

EMC

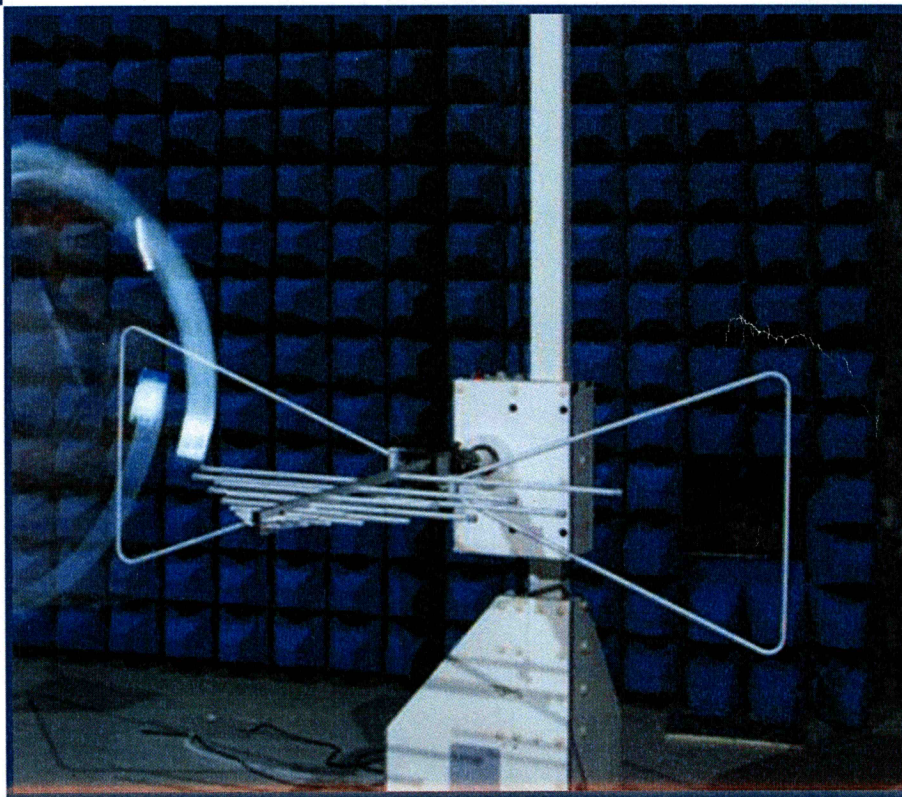
TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
Mobile Phone

ISSUED TO
Realme Chongqing Mobile Telecommunications Corp., Ltd.
No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China



Tested by: Liu Zhenxiang

Liu Zhenxiang

Date Sep. 23, 2021

Approved by: [Signature]

Liao Jianming
(Technical Director)

Date Sep. 23, 2021

Report No.: BL-SZ2170683-401
EUT Name: Mobile Phone
Model Name: RMX3430
Brand Name: realme
Test Standard: 47 CFR Part 15 Subpart B
FCC ID: 2AUYFRMX3430

Test Conclusion: Pass
Test Date: Jul. 23, 2021 ~ Aug. 09, 2021
Date of Issue: Sep. 23, 2021

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 16, 2021</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Sep. 23, 2021</u>	<u>Updated Section 4.4 Test Configurations</u>

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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 refer to the BALUN report mode v7.0.
- (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	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

2.2 Manufacturer Information

Manufacturer	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

2.3 Factory Information

Factory	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

2.4 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	RMX3430
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	11
Software Version	realme UI V2.0
Dimensions (Approx.)	164.5*75.9*9.6mm
Weight (Approx.)	207g(with battery)

2.5 Ancillary Equipment

Ancillary Equipment 1	Li-Polymer Battery 1	
	Brand Name	realme
	Model No.	BLP793
	Serial No.	N/A
	Capacitance	Rated: 5860mAh/22.67Wh Typical: 6000mAh/23.22Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	Sunwoda Electronic Co., Ltd.
Ancillary Equipment 2	Li-Polymer Battery (alternative) 2	
	Brand Name	realme
	Model No.	BLP793
	Serial No.	N/A
	Capacitance	Rated: 5860mAh/22.67Wh Typical: 6000mAh/23.22Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	Dongguan NVT Technology Co., Ltd.
Ancillary Equipment 3	Li-Polymer Battery (alternative) 3	
	Brand Name	realme
	Model No.	BLP793
	Serial No.	N/A
	Capacitance	Rated: 5860mAh/22.67Wh Typical: 6000mAh/23.22Wh
	Rated Voltage	3.87 V
	Limited Voltage	4.45 V
	Manufacturer	TWS Technology (Guangzhou) Limited
Ancillary Equipment 4	Power Supply Unit 1	
	Brand Name	realme
	Model No.	OP92JAUH
	Serial No.	N/A
	Rated Input	100-240VAC~ 50/60Hz 0.5A
	Rated Output	5VDC 2A or 9VDC 2A (US Plug)
Ancillary Equipment 5	Power Supply Unit (alternative) 2	
	Brand Name	realme
	Model No.	OP92CAUH
	Serial No.	N/A
	Rated Input	100-240VAC~ 50/60Hz 0.5A
	Rated Output	5VDC 2A or 9VDC 2A (US Plug)
Ancillary Equipment 6	Power Supply Unit (alternative) 3	

	Brand Name	realme
	Model No.	OP92YAUH
	Serial No.	N/A
	Rated Input	100-240VAC~ 50/60Hz 0.5A
	Rated Output	5VDC 2A or 9VDC 2A (US Plug)
Ancillary Equipment 7	USB Cable	
	Model No.	DL143
	Length (Approx.)	1.0 m
Note 1: Letter in () means plug type. Note 2: All adapters are tested, only the worst data of OP92CAUH (US Plug 100-240VAC) shown in this report. Note 3: All battery's are tested, only the worst data of BLP793 (Sunwoda Electronic 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 5 4G Network LTE FDD Band 5/7 LTE TDD Band 38/41 Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80) U-NII-1/2A/2C/3, GPS, GLONASS, BDS, SBAS, 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	2.0 GHz
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3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart B (10-1-19 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)	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 3.87 V 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&SCHWA RZ	ESRP	101036	2021.06.01	2022.05.31	☐
Test Antenna- Bi-Log	SCHWARZBECK	VULB 9168	9168-0883	2020.05.11	2022.05.10	☐
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60 *7.35m	N/A	2018.08.08	2022.08.07	☐
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	MY53220118	2020.09.18	2021.09.17	☒
Test Antenna- Bi-Log	SCHWARZBECK	VULB 9163	9163-624	2019.07.02	2022.07.01	☒
Anechoic Chamber	YIHENG	9m*6m*6m	N/A	2018.07.18	2022.07.17	☒
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	MY53220118	2020.09.18	2021.09.17	☒
Test Antenna- Horn	SCHWARZBECK	BBHA 9120D	9120D-1917	2019.07.02	2022.07.01	☒
Anechoic Chamber	YIHENG	9m*6m*6m	N/A	2018.07.18	2022.07.17	☒
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-	A-INFOMW	LB-	J211060273	2021.01.05	2023.01.04	☒

Radiated Emission Test For Frequency Above 18 GHz						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
Horn		180400KF				
Anechoic Chamber	YIHENG	9m*6m*6m	N/A	2018.07.18	2022.07.17	☒
Test Software	BALUN	BL410_E	V19.918	--	--	☒

Conducted disturbance Test						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9010B	MY5711030 9	2021.06.01	2022.05.31	☒
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	2018.08.16	2021.08.15	☒
Test Software	BALUN	BL410_E	V19.918	--	--	☒

