

TEST REPORT

APPLICANT: Reliance Communications, LLC

PRODUCT NAME: Orbic SPEED X 5G

MODEL NAME : R5sH14

BRAND NAME : Orbic

FCC ID : 2ABGH-R5SH14

STANDARD(S) : 47 CFR Part 15 Subpart B

RECEIPT DATE : 2023-09-26

TEST DATE : 2023-11-10 to 2023-11-15

ISSUE DATE : 2024-05-24

Edited by:

Chen Bilian(Rapporteur)

Approved by:

Xiao Xiong(Supervisor)

NOTE: This document is issued by Shenzhen Morlab Communications Technology Co., Ltd., the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.



Tel: 86-755-36698555 Http://www.morlab.cn Fax: 86-755-36698525





DIRECTORY

1. Technical Information
1.1. Applicant and Manufacturer Information
1.2. Equipment Under Test (EUT) Description
2. Test Results······
2.1. Applied Reference Documents
2.2. EUT Setup and Operating Conditions
3. 47 CFR Part 15B Requirements
3.1. Conducted Emission
3.2. Radiated Emission ······ 1
Annex A Test Uncertainty 20
Annex B Testing Laboratory Information 22

Change History					
Version Date Reason for change					
1.0 2024-05-24		First edition			

Shenzhen Morlab Communications Technology Co., Ltd.



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Reliance Communications, LLC	
Applicant Address: 555 Wireless Blvd. Hauppauge, NY 11788, USA		
Manufacturer:	MeiG Smart Technology Co., Ltd	
Manufacturer Address:	2nd Floor,Office Building,No.5 Lingxia Road,Fenghuang,Fuyong	
	Street,Bao'an District,Shenzhen	

1.2. Equipment Under Test (EUT) Description

Product Name:	Orbic SPEED X 5G		
EUT No.:	13#		
Hardware Version:	R5sH14_MB_V1.01		
Software Version:	R5sH14_V1.0.06		
Tx Frequency:	WCDMA Band II: 1850 MHz ~ 1910 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 48: 3550 MHz ~ 3700 MHz		
	LTE Band 66: 1710 MHz ~ 1780 MHz		
	5G NR n2: 1850 MHz ~ 1910 MHz		
	5G NR n5: 824 MHz ~ 849 MHz		
	5G NR n66: 1710 MHz ~ 1780 MHz		
	5G NR n77: 3300 MHz ~ 4200 MHz		
	802.11b/g/n/ax: 2412 MHz ~ 2462 MHz		
	802.11a/ac/n/ax: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz;		
	5500 MHz ~ 5720 MHz; 5745 MHz ~ 5825 MHz		
Rx Frequency:	WCDMA Band II: 1930 MHz ~ 1990 MHz		
	WCDMA Band V: 869 MHz ~ 894 MHz		
	LTE Band 2: 1930 MHz ~ 1990 MHz		
	LTE Band 4: 2110 MHz ~ 2155 MHz		





	LTE Band 5: 869 MHz ~ 894 MHz				
	LTE Band 7: 2620 MHz ~ 2690 MHz				
	LTE Band 12: 729 MHz ~ 746 MHz				
	LTE Band 13: 746 MHz ~ 756 MHz				
	LTE Band 48: 355	LTE Band 48: 3550 MHz ~ 3700 MHz			
		0 MHz ~ 2200 MHz			
	5G NR n2: 1930 I				
	5G NR n5: 869 M				
		MHz ~ 2200 MHz			
		MHz ~ 4200 MHz			
		412 MHz ~ 2462 MHz 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz;			
		5500 MHz ~ 5240 MHz; 5745 MHz ~ 5825 MHz			
CA UL:		CA_66B, CA_66C, CA_2A-4A, CA_2A-5A,			
-/·_ -		2A-66A, CA_4A-5A, CA_4A-13A, CA_5A-66A,			
		_2A-12A, CA_4A-12A, CA_12A-66A			
EN_DC:	·	13A_n2, DC_66A_n2, DC_2A_n5, DC_48A_n5,			
	DC_66A_n5, DC_	_2A_n66, DC_5A_n66, DC_13A_n66,			
	DC_2A_n77, DC_	DC_2A_n77, DC_5A_n77, DC_13A_n77, DC_66A_n77,			
	DC_4A_n2, DC_1	DC_4A_n2, DC_12A_n2, DC_4A_n5, DC_12A_n66			
Accessory:	AC Adapter				
	Brand Name:	Orbic			
	Model No.:	OACH023US1			
	Serial No.:	(N/A, marked #1 by test site)			
	Rated Input:	100-240V~ 50/60Hz, 0.5A			
	Rated Output:	5V=3A, 9V=2A, 12V=1.5A			
	Manufacturer 1:	WATAI ELECTRONICS PRIVATE LIMITED			
		KANGYIN ELECTRONIC TECHNOLOGY			
	Manufacturer 2:	CO.,LTD			
	Battery				
	Brand Name:	Orbic			
	Model No.:	R562L5			
	Serial No.:	(N/A, marked #1 by test site)			
	Capacity:	5000mAh			
	Rated Voltage:	3.85V			
	Charge Limit:	4.4V			
	Manufacturer:	Shenzhen Aerospace Electronic Co.,Ltd			
1	Sherizhen Aerospace Electronic Co.,Lta				
		,			
	USB Cable Model No.:	OAUC023US1			





