

TEST REPORT

Applicant: CommuniTake Technologies Ltd.
Address: Yokneam Star Building, High-Tech Park, POB 344,
Yokneam, Israel 2069205
Equipment Type: 4G Smart phone
Model Name: CTGED01
Brand Name: CommuniTake
FCC ID: 2AUHC-CTGED01
Test Standard: 47 CFR Part 15 Subpart B
Test Date: Jan. 12, 2022 - Mar. 10, 2022
Date of Issue: Mar. 21, 2022



Tested by: Sijie Zheng

Checked by: Xia Long

Approved by: Liao Jianming
(Technical Director)

Sijie Zheng

Xia Long

Jm Liao

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Mar. 21, 2022</u>	<u>Initial Issue</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

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	CommuniTake Technologies Ltd.
Address	Yokneam Star Building, High-Tech Park, POB 344, Yokneam, Israel 2069205

2.2 Manufacturer Information

Manufacturer	CommuniTake Technologies Ltd.
Address	Yokneam Star Building, High-Tech Park, POB 344, Yokneam, Israel 2069205

2.3 Factory Information

Factory	Shenzhen Joyhong Technology Co., Ltd.
Address	4/F., Building A2, Zhengfeng Industrial Park, Fengtang Road, Fuyong, Bao'an, Shenzhen, China

2.4 General Description for Equipment under Test (EUT)

EUT Name	4G Smart phone
Model Name Under Test	CTGED01
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Ancillary Equipment

Ancillary Equipment 1	Li ion Rechargeable Battery	
	Brand Name	N/A
	Model No.	CTGED01
	Serial No.	N/A
	Capacity	2500mAh
	Charging Voltage	4.354 V/9.5Wh
	Nominal Voltage	3.8 V
Ancillary Equipment 2	Adapter	
	Brand Name	N/A
	Model No.	SR-C50501000U1 (USA Plug)
	Serial No.	N/A
	Rated Input	100-240VAC 50/60Hz 0.2A
	Rated Output	5 V=1000Ma
Ancillary Equipment 3	USB Cable	
	Model No.	N/A
	Length (Approx.)	1.0m
Note: Letter in () means plug type.		

2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EGPRS 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12 Bluetooth 4.2 (BR+EDR+BLE) WIFI 802.11b, 802.11g, 802.11n
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The requirement for the following technical information of the EUT was tested in this report:

The Highest Speed of Processor	N/A
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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

Note: Compared with the EUT of test report BL-SZ2010032-401, the changes of the EUT of this report as below:

1. LCD display change.
2. Disabled LTE Band 17 by software control.
3. Turn off the Voice function.

Therefore, delete all data of GSM and B17, add GPRS related test data, all items were retested in this report, but only the worst data was shown in this report.

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)	3.22 dB
Radiated emissions (30 MHz-1 GHz)-10m	4.80 dB
Radiated emissions (30 MHz-1 GHz)-3m	4.76 dB
Radiated emissions (1 GHz-18 GHz)-3m	4.88 dB

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments, Test Date and Test Engineer

Test items	Voltage	Temperature	Relative Humidity	Ambient Pressure	Test Date	Test Engineer
Radiated Emission	AC 120V/60Hz DC 3.8V(battery)	21.5℃	49%	101kPa	Mar. 10, 2022	Jiang Pan
Conducted Emission	AC 230V/50Hz AC 120V/60Hz DC 3.8V(battery)	21℃	42%	101kPa	Feb. 23, 2022	Ye Guangqi

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	2021.10.10	2022.10.09	☐
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2018054558	2021.10.10	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	☐
Description	Manufacturer	Name		Version		Use
Test Software	BALUN	BL410-E		V19.918		☐

Radiated Emission Test For Frequency Below 1 GHz (3m)						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	MY55330120	2021.10.20	2022.10.19	☒
Amplifier (30-1GHz)	COM-MV	ZT30-1000M	B2017119081	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	☒
Description	Manufacturer	Name		Version		Use
Test Software	BALUN	BL410-E		V19.918		☒

Radiated Emission Test For Frequency Above 1 GHz (3m)						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	Agilent	N9038A	MY55330120	2021.10.20	2022.10.19	☒
EMI Receiver	ROHDE & SCHWARZ	FSV40	101544	2022.01.04	2023.01.03	☒
Amplifier (1-12GHz)	Advanced Microwave	WLA652A	1740103	2021.10.20	2022.10.19	☒
Amplifier (0.8-21GHz)	Mini-Circuits	ZVA-213-S+	225321316	2021.10.20	2022.10.19	☒
Amplifier (18-40GHz)	COM-MV	KA_LNA18-40G-01	18050001	2021.10.20	2022.10.19	☒
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	1917	2019.07.02	2022.07.01	☒
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	☒
Description	Manufacturer	Name		Version		Use
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	3.5m*3.1m*2.8m	N/A	2022.02.19	2025.02.18	☒
Description	Manufacturer	Name		Version		Use
Test Software	BALUN	BL410-E		V19.918		☒

4.3 Test Enclosure list

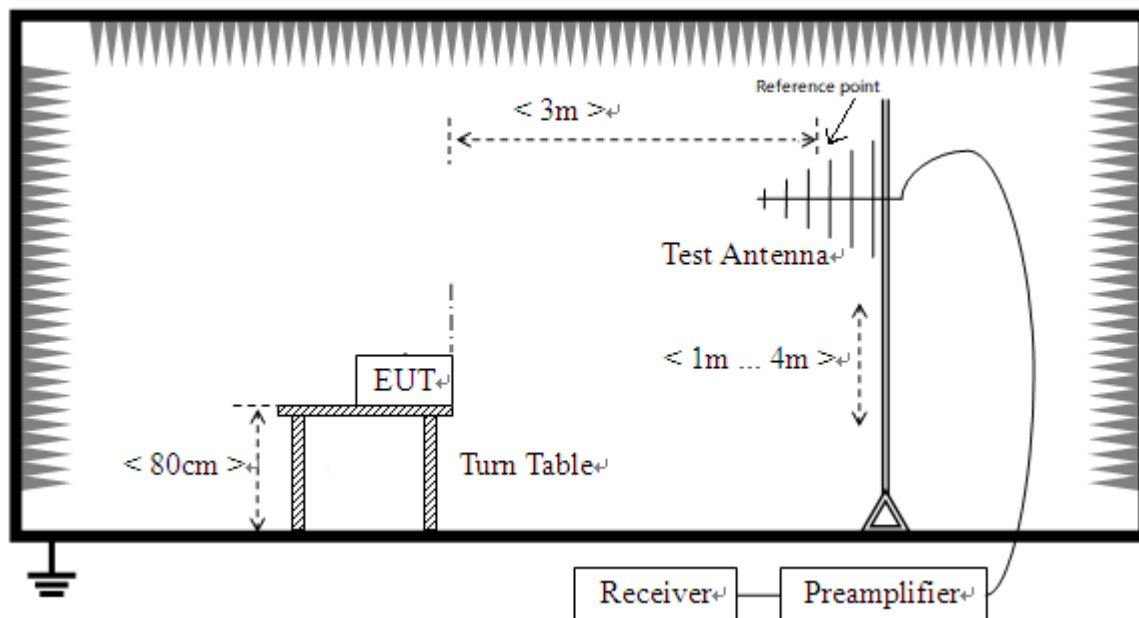
Description	Manufacturer	Model	Serial No.	Length	Description	Use
Wireless Communications Test Set	R&S	CMW500	127801	N/A	Cal. Due 2023.01.03	☒
Laptop	HONOR	N/A	N/A	N/A	N/A	☒
Laptop	Apple	A1465	N/A	N/A	N/A	☒
TF Card	Kingston	N/A	N/A	N/A	N/A	☒
Headset	N/A	N/A	N/A	N/A	N/A	☒

