



FCC 47 CFR PART 15 SUBPART C

CERTIFICATION TEST REPORT

For

HYGROMETER WITH VENTILATION RECOMMENDATION

MODEL NUMBER: AHFL 433 A1

FCC ID: 2AJ90-AHFL433A1

REPORT NUMBER: 4788440781.1-1

ISSUE DATE: May 29, 2018

Prepared for

**Lidl US Trading LLC
3500 South Clark St Arlington VA 22202**

Prepared by

**UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch
Room 101, Building 10, Innovation Technology Park,
Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
Tel: +86 769 22038881
Fax: +86 769 33871725
Website: www.ul.com**



Revision History

Rev.	Issue Date	Revisions	Revised By
--	5/29/2018	Initial Issue	



Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	Dell Time	FCC 15.231 (e)	PASS
2	20dB Bandwidth	FCC 15.231 (c)	PASS
3	Radiated emission	FCC 15.231 (e)/15.209	PASS



TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	5
2. TEST METHODOLOGY	6
3. FACILITIES AND ACCREDITATION	6
4. CALIBRATION AND UNCERTAINTY	7
4.1. MEASURING INSTRUMENT CALIBRATION	7
4.2. MEASUREMENT UNCERTAINTY	7
5. EQUIPMENT UNDER TEST	8
5.1. DESCRIPTION OF EUT	8
5.2. TEST CHANNEL CONFIGURATION	8
5.3. TEST ENVIRONMENT	8
5.4. DESCRIPTION OF TEST SETUP	9
5.5. MEASURING INSTRUMENT AND SOFTWARE USED	10
6. ANTENNA PORT TEST RESULTS	11
6.1. ON TIME AND DUTY CYCLE	11
6.2. TRANSMITTER TIMEOUT	13
6.3. 20dB BANDWIDTH	16
6.4. RADIATED EMISSION	18
6.4.1. FUNDAMENTAL FIELD STRENGTH	24
6.4.2. SPURIOUS EMISSIONS BELOW 1G	26
6.4.3. SPURIOUS EMISSIONS ABOVE 1G	28
6.4.4. SPURIOUS EMISSIONS BELOW 30M	30



1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Lidl US Trading LLC
Address: 3500 South Clark St Arlington VA 22202

Manufacturer Information

Company Name: Putian Winka Electronic CO.,LTD.
Address: The west of Lihan Avenue (Within Putian City Jiali Electronic Industry Co.,Ltd),
Hanjiang District, Putian, Fujian, China

EUT Information

EUT Name: HYGROMETER WITH VENTILATION RECOMMENDATION
Model: AHFL 433 A1
Contract No: OR-291952,OR-300037
Brand: AURIOL
Sample Received Date: April 16, 2018
Date of Tested: April 16~May 29, 2018

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	PASS

Tested By:

Kebo Zhang
Engineer

Checked By:

Shawn Wen
Laboratory Leader

Approved By:

Stephen Guo
Laboratory Manager



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2 FCC CFR 47 Part 15 and KDB414788 D01 Radiated Test Site v01.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p>IAS (Lab Code: TL-702) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has demonstrated compliance with ISO/IEC Standard 17025:2005, General requirements for the competence of testing and calibration laboratories</p> <p>FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p>IC(Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320.</p> <p>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B, the VCCI registration No. is C-20012 and T-20011</p>
---------------------------	---

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.



4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognize national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Uncertainty for Conduction emission test	2.90dB
Uncertainty for Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	4.52dB
Uncertainty for Radiation Emission test (1GHz to 26GHz)(include Fundamental emission)	5.04dB(1-6GHz)
	5.30dB (6GHz-18Gz)
	5.23dB (18GHz-26Gz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Equipment	HYGROMETER WITH VENTILATION RECOMMENDATION
Model Name	OR-291952,OR-300037, AHFL 433 A1
Operation description	The EUT can transmit at 433.92MHz and it has three periodic transmission (50S, 53S, 56S) and it can be changed by the switch.
Operation Frequency	433.92MHz
Modulation Type	FSK
Power supply	DC 3V via Battery

5.2. TEST CHANNEL CONFIGURATION

Test Mode	Frequency
FSK	433.92MHz

5.3. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests	
Relative Humidity	55 ~ 65%	
Atmospheric Pressure:	1025Pa	
Temperature	TN	23 ~ 28°C
Voltage :	VL	N/A
	VN	DC3V
	VH	N/A

Note: VL= Lower Extreme Test Voltage
VN= Nominal Voltage, DC 3V via Battery
VH= Upper Extreme Test Voltage
TN= Normal Temperature



5.4. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
1	N/A	N/A	N/A	N/A

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	N/A	N/A	N/A	N/A	N/A

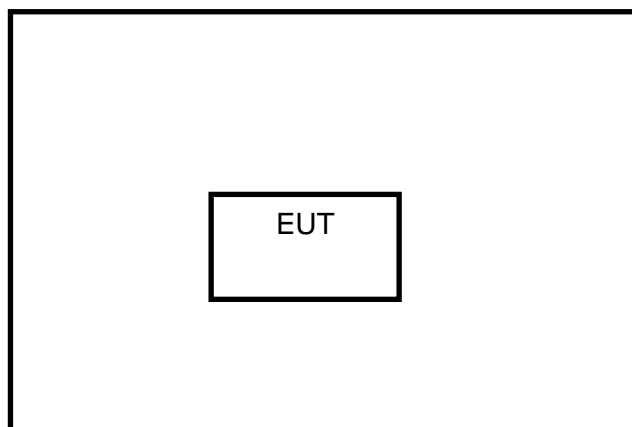
ACCESSORY

Item	Accessory	Brand Name	Model Name	Description
1	N/A	N/A	N/A	N/A

TEST SETUP

1. A fully charged battery was used for all tests.
2. The test sample can be into a transmission mode through the power on.

SETUP DIAGRAM FOR TEST



**5.5. MEASURING INSTRUMENT AND SOFTWARE USED**

Radiated Emissions						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Dec.12, 2017	Dec.11, 2018
<input checked="" type="checkbox"/>	Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Dec.12, 2017	Dec.11, 2018
<input checked="" type="checkbox"/>	Preamplifier	HP	8447D	2944A09099	Dec.12, 2017	Dec.11, 2018
<input checked="" type="checkbox"/>	EMI Measurement Receiver	R&S	ESR26	101377	Dec.12, 2017	Dec.11, 2018
<input checked="" type="checkbox"/>	Horn Antenna	TDK	HRN-0118	130939	Jan. 09, 2016	Jan. 09, 2019
<input checked="" type="checkbox"/>	High Gain Horn Antenna	Schwarzbeck	BBHA-9170	691	Jan.06, 2016	Jan.06, 2019
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-0118	TRS-305-00066	Dec.12, 2017	Dec.11, 2018
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-2	TRS-307-00003	Dec.12, 2017	Dec.11, 2018
<input checked="" type="checkbox"/>	Loop antenna	Schwarzbeck	1519B	00008	Mar. 26, 2016	Mar. 26, 2019
Software						
Used	Description		Manufacturer	Name		Version
<input checked="" type="checkbox"/>	Test Software for Radiated disturbance		Farad	EZ-EMC		Ver. UL-3A1
Other instruments						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	Spectrum Analyzer	Keysight	N9030A	MY55410512	Dec.12, 2017	Dec.11, 2018
<input checked="" type="checkbox"/>	Power Meter	Keysight	N9031A	MY55416024	Dec.12, 2017	Dec.11, 2018
<input checked="" type="checkbox"/>	Power Sensor	Keysight	N9323A	MY55440013	Dec.12, 2017	Dec.11, 2018

