





# FCC 15B TEST REPORT No. I21Z61147-EMC01

for

**HMD Global Oy** 

**Smart Phone** 

Model Name:TA-1399

FCC ID: 2AJOTTA-1399

with

Hardware Version: V1.0

Software Version: 04US 0 033

Issued Date: 2021-09-07

#### Note:

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The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S.Government.

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## **REPORT HISTORY**

Report Number	Revision	Description	Issue Date
I21Z61147-EMC01	Rev.0	1 <sup>st</sup> edition	2021-09-07





## **CONTENTS**

1. TEST LABORATORY	4
1.1. TESTING LOCATION	4
1.2. TESTING ENVIRONMENT	
1.3. PROJECT DATA	4
1.4. SIGNATURE	4
2. CLIENT INFORMATION	5
2.1. APPLICANT INFORMATION	5
2.2. MANUFACTURER INFORMATION	5
3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)	
3.1. ABOUT EUT	6
3.2. INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST	6
3.3. INTERNAL IDENTIFICATION OF AE USED DURING THE TEST	6
3.4. EUT SET-UPS	7
3.5. GENERAL DESCRIPTION	
4. REFERENCE DOCUMENTS	
4.1. REFERENCE DOCUMENTS FOR TESTING	
5. LABORATORY ENVIRONMENT	9
6. SUMMARY OF TEST RESULTS	
7. TEST EQUIPMENTS UTILIZED	.11
ANNEX A: MEASUREMENT RESULTS	.12
ANNEX B: PERSONS INVOLVED IN THIS TESTING	.31





## 1. Test Laboratory

## 1.1. Testing Location

Location 1: CTTL(BDA)

Address: No.18A, Kangding Street, Beijing

Economic-Technology Development Area, Beijing, P.

R. China 100176

1.2. <u>Testing Environment</u>

Normal Temperature:  $15-35^{\circ}$ C Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: 2021-08-02 Testing End Date: 2021-09-03

1.4. Signature

An Hui

(Prepared this test report)

长新

**Zhang Ying** 

(Reviewed this test report)

Zhang Xia

Deputy Director of the laboratory

(Approved this test report)





## 2. Client Information

## 2.1. Applicant Information

Company Name: HMD Global Oy

Address: Bertel Jungin aukio 9, 02600 Espoo, Finland

City: /
Postal Code: /

Country: Finland

Telephone: +393 316272922

Fax:

#### 2.2. Manufacturer Information

Company Name: HMD Global Oy

Address: Bertel Jungin aukio 9, 02600 Espoo, Finland

City: /
Postal Code: /

Country: Finland

Telephone: +393 316272922

Fax: /





## 3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

#### 3.1. About EUT

Description Smart Phone Model Name TA-1399

FCC ID 2AJOTTA-1399

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL, Telecommunication Technology Labs, Academy of Telecommunication Research, MIIT.

#### 3.2. Internal Identification of EUT used during the test

 EUT ID\*
 SN or IMEI
 HW Version
 SW Version

 EUT1
 354773220009801
 V1.0
 04US\_0\_033

#### 3.3. Internal Identification of AE used during the test

AE ID*	Description	NOTE
AE1	Battery	1
AE2	Adapter	1
AE3	USB Cable	1
AE4	Headset	1

#### AE1

Model /

Manufacturer TIANJIN LISHEN BATTERY JOINT-STOCK CO.,LTD.

Capacitance 4370mAh Nominal voltage 3.87V

AE2

Model 1-CHUSQ302-097

Manufacturer HUIZHOU PUAN ELECTRONICS CO.,LTD

Length /

AE3

Model

Manufacturer Huizhou Washin Electronics Co.,Ltd

Length /

AE4

Model CCB0049A12C1

Manufacturer DALIN

Length of cable /

<sup>\*</sup>EUT ID: is used to identify the test sample in the lab internally.

<sup>\*</sup>AE ID: is used to identify the test sample in the lab internally.





#### 3.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	EUT1 + AE1 + AE2 + AE3 + AE4	Charger + Real Camera + GSM850 idle
Set.1	EUT1 + AE1 + AE2 + AE3 + AE4	MP4
Set.1	EUT1 + AE1 + AE2 + AE3 + AE4	FM
Set.2	EUT1 + AE1 + AE3	USB + SD + Front Camera

#### Note1:

The device contains receivers which tune and operate between 30MHz-960MHz in the following bands: GSM 850MHz,WCDMA Band5, LTE Bands 5/12/13/26/71, 5G NR n71. The measurement results showed here are worst cases of different bands.

