

EMI CERTIFICATION REPORT

Applicant:

LG Electronics MobileComm U.S.A., Inc.
1000 Sylvan Avenue, Englewood Cliffs NJ 07632

Date of Receipt: March 10, 2016**Date of Issue: April 18, 2016****Test Report No. HCT-E-1604-F016****HCT FRN: 0005866421****FCC ID :****ZNFDM02H**

Rule Part(s) / Standard(s): FCC CFR 47 PART 15 Subpart B Class B

FCC Classification: JBP (Part 15 B – Class B Computing Device Peripheral)

EUT Type: Cellular/PCS GSM/WCDMA Phone with WLAN, Bluetooth and NFC

Model Name: DM-02H

Additional Model Name(s): DS1604

Test Port: Micro USB / Earphone Port

Date of Test: March 21, 2016 - March 22, 2016

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 C63.4-2003. (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

Tested By

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Test Engineer
EMC Team
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Reviewed By

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DOCUMENT HISTORY

The revision history for this document is shown in table.

Version	Date	Description
HCT-E-1604-F016	April 18, 2016	Initial Release



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ATTACHMENT: TEST SETUP PHOTOGRAPHS



1. GENERAL INFORMATION

1.1 Description of EUT

Equipment Under Test is manufactured by **LG Electronics MobileComm U.S.A., Inc.**
Its basic purpose is used for communications.

Model	DM-02H
Additional Model Name(s)	DS1604
FCC ID	ZNFDM02H
EUT Type	Cellular/PCS GSM/WCDMA Phone with WLAN, Bluetooth and NFC
TX Frequency	824.20 MHz to 848.80 MHz (GSM 850) 1 850.20 MHz to 1 909.80 MHz (GSM 1 900) 826.40 MHz to 846.60 MHz (WCDMA B5)
RX Frequency	869.20 MHz to 893.80 MHz (GSM 850) 1 930.20 MHz to 1 989.80 MHz (GSM 1 900) 871.40 MHz to 891.60 MHz (WCDMA B5)



1.2 Related Submittal(s) / Grant(s)

Original submittal only.

1.3 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 C63.4-2003.

Measurement Facilities	Reg. No.
HCT FRN: 0005866421 Radiated Field strength measurement facility (3 m)	90661 (February 28, 2014)
HCT FRN: 0005866421 Radiated Field strength measurement facility (10 m)	90661 (February 28, 2014)



1.4 Tested System Details

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

Device Type	Model Name	Manufacturer	FCC ID / DoC	Connected To
EUT	DM-02H	LG	ZNFDM02H	Notebook PC, Earphone
USB cable	EAD63769703	CRESYN	-	EUT, Notebook PC
Earphone	EAB62950101	I-Sound	-	EUT
Quick cover	ACQ88739701	Young-Kwang		EUT
Standard cover	-	-	-	EUT
Notebook PC	ProBook6560b	HP	DoC	EUT, Notebook PC adaptor, RJ45 cable, Serial mouse
Notebook PC adaptor	PPP009D	DELTA Electronics (Jiangsu) LTD	-	Notebook PC
Gateway	TL-WR747N	TP-LINK	-	RJ45 cable, Gateway adaptor
Gateway adaptor	T120150-2H1	TP-LINK	-	Gateway
Serial mouse	Serial 2 button mouse	Radio shack	FSUGMZE3	Notebook PC
RJ45 cable	-	-	-	Notebook PC, Gateway
Micro SD card	16 GB	Samsung	-	EUT



1.5 Cable Description

Product Name	Port	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (m)
EUT	Micro USB	Y	Y	(P,D)1.2
	Earphone	N/A	Y	(D)1.2
Notebook PC	RJ 45	N/A	N	(D)2.5
	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.

