
FCC Test Report

Report No.: AGC00552200802FE06

FCC ID : 2AHZ5NOTE20PRO
APPLICATION PURPOSE : Original Equipment
PRODUCT DESIGNATION : Smart Phone
BRAND NAME : CUBOT
MODEL NAME : NOTE 20 PRO
APPLICANT : Shenzhen Huafurui Technology Co., Ltd.
DATE OF ISSUE : Sep. 08, 2020
STANDARD(S) : FCC Rules and Regulations Part 15 Subpart C Section
15.225 ANSI C63.10: 2013
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 "Dedicated Testing/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.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: <http://cn.agc-cert.com/>



REPORT REVISE RECORD

| Report Version | Revise Time | Issued Date | Valid Version | Notes |
|----------------|-------------|---------------|---------------|-----------------|
| V1.0 | / | Sep. 08, 2020 | 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 "Dedicated Testing/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.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: <http://cn.agc-cert.com/>



TABLE OF CONTENTS

| | |
|---|-----------|
| 1 . GENERAL INFORMATION..... | 4 |
| 1.1 . GENERAL DESCRIPTION OF EUT..... | 4 |
| 1.2 . OPERATION OF EUT DURING TESTING..... | 5 |
| 1.3 . DESCRIPTION OF TEST SETUP..... | 5 |
| 1.4 . MEASUREMENT INSTRUMENTS LIST..... | 6 |
| 3. RADIATED EMISSION..... | 7 |
| 3.1. TEST LIMIT..... | 7 |
| 3.2. MEASUREMENT PROCEDURE..... | 8 |
| 3.3. TEST SETUP..... | 10 |
| 3.4. TEST RESULT..... | 11 |
| 4. FREQUENCY STABILITY..... | 15 |
| 4.1. MEASUREMENT PROCEDURE..... | 15 |
| 4.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)..... | 15 |
| 4.3. MEASUREMENT RESULTS..... | 16 |
| 5. BANDWIDTH..... | 17 |
| 5.1. MEASUREMENT PROCEDURE..... | 17 |
| 5.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)..... | 17 |
| 5.3. MEASUREMENT RESULTS..... | 18 |
| 6. LINE CONDUCTED EMISSION TEST..... | 19 |
| 6.1. LIMITS OF LINE CONDUCTED EMISSION TEST..... | 19 |
| 6.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST..... | 19 |
| 6.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST..... | 20 |
| 6.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST..... | 20 |
| 6.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST..... | 21 |
| APPENDIX A: PHOTOGRAPHS OF TEST SETUP..... | 23 |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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.

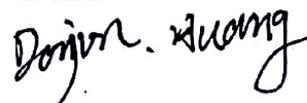


1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF EUT

| | |
|---------------------------------|---|
| Applicant | Shenzhen Huafului Technology Co., Ltd. |
| Address | Unit 1401 14/F, Jin qi zhi gu mansion Liu xian street ,Xili, Nan shan district Shenzhen,China |
| Manufacturer | Shenzhen Huafului Technology Co., Ltd. |
| Address | Unit 1401 14/F, Jin qi zhi gu mansion Liu xian street ,Xili, Nan shan district Shenzhen,China |
| Factory | Shenzhen Huafului Technology Co., Ltd. |
| Address | Unit 1401 14/F, Jin qi zhi gu mansion Liu xian street ,Xili, Nan shan district Shenzhen,China |
| Product Designation | Smart Phone |
| Brand Name | CUBOT |
| Test Model | NOTE 20 PRO |
| Date of test | Aug. 13, 2020~Sep. 08, 2020 |
| Operating Frequency(NFC) | 13.56MHz |
| Max Output Power | 80.55dBuV/m (Peak) |
| Modulation(NFC) | ASK |
| Antenna Type(NFC) | PIFA antenna |
| Antenna Gain(NFC) | 1.0dBi |
| Hardware Version | LV966_MB_V1.0 |
| Software Version | CUBOT_NOTE 20 PRO_A013C_V02_20200729 |
| Power Supply: | DC 3.85V |
| Test Result | Pass |

Prepared By



Donjon Huang
(Project Engineer)

Sep. 08, 2020

Reviewed By



Max Zhang
(Reviewer)

Sep. 08, 2020

Approved By



Forrest Lei
(Authorized Officer)

Sep. 08, 2020

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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 15 days 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.

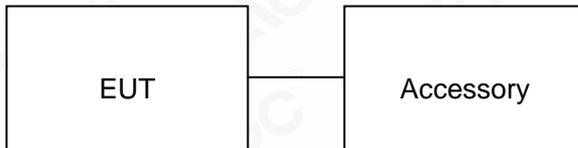


1.2. OPERATION OF EUT DURING TESTING

| NO. | TEST MODE DESCRIPTION |
|--|-----------------------|
| 1 | Transmitting |
| Note: 1. All the test had been tested with full charging, 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. | |

1.3. DESCRIPTION OF TEST SETUP

Configure :



| Item | Equipment | Model No. | ID or Specification | Remark |
|------|-------------|-----------------|------------------------|--------|
| 1 | Smart Phone | NOTE 20 PRO | FCC ID: 2AHZ5NOTE20PRO | EUT |
| 2 | Adapter | HJ-0502000W2-US | DC 5.0V 2A | AE |
| 3 | Battery | NOTE 20 | DC 3.85V 4200mAh | AE |
| 4 | USB Cable | N/A | N/A | AE |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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.



