REPORT No.: SZ20050355W07

TEST REPORT

APPLICANT	:	Nortek Security & Control LLC
PRODUCT NAME	:	Edge Panel
MODEL NAME	:	2GIG-EDG-NA-V
BRAND NAME	:	2GIG
FCC ID	:	EF400169
STANDARD(S)	:	47 CFR Part 15 Subpart C
RECEIPT DATE	:	2020-07-02
TEST DATE	:	2020-07-17 to 2020-07-29
ISSUE DATE	:	2020-08-13

Edited by: Peng Mi (Rapporteur)

Approved by: Peng Huarui (Supervisor)

MORLAB

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DIRECTORY

Change History		
Version	Date	Reason for change
1.0	2020-08-13	First edition

1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Nortek Security & Control LLC
Applicant Address:	5919 Sea Otter Place, Carlsbad, CA 92010, United States
Manufacturer:	Flextronics Electronics Technology (Shenzhen) Co., Ltd
Manufacturer Address:	89 Yong Fu Road, Tong Fu Yu Industrial Park, Fu Yong Town, Bao An District, Shenzhen, Guangdong, 518103, China

1.2. Equipment Under Test (EUT) Description

Product Name:	Edge Panel	
Serial No.:	(N/A, marked #1 by test site)	
Hardware Version:	A	
Software Version:	0	
Modulation Type:	916 MHz: GFSK 908.4 MHz, 908.42 MHz: FSK	
Operating Frequency Range:	Z-wave: 916 MHz; 908.4 MHz; 908.42 MHz	
Channel Number:	3	
Antenna Type:	FPC Antenna	
Antenna Gain:	1.35dBi	
Accessory Information:	Battery	
	Brand Name:	Highpower
	Model No.:	115150
	Serial No.:	(N/A, marked #1 by test site)
	Capacity:	4020mAh
	Rated Voltage:	3.8V
	Charge Limit:	4.4V

Accessory Information:	AC Adapter	
	Brand Name:	ZBPOWER
	Model No.:	ZB-H140017
	Serial No.:	(N/A, marked #1 by test site)
	Rated Output:	14.0V⎓1.7A
	Rated Input:	100-240V~50/60Hz,Max 0.6A

Note 1: This test report is updated from report (Report No.: SZ20050354W07, FCC ID: EF400168), based on the similarity between before, only changed the model name and FCC ID, the other are all the same. The changes do not affect the test results.

Note 2: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

1.3. The Channel Number and Frequency

Channel	Frequency(MHz)
L	908.4
M	908.42
H	916

1.4. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart C for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 15	Radio Frequency Devices

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Test Date	Test Engineer	Result	Method determination /Remark
1	15.203	Antenna Requirement	N/A	N/A	PASS	No deviation
2	15.247	Maximum Average Conducted Output Power	Jul 29, 2020	Lu Qiang	PASS	No deviation
3	15.215	Bandwidth	Jul 29, 2020	Lu Qiang	PASS	No deviation
4	15.207	Conducted Emission	Jul 17, 2020	Lin Jiayong	PASS	No deviation
5	15.249	Field strength	Jul 17, 2020	Peng Xuewei	PASS	No deviation
6	15.209, 15.249	Radiated Emission and field strength of harmonics	Jul 17, 2020	Peng Xuewei	PASS	No deviation

Note 1: The test results of these test items in this report refer to the test report (Report No.: SZ20050354W07).

Note 2: The tests were performed according to the method of measurements prescribed in ANSIC63.10-2013.

Note 3: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

1.5. Environmental Conditions

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

Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106

2. 47 CFR Part 15C Requirements

2.1. Antenna Requirement

2.1.1. Applicable Standard

According to FCC 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 shall be considered sufficient to comply with the provisions of this section.

2.1.2. Result: Compliant

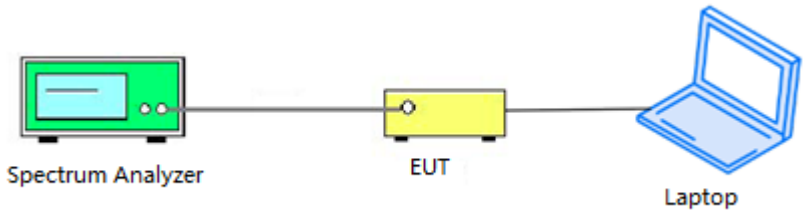
Inside of the EUT has a permanently attached spring antenna fixed to PCB with solder. Please refer to the EUT internal photos.

2.2. Maximum Average Conducted Output Power

2.2.1. Test Description

The measured output power was calculated by the reading of the spectrum analyzer and calibration.

Test Setup:



The EUT (Equipment under the test) is coupled to the Spectrum analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading, all test result in Spectrum analyzer.

2.2.2. Test Procedure

KDB 558074 Section 8.3.2 was used in order to prove compliance.

2.2.3. Test Result

Channel	Frequency (MHz)	Average Power				Limit		Verdict
		Measured	Duty Factor	Duty Factor Calculated				
		dBm		dBm	W	dBm	W	
L	908.4	-14.83	17.17	2.34	0.002	30	1	PASS
M	908.42	-9.38		7.79	0.006			PASS
H	916	-15.53		1.64	0.001			PASS

