

TEST REPORT



CTK Co., Ltd.
(Ho-dong), 113, Yejik-ro, Cheoin-gu,
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Tel: +82-31-339-9970
Fax: +82-31-624-9501

Report No.:
CTK-2022-02091
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1. Applicant

- Name : BITFINDER, INC
- Address : 315 Montgomery Street, 10th Floor, San Francisco, California, United States
- Date of Receipt : 2022-05-13

2. Manufacturer

- Name : BITFINDER, INC
- Address : 315 Montgomery Street, 10th Floor, San Francisco, California, United States

3. Use of Report : For FCC & ISED Certification

4. Test Sample / Model : AWAIR MESH SURFACE MOUNT / AWAIRNET

5. Date of Test : 2022-06-02 to 2022-06-24



6. Test Standard(method) used : FCC 47 CFR part 15 subpart C 15.225
RSS-Gen Issue 5, RSS-210 Issue 10

7. Testing Environment: Temp.: (23 ± 1) °C, Humidity: (48 ± 3) % R.H.

8. Test Results : Compliance

9. Location of Test : Permanent Testing Lab On Site Testing

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This report cannot be reproduced or copied without the written consent of CTK.

Approval	Tested by	Technical Manager
	Gwanyong Kim: (Signature) 	Young-taek Lee: (Signature) 

Remark. This report is not related to KOLAS accreditation and relevant regulation.

2022-08-08

CTK Co., Ltd.

**CTK Co., Ltd.**

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REPORT REVISION HISTORY

Date	Revision	Page No
2022-08-08	Issued (CTK-2022-02091)	all

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1. General Product Description

1.1 Client Information

Company	BITFINDER, INC
Contact Point	315 Montgomery Street, 10th Floor, San Francisco, California, United States
Contact Person	Name : Kevin Cho E-mail : adnan@getawair.com

1.2 Product Information

FCC ID	2AF65AWAIRNET
Certification Number ISED	28737-AWAIRNET
Product Description	AWAIR MESH SURFACE MOUNT
Basic model (HVIN)	AWAIRNET
Variant Model name	-
FVIN	0.7.4.rev1
Operating Frequency Range	13.56 MHz
RF Output Power	64.1 dBuV/m @ 3 m
Antenna Type	FPC Coil Antenna
Power Source	DC 3.3 V, DC 5 V (Selectively use)

1.3 Antenna Information

<input type="checkbox"/>	Integral antenna (antenna permanently attached)
<input type="checkbox"/>	Temporary RF connector provided
<input type="checkbox"/>	No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
<input checked="" type="checkbox"/>	External antenna (dedicated antennas)



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2. Facility and Accreditations

2.1 Test Facility

5, Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142 Korea

2.2 Laboratory Accreditations and Listings

Country	Agency	Registration Number
USA	FCC	805871
CANADA	ISED	8737A-2
KOREA	NRRA	KR0025

2.3 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less. All test equipment calibrations are traceable to the Korea Research Institute of Standards and Science (KRISS), therefore, all test data recorded in this report is traceable to KRISS.



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3. Test Specifications


3.1 Standards

FCC Part Section(s)	RSS Section(s)	Requirement(s)	Status (Note 1)	Report Clause
15.203	RSS-Gen 6.8	Antenna Requirement	C	1.3
15.215(c)	RSS-Gen 6.7	Emission Bandwidth	C	4.1
15.225 (a)(b)(c)(d)	RSS-210 Annex B.6 (a)(b)(c)(d)	Field strength emissions	C	4.2
15.225(e)	RSS-210 Annex B.6	Frequency tolerance	C	4.3
15.207(a)	RSS-Gen 8.8	AC Power line Conducted Emissions	C	-

Note 1: C=Complies NC=Not Complies NT=Not Tested NA=Not Applicable

Note 2: The data in this test report are traceable to the national or international standards.

Note 3: The sample was tested according to the following specification: ANSI C63.10-2013.

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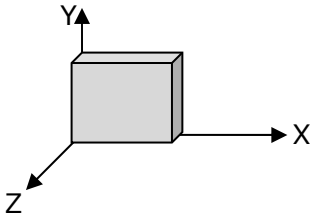
3.2 Mode of operation during the test

The EUT is operated in a manner representative of the typical of the equipments. During at testing, system components were manipulated within the confines of typical usage to maximize each emission. All modulation modes were tests.

Test mode

Transmit Status (DC 3.3 V)
Transmit Status (DC 5 V)

Indication of the position of the EUT to be measured

<p>EUT faces identified relative to view from receiving antenna</p>	
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3.3 Peripheral Devices

No.	Device	Manufacturer	Model No.	Serial No.
1	AC ADAPTOR	Kuantech (Beihai) Co., Ltd	KSA29B0500200D5	P0618



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3.4 Maximum Measurement Uncertainty

The value of the measurement uncertainty for the measurement of each parameter.
Coverage factor $k = 2$, Confidence levels of 95 %

Test Item	Uncertainty
Radiated emissions	3.88 dB (C.L. : Approx. 95%, $k = 2$)
Frequency tolerance	10 Hz (C.L. : Approx. 95%, $k = 2$)
AC Conducted Emission	1.94 dB (C.L. : Approx. 95%, $k = 2$)

4. Technical Characteristic Test

4.1 Emission Bandwidth

Requirement

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

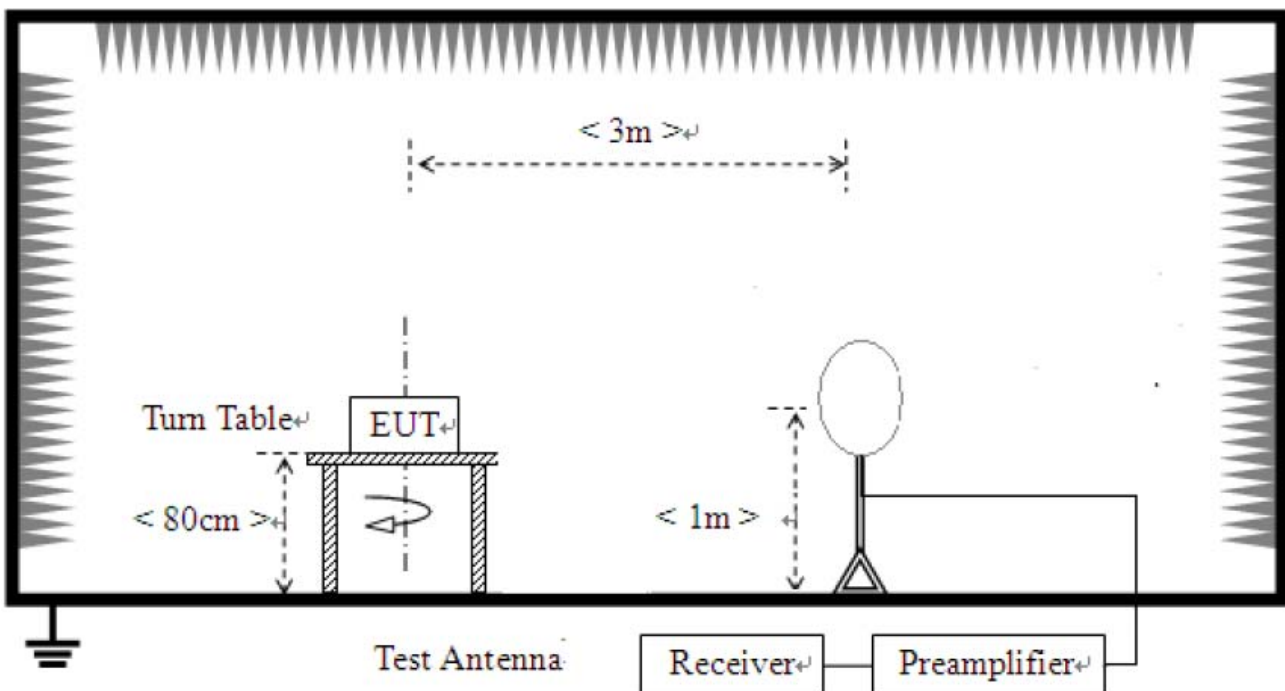
The occupied bandwidth or the "99% emission bandwidth" is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

In some cases, the "x dB bandwidth" is required, which is defined as the frequency range between two points, one at the lowest frequency below and one at the highest frequency above the carrier frequency, at which the maximum power level of the transmitted emission is attenuated x dB below the maximum in-band power level of the modulated signal, where the two points are on the outskirts of the in-band emission.

Test Procedures

For the emission bandwidth refer ANSI C63.10-2013, clause 6.9(Occupied bandwidth).

