

# **FCC Test Report**

Report No.: AGC00174210102FE03

FCC ID : XPYNORAB1

APPLICATION PURPOSE : Original Equipment

**PRODUCT DESIGNATION**: NORA-B1

**BRAND NAME** : u-blox

**MODEL NAME**: NORA-B100, NORA-B101, NORA-B106

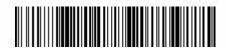
**APPLICANT** : u-blox AG

**DATE OF ISSUE** : Jun. 09, 2021

**STANDARD(S)** : FCC Part 15.247

REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Sedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGE, the test result presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 2 of 69

# REPORT REVISE RECORD

| Report Version | Revise Time | Issued Date   | Valid Version | Notes           |
|----------------|-------------|---------------|---------------|-----------------|
| V1.0           |             | Jun. 09, 2021 | Valid         | Initial Release |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Restrict/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 3 of 69

# **TABLE OF CONTENTS**

| 1. VERIFICATION OF COMPLIANCE          | 5        |
|----------------------------------------|----------|
| 2. GENERAL INFORMATION                 | 6        |
| 2.1. PRODUCT DESCRIPTION               |          |
| 2.4. TEST METHODOLOGY                  |          |
| 2.8. DESCRIPTION OF AVAILABLE ANTENNAS |          |
| 3. MEASUREMENT UNCERTAINTY             |          |
| 4. DESCRIPTION OF TEST MODES           |          |
| 5. SYSTEM TEST CONFIGURATION           | 11       |
| 5.1. CONFIGURATION OF TESTED SYSTEM    | 11<br>11 |
| 6. TEST FACILITY                       | 12       |
| 7. PEAK OUTPUT POWER                   | 13       |
| 7.1. MEASUREMENT PROCEDURE             | 13       |
| 8. 6 DB BANDWIDTH                      |          |
| 8.1. MEASUREMENT PROCEDURE             | 16       |
| 9. CONDUCTED SPURIOUS EMISSION         | 18       |
| 9.1. MEASUREMENT PROCEDURE             | 18<br>18 |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Restrict/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written exphorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuence of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Report No.: AGC00174210102FE03 Page 4 of 69

| 9.4. LIMITS AND MEASUREMENT RESULT                          | 18 |
|-------------------------------------------------------------|----|
| 10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY         | 26 |
| 10.1. MEASUREMENT PROCEDURE                                 | 26 |
| 10.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)          |    |
| 10.3. MEASUREMENT EQUIPMENT USED                            |    |
| 10.4. LIMITS AND MEASUREMENT RESULT                         | 26 |
| 11. RADIATED EMISSION                                       | 28 |
| 11.1. MEASUREMENT PROCEDURE                                 |    |
| 11.2. TEST SETUP                                            | 29 |
| 11.3. LIMITS AND MEASUREMENT RESULT                         |    |
| 11.4. TEST RESULT                                           | 30 |
| 12. FCC LINE CONDUCTED EMISSION TEST                        | 59 |
| 12.1. LIMITS OF LINE CONDUCTED EMISSION TEST                | 59 |
| 12.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST         | 59 |
| 12.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST | 60 |
| 12.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST       |    |
| 12.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST           | 61 |
| APPENDIX A: PHOTOGRAPHS OF TEST SETUP                       | 63 |
| APPENDIX B. PHOTOGRAPHS OF FUT                              | 69 |



Page 5 of 69

# 1. VERIFICATION OF COMPLIANCE

| u-blox AG                                                                                                                                                                                |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Zuercherstrasse 68,Thalwil 8800, Switzerland                                                                                                                                             |  |
| u-blox AG                                                                                                                                                                                |  |
| Zuercherstrasse 68,Thalwil 8800, Switzerland                                                                                                                                             |  |
| NORA-B1                                                                                                                                                                                  |  |
| u-blox                                                                                                                                                                                   |  |
| NORA-B100                                                                                                                                                                                |  |
| NORA-B101, NORA-B106                                                                                                                                                                     |  |
| All the series models are the same as the test model except for the model names and antenna type.  NORA-B100 - u.FL connector;  NORA-B101 - Antenna pin;  NORA-B106 - PCB Trace antenna. |  |
| Feb. 23, 2021 to Jun. 09, 2021                                                                                                                                                           |  |
| No any deviation from the test method                                                                                                                                                    |  |
| Normal                                                                                                                                                                                   |  |
| Pass                                                                                                                                                                                     |  |
| AGCRT-US-BLE/RF                                                                                                                                                                          |  |
|                                                                                                                                                                                          |  |

#### We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC part 15.247.

| Prepared By | John Zerog                          |               |
|-------------|-------------------------------------|---------------|
| Page 19     | John Zeng<br>(Project Engineer)     | Jun. 09, 2021 |
| Reviewed By | Max Zhang                           |               |
| No.         | Max Zhang<br>(Reviewer)             | Jun. 09, 2021 |
| Approved By | Formerlies                          |               |
| · · ·       | Forrest Lei<br>(Authorized Officer) | Jun. 09, 2021 |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written appropriation of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 6 of 69

# 2. GENERAL INFORMATION

#### 2.1. PRODUCT DESCRIPTION

The EUT is designed as a "NORA-B1". It is designed by way of utilizing the O-QPSK technology to achieve the system operation.

A major technical description of EUT is described as following

| Operation Frequency                                                                             | 2.405 GHz to 2.475GHz |
|-------------------------------------------------------------------------------------------------|-----------------------|
| RF Output Power 2.871dBm (Max)                                                                  |                       |
| Modulation O-QPSK                                                                               |                       |
| Number of channels 15 Channels                                                                  |                       |
| Antenna Designation  See section 2.9 of the report (Comply with requirements of the FCC 15.203) |                       |
| Antenna Gain See section 2.8 of the report                                                      |                       |
| Hardware Version A                                                                              |                       |
| Software Version V1.0                                                                           |                       |
| Power Supply DC 3.3V                                                                            |                       |

#### 2.2. TABLE OF CARRIER FREQUENCYS

| Frequency Band | Channel Number | Frequency |
|----------------|----------------|-----------|
|                | 0              | 2405 MHz  |
| 100 2C         | 1              | 2410 MHz  |
| 2400~2483.5MHz |                |           |
| cC -           | 13             | 2470 MHz  |
| 200            | ® 14           | 2475 MHz  |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Festing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written perhorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 7 of 69

# 2.3. RELATED SUBMITTAL(S)/GRANT(S)

This submittal(s) (test report) is intended for **FCC ID: XPYNORAB1** filing to comply with the FCC Part 15.247 requirements.

#### 2.4. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

#### 2.5. SPECIAL ACCESSORIES

Refer to section 5.2.

#### 2.6. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

#### 2.7. ANTENNA REQUIREMENT

This intentional radiator is designed with a permanently attached antenna of an antenna to ensure that no antenna other than that furnished by the responsible party shall be used with the device. For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.

