

EMC

TEST REPORT

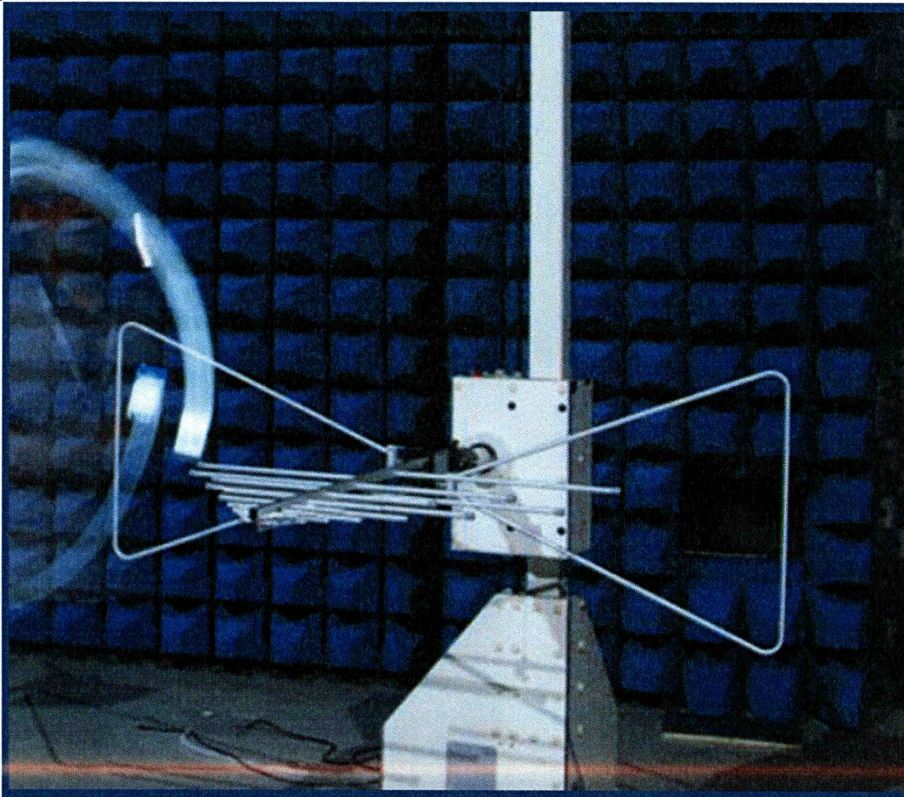
ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
5G Mobile Phone

ISSUED TO
Nubia Technology Co., Ltd.

Room 1801, Building 2, Chongwen Park, Nanshan Zhiyuan, No.3370,
Liuxian Rd, Nanshan District, Shenzhen City, Guangdong Province, P.
R. China



Tested by: Liu Zhenxiang

Liu Zhenxiang

Date: Aug. 26, 2021

Approved by: Liao Jianming

Liao Jianming
(Technical Director)

Date: Aug. 26, 2021

Report No.: BL-SZ2170148-401

EUT Name: 5G Mobile Phone

Model Name: NX669J-S

Brand Name: REDMAGIC

Test Standard: 47 CFR Part 15 Subpart B

FCC ID: 2AHJO-NX669J-S

Test Conclusion: Pass

Test Date: Jul. 13, 2021 ~ Jul. 24, 2021

Date of Issue: Aug. 26, 2021

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Aug. 18, 2021</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Aug. 26, 2021</u>	<u>Updated Section 2.6 Technical Information</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	Nubia Technology Co., Ltd.
Address	Room 1801, Building 2, Chongwen Park, Nanshan Zhiyuan, No.3370, Liuxian Rd, Nanshan District, Shenzhen City, Guangdong Province, P. R. China

2.2 Manufacturer Information

Manufacturer	Nubia Technology Co., Ltd.
Address	Room 1801, Building 2, Chongwen Park, Nanshan Zhiyuan, No.3370, Liuxian Rd, Nanshan District, Shenzhen City, Guangdong Province, P. R. China

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	5G Mobile Phone
Model Name Under Test	NX669J-S
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	NX669S_V1AMB
Software Version	NX669S_UNCommon_v4.01
Dimensions (Approx.)	169.86*77.19*9.7mm
Weight (Approx.)	215g (with battery)

2.5 Ancillary Equipment

Ancillary Equipment 1	Adapter	
	Brand Name	N/A
	Model No.	NB-A930A-A
	Serial No.	N/A
	Rated Input	100-240 V~, 0.8 A, 50/60 Hz
	Rated Output	QC: 5 V= 3 A, 9 V= 3 A, 12 V= 2.5 A PD: 5 V= 3 A, 9 V= 3 A, 12 V= 2.5 A 15 V= 2 A PPS: 3.3V-11V 2.72A
Ancillary Equipment 2	Battery	
	Brand Name	N/A
	Model No.	Li3945T44P8h906455
	Serial No.	N/A
	Capacity	4960 mAh
	Rated Voltage	3.87 V
	Limit Charge Voltage	4.45V
Ancillary Equipment 3	USB Cable	
	Model No.	N/A
	Length (Approx.)	1 m

2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz
	3G Network CDMA 1x Band Class 0/ 1 EVDO Rel. 0/Rev. A Band Class 0/ 1 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
	5G Network SA: n41
	NSA(EN-DC): DC_2A_n41A, DC_66A_n41A
	Bluetooth (BR+EDR+BLE)
	2.4G WIFI 802.11b, 802.11g, 802.11n(HT20), 802.11ax (HE20)
	5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac (VHT20/40/80), 802.11ax (HE20/40/80), U-NII-1/2A/2C/3, NFC

The requirement for the following technical information of the EUT was tested in this report:

The Highest Speed of Processor	2.84 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&SCHWARZ	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	2018.10.16	2021.10.15	☐
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-Horn	A-INFOMW	LB-180400KF	J211060273	2021.01.05	2023.01.04	☒
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	MY57110309	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	--	--	☒
Test Software	BALUN	BL410_E	V19.918	--	--	☒