Test Setup

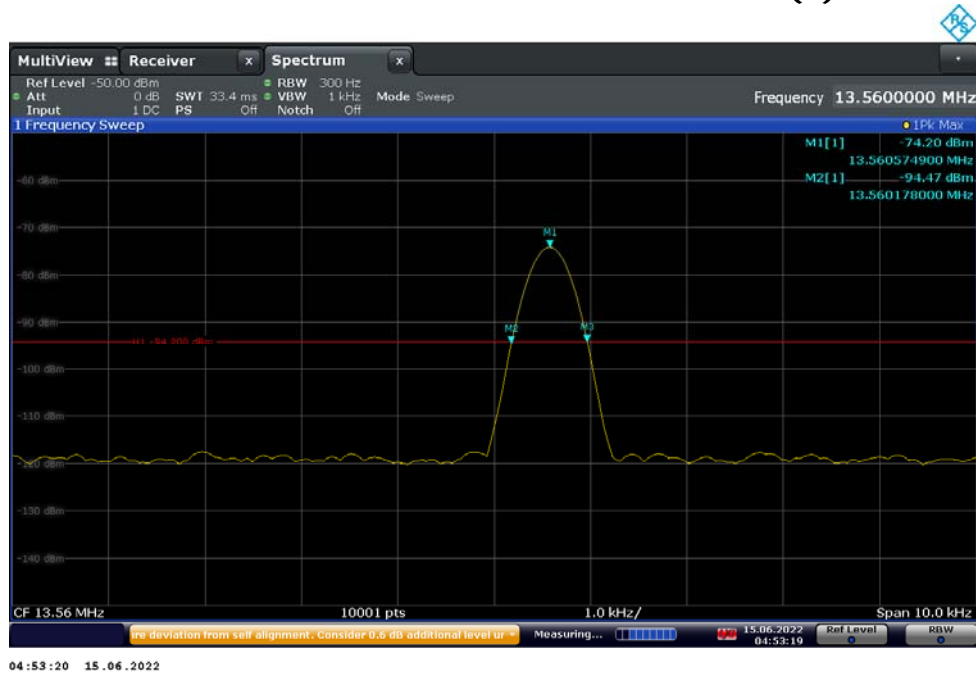


Test results

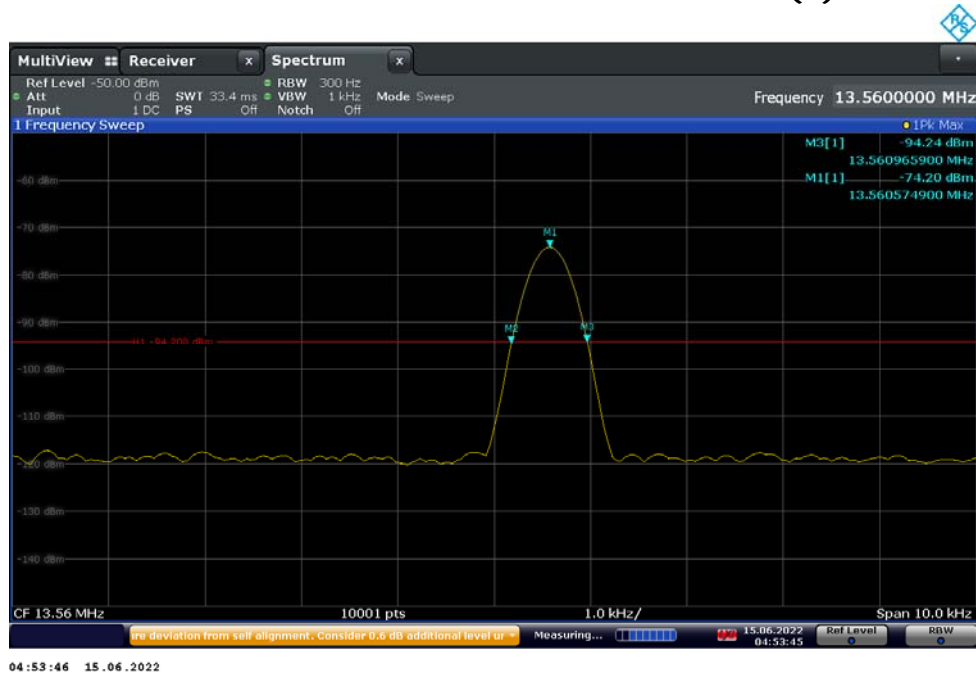
Test mode : DC 3.3 V

Emission Bandwidth	Result	Limit
20 dB Bandwidth	0.788 kHz	N/A
99 % Bandwidth	0.674 kHz	N/A

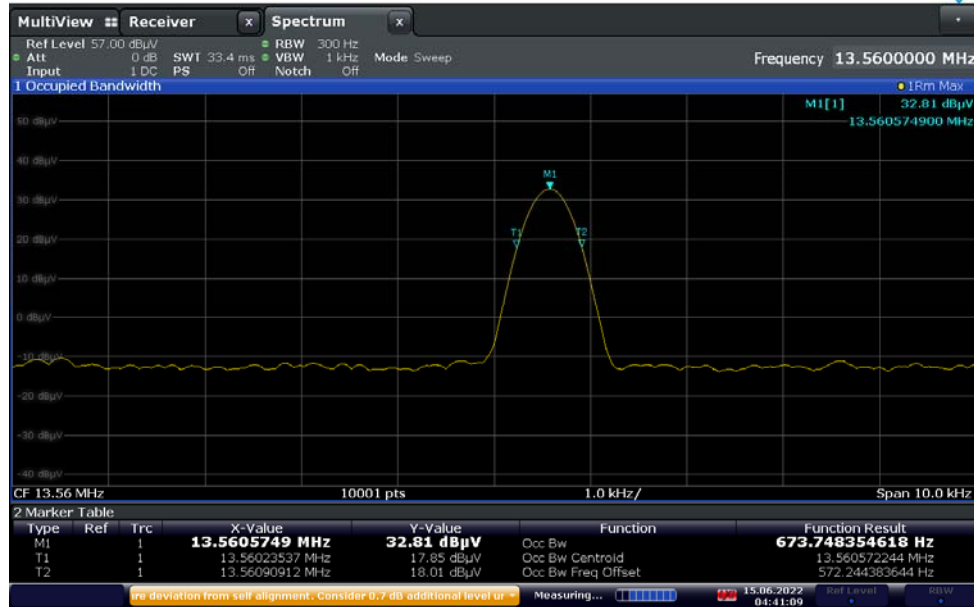
Emission Bandwidth Plot 20dB Bandwidth (A)



Emission Bandwidth Plot 20dB Bandwidth (B)



Emission Bandwidth Plot 99% Bandwidth

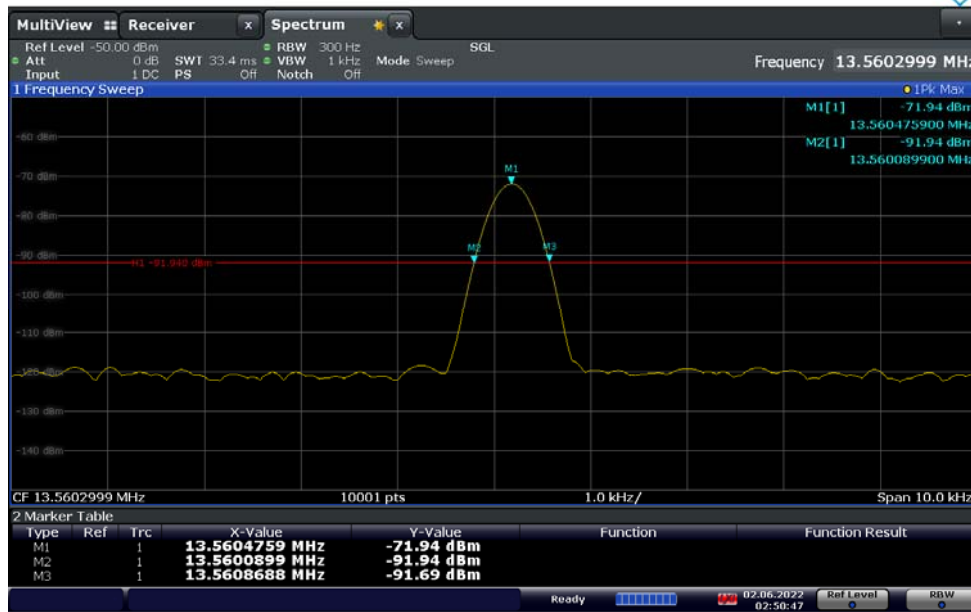


04:41:09 15.06.2022

Test mode : DC 5 V

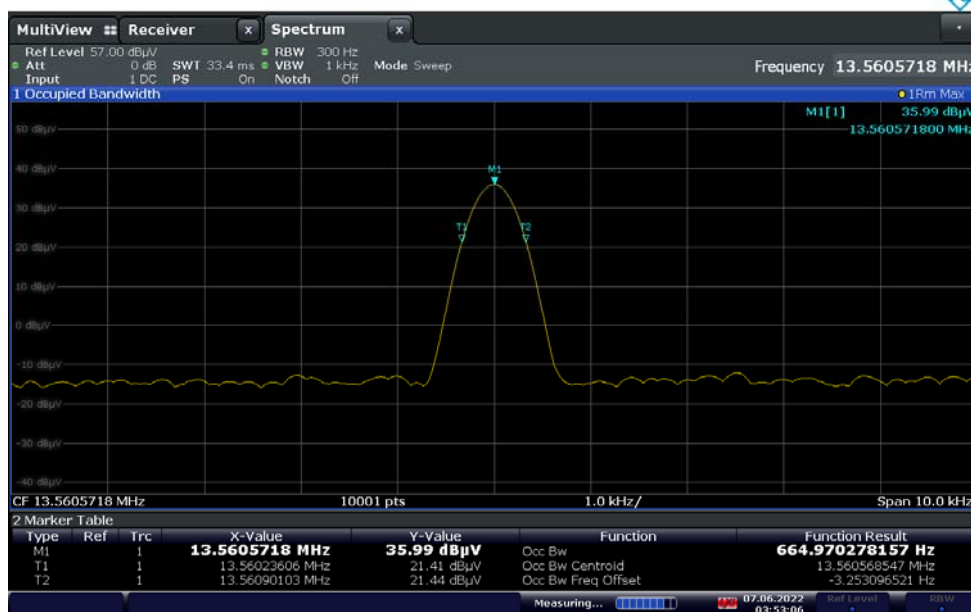
Emission Bandwidth	Result	Limit
20 dB Bandwidth	0.779 kHz	N/A
99 % Bandwidth	0.665 kHz	N/A

Emission Bandwidth Plot 20dB Bandwidth



02:50:47 02.06.2022

Emission Bandwidth Plot 99% Bandwidth



03:53:06 07.06.2022

4.2 Field strength emissions

Requirement

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.

Frequency(MHz)	Field Strength uV/m@30m	Field Strength dBuV/m@30m	Field Strength dBuV/m@3m
13.553-13.567	15,848	84.0	124.0

- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.

Frequency(MHz)	Field Strength uV/m@30m	Field Strength dBuV/m@30m	Field Strength dBuV/m@3m
13.410-13.553	334	50.5	90.5
13.567-13.710	334	50.5	90.5

- © Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.

Frequency(MHz)	Field Strength uV/m@30m	Field Strength dBuV/m@30m	Field Strength dBuV/m@3m
13.110-13.410	106	40.5	80.5
13.710-14.010	106	40.5	80.5

- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in §15.209(RSS-GEN).



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The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table :

Frequency(MHz)	Field Strength uV/m	Field Strength dBuV/m	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	48.5 - 13.8	300
0.490-1.705	24000/F(kHz)	33.8 - 23	30
1.705-30	30	29.5	30
30-88	100**	40	3
88-216	150**	43.5	3
216-960	200**	46	3
Above 960	500	54	3

** Except as provided in 15.209(g).fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72MHz, 76-88MHz, 174-216MHz, 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g.15.231 and 15.241.

Note : The emission limits shown in the above table 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.



