



# FCC PART 15B TEST REPORT

No. I22Z60130-EMC01

for

**TCL Communication Ltd.**

**5G NR/LTE/WCDMA/GSM mobile phone**

**Model name: T7760**

**FCC ID: 2ACCJN065**

with

**Hardware Version: 03**

**Software Version: v4.0.7FA6**

**Issued Date: 2022-03-08**

**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.

**Test Laboratory:**

CTTL-Telecommunication Technology Labs, CAICT

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## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I22Z60130-EMC01	Rev.0	1 <sup>st</sup> edition	2022-03-08

Note: the latest revision of the test report supersedes all previous version.



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## 1. Test Laboratory

### 1.1. Testing Location

CTTL (huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,  
P. R. China 100191

### 1.2. Testing Environment

Normal Temperature: 15-35° C

Relative Humidity: 20-75%

### 1.3. Project data

Testing Start Date: 2022-02-13


Testing End Date: 2022-02-23

### 1.4. Signature



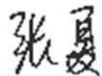
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Wang Xue  
(Prepared this test report)



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(Reviewed this test report)



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Zhang Xia  
(Approved this test report)



## **2. Client Information**

### **2.1. Applicant Information**

Company Name: TCL Communication Ltd.  
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### **2.2. Manufacturer Information**

Company Name: TCL Communication Ltd.  
Address: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong  
Contact Person Peter yang  
Contact Email peter.yang@tcl.com  
Telephone: +86 755 3664 5759  
Fax: +86 755 3664 5759

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

#### **3.1. About EUT**

Description	5G NR/LTE/WCDMA/GSM mobile phone
Model Name	T776O
FCC ID:	2ACCJN065

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

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

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	016197000031555	03	v4.0.7FA6

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

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

AE ID*	Description	SN	Remarks
AE1	Battery	/	/
AE2	USB Cable	/	/
AE3	Charger	/	/
AE4	Headset	/	/

##### AE1

Model	TLp049B7
Manufacturer	VEKEN
Capacity	4900mAh
Nominal Voltage	

##### AE2

Model	CDA0000128C1
Manufacturer	JUWEI
Length of cable	/

##### AE3

Model	QC13US
Manufacturer	BYD
Length of cable	/

##### AE4

Model	WH35
Manufacturer	JUWEI
Length of cable	/

\*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	Charger1 + REAR Camera + GSM 850 idle



Set.2	EUT1 + AE1 + AE2 + AE3	Charger1 + MP4 + WCDMA 850 idle
Set.3	EUT1 + AE1 + AE2 + AE4	USB + front camera +LTE B5 idle + FM

**Note:**

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

It supports

GSM Band	GSM900/DCS1800/PCS1900/GSM850
UMTS Band	FDD Band I(W2100)/FDD Band II(W1900) /FDD Band IV(W1700)/FDD Band V(W850)/ FDD VIII(W900)
LTE Band	FDD1/FDD2/FDD3/FDD4/FDD5/ FDD7/FDD12/FDD13/FDD17/FDD20/ FDD25/ FDD26/ FDD28/ FDD29/TDD38/ TDD40/TDD41/ TDD42/ TDD48/FDD66/ FDD71
LTE DL 2CA Band	CA_2A-2A,CA_2C,CA_2A-4A,CA_2A-5A, CA_2A-7A,CA_2A-12A,CA_2A-13A,CA_2A_28A, CA_2A-29A,CA_2A-38A,CA_2A-66A,CA_2A-71A, CA_3C,CA_4A-5A,CA_4A-7A,CA_4A-12A,CA_4A-13A, CA_4A-17A,CA_4A-28A,CA_4A-29A,CA_4A-71A,CA_5A-7A, CA_5A-41A,CA_5A-66A,CA_7A-7A,CA_7C,CA_7A-12A, CA_7A-13A,CA_7A-25A,CA_7A-28A,CA_7A-29A, CA_7A-66A,CA_7A-71A,CA_12A-25A,CA_12A-66A, CA_13A-66A,CA_25A-25A,CA_25A-66A,CA_28C,CA_28A-38A, CA_29A-66A,CA_41A-41A,CA_41A-48A,CA_66A-66A,CA_66A-71A
NR Band	n2(only NSA)/n5/n7(only NSA)/n25/n28(only NSA)/n41/n66/n71/n77/n78
NR DL Band-ENDC	2A_n2A/5A_n2A/12A_n2A/13A_n2A/66A_n2A/71A_n2A/ 2A-5A_n2A/2A-12A_n2A/2A-13A_n2A/2A-66A_n2A/5A-66A_n2A/ 2A-71A_n2A/12A-66A_n2A/13A-66A_n2A/2A_n5A/7A_n5A/ 66A_n5A/2A-2A_n5A/2A-66A_n5A/7A-7A_n5A/ 66A-66A_n5A/7A_n25A/2A_n25A/12A_n25A/66A_n25A/ 2A-7A_n25A/2A-66A_n25A/12A-66A_n25A/2A_n41A/4A_n41A/ 12A_n41A/25A_n41A/66A_n41A/71A_n41A/2A-4A_n41A/ 2A-12A_n41A/2A-66A_n41A/2A-71A_n41A/12A-66A_n41A/ 66A-71A_n41A/2A_n66A/5A_n66A/7A_n66A/12A_n66A/ 13A_n66A/66A_n66A/71A_n66A/2A-5A_n66A/ 2A-12A_n66A/2A-13A_n66A/2A-66A_n66A/2A-71A_n66A/ 5A-7A_n66A/5A-66A_n66A/7A-7A_n66A/7A-12A_n66A/ 7A-13A_n66A/7A-66A_n66A/7A-71A_n66A/12A-66A_n66A/ 13A-66A_n66A/7C_n66A/2A-7A_n66A/2A_n71A/7A_n71A/ 66A_n71A/2A-7A_n71A/2A-66A_n71A/7A-66A_n71A/ 2A_n77A/7A_n77A/12A_n77A/25A_n77A/66A_n77A/ 2A-7A_n77A/2A-29A_n77A/2A-66A_n77A/7A-7A_n77A/ 7A-25A_n77A/7A-29A_n77A/7A-66A_n77A/25A-25A_n77A/ 25A-66A_n77A/7C_n77A/5A_n77A/DC_13A_n77A/ 2A-2A_n77A/2A-5A_n77A/2A-13A_n77A/5A-66A_n77A/

