

# **TEST REPORT**

EMI Test for FCC Certification / ISED of LM-K300UM Model

APPLICANT
LG Electronics USA, Inc.

REPORT NO. HCT-EM-2003-FI006

DATE OF ISSUE March 16, 2020



HCT Co., Ltd.

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## TEST REPORT

EMI Test for FCC Certification / ISED

REPORT NO. HCT-EM-2003-FI006

DATE OF ISSUE March 16, 2020

FCC ID / IC ZNFK300UM / 2703C-K300WM

Applicant LG Electronics USA, Inc. 1000 Sylvan Avenue, Englewood Cliffs NJ 07632 United States **Product Name SMART PHONE** Model Name LM-K300UM Series Model Name Refer to the clause 1.1 Description of EUT Travel Adaptor Information Model name: MCS-V01WR Manufacturer: SUNLIN Date of Test March 03, 2020 to March 09, 2020 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 LG Electronics Inc. The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

> Tested by Kyoung-Hee Yoon

Technical Manager Jeong-Hyun Choi

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#### **REVISION HISTORY**

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

Revision No.	Date of Issue	Description	
0	March 16, 2020	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 denial the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C 862

This Test Report is not related to the accredited test result by KOLAS (Korea Laboratory Accreditation Scheme) / A2LA(American Association for Laboratory Accreditation), which signed the ILAC-MRA.

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## 1. GENERAL INFORMATION

## 1.1 Description of EUT

FCC ID	ZNFK300UM				
IC	2703C-K300WM				
Model Name	LM-K300UM				
Series Model Name	LMK300UM, K300UM, LM-K300WM, LMK300WM, K300WM, LM-K300QM6, LMK300QM6, K300QM6				
Product Name	SMART PHONE				
TX Frequency	824.70 MHz to 848.31 MHz (CDMA BC0) 1 851.25 MHz to 1 908.75 MHz (CDMA BC1) 824.20 MHz to 848.80 MHz (GSM 850) 1 850.20 MHz to 1 909.80 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) 2 496 MHz to 2570 MHz (LTE B7) 699 MHz to 716 MHz (LTE B13) 704 MHz to 716 MHz (LTE B17) 1 850 MHz to 1 915 MHz (LTE B25) 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)				
RX Frequency	869.70 MHz to 893.31 MHz (CDMA BC0) 1 931.25 MHz to 1 988.75 MHz (CDMA BC1) 869.20 MHz to 893.80 MHz (GSM 850) 1 930.20 MHz to 1 989.80 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) 2 516 MHz to 2 690 MHz (LTE B7) 729 MHz to 746 MHz (LTE B13) 734 MHz to 756 MHz (LTE B17) 1 925 MHz to 1 990 MHz (LTE B25) 2 110 MHz to 2 200 MHz (LTE B66) 2 402 MHz to 2 462 MHz (Bluetooth) 2 412 MHz to 2 462 MHz (WiFi 2.4 GHz)				

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#### 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-K300UM	-	LG
Travel Adaptor	MCS-V01WR	-	SUNLIN
DATA Cable	EAD62377927	-	NINGBO BROAD
Earphone	EAB64468444	-	CRESYN
Micro SD Card  Extreme MicroSDHC  UHS-I CLASS 10 (32 GB)		-	SANDISK

## 1.3 Cable Description

Product Name	Port	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (m)
EUT	Micro USB	Y	N/A	(P) 1.0
	Earphone	N/A	N	(D) 1.2

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	Micro USB	N	N/A	Υ	Both End
	Earphone	N	N/A	Υ	EUT End

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#### 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		
Radiated Field strength measurement facility  10 m Semi Anechoic chamber #1	KR0032	
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. Espectially, all antenna for measurement is calibrated in accordance with the requirements of C63.5:2017

#### 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
3 m Radiated Emissions (30 MHz to 1 GHz)	4.8 dB
3 m Radiated Emissions (1 GHz to 18 GHz)	5.4 dB
3 m Radiated Emissions (18 GHz to 40 GHz)	5.7 dB

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#### 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 Class A		ss A	Class B		
	Bandwidth (kHz)	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.

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#### 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**

		Class A		Class B		
Frequency (MHz)	Antenna Distance (m)	Field Strength (µV/m)	Quasi-Peak (dBµV/m)	Antenna Distance (m)	Field Strength (µV/m)	Quasi-Pea (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
F	A-4	Nata	Clas	s A	Cla	ss B
Frequency (MHz)	Antenna D		Peak (dBµV/m)	Average (dBµV/m)	Peak (dBµV/m)	Average (dBµV/m)
Above 1 000	3		80	60	74	54

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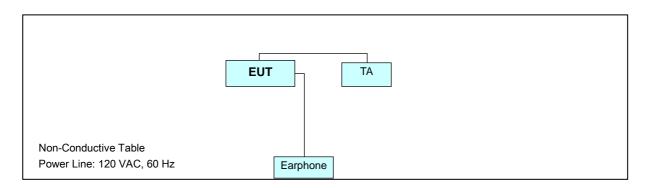


#### 2.2.1 Frequency Range of Radiated Measurements

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 ઊt, whichever is lower

## 2.3 Configuration of Tested System



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#### 3. PRELIMINARY TEST

#### 3.1 Conducted Emission

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

Operating Modes: FRONT CAMERA & MP3 mode

REAR CAMERA & FM RADIO mode

IDLE mode

NOTE. The worst-case emissions are reported.

