

TEST REPORT

EMI Test for FCC Certification / ISED of SM-T720 Model

APPLICANT

SAMSUNG Electronics Co., Ltd.

REPORT NO.

HCT-EM-1906-FI001

DATE OF ISSUE

July 02, 2019

HCT Co., Ltd.

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FCC ID. / IC
A3LSMT720U / 649E-SMT720U

Applicant **SAMSUNG Electronics Co., Ltd.**
129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea

Product Name Tablet
Model Name SM-T720
Series Model Name SM-T720X

Date of Test June 03, 2019 to June 13, 2019

Test Standard Used FCC CFR 47 PART 15 Subpart B Class B / ICES-003 Issue 6 Class B
ANSI C63.4-2014

Test Results Refer to the present document

Manufacturer **SAMSUNG Electronics Co., Ltd.**

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

Tested by
Na-Eun Song

(signature)

Technical Manager
Jeong-Hyun Choi

(signature)

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	July 02, 2019	Initial Release

The device bearing the trade name and model specified above, has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2014. (See Test Report if any modifications were made for compliance)
I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.
HCT certifies that no party to application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C 862

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1. GENERAL INFORMATION

1.1 Description of EUT

Its basic purpose is used for communications.

FCC ID	A3LSMT720U
IC	649E-SMT720U
Model	SM-T720
Series Model Name	SM-T720X
EUT Type	Tablet
Frequency band	BT BDR/EDR/LE , WLAN a/b/g/n/ac(HT20/40/80), ANT+
Power Supply	Travel adaptor: Input: AC 100 to 240 V, 50/60 Hz, 0.5 A Output: DC 9.0 V 1.67 A or DC 5.0 V 2.0 A Battery: Low 3.4 V / Normal 3.85 V / High 4.35 V, Li-ion Battery

1.2 Tested System Details

All equipment descriptions used in the tested system (including inserted cards) are:

Device Type	Model Name	Serial Number	Manufacturer
EUT	SM-T720	-	SMASUNG
Notebook PC	ProBook6560b	5CB2053MXF	HP
Notebook PC Adaptor	Series PPP009L-E	-	LITE-ON TECHNOLOGY (CHANGZHOU)
Gateway	TL-WR747N	-	TP Link
Gateway Adaptor	T090060-2H1	-	TP Link
Serial Mouse	Serial 2 Button mouse	02031069	Radio Shack
RJ45 cable	-	-	-
TA	EP-TA200	-	SOLUM
Data Cable	EP-DT725BBE	-	KSD
Earphone	EHS64AVFWE	-	ALMUS
Ear-jack GENDER	KCA-ET-2-0305	-	KSD
Micro SD Card	-	-	SAMSUNG
Keyboard	EJ-FT720	-	SAMSUNG
Charging Dock	EE-D3200	-	SAMSUNG

1.3 Cable Description

Product Name	Port	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (m)
EUT	USB Type C	Y	Y	(P,D) 1.0
	USB Type C (Ear-jack gender)	N/A	N	(D) 0.09
Ear-jack gender	Earphone	N/A	N	(D) 1.2
Notebook PC	RJ 45	N/A	N	(D) 1.6
	Serial(Mouse)	N/A	Y	(D) 1.8
	DC IN	N	N/A	(P) 1.8
Gateway	DC IN	N	N/A	(P) 1.8

NOTE. The marked "(D)" means the data cable and "(P)" means the power cable.

1.4 Noise Suppression Parts on Cable (I/O Cable)

Product Name	Port	Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
EUT	USB Type C	N	N/A	Y	Both End
	USB Type C (Ear-jack gender)	N	N/A	Y	Both End
Ear-jack gender	Earphone	N	N/A	Y	EUT End
Notebook PC	RJ 45	N	N/A	N	N/A
	Serial(Mouse)	N	N/A	Y	Notebook End

1.5 Test Facility

Test site is located at 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, South Korea. Those measurement facilities are constructed in conformance with the requirements of ANSI C63.4-2014. The Normalized site attenuations (30 MHz to 1 GHz) and Site validation (1 GHz to 18 GHz) were performed in accordance with the standard in ANSI C63.4-2014

Measurement Facilities	Designation No.
Radiated Field strength measurement facility 3 m Semi Anechoic chamber	KR0032
Radiated Field strength measurement facility 10 m Semi Anechoic chamber #1	
Radiated Field strength measurement facility 10 m Semi Anechoic chamber #2	
Filing the EMI Measurement Facility (3 m Semi Anechoic Chamber and Shielded Room)	IC 5944A-4
Filing the EMI Measurement Facility (10 m Semi-Anechoic Chamber)	IC 5944A-2

1.6 Calibration of Measuring Instrument

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturers recommendations for utilizing calibration equipment, which is traceable to recognized national standards. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2006).

1.7 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty
Conducted Emission (0.15 MHz to 30 MHz)	1.78 dB
Radiated Emissions (30 MHz to 1 GHz)	6.00 dB
Radiated Emissions (1 GHz to 18 GHz)	4.78 dB
Radiated Emissions (18 GHz to 40 GHz)	4.94 dB

2. DESCRIPTION OF TEST

2.1 Measurement of Conducted Emission

The test procedure was in accordance with ANSI C63.4-2014, Clause 7.3

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN).
If the EUT is connected to the PC through USB, the AC power-line adapter of the PC is directly connected to a line impedance stabilization network (LISN).
Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both conducted lines are measured in Quasi-Peak and Average mode, including the worst-case data points for each tested configuration.
- c. The frequency range from 150 kHz to 30 MHz was searched.

Conducted Emission Limits

Frequency (MHz)	Resolution Bandwidth (kHz)	Class A		Class B	
		Quasi-Peak (dBµV)	Average (dBµV)	Quasi-Peak (dBµV)	Average (dBµV)
0.15 to 0.5	9	79	66	66 to 56*	56 to 46*
0.5 to 5	9	73	60	56	46
5 to 30	9	73	60	60	50

NOTE. Decreases with the logarithm of the frequency.

2.2 Measurement of Radiated Emission

The test procedure was in accordance with ANSI C63.4-2014, Clause 8.3

- a. The EUT was placed on the top of a turn table 0.8 meters above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 m away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from 1 m to 4 m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 m to 4 m and the turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to Peak and Average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- g. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.
(1 GHz to 40 GHz)

Radiated Emission Limits

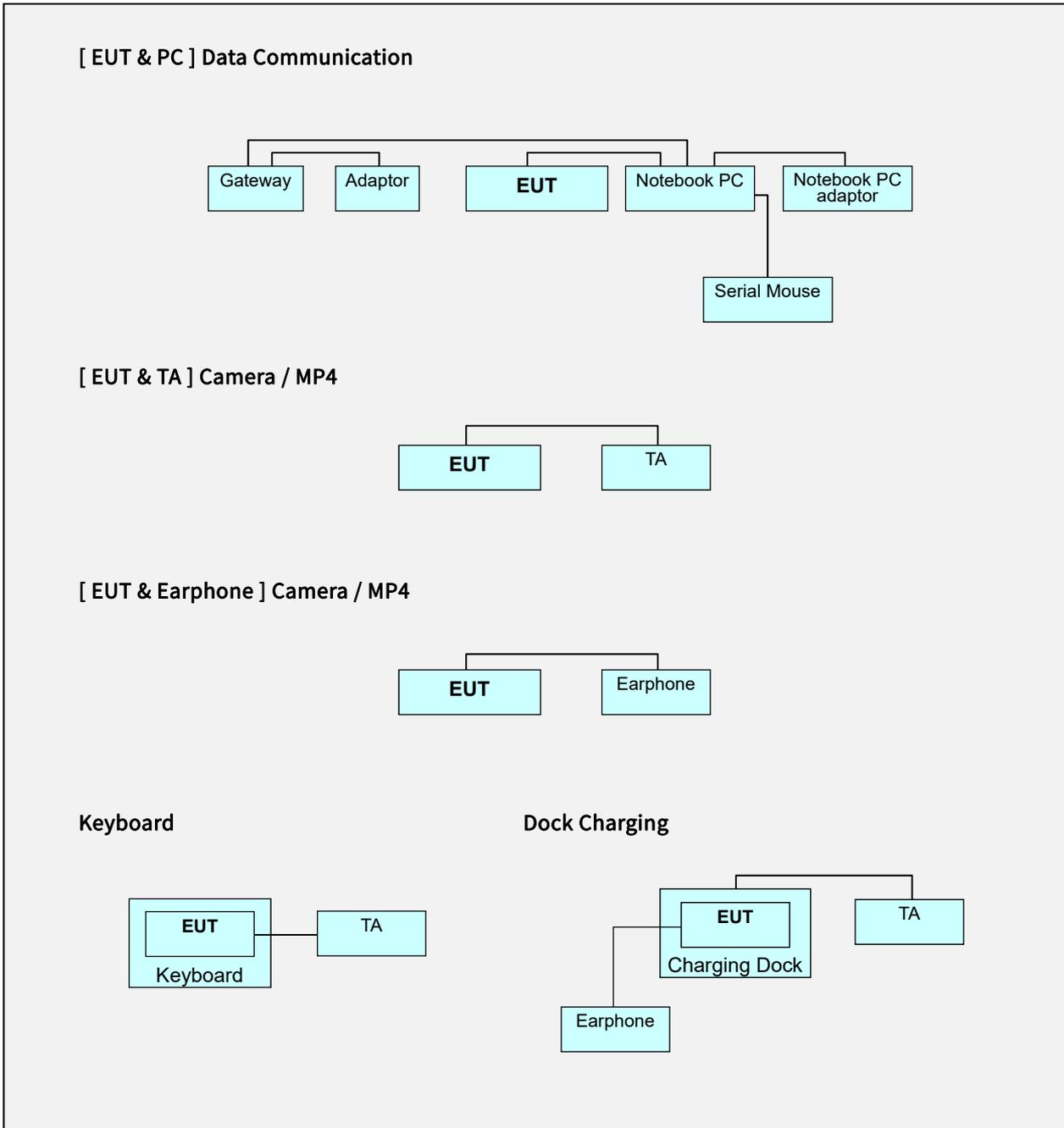
Frequency (MHz)	Class A			Class B		
	Antenna Distance (m)	Field Strength (μV/m)	Quasi-Peak (dBμV/m)	Antenna Distance (m)	Field Strength (μV/m)	Quasi-Peak (dBμV/m)
30 to 88	10	90	39.0	3	100	40.0
88 to 216	10	150	43.5	3	150	43.5
216 to 960	10	210	46.4	3	200	46.0
Above 960	10	300	49.5	3	500	54.0
Frequency (MHz)	Antenna Distance (m)	Class A		Class B		
		Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)	
Above 1 000	3	80	60	74	54	