1.4. MEASUREMENT INSTRUMENTS LIST

| NAME OF EQUIPMENT | MANUFACTURER | MODEL | S/N | Cal. Date | Cal. Due |
|---------------------------|--------------|----------|-----------------|---------------|---------------|
| TEST RECEIVER | R&S | ESCI | 10096 | May 15, 2020 | May 14, 2022 |
| Amplifier | Schwarzbeck | BBV 9718 | 9718-205 | June 10,2020 | June 09,2021 |
| WIDEBAND REQUENCY ANTENNA | SCHWARZBECK | VULB9168 | VULB9168-494 | Jan. 09, 2019 | Jan. 08, 2021 |
| WIDEBAND REQUENCY ANTENNA | SCHWARZBECK | VULB9168 | VULB9168-D69250 | Sep. 20, 2019 | Sep. 19, 2020 |
| LOOP ANTENNA | A.H | SAS-562B | / | Feb.27, 2020 | Feb.26, 2022 |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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 15 days 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.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



3. RADIATED EMISSION

3.1. TEST LIMIT

Within the 13.110MHz-14.010MHz band

| Frequencies (MHz) | Field Strength at 30m (microvolts/meter) | Field Strength at 30m (dBuV/m) | Field Strength at 3m (dBuV/m) |
|--------------------------------|--|--------------------------------|-------------------------------|
| 13.553~13.567 | 15.848 | 84 | 124 |
| 13.410~13.553 13.567~13.710 | 334 | 50.5 | 90.5 |
| 13.110~13.410 13.710~14.010 | 106 | 40.5 | 80.5 |

According to 15.35, on any frequency or frequencies below or equal to 1000 MHz, the limits Shown are based on measuring equipment employing a CISPR quasi-peak detector function and related measurement bandwidths, unless otherwise specified the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test.

Outside of the 13.110MHz-14.010MHz band

| Frequency (MHz) | Distance Meters | Field Strengths Limit | |
|-----------------|-----------------|--|----------------|
| | | μ V/m | dB(μ V)/m |
| 0.009 ~ 0.490 | 300 | 2400/F(kHz) | --- |
| 0.490 ~ 1.705 | 30 | 24000/F(kHz) | --- |
| 1.705 ~ 30 | 30 | 30 | --- |
| 30 ~ 88 | 3 | 100 | 40.0 |
| 88 ~ 216 | 3 | 150 | 43.5 |
| 216 ~ 960 | 3 | 200 | 46.0 |
| 960 ~ 1000 | 3 | 500 | 54.0 |
| Above 1000 | 3 | Other:74.0 dB(μ V)/m (Peak) 54.0 dB(μ V)/m (Average) | |

Remark: (1) Emission level dB μ V = 20 log Emission level μ V/m
 (2) The smaller limit shall apply at the cross point between two frequency bands.
 (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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.



3.2. MEASUREMENT PROCEDURE

1. The EUT was placed on the top of the turntable 0.8 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 emissions, 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.
5. 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 VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
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 "Dedicated Testing/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 15 days 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.



The following table is the setting of spectrum analyzer and receiver.

| Spectrum Parameter | Setting |
|-----------------------|---|
| Start ~Stop Frequency | 9KHz~150KHz/RB 200Hz for QP |
| Start ~Stop Frequency | 150KHz~30MHz/RB 9KHz for QP |
| Start ~Stop Frequency | 30MHz~1000MHz/RB 120KHz for QP |
| Start ~Stop Frequency | 1GHz~26.5GHz 1MHz/1MHz for Peak, 1MHz/10Hz for Average |

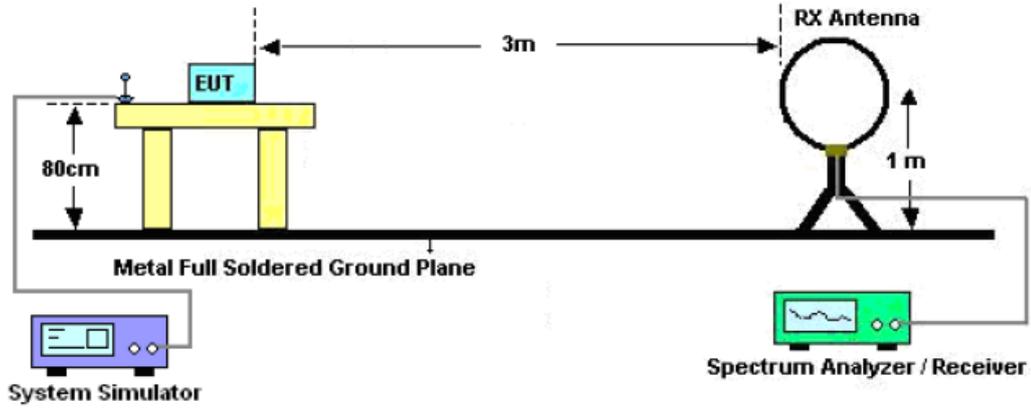
| Receiver Parameter | Setting |
|-----------------------|--------------------------------|
| Start ~Stop Frequency | 9KHz~150KHz/RB 200Hz for QP |
| Start ~Stop Frequency | 150KHz~30MHz/RB 9KHz for QP |
| Start ~Stop Frequency | 30MHz~1000MHz/RB 120KHz for QP |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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.

