On your side

TEST REPORT

EMI Test for FCC Certification of LM-Q720AM Model

APPLICANT
LG Electronics USA, Inc.

REPORT NO.
HCT-EM-1908-FC005-R1

DATE OF ISSUE
August 07, 2019

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TEST REPORT

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FCC ID.
ZNFQ720AM

Applicant	**LG Electronics USA, Inc.** 1000 Sylvan Avenue, Englewood Cliffs NJ 07632 United States
Product Name	Multi-band GSM/WCDMA/LTE Phone with WLAN, Bluetooth, NFC
Model Name	LM-Q720AM
Series Model Name	LMQ720AM, Q720AM
Date of Test	July 31, 2019 to August 01, 2019
Test Standard Used	FCC CFR 47 PART 15 Subpart B Class B ANSI C63.4-2014
Test Results	Refer to the present document
Manufacturer	LG Electronics Inc.

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	August 02, 2019	Initial Release
1	August 07, 2019	Revised the Product Name

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

CONTENTS

1. GENERAL INFORMATION

1.1 Description of EUT

FCC ID	ZNFQ720AM
Model	LM-Q720AM
Series Model Name	LMQ720AM, Q720AM
EUT Type	Multi-band GSM/WCDMA/LTE Phone with WLAN, Bluetooth, NFC
TX Frequency	824.2 MHz to 848.8 MHz (GSM 850) 1 850.2 MHz to 1 909.8 MHz (GSM 1 900) 1 852.4 MHz to 1 907.6 MHz (WCDMA B2) 1712.4 MHz to 1752.6 MHz (WCDMA B4) 826.40 MHz to 846.60 MHz (WCDMA B5) 1 850 MHz to 1 910 MHz (LTE B2) 1 710 MHz to 1 755 MHz (LTE B4) 824 MHz to 849 MHz (LTE B5) 699 MHz to 716 MHz (LTE B12) 788 MHz to 798 MHz (LTE B14) 2 305 MHz to 2 315 MHz (LTE B30) 1 710 MHz to 1 780 MHz (LTE B66) 2 402 MHz to 2 480 MHz (Bluetooth) 2 412 MHz to 2 462 MHz (WiFi 2.4 GHz) 5 180 MHz to 5 240 MHz (WiFi 5 GHz_UNII 1) 5 260 MHz to 5 320 MHz (WiFi 5 GHz_UNII 2A) 5 500 MHz to 5 720 MHz (WiFi 5 GHz_UNII 2C) 5 745 MHz to 5 825 MHz (WiFi 5 GHz_UNII 3) 13.56 MHz (NFC)
RX Frequency	869.2 MHz to 893.8 MHz (GSM 850) 1 930.2 MHz to 1 989.8 MHz (GSM 1 900) 1 932.4 MHz to 1 987.6 MHz (WCDMA B2) 2 112.4 MHz to 2 152.6 MHz (WCDMA B4) 871.40 MHz to 891.60 MHz (WCDMA B5) 1 930 MHz to 1 990 MHz (LTE B2) 2 110 MHz to 2 155 MHz (LTE B4) 869 MHz to 894 MHz (LTE B5) 729 MHz to 746 MHz (LTE B12) 758 MHz to 768 MHz (LTE B14)

RX Frequency	717 MHz to 728 MHz (LTE B29) 2 350 MHz to 2 360 MHz (LTE B30) 2 110 MHz to 2 200 MHz (LTE B66) 2 402 MHz to 2 480 MHz (Bluetooth) 2 412 MHz to 2 462 MHz (WiFi 2.4 GHz) 5 180 MHz to 5 240 MHz (WiFi 5 GHz_UNII 1) 5 260 MHz to 5 320 MHz (WiFi 5 GHz_UNII 2A) 5 500 MHz to 5 720 MHz (WiFi 5 GHz_UNII 2C) 5 745 MHz to 5 825 MHz (WiFi 5 GHz_UNII 3) 13.56 MHz (NFC)