2.2.1 Frequency Range of Radiated Measurements

An unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a Radiated Emission limit is specified, up to the frequency shown in the following table

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 to 108	1 000
108 to 500	2 000
500 to 1 000	5 000
Above 1 000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

2.3 Configuration of Tested System



Non-Conductive Table
Power Line: 120 VAC, 60 Hz

3. PRELIMINARY TEST

During preliminary tests, the following operating mode was investigated.

- Data Communication
- Rear / Front Camera (Preview / Recording)
- MP4 Play
- Keyboard
- Dock Charging

3.1 Conducted Emission

It was tested the following operating mode, after connecting all peripheral devices.

Operating Modes:

[EUT+PC]

DATA Communication

[EUT+TA]

- Rear Camera Preview / Front Camera Preview
- Rear Camera Recording / Front Camera Recording
- MP4 Play

Keyboard mode

Dock Charging mode

NOTE. The worst case of operating mode is reported.

3.2 Radiated Emission

It was tested the following operating mode, after connecting all peripheral devices.

[EUT+PC]

DATA Communication

[EUT+TA]

Rear Camera Preview / Front Camera Preview

Rear Camera Recording / Front Camera Recording

MP4 Play

[EUT+Earphone]

Rear Camera Preview / Front Camera Preview

Rear Camera Recording / Front Camera Recording

MP4 Play

Keyboard mode

Dock Charging mode

NOTE.

1. Three orientations have been investigated and the worst case orientation is reported.
2. The worst case of operating mode is reported.

4. CONDUCTED EMISSION AND RADIATED EMISSION TEST SUMMARY

4.1 Conducted Emission

4.1.1 Measuring instruments

Type	Manufacturer	Model Name	Serial Number	Calibration Cycle	Calibration Date
<input checked="" type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESCI	100584	1 year	06.25.2018
<input checked="" type="checkbox"/> LISN	Rohde & Schwarz	ENV216	102245	1 year	12.12.2018
<input checked="" type="checkbox"/> LISN	Rohde & Schwarz	ENV216	100073	1 year	04.30.2019
<input type="checkbox"/> Radio communication analyzer	ANRITSU	MT8820C	6201138643	1 year	08.21.2018
<input type="checkbox"/> Antenna (for Communication)	Schwarzbeck	USLP9142	VSLP 9142-200	-	-
<input checked="" type="checkbox"/> Software	Rohde & Schwarz	EMC32 VER8.54.0	-	-	-

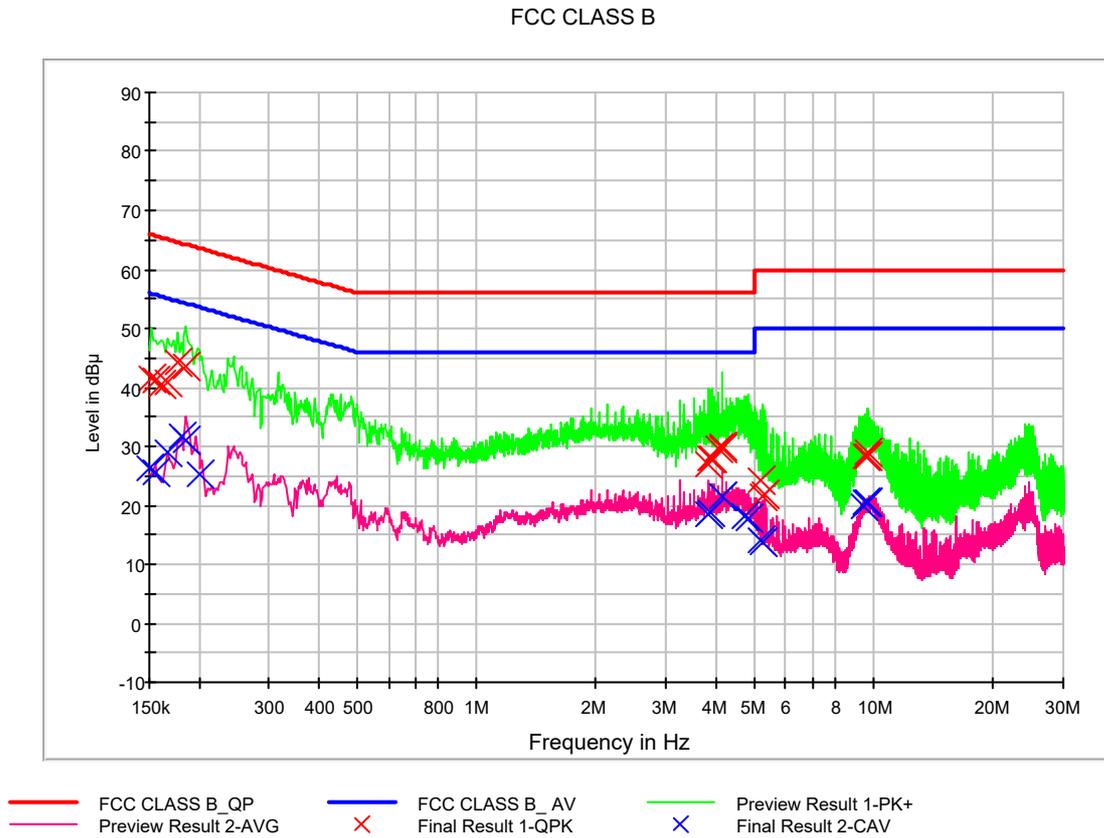
4.1.2 Operating Condition

The test results of conducted emission at mains ports provide the following information:

Test Standard Used	FCC CFR 47 PART 15 Subpart B Class B / ICES-003 Issue 6 Class B ANSI C63.4-2014
Detector	Quasi-Peak, CISPR-Average
Bandwidth	9 kHz (6 dB)
Operating Mode	Data Communication mode Rear Camera Preview Keyboard mode Dock Charging mode
Kind of Test Site	Shielded Room
Temperature	23.5 / 23.9 °C
Relative Humidity	42.2 / 42.2 %
Test Date	June 03 / June 13, 2019

4.1.3 Measuring Data

Figure 1: Conducted Emission, DATA Communication, Line (L1)



QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.152000	41.7	9.000	L1	9.6	24.2	65.9
0.156000	41.2	9.000	L1	9.6	24.5	65.7
0.160000	40.4	9.000	L1	9.6	25.1	65.5
0.166000	40.9	9.000	L1	9.6	24.3	65.2
0.176000	44.2	9.000	L1	9.6	20.5	64.7
0.186000	43.5	9.000	L1	9.7	20.7	64.2
3.850000	26.9	9.000	L1	9.8	29.1	56.0
3.858000	27.9	9.000	L1	9.8	28.1	56.0
3.910000	27.9	9.000	L1	9.8	28.1	56.0
4.058000	29.7	9.000	L1	9.8	26.3	56.0
4.156000	30.0	9.000	L1	9.8	26.0	56.0
4.160000	29.8	9.000	L1	9.8	26.2	56.0
5.184000	24.1	9.000	L1	9.8	35.9	60.0
5.282000	21.7	9.000	L1	9.9	38.3	60.0
5.292000	22.0	9.000	L1	9.9	38.0	60.0
9.512000	28.4	9.000	L1	10.0	31.6	60.0
9.596000	28.4	9.000	L1	10.0	31.6	60.0
9.692000	28.9	9.000	L1	10.0	31.1	60.0