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Test Location

10 m SAC (test distance : 10 m, 3 m)

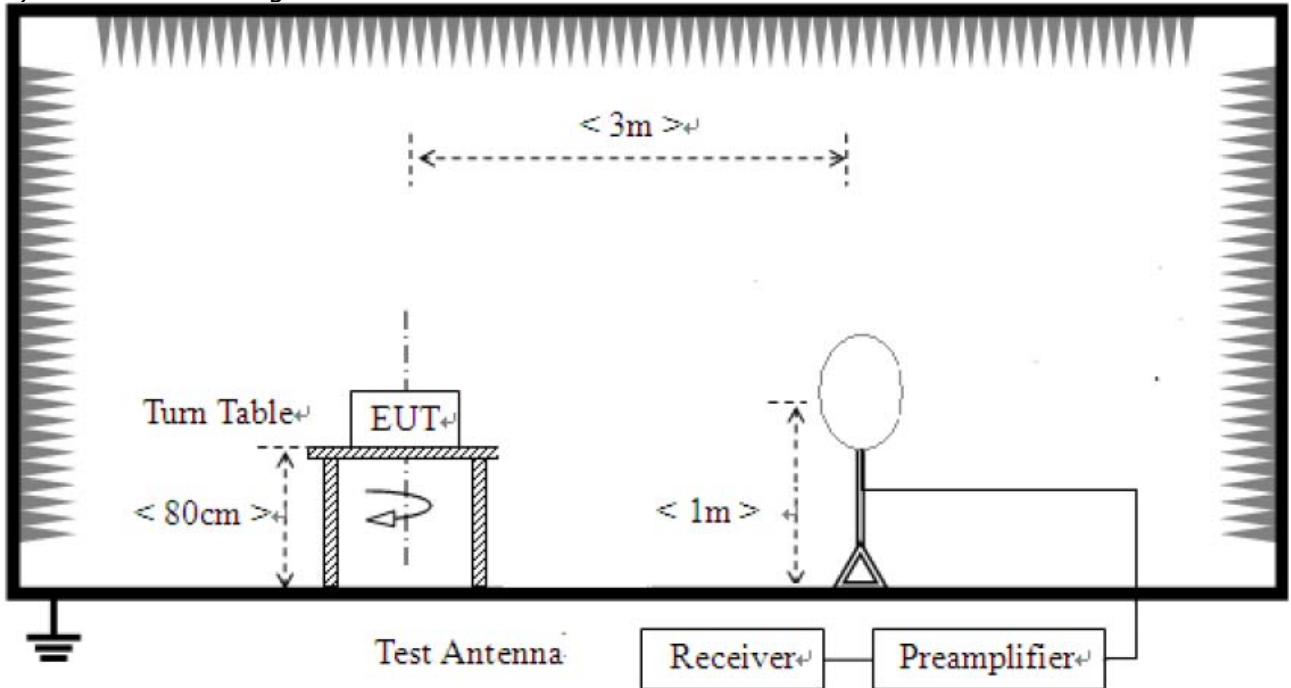
Test Procedures

Test Method	
<input checked="" type="checkbox"/>	Refer as ANSI C63.10-2013, clause 6.4(Radiated emissions from unlicensed wireless devices below 30 MHz).
<input checked="" type="checkbox"/>	Radiated emission tests shall be performed in the frequency range of 9 kHz to 30 MHz, using a calibrated loop antenna. When perpendicular to the ground plane, the lowest height of the magnetic antenna shall be 1 m above the ground and shall be positioned at the specified distance from the EUT. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
<input checked="" type="checkbox"/>	The results shall be by using the square of an inverse linear distance extrapolation factor(40 dB/decade).
<input checked="" type="checkbox"/>	Refer as ANSI C63.10-2013, clause 6.5(Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz).
<input checked="" type="checkbox"/>	In the frequency rage above 30 MHz, Bi-Log Test Antenna(30 MHz to 1 GHz) is used. Test Antenna height is carried from 1m to 4m above the ground to determine the maximum value of the field strength. The emissions levels at both horizontal and vertical polarizations should be tested.
<input checked="" type="checkbox"/>	Emissions more than 20 dB below the limit do not need to be reported.

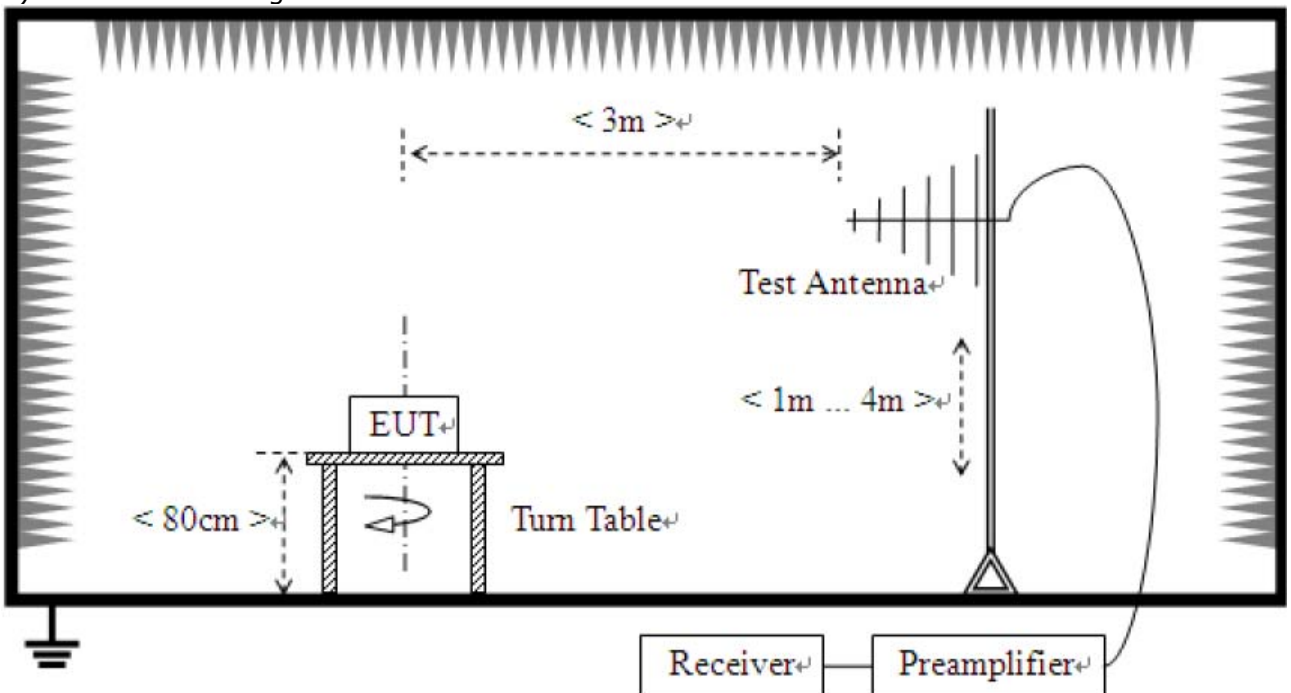
Measuring instrument Settings	
Frequency Range	9 kHz – 1 000 MHz
RBW	200 Hz (9 kHz – 150 kHz) 9 kHz (150 kHz – 30 MHz) 120 kHz (30 MHz – 1 000 MHz)
VBW	≥ RBW
Sweep time	auto couple
Detector function	CISPR quasi-peak(below 1 000 MHz)

Test Setup

- 1) For field strength of emissions from 9 kHz to 30 MHz



- 2) For field strength of emissions from 30 MHz to 1 GHz



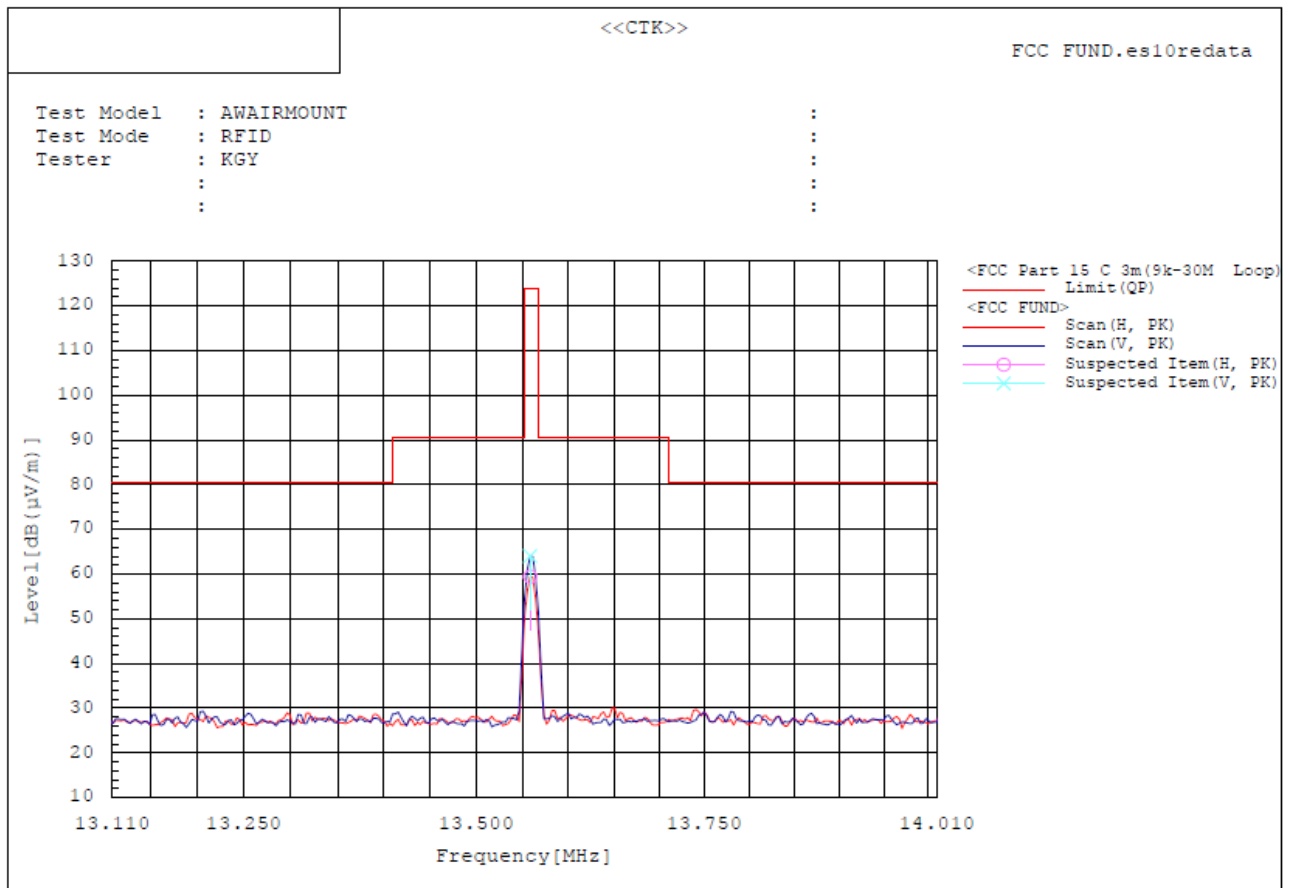
Test results

1) Radiated emissions within the band 13.110-14.010 MHz

Test mode : DC 3.3 V

The requirements are:

