TEST REPORT

No. I18Z60981-EMC01

for

TCL Communication Ltd.

LTE / UMTS / GSM mobile phone

Model Name: 5033X

FCC ID: 2ACCJH095

with

Hardware Version: 05

Software Version: v7LT8

Issued Date: 2018-07-13

TESTING
NVLAP LAB CODE 600118-0

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

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

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I18Z60981-EMC01	Rev.0	1st edition	2018-06-26
I18Z60981-EMC01	Rev.1	Add KDB 484596 in the statements on page 8	2018-07-13

CONTENTS

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℃

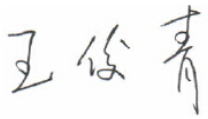
Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: 2018-04-12

Testing End Date: 2018-04-20

1.4. Signature



Wang Junqing

(Prepared this test report)

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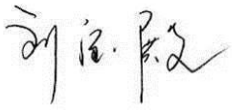
(Reviewed this test report)



Liu Baodian

Deputy Director of the laboratory

(Approved this test report)

2. Client Information

2.1. Certification Contact Information

Company Name:	TCL Communication Ltd.
Address /Post:	17 Huifeng 3th Road,ZhongKai Hi-tech Development District，Huizhou,Guangdong 516006 P.R.China
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Contact Email:	tingting.li@tcl.com
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2.2. Applicant Information

Company Name:	TCL Communication Ltd.
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Contact Person:	Zhizhou Gong
Contact Email:	zhizhou.gong@tcl.com
Telephone:	0086-755-36611722

2.3. Manufacturer Information

Company Name:	TCL Communication Ltd.
Address /Post:	7/F, Block F4, TCL Communication Technology Building, TCL International E City, Zhong Shan Yuan Road, Nanshan District, Shenzhen, Guangdong, P.R. China 518052
Contact Person:	Zhizhou Gong
Contact Email:	zhizhou.gong@tcl.com
Telephone:	0086-755-36611722

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

3.1. About EUT

Description	LTE / UMTS / GSM mobile phone
Model Name	5033X
FCC ID	2ACCJH095
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, CAICT.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	356270090200022	05	v7LT8

*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	/	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	Charger	/	/
AE8	Charger	/	/
AE9	Charger	/	/
AE10	Charger	/	/
AE11	Charger	/	/
AE12	Charger	/	/

AE1

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

AE2

Model	CBA0066AGAC5
Manufacturer	PUAN
Length of cable	/

AE3

Model	CBA0066AGAC7
Manufacturer	CHENYANG
Length of cable	/

AE4

Model	CBA3068AGAC5
Manufacturer	PUAN
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	CBA0066AAAC5
Manufacturer	HUIZHOU PUAN ELECTRONICS CO.,LTD
Length of cable	/

AE8

Model	CBA0066AAAC7
Manufacturer	JIANGSU CHENYANG ELECTRON CO.,LTD
Length of cable	/

AE9

Model	CBA0066ABAC5
Manufacturer	PUAN
Length of cable	/

AE10

Model	CBA0066ABAC7
Manufacturer	CHENYANG
Length of cable	/

AE11

Model	CBA3068AAAC5
Manufacturer	HUIZHOU PUAN ELECTRONICS CO.,LTD
Length of cable	/

AE12

Model	CBA3068ABAC5
Manufacturer	PUAN
Length of cable	/

*AE ID: is used to identify the test sample in the lab internally.
Note: The USB cables are shielded.

3.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	EUT1+ AE1+ AE2+ AE5/AE6	Charger
Set.2	EUT1+ AE1+ AE3+ AE5/AE6	Charger
Set.3	EUT1+ AE1+ AE4+ AE5/AE6	Charger
Set.4	EUT1+ AE1+ AE5/AE6	USB mode

Note: LTE / UMTS / GSM mobile phone, 5033X manufactured by TCL Communication Ltd is a variant model based on 5033A for conformance test. According to the KDB 484596, no test needs to been performed, all results are cited from the initial model. The report number for initial model is I18Z60562-EMC01.

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	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.

5. 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

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	ESU26	100235	R&S	2019-02-28	1 year
2	Test Receiver	ESCI 7	100344	R&S	2019-02-28	1 year
3	Universal Radio Communication Tester	CMU200	109914	R&S	2019-04-01	1 year
4	Universal Radio Communication Tester	CMW500	116588	R&S	2018-12-26	1 year
5	LISN	ENV216	101200	R&S	2018-08-03	1 year
6	EMI Antenna	VULB 9163	9163-301	Schwarzbeck	2019-01-03	3 years
7	EMI Antenna	3115	00167250	ETS-Lindgren	2018-05-21	3 years
8	PC	OPTIPLEX 380	2X1YV2X	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. 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 (μV/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:

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

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 dB, k=2.