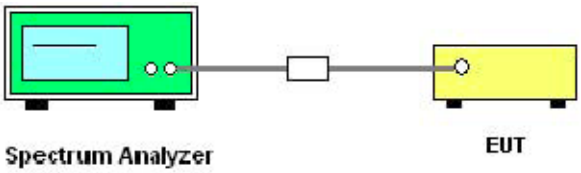
2.3. Bandwidth

2.3.1. Requirement

Refer to FCC 15.215

2.3.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

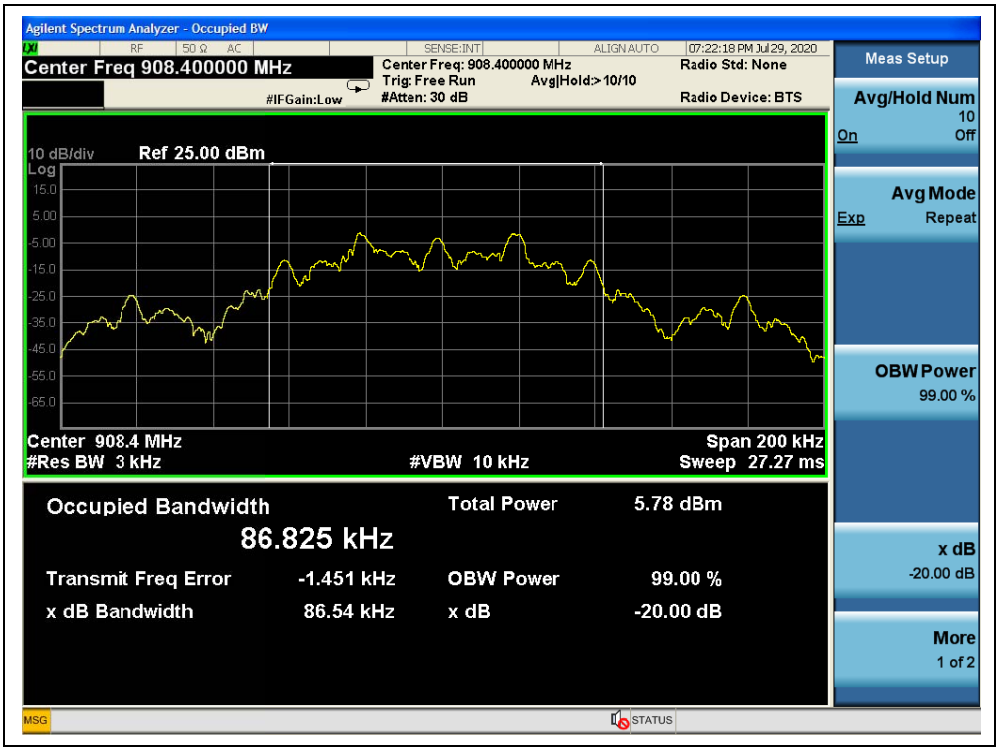
Adjust the resolution bandwidth (RBW) value until the envelope of the signal is clearly displayed. In order to make an accurate measurement, set the span greater than RBW.

2.3.3. Test Result

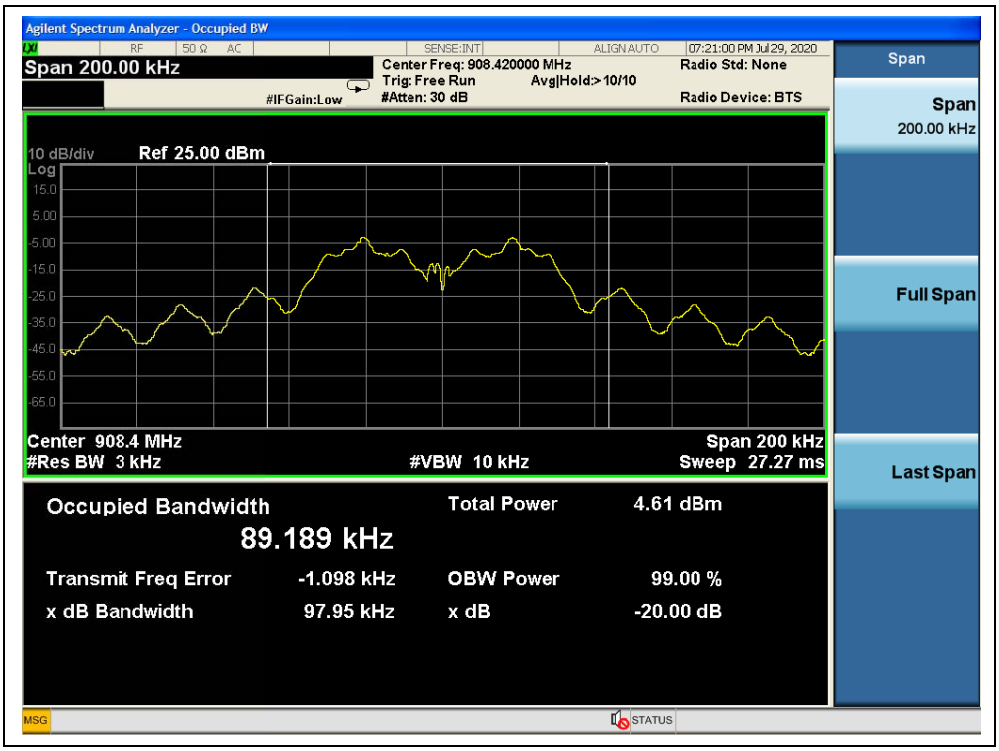
A. Test Verdict:

Channel	Frequency (MHz)	20 dB Bandwidth (kHz)	Result
L	908.4	86.54	PASS
M	908.42	97.95	PASS
H	916	115.3	PASS

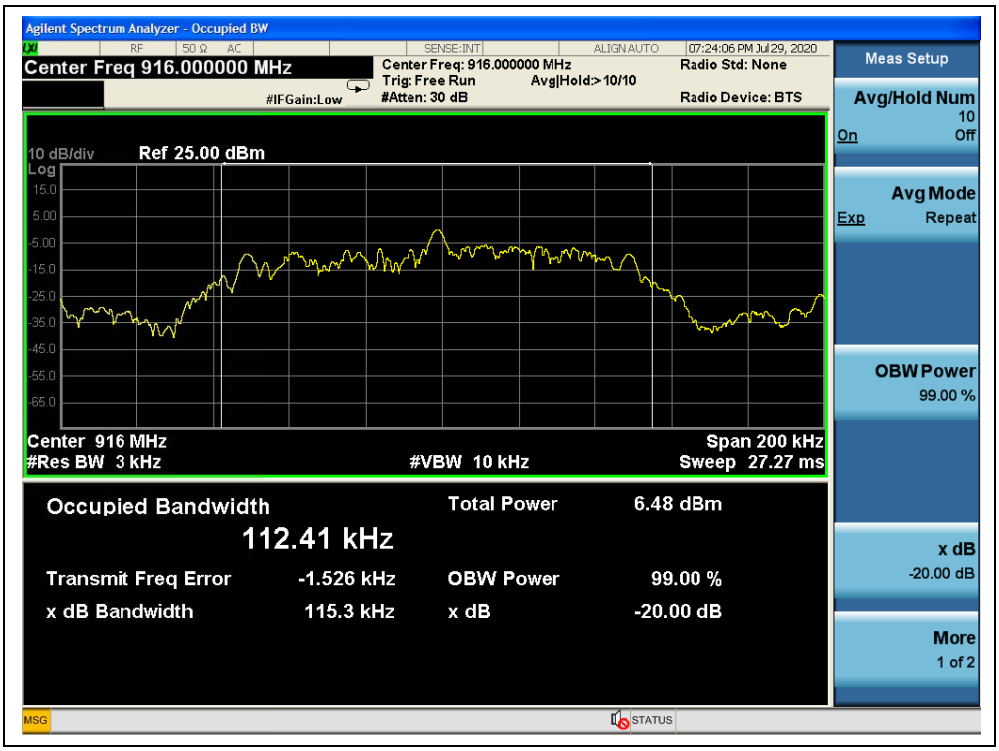
B. Test Plots:



