

# Shenzhen General Testing & Inspection Technology Co.,Ltd.

1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China Tel: +86-755- 27521059 Fax: +86-755- 27521011 Http://www.sz-ctc.com.cn

Т	<b>EST REPORT</b>	
Report No. ····::	GTI20181563F	
FCC ID:	2AC88-ELTP18A04	
IC:	24230-ELTP18A04	
Applicant·····:	HONGKONG UCLOUDLINK NETWORK	TECHNOLOGY LIMITED
Address·····:	Suite 603, 6/F, Laws Commercial Plaza, Road, Kowloon, Hong Kong, China	788 Cheung Sha Wan
Manufacturer·····:	HONGKONG UCLOUDLINK NETWORK	TECHNOLOGY LIMITED
Address·····:	Suite 603, 6/F, Laws Commercial Plaza, Road, Kowloon, Hong Kong, China	788 Cheung Sha Wan
Product Name····:	Smart Phone	
Trade Mark·····:	GlocalMe	
Model/Type reference·····:	ELTP18A04	
Listed Model(s) ·····:	N/A	
Standard·····:	47 CFR FCC Part 15 Subpart B - Unint ANSI C63.4: 2014 ICES-003: 2016	entional Radiators
Date of receipt of test sample:	2018-07-25	
Date of testing:	2018-07-26 to 2018-08-08	
Date of issue:	2018-08-09	
Result:	PASS	
Compiled by: (Printed name+signature)	Terry Su	Terry. Su
Supervised by: ( Printed name+signature)	Cary Luo	anglino
Approved by:  ( Printed name+signature)	Walter Chen	water chis

Shenzhen, Guangdong, China

This test report may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by GTI. The test results in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver.

Any objections must be raised to GTI within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit. The test report merely correspond to the test sample.





		lable of Contents	Page
1. TE	ST SUMMARY		3
1.1.	TEST STANDARDS		3
1.2.			
1.3.			
1.4.			
1.5.			
1.6.	ENVIRONMENTAL CONDITIONS		6
2. G	ENERAL INFORMATION		7
2.1.	CLIENT INFORMATION		7
2.2.			
2.3.		N	
2.4.			
2.5.			
3. EI	MC EMISSION TEST		10
3.1.	RADIATED EMISSION		10
3.2.	CONDUCTED EMISSION (AC MAINS)		16
4. El	JT TEST PHOTOS		21
5. PI	HOTOGRAPHS OF EUT CONSTRUCT	IONAL	22

Accreditation Administration of the People's Republic of China: <u>yz.cncaic.cn</u>

Page 3 of 22

Report No.: GTI20181563F



1. TEST SUMMARY

### 1.1. Test Standards

The tests were performed according to following standards:

47 CFR FCC Part 15 Subpart B: Unintentional Radiators.

IC Regulation ICES-003: 2016: Spectrum Management and Telecommunications Interference-Causing **Equipment Standard** 

ANSI C63.4: 2014: 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 40GHz.

# 1.2. Report version

Revised No.	Date of issue	Description
01	2018-08-09	Original





1.3. Test Description

FCC CFR Title 47 FCC Part 15 Subpart B / ICES-003					
	Standard Section				
Test Item	FCC Part 15 Subpart B	ICES-003	Result	Test Engineer	
Conducted Emissions Test	15.107	IECS-003 Section 6.1	Pass	Will Chen	
Radiated Emission Test	15.109	IECS-003 Section 6.2	Pass	Will Chen	

Note: The measurement uncertainty is not included in the test result.

Accreditation Administration of the People's Republic of China: <a href="mailto:yz.cncaic.cn">yz.cncaic.cn</a>



# 1.4. Test Facility

### Address of the report laboratory

### Shenzhen General Testing & Inspection Technology Co.,Ltd.

Add: 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

#### Laboratory accreditation

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

#### CNAS-Lab Code: L5365

Shenzhen General Testing & Inspection Technology Co.,Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

### A2LA-Lab Cert. No.: 4340.01

Shenzhen General Testing & Inspection Technology Co.,Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

### IC Registration No.: 9783A

The 3m alternate test site of Shenzhen General Testing & Inspection Technology Co.,Ltd.EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

#### FCC-Registration No.: 951311

Shenzhen General Testing & Inspection Technology Co.,Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 951311, Aug 26, 2017

# 1.5. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen General Testing & Inspection Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Below is the best measurement capability for Shenzhen General Testing & Inspection Technology Co., Ltd.