Measurement results for Set.1:

Charging Mode/Average detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
17858.050	38.7	-18.5	45.6	11.600	H
17387.150	38.6	-19.5	41.5	16.600	H
17787.500	38.4	-18.5	45.6	11.300	V
17371.850	38.4	-19.5	41.5	16.400	H
17908.200	38.4	-18.5	45.6	11.300	H
17588.600	38.2	-18.9	45.6	11.500	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)
17978.750	50.2	-17.7	45.6	22.300	H
17902.250	49.3	-18.5	45.6	22.200	H
17818.100	48.8	-18.5	45.6	21.700	V
17869.950	48.6	-18.5	45.6	21.500	H
17618.350	48.6	-18.9	45.6	21.900	H
17716.950	48.6	-18.9	45.6	21.900	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)
17416.050	38.7	-19.2	41.5	16.400	H
17903.100	38.6	-18.5	45.6	11.500	H
17371.000	38.4	-19.5	41.5	16.400	V
17459.400	38.4	-19.2	41.5	16.100	H
17975.350	38.4	-17.7	45.6	10.500	H
17869.100	38.4	-18.5	45.6	11.300	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)
17757.750	49.1	-18.5	45.6	22.000	H
17422.000	49.0	-19.2	41.5	26.700	H
17881.000	49.0	-18.5	45.6	21.900	V
17462.800	49.0	-19.2	41.5	26.700	H
17914.150	48.9	-18.5	45.6	21.800	H
17427.950	48.8	-19.2	41.5	26.500	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)
17763.700	38.5	-18.5	45.6	11.400	H
17897.150	38.5	-18.5	45.6	11.400	H
17908.200	38.4	-18.5	45.6	11.300	V
17906.500	38.3	-18.5	45.6	11.200	H
17282.600	38.3	-19.5	41.5	16.300	H
17893.750	38.2	-18.5	45.6	11.100	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)
17858.050	48.9	-18.5	45.6	21.800	H
17227.350	48.8	-19.5	41.5	26.800	H
17869.950	48.7	-18.5	45.6	21.600	V
17381.200	48.7	-19.5	41.5	26.700	H
17832.550	48.7	-18.5	45.6	21.600	H
17897.150	48.6	-18.5	45.6	21.500	H

Measurement results for Set.4:

USB Mode/Average detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
17888.367	37.4	-18.5	45.6	10.300	H
17365.900	37.4	-19.5	41.5	15.400	H
17789.200	37.4	-18.5	45.6	10.300	V
17891.767	37.2	-18.5	45.6	10.100	H
17773.333	37.2	-18.5	45.6	10.100	H
17875.333	37.2	-18.5	45.6	10.100	H

USB Mode/ Peak detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Antenna Pol. (H/V)
17411.800	49.8	-19.2	41.5	27.500	H
17535.333	49.1	-19.2	45.6	22.700	H
17769.933	48.6	-18.5	45.6	21.500	V
17912.167	48.6	-18.5	45.6	21.500	H
17941.067	48.5	-17.7	45.6	20.600	H
17389.700	48.5	-19.2	41.5	26.200	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.