#### 3.5. General Description

Equipment Under Test (EUT) is a model of Smart Phone with integrated antenna.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.





## 4. Reference Documents

## 4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 15, Subpart B	Radio frequency devices - Unintentional Radiators	2019
ANSI C63.4	American National Standard for	2014
	Methods of Measurement of Radio-	
	Noise Emissions from Low-Voltage	
	Electrical and Electronic Equipment	
	in the Range of 9 kHz to 40 GHz	

Note: The test methods have no deviation with standards.





## 5. LABORATORY ENVIRONMENT

**Semi-anechoic chamber SAC-1** (23 meters  $\times$  17meters  $\times$  10meters) did not exceed following limits along the EMC testing:

3	
Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz, >60dB;
	1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 M Ω
Ground system resistance	< 4 Ω
Normalised site attenuation (NSA)	< ±4 dB, 10 m distance
Site voltage standing-wave ratio (SVSWR)	Between 0 and 6 dB, from 1GHz to 6GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 3000 MHz

**Shielded room** did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz, >60dB;
	1MHz-1000MHz, >90dB.
Electrical insulation	> 2 M Ω
Ground system resistance	< 4 Ω





## 6. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:		
	Р	Pass
Verdict Column	NA	Not applicable
verdict Column	F	Fail
	BR	Re-use test data from basic model report.

Items	Test Name	Clause in FCC rules	Section in this report	Verdict	Test Location
1	Radiated Emission	15.109(a)	A.1	Р	CTTL(BDA)
2	Conducted Emission	15.107(a)	A.2	Р	CTTL(BDA)





## 7. Test Equipments Utilized

NO.	Description	TYPE	SERIES	MANUFACTU	CAL DUE	CALIBRATION
NO.	Description	ITPE	NUMBER		DATE	INTERVAL
1	LISN	ENV216	101459	R&S	2022-03-22	1 year
2	Test Receiver	ESCI	100766	R&S	2022-03-09	1 year
3	Universal Radio	CMW500	159408	R&S	2021-12-07	1 Year
3	Communication Tester	Civivv500	159406	Κασ	2021-12-07	i feai
4	Test Receiver	ESU26	100376	R&S	2022-03-08	1 year
5	BiLog Antenna	VULB9163	482	Schwarzbeck	2021-11-04	1 year
6	Dual-Ridge Waveguide	3117	00139065	ETS-Lindgren	2021-10-11	1 year
	Horn Antenna	3117	00139003	E13-Lindgren	2021-10-11	1 year
7	Universal Radio	MT8821C	6262257899	Anritsu	2022-05-06	1 year
,	Communication Tester	W110021C	0202257699	Aiiiisu	2022-05-00	1 year
8	Universal Radio	MT8000A	6262261933	Anritsu	2022-05-06	1 year
	Communication Tester	IVITOUUA	0202201933	Aiiiisu	2022-05-06	1 year
9	FM Signal Source	SMF100A	104940	R&S	2022-01-09	1 year





#### **ANNEX A: MEASUREMENT RESULTS**

#### A.1 Radiated Emission

#### Reference

FCC: CFR Part 15.109(a).

#### A.1.1 Method of measurement

The field strength of radiated emissions from the unintentional radiator (charging mode) at distances of 10 meters(for 30MHz-1GHz) and 3 meters (for above 1GHz) is tested. Tested in accordance with the procedures of ANSI C63.4 – 2014, section 8.3.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3/10 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

#### A.1.2 EUT Operating Mode:

The MS is operating in the charging mode. During the test MS is connected to a charger in the case of charging mode.

The EUT was tested while operating in licensed band Rx mode. All licensed band receivers that tune in the range of 30MHz-960MHz, as listed in Section 3.4, are investigated. Only the worst case emissions are reported.

All equipment is placed on the test table top and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions.

#### A.1.3 Measurement Limit

Frequency range	Field strength limit (μV/m)				
(MHz)	Quasi-peak	Average	Peak		
30-88	100				
88-216	150				
216-960	200				
960-1000	500				
>1000		500	5000		

Note: the above limit is for 3 meters test distance. 10 meters' limit is got by converting.