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: yz.cncaic.cn





Test Items	Measurement Uncertainty	Notes
Conducted Emissions 9kHz~30MHz	3.20 dB	(1)
Radiated Emissions 30~1000MHz	4.70 dB	(1)
Radiated Emissions 1~18GHz	5.00 dB	(1)
Radiated Emissions 18~40GHz	5.54 dB	(1)

**Note:** (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

### 1.6. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	25°C
Lative Humidity	55 %
Air Pressure	989 hPa





# 2. GENERAL INFORMATION

### 2.1. Client Information

Applicant:	HONGKONG UCLOUDLINK NETWORK TECHNOLOGY LIMITED
Address:	Suite 603, 6/F, Laws Commercial Plaza, 788 Cheung Sha Wan Road, Kowloon, Hong Kong, China
Manufacturer:	HONGKONG UCLOUDLINK NETWORK TECHNOLOGY LIMITED
Address:	Suite 603, 6/F, Laws Commercial Plaza, 788 Cheung Sha Wan Road, Kowloon, Hong Kong, China
Factory:	Shenzhen uCloudlink Network Technology Co., Ltd.
Address:	3rd Floor, A part of Building 1, Shenzhen Software Industry Base, Nanshan District Xuefu Road, 518057 Shenzhen City, Guangdong, China

# 2.2. General Description of EUT

Product Name:	Smart Phone
Model/Type reference:	ELTP18A04
Marketing Name:	GlocalMe
Listed Model(s):	1
Power supply:	3.85Vdc 3400mAh from Li-ion Battery
Adapter 1:	Model:HJ-0502000W2-US Input:100-240V 50/60Hz 0.3A Output:5V/2A
Adapter 2:	Model:PS10J050K2000UU Input:100-240V 50/60Hz 0.35A Output:5V/2A
Hardware version:	P3_MB_PCB_VA
Software version:	P3S18_TSV1.0.000.001.180720

# 2.3. Accessory Equipment information

Equipment Information				
Name	Model	S/N	Manufacturer	
LCD Monitor	1910m		HP	
PC	p7-1035cn		HP	
Keyboard	RFK-613		ERYEFU	
Mouse	RFK-613		ERYEFU	
Printer	HP LaserJet P1007	VNFN584036	HP	
Cable Information				
Name Shielded Type Ferrite Core Length				
VGA Cable	YES	YES	1.5M	
USB 3.0 Cable	YES	NO	1.2M	

Shenzhen General Testing & Inspection Technology Co., Ltd.

Accreditation Administration of the People's Republic of China: yz.cncaic.cn

Page 8 of 22

Report No.: GTI20181563F



2.4. Description of Test Modes

Test mode	Playing Video	Connect to PC (Downloading)	Camera	Adapter
1				
2				
3				

### Note:

- 1. is operation mode.
- 2. EUT with two AC/DC Adapters.

Pre-scan above all test mode, found below test mode which it was worse case mode.

Test item	Test mode (Worse case mode)	
Conducted emission	Mode 1	
Radiated emission	Mode 2	

Shenzhen General Testing & Inspection Technology Co., Ltd.





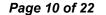
2.5. Measurement Instruments List

Conducted Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	LISN	R&S	ENV216	101112	Jan. 04, 2019
2	LISN	R&S	ENV216	101113	Jan. 04, 2019
3	EMI Test Receiver	R&S	ESCI	100920	Jan. 04, 2019
4	UNIVERSAL RADIO COMMUNICATION	Rohde & Schwarz	CMU200	114694	Jan. 04, 2019

Radia	ted Emission				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Log-Bicon Antenna	Schwarzbeck	CBL6141A	4180	Jan. 04, 2019
2	Spectrum Analyzer	HP	8563E	02052	Jan. 04, 2019
3	Horn Antenna	Schwarzbeck	BBHA 9120D	648	Jan. 04, 2019
4	Pre-Amplifier	HP	8447D	1937A03050	Jan. 04, 2019
5	Pre-Amplifier	EMCI	EMC051835	980075	Jan. 04, 2019
6	EMI Test Receiver	R&S	ESCI	100658	Jan. 04, 2019
7	Antenna Mast	UC	UC3000	N/A	N/A
8	Turn Table	UC	UC3000	N/A	N/A
9	UNIVERSAL RADIO COMMUNICATION	Rohde & Schwarz	CMU200	114694	Jan. 04, 2019

The Cal. Interval was one year.

