

EMC

TEST REPORT

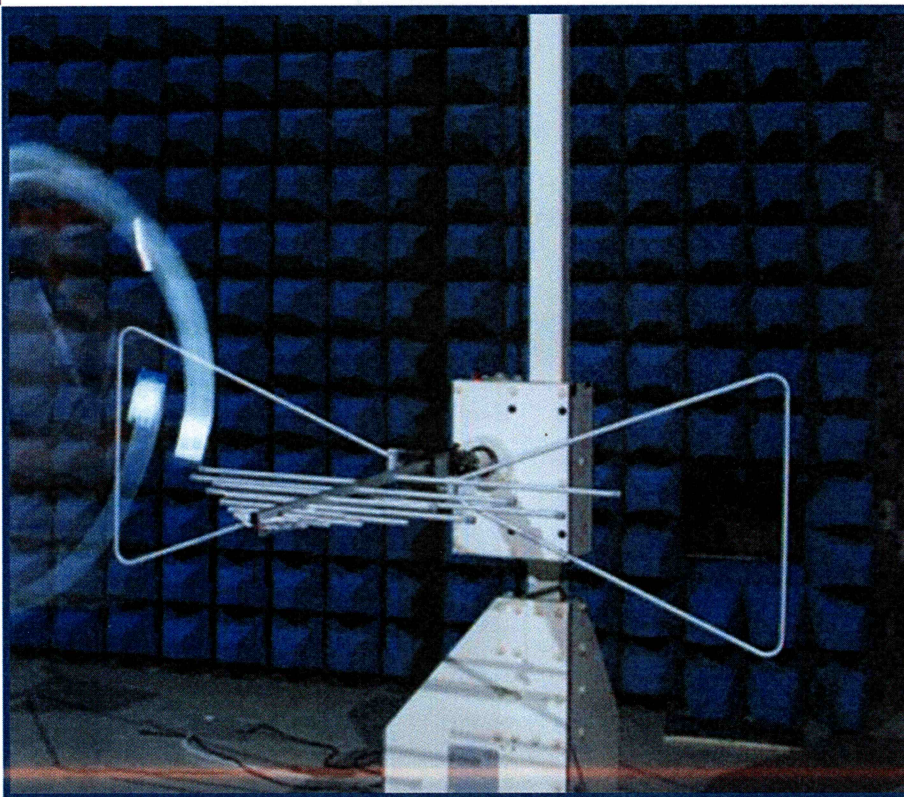
ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
Notebook Computer

ISSUED TO
Honor Device Co., Ltd.

Suite 3401, Unit A, Building 6, Shum Yip Sky Park, No. 8089, Hongli West Road, Xiangmihu Street, Futian District, Shenzhen, Guangdong 518040, People's Republic of China



Tested by: Huang Guoqiang
Huang Guoqiang

Date Aug. 31, 2021

Approved by: Wei Yanquan
Wei Yanquan
(Chief Engineer)

Date Aug. 31, 2021

Report No.: BL-SZ2170247-401
EUT Name: Notebook Computer
Model Name: HGE-W76, HGE-W56
(refer section 2.3)
Brand Name: HONOR
Test Standard: 47 CFR Part 15 Subpart B
(refer section 3.1)
FCC ID: 2AYGCHGE-WX6

Test Conclusion: Pass
Test Date: Jul. 07, 2021 ~ Aug. 07, 2021
Date of Issue: Aug. 31, 2021

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Aug. 31, 2021</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

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 v6.9.
- (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	Honor Device Co., Ltd.
Address	Suite 3401, Unit A, Building 6, Shum Yip Sky Park, No. 8089, Hongli West Road, Xiangmihu Street, Futian District, Shenzhen, Guangdong 518040, People's Republic of China

2.2 Manufacturer Information

Manufacturer	Honor Device Co., Ltd.
Address	Suite 3401, Unit A, Building 6, Shum Yip Sky Park, No. 8089, Hongli West Road, Xiangmihu Street, Futian District, Shenzhen, Guangdong 518040, People's Republic of China

2.3 General Description for Equipment under Test (EUT)

EUT Name	Notebook Computer
Model Name Under Test	HGE-W76, HGE-W56
Series Model Name	HGE-WXXXXXXXXX (The "X" in model name can be 0 to 9, A to Z, a to z, "-" or blank)
Description of Model name differentiation	Only differences are model names for trading purpose.
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Differences Description

Key component List	
CPU	Intel i7-11390H / Intel i5-11320H
Memory	16G
SSD	512G
1. ALL models are identical each other, except model name and CPU and SSD and Memory. 2. Tested all mode on model HGE-W76 (Intel i7-11390H +16G+512G), other configuration tested the worst case of each item on HGE-W76.	

2.5 Ancillary Equipment

Ancillary Equipment 1	Rechargeable Li-ion Polymer Battery 1	
	Brand Name	HONOR
	Model No.	HB5881P1EEW-31A
	Serial No.	9VHKAIL415
	Capacity	5195 mAh
	Rated Voltage	11.55 V
	Limit Charge Voltage	13.29 V
	Manufacturer	HONOR(Factory: Sunwoda)
Ancillary Equipment 2	Rechargeable Li-ion Polymer Battery 2	
	Brand Name	HONOR
	Model No.	HB5881P1EEW-31A
	Serial No.	9VHLAIL523
	Capacity	5195 mAh
	Rated Voltage	11.55 V
	Limit Charge Voltage	13.29 V
	Manufacturer	HONOR (Factory: Sunwoda)
Ancillary Equipment 3	Rechargeable Li-ion Polymer Battery 3	
	Brand Name	HONOR
	Model No.	HB5881P1EEW-31C
	Serial No.	9VHMAIL506
	Capacity	5195 mAh
	Rated Voltage	11.55 V
	Limit Charge Voltage	13.29 V
	Manufacturer	HONOR (Factory: Sunwoda)
Ancillary Equipment 4	Rechargeable Li-ion Polymer Battery 4	
	Brand Name	HONOR
	Model No.	HB5881P1EEW-31A
	Serial No.	9VHTGYL501
	Capacity	5195 mAh
	Rated Voltage	11.55 V
	Limit Charge Voltage	13.29 V
	Manufacturer	HONOR (Factory: Desay)
Ancillary Equipment 5	Rechargeable Li-ion Polymer Battery 5	
	Brand Name	HONOR
	Model No.	HB5881P1EEW-31A
	Serial No.	9VHUGYL501
	Capacity	5195 mAh
	Rated Voltage	11.55 V
	Limit Charge Voltage	13.29 V
	Manufacturer	HONOR (Factory: Desay)
Ancillary Equipment 6	Rechargeable Li-ion Polymer Battery 6	
	Brand Name	HONOR
	Model No.	HB5881P1EEW-31C