6. ANTENNA PORT TEST RESULTS

6.1. ON TIME AND DUTY CYCLE

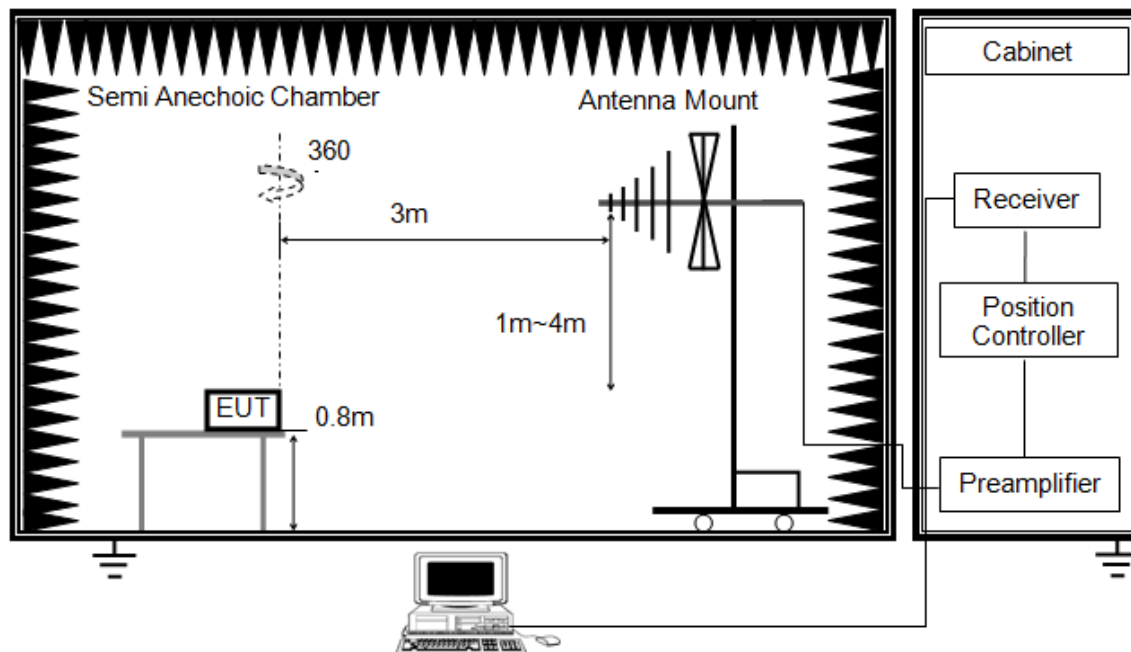
LIMITS

None; for reporting purposes only

PROCEDURE

FCC Reference:	Part 15.35(c)
Test Method Used:	ANSI C63.10 Section 7.5

TEST SETUP



- Set RBW of spectrum analyzer to 100KHz and VBW to 100KHz.
- Use a video trigger with the trigger level set to enable triggering only on full pulses.
- Sweep Time is at least a 100 ms.
- Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- Measure the maximum time duration of one single pulse.

TEST ENVIRONMENT

Temperature	24.3°C	Relative Humidity	63%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V



RESULTS

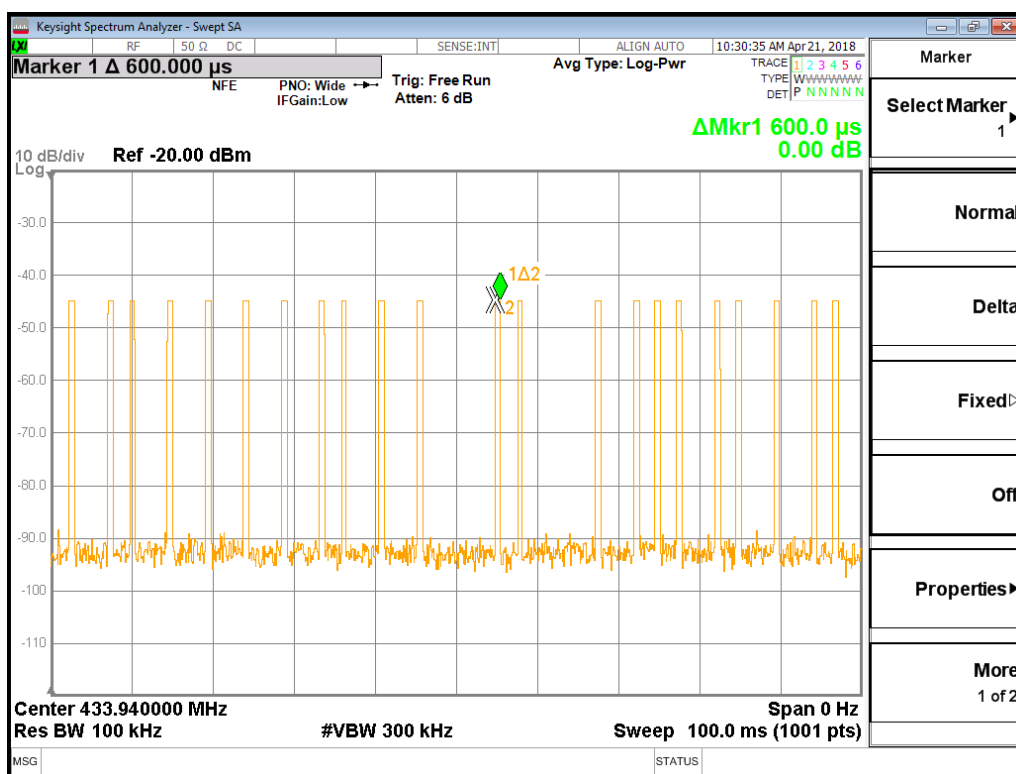
	On Time (ms)	Times	Total times (ms)
Ton	0.6	22	13.2

Note: Total times= On Time*22

Duty Cycle Correction Factor
-17.6

Note: Duty Cycle Correction Factor=20log (Ton/100).

Total Time:100ms



6.2. TRANSMITTER TIMEOUT

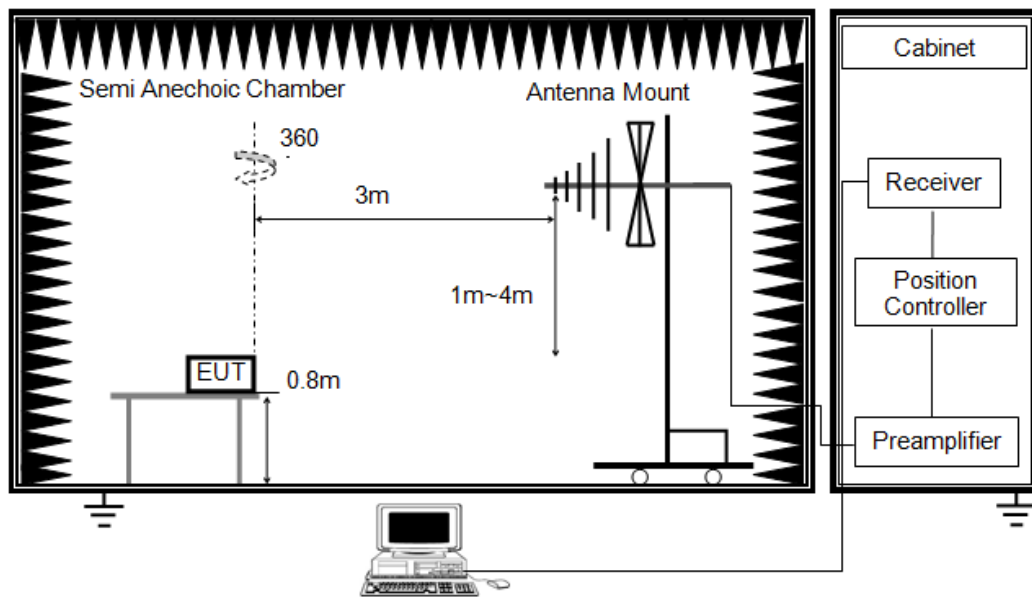
LIMITS

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

TEST PROCEDURE

FCC Reference:	Part 15.231(e)
Test Method Used:	The duration of each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds.

TEST SETUP



- Set RBW of spectrum analyzer to 100KHz and VBW to 300KHz.
- Use a video trigger with the trigger level set to enable triggering only on full pulses.
- Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- Measure the maximum time duration of one single pulse.

TEST ENVIRONMENT

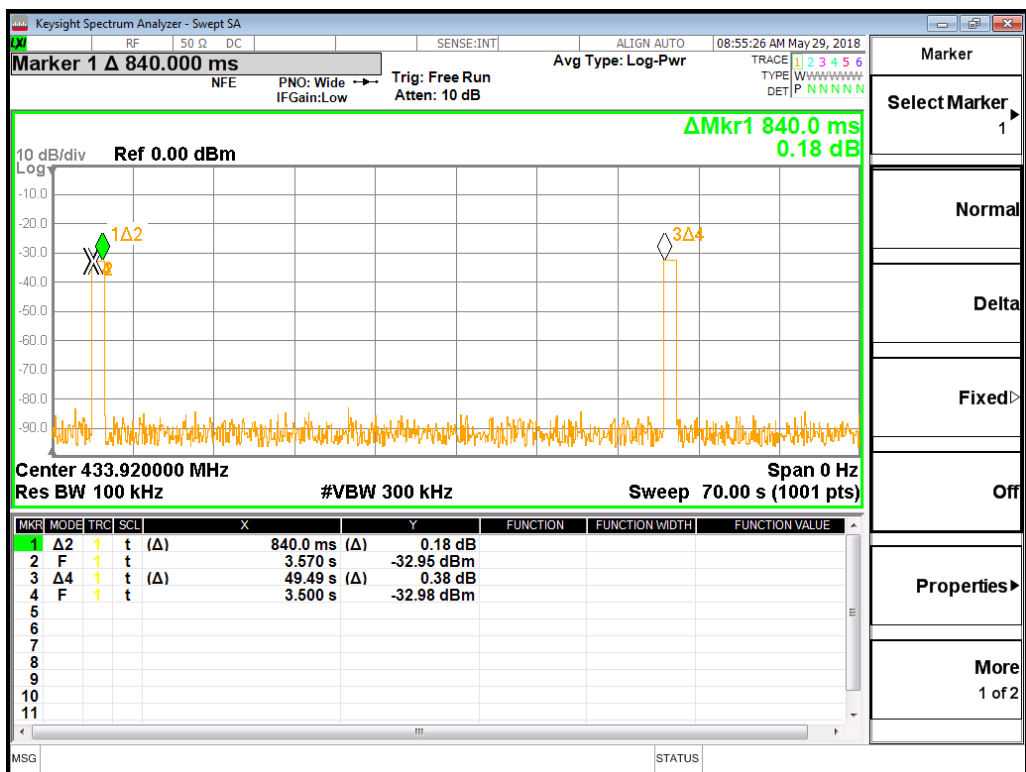
Temperature	24.3°C	Relative Humidity	63%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V



