FCC EMC TEST REPORT

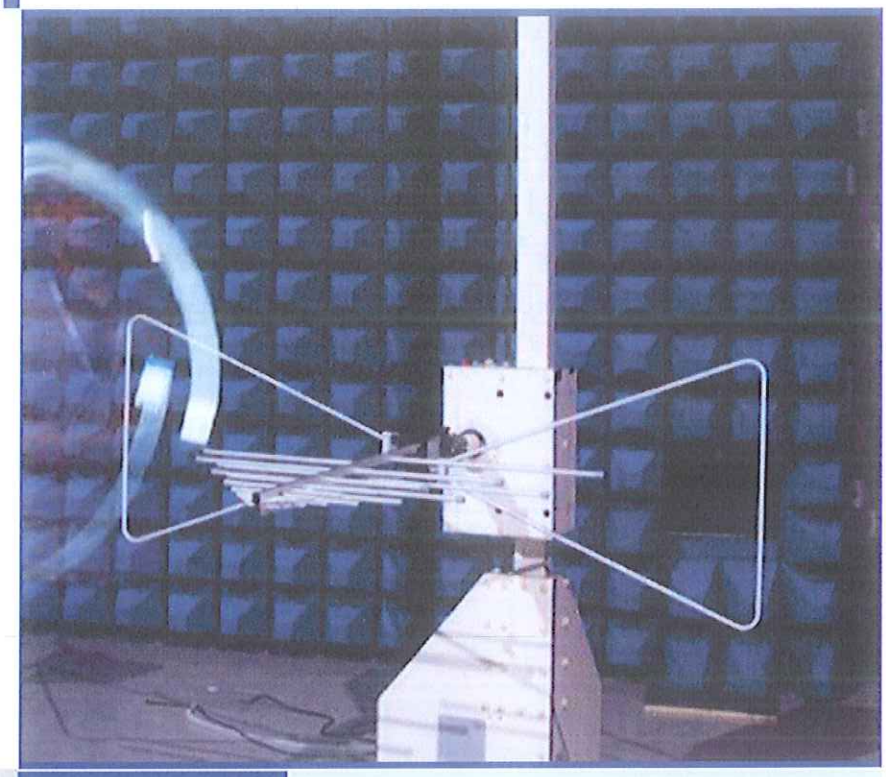
ISSUED BY
Shenzhen BALUN Technology Co., Ltd.

FOR

Tablet PC

ISSUED TO
Shenzhen Jingwah Information Technology Co., Ltd.

4F, Bldg 4, Jinghua Square, No. 1 Huafa North Road, Futian District, Shenzhen, China



Tested by: Zhang Yanqing
Zhang Yanqing
(Engineer)
Date Oct. 17, 2016

Approved by: Wei Yanquan
Wei Yanquan
(Chief Engineer)
Date Oct. 17, 2016

Report No.:	BL-SZ1690235-401
EUT Type:	Tablet PC
Model Name:	BNTV450
Brand Name:	nook
Test Standard:	47 CFR Part 15 Subpart B
FCC ID:	RBD-BNTV450
Test Conclusion:	Pass
Test Date:	Oct. 10, 2016 ~ Oct. 12, 2016
Date of Issue:	Oct. 17, 2016

Block B, 1st FL,Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong, P. R. China 518055
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Revision History

Version	Issue Date	Revisions Content
Rev. 01	Oct. 17, 2016	Initial Issue

TABLE OF CONTENTS

1 GENERAL INFORMATION

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100
Fax Number	+86 755 6182 4271

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory has been listed by US Federal Communications Commission to perform electromagnetic emission measurements. The recognition numbers of test site are 832625. The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Laboratory Condition

Ambient Temperature	20°C~25°C
Ambient Relative Humidity	45% - 55%
Ambient Pressure	100 kPa - 102 kPa

1.4 Announce

(1) The test report reference to the report template version v4.3.

(2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.

(3) The test report is invalid if there is any evidence and/or falsification.

(4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.

(5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are

duly noted in the revisions section.

(6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Shenzhen Jingwah Information Technology Co., Ltd.
Address	4F, Bldg 4, Jinghua Square, No. 1 Huafa North Road, Futian District, Shenzhen, China

2.2 Manufacturer Information

Manufacturer	SHENZHEN JINGWAH INFORMATION TECHNOLOGY CO., LTD
Address	4F, Bldg 4, Jinghua Square, No. 1 Huafa North Road, Futian District, Shenzhen, China

2.3 Factory Information

Factory	SHENZHEN JINGWAH INFORMATION TECHNOLOGY CO., LTD
Address	4F, Bldg 4, Jinghua Square, No. 1 Huafa North Road, Futian District, Shenzhen, China

2.4 General Description for Equipment under Test (EUT)

EUT Type	Tablet PC
Model Name Under Test	BNTV450
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	T8370-V6.1 M1
Software Version	BNTV450
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A
The Highest Speed of Processor	N/A
Network and Wireless connectivity	Bluetooth, WIFI

Note: The EUT have two sample which Configuration A is xingyuan display and Configuration B is xianchuang display, the internal structure and circuit electrical parameters are the same; but the LCD display is different. All of them were tested in this report.

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	PL3370100P
	Serial No.	N/A
	Capacitance	3000 mAh
	Rated Voltage	3.7 V
	Extreme Voltage	4.2 V
Ancillary Equipment 2	Charger	
	Brand Name	N/A
	Model No.	TPA – 95A050100UU
	Rated Input	100-240 V~, 50/60 Hz, 0.15 A
	Rated Output	5V⎓, 1 A
Ancillary Equipment 3	USB Cable	
	Length	1.0 m

2.6 Technical Information

N/A

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	FCC 47 CFR Part 15 Subpart B (10-1-15 Edition)	Unintentional Radiators
2	ANSI C63.4-2014	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

3.2 Verdict

No.	Description	FCC Rule	Test Verdict	Result
1	Radiated Emission	15.109	Pass	Annex A .1
2	Conducted Emission, AC Ports	15.107	Pass	Annex A .2

3.3 Test Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement	Value
Conducted emissions (9 kHz-30 MHz)	4.12 dB
Radiated emissions (30 MHz-1 GHz)	4.16 dB
Radiated emissions (1 GHz-18 GHz)	5.97 dB
Radiated emissions (18 GHz-40 GHz)	6.71 dB

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

Environment Parameter	Selected Values During Tests			
	Temperature	Voltage	Relative Humidity	Ambient Pressure
Normal Temperature, Normal Voltage (NTNV)	23°C~26°C	AC 120 V/60 Hz	50%-55%	100 to 102 kPa

4.2 Test Equipment List

Radiated Emission Test						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2016.07.05	2017.07.04	☒
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	9163-624	2015.07.22	2017.07.21	☒
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	9120D-1148	2015.07.22	2017.07.21	☒
Test Antenna-Loop	SCHWARZBECK	FMZB 1519	1519-037	2015.07.22	2017.07.21	☐
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2015.02.28	2017.02.27	☒

Conducted disturbance Test						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2016.07.05	2017.07.04	☒
LISN	SCHWARZBECK	NSLK 8127	8127-687	2016.07.05	2017.07.04	☒
Shielded Enclosure	ChangNing	CN-130701	130703	N/A	N/A	☒

4.3 Test Enclosure list

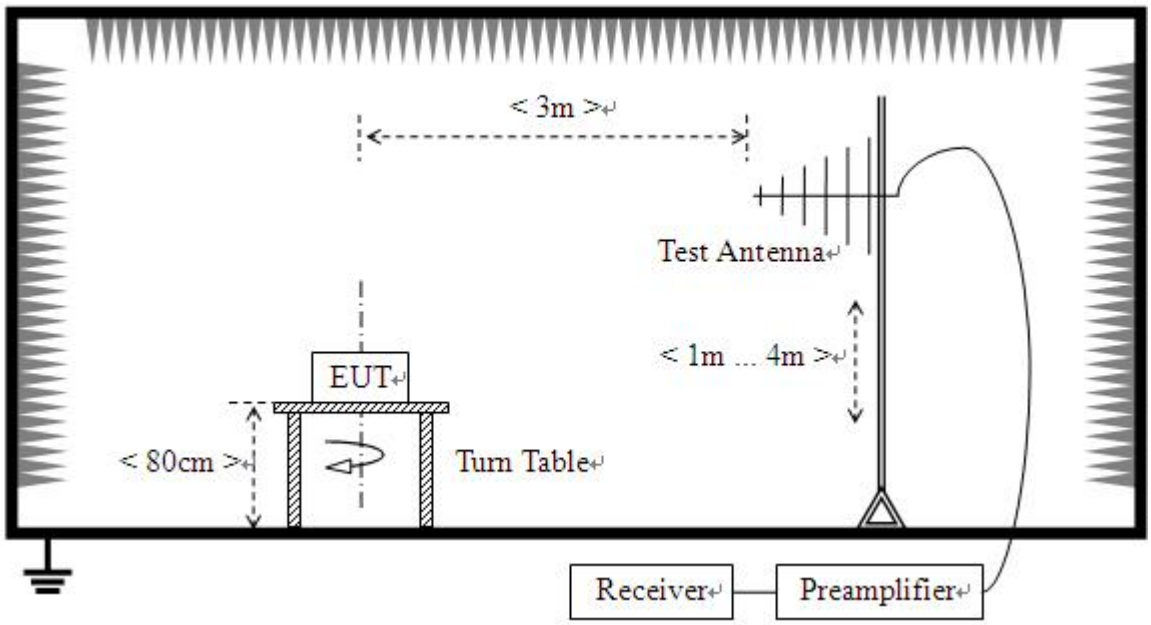
Description	Manufacturer	Model	Serial No.	Length	Description	Use
PC	N/A	N/A	N/A	N/A	Special Handled	☐
Laptop	Apple	A1465	N/A	N/A	N/A	☒
Printer	HP	DESKJET 1000	N/A	N/A	N/A	☐
Keyboard	Logitech	Y-BP62a	N/A	N/A	N/A	☐
Mouse	Logitech	M100	N/A	N/A	N/A	☐
USB disk	Kingston	N/A	N/A	N/A	N/A	☐
TF Card	Kingston	N/A	N/A	N/A	N/A	☒
VGA Cable	N/A	N/A	N/A	1.5 m	Shielded with core	☐
HDMI Cable	N/A	N/A	N/A	1.5 m	Shielded with core	☐
DVI Cable	N/A	N/A	N/A	1.5 m	Shielded with core	☐
Coaxial video cable	N/A	N/A	N/A	2.0 m	Shielded with core	☐
iPhone	Apple	A1586	N/A	N/A	N/A	☐
Phone	MI	M4	N/A	N/A	N/A	☐
Laptop	LENOVO	K29	N/A	N/A	N/A	☐
Bluetooth Earphone	SAMSUNG	Gear Circle	N/A	N/A	N/A	☐
GPS/GLONASS Vector signal generator	R&S	N5172B EXG	N/A	N/A	N/A	☐
WIFI Router	TP-LINK	TL-WDR7500	N/A	N/A	N/A	☐
Earphone	N/A	N/A	N/A	N/A	N/A	☒
Car Battery	Camel	55530	N/A	N/A	12 V/55 Ah	☐
Artificial load	N/A	N/A	N/A	N/A	2.5 Ω/100 W	☐
Artificial load	N/A	N/A	N/A	N/A	5 Ω/100 W	☐
Electronic Load	ITECH	IT8511	N/A	N/A	N/A	☐
USB Cable	N/A	N/A	N/A	1.5 m	Shielded with core	☐
DC Power Supply	ROHDE&SCHWARZ	HMP2020	18141664	N/A	N/A	☐

4.4 Test Configurations

Test Configurations (TC) No.	Description
TC01	The Video record test mode EUT + Battery + Charger + USB Cable + Earphone + TF Card
TC02	The Download test mode EUT + Battery + USB Cable + Laptop + Earphone + TF Card
TC03	The Video play test mode EUT + Battery + Charger + USB Cable + Earphone + TF Card