	Serial No.	9VHXGYL501
	Capacity	5195 mAh
	Rated Voltage	11.55 V
	Limit Charge Voltage	13.29 V
	Manufacturer	HONOR (Factory: Desay)
Ancillary Equipment 7	Adapter	
	Brand Name	HONOR
	Model No.	HN-200325UP0 (US Plug)
	Serial No.	N/A
	Rated Input	100-240 V~, 1.8 A, 50/60 Hz
	Rated Output	5 V= 2 A / 9 V= 2 A / 12 V= 2 A 15 V= 3 A / 20 V= 3.25 A
	Manufacturer	Honor Device Co., Ltd.
Ancillary Equipment 8	USB Cable	
	Length (Approx.)	1.8 m
Note: Letter in () means plug type.		

2.6 Technical Information

Network and Wireless connectivity	WIFI, Bluetooth
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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 11.55 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	ROHDE & SCHWARZ	FSV40	101544	2021.01.14	2022.01.13	☐
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	2022.07.27	☐
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	ROHDE & SCHWARZ	FSV40	101544	2021.01.14	2022.01.13	☒
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	2021.01.14	2022.01.13	☒
Test Antenna-Horn	A-INFOMW	LB-180400KF	J211060273	2020.01.06	2022.01.05	☒
Anechoic Chamber	YIHENG	9m*6m*6m	N/A	2021.07.17	2022.07.16	☒
Test Software	BALUN	BL410_E	V19.918	--	--	☒

Conducted disturbance Test						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	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

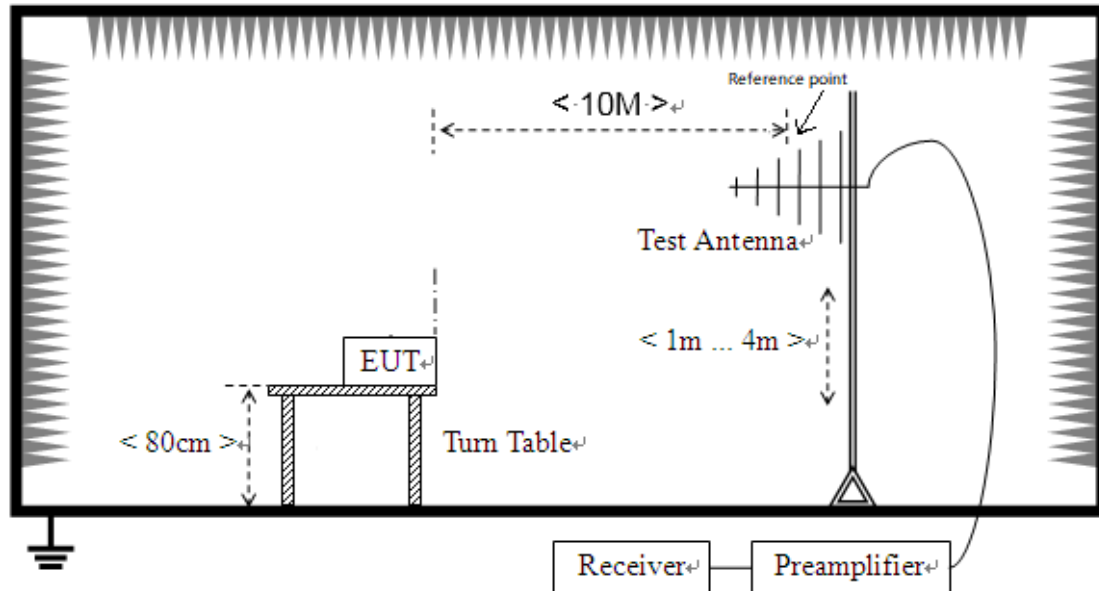
Description	Manufacturer	Model	Serial No.	Length	Description	Use
Mobile Disk	WD Element	WDBUZG0010BB K	WXA1A48LD 5JT	N/A	N/A	☒
Mobile Disk	WD Element	WDBC3C0010BS L-0B	N/A	N/A	N/A	☒
Mobile Disk	LACIE	LRD0SV2	N/A	N/A	N/A	☒
HDMI Cable	N/A	N/A	N/A	1.5 m	Shielded with core	☒
mouse	lenovo	MOEUUOA	N/A	N/A	N/A	☒
VGA Cable	N/A	N/A	N/A	1.0 m	Shielded with core	☒
Earphone	N/A	N/A	N/A	1.1 m	N/A	☒
Display Screen	Dell	U241HB	N/A	N/A	N/A	☒
Display Screen	ASUS	MX27U	H9LMRS0334 74	N/A	N/A	☒
Display Screen	AOC	LV243XIP	N/A	N/A	N/A	☒
Docking station	HUAWEI	AD11	N/A	N/A	N/A	☒

4.4 Test Configurations

Test Mode	
Mode 1:	Type-c 1-charging + Type-c 2-Mobile Disk + USB-Mobile Disk + Camera + Burintest + Earphone
Mode 2:	Type-c 1-Mobile Disk (Thunderbolt) + Type-c 2-charging + USB-Mobile Disk + Camera + HMDI + Audio + Burintest
Mode 3:	Type-c 1-charging + Type-c 2-Dock (Mobile Disk&HDMI) + USB-Mobile Disk + Camera + Audio + Burintest
Mode 4:	Type-c 1-Dock(Mobile Disk &VGA) + Type-c 2charging + USB-mouse + Camera + Audio + Burintest