Calculation Formula:

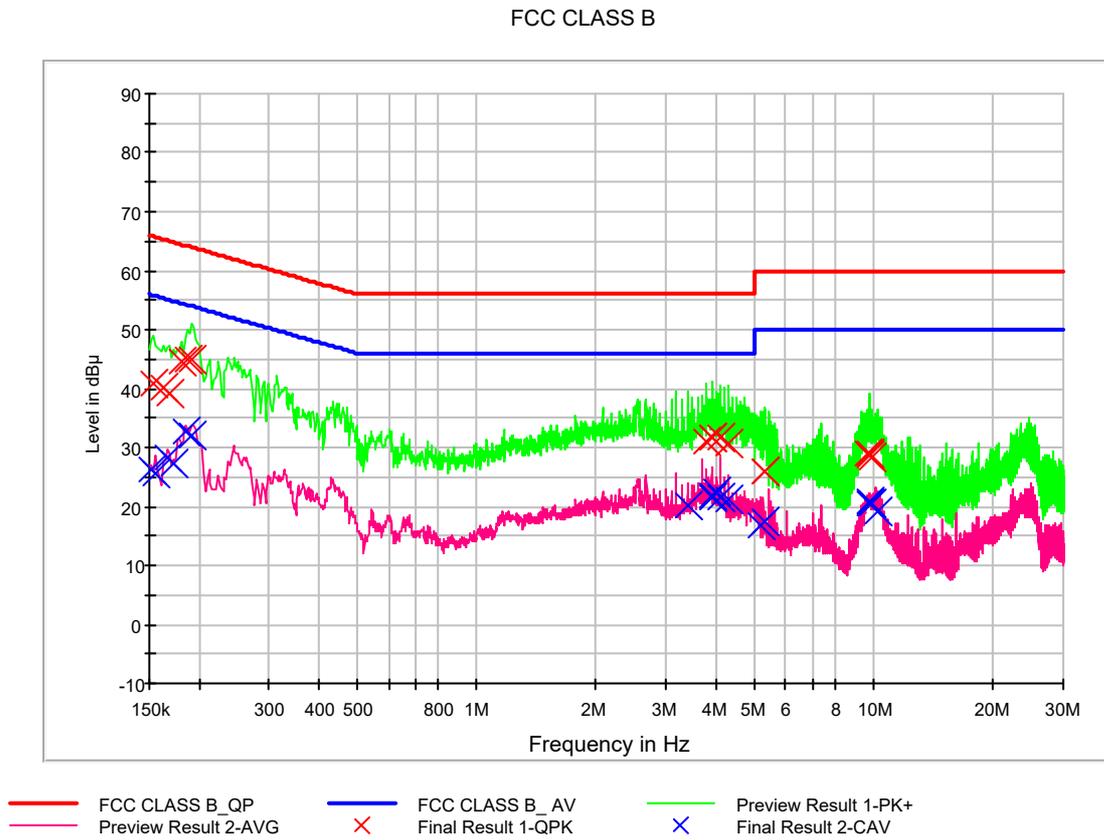
1. Conductor L1 = Hot, Conductor N = Neutral
2. Corr. = LISN Factor + Cable Loss
3. QuasiPeak or CAverage= Receiver Reading + Corr.
4. Margin = Limit – QuasiPeak or CAverage

CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.150000	26.1	9.000	L1	9.6	29.9	56.0
0.156000	25.5	9.000	L1	9.6	30.2	55.7
0.166000	28.9	9.000	L1	9.6	26.2	55.2
0.180000	31.7	9.000	L1	9.6	22.8	54.5
0.186000	31.1	9.000	L1	9.7	23.1	54.2
0.200000	25.3	9.000	L1	9.7	28.3	53.6
3.850000	18.5	9.000	L1	9.8	27.5	46.0
3.858000	18.7	9.000	L1	9.8	27.3	46.0
4.156000	21.5	9.000	L1	9.8	24.5	46.0
4.160000	21.6	9.000	L1	9.8	24.4	46.0
4.734000	18.2	9.000	L1	9.8	27.8	46.0
4.818000	17.7	9.000	L1	9.8	28.3	46.0
5.184000	14.2	9.000	L1	9.8	35.8	50.0
5.282000	13.6	9.000	L1	9.9	36.4	50.0
9.392000	19.9	9.000	L1	10.0	30.1	50.0
9.512000	20.4	9.000	L1	10.0	29.6	50.0
9.596000	20.4	9.000	L1	10.0	29.6	50.0
9.650000	20.6	9.000	L1	10.0	29.4	50.0

This report only responds to the tested sample and may not be reproduced, except in full, without written approval of the HCT Co., Ltd.

Figure 2: Conducted Emission, DATA Communication, Line (N)



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QuasiPeak Final Result, Line (N)

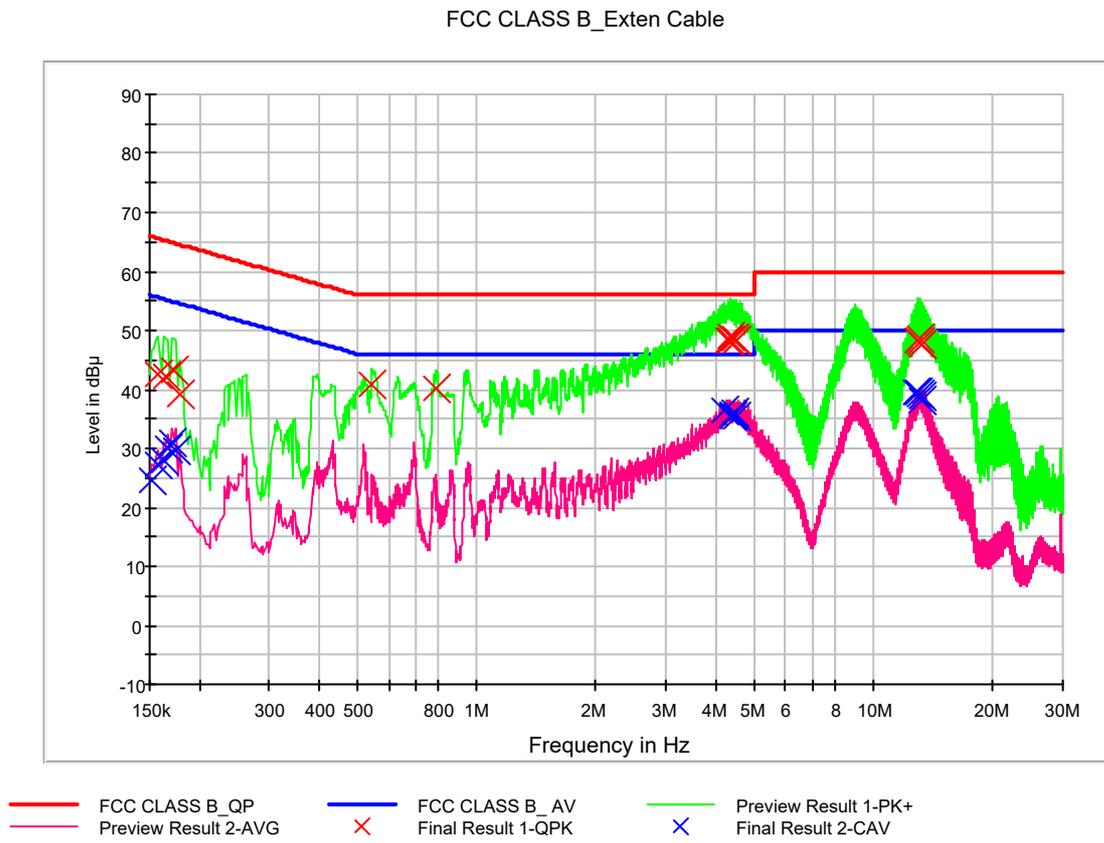
Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.154000	40.9	9.000	N	9.6	24.9	65.8
0.162000	40.1	9.000	N	9.6	25.2	65.4
0.168000	39.3	9.000	N	9.6	25.8	65.1
0.180000	44.7	9.000	N	9.6	19.8	64.5
0.188000	44.8	9.000	N	9.6	19.3	64.1
0.192000	45.0	9.000	N	9.6	19.0	63.9
3.800000	30.9	9.000	N	9.8	25.1	56.0
3.902000	31.7	9.000	N	9.8	24.4	56.0
3.906000	31.8	9.000	N	9.8	24.2	56.0
3.916000	31.7	9.000	N	9.8	24.3	56.0
4.100000	31.7	9.000	N	9.8	24.3	56.0
4.302000	30.7	9.000	N	9.8	25.3	56.0
5.286000	25.8	9.000	N	9.8	34.2	60.0
5.328000	26.1	9.000	N	9.8	33.9	60.0
9.650000	28.9	9.000	N	9.9	31.1	60.0
9.782000	28.7	9.000	N	9.9	31.3	60.0
9.802000	28.9	9.000	N	9.9	31.1	60.0
9.928000	28.4	9.000	N	9.9	31.6	60.0

CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.152000	26.2	9.000	N	9.6	29.7	55.9
0.156000	25.7	9.000	N	9.6	29.9	55.7
0.166000	28.3	9.000	N	9.6	26.8	55.2
0.172000	27.3	9.000	N	9.6	27.6	54.9
0.186000	32.7	9.000	N	9.6	21.5	54.2
0.192000	32.1	9.000	N	9.6	21.8	53.9
3.396000	20.2	9.000	N	9.8	25.8	46.0
3.906000	21.7	9.000	N	9.8	24.3	46.0
3.916000	21.4	9.000	N	9.8	24.6	46.0
4.008000	22.6	9.000	N	9.8	23.4	46.0
4.100000	21.7	9.000	N	9.8	24.3	46.0
4.302000	21.3	9.000	N	9.8	24.7	46.0
5.218000	16.9	9.000	N	9.8	33.1	50.0
5.286000	17.5	9.000	N	9.8	32.5	50.0
9.750000	20.9	9.000	N	9.9	29.1	50.0
9.802000	20.6	9.000	N	9.9	29.4	50.0
9.928000	20.6	9.000	N	9.9	29.4	50.0
10.236000	19.3	9.000	N	10.0	30.7	50.0

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Figure 3: Conducted Emission, Rear Camera Preview, Line (L1)



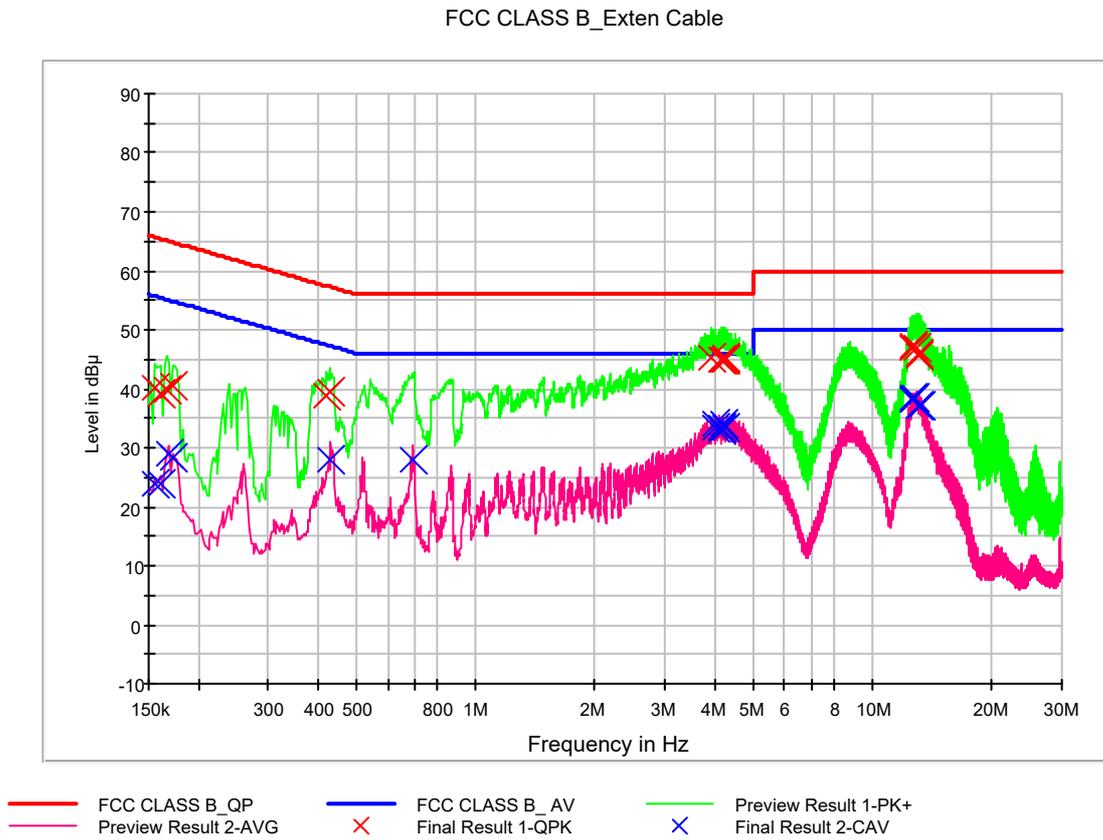
QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.158000	42.5	9.000	L1	9.7	23.0	65.6
0.164000	42.2	9.000	L1	9.7	23.0	65.3
0.172000	43.2	9.000	L1	9.7	21.6	64.9
0.178000	39.3	9.000	L1	9.7	25.3	64.6
0.544000	40.9	9.000	L1	9.8	15.1	56.0
0.788000	40.0	9.000	L1	9.8	16.0	56.0
4.304000	48.2	9.000	L1	10.0	7.8	56.0
4.330000	48.4	9.000	L1	10.0	7.6	56.0
4.356000	48.8	9.000	L1	10.0	7.2	56.0
4.440000	48.8	9.000	L1	10.0	7.2	56.0
4.502000	48.2	9.000	L1	10.0	7.8	56.0
4.522000	48.1	9.000	L1	10.0	7.9	56.0
12.876000	48.2	9.000	L1	10.3	11.8	60.0
12.900000	48.4	9.000	L1	10.3	11.6	60.0
13.070000	48.5	9.000	L1	10.3	11.5	60.0
13.140000	48.1	9.000	L1	10.3	11.9	60.0
13.176000	47.7	9.000	L1	10.3	12.3	60.0
13.204000	47.7	9.000	L1	10.3	12.3	60.0

CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.152000	24.6	9.000	L1	9.7	31.3	55.9
0.158000	27.3	9.000	L1	9.7	28.3	55.6
0.162000	27.9	9.000	L1	9.7	27.5	55.4
0.166000	30.0	9.000	L1	9.7	25.2	55.2
0.170000	30.9	9.000	L1	9.7	24.1	55.0
0.174000	29.8	9.000	L1	9.7	25.0	54.8
4.194000	36.4	9.000	L1	10.0	9.6	46.0
4.414000	35.5	9.000	L1	10.0	10.5	46.0
4.426000	35.7	9.000	L1	10.0	10.3	46.0
4.432000	35.8	9.000	L1	10.0	10.2	46.0
4.440000	35.9	9.000	L1	10.0	10.1	46.0
4.502000	35.3	9.000	L1	10.0	10.7	46.0
12.848000	39.6	9.000	L1	10.3	10.5	50.0
12.856000	39.5	9.000	L1	10.3	10.5	50.0
12.900000	39.5	9.000	L1	10.3	10.5	50.0
13.106000	39.1	9.000	L1	10.3	10.9	50.0
13.176000	38.8	9.000	L1	10.3	11.2	50.0
13.290000	38.1	9.000	L1	10.3	11.9	50.0

Figure 4: Conducted Emission, Rear Camera Preview, Line (N)



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QuasiPeak Final Result, Line (N)