4.4 Test Configurations

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

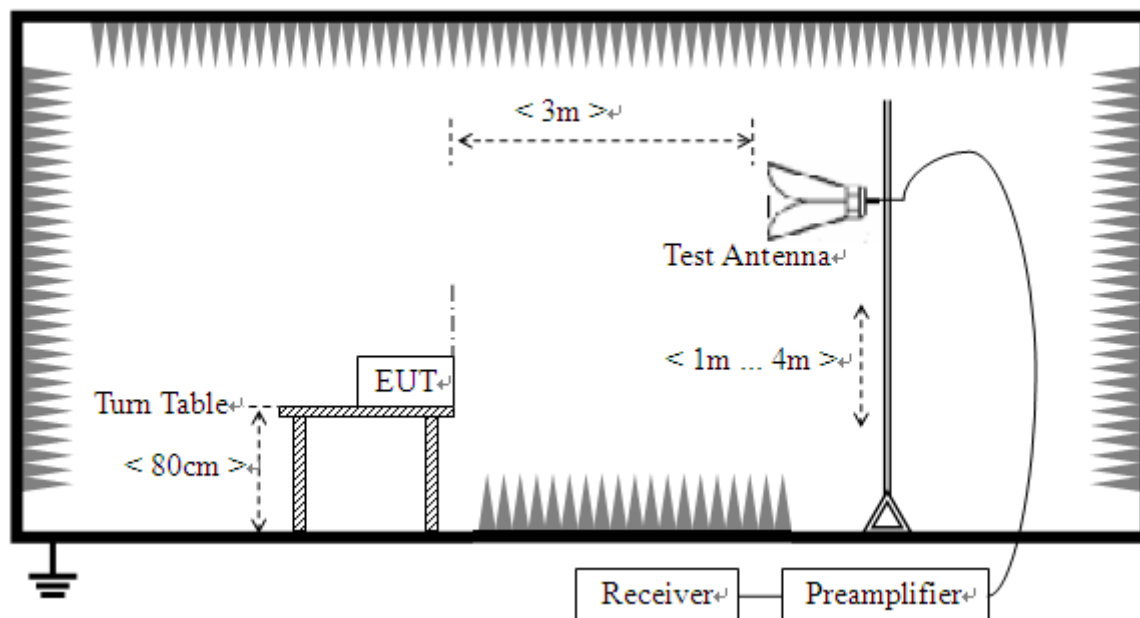
4.5 Test Setups

Test Setup 1

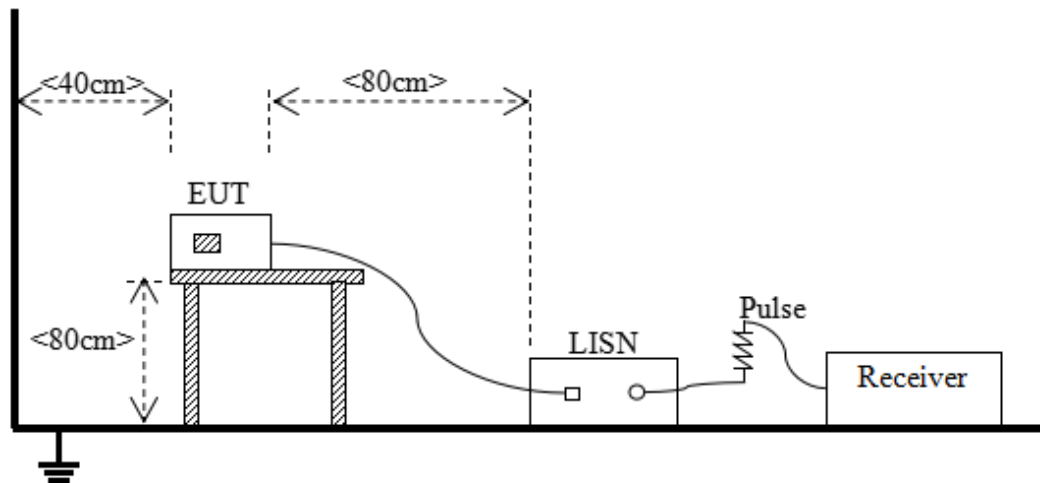


(For Radiated Emission Test (30 MHz-1 GHz))

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 Setup	Test Setup 1&2
	Test Configuration	TC01~TC07 ^{Note}
Conducted Emission, AC Ports	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 $\mu\text{V/m}$) = $20 \cdot \log [\text{Field Strength } (\mu\text{V/m})]$.
- 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.

The measurement frequency range is from 30 MHz to the 5th harmonic of the maximum frequency of the EUT internal source. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1 \text{ GHz}$, 100 kHz for $f < 1 \text{ GHz}$

VBW $\geq$ RBW

Sweep = auto

Detector function = peak for $f < 1 \text{ GHz}$, peak & RMS Average for $f \geq 1 \text{ GHz}$

Trace = max hold

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.

Use the following spectrum analyzer settings:

RBW = 9 KHz

VBW $\geq$ RBW

Sweep = 10ms

Detector function = peak & Average

Trace = max hold

5.1.2.4 Test Result

Please refer to ANNEX A.2.

NOTE:

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

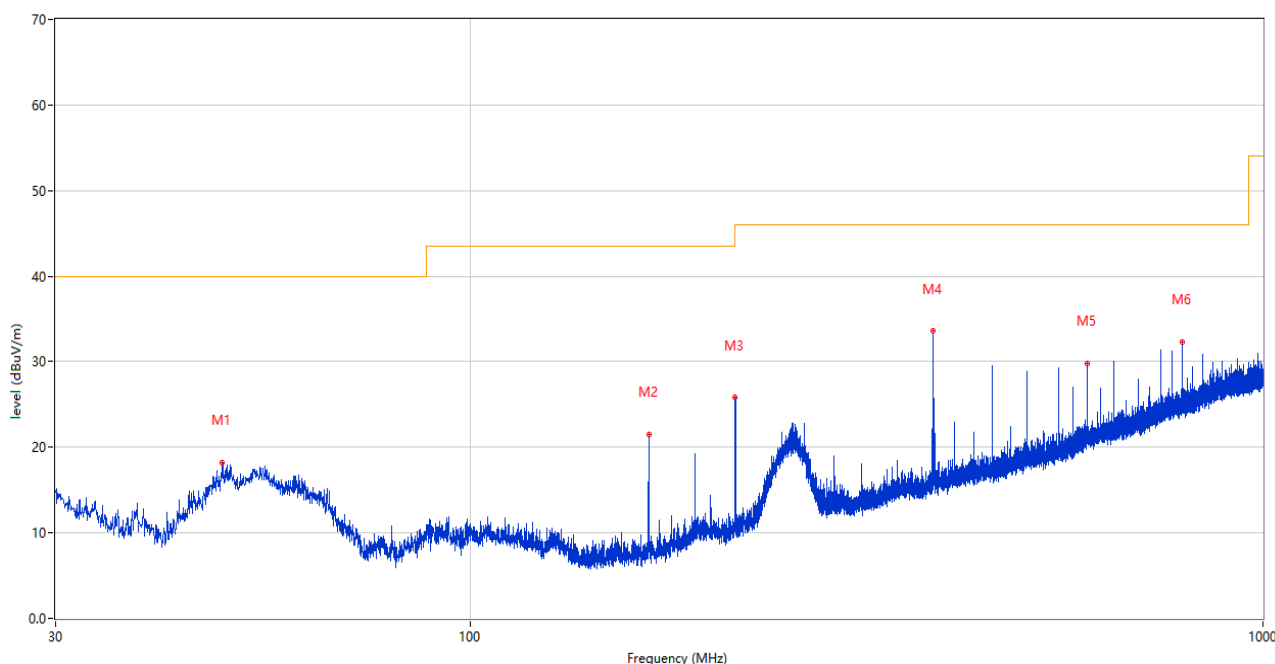
Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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