Manufacturer:	KANGYIN ELECTRONIC TECHNOLOGY CO.,LTD
---------------	---------------------------------------

Note:

- 1. This test report is variant from the original report (Report No.: SZ23070206E01, model name: R562L5) based on the similarity between before. It change produce name, model name, hardware version, software version, FCC ID, remove mmW function, add CA and EN DC combinations, the others are the same as before. This test has been tested RE and CE. For RE and CE, the test results in this report still refer to the test results of the original test 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	2023.11.15	Wang Deyong	PASS ^{Note 4}	No deviation
2	15.109	Radiated Emission	2023.11.10	Lin Jiayong	PASS ^{Note 4}	No deviation

Note 1: The tests were performed according to the method of measurements prescribed in ANSI C63.4-2014.

Note 2: 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 3: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.

Note 4: The test results of these test items in this report refer to the test report (Report No.: SZ23070206E01).

E-mail: service@morlab.cn

REPORT No.: SZ24040065E01



2.2. EUT Setup and Operating Conditions

Test Item	Test Item				
Mode 1	:	EUT + WCDMA Band II Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB			
		Cable + Charging Mode			
Mode 2	:	EUT + WCDMA Band V Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 3	:	EUT + LTE Band 2 Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 4	:	EUT + LTE Band 4 Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 5	:	EUT + LTE Band 5 Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 6	:	EUT + LTE Band 7 Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 7	:	EUT + LTE Band 12 Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 8	:	EUT + LTE Band 13 Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 9	:	EUT + LTE Band 48 Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 10	:	EUT + LTE Band 66 Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 11	:	EUT + 5G NR n2 Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 12	:	EUT + 5G NR n5 Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 13	:	EUT + 5G NR n66 Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 14	:	EUT + 5G NR n77 Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 15	:	EUT + 5G NR n260 Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 16	:	EUT + 5G NR n261 Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +			
		Charging Mode			
Mode 17	:	EUT + LTE Band 4 Idle + 2.4G WLAN Link + PC + PC Adapter + USB Cable + RJ45			
		Cable + Data Transmission Mode			
Mode 18	:	EUT + LTE Band 13 Idle + 5G WLAN Link + AC Adapter + USB Cable + RJ45			
		Cable + PC + Mobile phone + Ping network mode			

Tel: 86-755-36698555



Mode 19	:	EUT + CA_5B Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 20	:	EUT + CA_48C Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 21	:	EUT + CA_66B Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 22	:	EUT + CA_66C Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 23	:	EUT + CA_2A-4A Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 24	:	EUT + CA_2A-5A Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 25	:	EUT + CA_2A-13A Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 26	:	EUT + CA_2A-66A Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 27	:	EUT + DC_5A_n2 Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 28	:	EUT + DC_2A_n5 Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 29	:	EUT + DC_2A_n66 Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 30	:	EUT + DC_2A_n77 Idle + 5G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Mode 31	:	EUT + CA_2A-12A Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB Cable +
		Charging Mode
Domorki		

Remark:

The above test mode in boldface (Mode 18) was the worst case of conducted emission test, only the test data of these modes were reported. The above test mode in boldface (Mode 1) 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).

