

# TEST REPORT

**APPLICANT**: You Tec Ltd

**PRODUCT NAME**: Smartphone

MODEL NAME : X3

**BRAND NAME**: STK

FCC ID : 2A2KI-STKX3

**STANDARD(S)**: 47 CFR Part 15 Subpart B

**RECEIPT DATE** : 2021-06-18

**TEST DATE** : 2021-06-29

**ISSUE DATE** : 2021-08-09

Certification

Quality Street Certification

Quality Street Certification

Edited by:

He sinuo

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Change History			
Version	Date	Reason for Change	
1.0	2021-08-09	First edition	

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# 1.Technical Information

Note: Provide by applicant

# 1.1. Applicant and Manufacturer Information

Applicant:	You Tec Ltd		
Applicant Address:	Santok House Unit L, Braintree Industrial Estate, Braintree Road,		
	South Ruislip, Middlesex, United Kingdom, HA4 0EJ		
Manufacturer:	You Tec Ltd		
Manufacturer Address: Santok House Unit L, Braintree Industrial Estate, Braintree			
	South Ruislip, Middlesex, United Kingdom, HA4 0EJ		

# 1.2. Equipment Under Test (EUT) Description

Product Name:	Smartphone			
EUT No.:	1#			
Hardware Version:	STKX3XW1			
Software Version:	SW2_V1.6_HW1_V.1_DSVLTEEU_SIG_240721			
Tx Frequency:	GSM850: 824 MHz ~ 849 MHz			
	GSM1900: 1850 MHz ~ 1910 MHz			
	WCDMA Band II: 1850 MHz ~ 1910 MHz			
	WCDMA Band IV: 1710 MHz ~ 1755 MHz			
	WCDMA Band V: 824 MHz ~ 849 MHz			
	LTE Band 2: 1850 MHz ~ 1910 MHz			
	LTE Band 4: 1710 MHz ~ 1755 MHz			
	LTE Band 5: 824 MHz ~ 849 MHz			
	LTE Band 7: 2500 MHz ~ 2570 MHz			
	LTE Band 12: 699 MHz ~ 716 MHz			
	LTE Band 13: 777 MHz ~ 787 MHz			
	LTE Band 14: 788 MHz ~ 798 MHz			
	LTE Band 17: 704 MHz ~ 716 MHz			
	LTE Band 25: 1850 MHz ~ 1915 MHz			
	LTE Band 26: 814MHz ~ 849 MHz			
	LTE Band 30: 2305 MHz ~ 2315 MHz			
	LTE Band 40A: 2305 MHz ~2315 MHz			
	LTE Band 40B: 2350 MHz ~2360 MHz			
	LTE Band 41: 2535 MHz ~ 2655 MHz			
	LTE Band 66: 1710 MHz ~ 1780 MHz			
	LTE Band 71: 663 MHz ~ 698 MHz			





	Battery		
	Manufacturer: You Tec Ltd		
	Rated Output: 100-240V~50/60Hz, 0.3A		
	Rated Input: 5V=2A		
	Serial No.: (N/A, marked #1 by test site)		
	MC/X3WH2TI, MC/X3WH2TI2		
	Model No.: MC/X3WH2TC, MC/X3WH2TA2,		
	Brand Name:	STK	
	AC Adapter	0.714	
	FM : 87.5 MHz ~	ΊυδινιΗΖ	
		BDS/Galileo:1559 MHz ~ 1610MHz;	
	5745MHz ~ 5825MHz		
	802.11a/ac/n: 5180 MHz ~ 5240 MHz;5260 MHz ~ 5320MHz;		
	802.11b/g/n: 2412 MHz ~ 2462 MHz		
	Bluetooth 5.0: 2402 MHz ~ 2480 MHz		
	LTE Band 71: 617 MHz ~ 652 MHz		
	LTE Band 66: 2110 MHz ~ 2180 MHz		
	LTE Band 40B: 2330 MHz ~2360 MHz LTE Band 41: 2535 MHz ~ 2655 MHz		
	LTE Band 40A: 2305 MHz ~2315 MHz LTE Band 40B: 2350 MHz ~2360 MHz		
	LTE Band 30: 2350 MHz ~ 2360 MHz		
		7 MHz ~ 728 MHz	
	LTE Band 26: 859		
		30 MHz ~ 1995 MHz	
	LTE Band 17: 734	4 MHz ~ 746 MHz	
	LTE Band 14: 758	3 MHz ~ 768 MHz	
		6 MHz ~ 756 MHz	
		9 MHz ~ 746 MHz	
		0 MHz ~ 2690 MHz	
	LTE Band 5: 869		
		) MHz ~ 1990 MHz ) MHz ~ 2155 MHz	
		869 MHz ~ 894 MHz 3 MHz ~ 1990 MHz	
		2110 MHz ~ 2155 MHz	
		1930 MHz ~ 1990 MHz	
	GSM1900: 1930 MHz ~ 1990 MHz		
Rx Frequency:	GSM850: 869 MH		
	5745MHz ~ 5825		
		30 MHz ~ 5240 MHz;5260 MHz ~ 5320MHz;	
	802.11b/g/n: 2412 MHz ~ 2462 MHz		
	Bluetooth 5.0: 24	02 MHz ~ 2480 MHz	





