

EMC

TEST REPORT

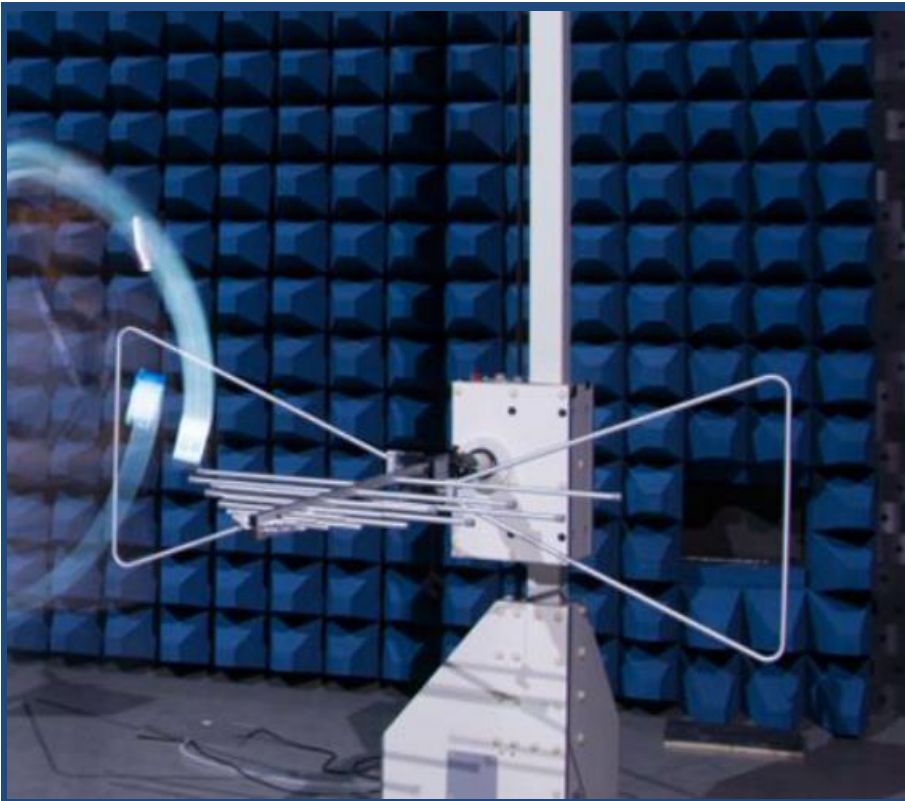
ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
Mobile Phone

ISSUED TO
Guangdong OPPO Mobile Telecommunications Corp., Ltd.

NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City,
Guangdong, China



Tested by: Zhang Guoxi

Date Jan. 20, 2022

Approved by: Liao Jianming
(Technical Director)

Date Jan. 20, 2022

Report No.: BL-SZ21B0785-401

EUT Name: Mobile Phone

Model Name: CPH2343

Brand Name: OPPO

Test Standard: 47 CFR Part 15 Subpart B

FCC ID: R9C-CPH2343

Test Conclusion: Pass

Test Date: Dec. 01, 2021 ~ Dec. 27, 2021

Date of Issue: Jan. 20, 2022

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Jan. 20, 2022</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION	4
1.1	Identification of the Testing Laboratory	4
1.2	Identification of the Responsible Testing Location	4
1.3	Laboratory Condition	4
1.4	Announce	4
2	PRODUCT INFORMATION	5
2.1	Applicant Information	5
2.2	Manufacturer Information	5
2.3	Factory Information	5
2.4	General Description for Equipment under Test (EUT)	5
2.5	Ancillary Equipment	6
2.6	Technical Information	8
3	SUMMARY OF TEST RESULTS	9
3.1	Test Standards	9
3.2	Verdict	9
3.3	Test Uncertainty	9
4	GENERAL TEST CONFIGURATIONS	10
4.1	Test Environments	10
4.2	Test Equipment List	10
4.3	Test Enclosure list	12
4.4	Test Configurations	13
4.5	Test Setups	14
4.6	Test Conditions	16
5	TEST ITEMS	17
5.1	Emission Tests	17
ANNEX A	TEST RESULTS	19

A.1	Radiated Emission	19
A.2	Conducted Emission	27
ANNEX B	TEST SETUP PHOTOS	31
ANNEX C	EUT EXTERNAL PHOTOS	31
ANNEX D	EUT INTERNAL PHOTOS	31

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 is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.
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 to 25°C
Ambient Relative Humidity	30% to 60%
Ambient Pressure	100 kPa to 102 kPa

1.4 Announce

- (1) The test report reference to the report template version v7.2.
- (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.
- (7) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

2.2 Manufacturer Information

Manufacturer	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

2.3 Factory Information

Factory	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

2.4 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	CPH2343
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	11
Software Version	ColorOS12.0.1
Dimensions (Approx.)	159.85x73.19x7.49mm
Weight (Approx.)	173g

2.5 Ancillary Equipment

Ancillary Equipment 1	Li-Polymer Battery 1	
	Brand Name	OPPO
	Model No.	BLP907
	Serial No.	N/A
	Capacitance	Rated: 4385mAh/16.96Wh Typical: 4500mAh/17.41Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	SUNWODA Electronic Co., Ltd
Ancillary Equipment 2	Li-Polymer Battery 2	
	Brand Name	OPPO
	Model No.	BLP907
	Serial No.	N/A
	Capacitance	Rated: 4385mAh/16.96Wh Typical: 4500mAh/17.41Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	Chongqing CosMX Battery Co., Ltd.
Ancillary Equipment 3	Li-Polymer Battery 3	
	Brand Name	OPPO
	Model No.	BLP907
	Serial No.	N/A
	Capacitance	Rated: 4385mAh/16.96Wh Typical: 4500mAh/17.41Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	TWS Technology (Guangzhou) Limited
Ancillary Equipment 4	Li-Polymer Battery 4	
	Brand Name	OPPO
	Model No.	BLP907
	Serial No.	N/A
	Capacitance	Rated: 4385mAh/16.96Wh Typical: 4500mAh/17.41Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	PT. Battery Technology Indonesia
Ancillary Equipment 5	Power Supply Unit 1	
	Brand Name	OPPO
	Model No.	VCB3HDUH (USA Plug)
	Serial No.	N/A(YOHOO)
	Rated Input	100-240VAC 50/60Hz 1.2A
	Rated Output	5VDC 2A or 5-11VDC 3A Max

Ancillary Equipment 6	Power Supply Unit 2	
	Brand Name	OPPO
	Model No.	VCB3HDUH (USA Plug)
	Serial No.	N/A(GOLDEN LAKE)
	Rated Input	100-240VAC 50/60Hz 1.2A
	Rated Output	5VDC 2A or 5-11VDC 3A Max
Ancillary Equipment 7	Power Supply Unit 3	
	Brand Name	OPPO
	Model No.	VCB3HDUH (USA Plug)
	Serial No.	N/A(HUNTKEY)
	Rated Input	100-240VAC 50/60Hz 1.2A
	Rated Output	5VDC 2A or 5-11VDC 3A Max
Ancillary Equipment 8	USB Cable 1	
	Model No.	DL143
	Length (Approx.)	1.0 m
Ancillary Equipment 9	USB Cable 2	
	Model No.	DL150
	Length (Approx.)	1.0 m
Ancillary Equipment 10	Headset	
	Model No.	MH156
	Length (Approx.)	1.0 m
Note 1: Letter in () means plug type. Note 2: All adapters are tested, only the worst data of VCB3HDUH-YOHOO (USA Plug) shown in this report. Note 3: All USB cable are tested, only the worst data of DL150 shown in this report. Note 4: All batteries are tested, only the worst data of BLP907 (Chongqing CosMX Battery Co., Ltd.) shown in this report.		