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <a href="yz.cncaic.cn">yz.cncaic.cn</a>





# 3. EMC EMISSION TEST

### 3.1. Radiated Emission

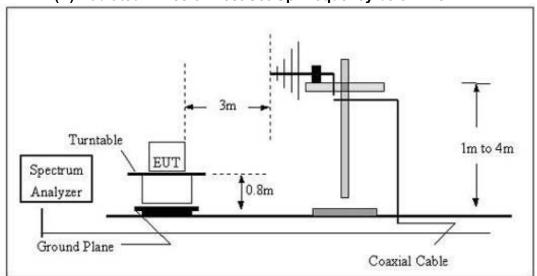
### LIMIT

### FCC CFR Title 47 Part 15 Subpart B Section 15.109/ IECS-003 Section 6.2:

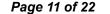
Frequency	Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
Above IGHZ	74.00	Peak

### **TEST CONFIGURATION**

### (B) Radiated Emission Test Set-Up Frequency below 1 GHz

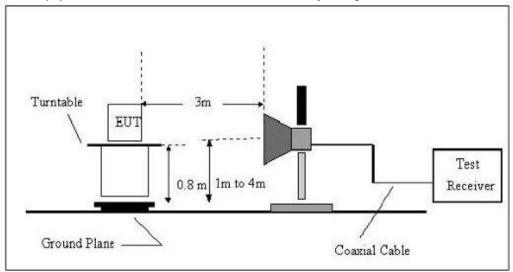


Accreditation Administration of the People's Republic of China: yz.cncaic.cn





(B) Radiated Emission Test Set-UP Frequency above 1GHz



### **TEST PROCEDURE**

- 1. The EUT was tested according to ANSI C63.4:2014.
- 2. The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated360 degrees to determine the position of the maximum emission level.
- 3. The EUT waspositioned such that the distance from antenna to the EUT was 3 meters.
- 4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna.
- 5. Use the following spectrum analyzer settings
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Below 1GHz, RBW=120KHz, VBW=300KHz, Sweep=auto, Detector function=peak, Trace=max hold; If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, theemission measurement will be repeated using the quasi-peak detector and reported.
  - (3) Above 1GHz, RBW=1MHz, VBW=3MHz

### **TEST MODE:**

Please refer to the clause 2.3

### **TEST RESULTS**

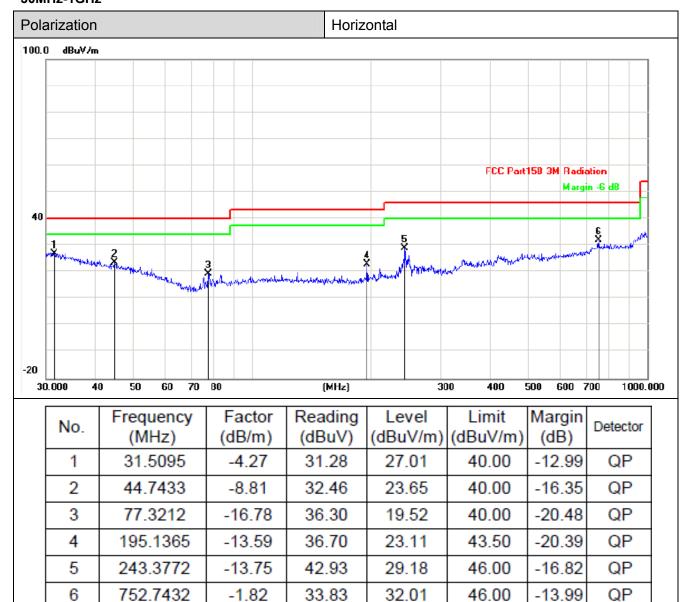


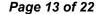
Shenzhen General Testing & Inspection Technology Co., Ltd.

