



TEST REPORT

No. I19Z60967-EMC01

for

TCL Communication Ltd.

LTE / UMTS / GSM mobile phone

Model Name: 5033M

FCC ID: 2ACCJH089

with

Hardware Version: 05

Software Version: v7LTD

Issued Date: 2019-06-06



Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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

Report Number	Revision	Description	Issue Date
I19Z60967-EMC01	Rev.0	1 st edition	2019-06-06

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2005 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (CN0066). The detail accreditation scope can be found on NVLAP website.

2. Test Laboratory

2.1. Testing Location

CTTL(huayuan North Road)

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

2.2. Testing Environment

Normal Temperature: 15-35°C

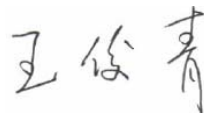
Relative Humidity: 20-75%

2.3. Project data

Testing Start Date: 2019-05-31

Testing End Date: 2019-06-05

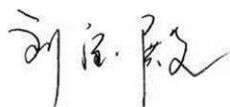
2.4. Signature



Wang Junqing
(Prepared this test report)



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(Reviewed this test report)



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Deputy Director of the laboratory
(Approved this test report)



3. Client Information

3.1. Certification Contact Information

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3.2. Applicant Information

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4. Equipment Under Test (EUT) and Ancillary Equipment (AE)

4.1. About EUT

Description	LTE / UMTS / GSM mobile phone
Model Name	5033M
FCC ID	2ACCJH089
Extreme vol. Limits	3.5VDC to 4.4VDC (nominal: 3.8VDC)

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.

4.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	358054100000038	05	v7LTD

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

4.3. Internal Identification of AE used during the test

AE ID*	Description	SN	Remarks
AE1	Battery	/	1860562BA001
AE2	Charger	/	16TCT-CH-1675
AE3	Charger	/	1860562CH004
AE4	Charger	/	1860562CH002
AE5	USB Cable	/	16TCT-DC-0029
AE6	USB Cable	/	17TCT-DC-0492
AE7	Headset	/	HS-0017
AE8	Headset	/	HS-0081
AE9	Headset	/	/
AE10	Headset	/	/

AE1

Model	CAB1930000C7
Manufacturer	Ningbo Veken Battery Co.,LTD
Capacitance	2000mAh
Nominal voltage	3.85V

AE2

Model	CBA0066AGAC5
Manufacturer	HUIZHOU PUAN ELECTRONICS CO.,LTD
Length of cable	/

AE3

Model	CBA0066AGAC7
Manufacturer	JIANGSU CHENYANG ELECTRON CO.,LTD
Length of cable	/



AE4		
Model	CBA3068AGAC5	
Manufacturer	HUIZHOU PUAN ELECTRONICS CO.,LTD	
Length of cable	/	
AE5		
Model	CDA3122005C1	
Manufacturer	HUIZHOU JUWEI ELECTRONICS CO.,LTD	
Length of cable	100cm	
AE6		
Model	CDA3122005C2	
Manufacturer	ShengHua Industrial Co., Ltd	
Length of cable	100cm	
AE7		
Model	CCB0046A10C4	
Manufacturer	Dongguan MeiHao Electronic Technology Co., Ltd.	
Length of cable	/	
AE8		
Model	CCB0046A10C1	
Manufacturer	HUIZHOU JUWEI ELECTRONICS CO.,LTD	
Length of cable	/	
AE9		
Model	CCB0049A10C1	
Manufacturer	HUIZHOU JUWEI ELECTRONICS CO.,LTD	
Length of cable	/	
AE10		
Model	CCB0049A10C4	
Manufacturer	Dongguan MeiHao Electronic Technology Co., Ltd.	
Length of cable	/	

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

Note: The USB cables are shielded.

4.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	EUT1+ AE1+ AE2+ AE5/AE6+ AE7/AE8/AE9/AE10	Charger +FM
Set.2	EUT1+ AE1+ AE3+ AE5/AE6	Charger +Camera
Set.3	EUT1+ AE1+ AE4+ AE5/AE6	Charger +MP3
Set.4	EUT1+ AE1+ AE5/AE6	USB mode +GPS

5. Reference Documents

5.1. 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	2016
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.