4.3 Test Enclosure list

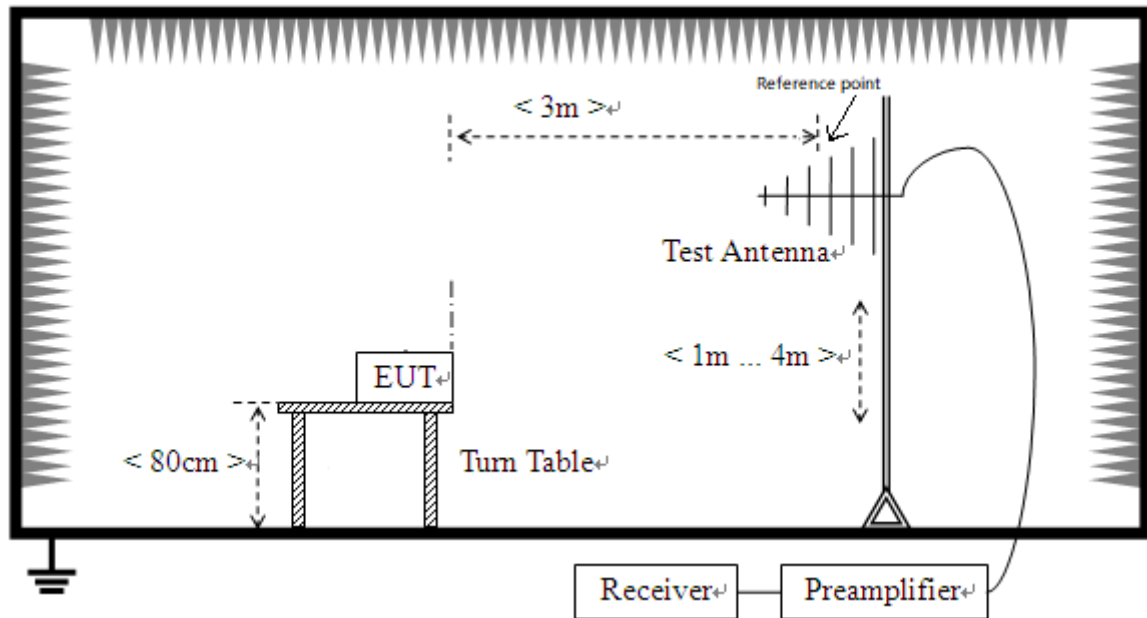
Description	Manufacturer	Model	Serial No.	Length	Description	Use
PC	Dell	015K3N	N/A	N/A	Special Handled	☐
Laptop	Apple	A1465	N/A	N/A	N/A	☒
Printer	HP	DESKJET 1000	N/A	N/A	N/A	☐
Keyboard	Logitech	Y-BP62a	N/A	N/A	N/A	☐
Mouse	Logitech	M100	N/A	N/A	N/A	☐
USB disk	Kingston	N/A	N/A	N/A	N/A	☐
TF Card	Kingston	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	☐
Bluetooth Earphone	SAMSUNG	Gear Circle	N/A	N/A	N/A	☐
Wireless Communication s Test Set	R&S	CMW500	142028	N/A	Cal. Due 2022.06.07	☐
WIFI Router	TP-LINK	TL-WDR7500	N/A	N/A	N/A	☐
Earphone	N/A	OPPO	N/A	1.1 m	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	ITECH	IT6863A	60001401068 7210006	N/A	N/A	☐
LCD Monitor	SAMSUNG	UA32C4000P	N/A	N/A	N/A	☐
LCD Monitor	Dell	U241HB	N/A	N/A	N/A	☐
RJ45 Cable	N/A	N/A	N/A	1.5 m	Shielded with core	☐

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
TC02	<u>The EGPRS 850 MHz RX Test Mode</u> EGPRS 850 MHz RX + EUT +Adapter + USB Cable + Battery
TC03	<u>The WCDMA Band 5 RX Test Mode</u> WCDMA Band 5 RX + EUT +Adapter + USB Cable + Battery
TC04	<u>The FDD LTE Band 5 RX Test Mode</u> LTE Band 5 RX + EUT +Adapter + USB Cable + Battery
TC05	<u>The FDD LTE Band 12 RX Test Mode</u> LTE Band 12 RX + EUT +Adapter + USB Cable + Battery
TC06	<u>The FDD LTE Band 17 RX Test Mode</u> LTE Band 17 RX + EUT +Adapter + USB Cable + Battery
TC07	<u>The Camera Test Mode</u> EUT + Adapter + USB Cable + Battery + Earphone + TF Card
TC08	<u>The Video Play Test Mode</u> EUT + Adapter + USB Cable + Battery + Earphone + TF Card
TC09	<u>The USB Test Mode</u> EUT + USB Cable + Battery + Laptop+ Earphone + TF Card

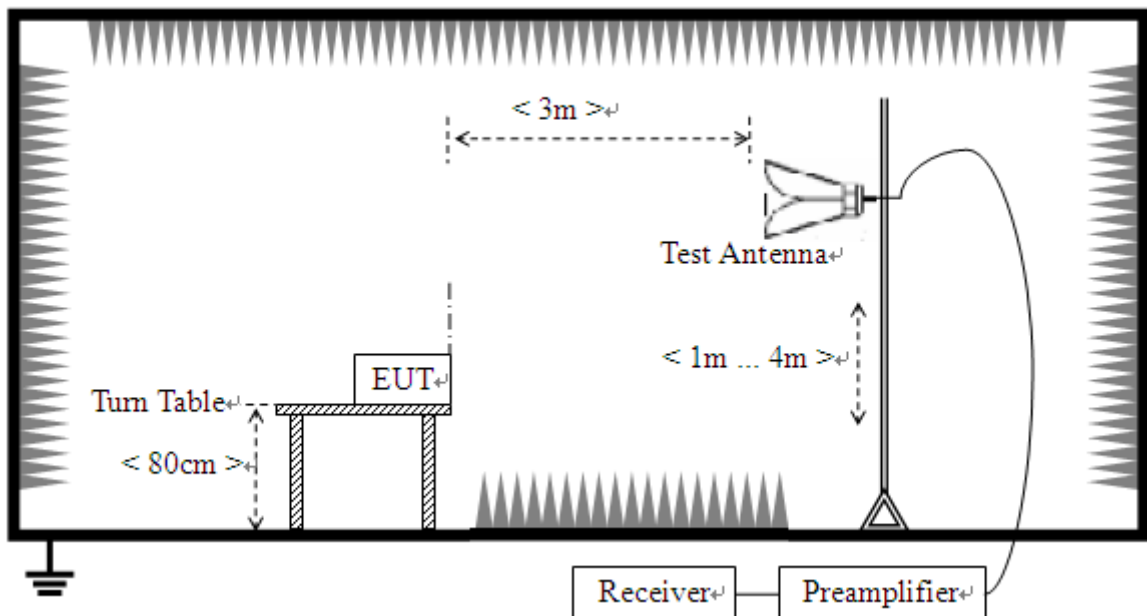
4.5 Test Setups

Test Setup 1



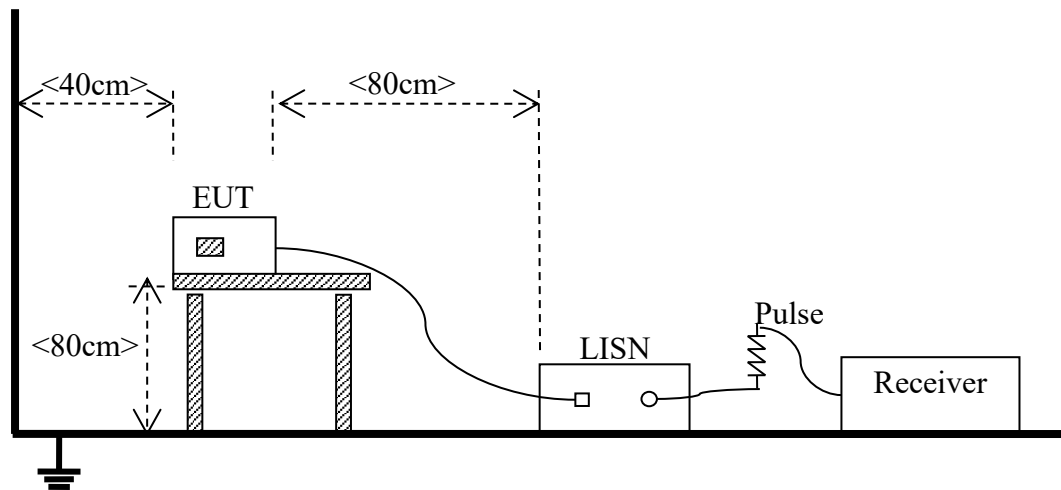
(For Radiated Emission Test (30 MHz-1 GHz))

