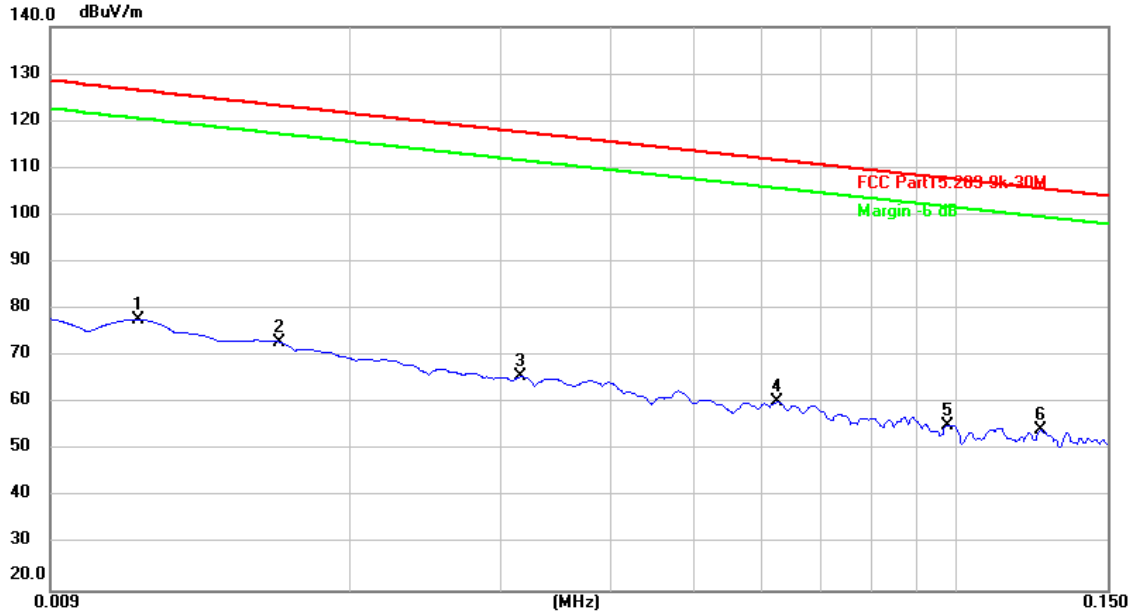
Ant. Pol.	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	0.0227	48.82	22.71	71.53	120.47	-48.94	peak
2	0.0310	44.34	21.25	65.59	117.76	-52.17	peak
3	0.0485	42.80	19.33	62.13	113.88	-51.75	peak
4	0.0680	40.50	18.49	58.99	110.94	-51.95	peak
5	0.0970	37.66	17.93	55.59	107.86	-52.27	peak
6	0.1137	36.82	17.92	54.74	106.48	-51.74	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical

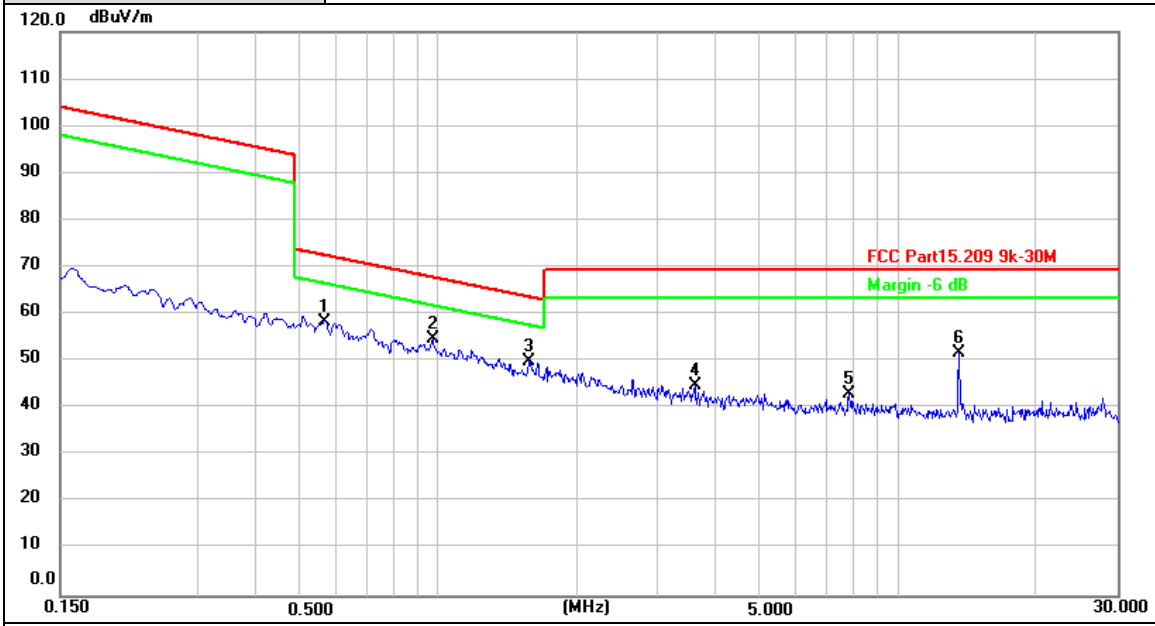


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	0.0113	49.91	27.91	77.82	126.52	-48.70	peak
2	0.0165	47.85	25.10	72.95	123.24	-50.29	peak
3	0.0314	44.44	21.19	65.63	117.65	-52.02	peak
4	0.0623	41.23	19.00	60.23	111.70	-51.47	peak
5	0.0981	37.47	17.88	55.35	107.76	-52.41	peak
6	0.1257	36.35	18.02	54.37	105.61	-51.24	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

150 KHz~30 MHz

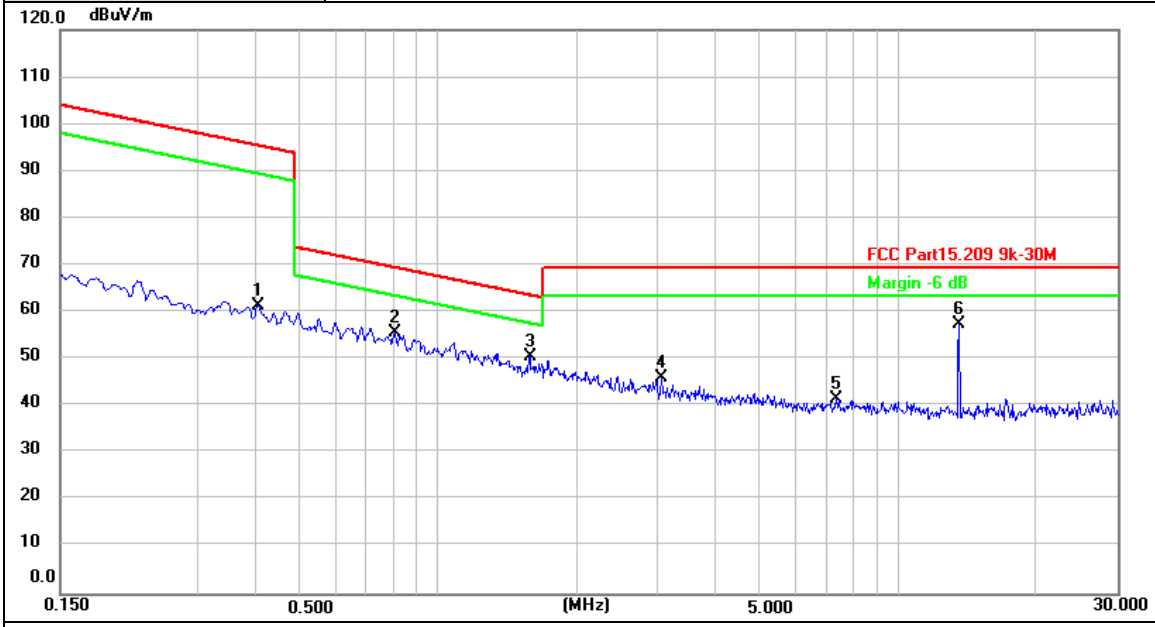
Ant. Pol.	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.5649	40.69	17.81	58.50	72.57	-14.07	peak
2 *	0.9694	36.57	18.10	54.67	67.89	-13.22	peak
3	1.5753	31.97	18.11	50.08	63.69	-13.61	peak
4	3.6066	26.63	18.15	44.78	69.50	-24.72	peak
5	7.8334	24.93	18.10	43.03	69.50	-26.47	peak
6	13.5601	33.94	17.83	51.77	69.50	-17.73	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical

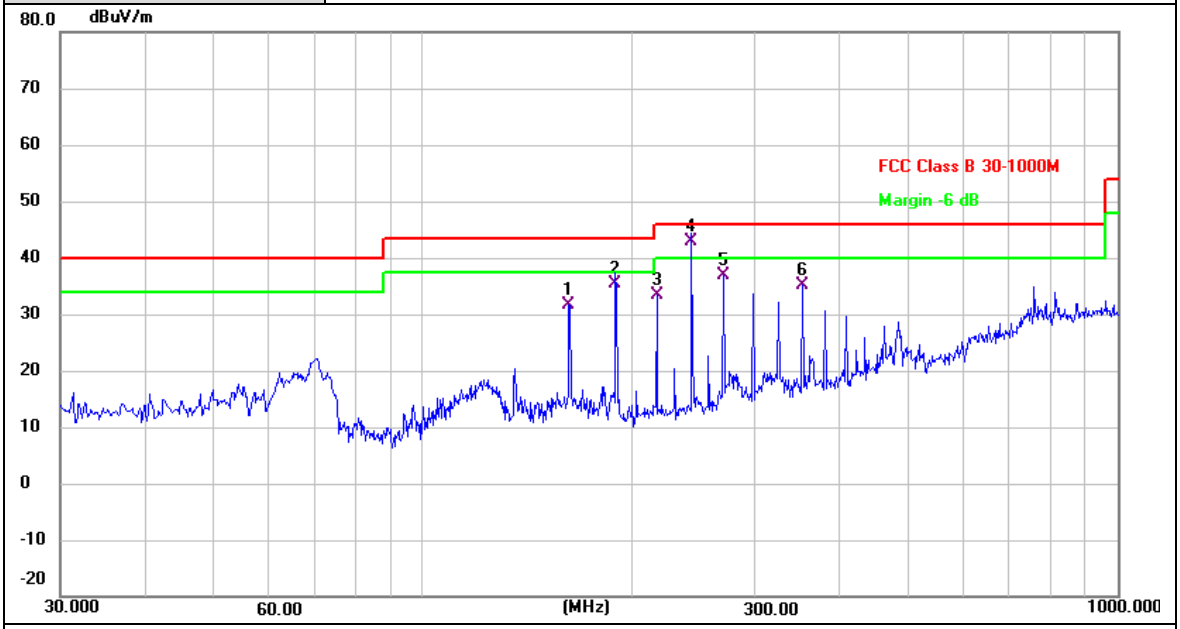


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.4052	43.68	17.62	61.30	95.45	-34.15	peak
2	0.8007	37.55	18.01	55.56	69.55	-13.99	peak
3	1.5768	32.47	18.11	50.58	63.68	-13.10	peak
4	3.0559	27.83	18.35	46.18	69.50	-23.32	peak
5	7.3453	23.54	18.08	41.62	69.50	-27.88	peak
6 *	13.5601	39.53	17.83	57.36	69.50	-12.14	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