Test Data and Plots

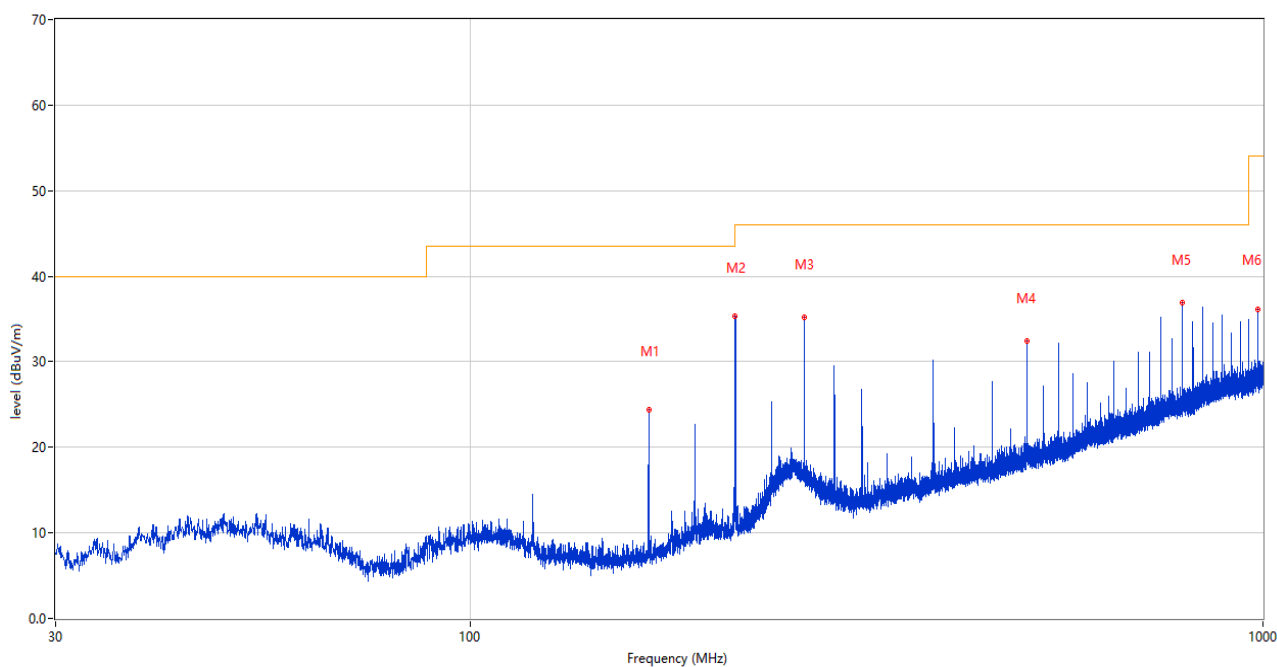
The Camera Test Mode

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



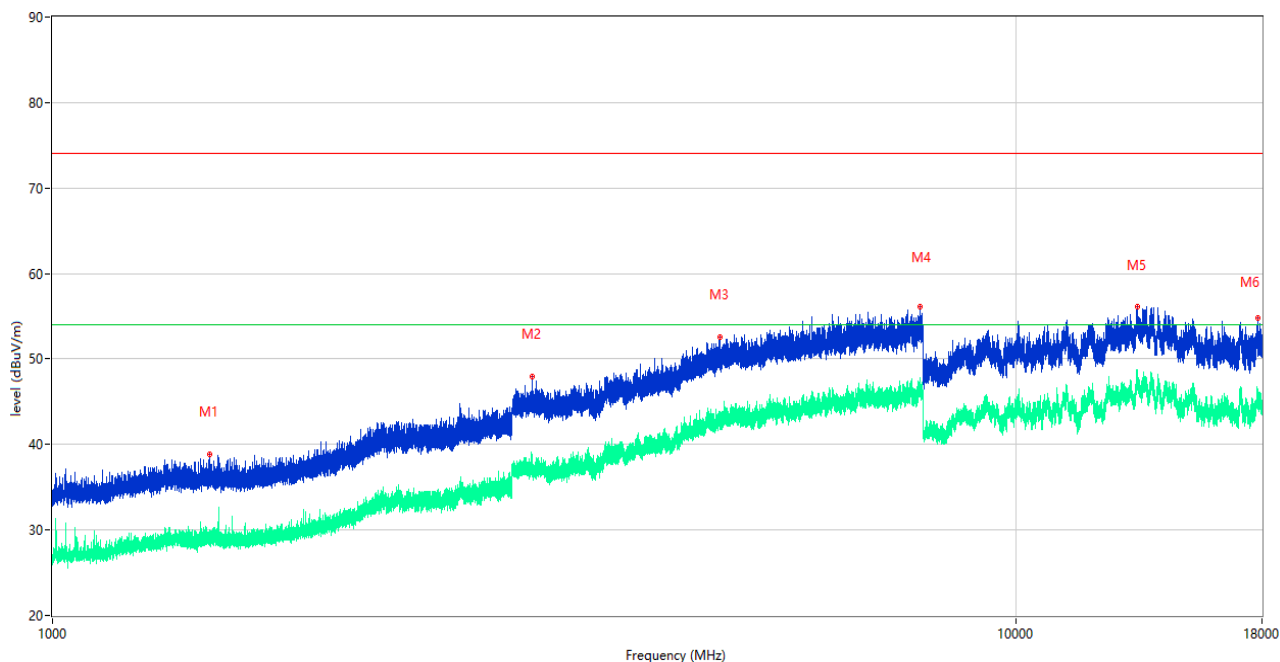
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.721	18.23	-25.36	40.0	-21.77	Peak	2.00	100	Vertical	Pass
2	168.031	21.43	-29.22	43.5	-22.07	Peak	312.00	100	Vertical	Pass
3	215.998	25.88	-26.41	43.5	-17.62	Peak	359.00	100	Vertical	Pass
4	384.002	33.55	-21.41	46.0	-12.45	Peak	348.00	200	Vertical	Pass
5	600.020	29.84	-15.80	46.0	-16.16	Peak	273.00	100	Vertical	Pass
6	791.984	32.28	-12.08	46.0	-13.72	Peak	180.00	100	Vertical	Pass