1.6 Noise Suppression Parts on Cable. (I/O Cable)

Product Name	Port	Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
EUT	Micro USB	N	N/A	Y	Both End
	Earphone	N	N/A	Y	Both End
Notebook PC	RJ 45	N	N/A	N	N/A
	Serial (Mouse)	N	N/A	Y	Notebook PC End



2. DESCRIPTION OF TEST

2.1 Measurement of Conducted Emission

The test procedure was in accordance with ANSI C63.4-2003

- 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.*



2.2 Measurement of Radiated Emission

The test procedure was in accordance with ANSI C63.4-2003, Clause 8

- 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.
- The EUT was set 3 m away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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.
- 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.
- 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.
- The antenna height scans apply for both horizontal and vertical polarizations, except that for vertical polarization, the minimum height of the center of the antenna shall be increased so that the lowest point of the bottom of the lowest antenna element clears the site reference ground plane by at least 25 cm. (below 1 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



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

2.3 Configuration of Tested System



Power Line: 120 VAC, 60 Hz



3. PRELIMINARY TEST

3.1 Conducted Emission Test

It was tested Data Communication mode, after connecting all peripheral devices.

Operation Mode: ☒ Data Communication mode

3. 2 Radiated Emission Test

It was tested Data Communication mode, after connecting all peripheral devices.

Operation Mode: ☒ Data Communication mode



4. CONDUCTED AND RADIATED EMISSION TEST SUMMARY

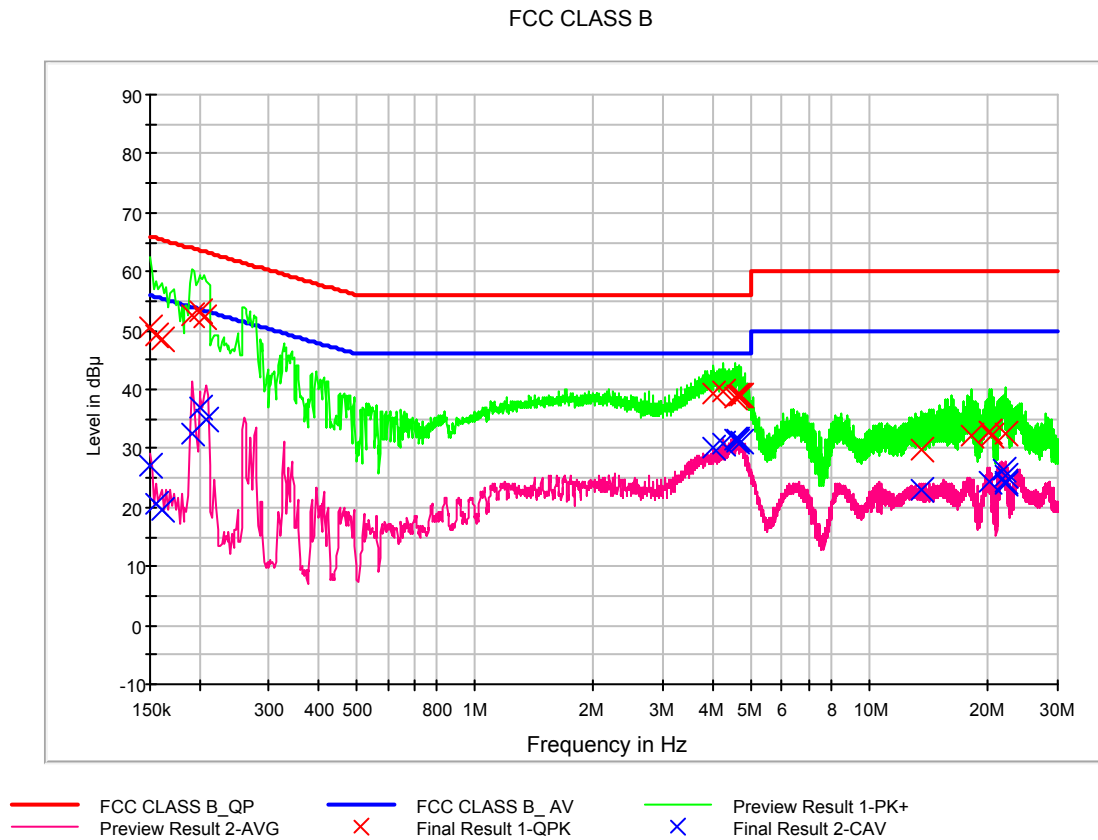
4.1 Conducted Emission Test

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

Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Quasi-Peak, CISPR-Average
Bandwidth	9 kHz (6 dB)
Operation Mode	Data Communication mode
Kind of Test Site	Shielded Room
Temperature	20.4 °C
Relative Humidity	28.6 %
Test Date	March 21, 2016

