

TEST REPORT

APPLICANT : Reliance Communications, LLC

PRODUCT NAME : Orbic Speed X 5G

MODEL NAME : R562L5

BRAND NAME : Orbic

FCC ID : 2ABGH-R562L5

STANDARD(S) : 47 CFR Part 15 Subpart B

RECEIPT DATE : 2023-09-26

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

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| Change History | | | |
|--------------------------------|------------|---------------|--|
| Version Date Reason for change | | | |
| 1.0 | 2024-04-01 | First edition | |
| | | | |

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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,Fenghu | | |
| | Street,Bao'an District,Shenzhen | |

1.2. Equipment Under Test (EUT) Description

| Product Name: | Orbic Speed X 5G | |
|-------------------|--|--|
| EUT No.: | 13# | |
| Hardware Version: | SPEEDVZ_V1.02_PCB | |
| Software Version: | R562L5_8.222.41_EQ103 | |
| 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 | |
| | 5G NR n260: 37000 MHz ~ 40000 MHz | |
| | 5G NR n261: 27500 MHz ~ 28350 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 | | | |
| | | S MHz ~ 756 MHz | | |
| | | 50 MHz ~ 3700 MHz | | |
| | 5G NR n2: 1930 I | 0 MHz ~ 2200 MHz | | |
| | 5G NR n5: 869 M | | | |
| | | MHz ~ 2200 MHz | | |
| | | MHz ~ 4200 MHz | | |
| | 5G NR n260: 370 | 00 MHz ~ 40000 MHz | | |
| | 5G NR n261: 275 | 00 MHz ~ 28350 MHz | | |
| | | 412 MHz ~ 2462 MHz | | |
| | | 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; | | |
| 04 111 | | 5500 MHz ~ 5720 MHz; 5745 MHz ~ 5825 MHz | | |
| CA_UL: | CA_5B, CA_48C, CA_66B, CA_66C, CA_2A-4A, CA_2A-5A, | | | |
| | CA_2A-13A, CA_2A-66A, CA_4A-5A, CA_4A-13A, CA_5A-66A, CA_13A-66A | | | |
| EN DC: | DC_5A_n2, DC_13A_n2, DC_66A_n2, DC_2A_n5, DC_48A_n5, | | | |
| | | _2A_n66, DC_5A_n66, DC_13A_n66, | | |
| | DC_2A_n77, DC_ | _5A_n77, DC_13A_n77, DC_66A_n77 | | |
| 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 | | |
| | Manufacturer 2: KANGYIN ELECTRONIC TECHNOLOG | | | |
| | Battery | | | |
| | Brand Name: | Orbic | | |
| | Model No.: | R562L5 | | |
| | İ | | | |
| | Serial No.: | (N/A, marked #1 by test site) | | |
| | Serial No.: Capacity: | (N/A, marked #1 by test site) 5000mAh | | |
| | | | | |
| | Capacity: | 5000mAh | | |
| | Capacity: Rated Voltage: | 5000mAh 3.85V | | |



| USB Cable | |
|---------------|-------------------------------|
| Model No.: | OAUC023US1 |
| Manufacturari | KANGYIN ELECTRONIC TECHNOLOGY |
| Manufacturer: | CO.,LTD |

Note:

 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 | No deviation |
| 2 | 15.109 | Radiated Emission | 2023.11.10 | Lin Jiayong | PASS | 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.



2.2. EUT Setup and Operating Conditions

| Test Item |) | | | |
|----------------|---|--|--|--|
| Mode 1 | Mode 1 : EUT + WCDMA Band II Idle + 2.4G WLAN Idle + AC Adapter + Battery + USB | | | |
| | | Cable + Charging Mode | | |
| Mode 2 : EUT + | | 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 | 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 | | |

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| 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 + |
| 10000 21 . | Charging Mode |
| Mode 25 : | |
| 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 |
| 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).

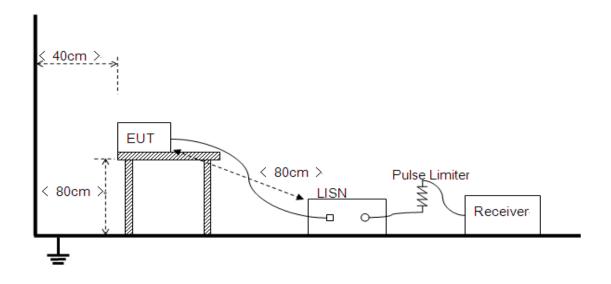
| Frequency Range | Conducted Limit (dBµV) | | |
|-----------------|------------------------|----------|--|
| (MHz) | Quasi-peak | Average | |
| 0.15 - 0.50 | 66 to 56 | 56 to 46 | |
| 0.50 - 5 | 56 | 46 | |
| 5 - 30 | 60 | 50 | |