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



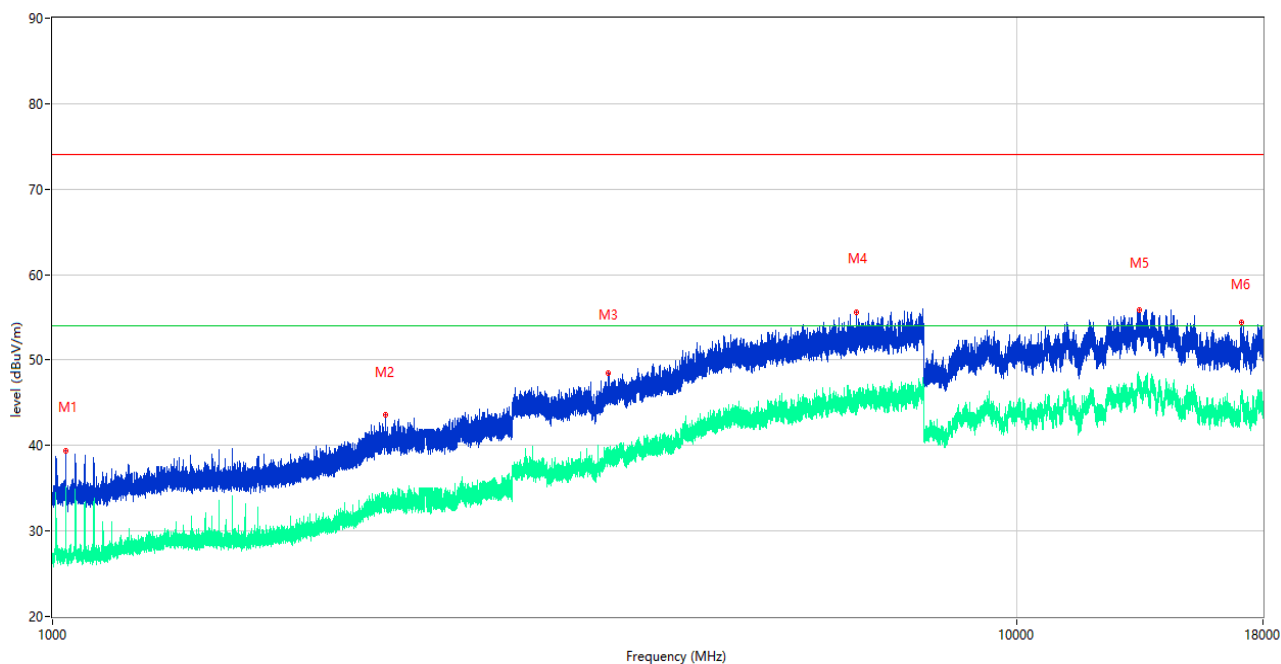
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	168.031	24.35	-29.22	43.5	-19.15	Peak	237.00	200	Horizontal	Pass
2	215.998	35.39	-26.41	43.5	-8.11	Peak	256.00	200	Horizontal	Pass
3	264.013	35.21	-24.51	46.0	-10.79	Peak	80.00	100	Horizontal	Pass
4	503.990	32.37	-18.59	46.0	-13.63	Peak	75.00	200	Horizontal	Pass
5	792.032	36.95	-12.08	46.0	-9.05	Peak	39.00	100	Horizontal	Pass
6	983.995	36.11	-8.67	54.0	-17.89	Peak	28.00	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	1455.900	38.84	-16.53	74.0	-35.16	Peak	256.00	100	Vertical	Pass
1**	1455.900	28.74	-16.53	54.0	-25.26	AV	256.00	100	Vertical	Pass
2	3143.750	47.92	-6.38	74.0	-26.08	Peak	96.00	100	Vertical	Pass
2**	3143.750	38.33	-6.38	54.0	-15.67	AV	96.00	100	Vertical	Pass
3	4927.000	52.54	0.77	74.0	-21.46	Peak	109.00	100	Vertical	Pass
3**	4927.000	42.94	0.77	54.0	-11.06	AV	109.00	100	Vertical	Pass
4	7953.500	56.17	2.98	74.0	-17.83	Peak	269.00	100	Vertical	Pass
4**	7953.500	46.52	2.98	54.0	-7.48	AV	269.00	100	Vertical	Pass
5	13360.500	56.15	5.16	74.0	-17.85	Peak	1.00	100	Vertical	Pass
5**	13360.500	47.79	5.16	54.0	-6.21	AV	1.00	100	Vertical	Pass
6	17820.500	54.74	2.20	74.0	-19.26	Peak	328.00	100	Vertical	Pass
6**	17820.500	45.79	2.20	54.0	-8.21	AV	328.00	100	Vertical	Pass