2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12/17/26/66 TDD LTE Band 38/41 LTE CA Uplink (UL): CA_7C, CA_38C, CA_41C 5G Network SA: NR n5/n7/n38/n41 NSA(EN-DC): NSA: DC_7A_n5A, DC_5A_n7A, DC_66A_n7A, DC_26A_n41A Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80), U-NII-1/2A/2C/3, GPS, GLONASS, BDS, Galileo, NFC
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The requirement for the following technical information of the EUT was tested in this report:

The Highest Speed of Processor	2.2GHz
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3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart B	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)	2.96 dB
Radiated emissions (30 MHz-1 GHz)	3.67 dB
Radiated emissions (1 GHz-18 GHz)	3.57 dB
Radiated emissions (18 GHz-40 GHz)	5.16 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)	20°C to 25°C	AC 120 V/60 Hz or DC 3.87V from Battery	30% to 60%	100 kPa to 102 kPa

4.2 Test Equipment List

Radiated Emission Test For Frequency Below 1 GHz (10 m)						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2021.10.08	2022.10.09	☐
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	9163-624	2019.07.02	2022.07.01	☐
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7.35m	N/A	2021.08.15	2024.08.14	☐
Test Software	BALUN	BL410_E	V19.918	--	--	☐

Radiated Emission Test For Frequency Below 1 GHz (3 m)						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	MY55330120	2021.10.20	2022.10.19	☒
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	9163-624	2019.07.02	2022.07.01	☒
Anechoic Chamber	YIHENG	9m*6m*6m	N/A	2021.09.04	2024.09.03	☒
Test Software	BALUN	BL410_E	V19.918	--	--	☒

Radiated Emission Test For Frequency 1 GHz-18 GHz						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	MY55330120	2021.10.20	2022.10.19	☒
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	9120D-1917	2019.07.02	2022.07.01	☒
Anechoic Chamber	YIHENG	9m*6m*6m	N/A	2021.09.04	2024.09.03	☒
Test Software	BALUN	BL410_E	V19.918	--	--	☒

Radiated Emission Test For Frequency Above 18 GHz						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	ROHDE & SCHWARZ	FSV40	101544	2021.04.01	2022.03.31	☒
Test Antenna-Horn	A-INFOMW	LB-180400KF	J211060273	2021.07.02	2024.07.01	☒
Anechoic Chamber	YIHENG	9m*6m*6m	N/A	2021.09.04	2024.09.03	☒
Test Software	BALUN	BL410_E	V19.918	--	--	☒

Conducted disturbance Test						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9010B	MY57110309	2021.10.10	2022.10.09	☒
LISN	SCHWARZBECK	NSLK 8127	8127-687	2021.06.08	2022.06.07	☒
Shielded Enclosure	YiHeng Electronic Co., Ltd	3.4m*3.1m*2.8m	N/A	2021.08.14	2024.08.13	☒
Test Software	BALUN	BL410_E	V19.918	--	--	☒

4.3 Test Enclosure list

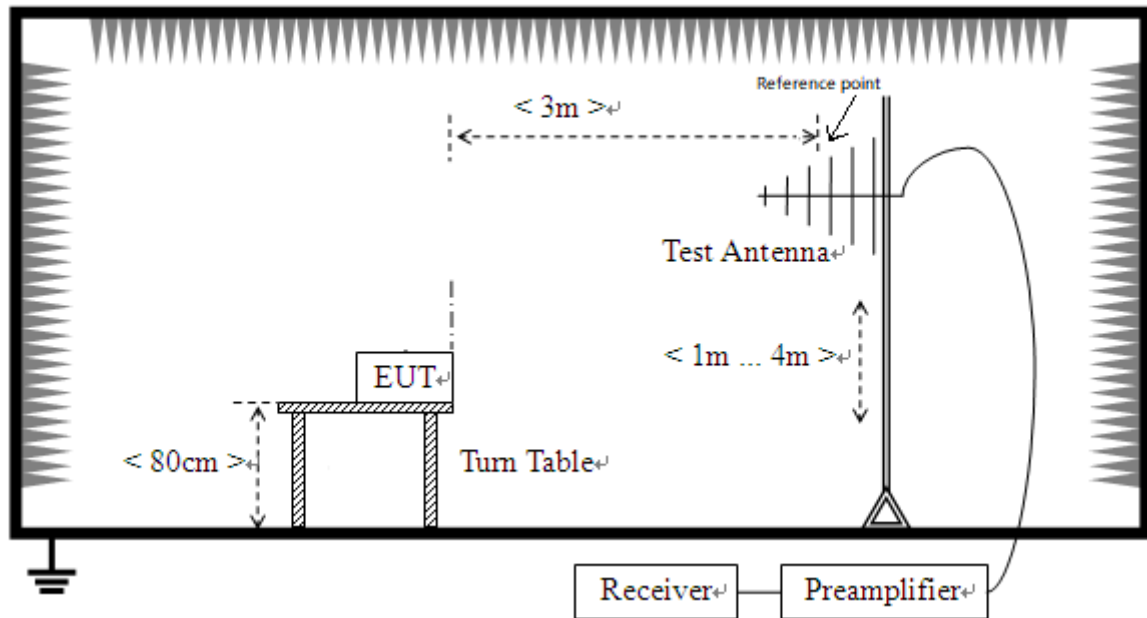
Description	Manufacturer	Model	Serial No.	Length	Description	Use
Laptop	HONOR	N/A	N/A	N/A	N/A	☒
TF Card	Kingston	N/A	N/A	N/A	N/A	☒

4.4 Test Configurations

Test Configurations (TC) No.	Description
TC01	<u>The GSM 850 MHz RX Test Mode</u> GSM 850 MHz RX + EUT +Adapter + USB Cable + Battery + Headset + TF Card
TC02	<u>The EGPRS 850 MHz RX Test Mode</u> EGPRS 850 MHz RX + EUT +Adapter + USB Cable + Battery + Headset + TF Card
TC03	<u>The WCDMA Band 5 RX Test Mode</u> WCDMA Band 5 RX + EUT +Adapter + USB Cable + Battery + Headset + TF Card
TC04	<u>The FDD LTE Band 5 RX Test Mode</u> LTE Band 5 RX + EUT +Adapter + USB Cable + Battery + Headset + TF Card
TC05	<u>The FDD LTE Band 12 RX Test Mode</u> LTE Band 12 RX + EUT +Adapter + USB Cable + Battery + Headset + TF Card
TC06	<u>The FDD LTE Band 17 RX Test Mode</u> LTE Band 17 RX + EUT +Adapter + USB Cable + Battery + Headset + TF Card
TC07	<u>The FDD LTE Band 26 RX Test Mode</u> LTE Band 26 RX + EUT +Adapter + USB Cable + Battery + Headset + TF Card
TC08	<u>The n5 RX Test Mode</u> n5 RX + EUT +Adapter + USB Cable + Battery + Headset + TF Card
TC09	<u>The Camera Test Mode</u> EUT + Adapter + USB Cable + Battery + Headset + TF Card
TC10	<u>The Video Play Test Mode</u> EUT + Adapter + USB Cable + Battery + Headset + TF Card
TC11	<u>The USB Test Mode</u> EUT + USB Cable + Battery + Laptop+ Headset + TF Card