13A-66A\_n77A/66A-66A\_n77A/2A\_n78A/5A\_n78A/7A\_n78A/  
12A\_n78A/25A\_n78A/28A\_n78A/66A\_n78A/71A\_n78A/  
2A-7A\_n78A/2A-12A\_n78A/2A-29A\_n78A/2A-38A\_n78A/  
2A-66A\_n78A/2A-71A\_n78A/5A-7A\_n78A/5A-66A\_n78A/  
7A-7A\_n78A/7A-12A\_n78A/7A-25A\_n78A/7A-28A\_n78A/  
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25A-25A\_n78A/66A-66A\_n78A/66A-71A\_n78A/7C\_n78A

NR UL Band-ENDC 2A\_n2A/5A\_n2A/12A\_n2A/13A\_n2A/66A\_n2A/71A\_n2A/  
2A\_n5A/7A\_n5A/66A\_n5A/2A\_n7A/28A\_n7A/66A\_n7A/  
7A\_n25A/2A\_n25A/12A\_n25A/66A\_n25A/  
2A\_n41A/4A\_n41A/12A\_n41A/25A\_n41A/66A\_n41A/  
71A\_n41A/2A\_n66A/5A\_n66A/7A\_n66A/12A\_n66A/  
13A\_n66A/66A\_n66A/71A\_n66A/2A\_n71A/7A\_n71A/  
66A\_n71A/2A\_n77A/7A\_n77A/12A\_n77A/25A\_n77A/  
66A\_n77/2A\_n78A/5A\_n78A/7A\_n78A/12A\_n78A/  
25A\_n78A/28A\_n78A/66A\_n78A/71A\_n78A/5A-n77A/13A-n77A

It has MP3, Camera, USB memory, FM, Bluetooth 5.1, Wi-Fi (802.11b/g/n/a/ac, 802.11n supports 20MHz and 40MHz bandwidth, 802.11ac supports 20MHz, 40MHz and 80MHz bandwidth) ,GNSS functions

The device contains receivers which tune and operate between 30MHz-960MHz in the following bands: GSM850, WCDMA850, LTE Band 5/12/13/17/20/26/28/71, NR band 5/71. All licensed band receivers that tune in the range of 30MHz-960MHz are investigated. Only the worst-case emissions are reported.



## **4. Reference Documents**

### **4.1. Reference Documents for testing**

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

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

Note: The test methods have no deviation with standards.

## 5. LABORATORY ENVIRONMENT

**Semi-anechoic chamber SAC-1** (10 meters×6.7meters×6.1meters) did not exceed following limits along the EMC testing:

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
Ground system resistance	< 4
Normalised site attenuation (NSA)	< ±4 dB, 3m distance
Site voltage standing-wave ratio ( $S_{VSWR}$ )	Between 0 and 6 dB, from 1GHz to 6GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 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
Ground system resistance	< 4

## 6. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:		
Verdict Column	P	Pass
	NA	Not applicable
	F	Fail

Items	Test Name	Clause in FCC rules	Section in this report	Verdict	Test Location
1	Radiated Emission	15.109(a)	B.1	P	CTTL(huayuan North Road)
2	Conducted Emission	15.107(a)	B.2	P	CTTL(huayuan North Road)

## 7. Test Equipments Utilized

NO.	Description	TYPE	SERIES NUMBER	MANUFACTURE	CAL DUE DATE	CALIBRATION INTERVAL
1	Test Receiver	ESW44	103023	R&S	2022-10-28	1 Year
2	Test Receiver	ESW44	103015	R&S	2022-09-03	1 Year
3	LISN	ENV216	101200	R&S	2022-05-30	1 year
4	Universal Radio Communication Tester	CMW500	116588	R&S	2022-12-20	1 year
5	Test Receiver	ESCI 7	100766	R&S	2022-04-09	1 Year
6	EMI Antenna	VULB 9163	01223	Schwarzbeck	2022-03-22	1 year
7	EMI Antenna	3115	00167250	ETS-Lindgren	2022-07-01	1 year
8	Signal Generator	SMBV100A	260613	R&S	2023-01-09	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 (USB mode of MS and charging mode of MS) at distances of 3 meters 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 USB mode and charging mode. During the test MS is connected to a PC via a USB cable in the case of USB mode and 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.