#### 2.8. DESCRIPTION OF AVAILABLE ANTENNAS

Model No.: NORA-B100

| Bluetooth Dedicated Antenna |                      |                     |
|-----------------------------|----------------------|---------------------|
| Antenna Type                | Frequency Band (GHz) | Max Peak Gain (dBi) |
| Monopole antenna            | 2400 ~ 2483.5        | 5.3                 |
| FPC antenna                 | 2400 ~ 2483.5        | -0.5                |

Model No.: NORA-B101

| Bluetooth Dedicated Antenna |                      |                     |  |
|-----------------------------|----------------------|---------------------|--|
| Antenna Type                | Frequency Band (GHz) | Max Peak Gain (dBi) |  |
| Monopole antenna            | 2400 ~ 2483.5        | 5.3                 |  |
| FPC antenna                 | 2400 ~ 2483.5        | -0.5                |  |

Model No.: NORA-B106

| Bluetooth Internal Antenna |                      |                     |
|----------------------------|----------------------|---------------------|
| Antenna Type               | Frequency Band (GHz) | Max Peak Gain (dBi) |
| PCB Antenna                | 2400 ~ 2483.5        | 2.0                 |

Note: The manufacturer of NORA-101's module ANT PIN claims that the gain is 0 dBi

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC he test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Report No.: AGC00174210102FE03 Page 8 of 69

# 2.9. DESCRIPTION OF ANTENNA RF PORT

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Antenna RF Port       |                                                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------|
|                          | Bluetooth (NORA-B100)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Bluetooth (NORA-B101) | Bluetooth (NORA-B106)                                                                                                |
| Software<br>Control Port | U.FL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ANT PIN+U.FL          | As shown below                                                                                                       |
|                          | P0.20 BR P0.22 P0.22 P0.24 P0.24 P0.29 C15 P0.31 C19 TXD C19 T | Dblox PR46            | P0.18  RED: P0.28  RED: P0.28  BLUE: P0.29  GREEN: P0.30  P0.24  P0.29  P0.31  TXD  TXD  TXD  TXD  TXD  TXD  TXD  TX |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Bedicated Pest Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issue of Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com. /Inspection he test results



Page 9 of 69

#### 3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ±U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

- Uncertainty of Conducted Emission, Uc = ±3.1 dB
- Uncertainty of Radiated Emission below 1GHz, Uc = ±4.0 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.8 dB
- Uncertainty of total RF power, conducted, Uc = ±0.8 dB
- Uncertainty of RF power density, conducted,  $Uc = \pm 2.6 \text{ dB}$
- Uncertainty of spurious emissions, conducted, Uc = ±2.7 dB
   Uncertainty of Occupied Channel Bandwidth: Uc = ±2 %

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Feat Q/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written appropriation of AGC where test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc=cert.com.



Page 10 of 69

# 4. DESCRIPTION OF TEST MODES

| NO. | TEST MODE DESCRIPTION      |
|-----|----------------------------|
| 1   | Low channel TX(2405MHz)    |
| 2   | Middle channel TX(2440MHz) |
| 3   | High channel TX(2475MHz)   |

#### Note:

- 1. Only the result of the worst case was recorded in the report, if no other cases.
- 2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 3. For Conducted Test method, a temporary antenna connector is provided by the manufacture.
- 4.The EUT enters the fixed frequency state through the pressing Button 1 (increment mode) and Button 2 (dec rement mode) on the control board.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Restriction Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written appropriation of AGC the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc=cert.com.

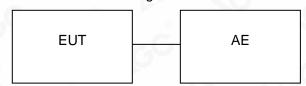


Page 11 of 69

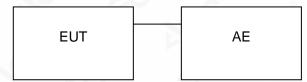
# 5. SYSTEM TEST CONFIGURATION

#### **5.1. CONFIGURATION OF TESTED SYSTEM**

Radiated Emission Configure:



Conducted Emission Configure:



#### **5.2. EQUIPMENT USED IN TESTED SYSTEM**

| Item | Equipment     | Model No. | ID or Specification | Remark |
|------|---------------|-----------|---------------------|--------|
| 1    | NORA-B1       | NORA-B100 | XPYNORAB1           | EUT    |
| 2    | Mobile phone  | TCL       | J326T               | AE     |
| 3    | PC            | HUAWEI    | DC 5V               | AE     |
| 4    | Control board | C3        | DC 3.3V             | AE     |

# **5.3. SUMMARY OF TEST RESULTS**

| FCC RULES     | DESCRIPTION OF TEST                    | RESULT    |
|---------------|----------------------------------------|-----------|
| 15.247 (b)(3) | Peak Output Power                      | Compliant |
| 15.247 (a)(2) | 6 dB Bandwidth                         | Compliant |
| 15.247 (d)    | Conducted Spurious Emission            | Compliant |
| 15.247 (e)    | Maximum Conducted Output Power Density | Compliant |
| 15.209        | Radiated Emission                      | Compliant |
| 15.207        | Conducted Emission                     | Compliant |
|               |                                        |           |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test resurrescribed in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuence of the test report in the test report and in the report apply only to the test report should be addressed to AGC by agc@agc-cert.com.



Page 12 of 69

## 6. TEST FACILITY

| Test Site                                                                                                                             | Attestation of Global Compliance (Shenzhen) Co., Ltd |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--|--|--|
| Location  1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Hepi Fuhai Street, Bao'an District, Shenzhen, Guangdong, China |                                                      |  |  |  |
| Designation Number CN1259                                                                                                             |                                                      |  |  |  |
| FCC Test Firm Registration Number                                                                                                     | 975832                                               |  |  |  |
| A2LA Cert. No.                                                                                                                        | 5054.02                                              |  |  |  |
| Description Attestation of Global Compliance (Shenzhen) Co., Ltd is accredited                                                        |                                                      |  |  |  |

#### TEST EQUIPMENT OF CONDUCTED EMISSION TEST

| Equipment     | Manufacturer | Model            | S/N    | Cal. Date     | Cal. Due      |
|---------------|--------------|------------------|--------|---------------|---------------|
| TEST RECEIVER | R&S          | ESPI             | 101206 | May 15, 2020  | May 14, 2021  |
| TEST RECEIVER | R&S          | ESPI             | 101206 | May 15, 2021  | May 14, 2022  |
| LISN          | R&S          | ESH2-Z5          | 100086 | Jul. 03, 2020 | Jul. 02, 2021 |
| Test software | R&S          | ES-K1(Ver.V1.71) | N/A    | N/A           | N/A           |

# **TEST EQUIPMENT OF RADIATED EMISSION TEST**

| Equipment                            | Manufacturer   | Model                | S/N        | Cal. Date     | Cal. Due      |
|--------------------------------------|----------------|----------------------|------------|---------------|---------------|
| TEST RECEIVER                        | R&S            | ESCI                 | 10096      | May 15, 2020  | May 14, 2021  |
| TEST RECEIVER                        | R&S            | ESCI                 | 10096      | May 15, 2021  | May 14, 2022  |
| EXA Signal<br>Analyzer               | Aglient        | N9010A               | MY53470504 | Dec. 07, 2020 | Dec. 06, 2021 |
| 2.4GHz Filter                        | EM Electronics | 2400-2500MHz         | N/A        | Mar. 23, 2020 | Mar. 22, 2022 |
| Attenuator                           | ZHINAN         | E-002                | N/A        | Sep. 03, 2020 | Sep. 02, 2022 |
| Horn antenna                         | SCHWARZBECK    | BBHA 9170            | #768       | Sep. 21, 2019 | Sep. 20, 2021 |
| Active loop<br>antenna<br>(9K-30MHz) | ZHINAN         | ZN30900C             | 18051      | May 22, 2020  | May 21, 2022  |
| Double-Ridged<br>Waveguide Horn      | ETS LINDGREN   | 3117                 | 00034609   | May 17, 2019  | May 16, 2021  |
| Double-Ridged Waveguide Horn         | ETS LINDGREN   | 3117                 | 00034609   | Apr. 23, 2021 | Apr. 22, 2022 |
| Broadband<br>Preamplifier            | ETS LINDGREN   | 3117PA               | 00225134   | Sep. 03, 2020 | Sep. 02, 2022 |
| ANTENNA                              | SCHWARZBECK    | VULB9168             | 494        | Sep. 20, 2019 | Sep. 19, 2021 |
| Test software                        | Tonscend       | JS32-RE<br>(Ver.2.5) | N/A        | N/A           | N/A           |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the specificated restriction. Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 13 of 69

#### 7. PEAK OUTPUT POWER

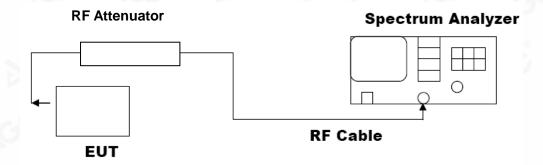
#### 7.1. MEASUREMENT PROCEDURE

For peak power test:

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. RBW ≥ DTS bandwidth
- 3. VBW≥3\*RBW.
- 4. SPAN≥VBW.
- 5. Sweep: Auto.
- 6. Detector function: Peak.
- 7. Trace: Max hold.

Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

# 7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION) PEAK POWER TEST SETUP



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



Page 14 of 69

#### 7.3. LIMITS AND MEASUREMENT RESULT

| PEAK OUTPUT POWER MEASUREMENT RESULT                         |                      |    |      |  |  |  |
|--------------------------------------------------------------|----------------------|----|------|--|--|--|
|                                                              | FOR GFSK MOUDULATION |    |      |  |  |  |
| Frequency Peak Power Applicable Limits (GHz) (dBm) Pass or F |                      |    |      |  |  |  |
| 2.405                                                        | 2.871                | 30 | Pass |  |  |  |
| 2.440                                                        | 2.732                | 30 | Pass |  |  |  |
| 2.475                                                        | 2.641                | 30 | Pass |  |  |  |

CH<sub>0</sub>



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Coedicated Postuagina Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written pathorization of AGC where the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



#### **CH07**



# CH15



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Pest no/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 16 of 69

#### 8. 6 DB BANDWIDTH

#### **8.1. MEASUREMENT PROCEDURE**

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 kHz, VBW ≥ 3×RBW.
- 4. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

# 8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

#### **8.3. LIMITS AND MEASUREMENT RESULTS**

| LIMITS AND MEASUREMENT RESULT |                |                   |          |  |  |  |
|-------------------------------|----------------|-------------------|----------|--|--|--|
| Applicable Limite             |                | Applicable Limits |          |  |  |  |
| Applicable Limits             | Test Data      | (kHz)             | Criteria |  |  |  |
| CO C                          | Low Channel    | 1515              | PASS     |  |  |  |
| >500KHZ                       | Middle Channel | 1545              | PASS     |  |  |  |
|                               | High Channel   | 1551              | PASS     |  |  |  |

## TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



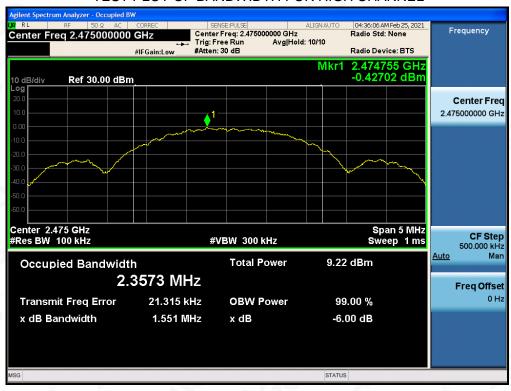
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bellicated Festing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



#### TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



#### TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written portorization of AGC the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 18 of 69

## 9. CONDUCTED SPURIOUS EMISSION

#### 9.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2, Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

# 9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

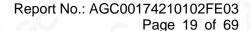
#### 9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

# 9.4. LIMITS AND MEASUREMENT RESULT

| LIMITS AND MEASUREMENT RESULT                                                                                                                                                                                                                                                                                          |                                          |          |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------|--|--|--|
| Annilla alda I limita                                                                                                                                                                                                                                                                                                  | Measurement Re                           | sult     |  |  |  |
| Applicable Limits                                                                                                                                                                                                                                                                                                      | Test Data                                | Criteria |  |  |  |
| In any 100 kHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power. | At least -20dBc than the reference level | PASS     |  |  |  |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Factorian (Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of ACC whe test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc=cert.com.



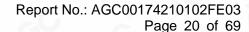


TEST RESULT FOR ENTIRE FREQUENCY RANGE

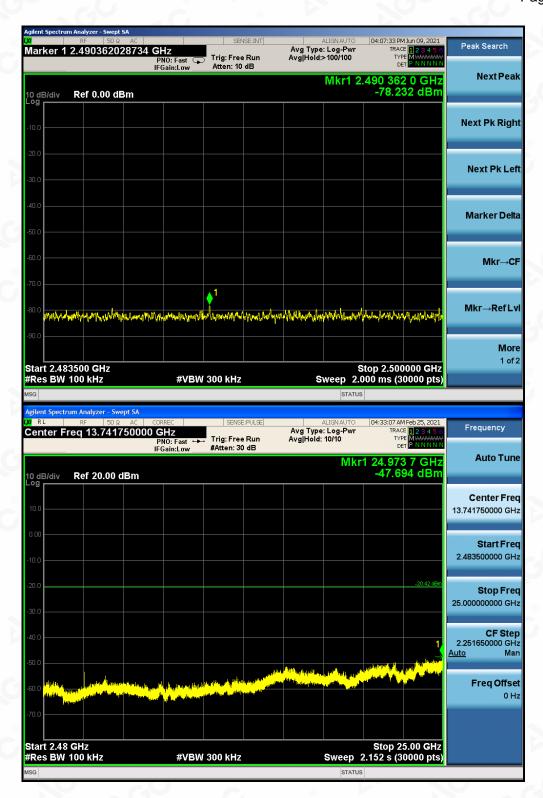
O-QPSK MODULATION IN LOW CHANNEL



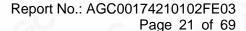
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC he test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.







Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Pestho/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

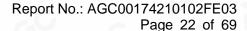




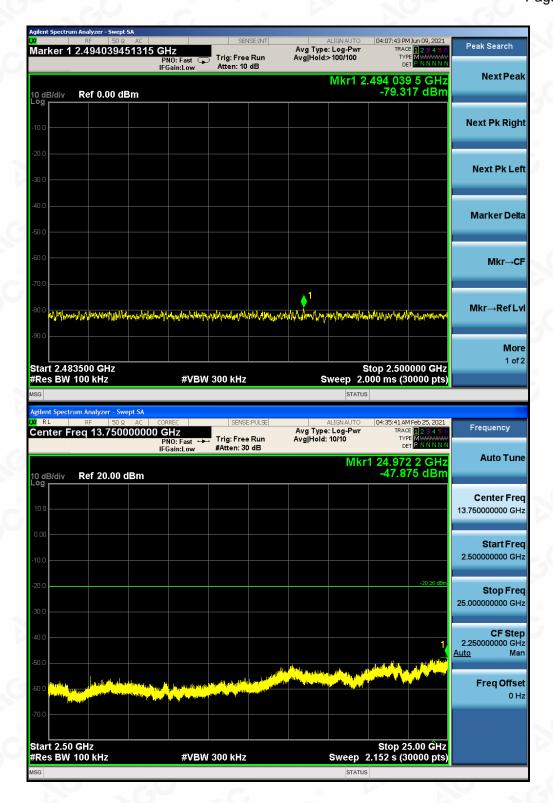
#### O-QPSK MODULATION IN MIDDLE CHANNEL



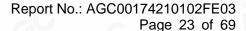
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Pestho/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.







Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Pestho/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



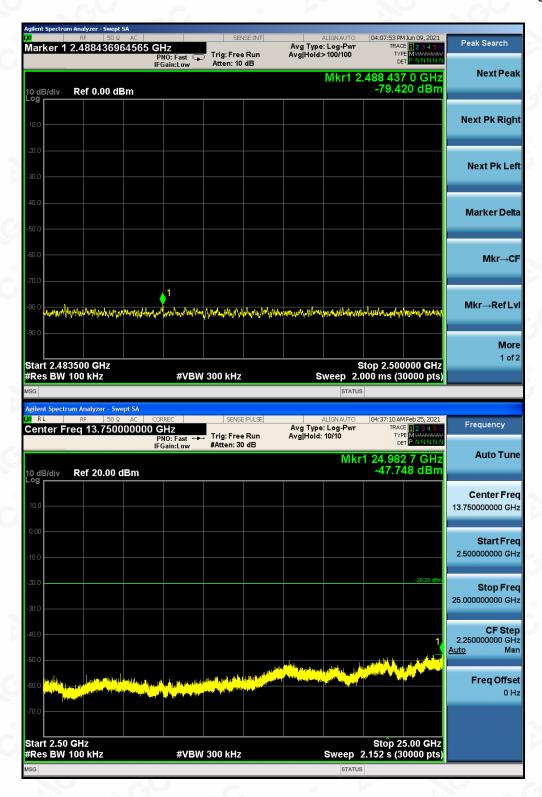


#### O-QPSK MODULATION IN HIGH CHANNEL



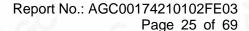
Compliance Best Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Post not/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results to the test deemed any objections to report issued by AGC should be submitted to AGC within 15day after the issuence of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.