4.3 Test Enclosure list

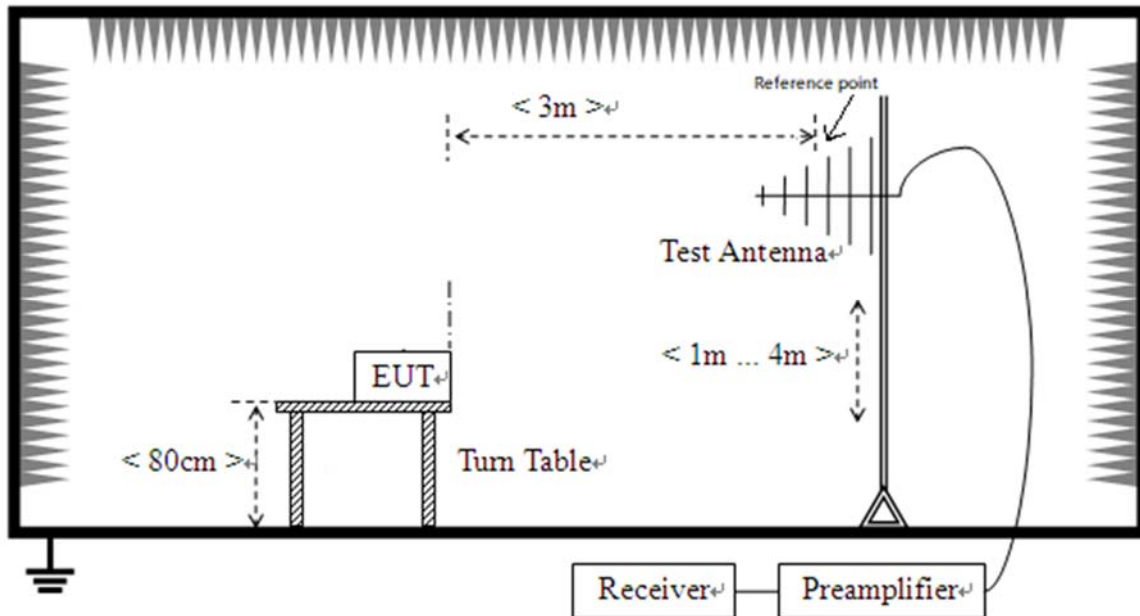
Description	Manufacturer	Model	Serial No.	Length	Description	Use
PC	Dell	015K3N	N/A	N/A	Special Handled	☐
Laptop	N/A	N/A	N/A	N/A	N/A	☒
Printer	HP	DESKJET 1000	N/A	N/A	N/A	☐
Keyboard	Logitech	Y-BP62a	N/A	N/A	N/A	☐
Mouse	Logitech	M100	N/A	N/A	N/A	☐
USB disk	Kingston	N/A	N/A	N/A	N/A	☐
TF Card	Kingston	N/A	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	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	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 + Earphone
TC02	<u>The EGPRS 850 MHz RX Test Mode</u> EGPRS 850 MHz RX + EUT +Adapter + USB Cable + Battery + Earphone
TC03	<u>The WCDMA Band 5 RX Test Mode</u> WCDMA Band 5 RX + EUT +Adapter + USB Cable + Battery + Earphone
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 FDD LTE Band 26 RX Test Mode</u> LTE Band 26 RX + EUT +Adapter + USB Cable + Battery
TC08	<u>The Camera Test Mode</u> EUT + Adapter + USB Cable + Battery + Earphone + TF Card
TC09	<u>The Video Play Test Mode</u> EUT + Adapter + USB Cable + Battery + Earphone + TF Card
TC10	<u>The USB Test Mode</u> EUT + USB Cable + Battery + Laptop+ Earphone + TF Card

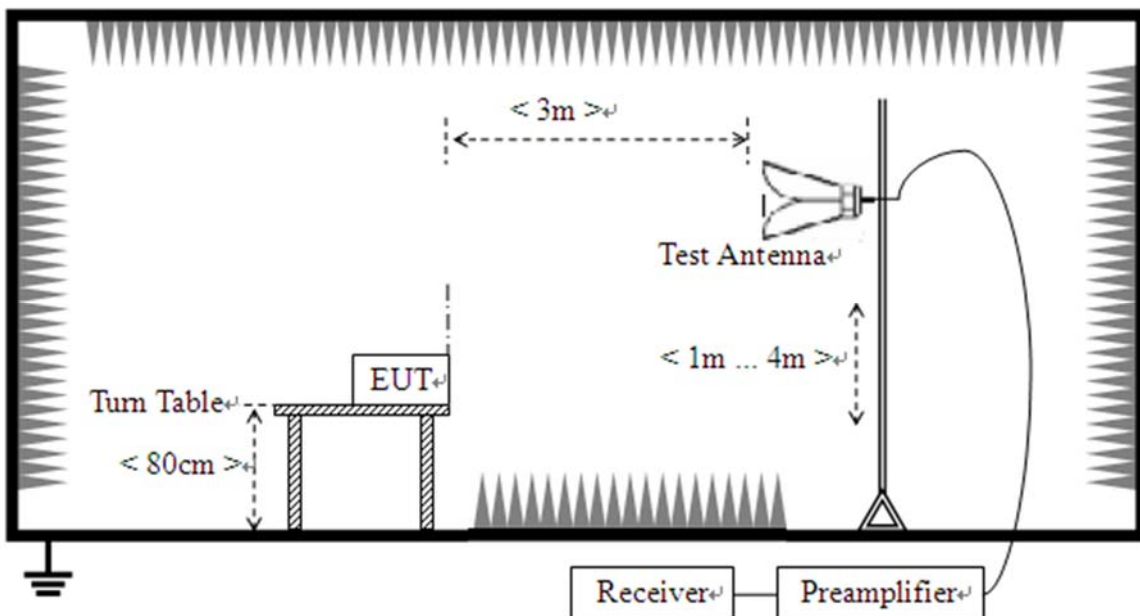
4.5 Test Setups

Test Setup 1



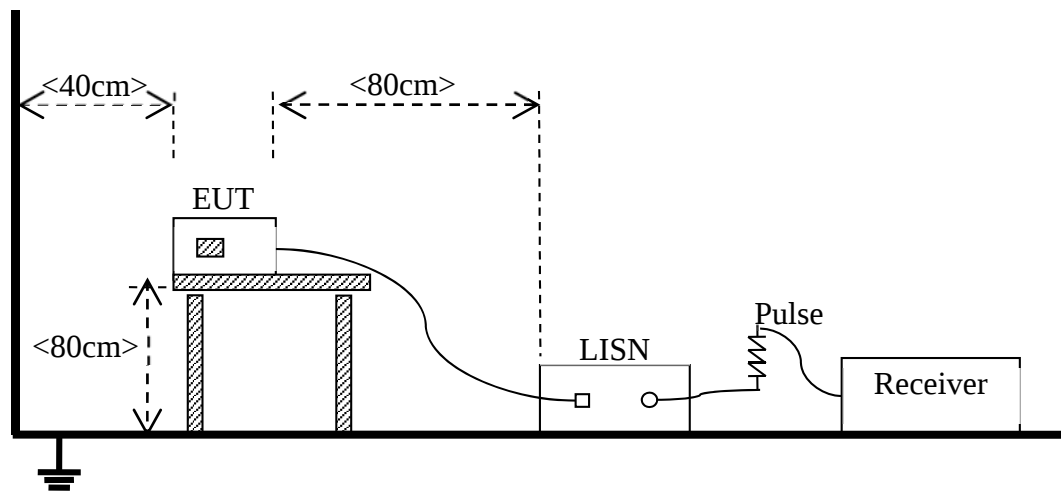
(For Radiated Emission Test (30 MHz-1 GHz))

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~TC10 ^{Note}
Conducted Emission, AC Ports	Test Env.	NTNV
	Test Setup	Test Setup 3
	Test Configuration	TC01~TC10 ^{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 (dBμV)	Average (dBμV)
0.15 - 0.50	79	66
0.50 - 30	73	60

Frequency range (MHz)	Class B	
	Quasi-peak (dBμV)	Average (dBμV)
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 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.