Charging Mode, Set.1

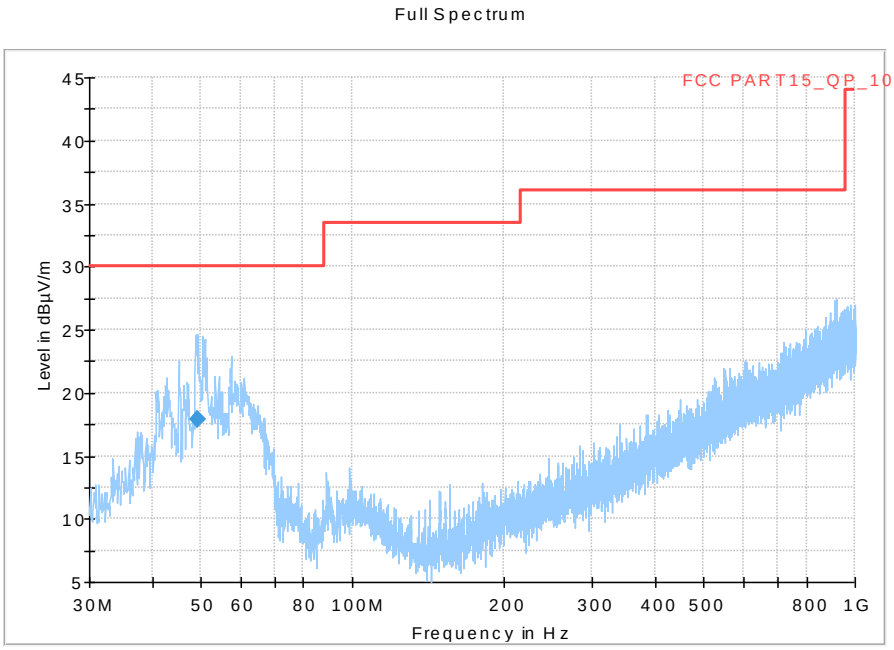


Fig A.1 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
49.418000	17.85	30.00	12.15	1000.0	120.000	176.0	V	30.0

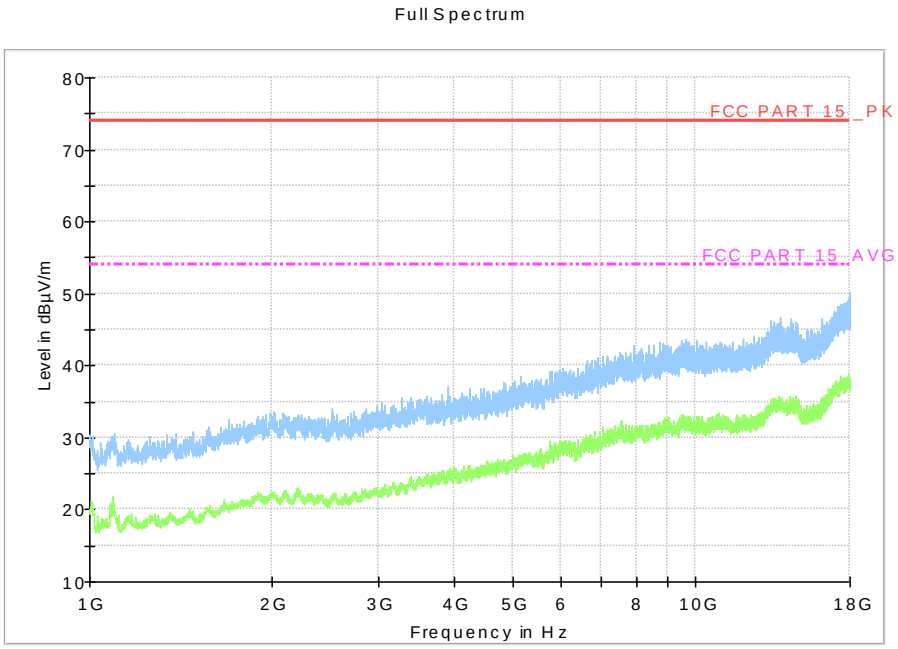


Fig A.2 Radiated Emission from 1GHz to 18GHz

Charging Mode, Set.2

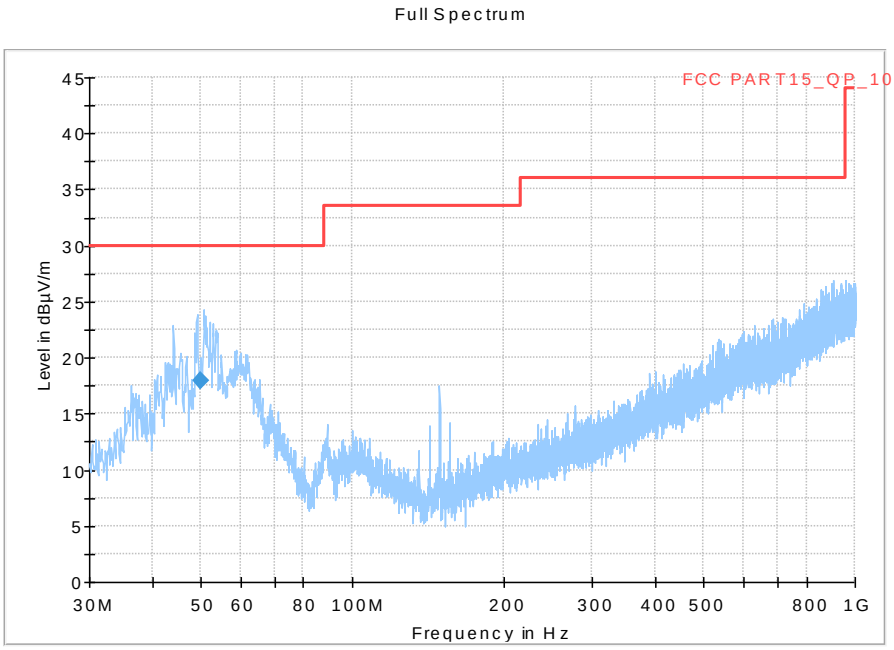


Fig A.3 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
50.061000	18.01	30.00	11.99	1000.0	120.000	111.0	V	30.0