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: yz.cncaic.cn

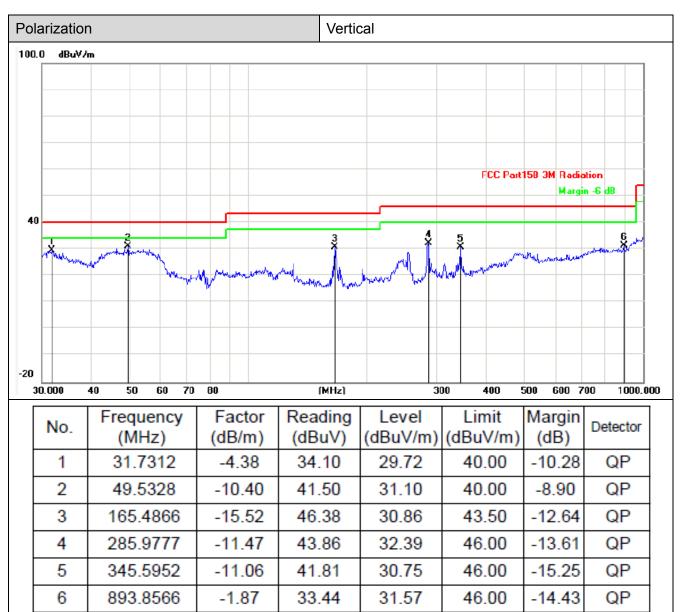


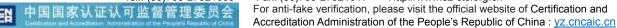
#### 30MHz-1GHz





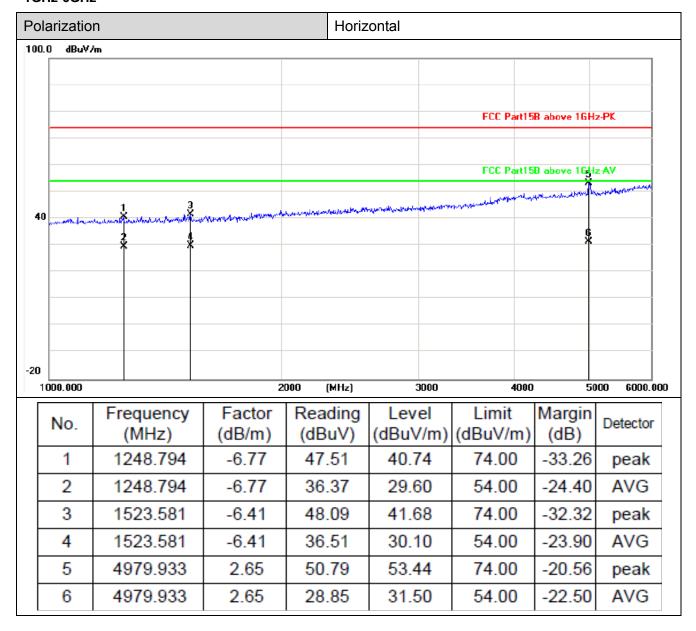


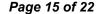




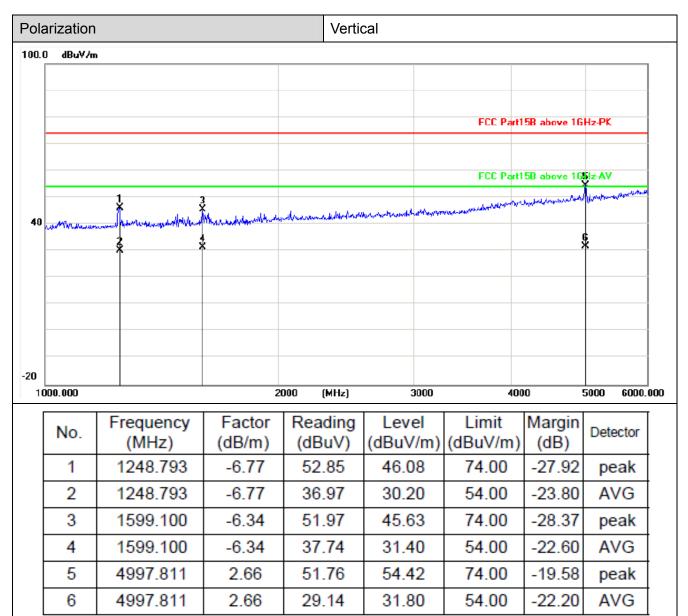


1GHz-6GHz















# 3.2. Conducted Emission (AC Mains)

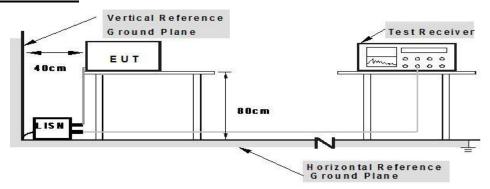
### **LIMIT**

### FCC CFR Title 47 Part 15 Subpart B Section 15.107/ IECS-003 Section 6.1:

Fraguency range (MHz)	Limit (d	BuV)
Frequency range (MHz)	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

<sup>\*</sup> Decreases with the logarithm of the frequency.