6. LABORATORY ENVIRONMENT

Semi-anechoic chamber SAC-1 (23 meters × 17meters × 10meters) 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/10m distance, from 30 to 1000 MHz
Site voltage standing-wave ratio (SVSWR)	Between 0 and 6 dB, from 1GHz to 18GHz
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 MΩ
Ground system resistance	< 4 Ω

7. 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)

8. Test Equipments Utilized

NO.	Description	TYPE	SERIES NUMBER	MANUFACTURE	CAL DUE DATE	CALIBRATION INTERVAL
1	Test Receiver	ESU26	100235	R&S	2020-03-01	1 year
2	Test Receiver	ESCI 7	100344	R&S	2020-02-14	1 year
4	Universal Radio Communication Tester	CMW500	116588	R&S	2019-12-26	1 year
	Universal Radio Communication Tester	CMW500	150344	R&S	2019-12-27	1 year
5	LISN	ENV216	101200	R&S	2020-03-14	1 year
	Signal Power	SMBV100A	260613	R&S	2019-12-27	1 year
6	EMI Antenna	VULB 9163	9163-483	Schwarzbeck	2019-08-21	1 year
7	EMI Antenna	3115	6914	ETS-Lindgren	2020-01-03	1 year
8	PC	M4000e-17	M706GWXD	DELL	N/A	N/A
9	Printer	P1606dn	VNC3L52122	HP	N/A	N/A

Test Item	Test Software and Version	Software Vendor
Radiated Continuous Emission	EMC32 V9.01	R&S
Conducted Emission	EMC32 V8.52.0	R&S

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 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 USB mode and charging mode with FM/Camera/MP3/GPS functions. 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 OPTIPLEX 380, and the serial number of the PC is 2X1YV2X. 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 ($\mu\text{V/m}$)		
	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/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:

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

Where

G_A : Antenna factor of receive antenna

G_{PL} : Path Loss

P_{Mea} : Measurement result on receiver.

Measurement uncertainty (worst case): $U = 4.3 \text{ dB}$, $k=2$.

Measurement results for Set.1:

Charging Mode/Average detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
17934.833	35.0	-17.7	45.6	7.100	H
17819.800	34.9	-18.5	45.6	7.800	H
17699.667	34.9	-18.9	45.6	8.200	V
17989.800	34.8	-17.7	45.6	6.900	H
17863.433	34.8	-18.5	45.6	7.700	H
17879.300	34.8	-18.5	45.6	7.700	H

Charging Mode/Peak detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
17664.533	47.8	-18.9	45.6	21.100	H
17611.833	46.6	-18.9	45.6	19.900	H
17571.033	46.5	-18.9	45.6	19.800	V
17847.567	46.5	-18.5	45.6	19.400	H
17915.000	46.3	-17.7	45.6	18.400	H
17389.133	46.3	-19.2	41.5	24.000	H

Measurement results for Set.2:

Charging Mode/Average detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
17869.667	35.1	-18.5	45.6	8.000	H
17792.600	35.1	-18.5	45.6	8.000	H
17586.333	35.0	-18.9	45.6	8.300	V
17993.200	35.0	-17.7	45.6	7.100	H
17869.100	35.0	-18.5	45.6	7.900	H
17901.967	34.9	-18.5	45.6	7.800	H

Charging Mode/Peak detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
17467.900	46.9	-19.2	41.5	24.600	H
17445.800	46.5	-19.2	41.5	24.200	H
17452.033	46.3	-19.2	41.5	24.000	V
17434.467	46.3	-19.2	41.5	24.000	H
17826.600	46.3	-18.5	45.6	19.200	H
17498.500	46.3	-19.2	41.5	24.000	H

Measurement results for Set.3:

Charging Mode/Average detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
17599.933	35.2	-18.9	45.6	8.500	H
17802.233	35.1	-18.5	45.6	8.000	H
17470.733	35.1	-19.2	41.5	12.800	V
17903.667	35.0	-18.5	45.6	7.900	H
17907.067	35.0	-18.5	45.6	7.900	H
17929.167	34.9	-17.7	45.6	7.000	H

Charging Mode/ Peak detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
17803.367	47.5	-18.5	45.6	20.400	H
17922.933	47.1	-17.7	45.6	19.200	H
17798.267	46.9	-18.5	45.6	19.800	V
17822.633	46.5	-18.5	45.6	19.400	H
17380.067	46.4	-19.5	41.5	24.400	H
17883.833	46.4	-18.5	45.6	19.300	H

Measurement results for Set.4:

USB Mode/Average detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
17998.300	35.0	-17.7	45.6	7.100	H
17990.933	35.0	-17.7	45.6	7.100	H
17977.900	34.9	-17.7	45.6	7.000	V
17961.467	34.8	-17.7	45.6	6.900	H
17925.200	34.8	-17.7	45.6	6.900	H
17592.567	34.8	-18.9	45.6	8.100	H

USB Mode/ Peak detector

Frequency (MHz)	Measurement Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Antenna Pol. (H/V)
1194.367	49.3	-41.2	24.1	66.400	H
3594.767	49.2	-37.4	32.1	54.500	H
3587.400	48.3	-37.4	32.1	53.600	V
17947.300	47.1	-17.7	45.6	19.200	H
17472.433	47.1	-19.2	41.5	24.800	H
3585.700	47.0	-37.4	32.1	52.300	H

Note: The measurement results of Set.1, Set.2, Set.3 and Set.4 showed here are worst cases of the combinations of different USB cables and headsets.