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

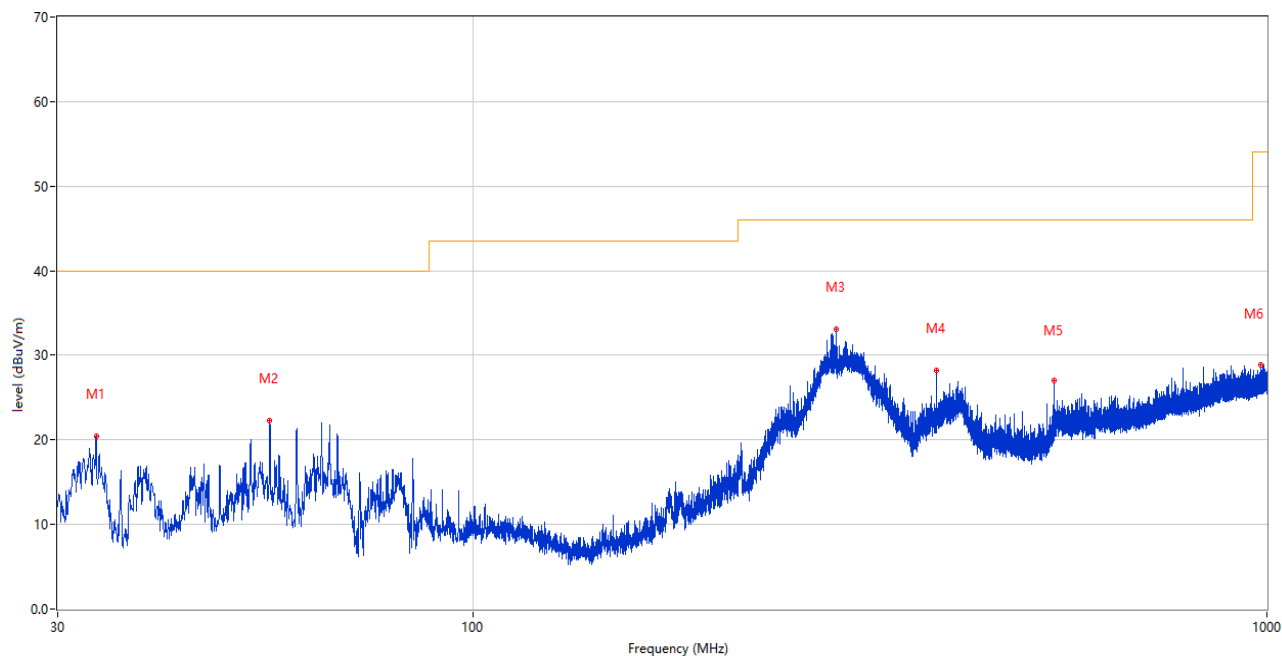


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1032.000	39.34	-17.76	74.0	-34.66	Peak	139.00	100	Horizontal	Pass
1**	1032.000	34.89	-17.76	54.0	-19.11	AV	139.00	100	Horizontal	Pass
2	2215.600	43.56	-11.96	74.0	-30.44	Peak	103.00	100	Horizontal	Pass
2**	2215.600	33.39	-11.96	54.0	-20.61	AV	103.00	100	Horizontal	Pass
3	3770.500	48.48	-3.00	74.0	-25.52	Peak	167.00	100	Horizontal	Pass
3**	3770.500	38.81	-3.00	54.0	-15.19	AV	167.00	100	Horizontal	Pass
4	6824.750	55.62	1.33	74.0	-18.38	Peak	217.00	100	Horizontal	Pass
4**	6824.750	44.50	1.33	54.0	-9.50	AV	217.00	100	Horizontal	Pass
5	13385.000	55.80	5.00	74.0	-18.20	Peak	325.00	100	Horizontal	Pass
5**	13385.000	47.15	5.00	54.0	-6.85	AV	325.00	100	Horizontal	Pass
6	17095.500	54.43	3.58	74.0	-19.57	Peak	142.00	100	Horizontal	Pass
6**	17095.500	45.77	3.58	54.0	-8.23	AV	142.00	100	Horizontal	Pass

Test Data and Plots

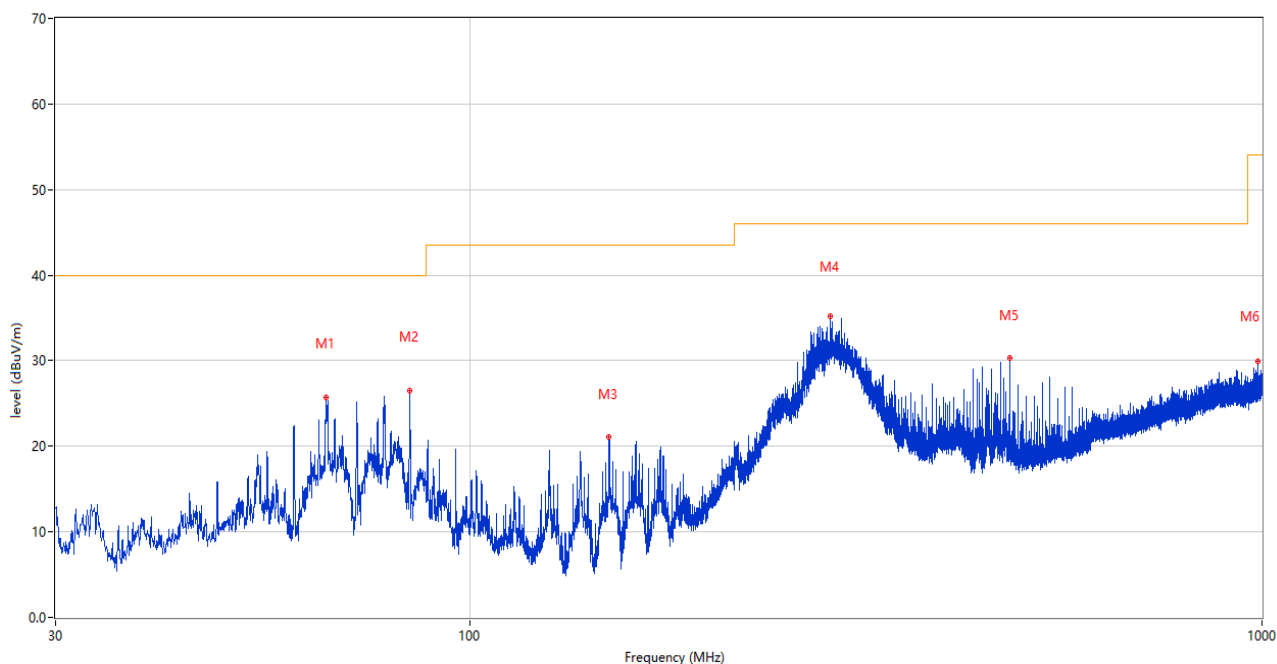
The USB Test Mode

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



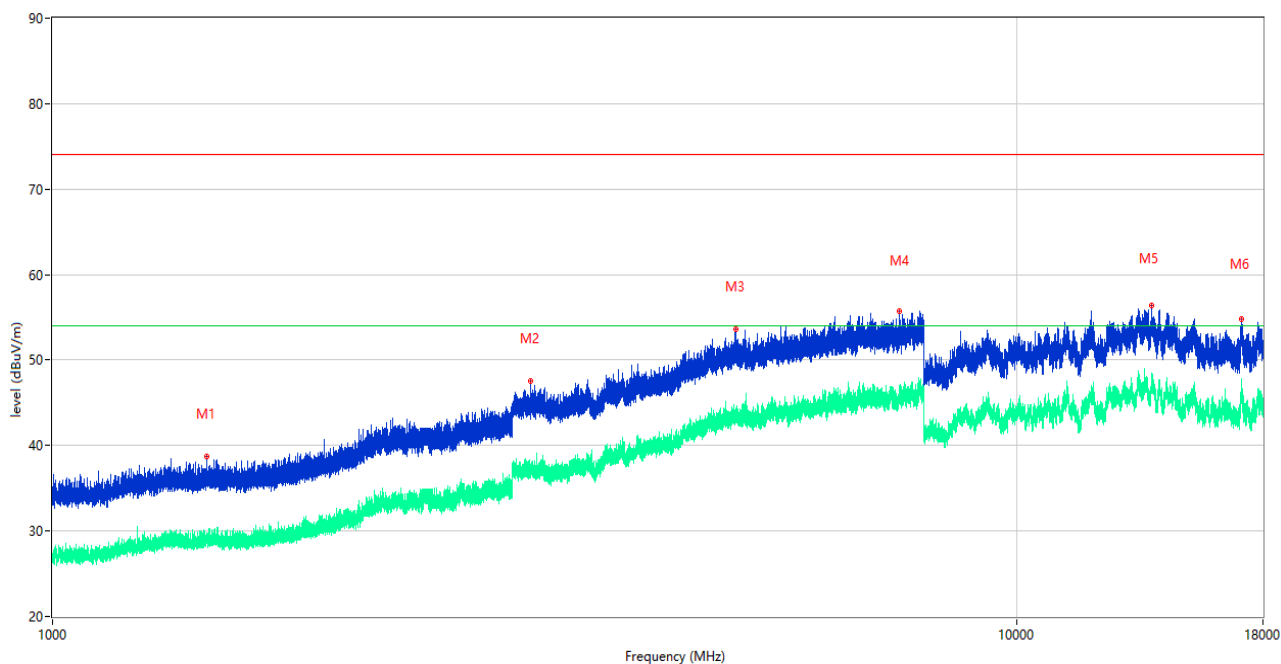
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	33.541	20.46	-28.86	40.0	-19.54	Peak	54.00	100	Vertical	Pass
2	55.511	22.28	-25.95	40.0	-17.72	Peak	73.00	100	Vertical	Pass
3	287.050	33.12	-23.94	46.0	-12.88	Peak	15.00	200	Vertical	Pass
4	384.002	28.16	-21.41	46.0	-17.84	Peak	0.00	200	Vertical	Pass
5	540.026	27.07	-17.69	46.0	-18.93	Peak	354.00	100	Vertical	Pass
6	981.231	28.90	-8.67	54.0	-25.10	Peak	0.00	200	Vertical	Pass