RESULTS

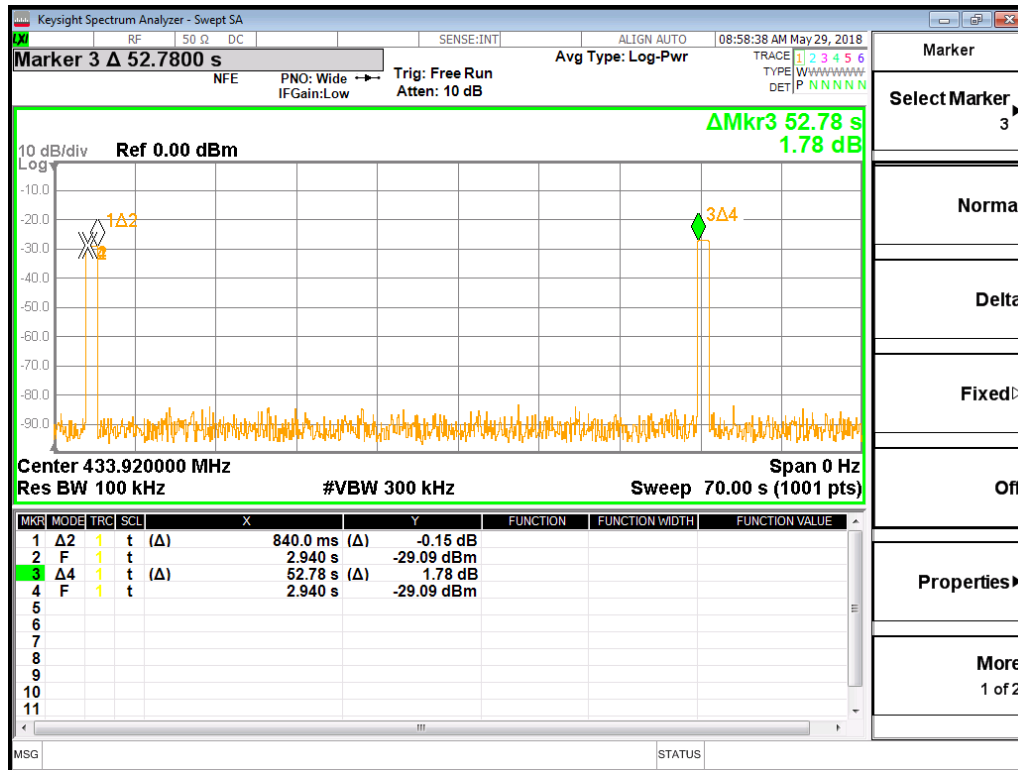
	On Time (ms)	Limit (S)	On Time*30 (s)	Period (s)	OFF Time (s)	Limit (S)
Period 1	840	1	25.2	49.49	48.65	10
Period 2	840	1	25.2	52.78	51.94	10
Period 3	980	1	29.4	56	55.02	10

Period 1 *

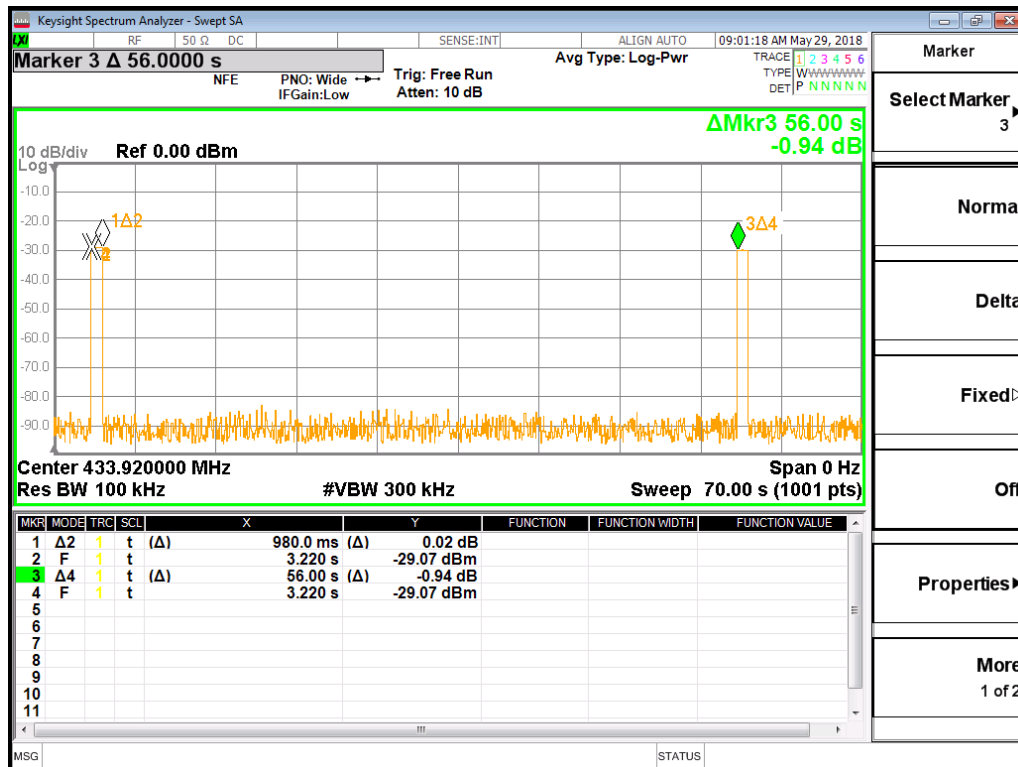




Period 2 *



Period 3 *



6.3. 20dB BANDWIDTH

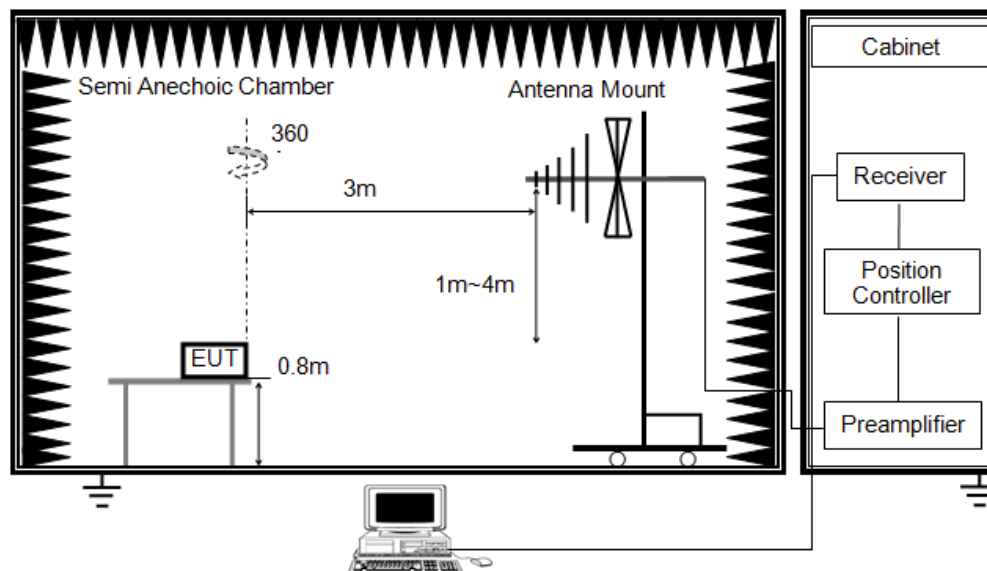
LIMITS

1. 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.
2. The limit has been calculated as: $0.0025 * 433.92 \text{ MHz} = 1.0848 \text{ MHz}$

TEST PROCEDURE

FCC Reference:	Part 15.231(c)
Test Method Used:	ANSI C63.10 Section 6.9.2

TEST SETUP



1. The EUT was arranged to its worst case and then 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.
2. The EUT was placed on a turntable with 0.8 meter above ground.
3. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower
4. Set the spectrum analyzer in the following setting as:
RBW shall be in the range of 1% to 5% of the OBW, VBW shall be approximately three times RBW