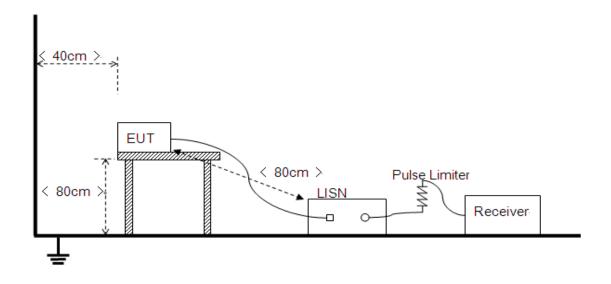
Frequency Range	Conducted Limit (dBμV)		
(MHz)	Quasi-peak	Average	
0.15 - 0.50	66 to 56	56 to 46	
0.50 - 5	56	46	
5 - 30	60	50	

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 0.50MHz.

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, and keeps 0.4m away from the grounded conducting wall. The EUT is connected to the power mains through a LISN which provides 50Ω/50μH 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.

The measurement results are obtained as below:

 $\label{eq:loss_loss} \text{E}\left[\text{dB}\mu\text{V}\right] = \text{U}_{\text{R}}[\text{dB}\mu\text{V}] + \text{L}_{\text{Cable loss}}\left[\text{dB}\right] + \text{A}_{\text{Factor}}\left[\text{dB}\right]$

U_R: Receiver Reading

A_{Factor}: Voltage Division Factor of LISN

L_{Cable loss}: Correction Factor Contains Pulse Limiter and Cable

During the test, the total correction Factor L_{Cable loss} and A_{Factor} were built in test software.

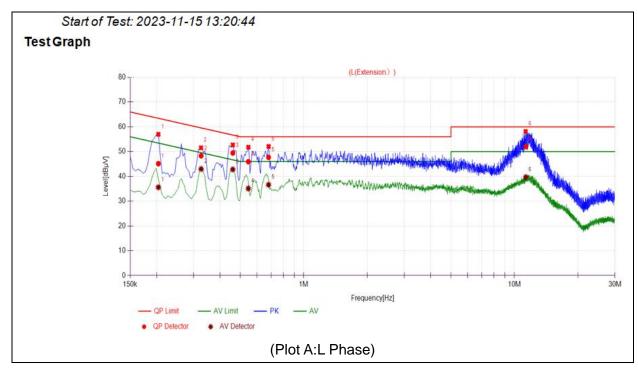
Tel: 86-755-36698555

Http://www.morlab.cn

Shenzhen Morlab Communications Technology Co., Ltd.



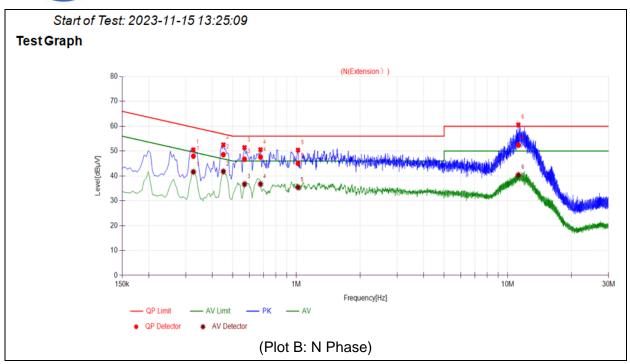
A. Test Plot and Suspicious Points:



No.	Fre.	Emission Level (dBµV)		Limit (c	dΒμV)	Power-line	Verdict
NO.	(MHz)	Quasi-peak	Average	Quasi-peak	Average	Power-line	verdict
1	0.2040	45.14	35.59	63.45	53.45		PASS
2	0.3257	48.30	43.00	59.56	49.56		PASS
3	0.4604	49.45	42.80	56.68	46.68]	PASS
4	0.5455	45.93	35.11	56.00	46.00	Line	PASS
5	0.6804	47.68	36.62	56.00	46.00		PASS
6	11.3186	52.07	39.66	60.00	50.00		PASS