(Channel L,908.4MHz)



(Channel M,908.42MHz)



(Channel H,916MHz)

2.4. Conducted Emission

2.4.1. Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

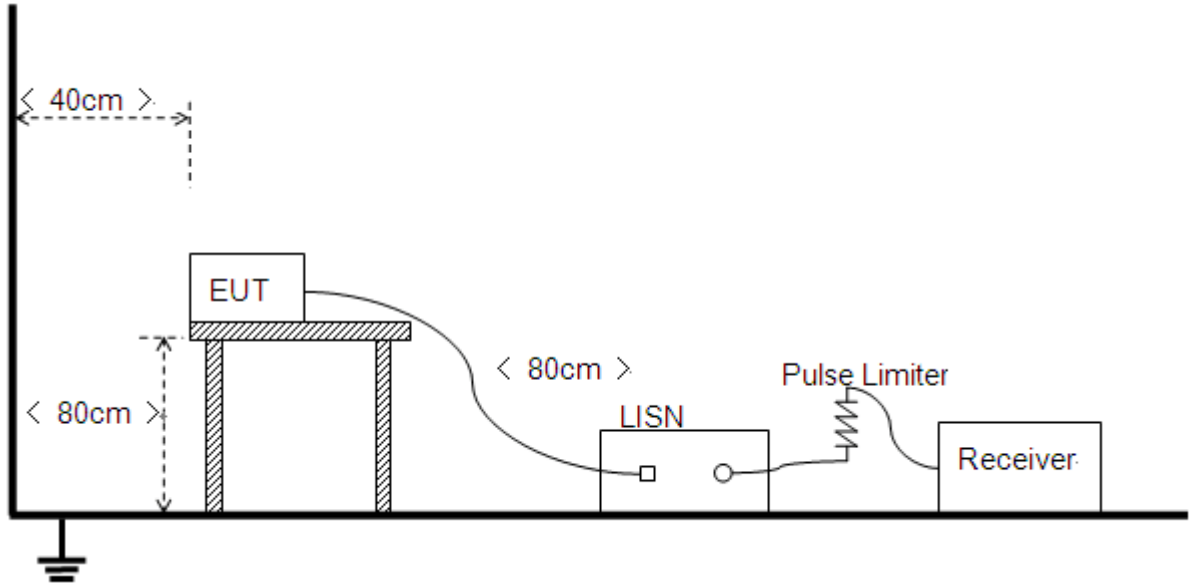
NOTE:

(a) The lower limit shall apply at the band edges.

(b) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

2.4.2. Test Description

Test Setup:



The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10: 2013.

2.4.3. Test Result

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hzwere considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

A. Test Setup:

Test Mode:EUT+Adapter+TX mode

Test Voltage:AC 120V/60Hz

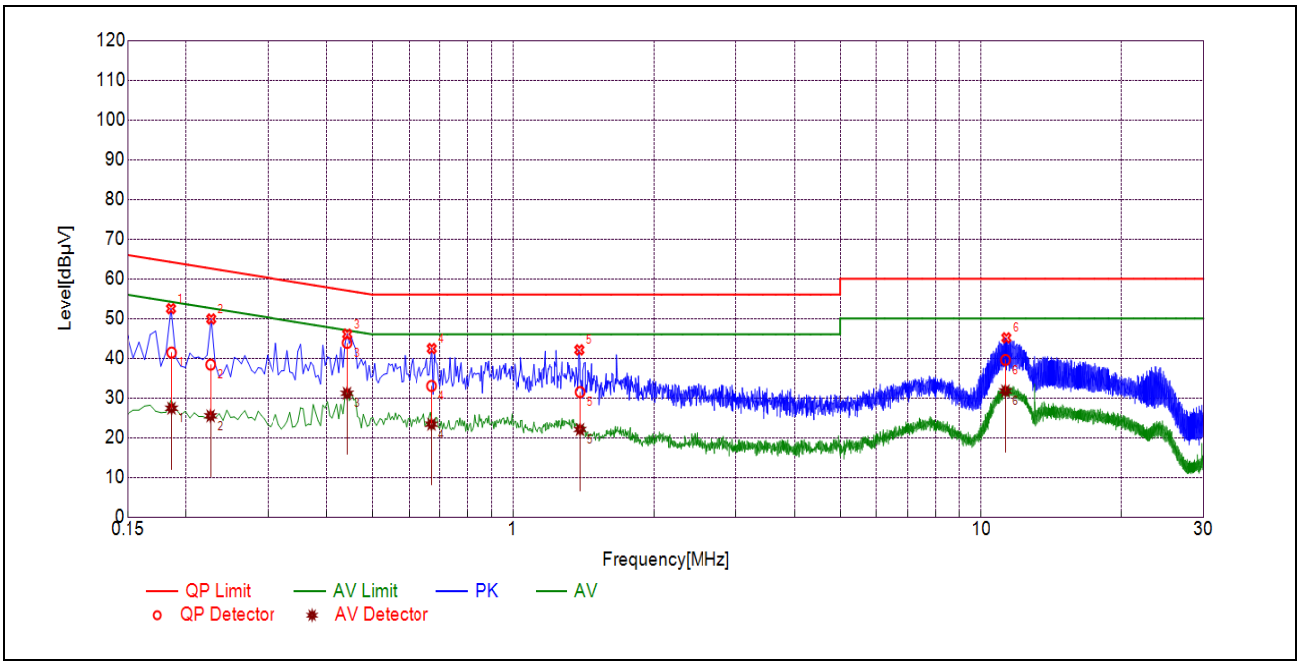
The measurement results are obtained as below:

$E\ [dB\mu V] = U_R + L_{Cable\ loss}\ [dB] + A_{Factor}$

U_R: Receiver Reading

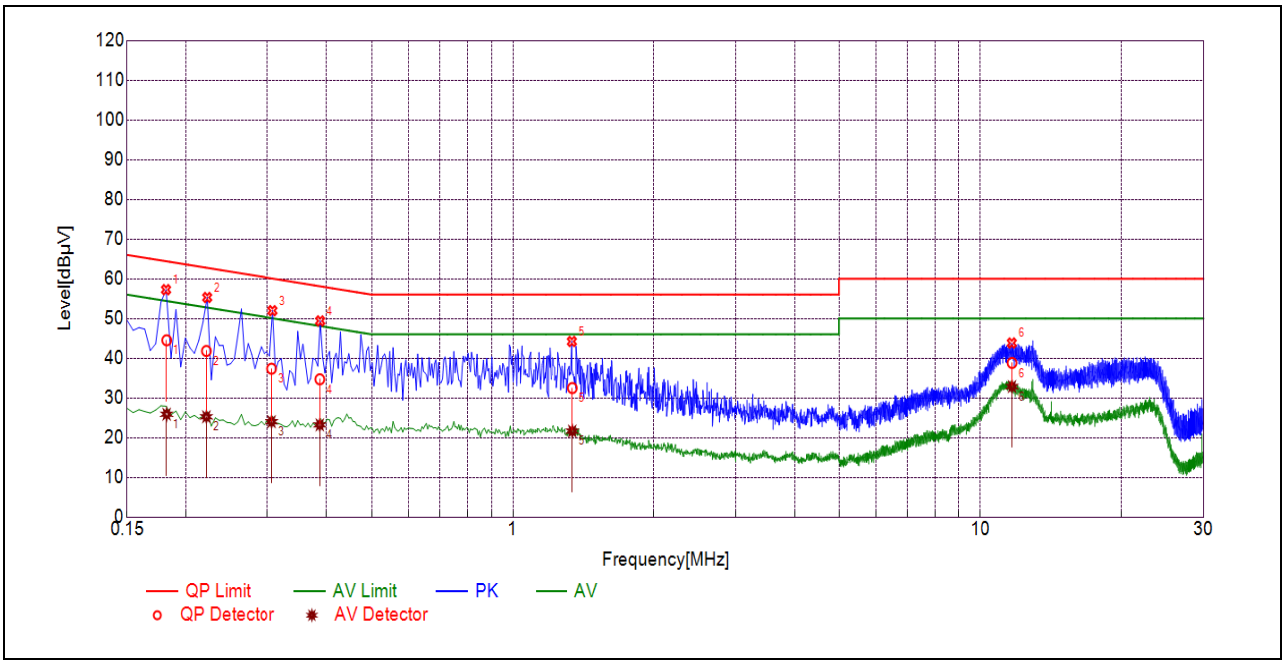
A_{Factor}: Voltage division factor of LISN

B. Test Plots:



(L Phase)

NO.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1865	41.42	27.40	64.19	54.19	Line	PASS
2	0.2258	38.38	25.48	62.60	52.60		PASS
3	0.4421	43.87	31.16	57.02	47.02		PASS
4	0.6710	33.02	23.38	56.00	46.00		PASS
5	1.3968	31.48	22.05	56.00	46.00		PASS
6	11.3211	39.57	31.75	60.00	50.00		PASS



(N Phase)

NO.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1820	44.52	25.89	64.39	54.39	Neutral	PASS
2	0.2211	41.83	25.25	62.78	52.78		PASS
3	0.3061	37.36	24.01	60.07	50.07		PASS
4	0.3877	34.70	23.22	58.11	48.11		PASS
5	1.3450	32.49	21.64	56.00	46.00		PASS
6	11.6883	38.81	32.86	60.00	50.00		PASS

2.5. Field Strength of Fundamental

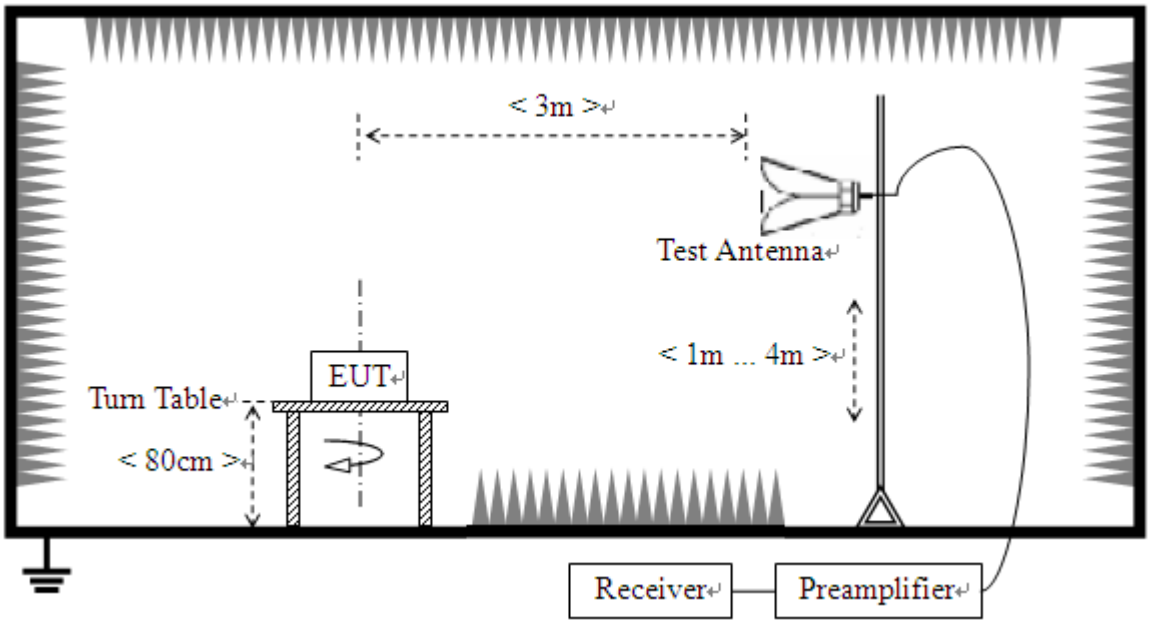
2.5.1. Requirement

According to FCC section 15.249(a), except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

2.5.2. Test Description

Test Setup:



The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

For the Test Antenna:

Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.

