

EMI TEST REPORT FCC CERTIFICATION

Applicant:

SAMSUNG Electronics Co., Ltd.
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Gyeonggi-do, 16677, Korea

Date of Issue: January 31, 2019

Test Report No. HCT-EM-1901-FC013

Test Site: HCT CO., LTD.

FCC ID :

A3LSMM305F

Applicable Standards : FCC CFR 47 PART 15 Subpart B Class B
ANSI C63.4-2014

EUT Type : Mobile Phone

Model Name : SM-M305M/DS

Series Model Name : SM-M305M, SM-M305F/DS, SM-M305F

Date of Test : January 22, 2019 to January 25, 2019

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 denial the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C 862

Tested By



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REVISION HISTORY

The revision history for this document is shown in table.

Report No.	Issue Date	Information About Changes
HCT-EM-1901-FC013	January 31, 2019	Initial Release



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1. GENERAL INFORMATION

1.1 Description of EUT

Its basic purpose is used for communications.

FCC ID	A3LSMM305F
Model name	SM-M305M/DS
Series model name	SM-M305M, SM-M305F/DS, SM-M305F
EUT type	Mobile Phone
Frequency band	GSM850/1900, WCDMA850/1700/1900, LTE B2/5/12(17)/13/41/66(4), BT EDR/LE 5.0, WLAN a/b/g/n/ac
Power rating	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: 3.6 V

1.2 Equipment Units Tested

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

Device Type	Model Name	Serial Number	Manufacturer	FCC ID / DoC
EUT	SM-M305M/DS	-	SAMSUNG	A3LSMM305F
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	FSUGMZE3
RJ45 cable	-	-	-	-
TA	EP-TA200	-	ELENTEC	-
Data cable	EP-DR140AWE	-	KSD	-
Earphone	EHS61ASFWE	-	YOUNGBO	-
Micro SD card (64 GB)	-	-	SAMSUNG	-
Notebook PC	ProBook6560b	5CB2053MXF	HP	-
Notebook PC adaptor	Series PPP009L-E	-	LITE-ON TECHNOLOGY (CHANGZHOU)	-
Gateway	TL-WR747N	-	TP Link	-



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
	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

* 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
	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	Registration Number
Radiated Field strength measurement facility 3 m Semi Anechoic chamber	90661
Radiated Field strength measurement facility 10 m Semi Anechoic chamber	

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 (dB)
Conducted Emission (0.15 MHz to 30 MHz)	1.82 dB
Radiated Emissions (30 MHz to 1 GHz)	5.20 dB
Radiated Emissions (1 GHz to 18 GHz)	5.24 dB
Radiated Emissions (18 GHz to 40 GHz)	5.40 dB



2. LIST OF TEST EQUIPMENT

<u>Type</u>	<u>Manufacturer</u>	<u>Model Name</u>	<u>Serial Number</u>	<u>Calibration Cycle</u>	<u>CAL Date</u>
<u>Conducted Emission</u>					
<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	05.03.2018
<input checked="" type="checkbox"/> Radio communication analyzer	ANRITSU	MT8820C	6201138643	1 year	08.21.2018
<input checked="" type="checkbox"/> Antenna (for Communication)	Schwarzbeck	USLP9142	VSLP 9142-200	-	-
<input checked="" type="checkbox"/> Software	Rohde & Schwarz	EMC32 VER8.54.0	-	-	-
<u>Radiated Emission</u>					
-For measurement below 1 GHz					
<input checked="" type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESU40	100524	1 year	07.27.2018
<input checked="" type="checkbox"/> Trilog Antenna	Schwarzbeck	VULB 9168	00847	2 year	04.13.2018
<input checked="" type="checkbox"/> Antenna master	INNCO Systems	MA4640-XP-ET	-	N/A	-
<input checked="" type="checkbox"/> Antenna master controller	INNCO Systems	CO 3000	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"/> Radio communication analyzer	ANRITSU	MT8820C	6201138643	1 year	08.21.2018
<input checked="" type="checkbox"/> Antenna (for Communication)	Schwarzbeck	USLP9142	VSLP 9142-200	-	-
<input checked="" type="checkbox"/> Software	Rohde & Schwarz	EMC32 VER8.40.0	-	-	-
-For measurement above 1 GHz					
<input checked="" type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESU40	100524	1 year	07.27.2018
<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	2 year	05.14.2018
<input checked="" type="checkbox"/> Low Noise Amplifier	TESTEK	TK-PA18H	170034-L	1 year	03.06.2018
<input checked="" type="checkbox"/> Power Amplifier	TESTEK	TK-PA1840H	170030-L	1 year	12.17.2018
<input checked="" type="checkbox"/> Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170#786	2 year	12.05.2017
<input checked="" type="checkbox"/> Radio communication analyzer	ANRITSU	MT8820C	6201138643	1 year	08.21.2018
<input checked="" type="checkbox"/> Antenna (for Communication)	Schwarzbeck	USLP9142	VSLP 9142-200	-	-
<input type="checkbox"/> Highpass Filter	Wainwright Instruments	WHKX1.0/15G-12SS	42	1 year	08.02.2018
<input checked="" type="checkbox"/> Software	Rohde & Schwarz	EMC32 VER8.40.0	-	-	-



3. DESCRIPTION OF MEASUREMENTS

3.1 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)	Quasi-Peak (dB(μV))	Average (dB(μV))
0.15 to 0.5	9	66 to 56*	56 to 46*
0.5 to 5	9	56	46
5 to 30	9	60	50

*Decreases with the logarithm of the frequency.



3.2 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)	Antenna Distance (m)	Field Strength ($\mu\text{V}/\text{m}$)	Quasi-Peak ($\text{dB}(\mu\text{V})/\text{m}$)
30 to 88	3	100	40.0
88 to 216	3	150	43.5
216 to 960	3	200	46.0
Above 960	3	500	54.0
Frequency (MHz)	Antenna Distance (m)	Peak ($\text{dB}(\mu\text{V})/\text{m}$)	Average ($\text{dB}(\mu\text{V})/\text{m}$)
Above 1 000	3	74	54

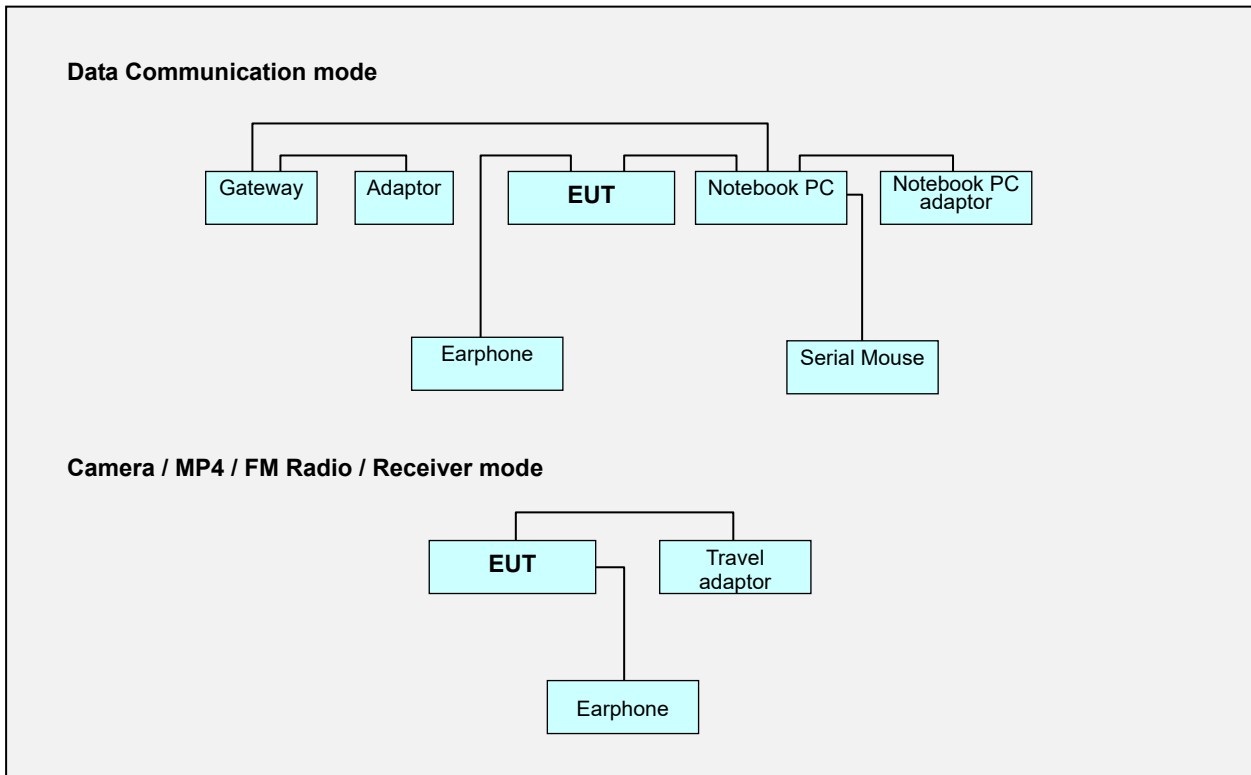


3.2.1 Frequency Range of Radiated Measurements

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	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