Tel: 86-755-36698555





No	Fre.	Emission Level (dBµV)		Limit (d	dΒμV)	Power-line	Verdict
No.	(MHz)	Quasi-peak	Average	Quasi-peak	Average	Power-line	verdict
1	0.3257	47.96	41.63	59.56	49.56		PASS
2	0.4515	48.56	41.78	56.85	46.85		PASS
3	0.5685	46.73	36.64	56.00	46.00		PASS
4	0.6768	47.60	36.72	56.00	46.00	Neutral	PASS
5	1.0180	45.07	35.42	56.00	46.00		PASS
6	11.2355	52.41	40.36	60.00	50.00		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	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 indBμV/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:

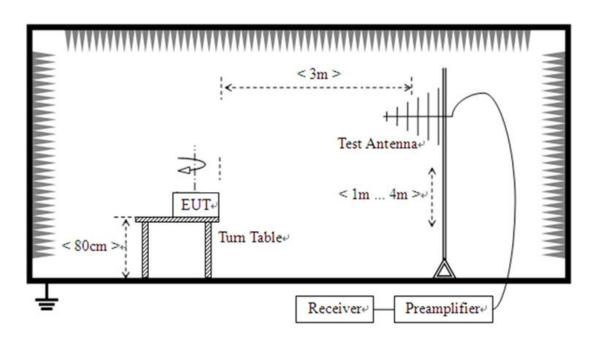
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measure- ment range (MHz)
Below 1.705	30. 1000. 2000. 5000. 5th harmonic of the highest frequency or 40 GHz, whichever is lower.



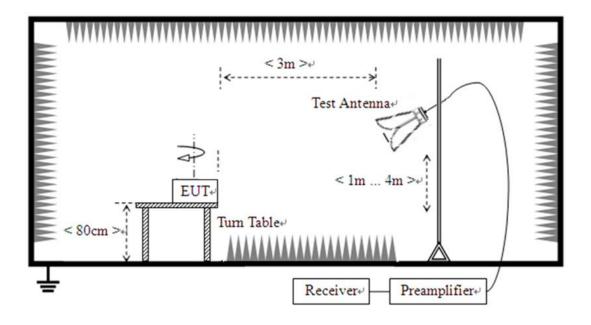


3.2.3. Test Setup

1) For radiated emissions from 30MHz to1GHz



2) For radiated emissions above 1GHz





Tel: 86-755-36698555



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 avariable-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 above 1 GHz, keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.

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 (6GHz-40GHz) which are attenuated more than 20 dB below the permissible value need not be reported.

The measurement results are obtained as below:

 $E \left[dB\mu V/m \right] = U_R \left[dB\mu V \right] + A_T [dB] + A_{Factor} \left[dB \right]; A_T = L_{Cable \ loss} \left[dB \right] - G_{preamp} \left[dB \right]$

A_T: Total correction Factor except Antenna

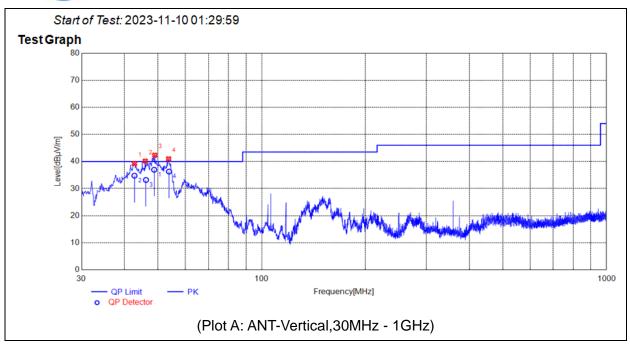
U_R: Receiver Reading G_{preamp}: Preamplifier Gain A_{Factor}: Antenna Factor at 3m

During the test, the total correction Factor A_T and A_{Factor} were built in test software.

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.