Brand Name:	STK
Model No.:	STK X3
Serial No.:	(N/A, marked #1 by test site)
Capacity:	4000mAh
Rated Voltage:	3.85V
Charge Limit:	4.40V
Manufacturer:	Zhongshan Tianmao Battery Co., Ltd.
USB Cable	
Model No.:	CAB/X3WHUSBC
Manufacturer:	You Tec Ltd

#### Note:

 According to the certificate holder, they declared that for model X3(FCC ID: 2A2KI-STKX3), there are 2 models of CPU, only the model suffix is different; Memory (EMMC+LPDDR4X) and camera have 2 Suppliers. It's just that the supplier is different. details as follows:

Part Name		Supplier	Supplier
Fait Name	;	(Main Supply)	(Secondary Supply)
CPU		MediaTek.Inc	MediaTek.Inc
CFU		(Model: MT6762V/CB)	(Model: MT6762V/WA)
EMMC		Hosin Global Electronics Co.,	Shenzhen Longsys Electronics
Memory	EIVIIVIC	Ltd.	Co., Ltd.
, ,		Rayson Hi-Tech (HK) Limited	Shenzhen Longsys Electronics
	LPDDR4X	Rayson Hi-Tech (HK) Limited	Co., Ltd.
Camera		Chongqing Ts-Precision	Shen zhen Holitech opto-
		Technology Co., Ltd.	Electronics Co., Ltd.

Except for the above differences, their electrical circuit design, layout, components used and internal wiring are identical. The second supplier's prototype has tested test item RE. The changes do not affect the results in report.

2. For a more detailed description, please refer to specification or user's manual supplied by the applicant and/or manufacturer.



# 2. Test Results

## 2.1. Applied Reference Documents

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart B:

No.	Identity	Document Title	
1	47 CFR Part 15	Radio Frequency Devices	

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Test Date	Test Engineer	Result	Method Determination Remark
1	15.107	Conducted Emission	2021.06.29	Wu Runfeng	PASS	No deviation
2	15.109	Radiated Emission	2021.06.29	Lin Jiayong	PASS	No deviation

**Note 1:**Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

**Note 2:**When the test result is a critical value,we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.





# 2.2. EUT Setup and Operating Conditions

Note: All of the following test modes are tested in all the test items.