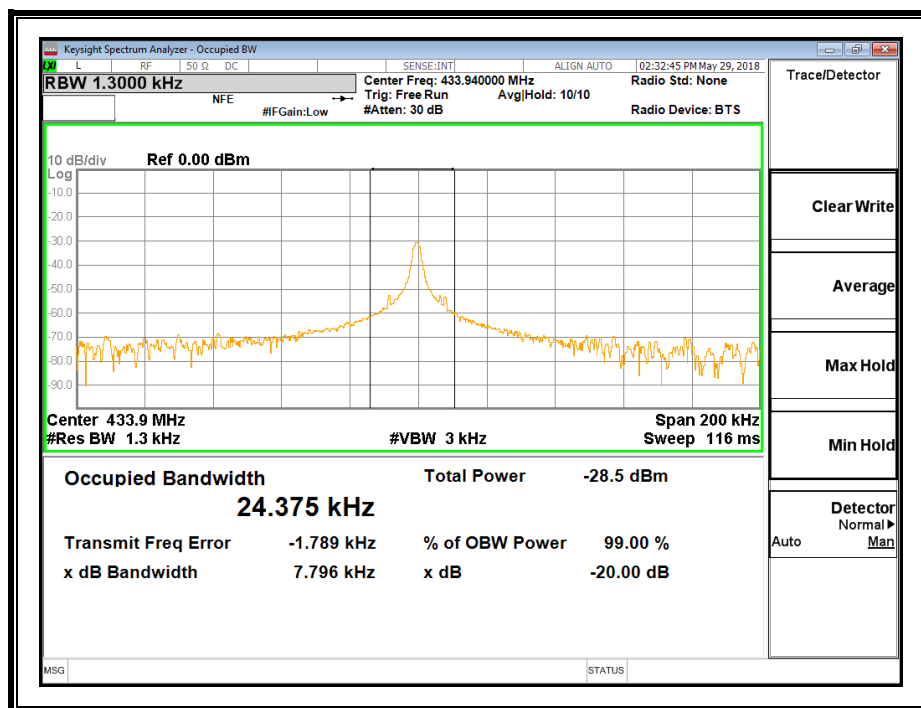
TEST ENVIRONMENT

Temperature	24.3°C	Relative Humidity	63%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V



RESULTS

Transmitter 20 dB Bandwidth (MHz)	Limit (MHz)	Result
0.007796	1.0848	Complied





6.4. RADIATED EMISSION

LIMITS

- Please refer to FCC part 15.231(e)

Fundamental frequency (MHz)	Field strength of fundamental (microvolts/meter)	Field strength of spurious emission (microvolts/meter)
40.66-40.70	1,000	100
70-130	500	50
130-174	500 to 1,500 ¹	50 to 150 ¹
174-260	1,500	150
260-470	1,500 to 5,000 ¹	150 to 500 ¹
Above 470	5,000	500

Note:

1. To obtain the average limit at the test frequency the values given in the table of FCC part 15.231(b) have to be linear interpolated and then converted to dBμV/m. The limit at 260 MHz is 3750 μV/m and at 470 MHz it is 12500 μV/m. Limit at 433.92 MHz is calculated as shown in ANSI C63.10 Section 7.6.2:

Limit [μV/m] = Limlower + ΔF [(Limupper – Limlower) / (fupper – flower)]
where ΔF = fc – flower = 433.92 – 260 = 173.92

Limit = 1500 + 173.92 * [(5000 – 1500) / (470 - 260)]
= 1500 + 173.92 * [3500 / 210]
= 4398.7 μV/m

dBμV/m = 20 * log (μV/m)
= 20 * log (4398.7)

Average Limit at 433.92 MHz = 72.87 dBμV/m

If the average limit is specified for the EUT, the peak limit is 20 dB above the average limit as specified in FCC 15.35 (b)

- Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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
Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

3. Radiation Disturbance Test Limit for FCC (Class B)(9KHz-1GHz)

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

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.

Restricted bands of operation

MHz	MHz	MHz	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			

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

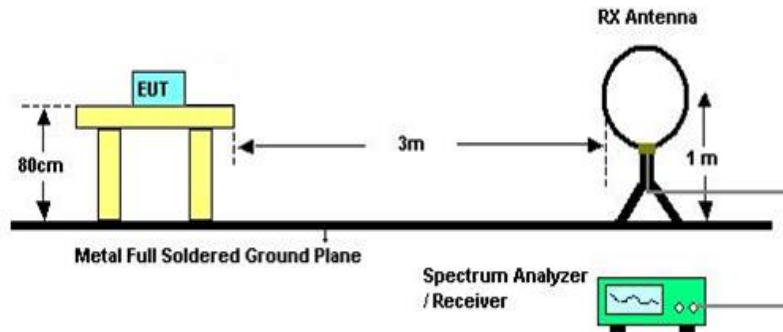
²Above 38.6c

TEST PROCEDURE

FCC Reference:	Parts 15.231(e) / 15.209
Test Method Used:	ANSI C63.10 Sections 6.3 and 6.5

TEST SETUP

Below 30MHz

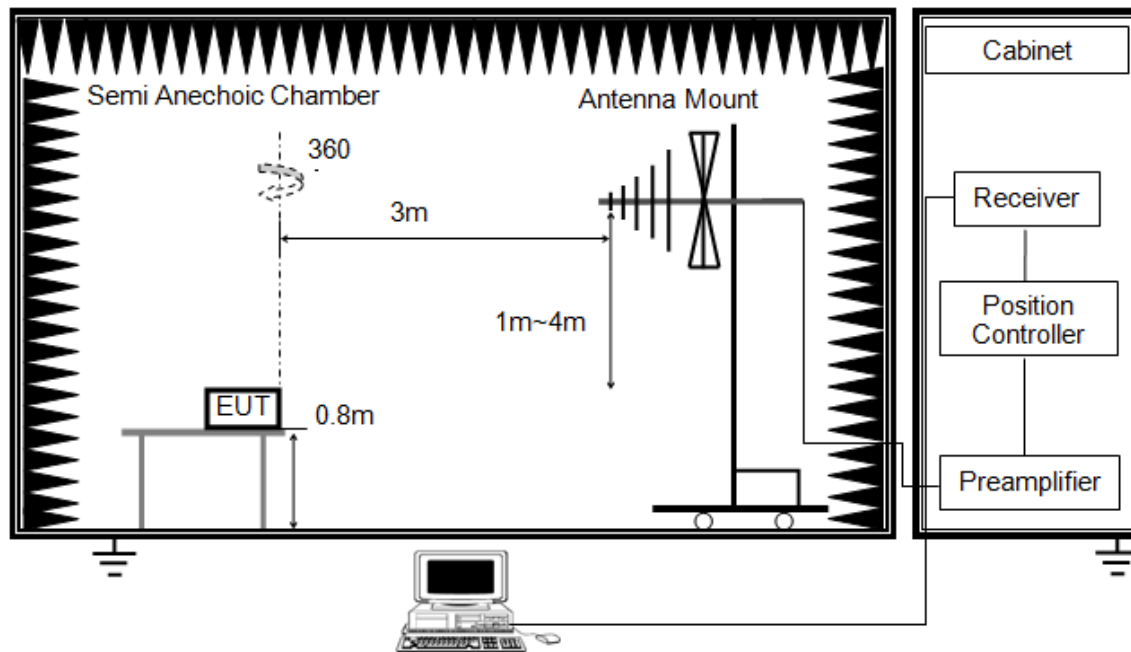


The setting of the spectrum analyser

RBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
VBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/ Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013
2. The EUT was arranged to its worst case and then 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. 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 and average detector and reported.
7. Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

Below 1G

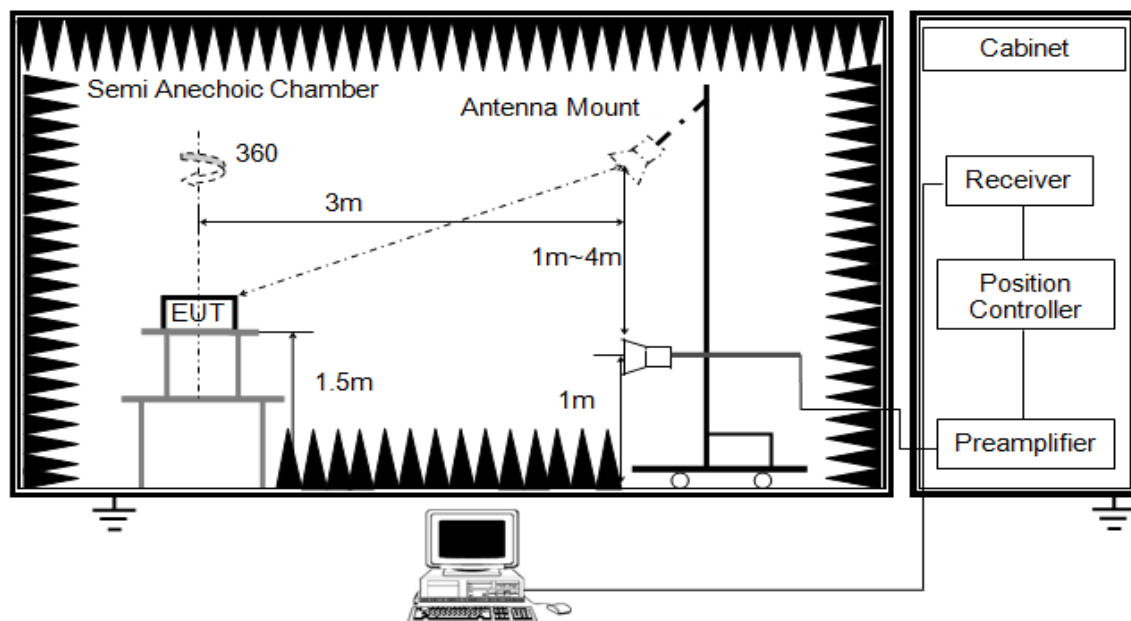


The setting of the spectrum analyser

RBW	120K
VBW	300K
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

ABOVE 1G



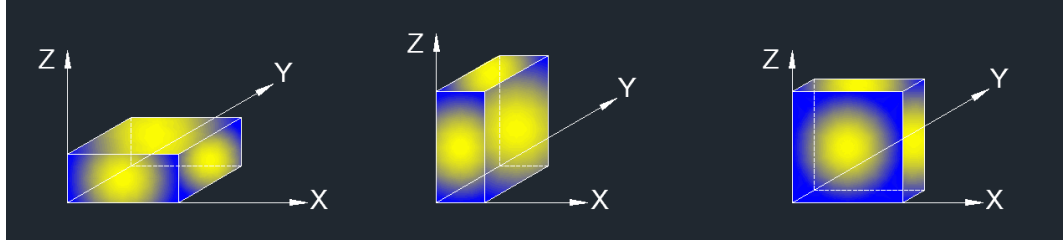
RBW	1M
VBW	3M
Sweep	Auto
Detector	Peak For Average see note 6
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For average value=peak average+Duty Correction Factor
For the Duty Cycle and Correction Factor please refer to clause 7.1.ON TIME AND DUTY CYCLE.
8. For the actual test configuration, please refer to the related item in this test report.
(Photographs of the Test Configuration)