NOTE:

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

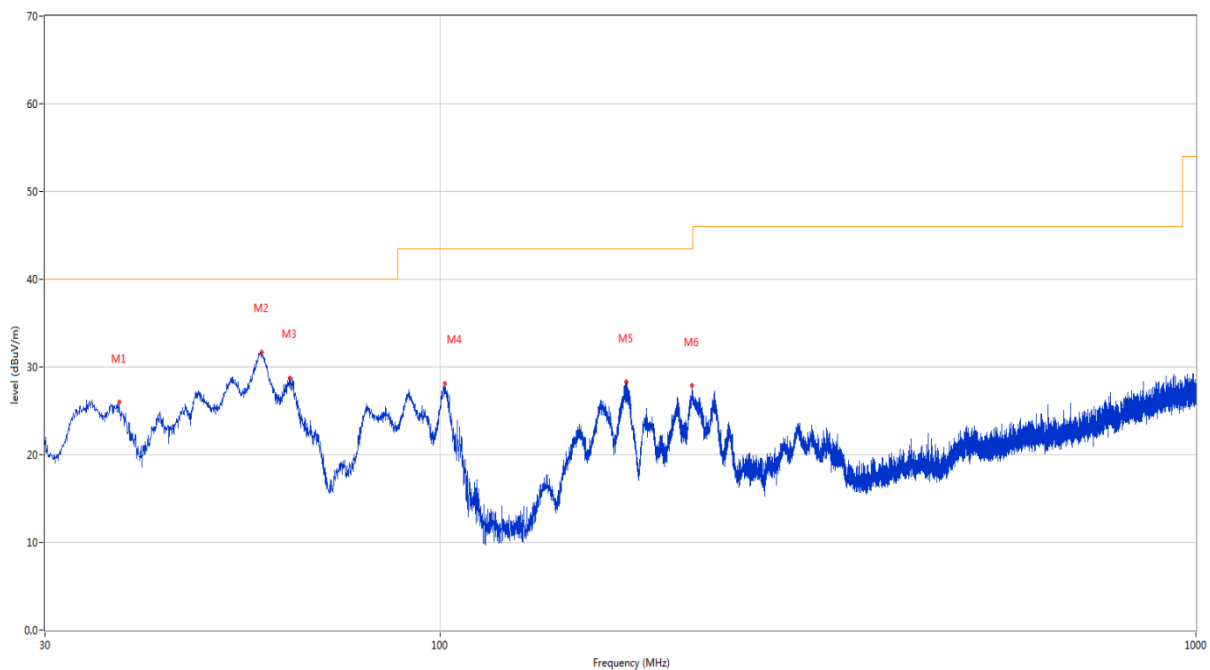
Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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

Test Data and Plots

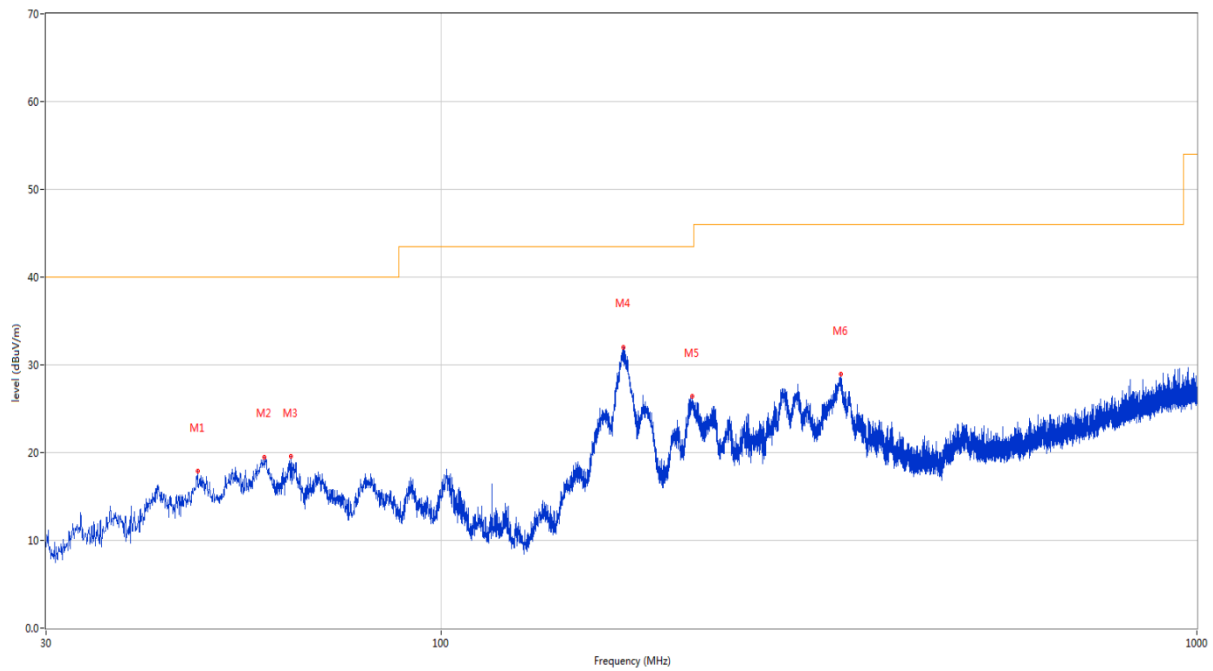
The Camera Test Mode

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



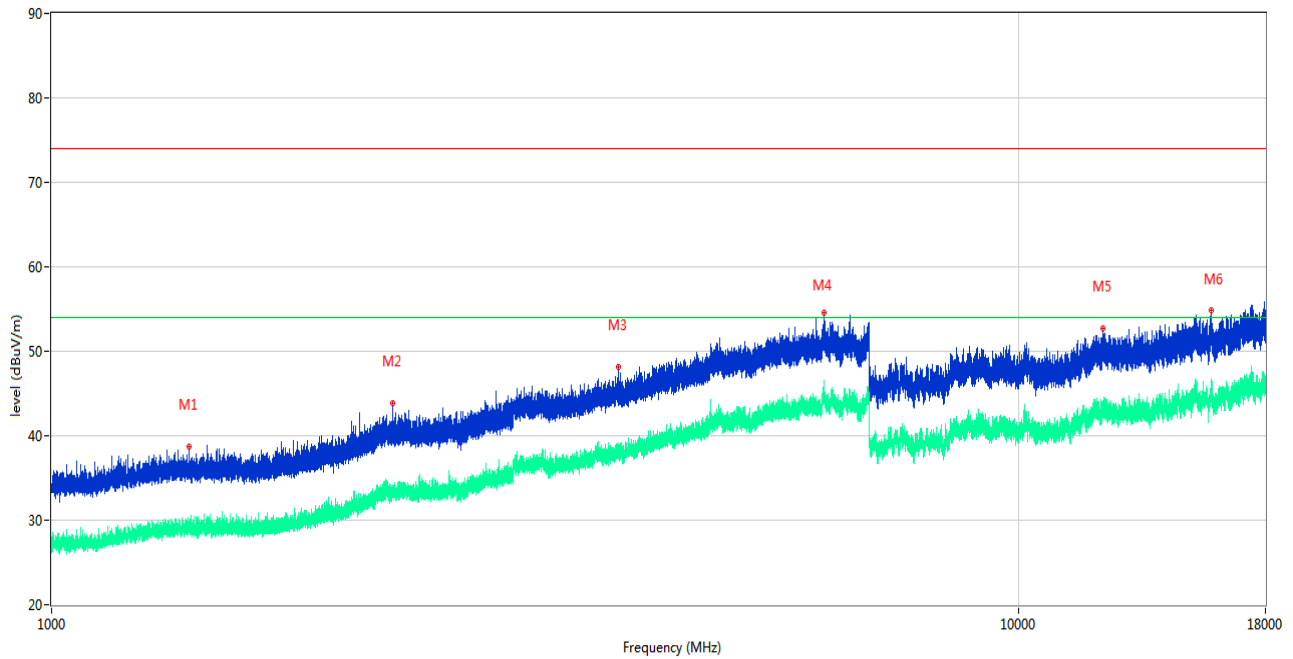
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	37.614	26.00	-24.54	40.0	-14.00	Peak	199.90	100	Vertical	Pass
2	58.130	31.68	-24.10	40.0	-8.32	Peak	189.60	100	Vertical	Pass
3	63.222	28.72	-24.80	40.0	-11.28	Peak	210.30	100	Vertical	Pass
4	101.440	28.12	-24.60	43.5	-15.38	Peak	37.40	100	Vertical	Pass
5	176.130	28.30	-26.35	43.5	-15.20	Peak	147.30	100	Vertical	Pass
6	215.464	27.85	-23.83	43.5	-15.65	Peak	360.00	200	Vertical	Pass