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

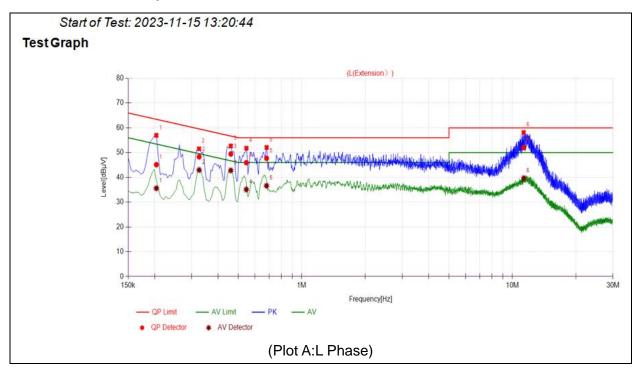
During the test, the total correction Factor L_{Cable loss} and A_{Factor} were built in test software.

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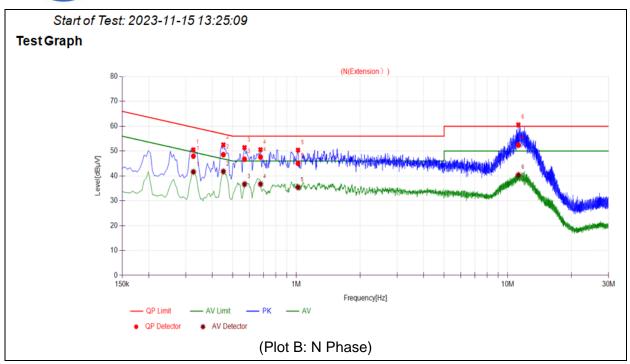


A. Test Plot and Suspicious Points:



| No. | Fre. | Emission Level (dBµV) | | Limit (d | 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 | Lina | 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 |





| No | Fre. | Emission Level (dBµV) | | Limit (d | dΒμV) | Dower 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 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

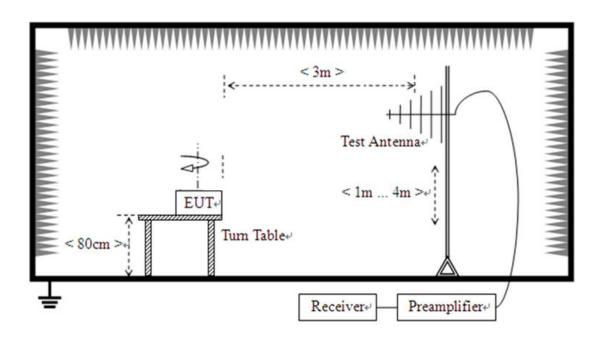
According to 15.33(b)(1), the frequency range of radiated measurement for the EUT is listed in the following table:

| 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. |



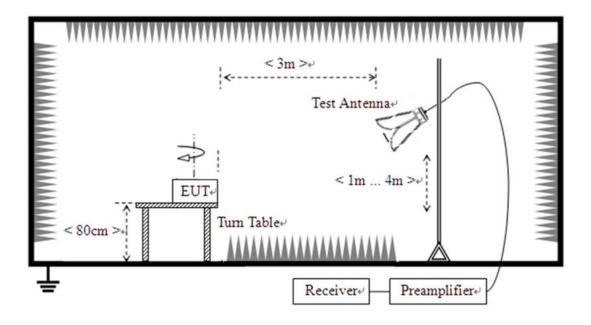
3.2.3. Test Setup

1) For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz

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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

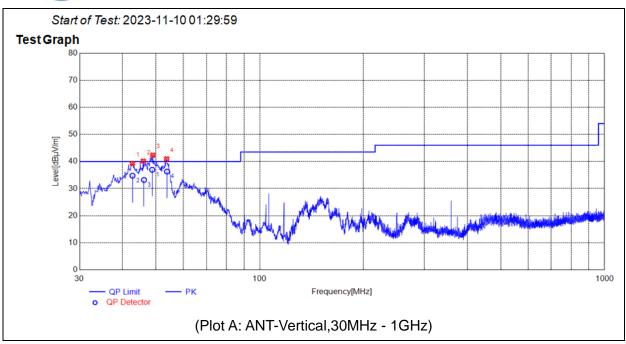
U_R: Receiver Reading G_{preamp}: Preamplifier Gain A_{Factor}: Antenna Factor at 3m

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.