Charging Mode, Set.1

Full Spectrum

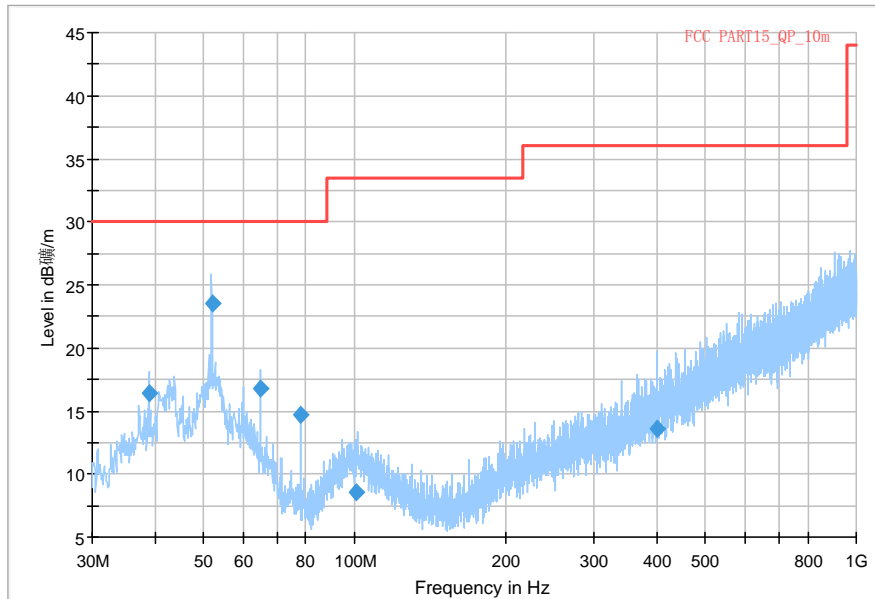


Fig A.1 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
38.984000	16.42	30.00	13.58	1000.0	120.000	276.0	V	-26.0
51.982000	23.50	30.00	6.50	1000.0	120.000	105.0	V	24.0
65.017000	16.84	30.00	13.16	1000.0	120.000	225.0	V	169.0
78.015000	14.67	30.00	15.33	1000.0	120.000	199.0	V	-27.0
100.838000	8.57	33.50	24.95	1000.0	120.000	319.0	V	25.0
401.967000	13.56	36.00	22.46	1000.0	120.000	292.0	V	120.0