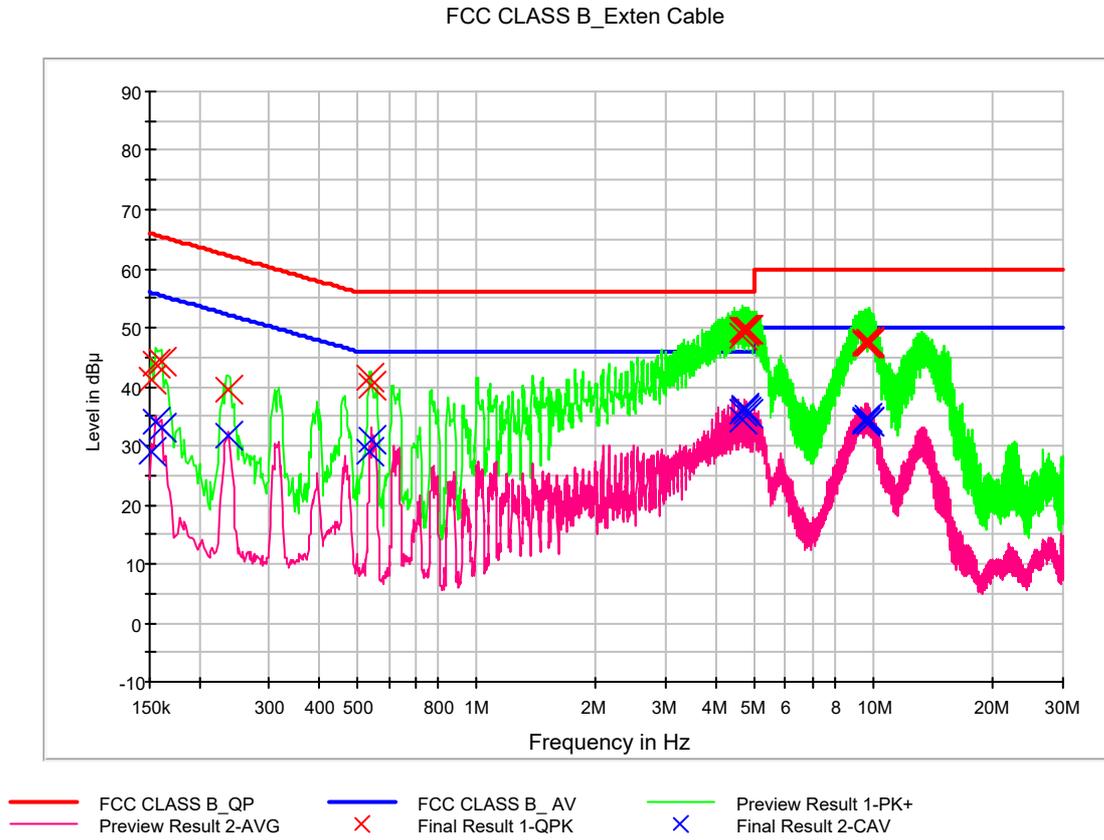
Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.156000	40.3	9.000	N	9.8	25.4	65.7
0.160000	39.3	9.000	N	9.8	26.2	65.5
0.166000	39.8	9.000	N	9.8	25.4	65.2
0.172000	40.5	9.000	N	9.8	24.4	64.9
0.422000	38.8	9.000	N	9.9	18.6	57.4
0.428000	39.5	9.000	N	9.9	17.8	57.3
3.940000	45.4	9.000	N	10.2	10.6	56.0
4.170000	44.8	9.000	N	10.2	11.2	56.0
4.198000	45.0	9.000	N	10.2	11.0	56.0
4.250000	45.2	9.000	N	10.2	10.8	56.0
4.254000	45.0	9.000	N	10.2	11.0	56.0
4.258000	45.3	9.000	N	10.2	10.7	56.0
12.626000	46.9	9.000	N	10.6	13.1	60.0
12.638000	46.9	9.000	N	10.6	13.1	60.0
12.692000	47.2	9.000	N	10.6	12.8	60.0
12.924000	46.8	9.000	N	10.6	13.2	60.0
13.140000	46.0	9.000	N	10.6	14.0	60.0
13.148000	45.6	9.000	N	10.6	14.4	60.0

CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.156000	23.9	9.000	N	9.8	31.8	55.7
0.160000	24.0	9.000	N	9.8	31.5	55.5
0.168000	28.9	9.000	N	9.8	26.2	55.1
0.172000	28.2	9.000	N	9.8	26.7	54.9
0.428000	27.9	9.000	N	9.9	19.4	47.3
0.692000	27.9	9.000	N	9.9	18.1	46.0
4.014000	33.5	9.000	N	10.2	12.5	46.0
4.024000	34.0	9.000	N	10.2	12.0	46.0
4.168000	33.1	9.000	N	10.2	12.9	46.0
4.172000	33.4	9.000	N	10.2	12.6	46.0
4.198000	34.0	9.000	N	10.2	12.0	46.0
4.258000	33.4	9.000	N	10.2	12.6	46.0
12.626000	38.1	9.000	N	10.6	11.9	50.0
12.670000	38.3	9.000	N	10.6	11.7	50.0
12.692000	38.5	9.000	N	10.6	11.5	50.0
12.840000	38.5	9.000	N	10.6	11.5	50.0
13.146000	37.3	9.000	N	10.6	12.7	50.0
13.164000	37.1	9.000	N	10.6	12.9	50.0

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Figure 5: Conducted Emission, Keyboard, Line (L1)



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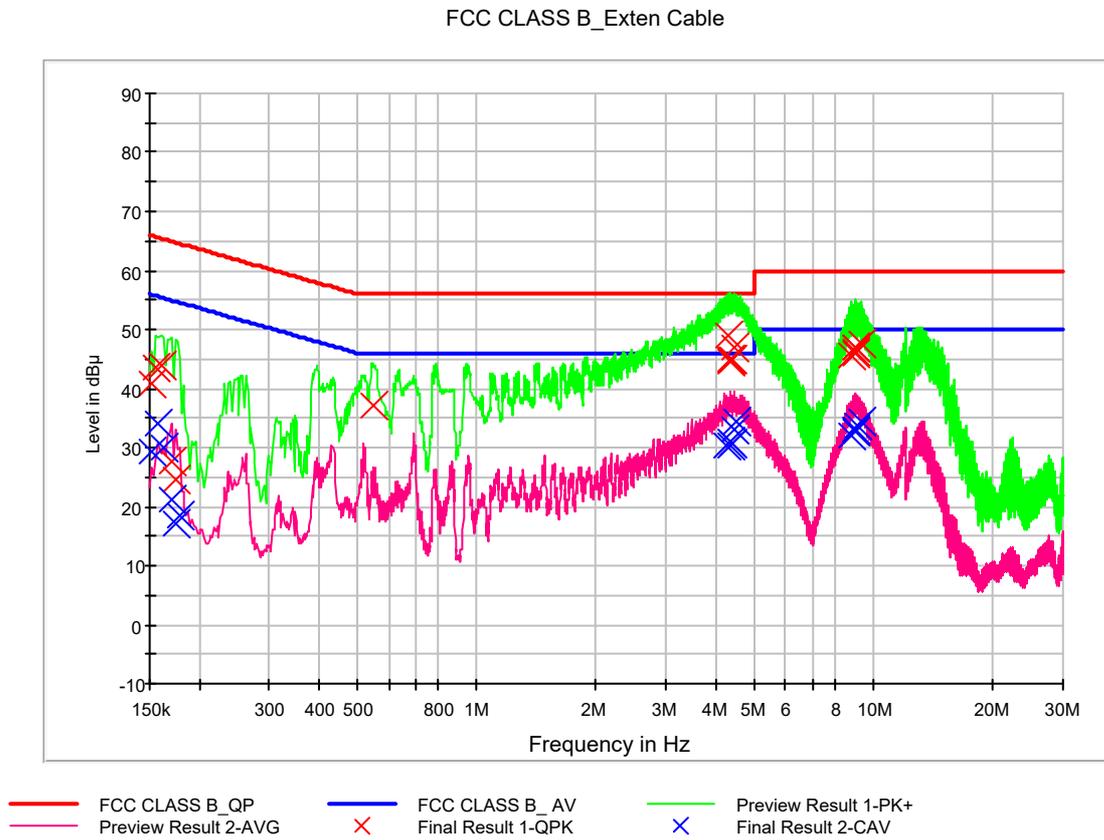
QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.152000	41.2	9.000	L1	9.7	24.6	65.9
0.156000	44.1	9.000	L1	9.7	21.6	65.7
0.160000	44.3	9.000	L1	9.7	21.2	65.5
0.236000	39.4	9.000	L1	9.7	22.8	62.2
0.538000	41.5	9.000	L1	9.8	14.5	56.0
0.542000	40.2	9.000	L1	9.8	15.8	56.0
4.682000	48.6	9.000	L1	10.0	7.4	56.0
4.694000	49.6	9.000	L1	10.0	6.4	56.0
4.704000	49.8	9.000	L1	10.0	6.2	56.0
4.710000	49.3	9.000	L1	10.0	6.7	56.0
4.772000	49.7	9.000	L1	10.0	6.3	56.0
4.854000	49.5	9.000	L1	10.0	6.5	56.0
9.534000	47.3	9.000	L1	10.2	12.7	60.0
9.560000	47.8	9.000	L1	10.2	12.2	60.0
9.606000	47.2	9.000	L1	10.2	12.8	60.0
9.704000	47.4	9.000	L1	10.2	12.6	60.0
9.718000	47.5	9.000	L1	10.2	12.5	60.0
9.722000	47.6	9.000	L1	10.2	12.4	60.0

CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.152000	29.1	9.000	L1	9.7	26.8	55.9
0.156000	34.1	9.000	L1	9.7	21.6	55.7
0.160000	32.9	9.000	L1	9.7	22.6	55.5
0.238000	31.6	9.000	L1	9.7	20.5	52.2
0.538000	29.0	9.000	L1	9.8	17.0	46.0
0.542000	31.0	9.000	L1	9.8	15.0	46.0
4.682000	34.3	9.000	L1	10.0	11.7	46.0
4.694000	35.7	9.000	L1	10.0	10.3	46.0
4.700000	36.1	9.000	L1	10.0	9.9	46.0
4.704000	36.3	9.000	L1	10.0	9.7	46.0
4.780000	35.9	9.000	L1	10.0	10.1	46.0
4.856000	35.5	9.000	L1	10.0	10.5	46.0
9.534000	34.1	9.000	L1	10.2	15.9	50.0
9.550000	34.2	9.000	L1	10.2	15.8	50.0
9.560000	34.4	9.000	L1	10.2	15.6	50.0
9.684000	34.7	9.000	L1	10.2	15.3	50.0
9.718000	34.2	9.000	L1	10.2	15.8	50.0
9.722000	34.2	9.000	L1	10.2	15.8	50.0