2.5.3. Test Procedure

Use the following spectrum analyzer settings:
Span = wide enough to fully capture the emission being measured
RBW = 120 kHz
VBW ≥ RBW
Sweep = auto
Detector function =quasi-peak
Trace = max hold

2.5.4. Test Result

The measurement results are obtained as below:
E [dBμV/m] =U_R + A_T + A_{Factor} [dB]; A_T =$L_{Cable\ loss}$ [dB]-G_{preamp} [dB]
A_T: Total correction Factor except Antenna
U_R: Receiver Reading
G_{preamp}: Preamplifier Gain
A_{Factor}: Antenna Factor at 3m
During the test, the total correction Factor AT and A_{Factor} were built in test software.
Note: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report

A. Test Verdict:

Frequency (MHz)	Detector	Antenna	Receiver Reading U_R (dBuV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
908.4	QP	Horizontal	85.10	-34.0	22.2	73.30	93.97	PASS
908.4	QP	Vertical	84.63	-34.0	22.2	72.83	93.97	PASS
908.42	QP	Horizontal	85.14	-34.0	22.2	73.34	93.97	PASS
908.42	QP	Vertical	84.95	-34.0	22.2	73.15	93.97	PASS
916	QP	Horizontal	84.40	-34.0	22.2	72.6	93.97	PASS
916	QP	Vertical	84.39	-34.0	22.2	72.59	93.97	PASS

2.6. Radiated Emission and Field Strength of Harmonics

2.6.1. Requirement

According to section 15.249(a), the field strength of emissions from intentional radiators operated withinthese frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

According to section 15.249(d), Emission Radiated outside of the specified frequency bands, except forharmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the generalradiated emission limits in Section 15.209:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)	Field Strength Limitation at 3mMeasurement Distance	
			(uV/m)	(dBuV/m)
0.009 - 0.490	2400/F(kHz)	300	10000* 2400/F(KHz)	20log 2400/F(KHz) + 80
0.490 - 1.705	24000/F(kHz)	30	100* 2400/F(KHz)	20log 2400/F(KHz) + 40
1.705 - 30.0	30	30	100*30	20log 30 + 40
30 - 88	100	3	100	20log 100
88 - 216	150	3	150	20log 150
216 - 960	200	3	200	20log 200
Above 960	500	3	500	20log 500

According to section 15.249(e), for frequencies above 1000MHz, the above field strength limits are basedon average limits. The peak field strength of any emission shall not exceed the maximum permittedaverage limits specified above by more than 20dB under any condition of modulation.

Note:

1) The tighter limit shall apply at the boundary between two frequency range.

2) Limitation expressed in dBuV/m is calculated by 20log Emission Level(uV/m).

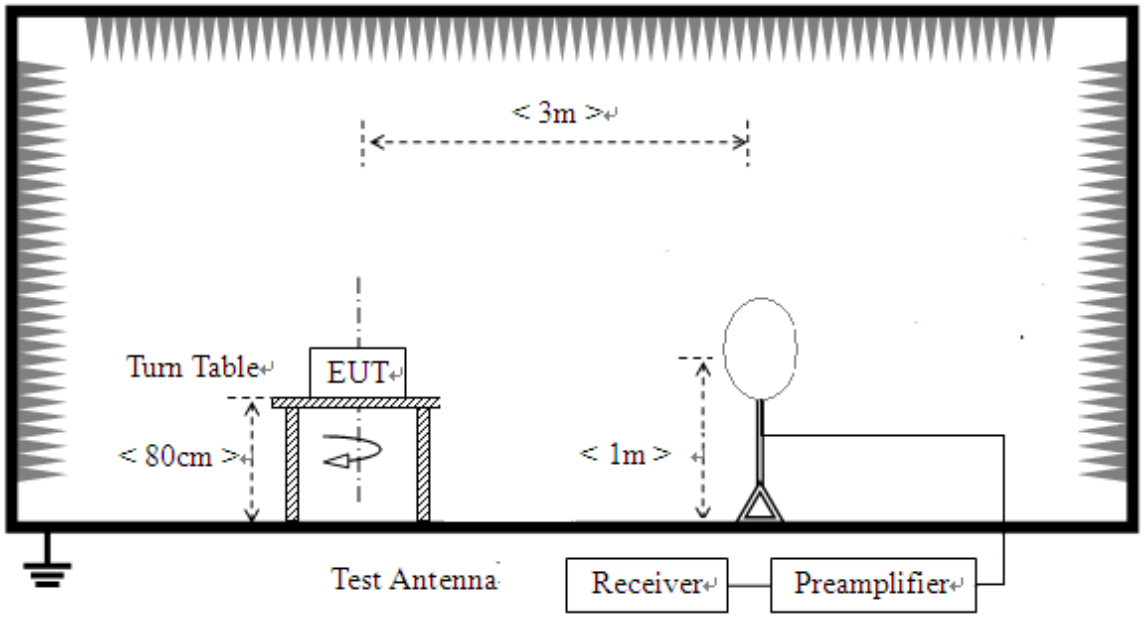
3) If measurement is made at 3m distance, then F.S Limitation at 3m distance is adjusted by using theformula of Ld1 = Ld2 * $(d2/d1)^2$.