Full Spectrum

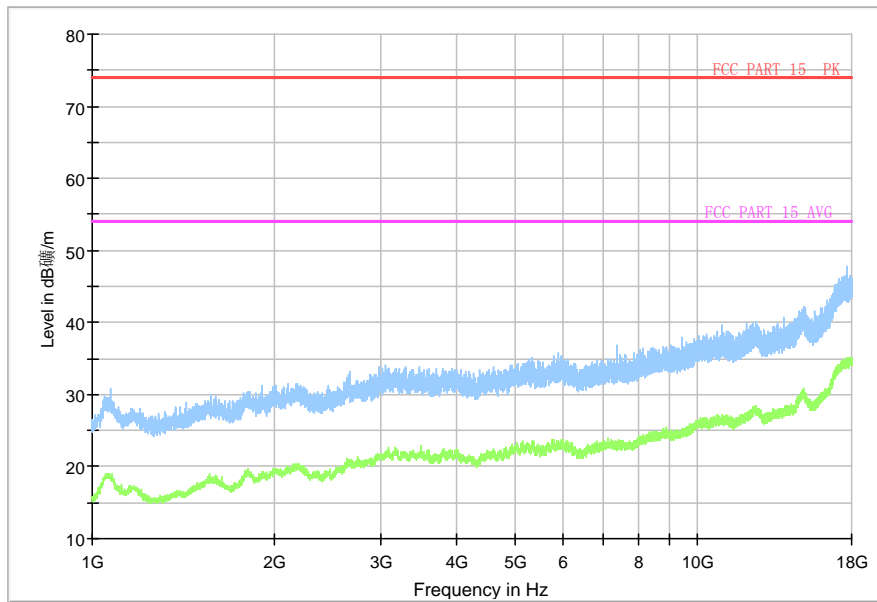


Fig A.2 Radiated Emission from 1GHz to 18GHz

Charging Mode, Set.2

Full Spectrum

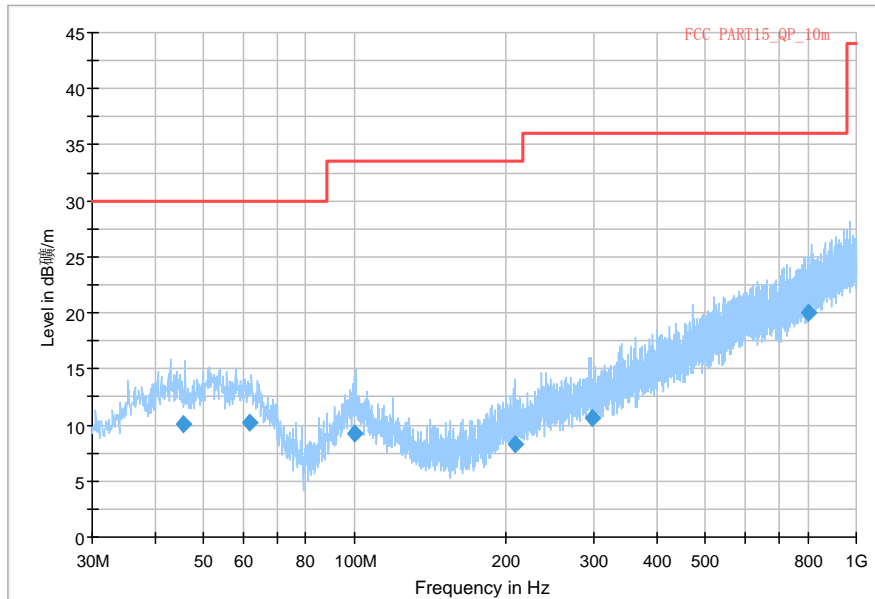


Fig A.3 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
45.405000	10.08	30.00	19.92	1000.0	120.000	119.0	V	166.0
61.978000	10.23	30.00	19.77	1000.0	120.000	100.0	V	210.0
100.062000	9.26	33.50	24.26	1000.0	120.000	293.0	V	109.0
208.471000	8.28	33.50	25.24	1000.0	120.000	212.0	V	201.0
296.805000	10.59	36.00	25.43	1000.0	120.000	119.0	V	70.0
803.446000	20.04	36.00	15.98	1000.0	120.000	192.0	V	206.0