Complies



Spectrum Selection

No.	Frequency [MHz]	Pol	Reading PK [dB(µV)]	c.f [dB(1/m)]	Result PK [dB(µV/m)]	Limit QP [dB(µV/m)]	Margin QP-PK [dB]	Height [cm]	Angle [deg]	Remark
1	13.559	H	32.9	26.5	59.4	124.0	64.6	99.9	359.3	
2	13.559	V	37.6	26.5	64.1	124.0	59.9	99.9	85.6	

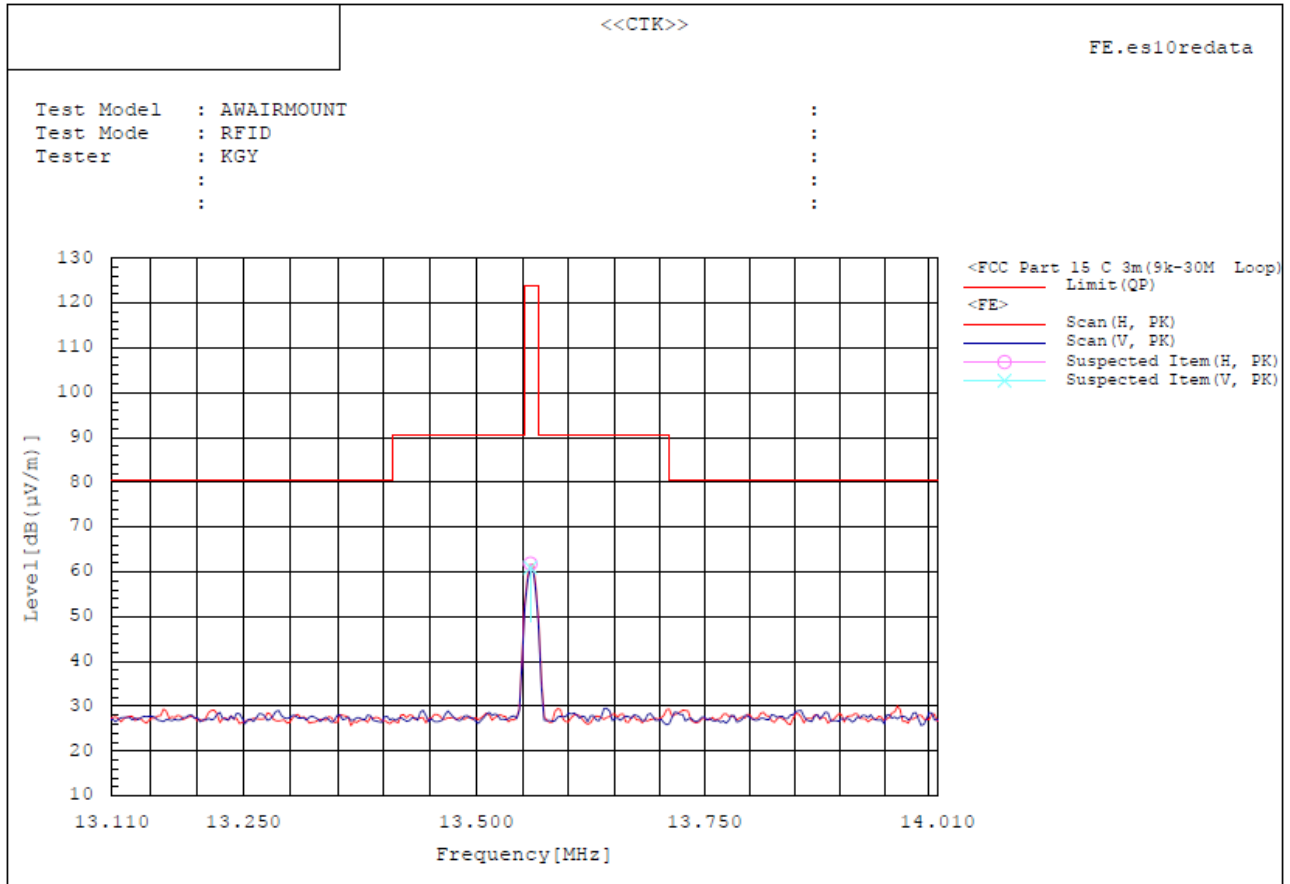
Remark :

1. Result = Reading + c.f(correction factor)
2. Correction factor = Antenna factor + Cable loss + 6 dB attenuator
3. The test result in peak detector is less than quasi-peak limit.

Test mode : DC 5 V

The requirements are:

Complies



Spectrum Selection

No.	Frequency [MHz]	Pol	Reading PK [dB (µV)]	c.f [dB(l/m)]	Result PK [dB (µV/m)]	Limit QP [dB (µV/m)]	Margin QP-PK [dB]	Height [cm]	Angle [deg]	Remark
1	13.559	H	35.3	26.5	61.8	124.0	62.2	99.9	359.2	
2	13.559	V	34.4	26.5	60.9	124.0	63.1	99.9	291.8	

Remark :

1. Result = Reading + c.f(correction factor)
2. Correction factor = Antenna factor + Cable loss + 6 dB attenuator
3. The test result in peak detector is less than quasi-peak limit.

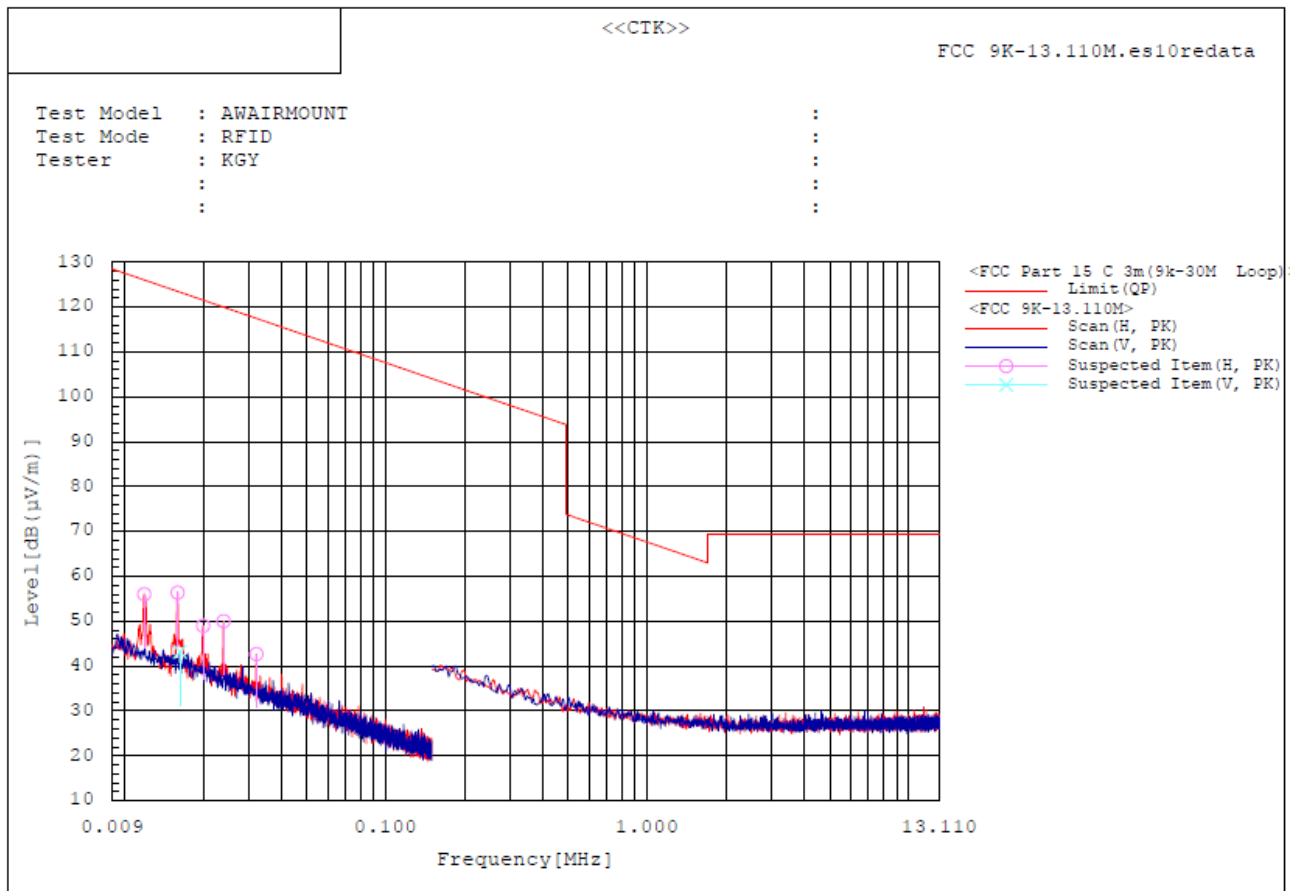
2) Field strength of any emissions appearing outside of the 13.110-14.010 MHz

Frequency range : 9 kHz – 13.110 MHz

Test mode : DC 3.3 V

The requirements are:

Complies



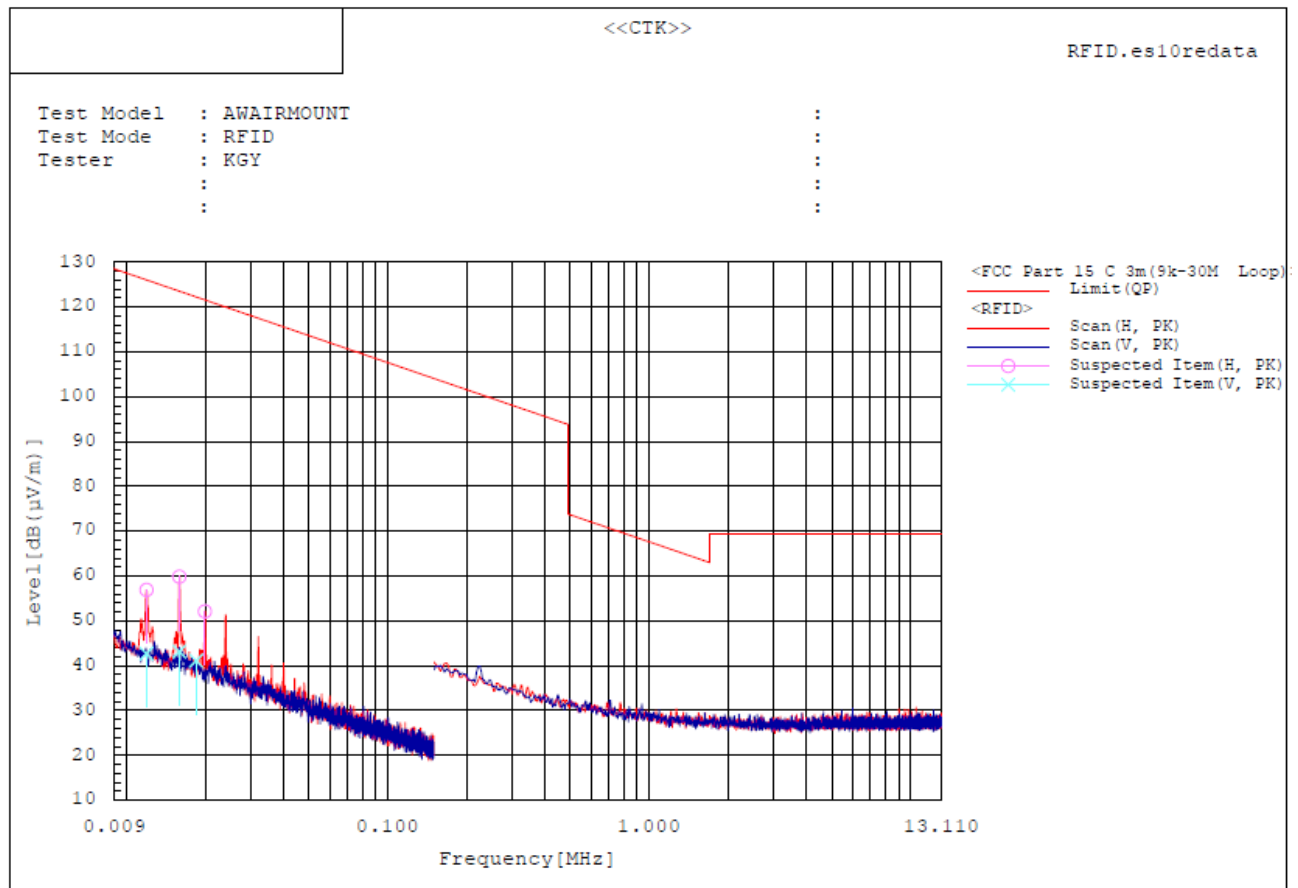
Remark :