### **TEST CONFIGURATION**



Note: 1.Support units were connected to second LISM.

2.Both of LISMs (AMM) are 80 cm from EUT and at least 80 from other units and other metal planes

### **TEST PROCEDURE**

- 1. The EUT was setup according to ANSI C63.4-2014.
- 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
- 3. The EUT and simulators are connected to the main power through a line impedancestabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for themeasuring equipment.
- 4. The peripheral devices are also connected to the main power through aLISN. (Please refer to the block diagram of the test setup and photographs)
- 5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor,was individually connected through a LISN to the input power source.
- 6. The excess length of the power cord between the EUT and the LISN receptacle were foldedback and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- 7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHzusing a receiver bandwidth of 9 kHz.
- 8. During the above scans, the emissions were maximized by cable manipulation.

#### **TEST RESULTS**

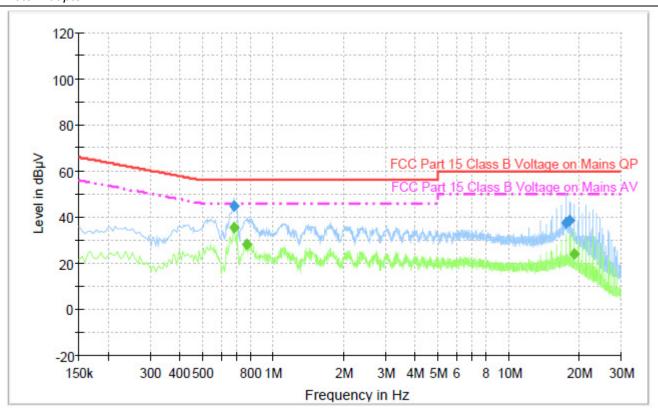
For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <a href="mailto:yz.cncaic.cn">yz.cncaic.cn</a>





Polarization L

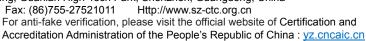
Note: Adapter 1



# **Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dΒμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.685500	44.6	1000.000	9.000	Off	L1	9.8	11.4	56.0	
17.511000	37.5	1000.000	9.000	Off	L1	9.8	22.5	60.0	
18.258000	38.3	1000.000	9.000	Off	L1	9.9	21.7	60.0	

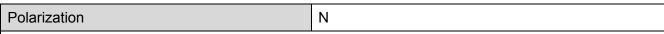
	i iiiai iii	Jusuio	mont Do	TOOLOI 2	•					
	Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ	Comment
-									V)	
	0.685500	35.4	1000.000	9.000	Off	L1	9.8	10.6	46.0	
	0.775500	28.1	1000.000	9.000	Off	L1	9.9	17.9	46.0	
	19.027500	24.1	1000.000	9.000	Off	L1	9.9	25.9	50.0	



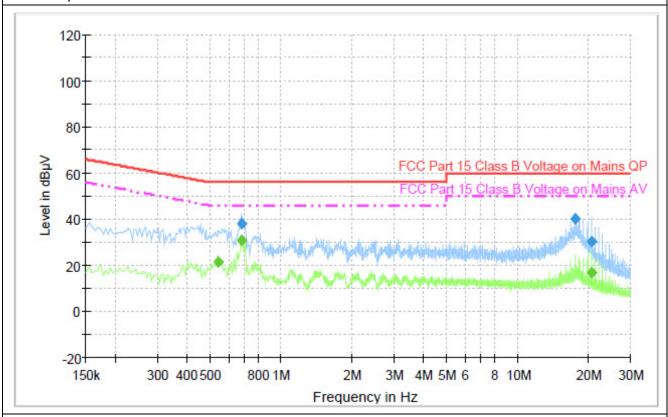








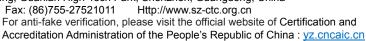


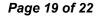


# **Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.685500	38.1	1000.000	9.000	Off	N	10.0	17.9	56.0	
17.502000	40.3	1000.000	9.000	Off	N	9.8	19.7	60.0	
20.553000	30.5	1000.000	9.000	Off	N	9.9	29.5	60.0	

