

# FCC REPORT

**Applicant:** HMD global Oy

**Address of Applicant:** Bertel Jungin aukio 9, 02600 Espoo, Finland

## Equipment Under Test (EUT)

**Product Name:** Smart Phone

**Model No.:** TA-1390

**Trade mark:** NOKIA

**FCC ID:** 2AJOTTA-1390

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart B

**Date of sample receipt:** 19 Aug., 2021

**Date of Test:** 20 Aug., to 28 Aug., 2021

**Date of report issued:** 29 Aug., 2021

**Test Result:** PASS \*

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang

Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**2 Version**

Version No.	Date	Description
00	29 Aug., 2021	Original

**Tested by:**Mike.Ou  
Test Engineer**Date:**

29 Aug., 2021

**Reviewed by:**Winner Zhang  
Project Engineer**Date:**

29 Aug., 2021

### 3 Contents

	Page
<b>1 COVER PAGE.....</b>	<b>1</b>
<b>2 VERSION.....</b>	<b>2</b>
<b>3 CONTENTS.....</b>	<b>3</b>
<b>4 TEST SUMMARY.....</b>	<b>4</b>
<b>5 GENERAL INFORMATION.....</b>	<b>5</b>
5.1 CLIENT INFORMATION .....	5
5.2 GENERAL DESCRIPTION OF E.U.T. ....	5
5.3 TEST MODE.....	7
5.4 MEASUREMENT UNCERTAINTY.....	7
5.5 DESCRIPTION OF SUPPORT UNITS .....	8
5.6 RELATED SUBMITTAL(S) / GRANT (s).....	8
5.7 DESCRIPTION OF CABLE USED .....	8
5.8 ADDITIONS TO, DEVIATIONS, OR EXCLUSIONS FROM THE METHOD .....	8
5.9 LABORATORY FACILITY.....	8
5.10 LABORATORY LOCATION.....	8
5.11 TEST INSTRUMENTS LIST.....	9
<b>6 TEST RESULTS AND MEASUREMENT DATA.....</b>	<b>10</b>
6.1 CONDUCTED EMISSION.....	10
6.2 RADIATED EMISSION .....	13
<b>7 TEST SETUP PHOTO .....</b>	<b>19</b>
<b>8 EUT CONSTRUCTIONAL DETAILS .....</b>	<b>19</b>

## 4 Test Summary

Test Item	Section in CFR 47	Result
Conducted Emission	Part 15.107	Pass
Radiated Emission	Part 15.109	Pass
<b>Remark:</b>		
1. Pass: The EUT complies with the essential requirements in the standard.		
Test Method:	ANSI C63.4:2014	

## 5 General Information

### 5.1 Client Information

Applicant:	HMD global Oy
Address:	Bertel Jungin aukio 9, 02600 Espoo, Finland
Manufacturer:	HMD global Oy
Address:	Bertel Jungin aukio 9, 02600 Espoo, Finland

### 5.2 General Description of E.U.T.

Product Name:	Smart Phone		
Model No.:	TA-1390		
Frequency Bands:	Band	TX Frequency (MHz)	RX Frequency (MHz)
	GSM850:	824~849	869~894
	GSM1900	1850~1910	1930~1990
	WCDMA Band II:	1850~1910	1930~1990
	WCDMA Band IV:	1710~1755	2110~2155
	WCDMA Band V:	824~849	869~894
	LTE Band 2:	1850~1910	1930~1990
	LTE Band 4:	1710~1755	2110~2155
	LTE Band 5:	824~849	869~894
	LTE Band 7:	2500~2570	2620~2690
	LTE Band 12:	699~716	729~746
	LTE Band 13:	777~787	746~756
	LTE Band 17:	704~716	734~746
	LTE Band 25:	1850~1915	1930~1995
	LTE Band 26:	814~849	859~894
	LTE Band 38:	2570~2620	2570~2620
	LTE Band 41:	2496~2690	2496~2690
	LTE Band 66:	1710~1780	2110~2200
	LTE Band CA_7C:	2500~2570	2620~2690
	LTE Band CA_38C:	2570~2620	2570~2620
	LTE Band CA_41C:	2496~2690	2496~2690
	NR n2:	1850~1910	1930~1990
	NR n5:	824~849	869~894
	NR n7:	2500~2570	2620~2690
	NR n38:	2570~2620	2570~2620
	NR n41:	2496~2690	2496~2690
	NR n66:	1710~1780	2110~2200
	NR n71:	663~698	617~652
	NR n78:	3450~3550	3450~3550
	Wi-Fi 2.4G	2412~2462	2412~2462
	Bluetooth	2402~2480	2402~2480
	Wi-Fi 5G	5150~5850	5150~5850
	GNSS(GPS + Galileo + Glonass + Beidou)	/	1599~1610
	NFC	13.56	13.56
	FM	/	88~108