1. Result = Reading + c.f(correction factor)
2. Correction factor = Antenna factor + Cable loss + 6 dB attenuator
3. Emissions more than 20 dB below the limit do not need to be reported.

Test mode : DC 5 V

The requirements are:

Complies



Remark :

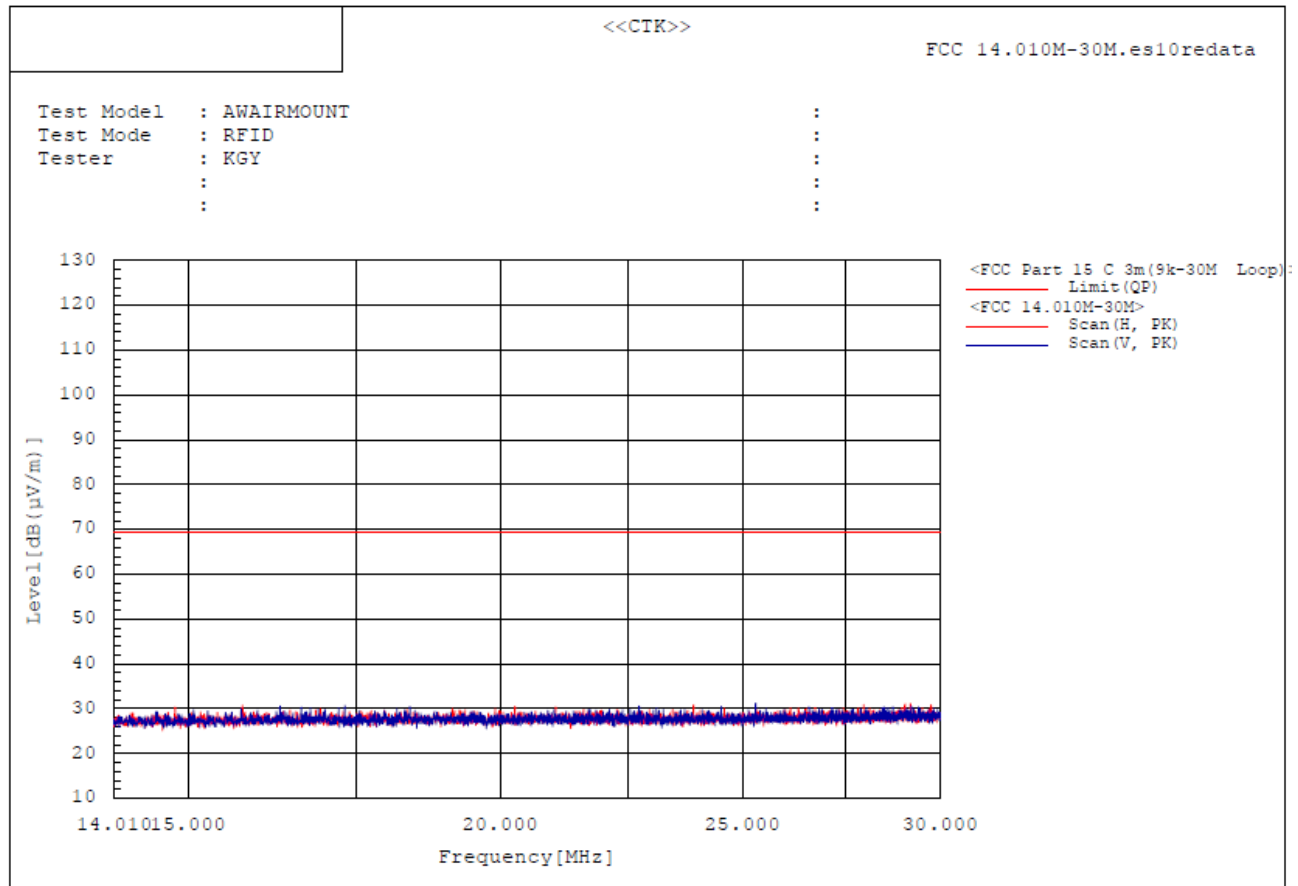
1. Result = Reading + c.f(correction factor)
2. Correction factor = Antenna factor + Cable loss + 6 dB attenuator
3. Emissions more than 20 dB below the limit do not need to be reported.

Frequency range : 14.010 MHz – 30 MHz

Test mode : DC 3.3 V

The requirements are:

Complies



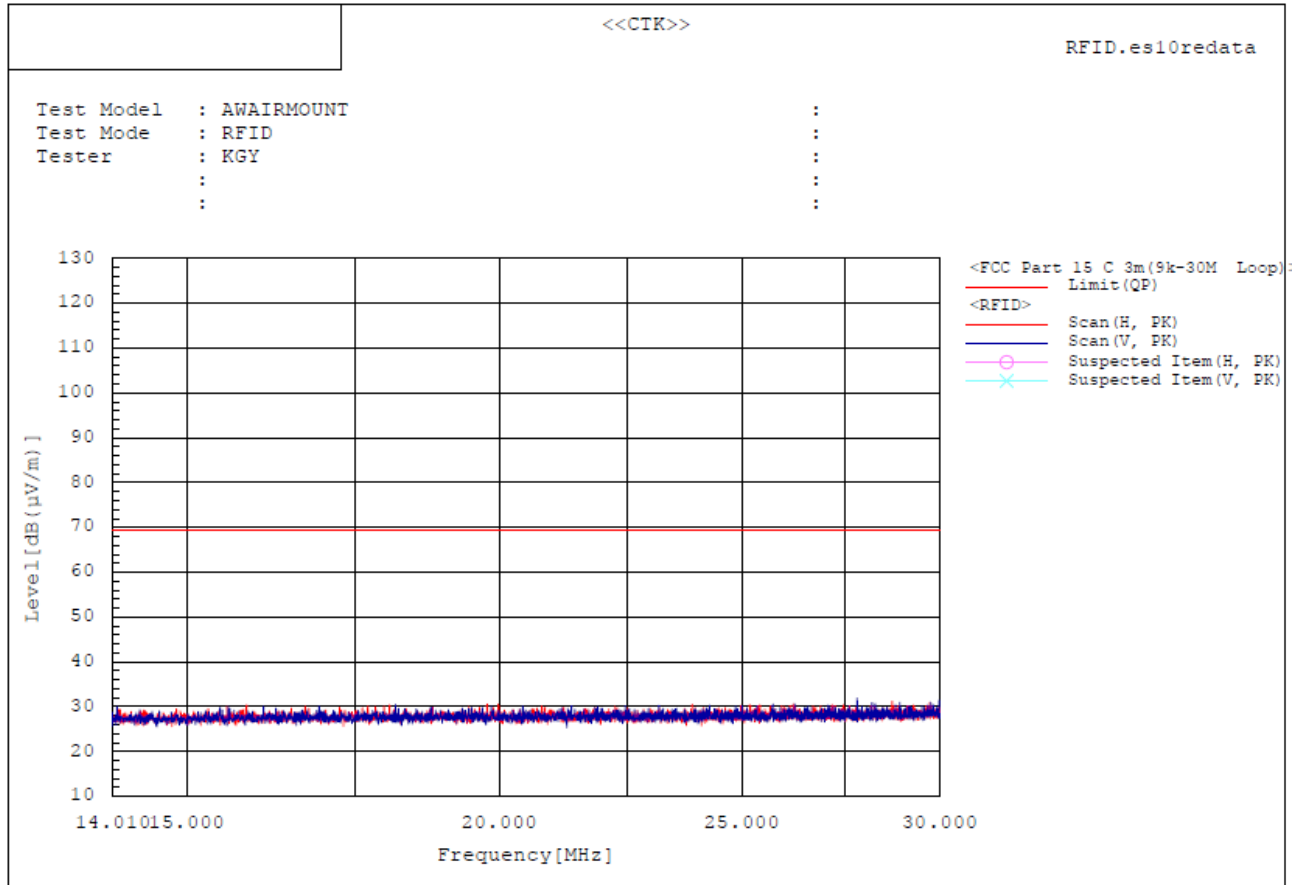
Remark :

1. Result = Reading + c.f.(correction factor)
2. Correction factor = Antenna factor + Cable loss + 6 dB attenuator
3. Emissions more than 20 dB below the limit do not need to be reported.