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



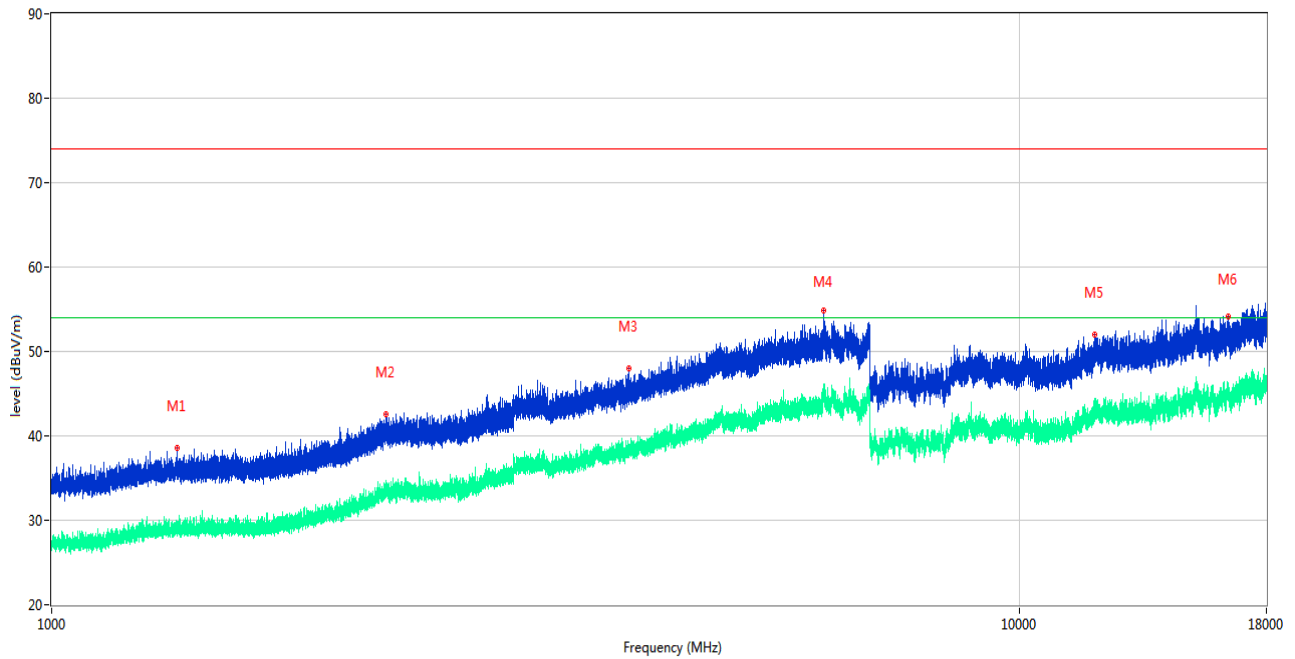
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	47.605	17.90	-22.74	40.0	-22.10	Peak	148.80	100	Horizontal	Pass
2	58.324	19.46	-24.08	40.0	-20.54	Peak	285.80	200	Horizontal	Pass
3	63.271	19.53	-24.81	40.0	-20.47	Peak	307.10	200	Horizontal	Pass
4	174.385	32.00	-26.57	43.5	-11.50	Peak	106.10	100	Horizontal	Pass
5	214.979	26.47	-23.75	43.5	-17.03	Peak	143.60	100	Horizontal	Pass
6	338.218	28.96	-20.09	46.0	-17.04	Peak	196.50	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	1387.600	38.70	-17.43	74.0	-35.30	Peak	36.00	150	Vertical	Pass
1**	1387.600	28.59	-17.43	54.0	-25.41	AV	36.00	150	Vertical	Pass
2	2254.900	43.92	-12.55	74.0	-30.08	Peak	173.00	150	Vertical	Pass
2**	2254.900	33.51	-12.55	54.0	-20.49	AV	173.00	150	Vertical	Pass
3	3851.600	48.21	-5.72	74.0	-25.79	Peak	100.00	150	Vertical	Pass
3**	3851.600	38.44	-5.72	54.0	-15.56	AV	100.00	150	Vertical	Pass
4	6287.800	54.53	-0.16	74.0	-19.47	Peak	39.00	150	Vertical	Pass
4**	6287.800	45.62	-0.16	54.0	-8.38	AV	39.00	150	Vertical	Pass
5	12224.737	52.73	1.30	74.0	-21.27	Peak	142.00	150	Vertical	Pass
5**	12224.737	43.02	1.30	54.0	-10.98	AV	142.00	150	Vertical	Pass
6	15820.463	54.82	1.85	74.0	-19.18	Peak	20.00	150	Vertical	Pass
6**	15820.463	44.91	1.85	54.0	-9.09	AV	20.00	150	Vertical	Pass