3.3 Configuration of Tested System



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



4. PRELIMINARY TEST

During preliminary tests, the following operating mode was investigated.

Rear Camera (Preview/Recording)	Front Camera (Preview/Recording)
FM Radio (Low/Middle/High CH)	MP4 Play
Data Communication	
Receiver mode (LTE B12, B13, B17) (Low CH/ Middle CH/ High CH Idle)	
Receiver mode (LTE B5) (Middle CH)	
Receiver mode (WCDMA 850) (Middle CH)	
Receiver mode (GSM 850) (Middle CH)	

4.1 Conducted Emission

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

Operating Modes:

Rear Camera Preview +FM Radio (Low CH)
 Front Camera Preview + FM Radio (Middle CH)
 FM Radio (High CH)
 MP4 Play
 Data Communication
 Receiver mode (LTE B5 Low CH Idle) + Camera Recording (Rear)
 Receiver mode (LTE B5 Middle CH Idle) + Camera Recording (Front)
 Receiver mode (LTE B5 High CH Idle)
 Receiver mode (LTE B12, B13, B17 Low CH Idle)
 Receiver mode (LTE B12, B13, B17 Middle CH Idle)
 Receiver mode (LTE B12, B13, B17 High CH Idle)

NOTE.

1. The worst case of operating mode is reported.

4.2 Radiated Emission

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

Operating Modes:

Rear Camera Preview +FM Radio (Low CH)
 Front Camera Preview + FM Radio (Middle CH)
 FM Radio (High CH)
 MP4 Play
 Data Communication
 Receiver mode (LTE B5 Low CH Idle) + Camera Recording (Rear)
 Receiver mode (LTE B5 Middle CH Idle) + Camera Recording (Front)
 Receiver mode (LTE B5 High CH Idle)
 Receiver mode (LTE B12, B13, B17 Low CH Idle)
 Receiver mode (LTE B12, B13, B17 Middle CH Idle)
 Receiver mode (LTE B12, B13, B17 High CH Idle)

NOTE.

1. Three orientations have been investigated and the worst case orientation is reported.

2. The worst case of operating mode is reported.



5. CONDUCTED AND RADIATED EMISSION TEST SUMMARY

5.1 Conducted Emission

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

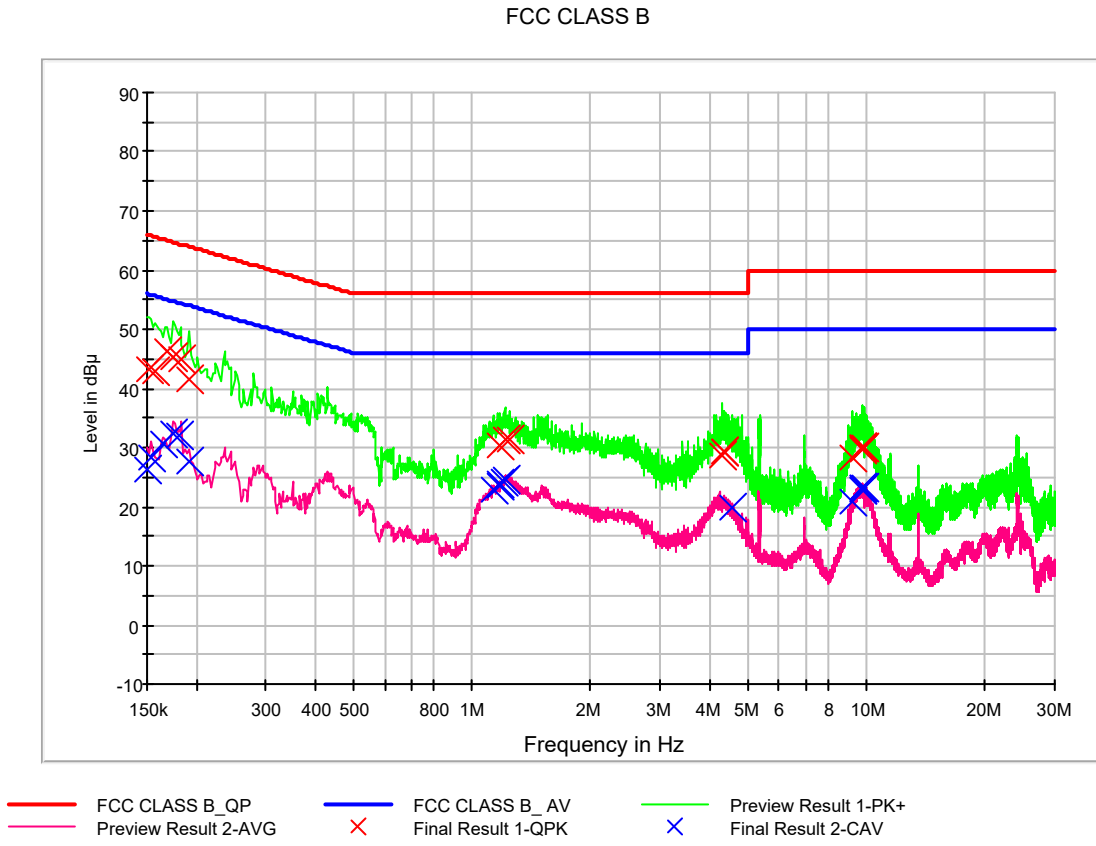
Applicable Standards	FCC PART 15 Subpart B Class B ANSI C63.4-2014
Detector	Quasi-Peak, CISPR-Average
Bandwidth	9 kHz (6 dB)
Worst Case of Operating Mode	Data Communication FM Radio (High CH) Receiver mode (LTE B5 Middle CH Idle) + Camera Recording (Front) Receiver mode (LTE B12, B13, B17 Low CH Idle)
Kind of Test Site	Shielded Room
Temperature	21.8 °C
Relative Humidity	44.3 %
Test Date	January 23, 2019

- 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



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





QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	43.3	9.000	L1	9.6	22.5	65.9
0.158000	42.8	9.000	L1	9.6	22.7	65.6
0.168000	46.4	9.000	L1	9.6	18.7	65.1
0.174000	45.2	9.000	L1	9.6	19.6	64.8
0.182000	44.9	9.000	L1	9.6	19.5	64.4
0.192000	41.6	9.000	L1	9.7	22.3	63.9
1.172000	30.3	9.000	L1	9.7	25.7	56.0
1.212000	31.4	9.000	L1	9.7	24.6	56.0
1.246000	31.2	9.000	L1	9.7	24.8	56.0
4.324000	28.7	9.000	L1	9.8	27.3	56.0
4.344000	29.2	9.000	L1	9.8	26.8	56.0
4.376000	29.2	9.000	L1	9.8	26.8	56.0
9.226000	28.4	9.000	L1	9.9	31.6	60.0
9.728000	29.9	9.000	L1	10.0	30.1	60.0
9.758000	29.8	9.000	L1	10.0	30.2	60.0
9.786000	29.9	9.000	L1	10.0	30.1	60.0
9.790000	29.9	9.000	L1	10.0	30.1	60.0
9.834000	30.0	9.000	L1	10.0	30.0	60.0