Test Modes				
Mode 1	:	GSM850 Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + USB Cable(Charging from Adapter) + Earphone + Adapter + SIM Card		
Mada		GSM1900 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
Mode 2	:	from Adapter) + Earphone + Adapter + SIM Card		
Mada 2	_	WCDMA Band II Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB		
Mode 3	•	Cable(Charging from Adapter) + Earphone + Adapter + SIM Card		
Mode 4		WCDMA Band IV Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB		
IVIOGE 4	•	Cable(Charging from Adapter) + Earphone + Adapter + SIM Card		
Mode 5		WCDMA Band V Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB		
Wiodo o	•	Cable(Charging from Adapter) + Earphone + Adapter + SIM Card		
Mode 6	:	LTE Band 2 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
		from Adapter) + Earphone + Adapter + SIM Card		
Mode 7	:	LTE Band 4 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
		from Adapter) + Earphone + Adapter + SIM Card		
Mode 8	:	LTE Band 5 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
		from Adapter) + Earphone + Adapter + SIM Card		
Mode 9	:	LTE Band 12 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
		from Adapter) + Earphone + Adapter + SIM Card		
Mode 10	:	LTE Band 13 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
		from Adapter) + Earphone + Adapter + SIM Card		
Mode 11	:	LTE Band 14 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
	_	from Adapter) + Earphone + Adapter + SIM Card		
Mode 12	٠	LTE Band 7 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging from Adapter) + Earphone + Adapter + SIM Card		
Mada 12		LTE Band 17 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
Mode 13	•	from Adapter) + Earphone + Adapter + SIM Card + Galileo Rx		
Mode 14	•	LTE Band 25 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
IVIOGE 14	•	from Adapter) + Earphone + Adapter + SIM Card + GLONASS Rx		
Mode 15	:	LTE Band 26 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
mode 10		from Adapter) + Earphone + Adapter + SIM Card + BDS Rx		
Mode 16	:	LTE Band 29 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
		from Adapter) + Earphone + Adapter + SIM Card + GPS Rx		
Mode 17	:	LTE Band 30 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
		from Adapter) + Earphone + Adapter + SIM Card + FM Rx		
Mode 18	:	LTE Band 40A Idle + + Bluetooth Idle + 5G WLAN Idle+ PC(data transfer) +		
		Battery + Earphone + USB Cable + SIM Card + PC Adapter		
Mode 19	:	LTE Band 41 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
	_	from Adapter) + Earphone + Adapter + SIM Card + MP4		
Mode 20	٠	LTE Band 66 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB		
Mada 04		Cable(Charging from Adapter) + Earphone + Adapter + SIM Card + Camera  LTE Band 71 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB Cable(Charging		
Mode 21	•	from Adapter) + Earphone + Adapter + SIM Card		
Mode 22		LTE Band 40B Idle + Bluetooth Idle + 5G WLAN Idle + Battery + USB		
IVIOUE ZZ	•	Cable(Charging from Adapter) + Earphone + Adapter + SIM Card		
		Towns (Changing Hom / Maptor) - Darphono - / Maptor - One Odia		



#### Remark:

The above test mode in boldface (Mode 20) was the worst case of conducted emission test, only the test data of these modes were reported. The above test mode in boldface (Mode 18) was the worst case of radiated emission test, only the test data of these modes were reported.

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

Temperature (°C):	15 - 35
Relative Humidity (%):	30 - 60
Atmospheric Pressure (kPa):	86 - 106





# 3. 47 CFR Part 15B Requirements

### 3.1. Conducted Emission

### 3.1.1. Requirement

According to FCC section 15.107, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a  $50\mu H/50\Omega$  line impedance stabilization network (LISN).

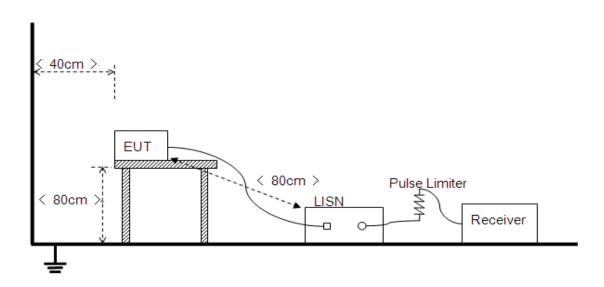
Frequency Range	Conducted Limit (dBμV)		
(MHz)	Quasi-peak Average		
0.15 - 0.50	66 to 56	56 to 46	
0.50 - 5	56	46	
5 - 30	60	50	

#### NOTE:

- a) The limit subjects to the Class B digital device.
- b) The lower limit shall apply at the band edges.
- c) The limit decreases linearly with the logarithm of the frequency in the range 0.15 0.50 MHz.