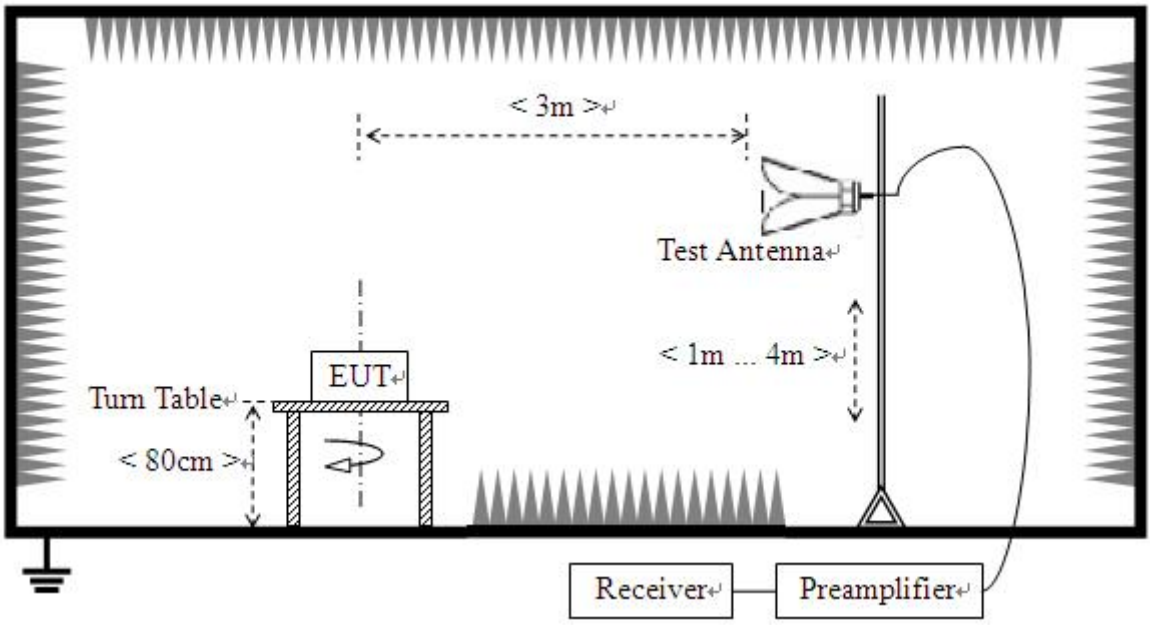
4.5 Test Setups

Test Setup 1



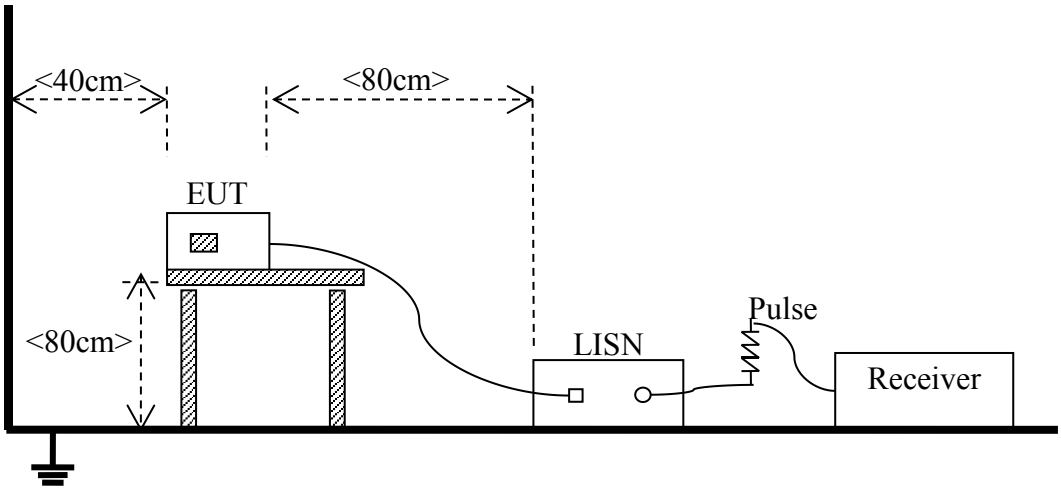
(For Radiated Emission Test (30 MHz-1 GHz))

Test Setup 2



(For Radiated Emission Test (above 1 GHz))

Test Setup 3



(For Conducted Emission, AC Ports Test)

4.6 Test Conditions

Test Case	Test Conditions	
Radiated Emission	Test Env.	NTNV
	Test Setup	Test Setup 1&2
	Test Configuration	TC01~TC03 Note
Conducted Emission, AC Ports	Test Env.	NTNV
	Test Setup	Test Setup 3
	Test Configuration	TC01~TC03 Note

Note: Based on client request, all normal using modes of the normal function were tested but only the worst test data of the worst mode is reported by this report. The Video record test mode is the worst mode in this report.

5 TEST ITEMS

5.1 Emission Tests

5.1.1 Radiated Emission

5.1.1.1 Limit

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

NOTE:

1) Field Strength (dBμV/m) = 20*log [Field Strength (μV/m)].
2) In the emission tables above, the tighter limit applies at the band edges.
3) For above 1000 MHz, limit field strength of harmonics: 54 dBuV/m@3 m (AV) and 74 dBuV/m@3 m (PK)

5.1.1.2 Test Setup

Refer to 4.5 section (test setups1 to test setups2) for radiated emission test, the photo of test setup please refer to ANNEX B.

5.1.1.3 Test Procedure

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

An initial pre-scan was performed in the chamber using the EMI Receiver in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bi-Log antenna with 2 orthogonal polarities.

5.1.1.4 Test Result

Please refer to ANNEX A.1.

5.1.2 Conducted Emission

5.1.2.1 Test Limit

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

NOTE:

1) The limit is applicable to Class B ITE.
2) The lower limit shall apply at the band edges.
3) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50 MHz.

5.1.2.2 Test Setup

Refer to 4.5 section test (test setup 3) for conducted emission, the photo of test setup please refer to ANNEX B.

5.1.2.3 Test Procedure

The EUT is connected to the power mains through a LISN which provides 50 Ω/50 μH of coupling impedance for the measuring instrument. The test frequency range is from 150 kHz to 30 MHz. The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels that are 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.

Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

5.1.2.4 Test Result

Please refer to ANNEX A.2.

ANNEX A TEST RESULTS

A.1 Radiated Emission

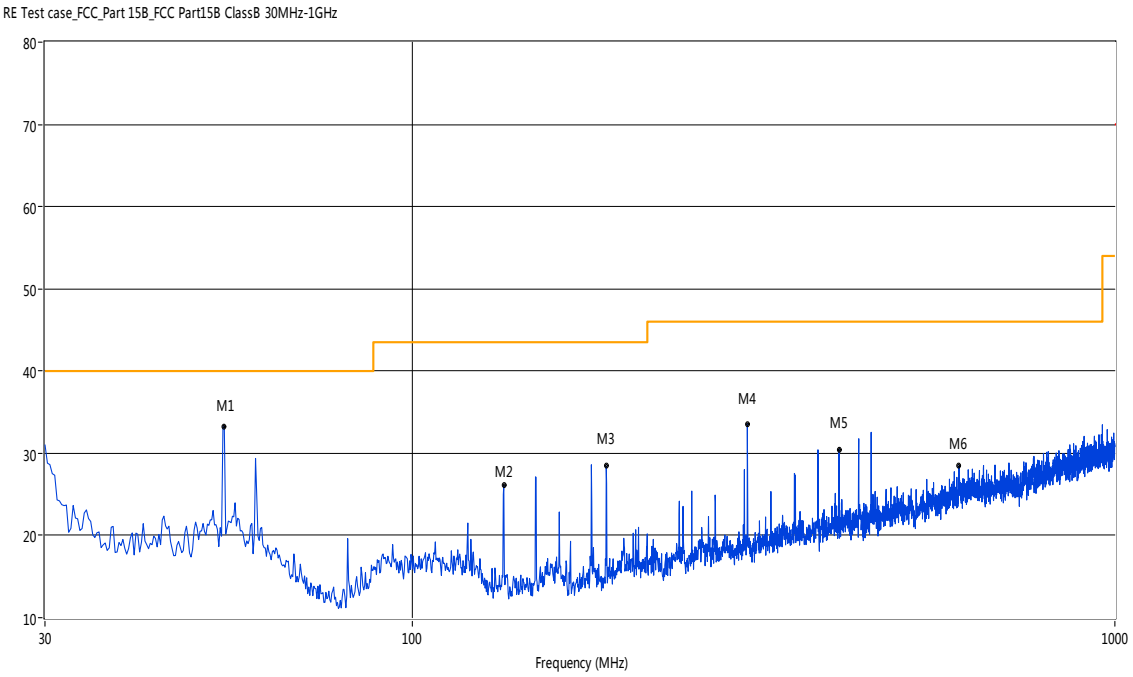
Note 1: The symbol of "--" in the table which means not application.

Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Test Data and Plots

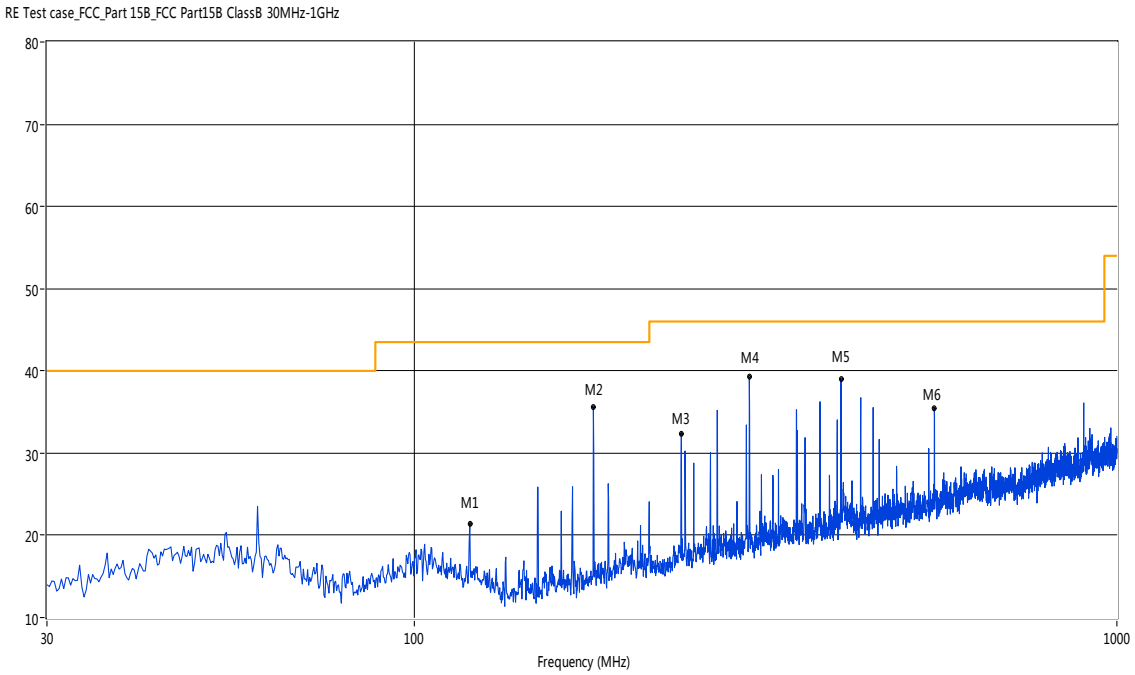
The worst test mode: The Video record test mode (xianchuang)