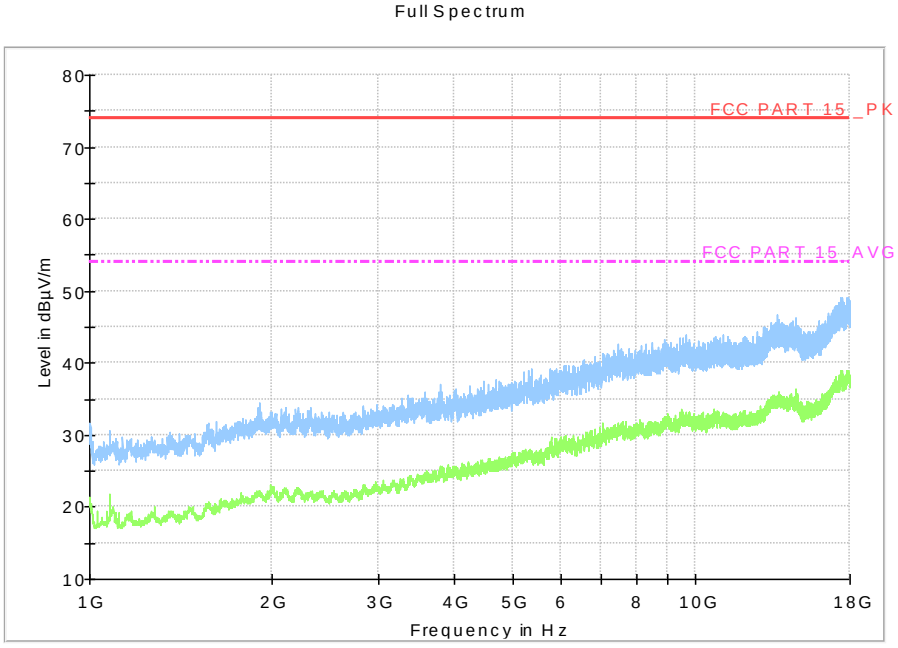


Fig A.4 Radiated Emission from 1GHz to 18GHz

Charging Mode, Set.3

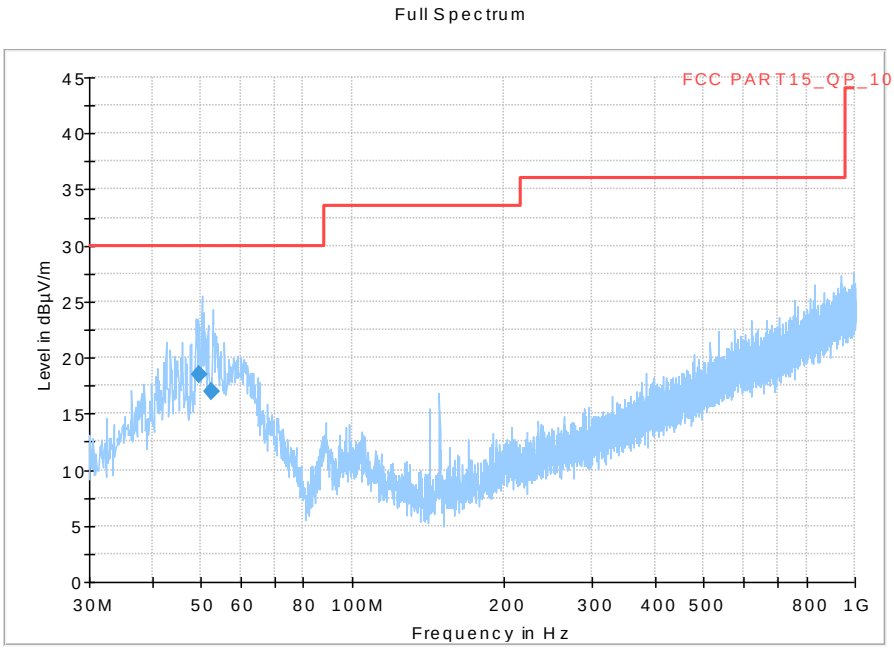


Fig A.5 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
49.576000	18.50	30.00	11.50	1000.0	120.000	125.0	V	30.0
52.532000	16.96	30.00	13.04	1000.0	120.000	100.0	V	195.0