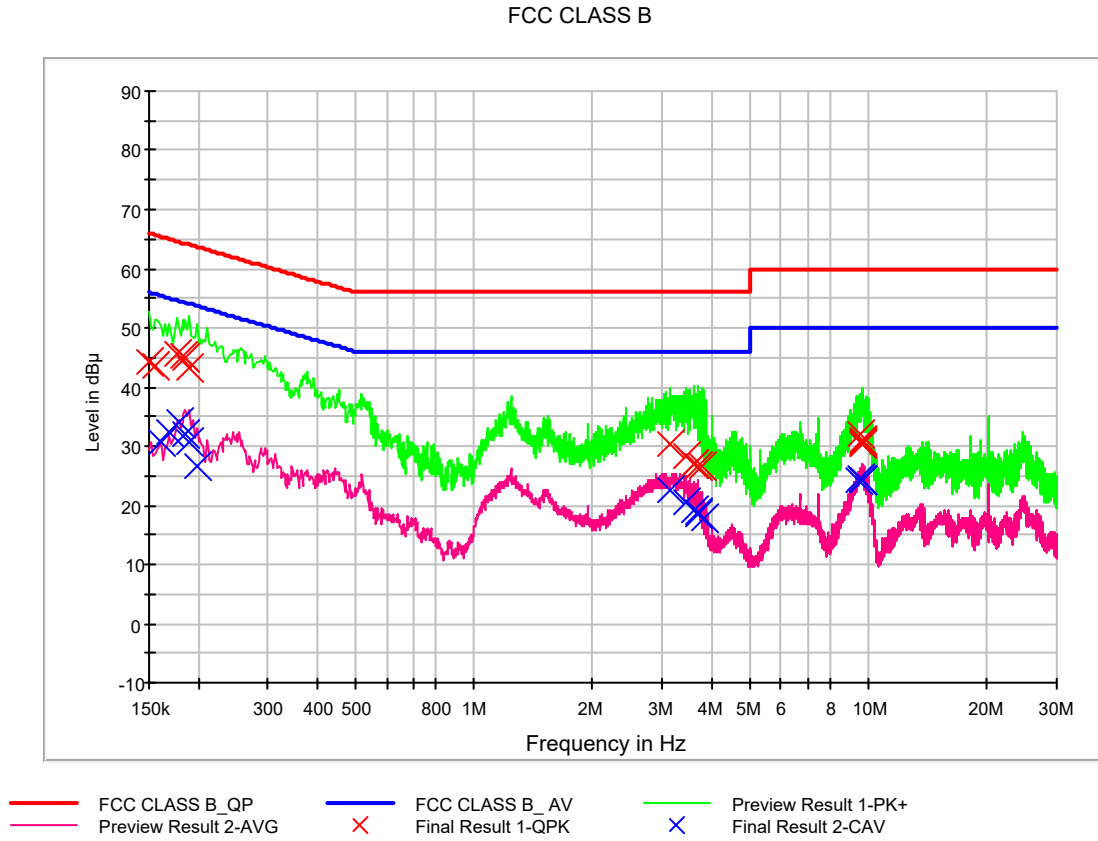


CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	26.3	9.000	L1	9.6	29.7	56.0
0.154000	28.2	9.000	L1	9.6	27.5	55.8
0.164000	30.6	9.000	L1	9.6	24.7	55.3
0.174000	32.4	9.000	L1	9.6	22.4	54.8
0.180000	32.1	9.000	L1	9.6	22.4	54.5
0.192000	27.6	9.000	L1	9.7	26.3	53.9
1.130000	22.8	9.000	L1	9.7	23.2	46.0
1.170000	23.5	9.000	L1	9.7	22.5	46.0
1.176000	23.9	9.000	L1	9.7	22.1	46.0
1.198000	24.4	9.000	L1	9.7	21.6	46.0
1.212000	24.7	9.000	L1	9.7	21.3	46.0
4.544000	19.7	9.000	L1	9.8	26.3	46.0
9.226000	20.8	9.000	L1	9.9	29.2	50.0
9.728000	22.8	9.000	L1	10.0	27.2	50.0
9.758000	23.2	9.000	L1	10.0	26.8	50.0
9.790000	23.0	9.000	L1	10.0	27.0	50.0
9.798000	23.1	9.000	L1	10.0	26.9	50.0
9.854000	23.2	9.000	L1	10.0	26.8	50.0



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





QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	44.2	9.000	N	9.6	21.8	66.0
0.156000	43.6	9.000	N	9.6	22.1	65.7
0.176000	45.7	9.000	N	9.6	18.9	64.7
0.182000	45.3	9.000	N	9.6	19.1	64.4
0.186000	44.9	9.000	N	9.6	19.3	64.2
0.190000	43.1	9.000	N	9.6	20.9	64.0
3.142000	30.2	9.000	N	9.8	25.8	56.0
3.456000	28.5	9.000	N	9.8	27.5	56.0
3.618000	27.0	9.000	N	9.8	29.0	56.0
3.628000	27.1	9.000	N	9.8	28.9	56.0
3.700000	26.6	9.000	N	9.8	29.4	56.0
3.804000	26.5	9.000	N	9.8	29.5	56.0
9.582000	32.1	9.000	N	9.9	27.9	60.0
9.596000	30.8	9.000	N	9.9	29.2	60.0
9.614000	31.1	9.000	N	9.9	28.9	60.0
9.628000	30.4	9.000	N	9.9	29.6	60.0
9.634000	30.5	9.000	N	9.9	29.5	60.0
9.680000	30.8	9.000	N	9.9	29.2	60.0