Full Spectrum

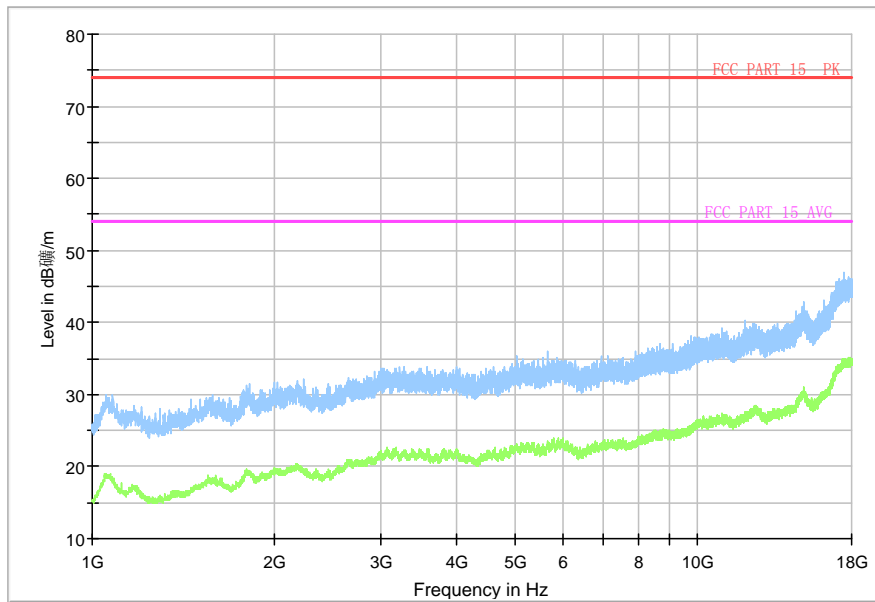


Fig A.4 Radiated Emission from 1GHz to 18GHz

Charging Mode, Set.3

Full Spectrum

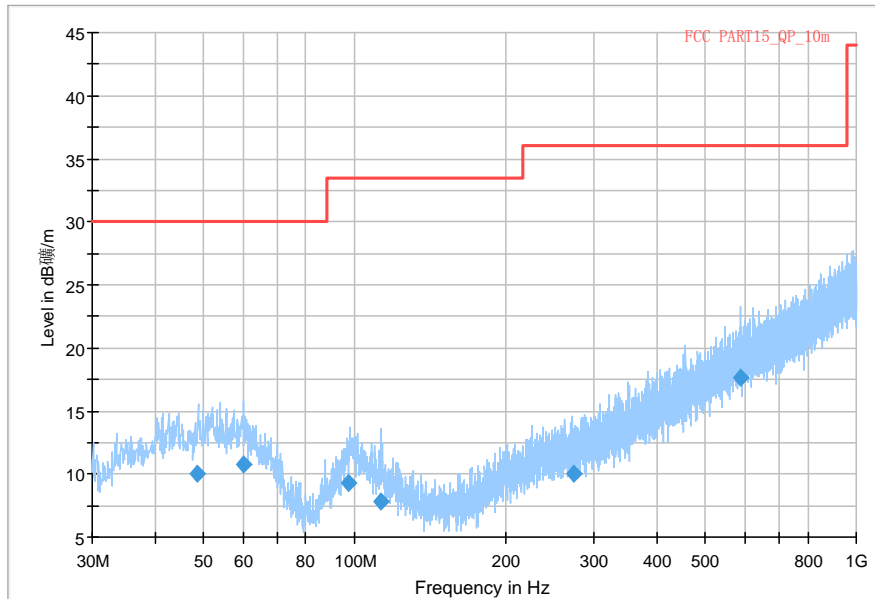


Fig A.5 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
48.638000	10.09	30.00	19.91	1000.0	120.000	119.0	V	-5.0
60.213000	10.81	30.00	19.19	1000.0	120.000	277.0	V	150.0
97.540000	9.26	33.50	24.26	1000.0	120.000	282.0	V	96.0
112.995000	7.77	33.50	25.75	1000.0	120.000	103.0	V	60.0
272.629000	10.03	36.00	25.99	1000.0	120.000	125.0	V	150.0
588.743000	17.69	36.00	18.33	1000.0	120.000	115.0	V	8.0