- 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, Standard Cover, Line (L1)**



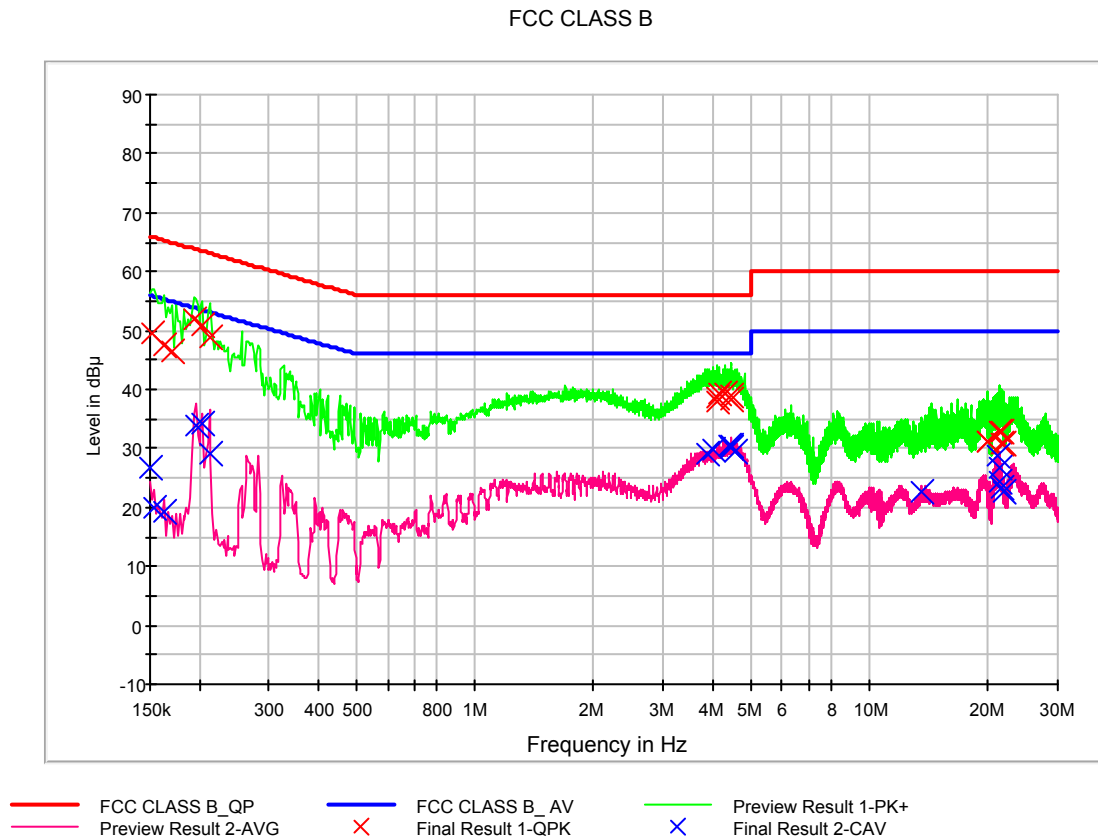
QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	50.7	9.000	L1	9.7	15.3	66.0
0.156000	49.3	9.000	L1	9.6	16.4	65.7
0.160000	48.5	9.000	L1	9.6	17.0	65.5
0.192000	52.6	9.000	L1	9.6	11.3	63.9
0.200000	53.2	9.000	L1	9.6	10.4	63.6
0.206000	52.4	9.000	L1	9.6	11.0	63.4
4.036000	39.4	9.000	L1	9.8	16.6	56.0
4.248000	39.6	9.000	L1	9.8	16.4	56.0
4.566000	38.5	9.000	L1	9.9	17.5	56.0
4.604000	39.0	9.000	L1	9.9	17.0	56.0
4.674000	38.9	9.000	L1	9.9	17.1	56.0
4.742000	39.1	9.000	L1	9.9	16.9	56.0
13.552000	29.8	9.000	L1	10.1	30.2	60.0
18.050000	32.1	9.000	L1	10.2	27.9	60.0
20.242000	32.9	9.000	L1	10.3	27.1	60.0
20.246000	33.0	9.000	L1	10.3	27.0	60.0
20.462000	32.1	9.000	L1	10.3	27.9	60.0
22.156000	32.4	9.000	L1	10.3	27.6	60.0



CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	27.1	9.000	L1	9.7	28.9	56.0
0.156000	20.7	9.000	L1	9.6	35.0	55.7
0.160000	19.7	9.000	L1	9.6	35.7	55.5
0.192000	32.4	9.000	L1	9.6	21.5	53.9
0.200000	36.8	9.000	L1	9.6	16.8	53.6
0.208000	34.9	9.000	L1	9.6	18.4	53.3
4.036000	30.0	9.000	L1	9.8	16.0	46.0
4.250000	30.8	9.000	L1	9.8	15.2	46.0
4.566000	31.4	9.000	L1	9.9	14.6	46.0
4.604000	31.5	9.000	L1	9.9	14.5	46.0
4.622000	31.1	9.000	L1	9.9	14.9	46.0
4.742000	31.1	9.000	L1	9.9	14.9	46.0
13.552000	22.9	9.000	L1	10.1	27.1	50.0
20.242000	24.4	9.000	L1	10.3	25.6	50.0
21.784000	26.4	9.000	L1	10.3	23.6	50.0
22.074000	25.4	9.000	L1	10.3	24.6	50.0
22.086000	24.4	9.000	L1	10.3	25.6	50.0
22.222000	23.9	9.000	L1	10.3	26.1	50.0

**Figure 2: Conducted Emission, Standard Cover, Line (N)**



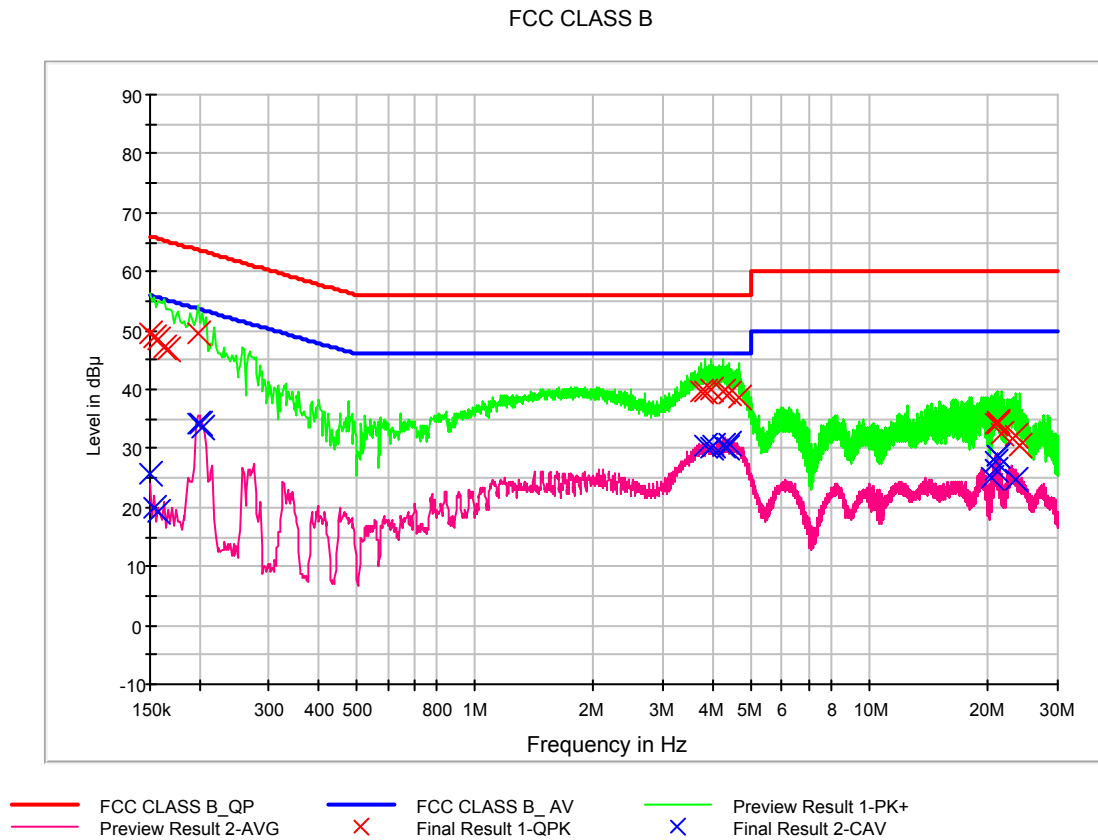
QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	49.4	9.000	N	9.6	16.5	65.9
0.162000	47.6	9.000	N	9.6	17.8	65.4
0.170000	46.6	9.000	N	9.6	18.4	65.0
0.194000	51.9	9.000	N	9.6	12.0	63.9
0.204000	50.9	9.000	N	9.6	12.6	63.4
0.212000	48.9	9.000	N	9.6	14.2	63.1
4.096000	38.5	9.000	N	9.8	17.5	56.0
4.112000	38.1	9.000	N	9.8	17.9	56.0
4.172000	39.5	9.000	N	9.8	16.5	56.0
4.314000	39.2	9.000	N	9.8	16.8	56.0
4.456000	38.9	9.000	N	9.8	17.1	56.0
4.460000	38.3	9.000	N	9.8	17.7	56.0
19.880000	31.3	9.000	N	10.3	28.7	60.0
19.952000	31.1	9.000	N	10.3	28.9	60.0
21.438000	32.9	9.000	N	10.3	27.1	60.0
21.706000	32.8	9.000	N	10.3	27.2	60.0
21.720000	31.0	9.000	N	10.3	29.0	60.0
21.796000	30.9	9.000	N	10.3	29.1	60.0



CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	26.8	9.000	N	9.6	29.2	56.0
0.154000	20.0	9.000	N	9.6	35.8	55.8
0.162000	19.1	9.000	N	9.6	36.3	55.4
0.196000	34.0	9.000	N	9.6	19.7	53.8
0.204000	34.1	9.000	N	9.6	19.4	53.4
0.212000	29.2	9.000	N	9.6	24.0	53.1
3.852000	29.3	9.000	N	9.8	16.7	46.0
4.032000	29.8	9.000	N	9.8	16.2	46.0
4.386000	30.5	9.000	N	9.8	15.5	46.0
4.456000	30.6	9.000	N	9.8	15.4	46.0
4.480000	30.1	9.000	N	9.8	15.9	46.0
4.538000	29.5	9.000	N	9.8	16.5	46.0
13.562000	22.5	9.000	N	10.1	27.5	50.0
21.220000	28.6	9.000	N	10.3	21.4	50.0
21.360000	26.8	9.000	N	10.3	23.2	50.0
21.438000	24.5	9.000	N	10.3	25.5	50.0
21.706000	23.5	9.000	N	10.3	26.5	50.0
21.784000	22.6	9.000	N	10.3	27.4	50.0

**Figure 3: Conducted Emission, Quick Cover, Line (L1)**



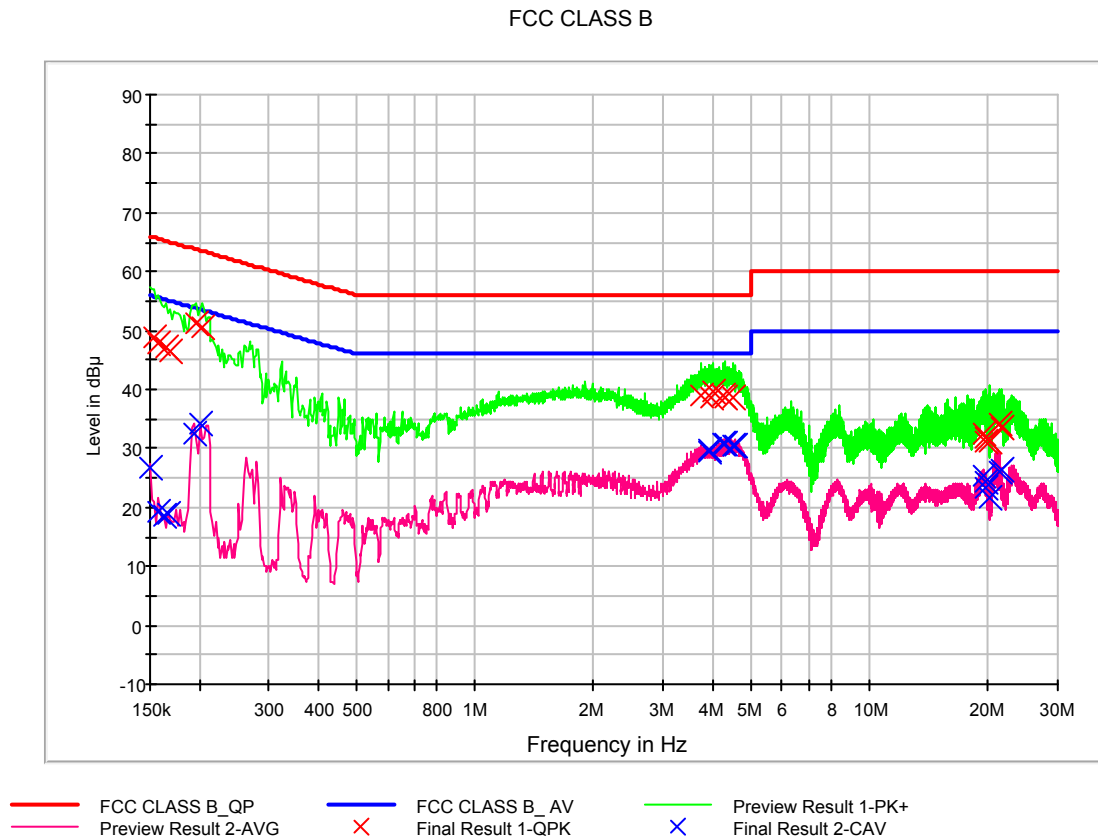
QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	49.7	9.000	L1	9.7	16.3	66.0
0.154000	48.8	9.000	L1	9.6	17.0	65.8
0.158000	48.3	9.000	L1	9.6	17.2	65.6
0.162000	47.1	9.000	L1	9.6	18.2	65.4
0.166000	46.7	9.000	L1	9.6	18.4	65.2
0.198000	49.7	9.000	L1	9.6	14.0	63.7
3.744000	39.7	9.000	L1	9.8	16.3	56.0