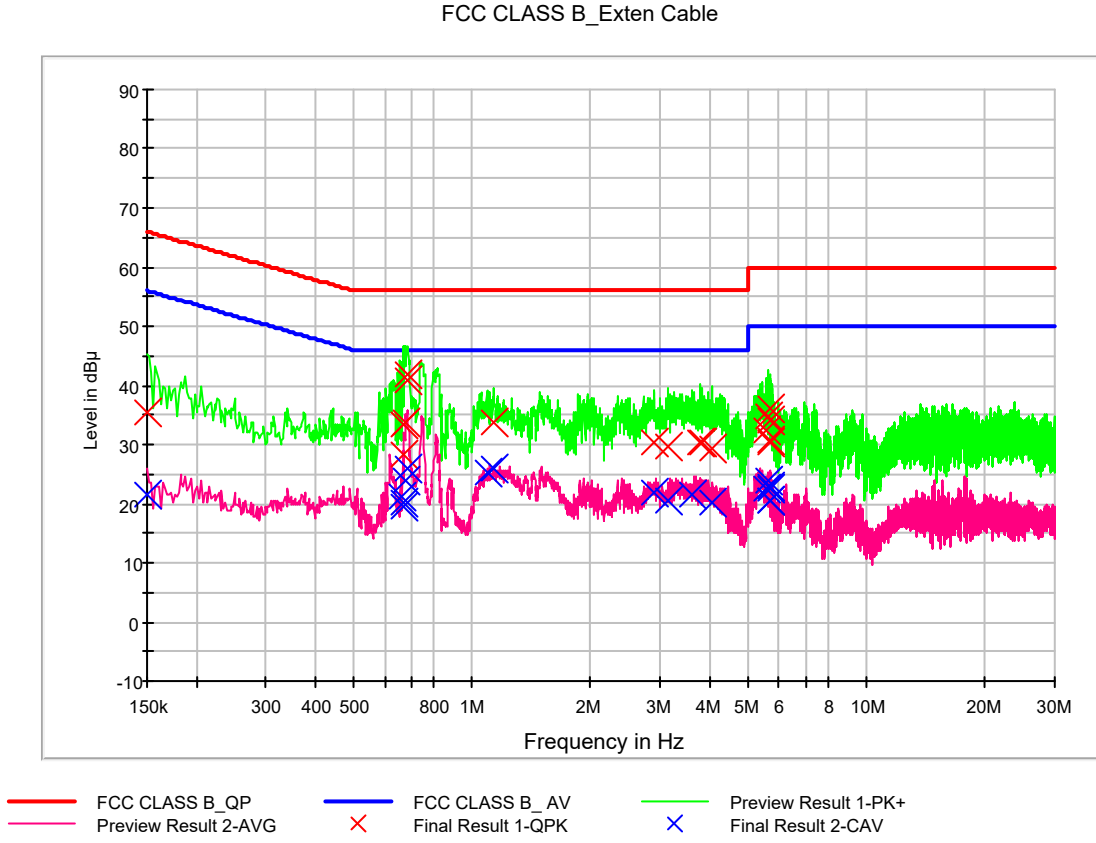


CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.160000	30.7	9.000	N	9.6	24.8	55.5
0.168000	32.4	9.000	N	9.6	22.6	55.1
0.178000	34.0	9.000	N	9.6	20.6	54.6
0.186000	31.9	9.000	N	9.6	22.3	54.2
0.190000	30.5	9.000	N	9.6	23.5	54.0
0.198000	26.5	9.000	N	9.6	27.2	53.7
3.142000	22.5	9.000	N	9.8	23.5	46.0
3.456000	20.5	9.000	N	9.8	25.5	46.0
3.628000	19.2	9.000	N	9.8	26.8	46.0
3.696000	18.4	9.000	N	9.8	27.6	46.0
3.700000	18.8	9.000	N	9.8	27.2	46.0
3.808000	17.8	9.000	N	9.8	28.2	46.0
9.398000	24.1	9.000	N	9.9	25.9	50.0
9.582000	24.7	9.000	N	9.9	25.3	50.0
9.596000	24.2	9.000	N	9.9	25.8	50.0
9.614000	24.3	9.000	N	9.9	25.7	50.0
9.628000	24.3	9.000	N	9.9	25.7	50.0
9.680000	24.2	9.000	N	9.9	25.8	50.0



Figure 3: Conducted Emission, FM Radio (High CH), Line (L1)





QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	35.3	9.000	L1	9.7	30.7	66.0
0.670000	28.4	9.000	L1	9.8	27.6	56.0
0.674000	33.3	9.000	L1	9.8	22.7	56.0
0.680000	33.8	9.000	L1	9.8	22.2	56.0
0.684000	41.0	9.000	L1	9.8	15.0	56.0
0.690000	42.0	9.000	L1	9.8	14.0	56.0
1.134000	33.8	9.000	L1	9.8	22.2	56.0
2.880000	30.5	9.000	L1	9.9	25.5	56.0
3.144000	29.5	9.000	L1	9.9	26.5	56.0
3.784000	30.2	9.000	L1	10.0	25.8	56.0
3.840000	30.4	9.000	L1	10.0	25.6	56.0
4.078000	29.5	9.000	L1	10.0	26.5	56.0
5.590000	32.3	9.000	L1	10.1	27.7	60.0
5.604000	34.7	9.000	L1	10.1	25.3	60.0
5.668000	33.9	9.000	L1	10.1	26.1	60.0
5.672000	30.8	9.000	L1	10.1	29.2	60.0
5.680000	30.2	9.000	L1	10.1	29.8	60.0
5.710000	36.1	9.000	L1	10.1	23.9	60.0

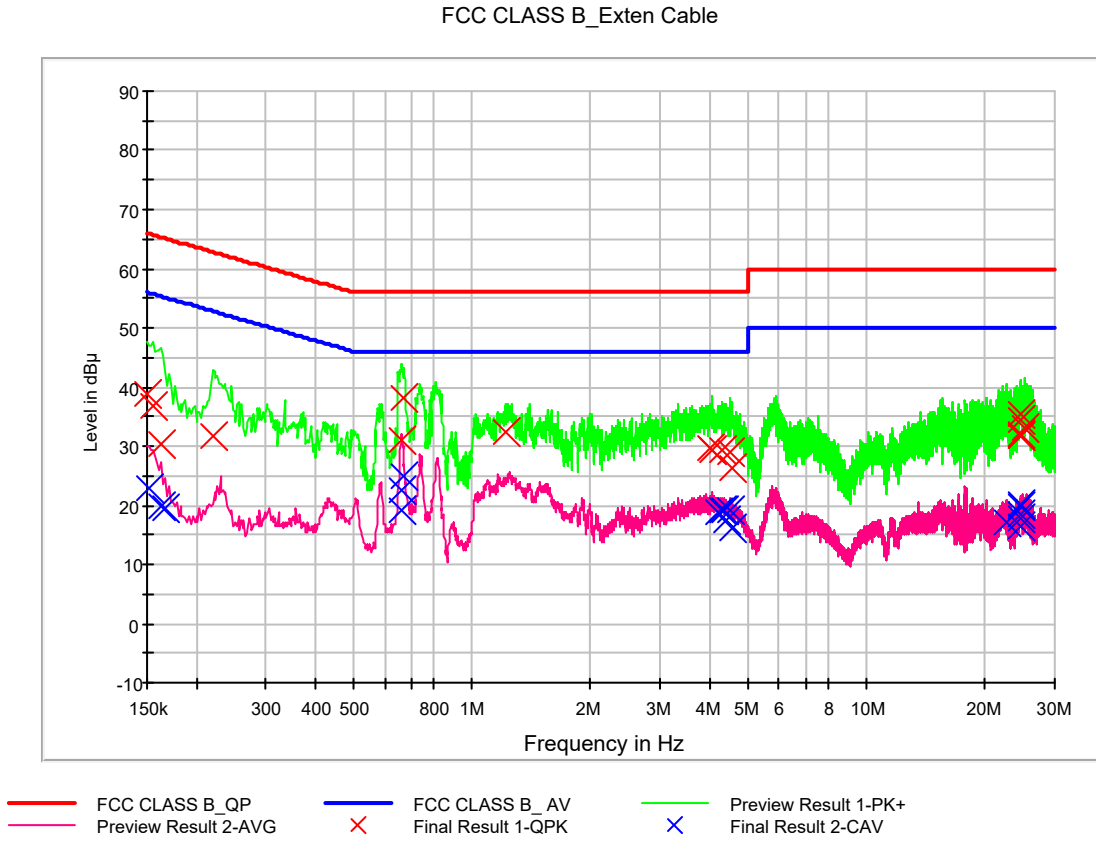


CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	21.4	9.000	L1	9.7	34.6	56.0
0.664000	21.1	9.000	L1	9.8	24.9	46.0
0.668000	19.5	9.000	L1	9.8	26.5	46.0
0.674000	20.1	9.000	L1	9.8	25.9	46.0
0.680000	23.9	9.000	L1	9.8	22.1	46.0
0.686000	25.9	9.000	L1	9.8	20.1	46.0
1.090000	25.3	9.000	L1	9.8	20.7	46.0
1.134000	26.0	9.000	L1	9.8	20.0	46.0
2.880000	21.8	9.000	L1	9.9	24.2	46.0
3.144000	20.6	9.000	L1	9.9	25.4	46.0
3.596000	21.5	9.000	L1	9.9	24.5	46.0
4.078000	20.2	9.000	L1	10.0	25.8	46.0
5.590000	22.6	9.000	L1	10.1	27.4	50.0
5.604000	24.1	9.000	L1	10.1	25.9	50.0
5.668000	22.4	9.000	L1	10.1	27.6	50.0
5.672000	20.6	9.000	L1	10.1	29.4	50.0
5.680000	20.5	9.000	L1	10.1	29.5	50.0
5.710000	22.9	9.000	L1	10.1	27.1	50.0



Figure 4: Conducted Emission, FM Radio (High CH), Line (N)





QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	38.9	9.000	N	9.8	27.1	66.0
0.156000	36.9	9.000	N	9.8	28.8	65.7
0.162000	30.4	9.000	N	9.8	34.9	65.4
0.220000	31.7	9.000	N	9.9	31.1	62.8
0.664000	31.0	9.000	N	9.9	25.0	56.0
0.670000	38.2	9.000	N	9.9	17.8	56.0
1.220000	32.4	9.000	N	10.0	23.6	56.0
4.020000	29.5	9.000	N	10.2	26.5	56.0
4.062000	29.5	9.000	N	10.2	26.5	56.0
4.286000	29.2	9.000	N	10.2	26.8	56.0
4.510000	29.1	9.000	N	10.2	26.9	56.0
4.566000	26.4	9.000	N	10.2	29.6	56.0
24.528000	35.5	9.000	N	11.0	24.5	60.0
24.594000	34.5	9.000	N	11.0	25.5	60.0
24.622000	31.9	9.000	N	11.0	28.1	60.0
24.678000	31.5	9.000	N	11.0	28.5	60.0
24.718000	31.8	9.000	N	11.0	28.2	60.0
25.180000	33.0	9.000	N	11.0	27.0	60.0

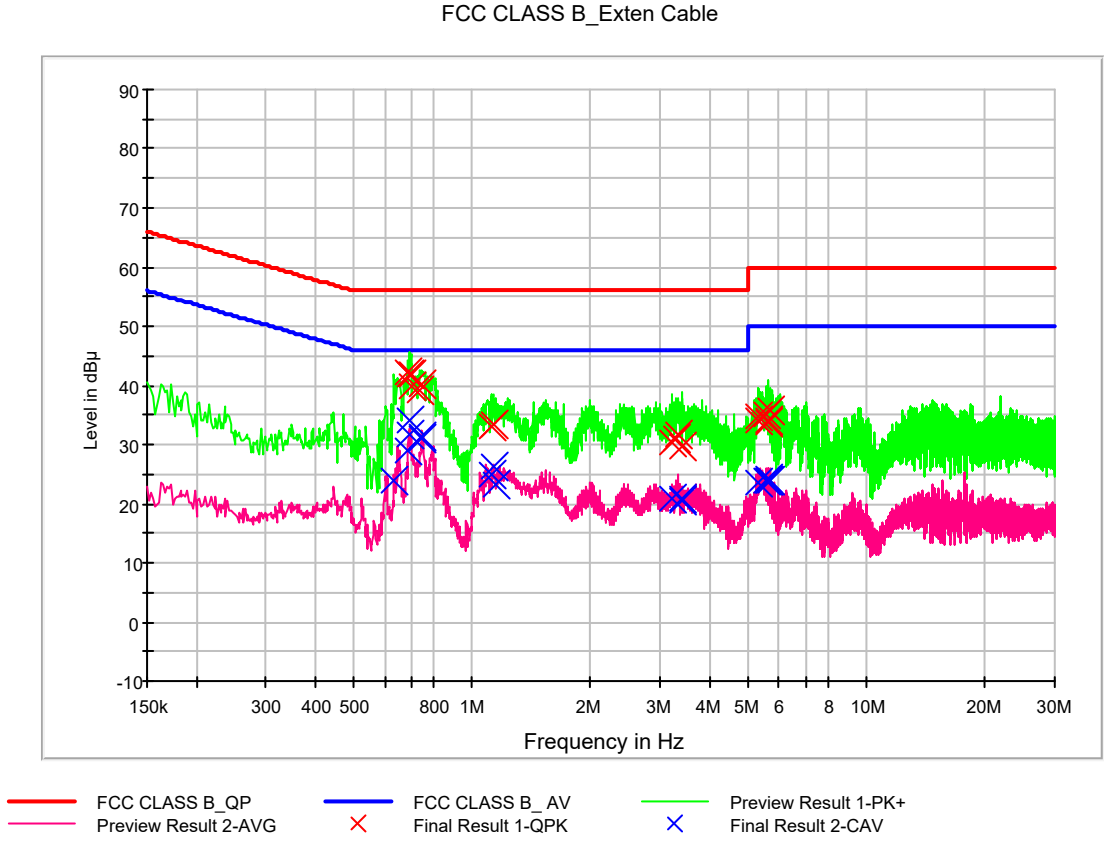


CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	22.9	9.000	N	9.8	33.0	55.9
0.162000	20.0	9.000	N	9.8	35.4	55.4
0.166000	19.4	9.000	N	9.8	35.8	55.2
0.662000	19.0	9.000	N	9.9	27.0	46.0
0.666000	22.6	9.000	N	9.9	23.4	46.0
0.670000	24.9	9.000	N	9.9	21.1	46.0
4.182000	18.9	9.000	N	10.2	27.1	46.0
4.280000	19.1	9.000	N	10.2	26.9	46.0
4.360000	19.2	9.000	N	10.2	26.8	46.0
4.392000	17.3	9.000	N	10.2	28.7	46.0
4.510000	19.1	9.000	N	10.2	26.9	46.0
4.566000	16.2	9.000	N	10.2	29.8	46.0
22.652000	17.0	9.000	N	11.0	33.0	50.0
24.456000	19.7	9.000	N	11.0	30.3	50.0
24.528000	20.2	9.000	N	11.0	29.8	50.0
24.534000	18.4	9.000	N	11.0	31.6	50.0
24.678000	16.3	9.000	N	11.0	33.7	50.0
24.718000	17.7	9.000	N	11.0	32.3	50.0



Figure 5: Conducted Emission, Receiver mode (LTE B5 Middle CH Idle) + Camera Recording (Front), Line (L1)





QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.690000	42.2	9.000	L1	9.8	13.8	56.0
0.696000	41.9	9.000	L1	9.8	14.1	56.0
0.700000	41.7	9.000	L1	9.8	14.3	56.0
0.704000	39.8	9.000	L1	9.8	16.2	56.0
0.740000	39.0	9.000	L1	9.8	17.0	56.0
0.748000	40.2	9.000	L1	9.8	15.8	56.0
1.124000	33.1	9.000	L1	9.8	22.9	56.0
1.130000	33.4	9.000	L1	9.8	22.6	56.0
3.226000	30.4	9.000	L1	9.9	25.6	56.0
3.282000	31.1	9.000	L1	9.9	24.9	56.0
3.340000	31.6	9.000	L1	9.9	24.4	56.0
3.398000	29.5	9.000	L1	9.9	26.5	56.0
5.334000	34.9	9.000	L1	10.0	25.1	60.0
5.342000	33.9	9.000	L1	10.0	26.1	60.0
5.594000	35.2	9.000	L1	10.1	24.8	60.0
5.608000	34.2	9.000	L1	10.1	25.8	60.0
5.664000	33.6	9.000	L1	10.1	26.4	60.0
5.710000	35.6	9.000	L1	10.1	24.4	60.0