Figure 6: Conducted Emission, Keyboard, Line (N)



QuasiPeak Final Result, Line (N)

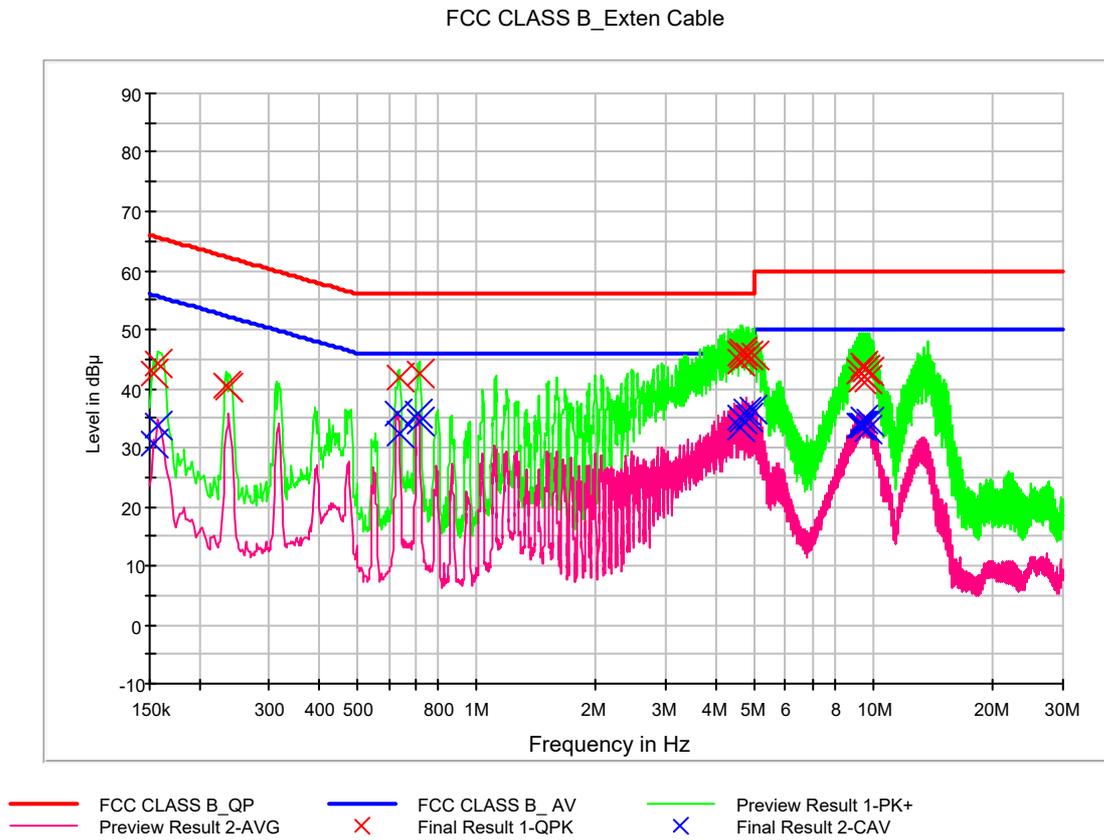
Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.152000	41.0	9.000	N	9.8	24.9	65.9
0.156000	43.4	9.000	N	9.8	22.2	65.7
0.160000	43.8	9.000	N	9.8	21.7	65.5
0.170000	27.8	9.000	N	9.8	37.2	65.0
0.174000	24.7	9.000	N	9.8	40.1	64.8
0.548000	37.0	9.000	N	9.9	19.0	56.0
4.302000	49.1	9.000	N	10.2	6.9	56.0
4.342000	45.0	9.000	N	10.2	11.0	56.0
4.346000	44.8	9.000	N	10.2	11.2	56.0
4.364000	44.7	9.000	N	10.2	11.3	56.0
4.426000	45.0	9.000	N	10.2	11.0	56.0
4.448000	47.0	9.000	N	10.2	9.0	56.0
8.814000	45.5	9.000	N	10.4	14.5	60.0
8.944000	46.3	9.000	N	10.4	13.7	60.0
8.968000	46.9	9.000	N	10.4	13.1	60.0
9.018000	46.1	9.000	N	10.4	13.9	60.0
9.038000	47.1	9.000	N	10.4	12.9	60.0
9.336000	47.7	9.000	N	10.4	12.3	60.0

CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.152000	29.2	9.000	N	9.8	26.7	55.9
0.158000	34.0	9.000	N	9.8	21.6	55.6
0.162000	29.9	9.000	N	9.8	25.4	55.4
0.170000	21.1	9.000	N	9.8	33.9	55.0
0.174000	17.1	9.000	N	9.8	37.6	54.8
0.178000	18.4	9.000	N	9.8	36.2	54.6
4.274000	30.4	9.000	N	10.2	15.6	46.0
4.346000	30.2	9.000	N	10.2	15.8	46.0
4.364000	30.9	9.000	N	10.2	15.1	46.0
4.426000	30.5	9.000	N	10.2	15.5	46.0
4.448000	33.0	9.000	N	10.2	13.0	46.0
4.534000	34.5	9.000	N	10.2	11.5	46.0
8.814000	32.1	9.000	N	10.4	17.9	50.0
8.944000	32.9	9.000	N	10.4	17.1	50.0
8.970000	33.1	9.000	N	10.4	17.0	50.0
9.018000	32.7	9.000	N	10.4	17.3	50.0
9.108000	33.7	9.000	N	10.4	16.3	50.0
9.336000	34.4	9.000	N	10.4	15.6	50.0

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Figure 7: Conducted Emission, Dock Charging, Line (L1)



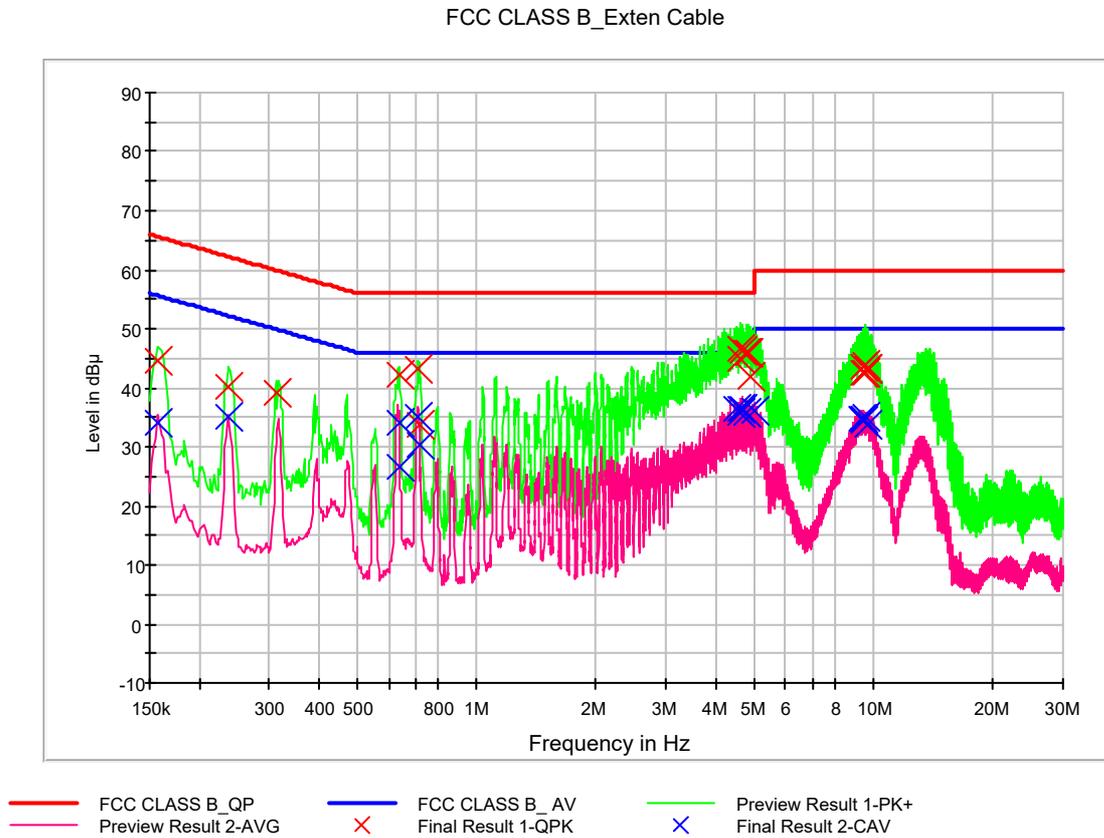
QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.154000	42.6	9.000	L1	9.7	23.2	65.8
0.158000	44.4	9.000	L1	9.7	21.2	65.6
0.234000	40.6	9.000	L1	9.7	21.7	62.3
0.238000	40.1	9.000	L1	9.7	22.1	62.2
0.638000	41.8	9.000	L1	9.8	14.2	56.0
0.718000	42.4	9.000	L1	9.8	13.6	56.0
4.598000	44.5	9.000	L1	10.0	11.5	56.0
4.606000	45.9	9.000	L1	10.0	10.1	56.0
4.680000	45.4	9.000	L1	10.0	10.6	56.0
4.698000	46.1	9.000	L1	10.0	9.9	56.0
4.862000	45.6	9.000	L1	10.0	10.4	56.0
5.016000	45.6	9.000	L1	10.0	14.4	60.0
9.222000	43.0	9.000	L1	10.2	17.0	60.0
9.280000	41.6	9.000	L1	10.2	18.4	60.0
9.392000	43.8	9.000	L1	10.2	16.2	60.0
9.542000	43.4	9.000	L1	10.2	16.6	60.0
9.596000	41.6	9.000	L1	10.2	18.4	60.0
9.714000	43.0	9.000	L1	10.2	17.0	60.0

CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.154000	30.6	9.000	L1	9.7	25.2	55.8
0.158000	33.8	9.000	L1	9.7	21.8	55.6
0.634000	35.7	9.000	L1	9.8	10.3	46.0
0.638000	32.3	9.000	L1	9.8	13.7	46.0
0.712000	35.7	9.000	L1	9.8	10.3	46.0
0.716000	34.5	9.000	L1	9.8	11.5	46.0
4.598000	33.4	9.000	L1	10.0	12.6	46.0
4.606000	35.1	9.000	L1	10.0	10.9	46.0
4.682000	34.7	9.000	L1	10.0	11.3	46.0
4.776000	36.1	9.000	L1	10.0	9.9	46.0
4.862000	35.2	9.000	L1	10.0	10.8	46.0
4.932000	36.3	9.000	L1	10.0	9.7	46.0
9.222000	33.7	9.000	L1	10.2	16.3	50.0
9.300000	33.8	9.000	L1	10.2	16.2	50.0
9.392000	34.7	9.000	L1	10.2	15.3	50.0
9.448000	33.8	9.000	L1	10.2	16.2	50.0
9.596000	33.1	9.000	L1	10.2	16.9	50.0
9.714000	34.2	9.000	L1	10.2	15.8	50.0

Figure 8: Conducted Emission, Dock Charging, Line (N)



QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.158000	44.4	9.000	N	9.8	21.1	65.6
0.238000	40.2	9.000	N	9.9	21.9	62.2
0.312000	39.2	9.000	N	9.9	20.7	59.9
0.636000	42.4	9.000	N	9.9	13.6	56.0
0.714000	43.1	9.000	N	9.9	12.9	56.0
0.722000	33.8	9.000	N	9.9	22.2	56.0
4.602000	46.6	9.000	N	10.2	9.4	56.0
4.618000	44.8	9.000	N	10.2	11.2	56.0
4.688000	46.3	9.000	N	10.2	9.7	56.0
4.760000	45.9	9.000	N	10.2	10.1	56.0
4.850000	45.9	9.000	N	10.2	10.1	56.0
4.868000	41.9	9.000	N	10.2	14.1	56.0
9.376000	43.6	9.000	N	10.4	16.4	60.0
9.398000	42.5	9.000	N	10.4	17.5	60.0
9.536000	43.7	9.000	N	10.4	16.3	60.0
9.560000	42.6	9.000	N	10.4	17.4	60.0
9.696000	43.2	9.000	N	10.4	16.8	60.0
9.702000	43.3	9.000	N	10.4	16.7	60.0

CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.158000	34.1	9.000	N	9.8	21.5	55.6
0.236000	35.2	9.000	N	9.9	17.0	52.2
0.636000	34.0	9.000	N	9.9	12.0	46.0
0.640000	26.8	9.000	N	9.9	19.2	46.0
0.714000	35.2	9.000	N	9.9	10.8	46.0
0.718000	30.2	9.000	N	9.9	15.8	46.0
4.536000	36.4	9.000	N	10.2	9.6	46.0
4.602000	35.8	9.000	N	10.2	10.2	46.0
4.606000	36.3	9.000	N	10.2	9.7	46.0
4.688000	36.5	9.000	N	10.2	9.5	46.0
4.760000	35.8	9.000	N	10.2	10.2	46.0
5.008000	36.1	9.000	N	10.2	13.9	50.0
9.302000	34.7	9.000	N	10.4	15.3	50.0
9.376000	34.9	9.000	N	10.4	15.1	50.0
9.398000	34.4	9.000	N	10.4	15.6	50.0
9.446000	34.9	9.000	N	10.4	15.1	50.0
9.536000	35.1	9.000	N	10.4	14.9	50.0
9.666000	33.6	9.000	N	10.4	16.4	50.0

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4.2 Radiated Emission Below 1 GHz

4.2.1 Measuring instruments

	Type	Manufacturer	Model Name	Serial Number	Calibration Cycle	Calibration Date
<input checked="" type="checkbox"/>	EMI test receiver	Rohde & Schwarz	ESU40	100524	1 year	05.17.2019
<input checked="" type="checkbox"/>	Trilog antenna	Schwarzbeck	VULB 9168	255	2 year	03.26.2019
<input checked="" type="checkbox"/>	Antenna master	INNCO Systems	MA4640-XP-ET	-	N/A	-
<input checked="" type="checkbox"/>	Antenna master controller	INNCO Systems	CO3000	CO3000/870/ 35990515/L	N/A	-
<input checked="" type="checkbox"/>	Turn Table	INNCO Systems	1060	-	N/A	-
<input checked="" type="checkbox"/>	Turn table controller	INNCO Systems	CO2000	CO2000/095/ 7590304/L	N/A	-
<input type="checkbox"/>	Radio communication analyzer	ANRITSU	MT8820C	6201138643	1 year	08.21.2018
<input type="checkbox"/>	Antenna (for Communication)	Schwarzbeck	USLP9142	VSLP 9142-200	-	-
<input checked="" type="checkbox"/>	Software	Rohde & Schwarz	EMC32 VER8.40.0	-	-	-

4.2.2 Operating Condition

The test results of radiated emission provide the following information:

Used Test Standard	FCC CFR 47 PART 15 Subpart B Class B / ICES-003 Issue 6 Class B ANSI C63.4-2014
Detector	Quasi-Peak
Bandwidth	120 kHz (6 dB)
Worst Case Operating Mode	Data Communication mode [EUT+TA] Rear Camera Preview [EUT+Earphone] Rear Camera Preview Keyboard mode Dock Charging mode
Kind of Test Site	3 m semi anechoic chamber
Temperature	22.3 °C
Relative Humidity	44.6 %
Test Date	June 04, 2019

Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. QuasiPeak = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss
4. Margin = Limit - QuasiPeak

4.2.3 Measuring Data

Data Communication mode

Frequency (MHz)	Quasi Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
30.178400	28.1	100.0	V	68.0	18.3	11.9	40.0
78.994400	24.0	100.0	V	178.0	16.0	16.0	40.0
265.591200	35.2	100.0	H	149.0	19.3	10.8	46.0
277.100800	30.4	100.0	H	181.0	19.7	15.6	46.0
600.054400	37.0	100.0	V	0.0	27.4	9.0	46.0
800.036000	39.1	225.0	H	223.0	30.4	6.9	46.0

[EUT+TA] Rear Camera Preview

Frequency (MHz)	Quasi Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
43.998400	31.0	100.0	V	129.0	19.3	9.0	40.0
59.983200	27.1	100.0	V	91.0	19.4	12.9	40.0
121.116000	26.1	100.0	V	44.0	17.5	17.4	43.5
143.898400	27.1	100.0	V	70.0	19.2	16.4	43.5
288.505600	21.3	100.0	H	289.0	20.1	24.7	46.0
700.716000	28.8	116.8	V	108.0	28.8	17.2	46.0

[EUT+Earphone] Rear Camera Preview

Frequency (MHz)	Quasi Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
30.779309	17.8	175.0	V	341.0	18.4	22.2	40.0
67.247200	24.1	325.1	H	309.0	18.4	15.9	40.0
114.580800	20.2	274.8	V	7.0	16.8	23.3	43.5
149.335200	17.6	274.8	V	231.0	19.4	25.9	43.5
559.852800	26.1	325.0	H	26.0	26.6	19.9	46.0
706.475200	29.0	274.8	H	46.0	28.9	17.0	46.0

Keyboard mode

Frequency (MHz)	Quasi Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
43.926400	16.9	100.0	V	33.0	19.3	23.1	40.0
60.886400	17.0	175.0	H	30.0	19.3	23.0	40.0
114.539200	20.4	191.8	V	96.0	16.8	23.1	43.5
152.640000	18.1	174.8	H	221.0	19.6	25.4	43.5
485.349600	24.1	274.7	V	330.0	24.9	21.9	46.0
680.484000	28.5	192.8	V	39.0	28.5	17.5	46.0