The model of the PC is M4000E-17, and the serial number of the PC is M706GWXD. The software is used to let the PC keep on copying data to MS, reading and erasing the data after copy action was finished.

Note: I/O information: Printer – USB, Mouse – PS/2, Keyboard – USB.

#### **A.1.3 Measurement Limit**

Frequency range (MHz)	Field strength limit ( $\mu\text{V}/\text{m}$ )		
	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.

#### **A.1.4 Test Condition**

Frequency range (MHz)	RBW/BW	Sweep Time (s)	Detector
30-1000	120kHz (IF Bandwidth)	5	Peak/Quasi-peak
Above 1000	1MHz/3MHz	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:

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

Where

$G_A$ : Antenna factor of receive antenna

$G_{\text{PL}}$ : Path Loss

$P_{\text{Mea}}$ : Measurement result on receiver.

Measurement uncertainty (worst case):  $U = 4.74 \text{ dB}$ ,  $k=2$ .

#### Measurement results for Set.1:

##### Charing Mode/Average detector

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17984.360	44.30	-29.06	46.66	26.70	54.00	9.70	V
17948.660	44.20	-28.94	46.66	26.48	54.00	9.80	H
17964.640	43.90	-29.06	46.66	26.30	54.00	10.10	V
17916.700	43.90	-29.33	46.66	26.57	54.00	10.10	V
17962.260	43.90	-29.06	46.66	26.30	54.00	10.10	H
17983.680	43.80	-29.06	46.66	26.20	54.00	10.20	V

##### Charging Mode/Peak detector

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17488.980	56.40	-29.77	44.35	41.82	74.00	17.60	V
17924.180	55.10	-29.40	46.66	37.84	74.00	18.90	H
17805.180	55.00	-29.63	45.95	38.68	74.00	19.00	V
17135.040	55.00	-29.66	42.36	42.29	74.00	19.00	V
17117.700	54.80	-29.41	42.36	41.85	74.00	19.20	V
17906.840	54.80	-29.33	45.95	38.17	74.00	19.20	H

**Measurement results for Set.2:**
**Charing Mode/Average detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17932.680	44.00	-29.40	46.66	26.74	54.00	10.00	V
17956.480	43.90	-28.94	46.66	26.18	54.00	10.10	V
17983.680	43.90	-29.06	46.66	26.30	54.00	10.10	H
17993.880	43.80	-29.06	46.66	26.20	54.00	10.20	H
17928.940	43.80	-29.40	46.66	26.54	54.00	10.20	V
17969.060	43.80	-29.06	46.66	26.20	54.00	10.20	V

**Charging Mode/Peak detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17893.240	55.90	-29.53	45.95	39.48	74.00	18.10	V
17911.260	55.20	-29.33	45.95	38.57	74.00	18.80	V
17940.840	55.10	-28.94	46.66	37.38	74.00	18.90	V
17606.280	54.80	-29.52	45.25	39.07	74.00	19.20	V
17961.920	54.80	-29.06	46.66	37.20	74.00	19.20	H
17950.020	54.80	-28.94	46.66	37.08	74.00	19.20	V

**Measurement results for Set.3:**
**USB Mode/Average detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
9703.320	46.70	-36.16	37.97	44.90	54.00	7.30	V
9703.660	46.20	-36.16	37.97	44.40	54.00	7.80	V
9702.980	45.10	-36.16	37.97	43.30	54.00	8.90	H
9704.000	45.00	-36.16	37.97	43.20	54.00	9.00	V
17957.500	44.30	-28.94	46.66	26.58	54.00	9.70	H
17963.960	44.30	-29.06	46.66	26.70	54.00	9.70	H