#### 3.1.2. Test Setup

Please refer to Annex A for the photographs of the Test Configuration.



The EUT is placed on a 0.8m high insulating table, which stands on the grounded conducting floor,



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and keeps 0.4m away from the grounded conducting wall. The EUT is connected to the power mains through a LISN which provides  $50\Omega/50\mu H$  of coupling impedance for the measuring instrument. A Pulse Limiter is used to protect the measuring instrument. The factors of the whole test system are calibrated to correct the reading.

The power strip or extension cord has been investigated to make sure that the LISN integrity inma intained with respect to the impedance characteristics as prescribed in ANSI C63.4-2014 at Clause 4.3.

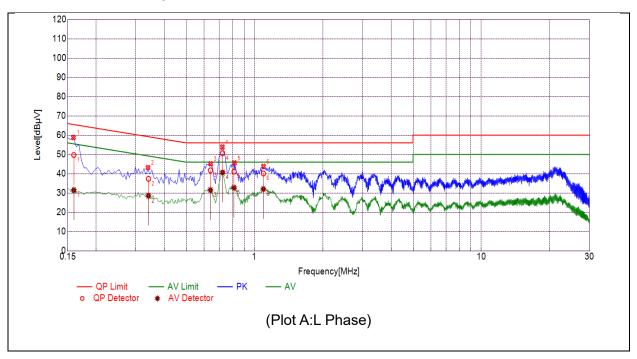
#### 3.1.3. Test Result

Set RBW=9 kHz, VBW=30 kHz. The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. All test modes are considered, refer to recorded points and plots below.



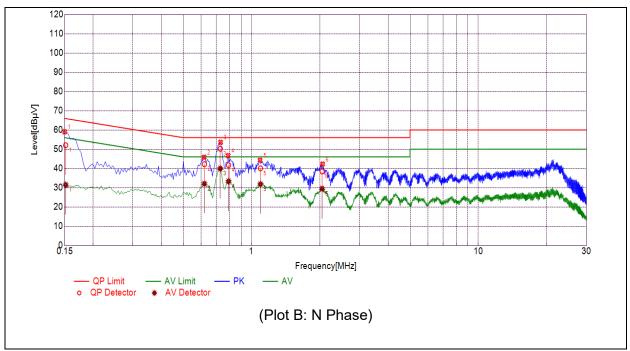


## A. Test Plot and Suspicious Points:



NO.	Fre.	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
NO.	(MHz)	Quai-peak	Average	Quai-peak	Average	Power-line	verdict
1	0.1596	49.73	31.45	65.49	55.49		PASS
2	0.3405	37.37	28.54	59.19	49.19		PASS
3	0.6390	41.77	31.53	56.00	46.00	Lina	PASS
4	0.7230	50.66	40.64	56.00	46.00	Line	PASS
5	0.8120	41.13	32.70	56.00	46.00		PASS
6	1.0940	40.13	32.04	56.00	46.00		PASS





NO.	Fre.	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
NO.	(MHz)	Quai-peak	Average	Quai-peak	Average	Power-line	verdict
1	0.1515	52.08	31.46	65.92	55.92		PASS
2	0.6196	42.19	32.06	56.00	46.00		PASS
3	0.7281	50.24	39.95	56.00	46.00	Noutral	PASS
4	0.7916	41.73	33.30	56.00	46.00	Neutral	PASS
5	1.0948	40.06	31.84	56.00	46.00		PASS
6	2.0482	38.43	29.47	56.00	46.00		PASS



### 3.2. Radiated Emission

### 3.2.1. Requirement

According to FCC section 15.109 (a), the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency	Field Strength Limitation at 3m Measurement Dist					
Range (MHz)	(μV/m)	(dBµV/m)				
30.0 - 88.0	100	20log 100				
88.0 - 216.0	150	20log 150				
216.0 - 960.0	200	20log 200				
Above 960.0	500	20log 500				

As shown in FCC section 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector. When average radiated emission measurements are specified in this part, including emission measurements below 1000MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

#### Note:

- 1) The tighter limit shall apply at the boundary between two frequency range.
- 2) Limitation expressed in dBµV/m is calculated by 20log Emission Level(µV/m).