Limit(10m) = Limit(3m) + 20[log(3/10)]

#### A.1.4 Test Condition

Frequency range (MHz)	RBW/VBW	Sweep Time (s)	Detector
30-1000	120kHz (IF Bandwidth)	5	Peak/Quasi-peak
Above 1000	1MHz/1MHz	15	Peak, Average





#### A.1.5 Measurement Results

A "reference path loss" is established and the  $A_{Rpl}$  is the attenuation of "reference path loss". It includes the antenna factor of receive antenna and the path loss.

The measurement results are obtained as described below:

Result =  $P_{Mea} + A_{Rpl} = P_{Mea} + G_A + G_{PL}$ 

Where

GA: Antenna factor of receive antenna

GPL: Path Loss

P<sub>Mea</sub>: Measurement result on receiver.

Measurement uncertainty (worst case): 30MHz-1GHz: 5.16dB, 1GHz-18GHz: 5.44dB, *k*=2.

Note: The measurement results showed here are worst cases of the combinations of different Battery, cables and Headset.

Note: The measurement results showed here are worst cases.





#### **Measurement results for Set.1**:

#### EUT1 Charger+Back Camera+GSM 850MHz idle Mode/QP detector

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBuV/m)	(cm)		(deg)	(dB)	(dB)	(dBuV/m)
33.007000	26.7	100.0	v	240.0	-2.0	13.3	40.0
67.830000	30.3	100.0	V	210.0	-3.7	9.7	40.0
71.128000	31.9	125.0	V	180.0	-4.8	8.1	40.0
75.881000	30.1	113.0	V	195.0	-5.9	9.9	40.0
175.888000	25.4	100.0	V	0.0	-3.8	18.1	43.5
312.464000	28.4	112.0	н	165.0	1.3	17.6	46.0

#### **EUT1 Charger+Back Camera+GSM 850MHz idle Mode/Average detector**

Frequency M	Measurement	Cable	Antenna	Receiver	Limit	Margin	Antenna
1	Result	loss	Factor	eading		(dB)	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(ub)	(H/V)
17268.500	40.38	-22.8	41.4	21.75	54.0	13.6	Н
17428.500	40.34	-23.1	41.3	22.18	54.0	13.7	Н
17248.000	40.33	-22.8	41.5	21.71	54.0	13.7	Н
17041.500	40.31	-23.0	41.7	21.69	54.0	13.7	Н
17261.500	40.31	-22.8	41.4	21.68	54.0	13.7	Н
17262.000	40.30	-22.8	41.4	21.67	54.0	13.7	Н

#### EUT1 Charger+Back Camera+GSM 850MHz idle Mode/Peak detector

Frequency	Measurement	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVITZ)	(dBµV/m)	(dB)	(dB/m)	(dBμV)		(ub)	(H/V)
17072.000	53.56	-23.0	41.6	34.96	74.0	20.4	Н
17481.000	53.19	-23.0	41.2	35.00	74.0	20.8	Н
16841.500	53.13	-23.0	41.6	34.53	74.0	20.9	V
17431.500	53.01	-23.1	41.3	34.86	74.0	21.0	V
17130.500	52.95	-23.0	41.6	34.40	74.0	21.0	Н
17967.500	52.94	-22.8	41.3	34.40	74.0	21.1	V





#### **Measurement results for Set.1**:

### **EUT1 Charger+MP4 Mode/QP detector**

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBuV/m)	(cm)		(deg)	(dB)	(dB)	(dBuV/m)
42.707000	25.1	100.0	v	180.0	-0.3	14.9	40.0
67.733000	30.3	100.0	v	59.0	-3.7	9.7	40.0
71.322000	31.8	100.0	v	180.0	-4.8	8.2	40.0
75.299000	30.9	125.0	v	180.0	-5.8	9.1	40.0
177.828000	22.7	100.0	V	15.0	-3.7	20.8	43.5
314.307000	27.3	111.0	н	180.0	1.4	18.7	46.0

#### **EUT1 Charger+MP4 Mode/Average detector**

Frequency	Measurement	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVITIZ)	(dBµV/m)	/m) (dB) (dB/m) (dBμV) (dBμV)	(ub)	(H/V)			
17288.500	40.53	-22.8	41.4	21.90	54.0	13.5	Н
17257.500	40.40	-22.8	41.4	21.77	54.0	13.6	Н
17042.000	40.40	-23.0	41.7	21.77	54.0	13.6	Н
17001.500	40.39	-23.0	41.7	21.71	54.0	13.6	Н
17030.500	40.39	-23.0	41.7	21.75	54.0	13.6	V
17167.500	40.36	-23.0	41.5	21.79	54.0	13.6	V