Dock Charging mode

Frequency (MHz)	Quasi Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
40.891200	16.7	100.0	V	330.0	19.1	23.3	40.0
50.930400	17.5	225.2	H	343.0	19.8	22.5	40.0
61.572000	17.1	193.8	H	138.0	19.2	22.9	40.0
114.559200	20.9	193.8	V	97.0	16.8	22.6	43.5
462.090400	23.4	174.8	H	259.0	24.4	22.6	46.0
704.324800	28.9	274.9	H	293.0	28.9	17.1	46.0

4.3 Radiated Emission Above 1 GHz

4.3.1 Measuring instruments

	Type	Manufacturer	Model Name	Serial Number	Calibration Cycle	Calibration Date
<input checked="" type="checkbox"/>	EMI test receiver	Rohde & Schwarz	ESU40	100524	1 year	05.17.2019
<input checked="" type="checkbox"/>	Antenna master	INNCO Systems	MA4640-XP-ET	-	N/A	-
<input checked="" type="checkbox"/>	Antenna master controller	INNCO Systems	CO3000	CO3000/870/ 35990515/L	N/A	-
<input checked="" type="checkbox"/>	Turn table	INNCO Systems	1060	-	N/A	-
<input checked="" type="checkbox"/>	Turn table controller	INNCO Systems	CO2000	CO2000/095/ 7590304/L	N/A	-
<input checked="" type="checkbox"/>	Horn antenna	Schwarzbeck	BBHA 9120D	01836	1 year	07.20.2018
<input checked="" type="checkbox"/>	Low Noise amplifier	TESTEK	TK-PA18H	170034-L	1 year	03.04.2019
<input checked="" type="checkbox"/>	Power Amplifier	TK-PA1840H	TESTEK	170030-L	1 year	12.17.2018
<input checked="" type="checkbox"/>	Horn Antenna	BBHA 9170	Schwarzbeck	BBHA 9170 #786	2 year	12.05.2017
<input type="checkbox"/>	Radio communication analyzer	ANRITSU	MT8820C	6201138643	1 year	08.21.2018
<input type="checkbox"/>	Antenna (for Communication)	Schwarzbeck	USLP9142	VSLP 9142-200	-	-
<input checked="" type="checkbox"/>	Software	Rohde & Schwarz	EMC32 VER8.40.0	-	-	-

4.3.2 Operating Condition

The test results of radiated emission provide the following information:

Used Test Standard	FCC CFR 47 PART 15 Subpart B Class B / ICES-003 Issue 6 Class B ANSI C63.4-2014
Detector	Peak mode: Peak (RBW: 1 MHz, VBW: 3 MHz) CISPR-Average mode: Peak (RBW: 1 MHz, VBW: 10 Hz)
Highest Frequency	5 825 MHz
Tested Frequency Range	1 GHz to 30 GHz
Worst Case Operating Mode	Data Communication mode [EUT+TA] Rear Camera Preview [EUT+Earphone] Rear Camera Preview Keyboard mode Dock Charging mode
Kind of Test Site	3 m semi anechoic chamber
Temperature	21.3 °C
Relative Humidity	42.4 %
Test Date	June 13, 2019

Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. Peak or CAverage = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor+ Cable Loss –Amplifier Gain
4. Margin = Limit - Peak or CAverage

4.3.3 Measuring Data

Data Communication

Frequency (MHz)	Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
1399.965000	48.2	188.6	H	176.0	-26.0	25.8	74.0
1996.805000	46.6	113.4	V	49.0	-25.2	27.4	74.0
2660.585000	49.4	249.8	V	29.0	-22.6	24.6	74.0
4480.660000	44.2	175.7	V	4.0	-17.5	29.8	74.0
9674.815000	47.9	100.0	V	18.0	-5.1	26.1	74.0
14786.795000	50.1	149.9	H	0.0	1.1	23.9	74.0

Frequency (MHz)	CAverage (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
1399.965000	46.4	188.6	H	176.0	-26.0	7.6	54.0
1996.805000	21.7	113.4	V	49.0	-25.2	32.3	54.0
2660.585000	24.1	249.8	V	29.0	-22.6	29.9	54.0
4480.660000	27.9	175.7	V	4.0	-17.5	26.1	54.0
9674.815000	35.1	100.0	V	18.0	-5.1	18.9	54.0
14786.795000	36.5	149.9	H	0.0	1.1	17.5	54.0

[EUT+TA] Rear Camera Preview

Frequency (MHz)	Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
3062.480000	35.6	100.0	H	54.0	-20.9	38.4	74.0
5285.850000	39.1	113.3	H	353.0	-15.4	34.9	74.0
7508.170000	44.8	100.0	V	19.0	-9.2	29.2	74.0
9534.760000	48.4	150.1	V	178.0	-5.1	25.6	74.0
10209.030000	48.0	150.0	V	354.0	-4.4	26.0	74.0
14745.085000	49.5	149.5	H	245.0	1.0	24.5	74.0

Frequency (MHz)	CAverage (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
3062.480000	22.3	100.0	H	54.0	-20.9	31.7	54.0
5285.850000	26.4	113.3	H	353.0	-15.4	27.6	54.0
7508.170000	31.5	100.0	V	19.0	-9.2	22.5	54.0
9534.760000	35.8	150.1	V	178.0	-5.1	18.2	54.0
10209.030000	35.4	150.0	V	354.0	-4.4	18.6	54.0
14745.085000	36.8	149.5	H	245.0	1.0	17.2	54.0

[EUT+Earphone] Rear Camera Preview

Frequency (MHz)	Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
3008.315000	34.5	150.0	H	0.0	-21.0	39.5	74.0
4895.835000	38.6	160.5	V	272.0	-16.1	35.4	74.0
7367.165000	44.4	100.0	H	50.0	-9.6	29.6	74.0
9664.865000	47.6	149.9	H	146.0	-5.1	26.4	74.0
11284.145000	47.8	125.8	V	87.0	-2.4	26.2	74.0
14781.275000	49.6	199.6	V	50.0	1.1	24.4	74.0

Frequency (MHz)	CAverage (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
3008.315000	22.2	150.0	H	0.0	-21.0	31.8	54.0
4895.835000	26.1	160.5	V	272.0	-16.1	27.9	54.0
7367.165000	31.5	100.0	H	50.0	-9.6	22.5	54.0
9664.865000	35.1	149.9	H	146.0	-5.1	18.9	54.0
11284.145000	35.2	125.8	V	87.0	-2.4	18.8	54.0
14781.275000	36.9	199.6	V	50.0	1.1	17.1	54.0

Keyboard mode

Frequency (MHz)	Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
3115.435000	35.3	100.0	V	296.0	-20.9	38.7	74.0
4931.515000	39.2	100.0	V	37.0	-16.0	34.8	74.0
7412.785000	44.4	111.4	V	21.0	-9.5	29.6	74.0
9664.290000	48.5	149.7	H	275.0	-5.1	25.5	74.0
10926.920000	49.0	113.4	V	54.0	-2.6	25.0	74.0
14729.135000	50.0	149.6	H	0.0	1.0	24.0	74.0

Frequency (MHz)	CAverage (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
3115.435000	22.5	100.0	V	296.0	-20.9	31.5	54.0
4931.515000	26.5	100.0	V	37.0	-16.0	27.5	54.0
7412.785000	31.8	111.4	V	21.0	-9.5	22.2	54.0
9664.290000	35.3	149.7	H	275.0	-5.1	18.7	54.0
10926.920000	36.1	113.4	V	54.0	-2.6	17.9	54.0
14729.135000	36.9	149.6	H	0.0	1.0	17.2	54.0

Dock Charging mode

Frequency (MHz)	Peak (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
2956.625000	34.7	249.8	V	0.0	-21.2	39.3	74.0
5422.690000	38.9	245.4	V	118.0	-15.3	35.2	74.0
7372.145000	44.6	203.6	H	0.0	-9.6	29.4	74.0
9605.720000	48.7	125.8	V	101.0	-5.1	25.4	74.0
10247.540000	47.7	100.0	V	208.0	-4.2	26.3	74.0
15002.085000	49.8	150.1	V	61.0	1.4	24.2	74.0

Frequency (MHz)	CAverage (dB μ V/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
2956.625000	22.2	249.8	V	0.0	-21.2	31.8	54.0
5422.690000	26.3	245.4	V	118.0	-15.3	27.7	54.0
7372.145000	31.7	203.6	H	0.0	-9.6	22.3	54.0
9605.720000	35.7	125.8	V	101.0	-5.1	18.3	54.0
10247.540000	35.5	100.0	V	208.0	-4.2	18.5	54.0
15002.085000	36.7	150.1	V	61.0	1.4	17.3	54.0

5. CONCLUSION

The data collected shows that the **EUT Type: Tablet, Model: SM-T720**

complies with § 15.107 and § 15.109 of the FCC rules and ICES-003 Issue 6 of the IC rules.

6. APPENDIX A. TEST SETUP PHOTO

Please refer to Appendix. A and test setup photo file no. as follows;

File No.	Date of Issue	Description
HCT-EM-1906-FI001-P	July 02, 2019	Initial Release

End of report