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

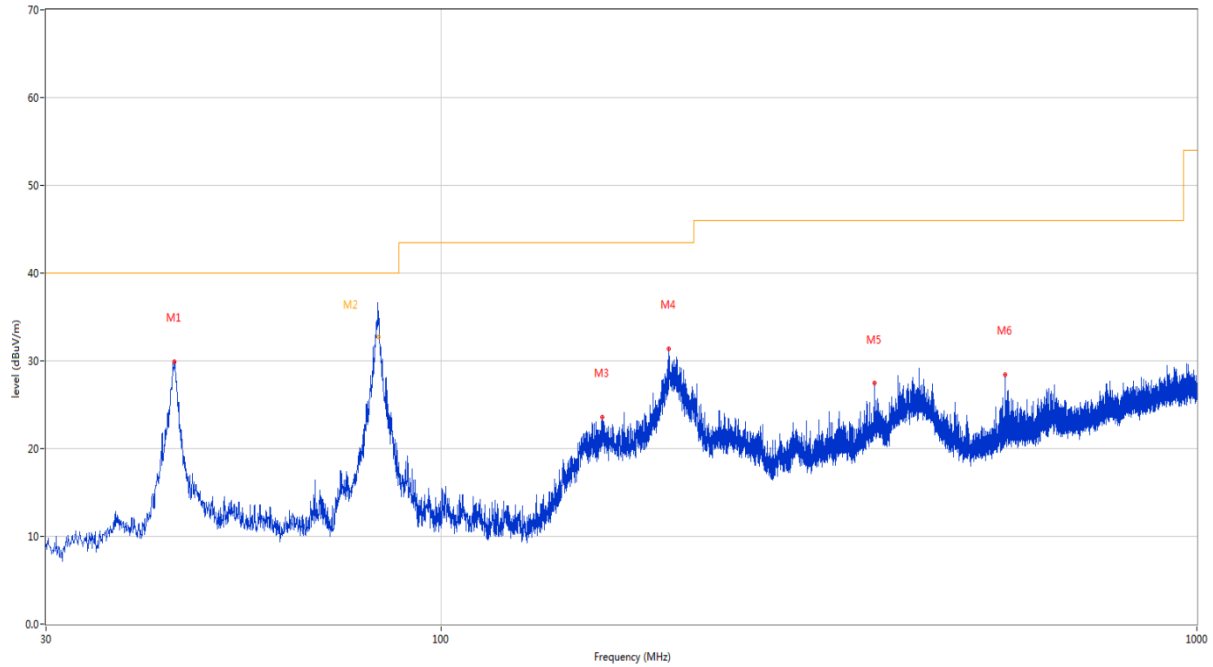


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1348.800	38.59	-17.33	74.0	-35.41	Peak	259.00	150	Horizontal	Pass
1**	1348.800	28.85	-17.33	54.0	-25.15	AV	259.00	150	Horizontal	Pass
2	2213.500	42.54	-12.94	74.0	-31.46	Peak	219.00	150	Horizontal	Pass
2**	2213.500	32.93	-12.94	54.0	-21.07	AV	219.00	150	Horizontal	Pass
3	3948.800	47.96	-4.86	74.0	-26.04	Peak	0.00	150	Horizontal	Pass
3**	3948.800	37.68	-4.86	54.0	-16.32	AV	0.00	150	Horizontal	Pass
4	6274.800	54.81	-0.25	74.0	-19.19	Peak	42.00	150	Horizontal	Pass
4**	6274.800	44.88	-0.25	54.0	-9.12	AV	42.00	150	Horizontal	Pass
5	11976.337	52.01	0.82	74.0	-21.99	Peak	252.00	150	Horizontal	Pass
5**	11976.337	42.18	0.82	54.0	-11.82	AV	252.00	150	Horizontal	Pass
6	16440.750	54.19	1.02	74.0	-19.81	Peak	69.00	150	Horizontal	Pass
6**	16440.750	45.85	1.02	54.0	-8.15	AV	69.00	150	Horizontal	Pass

Test Data and Plots

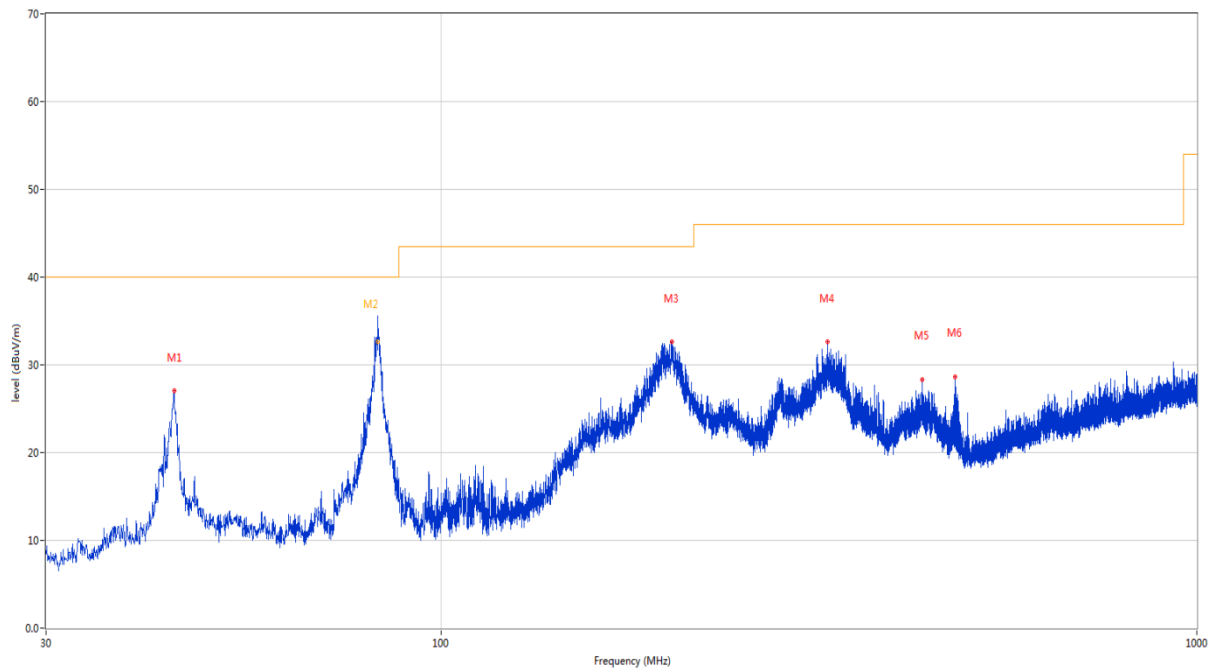
The USB Test Mode

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



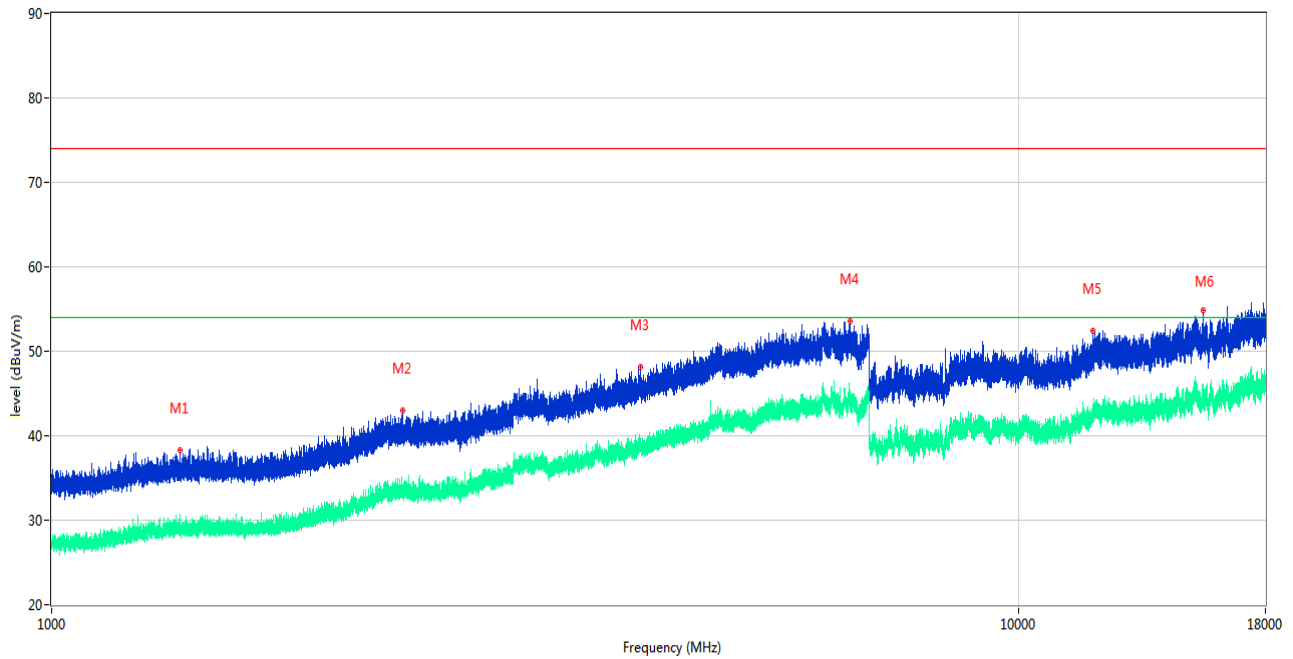
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	44.404	29.94	-23.28	40.0	-10.06	Peak	112.60	100	Vertical	Pass
2	82.592	40.22	-28.29	40.0	0.22	Peak	118.10	154	Vertical	N/A
2*	82.592	32.74	-28.29	40.0	-7.26	QP	118.10	154	Vertical	Pass
3	163.569	23.60	-26.88	43.5	-19.90	Peak	360.00	200	Vertical	Pass
4	200.283	31.32	-24.06	43.5	-12.18	Peak	234.80	100	Vertical	Pass
5	374.496	27.44	-19.03	46.0	-18.56	Peak	360.00	200	Vertical	Pass
6	558.117	28.39	-15.43	46.0	-17.61	Peak	160.70	100	Vertical	Pass