#### **EUT1 Charger+MP4 Mode/Peak detector**

Fraguency	Measurement	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBμV)	(ασμν/ιιι)	(ub)	(H/V)
16952.000	53.81	-23.0	41.7	35.15	74.0	20.2	٧
16855.500	53.12	-23.0	41.6	34.51	74.0	20.9	Н
16653.500	52.98	-23.3	41.5	34.74	74.0	21.0	٧
17032.500	52.92	-23.0	41.7	34.28	74.0	21.1	٧
17275.000	52.89	-22.8	41.4	34.25	74.0	21.1	V
17014.000	52.78	-23.0	41.7	34.12	74.0	21.2	Н





#### **Measurement results for Set.1**:

### **EUT1 Charger+FM Mode/QP detector**

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBuV/m)	(cm)		(deg)	(dB)	(dB)	(dBuV/m)
32.231000	24.0	100.0	v	180.0	-2.2	16.0	40.0
42.804000	24.0	125.0	V	105.0	-0.3	16.0	40.0
68.024000	27.4	100.0	V	225.0	-3.8	12.6	40.0
71.322000	29.8	125.0	V	180.0	-4.8	10.2	40.0
76.075000	30.0	125.0	V	180.0	-5.9	10.0	40.0
178.022000	25.1	100.0	V	30.0	-3.7	18.4	43.5

#### **EUT1 Charger+FM Mode/Average detector**

			_				1
Frequency	Measurement	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading			Pol.
(MHz)	(dBµV/m)	$\mu$ V/m) (dB) (dB/m) (dB $\mu$ V) (dB $\mu$ V/m)	(dB)	(H/V)			
17392.500	40.55	-23.0	41.3	22.27	54.0	13.4	Н
17167.500	40.47	-23.0	41.5	21.90	54.0	13.5	V
17139.000	40.44	-23.0	41.6	21.88	54.0	13.6	V
17246.500	40.41	-22.8	41.5	21.79	54.0	13.6	Н
17264.500	40.40	-22.8	41.4	21.77	54.0	13.6	V
17042.000	40.40	-23.0	41.7	21.77	54.0	13.6	Н

#### **EUT1 Charger+FM Mode/Peak detector**

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
17461.500	53.37	-23.2	41.2	35.29	74.0	20.6	Н
17224.500	53.35	-22.9	41.5	34.74	74.0	20.7	V
17441.500	53.11	-23.1	41.3	34.99	74.0	20.9	Н
17030.000	53.02	-23.0	41.7	34.38	74.0	21.0	V
17966.000	52.95	-22.8	41.3	34.41	74.0	21.1	V
17172.500	52.94	-22.9	41.5	34.36	74.0	21.1	V





#### **Measurement results for Set.2**:

#### **EUT1 USB + SD + Front Camera Mode/QP detector**

Frequency	QuasiPeak	Height	Polarization	Azimuth	Corr.	Margin	Limit
(MHz)	(dBuV/m)	(cm)		(deg)	(dB)	(dB)	(dBuV/m)
35.432000	28.1	100.0	v	225.0	-1.4	11.9	40.0
51.534000	23.4	113.0	v	105.0	-0.3	16.6	40.0
72.001000	24.3	113.0	v	315.0	-5.0	15.7	40.0
89.170000	24.7	125.0	н	270.0	-4.0	18.8	43.5
167.934000	26.4	112.0	н	-31.0	-4.3	17.1	43.5
517.425000	38.3	125.0	v	315.0	6.6	7.7	46.0

### **EUT1 USB + SD + Front Camera Mode/Average detector**

Fraguency	Measurement	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVITIZ)	(dBμV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/π)	(ub)	(H/V)
17042.500	40.16	-23.0	41.7	21.53	54.0	13.8	Н
17102.000	40.15	-23.0	41.6	21.60	54.0	13.8	V
17265.000	40.06	-22.8	41.4	21.43	54.0	13.9	Н
17165.500	40.05	-23.0	41.5	21.48	54.0	13.9	Н
17269.500	40.05	-22.8	41.4	21.41	54.0	14.0	Н
17168.500	40.04	-23.0	41.5	21.47	54.0	14.0	Н