Example: F.S Limit at 30m distance is 30uV/m, then F.S Limitation at 3m distance is adjusted as Ld1 = L1 = 30uV/m * $(10)^2$= 100 * 30uV/m

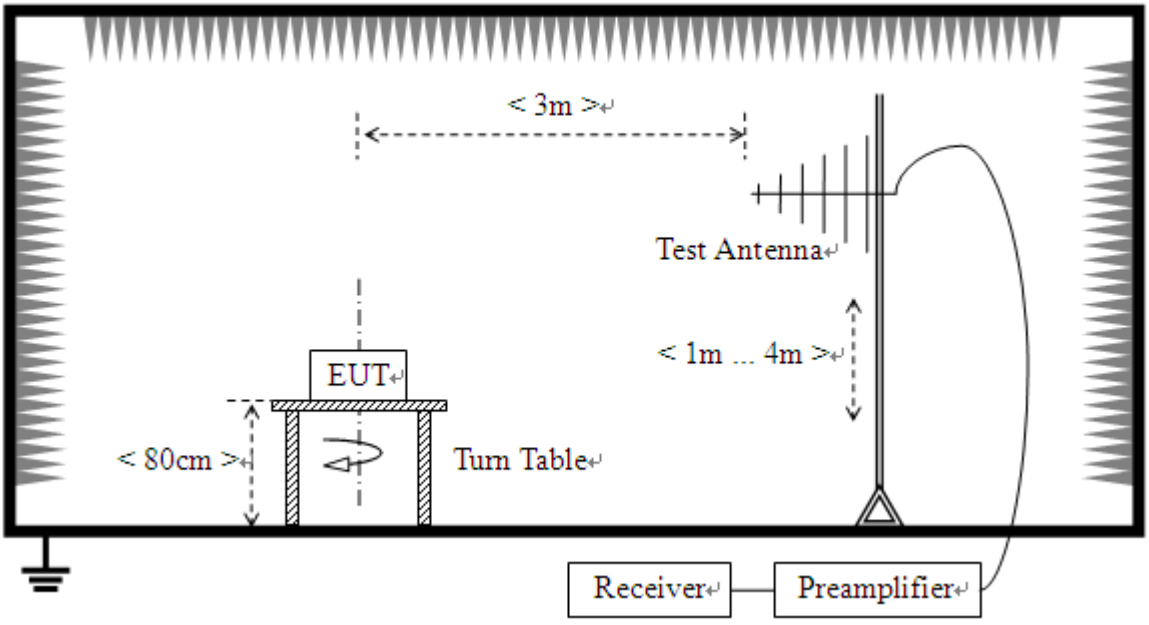
2.6.2. Test Description

A. Test Setup:

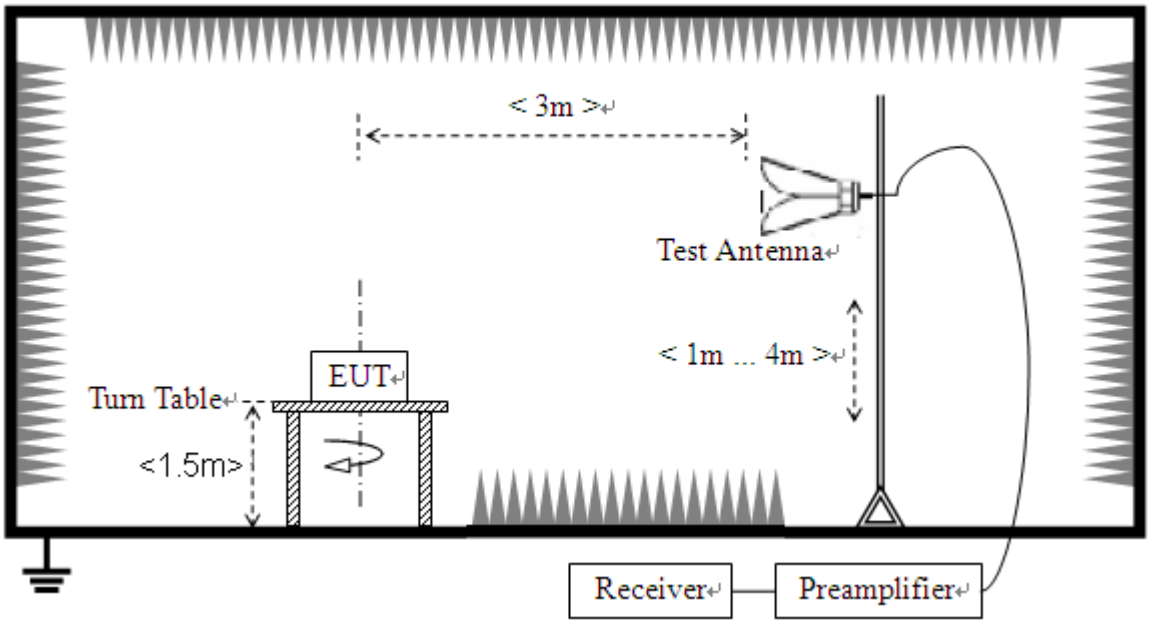
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



The RF absorbing material used on the reference ground plane and on the turntable have a maximum height (thickness) of 30 cm (12 in) and have a minimum-rated attenuation of 20 dB at all frequencies from 1 GHz to 18 GHz. Test site have a minimum area of the ground plane covered with RF absorbing material as specified in Figure 6 of ANSI C63.4: 2014.

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4dB according to the standards: ANSI C63.10:2013. For radiated emissions below or equal to 1GHz,The EUT was set-up on insulator 80cm above the Ground Plane,For radiated emissions above 1GHz, The EUT was set-up on insulator 150cm above the Ground Plane. The set-up and test methods were according to ANSI C63.10:2013.

The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

For the Test Antenna:

(a) In the frequency range of 9kHz to 30MHz, magnetic field is measured with Loop Test Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
(b) In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Place the test antenna at 3m away from area of the EUT, while keeping the test antenna aimed at the source of emissions at each frequency of significant

emissions, with polarization oriented for maximum response. The test antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final test antenna elevation shall be that which maximizes the emissions. The test antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. The emission levels at both horizontal and vertical polarizations should be tested.