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



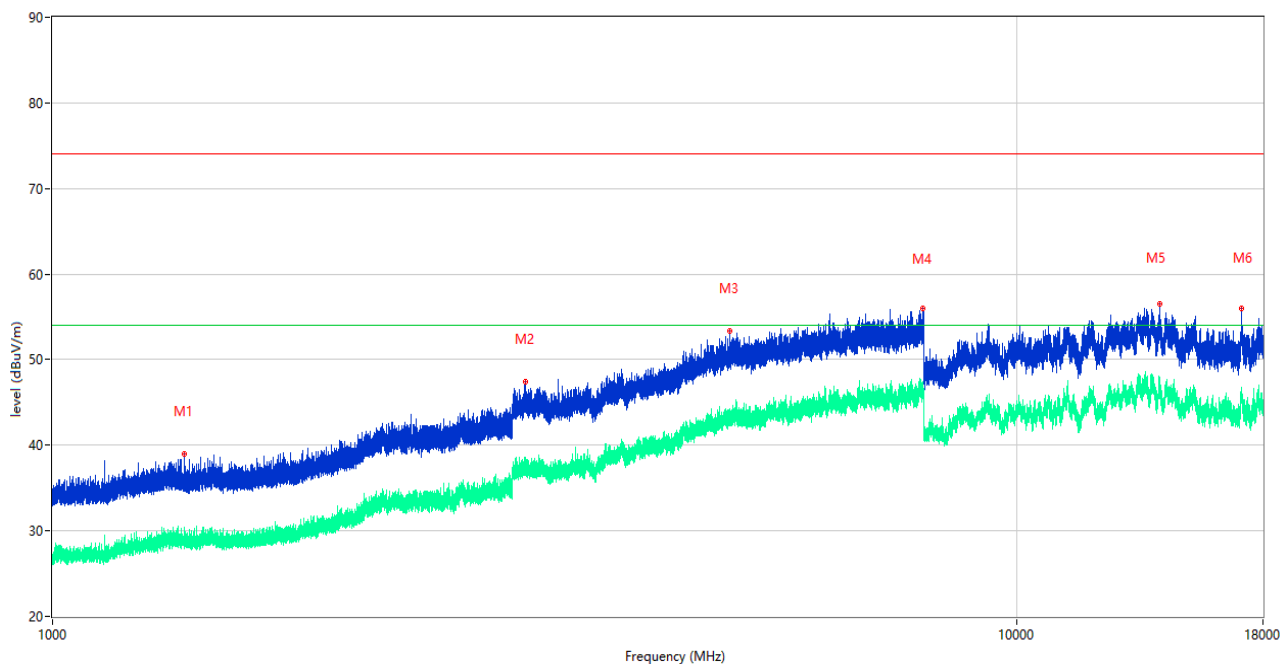
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	65.890	25.67	-27.77	40.0	-14.33	Peak	148.00	200	Horizontal	Pass
2	84.029	26.55	-30.13	40.0	-13.45	Peak	146.00	200	Horizontal	Pass
3	149.844	21.12	-30.05	43.5	-22.38	Peak	0.00	200	Horizontal	Pass
4	285.110	35.20	-24.00	46.0	-10.80	Peak	71.00	100	Horizontal	Pass
5	480.031	30.37	-19.19	46.0	-15.63	Peak	146.00	200	Horizontal	Pass
6	989.039	29.97	-8.55	54.0	-24.03	Peak	0.00	200	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	1446.400	38.68	-16.59	74.0	-35.32	Peak	44.00	100	Vertical	Pass
1**	1446.400	29.74	-16.59	54.0	-24.26	AV	44.00	100	Vertical	Pass
2	3135.000	47.61	-5.50	74.0	-26.39	Peak	277.00	100	Vertical	Pass
2**	3135.000	37.82	-5.50	54.0	-16.18	AV	277.00	100	Vertical	Pass
3	5114.500	53.65	0.15	74.0	-20.35	Peak	216.00	100	Vertical	Pass
3**	5114.500	43.20	0.15	54.0	-10.80	AV	216.00	100	Vertical	Pass
4	7560.500	55.71	2.74	74.0	-18.29	Peak	253.00	100	Vertical	Pass
4**	7560.500	45.65	2.74	54.0	-8.35	AV	253.00	100	Vertical	Pass
5	13799.999	56.41	5.81	74.0	-17.59	Peak	0.00	100	Vertical	Pass
5**	13799.999	47.54	5.81	54.0	-6.46	AV	0.00	100	Vertical	Pass
6	17099.000	54.82	3.71	74.0	-19.18	Peak	310.00	100	Vertical	Pass
6**	17099.000	47.24	3.71	54.0	-6.76	AV	310.00	100	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	1370.700	38.92	-16.82	74.0	-35.08	Peak	334.00	100	Horizontal	Pass
1**	1370.700	28.07	-16.82	54.0	-25.93	AV	334.00	100	Horizontal	Pass
2	3095.250	47.40	-6.00	74.0	-26.60	Peak	60.00	100	Horizontal	Pass
2**	3095.250	37.29	-6.00	54.0	-16.71	AV	60.00	100	Horizontal	Pass
3	5042.750	53.33	0.10	74.0	-20.67	Peak	134.00	100	Horizontal	Pass
3**	5042.750	43.22	0.10	54.0	-10.78	AV	134.00	100	Horizontal	Pass
4	7997.750	56.01	2.80	74.0	-17.99	Peak	360.00	100	Horizontal	Pass
4**	7997.750	46.45	2.80	54.0	-7.55	AV	360.00	100	Horizontal	Pass
5	14055.500	56.51	5.29	74.0	-17.49	Peak	237.00	100	Horizontal	Pass
5**	14055.500	47.72	5.29	54.0	-6.28	AV	237.00	100	Horizontal	Pass
6	17118.000	55.98	3.46	74.0	-18.02	Peak	72.00	100	Horizontal	Pass
6**	17118.000	44.99	3.46	54.0	-9.01	AV	72.00	100	Horizontal	Pass