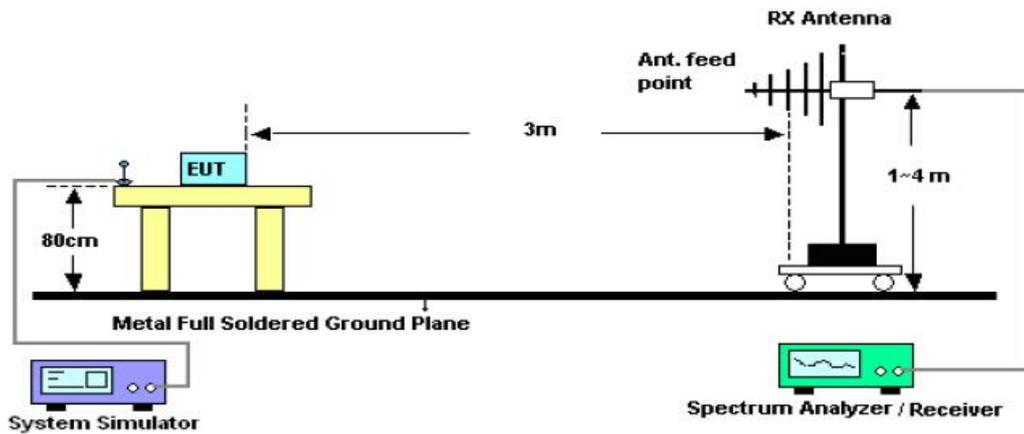


3.3. TEST SETUP

Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



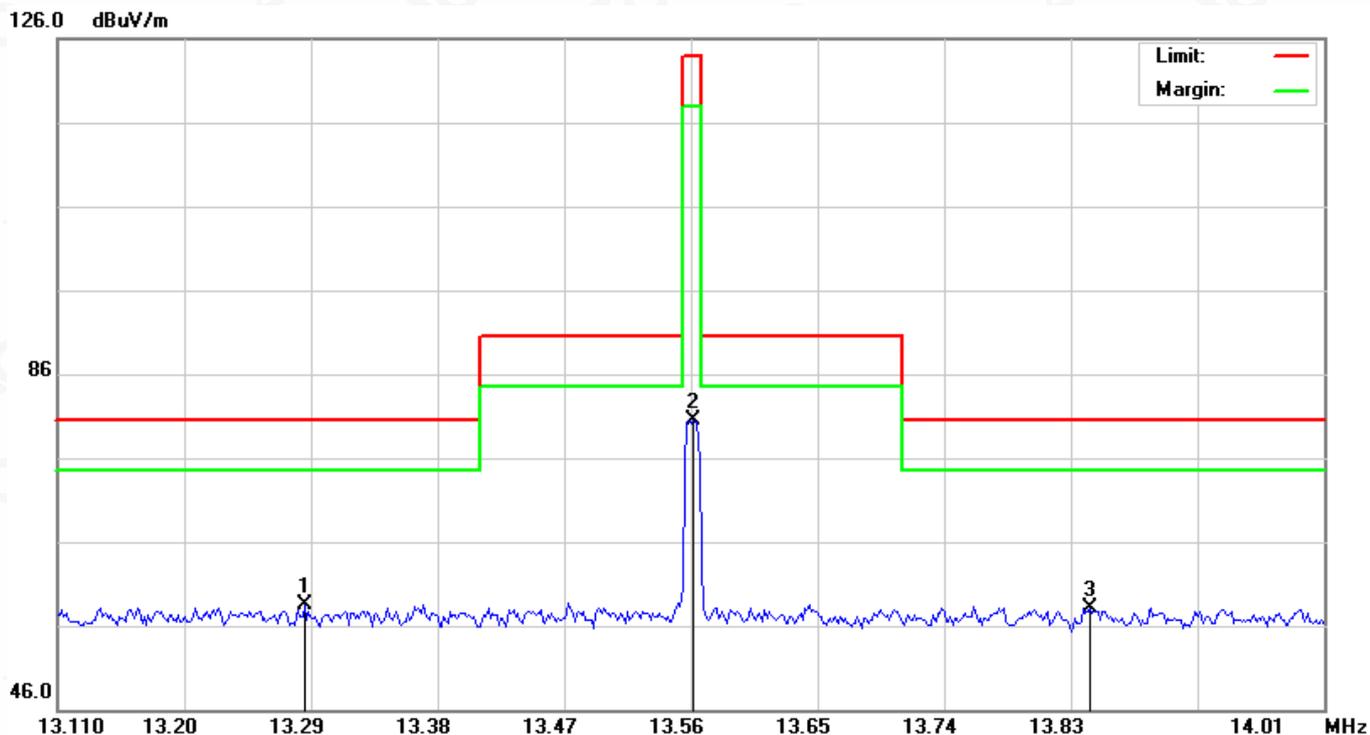
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the 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.



3.4. TEST RESULT

RADIATED EMISSION BELOW 30MHZ

| | | | |
|---------------|-------------|---------------------|-------------|
| EUT : | Smart Phone | Model Name | NOTE 20 PRO |
| Temperature : | 20 °C | Relative Humidity : | 53% |
| Pressure : | 1010hPa | Test Voltage : | DC3.85V |
| Test Mode : | Mode 1 | Polarization : | Face |

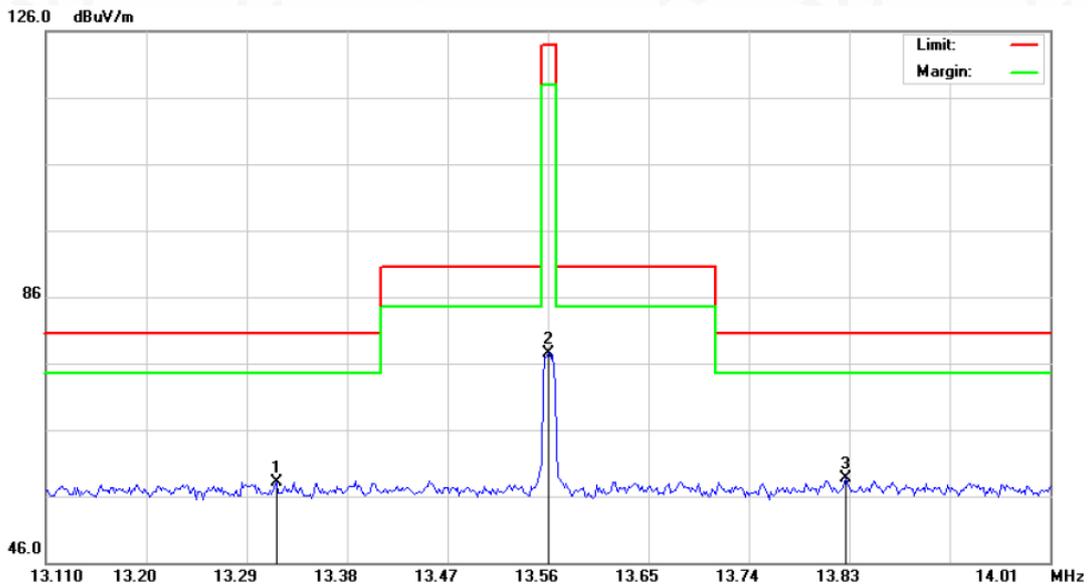


| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector |
|-----|----|---------|---------|--------|-------------|--------|--------|----------|
| | | MHz | dBuV | dBuV/m | dBuV/m | dBuV/m | dB | |
| 1 | * | 13.2854 | -6.41 | 65.00 | 58.59 | 80.50 | -21.91 | peak |
| 2 | | 13.5614 | 15.55 | 65.00 | 80.55 | 124.00 | -43.45 | peak |
| 3 | | 13.8435 | -6.84 | 65.00 | 58.16 | 80.50 | -22.34 | peak |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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 15 days 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 : | Smart Phone | Model Name | NOTE 20 PRO |
| Temperature : | 20 °C | Relative Humidity : | 53% |
| Pressure : | 1010 hPa | Test Voltage : | DC3.85V |
| Test Mode : | Mode 1 | Polarization : | Side |



| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector |
|-----|----|---------|---------|--------|-------------|--------|--------|----------|
| | | MHz | dBuV | dBuV/m | dBuV/m | dBuV/m | dB | |
| 1 | | 13.3170 | -6.95 | 65.00 | 58.05 | 80.50 | -22.45 | peak |
| 2 | | 13.5600 | 12.57 | 65.00 | 77.57 | 124.00 | -46.43 | peak |
| 3 | * | 13.8268 | -6.36 | 65.00 | 58.64 | 80.50 | -21.86 | peak |

Note: Other emissions from 9 kHz to 30 MHz are considered as ambient noise. No recording in the test report.

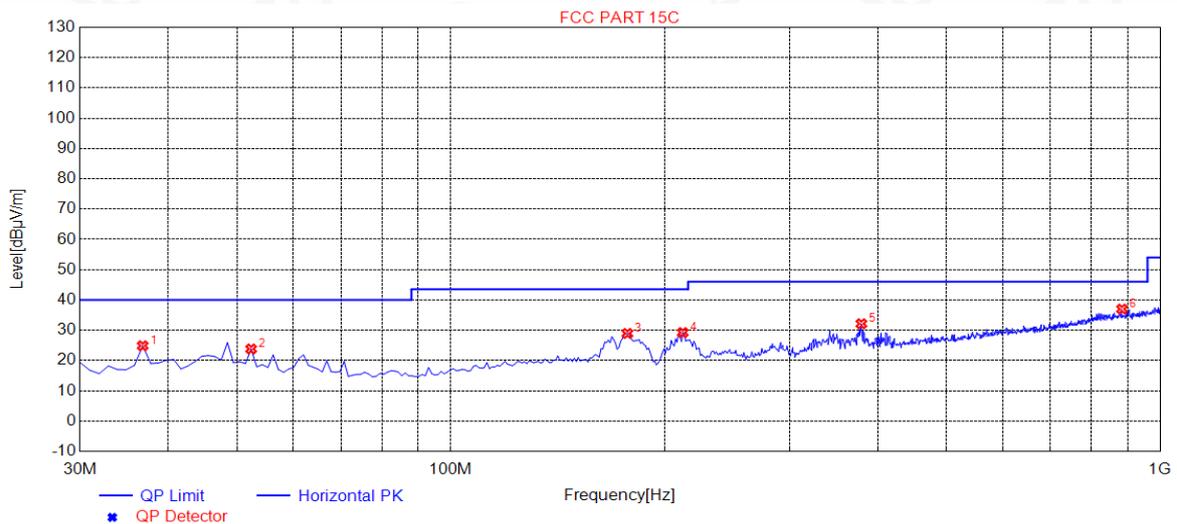
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the 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 15 days 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.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



RADIATED EMISSION 30MHz- 1GHz

| | | | |
|---------------|-------------|---------------------|-------------|
| EUT : | Smart Phone | Model Name | NOTE 20 PRO |
| Temperature : | 20 °C | Relative Humidity : | 53% |
| Pressure : | 1010 hPa | Test Voltage : | DC3.85V |
| Test Mode : | Mode 1 | Polarization : | Horizontal |



| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|------------|
| 1 | 36.7900 | 24.87 | 11.16 | 40.00 | 15.13 | 100 | 207 | Horizontal |
| 2 | 52.3100 | 23.81 | 11.49 | 40.00 | 16.19 | 100 | 104 | Horizontal |
| 3 | 177.4400 | 28.95 | 13.24 | 43.50 | 14.55 | 100 | 353 | Horizontal |
| 4 | 212.3600 | 29.23 | 12.80 | 43.50 | 14.27 | 100 | 157 | Horizontal |
| 5 | 379.2000 | 32.13 | 19.00 | 46.00 | 13.87 | 100 | 357 | Horizontal |
| 6 | 883.6000 | 36.99 | 29.81 | 46.00 | 9.01 | 100 | 293 | Horizontal |

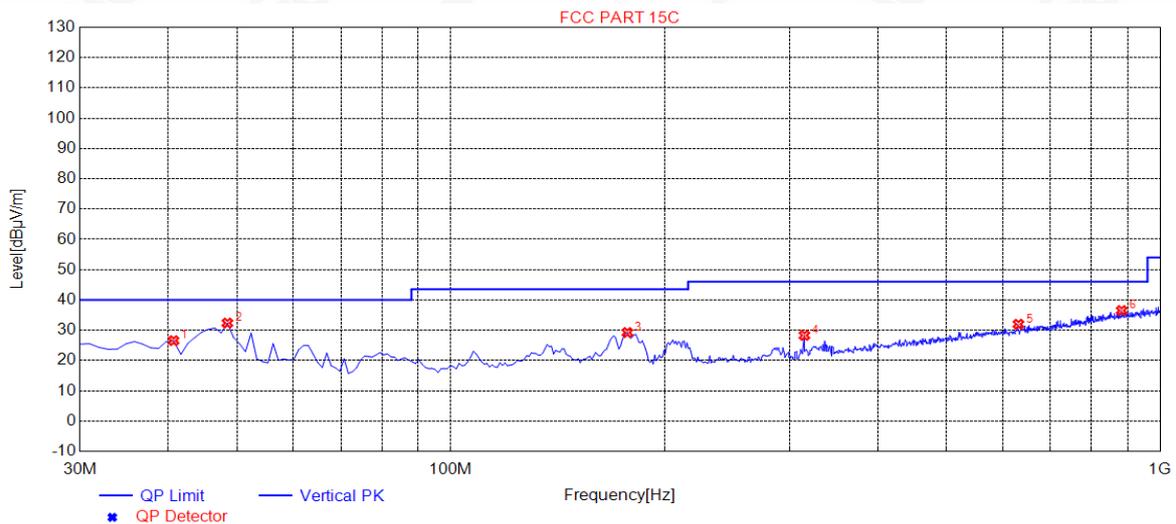
RESULT: PASS

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



| | | | |
|---------------|-------------|---------------------|-------------|
| EUT : | Smart Phone | Model Name | NOTE 20 PRO |
| Temperature : | 20 °C | Relative Humidity : | 53% |
| Pressure : | 1010 hPa | Test Voltage : | DC3.85V |
| Test Mode : | Mode 1 | Polarization : | Vertical |



| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|
| 1 | 40.6700 | 26.56 | 11.91 | 40.00 | 13.44 | 100 | 240 | Vertical |
| 2 | 48.4300 | 32.36 | 11.71 | 40.00 | 7.64 | 100 | 358 | Vertical |
| 3 | 177.4400 | 29.24 | 13.24 | 43.50 | 14.26 | 100 | 114 | Vertical |
| 4 | 315.1800 | 28.30 | 16.48 | 46.00 | 17.70 | 100 | 1 | Vertical |
| 5 | 631.4000 | 31.97 | 24.86 | 46.00 | 14.03 | 100 | 184 | Vertical |
| 6 | 882.6300 | 36.50 | 29.79 | 46.00 | 9.50 | 100 | 293 | Vertical |

RESULT: PASS

Note:

Factor=Antenna Factor + Cable loss, Margin= Limit-Result.

The “Factor” value can be calculated automatically by software of measurement system.

The mode 1 is the worst case, and only the data of the worst case recorded in this test report.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/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.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/

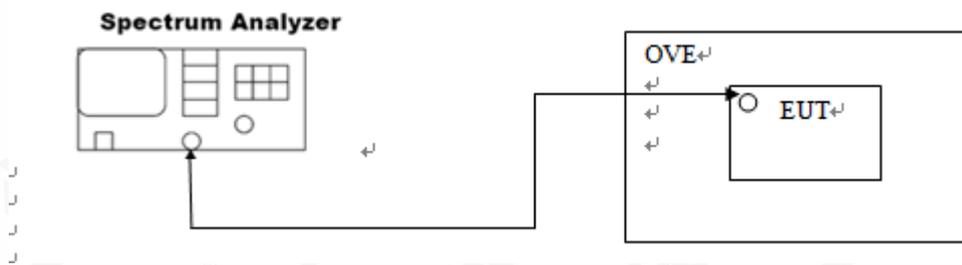


4. FREQUENCY STABILITY

4.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the operation frequency.
3. Set SPA Centre Frequency = Operation Frequency, RBW= 1 KHz, VBW \geq 3 \times RBW.
4. Set SPA Trace 1 Max hold, then View.
5. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
6. Extreme temperature rule is -20°C~40°C.

4.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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.

4.3. MEASUREMENT RESULTS

Operating frequency: 13.56MHz

Voltage vs. Frequency Stability (Test Temperature: 20°C)

| Voltage(V) | Measurement Frequency (MHz) | Max. Deviation (MHz) | Limit(MHz) | Conclusion |
|------------|-----------------------------|----------------------|------------|------------|
| 3.85 | 13.56076 | 0.00080 | 0.001356 | PASS |
| 3.27 | 13.56079 | | | |
| 4.40 | 13.56080 | | | |

Temperature vs. Frequency Stability (Test Voltage: 3.85V)

| Temperature | Measurement Frequency (MHz) | Max. Deviation (MHz) | Limit(MHz) | Conclusion |
|-------------|-----------------------------|----------------------|------------|------------|
| - 20°C | 13.56080 | 0.00086 | 0.001356 | PASS |
| -10°C | 13.56085 | | | |
| 0°C | 13.56083 | | | |
| 10°C | 13.56082 | | | |
| 20°C | 13.56086 | | | |
| 30°C | 13.56085 | | | |
| 40°C | 13.56084 | | | |

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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.

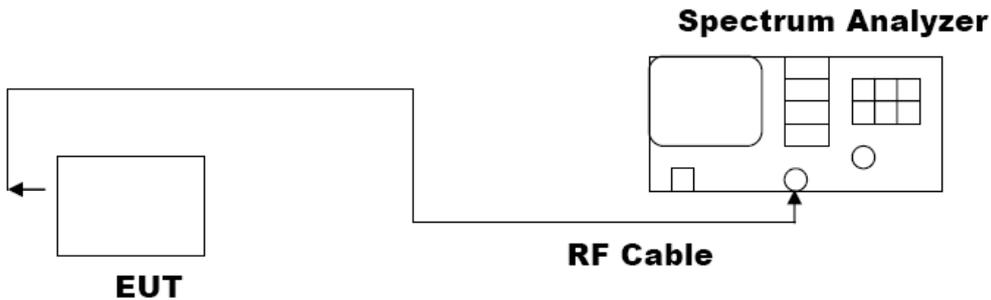


5. BANDWIDTH

5.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the operation frequency.
3. Set SPA Centre Frequency = Operation Frequency, RBW= 10 KHz, VBW \geq 3 \times RBW.
4. Set SPA Trace 1 Max hold, then View.

5.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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 15 days 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.