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~TC07 ^{Note}
Conducted Emission, AC Ports	Test Env.	NTNV
	Test Setup	Test Setup 3
	Test Configuration	TC01~TC07 ^{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 ($\mu\text{V/m}$)	Field Strength (dB $\mu\text{V/m}$)	Field Strength (dB $\mu\text{V/m}$)	Field Strength ($\mu\text{V/m}$)	Field Strength (dB $\mu\text{V/m}$)
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 (dB $\mu\text{V/m}$) = $20 \times \log [\text{Field Strength } (\mu\text{V/m})]$.
- 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 (dB $\mu\text{V/m}$) = Reading (dB μV) + 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/m) = Reading (dB μ V) + Factor (dB/m)

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.

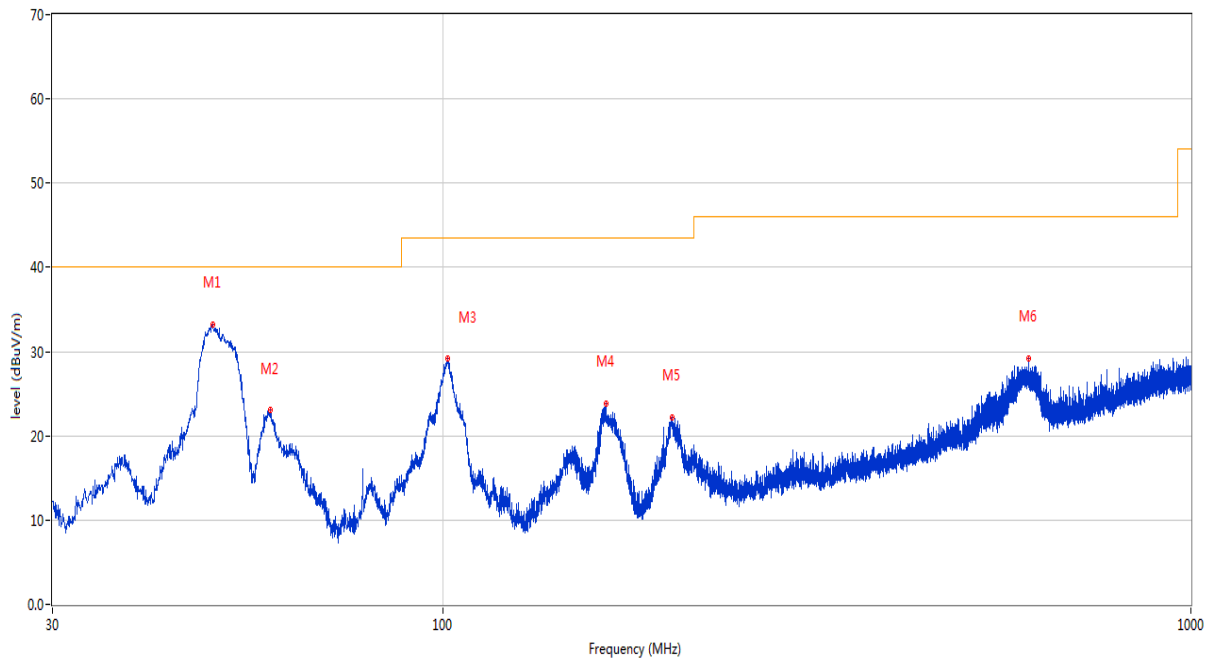
Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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