RESULTS



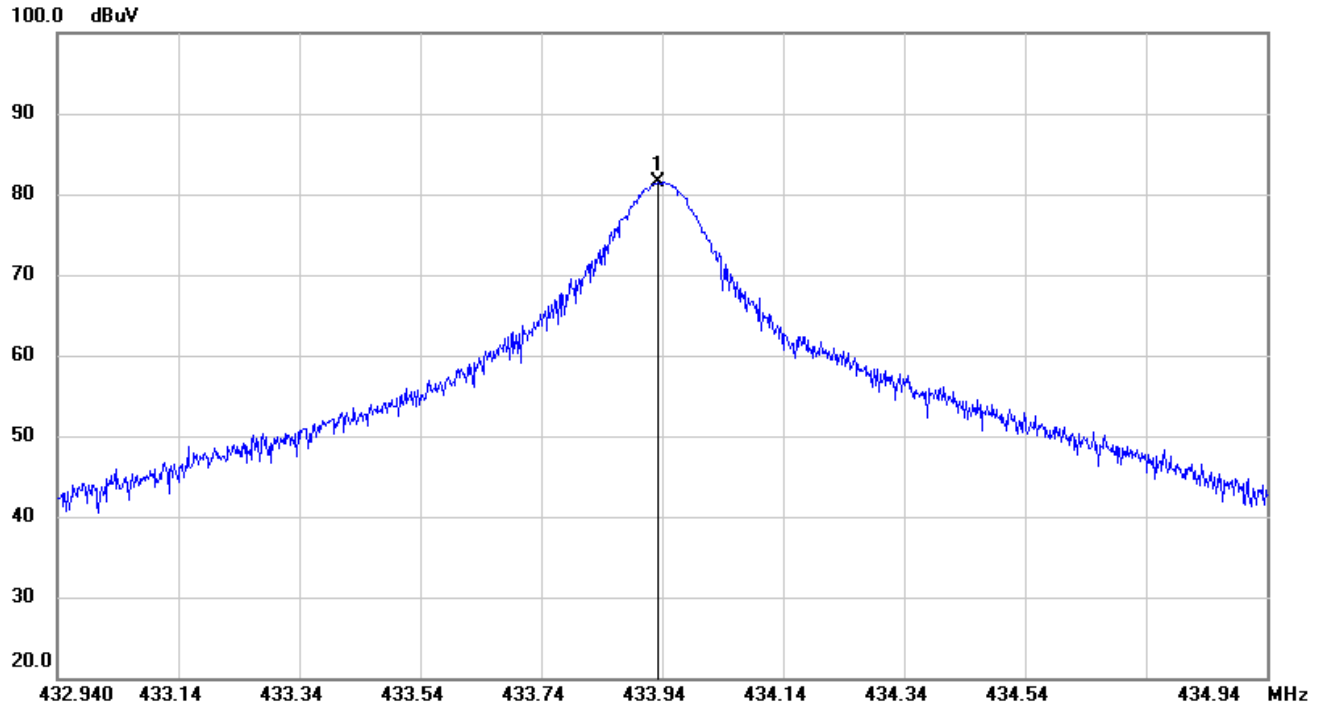
X axis, Y axis, Z axis positions:



Note: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

TEST ENVIRONMENT

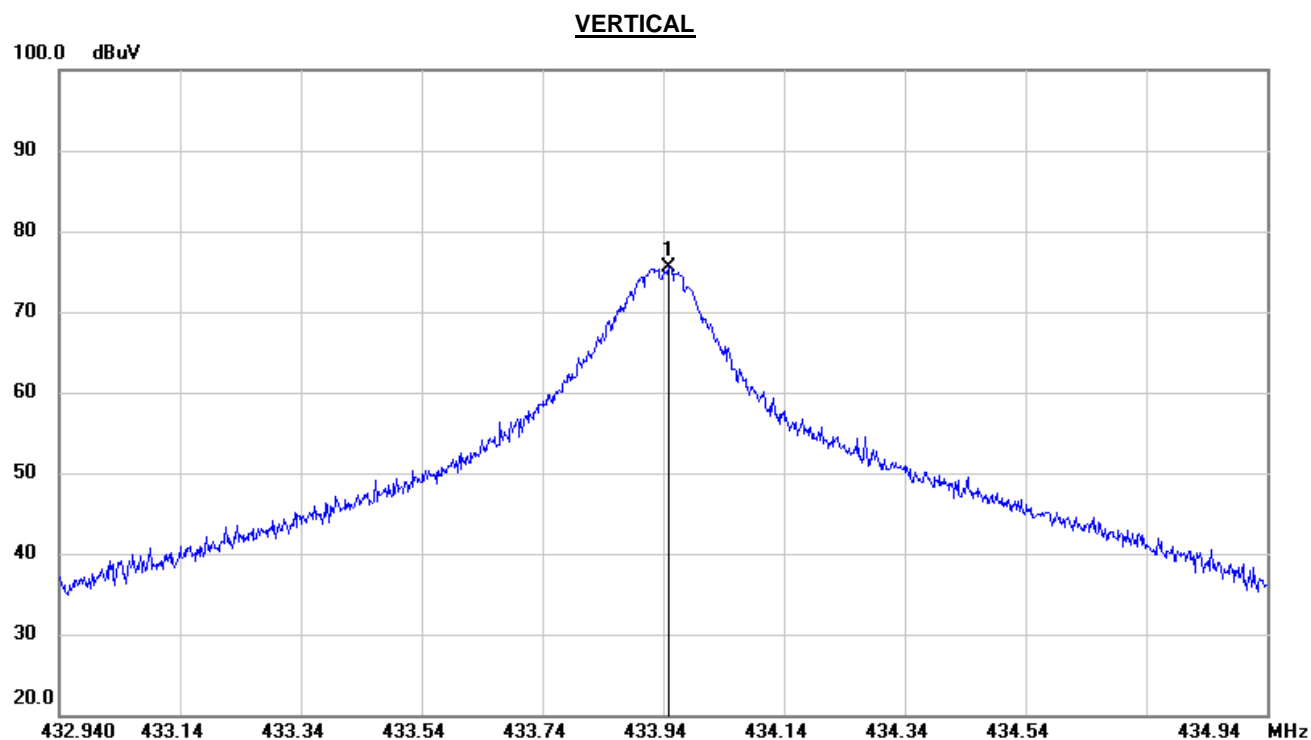
Temperature	25.1°C	Relative Humidity	62%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V

**6.4.1. FUNDAMENTAL FIELD STRENGTH****HORIZONTAL**

Frequency	Reading	Correct	Peak Result	Average Result	Limit	Margin	Remark
(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dBuV)	(dB)	
433.9340	93.33	-11.89	81.44		92.87	-11.43	peak
				63.84	72.87	-9.03	average