#### **EUT1 USB + SD + Front Camera Mode/Peak detector**

Frequency (MHz)	Measurement Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
47472 500					740	20.0	
17172.500	53.20	-22.9	41.5	34.62	74.0	20.8	Н
17149.500	52.98	-23.0	41.5	34.41	74.0	21.0	V
17958.000	52.77	-22.7	41.3	34.21	74.0	21.2	V
17442.500	52.73	-23.1	41.3	34.62	74.0	21.3	V
17835.500	52.70	-22.5	41.3	33.92	74.0	21.3	Н
17072.000	52.54	-23.0	41.6	33.94	74.0	21.5	Н





#### EUT1 Charger+Back Camera+GSM 850MHz idle Mode, Set.1

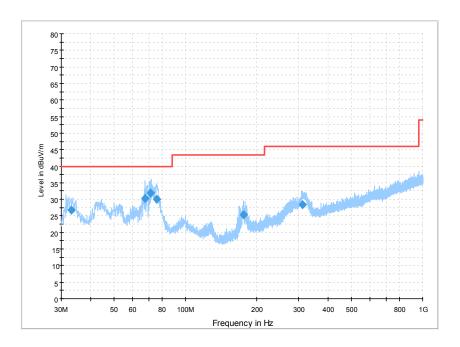


Figure A.1 Radiated Emission from 30MHz to 1GHz

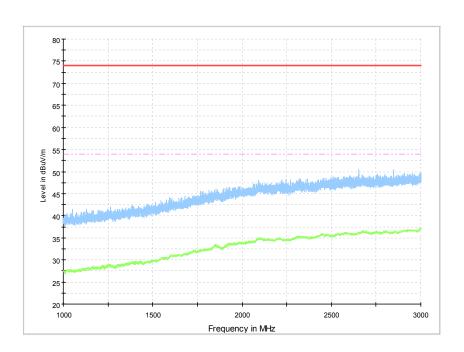


Figure A.2 Radiated Emission from 1GHz to 3GHz





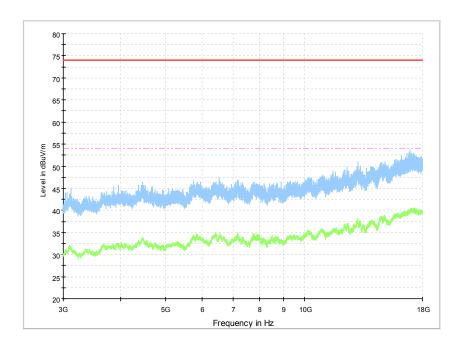


Figure A.3 Radiated Emission from 3GHz to 18GHz





## EUT1 Charger+MP4 Mode, Set.1

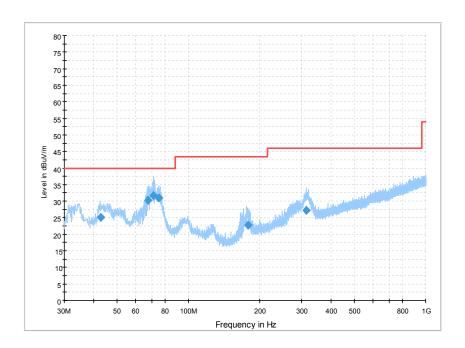


Figure A.4 Radiated Emission from 30MHz to 1GHz

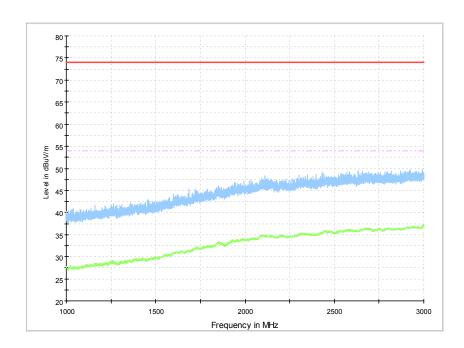


Figure A.5 Radiated Emission from 1GHz to 3GHz