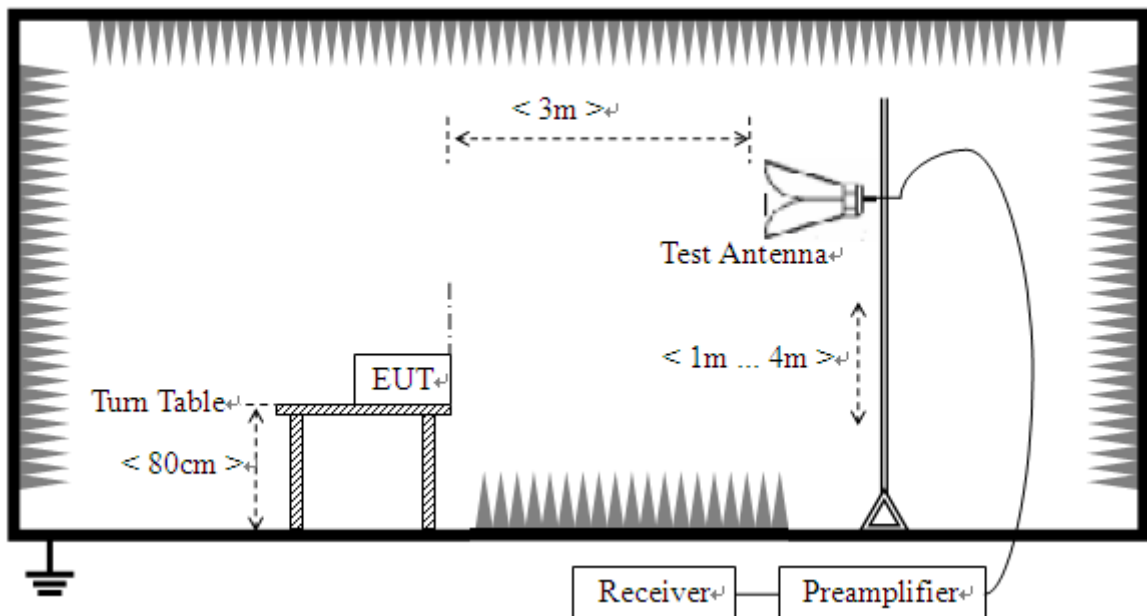
4.5 Test Setups

Test Setup 1



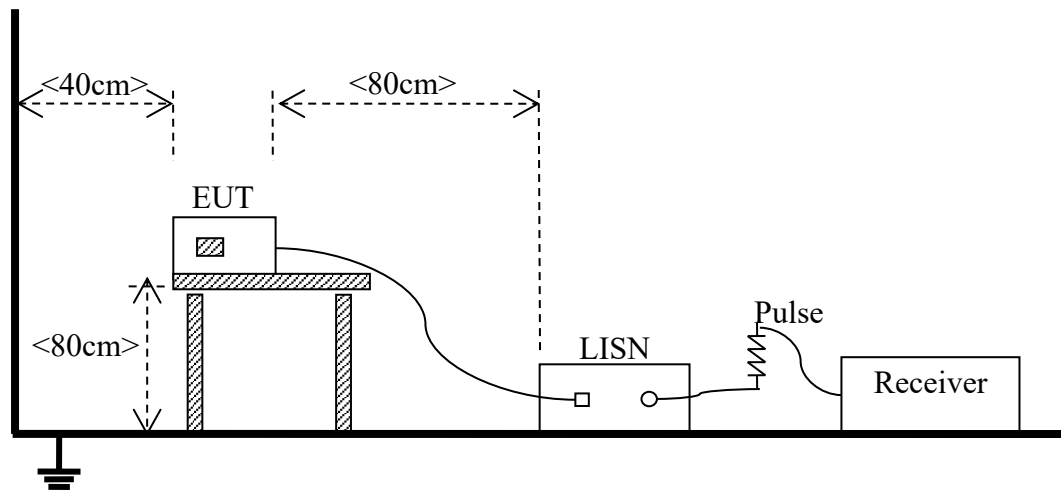
(For Radiated Emission Test (30 MHz-1 GHz))

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~TC11 Note
Conducted Emission, AC Ports	Test Env.	NTNV
	Test Setup	Test Setup 3
	Test Configuration	TC01~TC11 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 Camera 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 range (MHz)	Class B (at 3 m)		Class B (at 10 m)	Class A (at 10 m)	
	Field Strength (μV/m)	Field Strength (dBμV/m)	Field Strength (dBμV/m)	Field Strength (μV/m)	Field Strength (dBμV/m)
30 - 88	100	40	30	90	39
88 - 216	150	43.5	33.5	150	43.5
216 - 960	200	46	36	210	46.4
Above 960	500	54	44	300	49.5

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.

5.1.1.2 Test Setup

Refer to 4.5 section (test setup 1 to test setup 2) 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.

NOTE:

1. Results (dBuV/m) = Reading (dBuV/m) + Factor (dB/m)

The reading level is calculated by software which is not shown in the sheet

2. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain (dB)

3. Over limit = Results – Limit.

5.1.2 Conducted Emission

5.1.2.1 Test Limit

Frequency range (MHz)	Class A	
	Quasi-peak (dB μ V)	Average (dB μ V)
0.15 - 0.50	79	66
0.50 - 30	73	60

Frequency range (MHz)	Class B	
	Quasi-peak (dB μ V)	Average (dB μ V)
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

NOTE:

- 1) The lower limit shall apply at the band edges.
- 2) 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 μ H 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.

NOTE:

1. Results (dB μ V) = Reading (dB μ V) + Factor (dB)

The reading level is calculated by software which is not shown in the sheet

2. Factor = Insertion loss + Cable loss

3. Over limit = Results – Limit.

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.

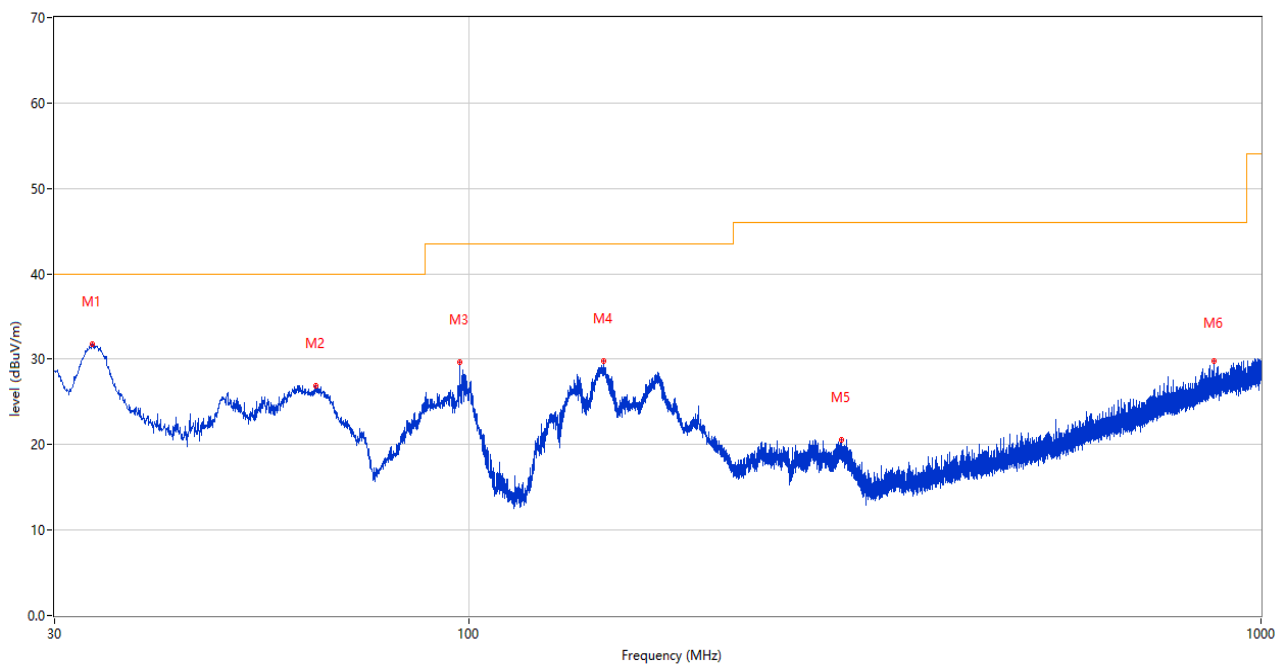
Note 3: The Radiated Emission from 18G-40G is noise only, do not show on the report.

Note 4: All the configurations were pre tested, only the worst configuration has been reported in this report.