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	LM-Q720AM	-	LG
Data Cable	EAD64746102	-	LUXSHARE
Data Cable	EAD64746105	-	KSD
Data Cable	EAD64746101	-	Ningbo broad
Earphone	EAB64468445	-	BUJEON
Notebook PC	ProBook6560b	5CB2053MXF	HP
Notebook PC Adaptor	Series PPP009L-E	-	LITE-ON TECHNOLOGY (CHANGZHOU)
Gateway	DIR-806M	-	D-Link
Gateway Adaptor	AMS1-0501200FK	-	D-Link
Serial Mouse	Serial 2 Button mouse	02031069	Radio Shack
RJ45 cable	-	-	-
Micro SD Card	SAMSUNG EVO+ microSDXC CLASS10 UHS- I (256 GB)	-	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
	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
	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	

1.6 Calibration of Measuring Instrument

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in ac cordance with the manufacturers recommendations for utilizing calibration equipment, which is traceable to recognized national standards.Espectially, all antenna for measurement is calibrated in accordance with the requirements ofC63.5:2017

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)	1.8 dB
Radiated Emissions (30 MHz to 1 GHz)	4.8 dB
Radiated Emissions (1 GHz to 18 GHz)	5.4 dB
Radiated Emissions (18 GHz to 40 GHz)	5.7 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

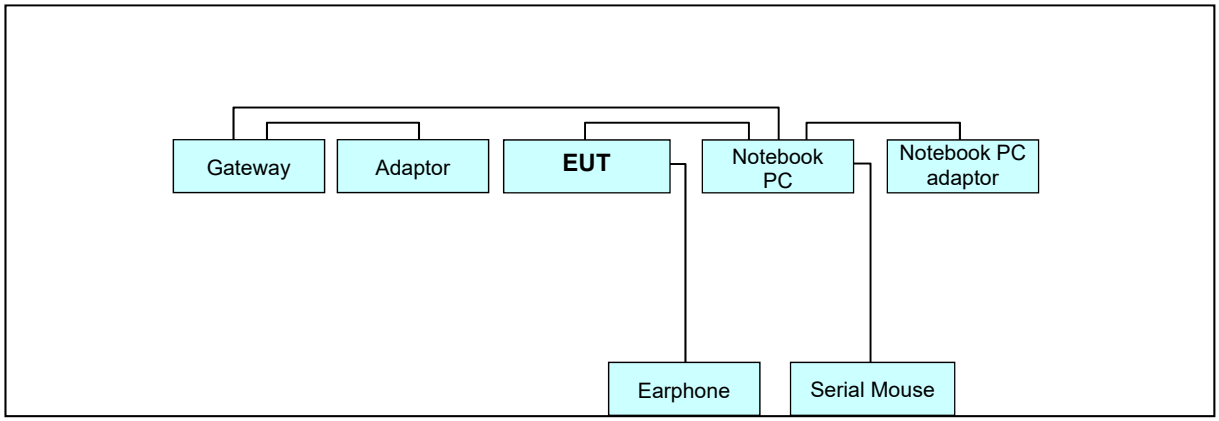
Frequency (MHz)	Antenna Distance (m)	Class A		Class B	
		Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
Above 1 000	3	80	60	74	54

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

3.1 Conducted Emission

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

Operating Modes: Data Communication mode

3.2 Radiated Emission

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

Operating Modes: Data Communication mode

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
☒	EMI Test Receiver	Rohde & Schwarz	ESCI	100584	1 year	06.18.2019
☒	LISN	Rohde & Schwarz	ENV216	102245	1 year	12.12.2018
☒	LISN	Rohde & Schwarz	ENV216	100073	1 year	04.30.2019
☒	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:

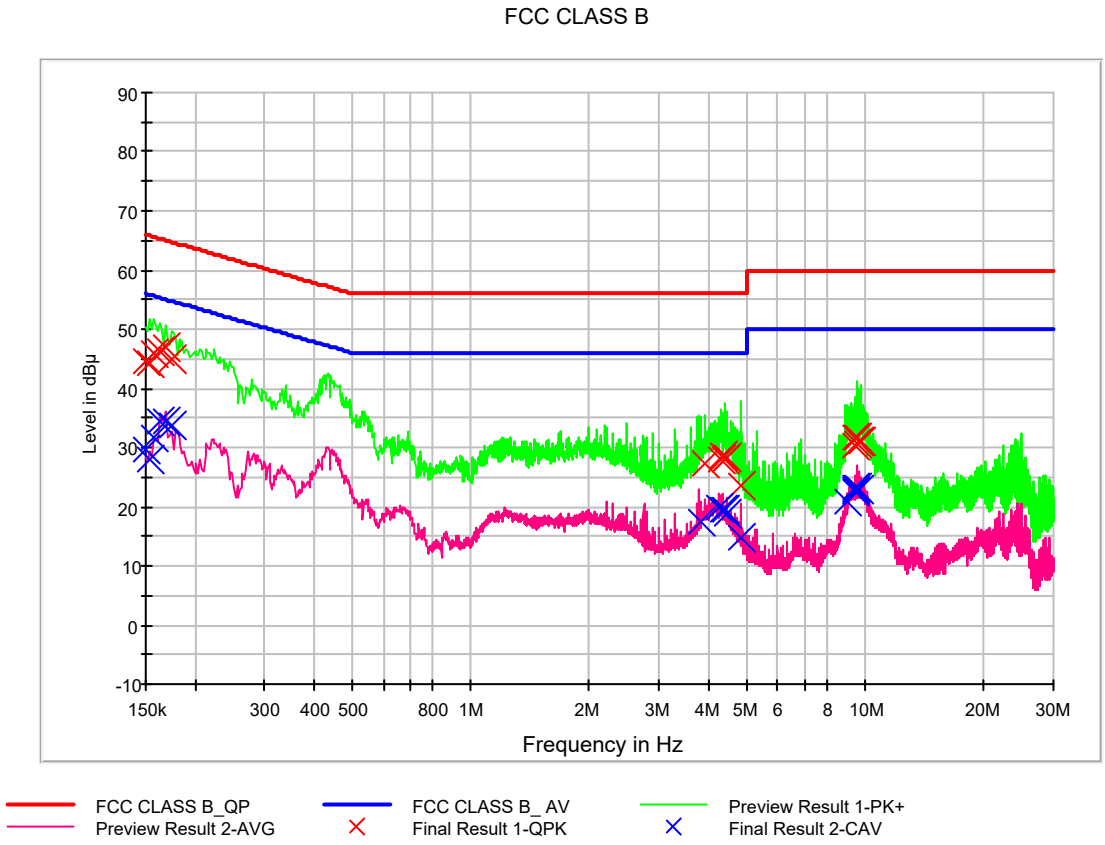
Test Standard Used	FCC CFR 47 PART 15 Subpart B Class B ANSI C63.4-2014
Detector	Quasi-Peak, CISPR-Average
Bandwidth	9 kHz (6 dB)
Operating Mode	Data Communication mode
Worst Case of Data Cable	KSD
Kind of Test Site	EMI Shielded Room
Temperature	21.6 °C
Relative Humidity	43.3 %
Test Date	August 01, 2019

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

4.1.3 Measuring Data

Figure 1: Conducted Emission, AC Main Port, Line (L1)