3.818000	39.7	9.000	L1	9.8	16.3	56.0
3.958000	40.0	9.000	L1	9.8	16.0	56.0
4.242000	39.5	9.000	L1	9.8	16.5	56.0
4.384000	39.5	9.000	L1	9.8	16.5	56.0
4.666000	38.6	9.000	L1	9.9	17.5	56.0
20.918000	34.1	9.000	L1	10.3	25.9	60.0
21.066000	34.5	9.000	L1	10.3	25.5	60.0
21.208000	34.4	9.000	L1	10.3	25.6	60.0
21.554000	32.7	9.000	L1	10.3	27.3	60.0
23.536000	32.2	9.000	L1	10.3	27.8	60.0
23.964000	30.5	9.000	L1	10.3	29.5	60.0



CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	25.6	9.000	L1	9.7	30.4	56.0
0.154000	20.0	9.000	L1	9.6	35.8	55.8
0.158000	19.3	9.000	L1	9.6	36.2	55.6
0.198000	34.2	9.000	L1	9.6	19.5	53.7
0.200000	34.2	9.000	L1	9.6	19.4	53.6
0.204000	33.7	9.000	L1	9.6	19.8	53.4
3.818000	30.3	9.000	L1	9.8	15.7	46.0
3.958000	30.2	9.000	L1	9.8	15.8	46.0
4.034000	30.5	9.000	L1	9.8	15.5	46.0
4.242000	30.5	9.000	L1	9.8	15.5	46.0
4.342000	30.2	9.000	L1	9.8	15.8	46.0
4.384000	30.8	9.000	L1	9.8	15.2	46.0
20.424000	25.1	9.000	L1	10.3	24.9	50.0
20.780000	26.5	9.000	L1	10.3	23.5	50.0
20.924000	27.6	9.000	L1	10.3	22.4	50.0
21.066000	28.7	9.000	L1	10.3	21.3	50.0
21.134000	28.7	9.000	L1	10.3	21.3	50.0
23.536000	24.8	9.000	L1	10.3	25.2	50.0