Test Data and Plots

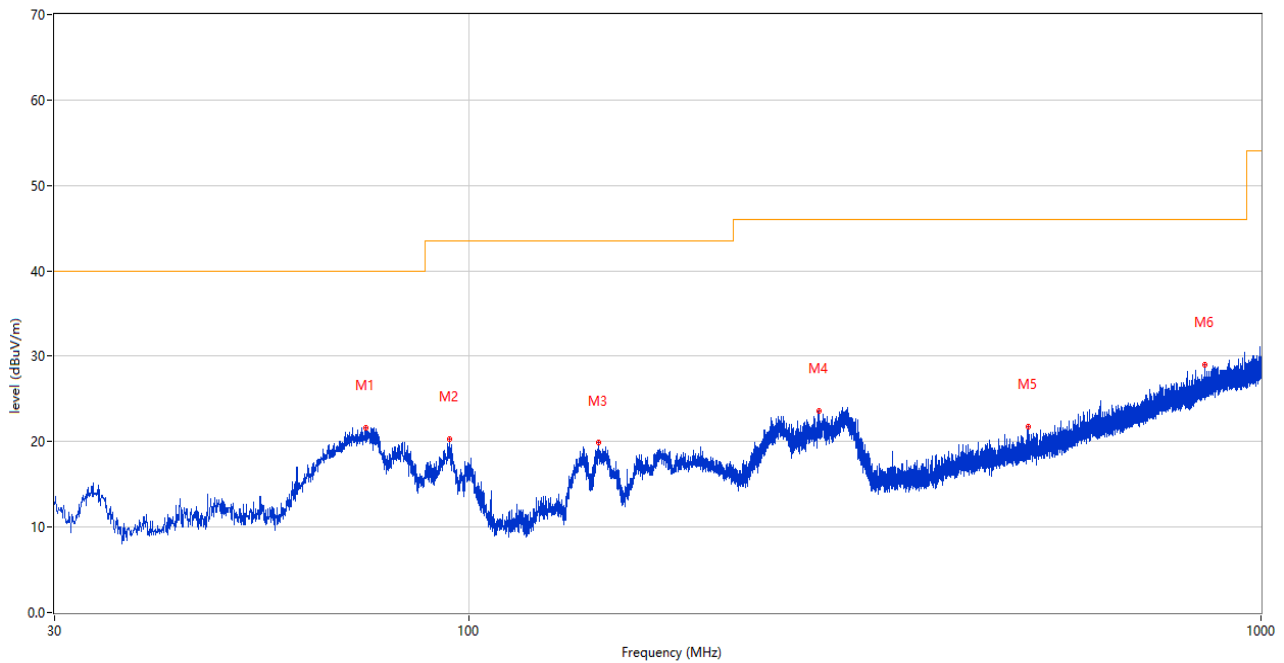
The Camera Test Mode

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



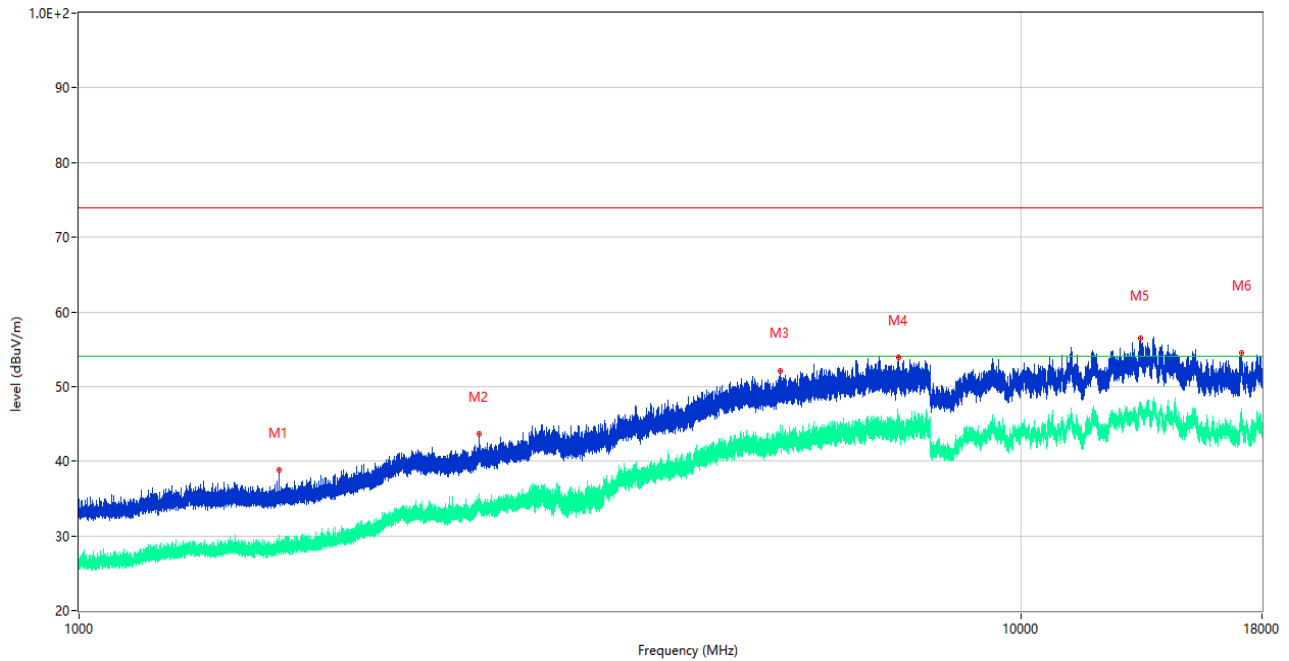
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	33.444	31.71	-28.88	40.0	-8.29	Peak	1.00	200	Vertical	Pass
2	64.144	26.90	-27.27	40.0	-13.10	Peak	202.00	100	Vertical	Pass
3	97.318	29.65	-27.17	43.5	-13.85	Peak	268.00	100	Vertical	Pass
4	147.904	29.75	-30.18	43.5	-13.75	Peak	282.00	100	Vertical	Pass
5	295.780	20.60	-23.81	46.0	-25.40	Peak	121.00	100	Vertical	Pass
6	873.124	29.79	-10.44	46.0	-16.21	Peak	1.00	200	Vertical	Pass

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



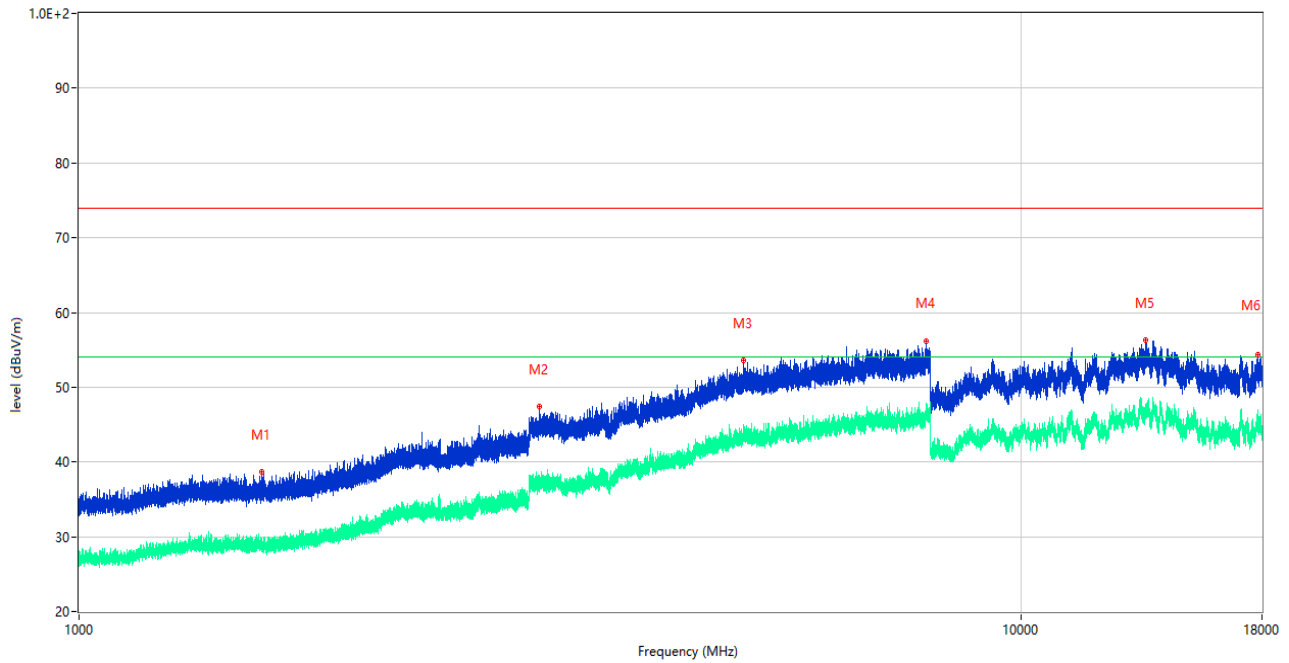
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	74.184	21.61	-30.78	40.0	-18.39	Peak	296.00	200	Horizontal	Pass
2	94.650	20.35	-27.62	43.5	-23.15	Peak	296.00	200	Horizontal	Pass
3	145.915	19.84	-30.22	43.5	-23.66	Peak	264.00	200	Horizontal	Pass
4	276.380	23.55	-24.37	46.0	-22.45	Peak	56.00	100	Horizontal	Pass
5	507.774	21.75	-18.45	46.0	-24.25	Peak	306.00	100	Horizontal	Pass
6	848.244	28.94	-10.81	46.0	-17.06	Peak	10.00	100	Horizontal	Pass