Test Data and Plots

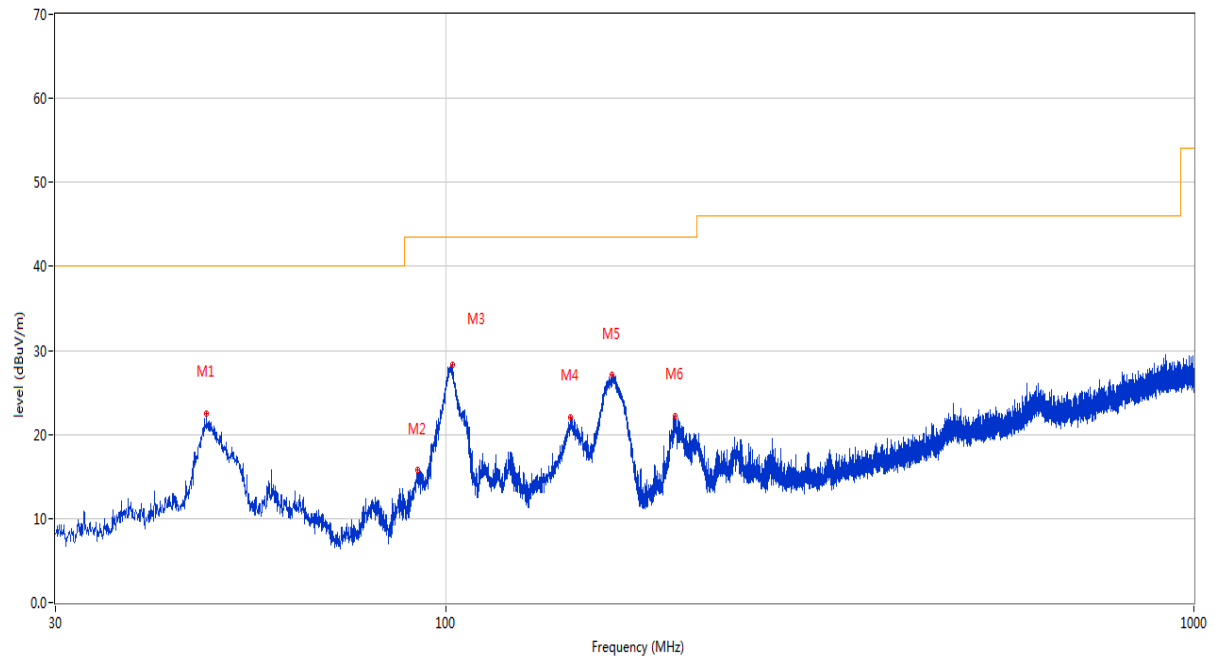
The Camera Test Mode

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



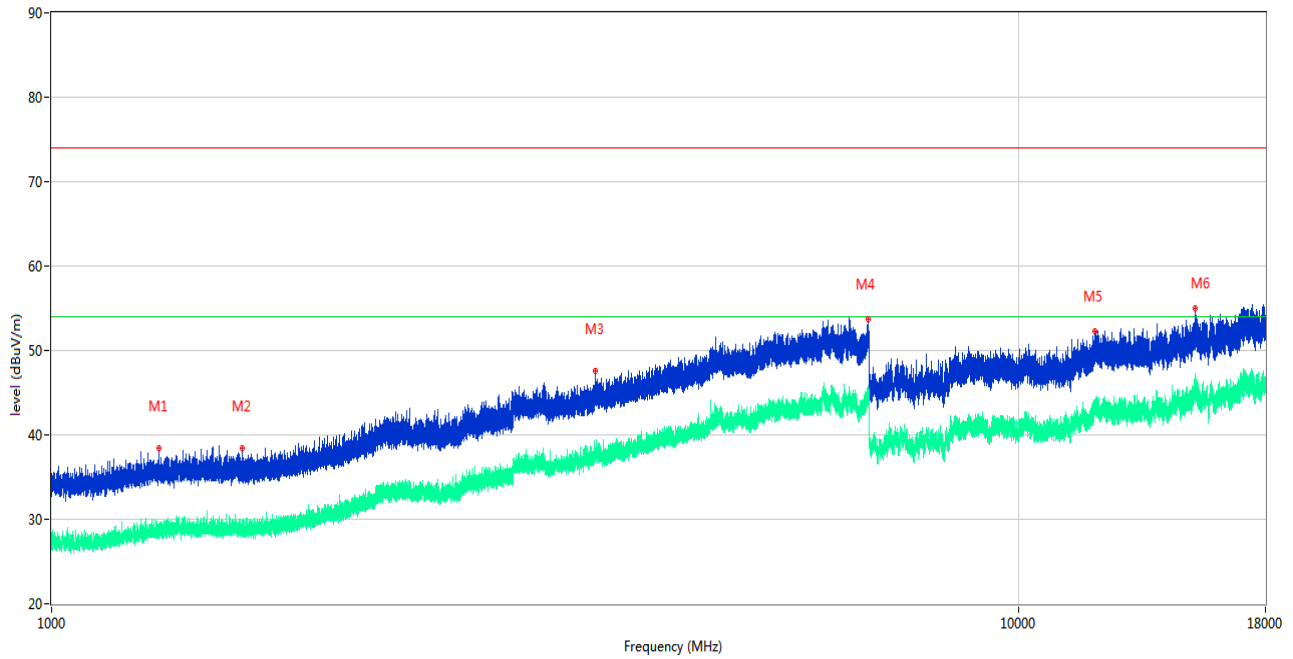
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	49.109	33.28	-22.41	40.0	-6.72	Peak	205.70	100	Vertical	Pass
2	58.761	23.04	-24.04	40.0	-16.96	Peak	174.30	100	Vertical	Pass
3	101.198	29.14	-24.63	43.5	-14.36	Peak	79.60	100	Vertical	Pass
4	164.878	23.82	-26.78	43.5	-19.68	Peak	253.30	100	Vertical	Pass
5	202.078	22.25	-23.78	43.5	-21.25	Peak	226.90	100	Vertical	Pass
6	607.489	29.12	-14.47	46.0	-16.88	Peak	190.00	100	Vertical	Pass

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



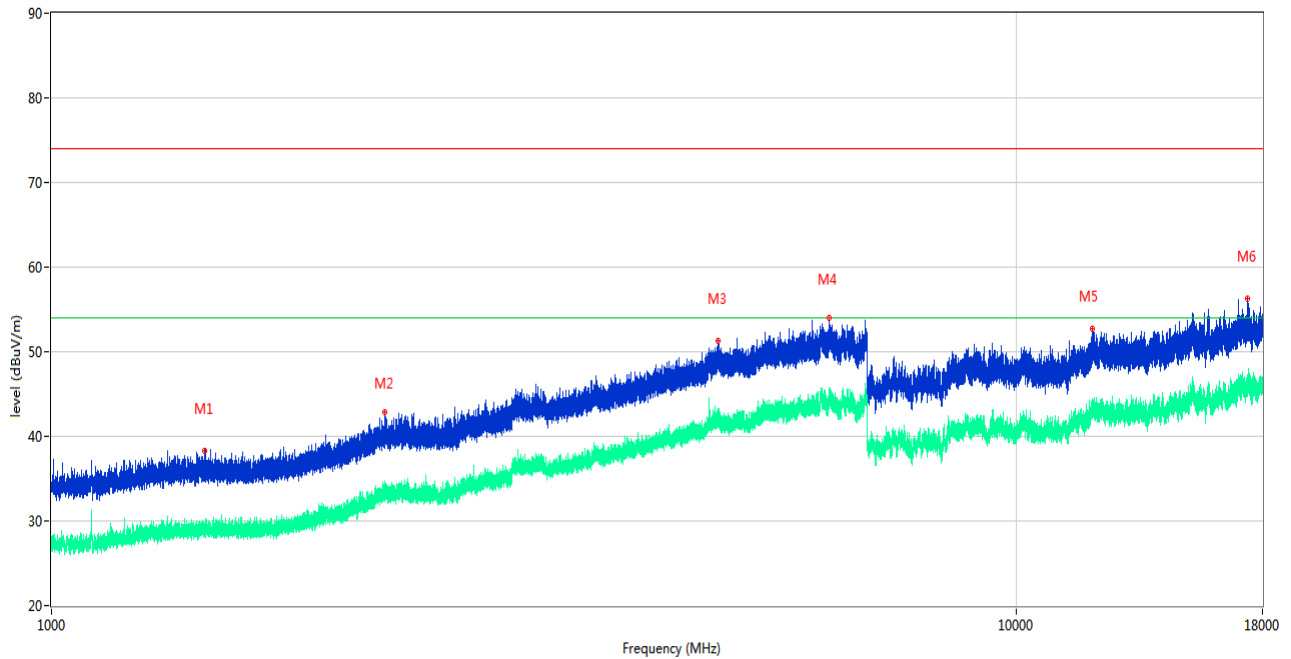
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	47.751	22.52	-22.70	40.0	-17.48	Peak	154.60	200	Horizontal	Pass
2	91.595	15.82	-25.72	43.5	-27.68	Peak	297.40	200	Horizontal	Pass
3	101.925	28.36	-24.54	43.5	-15.14	Peak	297.40	200	Horizontal	Pass
4	146.546	22.05	-27.62	43.5	-21.45	Peak	20.50	200	Horizontal	Pass
5	166.624	27.04	-26.85	43.5	-16.46	Peak	0.00	200	Horizontal	Pass
6	202.223	22.13	-23.76	43.5	-21.37	Peak	328.90	200	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	1291.600	38.38	-17.49	74.0	-35.62	Peak	276.00	150	Vertical	Pass
1**	1291.600	28.37	-17.49	54.0	-25.63	AV	276.00	150	Vertical	Pass
2	1574.900	38.42	-17.55	74.0	-35.58	Peak	54.00	150	Vertical	Pass
2**	1574.900	28.49	-17.55	54.0	-25.51	AV	54.00	150	Vertical	Pass
3	3651.000	47.62	-6.21	74.0	-26.38	Peak	299.00	150	Vertical	Pass
3**	3651.000	38.04	-6.21	54.0	-15.96	AV	299.00	150	Vertical	Pass
4	6993.000	53.71	0.28	74.0	-20.29	Peak	284.00	150	Vertical	Pass
4**	6993.000	44.30	0.28	54.0	-9.70	AV	284.00	150	Vertical	Pass
5	11999.912	52.27	1.28	74.0	-21.73	Peak	260.00	150	Vertical	Pass
5**	11999.912	43.54	1.28	54.0	-10.46	AV	260.00	150	Vertical	Pass
6	15239.550	54.95	0.96	74.0	-19.05	Peak	284.00	150	Vertical	Pass
6**	15239.550	45.67	0.96	54.0	-8.33	AV	284.00	150	Vertical	Pass