A.1.1 Test Antenna Vertical, 30 MHz – 1 GHz



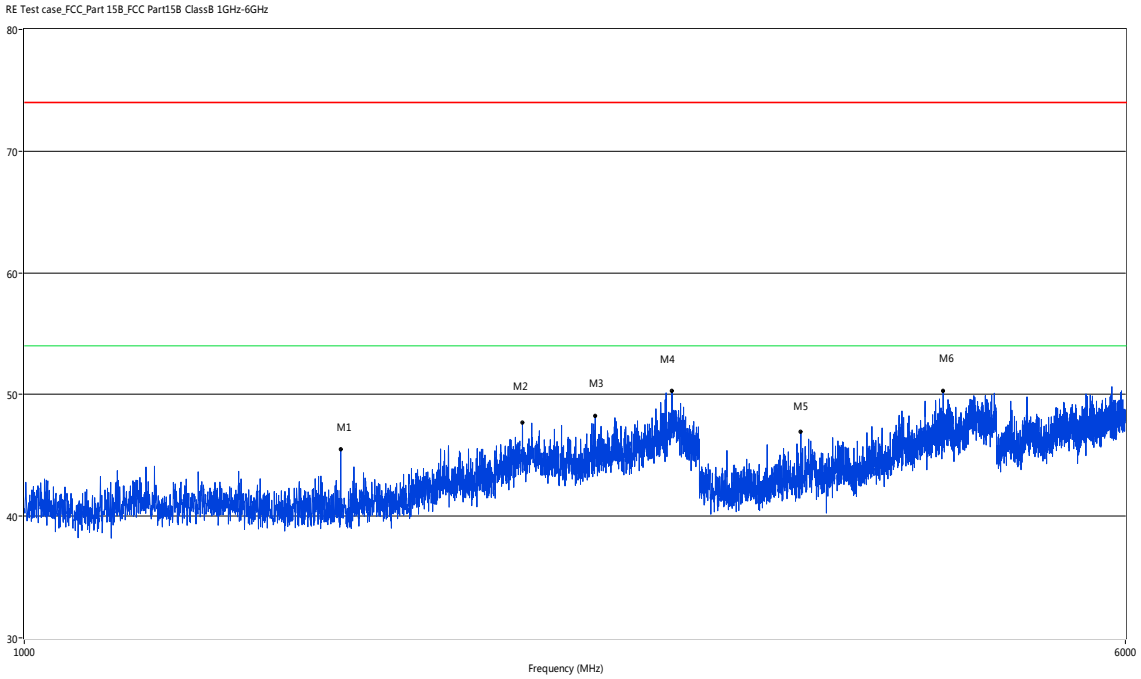
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	54.001	33.27	-18.72	40.0	6.73	Peak	0.30	100	Vertical	Pass
2	134.976	26.11	-23.48	43.5	17.39	Peak	0.80	100	Vertical	Pass
3	188.798	28.45	-21.27	43.5	15.05	Peak	267.50	100	Vertical	Pass
4	299.835	33.59	-17.63	46.0	12.41	Peak	334.20	100	Vertical	Pass
5	404.811	30.48	-14.99	46.0	15.52	Peak	63.20	100	Vertical	Pass
6	599.975	28.50	-10.76	46.0	17.50	Peak	171.10	100	Vertical	Pass

A.1.2 Test Antenna Horizontal, 30 MHz – 1 GHz



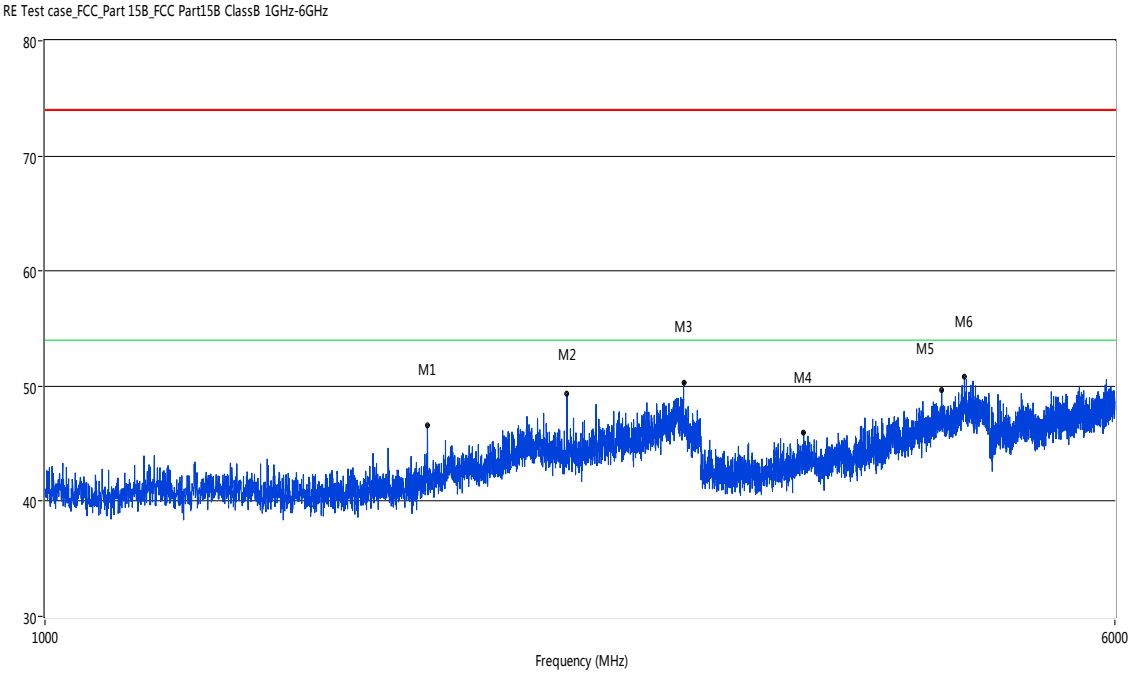
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	119.945	21.13	-21.74	43.5	22.37	Peak	359.20	100	Horizontal	Pass
2	179.828	35.54	-22.06	43.5	7.96	Peak	19.60	100	Horizontal	Pass
3	239.953	32.36	-19.10	46.0	13.64	Peak	259.90	100	Horizontal	Pass
4	299.835	39.27	-17.63	46.0	6.73	Peak	89.40	100	Horizontal	Pass
5	404.811	38.94	-14.99	46.0	7.06	Peak	239.90	100	Horizontal	Pass
6	549.790	35.46	-12.08	46.0	10.54	Peak	219.50	100	Horizontal	Pass

A.1.3 Test Antenna Vertical, 1 GHz – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1673.832	45.47	-1.70	74.0	28.53	Peak	325.90	100	Vertical	Pass
2	2249.188	47.67	2.58	74.0	26.33	Peak	188.80	100	Vertical	Pass
3	2532.117	48.25	2.28	74.0	25.75	Peak	158.00	100	Vertical	Pass
4	2869.033	50.27	6.35	74.0	23.73	Peak	22.90	100	Vertical	Pass
5	3538.365	46.94	9.87	74.0	27.06	Peak	203.00	100	Vertical	Pass
6	4459.885	50.33	12.46	74.0	23.67	Peak	1.50	100	Vertical	Pass

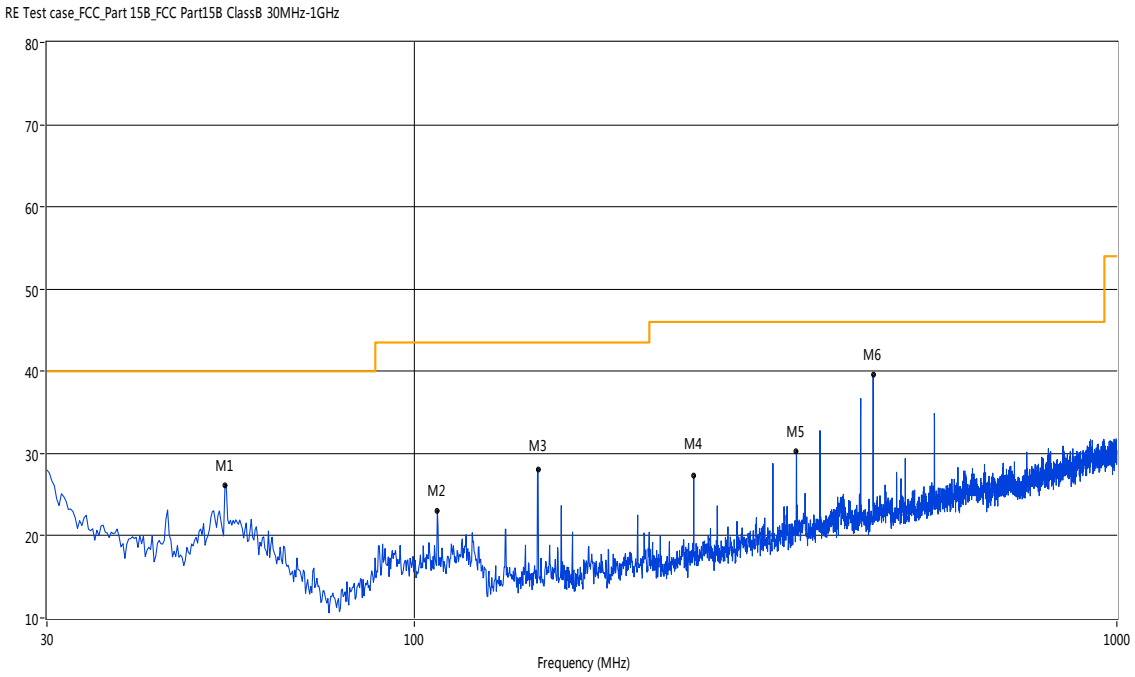
A.1.4 Test Antenna Horizontal, 1 GHz – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1897.276	46.54	-0.37	74.0	27.46	Peak	65.20	100	Horizontal	Pass
2	2397.151	49.32	1.52	74.0	24.68	Peak	339.40	100	Horizontal	Pass
3	2914.021	50.33	6.20	74.0	23.67	Peak	157.90	100	Horizontal	Pass
4	3563.109	45.96	9.80	74.0	28.04	Peak	49.40	100	Horizontal	Pass
5	4489.878	49.63	12.72	74.0	24.37	Peak	176.90	100	Horizontal	Pass
6	4663.834	50.79	13.05	74.0	23.21	Peak	96.50	100	Horizontal	Pass

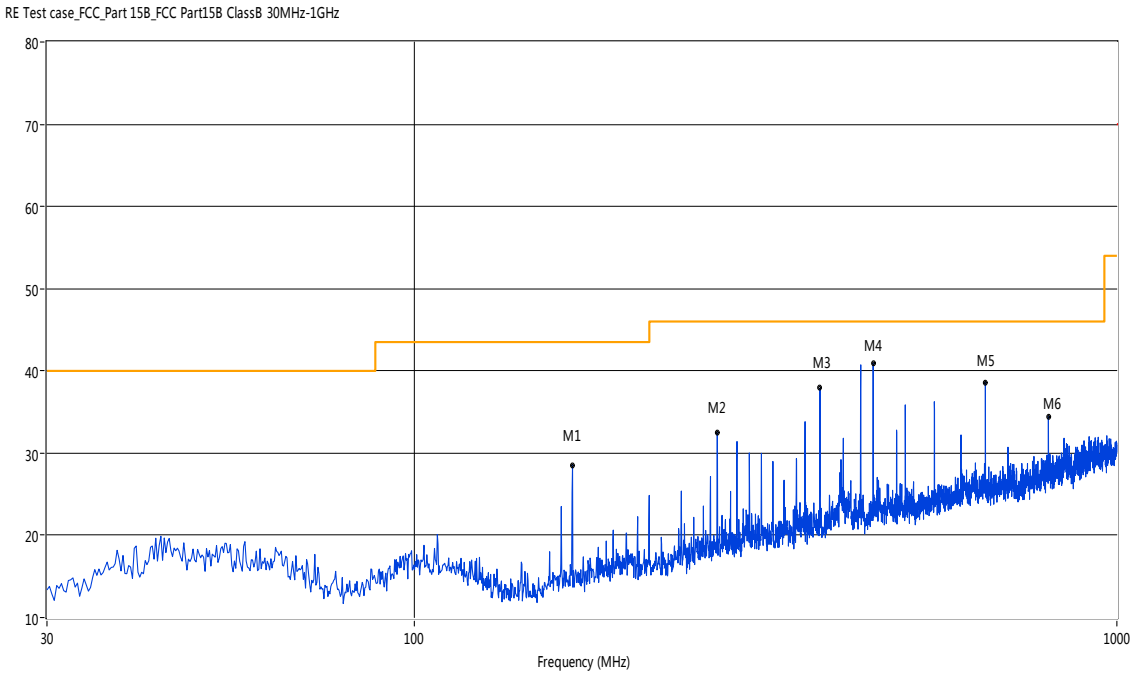
The worst test mode: The Video record test mode (xingyuan)