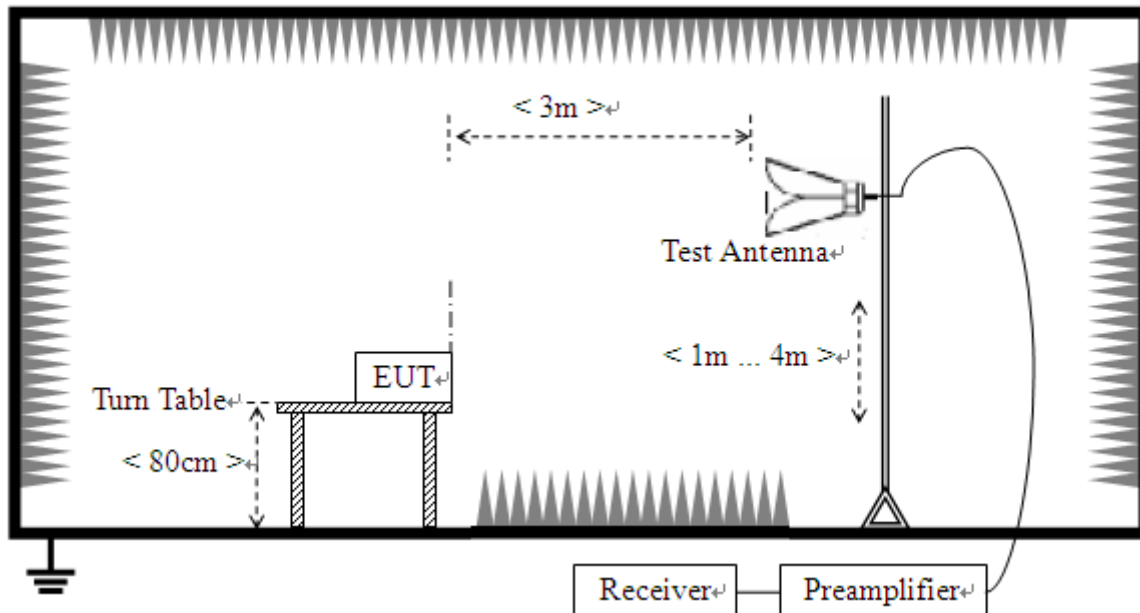
4.5 Test Setups

Test Setup 1



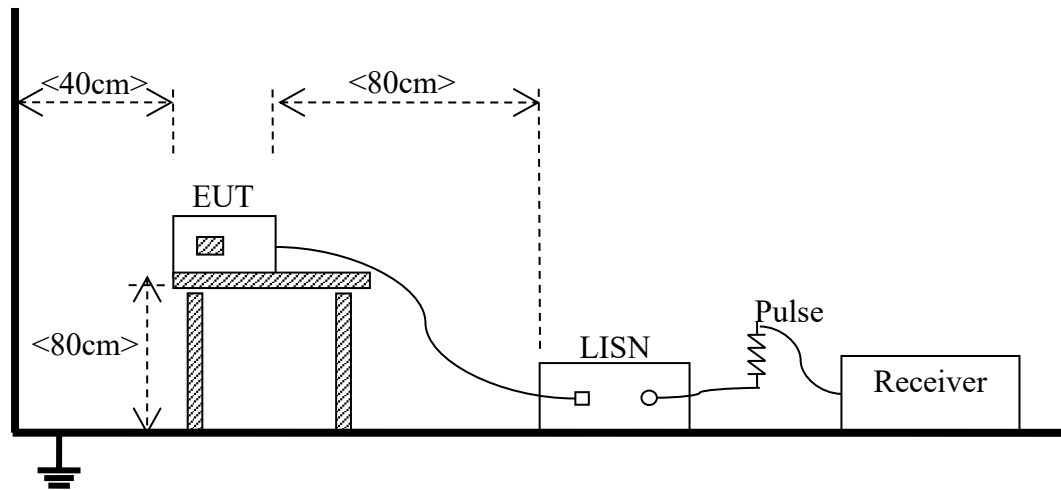
(For Radiated Emission Test (30 MHz-1 GHz))

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	Mode 1 ~ Mode 4 ^{Note}
Conducted Emission	Test Env.	NTNV
	Test Setup	Test Setup 3
	Test Configuration	Mode 1 ~ Mode 4 ^{Note}

Note:

- 1) If there is one kind of accessories with different models, each one should be applied throughout the compliance test respectively, however, only the worst case will be recorded in this report.
- 2) If EUT has more than one typical operation, only the worst test mode will be recorded in this report.

Worst Case:

1) Radiated Emission

Mode 3 : Type-c 1-charging + Type-c 2-Dock(Mobile Disk&HDMI) + USB-Mobile Disk + Camera+Audio + Burintest. (30MHz-1GHz).

Mode 2: Type-c 1-Mobile Disk(Thunderbolt) + Type-c 2-charging + USB-Mobile Disk + Camera + HMDI + Audio + Burintest. (1GHz-40GHz).

2) Conducted Emission

Mode 3 : Type-c 1-charging + Type-c 2-Dock(Mobile Disk&HDMI) + USB-Mobile Disk + Camera + Audio + Burintest.

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) + 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

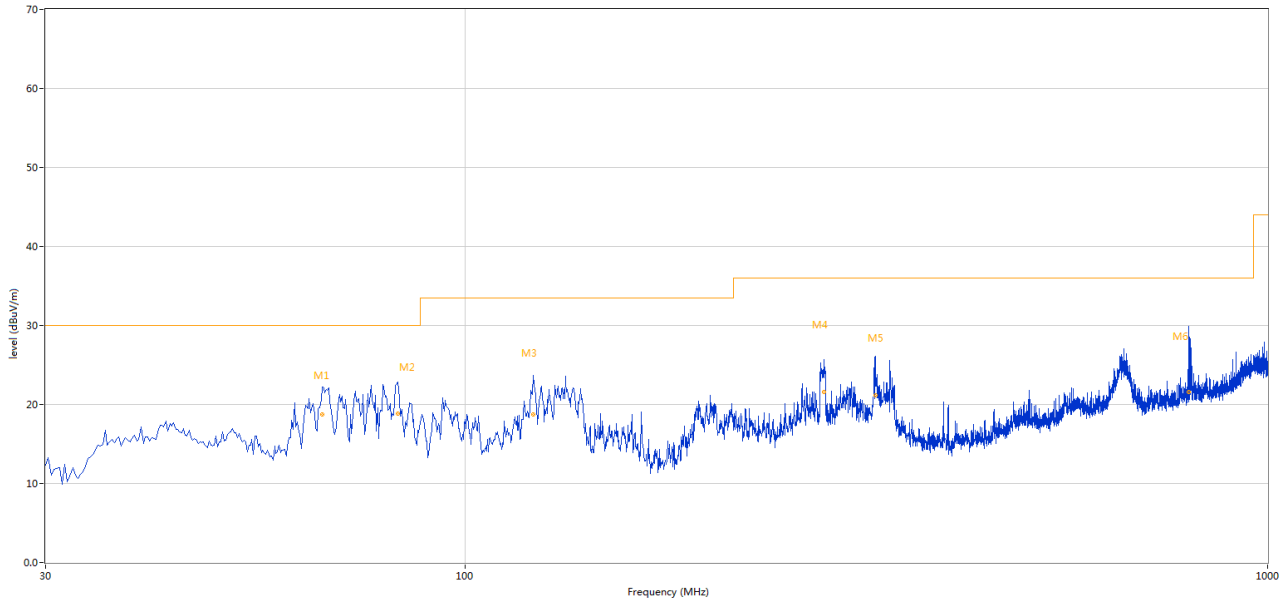
Note 1: The symbol of “--” in the table which means not application.