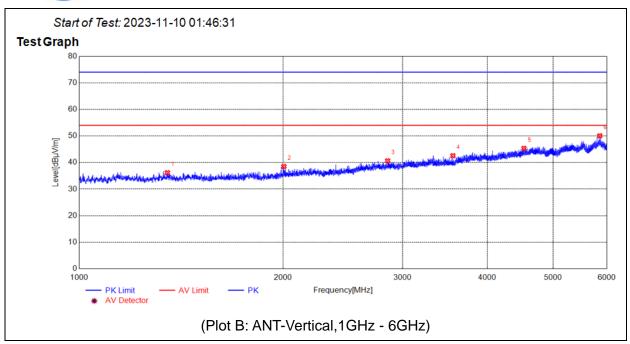






Na	Fre.	PK	QP	AV	Limit-PK	Limit-QP	Limit-AV	ANIT	Voudiet
No.	MHz	dBµV/m	dΒμV/m	dBµV/m	dBµV/m	dBµV/m	dBµV/m	ANT	Verdict
1	42.7083	39.25	34.76	N.A.	N.A.	40.00	N.A.	V	PASS
2	45.9096	40.15	33.19	N.A.	N.A.	40.00	N.A.	V	PASS
3	48.9169	42.33	36.95	N.A.	N.A.	40.00	N.A.	V	PASS
4	53.6704	40.97	36.28	N.A.	N.A.	40.00	N.A.	V	PASS

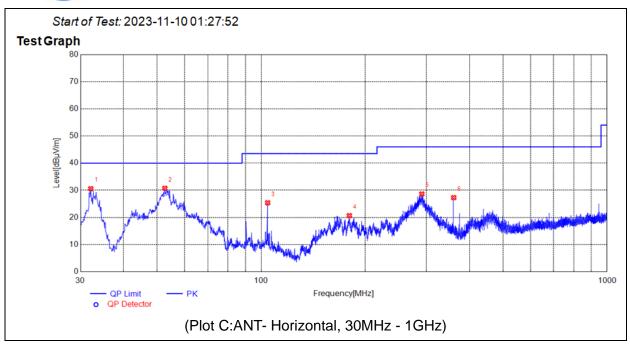




Na	Fre.	PK	QP	AV	Limit-PK	Limit-QP	Limit-AV	ANIT	Verdict
No.	MHz	dBµV/m	dΒμV/m	dBµV/m	dBµV/m	dBµV/m	dΒμV/m	ANT	verdict
1	1349.5350	36.16	N.A.	N.A.	74.00	N.A.	54.00	V	PASS
2	2004.6005	38.51	N.A.	N.A.	74.00	N.A.	54.00	V	PASS
3	2851.6852	40.64	N.A.	N.A.	74.00	N.A.	54.00	V	PASS
4	3559.2559	42.56	N.A.	N.A.	74.00	N.A.	54.00	V	PASS
5	4530.8531	45.32	N.A.	N.A.	74.00	N.A.	54.00	V	PASS
6	5859.9860	50.06	N.A.	N.A.	74.00	N.A.	54.00	V	PASS

Tel: 86-755-36698555

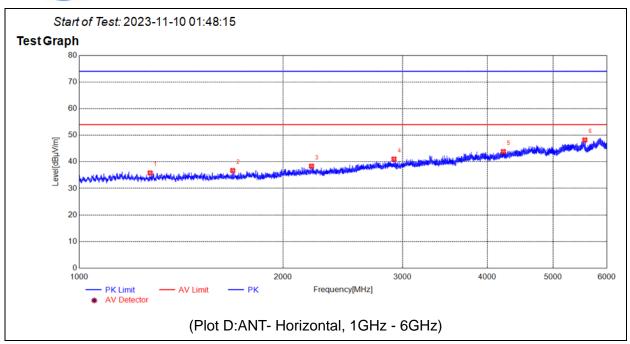




Na	Fre.	PK	QP	AV	Limit-PK	Limit-QP	Limit-AV	ANT	Verdict
No.	MHz	dBµV/m	dBµV/m	dΒμV/m	dBµV/m	dBµV/m	dBµV/m	ANT	verdict
1	32.1342	30.58	N.A.	N.A.	N.A.	40.00	N.A.	Н	PASS
2	52.6033	30.73	N.A.	N.A.	N.A.	40.00	N.A.	Н	PASS
3	104.3094	25.39	N.A.	N.A.	N.A.	43.50	N.A.	Н	PASS
4	179.6860	20.67	N.A.	N.A.	N.A.	43.50	N.A.	Н	PASS
5	291.1501	28.64	N.A.	N.A.	N.A.	46.00	N.A.	Н	PASS
6	360.0270	27.30	N.A.	N.A.	N.A.	46.00	N.A.	Н	PASS