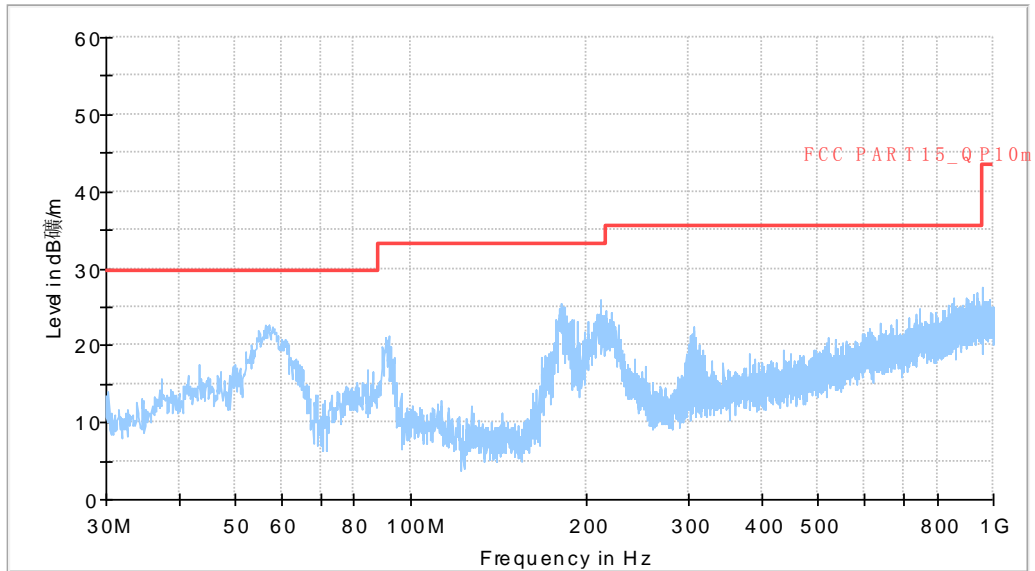
**USB Mode/Peak detector**

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17967.360	56.30	-29.06	46.66	38.70	74.00	17.70	V
17951.040	55.50	-28.94	46.66	37.78	74.00	18.50	H
17895.960	55.30	-29.53	45.95	38.88	74.00	18.70	V
17979.940	55.10	-29.06	46.66	37.50	74.00	18.90	V
17958.860	55.00	-28.94	46.66	37.28	74.00	19.00	V
17901.740	55.00	-29.33	45.95	38.37	74.00	19.00	V



Measurement results for Set.1:

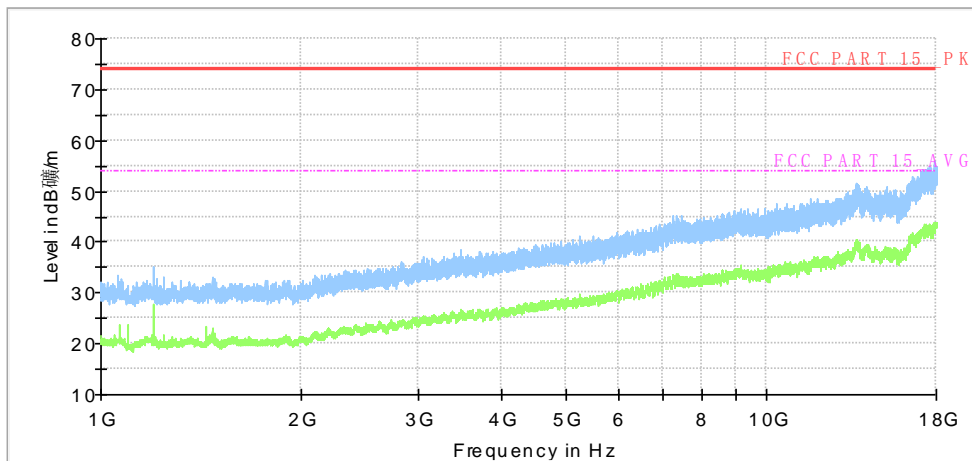
Full Spectrum



- Preview Result 1-PK+ [Preview Result 1.Result:1]
- \* Critical\_Freqs PK+ [Critical\_Freqs.Result:4]
- FCC PART 15\_QP10m [..]
- ◆ Final\_Result QPK [Final\_Result.Result:4]