Test mode : DC 5 V

The requirements are:

Complies



Remark :

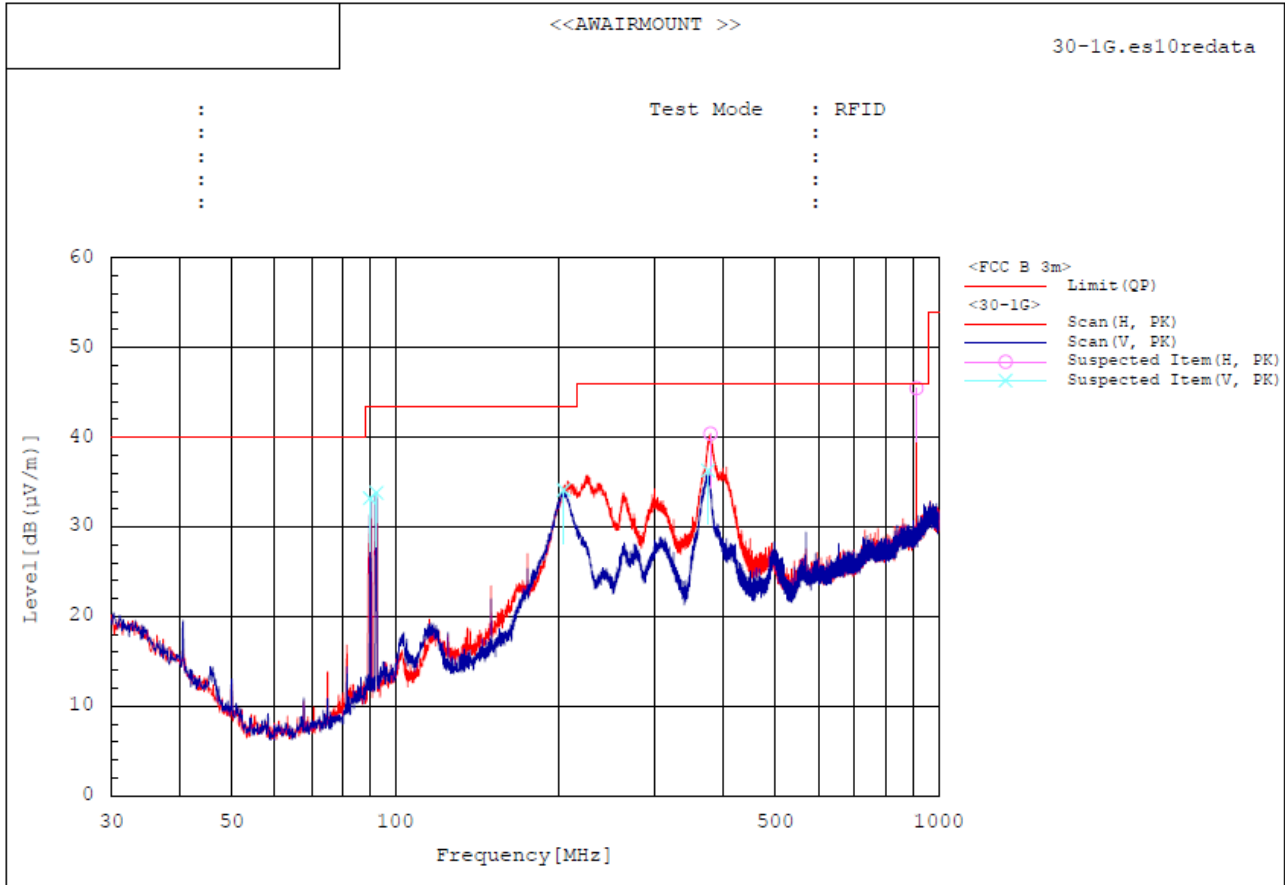
1. Result = Reading + c.f.(correction factor)
2. Correction factor = Antenna factor + Cable loss + 6 dB attenuator
3. Emissions more than 20 dB below the limit do not need to be reported.

3) Radiated emissions in the range of 30 MHz to 1 000 MHz band

Test mode : DC 3.3 V

The requirements are:

Complies



Spectrum Selection

No.	Frequency [MHz]	Pol	Reading PK [dB (µV)]	c.f [dB (1/m)]	Result PK [dB (µV/m)]	Limit QP [dB (µV/m)]	Margin QP-PK [dB]	Height [cm]	Angle [deg]	Remark
1	89.752	V	48.5	-15.3	33.2	43.5	10.3	99.9	332.3	
2	92.274	V	48.8	-15.0	33.8	43.5	9.7	99.9	289.1	
3	204.115	V	47.6	-13.5	34.1	43.5	9.4	99.9	153.5	
4	376.193	V	42.3	-6.0	36.3	46.0	9.7	99.9	126.4	
5	380.073	H	46.3	-5.9	40.4	46.0	5.6	100.5	310.6	
6	910.178	H	38.8	6.7	45.5	46.0	0.5	100.5	124.4	

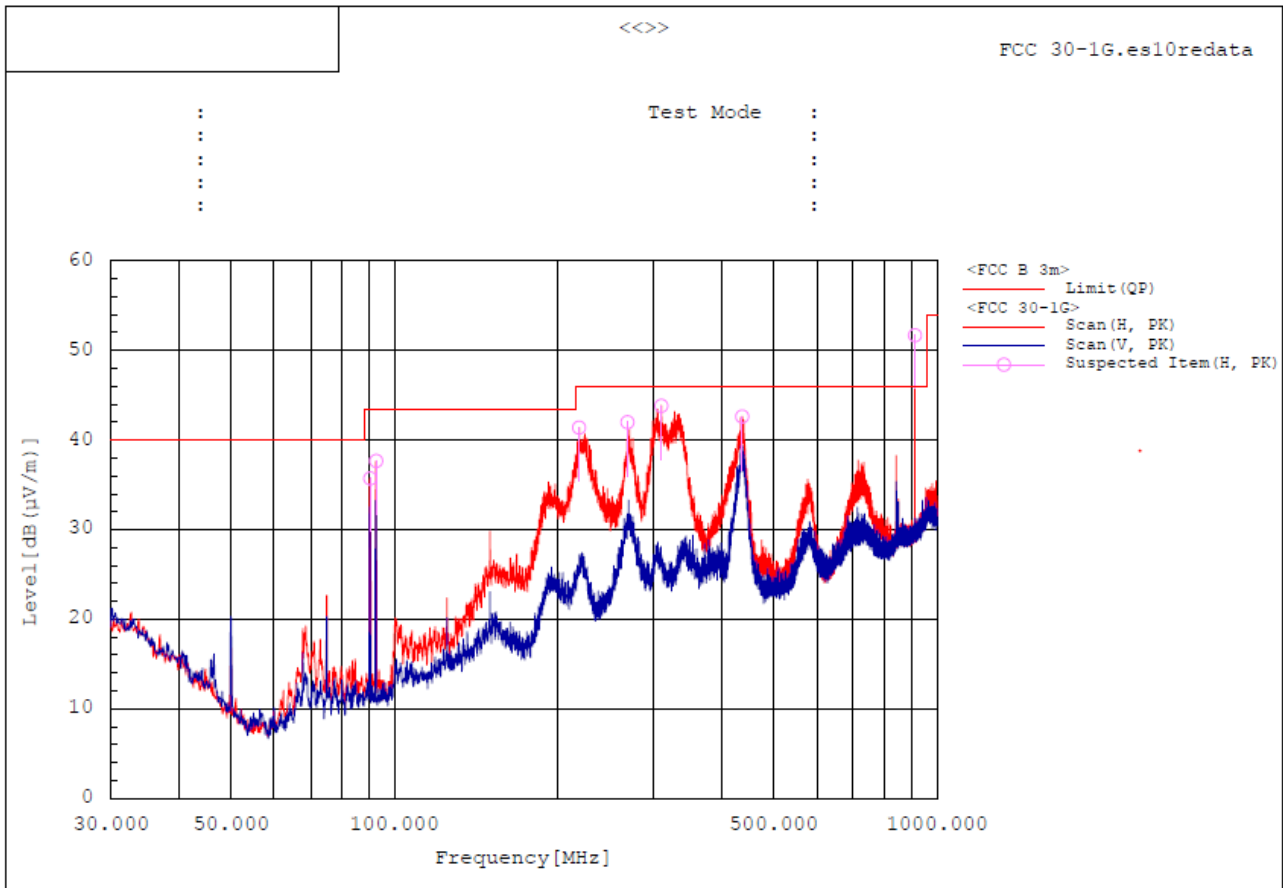
Remark :

1. Result = Reading + c.f(Correction factor)
2. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain
3. No.6 is the fundamental frequency of the Sub-giga (USN) signal.

Test mode : DC 5 V

The requirements are:

Complies



Spectrum Selection

No.	Frequency [MHz]	Pol	Reading PK [dB (µV)]	c.f [dB (1/m)]	Result PK [dB (µV/m)]	Limit QP [dB (µV/m)]	Margin QP-PK [dB]	Height [cm]	Angle [deg]	Remark
1	90.237	H	50.9	-15.2	35.7	43.5	7.8	200.1	2.4	
2	92.468	H	52.7	-15.0	37.7	43.5	5.8	200.1	10.5	
3	218.762	H	54.8	-13.4	41.4	46.0	4.6	99.9	306.9	
4	268.717	H	50.7	-8.7	42.0	46.0	4.0	99.9	228.3	
5	310.136	H	52.2	-8.4	43.8	46.0	2.2	99.9	355.4	
6	437.109	H	46.5	-3.9	42.6	46.0	3.4	99.9	241.8	
7	910.178	H	45.0	6.7	51.7	46.0	-5.7	200.1	0.1	

Remark :

1. Result = Reading + c.f(Correction factor)
2. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain
3. No.6 is the fundamental frequency of the Sub-giga (USN) signal.

4.3 Frequency Stability

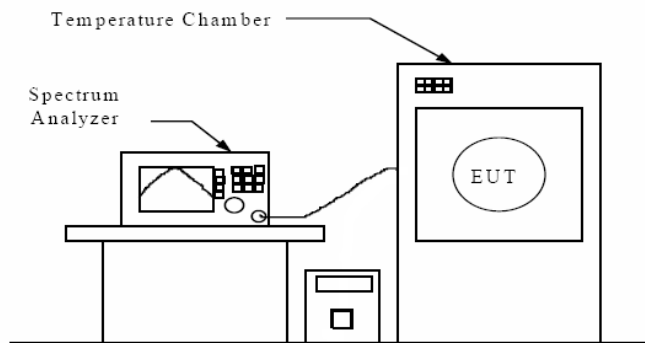
Requirement

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ 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.

Test Procedures

For the emission bandwidth refer ANSI C63.10-2013, clause 6.8(Frequency stability tests).