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



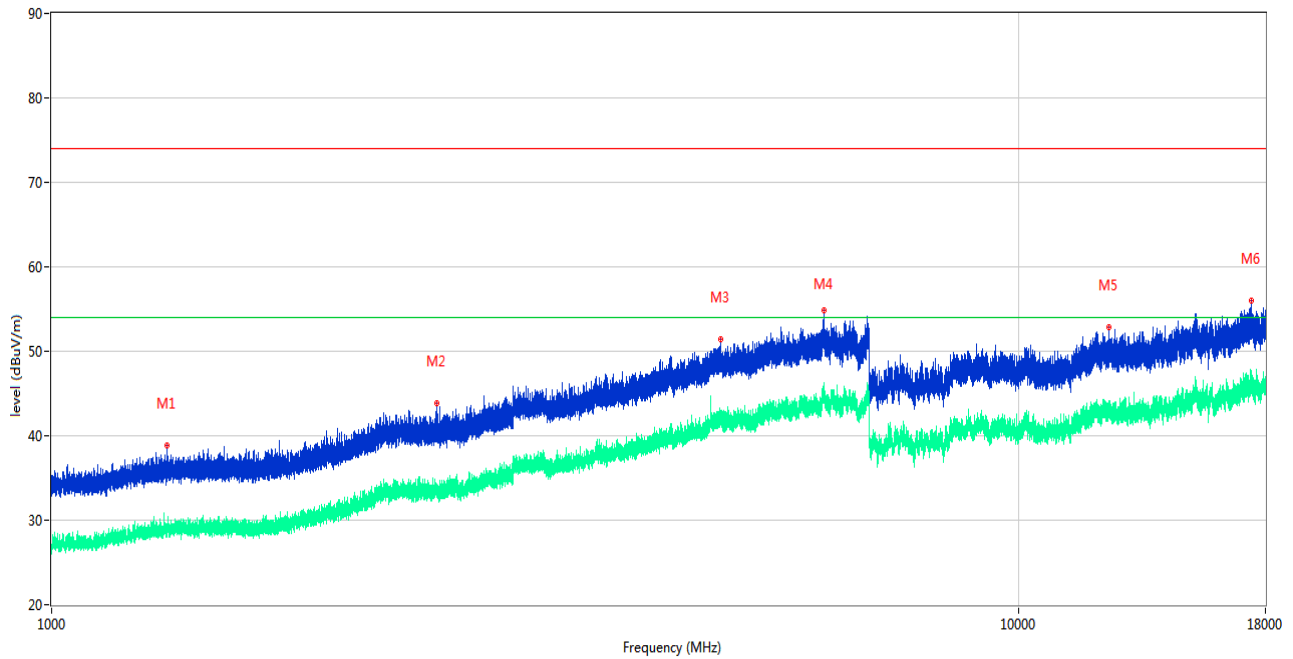
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	44.307	27.09	-23.28	40.0	-12.91	Peak	360.00	200	Horizontal	Pass
2	82.387	38.42	-28.28	40.0	-1.58	Peak	158.90	200	Horizontal	N/A
2*	82.387	32.64	-28.28	40.0	-7.36	QP	158.90	200	Horizontal	Pass
3	201.932	32.60	-23.80	43.5	-10.90	Peak	95.10	200	Horizontal	Pass
4	324.298	32.64	-20.99	46.0	-13.36	Peak	154.70	100	Horizontal	Pass
5	433.569	28.30	-18.01	46.0	-17.70	Peak	111.10	200	Horizontal	Pass
6	479.304	28.59	-16.98	46.0	-17.41	Peak	249.20	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	1356.300	38.27	-17.39	74.0	-35.73	Peak	68.00	150	Vertical	Pass
1**	1356.300	30.45	-17.39	54.0	-23.55	AV	68.00	150	Vertical	Pass
2	2306.000	42.94	-12.76	74.0	-31.06	Peak	289.00	150	Vertical	Pass
2**	2306.000	33.60	-12.76	54.0	-20.40	AV	289.00	150	Vertical	Pass
3	4061.400	48.17	-5.09	74.0	-25.83	Peak	126.00	150	Vertical	Pass
3**	4061.400	39.03	-5.09	54.0	-14.97	AV	126.00	150	Vertical	Pass
4	6692.000	53.51	-0.31	74.0	-20.49	Peak	51.00	150	Vertical	Pass
4**	6692.000	45.10	-0.31	54.0	-8.90	AV	51.00	150	Vertical	Pass
5	11936.950	52.45	1.69	74.0	-21.55	Peak	39.00	150	Vertical	Pass
5**	11936.950	43.76	1.69	54.0	-10.24	AV	39.00	150	Vertical	Pass
6	15525.675	54.83	1.35	74.0	-19.17	Peak	110.00	150	Vertical	Pass
6**	15525.675	44.96	1.35	54.0	-9.04	AV	110.00	150	Vertical	Pass