A.1.3 Test Antenna Vertical, 1 GHz – 18 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1631.300	38.77	-16.75	74.0	-35.23	Peak	0.00	150	Vertical	Pass
1**	1631.300	27.78	-16.75	54.0	-26.22	AV	0.00	150	Vertical	Pass
2	2660.700	43.61	-9.10	74.0	-30.39	Peak	0.00	150	Vertical	Pass
2**	2660.700	34.84	-9.10	54.0	-19.16	AV	0.00	150	Vertical	Pass
3	5541.250	52.10	0.86	74.0	-21.90	Peak	45.00	150	Vertical	Pass
3**	5541.250	42.52	0.86	54.0	-11.48	AV	45.00	150	Vertical	Pass
4	7409.500	53.88	2.73	74.0	-20.12	Peak	69.00	150	Vertical	Pass
4**	7409.500	46.18	2.73	54.0	-7.82	AV	69.00	150	Vertical	Pass
5	13365.500	56.46	5.13	74.0	-17.54	Peak	273.00	150	Vertical	Pass
5**	13365.500	47.11	5.13	54.0	-6.89	AV	273.00	150	Vertical	Pass
6	17108.000	54.55	3.62	74.0	-19.45	Peak	325.00	150	Vertical	Pass
6**	17108.000	45.62	3.62	54.0	-8.38	AV	325.00	150	Vertical	Pass

A.1.4 Test Antenna Horizontal, 1 GHz – 18 GHz

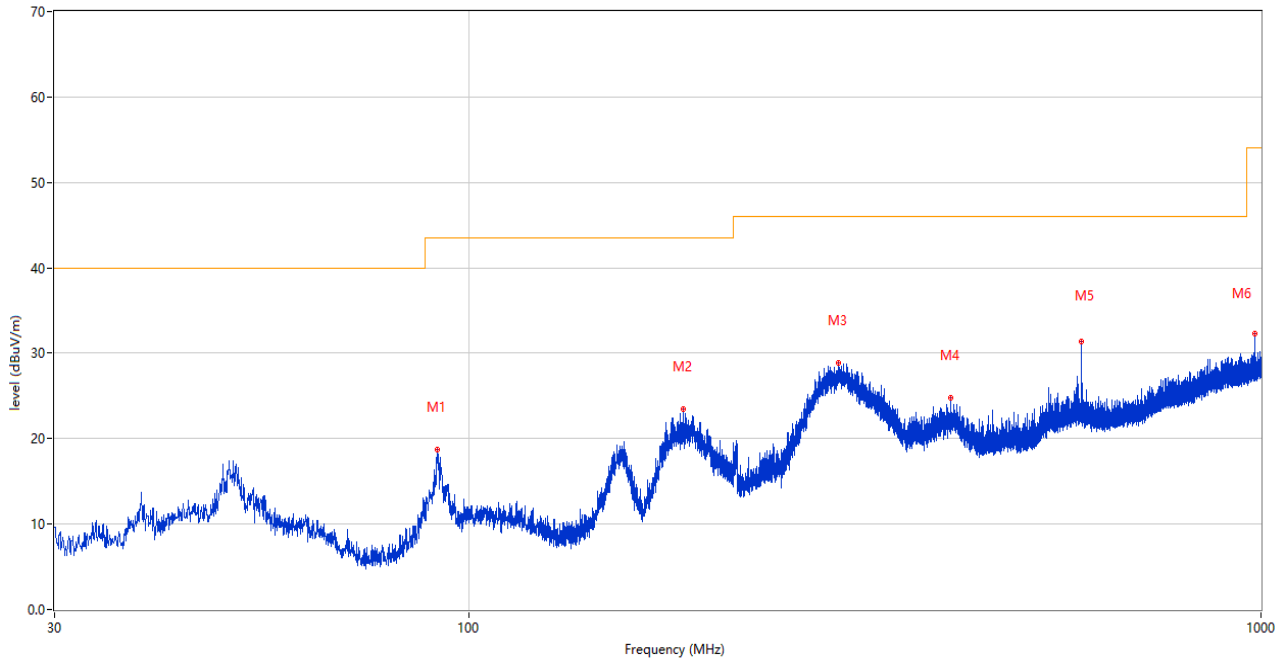


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1564.400	38.68	-16.83	74.0	-35.32	Peak	155.00	150	Horizontal	Pass
1**	1564.400	28.39	-16.83	54.0	-25.61	AV	155.00	150	Horizontal	Pass
2	3078.250	47.46	-5.90	74.0	-26.54	Peak	360.00	150	Horizontal	Pass
2**	3078.250	36.93	-5.90	54.0	-17.07	AV	360.00	150	Horizontal	Pass
3	5069.750	53.67	0.19	74.0	-20.33	Peak	91.00	150	Horizontal	Pass
3**	5069.750	43.43	0.19	54.0	-10.57	AV	91.00	150	Horizontal	Pass
4	7927.250	56.19	3.01	74.0	-17.81	Peak	175.00	150	Horizontal	Pass
4**	7927.250	47.13	3.01	54.0	-6.87	AV	175.00	150	Horizontal	Pass
5	13558.000	56.31	4.74	74.0	-17.69	Peak	209.00	150	Horizontal	Pass
5**	13558.000	45.85	4.74	54.0	-8.15	AV	209.00	150	Horizontal	Pass
6	17802.000	54.29	2.84	74.0	-19.71	Peak	106.00	150	Horizontal	Pass
6**	17802.000	45.76	2.84	54.0	-8.24	AV	106.00	150	Horizontal	Pass