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.

Test Data and Plots

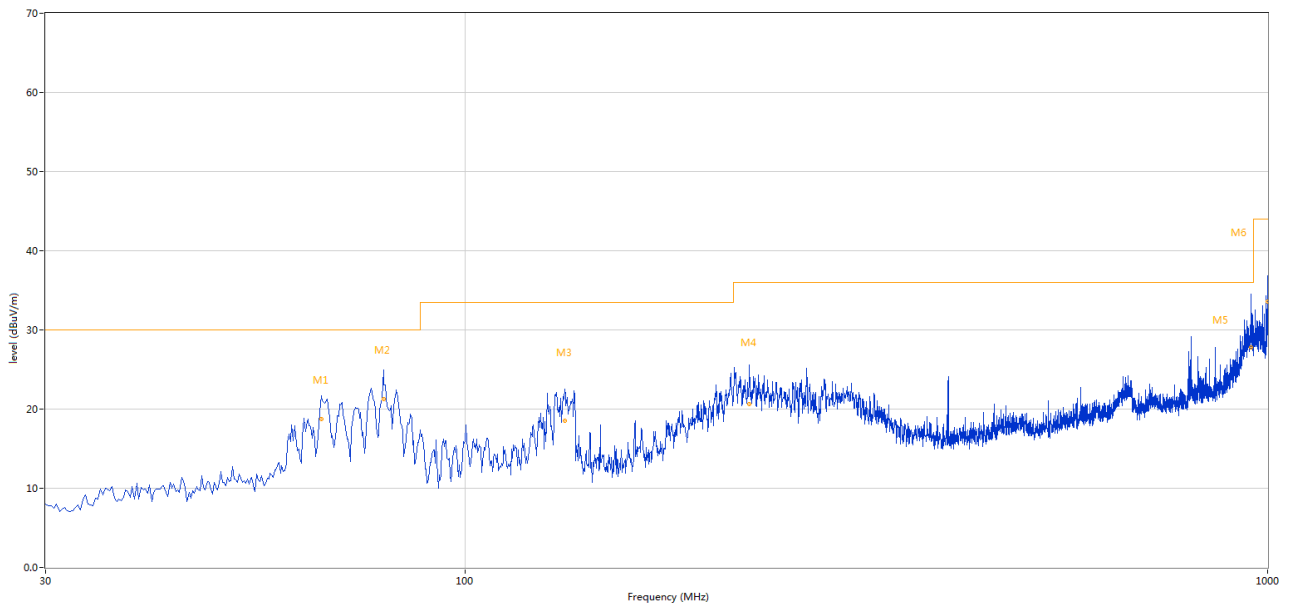
Test Mode 3: Type-c 1-charging + Type-c 2-Dock (Mobile Disk&HDMI) + USB-Mobile Disk + Camera + Audio + Burintest

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	66.366	22.17	-29.12	30.0	-7.83	Peak	156.00	400	Vertical	N/A
1*	66.366	18.72	-29.12	30.0	-11.28	QP	156.00	400	Vertical	Pass
2	82.367	22.86	-31.28	30.0	-7.14	Peak	307.00	400	Vertical	N/A
2*	82.367	18.89	-31.28	30.0	-11.11	QP	307.00	400	Vertical	Pass
3	121.642	23.70	-27.84	33.5	-9.80	Peak	250.00	100	Vertical	N/A
3*	121.642	18.77	-27.84	33.5	-14.73	QP	250.00	100	Vertical	Pass
4	279.955	25.67	-26.31	36.0	-10.33	Peak	0.00	200	Vertical	N/A
4*	279.955	21.54	-26.31	36.0	-14.46	QP	0.00	200	Vertical	Pass
5	324.321	26.12	-24.76	36.0	-9.88	Peak	220.00	100	Vertical	N/A
5*	324.321	21.15	-24.76	36.0	-14.85	QP	220.00	100	Vertical	Pass
6	797.078	29.89	-14.03	36.0	-6.11	Peak	256.00	200	Vertical	N/A
6*	797.078	21.55	-14.03	36.0	-14.45	QP	256.00	200	Vertical	Pass