Test Setup





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Test Results

Test mode : DC 3.3 V

The requirements are:

Complies

Condition	Measurement Frequency (MHz)				Frequency Stability (ppm)			
	Startup	2 min	5 min	10 min	Start-up	2 min	5 min	10 min
Temp. 50℃	13.560565	13.560565	13.560565	13.560560	-4.79	-4.79	-4.79	-5.16
Temp. 40℃	13.560580	13.560580	13.560580	13.560580	-3.69	-3.69	-3.69	-3.69
Temp. 30℃	13.560610	13.560610	13.560610	13.560615	-1.47	-1.47	-1.47	-1.11
Temp. 20℃	13.560630	13.560630	13.560630	13.560625	0	0	0	-0.37
Temp. 10℃	13.560665	13.560665	13.560665	13.560665	2.58	2.58	2.58	2.58
Temp. 0℃	13.560675	13.560675	13.560675	13.560670	3.32	3.32	3.32	2.95
Temp. -10℃	13.560660	13.560660	13.560660	13.560660	2.21	2.21	2.21	2.21
Temp. -20℃	13.560615	13.560615	13.560615	13.560615	-1.11	-1.11	-1.11	-1.11
Voltage 85%	13.560620	13.560620	13.560620	13.560620	-0.74	-0.74	-0.74	-0.74
Voltage 115%	13.560625	13.560625	13.560625	13.560625	-0.37	-0.37	-0.37	-0.37
Limit(ppm)	-				100			

Test mode : DC 5 V

The requirements are:

Complies

Condition	Measurement Frequency (MHz)				Frequency Stability (ppm)			
	Startup	2 min	5 min	10 min	Start-up	2 min	5 min	10 min
Temp. 50℃	13.560490	13.560490	13.560490	13.560490	-2.95	-2.95	-2.95	-2.95
Temp. 40℃	13.560495	13.560495	13.560495	13.560495	-2.58	-2.58	-2.58	-2.58
Temp. 30℃	13.560505	13.560505	13.560505	13.560505	-1.84	-1.84	-1.84	-1.84
Temp. 20℃	13.560530	13.560530	13.560530	13.560530	0	0	0	0
Temp. 10℃	13.560540	13.560540	13.560540	13.560540	0.74	0.74	0.74	0.74
Temp. 0℃	13.560555	13.560555	13.560555	13.560555	1.84	1.84	1.84	1.84
Temp. -10℃	13.560550	13.560550	13.560550	13.560550	1.47	1.47	1.47	1.47
Temp. -20℃	13.560490	13.560495	13.560495	13.560495	-2.95	-2.58	-2.58	-2.58
Voltage 85%	13.560550	13.560550	13.560550	13.560550	1.47	1.47	1.47	1.47
Voltage 115%	13.560555	13.560555	13.560555	13.560555	1.84	1.84	1.84	1.84
Limit(ppm)	-				100			

4.4 AC Conducted Emissions

A radio apparatus that is designed to be connected to the public utility (AC) power line shall ensure that the radio frequency voltage, which is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz-30 MHz, shall not exceed the limits.

Test Procedures

ANSI C63.10-2013 - Section 6.2.2

The EUT was placed on a non-metallic table 0.8m above the metallic, grounded floor and 0.4m from the reference ground plane wall. The distance to other metallic surfaces was at least 0.8m.

Amplitude measurements were performed with a quasi-peak detector and an average detector.

Limit

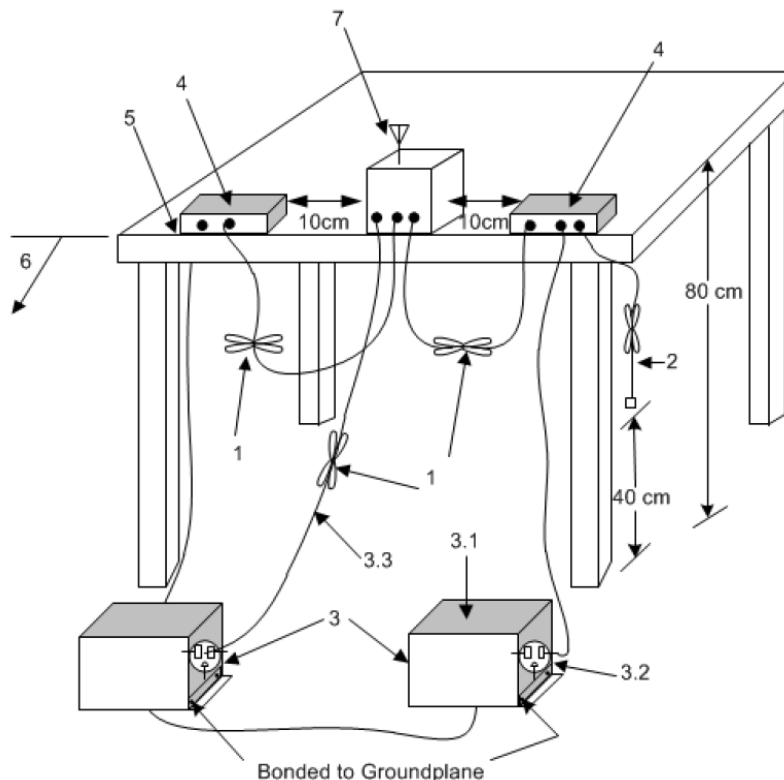
- 15.207(a)

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

* The level decreases linearly with the logarithm of the frequency.

** A linear average detector is required.

Test Setup



Test Results

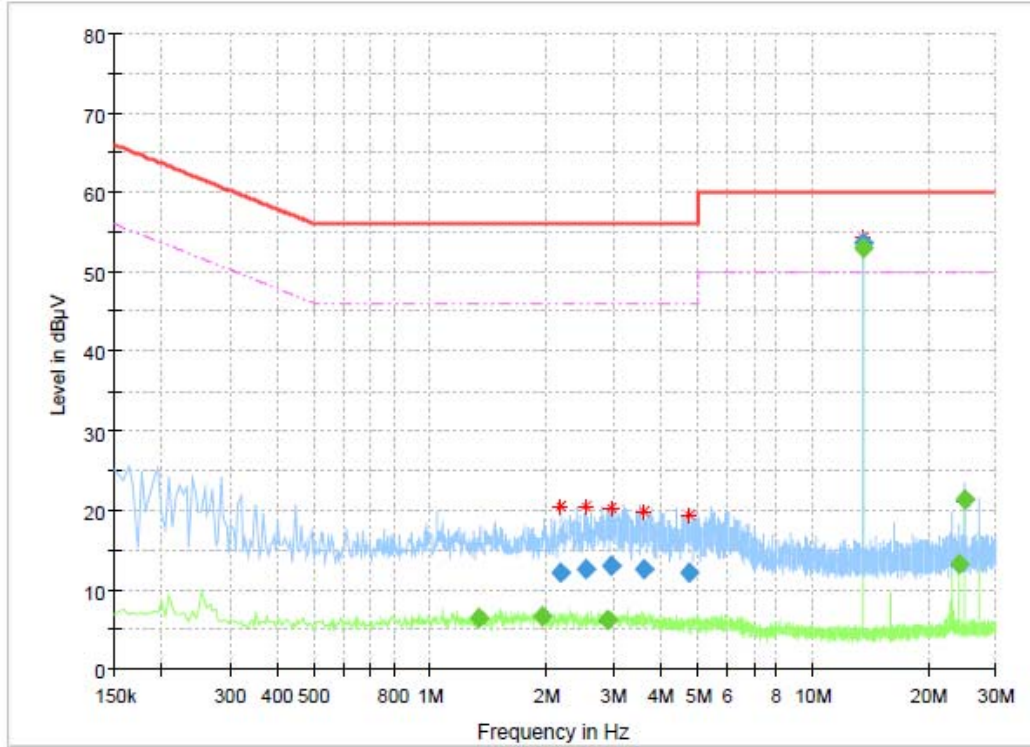
The requirements are:

Complies

Test Data

Test mode : DC 3.3 V

[LINE]



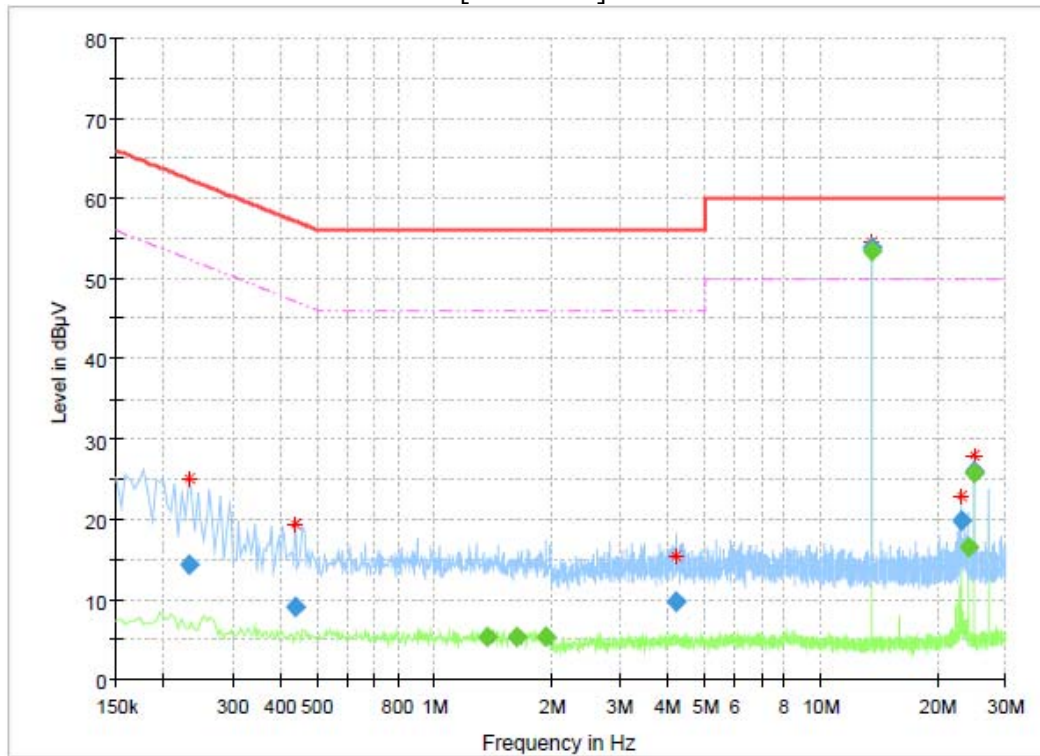
Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
1.338000	---	6.38	46.00	39.62	1000.0	9.000	L1	ON	9.8
1.959000	---	6.61	46.00	39.39	1000.0	9.000	L1	ON	9.7
2.193000	12.14	---	56.00	43.86	1000.0	9.000	L1	ON	9.7
2.553000	12.63	---	56.00	43.37	1000.0	9.000	L1	ON	9.8
2.895000	---	6.24	46.00	39.76	1000.0	9.000	L1	ON	9.8
2.971500	12.98	---	56.00	43.02	1000.0	9.000	L1	ON	9.8
3.619500	12.48	---	56.00	43.52	1000.0	9.000	L1	ON	9.8
4.771500	12.09	---	56.00	43.91	1000.0	9.000	L1	ON	9.9
13.560000	---	53.07	50.00	-3.07	1000.0	9.000	L1	ON	10.0
13.560000	53.56	---	60.00	6.44	1000.0	9.000	L1	ON	10.0
24.000000	---	13.16	50.00	36.84	1000.0	9.000	L1	ON	10.0
24.999000	---	21.28	50.00	28.72	1000.0	9.000	L1	ON	10.0

Remark :

1. 13.56 MHz is the carrier frequencies.