Test Data and Plots

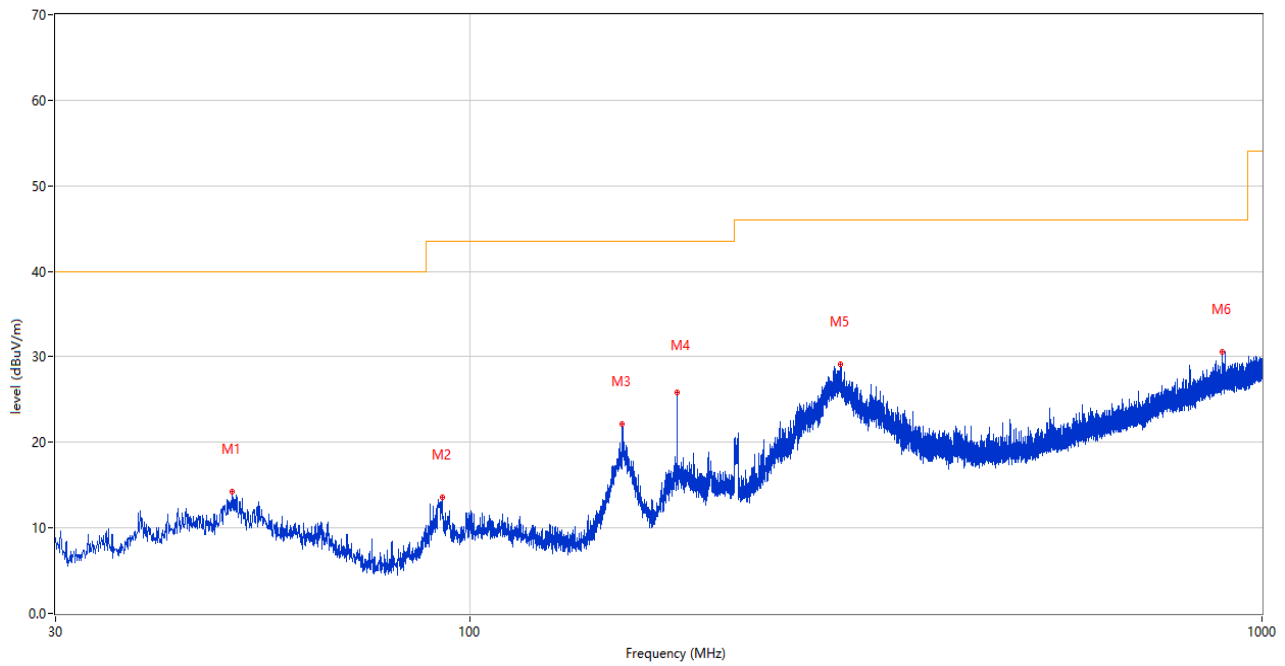
The USB Test Mode

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



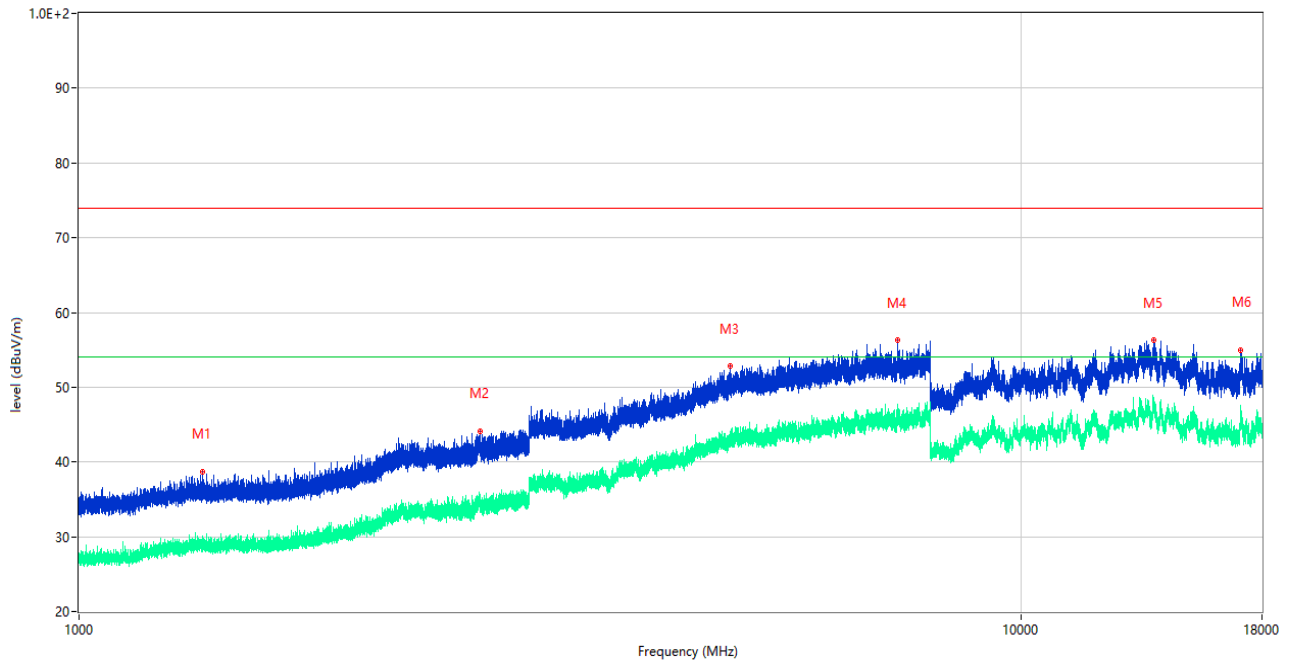
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	91.304	18.74	-28.24	43.5	-24.76	Peak	7.00	100	Vertical	Pass
2	186.316	23.43	-27.92	43.5	-20.07	Peak	71.00	100	Vertical	Pass
3	292.627	28.83	-23.90	46.0	-17.17	Peak	0.00	200	Vertical	Pass
4	405.730	24.78	-20.73	46.0	-21.22	Peak	138.00	100	Vertical	Pass
5	593.958	31.40	-16.07	46.0	-14.60	Peak	164.00	100	Vertical	Pass
6	982.540	32.24	-8.59	54.0	-21.76	Peak	83.00	200	Vertical	Pass

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



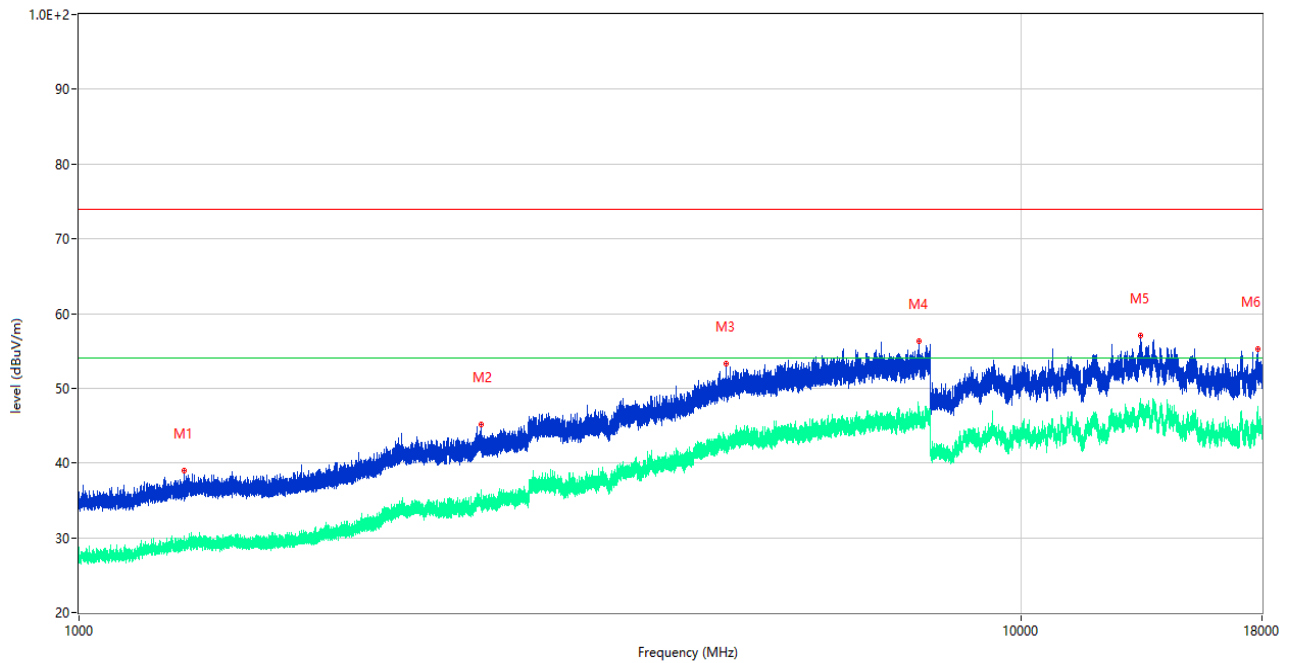
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	50.127	14.27	-25.59	40.0	-25.73	Peak	322.00	200	Horizontal	Pass
2	92.226	13.63	-28.04	43.5	-29.87	Peak	283.00	200	Horizontal	Pass
3	155.858	22.13	-29.79	43.5	-21.37	Peak	0.00	200	Horizontal	Pass
4	182.581	25.90	-28.27	43.5	-17.60	Peak	233.00	100	Horizontal	Pass
5	293.694	29.19	-23.84	46.0	-16.81	Peak	252.00	100	Horizontal	Pass
6	891.602	30.54	-10.12	46.0	-15.46	Peak	78.00	100	Horizontal	Pass

A.1.7 Test Antenna Vertical, 1 GHz – 18 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1352.000	38.66	-16.70	74.0	-35.34	Peak	304.00	150	Vertical	Pass
1**	1352.000	28.87	-16.70	54.0	-25.13	AV	304.00	150	Vertical	Pass
2	2666.300	44.04	-9.43	74.0	-29.96	Peak	246.00	150	Vertical	Pass
2**	2666.300	35.28	-9.43	54.0	-18.72	AV	246.00	150	Vertical	Pass
3	4914.750	52.86	0.93	74.0	-21.14	Peak	222.00	150	Vertical	Pass
3**	4914.750	42.80	0.93	54.0	-11.20	AV	222.00	150	Vertical	Pass
4	7398.500	56.25	2.42	74.0	-17.75	Peak	79.00	150	Vertical	Pass
4**	7398.500	46.25	2.42	54.0	-7.75	AV	79.00	150	Vertical	Pass
5	13802.000	56.36	5.79	74.0	-17.64	Peak	134.00	150	Vertical	Pass
5**	13802.000	47.39	5.79	54.0	-6.61	AV	134.00	150	Vertical	Pass
6	17099.500	54.89	3.73	74.0	-19.11	Peak	204.00	150	Vertical	Pass
6**	17099.500	46.09	3.73	54.0	-7.91	AV	204.00	150	Vertical	Pass