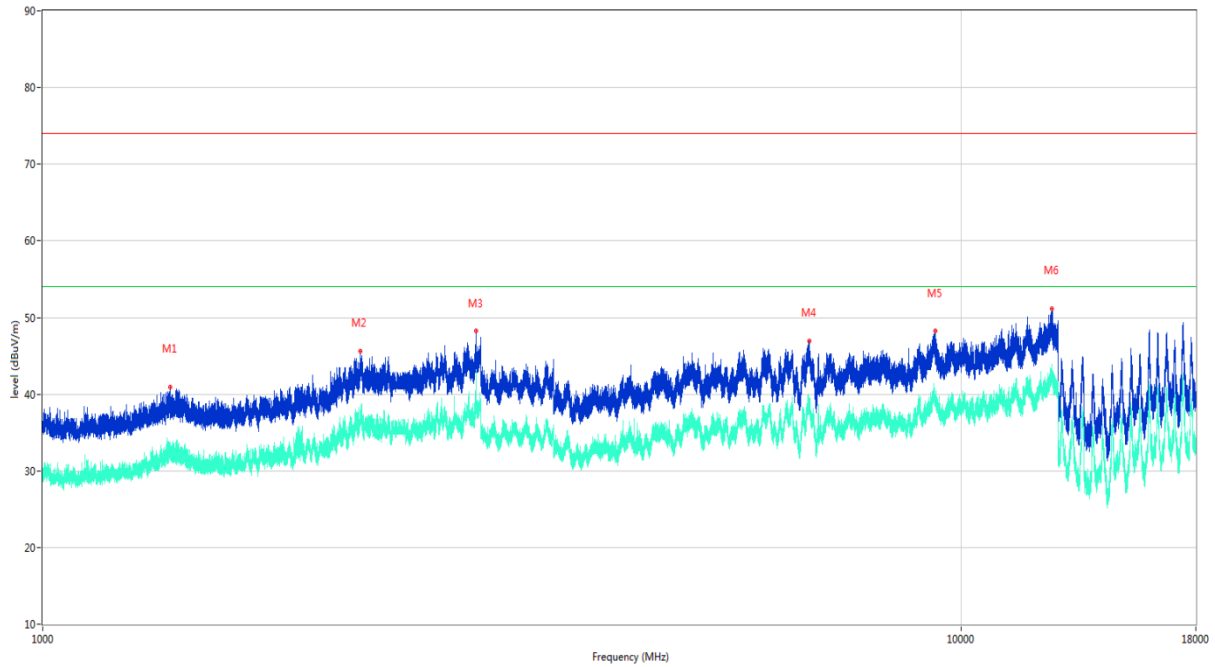
A.1.2 Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	66.123	21.68	-29.08	30.0	-8.32	Peak	100.00	400	Horizontal	N/A
1*	66.123	18.71	-29.08	30.0	-11.29	QP	100.00	400	Horizontal	Pass
2	79.067	24.91	-31.17	30.0	-5.09	Peak	257.00	400	Horizontal	N/A
2*	79.067	21.30	-31.17	30.0	-8.70	QP	257.00	400	Horizontal	Pass
3	133.037	22.52	-27.03	33.5	-10.98	Peak	120.00	400	Horizontal	N/A
3*	133.037	18.48	-27.03	33.5	-15.02	QP	120.00	400	Horizontal	Pass
4	226.133	25.61	-28.23	36.0	-10.39	Peak	176.00	400	Horizontal	N/A
4*	226.133	20.66	-28.23	36.0	-15.34	QP	176.00	400	Horizontal	Pass
5	952.629	34.48	-11.65	36.0	-1.52	Peak	149.00	100	Horizontal	N/A
5*	952.629	27.77	-11.65	36.0	-8.23	QP	149.00	100	Horizontal	Pass
6	1000.000	36.79	-11.32	44.0	-7.21	Peak	210.00	300	Horizontal	N/A
6*	1000.000	33.60	-11.32	44.0	-10.40	QP	210.00	300	Horizontal	Pass

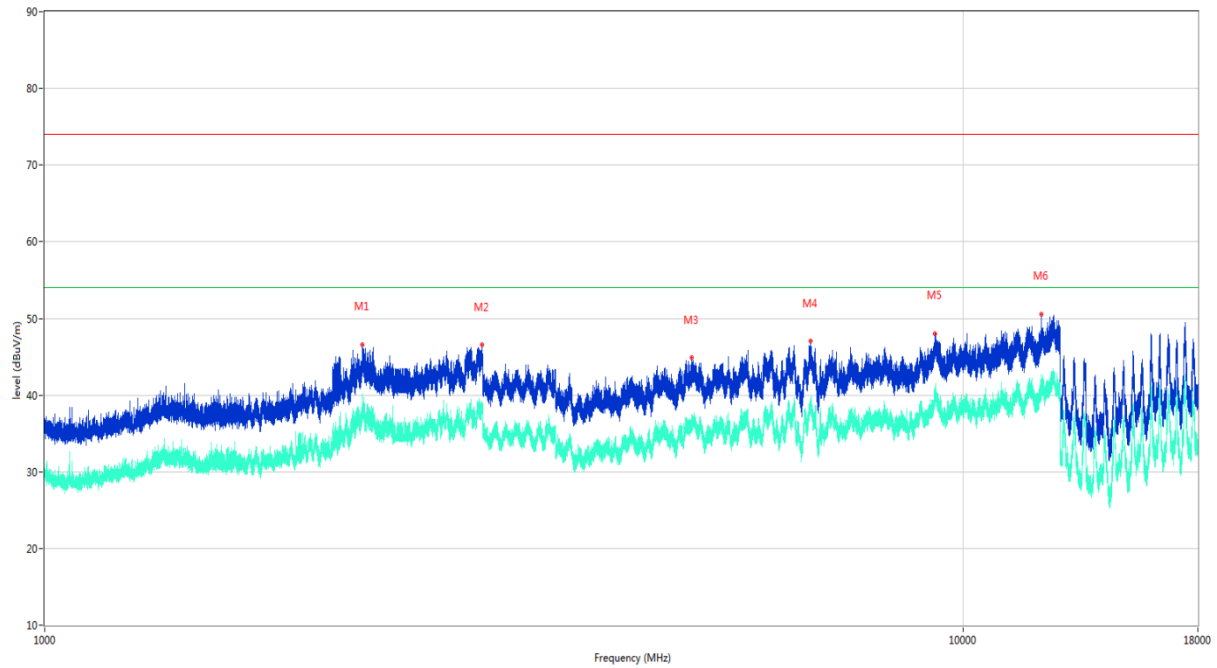
Test Mode 2: Type-c 1-Mobile Disk (Thunderbolt) + Type-c 2-charging + USB-Mobile Disk + Camera + HMDI + Audio + Burintest

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	1377.400	40.95	-15.20	74.0	-33.05	Peak	320.10	100	Vertical	Pass
1**	1377.400	32.50	-15.20	54.0	-21.50	AV	320.10	100	Vertical	Pass
2	2216.600	45.62	-8.51	74.0	-28.38	Peak	166.20	100	Vertical	Pass
2**	2216.600	36.67	-8.51	54.0	-17.33	AV	166.20	100	Vertical	Pass
3	2963.500	48.29	-5.12	74.0	-25.71	Peak	68.80	100	Vertical	Pass
3**	2963.500	41.85	-5.12	54.0	-12.15	AV	68.80	100	Vertical	Pass
4	6835.000	46.98	-1.92	74.0	-27.02	Peak	313.50	100	Vertical	Pass
4**	6835.000	38.19	-1.92	54.0	-15.81	AV	313.50	100	Vertical	Pass
5	9360.950	48.27	20.04	74.0	-25.73	Peak	154.50	100	Vertical	Pass
5**	9360.950	38.76	20.04	54.0	-15.24	AV	154.50	100	Vertical	Pass
6	12550.762	51.10	21.89	74.0	-22.90	Peak	359.30	100	Vertical	Pass
6**	12550.762	41.84	21.89	54.0	-12.16	AV	359.30	100	Vertical	Pass