Full Spectrum

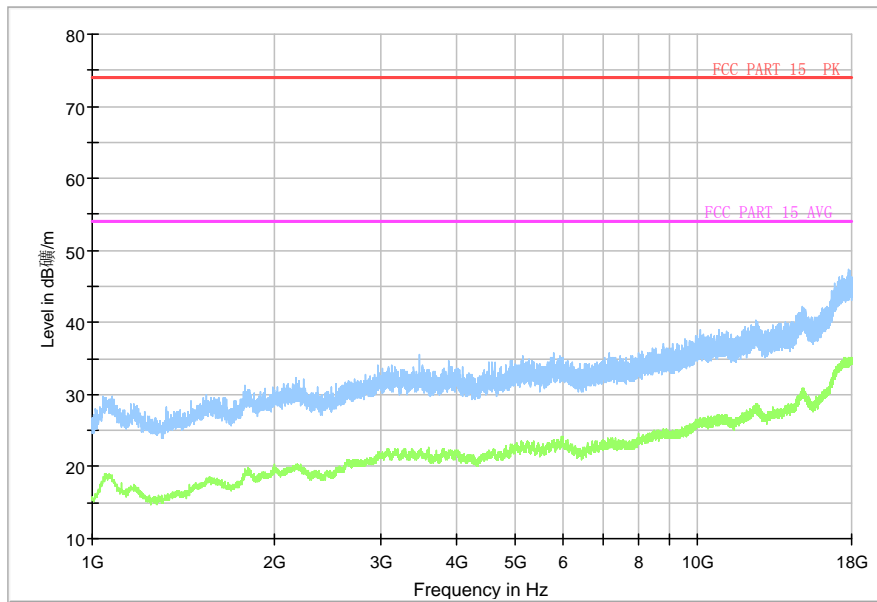


Fig A.6 Radiated Emission from 1GHz to 18GHz

USB Mode, Set.4

Full Spectrum

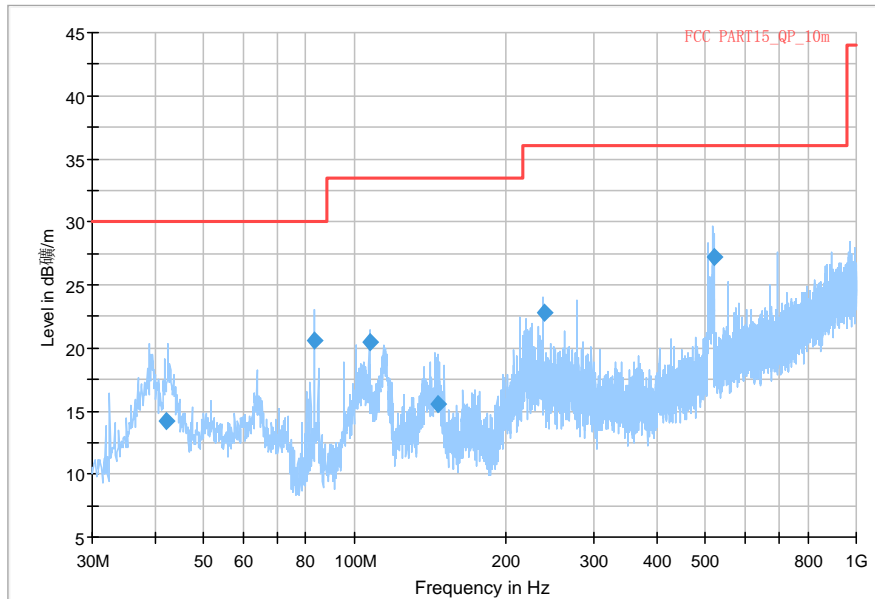


Fig A.7 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
42.176000	14.21	30.00	15.79	1000.0	120.000	105.0	V	26.0
83.493000	20.61	30.00	9.39	1000.0	120.000	125.0	V	120.0
107.318000	20.43	33.50	13.09	1000.0	120.000	125.0	V	70.0
147.125000	15.59	33.50	17.93	1000.0	120.000	118.0	V	162.0
238.411000	22.82	36.00	13.20	1000.0	120.000	109.0	V	210.0
519.868000	27.21	36.00	8.81	1000.0	120.000	277.0	V	11.0

Full Spectrum

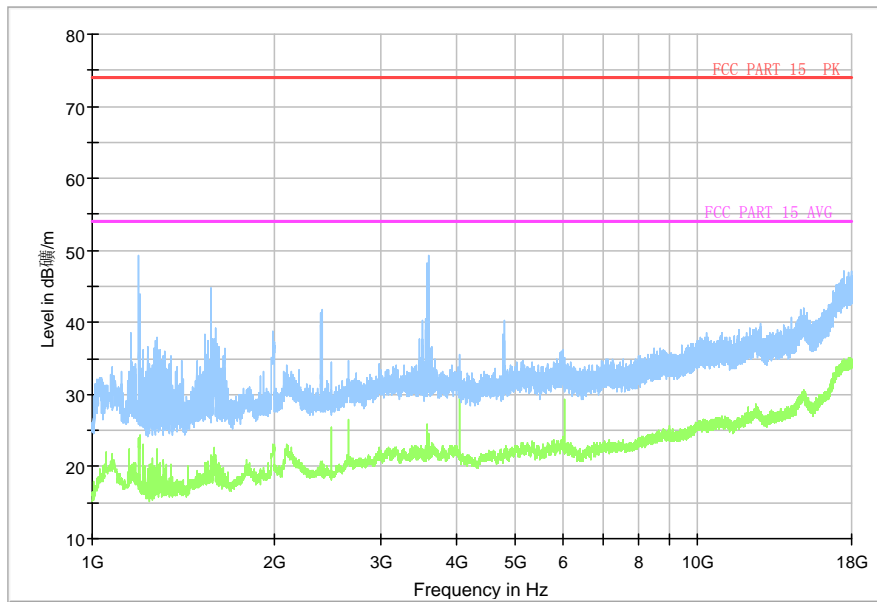


Fig A.8 Radiated Emission from 1GHz to 18GHz

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 with FM/Camera/MP3/GPS functions. 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 OPTIPLEX 380, and the serial number of the PC is 2X1YV2X. 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 μ 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: $U= 2.9$ dB, $k=2$.