A.1.8 Test Antenna Horizontal, 1 GHz – 18 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1292.200	39.02	-16.83	74.0	-34.98	Peak	360.00	150	Horizontal	Pass
1**	1292.200	30.27	-16.83	54.0	-23.73	AV	360.00	150	Horizontal	Pass
2	2668.600	45.20	-9.46	74.0	-28.80	Peak	360.00	150	Horizontal	Pass
2**	2668.600	35.17	-9.46	54.0	-18.83	AV	360.00	150	Horizontal	Pass
3	4856.250	53.29	0.28	74.0	-20.71	Peak	341.00	150	Horizontal	Pass
3**	4856.250	42.80	0.28	54.0	-11.20	AV	341.00	150	Horizontal	Pass
4	7791.250	56.33	3.04	74.0	-17.67	Peak	233.00	150	Horizontal	Pass
4**	7791.250	46.67	3.04	54.0	-7.33	AV	233.00	150	Horizontal	Pass
5	13361.500	57.00	5.16	74.0	-17.00	Peak	278.00	150	Horizontal	Pass
5**	13361.500	46.90	5.16	54.0	-7.10	AV	278.00	150	Horizontal	Pass
6	17809.000	55.30	2.60	74.0	-18.70	Peak	346.00	150	Horizontal	Pass
6**	17809.000	45.80	2.60	54.0	-8.20	AV	346.00	150	Horizontal	Pass

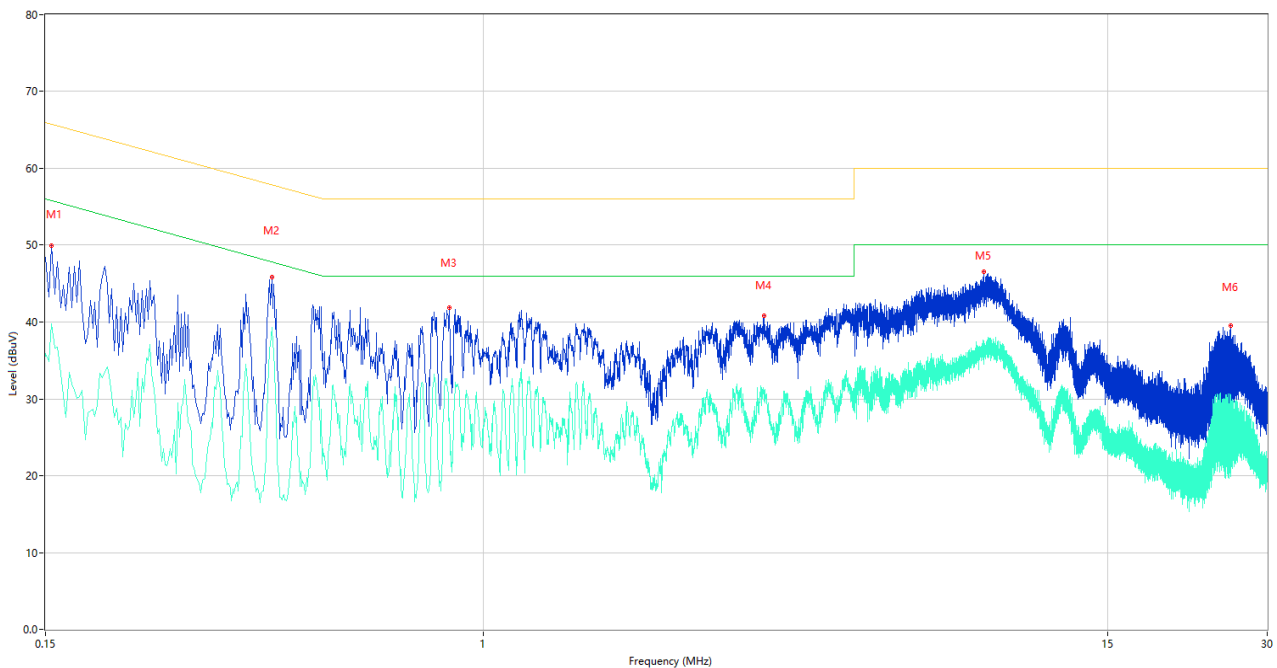
A.2 Conducted Emission

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.

Test Data and Plots

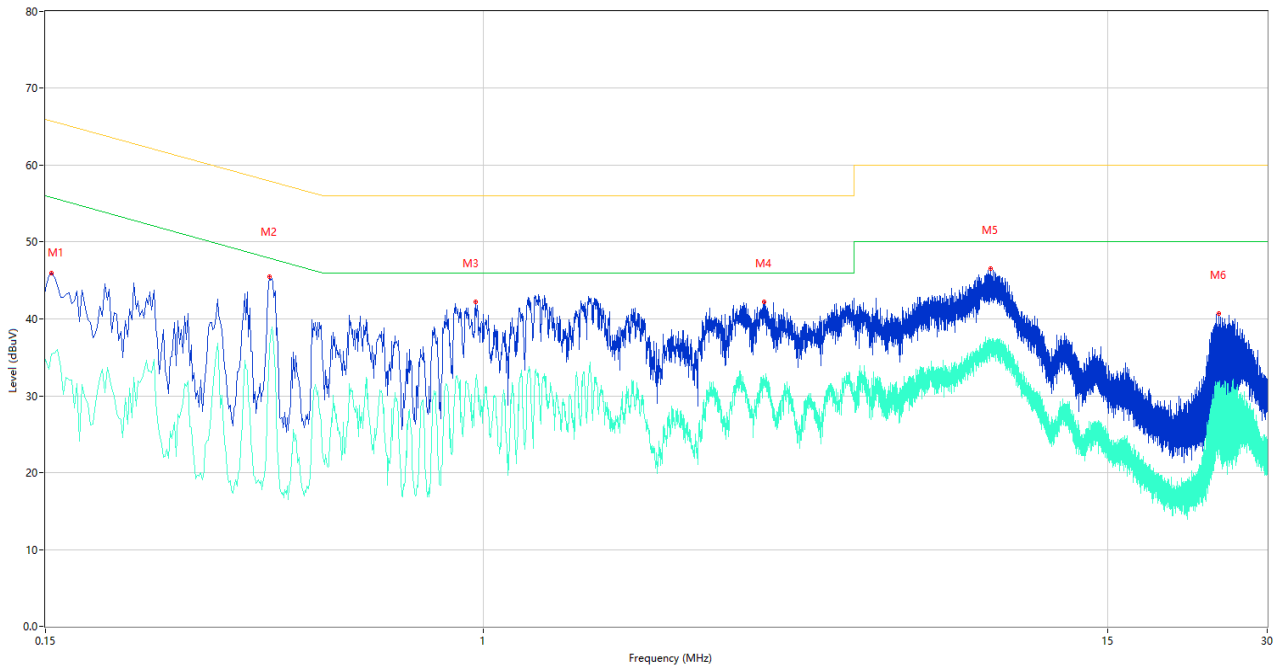
The Camera Test Mode

A.2.1 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	48.38	10.19	66.00	-17.62	Peak	L	Pass
1**	0.150	35.93	10.19	56.00	-20.07	AV	L	Pass
2	0.400	45.86	10.09	57.85	-11.99	Peak	L	Pass
2**	0.400	39.36	10.09	47.85	-8.49	AV	L	Pass
3	0.864	41.88	10.05	56.00	-14.12	Peak	L	Pass
3**	0.864	27.53	10.05	46.00	-18.47	AV	L	Pass
4	3.382	40.77	10.08	56.00	-15.23	Peak	L	Pass
4**	3.382	30.66	10.08	46.00	-15.34	AV	L	Pass
5	8.794	46.50	10.08	60.00	-13.50	Peak	L	Pass
5**	8.794	36.25	10.08	50.00	-13.75	AV	L	Pass
6	25.602	39.51	10.16	60.00	-20.49	Peak	L	Pass
6**	25.602	28.18	10.16	50.00	-21.82	AV	L	Pass