Power supply:	Rechargeable Lithium ion Polymer Battery DC3.85V, 4.85Ah
AC adapter:	<p>Adapter 1: Model: TN-050200U3, TN-050200E3, TN-050200C3A Input: AC100-240V, 50/60Hz, 0.35A Output: DC 5.0V, 2.0A 10.0W Note: Only the pins are different between different models</p> <p>Adapter 2: Model: TN-050200U3, TN-050200A3, TN-050200C3A Input: AC100-240V, 50/60Hz, 0.35A Output: DC 5.0V, 2.0A 10.0W Note: Only the pins are different between different models</p> <p>Adapter 3: Model: AD-010A, AD-010X Input: AC100-240V, 50/60Hz, 0.35A Output: DC 5.0V, 2.0A 10.0W Note: Only the pins are different between different models</p>
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

### 5.3 Test Mode

Operating mode	Detail description
TM 1 mode	Keep the EUT and PC data exchange (Worst case)
TM 2 mode	Keep the EUT in Charging+Recording mode
TM 3 mode	Keep the EUT in Charging+Playing mode
TM 4 mode	Keep the EUT in FM receiver mode
TM 5 mode	Keep the EUT in GPS receiver mode
TM 6 mode	GSM850 Idle+BT+WLAN +GPS Rx+playing MP4 (SD card)+NFC+adapter
TM 7 mode	WCDMA Band V Idle+BT+WLAN +GPS Rx+playing MP4 (SD card)+NFC+adapter
TM 8 mode	LTE Band 5 Idle+BT+WLAN +GPS Rx+playing MP4 (SD card)+NFC+adapter
TM 9 mode	LTE Band 12 Idle +BT+WLAN +GPS Rx+playing MP4 (SD card)+NFC+adapter
TM 10 mode	LTE Band 13 Idle +BT+WLAN +GPS Rx+playing MP4 (SD card)+NFC+adapter
TM 11 mode	LTE Band 17 Idle +BT+WLAN +GPS Rx+playing MP4 (SD card)+NFC+adapter
TM 12 mode	NR n5 Idle +BT+WLAN +GPS Rx+playing MP4 (SD card)+NFC+adapter
TM 13 mode	NR n71 Idle +BT+WLAN +GPS Rx+playing MP4 (SD card)+NFC+adapter
Remark :	<ol style="list-style-type: none"> <li>1. During the test, pre-scan all mode, found TM 1 was worse case mode.</li> <li>2. Pre-scan all adapter and all USB Cable, found adapter 1 and USB Cable 1 was worse case mode.</li> <li>3. The report only reflects the worst mode.</li> </ol>

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

### 5.4 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Conducted Emission (9kHz ~ 30MHz)	±2.62 dB (k=2)
Radiated Emission (9kHz ~ 30MHz) (3m SAC)	±3.13 dB
Radiated Emission (30MHz ~ 1000MHz) (3m SAC)	±4.45 dB
Radiated Emission (1GHz ~ 18GHz) (3m SAC)	±5.34 dB
Radiated Emission (18GHz ~ 40GHz) (3m SAC)	±5.34 dB

**Note:** The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.26-2015. All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

## 5.5 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
LENOVO	Laptop	SL510	2847A65	DoC
DELL	MOUSE	MS116t1	N/A	DoC
MERCURY	Wireless router	MW150R	12922104015	FCC ID

## 5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.

## 5.7 Description of Cable Used

Cable Type	Vendor	Model Name	Spec Info	Supplier PN
Detached USB Cable 1	Shenzhen Chuangytong Technology Co., Ltd.	88806-025	Type-C/2A data cable/1M/AWG2 4/Black/CYT	P103-BVJ130-010
Detached USB Cable 2	Shenzhen Yihuaxing Electronics CO.,Ltd.	T365-011B	Type-C/2A data cable/1M/AWG2 4/Black/YHX	P103-BVJ130-000
Detached headset cable	DongGuan LongTa Xin Electronics Co.,Ltd	LTX-LH021	3.5 round wire semi-in-ear type/low end with wheat/black 1.2m	P106-BTX130-000