Charging Mode, Set.1

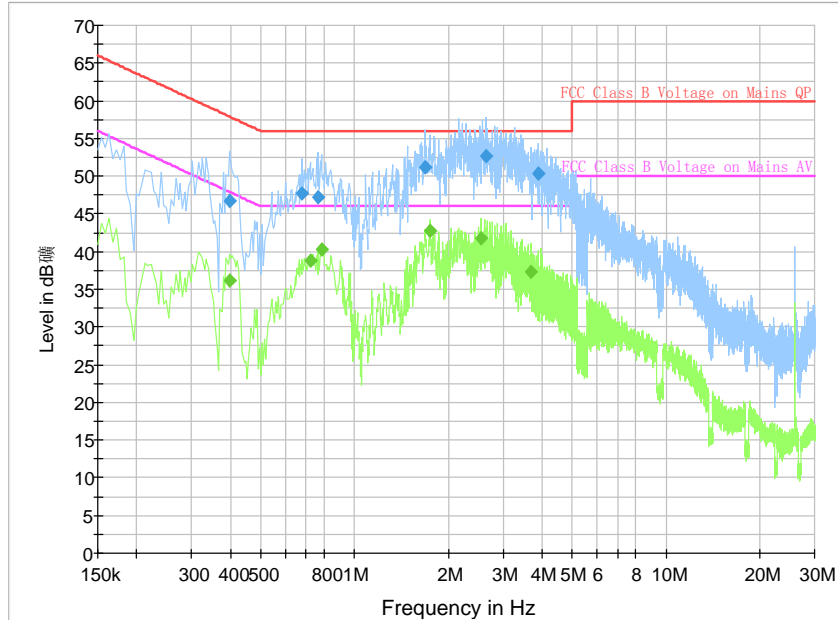


Fig A.9 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.397500	46.8	2000.0	9.000	L1	19.8	11.1	57.9
0.681000	47.6	2000.0	9.000	L1	19.8	8.4	56.0
0.766500	47.2	2000.0	9.000	L1	19.8	8.8	56.0
1.684500	51.3	2000.0	9.000	L1	19.6	4.7	56.0
2.643000	52.7	2000.0	9.000	L1	19.6	3.3	56.0
3.903000	50.3	2000.0	9.000	L1	19.6	5.7	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.397500	36.2	2000.0	9.000	L1	19.8	11.7	47.9
0.721500	38.7	2000.0	9.000	L1	19.8	7.3	46.0
0.784500	40.2	2000.0	9.000	L1	19.8	5.8	46.0
1.743000	42.7	2000.0	9.000	L1	19.6	3.3	46.0
2.553000	41.8	2000.0	9.000	L1	19.6	4.2	46.0
3.669000	37.4	2000.0	9.000	L1	19.6	8.6	46.0

Note: The measurement results showed here are worst cases of the combinations of different USB cables and headsets.

Charging Mode, Set.2

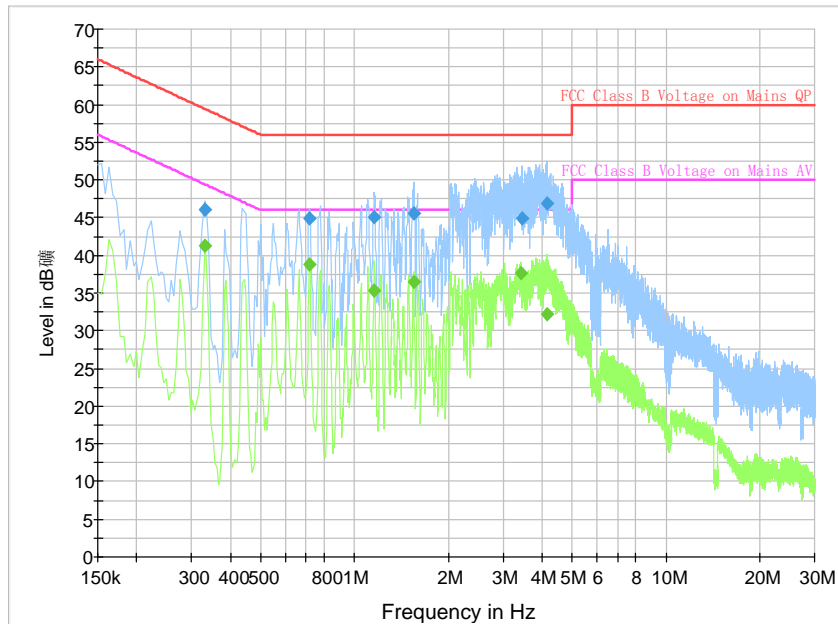


Fig A.10 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.330000	46.0	2000.0	9.000	L1	19.8	13.4	59.5
0.717000	44.8	2000.0	9.000	L1	19.8	11.2	56.0
1.158000	45.0	2000.0	9.000	L1	19.7	11.0	56.0
1.549500	45.6	2000.0	9.000	L1	19.6	10.4	56.0
3.453000	44.8	2000.0	9.000	L1	19.6	11.2	56.0
4.159500	46.9	2000.0	9.000	L1	19.6	9.1	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.330000	41.3	2000.0	9.000	N	19.8	8.2	49.5
0.717000	38.9	2000.0	9.000	L1	19.8	7.1	46.0
1.158000	35.3	2000.0	9.000	L1	19.7	10.7	46.0
1.549500	36.5	2000.0	9.000	L1	19.6	9.5	46.0
3.435000	37.7	2000.0	9.000	L1	19.6	8.3	46.0
4.159500	32.2	2000.0	9.000	L1	19.6	13.8	46.0

Note: The measurement results showed here are worst cases of the combinations of different USB cables.