**Figure 4: Conducted Emission, Quick Cover, Line (N)**



QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.154000	48.8	9.000	N	9.6	17.0	65.8
0.158000	47.9	9.000	N	9.6	17.7	65.6
0.164000	47.3	9.000	N	9.6	18.0	65.3
0.168000	46.5	9.000	N	9.6	18.5	65.1
0.196000	51.2	9.000	N	9.6	12.5	63.8
0.204000	50.6	9.000	N	9.6	12.9	63.4
3.748000	38.9	9.000	N	9.8	17.1	56.0
3.946000	38.7	9.000	N	9.8	17.3	56.0
4.034000	39.6	9.000	N	9.8	16.4	56.0
4.244000	38.9	9.000	N	9.8	17.1	56.0
4.316000	38.8	9.000	N	9.8	17.2	56.0
4.526000	38.8	9.000	N	9.8	17.2	56.0
19.390000	32.6	9.000	N	10.3	27.4	60.0
19.660000	31.9	9.000	N	10.3	28.1	60.0
19.806000	31.3	9.000	N	10.3	28.7	60.0
20.080000	31.1	9.000	N	10.3	28.9	60.0
21.490000	34.3	9.000	N	10.3	25.7	60.0
21.546000	33.5	9.000	N	10.3	26.5	60.0



CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	26.6	9.000	N	9.6	29.4	56.0
0.158000	19.3	9.000	N	9.6	36.3	55.6
0.162000	18.7	9.000	N	9.6	36.7	55.4
0.166000	18.8	9.000	N	9.6	36.4	55.2
0.194000	32.6	9.000	N	9.6	21.3	53.9
0.202000	34.1	9.000	N	9.6	19.5	53.5
3.920000	29.7	9.000	N	9.8	16.3	46.0
3.928000	29.5	9.000	N	9.8	16.5	46.0
4.244000	30.7	9.000	N	9.8	15.3	46.0
4.316000	30.7	9.000	N	9.8	15.3	46.0
4.526000	30.4	9.000	N	9.8	15.6	46.0
4.552000	30.4	9.000	N	9.8	15.6	46.0
19.390000	25.2	9.000	N	10.3	24.8	50.0
19.660000	24.4	9.000	N	10.3	25.6	50.0
19.806000	23.2	9.000	N	10.3	26.8	50.0
20.080000	21.6	9.000	N	10.3	28.4	50.0
21.490000	25.9	9.000	N	10.3	24.1	50.0
21.546000	26.3	9.000	N	10.3	23.7	50.0



4.2 Radiated Emission Test

The test results of radiated emission provide the following information:

-For Measurement Below 1 GHz

Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Quasi-Peak
Bandwidth	120 kHz (6 dB)
Operation Mode	Data Communication mode
Kind of Test Site	3 m semi anechoic chamber
Temperature	21.1 °C
Relative Humidity	27.3 %
Test Date	March 22, 2016

- 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



Standard Cover

Frequency (MHz)	Quasi Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
36.831663	30.1	120.0	V	184.0	15.2	9.9	40.0
54.086653	33.0	100.0	V	119.0	15.8	7.0	40.0
63.486092	32.0	100.0	V	210.0	15.0	8.0	40.0
77.653307	33.3	250.0	H	91.0	12.5	6.7	40.0
82.284970	32.6	250.0	H	92.0	11.8	7.4	40.0
263.426533	39.9	150.0	H	241.0	16.8	6.1	46.0

Quick Cover

Frequency (MHz)	Quasi Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
34.767776	29.9	100.0	V	105.0	15.0	10.1	40.0
54.086653	34.2	100.0	V	132.0	15.8	5.8	40.0
63.486092	31.2	100.0	V	165.0	15.0	8.8	40.0
77.613307	36.2	243.0	H	116.0	12.5	3.8	40.0
81.061082	31.5	275.0	H	77.0	11.9	8.5	40.0
263.706533	38.1	125.0	H	239.0	16.8	7.9	46.0