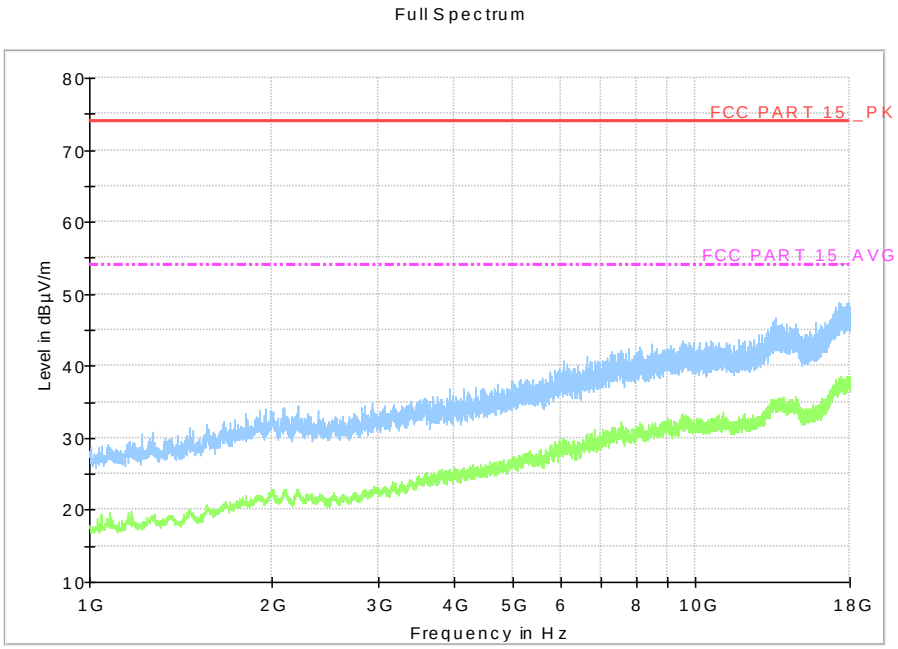


Fig A.6 Radiated Emission from 1GHz to 18GHz

USB Mode, Set.4

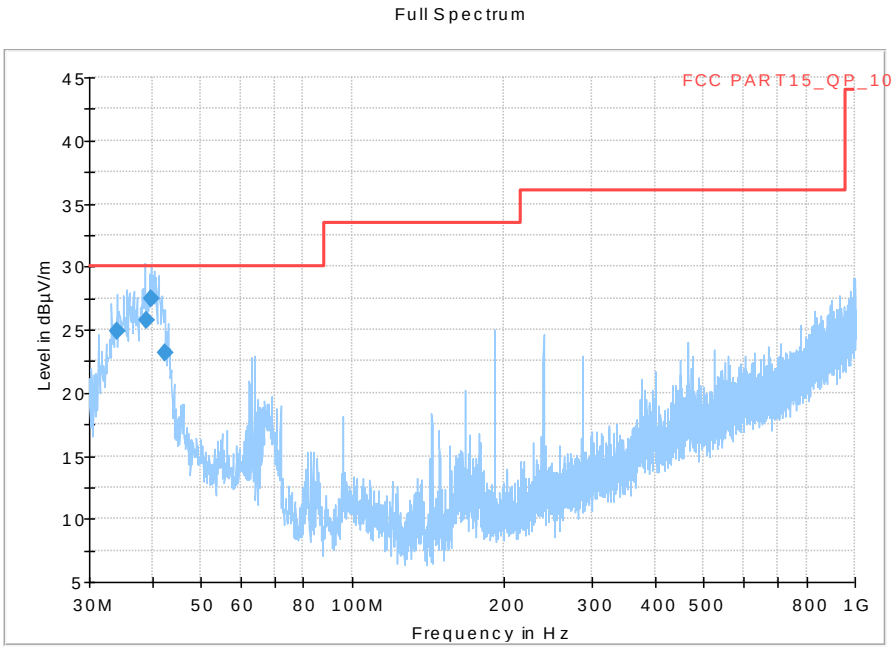


Fig A.7 Radiated Emission from 30MHz to 1GHz

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
34.074000	24.91	30.00	5.09	1000.0	120.000	184.0	V	202.0
39.090000	25.79	30.00	4.21	1000.0	120.000	325.0	V	93.0
39.857000	27.45	30.00	2.55	1000.0	120.000	125.0	V	97.0
42.495000	23.22	30.00	6.78	1000.0	120.000	278.0	V	174.0