A.1.5 Test Antenna Vertical, 30 MHz – 1 GHz



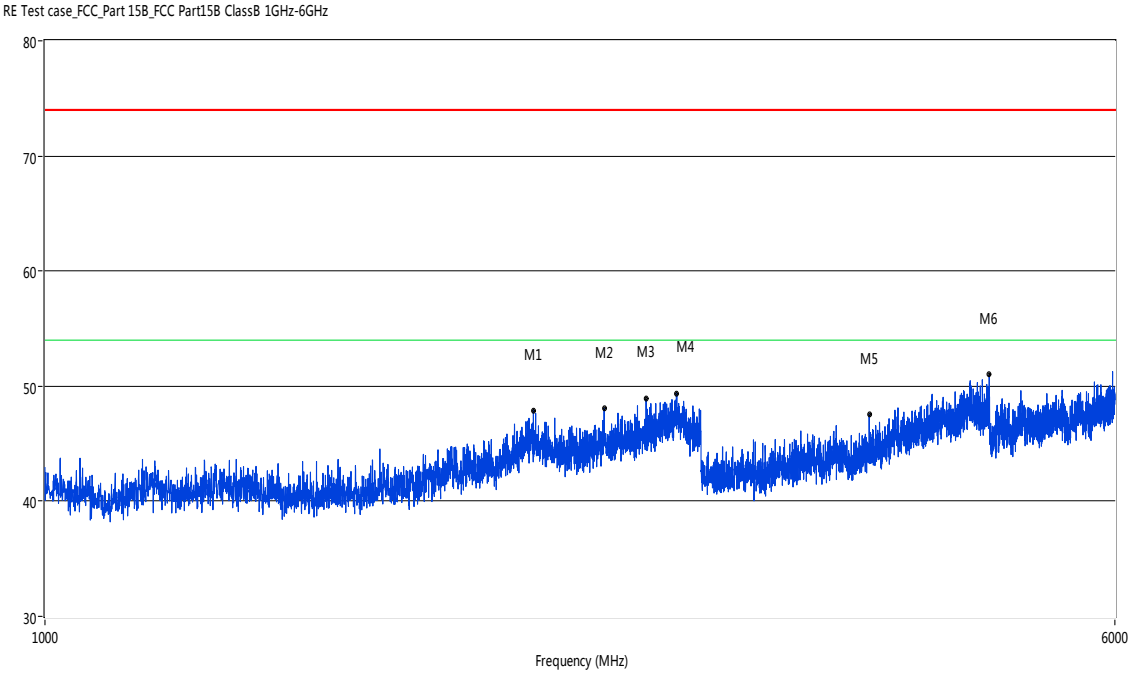
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	53.759	26.10	-18.75	40.0	13.90	Peak	109.00	100	Vertical	Pass
2	107.823	23.04	-20.18	43.5	20.46	Peak	134.20	100	Vertical	Pass
3	150.007	28.05	-23.52	43.5	15.45	Peak	360.00	100	Vertical	Pass
4	249.893	27.27	-18.94	46.0	18.73	Peak	360.00	100	Vertical	Pass
5	349.778	30.23	-16.24	46.0	15.77	Peak	360.00	100	Vertical	Pass
6	449.905	39.58	-14.47	46.0	6.42	Peak	149.40	100	Vertical	Pass

A.1.6 Test Antenna Horizontal, 30 MHz – 1 GHz



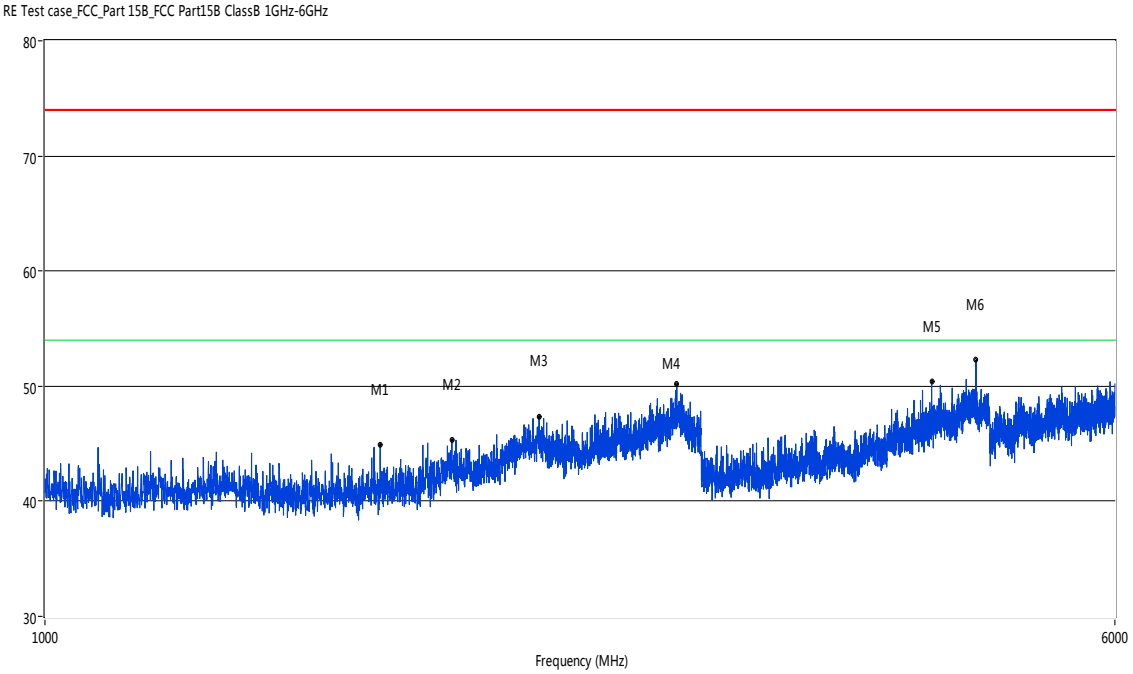
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	167.948	28.53	-22.82	43.5	14.97	Peak	286.60	100	Horizontal	Pass
2	269.773	32.49	-18.48	46.0	13.51	Peak	79.40	100	Horizontal	Pass
3	377.901	37.92	-15.74	46.0	8.08	Peak	231.30	100	Horizontal	Pass
4	449.905	40.96	-14.47	46.0	5.04	Peak	250.90	100	Horizontal	Pass
5	649.918	38.60	-10.09	46.0	7.40	Peak	327.10	100	Horizontal	Pass
6	799.018	34.45	-7.36	46.0	11.55	Peak	3.70	100	Horizontal	Pass

A.1.7 Test Antenna Vertical, 1 GHz – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2266.183	47.91	1.68	74.0	26.09	Peak	361.00	100	Vertical	Pass
2	2551.112	48.07	3.02	74.0	25.93	Peak	354.50	100	Vertical	Pass
3	2736.566	48.87	4.25	74.0	25.13	Peak	218.20	100	Vertical	Pass
4	2879.030	49.35	7.22	74.0	24.65	Peak	279.70	100	Vertical	Pass
5	3976.256	47.54	11.04	74.0	26.46	Peak	168.70	100	Vertical	Pass
6	4861.785	51.00	13.47	74.0	23.00	Peak	233.50	100	Vertical	Pass

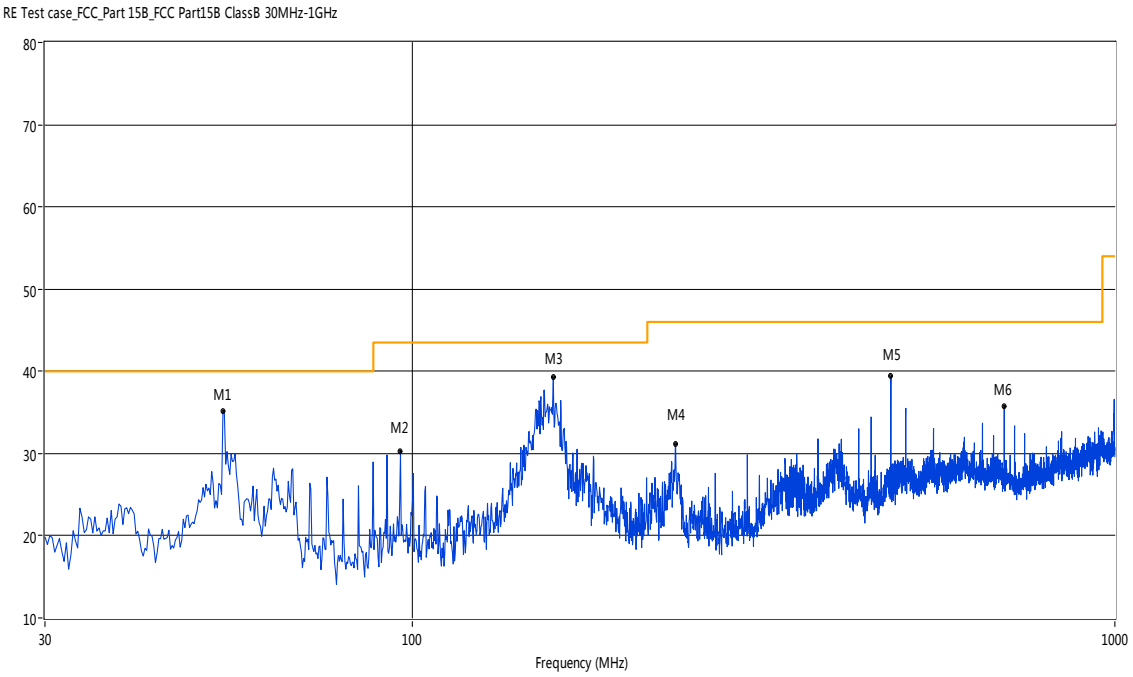
A.1.8 Test Antenna Horizontal, 1 GHz – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1753.312	44.88	-1.14	74.0	29.12	Peak	0.30	100	Horizontal	Pass
2	1976.756	45.34	0.62	74.0	28.66	Peak	32.50	100	Horizontal	Pass
3	2287.678	47.37	2.30	74.0	26.63	Peak	36.90	100	Horizontal	Pass
4	2881.030	50.18	7.06	74.0	23.82	Peak	129.20	100	Horizontal	Pass
5	4414.896	50.36	12.50	74.0	23.64	Peak	58.50	100	Horizontal	Pass
6	4754.561	52.25	13.54	74.0	21.75	Peak	255.00	100	Horizontal	Pass

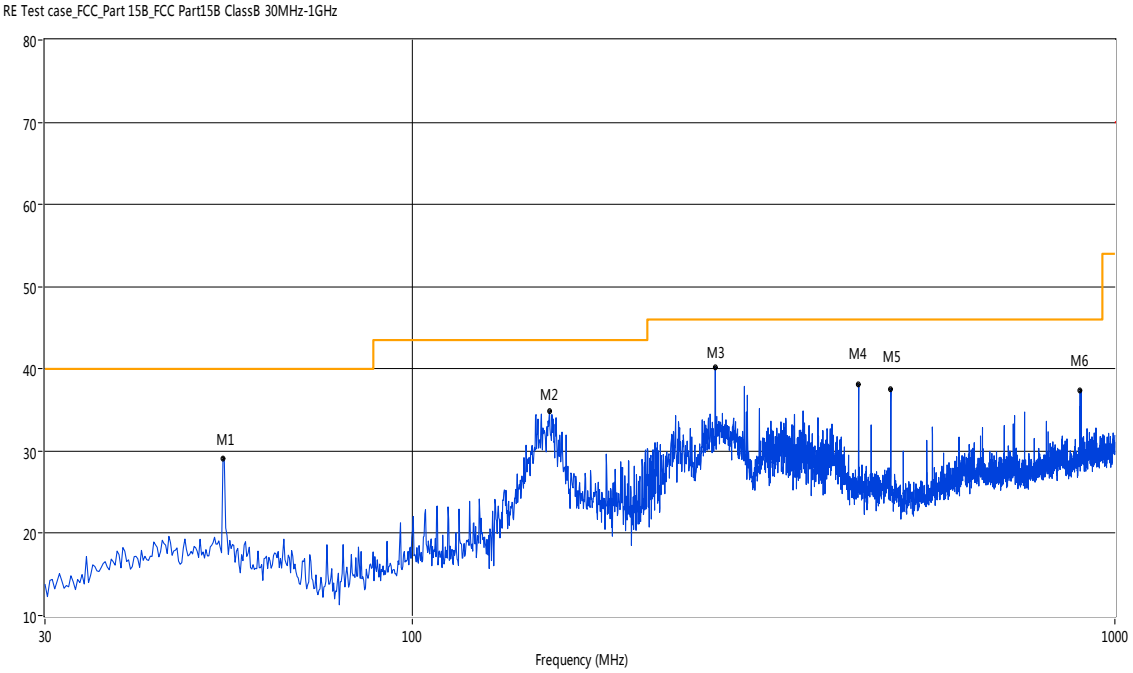
The Download test mode (xianchuang)