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

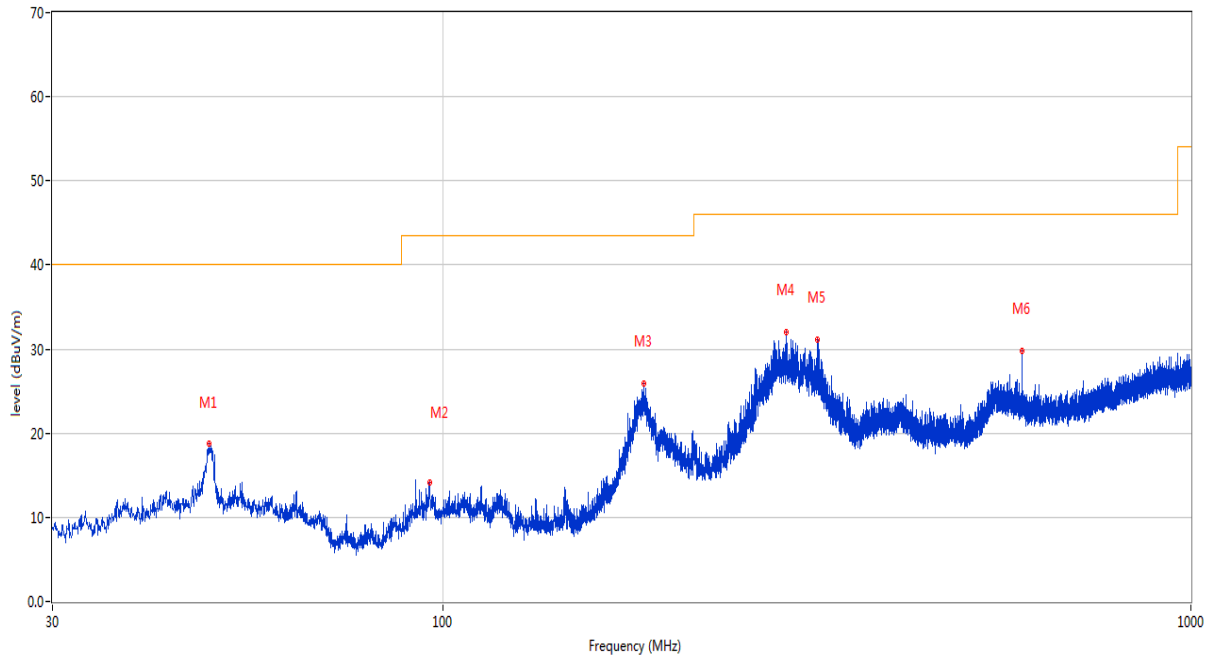


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1440.600	38.24	-17.46	74.0	-35.76	Peak	329.00	150	Horizontal	Pass
1**	1440.600	29.63	-17.46	54.0	-24.37	AV	329.00	150	Horizontal	Pass
2	2217.800	42.85	-12.77	74.0	-31.15	Peak	-3.00	150	Horizontal	Pass
2**	2217.800	33.65	-12.77	54.0	-20.35	AV	-3.00	150	Horizontal	Pass
3	4912.000	51.34	-2.34	74.0	-22.66	Peak	359.00	150	Horizontal	Pass
3**	4912.000	42.34	-2.34	54.0	-11.66	AV	359.00	150	Horizontal	Pass
4	6404.200	53.94	-0.84	74.0	-20.06	Peak	125.00	150	Horizontal	Pass
4**	6404.200	44.40	-0.84	54.0	-9.60	AV	125.00	150	Horizontal	Pass
5	11998.763	52.69	1.26	74.0	-21.31	Peak	286.00	150	Horizontal	Pass
5**	11998.763	43.09	1.26	54.0	-10.91	AV	286.00	150	Horizontal	Pass
6	17368.162	56.25	2.39	74.0	-17.75	Peak	104.00	150	Horizontal	Pass
6**	17368.162	47.06	2.39	54.0	-6.94	AV	104.00	150	Horizontal	Pass