Tel: 86-755-36698555





No	Fre.	PK	QP	AV	Limit-PK	Limit-QP	Limit-AV	ANT	Verdict
No.	MHz	dBµV/m	dΒμV/m	dBµV/m	dBµV/m	dBµV/m	dBµV/m	ANT	verdict
1	1273.0273	35.81	N.A.	N.A.	74.00	N.A.	54.00	Н	PASS
2	1685.0685	36.72	N.A.	N.A.	74.00	N.A.	54.00	Н	PASS
3	2201.6202	38.38	N.A.	N.A.	74.00	N.A.	54.00	Н	PASS
4	2913.6914	41.04	N.A.	N.A.	74.00	N.A.	54.00	Н	PASS
5	4224.3224	43.87	N.A.	N.A.	74.00	N.A.	54.00	Н	PASS
6	5571.4571	48.22	N.A.	N.A.	74.00	N.A.	54.00	Н	PASS

Tel: 86-755-36698555



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.			
	FL.3, Building A, FeiYang Science Park, No.8 LongChang		
Laboratory Address:	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 Laboratory:	The FCC designation number is CN1192.
	Test firm registration number is 226174.
	(Shenzhen Morlab Communications Technology Co., Ltd.)

4. Test Software Utilized

Model	Version Number	Producer
TS+ -[JS32-RE]	Version 2.5.0.6	Tonscend
TS+ -[JS32-CE]	Version 2.5.0.0	Tonscend





5. Test Equipments Utilized

Description	Model	Serial No.	Manufacturer	Cal. Date	Due. Date
Bi-Log Antenna	VULB 9163	9163-274	SCHWARZBECK	2023/6/27	2024/6/26
Bi-Log Antenna	VULB 9163	9163-519	SCHWARZBECK	2023/7/1	2024/6/30
Horn Antenna	BBHA 9120D	9120D-963	SCHWARZBECK	2023/6/27	2024/6/26
Horn Antenna	BBHA 9120D	01774	SCHWARZBECK	2023/7/1	2024/6/30
Horn Antenna	BBHA9170	BBHA9170 #773	SCHWARZBECK	2023/7/1	2024/6/30
Receiver	N9038A	MY541300 16	Agilent	2023/6/21	2024/6/20
Receiver	N9038A	MY564000 93	KEYSIGHT	2023/2/9	2024/2/8
6db Attenuator	BW-N6W5+	E191001	Mini-circuits	2023/9/19	2024/9/18
Preamplifier	S020180L3203	61171/611 72	LUCIX CORP.	2023/6/27	2024/6/26
Preamplifier	S10M100L3802	46732	LUCIX CORP.	2023/6/27	2024/6/26
Preamplifier	DCLNA0118-40 C-S	DS77209	Decentest	2023/7/4	2024/7/3
RF Coaxial Cable	PE330	MRE001	Pasternack	N/A	N/A
RF Coaxial Cable	CLU18	MRE002	Pasternack	N/A	N/A
RF Coaxial Cable	CLU18	MRE003	Pasternack	N/A	N/A
RF Coaxial Cable	QA360-40-KK- 0.5	22290045	Qualwave	N/A	N/A
RF Coaxial Cable	QA360-40-KKF -2	22290046	Qualwave	N/A	N/A
RF Coaxial Cable	QA500-18-NN- 5	22120181	Qualwave	N/A	N/A
RF Coaxial Cable	BNC	MRE04	Qualwave	N/A	N/A
Receiver	ESPI	101052	R&S	2023/6/21	2024/6/20
LISN	NSLK 8127	8127449	Schwarzbeck	2023/2/21	2024/2/20
10dB Pulse Limiter	VTSD 9561-F	VTSD 9561 F-B #206	SCHWARZBECK	2023/6/27	2024/6/26
System Simulator	CMW500	152038	R&S	2023/9/19	2024/9/18



6. Ancillary Equipment Utilized

Description	Manufacturer	Model	Serial No.
mobile phone	HONOR	PLK-AL10	N/A
RJ45 Cable	N/A	N/A	N/A
PC	DELL	VOSTRO 5370	DF2DR A01 DPC
PC adapter	DELL	LA45NM140	OKXTTW

END OF REPORT	