30MHz-1GHz

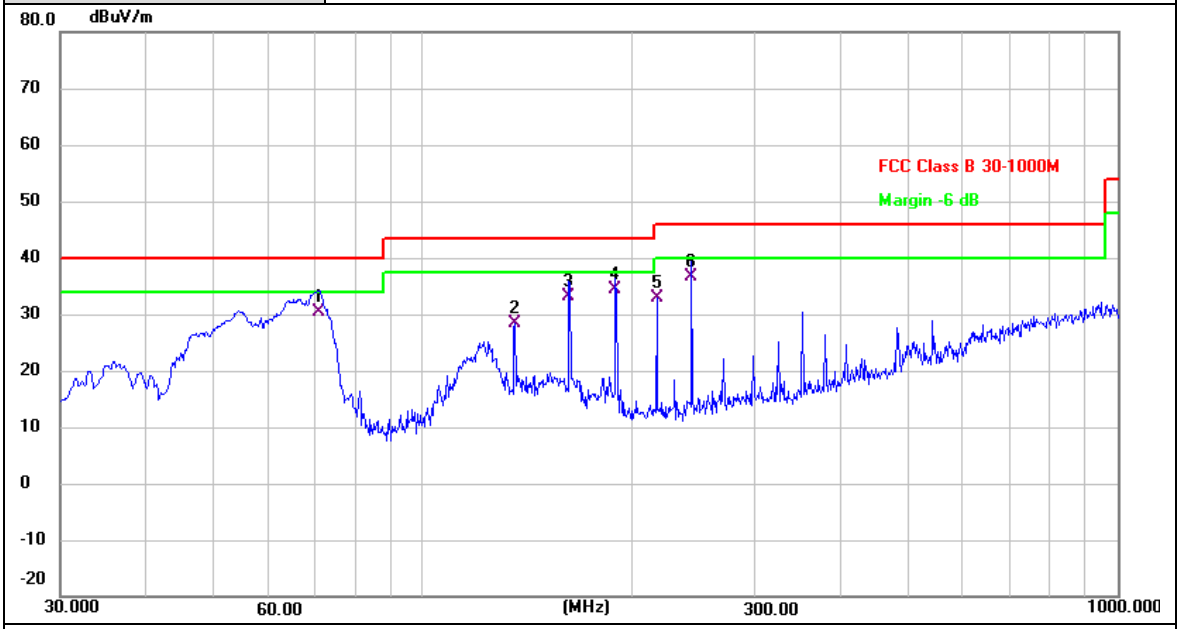
Ant. Pol.	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	162.5667	47.87	-16.14	31.73	43.50	-11.77	QP
2	189.7267	54.06	-18.79	35.27	43.50	-8.23	QP
3	216.8867	52.04	-18.77	33.27	46.00	-12.73	QP
4 *	244.0467	60.79	-17.82	42.97	46.00	-3.03	QP
5	271.2067	53.70	-16.79	36.91	46.00	-9.09	QP
6	352.6867	49.32	-14.28	35.04	46.00	-10.96	QP

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	70.7400	49.39	-18.98	30.41	40.00	-9.59	QP
2	135.7300	45.57	-17.13	28.44	43.50	-15.06	QP
3	162.5667	49.29	-16.14	33.15	43.50	-10.35	QP
4 *	189.7267	53.13	-18.79	34.34	43.50	-9.16	QP
5	216.8867	51.70	-18.77	32.93	46.00	-13.07	QP
6	244.0467	54.34	-17.82	36.52	46.00	-9.48	QP

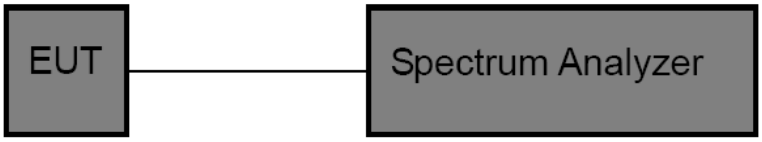
Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

3.3. Bandwidth

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.215
Intentional radiators must be designed to ensure that the 20dB emission bandwidth in the specific band. 13.553~13.567MHz.