Note: The peak emissions without marker on the above plots are fundamental wave and need not to compare with the limit.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC he test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



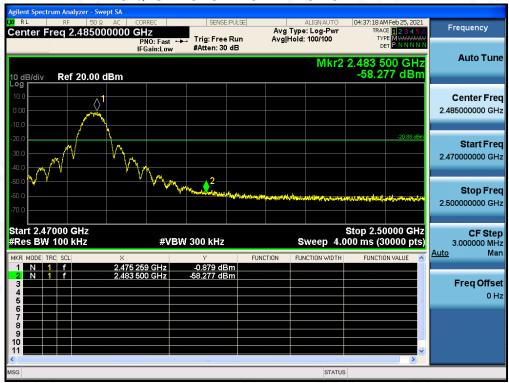


#### **TEST RESULT FOR BAND EDGE**

#### O-QPSK MODULATION IN LOW CHANNEL



#### O-QPSK MODULATION IN HIGH CHANNEL



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC he test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 26 of 69

#### 10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

#### 10.1. MEASUREMENT PROCEDURE

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set the SPA Trace 1 Max hold, then View.

Note: The method of PKPSD in the KDB 558074 item 10.2 was used in this testing.

# 10.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer to Section 7.2.

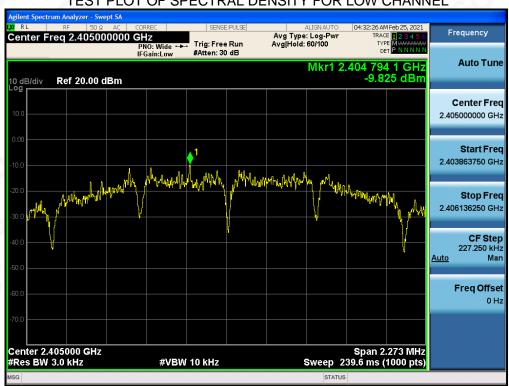
#### 10.3. MEASUREMENT EQUIPMENT USED

Refer to Section 6.

#### 10.4. LIMITS AND MEASUREMENT RESULT

| Channel No.    | PSD<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Result |
|----------------|-------------------|---------------------|--------|
| Low Channel    | -9.825            | 8                   | Pass   |
| Middle Channel | -10.257           | 8                   | Pass   |
| High Channel   | -10.289           | 8                   | Pass   |

#### TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL



Compliance Section 1981 Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the a/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15d he test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



#### TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



#### TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Dedicated Pestho/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 28 of 69

#### 11. RADIATED EMISSION

#### 11.1. MEASUREMENT PROCEDURE

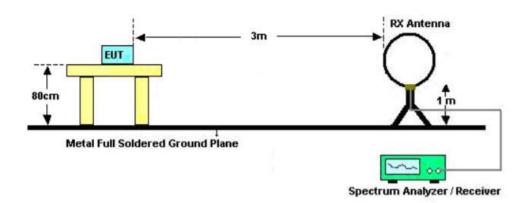
- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Bedicated Festivo/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc=cert.com.

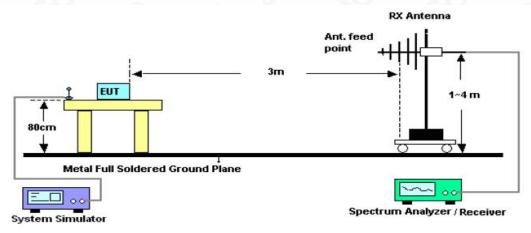


#### 11.2. TEST SETUP

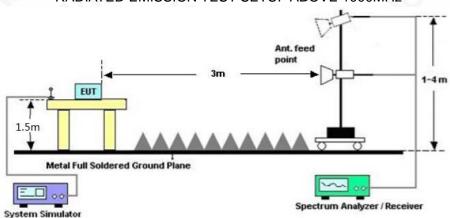
# Radiated Emission Test-Setup Frequency Below 30MHz



#### RADIATED EMISSION TEST SETUP 30MHz-1000MHz



#### RADIATED EMISSION TEST SETUP ABOVE 1000MHz



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the coefficient of stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter pathorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 30 of 69

#### 11.3. LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has to be followed

| Frequencies<br>(MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|----------------------|-----------------------------------|-------------------------------|
| 0.009~0.490          | 2400/F(kHz)                       | 300                           |
| 0.490~1.705          | 24000/F(kHz)                      | 30                            |
| 1.705~30.0           | 30                                | 30                            |
| 30~88                | 100                               | 3                             |
| 88~216               | 150                               | 3                             |
| 216~960              | 200                               | 3                             |
| Above 960            | 500                               | 3                             |

Note: All modes were tested for restricted band radiated emission, the test records reported below are the worst result compared to other modes.

#### 11.4. TEST RESULT

#### **RADIATED EMISSION BELOW 30MHz**

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Sedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter perhorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

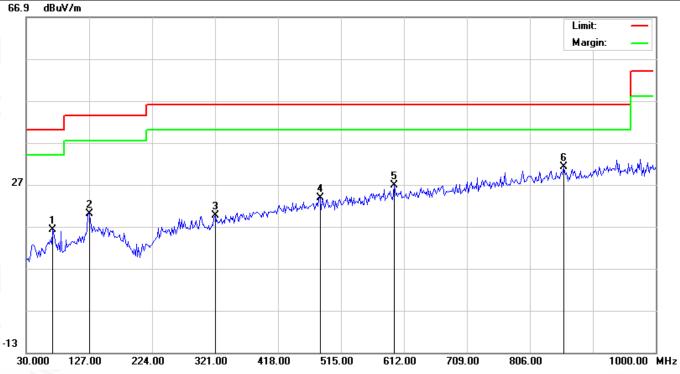


Page 31 of 69

# **RADIATED EMISSION BELOW 1GHZ**

#### Antenna 1

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Horizontal     |



|   | No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |
|---|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|
|   |     |    | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector |
| 4 | 1   |    | 70.4167  | -0.83            | 17.02             | 16.19            | 40.00  | -23.81 | peak     |
|   | 2   |    | 127.0000 | 1.55             | 18.41             | 19.96            | 43.50  | -23.54 | peak     |
|   | 3   |    | 321.0000 | -0.54            | 20.21             | 19.67            | 46.00  | -26.33 | peak     |
|   | 4   |    | 482.6667 | -0.89            | 24.64             | 23.75            | 46.00  | -22.25 | peak     |
|   | 5   |    | 597.4500 | -0.03            | 26.90             | 26.87            | 46.00  | -19.13 | peak     |
|   | 6   | *  | 857.7333 | 0.01             | 31.15             | 31.16            | 46.00  | -14.84 | peak     |

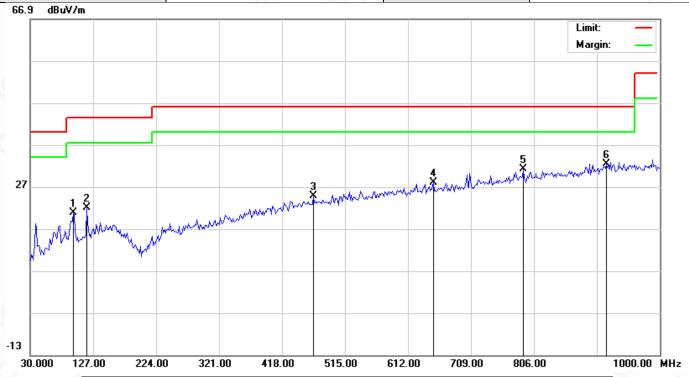
**RESULT: PASS** 

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



Page 32 of 69

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Vertical       |



| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |
|-----|-----|----------|------------------|-------------------|------------------|--------|--------|----------|
|     |     | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector |
| 1   |     | 96.2833  | 5.13             | 15.63             | 20.76            | 43.50  | -22.74 | peak     |
| 2   |     | 117.3000 | 4.23             | 17.71             | 21.94            | 43.50  | -21.56 | peak     |
| 3   |     | 466.5000 | 0.53             | 24.32             | 24.85            | 46.00  | -21.15 | peak     |
| 4   |     | 650.8000 | 0.40             | 27.56             | 27.96            | 46.00  | -18.04 | peak     |
| 5   |     | 789.8333 | 1.10             | 30.18             | 31.28            | 46.00  | -14.72 | peak     |
| 6   | *   | 917.5500 | 0.65             | 31.85             | 32.50            | 46.00  | -13.50 | peak     |