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



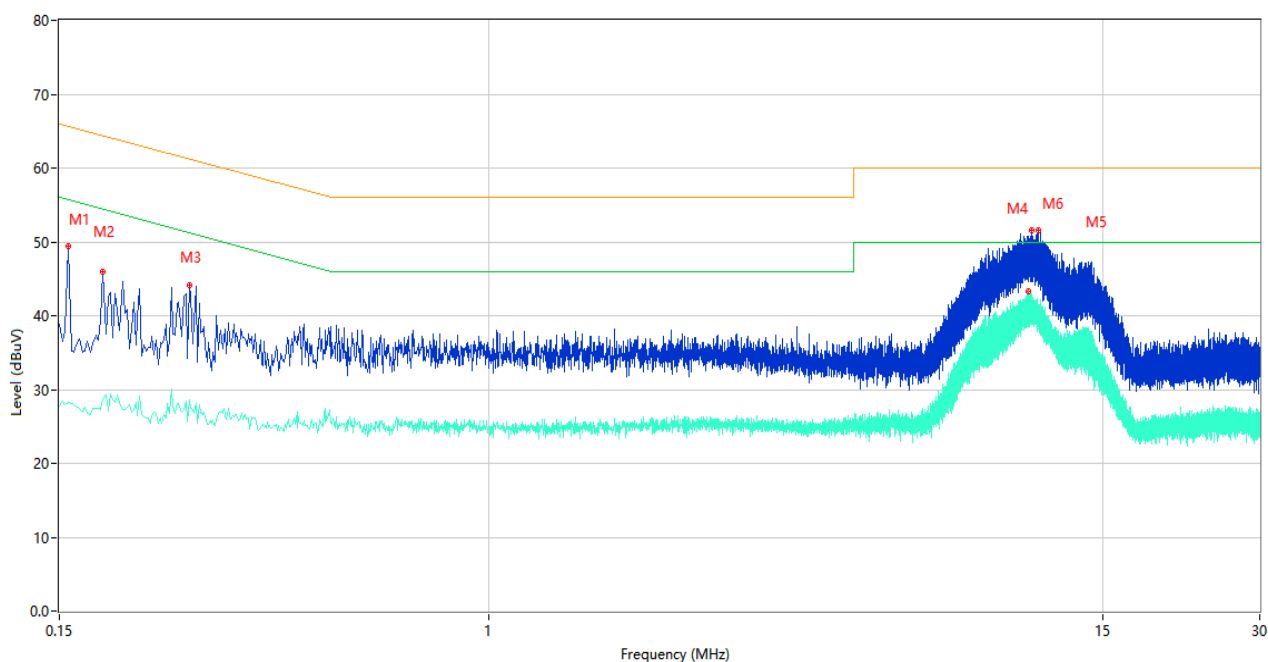
A.2 Conducted Emission

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

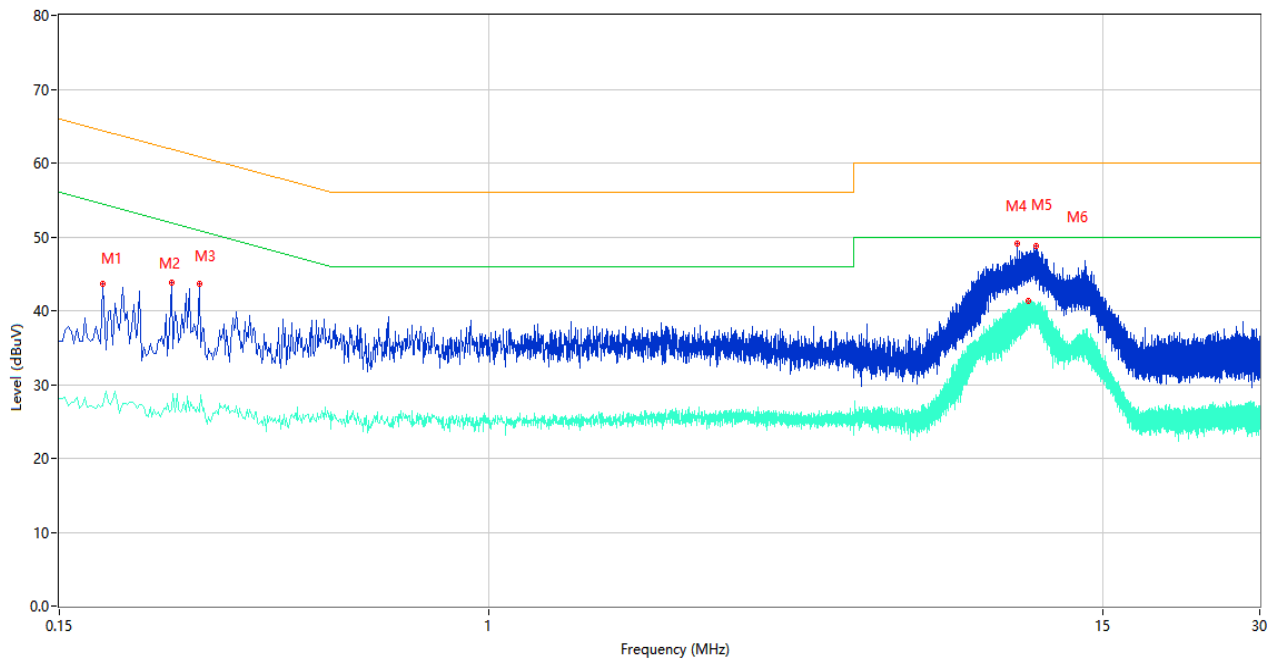
The Camera Test Mode

A.2.1 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	38.87	10.41	66.00	-27.13	Peak	L	Pass
1**	0.150	27.76	10.41	56.00	-28.24	AV	L	Pass
2	0.182	46.00	10.39	64.39	-18.39	Peak	L	Pass
2**	0.182	28.68	10.39	54.39	-25.71	AV	L	Pass
3	0.266	44.19	10.34	61.24	-17.05	Peak	L	Pass
3**	0.266	28.52	10.34	51.24	-22.72	AV	L	Pass
4	10.960	51.59	10.38	60.00	-8.41	Peak	L	Pass
4**	10.960	40.26	10.38	50.00	-9.74	AV	L	Pass
5	10.818	50.32	10.37	60.00	-9.68	Peak	L	Pass
5**	10.818	43.25	10.37	50.00	-6.75	AV	L	Pass
6	11.280	51.59	10.38	60.00	-8.41	Peak	L	Pass
6**	11.280	39.79	10.38	50.00	-10.21	AV	L	Pass