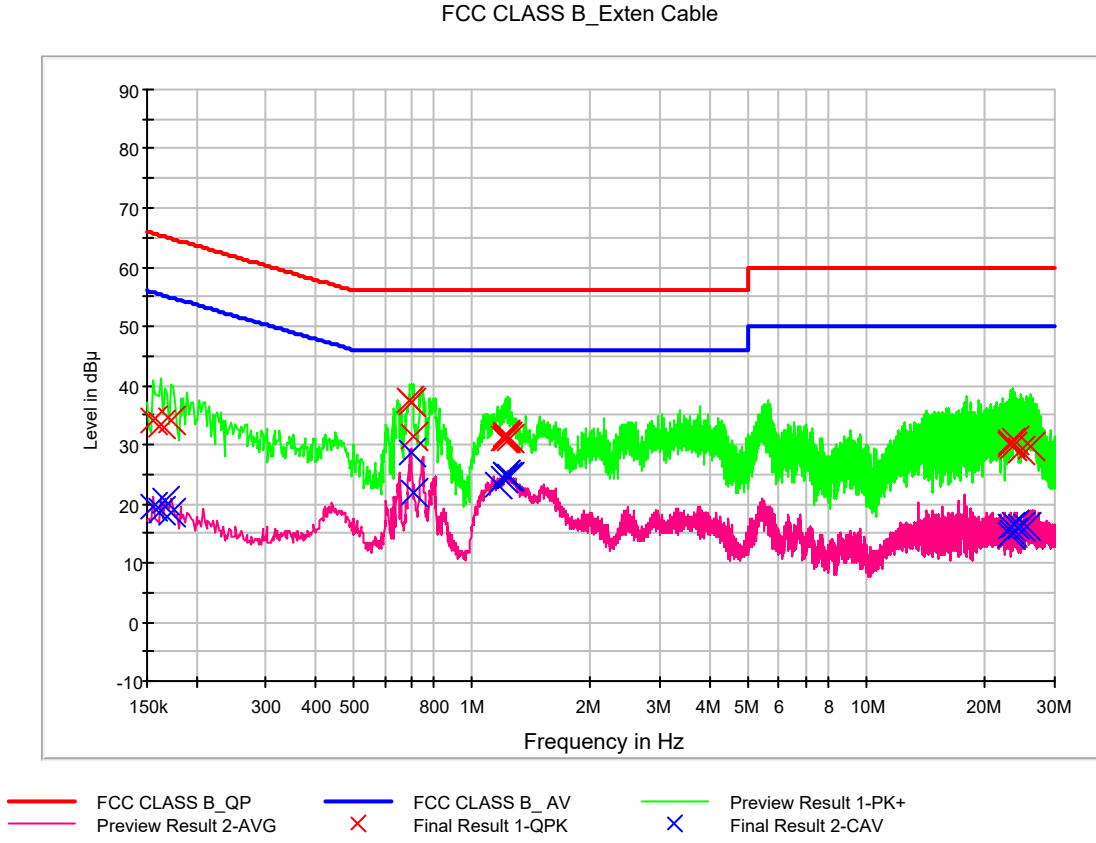


CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.634000	24.0	9.000	L1	9.8	22.0	46.0
0.686000	29.0	9.000	L1	9.8	17.0	46.0
0.692000	31.7	9.000	L1	9.8	14.3	46.0
0.698000	34.2	9.000	L1	9.8	11.8	46.0
0.744000	31.0	9.000	L1	9.8	15.0	46.0
0.748000	31.4	9.000	L1	9.8	14.6	46.0
1.124000	25.0	9.000	L1	9.8	21.0	46.0
1.130000	26.2	9.000	L1	9.8	19.8	46.0
1.150000	23.1	9.000	L1	9.8	22.9	46.0
3.226000	20.9	9.000	L1	9.9	25.1	46.0
3.398000	20.8	9.000	L1	9.9	25.2	46.0
3.404000	20.6	9.000	L1	9.9	25.4	46.0
5.322000	23.7	9.000	L1	10.0	26.3	50.0
5.594000	23.8	9.000	L1	10.1	26.2	50.0
5.608000	24.1	9.000	L1	10.1	25.9	50.0
5.650000	23.9	9.000	L1	10.1	26.1	50.0
5.664000	23.7	9.000	L1	10.1	26.3	50.0
5.710000	23.8	9.000	L1	10.1	26.2	50.0



Figure 6: Conducted Emission, Receiver mode (LTE B5 Middle CH Idle) + Camera Recording (Front), Line (N)





QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.156000	34.0	9.000	N	9.8	31.7	65.7
0.162000	33.4	9.000	N	9.8	32.0	65.4
0.172000	34.0	9.000	N	9.8	30.9	64.9
0.696000	37.5	9.000	N	9.9	18.5	56.0
0.702000	37.2	9.000	N	9.9	18.8	56.0
0.710000	31.5	9.000	N	9.9	24.5	56.0
1.200000	30.9	9.000	N	10.0	25.1	56.0
1.212000	31.1	9.000	N	10.0	24.9	56.0
1.216000	31.3	9.000	N	10.0	24.7	56.0
1.222000	31.8	9.000	N	10.0	24.2	56.0
1.226000	31.2	9.000	N	10.0	24.8	56.0
1.242000	30.9	9.000	N	10.0	25.1	56.0
23.132000	30.2	9.000	N	11.0	29.8	60.0
23.214000	30.0	9.000	N	11.0	30.0	60.0
23.574000	29.7	9.000	N	11.0	30.3	60.0
23.628000	30.6	9.000	N	11.0	29.4	60.0
24.462000	29.0	9.000	N	11.0	31.0	60.0
26.174000	29.5	9.000	N	11.1	30.5	60.0

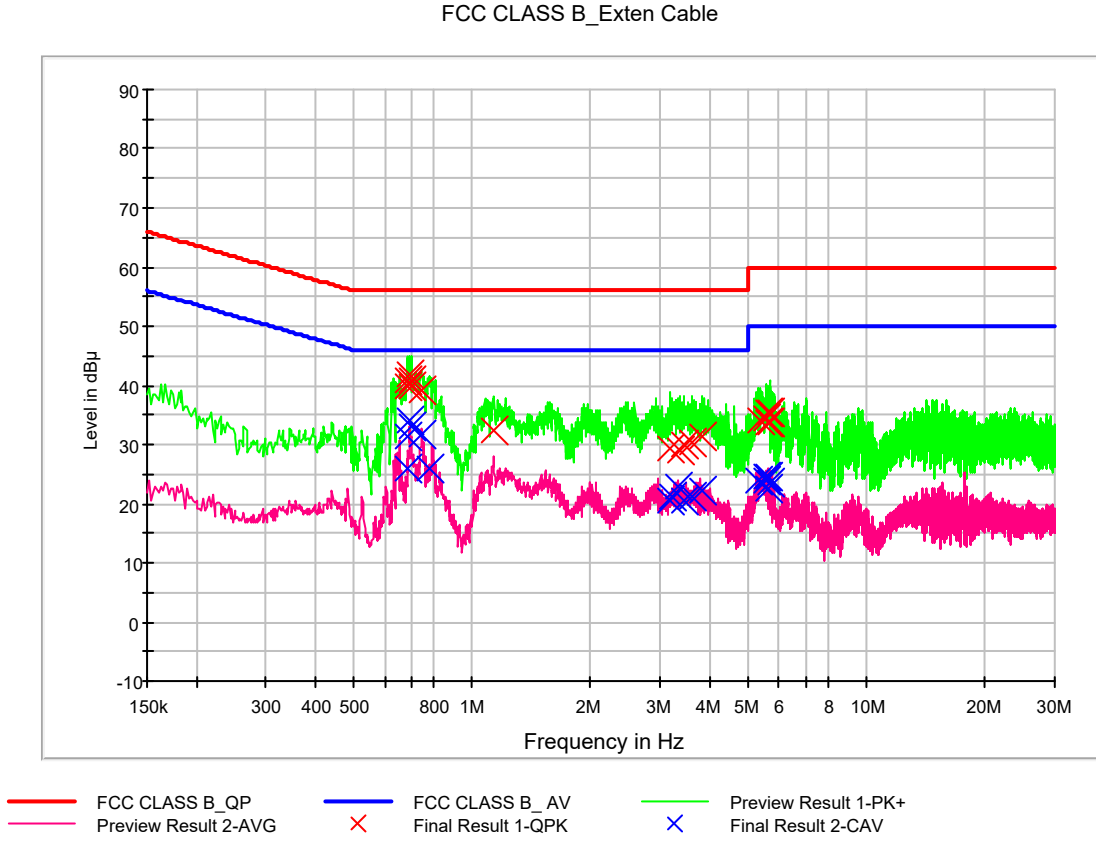


CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.156000	19.4	9.000	N	9.8	36.3	55.7
0.162000	18.7	9.000	N	9.8	36.7	55.4
0.166000	20.5	9.000	N	9.8	34.6	55.2
0.172000	18.6	9.000	N	9.8	36.3	54.9
0.700000	28.8	9.000	N	9.9	17.2	46.0
0.710000	22.0	9.000	N	9.9	24.0	46.0
1.156000	23.2	9.000	N	10.0	22.8	46.0
1.200000	24.1	9.000	N	10.0	21.9	46.0
1.216000	25.0	9.000	N	10.0	21.0	46.0
1.222000	24.8	9.000	N	10.0	21.2	46.0
1.226000	24.6	9.000	N	10.0	21.4	46.0
1.244000	24.6	9.000	N	10.0	21.4	46.0
23.132000	14.8	9.000	N	11.0	35.2	50.0
23.214000	16.2	9.000	N	11.0	33.8	50.0
23.574000	15.0	9.000	N	11.0	35.0	50.0
23.628000	16.5	9.000	N	11.0	33.5	50.0
24.462000	15.9	9.000	N	11.0	34.1	50.0
25.554000	16.1	9.000	N	11.0	33.9	50.0