A.1.9 Test Antenna Vertical, 30 MHz – 1 GHz



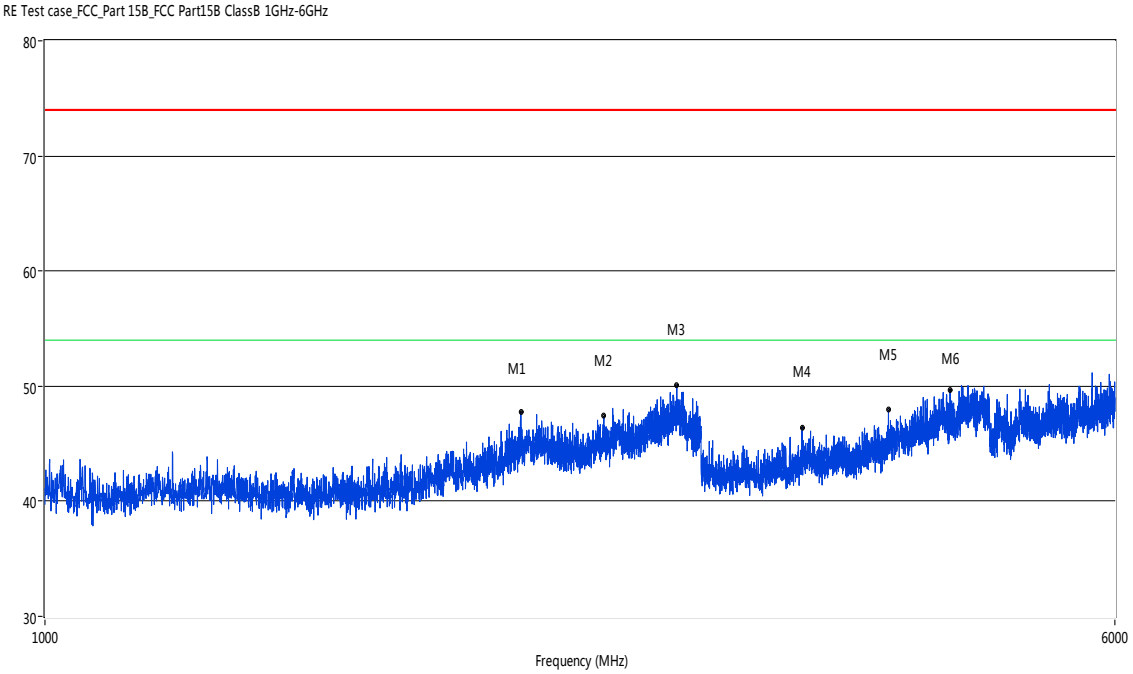
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	53.759	35.16	-18.75	40.0	4.84	Peak	278.20	100	Vertical	Pass
2	96.186	30.23	-20.75	43.5	13.27	Peak	359.80	100	Vertical	Pass
3	158.735	39.25	-23.12	43.5	4.25	Peak	283.40	100	Vertical	Pass
4	236.801	31.22	-19.34	46.0	14.78	Peak	304.50	100	Vertical	Pass
5	479.968	39.40	-13.81	46.0	6.60	Peak	357.20	100	Vertical	Pass
6	695.981	35.69	-9.11	46.0	10.31	Peak	186.30	100	Vertical	Pass

A.1.10 Test Antenna Horizontal, 30 MHz – 1 GHz



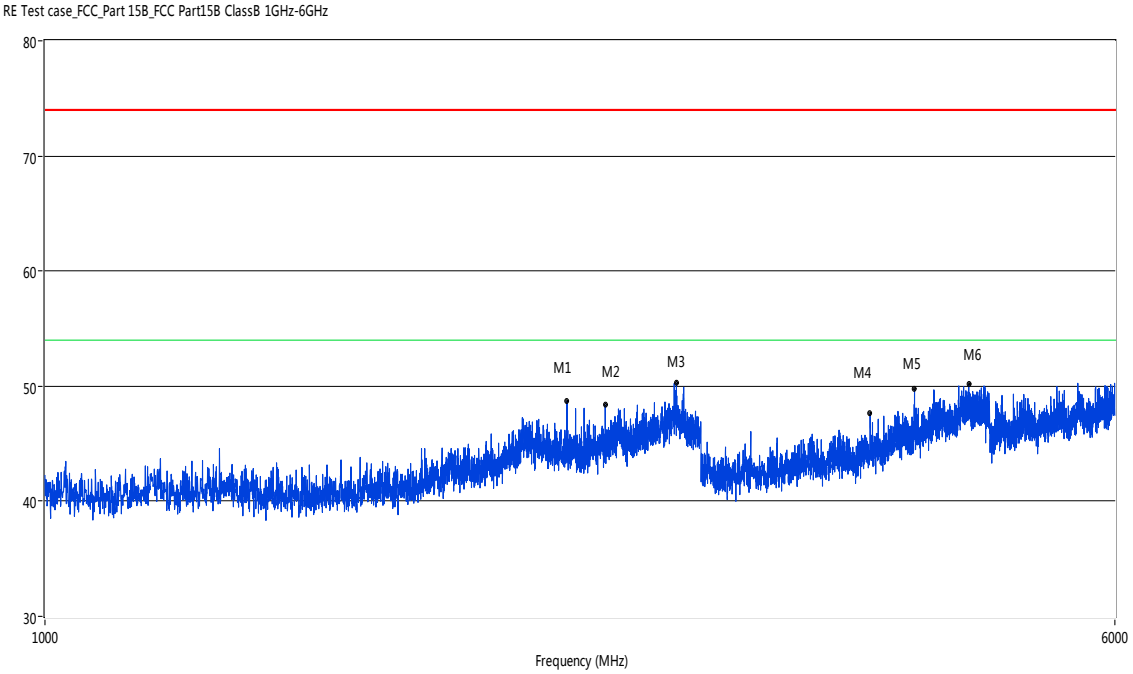
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	53.759	29.03	-18.75	40.0	10.97	Peak	8.20	100	Horizontal	Pass
2	156.796	34.81	-23.21	43.5	8.69	Peak	58.40	100	Horizontal	Pass
3	269.773	40.23	-18.48	46.0	5.77	Peak	129.50	100	Horizontal	Pass
4	431.965	38.12	-14.65	46.0	7.88	Peak	180.40	100	Horizontal	Pass
5	479.968	37.59	-13.81	46.0	8.41	Peak	78.70	100	Horizontal	Pass
6	892.357	37.36	-5.79	46.0	8.64	Peak	63.60	100	Horizontal	Pass

A.1.11 Test Antenna Vertical, 1 GHz – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2218.695	47.77	2.13	74.0	26.23	Peak	8.00	100	Vertical	Pass
2	2549.613	47.40	3.11	74.0	26.60	Peak	34.00	100	Vertical	Pass
3	2881.030	50.05	7.06	74.0	23.95	Peak	330.80	100	Vertical	Pass
4	3554.861	46.43	9.79	74.0	27.57	Peak	30.80	100	Vertical	Pass
5	4106.723	47.94	11.35	74.0	26.06	Peak	331.30	100	Vertical	Pass
6	4552.862	49.71	12.67	74.0	24.29	Peak	183.20	100	Vertical	Pass

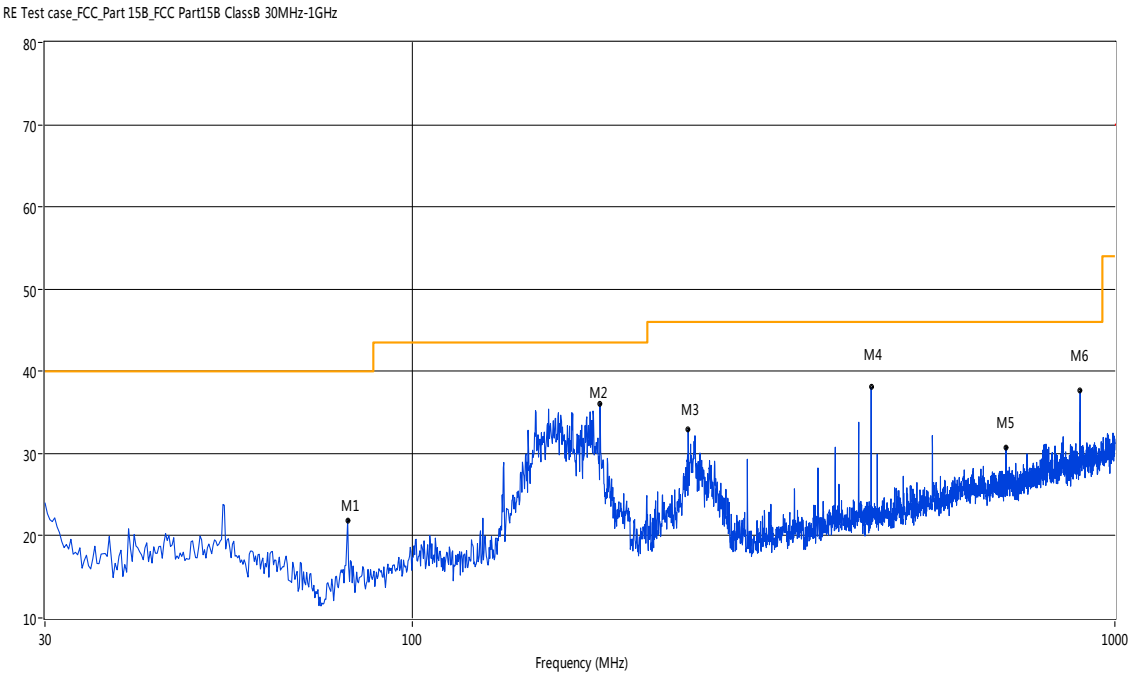
A.1.12 Test Antenna Horizontal, 1 GHz – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2396.651	48.73	1.50	74.0	25.27	Peak	321.90	100	Horizontal	Pass
2	2555.611	48.38	2.75	74.0	25.62	Peak	360.00	100	Horizontal	Pass
3	2879.030	50.28	7.22	74.0	23.72	Peak	268.90	100	Horizontal	Pass
4	3982.254	47.63	11.07	74.0	26.37	Peak	0.50	100	Horizontal	Pass
5	4289.678	49.74	11.88	74.0	24.26	Peak	311.70	100	Horizontal	Pass
6	4697.576	50.17	13.26	74.0	23.83	Peak	227.30	100	Horizontal	Pass