### 3.2.2. Frequency Range of Measurement

According to 15.33(b)(1), the frequency range of radiated measurement for the EUT is listed in the following table:

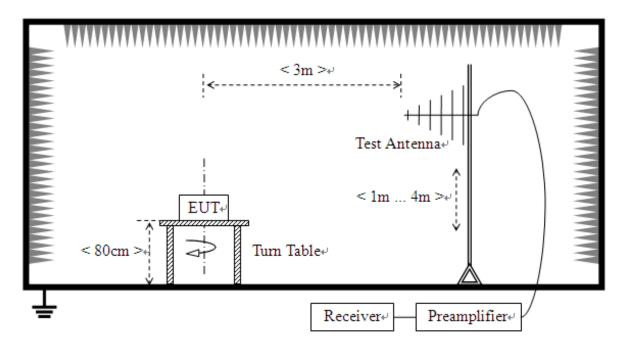
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measure- ment range (MHz)
Below 1.705	30. 1000. 2000. 5000. 5th harmonic of the highest frequency or 40 GHz, whichever is lower.



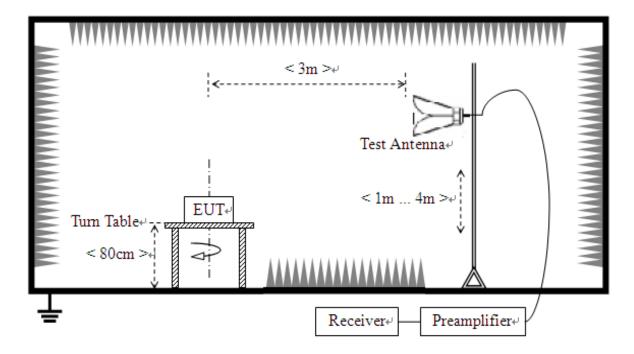


### 3.2.3. Test Setup

1) For radiated emissions from 30MHz to1GHz



2) For radiated emissions above 1GHz







The test is performed in a 3m Semi-Anechoic Chamber; the antenna factor, cable loss and so on of the site (factors) is calculated to correct the reading. The EUT is placed on a 0.8m high insulating Turn Table, and keeps 3m away from the Test Antenna, which is mounted on variable-height antenna master tower.

#### For the test Antenna:

In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz)are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. The emission levels at both horizontal and vertical polarizations should be tested.

For measurements below 1GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video bandwidth is set to 3MHz for peak measurements and as applicable for average measurements.

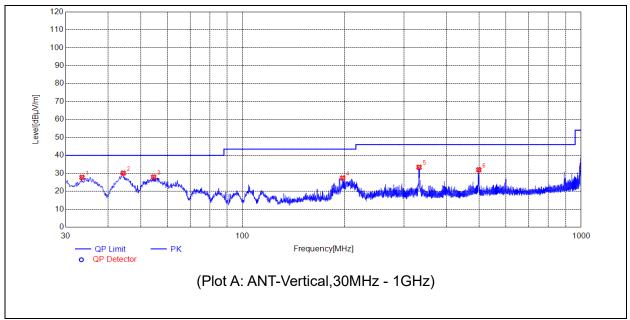
#### 3.2.4. Test Result

The maximum radiated emission is searched using PK, QP and AV detectors; the emission levels more than the limits, and that have narrow margins from the limits will be re-measured with AV and QP detectors. Both the vertical and the horizontal polarizations of the Test Antenna are considered to perform the tests. All test modes are considered, refer to recorded points and plots below.

The amplitude of emissions which (6GHz-30GHz) are attenuated more than 20 dB below the permissible value need not be reported.