Test Data and Plots

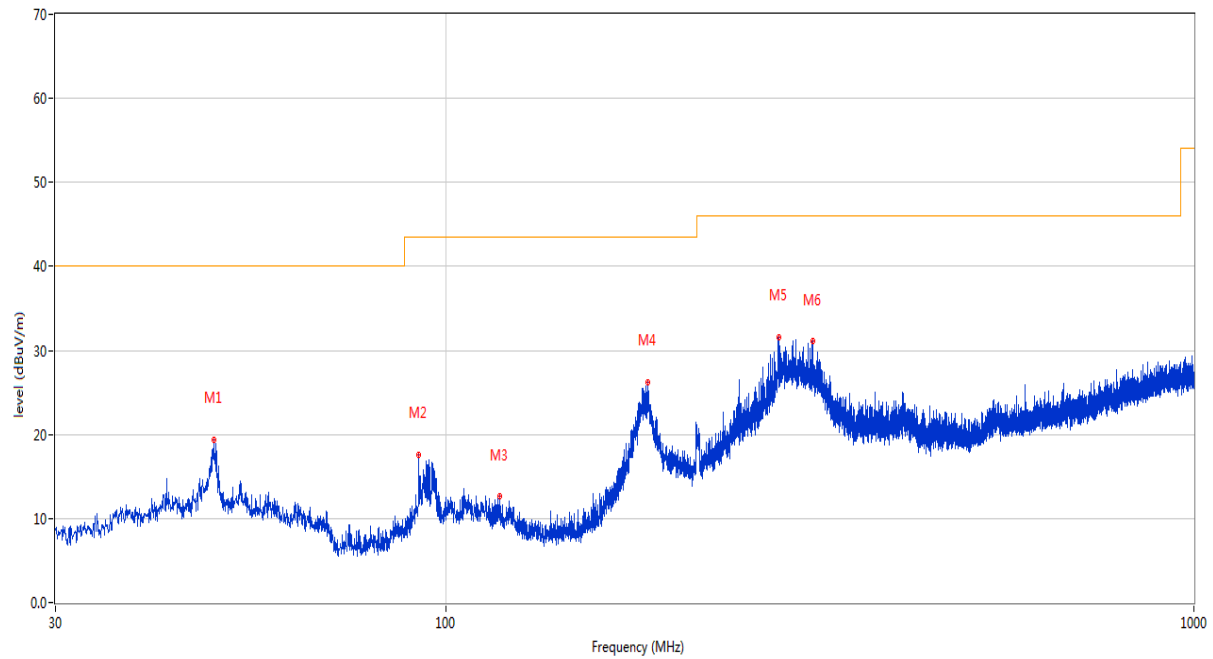
The USB Test Mode

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



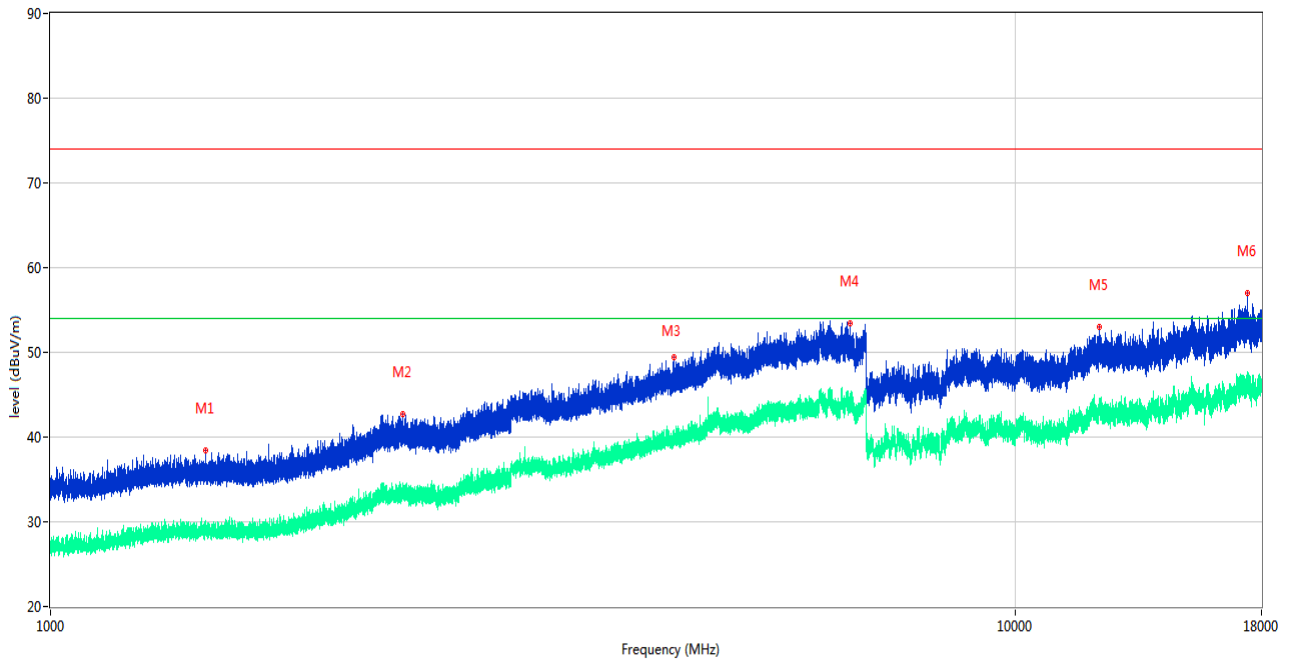
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.624	18.83	-22.51	40.0	-21.17	Peak	61.30	100	Vertical	Pass
2	95.766	14.20	-24.77	43.5	-29.30	Peak	0.00	200	Vertical	Pass
3	185.588	25.88	-25.40	43.5	-17.62	Peak	146.00	100	Vertical	Pass
4	287.390	32.08	-22.02	46.0	-13.92	Peak	69.80	200	Vertical	Pass
5	316.926	31.16	-20.92	46.0	-14.84	Peak	0.00	200	Vertical	Pass
6	593.958	29.79	-14.68	46.0	-16.21	Peak	238.70	200	Vertical	Pass

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



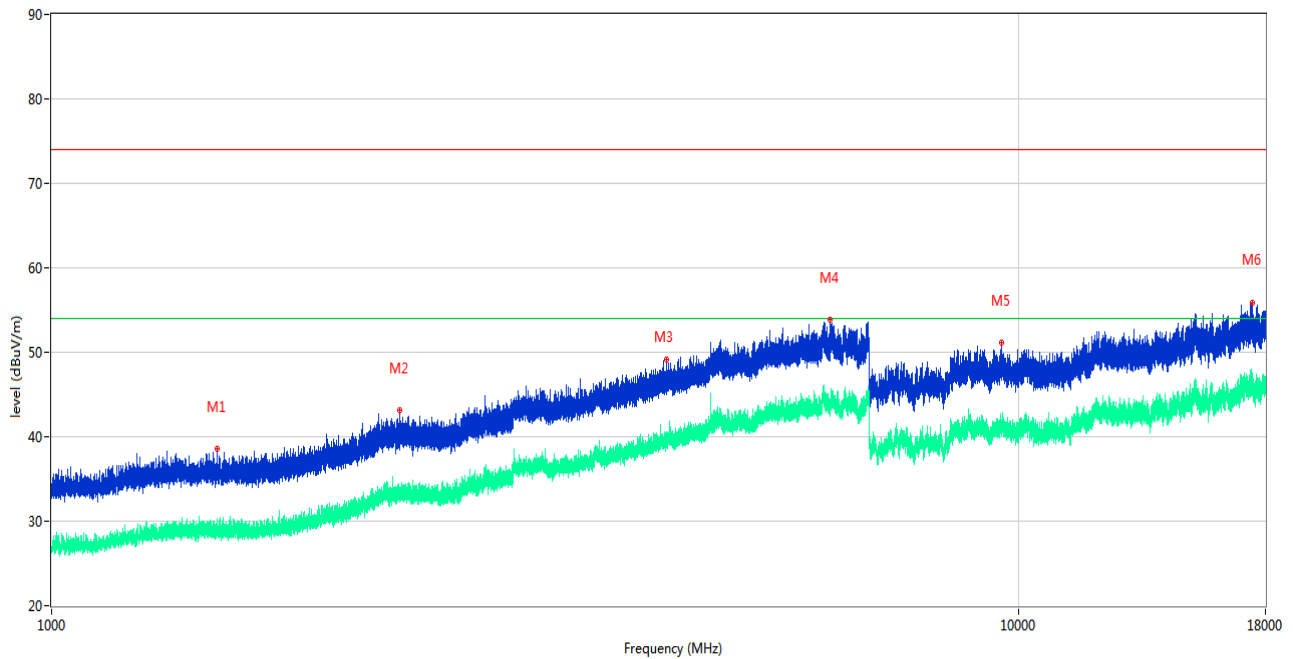
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.867	19.41	-22.46	40.0	-20.59	Peak	0.00	200	Horizontal	Pass
2	91.886	17.63	-25.66	43.5	-25.87	Peak	286.80	200	Horizontal	Pass
3	117.882	12.66	-25.84	43.5	-30.84	Peak	122.20	100	Horizontal	Pass
4	185.782	26.28	-25.40	43.5	-17.22	Peak	249.20	200	Horizontal	Pass
5	278.126	31.58	-21.90	46.0	-14.42	Peak	116.60	100	Horizontal	Pass
6	308.778	31.07	-21.54	46.0	-14.93	Peak	84.60	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	1448.100	38.41	-17.47	74.0	-35.59	Peak	0.00	150	Vertical	Pass
1**	1448.100	28.67	-17.47	54.0	-25.33	AV	0.00	150	Vertical	Pass
2	2319.600	42.67	-12.73	74.0	-31.33	Peak	213.00	150	Vertical	Pass
2**	2319.600	34.55	-12.73	54.0	-19.45	AV	213.00	150	Vertical	Pass
3	4425.800	49.37	-4.84	74.0	-24.63	Peak	217.00	150	Vertical	Pass
3**	4425.800	39.32	-4.84	54.0	-14.68	AV	217.00	150	Vertical	Pass
4	6740.000	53.42	-0.23	74.0	-20.58	Peak	26.00	150	Vertical	Pass
4**	6740.000	43.97	-0.23	54.0	-10.03	AV	26.00	150	Vertical	Pass
5	12234.225	52.97	1.18	74.0	-21.03	Peak	99.00	150	Vertical	Pass
5**	12234.225	43.15	1.18	54.0	-10.85	AV	99.00	150	Vertical	Pass
6	17420.663	57.05	3.74	74.0	-16.95	Peak	262.00	150	Vertical	Pass
6**	17420.663	47.60	3.74	54.0	-6.40	AV	262.00	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	1483.000	38.63	-17.51	74.0	-35.37	Peak	133.00	150	Horizontal	Pass
1**	1483.000	29.32	-17.51	54.0	-24.68	AV	133.00	150	Horizontal	Pass
2	2292.400	43.20	-12.67	74.0	-30.80	Peak	360.00	150	Horizontal	Pass
2**	2292.400	33.96	-12.67	54.0	-20.04	AV	360.00	150	Horizontal	Pass
3	4324.000	49.13	-4.31	74.0	-24.87	Peak	78.00	150	Horizontal	Pass
3**	4324.000	39.59	-4.31	54.0	-14.41	AV	78.00	150	Horizontal	Pass
4	6384.800	53.91	-2.28	74.0	-20.09	Peak	176.00	150	Horizontal	Pass
4**	6384.800	43.92	-2.28	54.0	-10.08	AV	176.00	150	Horizontal	Pass
5	9605.900	51.13	-0.00	74.0	-22.87	Peak	59.00	150	Horizontal	Pass
5**	9605.900	40.46	-0.00	54.0	-13.54	AV	59.00	150	Horizontal	Pass
6	17430.901	55.91	3.42	74.0	-18.09	Peak	131.00	150	Horizontal	Pass
6**	17430.901	46.40	3.42	54.0	-7.60	AV	131.00	150	Horizontal	Pass