Note: 1. Peak Result = Reading+ Correct Factor

2. Average Result= Peak Result+ Duty Correct Factor



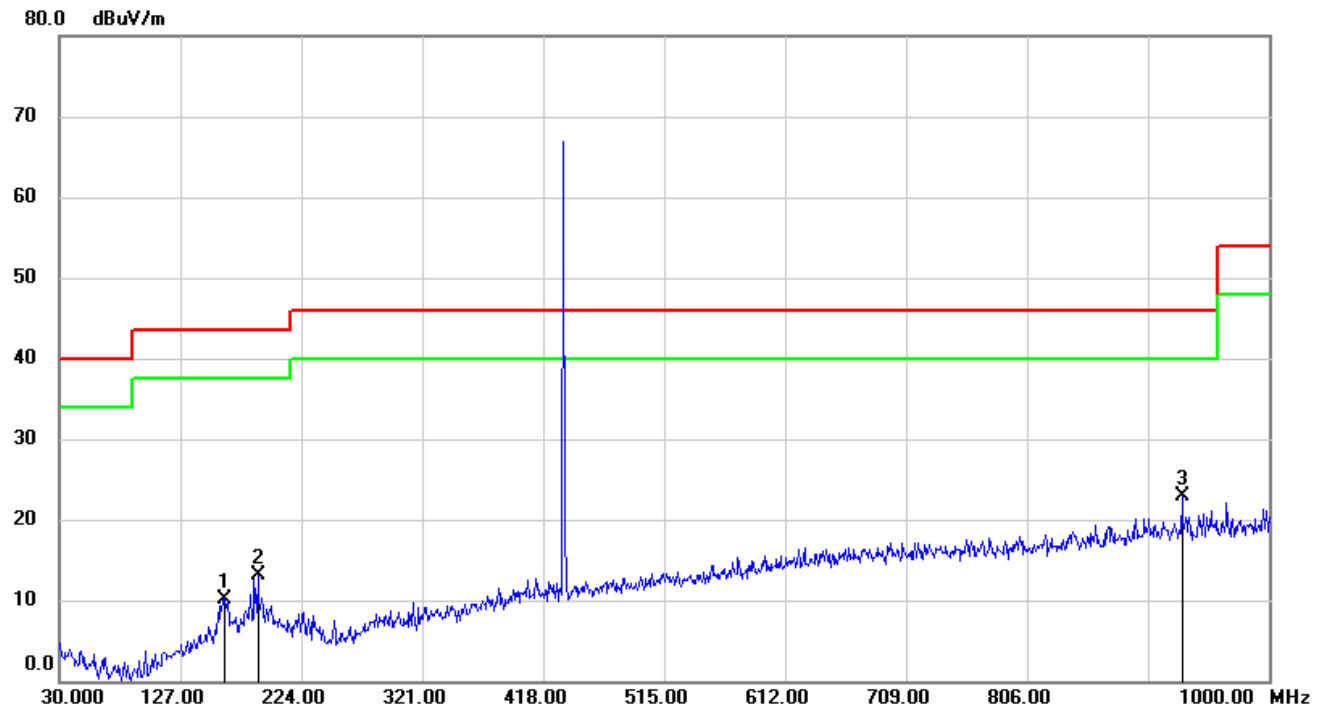
Frequency	Reading	Correct	Peak Result	Average Result	Limit	Margin	Remark
(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dBuV)	(dB)	
433.9480	87.44	-11.89	75.55		92.87	-17.32	peak
				57.95	72.87	-14.92	average

Note: 1. Peak Result = Reading+ Duty Correction Factor
2. Average Result= Peak Result+ Correct Factor



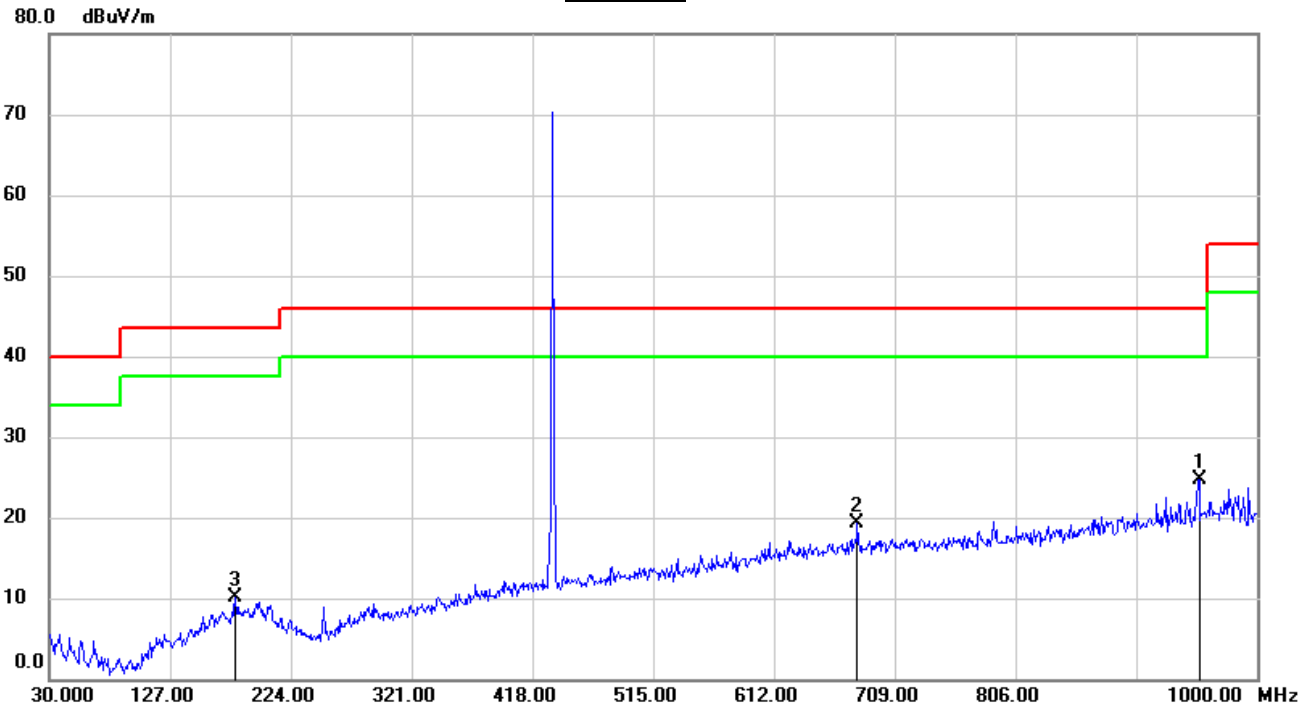
6.4.2. SPURIOUS EMISSIONS BELOW 1G

HORIZONTAL



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	162.8900	26.54	-16.34	10.20	43.50	-33.30	peak
2	189.0800	28.12	-15.00	13.12	43.50	-30.38	peak
3	930.1600	28.03	-5.07	22.96	46.00	-23.04	peak

- Note: 1. Result Level = Read Level + Correct Factor.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

**VERTICAL**

No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	953.4400	29.42	-4.73	24.69	46.00	-21.31	peak
2	678.9300	27.40	-8.07	19.33	46.00	-26.67	peak
3	179.3800	25.25	-15.21	10.04	43.50	-33.46	peak

Note: 1. Result Level = Read Level + Correct Factor.

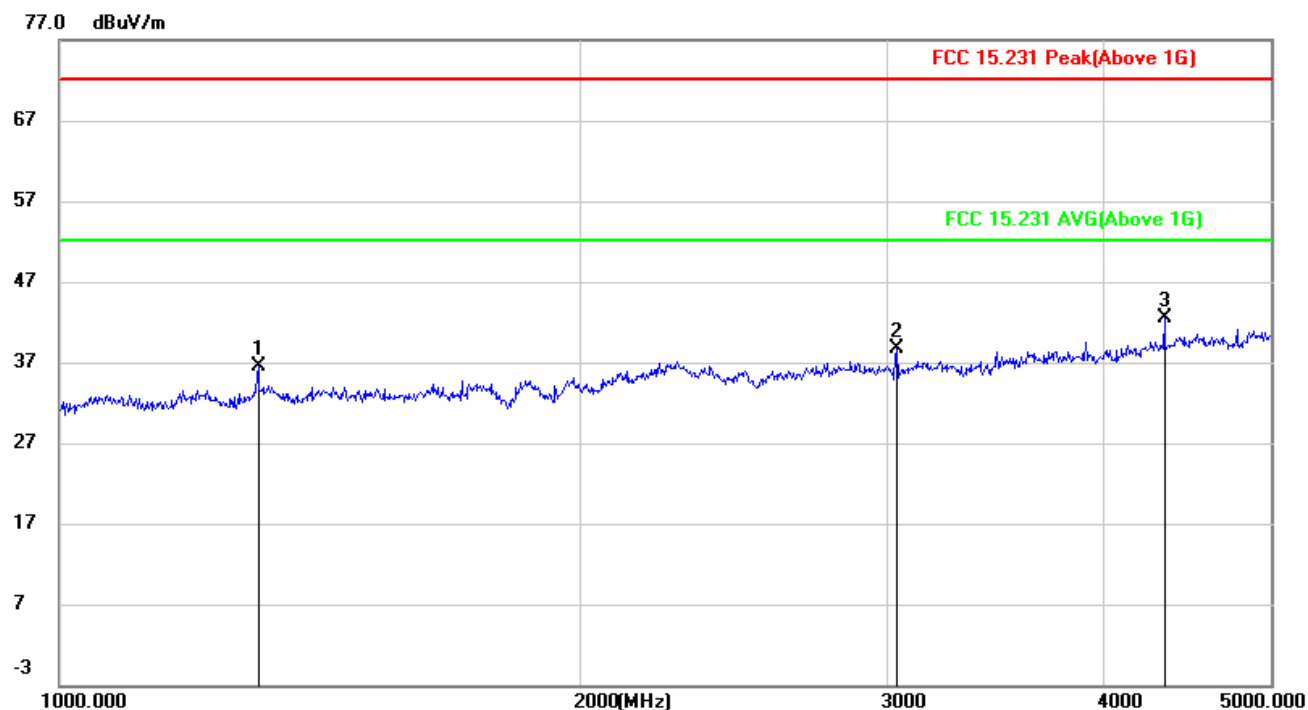
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.