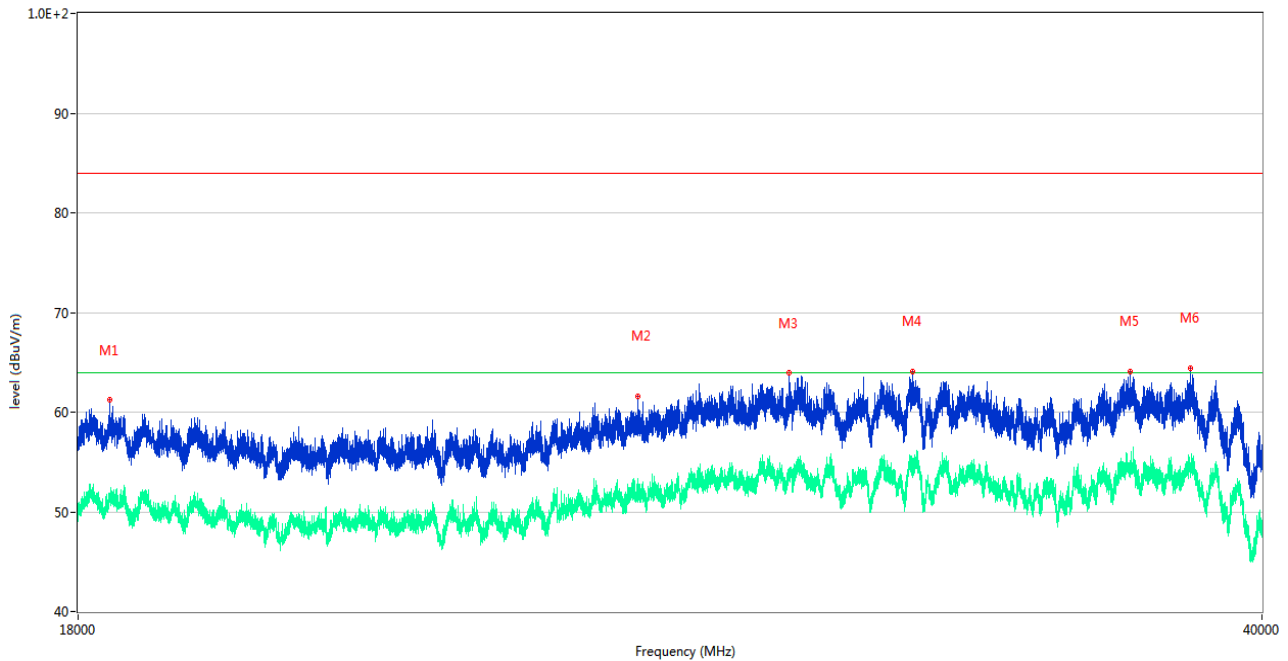
A.1.4 Test Antenna Horizontal, 1 GHz – 18 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2218.600	46.61	-8.73	74.0	-27.39	Peak	198.20	100	Horizontal	Pass
1**	2218.600	37.76	-8.73	54.0	-16.24	AV	198.20	100	Horizontal	Pass
2	2992.900	46.56	-5.48	74.0	-27.44	Peak	1.20	100	Horizontal	Pass
2**	2992.900	38.03	-5.48	54.0	-15.97	AV	1.20	100	Horizontal	Pass
3	5060.600	44.92	-3.27	74.0	-29.08	Peak	16.80	100	Horizontal	Pass
3**	5060.600	35.77	-3.27	54.0	-18.23	AV	16.80	100	Horizontal	Pass
4	6816.000	47.01	-2.31	74.0	-26.99	Peak	275.90	100	Horizontal	Pass
4**	6816.000	38.08	-2.31	54.0	-15.92	AV	275.90	100	Horizontal	Pass
5	9305.463	47.96	20.04	74.0	-26.04	Peak	92.50	100	Horizontal	Pass
5**	9305.463	39.70	20.04	54.0	-14.30	AV	92.50	100	Horizontal	Pass
6	12157.750	50.51	20.36	74.0	-23.49	Peak	359.20	100	Horizontal	Pass
6**	12157.750	42.74	20.36	54.0	-11.26	AV	359.20	100	Horizontal	Pass

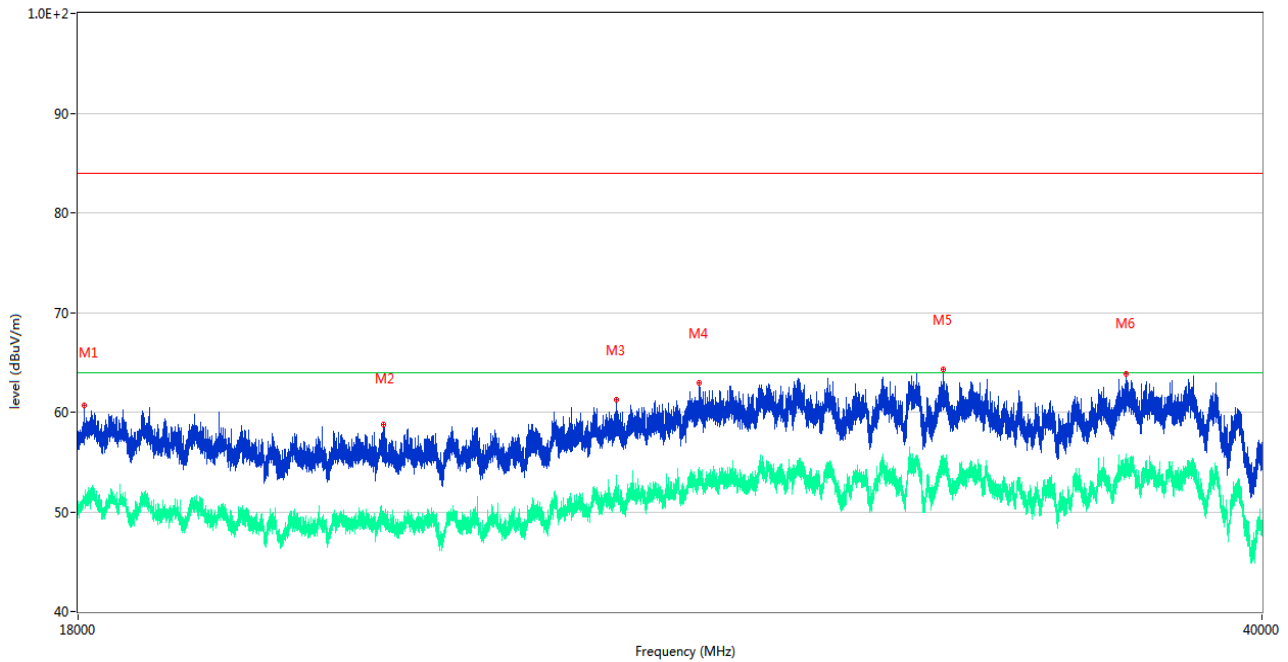
Test Mode 2: Type-c 1-Mobile Disk (Thunderbolt) + Type-c 2-charging + USB-Mobile Disk + Camera + HMDI + Audio + Burintest