## 5.8 Additions to, deviations, or exclusions from the method

No

## 5.9 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

● **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

## 5.10 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://www.ccis-cb.com>

## 5.11 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Management Number	Cal.Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	SAEMC	9m*6m*6m	WXJ001-1	01-19-2021	01-18-2024
BiConiLog Antenna	SCHWARZBECK	VULB9163	WXJ002	03-03-2021	03-02-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	WXJ002-2	03-03-2021	03-02-2022
Pre-amplifier	HP	8447D	WXG001-2	03-07-2021	03-06-2022
Pre-amplifier	SKET	LNPA_0118G-50	WXG001-3	03-07-2021	03-06-2022
EMI Test Receiver	Rohde & Schwarz	ESRP7	WXJ003-1	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP30	WXJ004	03-03-2021	03-02-2022
Signal Generator	Agilent	N5173B	WXJ006-7	03-25-2021	03-24-2022
Simulated Station	Rohde & Schwarz	CMW500	WXJ008-3	06-17-2021	06-16-2022
RF Switch Unit	Tonscend	JS0806-F	WXJ089	N/A	
Test Software	Tonscend	TS+	Version: 3.0.0.1		

Conducted Emission:					
Test Equipment	Manufacturer	Model No.	Management Number	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
EMI Test Receiver	Rohde & Schwarz	ESCI	WXJ003	03-03-2021	03-02-2022
LISN	Rohde & Schwarz	ENV432	WXJ005-2	04-06-2021	04-05-2022
LISN	Rohde & Schwarz	ESH3-Z5	WXJ005-1	06-17-2020	06-16-2022
Coaxial Cable	JYT	JYTCE-1G-NN-2M	WXG003-1	03-03-2021	03-02-2022
Simulated Station	Rohde & Schwarz	CMW500	WXJ008-3	06-17-2021	06-16-2022
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY60192444	11-27-2020	11-26-2021
RF Switch	Top Precision	RSU0301	WXG003	N/A	N/A
EMI Test Software	AUDIX	E3	Version: 6.110919b		