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

Full Spectrum

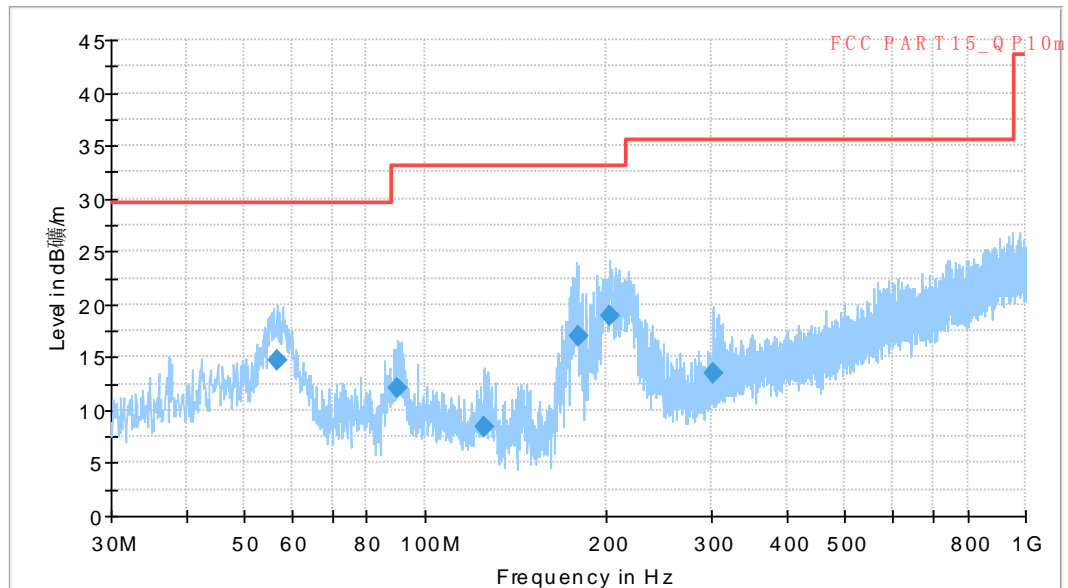


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- Preview Result 1-PK+ [Preview Result 1.Result:1]
- \* Critical\_Freqs AVG [Critical\_Freqs.Result:5]
- \* Critical\_Freqs PK+ [Critical\_Freqs.Result:4]
- FCC PART 15\_PK [..]
- FCC PART 15\_AVG [..]
- ◆ Final\_Result PK+ [Final\_Result.Result:4]
- ◆ Final\_Result AVG [Final\_Result.Result:5]

Fig A.2 Radiated Emission from 1GHz to 18GHz

### Measurement results for Set.2:

Full Spectrum



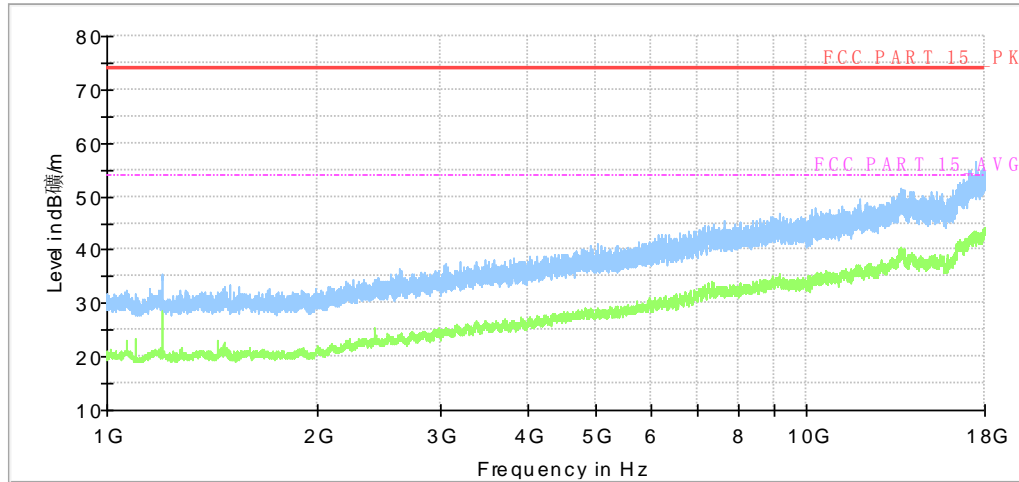
- Preview Result 1-PK+ [Preview Result 1.Result:1]
- \* Critical\_Freqs PK+ [Critical\_Freqs.Result:4]
- FCC PART 15\_QP10m [..]
- ◆ Final\_Result QPK [Final\_Result.Result:4]

Fig A.3 Radiated Emission from 30MHz to 1GHz

### Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
56.578000	14.67	29.54	14.87	2000.0	120.000	95.0	V	260.0
90.237000	12.10	33.06	20.96	2000.0	120.000	103.0	V	300.0
125.642000	8.34	33.06	24.72	2000.0	120.000	125.0	V	30.0
179.574000	16.97	33.06	16.09	2000.0	120.000	103.0	V	-28.0
203.145000	18.96	33.06	14.10	2000.0	120.000	125.0	V	-28.0
302.764000	13.52	35.56	22.04	2000.0	120.000	95.0	V	120.0