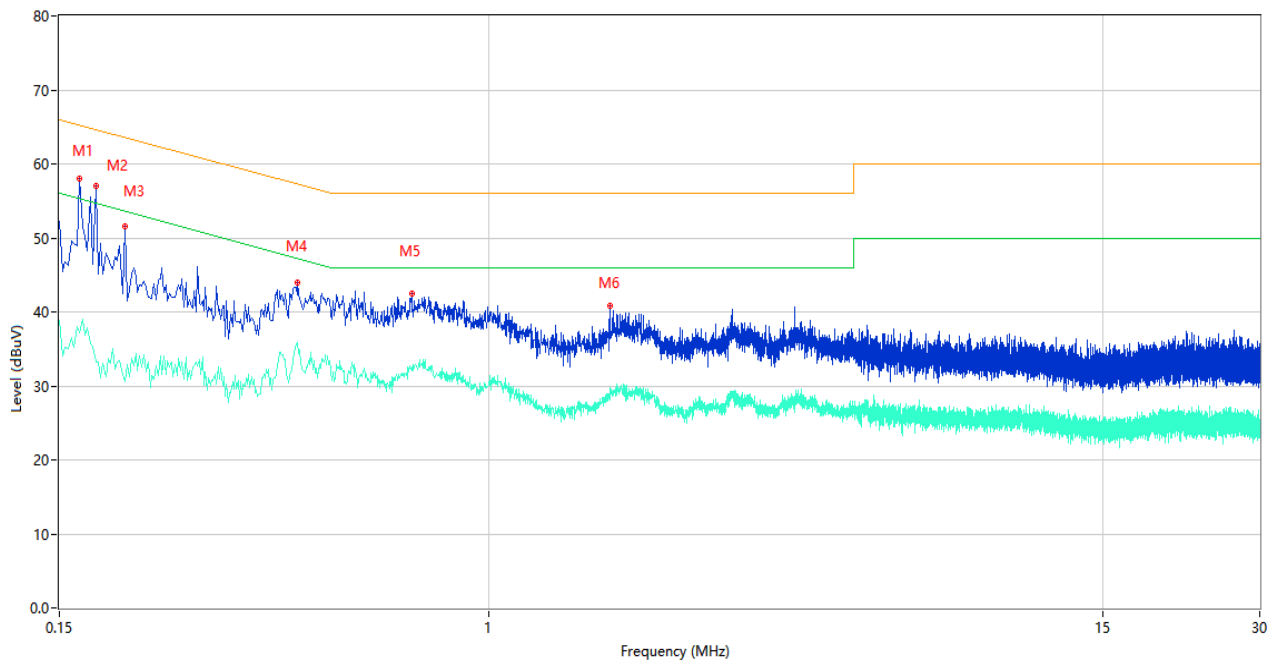
A.2 Conducted Emission

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

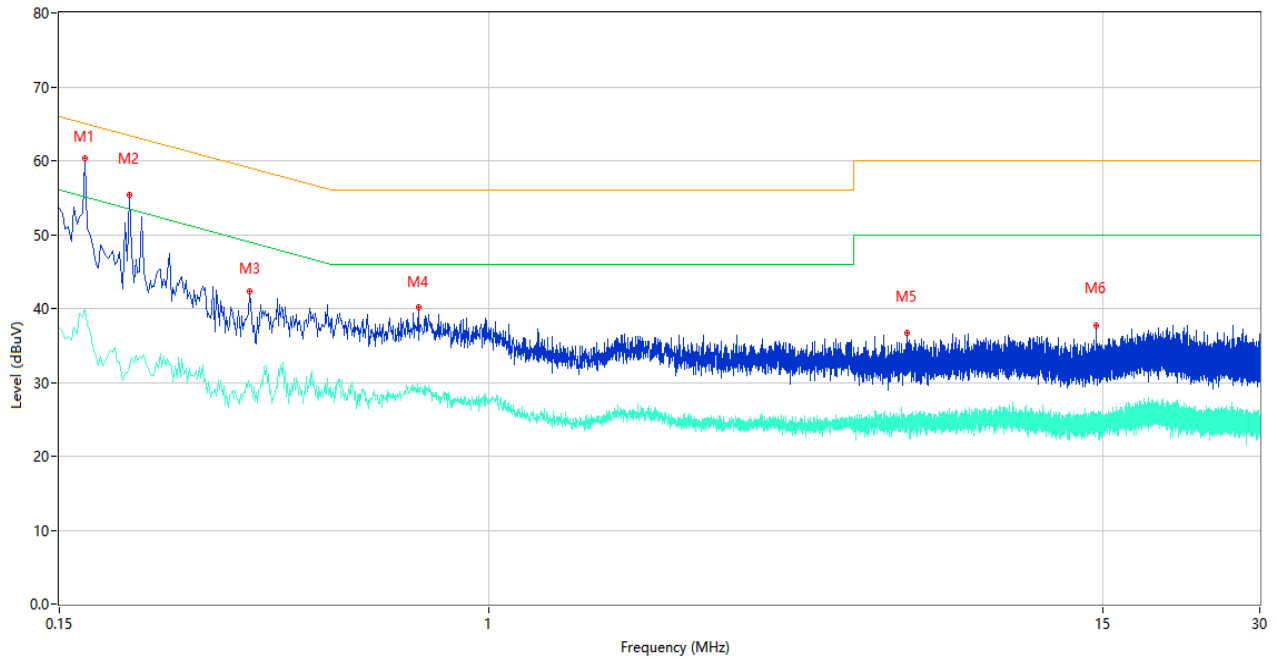
The Camera Test Mode

A.2.1 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.164	57.95	10.40	65.26	-7.31	Peak	L	Pass
1**	0.164	37.13	10.40	55.26	-18.13	AV	L	Pass
2	0.176	57.04	10.39	64.67	-7.63	Peak	L	Pass
2**	0.176	33.25	10.39	54.67	-21.42	AV	L	Pass
3	0.200	51.52	10.38	63.61	-12.09	Peak	L	Pass
3**	0.200	30.58	10.38	53.61	-23.03	AV	L	Pass
4	0.430	44.03	10.31	57.25	-13.22	Peak	L	Pass
4**	0.430	35.90	10.31	47.25	-11.35	AV	L	Pass
5	0.710	42.49	10.27	56.00	-13.51	Peak	L	Pass
5**	0.710	32.61	10.27	46.00	-13.39	AV	L	Pass
6	1.702	40.85	10.26	56.00	-15.15	Peak	L	Pass
6**	1.702	28.99	10.26	46.00	-17.01	AV	L	Pass