A.1.5 Test Antenna Vertical, 18 GHz – 40 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	18383.250	61.21	10.24	84.0	-22.79	Peak	65.00	150	Vertical	Pass
1**	18383.250	51.75	10.24	64.0	-12.25	AV	65.00	150	Vertical	Pass
2	26252.051	61.52	10.25	84.0	-22.48	Peak	112.00	150	Vertical	Pass
2**	26252.051	53.32	10.25	64.0	-10.68	AV	112.00	150	Vertical	Pass
3	29075.750	64.00	10.73	84.0	-20.00	Peak	178.00	150	Vertical	Pass
3**	29075.750	53.62	10.73	64.0	-10.38	AV	178.00	150	Vertical	Pass
4	31602.450	64.15	9.36	84.0	-19.85	Peak	227.00	150	Vertical	Pass
4**	31602.450	54.55	9.36	64.0	-9.45	AV	227.00	150	Vertical	Pass
5	36603.198	64.04	8.59	84.0	-19.96	Peak	275.00	150	Vertical	Pass
5**	36603.198	53.83	8.59	64.0	-10.17	AV	275.00	150	Vertical	Pass
6	38115.148	64.36	6.65	84.0	-19.64	Peak	223.00	150	Vertical	Pass
6**	38115.148	54.32	6.65	64.0	-9.68	AV	223.00	150	Vertical	Pass

A.1.6 Test Antenna Horizontal, 18 GHz – 40 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	18073.545	60.62	10.87	84.0	-23.38	Peak	316.00	150	Horizontal	Pass
1**	18073.545	51.55	10.87	64.0	-12.45	AV	316.00	150	Horizontal	Pass
2	22121.949	58.72	7.35	84.0	-25.28	Peak	23.00	150	Horizontal	Pass
2**	22121.949	49.63	7.35	64.0	-14.37	AV	23.00	150	Horizontal	Pass
3	25876.000	61.15	10.03	84.0	-22.85	Peak	165.00	150	Horizontal	Pass
3**	25876.000	51.62	10.03	64.0	-12.38	AV	165.00	150	Horizontal	Pass
4	27354.901	62.92	10.69	84.0	-21.08	Peak	362.00	150	Horizontal	Pass
4**	27354.901	54.36	10.69	64.0	-9.64	AV	362.00	150	Horizontal	Pass
5	32272.999	64.37	8.97	84.0	-19.63	Peak	362.00	150	Horizontal	Pass
5**	32272.999	54.95	8.97	64.0	-9.05	AV	362.00	150	Horizontal	Pass
6	36506.998	63.83	8.74	84.0	-20.17	Peak	4.00	150	Horizontal	Pass
6**	36506.998	54.75	8.74	64.0	-9.25	AV	4.00	150	Horizontal	Pass