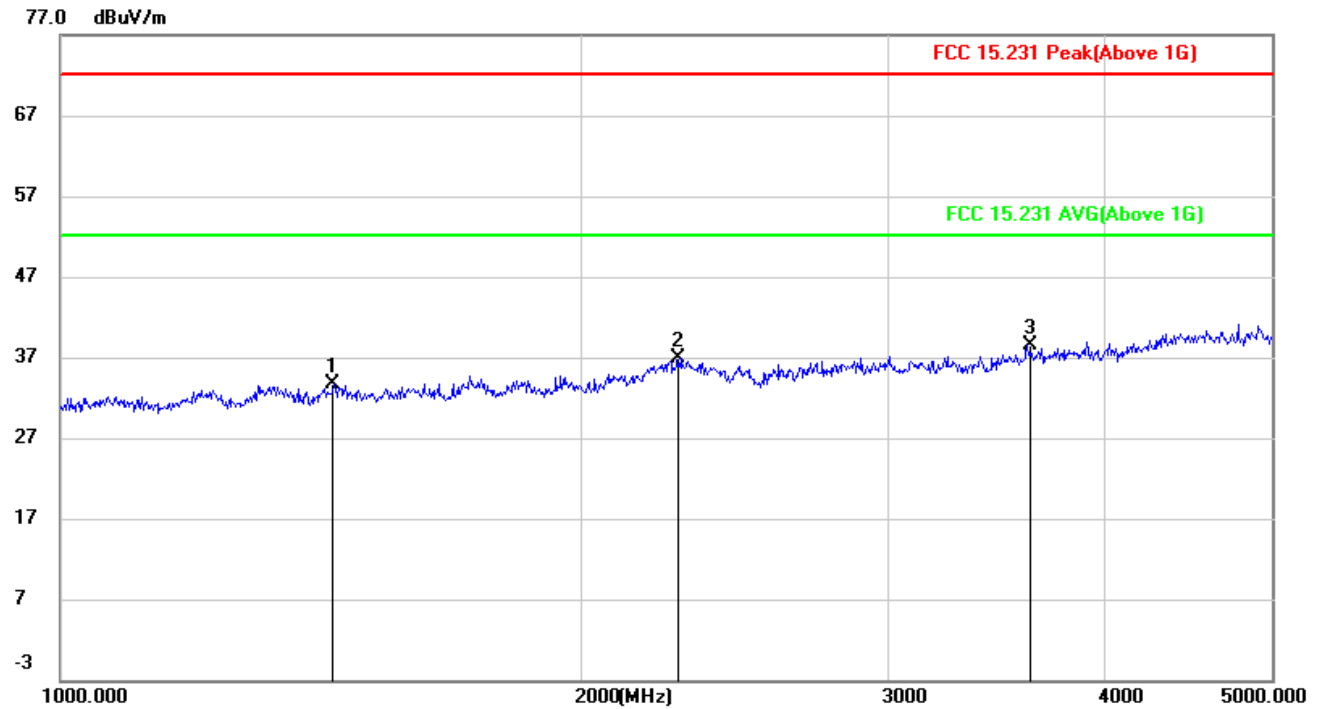
6.4.3. SPURIOUS EMISSIONS ABOVE 1G

HORIZONTAL



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1302.060	49.19	-12.67	36.52	72.09	-35.57	peak
2	3040.803	45.95	-7.16	38.79	72.09	-33.30	peak
3	4346.699	45.30	-2.83	42.47	72.09	-29.62	peak

Note: 1. Peak Result = Reading Level + Correct Factor.
2. Average Result = Peak Result + Duty Correction Factor.
3. No burst found.

VERTICAL

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1438.690	46.39	-12.75	33.64	72.09	-38.45	peak
2	2279.673	45.15	-8.24	36.91	72.09	-35.18	peak
3	3618.071	44.05	-5.46	38.59	72.09	-33.50	peak

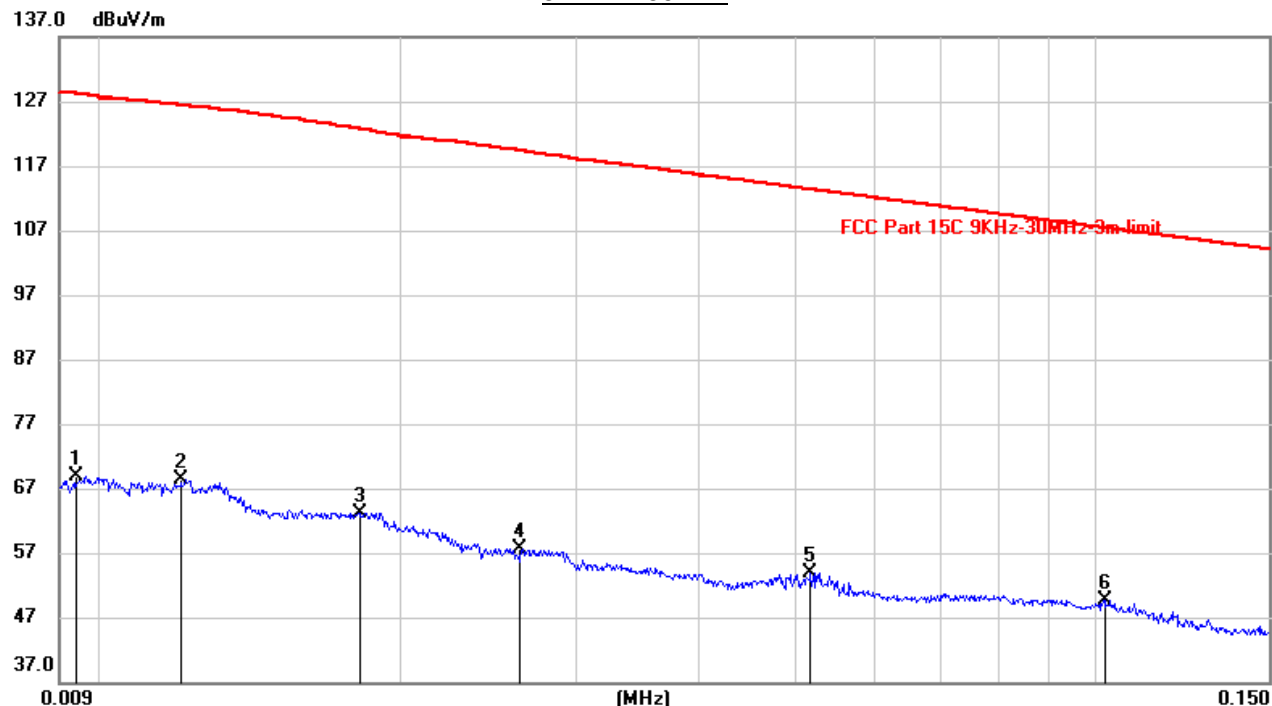
Note: 1. Peak Result = Reading Level + Correct Factor.
2. Average Result = Peak Result + Duty Correction Factor.
3. No burst found.