Figure 7: Conducted Emission, Receiver mode (LTE B12, B13, B17 Low CH Idle), Line (L1)





QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.686000	39.8	9.000	L1	9.8	16.2	56.0
0.690000	41.0	9.000	L1	9.8	15.0	56.0
0.696000	42.0	9.000	L1	9.8	14.0	56.0
0.700000	40.9	9.000	L1	9.8	15.1	56.0
0.704000	40.0	9.000	L1	9.8	16.0	56.0
0.742000	39.3	9.000	L1	9.8	16.7	56.0
1.140000	32.3	9.000	L1	9.8	23.7	56.0
3.186000	29.3	9.000	L1	9.9	26.7	56.0
3.350000	29.1	9.000	L1	9.9	26.9	56.0
3.444000	29.9	9.000	L1	9.9	26.1	56.0
3.596000	30.4	9.000	L1	9.9	25.6	56.0
3.824000	31.4	9.000	L1	10.0	24.6	56.0
5.394000	34.2	9.000	L1	10.0	25.8	60.0
5.548000	34.4	9.000	L1	10.1	25.6	60.0
5.638000	33.8	9.000	L1	10.1	26.2	60.0
5.650000	35.5	9.000	L1	10.1	24.5	60.0
5.668000	33.6	9.000	L1	10.1	26.4	60.0
5.712000	35.5	9.000	L1	10.1	24.5	60.0

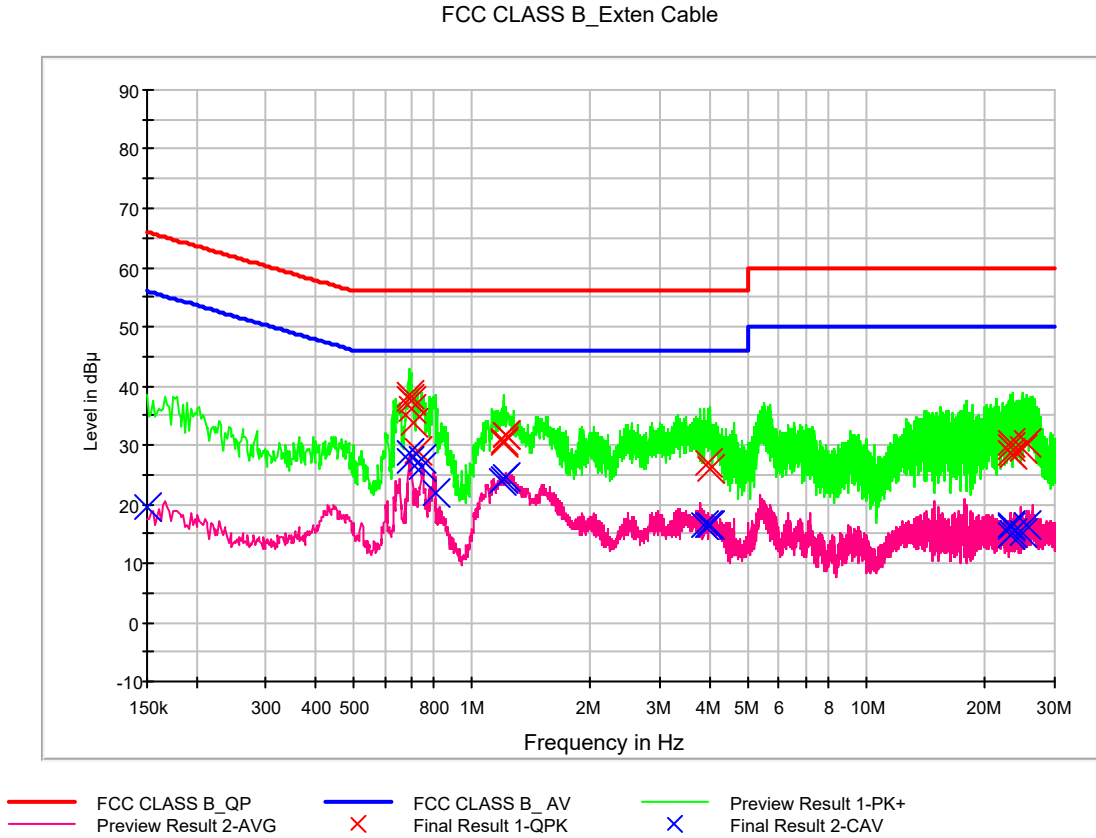


CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.686000	25.9	9.000	L1	9.8	20.1	46.0
0.690000	31.2	9.000	L1	9.8	14.8	46.0
0.696000	34.2	9.000	L1	9.8	11.8	46.0
0.700000	33.0	9.000	L1	9.8	13.0	46.0
0.748000	31.7	9.000	L1	9.8	14.3	46.0
0.778000	25.9	9.000	L1	9.8	20.1	46.0
3.186000	20.4	9.000	L1	9.9	25.6	46.0
3.204000	21.3	9.000	L1	9.9	24.7	46.0
3.334000	23.0	9.000	L1	9.9	23.0	46.0
3.444000	20.4	9.000	L1	9.9	25.6	46.0
3.596000	21.3	9.000	L1	9.9	24.8	46.0
3.824000	22.2	9.000	L1	10.0	23.8	46.0
5.344000	24.0	9.000	L1	10.0	26.0	50.0
5.548000	23.9	9.000	L1	10.1	26.1	50.0
5.600000	24.4	9.000	L1	10.1	25.6	50.0
5.638000	22.7	9.000	L1	10.1	27.3	50.0
5.650000	24.7	9.000	L1	10.1	25.3	50.0
5.694000	23.4	9.000	L1	10.1	26.6	50.0



Figure 8: Conducted Emission, Receiver mode (LTE B12, B13, B17 Low CH Idle), Line (N)





QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.692000	38.6	9.000	N	9.9	17.4	56.0
0.696000	37.7	9.000	N	9.9	18.3	56.0
0.700000	37.3	9.000	N	9.9	18.7	56.0
0.704000	35.9	9.000	N	9.9	20.1	56.0
0.708000	33.6	9.000	N	9.9	22.4	56.0
0.726000	29.1	9.000	N	9.9	26.9	56.0
1.198000	30.2	9.000	N	10.0	25.8	56.0
1.206000	30.5	9.000	N	10.0	25.5	56.0
1.218000	31.6	9.000	N	10.0	24.4	56.0
1.222000	31.6	9.000	N	10.0	24.4	56.0
3.970000	26.8	9.000	N	10.2	29.2	56.0
4.008000	26.0	9.000	N	10.2	30.0	56.0
23.132000	28.8	9.000	N	11.0	31.2	60.0
23.226000	29.8	9.000	N	11.0	30.2	60.0
23.244000	30.2	9.000	N	11.0	29.8	60.0
23.338000	28.4	9.000	N	11.0	31.6	60.0
24.850000	29.3	9.000	N	11.0	30.7	60.0
25.560000	30.2	9.000	N	11.0	29.8	60.0



CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	19.6	9.000	N	9.8	36.4	56.0
0.692000	27.2	9.000	N	9.9	18.8	46.0
0.696000	28.5	9.000	N	9.9	17.5	46.0
0.744000	26.3	9.000	N	9.9	19.7	46.0
0.748000	27.6	9.000	N	9.9	18.4	46.0
0.806000	22.0	9.000	N	9.9	24.0	46.0
1.194000	24.0	9.000	N	10.0	22.0	46.0
1.206000	24.3	9.000	N	10.0	21.7	46.0
1.220000	24.6	9.000	N	10.0	21.4	46.0
3.890000	16.3	9.000	N	10.2	29.7	46.0
3.970000	16.5	9.000	N	10.2	29.5	46.0
4.008000	16.6	9.000	N	10.2	29.4	46.0
23.132000	14.6	9.000	N	11.0	35.4	50.0
23.226000	16.2	9.000	N	11.0	33.8	50.0
23.244000	16.4	9.000	N	11.0	33.6	50.0
23.338000	15.0	9.000	N	11.0	35.0	50.0
24.850000	15.2	9.000	N	11.0	34.8	50.0
25.560000	16.5	9.000	N	11.0	33.5	50.0