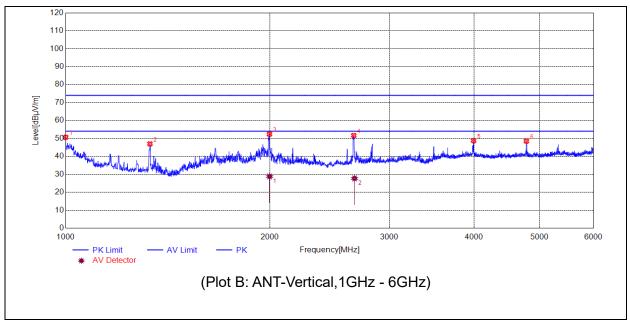
Note: All radiated emission tests were performed in X, Y, Z axis direction, and only the worst axis test condition was recorded in this test report.





No.	Fre. MHz	PK dBµV/m	QP dBµV/m	AV dBμV/m	Limit-PK dBµV/m	Limit-QP dBµV/m	Limit-AV dBµV/m	ANT	Verdict
1	33.4923	27.77	N.A	N.A	N.A	40.00	N.A	<b>V</b>	PASS
2	44.3574	30.13	N.A	N.A	N.A	40.00	N.A	V	PASS
3	54.5435	27.93	N.A	N.A	N.A	40.00	N.A	V	PASS
4	197.4387	27.41	N.A	N.A	N.A	43.50	N.A	V	PASS
5	331.8942	33.40	N.A	N.A	N.A	46.00	N.A	V	PASS
6	498.3628	31.97	N.A	N.A	N.A	46.00	N.A	V	PASS

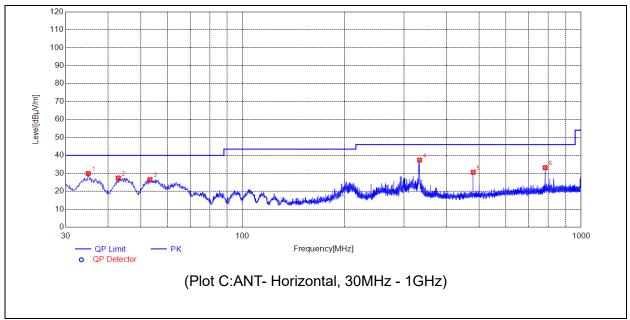




No.	Fre. MHz	PK dBµV/m	QP dBµV/m	AV dBμV/m	Limit-PK dBµV/m	Limit-QP dBµV/m	Limit-AV dBµV/m	ANT	Verdict
1	1000.0000	50.64	N.A	N.A	74.00	N.A	54.00	V	PASS
2	1331.0662	46.99	N.A	N.A	74.00	N.A	54.00	V	PASS
3	1997.1994	52.39	N.A	28.79	74.00	N.A	54.00	V	PASS
4	2659.3319	51.64	N.A	27.71	74.00	N.A	54.00	V	PASS
5	3994.5989	48.77	N.A	N.A	74.00	N.A	54.00	V	PASS
6	4779.7560	48.50	N.A	N.A	74.00	N.A	54.00	V	PASS

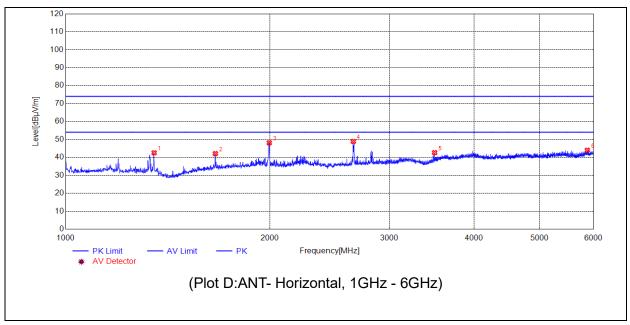
Tel: 86-755-36698555





No.	Fre. MHz	PK dBµV/m	QP dBµV/m	AV dBμV/m	Limit-PK dBµV/m	Limit-QP dBµV/m	Limit-AV dBµV/m	ANT	Verdict
1	34.9475	29.94	N.A	N.A	N.A	40.00	N.A	Н	PASS
2	42.9023	27.41	N.A	N.A	N.A	40.00	N.A	Н	PASS
3	53.1853	26.51	N.A	N.A	N.A	40.00	N.A	Н	PASS
4	333.2523	37.40	N.A	N.A	N.A	46.00	N.A	Н	PASS
5	480.0280	30.60	N.A	N.A	N.A	46.00	N.A	Н	PASS
6	782.9893	33.16	N.A	N.A	N.A	46.00	N.A	Н	PASS