I mai measurement Detector 2										
Frequency	Average	Meas. Time	Bandwidth	Filter	Line	Corr.	Margin	Limit	Comment	
(MHz)	(dBµV)	(ms)	(kHz)			(dB)	(dB)	(dBµ		
								(V)		
0.546000	21.3	1000.000	9.000	Off	N	10.1	24.7	46.0		
0.685500	30.7	1000.000	9.000	Off	N	10.0	15.3	46.0		
20.571000	16.7	1000.000	9.000	Off	N	9.9	33.3	50.0		

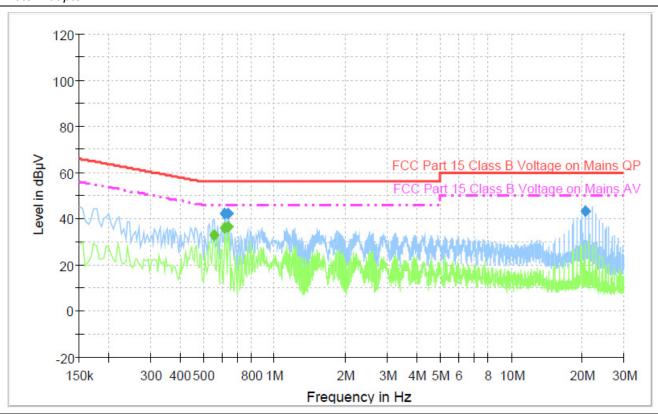






Polarization

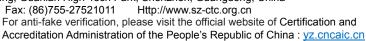
Note: Adapter 2

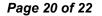


## Final Measurement Detector 1

-										
	Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
	0.618000	42.4	1000.000	9.000	Off	L1	9.8	13.6	56.0	
	0.640500	42.0	1000.000	9.000	Off	L1	9.8	14.0	56.0	
Г	20.548500	43.3	1000.000	9.000	Off	L1	9.9	16.7	60.0	

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.555000	32.9	1000.000	9.000	Off	L1	9.8	13.2	46.0	
0.618000	36.1	1000.000	9.000	Off	L1	9.8	9.9	46.0	
0.640500	36.7	1000.000	9.000	Off	L1	9.8	9.3	46.0	

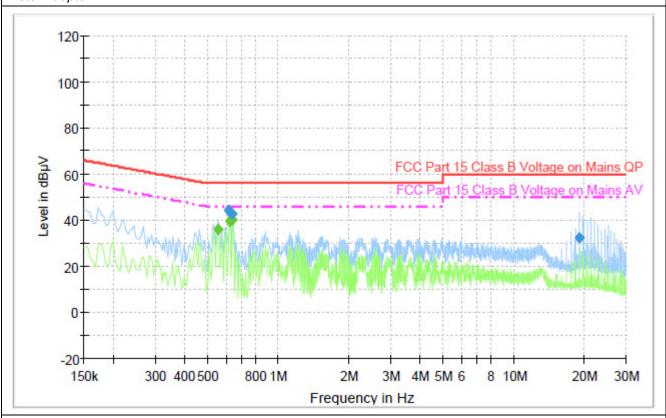








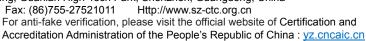
Note: Adapter 2



# **Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.618000	44.2	1000.000	9.000	Off	N	10.0	11.8	56.0	
0.640500	42.6	1000.000	9.000	Off	N	10.0	13.4	56.0	
19.027500	32.2	1000.000	9.000	Off	N	9.9	27.8	60.0	

i mai moasaromont Botottoi E									
Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.555000	36.1	1000.000	9.000	Off	N	10.1	9.9	46.0	
0.622500	39.8	1000.000	9.000	Off	N	10.0	6.2	46.0	
0.640500	40.2	1000.000	9.000	Off	N	10.0	5.8	46.0	







# 4. EUT TEST PHOTOS

Reference to the document No.: Test Photographs 3.



Reference to the document No.: External Photographs and Internal Photographs.

Report No.: GTI20181563F



5. PHOTOGRAPHS OF EUT CONSTRUCTIONAL

**************************************	
THE END	

Shenzhen General Testing & Inspection Technology Co., Ltd.