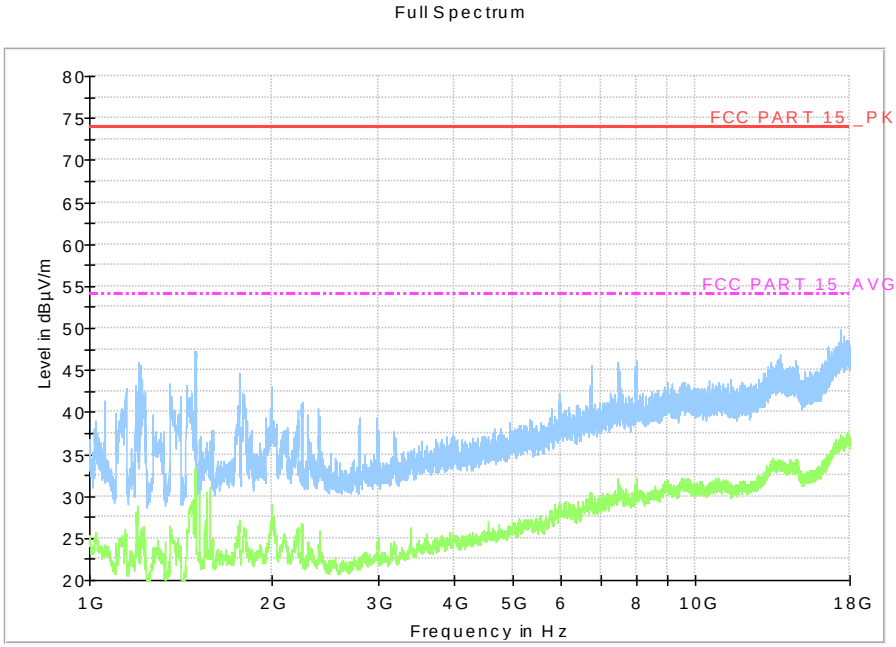


Fig A.8 Radiated Emission from 1GHz to 18GHz

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. 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 (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*= 2.9 dB, *k*=2.

Charging Mode, Set.1

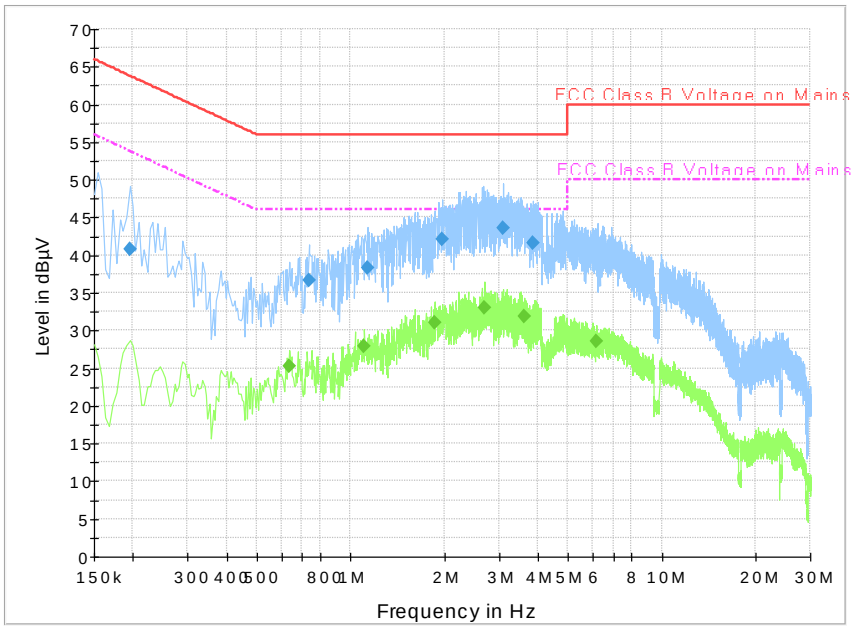


Fig A.9 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.195000	40.7	2000.0	9.000	L1	19.8	23.1	63.8
0.735000	36.6	2000.0	9.000	L1	19.8	19.4	56.0
1.131000	38.4	2000.0	9.000	L1	19.6	17.6	56.0
1.968000	42.1	2000.0	9.000	L1	19.7	13.9	56.0
3.097500	43.5	2000.0	9.000	L1	19.7	12.5	56.0
3.844500	41.5	2000.0	9.000	L1	19.6	14.5	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.636000	25.3	2000.0	9.000	L1	19.8	20.7	46.0
1.108500	27.8	2000.0	9.000	L1	19.6	18.2	46.0
1.869000	31.1	2000.0	9.000	L1	19.7	14.9	46.0
2.688000	33.0	2000.0	9.000	L1	19.7	13.0	46.0
3.628500	31.9	2000.0	9.000	L1	19.6	14.1	46.0
6.171000	28.5	2000.0	9.000	L1	19.7	21.5	50.0