**RESULT: PASS** 

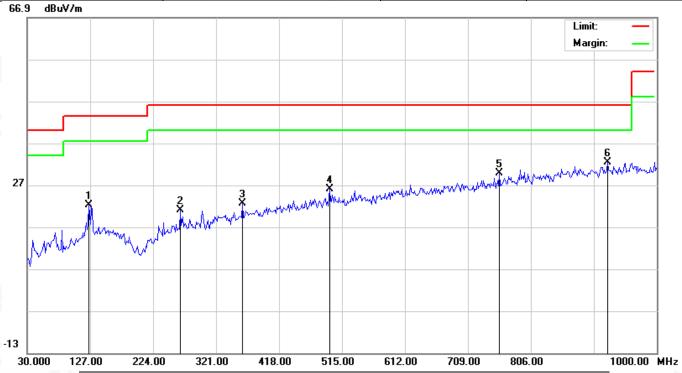
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



Page 33 of 69

#### Antenna 2

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Horizontal     |



| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |
|-----|-----|----------|------------------|-------------------|------------------|--------|--------|----------|
|     |     | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector |
| 1   |     | 125.3833 | 3.83             | 18.31             | 22.14            | 43.50  | -21.36 | peak     |
| 2   | 2   | 266.0333 | 2.20             | 18.80             | 21.00            | 46.00  | -25.00 | peak     |
| 3   | ,   | 361.4166 | 0.91             | 21.63             | 22.54            | 46.00  | -23.46 | peak     |
| 4   | 4   | 495.6000 | 1.01             | 24.90             | 25.91            | 46.00  | -20.09 | peak     |
| 5   | -   | 757.5000 | 0.42             | 29.45             | 29.87            | 46.00  | -16.13 | peak     |
| 6   | * ( | 924.0167 | 0.42             | 31.91             | 32.33            | 46.00  | -13.67 | peak     |

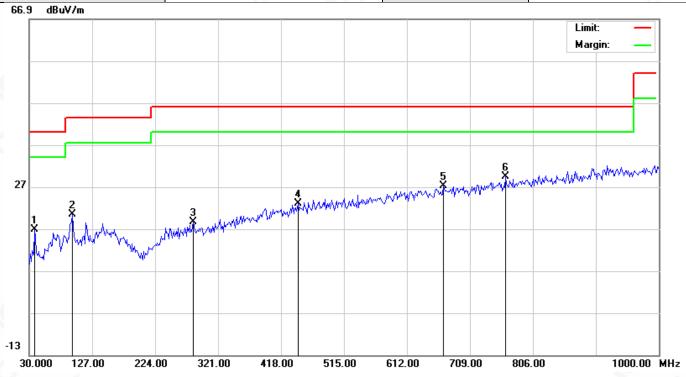
**RESULT: PASS** 

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written appropriation of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 34 of 69

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Vertical       |



| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |
|-----|-----|----------|------------------|-------------------|------------------|--------|--------|----------|
|     |     | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector |
| 1   |     | 38.0833  | 2.75             | 14.03             | 16.78            | 40.00  | -23.22 | peak     |
| 2   |     | 96.2833  | 4.75             | 15.63             | 20.38            | 43.50  | -23.12 | peak     |
| 3   |     | 282.2000 | -1.27            | 19.89             | 18.62            | 46.00  | -27.38 | peak     |
| 4   |     | 443.8667 | -0.85            | 23.86             | 23.01            | 46.00  | -22.99 | peak     |
| 5   |     | 668.5833 | -0.63            | 27.77             | 27.14            | 46.00  | -18.86 | peak     |
| 6   | ×   | 763.9667 | -0.20            | 29.60             | 29.40            | 46.00  | -16.60 | peak     |

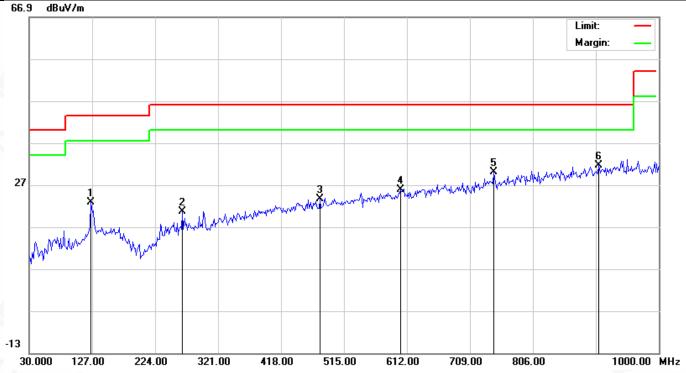
**RESULT: PASS** 

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



Page 35 of 69

| EUT         | NORA-B1 | Model Name        | NORA-B106      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Horizontal     |



| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |
|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|
|     |    | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector |
| 1   |    | 125.3833 | 4.41             | 18.31             | 22.72            | 43.50  | -20.78 | peak     |
| 2   |    | 266.0333 | 1.79             | 18.80             | 20.59            | 46.00  | -25.41 | peak     |
| 3   |    | 477.8167 | -0.94            | 24.54             | 23.60            | 46.00  | -22.40 | peak     |
| 4   |    | 602.3000 | -1.09            | 26.98             | 25.89            | 46.00  | -20.11 | peak     |
| 5   |    | 746.1833 | 0.85             | 29.19             | 30.04            | 46.00  | -15.96 | peak     |
| 6   | *  | 907.8500 | -0.15            | 31.77             | 31.62            | 46.00  | -14.38 | peak     |

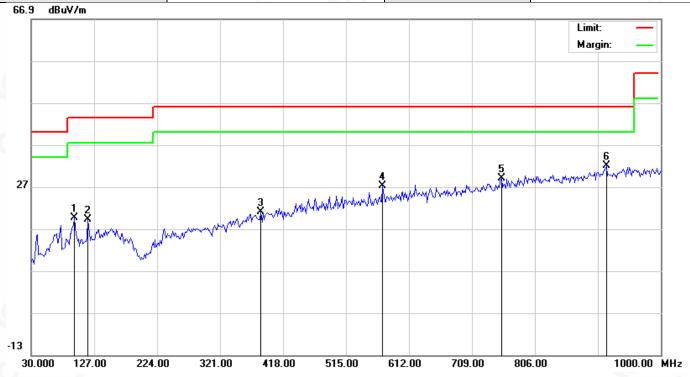
**RESULT: PASS** 

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



Page 36 of 69

| EUT         | NORA-B1 | Model Name        | NORA-B106      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Vertical       |



| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |
|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|
|     |    | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector |
| 1   |    | 96.2833  | 3.97             | 15.63             | 19.60            | 43.50  | -23.90 | peak     |
| 2   |    | 117.3000 | 1.47             | 17.71             | 19.18            | 43.50  | -24.32 | peak     |
| 3   |    | 384.0500 | -1.43            | 22.42             | 20.99            | 46.00  | -25.01 | peak     |
| 4   |    | 571.5833 | 0.74             | 26.39             | 27.13            | 46.00  | -18.87 | peak     |
| 5   |    | 754.2667 | -0.47            | 29.38             | 28.91            | 46.00  | -17.09 | peak     |
| 6   | *  | 915.9333 | 0.07             | 31.84             | 31.91            | 46.00  | -14.09 | peak     |