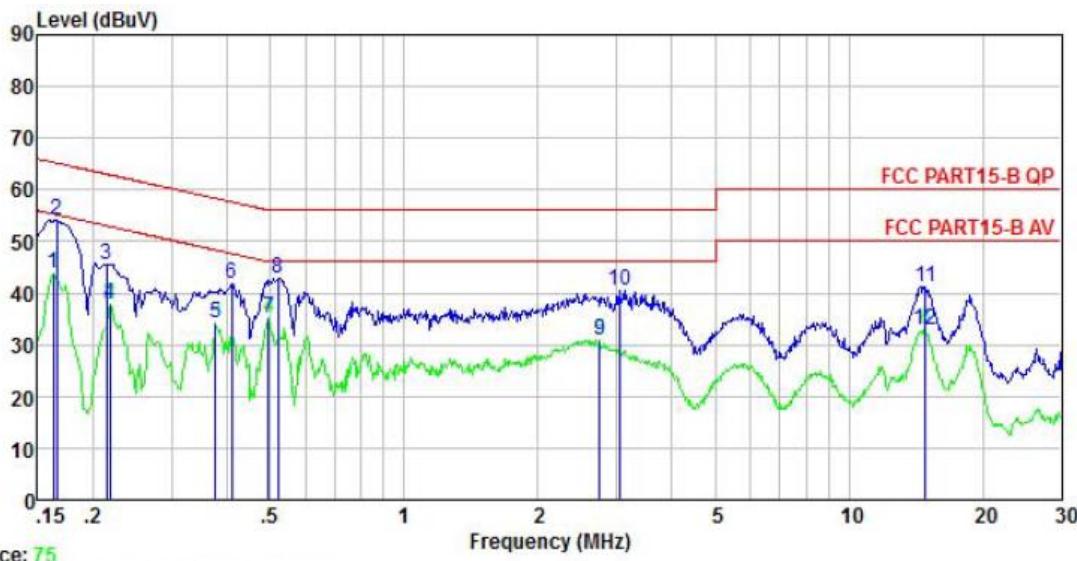
## 6 Test results and Measurement Data

### 6.1 Conducted Emission

Test Requirement:	FCC Part 15 B Section 15.107		
Test Frequency Range:	150kHz to 30MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9kHz, VBW=30kHz		
Limit:	Frequency range (MHz)		Limit (dB $\mu$ V)
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	0.5-30	60	50
* Decreases with the logarithm of the frequency.			
Test setup:	<p>Reference Plane</p> <p>LISN</p> <p>AUX Equipment</p> <p>E.U.T</p> <p>Test table/Insulation plane</p> <p>EMI Receiver</p> <p>Filter</p> <p>AC power</p> <p>40cm</p> <p>80cm</p> <p>Remark: E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>		
Test procedure	<ol style="list-style-type: none"> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). They provide a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4(latest version) on conducted measurement.</li> </ol>		
Test Instruments:	Refer to section 5.11 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Pass		

**Measurement data:**

<b>Product name:</b>	Smart Phone	<b>Product model:</b>	TA-1390
<b>Test by:</b>	Mike	<b>Test mode:</b>	TM 1 mode
<b>Test frequency:</b>	150 kHz ~ 30 MHz	<b>Phase:</b>	Line
<b>Test voltage:</b>	AC 120 V/60 Hz	<b>Environment:</b>	Temp: 22.5°C Huni: 55%