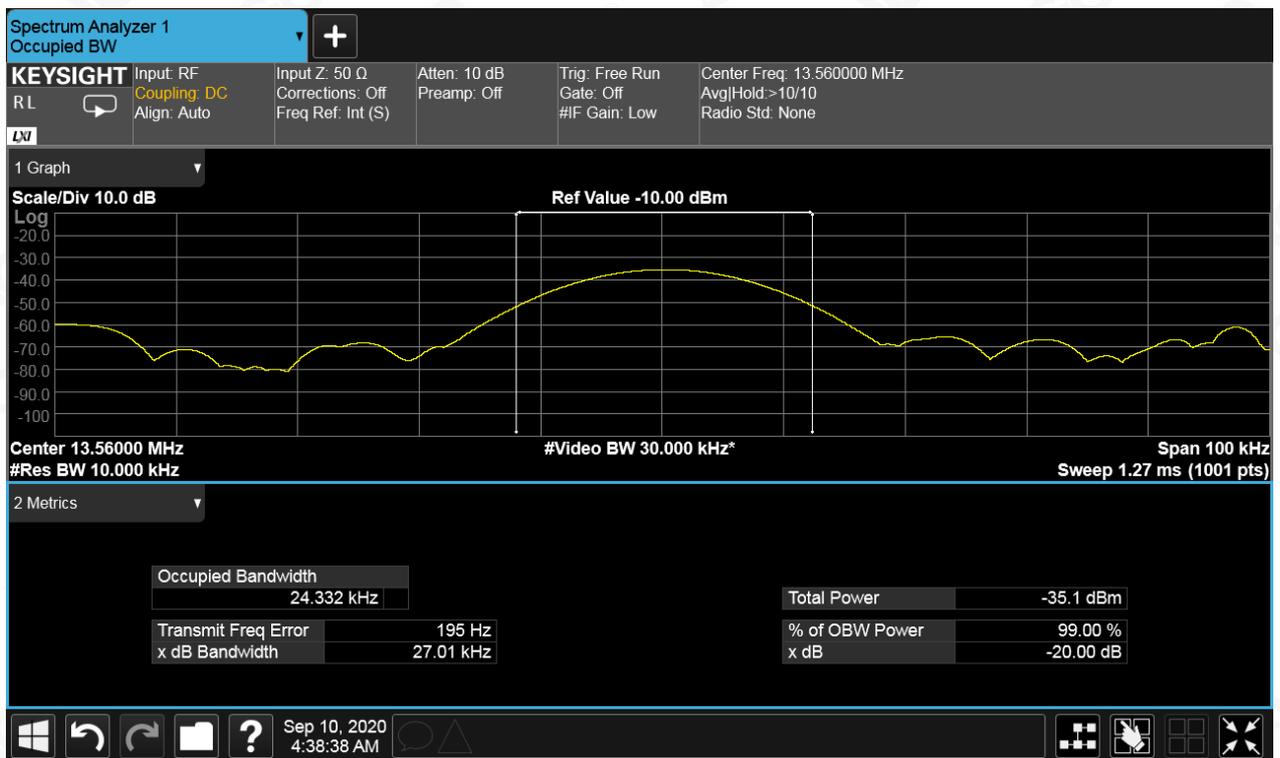
Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: <http://cn.agc-cert.com/>



5.3. MEASUREMENT RESULTS

| | |
|-----------|-----------|
| TEST ITEM | BANDWIDTH |
| TEST MODE | Mode1 |

| Test Data (kHz) | | Criteria |
|--------------------|--------|----------|
| Occupied Bandwidth | 24.332 | PASS |
| -20dB Bandwidth | 27.01 | PASS |



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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 15 days 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.

Attestation of Global Compliance(Shenzhen)Co., Ltd
 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
 Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



6. LINE CONDUCTED EMISSION TEST

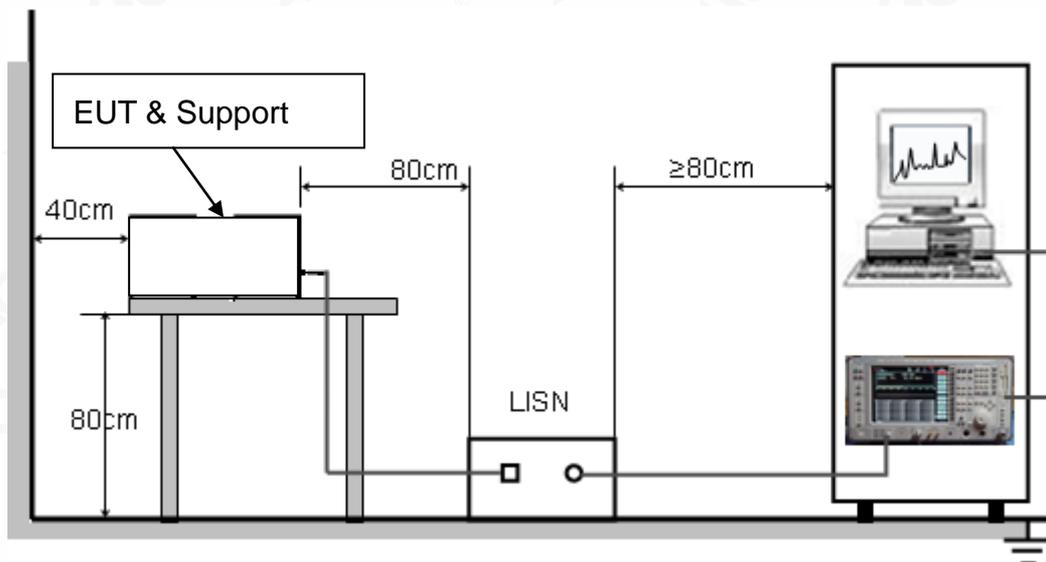
6.1. LIMITS OF LINE CONDUCTED EMISSION TEST

| Frequency | Maximum RF Line Voltage | |
|---------------|-------------------------|----------------|
| | Q.P.(dBuV) | Average(dBuV) |
| 150kHz~500kHz | 66-56 | 56-46 |
| 500kHz~5MHz | 56 | 46 |
| 5MHz~30MHz | 60 | 50 |

Note:

1. The lower limit shall apply at the transition frequency.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

6.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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 15 days 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.