6.4.4. SPURIOUS EMISSIONS BELOW 30M

HORIZONTAL

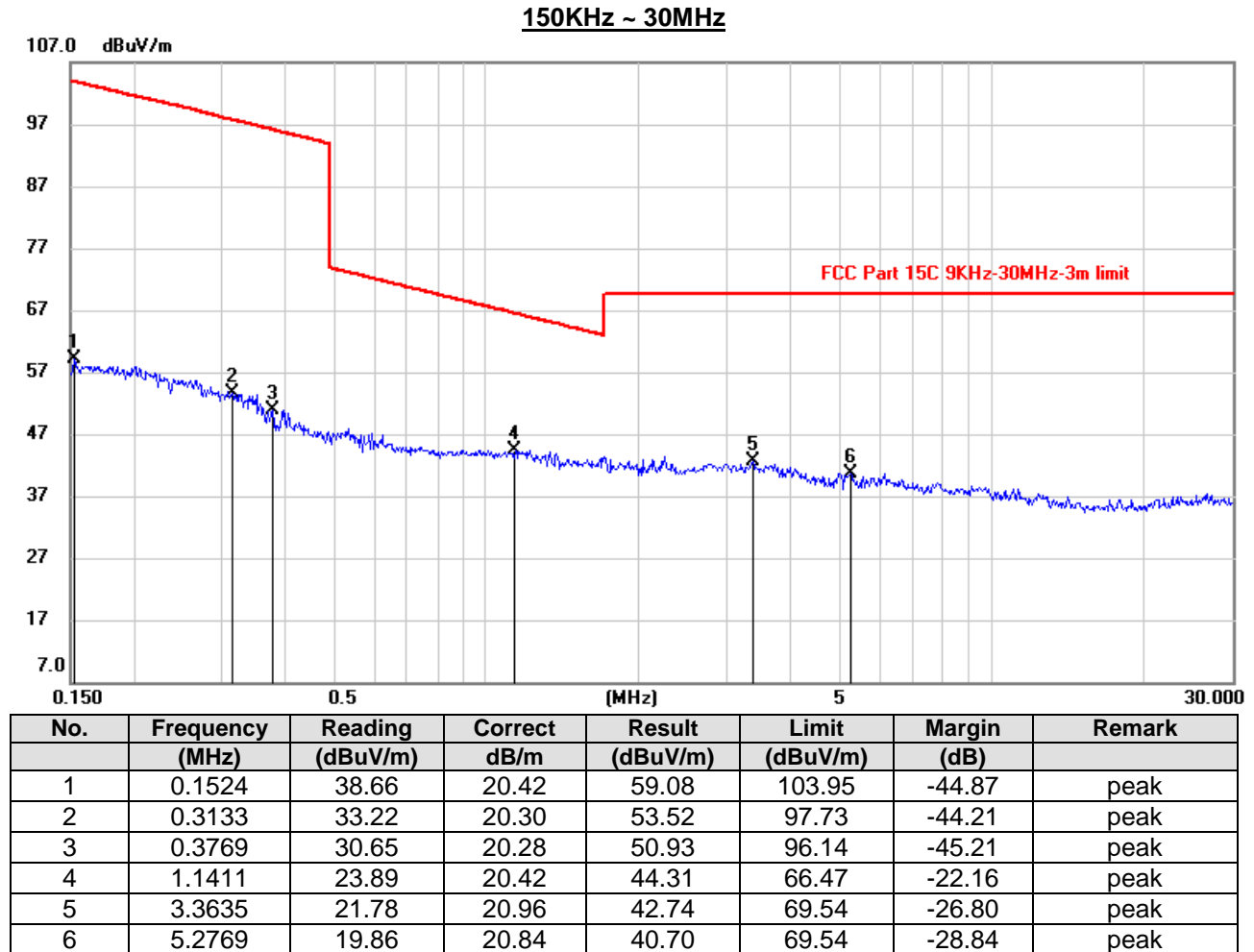
9KHz~ 150KHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0094	48.50	20.26	68.76	128.06	-59.30	peak
2	0.0120	48.15	20.23	68.38	126.40	-58.02	peak
3	0.0181	42.91	20.29	63.20	122.72	-59.52	peak
4	0.0263	37.25	20.31	57.56	119.36	-61.80	peak
5	0.0516	33.66	20.31	53.97	113.37	-59.40	peak
6	0.1023	29.51	20.23	49.74	107.41	-57.67	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

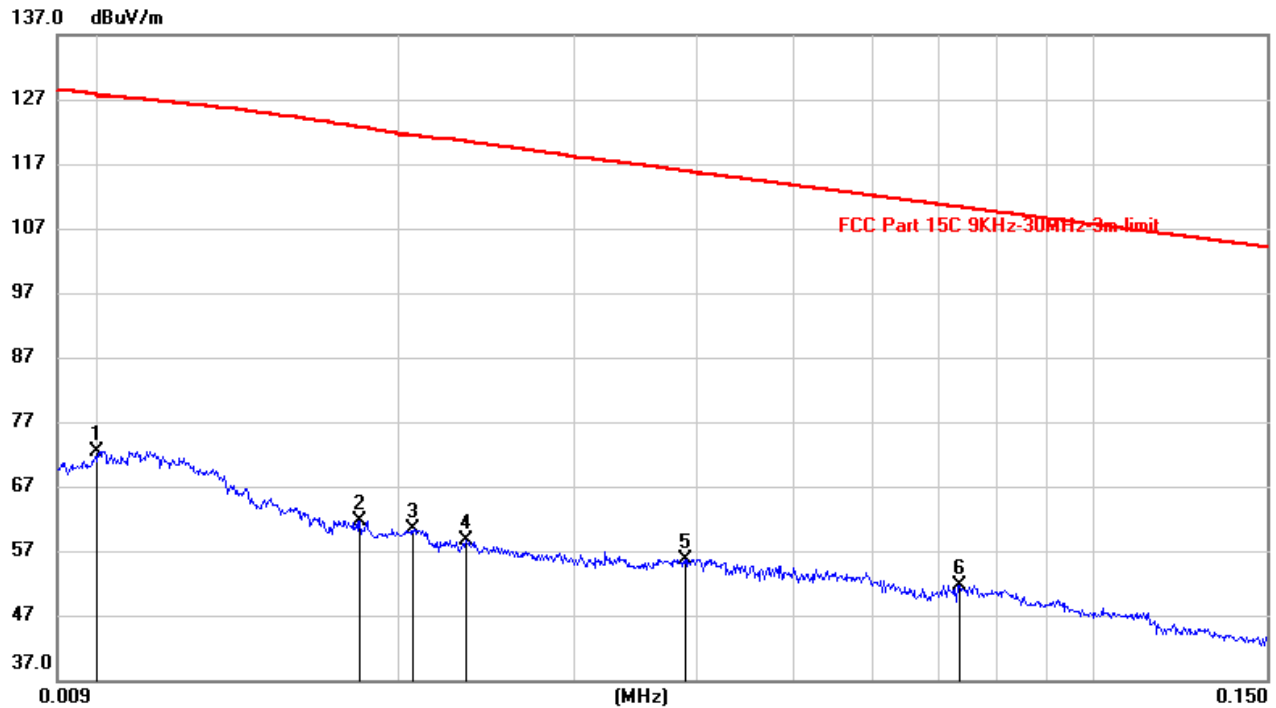


Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

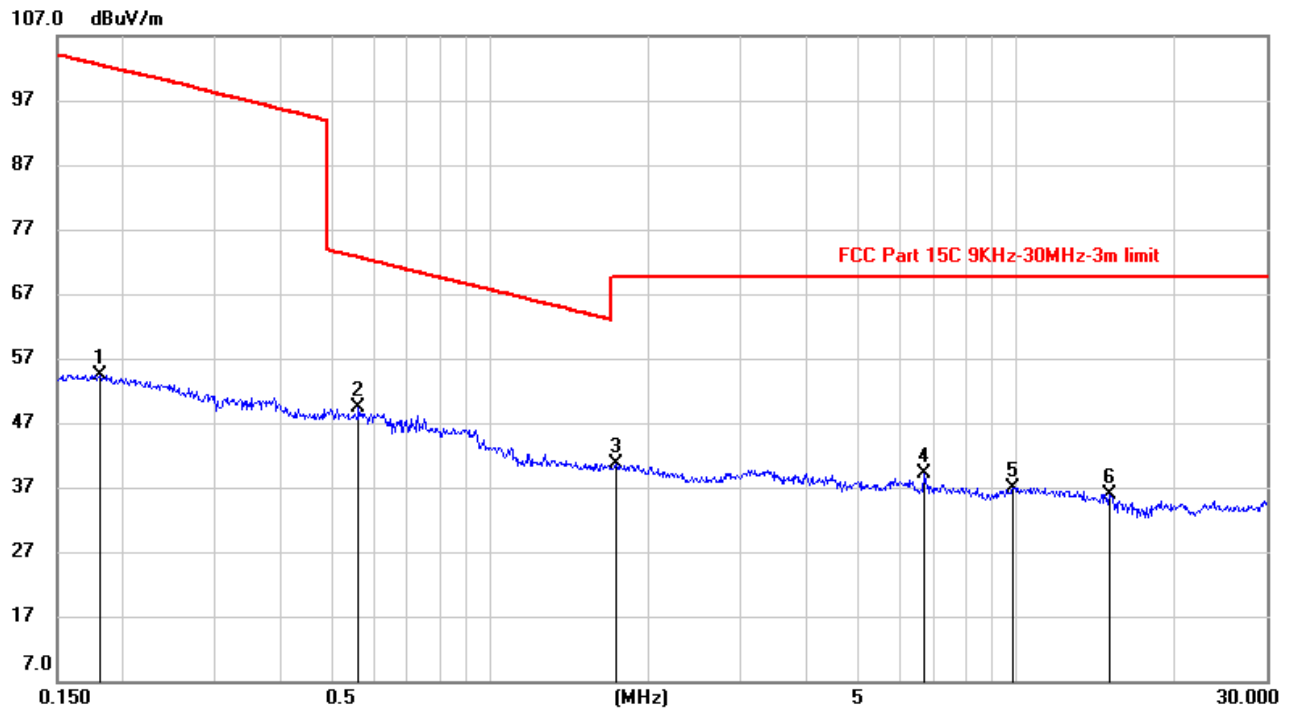


VERTICAL
9KHz~ 150KHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0100	52.23	20.21	72.44	127.60	-55.16	peak
2	0.0182	41.41	20.29	61.70	122.66	-60.96	peak
3	0.0206	40.15	20.31	60.46	121.37	-60.91	peak
4	0.0233	38.35	20.31	58.66	120.42	-61.76	peak
5	0.0388	35.44	20.31	55.75	115.86	-60.11	peak
6	0.0734	31.27	20.31	51.58	110.31	-58.73	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

**150KHz ~ 30MHz**

No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1806	34.08	20.39	54.47	102.47	-48.00	peak
2	0.5611	29.16	20.26	49.42	72.66	-23.24	peak
3	1.7436	19.97	20.64	40.61	69.54	-28.93	peak
4	6.6977	18.21	20.90	39.11	69.54	-30.43	peak
5	9.8605	15.91	21.06	36.97	69.54	-32.57	peak
6	15.0655	15.01	20.93	35.94	69.54	-33.60	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

END OF REPORT