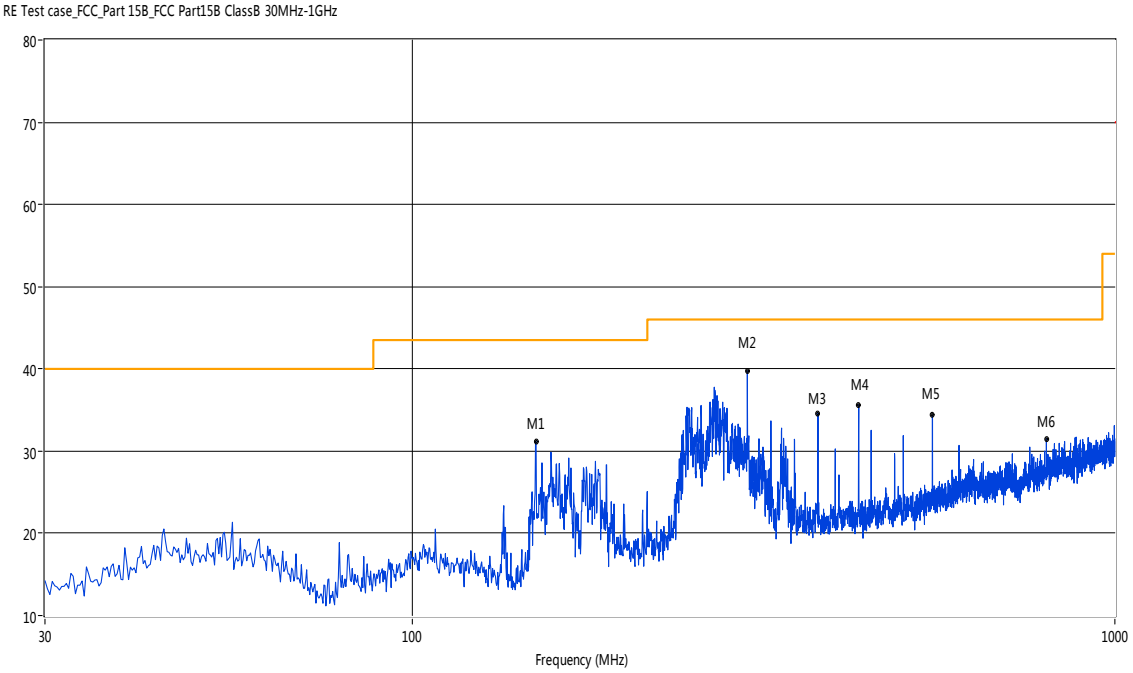
The Download test mode (xingyuan)

A.1.13 Test Antenna Vertical, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	80.912	21.90	-24.38	40.0	18.10	Peak	145.50	100	Vertical	Pass
2	184.919	36.09	-21.70	43.5	7.41	Peak	356.40	100	Vertical	Pass
3	246.983	32.92	-18.89	46.0	13.08	Peak	359.80	100	Vertical	Pass
4	449.905	38.05	-14.47	46.0	7.95	Peak	33.60	100	Vertical	Pass
5	699.860	30.77	-9.09	46.0	15.23	Peak	28.40	100	Vertical	Pass
6	892.357	37.60	-5.79	46.0	8.40	Peak	99.50	100	Vertical	Pass

A.1.14 Test Antenna Horizontal, 30 MHz – 1 GHz

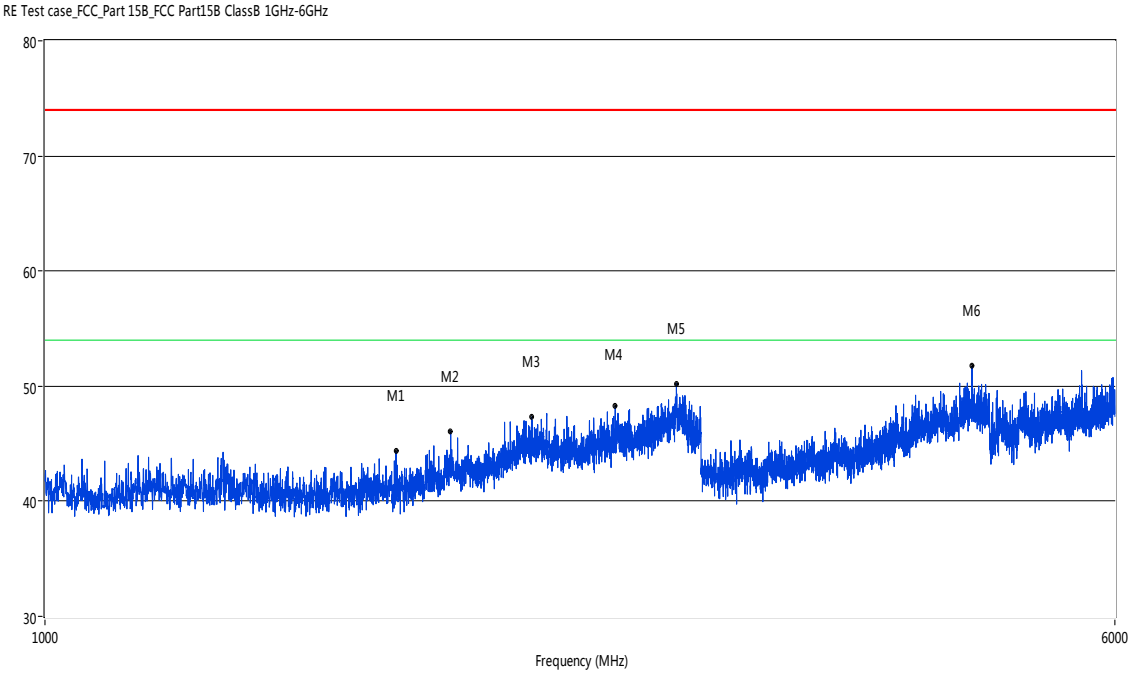


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	150.007	31.18	-23.52	43.5	12.32	Peak	41.70	100	Horizontal	Pass
2	299.835	39.77	-17.63	46.0	6.23	Peak	194.30	100	Horizontal	Pass
3	377.901	34.61	-15.74	46.0	11.39	Peak	164.30	100	Horizontal	Pass
4	431.965	35.65	-14.65	46.0	10.35	Peak	261.40	100	Horizontal	Pass
5	549.790	34.36	-12.08	46.0	11.64	Peak	149.00	100	Horizontal	Pass
6	799.018	31.52	-7.36	46.0	14.48	Peak	286.70	100	Horizontal	Pass

A.1.15 Test Antenna Vertical, 1 GHz – 6 GHz

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1968.758	45.52	0.67	74.0	28.48	Peak	337.30	100	Vertical	Pass
2	2274.181	48.19	2.09	74.0	25.81	Peak	34.60	100	Vertical	Pass
3	2665.584	48.65	3.48	74.0	25.35	Peak	96.10	100	Vertical	Pass
4	2882.029	49.85	7.01	74.0	24.15	Peak	96.10	100	Vertical	Pass
5	4473.382	49.97	12.55	74.0	24.03	Peak	192.90	100	Vertical	Pass
6	4783.804	51.11	13.61	74.0	22.89	Peak	103.70	100	Vertical	Pass

A.1.16 Test Antenna Horizontal, 1 GHz – 6 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1799.800	44.35	-1.60	74.0	29.65	Peak	190.10	100	Horizontal	Pass
2	1972.757	46.06	0.71	74.0	27.94	Peak	326.00	100	Horizontal	Pass
3	2258.685	47.33	2.05	74.0	26.67	Peak	10.70	100	Horizontal	Pass
4	2598.600	48.30	2.99	74.0	25.70	Peak	334.90	100	Horizontal	Pass
5	2879.030	50.23	7.22	74.0	23.77	Peak	211.60	100	Horizontal	Pass
6	4723.069	51.73	13.60	74.0	22.27	Peak	289.10	100	Horizontal	Pass

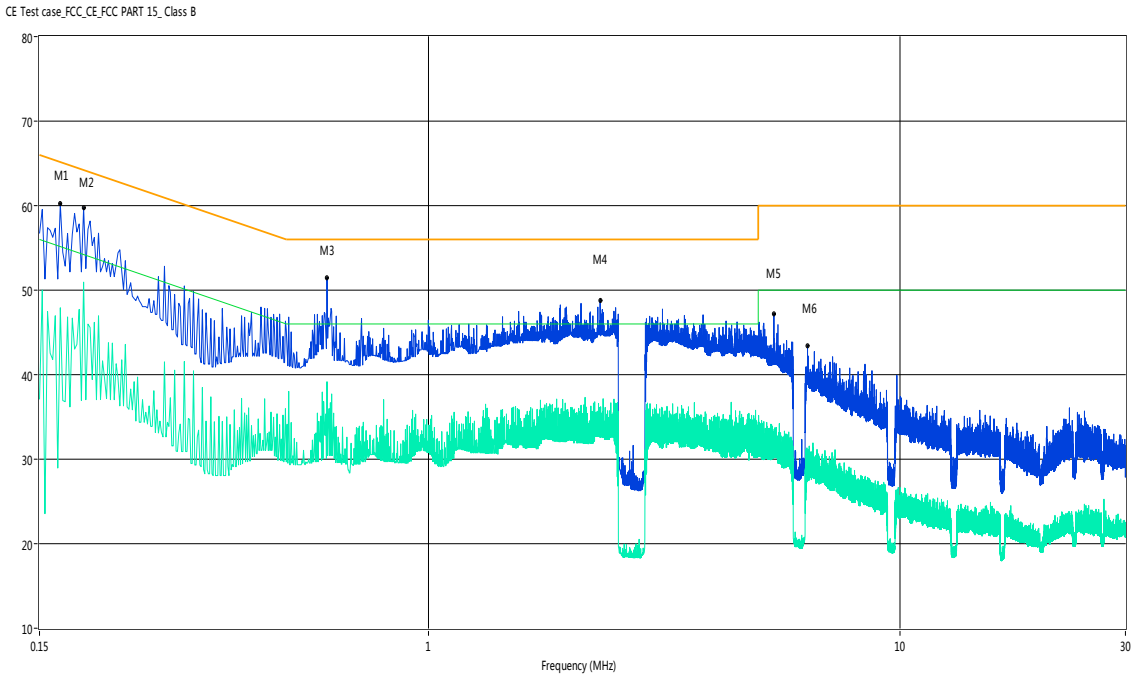
A.2 Conducted Emission

Test Data and Plots

The worst test mode: The Video record test mode (xianchuang)

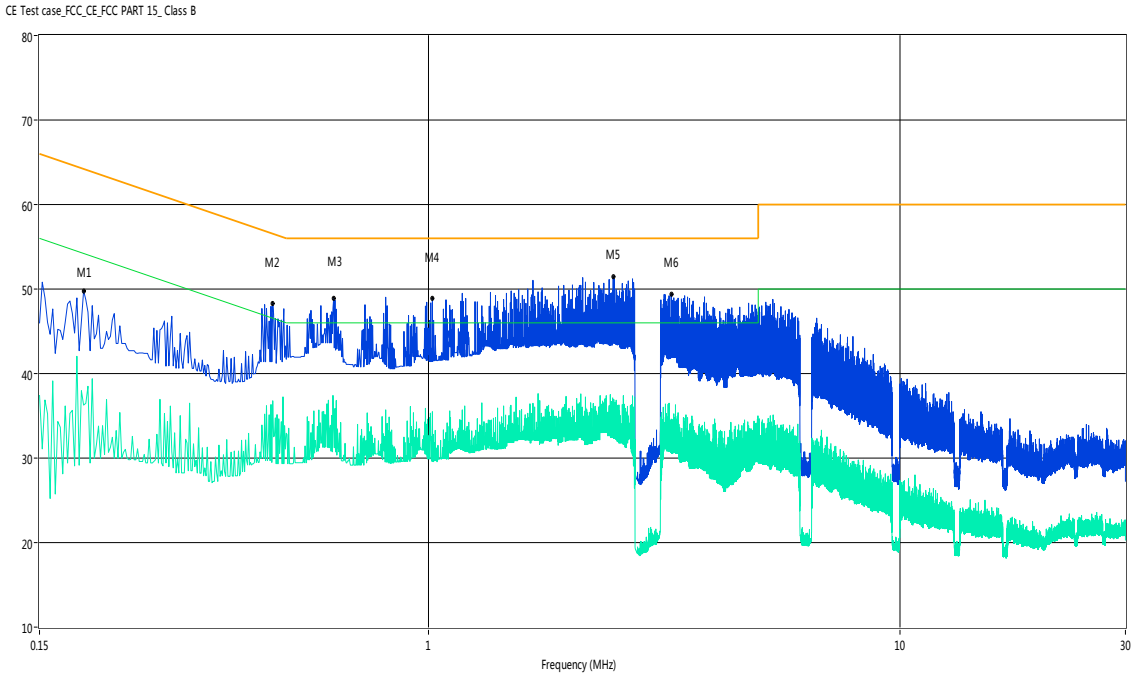
Note: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