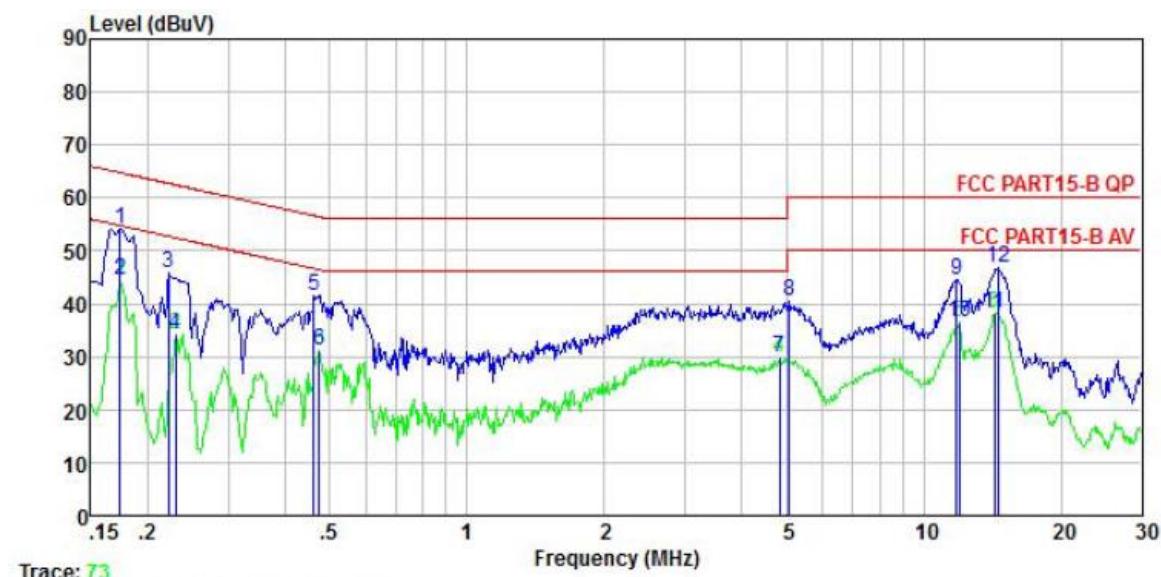


Freq	Read	LISN	Aux	Cable	Limit	Over	Line	Limit	Remark
	Freq	Level	Factor	Factor					
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	dB	
1	0.162	33.59	10.22	-0.08	0.01	43.74	55.34	-11.60	Average
2	0.166	43.95	10.22	-0.09	0.01	54.09	65.16	-11.07	QP
3	0.214	35.56	10.24	-0.18	0.03	45.65	63.05	-17.40	QP
4	0.219	27.72	10.24	-0.18	0.03	37.81	52.88	-15.07	Average
5	0.377	23.61	10.27	0.27	0.03	34.18	48.34	-14.16	Average
6	0.410	31.06	10.28	0.33	0.04	41.71	57.64	-15.93	QP
7	0.497	25.22	10.29	-0.32	0.03	35.22	46.05	-10.83	Average
8	0.521	32.96	10.29	-0.36	0.03	42.92	56.00	-13.08	QP
9	2.750	20.61	10.35	-0.23	0.10	30.83	46.00	-15.17	Average
10	3.041	30.23	10.35	-0.20	0.07	40.45	56.00	-15.55	QP
11	14.828	26.73	10.76	3.54	0.14	41.17	60.00	-18.83	QP
12	14.828	18.43	10.76	3.54	0.14	32.87	50.00	-17.13	Average

**Notes:**

- An initial pre-scan was performed on the line and neutral lines with peak detector.
- Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- Final Level =Receiver Read level + LISN Factor + Aux Factor + Cable Loss.

<b>Product name:</b>	Smart Phone	<b>Product model:</b>	TA-1390
<b>Test by:</b>	Mike	<b>Test mode:</b>	TM 1 mode
<b>Test frequency:</b>	150 kHz ~ 30 MHz	<b>Phase:</b>	Neutral
<b>Test voltage:</b>	AC 120 V/60 Hz	<b>Environment:</b>	Temp: 22.5°C Huni: 55%



Freq MHz	Read Level dBuV	LISN Factor dB	Aux Factor dB	Cable Loss dB	Level dBuV	Limit Line dBuV	Over Line dB	Over Limit Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1 0.174	44.03	10.21	0.00	0.01	54.25	64.77	-10.52	QP
2 0.174	34.24	10.21	0.00	0.01	44.46	54.77	-10.31	Average
3 0.222	35.72	10.23	0.00	0.03	45.98	62.74	-16.76	QP
4 0.230	23.85	10.23	0.00	0.02	34.10	52.44	-18.34	Average
5 0.461	31.18	10.28	0.00	0.03	41.49	56.67	-15.18	QP
6 0.474	20.77	10.28	0.01	0.03	31.09	46.45	-15.36	Average
7 4.822	18.85	10.41	0.65	0.09	30.00	46.00	-16.00	Average
8 5.085	29.41	10.41	0.68	0.09	40.59	60.00	-19.41	QP
9 11.807	31.71	10.65	2.09	0.10	44.55	60.00	-15.45	QP
10 11.933	23.74	10.65	2.12	0.10	36.61	50.00	-13.39	Average
11 14.288	24.44	10.71	2.91	0.13	38.19	50.00	-11.81	Average
12 14.594	33.14	10.72	2.98	0.13	46.97	60.00	-13.03	QP

**Notes:**

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Aux Factor + Cable Loss.