A.2.2 N Phase

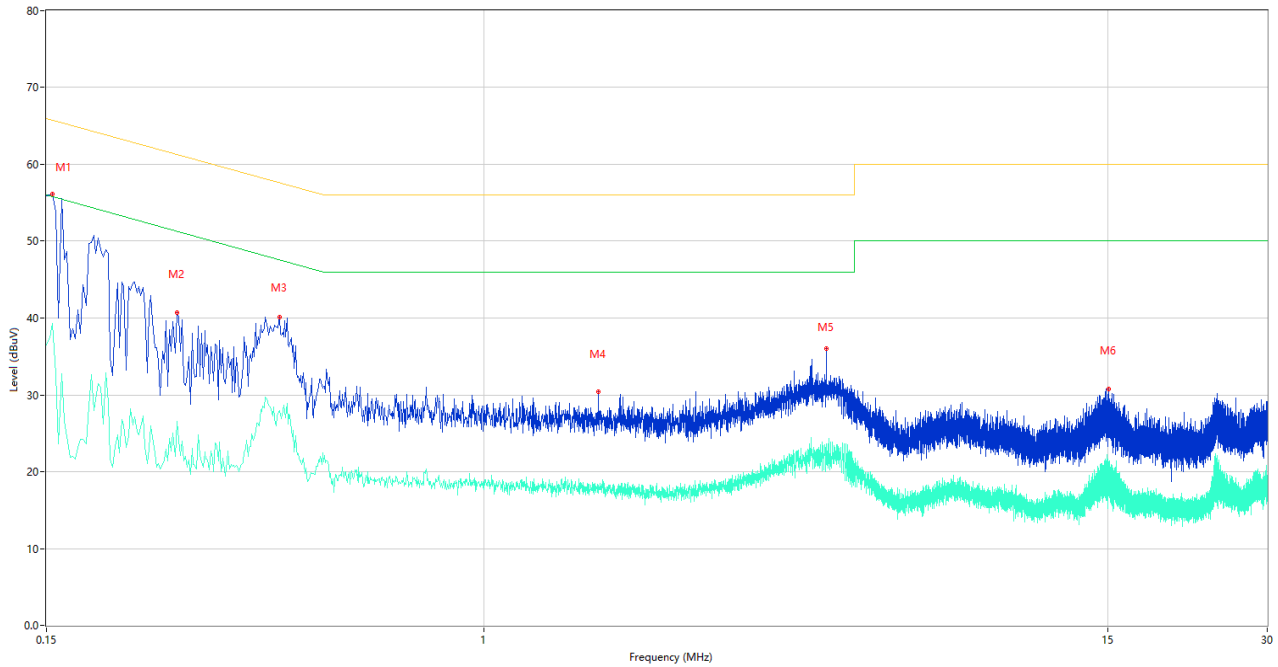


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.154	45.95	10.18	65.78	-19.83	Peak	N	Pass
1**	0.154	35.46	10.18	55.78	-20.32	AV	N	Pass
2	0.396	45.47	10.09	57.94	-12.47	Peak	N	Pass
2**	0.396	36.00	10.09	47.94	-11.94	AV	N	Pass
3	0.968	42.22	10.04	56.00	-13.78	Peak	N	Pass
3**	0.968	31.35	10.04	46.00	-14.65	AV	N	Pass
4	3.380	42.23	10.08	56.00	-13.77	Peak	N	Pass
4**	3.380	31.98	10.08	46.00	-14.02	AV	N	Pass
5	9.046	46.54	10.08	60.00	-13.46	Peak	N	Pass
5**	9.046	36.81	10.08	50.00	-13.19	AV	N	Pass
6	24.292	40.66	10.16	60.00	-19.34	Peak	N	Pass
6**	24.292	31.32	10.16	50.00	-18.68	AV	N	Pass

Test Data and Plots

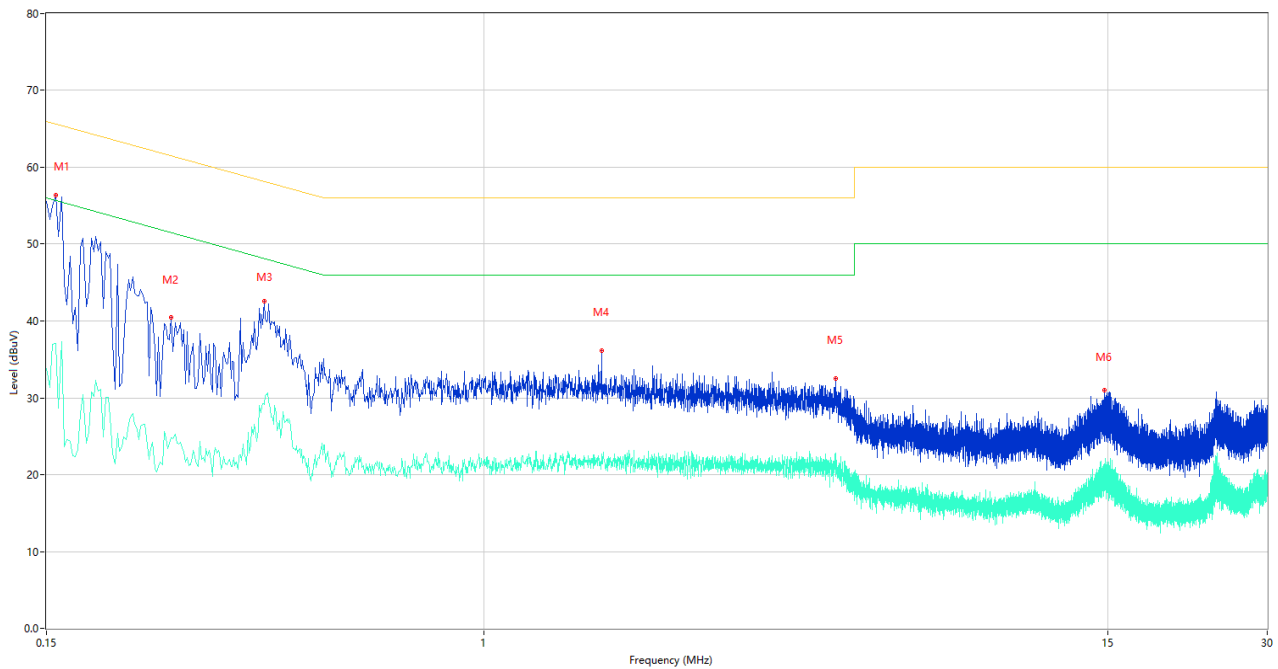
The USB Test Mode

A.2.3 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.154	56.13	10.18	65.78	-9.65	Peak	L	Pass
1**	0.154	39.29	10.18	55.78	-16.49	AV	L	Pass
2	0.264	40.75	10.08	61.30	-20.55	Peak	L	Pass
2**	0.264	26.52	10.08	51.30	-24.78	AV	L	Pass
3	0.412	40.15	10.09	57.61	-17.46	Peak	L	Pass
3**	0.412	27.93	10.09	47.61	-19.68	AV	L	Pass
4	1.648	30.43	9.92	56.00	-25.57	Peak	L	Pass
4**	1.648	18.26	9.92	46.00	-27.74	AV	L	Pass
5	4.424	36.05	10.02	56.00	-19.95	Peak	L	Pass
5**	4.424	21.87	10.02	46.00	-24.13	AV	L	Pass
6	15.080	30.78	10.14	60.00	-29.22	Peak	L	Pass
6**	15.080	20.49	10.14	50.00	-29.51	AV	L	Pass

A.2.4 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.156	56.36	10.18	65.67	-9.31	Peak	N	Pass
1**	0.156	37.03	10.18	55.67	-18.64	AV	N	Pass
2	0.258	40.51	10.08	61.50	-20.99	Peak	N	Pass
2**	0.258	24.81	10.08	51.50	-26.69	AV	N	Pass
3	0.386	42.58	10.09	58.15	-15.57	Peak	N	Pass
3**	0.386	29.07	10.09	48.15	-19.08	AV	N	Pass
4	1.668	36.14	9.92	56.00	-19.86	Peak	N	Pass
4**	1.668	22.67	9.92	46.00	-23.33	AV	N	Pass
5	4.614	32.50	9.99	56.00	-23.50	Peak	N	Pass
5**	4.614	22.81	9.99	46.00	-23.19	AV	N	Pass
6	14.790	30.99	10.14	60.00	-29.01	Peak	N	Pass
6**	14.790	20.31	10.14	50.00	-29.69	AV	N	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ21B0785-AE-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ21B0785-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ21B0785-AI.PDF”.

--END OF REPORT--