#### 3.2 Radiated Emission

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

Operating Modes: FRONT CAMERA & MP3 mode

REAR CAMERA & FM RADIO mode

IDLE mode

NOTE. The worst-case emissions are reported.

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#### 4. CONDUCTED EMISSION AND RADIATED EMISSION TEST SUMMARY

#### 4.1 Conducted Emission

## 4.1.1 Measuring instruments

	Туре	Manufacturer	Model Name	Serial Number	Calibration Cycle	Calibration Date
$\boxtimes$	EMI Test Receiver	Rohde & Schwarz	ESCI	100584	1 year	06.18.2019
$\boxtimes$	LISN	Rohde & Schwarz	ENV216	102245	1 year	09.11.2019
$\boxtimes$	Radio communication analyzer	ANRITSU	MT8820C	6201138643	1 year	08.20.2019
$\boxtimes$	Antenna (for Communication)	Schwarzbeck	USLP9142	VSLP 9142-200	-	-
$\boxtimes$	Software	Rohde & Schwarz	EMC32	-	-	-

## 4.1.2 Operating Condition

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

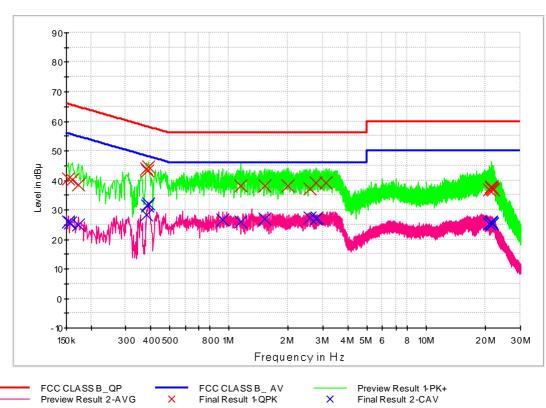
FCC CFR 47 PART 15 Subpart B Class B ICES-003 Issue 6 Class B ANSI C63.4-2014
150 kHz to 30 MHz
Quasi-Peak, CISPR-Average
9 kHz (6 dB)
REAR CAMERA & FM RADIO mode
EMI Shielded Room
24.1 / 25.1 °C
42.3 / 43.6 %
March 03 / March 06, 2020

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#### 4.1.3 Measuring Data

Figure 1: Conducted Emission (150 kHz to 30 MHz), Line (L1)



FCC CLASS B\_Exten Cable

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## QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.154000	40.6	9.000	L1	9.8	25.1	65.8
0.160000	40.3	9.000	L1	9.8	25.2	65.5
0.172000	38.5	9.000	L1	9.8	26.3	64.9
0.382000	43.8	9.000	L1	9.8	14.4	58.2
0.386000	43.2	9.000	L1	9.8	14.9	58.1
0.392000	44.5	9.000	L1	9.8	13.5	58.0
1.146000	38.2	9.000	L1	9.8	17.8	56.0
1.526000	38.3	9.000	L1	9.9	17.7	56.0
1.986000	38.1	9.000	L1	9.9	17.9	56.0
2.564000	37.0	9.000	L1	9.9	19.0	56.0
2.746000	39.0	9.000	L1	9.9	17.0	56.0
3.092000	39.1	9.000	L1	9.9	16.9	56.0
20.972000	36.7	9.000	L1	10.6	23.3	60.0
21.264000	37.6	9.000	L1	10.6	22.4	60.0
21.366000	37.6	9.000	L1	10.6	22.4	60.0
21.642000	37.1	9.000	L1	10.6	22.9	60.0
21.660000	37.0	9.000	L1	10.6	23.0	60.0
21.788000	36.8	9.000	L1	10.6	23.2	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

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## CAverage Final Result, Line (L1)