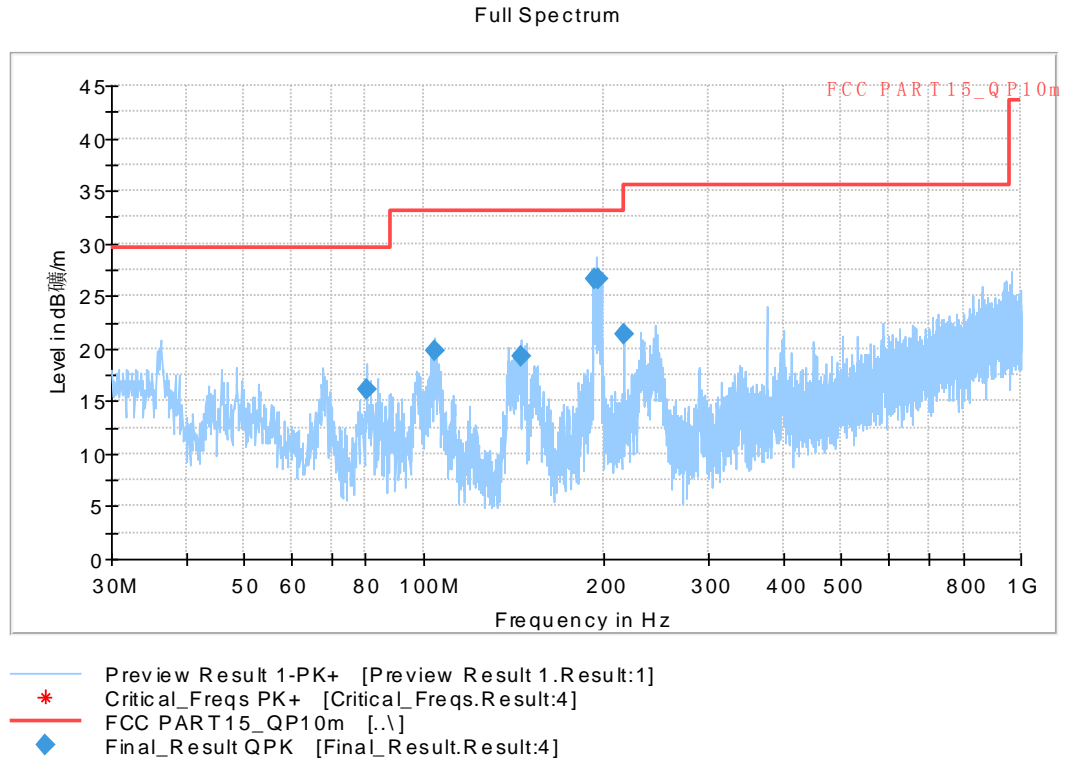
Full Spectrum



- Preview Result 2-AVG [Preview Result 2.Result:2]
- Preview Result 1-PK+ [Preview Result 1.Result:1]
- \* Critical\_Freqs AVG [Critical\_Freqs.Result:5]
- \* Critical\_Freqs PK+ [Critical\_Freqs.Result:4]
- FCC PART 15 \_PK [..]
- - - - - FCC PART 15\_AVG [..]
- ◆ Final\_Result PK+ [Final\_Result.Result:4]
- ◆ Final\_Result AVG [Final\_Result.Result:5]

**Fig A.4 Radiated Emission from 1GHz to 18GHz**

### Measurement results for Set.3:

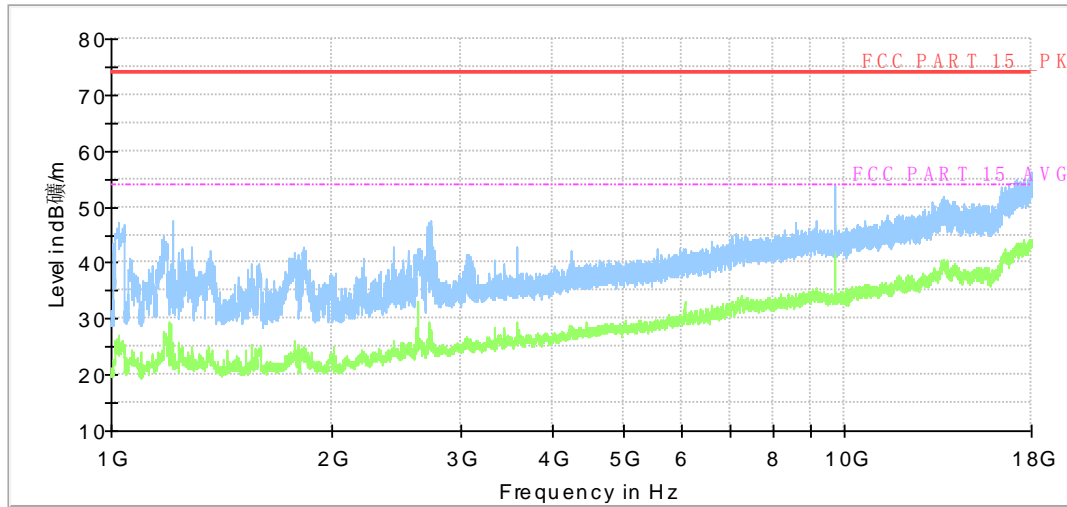


**Fig A.5 Radiated Emission from 30MHz to 1GHz**

### Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
80.246000	16.15	30.00	13.85	2000.0	120.000	125.0	V	63.0
104.496000	19.73	30.00	10.27	2000.0	120.000	125.0	V	30.0
145.818000	19.25	30.00	10.75	2000.0	120.000	125.0	V	300.0
192.669000	26.55	30.00	3.45	2000.0	120.000	125.0	V	-30.0
196.258000	26.53	30.00	3.47	2000.0	120.000	95.0	V	-30.0
215.949000	21.35	30.00	8.65	2000.0	120.000	106.0	V	63.0

Full Spectrum



- Preview Result 2-AVG [Preview Result 2.Result:2]
- Preview Result 1-PK+ [Preview Result 1.Result:1]
- \* Critical\_Freqs AVG [Critical\_Freqs.Result:5]
- \* Critical\_Freqs PK+ [Critical\_Freqs.Result:4]
- FCC PART 15 \_PK [..]
- - - - - FCC PART 15 \_AVG [..]
- ◆ Final\_Result PK+ [Final\_Result.Result:4]
- ◆ Final\_Result AVG [Final\_Result.Result:5]

**Fig A.6 Radiated Emission from 1GHz 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 USB mode and charging mode. During the test MS is connected to a PC via a USB cable in the case of USB mode and is connected to a charger in the case of charging mode. The model of the PC is DELL M4000E-17, and the serial number of the PC is M706GWXD. The software is used to let the PC keep on copying data to MS, reading and erasing the data after copy action was finished.