6.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
2. Support equipment, if needed, was placed as per ANSI C63.10.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
4. All support equipments received AC120V/60Hz power from a LISN, if any.
5. The EUT received charging voltage by adapter which received 120V/60Hz power by a LISN..
6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.
9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

6.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

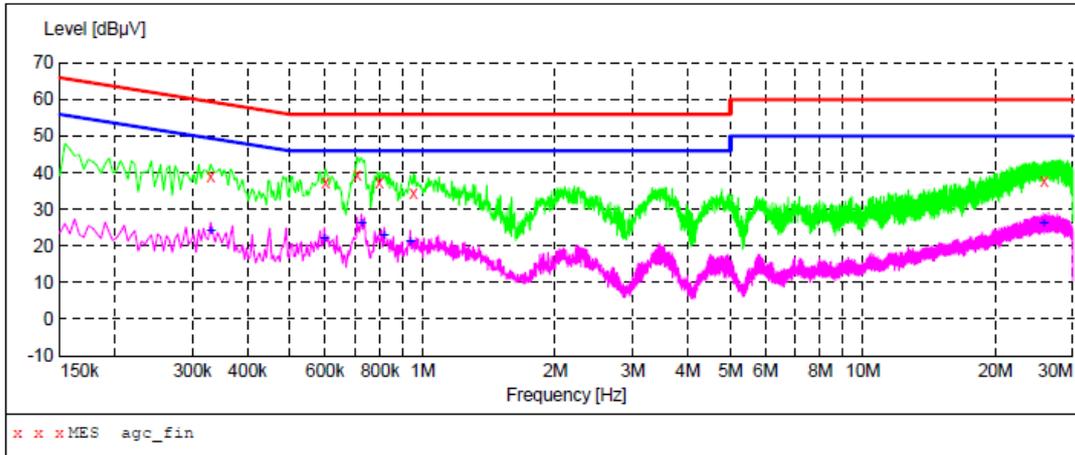
1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
3. The test data of the worst case condition(s) was reported on the Summary Data page.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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 15 days 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.



6.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

LINE CONDUCTED EMISSION TEST LINE 1-L



MEASUREMENT RESULT: "agc_fin"

2020/8/14 10:36

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line |
|------------------|---------------|--------------|---------------|--------------|----------|------|
| 0.330000 | 38.80 | 9.3 | 60 | 20.7 | QP | L1 |
| 0.602000 | 37.20 | 9.3 | 56 | 18.8 | QP | L1 |
| 0.710000 | 39.50 | 9.3 | 56 | 16.5 | QP | L1 |
| 0.798000 | 37.40 | 9.3 | 56 | 18.6 | QP | L1 |
| 0.954000 | 34.40 | 9.3 | 56 | 21.6 | QP | L1 |
| 25.846000 | 37.90 | 11.6 | 60 | 22.1 | QP | L1 |

MEASUREMENT RESULT: "agc_fin2"

2020/8/14 10:36

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line |
|------------------|---------------|--------------|---------------|--------------|----------|------|
| 0.330000 | 24.20 | 9.3 | 50 | 25.3 | AV | L1 |
| 0.598000 | 22.00 | 9.3 | 46 | 24.0 | AV | L1 |
| 0.726000 | 26.30 | 9.3 | 46 | 19.7 | AV | L1 |
| 0.818000 | 22.80 | 9.3 | 46 | 23.2 | AV | L1 |
| 0.938000 | 21.00 | 9.3 | 46 | 25.0 | AV | L1 |
| 25.758000 | 26.10 | 11.6 | 50 | 23.9 | AV | L1 |

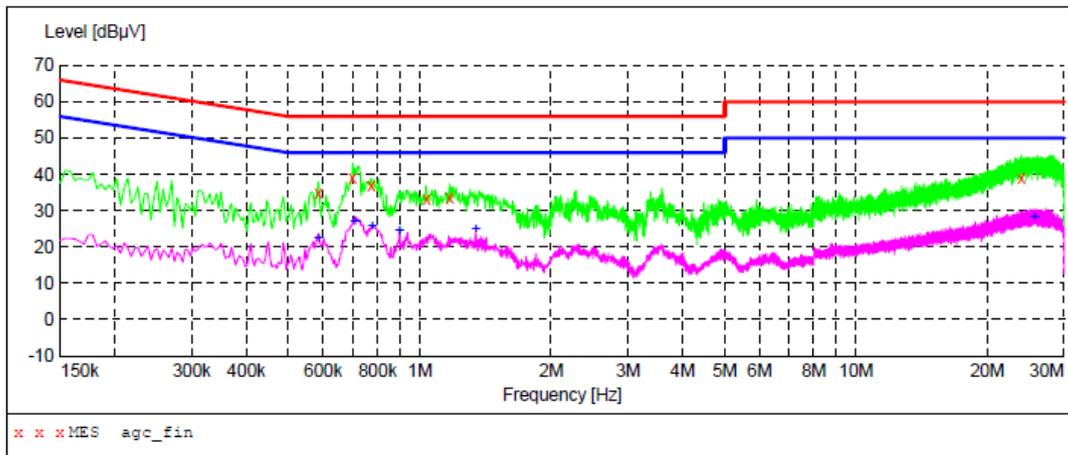
RESULT: PASS

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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 15 days 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.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



Line Conducted Emission Test Line 2-N



MEASUREMENT RESULT: "agc_fin"

2020/8/14 10:43

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line |
|------------------|---------------|--------------|---------------|--------------|----------|------|
| 0.586000 | 34.70 | 9.3 | 56 | 21.3 | QP | N |
| 0.702000 | 39.00 | 9.3 | 56 | 17.0 | QP | N |
| 0.774000 | 36.90 | 9.3 | 56 | 19.1 | QP | N |
| 1.034000 | 33.20 | 9.3 | 56 | 22.8 | QP | N |
| 1.170000 | 33.60 | 9.3 | 56 | 22.4 | QP | N |
| 23.974000 | 38.80 | 11.5 | 60 | 21.2 | QP | N |

MEASUREMENT RESULT: "agc_fin2"