No.	Fre. MHz	PK dBµV/m	QP dBµV/m	ΑV dBμV/m	Limit-PK dBµV/m	Limit-QP dBµV/m	Limit-AV dBµV/m	ANT	Verdict
1	1350.0700	42.54	N.A	N.A	74.00	N.A	54.00	Н	PASS
2	1662.1324	42.12	N.A	N.A	74.00	N.A	54.00	Н	PASS
3	1996.1992	48.13	N.A	N.A	74.00	N.A	54.00	Н	PASS
4	2655.3311	48.88	N.A	N.A	74.00	N.A	54.00	Н	PASS
5	3499.4999	42.63	N.A	N.A	74.00	N.A	54.00	Н	PASS
6	5878.9758	43.98	N.A	N.A	74.00	N.A	54.00	Н	PASS



# **Annex A Test Uncertainty**

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

### **Uncertainty of Conducted Emission Measurement**

Measuring Uncertainty for	9kHz-150kHz	±3.3dB
a Level of Confidence of	150kHz-30MHz	±2.8dB
95%(U=2Uc(y))		

### Uncertainty of Radiated Emission Measurement

Measuring Uncertainty for	30MHz-200MHz	±5.06dB
a Level of Confidence of	200MHz-1000MHz	±5.04dB
95%(U=2Uc(y))	1GHz-6GHz	±5.18dB
	6GHz-18GHz	±5.48dB





# **Annex B Testing Laboratory Information**

### 1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang
	Road, Block 67, BaoAn District, ShenZhen, GuangDong
	Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

### 2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
	FL.3, Building A, FeiYang Science Park, No.8 LongChang
Address:	Road, Block 67, BaoAn District, ShenZhen, GuangDong
	Province, P. R. China

#### 3. Accreditation Certificate

Accredited Testing	The FCC designation number is CN1192.		
Laboratory:	Test firm registration number is 226174.		
	(Shenzhen Morlab Communications Technology Co., Ltd.)		

#### 4. Test Software Utilized

Model	Version Number	Producer
JS32-RE	Version 2.0.2.0	Tonscend
TS+ -[ JS32-CE]	Version2.5.0.0	Tonscend





## 5. Test Equipments Utilized

Description	Model	Serial No.	Manufacturer	Cal. Date	Due. Date
Bi-Log Antenna	VULB 9163	9163-519	SCHWARZBE CK	2019/5/24	2022/5/23
Horn Antenna	BBHA 9120D	01774	SCHWARZBE CK	2019/7/26	2022/7/25
Horn Antenna	BBHA 9170	BBHA 9170#773	SCHWARZBE CK	2019/7/26	2022/7/25
Receiver	N9038A	MY56400093	KEYSIGHT	2021/3/9	2022/3/8
Signal Analyzer	N9020A	MY56060145	Agilent	2020/8/24	2021/8/23
6db Attenuator	BW-N6W5+	E191001	Mini-circuits	2020/10/20	2021/10/19
Preamplifier	S020180L320 3	61171/61172	LUCIX CORP.	2020/7/21	2021/7/20
Preamplifier	S10M100L380 2	46732	LUCIX CORP.	2020/7/21	2021/7/20
Receiver	ESPI	101052	R&S	2020/7/21	2021/7/20
LISN	NSLK 8127	8127449	Schwarzbeck	2021/3/9	2022/3/8
10dB Pulse Limiter	VTSD 9561-F	VTSD 9561 F- B #206	SCHWARZBE CK	2020/7/24	2021/7/23

## 5. Ancillary Equipment Utilized

Description	Manufacturer	Model	Serial No.
PC	DELL	Vostro5370	2017AP6215
PC Adapter	DELL	LA45NM140	051F-A09
Earphone	VIVO	N/A	N/A

END OF REPORT	