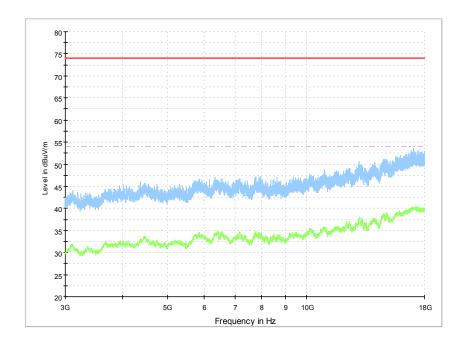


Figure A.6 Radiated Emission from 3GHz to 18GHz





## EUT1 Charger+FM Mode, Set.1

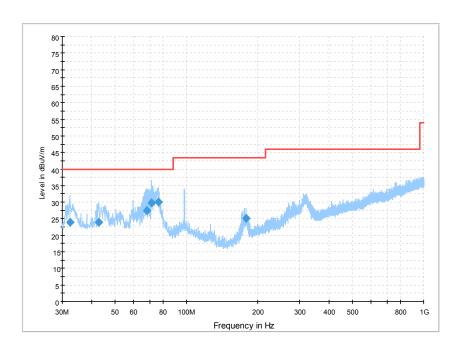


Figure A.7 Radiated Emission from 30MHz to 1GHz

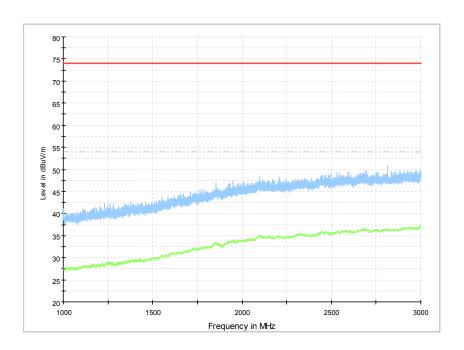


Figure A.8 Radiated Emission from 1GHz to 3GHz





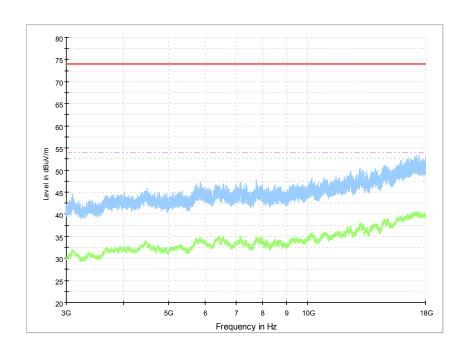


Figure A.9 Radiated Emission from 3GHz to 18GHz





## **EUT1 USB + SD + Front Camera Mode, Set.2**

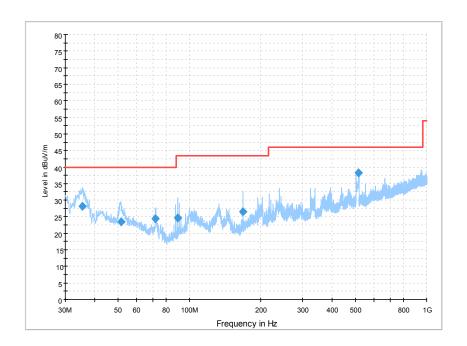


Figure A.10 Radiated Emission from 30MHz to 1GHz

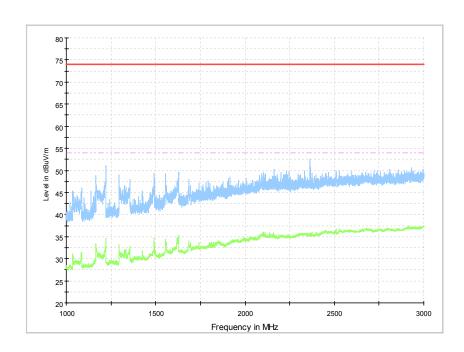


Figure A.11 Radiated Emission from 1GHz to 3GHz





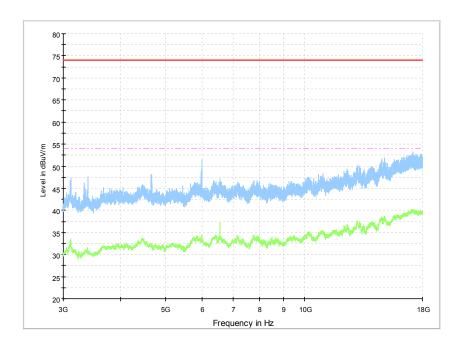


Figure A.12 Radiated Emission from 3GHz to 18GHz





## A.2 Conducted Emission

Reference

FCC: CFR Part 15.107(a).

#### A.2.1 Method of measurement

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits. Tested in accordance with the procedures of ANSI C63.4 - 2014, section 7.3.