2020/8/14 10:44

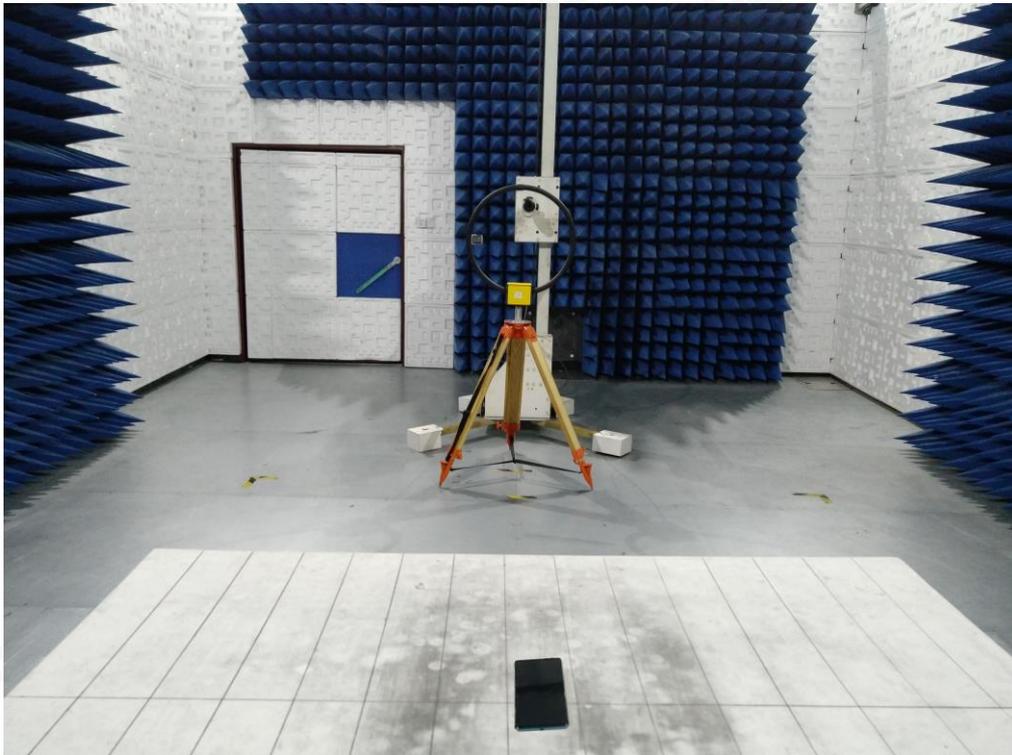
| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line |
|------------------|---------------|--------------|---------------|--------------|----------|------|
| 0.586000 | 22.20 | 9.3 | 46 | 23.8 | AV | N |
| 0.710000 | 27.10 | 9.3 | 46 | 18.9 | AV | N |
| 0.778000 | 25.90 | 9.3 | 46 | 20.1 | AV | N |
| 0.898000 | 24.30 | 9.3 | 46 | 21.7 | AV | N |
| 1.342000 | 24.70 | 9.3 | 46 | 21.3 | AV | N |
| 25.610000 | 28.00 | 11.6 | 50 | 22.0 | AV | N |

RESULT: PASS

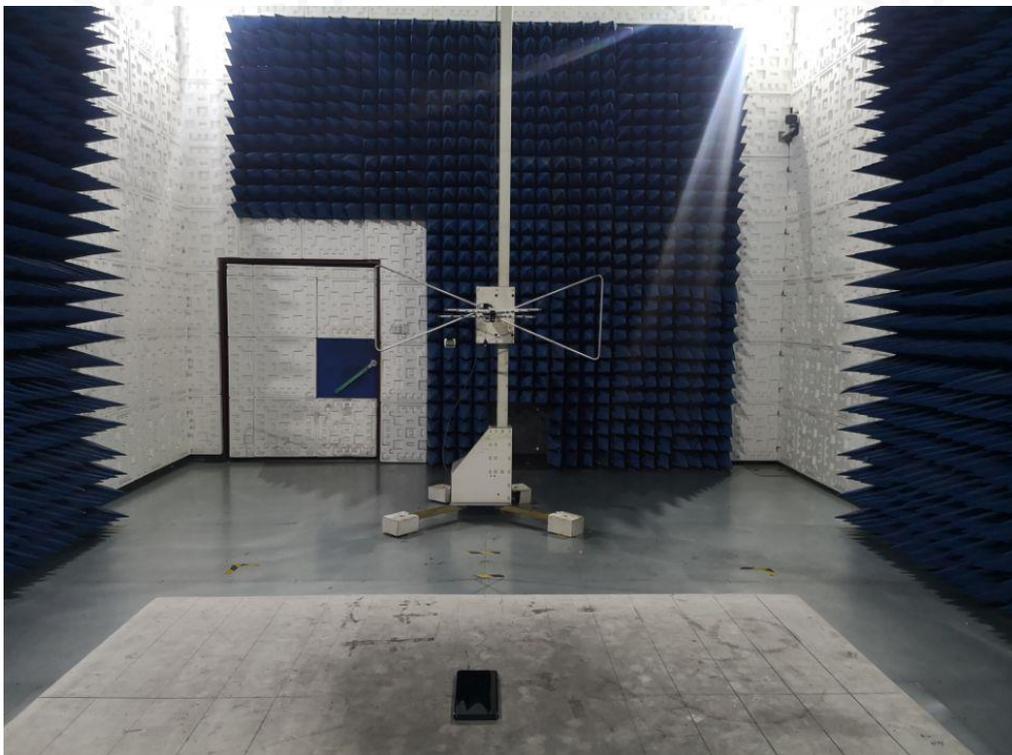
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the 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 15 days 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.



APPENDIX A: PHOTOGRAPHS OF TEST SETUP
RADIATED EMISSION TEST SETUP BELOW 30MHz



RADIATED EMISSION TEST SETUP BELOW 1GHz



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: <http://cn.agc-cert.com/>



FCC LINE CONDUCTED EMISSION TEST SETUP



----END OF REPORT----

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/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.

Attestation of Global Compliance(Shenzhen)Co., Ltd

Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: <http://cn.agc-cert.com/>





Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the “Company”) solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the “Clients”).
2. Any report issued by Company as a result of this application for testing services (the “Report”) shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
4. The non-CMA report issued by AGC is only permitted to be used by the client as internal reference use and shall not be used for public demonstration purpose.
5. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
6. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
7. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
8. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
9. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
10. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/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 15 days 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.