# RESULT: PASS Note:

- 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.
- 2. All test modes had been tested. The mode 1 is the worst case and recorded in the report.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written appropriation of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 37 of 69

# **RADIATED EMISSION ABOVE 1GHZ**

#### Antenna 1

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Horizontal     |

| Meter Reading | Factor                            | Emission Level                                        | Limits                                                                                                                    | Margin                                                                                                                                                      | Value Type                                                                                                                                                                                                |
|---------------|-----------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (dBµV)        | (dB)                              | (dBµV/m)                                              | (dBµV/m)                                                                                                                  | (dB)                                                                                                                                                        | value Type                                                                                                                                                                                                |
| 45.26         | 0.08                              | 45.34                                                 | 74                                                                                                                        | -28.66                                                                                                                                                      | peak                                                                                                                                                                                                      |
| 34.79         | 0.08                              | 34.87                                                 | 54                                                                                                                        | -19.13                                                                                                                                                      | AVG                                                                                                                                                                                                       |
| 41.06         | 2.21                              | 43.27                                                 | 74                                                                                                                        | -30.73                                                                                                                                                      | peak                                                                                                                                                                                                      |
| 30.54         | 2.21                              | 32.75                                                 | 54                                                                                                                        | -21.25                                                                                                                                                      | AVG                                                                                                                                                                                                       |
| 50            |                                   | 8                                                     |                                                                                                                           | <b>100</b>                                                                                                                                                  |                                                                                                                                                                                                           |
|               | (dBµV)<br>45.26<br>34.79<br>41.06 | (dBµV) (dB)<br>45.26 0.08<br>34.79 0.08<br>41.06 2.21 | (dBμV)     (dB)     (dBμV/m)       45.26     0.08     45.34       34.79     0.08     34.87       41.06     2.21     43.27 | (dBμV)     (dB)     (dBμV/m)     (dBμV/m)       45.26     0.08     45.34     74       34.79     0.08     34.87     54       41.06     2.21     43.27     74 | (dBμV)     (dB)     (dBμV/m)     (dBμV/m)     (dBμV/m)       45.26     0.08     45.34     74     -28.66       34.79     0.08     34.87     54     -19.13       41.06     2.21     43.27     74     -30.73 |

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Vertical       |

|           |               |        |                |          |        | (2)        |
|-----------|---------------|--------|----------------|----------|--------|------------|
| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Value Type |
| (MHz)     | (dBµV)        | (dB)   | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4810.000  | 56.28         | 0.08   | 56.36          | 74 🔍     | -17.64 | peak       |
| 4810.000  | 35.46         | 0.08   | 35.54          | 54       | -18.46 | AVG        |
| 7215.000  | 42.87         | 2.21   | 45.08          | 74       | -28.92 | peak       |
| 7215.000  | 32.94         | 2.21   | 35.15          | 54       | -18.85 | AVG        |
|           |               |        |                | (0)      |        |            |
| 8         |               |        |                |          | 0      |            |

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the specificated resting/inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter pathorization of AGC, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 38 of 69

/Inspection The test results

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 2  | Antenna           | Horizontal     |

| Frequency     | Meter Reading     | Factor      | Emission Level | Limits   | Margin | Value Type |
|---------------|-------------------|-------------|----------------|----------|--------|------------|
| (MHz)         | (dBµV)            | (dB)        | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4880.000      | 46.19             | 0.14        | 46.33          | 74       | -27.67 | peak       |
| 4880.000      | 36.14             | 0.14        | 36.28          | 54       | -17.72 | AVG        |
| 7320.000      | 42.58             | 2.36        | 44.94          | 74       | -29.06 | peak       |
| 7320.000      | 31.55             | 2.36        | 33.91          | 54       | -20.09 | AVG        |
| (8)           |                   |             |                | 8        |        |            |
|               | ®                 |             |                |          | 0      |            |
| emark:        | - 0               | ®           |                | .0       | - 0    | 0          |
| actor = Anter | na Factor + Cable | Loss – Pre- | amplifier.     |          |        | - G        |

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 2  | Antenna           | Vertical       |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Value Type |
|-----------|---------------|--------|----------------|----------|--------|------------|
| (MHz)     | (dBµV)        | (dB)   | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4880.000  | 46.29         | 0.14   | 46.43          | 74       | -27.57 | peak       |
| 4880.000  | 36.78         | 0.14   | 36.92          | 54       | -17.08 | AVG        |
| 7320.000  | 42.16         | 2.36   | 44.52          | 74       | -29.48 | peak       |
| 7320.000  | 31.05         | 2.36   | 33.41          | 54       | -20.59 | AVG        |
|           |               | - GC   | (0)            | ©        |        |            |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Bedicated Pest Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issue of Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 39 of 69

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 3  | Antenna           | Horizontal     |

| leter Reading | Factor                  | Emission Level                                           | Limits                                                                                | Margin                                                                                                     |                                                                                                                                            |
|---------------|-------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| (dBµV)        | (dB)                    | (dBµV/m)                                                 | (dBµV/m)                                                                              | (dB)                                                                                                       | Value Type                                                                                                                                 |
| 46.25         | 0.22                    | 46.47                                                    | 74                                                                                    | -27.53                                                                                                     | peak                                                                                                                                       |
| 35.18         | 0.22                    | 35.4                                                     | 54                                                                                    | -18.6                                                                                                      | AVG                                                                                                                                        |
| 40.25         | 2.64                    | 42.89                                                    | 74                                                                                    | -31.11                                                                                                     | peak                                                                                                                                       |
| 30.64         | 2.64                    | 33.28                                                    | 54                                                                                    | -20.72                                                                                                     | AVG                                                                                                                                        |
|               |                         |                                                          | <u> </u>                                                                              |                                                                                                            |                                                                                                                                            |
| ®             |                         |                                                          |                                                                                       | ®                                                                                                          |                                                                                                                                            |
|               | 46.25<br>35.18<br>40.25 | 46.25     0.22       35.18     0.22       40.25     2.64 | 46.25     0.22     46.47       35.18     0.22     35.4       40.25     2.64     42.89 | 46.25     0.22     46.47     74       35.18     0.22     35.4     54       40.25     2.64     42.89     74 | 46.25     0.22     46.47     74     -27.53       35.18     0.22     35.4     54     -18.6       40.25     2.64     42.89     74     -31.11 |

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 3  | Antenna           | Vertical       |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Value Type |
|-----------|---------------|--------|----------------|----------|--------|------------|
| (MHz)     | (dBµV)        | (dB)   | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4950.000  | 46.29         | 0.22   | 46.51          | 74       | -27.49 | peak       |
| 4950.000  | 36.17         | 0.22   | 36.39          | 54       | -17.61 | AVG        |
| 7425.000  | 40.25         | 2.64   | 42.89          | 74       | -31.11 | peak       |
| 7425.000  | 30.51         | 2.64   | 33.15          | 54       | -20.85 | AVG        |
|           | -0            | 8      |                |          | 60     |            |
| emark:    |               |        | @              |          |        |            |

RESULT: PASS

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



Page 40 of 69

## Antenna 2

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Horizontal     |

| er Reading<br>(dBµV)<br>46.27 | Factor<br>(dB)<br>0.08 | Emission Level<br>(dBµV/m)<br>46.35 | Limits<br>(dBµV/m) | Margin<br>(dB) | Value Type |
|-------------------------------|------------------------|-------------------------------------|--------------------|----------------|------------|
| 46.27                         | . ,                    | , , ,                               | , , ,              | (dB)           |            |
|                               | 0.08                   | 46 35                               |                    |                |            |
|                               |                        | +0.00                               | 74                 | -27.65         | peak       |
| 37.45                         | 0.08                   | 37.53                               | 54                 | -16.47         | AVG        |
| 42.35                         | 2.21                   | 44.56                               | 74                 | -29.44         | peak       |
| 31.58                         | 2.21                   | 33.79                               | 54                 | -20.21         | AVG        |
|                               |                        |                                     |                    | ©              |            |
| (                             |                        |                                     |                    |                | (8)        |
|                               |                        | (8)                                 |                    |                |            |
|                               | 42.35<br>31.58         |                                     |                    |                |            |

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Vertical       |

| Frequency    | Meter Reading   | Factor          | Emission Level | Limits   | Margin | Value Type |
|--------------|-----------------|-----------------|----------------|----------|--------|------------|
| (MHz)        | (dBµV)          | (dB)            | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4810.000     | 45.28           | 0.08            | 45.36          | 74       | -28.64 | peak       |
| 4810.000     | 34.19           | 0.08            | 34.27          | 54 🌑     | -19.73 | AVG        |
| 7215.000     | 43.15           | 2.21            | 45.36          | 74       | -28.64 | peak       |
| 7215.000     | 32.46           | 2.21            | 34.67          | 54       | -19.33 | AVG        |
|              |                 | - 6             |                |          |        | 69         |
| emark:       |                 |                 | 7.0            |          | (a)    |            |
| ctor = Anter | na Factor + Cab | le Loss – Pre-a | mplifier.      |          |        | ®          |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 41 of 69

g/Inspection The test results he test report.