Charging Mode, Set.3

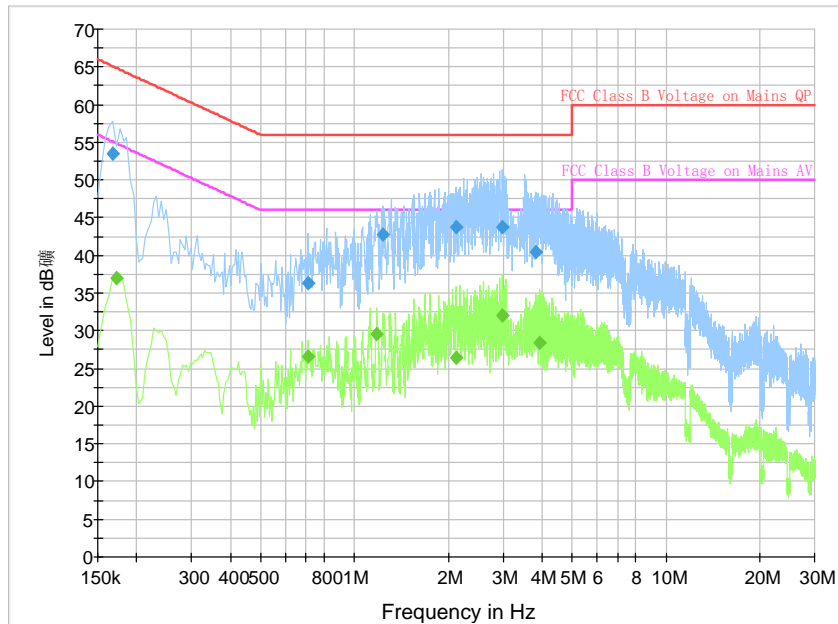


Fig A.11 Conducted Emission

Final Result 1

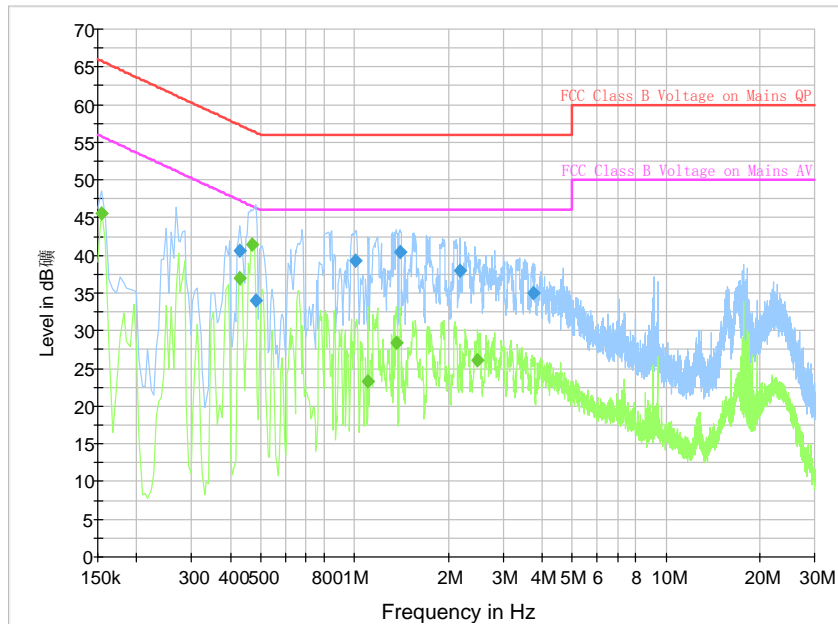
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.168000	53.5	2000.0	9.000	N	26.7	11.5	65.1
0.708000	36.2	2000.0	9.000	L1	19.8	19.8	56.0
1.234500	42.8	2000.0	9.000	L1	19.6	13.2	56.0
2.121000	43.7	2000.0	9.000	L1	19.6	12.3	56.0
2.989500	43.7	2000.0	9.000	L1	19.6	12.3	56.0
3.822000	40.4	2000.0	9.000	L1	19.6	15.6	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.172500	37.0	2000.0	9.000	N	25.7	17.8	54.8
0.708000	26.5	2000.0	9.000	L1	19.8	19.5	46.0
1.180500	29.6	2000.0	9.000	L1	19.7	16.4	46.0
2.121000	26.4	2000.0	9.000	L1	19.6	19.6	46.0
2.989500	32.0	2000.0	9.000	L1	19.6	14.0	46.0
3.939000	28.4	2000.0	9.000	L1	19.6	17.6	46.0

Note: The measurement results showed here are worst cases of the combinations of different USB cables.

USB Mode, Set.4



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.429000	40.6	2000.0	9.000	L1	19.8	16.7	57.3
0.483000	34.0	2000.0	9.000	L1	19.8	22.3	56.3
1.009500	39.3	2000.0	9.000	L1	19.7	16.7	56.0
1.396500	40.4	2000.0	9.000	N	19.6	15.6	56.0
2.179500	38.0	2000.0	9.000	N	19.6	18.0	56.0
3.759000	35.0	2000.0	9.000	N	19.6	21.0	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.154500	45.6	2000.0	9.000	N	29.6	10.1	55.8
0.429000	36.9	2000.0	9.000	N	19.8	10.4	47.3
0.469500	41.4	2000.0	9.000	N	19.8	5.1	46.5
1.104000	23.3	2000.0	9.000	N	19.7	22.7	46.0
1.360500	28.4	2000.0	9.000	L1	19.6	17.6	46.0
2.490000	26.2	2000.0	9.000	N	19.6	19.8	46.0

Note: The measurement results showed here are worst cases of the combinations of different USB cables.

END OF REPORT