A.2.1 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.17	60.2	11.00	65.5	5.30	Peak	L Line	Pass
1**	0.17	47.9	11.00	55.5	7.60	AV	L Line	Pass
2	0.19	59.8	11.00	65.0	5.20	Peak	L Line	Pass
2**	0.19	51.0	11.00	55.0	4.00	AV	L Line	Pass
3	0.61	51.5	11.00	56.0	4.50	Peak	L Line	Pass
3**	0.61	39.2	11.00	46.0	6.80	AV	L Line	Pass
4	2.31	48.8	11.00	56.0	7.20	Peak	L Line	Pass
4**	2.31	31.6	11.00	46.0	14.40	AV	L Line	Pass
5	5.40	47.2	11.00	60.0	12.80	Peak	L Line	Pass
5**	5.40	31.9	11.00	50.0	18.10	AV	L Line	Pass
6	6.36	43.4	11.00	60.0	16.60	Peak	L Line	Pass
6**	6.36	30.1	11.00	50.0	19.90	AV	L Line	Pass

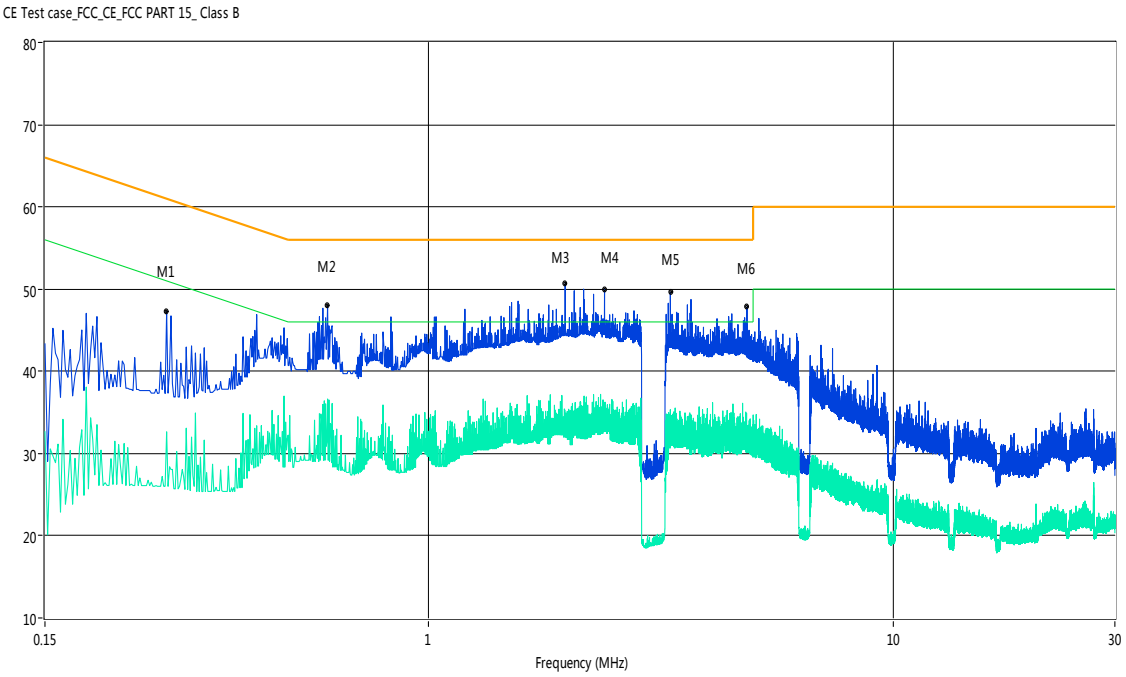
A.2.2 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.19	49.8	11.00	65.0	15.20	Peak	N Line	Pass
1**	0.19	36.3	11.00	55.0	18.70	AV	N Line	Pass
2	0.47	48.3	11.00	56.9	8.60	Peak	N Line	Pass
2**	0.47	36.8	11.00	46.9	10.10	AV	N Line	Pass
3	0.63	48.9	11.00	56.0	7.10	Peak	N Line	Pass
3**	0.63	33.3	11.00	46.0	12.70	AV	N Line	Pass
4	1.02	49.0	11.00	56.0	7.00	Peak	N Line	Pass
4**	1.02	35.5	11.00	46.0	10.50	AV	N Line	Pass
5	2.46	51.5	11.00	56.0	4.50	Peak	N Line	Pass
5**	2.46	32.8	11.00	46.0	13.20	AV	N Line	Pass
6	3.27	49.4	11.00	56.0	6.60	Peak	N Line	Pass
6**	3.27	34.6	11.00	46.0	11.40	AV	N Line	Pass

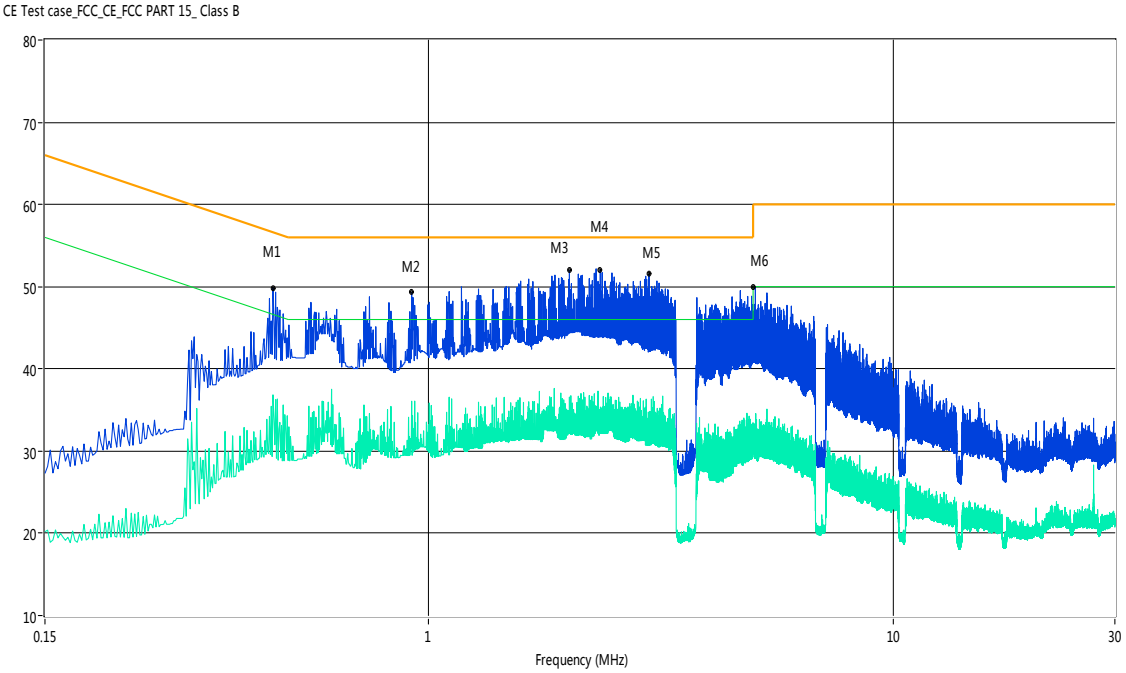
The worst test mode: The Video record test mode (xingyaun)

A.2.3 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.274	47.3	11.00	61.0	13.70	Peak	L Line	Pass
1**	0.274	32.6	11.00	51.0	18.40	AV	L Line	Pass
2	0.608	48.0	11.00	56.0	8.00	Peak	L Line	Pass
2**	0.608	36.6	11.00	46.0	9.40	AV	L Line	Pass
3	1.972	50.6	11.00	56.0	5.40	Peak	L Line	Pass
3**	1.972	33.7	11.00	46.0	12.30	AV	L Line	Pass
4	2.396	50.0	11.00	56.0	6.00	Peak	L Line	Pass
4**	2.396	34.8	11.00	46.0	11.20	AV	L Line	Pass
5	3.320	49.6	11.00	56.0	6.40	Peak	L Line	Pass
5**	3.320	35.3	11.00	46.0	10.70	AV	L Line	Pass
6	4.850	47.8	11.00	56.0	8.20	Peak	L Line	Pass
6**	4.850	28.0	11.00	46.0	18.00	AV	L Line	Pass

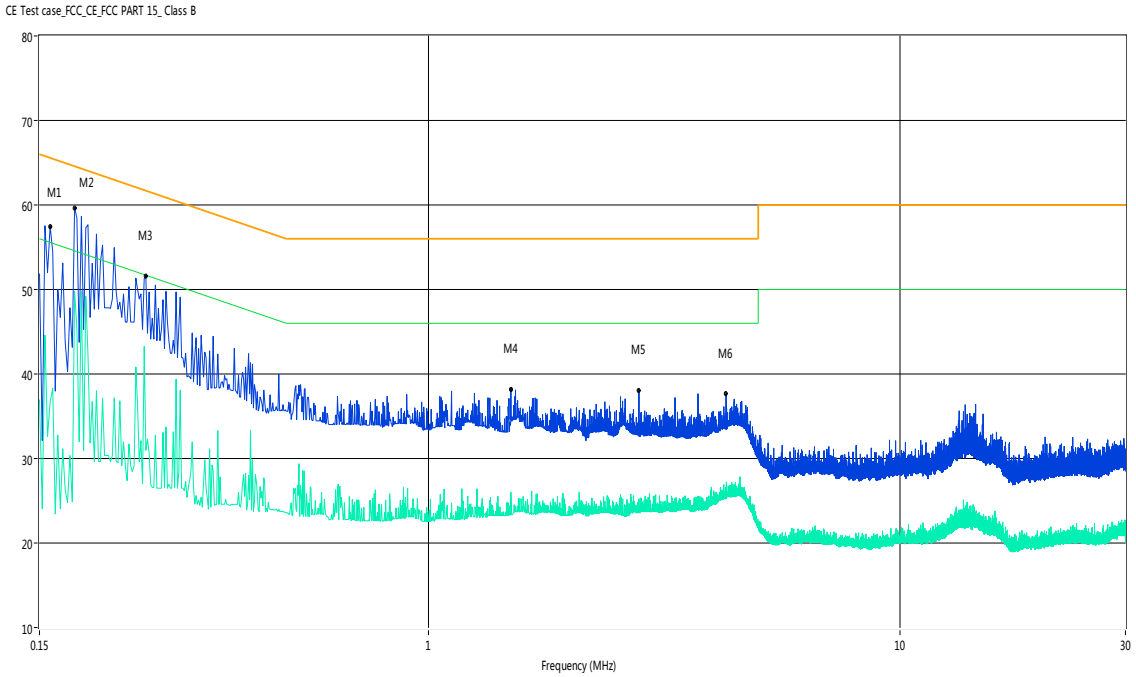
A.2.4 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.464	49.9	11.00	56.6	6.70	Peak	N Line	Pass
1**	0.464	36.8	11.00	46.6	9.80	AV	N Line	Pass
2	0.922	49.3	11.00	56.0	6.70	Peak	N Line	Pass
2**	0.922	36.1	11.00	46.0	9.90	AV	N Line	Pass
3	2.014	52.0	11.00	56.0	4.00	Peak	N Line	Pass
3**	2.014	36.6	11.00	46.0	9.40	AV	N Line	Pass
4	2.346	52.0	11.00	56.0	4.00	Peak	N Line	Pass
4**	2.346	27.2	11.00	46.0	18.80	AV	N Line	Pass
5	2.986	51.6	11.00	56.0	4.40	Peak	N Line	Pass
5**	2.986	27.8	11.00	46.0	18.20	AV	N Line	Pass
6	5.000	46.8	11.00	56.0	9.20	Peak	N Line	Pass
6**	5.000	33.0	11.00	46.0	13.00	AV	N Line	Pass