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 2  | Antenna           | Horizontal     |

| Frequency | Meter Reading     | Factor      | Emission Level | Limits   | Margin | Value Type |
|-----------|-------------------|-------------|----------------|----------|--------|------------|
| (MHz)     | (dBµV)            | (dB)        | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4880.000  | 46.19             | 0.14        | 46.33          | 74       | -27.67 | peak       |
| 4880.000  | 35.17             | 0.14        | 35.31          | 54       | -18.69 | AVG        |
| 7320.000  | 42.16             | 2.36        | 44.52          | 74       | -29.48 | peak       |
| 7320.000  | 32.48             | 2.36        | 34.84          | 54       | -19.16 | AVG        |
| ®         |                   |             |                | <u>@</u> |        |            |
|           | ®                 |             |                |          | ®      |            |
| emark:    | - 0               | 0           |                |          | - 0    | @          |
|           | na Factor + Cable | Loss – Pre- | amplifier.     |          |        | - 0        |

| Factor = | Antenna | Factor + | Cable Loss - | Pre-amplifier. |
|----------|---------|----------|--------------|----------------|
|          |         |          |              |                |

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 2  | Antenna           | Vertical       |

| Frequency | Meter Reading | Factor            | Emission Level | Limits   | Margin | Value Type |
|-----------|---------------|-------------------|----------------|----------|--------|------------|
| (MHz)     | (dBµV)        | (dB)              | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4880.000  | 46.13         | 0.14              | 46.27          | 74       | -27.73 | peak       |
| 4880.000  | 35.82         | 0.14              | 35.96          | 54       | -18.04 | AVG        |
| 7320.000  | 42.19         | 2.36              | 44.55          | 74       | -29.45 | peak       |
| 7320.000  | 32.54         | 2.36 <sup>°</sup> | 34.9           | 54       | -19.1  | AVG        |
|           |               | - C               | @              |          |        |            |
|           |               |                   |                | ®        |        |            |

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Bedicated Pest Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issue of Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 42 of 69

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 3  | Antenna           | Horizontal     |

| Frequency | Meter Reading      | Factor      | Emission Level | Limits   | Margin |            |
|-----------|--------------------|-------------|----------------|----------|--------|------------|
| (MHz)     | (dBµV)             | (dB)        | (dBµV/m)       | (dBµV/m) | (dB)   | Value Type |
| 4950.000  | 45.29              | 0.22        | 45.51          | 74       | -28.49 | peak       |
| 4950.000  | 36.17              | 0.22        | 36.39          | 54       | -17.61 | AVG        |
| 7425.000  | 40.23              | 2.64        | 42.87          | 74       | -31.13 | peak       |
| 7425.000  | 31.58              | 2.64        | 34.22          | 54       | -19.78 | AVG        |
| 8         |                    |             |                | <u>(</u> |        |            |
|           | ®                  |             |                |          | 0      |            |
| emark:    | 0 1                | ©           |                | <u> </u> | 8      |            |
|           | nna Factor + Cable | Loss – Pre- | amplifier.     | 10       | - GG   | - (        |

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 3  | Antenna           | Vertical       |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Value Type |
|-----------|---------------|--------|----------------|----------|--------|------------|
| (MHz)     | (dBµV)        | (dB)   | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4950.000  | 46.19         | 0.22   | 46.41          | 74       | -27.59 | peak       |
| 4950.000  | 36.57         | 0.22   | 36.79          | 54       | -17.21 | AVG        |
| 7425.000  | 42.15         | 2.64   | 44.79          | 74       | -29.21 | peak       |
| 7425.000  | 31.64         | 2.64   | 34.28          | 54       | -19.72 | AVG        |
|           | Y - C         | 8      |                |          | 60     |            |
|           |               |        | (8)            |          |        |            |

RESULT: PASS

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 43 of 69

| EUT         | NORA-B1 | Model Name        | NORA-B106      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Horizontal     |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | )/ I = T   |
|-----------|---------------|--------|----------------|----------|--------|------------|
| (MHz)     | (dBµV)        | (dB)   | (dBµV/m)       | (dBµV/m) | (dB)   | Value Type |
| 4810.000  | 45.16         | 0.08   | 45.24          | 74       | -28.76 | peak       |
| 4810.000  | 34.89         | 0.08   | 34.97          | 54       | -19.03 | AVG        |
| 7215.000  | 40.21         | 2.21   | 42.42          | 74       | -31.58 | peak       |
| 7215.000  | 31.27         | 2.21   | 33.48          | 54       | -20.52 | AVG        |
| @         |               |        |                | @        |        |            |
|           | 8             |        |                |          |        |            |

| EUT         | NORA-B1 | Model Name        | NORA-B106      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Vertical       |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Value Type |
|-----------|---------------|--------|----------------|----------|--------|------------|
| (MHz)     | (dBµV)        | (dB)   | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4810.000  | 46.34         | 0.08   | 46.42          | 74       | -27.58 | peak       |
| 4810.000  | 35.27         | 0.08   | 35.35          | 54       | -18.65 | AVG        |
| 7215.000  | 42.19         | 2.21   | 44.4           | 74 🌑     | -29.6  | peak       |
| 7215.000  | 30.55         | 2.21   | 32.76          | 54       | -21.24 | AVG        |
|           | 1             | @      |                |          | -C     | ©          |
| emark:    |               | - 60   |                |          |        | 69         |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 44 of 69

g/Inspection
The test results
the test report.

| EUT         | NORA-B1 | Model Name        | NORA-B106      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 2  | Antenna           | Horizontal     |

| Frequency     | Meter Reading      | Factor      | Emission Level | Limits   | Margin | Value Type |
|---------------|--------------------|-------------|----------------|----------|--------|------------|
| (MHz)         | (dBµV)             | (dB)        | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4880.000      | 46.12              | 0.14        | 46.26          | 74       | -27.74 | peak       |
| 4880.000      | 36.24              | 0.14        | 36.38          | 54       | -17.62 | AVG        |
| 7320.000      | 41.28              | 2.36        | 43.64          | 74       | -30.36 | peak       |
| 7320.000      | 32.06              | 2.36        | 34.42          | 54       | -19.58 | AVG        |
| ®             |                    |             |                | 8        |        |            |
|               | 8                  |             |                |          | 0      |            |
| emark:        | - 0                | ®           |                |          | - 0    | 0          |
| actor = Anter | nna Factor + Cable | Loss – Pre- | amplifier.     |          |        | - G        |

| EUT         | NORA-B1 | Model Name        | NORA-B106      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 2  | Antenna           | Vertical       |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Value Type |
|-----------|---------------|--------|----------------|----------|--------|------------|
| (MHz)     | (dBµV)        | (dB)   | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4880.000  | 46.13         | 0.14   | 46.27          | 74       | -27.73 | peak       |
| 4880.000  | 35.17         | 0.14   | 35.31          | 54       | -18.69 | AVG        |
| 7320.000  | 42.37         | 2.36   | 44.73          | 74       | -29.27 | peak       |
| 7320.000  | 32.63         | 2.36   | 34.99          | 54       | -19.01 | AVG        |
|           |               | -00    | 0              |          |        |            |
| mark:     |               |        |                |          | ©      |            |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated Festive Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