-For Measurement Above 1 GHz

Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Peak mode: Peak (RBW: 1 MHz, VBW: 3 MHz) CISPR-Average mode: Peak (RBW: 1 MHz, VBW: 10 Hz)
Highest Operating Frequency	1.2 GHz
Testing Frequency Range	1 GHz to 6 GHz
Operation Mode	Data Communication mode
Kind of Test Site	3 m semi anechoic chamber
Temperature	21.1 °C
Relative Humidity	27.3 %
Test Date	March 22, 2016

- 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



Standard Cover

Frequency (MHz)	Peak (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1331.913828	48.8	100.0	V	229.0	-9.8	25.2	74.0
1399.949900	49.3	100.0	V	198.0	-9.6	24.7	74.0
1992.434870	53.6	100.0	V	227.0	-8.4	20.4	74.0

Frequency (MHz)	CAverage (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1331.913828	31.1	100.0	V	229.0	-9.8	22.9	54.0
1399.949900	46.8	100.0	V	198.0	-9.6	7.2	54.0
1992.434870	36.0	100.0	V	227.0	-8.4	18.0	54.0

Quick Cover

Frequency (MHz)	Peak (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1332.314630	47.2	150.0	V	129.0	-9.8	26.8	74.0
1399.949900	48.3	141.0	H	344.0	-9.6	25.7	74.0
1992.034068	53.8	100.0	V	230.0	-8.4	20.2	74.0

Frequency (MHz)	CAverage (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1332.314630	29.7	150.0	V	129.0	-9.8	24.3	54.0
1399.949900	45.5	141.0	H	344.0	-9.6	8.5	54.0
1992.034068	36.2	100.0	V	230.0	-8.4	17.8	54.0



5. 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>					
☒ EMI Test Receiver	Rohde & Schwarz	ESCI	100584	1 year	12.28.2015
☒ LISN	Rohde & Schwarz	ESH3-Z5	100282	1 year	06.11.2015
☒ LISN	Rohde & Schwarz	ENV216	100073	1 year	12.28.2015
☒ Software	Rohde & Schwarz	EMC32	-	-	-
<u>Radiated Emission</u>					
-For measurement below 1 GHz					
☒ EMI Test Receiver	Rohde & Schwarz	ESI40	831564103	1 year	03.30.2016
☒ Trilog Antenna	Schwarzbeck	VULB9160	3301	2 year	11.17.2014
☒ Antenna master	HD GmbH	MA240	240/520	N/A	-
☒ Antenna master controller	HD GmbH	HD 100	100/637	N/A	-
☒ Turn Table	EMCO	1060-2M	-	N/A	-
☒ Turn Table controller	EMCO	2090	9702-1224	N/A	-
☐ EMI Test Receiver	Rohde & Schwarz	ESU 26	100241	1 year	06.05.2015
☐ Antenna master	INNCO Systems	MA4000-EP	MA4000/283	N/A	-
☐ Turn Table	INNCO Systems	DT3000-3T	DT3000/69	N/A	-
☒ Software	Rohde & Schwarz	EMC32	-	-	-
-For measurement above 1 GHz					
☒ EMI Test Receiver	Rohde & Schwarz	ESI40	831564103	1 year	03.30.2016
☒ Antenna master	HD GmbH	MA240	240/520	N/A	-
☒ Antenna master controller	HD GmbH	HD 100	100/637	N/A	-
☒ Turn Table	EMCO	1060-2M	-	N/A	-
☒ Turn Table controller	EMCO	2090	9702-1224	N/A	-
☐ Power Amplifier	CERNEX	CBLU1183540	21691	1 year	07.06.2015
☒ Power Amplifier	CERNEX	CBLU5183530	24348	1 year	06.15.2015
☒ Horn Antenna	Schwarzbeck	BBHA 9120D	296	2 year	10.07.2014
☐ EMI Test Receiver	Rohde & Schwarz	ESU 26	100241	1 year	06.05.2015
☐ Turn Table	INNCO Systems	DT3000-3T	DT3000/69	N/A	-
☒ Software	Rohde & Schwarz	EMC32	-	-	-



6. CONCLUSION

The data collected shows that the **EUT Type: Cellular/PCS GSM/WCDMA Phone with WLAN, Bluetooth and NFC, Model: DM-02H, FCC ID: ZNFDM02H** complies with §15.107 and §15.109 of the FCC rules.