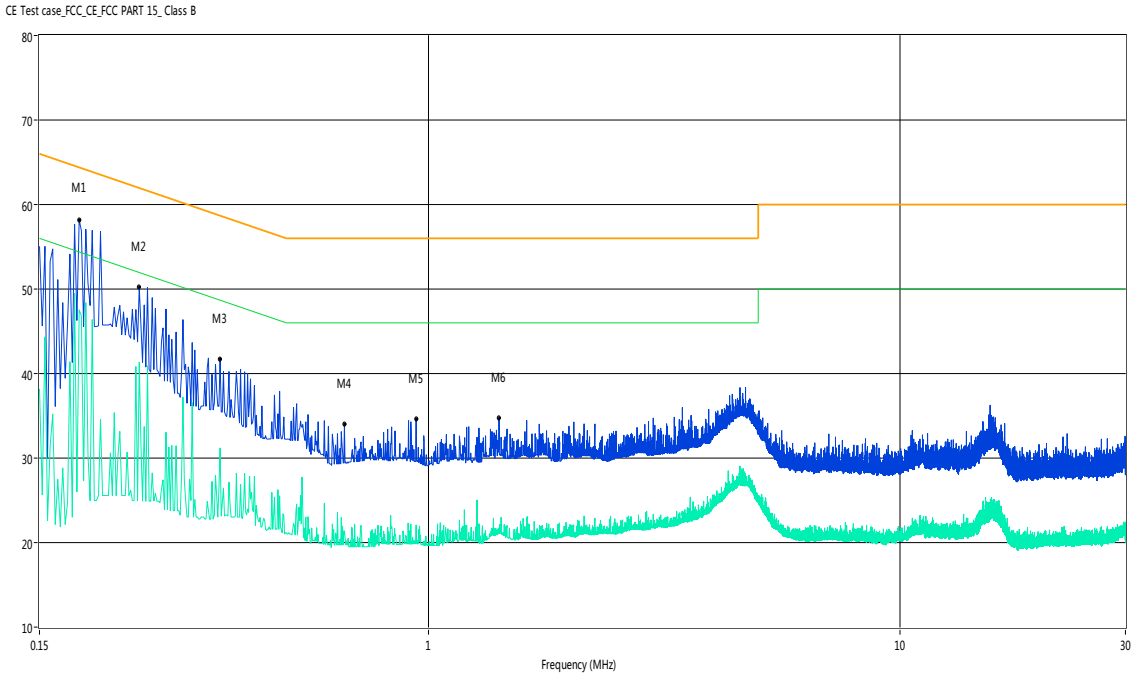
The Download test mode (xianchuang)

A.2.5 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.16	57.5	11.00	65.8	8.30	Peak	L Line	Pass
1**	0.16	36.7	11.00	55.8	19.10	AV	L Line	Pass
2	0.18	59.7	11.00	65.2	5.50	Peak	L Line	Pass
2**	0.18	49.8	11.00	55.2	5.40	AV	L Line	Pass
3	0.25	51.5	11.00	63.1	11.60	Peak	L Line	Pass
3**	0.25	31.0	11.00	53.1	22.10	AV	L Line	Pass
4	1.50	38.2	11.00	56.0	17.80	Peak	L Line	Pass
4**	1.50	26.0	11.00	46.0	20.00	AV	L Line	Pass
5	2.79	38.0	11.00	56.0	18.00	Peak	L Line	Pass
5**	2.79	25.2	11.00	46.0	20.80	AV	L Line	Pass
6	4.27	37.6	11.00	56.0	18.40	Peak	L Line	Pass
6**	4.27	26.0	11.00	46.0	20.00	AV	L Line	Pass

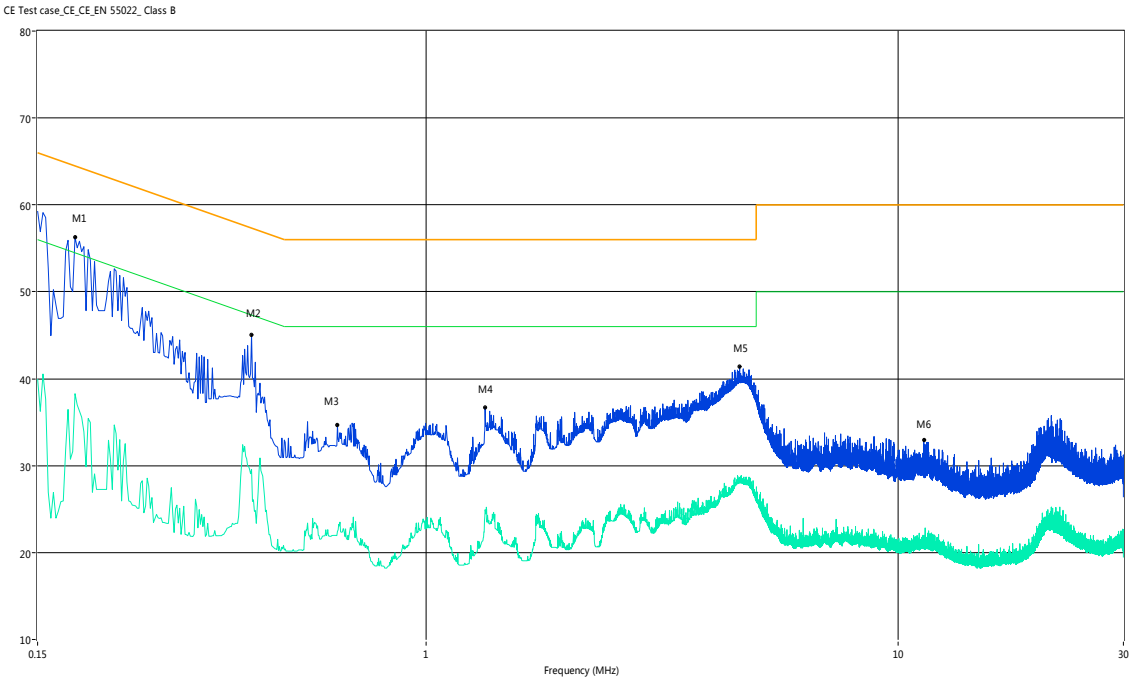
A.2.6 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.18	58.2	11.00	65.1	6.90	Peak	N Line	Pass
1**	0.18	47.5	11.00	55.1	7.60	AV	N Line	Pass
2	0.24	50.2	11.00	63.3	13.10	Peak	N Line	Pass
2**	0.24	41.3	11.00	53.3	12.00	AV	N Line	Pass
3	0.36	41.7	11.00	59.9	18.20	Peak	N Line	Pass
3**	0.36	31.2	11.00	49.9	18.70	AV	N Line	Pass
4	0.66	34.1	11.00	56.0	21.90	Peak	N Line	Pass
4**	0.66	21.4	11.00	46.0	24.60	AV	N Line	Pass
5	0.94	34.6	11.00	56.0	21.40	Peak	N Line	Pass
5**	0.94	22.1	11.00	46.0	23.90	AV	N Line	Pass
6	1.41	34.7	11.00	56.0	21.30	Peak	N Line	Pass
6**	1.41	21.7	11.00	46.0	24.30	AV	N Line	Pass

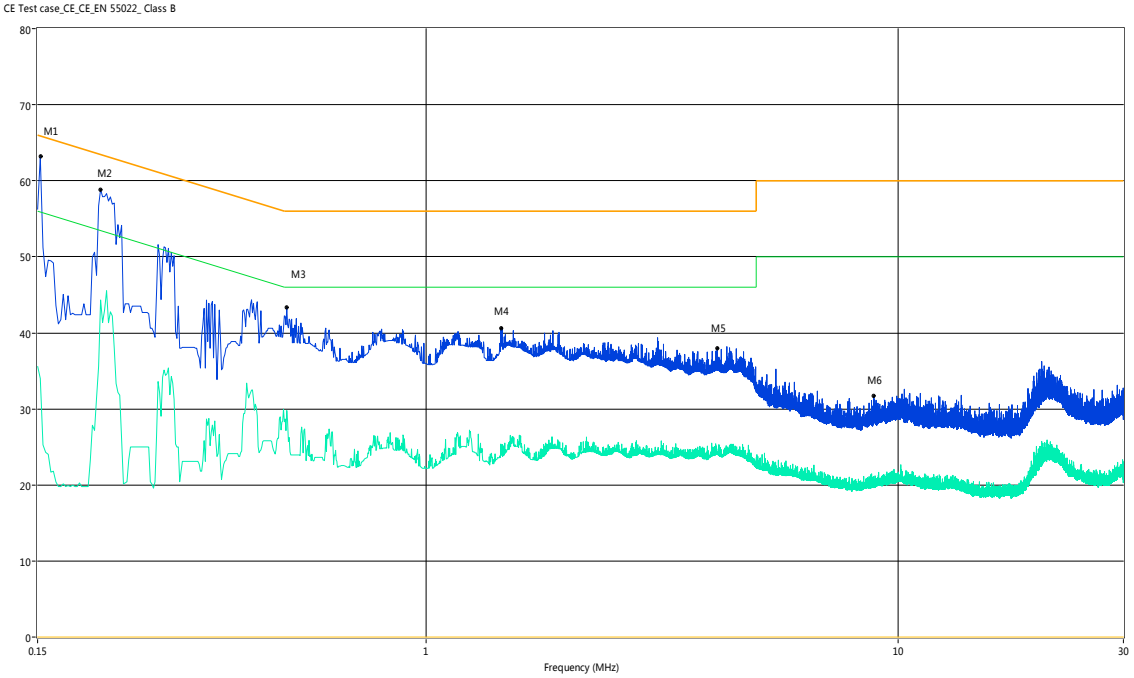
The Download test mode (xingyaun)

A.2.7 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.180	56.3	11.00	64.5	8.20	Peak	L Line	Pass
1**	0.180	38.3	11.00	54.5	16.20	AV	L Line	Pass
2	0.426	45.0	11.00	57.3	12.30	Peak	L Line	Pass
2**	0.426	29.6	11.00	47.3	17.70	AV	L Line	Pass
3	0.648	34.6	11.00	56.0	21.40	Peak	L Line	Pass
3**	0.648	22.4	11.00	46.0	23.60	AV	L Line	Pass
4	1.332	36.7	11.00	56.0	19.30	Peak	L Line	Pass
4**	1.332	24.9	11.00	46.0	21.10	AV	L Line	Pass
5	4.612	41.4	11.00	56.0	14.60	Peak	L Line	Pass
5**	4.612	28.3	11.00	46.0	17.70	AV	L Line	Pass
6	11.328	32.9	11.00	60.0	27.10	Peak	L Line	Pass
6**	11.328	21.2	11.00	50.0	28.80	AV	L Line	Pass

A.2.8 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	62.9	11.00	65.9	3.0	Peak	N Line	Pass
1**	0.152	34.0	11.00	55.9	21.90	AV	N Line	Pass
2	0.204	58.9	11.00	63.4	4.50	Peak	N Line	Pass
2**	0.204	44.3	11.00	53.4	9.10	AV	N Line	Pass
3	0.506	43.4	11.00	56.0	12.60	Peak	N Line	Pass
3**	0.506	29.8	11.00	46.0	16.20	AV	N Line	Pass
4	1.438	40.6	11.00	56.0	15.40	Peak	N Line	Pass
4**	1.438	25.4	11.00	46.0	20.60	AV	N Line	Pass
5	4.134	38.0	11.00	56.0	18.00	Peak	N Line	Pass
5**	4.134	24.4	11.00	46.0	21.60	AV	N Line	Pass
6	8.878	31.7	11.00	60.0	28.30	Peak	N Line	Pass
6**	8.878	20.7	11.00	50.0	29.30	AV	N Line	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ1690235-AE.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL- SZ1690235-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL- SZ1690235-AI.PDF”.

--END OF REPORT--