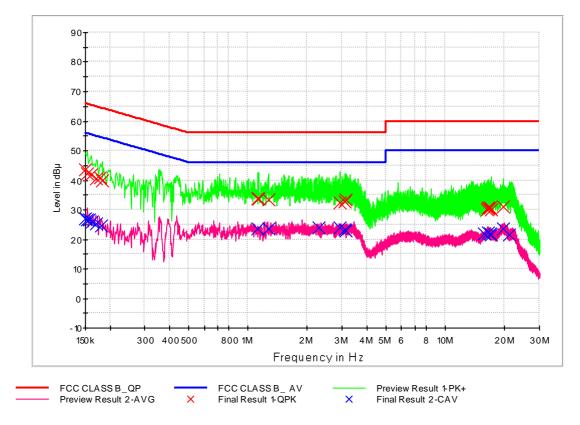
Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154000	25.9	9.000	L1	9.8	29.9	55.8
0.158000	25.7	9.000	L1	9.8	29.8	55.6
0.172000	24.8	9.000	L1	9.8	30.0	54.9
0.382000	28.4	9.000	L1	9.8	19.8	48.2
0.388000	31.3	9.000	L1	9.8	16.8	48.1
0.392000	32.0	9.000	L1	9.8	16.1	48.0
0.930000	26.8	9.000	L1	9.8	19.2	46.0
1.146000	25.9	9.000	L1	9.8	20.1	46.0
1.526000	27.0	9.000	L1	9.9	19.0	46.0
2.564000	27.3	9.000	L1	9.9	18.7	46.0
2.746000	27.0	9.000	L1	9.9	19.0	46.0
2.798000	27.3	9.000	L1	9.9	18.7	46.0
20.972000	25.2	9.000	L1	10.6	24.8	50.0
21.264000	25.5	9.000	L1	10.6	24.5	50.0
21.292000	26.0	9.000	L1	10.6	24.0	50.0
21.620000	25.2	9.000	L1	10.6	24.8	50.0
21.642000	25.3	9.000	L1	10.6	24.7	50.0
21.660000	25.3	9.000	L1	10.6	24.7	50.0

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Figure 2: Conducted Emission (150 kHz to 30 MHz), Line (N)





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## QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	43.5	9.000	N	9.8	22.5	66.0
0.154000	42.3	9.000	N	9.8	23.5	65.8
0.160000	42.0	9.000	N	9.8	23.5	65.5
0.170000	40.6	9.000	N	9.8	24.3	65.0
0.178000	40.7	9.000	N	9.8	23.9	64.6
0.182000	39.9	9.000	N	9.8	24.5	64.4
1.120000	33.8	9.000	N	9.8	22.2	56.0
1.132000	33.9	9.000	N	9.8	22.1	56.0
1.268000	33.3	9.000	N	9.8	22.7	56.0
2.914000	32.3	9.000	N	9.9	23.7	56.0
3.100000	32.6	9.000	N	9.9	23.4	56.0
3.152000	33.2	9.000	N	9.9	22.8	56.0
16.250000	30.1	9.000	N	10.5	29.9	60.0
16.430000	30.5	9.000	N	10.5	29.5	60.0
16.452000	30.5	9.000	N	10.5	29.5	60.0
16.820000	30.5	9.000	N	10.5	29.5	60.0
17.168000	30.1	9.000	N	10.5	29.9	60.0
19.702000	30.9	9.000	N	10.6	29.1	60.0

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## CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	27.0	9.000	N	9.8	29.0	56.0
0.154000	26.8	9.000	N	9.8	29.0	55.8
0.158000	26.5	9.000	N	9.8	29.0	55.6
0.162000	25.8	9.000	N	9.8	29.5	55.4
0.170000	25.1	9.000	N	9.8	29.8	55.0
0.180000	24.4	9.000	N	9.8	30.1	54.5
1.120000	23.6	9.000	N	9.8	22.4	46.0
1.268000	23.7	9.000	N	9.8	22.3	46.0
2.288000	23.8	9.000	N	9.9	22.2	46.0
2.914000	24.0	9.000	N	9.9	22.0	46.0
3.100000	23.3	9.000	N	9.9	22.7	46.0
3.152000	22.9	9.000	N	9.9	23.1	46.0
15.808000	22.0	9.000	N	10.5	28.0	50.0
16.452000	22.3	9.000	N	10.5	27.7	50.0
16.836000	22.0	9.000	N	10.5	28.0	50.0
17.168000	21.6	9.000	N	10.5	28.4	50.0
19.702000	23.5	9.000	N	10.6	26.5	50.0
21.074000	21.5	9.000	N	10.7	28.5	50.0

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#### 4.2 Radiated Emission Below 1 GHz