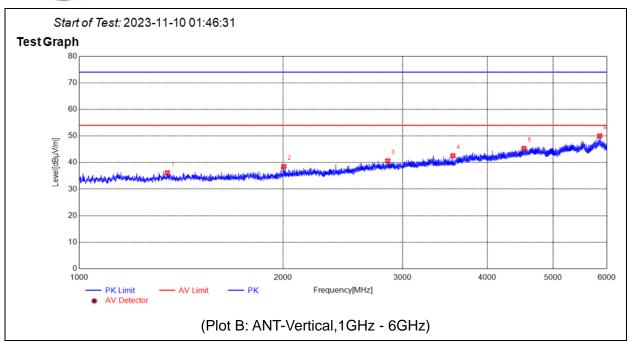






| No | Fre. | PK | QP | AV | Limit-PK | Limit-QP | Limit-AV | ANIT | Verdict |
|-----|---------|--------|--------|--------|----------|----------|----------|------|---------|
| No. | MHz | dBµV/m | dΒμV/m | dΒμV/m | dΒμV/m | dBµV/m | dBµV/m | ANT | verdict |
| 1 | 42.7083 | 39.25 | 34.76 | N.A. | N.A. | 40.00 | N.A. | > | PASS |
| 2 | 45.9096 | 40.15 | 33.19 | N.A. | N.A. | 40.00 | N.A. | ٧ | PASS |
| 3 | 48.9169 | 42.33 | 36.95 | N.A. | N.A. | 40.00 | N.A. | ٧ | PASS |
| 4 | 53.6704 | 40.97 | 36.28 | N.A. | N.A. | 40.00 | N.A. | V | PASS |



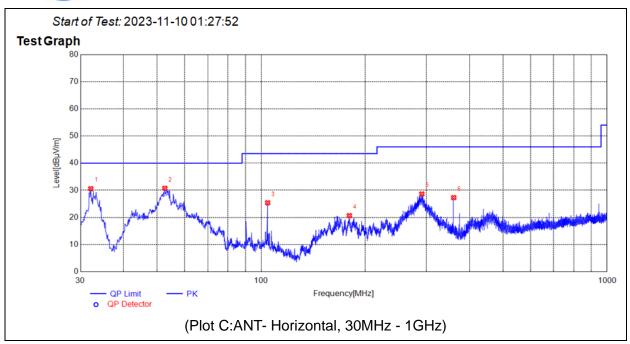


| Na | Fre. | PK | QP | AV | Limit-PK | Limit-QP | Limit-AV | ANIT | Verdict |
|-----|-----------|--------|--------|--------|----------|----------|----------|----------|---------|
| No. | MHz | dBµV/m | dΒμV/m | dBµV/m | dΒμV/m | dBµV/m | dΒμV/m | ANT | verdict |
| 1 | 1349.5350 | 36.16 | N.A. | N.A. | 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 |

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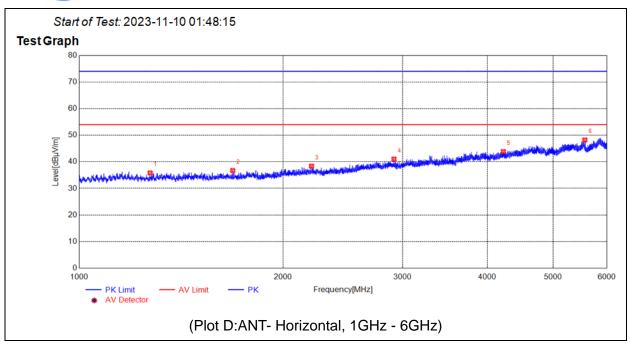


| Na | Fre. | PK | QP | AV | Limit-PK | Limit-QP | Limit-AV | ANT | Verdict |
|-----|----------|--------|--------|--------|----------|----------|----------|-----|---------|
| No. | MHz | dBµV/m | dBµV/m | dΒμV/m | dBµV/m | dBµV/m | dBµV/m | ANT | veraict |
| 1 | 32.1342 | 30.58 | N.A. | N.A. | N.A. | 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 |

Shenzhen Morlab Communications Technology Co., Ltd.

FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China





| 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

Http://www.morlab.cn



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

| Approdited Testing | The FCC designation number is CN1192. | |
|--------------------|---|--|
| Accredited Testing | Test firm registration number is 226174. | |
| Laboratory: | (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 |

| FND OF REPORT | |
|-------------------|--|