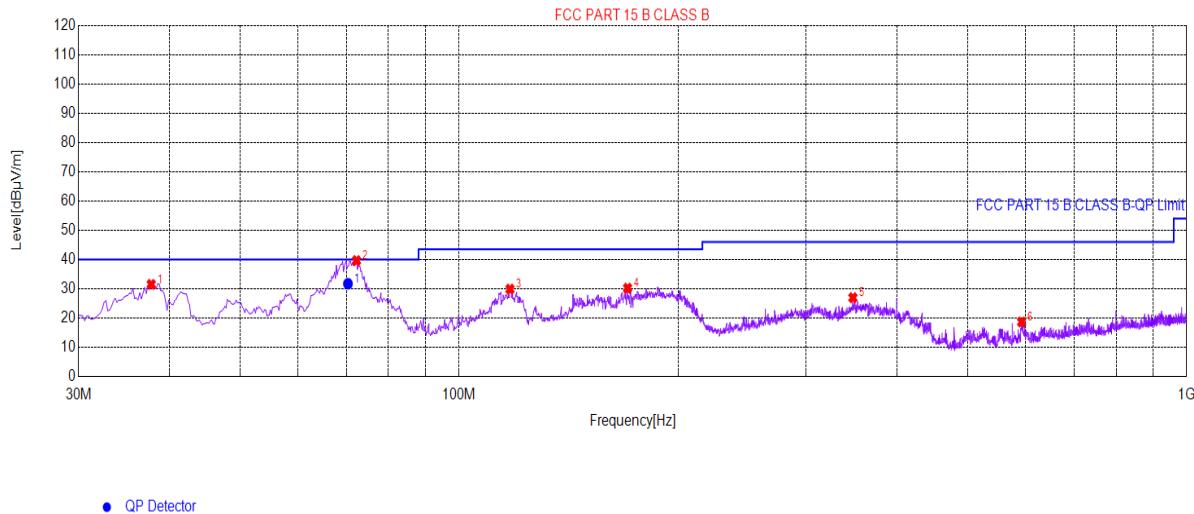
## 6.2 Radiated Emission

Test Requirement:	FCC Part 15 B Section 15.109													
Test Frequency Range:	30MHz to 6000MHz													
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)													
Receiver setup:	Frequency	Detector	RBW	VBW	Remark									
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value									
	Above 1GHz	Peak	1MHz	3MHz	Peak Value									
Limit:	RMS	1MHz	3MHz	Average	Value									
	Frequency	Limit (dBuV/m @3m)		Remark										
	30MHz-88MHz	40.0		Quasi-peak Value										
	88MHz-216MHz	43.5		Quasi-peak Value										
	216MHz-960MHz	46.0		Quasi-peak Value										
	960MHz-1GHz	54.0		Quasi-peak Value										
Test setup:	Above 1GHz													
	Below 1GHz													
Test Procedure:	<ol style="list-style-type: none"> <li>The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters 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.</li> </ol>													

	<ol style="list-style-type: none"><li>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</li><li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li><li>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li></ol>
Test Instruments:	Refer to section 5.11 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	All of the observed value above 6GHz were the noise floor , which were not recorded

**Measurement Data:****Below 1GHz:**

<b>Product Name:</b>	Smart Phone	<b>Product Model:</b>	TA-1390
<b>Test By:</b>	Mike	<b>Test mode:</b>	TM 1 mode
<b>Test Frequency:</b>	30 MHz ~ 1 GHz	<b>Polarization:</b>	Vertical
<b>Test Voltage:</b>	AC 120V/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%

**Suspected List**

<b>Suspected List</b>									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	37.7616	54.75	31.50	-23.25	40.00	8.50	286	16	Vertical
2	72.3005	63.61	39.63	-23.98	40.00	0.37	242	2	Vertical
3	117.511	52.79	29.90	-22.89	43.50	13.60	331	283	Vertical
4	170.484	54.02	30.21	-23.81	43.50	13.29	378	126	Vertical
5	347.835	44.26	26.95	-17.31	46.00	19.05	255	349	Vertical
6	593.294	30.95	18.66	-12.29	46.00	27.34	177	132	Vertical

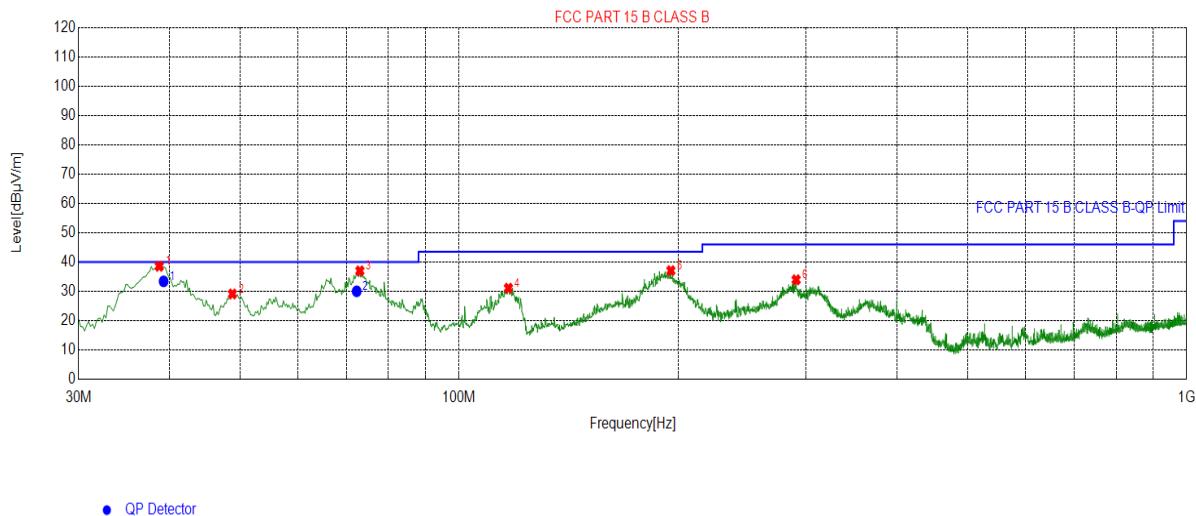
**Final Data List**

<b>Final Data List</b>								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	70.3625	-23.97	31.73	40.00	8.27	193	65.5	Vertical