A.2.2 N Phase

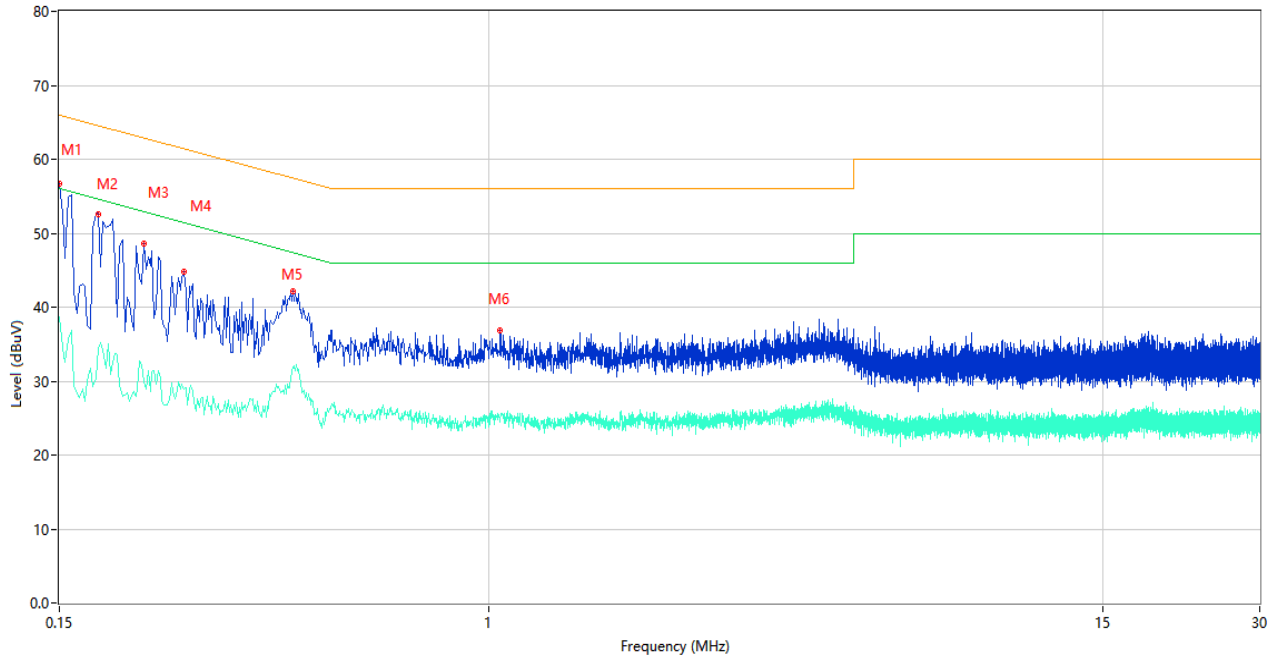


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.182	43.67	10.39	64.39	-20.72	Peak	N	Pass
1**	0.182	27.07	10.39	54.39	-27.32	AV	N	Pass
2	0.246	43.85	10.34	61.89	-18.04	Peak	N	Pass
2**	0.246	26.66	10.34	51.89	-25.23	AV	N	Pass
3	0.278	43.66	10.34	60.88	-17.22	Peak	N	Pass
3**	0.278	26.35	10.34	50.88	-24.53	AV	N	Pass
4	10.290	49.08	10.37	60.00	-10.92	Peak	N	Pass
4**	10.290	40.01	10.37	50.00	-9.99	AV	N	Pass
5	10.798	46.98	10.37	60.00	-13.02	Peak	N	Pass
5**	10.798	41.40	10.37	50.00	-8.60	AV	N	Pass
6	11.174	48.70	10.38	60.00	-11.30	Peak	N	Pass
6**	11.174	39.18	10.38	50.00	-10.82	AV	N	Pass

Test Data and Plots

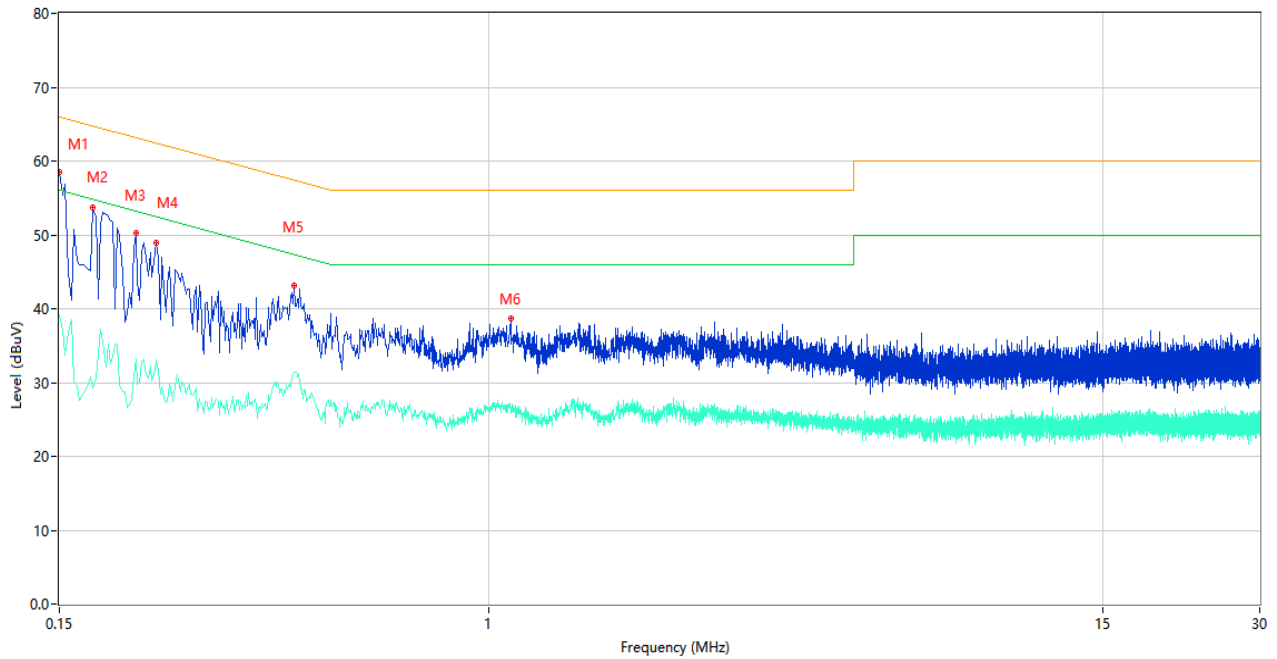
The USB Test Mode

A.2.3 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	56.61	10.41	66.00	-9.39	Peak	L	Pass
1**	0.150	38.62	10.41	56.00	-17.38	AV	L	Pass
2	0.178	52.60	10.39	64.58	-11.98	Peak	L	Pass
2**	0.178	34.35	10.39	54.58	-20.23	AV	L	Pass
3	0.218	48.62	10.37	62.89	-14.27	Peak	L	Pass
3**	0.218	29.95	10.37	52.89	-22.94	AV	L	Pass
4	0.260	44.71	10.34	61.43	-16.72	Peak	L	Pass
4**	0.260	28.93	10.34	51.43	-22.50	AV	L	Pass
5	0.420	42.17	10.31	57.45	-15.28	Peak	L	Pass
5**	0.420	31.82	10.31	47.45	-15.63	AV	L	Pass
6	1.050	36.86	10.23	56.00	-19.14	Peak	L	Pass
6**	1.050	24.74	10.23	46.00	-21.26	AV	L	Pass

A.2.4 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	58.45	10.41	66.00	-7.55	Peak	N	Pass
1**	0.150	39.21	10.41	56.00	-16.79	AV	N	Pass
2	0.174	53.64	10.39	64.77	-11.13	Peak	N	Pass
2**	0.174	29.31	10.39	54.77	-25.46	AV	N	Pass
3	0.210	50.25	10.38	63.21	-12.96	Peak	N	Pass
3**	0.210	33.22	10.38	53.21	-19.99	AV	N	Pass
4	0.230	48.90	10.36	62.45	-13.55	Peak	N	Pass
4**	0.230	33.10	10.36	52.45	-19.35	AV	N	Pass
5	0.422	43.12	10.31	57.41	-14.29	Peak	N	Pass
5**	0.422	31.48	10.31	47.41	-15.93	AV	N	Pass
6	1.100	38.61	10.23	56.00	-17.39	Peak	N	Pass
6**	1.100	26.62	10.23	46.00	-19.38	AV	N	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2170148-AE-1 PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2170148-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2170148-AI.PDF”.

--END OF REPORT--