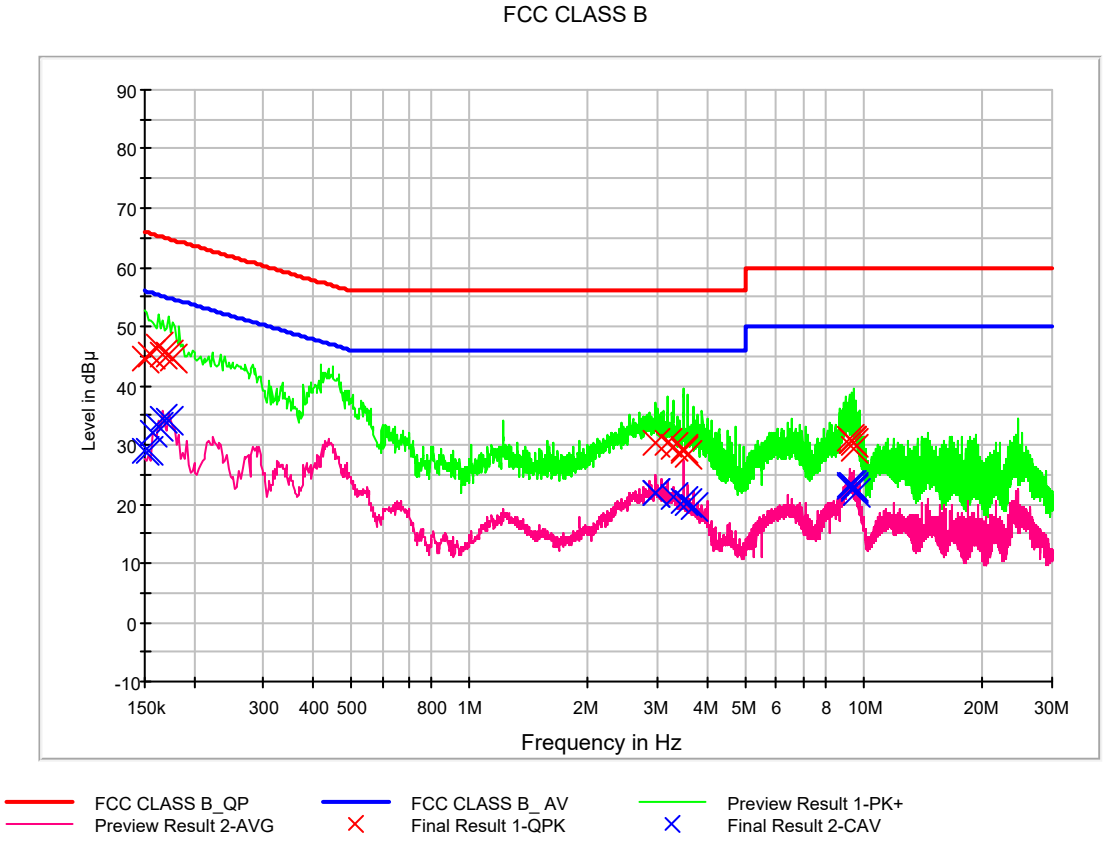
QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	44.5	9.000	L1	9.7	21.5	66.0
0.154000	44.3	9.000	L1	9.7	21.5	65.8
0.158000	45.9	9.000	L1	9.7	19.7	65.6
0.162000	46.3	9.000	L1	9.7	19.1	65.4
0.168000	46.8	9.000	L1	9.7	18.2	65.1
0.174000	45.1	9.000	L1	9.7	19.7	64.8
3.934000	27.2	9.000	L1	9.8	28.8	56.0
4.328000	28.0	9.000	L1	9.8	28.0	56.0
4.344000	28.5	9.000	L1	9.8	27.5	56.0
4.428000	28.0	9.000	L1	9.8	28.0	56.0
4.446000	28.1	9.000	L1	9.8	27.9	56.0
4.862000	23.4	9.000	L1	9.9	32.6	56.0
9.418000	31.7	9.000	L1	10.0	28.3	60.0
9.460000	30.3	9.000	L1	10.0	29.7	60.0
9.516000	31.7	9.000	L1	10.0	28.3	60.0
9.556000	30.8	9.000	L1	10.0	29.2	60.0
9.620000	30.9	9.000	L1	10.0	29.1	60.0
9.722000	31.2	9.000	L1	10.0	28.8	60.0

CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	29.6	9.000	L1	9.7	26.4	56.0
0.154000	28.1	9.000	L1	9.7	27.7	55.8
0.158000	31.7	9.000	L1	9.7	23.9	55.6
0.162000	34.5	9.000	L1	9.7	20.9	55.4
0.168000	34.4	9.000	L1	9.7	20.6	55.1
0.174000	33.9	9.000	L1	9.7	20.9	54.8
3.832000	17.5	9.000	L1	9.8	28.5	46.0
4.242000	19.9	9.000	L1	9.8	26.1	46.0
4.344000	19.6	9.000	L1	9.8	26.4	46.0
4.428000	19.4	9.000	L1	9.8	26.6	46.0
4.446000	18.9	9.000	L1	9.8	27.2	46.0
4.862000	14.7	9.000	L1	9.9	31.3	46.0
8.984000	20.9	9.000	L1	10.0	29.1	50.0
9.410000	22.7	9.000	L1	10.0	27.3	50.0
9.418000	23.2	9.000	L1	10.0	26.8	50.0
9.458000	22.8	9.000	L1	10.0	27.2	50.0
9.556000	23.1	9.000	L1	10.0	26.9	50.0
9.618000	23.0	9.000	L1	10.0	27.0	50.0

Figure 2: Conducted Emission, AC Main Port, Line (N)



QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	44.7	9.000	N	9.7	21.3	66.0
0.156000	45.1	9.000	N	9.7	20.5	65.7
0.162000	46.5	9.000	N	9.7	18.9	65.4
0.166000	45.3	9.000	N	9.7	19.9	65.2
0.172000	45.4	9.000	N	9.7	19.5	64.9
0.176000	44.5	9.000	N	9.7	20.2	64.7
2.954000	30.5	9.000	N	9.8	25.5	56.0
3.172000	30.4	9.000	N	9.8	25.6	56.0
3.274000	29.7	9.000	N	9.8	26.3	56.0
3.482000	29.1	9.000	N	9.8	26.9	56.0
3.486000	29.2	9.000	N	9.8	26.8	56.0
3.586000	28.2	9.000	N	9.8	27.8	56.0
9.168000	31.1	9.000	N	10.0	28.9	60.0
9.266000	30.8	9.000	N	10.0	29.2	60.0
9.270000	30.5	9.000	N	10.0	29.5	60.0
9.274000	30.7	9.000	N	10.0	29.3	60.0
9.372000	30.5	9.000	N	10.0	29.5	60.0
9.476000	29.5	9.000	N	10.0	30.5	60.0

CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	29.1	9.000	N	9.7	26.9	56.0
0.154000	29.1	9.000	N	9.7	26.7	55.8
0.158000	31.9	9.000	N	9.7	23.6	55.6
0.162000	33.2	9.000	N	9.7	22.2	55.4
0.166000	34.5	9.000	N	9.7	20.6	55.2
0.172000	34.0	9.000	N	9.7	20.8	54.9
2.954000	22.0	9.000	N	9.8	24.0	46.0
2.964000	22.0	9.000	N	9.8	24.0	46.0
3.274000	21.3	9.000	N	9.8	24.7	46.0
3.482000	20.5	9.000	N	9.8	25.5	46.0
3.586000	20.0	9.000	N	9.8	26.0	46.0
3.688000	19.4	9.000	N	9.8	26.6	46.0
9.168000	23.2	9.000	N	10.0	26.8	50.0
9.228000	23.0	9.000	N	10.0	27.0	50.0
9.268000	23.3	9.000	N	10.0	26.7	50.0
9.372000	22.9	9.000	N	10.0	27.1	50.0
9.476000	22.5	9.000	N	10.0	27.5	50.0
9.580000	21.8	9.000	N	10.0	28.2	50.0