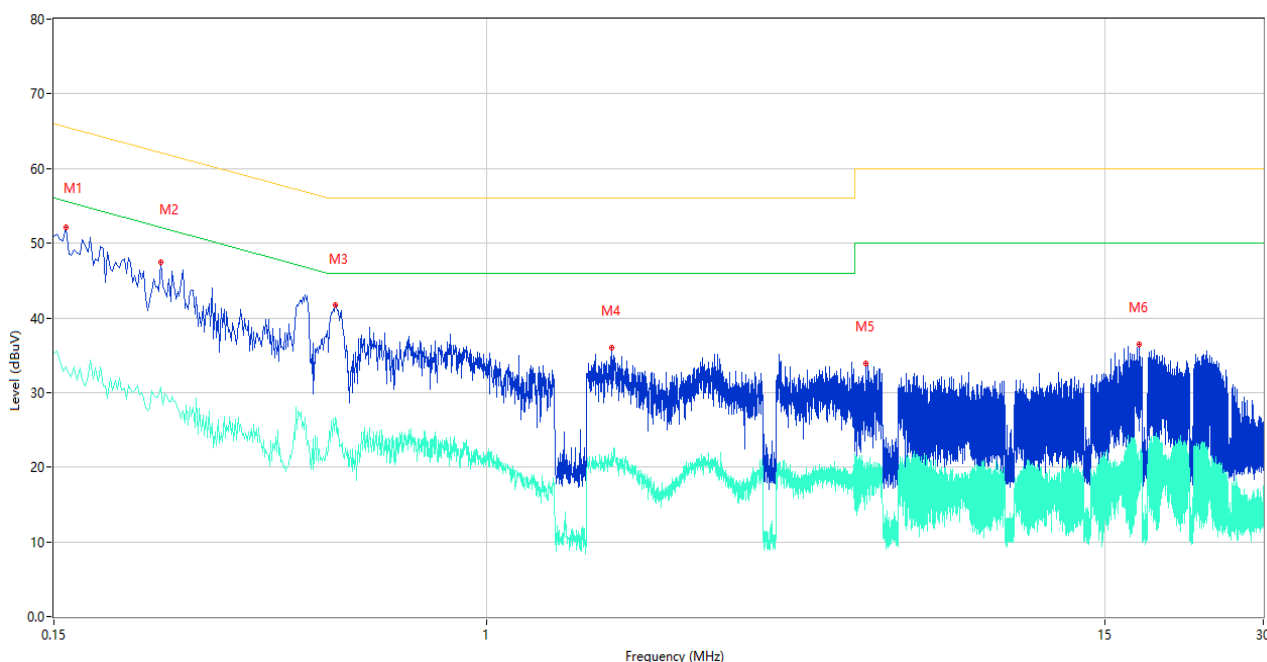
A.2 Conducted Emission

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

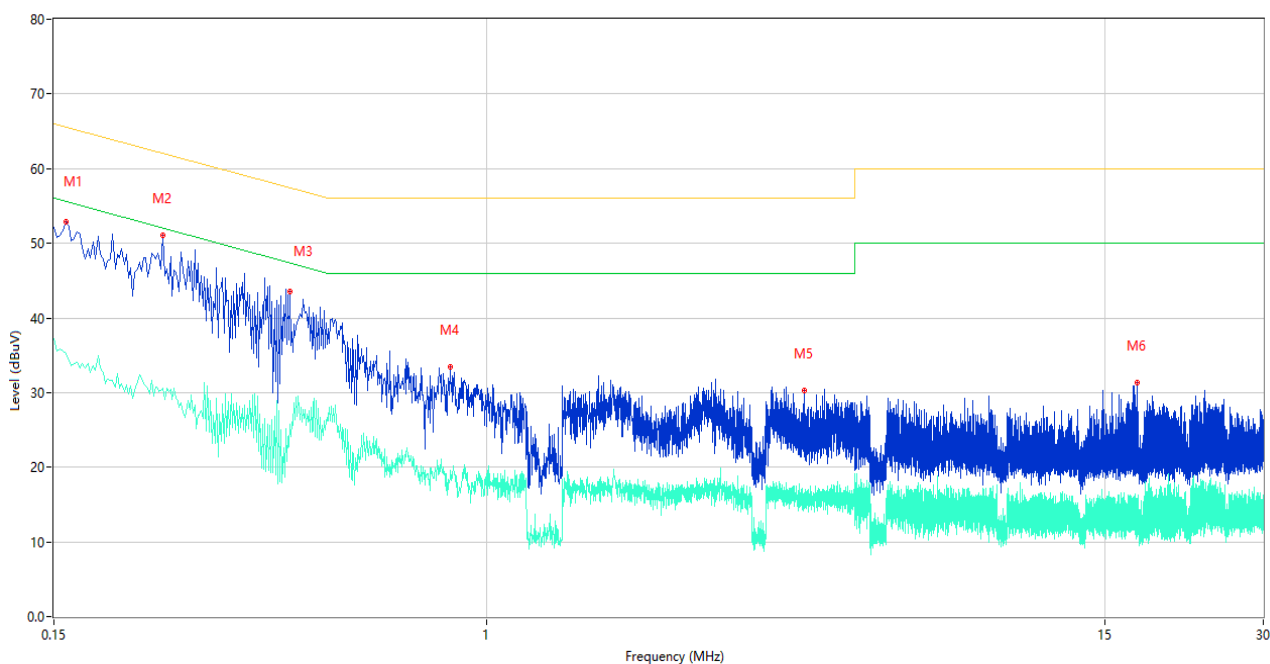
The Camera Test Mode

A.2.1 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.158	52.17	10.18	65.57	-13.40	Peak	L	Pass
1**	0.158	33.39	10.18	55.57	-22.18	AV	L	Pass
2	0.240	47.53	10.08	62.10	-14.57	Peak	L	Pass
2**	0.240	30.75	10.08	52.10	-21.35	AV	L	Pass
3	0.514	41.73	10.11	56.00	-14.27	Peak	L	Pass
3**	0.514	26.60	10.11	46.00	-19.40	AV	L	Pass
4	1.728	35.98	9.91	56.00	-20.02	Peak	L	Pass
4**	1.728	22.02	9.91	46.00	-23.98	AV	L	Pass
5	5.264	33.96	9.97	60.00	-26.04	Peak	L	Pass
5**	5.264	19.62	9.97	50.00	-30.38	AV	L	Pass
6	17.432	36.42	10.18	60.00	-23.58	Peak	L	Pass
6**	17.432	19.89	10.18	50.00	-30.11	AV	L	Pass