5.2 Radiated Emission

The test results of radiated emission provide the following information:

-For Measurement Below 1 GHz

Applicable Standards	FCC PART 15 Subpart B Class B ANSI C63.4-2014
Detector	Quasi-Peak
Bandwidth	120 kHz (6 dB)
Worst Case of Operating Mode	Data Communication FM Radio (High CH) Receiver mode (LTE B5 Middle CH Idle) + Camera Recording (Front) Receiver mode (LTE B12, B13, B17 Low CH Idle)
Kind of Test Site	3 m semi anechoic chamber
Temperature	22.5 / 23.1 °C
Relative Humidity	43.4 / 44.2 %
Test Date	January 22 / January 23, 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



Data Communication

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)
30.022733	22.4	100.0	V	325.0	18.3	17.6	40.0
77.319200	24.2	174.9	H	100.0	16.5	15.8	40.0
265.595200	33.2	100.0	H	143.0	19.4	12.8	46.0
277.004800	32.7	100.0	H	318.0	19.8	13.3	46.0
600.009600	34.9	100.0	V	0.0	27.4	11.1	46.0
800.037600	37.9	100.0	H	51.0	30.1	8.1	46.0

FM Radio (High CH)

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)
35.003200	30.4	100.0	V	83.0	18.8	9.6	40.0
43.220800	20.8	100.0	V	300.0	20.1	19.2	40.0
87.436800	18.7	199.7	H	0.0	14.7	21.3	40.0
140.528800	33.2	225.1	H	192.0	19.8	10.3	43.5
241.431200	23.8	100.0	V	66.0	18.5	22.2	46.0
696.634400	28.6	325.2	V	19.0	28.7	17.4	46.0

Receiver mode (LTE B5 Middle CH Idle) + Camera Recording (Front)

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)
30.609523	25.3	100.0	V	102.0	18.3	14.7	40.0
56.364000	19.5	100.0	V	1.0	19.9	20.5	40.0
110.212800	22.4	100.0	V	16.0	16.6	21.1	43.5
144.131200	27.7	225.0	H	182.0	19.8	15.8	43.5
173.691200	22.7	100.0	V	106.0	19.2	20.8	43.5
794.512800	30.3	274.9	H	115.0	30.1	15.7	46.0


Receiver mode (LTE B12, B13, B17 Low CH Idle)

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)
30.594064	25.6	100.0	V	346.0	18.3	14.4	40.0
110.118400	22.3	100.0	V	328.0	16.6	21.2	43.5
144.550400	26.5	118.8	H	19.0	19.8	17.0	43.5
181.555200	23.3	100.0	V	100.0	18.6	20.2	43.5
227.438400	22.7	100.0	V	80.0	17.9	23.3	46.0
643.050400	27.9	100.0	H	255.0	27.9	18.1	46.0



-For Measurement Above 1 GHz

Applicable Standards	FCC PART 15 Subpart B 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 of Operating Mode	Data Communication FM Radio (High CH) Receiver mode (LTE B5 Middle CH Idle) + Camera Recording (Front) Receiver mode (LTE B12, B13, B17 Low CH Idle)
Kind of Test Site	3 m semi anechoic chamber
Temperature	23.1 / 21.7 °C
Relative Humidity	44.2 / 43.5 %
Test Date	January 23 / January 25, 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



Data Communication

Frequency (MHz)	Peak (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1400.035000	47.2	204.6	H	180.0	-28.2	26.8	74.0
2077.690000	48.5	100.0	V	54.0	-26.4	25.5	74.0
2666.175000	49.0	124.6	V	4.0	-24.2	25.0	74.0
4481.645000	43.7	199.6	V	11.0	-19.6	30.3	74.0
5994.405000	43.7	335.6	V	105.0	-17.1	30.3	74.0
10962.490000	45.7	319.6	V	77.0	-5.7	28.3	74.0

Frequency (MHz)	CAverage (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1400.035000	45.7	204.6	H	180.0	-28.2	8.3	54.0
2077.690000	24.0	100.0	V	54.0	-26.4	30.0	54.0
2666.175000	21.9	124.6	V	4.0	-24.2	32.1	54.0
4481.645000	26.9	199.6	V	11.0	-19.6	27.1	54.0
5994.405000	27.4	335.6	V	105.0	-17.1	26.6	54.0
10962.490000	32.9	319.6	V	77.0	-5.7	21.1	54.0

FM Radio (High CH)

Frequency (MHz)	Peak (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
3149.625000	34.1	150.0	H	0.0	-22.6	39.9	74.0
5387.820000	36.3	125.6	V	0.0	-18.0	37.7	74.0
7452.480000	41.1	350.0	H	289.0	-12.8	32.9	74.0
9886.250000	43.6	100.0	H	72.0	-9.5	30.4	74.0
11231.810000	45.4	261.4	H	213.0	-5.2	28.6	74.0
14381.115000	46.7	350.0	V	29.0	-1.9	27.3	74.0

Frequency (MHz)	CAverage (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
3149.625000	21.0	150.0	H	0.0	-22.6	33.0	54.0
5387.820000	23.7	125.6	V	0.0	-18.0	30.3	54.0
7452.480000	28.3	350.0	H	289.0	-12.8	25.7	54.0
9886.250000	30.9	100.0	H	72.0	-9.5	23.1	54.0
11231.810000	32.8	261.4	H	213.0	-5.2	21.2	54.0
14381.115000	33.8	350.0	V	29.0	-1.9	20.2	54.0



Receiver mode (LTE B5 Middle CH Idle) + Camera Recording (Front)

Frequency (MHz)	Peak (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
3102.920000	33.5	177.7	V	304.0	-22.7	40.5	74.0
5238.055000	37.6	149.9	H	317.0	-18.2	36.4	74.0
7547.460000	41.4	100.0	H	133.0	-12.6	32.6	74.0
9331.620000	43.3	149.7	H	83.0	-10.5	30.7	74.0
11009.885000	45.8	125.8	V	249.0	-5.6	28.2	74.0
14718.345000	46.8	249.6	V	267.0	-1.4	27.2	74.0

Frequency (MHz)	CAverage (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
3102.920000	21.2	177.7	V	304.0	-22.7	32.8	54.0
5238.055000	24.2	149.9	H	317.0	-18.2	29.8	54.0
7547.460000	28.5	100.0	H	133.0	-12.6	25.5	54.0
9331.620000	30.2	149.7	H	83.0	-10.5	23.8	54.0
11009.885000	32.9	125.8	V	249.0	-5.6	21.1	54.0
14718.345000	34.1	249.6	V	267.0	-1.4	19.9	54.0

Receiver mode (LTE B12, B13, B17 Low CH Idle)

Frequency (MHz)	Peak (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
2218.540000	31.1	190.4	H	135.0	-25.9	42.9	74.0
4858.610000	35.8	249.9	V	322.0	-18.8	38.2	74.0
7537.875000	41.5	176.5	H	20.0	-12.6	32.5	74.0
9390.905000	42.9	277.4	H	50.0	-10.3	31.1	74.0
11053.900000	45.2	229.6	V	233.0	-5.5	28.8	74.0
14626.825000	48.2	160.7	V	57.0	-1.5	25.8	74.0

Frequency (MHz)	CAverage (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
2218.540000	18.8	190.4	H	135.0	-25.9	35.2	54.0
4858.610000	23.0	249.9	V	322.0	-18.8	31.0	54.0
7537.875000	28.5	176.5	H	20.0	-12.6	25.5	54.0
9390.905000	30.5	277.4	H	50.0	-10.3	23.5	54.0
11053.900000	32.4	229.6	V	233.0	-5.5	21.6	54.0
14626.825000	34.0	160.7	V	57.0	-1.5	20.0	54.0



6. CONCLUSION

The data collected shows that the **EUT Type: Mobile Phone, FCC ID: A3LSMM305F, Model: SM-M305M/DS** complies with §15.107 and §15.109 of the FCC rules.



7. APPENDIX A. TEST SETUP PHOTOGRAPHS

Please refer to Appendix A