A.2.2 N Phase

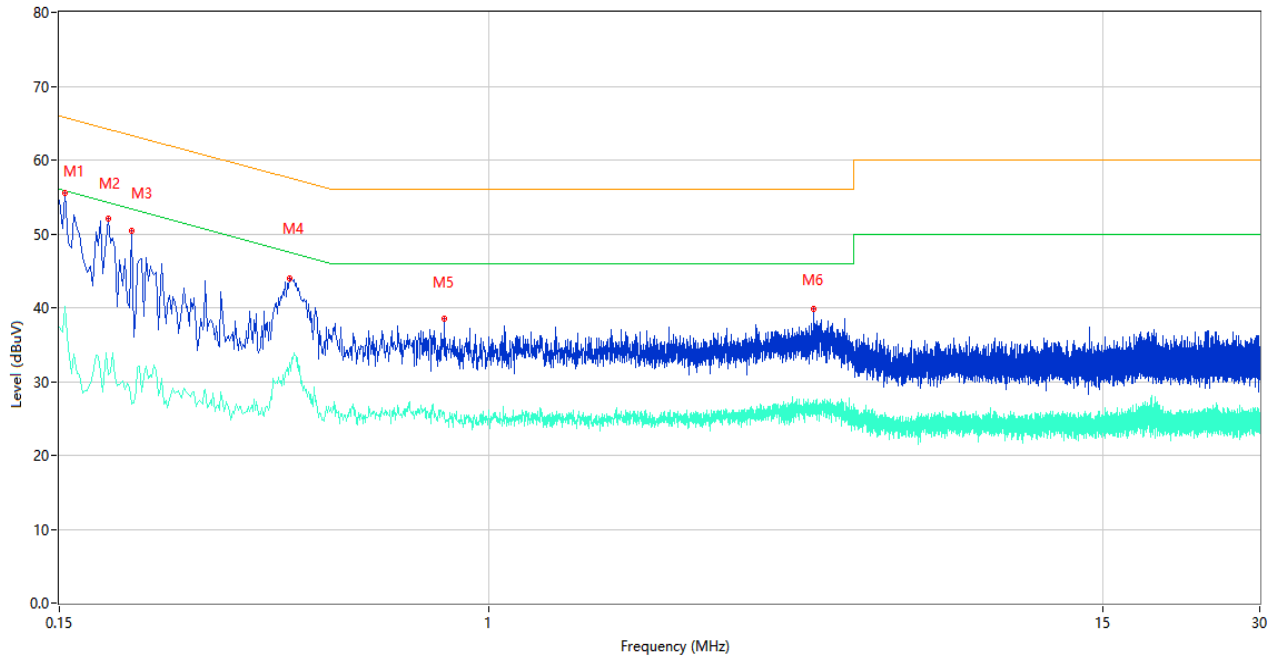


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.168	60.27	10.40	65.06	-4.79	Peak	N	N/A
1*	0.168	50.21	10.40	65.06	-14.85	QP	N	Pass
1**	0.168	39.98	10.40	55.06	-15.08	AV	N	Pass
2	0.204	55.40	10.38	63.45	-8.05	Peak	N	Pass
2**	0.204	32.02	10.38	53.45	-21.43	AV	N	Pass
3	0.348	42.24	10.32	59.01	-16.77	Peak	N	Pass
3**	0.348	29.36	10.32	49.01	-19.65	AV	N	Pass
4	0.732	40.14	10.27	56.00	-15.86	Peak	N	Pass
4**	0.732	28.70	10.27	46.00	-17.30	AV	N	Pass
5	6.328	36.61	10.33	60.00	-23.39	Peak	N	Pass
5**	6.328	24.47	10.33	50.00	-25.53	AV	N	Pass
6	14.556	37.60	10.40	60.00	-22.40	Peak	N	Pass
6**	14.556	25.81	10.40	50.00	-24.19	AV	N	Pass

Test Data and Plots

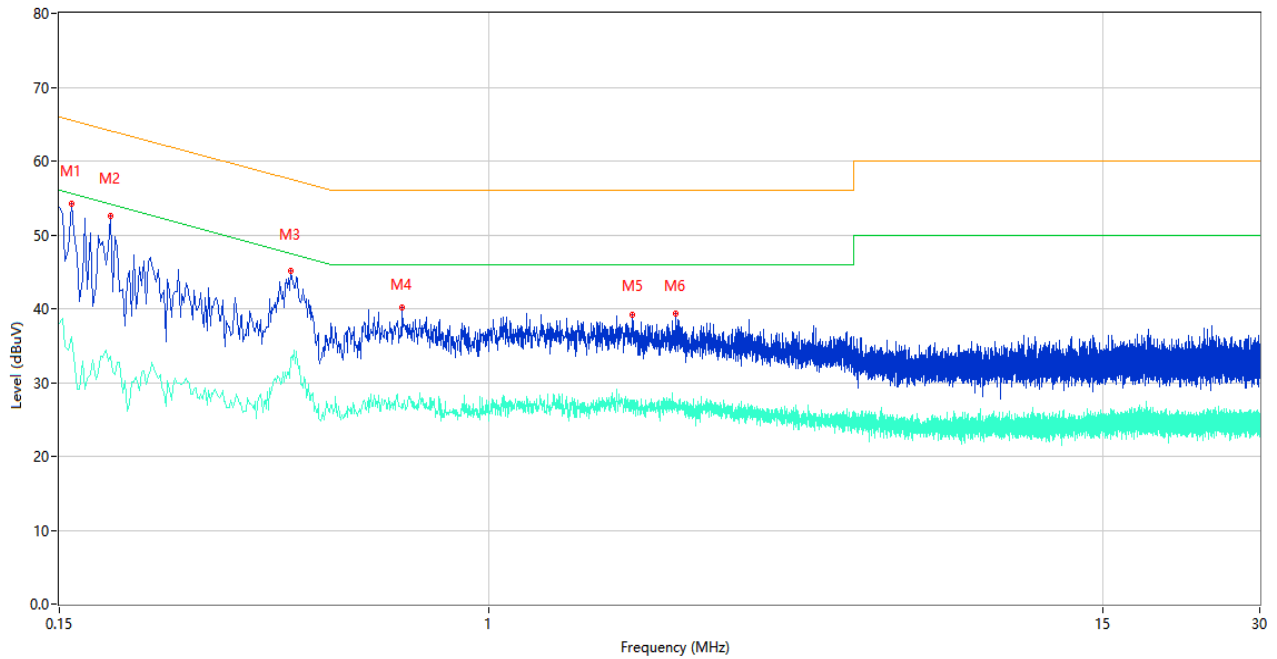
The USB Test Mode

A.2.3 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.154	55.53	10.41	65.78	-10.25	Peak	L	Pass
1**	0.154	40.20	10.41	55.78	-15.58	AV	L	Pass
2	0.186	52.09	10.39	64.21	-12.12	Peak	L	Pass
2**	0.186	30.88	10.39	54.21	-23.33	AV	L	Pass
3	0.206	50.43	10.38	63.37	-12.94	Peak	L	Pass
3**	0.206	26.94	10.38	53.37	-26.43	AV	L	Pass
4	0.414	44.04	10.31	57.57	-13.53	Peak	L	Pass
4**	0.414	32.51	10.31	47.57	-15.06	AV	L	Pass
5	0.822	38.52	10.26	56.00	-17.48	Peak	L	Pass
5**	0.822	25.49	10.26	46.00	-20.51	AV	L	Pass
6	4.178	39.89	10.31	56.00	-16.11	Peak	L	Pass
6**	4.178	27.41	10.31	46.00	-18.59	AV	L	Pass

A.2.4 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.158	54.21	10.40	65.57	-11.36	Peak	N	Pass
1**	0.158	36.16	10.40	55.57	-19.41	AV	N	Pass
2	0.188	52.62	10.38	64.12	-11.50	Peak	N	Pass
2**	0.188	33.59	10.38	54.12	-20.53	AV	N	Pass
3	0.416	45.14	10.31	57.53	-12.39	Peak	N	Pass
3**	0.416	33.19	10.31	47.53	-14.34	AV	N	Pass
4	0.682	40.15	10.27	56.00	-15.85	Peak	N	Pass
4**	0.682	27.15	10.27	46.00	-18.85	AV	N	Pass
5	1.884	39.10	10.25	56.00	-16.90	Peak	N	Pass
5**	1.884	27.59	10.25	46.00	-18.41	AV	N	Pass
6	2.280	39.38	10.28	56.00	-16.62	Peak	N	Pass
6**	2.280	26.89	10.28	46.00	-19.11	AV	N	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2170683-AE-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2170683-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2170683-AI.PDF”.

--END OF REPORT--