Test Configuration



Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
2. Spectrum Setting:
   20dB bandwidth:
   (1) Set RBW ≥ 1% of the 20dB bandwidth.
   (2) Set the video bandwidth (VBW) ≥ RBW.
   (3) Detector = Peak.
   (4) Trace mode = Max hold.
   (5) Sweep = Auto couple.
   Occupied Bandwidth:
   (1) Set RBW = 1% ~ 5% occupied bandwidth.
   (2) Set the video bandwidth (VBW) ≥ 3 RBW.
   (3) Detector = Peak.
   (4) Trace mode = Max hold.
   (5) Sweep = Auto couple.)

Test Mode

Please refer to the clause 1.7.

Test Results

Channel Frequency (MHz)	20dB Bandwidth (Hz)	Occupied Bandwidth (Hz)	Result
13.56	284	926	PASS

3.4. Field Strength of the Fundamental

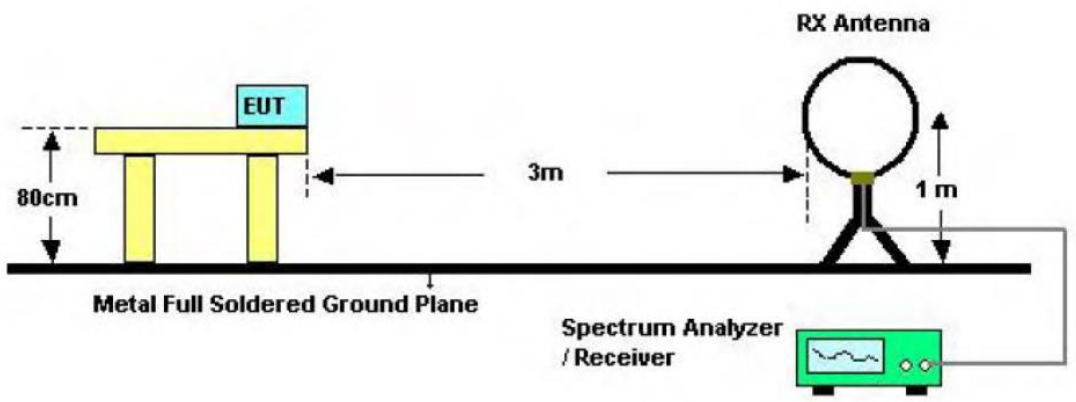
Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.225(a)(b)(c)

Fundamental frequency(MHz)	Field strength of fundamental (uV/m @30m)	Field strength of fundamental (dBuV/m @3m)
13.553-13.567	15848	124.0
13.410-13.553&13.567-13.710	334	90.5
13.110-13.410&13.710-14.010	106	80.5

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

Test Configuration



Below 30MHz Test Setup

Test Procedure

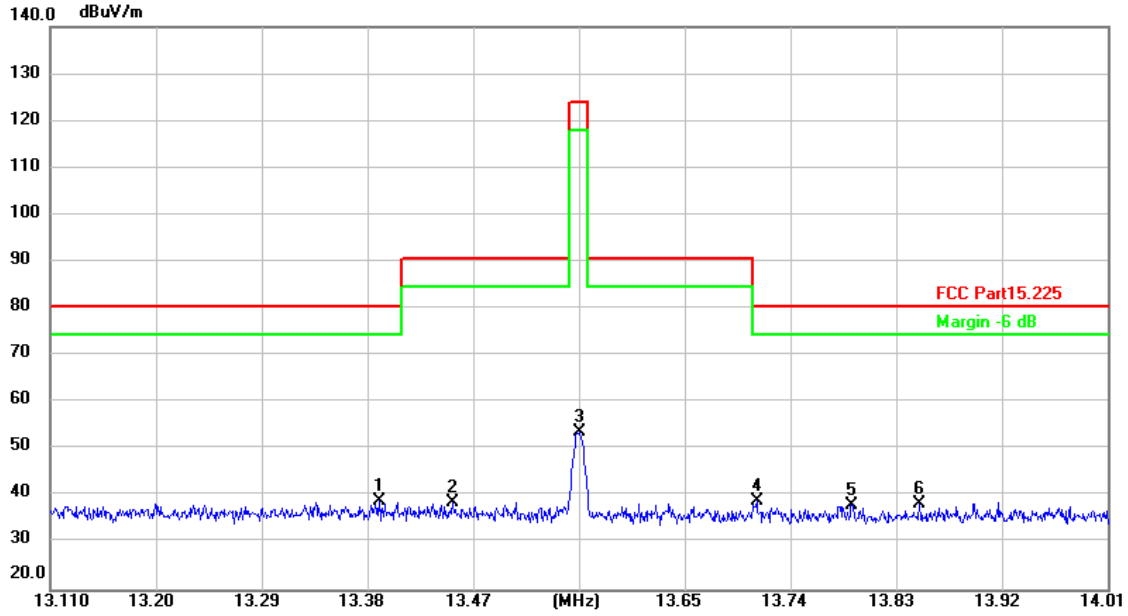
1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
2. The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