#### A.2.2 EUT Operating Mode

The MS is operating in the charging mode. During the test MS is connected to a charger in the case of charging mode.

#### A.2.3 Measurement Limit

Frequency of emission (MHz)	Conducted limit (dBµV)				
	Quasi-peak	Average			
0.15-0.5	66 to 56*	56 to 46*			
0.5-5	56	46			
5-30 60 50					
*Decreases with the logarithm of the frequency					

#### A.2.4 Test Condition in charging mode

Voltage (V)	Frequency (Hz)
120	60

RBW/IF bandwidth	Sweep Time(s)		
9kHz	1		





#### A.2.5 Measurement Results

Measurement uncertainty: *U*=3.08dB, *k*=2.

Note: The measurement results showed here are worst cases of the combinations of different Battery, cables and Headset.

Note: The measurement results showed here are worst cases.

#### EUT1 Charger+Back Camera+GSM 850MHz idle Mode, Set.1

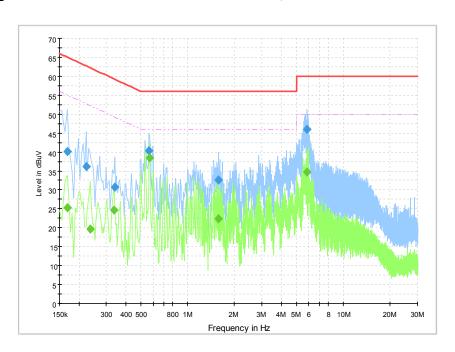


Figure A.13 Conducted Emission

#### Final Result 1

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Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(ms)	(kHz)			(dB)	(dB)	(dBuV)
0.168000	40.0	3000.0	9.000	On	L1	19.7	25.0	65.1
0.222000	36.2	3000.0	9.000	On	L1	19.7	26.6	62.7
0.339000	30.7	3000.0	9.000	On	N	19.7	28.5	59.2
0.564000	40.3	3000.0	9.000	On	L1	19.8	15.7	56.0
1.572000	32.5	3000.0	9.000	On	L1	19.7	23.5	56.0
5.824500	45.9	3000.0	9.000	On	L1	19.7	14.1	60.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(ms)	(kHz)			(dB)	(dB)	(dBuV)
0.168000	25.3	3000.0	9.000	On	L1	19.7	29.8	55.1
0.235500	19.7	3000.0	9.000	On	N	19.7	32.6	52.3
0.334500	24.6	3000.0	9.000	On	L1	19.7	24.7	49.3
0.568500	38.4	3000.0	9.000	On	L1	19.8	7.6	46.0
1.567500	22.5	3000.0	9.000	On	L1	19.7	23.5	46.0
5.824500	34.7	3000.0	9.000	On	L1	19.7	15.3	50.0





## EUT1 Charger+MP4 Mode, Set.1

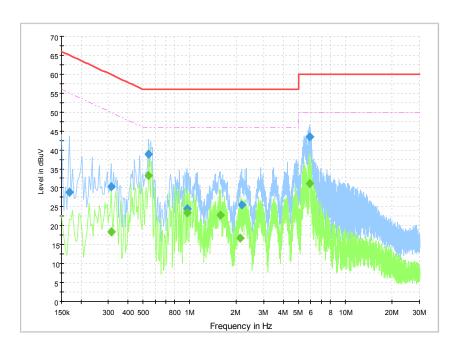


Figure A.14 Conducted Emission

#### Final Result 1

Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(ms)	(kHz)			(dB)	(dB)	(dBuV)
0.168000	28.8	3000.0	9.000	On	L1	19.7	36.3	65.1
0.312000	30.2	3000.0	9.000	On	L1	19.7	29.7	59.9
0.546000	38.9	3000.0	9.000	On	L1	19.8	17.1	56.0
0.960000	24.4	3000.0	9.000	On	N	19.7	31.6	56.0
2.152500	25.4	3000.0	9.000	On	L1	19.7	30.6	56.0
5.887500	43.5	3000.0	9.000	On	L1	19.7	16.5	60.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(ms)	(kHz)			(dB)	(dB)	(dBuV)
0.312000	18.4	3000.0	9.000	On	L1	19.7	31.5	49.9
0.546000	33.2	3000.0	9.000	On	L1	19.8	12.8	46.0
0.960000	23.4	3000.0	9.000	On	L1	19.7	22.6	46.0
1.576500	22.7	3000.0	9.000	On	L1	19.7	23.3	46.0
2.103000	16.7	3000.0	9.000	On	L1	19.7	29.3	46.0
5.932500	31.1	3000.0	9.000	On	L1	19.7	18.9	50.0