2.6.3. Test Result

According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak limit, it is unnecessary to perform an quasi-peak measurement.

The measurement results are obtained as below:

$E\ [dB\mu V/m] = U_R + A_T + A_{Factor}\ [dB]$; $A_T = L_{Cable\ loss}\ [dB] - G_{preamp}\ [dB]$

A_T: Total correction Factor except Antenna

U_R: Receiver Reading

G_{preamp}: Preamplifier Gain

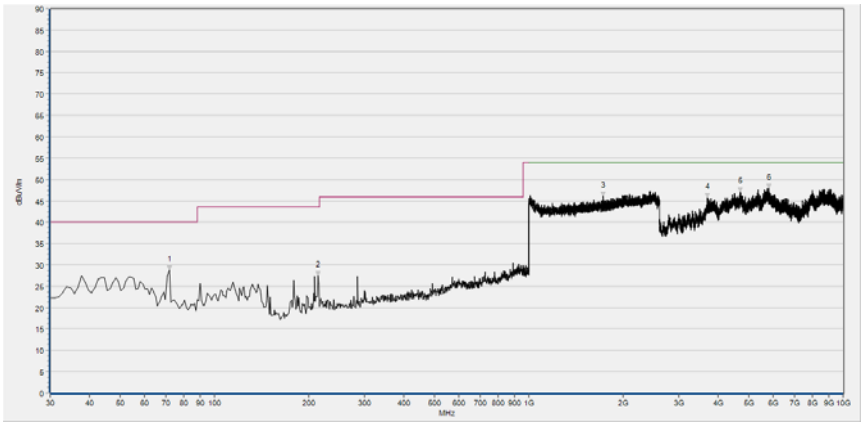
A_{Factor}: Antenna Factor at 3m

During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note 1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

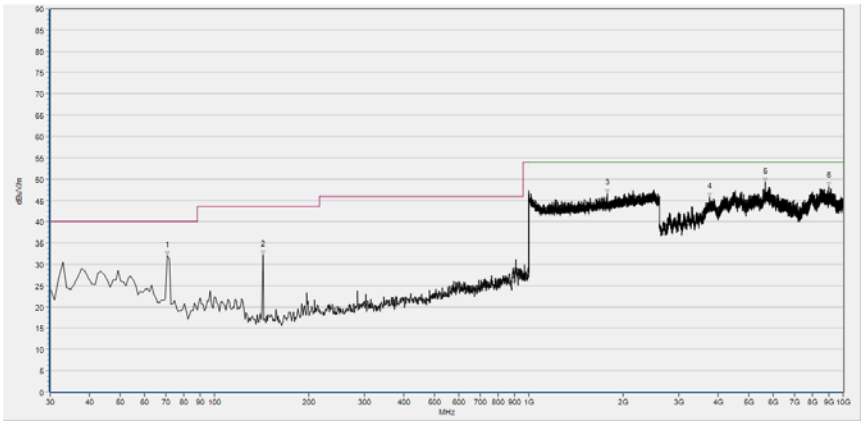
Note 2: The low frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Plots for Channel = L



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
71.710	28.84	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
213.330	27.42	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1726.933	46.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3699.640	45.83	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4701.600	47.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5811.600	47.93	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

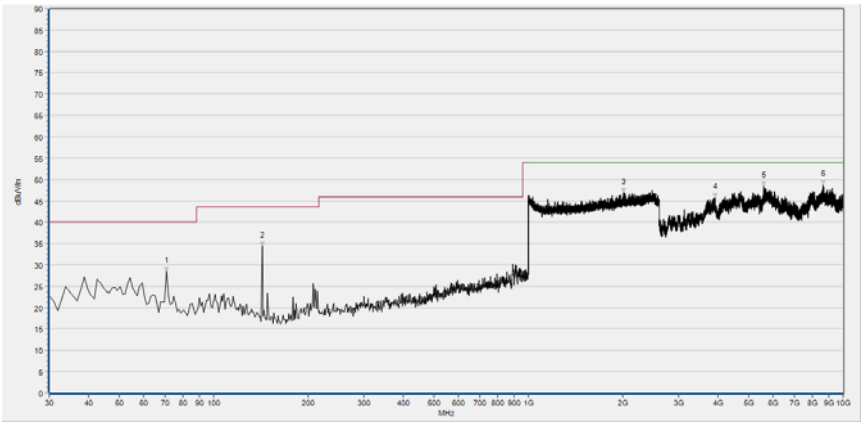
(Antenna Horizontal, 30MHz to 10GHz)



Fre. (MHz)	Pk (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
70.740	32.07	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
142.520	32.23	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1777.600	46.52	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3754.400	45.81	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5654.720	49.23	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9015.800	48.25	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

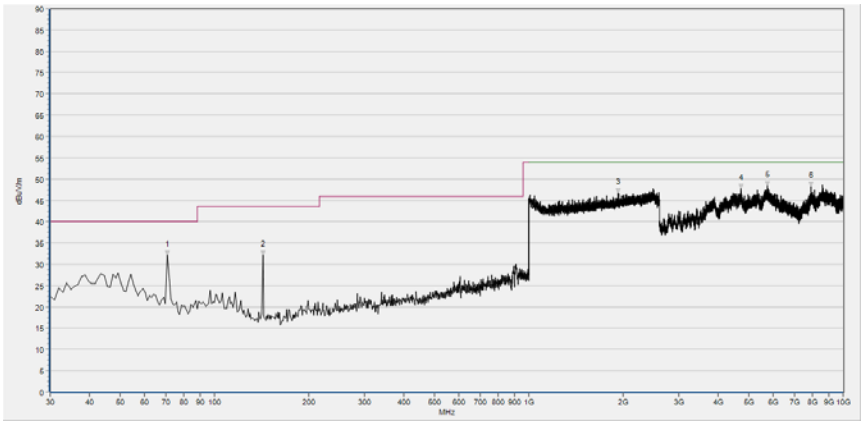
(Antenna Vertical, 30MHz to 10GHz)