**Remark:**

1. Final Level = Receiver Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

<b>Product Name:</b>	Smart Phone	<b>Product Model:</b>	TA-1390
<b>Test By:</b>	Mike	<b>Test mode:</b>	TM 1 mode
<b>Test Frequency:</b>	30 MHz ~ 1 GHz	<b>Polarization:</b>	Horizontal
<b>Test Voltage:</b>	AC 120V/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%



### Suspected List

<b>Suspected List</b>									
NO.	Freq. [MHz]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Factor [dB]	Limit [dB $\mu$ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	38.7317	61.62	38.54	-23.08	40.00	1.46	263	317	Horizontal
2	48.8218	51.32	29.11	-22.21	40.00	10.89	172	290	Horizontal
3	73.0766	61.02	36.98	-24.04	40.00	3.02	203	172	Horizontal
4	116.929	53.95	31.08	-22.87	43.50	12.42	272	220	Horizontal
5	195.515	59.92	37.05	-22.87	43.50	6.45	282	43	Horizontal
6	290.594	52.91	33.93	-18.98	46.00	12.07	376	103	Horizontal

### Final Data List

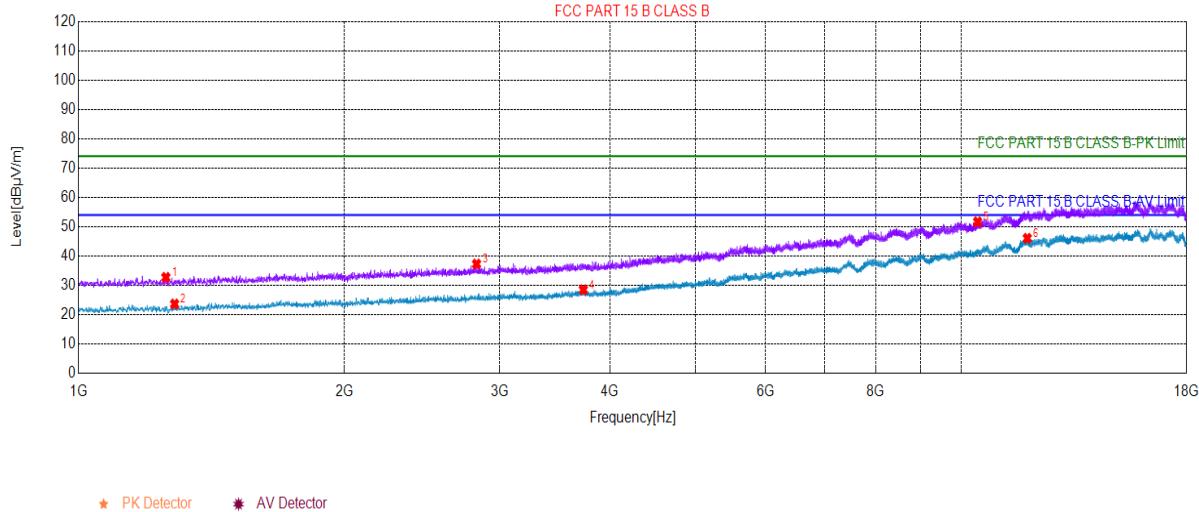
<b>Final Data List</b>							
NO.	Freq. [MHz]	Factor [dB]	QP Value [dB $\mu$ V/m]	QP Limit [dB $\mu$ V/m]	QP Margin [dB]	Height [cm]	Angle [°]
1	39.2607	-23.08	33.42	40.00	6.58	192	69.7
2	72.3376	-24.04	30.02	40.00	9.98	194	282.6