4.2 Radiated Emission Below 1 GHz

4.2.1 Measuring instruments

Type		Manufacturer	Model Name	Serial Number	Calibration Cycle	Calibration Date
☒	EMI test receiver	Rohde & Schwarz	ESU40	100524	1 year	05.17.2019
☒	Trilog antenna	Schwarzbeck	VULB 9168	255	2 year	03.26.2019
☒	Antenna master	INNCO Systems	MA4640-XP-ET	-	N/A	-
☒	Antenna master controller	INNCO Systems	CO3000	CO3000/870/ 35990515/L	N/A	-
☒	Turn Table	INNCO Systems	1060	-	N/A	-
☒	Turn table controller	INNCO Systems	CO2000	CO2000/095/ 7590304/L	N/A	-
☒	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 ANSI C63.4-2014
Detector	Quasi-Peak
Bandwidth	120 kHz (6 dB)
Operating Mode	Data Communication mode
Worst Case of Data Cable	KSD
Kind of Test Site	3 m semi anechoic chamber
Temperature	21.9 °C
Relative Humidity	41.4 %
Test Date	July 31, 2019

4.2.3 Measuring Data

Frequency (MHz)	Quasi Peak (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
66.535200	24.4	100.0	V	318.0	18.5	15.6	40.0
86.995200	26.2	274.9	H	264.0	14.7	13.8	40.0
179.908800	26.2	174.9	H	0.0	18.3	17.3	43.5
265.594400	34.9	125.2	H	132.0	19.3	11.1	46.0
799.830400	40.1	100.0	H	86.0	30.4	5.9	46.0
999.816800	47.7	100.0	H	42.0	32.3	6.3	54.0

- 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

4.3 Radiated Emission Above 1 GHz

4.3.1 Measuring instruments

	Type	Manufacturer	Model Name	Serial Number	Calibration Cycle	Calibration Date
☒	EMI test receiver	Rohde & Schwarz	ESU40	100524	1 year	05.17.2019
☒	Antenna master	INNCO Systems	MA4640-XP-ET	-	N/A	-
☒	Antenna master controller	INNCO Systems	CO3000	CO3000/870/ 35990515/L	N/A	-
☒	Turn table	INNCO Systems	1060	-	N/A	-
☒	Turn table controller	INNCO Systems	CO2000	CO2000/095/ 7590304/L	N/A	-
☒	Horn antenna	Schwarzbeck	BBHA 9120D	01836	1 year	07.19.2019
☒	Low Noise amplifier	TESTEK	TK-PA18H	170034-L	1 year	03.04.2019
☒	Power Amplifier	TK-PA1840H	TESTEK	170030-L	1 year	12.17.2018
☒	Horn Antenna	BBHA 9170	Schwarzbeck	BBHA 9170 #786	2 year	12.05.2017
☒	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 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
Operation Mode	Data Communication mode
Worst Case of Data Cable	KSD
Kind of Test Site	3 m semi anechoic chamber
Temperature	21.9 °C
Relative Humidity	41.4 %
Test Date	July 31, 2019

4.3.3 Measuring Data

Frequency (MHz)	Peak (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1332.63000	46.1	311.7	V	82.0	-26.3	27.9	74.0
1994.97000	50.3	111.5	V	52.0	-25.2	23.7	74.0
2655.42000	51.3	150.0	V	4.0	-22.7	22.7	74.0
5986.27500	43.6	100.0	V	118.0	-14.7	30.4	74.0
9820.05500	47.0	304.6	H	51.0	-5.1	27.0	74.0
14759.87500	48.4	189.6	H	251.0	1.1	25.6	74.0

Frequency (MHz)	CAverage (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1332.63000	21.0	311.7	V	82.0	-26.3	33.0	54.0
1994.97000	25.0	111.5	V	52.0	-25.2	29.0	54.0
2655.42000	21.9	150.0	V	4.0	-22.7	32.1	54.0
5986.27500	28.0	100.0	V	118.0	-14.7	26.0	54.0
9820.05500	34.4	304.6	H	51.0	-5.1	19.6	54.0
14759.87500	36.0	189.6	H	251.0	1.1	18.0	54.0

- 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

5. CONCLUSION

The data collected shows that the **EUT Type: Multi-band GSM/WCDMA/LTE Phone with WLAN, Bluetooth, NFC, Model: LM-Q720AM** complies with §15.107 and §15.109 of the FCC 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-1908-FC005-P	August 02, 2019	Initial Release

End of report