Note: I/O information: Printer – USB, Mouse – PS/2, Keyboard – USB.

### A.2.3 Measurement Limit

Frequency of emission (MHz)	Conducted limit (dB $\mu$ V)	
	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:  $U= 3.1 \text{ dB}$ ,  $k=2$ .

Charging Mode, Set.1:

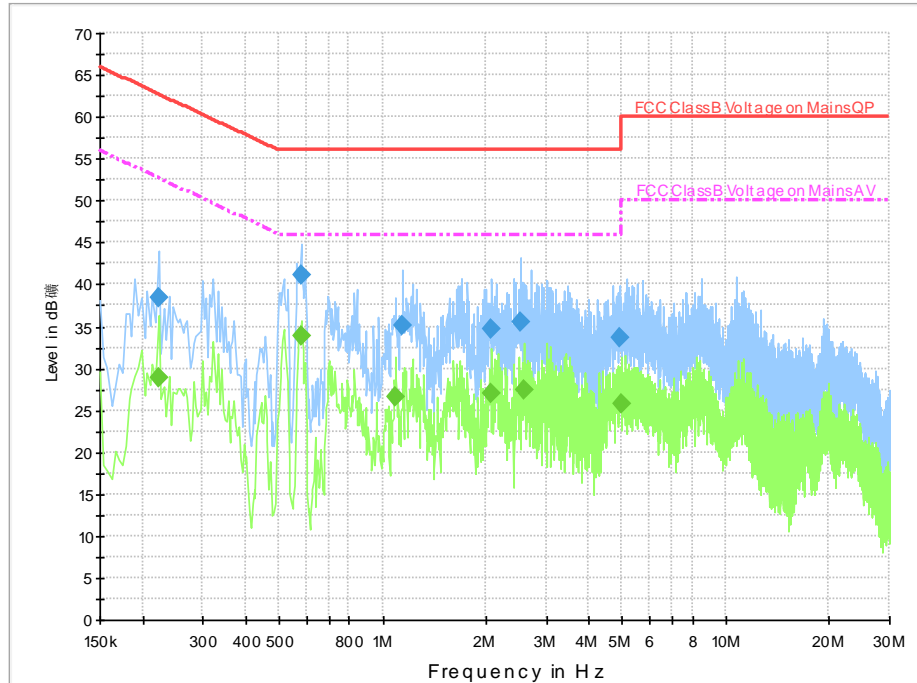


Fig A.7 Conducted Emission from 150kHz to 30MHz

#### Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.222000	38.4	5000.0	9.000	On	L1	20.0	24.4	62.7	
0.578000	41.1	5000.0	9.000	On	N	19.9	14.9	56.0	
1.142000	35.2	5000.0	9.000	On	N	19.8	20.8	56.0	
2.082000	34.7	5000.0	9.000	On	N	19.7	21.3	56.0	
2.534000	35.5	5000.0	9.000	On	N	19.7	20.5	56.0	
4.902000	33.7	5000.0	9.000	On	N	19.8	22.3	56.0	

#### Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.222000	28.9	5000.0	9.000	On	L1	20.0	23.8	52.7	
0.578000	34.0	5000.0	9.000	On	N	19.9	12.0	46.0	
1.090000	26.6	5000.0	9.000	On	N	19.8	19.4	46.0	
2.082000	27.1	5000.0	9.000	On	N	19.7	18.9	46.0	
2.578000	27.5	5000.0	9.000	On	N	19.7	18.5	46.0	
4.990000	25.7	5000.0	9.000	On	N	19.7	20.3	46.0	