[NEUTRAL]



Final Result

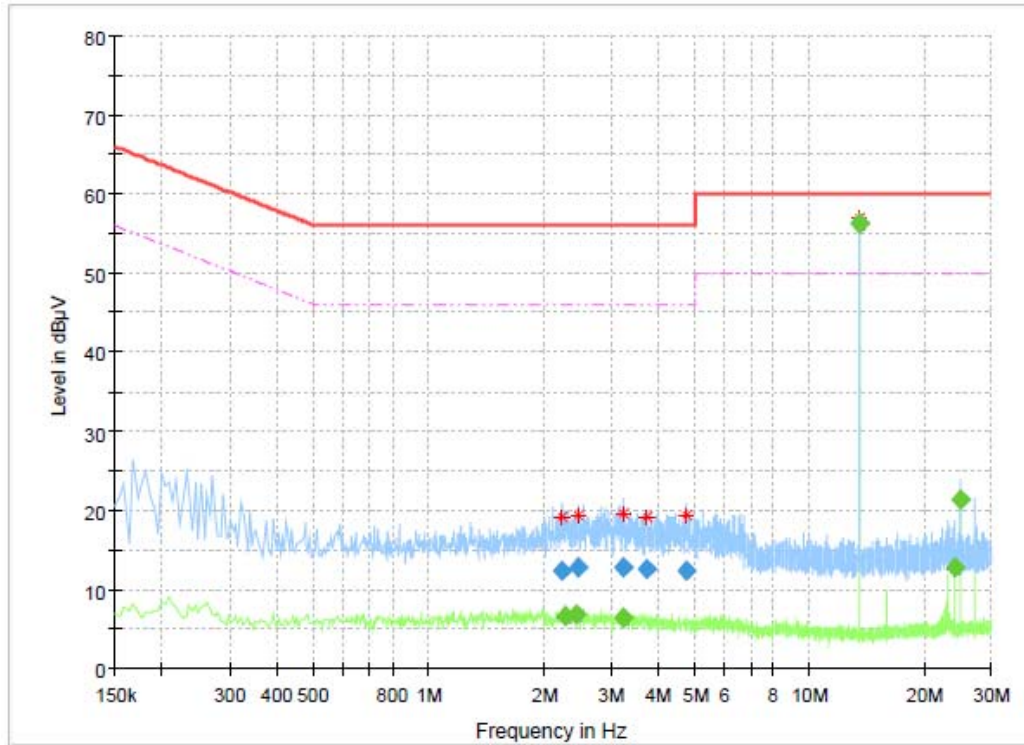
Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.231000	14.18	---	62.41	48.23	1000.0	9.000	N	ON	10.0
0.438000	8.97	---	57.10	48.13	1000.0	9.000	N	ON	10.2
1.369500	---	5.24	46.00	40.76	1000.0	9.000	N	ON	10.1
1.630500	---	5.38	46.00	40.62	1000.0	9.000	N	ON	10.0
1.941000	---	5.27	46.00	40.73	1000.0	9.000	N	ON	10.0
4.231500	9.74	---	56.00	46.26	1000.0	9.000	N	ON	10.0
13.560000	53.90	---	60.00	6.10	1000.0	9.000	N	ON	10.0
13.560000	---	53.51	50.00	-3.51	1000.0	9.000	N	ON	10.0
23.127000	19.69	---	60.00	40.31	1000.0	9.000	N	ON	10.0
24.000000	---	16.49	50.00	33.51	1000.0	9.000	N	ON	10.0
24.999000	---	25.77	50.00	24.23	1000.0	9.000	N	ON	10.0
24.999000	26.02	---	60.00	33.98	1000.0	9.000	N	ON	10.0

Remark :

1. 13.56 MHz is the carrier frequencies.

Test mode : DC 5 V

[LINE]



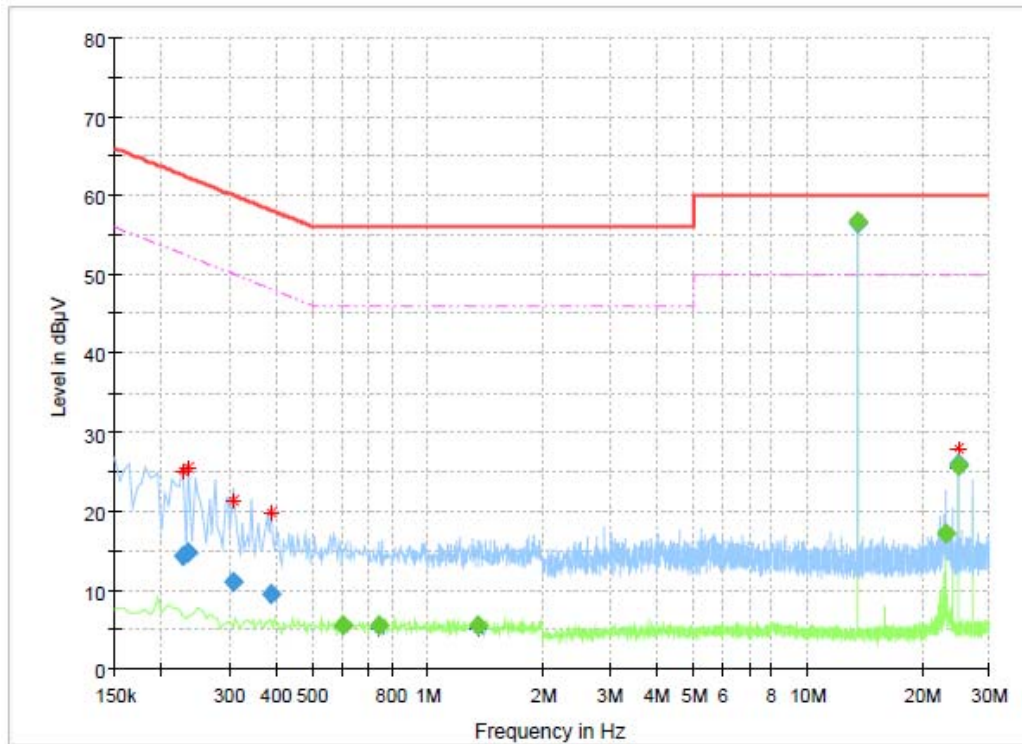
Final Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
2.229000	12.39	---	56.00	43.61	1000.0	9.000	L1	ON	9.7
2.301000	---	6.57	46.00	39.43	1000.0	9.000	L1	ON	9.7
2.449500	---	6.87	46.00	39.13	1000.0	9.000	L1	ON	9.7
2.476500	12.68	---	56.00	43.32	1000.0	9.000	L1	ON	9.7
3.241500	---	6.29	46.00	39.71	1000.0	9.000	L1	ON	9.8
3.241500	12.66	---	56.00	43.34	1000.0	9.000	L1	ON	9.8
3.741000	12.57	---	56.00	43.43	1000.0	9.000	L1	ON	9.8
4.767000	12.37	---	56.00	43.63	1000.0	9.000	L1	ON	9.9
13.560000	---	56.17	50.00	-6.17	1000.0	9.000	L1	ON	10.0
13.560000	56.16	---	60.00	3.84	1000.0	9.000	L1	ON	10.0
24.000000	---	12.66	50.00	37.34	1000.0	9.000	L1	ON	10.0
24.999000	---	21.36	50.00	28.64	1000.0	9.000	L1	ON	10.0

Remark :

1. 13.56 MHz is the carrier frequencies.

[NEUTRAL]



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.226500	14.33	---	62.58	48.24	1000.0	9.000	N	ON	10.0
0.235500	14.69	---	62.25	47.56	1000.0	9.000	N	ON	10.0
0.307500	11.09	---	60.04	48.95	1000.0	9.000	N	ON	10.0
0.388500	9.36	---	58.10	48.73	1000.0	9.000	N	ON	10.2
0.600000	---	5.51	46.00	40.49	1000.0	9.000	N	ON	10.3
0.748500	---	5.40	46.00	40.60	1000.0	9.000	N	ON	10.2
1.351500	---	5.40	46.00	40.60	1000.0	9.000	N	ON	10.1
13.560000	---	56.61	50.00	-6.61	1000.0	9.000	N	ON	10.0
13.560000	56.51	---	60.00	3.49	1000.0	9.000	N	ON	10.0
23.127000	---	17.15	50.00	32.85	1000.0	9.000	N	ON	10.0
24.999000	---	25.68	50.00	24.32	1000.0	9.000	N	ON	10.0
24.999000	25.96	---	60.00	34.04	1000.0	9.000	N	ON	10.0

Remark :

1. 13.56 MHz is the carrier frequencies.



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Report No.:
 CTK-2022-02091
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APPENDIX A – Test Equipment Used For Tests

No.	Name of Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI TEST RECEIVER	Rohde & Schwarz	ESW44	102039	2022-05-04	2023-05-04
2	Bilog Antenna	TESEQ	CBL6111D	60654	2021-09-03	2023-09-03
3	AMPLIFIER	SONOMA INSTRUMENT	310N	411011	2021-08-25	2022-08-25
4	ATTENUATOR	PASTERNAK	PE7AP006-06	L20210504000023	2021-08-25	2022-08-25
5	LISN	Rohde & Schwarz	ENV216	102698	2022-05-13	2023-05-13
6	EMI Test Receiver	Rohde & Schwarz	ESCI7	100816	2021-10-20	2022-10-20
7	Dual-Tracking DC Power Supply	Topward Electric Instruments Co.,Ltd.	6303D	692130	2022-04-22	2023-04-22
8	Signal Analyzer	Agilent	N9020A	MY49101016	2021-10-08	2022-10-08
9	DC Power Supply	HP	E3632A	KR75305831	2021-07-19	2022-07-19
10	Active Loop Antenna	SCHWARZBECK	FMZB 1513	1513-125	2022-04-15	2024-04-15
11	Temp&Humi Chamber	ESPEC CORP.	SH-642	93016524	2021-11-08	2022-11-08

No.	Name of Equipment	Manufacturer	Model No.	Serial No.	Check Date
1	RF Cable(conducted)	Junkosha Inc.	MWX221	2008S240	2022-06-14
2	RF Cable (9kHz-1GHz Radiated)	Canare Corporation	L-5D2W	N/A	2022-04-12
3	RF Cable (9kHz-1GHz Radiated)	HUBER+SUHNER	SUCOFLEX 104	MY27558/4	2022-04-12
4	RF Cable (AC Power Line Emissions)	Canare Corporation	L-5D2W	N/A	2022-05-13

-END-