## 4.2.1 Measuring instruments

	Туре	Manufacturer	Model Name	Serial Number	Calibration Cycle	Calibration Date
$\boxtimes$	EMI test receiver	Rohde & Schwarz	ESU40	100524	1 year	05.17.2019
$\boxtimes$	Bi-Log antenna	Schwarzbeck	VULB 9168	255	2 year	03.26.2019
$\boxtimes$	Antenna master	INNCO Systems	MA4640-XP-ET	-	N/A	-
$\boxtimes$	Antenna master controller	INNCO Systems	CO 3000	CO3000/870/ 35990515/L	N/A	-
$\boxtimes$	Turn Table	INNCO Systems	1060	-	N/A	-
$\boxtimes$	Turn table controller	INNCO Systems	CO2000	CO2000/095/ 7590304/L	N/A	-
$\boxtimes$	Radio communication analyzer	ANRITSU	MT8820C	6201138643	1 year	08.20.2019
$\boxtimes$	Antenna (for Communication)	Schwarzbeck	USLP9142	VSLP 9142-200	-	-
$\boxtimes$	Software	Rohde & Schwarz	EMC32	-	-	-

## 4.2.2 Operating Condition

The test results of radiated emission provide the following information:

FCC CFR 47 PART 15 Subpart B Class B ICES-003 Issue 6 Class B ANSI C63.4-2014
30 MHz to 1 000 MHz
Quasi-Peak
120 kHz (6 dB)
REAR CAMERA & FM RADIO mode
3 m semi anechoic chamber
23.5 °C
42.8 %
March 04, 2020

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#### 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)
30.355022	25.2	100.0	V	335.0	18.3	14.8	40.0
46.393600	22.6	100.0	V	272.0	19.5	17.4	40.0
59.672400	20.4	116.7	V	337.0	19.4	19.6	40.0
136.042400	18.5	117.8	V	117.0	18.7	25.0	43.5
200.859800	15.7	225.1	V	139.0	16.7	27.8	43.5
350.668600	20.4	274.9	V	50.0	21.7	25.6	46.0

#### - 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

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#### 4.3 Radiated Emission Above 1 GHz

## 4.3.1 Measuring instruments

	Туре	Manufacturer	Model Name	Serial Number	Calibration Cycle	Calibration Date
$\boxtimes$	EMI test receiver	Rohde & Schwarz	ESU40	100524	1 year	05.17.2019
$\boxtimes$	Antenna master	INNCO Systems	MA4640-XP-ET	-	N/A	-
$\boxtimes$	Antenna master controller	INNCO Systems	CO3000	CO3000/870/ 35990515/L	N/A	-
$\boxtimes$	Turn table	INNCO Systems	1060	-	N/A	-
$\boxtimes$	Turn table controller	INNCO Systems	CO2000	CO2000/095/ 7590304/L	N/A	-
$\boxtimes$	Low Noise amplifier	TESTEK	TK-PA18H	170034-L	1 year	03.03.2020
	Low Noise amplifier	TESTEK	TK-PA1840H	170030-L	1 year	02.13.2020
$\boxtimes$	Horn antenna	Schwarzbeck	BBHA 9120D	01836	1 year	07.19.2019
	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA917#786	1 year	12.03.2019
$\boxtimes$	Radio communication analyzer	ANRITSU	MT8820C	6201138643	1 year	08.20.2019
$\boxtimes$	Antenna (for Communication)	Schwarzbeck	USLP9142	VSLP 9142-200	-	
$\boxtimes$	Software	Rohde & Schwarz	EMC32	-	-	-

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## 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	2 690 MHz
Tested Frequency Range	1 GHz to 18 GHz
Worst Case of Operating Mode	REAR CAMERA & FM RADIO mode
Kind of Test Site	3 m semi anechoic chamber
Temperature	23.4 °C
Relative Humidity	42.2 %
Test Date	March 09, 2020

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#### 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)
2043.605000	31.2	100.0	Н	180.0	-26.4	42.8	74.0
4891.395000	37.1	150.0	٧	21.0	-18.1	36.9	74.0
7344.340000	41.9	248.4	Н	7.0	-12.5	32.1	74.0
9641.360000	44.1	150.0	Н	0.0	-9.8	29.9	74.0
11323.105000	46.0	206.4	٧	29.0	-4.7	28.0	74.0
14722.460000	47.7	113.4	٧	302.0	-1.1	26.3	74.0

Frequency (MHz)	CAverage (dBµV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2043.605000	18.7	100.0	Н	180.0	-26.4	35.3	54.0
4891.395000	24.2	150.0	٧	21.0	-18.1	29.8	54.0
7344.340000	28.8	248.4	Н	7.0	-12.5	25.2	54.0
9641.360000	31.0	150.0	Н	0.0	-9.8	23.0	54.0
11323.105000	33.0	206.4	٧	29.0	-4.7	21.0	54.0
14722.460000	34.3	113.4	٧	302.0	-1.1	19.7	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

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#### 5. CONCLUSION

The data collected shows that the **Product Name: SMART PHONE and Model: LM-K300UM** complies with §15.107 and §15.109 of the FCC rules and ICES-003 Issue 6 of the IC rules.

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#### 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-2003-FI006-P	March 16, 2020	Initial Release

End of report

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