Plot for Channel = M



Fre. (MHz)	Pk (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
70.740	28.52	N/A	N/A	N/A	40.00	N/A	Horizontal	PASS
142.520	34.41	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2003.200	46.88	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3911.280	45.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5586.640	48.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8620.640	48.85	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

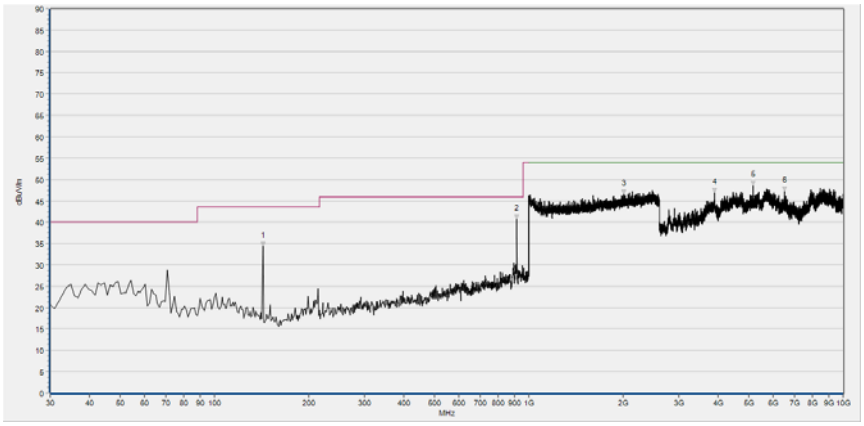
(Antenna Horizontal, 30MHz to 10GHz)



Fre. (MHz)	Pk (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
70.740	32.19	N/A	N/A	N/A	40.00	N/A	Vertical	PASS
142.520	32.24	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1924.800	46.74	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4734.160	47.82	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5749.440	48.49	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7905.800	48.27	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

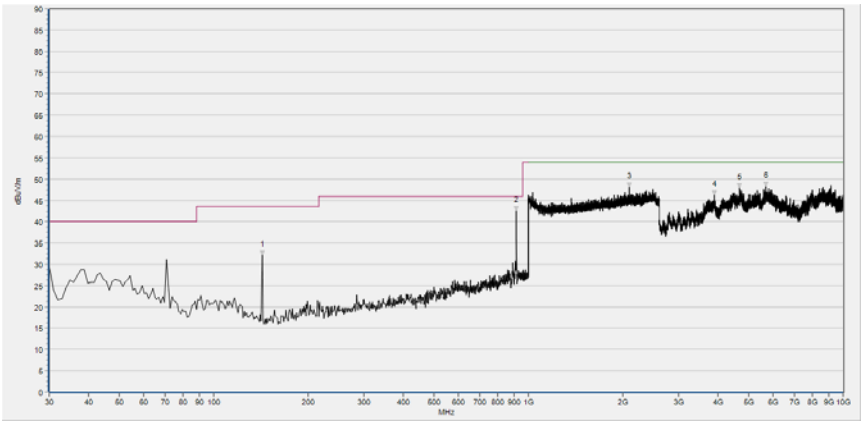
(Antenna Vertical, 30MHz to 10GHz)

Plot for Channel = H



Fre. (MHz)	Pk (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
142.520	34.43	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
915.610	40.66	N/A	N/A	N/A	46.00	N/A	Horizontal	PASS
2006.933	46.66	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3906.840	46.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5167.800	48.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6514.600	47.32	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 10GHz)



Fre. (MHz)	Pk (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
142.520	32.25	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
915.610	42.62	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2093.867	48.09	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3905.360	46.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4689.760	47.90	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5675.440	48.33	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 10GHz)

Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test items	Uncertainty
Bandwidth	±5%
Radiated Emission	±2.95dB

This uncertainty represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.MorlabLaboratory
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.

4. Test Equipments Utilized

4.1 Radiated Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
EXA Signal Analzyer	MY53470836	N9010A	Agilent	2020.04.01	2021.03.31
RF cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
Coaxial cable	CB02	RF02	Morlab	N/A	N/A
SMA connector	CN01	RF03	HUBER-SUHNER	N/A	N/A
Computer	T430i	Think Pad	Lenovo	N/A	N/A

4.2 Conducted Emission Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Receiver	MY56400093	N9038A	KEYSIGHT	2020.03.26	2021.03.25
LISN	8127449	NSLK 8127	Schwarzbeck	2020.03.26	2021.03.25
Pulse Limiter (10dB)	VTSD 9561 F-B #206	VTSD 9561-F	Schwarzbeck	2020.07.24	2021.07.23
Coaxial cable(BNC) (30MHz-26GHz)	CB01	EMC01	Morlab	N/A	N/A

4.3 List of Software Used

Description	Manufacturer	Software Version
Test system	Tonscend	V2.6
Power Panel	Agilent	V3.8
MORLAB EMCR V1.2	MORLAB	V1.0

4.4 Radiated Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal.Due
Receiver	MY54130016	N9038A	Agilent	2020.07.21	2021.07.20
Test Antenna - Bi-Log	9163-520	VULB 9163	Schwarzbeck	2019.05.24	2022.05.23
Test Antenna - Loop	1520-022	FMZB1520	Schwarzbeck	2019.02.14	2022.02.13
Test Antenna – Horn	01774	BBHA 9120D	Schwarzbeck	2019.07.26	2022.07.25
Test Antenna – Horn	BBHA9170 #774	BBHA9170	Schwarzbeck	2019.07.26	2022.07.25
Coaxial cable (N male) (9KHz-30MHz)	CB04	EMC04	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-26GHz)	CB02	EMC02	Morlab	N/A	N/A
Coaxial cable(N male) (30MHz-26GHz)	CB03	EMC03	Morlab	N/A	N/A
1-18GHz pre-Amplifier	61171/61172	S020180L3203	Tonscend	2020.07.21	2021.07.20
18-26.5GHz pre-Amplifier	46732	S10M100L3802	Tonscend	2020.07.21	2021.07.20
Notch Filter	N/A	WRCG-2400-2483.5-60SS	Wainwright	2019.12.01	2020.12.01
Anechoic Chamber	N/A	9m*6m*6m	CRT	2020.01.06	2023.01.05

END OF REPORT