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

Charging Mode, Set.2

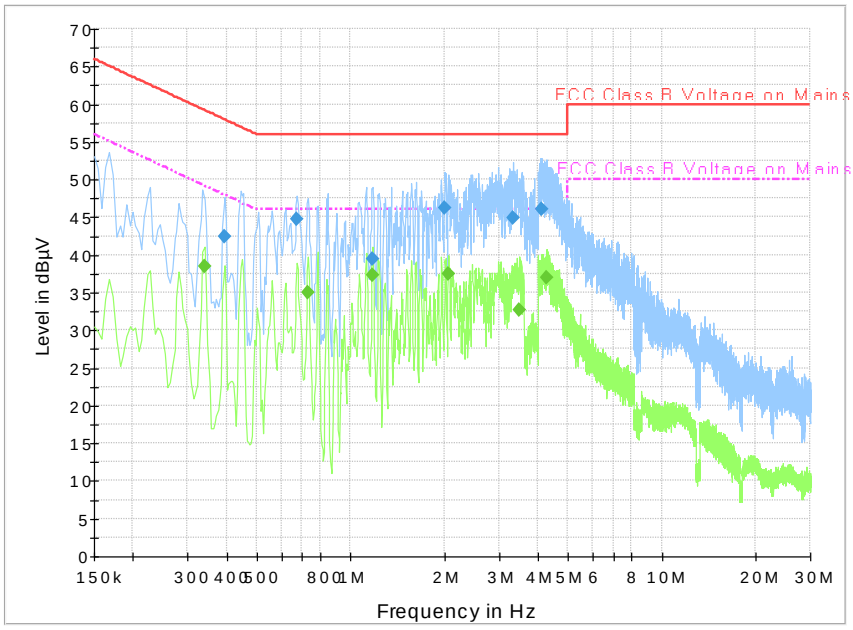


Fig A.10 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.393000	42.5	2000.0	9.000	L1	19.9	15.5	58.0
0.672000	44.7	2000.0	9.000	L1	19.8	11.3	56.0
1.180500	39.5	2000.0	9.000	L1	19.6	16.5	56.0
2.004000	46.3	2000.0	9.000	L1	19.7	9.7	56.0
3.331500	45.0	2000.0	9.000	L1	19.7	11.0	56.0
4.110000	46.0	2000.0	9.000	L1	19.6	10.0	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.339000	38.5	2000.0	9.000	L1	19.8	10.7	49.2
0.730500	35.0	2000.0	9.000	L1	19.8	11.0	46.0
1.176000	37.3	2000.0	9.000	L1	19.6	8.7	46.0
2.067000	37.5	2000.0	9.000	L1	19.7	8.5	46.0
3.484500	32.7	2000.0	9.000	L1	19.7	13.3	46.0
4.272000	37.0	2000.0	9.000	L1	19.6	9.0	46.0