Page 45 of 69

| EUT         | NORA-B1 | Model Name        | NORA-B106      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 3  | Antenna           | Horizontal     |

| Frequency     | Meter Reading     | Factor      | Emission Level | Limits   | Margin | Value Type |
|---------------|-------------------|-------------|----------------|----------|--------|------------|
| (MHz)         | (dBµV)            | (dB)        | (dBµV/m)       | (dBµV/m) | (dB)   | value Type |
| 4950.000      | 46.13             | 0.22        | 46.35          | 74       | -27.65 | peak       |
| 4950.000      | 35.84             | 0.22        | 36.06          | 54       | -17.94 | AVG        |
| 7425.000      | 40.27             | 2.64        | 42.91          | 74       | -31.09 | peak       |
| 7425.000      | 31.29             | 2.64        | 33.93          | 54       | -20.07 | AVG        |
| ®             |                   |             |                | ©        |        |            |
|               | 8                 |             |                |          | ®      |            |
| emark:        | - 0               | ®           |                |          | - 0    | <u>®</u>   |
| actor = Anter | na Factor + Cable | Loss – Pre- | amplifier.     |          |        | - G        |

| EUT         | NORA-B1 | Model Name        | NORA-B106      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 3  | Antenna           | Vertical       |

| Frequency     | Meter Reading      | Factor       | Emission Level | Limits   | Margin   | Value Type |
|---------------|--------------------|--------------|----------------|----------|----------|------------|
| (MHz)         | (dBµV)             | (dB)         | (dBµV/m)       | (dBµV/m) | (dB)     | value Type |
| 4950.000      | 46.12              | 0.22         | 46.34          | 74       | -27.66   | peak 🏻     |
| 4950.000      | 36.27              | 0.22         | 36.49          | 54       | -17.51   | AVG        |
| 7425.000      | 41.27              | 2.64         | 43.91          | 74       | -30.09   | peak       |
| 7425.000      | 32.68              | 2.64         | 35.32          | 54       | -18.68   | AVG        |
|               | 8                  |              |                |          | <b>®</b> |            |
| _ (C)         | -6                 | @            |                |          |          |            |
| Remark:       |                    |              |                |          |          |            |
| actor = Anter | nna Factor + Cable | Loss – Pre-a | mplifier.      | ®        |          |            |

## **RESULT: PASS**

#### Note:

- 1. The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.
- 2. Factor = Antenna Factor + Cable loss Amplifier gain, Over=Measure-Limit.
- The "Factor" value can be calculated automatically by software of measurement system.
- 4. The prototypes of all antenna specifications are tested. Antenna 1 and antenna 2 are detachable antennas. The antennas of the model NORA-B100 and NORA-B101 are detachable antennas, the antenna pins are slightly different, and the others are not different. The report only reflects the data of NORA-B100 as the worst. NORA-B101 meets the requirements by default, and the data is not Record in the report. The corresponding prototype model NORA-B100 reflects radiation and radiation spurious and sidebands. The data that reflects the specifications of the two antennas is the worst data. The model NORA-B106 is an integrated antenna, and has recorded the data in the report

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Bedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGE, he test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc~cert.com.



Page 46 of 69

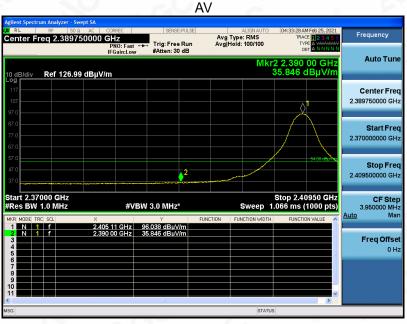
## TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS

#### Antenna 1

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Horizontal     |

PK





**RESULT: PASS** 

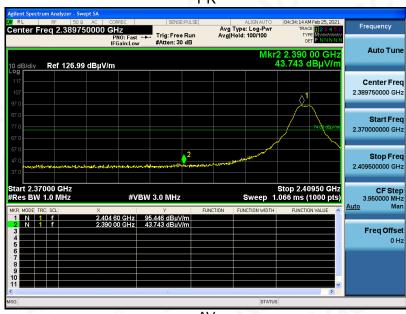
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated restriction Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter perhorization of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

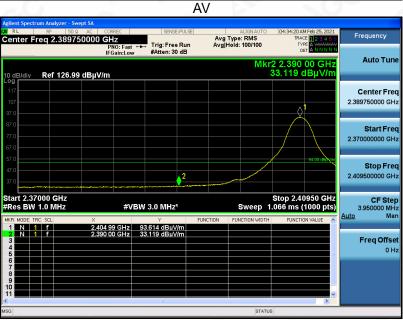


Page 47 of 69

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Vertical       |







**RESULT: PASS** 

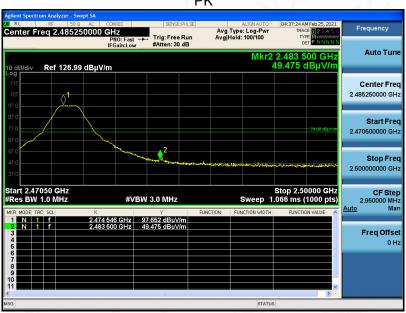
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated restriction Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter perhorization of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

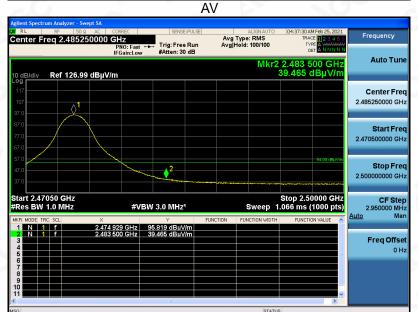




NORA-B1 NORA-B100 **EUT Model Name** 25° C **Temperature Relative Humidity** 55.4% **Pressure** 960hPa **Test Voltage** Normal Voltage **Test Mode** Mode 3 **Antenna** Horizontal

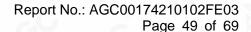






**RESULT: PASS** 

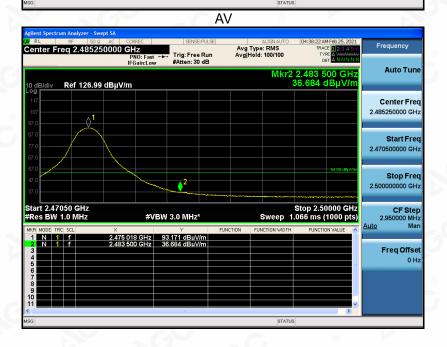
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Bedicated restriction Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter perhorization of AGE. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.





| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 3  | Antenna           | Vertical       |





**RESULT: PASS** 

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Sedicated Pesting/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the writter perhorization of AGE, the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



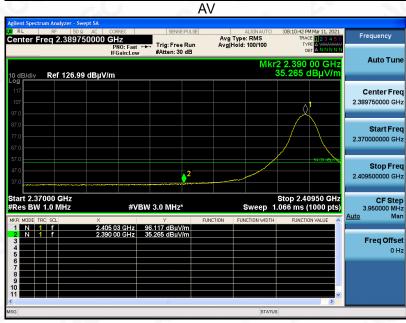


Antenna 2

| EUT         | NORA-B1 | Model Name        | NORA-B100      |
|-------------|---------|-------------------|----------------|
| Temperature | 25° C   | Relative Humidity | 55.4%          |
| Pressure    | 960hPa  | Test Voltage      | Normal Voltage |
| Test Mode   | Mode 1  | Antenna           | Horizontal     |







**RESULT: PASS** 

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the Sedicated Festivation is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the content of the report apply only to the tested sample. g/Inspection The test results the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.