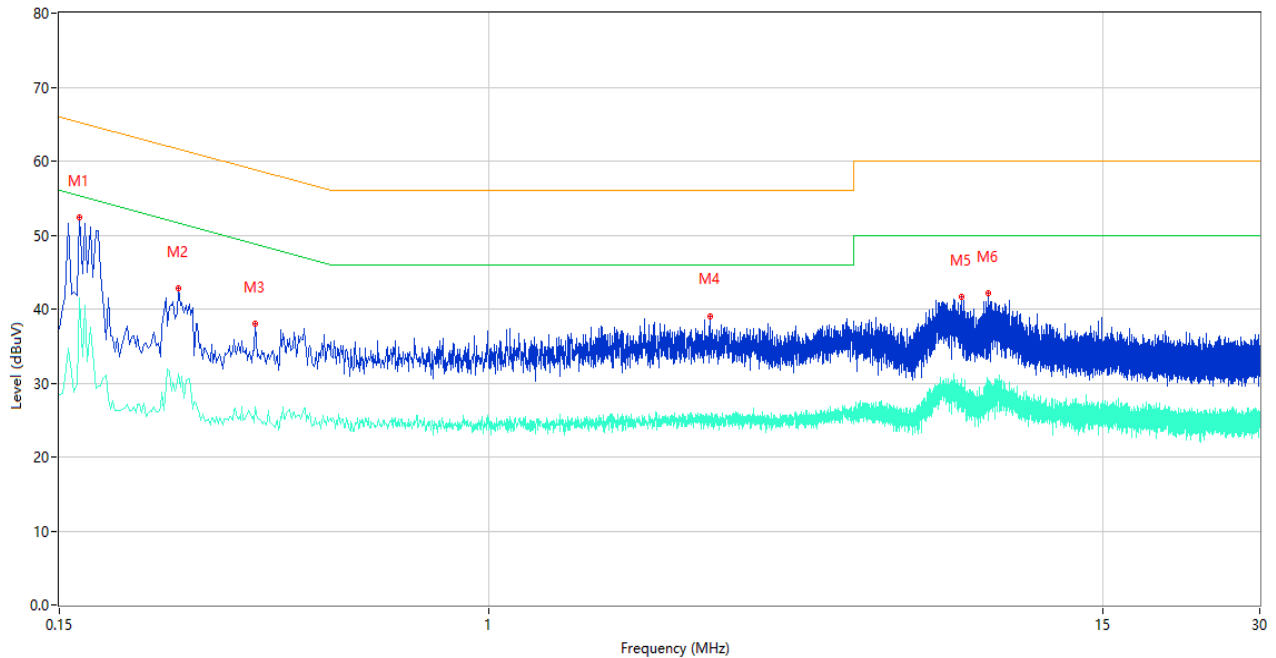
A.2 Conducted Emission

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

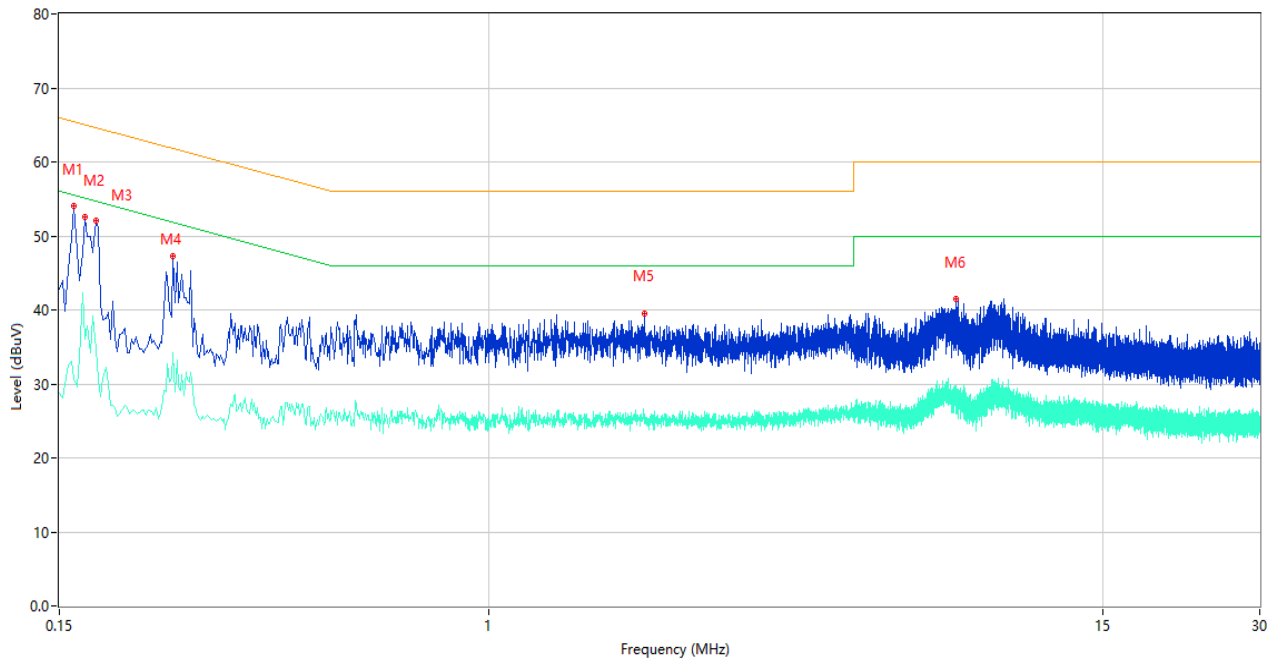
Test Mode 3: Type-c 1-charging + Type-c 2-Dock(Mobile Disk&HDMI) + USB-Mobile Disk + Camera + Audio + Burintest

A.2.1 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.164	52.42	10.40	65.26	-12.84	Peak	L	N/A
1*	0.164	48.96	10.40	65.26	-16.30	QP	L	Pass
1**	0.164	41.55	10.40	55.26	-13.71	AV	L	Pass
2	0.254	42.78	10.34	61.63	-18.85	Peak	L	N/A
2*	0.254	38.73	10.34	61.63	-22.90	QP	L	Pass
2**	0.254	31.32	10.34	51.63	-20.31	AV	L	Pass
3	0.356	38.00	10.31	58.82	-20.82	Peak	L	N/A
3*	0.356	35.57	10.31	58.82	-23.25	QP	L	Pass
3**	0.356	26.80	10.31	48.82	-22.02	AV	L	Pass
4	2.652	38.93	10.28	56.00	-17.07	Peak	L	N/A
4*	2.652	35.91	10.28	56.00	-20.09	QP	L	Pass
4**	2.652	25.08	10.28	46.00	-20.92	AV	L	Pass
5	8.042	41.58	10.36	60.00	-18.42	Peak	L	N/A
5*	8.042	36.05	10.36	60.00	-23.95	QP	L	Pass
5**	8.042	26.14	10.36	50.00	-23.86	AV	L	Pass
6	9.068	42.20	10.36	60.00	-17.80	Peak	L	N/A
6*	9.068	37.81	10.36	60.00	-22.19	QP	L	Pass
6**	9.068	30.33	10.36	50.00	-19.67	AV	L	Pass

A.2.2 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.160	54.05	10.40	65.46	-11.41	Peak	N	N/A
1*	0.160	50.03	10.40	65.46	-15.43	QP	N	Pass
1**	0.160	30.68	10.40	55.46	-24.78	AV	N	Pass
2	0.168	52.50	10.40	65.06	-12.56	Peak	N	N/A
2*	0.168	48.96	10.40	65.06	-16.10	QP	N	Pass
2**	0.168	36.11	10.40	55.06	-18.95	AV	N	Pass
3	0.176	52.00	10.39	64.67	-12.67	Peak	N	N/A
3*	0.176	48.28	10.39	64.67	-16.39	QP	N	Pass
3**	0.176	34.72	10.39	54.67	-19.95	AV	N	Pass
4	0.248	47.35	10.34	61.82	-14.47	Peak	N	N/A
4*	0.248	42.93	10.34	61.82	-18.89	QP	N	Pass
4**	0.248	34.14	10.34	51.82	-17.68	AV	N	Pass
5	1.982	39.54	10.27	56.00	-16.46	Peak	N	N/A
5*	1.982	35.60	10.27	56.00	-20.40	QP	N	Pass
5**	1.982	25.61	10.27	46.00	-20.39	AV	N	Pass
6	7.840	41.56	10.35	60.00	-18.44	Peak	N	N/A
6*	7.840	37.98	10.35	60.00	-22.02	QP	N	Pass
6**	7.840	29.67	10.35	50.00	-20.33	AV	N	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2170247-AE.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2170247-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2170247-AI.PDF”.

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