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

Charging Mode, Set.3

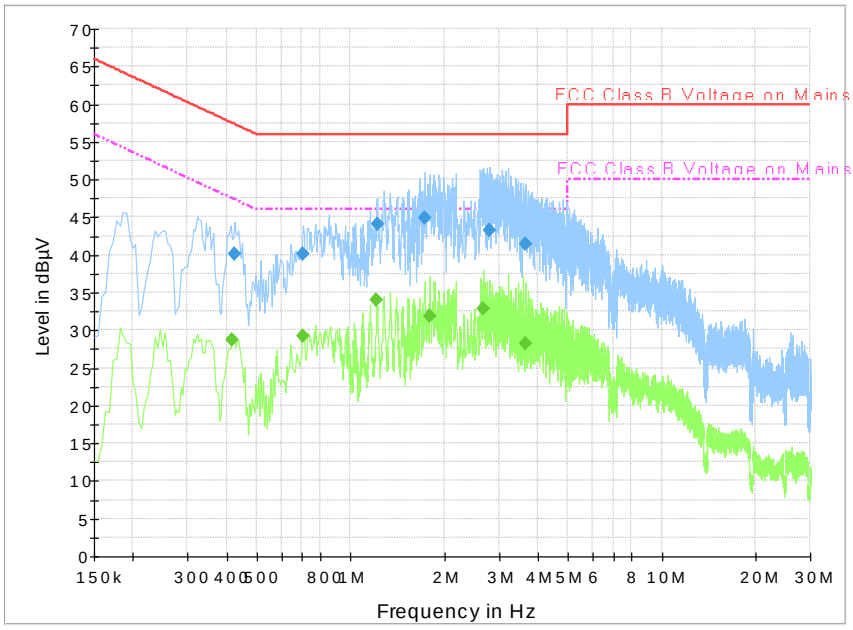


Fig A.11 Conducted Emission

Final Result 1

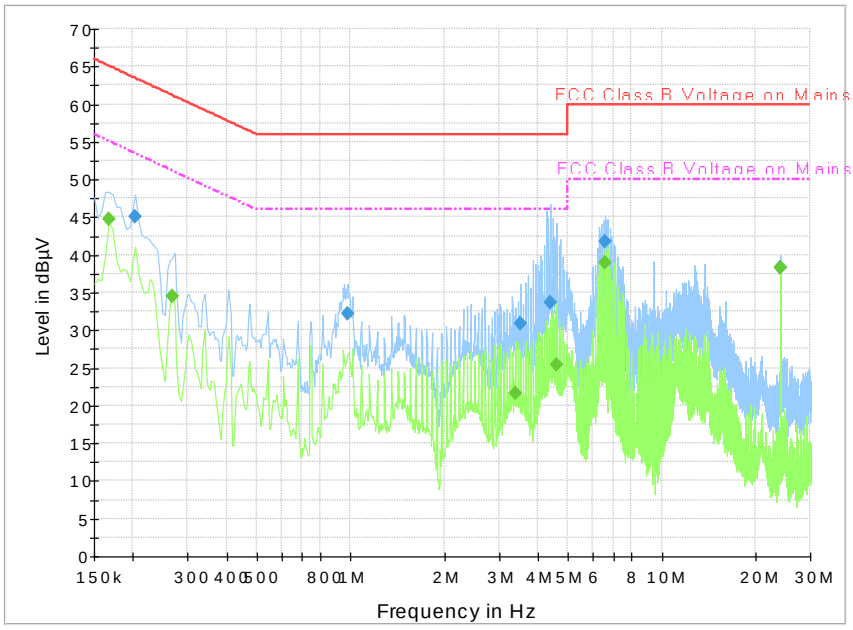
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.424500	40.1	2000.0	9.000	L1	19.9	17.2	57.4
0.703500	40.1	2000.0	9.000	L1	19.8	15.9	56.0
1.216500	44.1	2000.0	9.000	L1	19.6	11.9	56.0
1.729500	44.9	2000.0	9.000	L1	19.7	11.1	56.0
2.796000	43.3	2000.0	9.000	L1	19.7	12.7	56.0
3.655500	41.5	2000.0	9.000	L1	19.6	14.5	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.415500	28.7	2000.0	9.000	L1	19.9	18.9	47.5
0.703500	29.3	2000.0	9.000	L1	19.8	16.7	46.0
1.212000	34.1	2000.0	9.000	L1	19.6	11.9	46.0
1.797000	31.9	2000.0	9.000	L1	19.7	14.1	46.0
2.674500	32.9	2000.0	9.000	L1	19.7	13.1	46.0
3.655500	28.3	2000.0	9.000	L1	19.6	17.7	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)
0.204000	45.1	2000.0	9.000	L1	19.8	18.3	63.4
0.978000	32.1	2000.0	9.000	N	19.7	23.9	56.0
3.520500	30.8	2000.0	9.000	N	19.7	25.2	56.0
4.398000	33.7	2000.0	9.000	N	19.7	22.3	56.0
6.598500	41.8	2000.0	9.000	N	19.8	18.2	60.0
24.009000	38.3	2000.0	9.000	N	20.2	21.7	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.168000	44.7	2000.0	9.000	L1	19.8	10.4	55.1
0.267000	34.4	2000.0	9.000	L1	19.8	16.8	51.2
3.381000	21.7	2000.0	9.000	N	19.7	24.3	46.0
4.600500	25.4	2000.0	9.000	N	19.7	20.6	46.0
6.598500	38.9	2000.0	9.000	N	19.8	11.1	50.0
24.009000	38.4	2000.0	9.000	N	20.2	11.6	50.0

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

ANNEX B: Accreditation Certificate

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600118-0

Telecommunication Technology Labs, CAICT
Beijing
China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2016-09-29 through 2017-09-30
Effective Dates

For the National Voluntary Laboratory Accreditation Program

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