A.2.2 N Phase

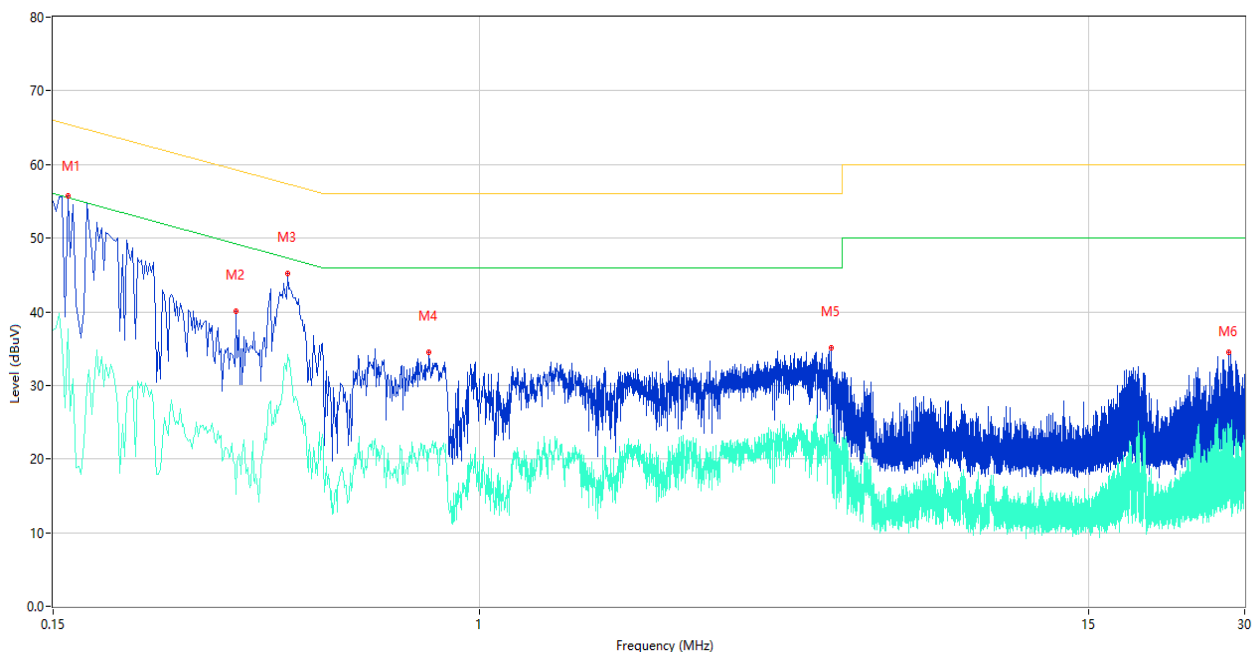


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.158	52.90	10.18	65.57	-12.67	Peak	N	Pass
1**	0.158	35.30	10.18	55.57	-20.27	AV	N	Pass
2	0.242	51.10	10.08	62.03	-10.93	Peak	N	Pass
2**	0.242	30.57	10.08	52.03	-21.46	AV	N	Pass
3	0.422	43.59	10.09	57.41	-13.82	Peak	N	Pass
3**	0.422	25.78	10.09	47.41	-21.63	AV	N	Pass
4	0.850	33.41	10.05	56.00	-22.59	Peak	N	Pass
4**	0.850	18.73	10.05	46.00	-27.27	AV	N	Pass
5	4.022	30.24	10.09	56.00	-25.76	Peak	N	Pass
5**	4.022	16.57	10.09	46.00	-29.43	AV	N	Pass
6	17.292	31.31	10.18	60.00	-28.69	Peak	N	Pass
6**	17.292	15.66	10.18	50.00	-34.34	AV	N	Pass

Test Data and Plots

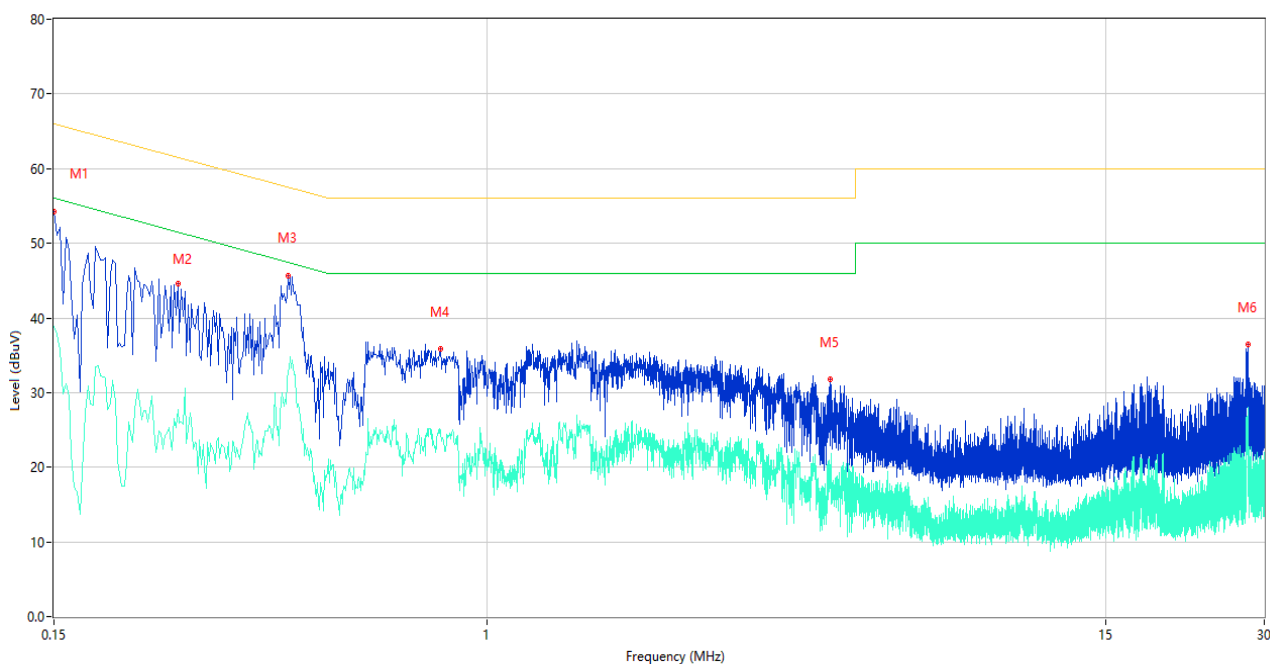
The USB Test Mode

A.2.3 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.160	55.68	10.17	65.46	-9.78	Peak	L	Pass
1**	0.160	37.60	10.17	55.46	-17.86	AV	L	Pass
2	0.338	40.01	10.08	59.25	-19.24	Peak	L	Pass
2**	0.338	15.17	10.08	49.25	-34.08	AV	L	Pass
3	0.426	45.19	10.09	57.33	-12.14	Peak	L	Pass
3**	0.426	34.26	10.09	47.33	-13.07	AV	L	Pass
4	0.798	34.53	10.06	56.00	-21.47	Peak	L	Pass
4**	0.798	20.36	10.06	46.00	-25.64	AV	L	Pass
5	4.772	35.05	9.97	56.00	-20.95	Peak	L	Pass
5**	4.772	22.72	9.97	46.00	-23.28	AV	L	Pass
6	27.984	34.54	10.24	60.00	-25.46	Peak	L	Pass
6**	27.984	24.76	10.24	50.00	-25.24	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	54.21	10.19	66.00	-11.79	Peak	N	Pass
1**	0.150	38.87	10.19	56.00	-17.13	AV	N	Pass
2	0.258	44.64	10.08	61.50	-16.86	Peak	N	Pass
2**	0.258	27.75	10.08	51.50	-23.75	AV	N	Pass
3	0.418	45.70	10.09	57.49	-11.79	Peak	N	Pass
3**	0.418	32.77	10.09	47.49	-14.72	AV	N	Pass
4	0.814	35.87	10.06	56.00	-20.13	Peak	N	Pass
4**	0.814	25.02	10.06	46.00	-20.98	AV	N	Pass
5	4.486	31.85	10.01	56.00	-24.15	Peak	N	Pass
5**	4.486	19.12	10.01	46.00	-26.88	AV	N	Pass
6	27.902	36.42	10.24	60.00	-23.58	Peak	N	Pass
6**	27.902	28.05	10.24	50.00	-21.95	AV	N	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2210355-AE.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2210355-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2210355-AI.PDF”.

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--END OF REPORT--