### Charging Mode, Set.2:

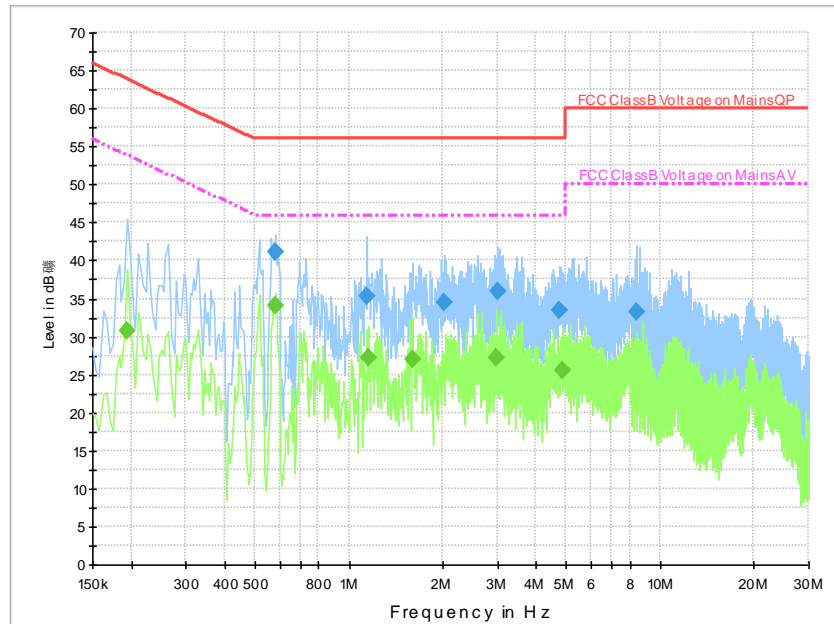


Fig A.8 Conducted Emission from 150kHz to 30MHz

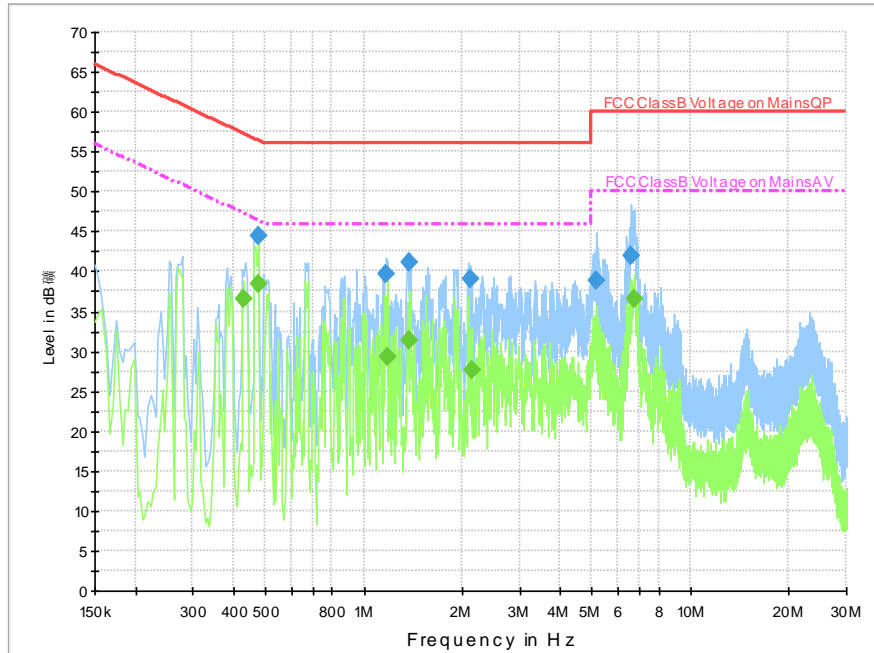
#### Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.578000	41.0	5000.0	9.000	On	N	19.9	15.0	56.0	
1.142000	35.4	5000.0	9.000	On	N	19.8	20.6	56.0	
2.022000	34.4	5000.0	9.000	On	N	19.7	21.6	56.0	
3.002000	35.9	5000.0	9.000	On	N	19.7	20.1	56.0	
4.746000	33.4	5000.0	9.000	On	N	19.7	22.6	56.0	
8.410000	33.2	5000.0	9.000	On	N	19.7	26.8	60.0	

#### Final Result 2

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.194000	30.7	5000.0	9.000	On	L1	20.0	23.2	53.9	
0.578000	34.1	5000.0	9.000	On	L1	19.8	11.9	46.0	
1.158000	27.3	5000.0	9.000	On	N	19.8	18.7	46.0	
1.606000	27.0	5000.0	9.000	On	N	19.8	19.0	46.0	
2.986000	27.2	5000.0	9.000	On	N	19.7	18.8	46.0	
4.846000	25.6	5000.0	9.000	On	N	19.8	20.4	46.0	



**USB Mode, Set.3:**

**Fig A.9 Conducted Emission from 150kHz to 30MHz**
**Final Result 1**

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.474000	44.5	5000.0	9.000	On	N	20.0	11.9	56.4	
1.174000	39.6	5000.0	9.000	On	N	19.8	16.4	56.0	
1.378000	41.2	5000.0	9.000	On	L1	19.5	14.8	56.0	
2.122000	39.0	5000.0	9.000	On	N	19.8	17.0	56.0	
5.158000	38.9	5000.0	9.000	On	N	19.7	21.1	60.0	
6.614000	42.0	5000.0	9.000	On	L1	19.5	18.0	60.0	

**Final Result 2**

Frequency (MHz)	Average (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.430000	36.6	5000.0	9.000	On	N	19.9	10.6	47.3	
0.474000	38.5	5000.0	9.000	On	N	20.0	8.0	46.4	
1.186000	29.3	5000.0	9.000	On	N	19.8	16.7	46.0	
1.382000	31.3	5000.0	9.000	On	L1	19.5	14.7	46.0	
2.134000	27.7	5000.0	9.000	On	L1	19.5	18.3	46.0	
6.710000	36.6	5000.0	9.000	On	N	19.7	13.4	50.0	

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