#### Remark:

- Final Level = Receiver Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

**Above 1GHz:**

<b>Product Name:</b>	Smart Phone	<b>Product Model:</b>	TA-1390
<b>Test By:</b>	Mike	<b>Test mode:</b>	TM 1 mode
<b>Test Frequency:</b>	1 GHz ~ 6 GHz	<b>Polarization:</b>	Vertical
<b>Test Voltage:</b>	AC 120V/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%

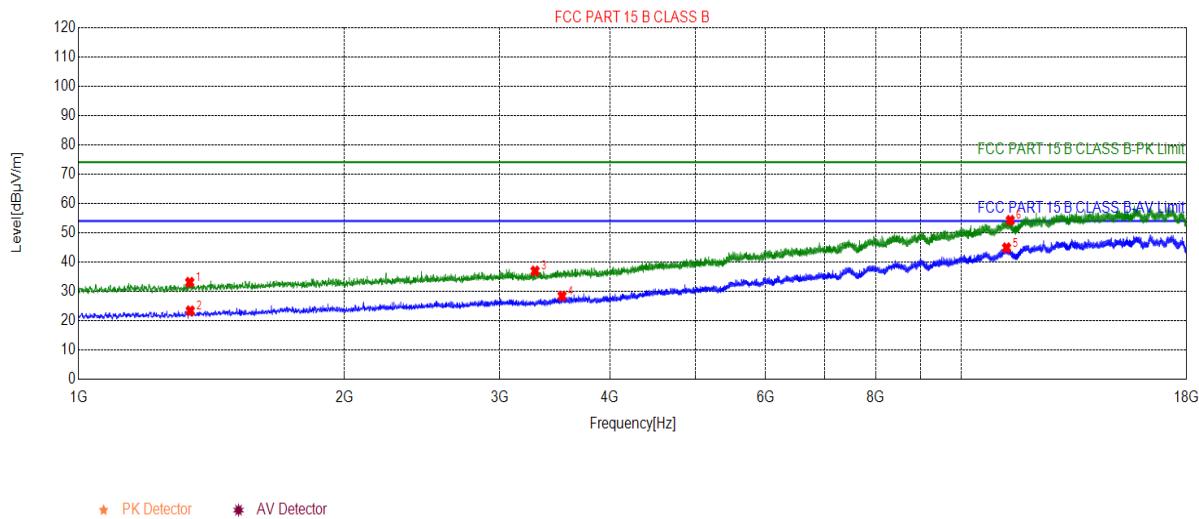
**Suspected List**

Suspected List									
NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1255.86	63.34	32.69	-30.65	74.00	41.31	173	315	Vertical
2	1284.76	54.13	23.63	-30.50	54.00	30.37	136	185	Vertical
3	2824.19	62.42	37.25	-25.17	74.00	36.75	175	130	Vertical
4	3731.18	51.50	28.47	-23.03	54.00	25.53	255	259	Vertical
5	10434.6	54.49	51.64	-2.85	74.00	22.36	167	359	Vertical
6	11878.8	45.18	46.03	0.85	54.00	7.97	158	70	Vertical

**Remark:**

1. Final Level = Receiver Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

<b>Product Name:</b>	Smart Phone	<b>Product Model:</b>	TA-1390
<b>Test By:</b>	Mike	<b>Test mode:</b>	TM 1 mode
<b>Test Frequency:</b>	1 GHz ~ 6 GHz	<b>Polarization:</b>	Horizontal
<b>Test Voltage:</b>	AC 120V/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%



### Suspected List

<b>Suspected List</b>									
NO.	Freq. [MHz]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Factor [dB]	Limit [dB $\mu$ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1336.61	63.25	33.07	-30.18	74.00	40.93	263	306	Horizonta
2	1338.31	53.51	23.34	-30.17	54.00	30.66	373	336	Horizonta
3	3290.01	61.23	36.92	-24.31	74.00	37.08	363	46	Horizonta
4	3529.72	52.03	28.38	-23.65	54.00	25.62	211	184	Horizonta
5	11253.2	46.44	44.84	-1.60	54.00	9.16	353	2	Horizonta
6	11363.7	55.21	54.20	-1.01	74.00	19.80	205	291	Horizonta

### Remark:

- Final Level = Receiver Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

## 7 Test Setup Photo

Reference to the test setup photos: 15B-Test Setup Photo

## 8 EUT Constructional Details

Reference to the External photo and Internal photo.

-----End of report-----