### **EUT1 Charger+FM Mode, Set.1**

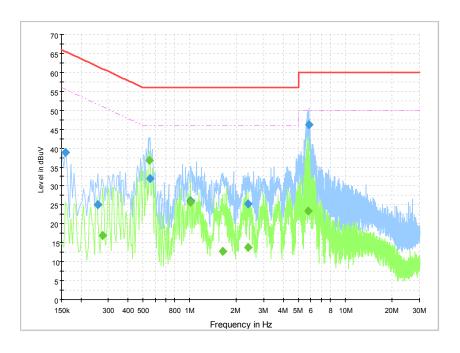


Figure A.15 Conducted Emission

#### Final Result 1

Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(ms)	(kHz)			(dB)	(dB)	(dBuV)
0.159000	38.9	3000.0	9.000	On	L1	19.7	26.6	65.5
0.258000	25.1	3000.0	9.000	On	N	19.7	36.4	61.5
0.555000	31.9	3000.0	9.000	On	N	19.8	24.1	56.0
1.014000	26.1	3000.0	9.000	On	N	19.6	29.9	56.0
2.368500	25.3	3000.0	9.000	On	L1	19.7	30.7	56.0
5.802000	46.1	3000.0	9.000	On	L1	19.7	13.9	60.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(ms)	(kHz)			(dB)	(dB)	(dBuV)
0.276000	16.8	3000.0	9.000	On	L1	19.7	34.1	50.9
0.550500	36.7	3000.0	9.000	On	L1	19.8	9.3	46.0
1.014000	25.7	3000.0	9.000	On	L1	19.6	20.3	46.0
1.630500	12.8	3000.0	9.000	On	L1	19.7	33.2	46.0
2.382000	13.8	3000.0	9.000	On	L1	19.7	32.2	46.0
5.757000	23.3	3000.0	9.000	On	N	19.7	26.7	50.0





## **EUT1 USB + SD + Front Camera Mode, Set.2**

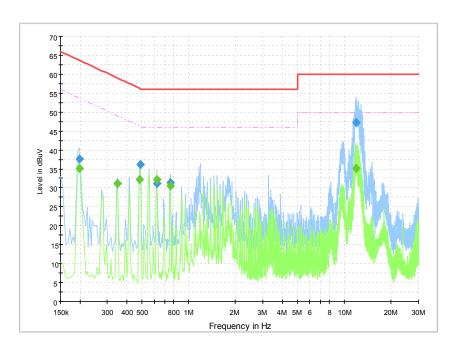


Figure A.16 Conducted Emission

#### Final Result 1

Frequency	QuasiPeak	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(ms)	(kHz)			(dB)	(dB)	(dBuV)
0.199500	37.7	5000.0	9.000	On	N	19.6	25.9	63.6
0.348000	31.1	5000.0	9.000	On	N	19.7	27.9	59.0
0.487500	36.1	5000.0	9.000	On	N	19.8	20.1	56.2
0.622500	31.2	5000.0	9.000	On	N	19.7	24.8	56.0
0.762000	31.4	5000.0	9.000	On	L1	19.7	24.6	56.0
11.850000	47.3	5000.0	9.000	On	L1	19.8	12.7	60.0

Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBuV)	(ms)	(kHz)			(dB)	(dB)	(dBuV)
0.199500	35.1	5000.0	9.000	On	N	19.6	18.5	53.6
0.348000	31.1	5000.0	9.000	On	N	19.7	17.9	49.0
0.483000	32.1	5000.0	9.000	On	L1	19.8	14.2	46.3
0.622500	32.1	5000.0	9.000	On	L1	19.7	13.9	46.0
0.762000	30.5	5000.0	9.000	On	N	19.7	15.5	46.0
11.850000	35.1	5000.0	9.000	On	L1	19.8	14.9	50.0





## **ANNEX B: Persons involved in this testing**

Test Item	Tester				
Conducted Continuous Emission	Li Zongliang				
Radiated Continuous Emission	Guo Qian				

\*\*\*END OF REPORT\*\*\*