Test Mode

Please refer to the clause 1.7.

Test Result

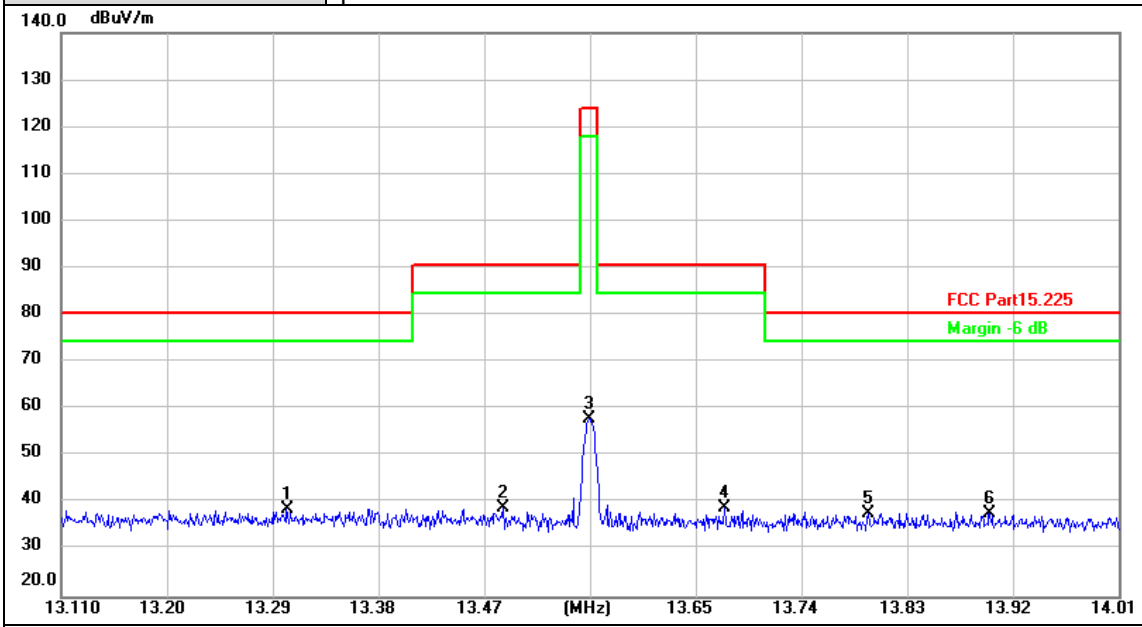
Ant. Pol.	Horizontal
Remark:	No report for the emission which more than 20 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	13.3903	21.33	17.85	39.18	80.50	-41.32	peak
2	13.4523	21.01	17.84	38.85	90.50	-51.65	peak
3	13.5606	35.93	17.83	53.76	124.00	-70.24	peak
4	13.7113	21.10	17.82	38.92	80.50	-41.58	peak
5	13.7922	20.43	17.81	38.24	80.50	-42.26	peak
6	13.8501	20.59	17.80	38.39	80.50	-42.11	peak

Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

Ant. Pol.	Vertical
Remark:	No report for the emission which more than 20 dB below the prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	13.3025	20.96	17.86	38.82	80.50	-41.68	peak
2	13.4864	21.17	17.84	39.01	90.50	-51.49	peak
3	13.5599	40.09	17.83	57.92	124.00	-66.08	peak
4	13.6749	21.09	17.82	38.91	90.50	-51.59	peak
5	13.7968	20.16	17.81	37.97	80.50	-42.53	peak
6	13.9002	20.06	17.80	37.86	80.50	-42.64	peak

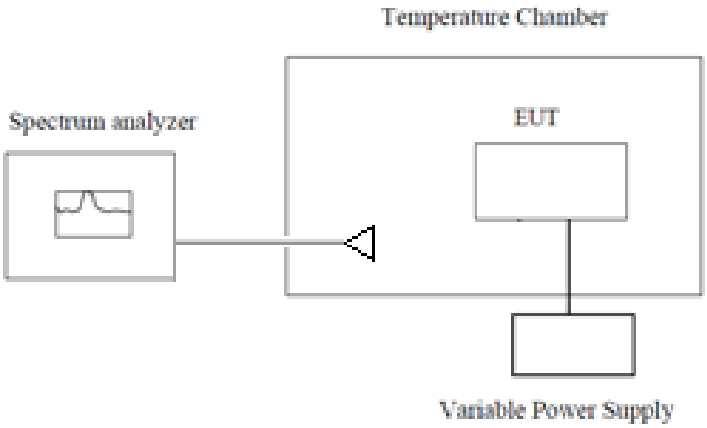
Remarks:
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
2.Margin value = Level -Limit value

3.5. Frequency Stability

Limit

The frequency tolerance of the carrier signal shall be maintained within ±0.01%(±100ppm) of the operating frequency over a temperature variation of −20 degrees to + 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

Test Configuration



Test Procedure

1. The equipment under test was connected to an external power supply.
2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.
3. The EUT was placed inside the temperature chamber.
4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25℃ operating frequency as reference frequency.
5. Turn EUT off and set the chamber temperature to -20℃. After the temperature stabilized for approximately 30 minutes recorded the frequency.
6. Repeat step measure with 10℃ increased per stage until the highest temperature of +60℃ reached.

Test Mode

Please refer to the clause 1.7.

Test Result

Test Environment		Frequency Reading(MHz)	Deviation(ppm)	Limit(ppm)	Result
Voltage	Temperature(℃)				
Vnom	0	13.560116	8.55	±100	Pass
	10	13.560116	8.55	±100	Pass
	20	13.560114	8.55	±100	Pass
	30	13.560114	8.55	±100	Pass
	40	13.560114	8.55	±100	Pass
85% Vnom	20	13.560116	8.55	±100	Pass
115% Vnom	20	13.560116	8.55	±100	Pass

3.6. Antenna Requirement

Requirement

RSS-Gen Issue 5 Section 8.3:

The applicant for equipment certification, as per RSP-100, must provide a list of all antenna types that may be used with the licence-exempt transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. Licence-exempt transmitters that have received equipment certification may operate with different types of antennas. However, it is not permissible to exceed the maximum equivalent isotropically radiated power(e.i.r.p.) limits specified in the applicable standard (RSS) for licence-exempt apparatus.

Result

PASS.
The EUT has an induction coil with a frequency of 13.56MHz.
Note: ☒Antenna use a permanently attached antenna which is not replaceable.
☐Not using a standard antenna jack or electrical connector for antenna replacement.
☐The antenna has to be professionally installed (please provide method of installation).
Which in accordance to RSS-Gen.8.3, please refer to the internal photos.

**************************THE END**************************