

## 10.4 MEASUREMENT RESULTS

| Conducted Power Measurement Results |                    |                    |                          |
|-------------------------------------|--------------------|--------------------|--------------------------|
| Mode                                | Channel Separation | Test Channel       | Measurement Result (dBm) |
|                                     |                    |                    | For 36.99dBm(5W)         |
| Analog +Vioce                       | 12.5 kHz           | Bottom(136.025MHz) | 36.20                    |
|                                     |                    | Middle(151.850MHz) | 35.93                    |
|                                     |                    | Middle(155.025MHz) | 36.32                    |
|                                     |                    | Middle(161.610MHz) | 36.28                    |
|                                     |                    | Top (173.975MHz)   | <b>36.38</b>             |
| Digital +Vioce                      | 12.5 kHz           | Bottom(136.025MHz) | 36.14                    |
|                                     |                    | Middle(151.850MHz) | 35.87                    |
|                                     |                    | Middle(155.025MHz) | 36.09                    |
|                                     |                    | Middle(161.610MHz) | 36.15                    |
|                                     |                    | Top (173.975MHz)   | <b>36.16</b>             |
| Digital+ Data                       | 12.5 kHz           | Bottom(136.025MHz) | 35.78                    |
|                                     |                    | Middle(151.850MHz) | 35.62                    |
|                                     |                    | Middle(155.025MHz) | 35.81                    |
|                                     |                    | Middle(161.610MHz) | 35.79                    |
|                                     |                    | Top (173.975MHz)   | 35.77                    |

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/



| Radiated Power Measurement Results |                    |                    |                          |
|------------------------------------|--------------------|--------------------|--------------------------|
| Mode                               | Channel Separation | Test Channel       | Measurement Result (dBm) |
|                                    |                    |                    | For 36.99dBm(5W)         |
| Analog +Vioce                      | 12.5 kHz           | Bottom(136.025MHz) | 35.63                    |
|                                    |                    | Middle(151.850MHz) | 35.34                    |
|                                    |                    | Middle(155.025MHz) | 35.71                    |
|                                    |                    | Middle(161.610MHz) | 35.94                    |
|                                    |                    | Top (173.975MHz)   | 35.78                    |
| Digital +Vioce                     | 12.5 kHz           | Bottom(136.025MHz) | 35.50                    |
|                                    |                    | Middle(151.850MHz) | 35.31                    |
|                                    |                    | Middle(155.025MHz) | 35.45                    |
|                                    |                    | Middle(161.610MHz) | 35.57                    |
|                                    |                    | Top (173.975MHz)   | 35.53                    |
| Digital+ Data                      | 12.5 kHz           | Bottom(136.025MHz) | 35.22                    |
|                                    |                    | Middle(151.850MHz) | 35.05                    |
|                                    |                    | Middle(155.025MHz) | 35.24                    |
|                                    |                    | Middle(161.610MHz) | 35.20                    |
|                                    |                    | Top (173.975MHz)   | 35.17                    |

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.



| Conducted Power Measurement Results |                    |                    |                          |
|-------------------------------------|--------------------|--------------------|--------------------------|
| Mode                                | Channel Separation | Test Channel       | Measurement Result (dBm) |
|                                     |                    |                    | For 43.98dBm(25W)        |
| Analog +Vioce                       | 12.5 kHz           | Bottom(136.025MHz) | 43.53                    |
|                                     |                    | Middle(151.850MHz) | 43.63                    |
|                                     |                    | Middle(155.025MHz) | 43.59                    |
|                                     |                    | Middle(161.610MHz) | 43.51                    |
|                                     |                    | Top (173.975MHz)   | <b>43.67</b>             |
| Digital +Vioce                      | 12.5 kHz           | Bottom(136.025MHz) | 43.41                    |
|                                     |                    | Middle(151.850MHz) | 43.25                    |
|                                     |                    | Middle(155.025MHz) | 43.38                    |
|                                     |                    | Middle(161.610MHz) | 43.40                    |
|                                     |                    | Top (173.975MHz)   | <b>43.58</b>             |
| Digital+ Data                       | 12.5 kHz           | Bottom(136.025MHz) | 42.98                    |
|                                     |                    | Middle(151.850MHz) | 43.06                    |
|                                     |                    | Middle(155.025MHz) | 43.11                    |
|                                     |                    | Middle(161.610MHz) | 43.09                    |
|                                     |                    | Top (173.975MHz)   | 43.15                    |

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/



| Radiated Power Measurement Results |                    |                    |                          |
|------------------------------------|--------------------|--------------------|--------------------------|
| Mode                               | Channel Separation | Test Channel       | Measurement Result (dBm) |
|                                    |                    |                    | For 43.98dBm(25W)        |
| Analog +Vioce                      | 12.5 kHz           | Bottom(136.025MHz) | 42.95                    |
|                                    |                    | Middle(151.850MHz) | 43.07                    |
|                                    |                    | Middle(155.025MHz) | 43.01                    |
|                                    |                    | Middle(161.610MHz) | 42.94                    |
|                                    |                    | Top (173.975MHz)   | 43.05                    |
| Digital +Vioce                     | 12.5 kHz           | Bottom(136.025MHz) | 42.83                    |
|                                    |                    | Middle(151.850MHz) | 42.69                    |
|                                    |                    | Middle(155.025MHz) | 42.80                    |
|                                    |                    | Middle(161.610MHz) | 42.82                    |
|                                    |                    | Top (173.975MHz)   | 42.99                    |
| Digital+ Data                      | 12.5 kHz           | Bottom(136.025MHz) | 42.41                    |
|                                    |                    | Middle(151.850MHz) | 42.52                    |
|                                    |                    | Middle(155.025MHz) | 42.50                    |
|                                    |                    | Middle(161.610MHz) | 42.45                    |
|                                    |                    | Top (173.975MHz)   | 42.57                    |

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/



| Conducted Power Measurement Results |                    |                    |                          |
|-------------------------------------|--------------------|--------------------|--------------------------|
| Mode                                | Channel Separation | Test Channel       | Measurement Result (dBm) |
|                                     |                    |                    | For 47.40dBm(55W)        |
| Analog +Vioce                       | 12.5 kHz           | Bottom(136.025MHz) | 47.08                    |
|                                     |                    | Middle(151.850MHz) | <b>47.14</b>             |
|                                     |                    | Middle(155.025MHz) | 47.05                    |
|                                     |                    | Middle(161.610MHz) | 47.11                    |
|                                     |                    | Top (173.975MHz)   | 47.12                    |
| Digital +Vioce                      | 12.5 kHz           | Bottom(136.025MHz) | 47.00                    |
|                                     |                    | Middle(151.850MHz) | <b>47.03</b>             |
|                                     |                    | Middle(155.025MHz) | 46.89                    |
|                                     |                    | Middle(161.610MHz) | 46.97                    |
|                                     |                    | Top (173.975MHz)   | 46.95                    |
| Digital+ Data                       | 12.5 kHz           | Bottom(136.025MHz) | 46.85                    |
|                                     |                    | Middle(151.850MHz) | 46.81                    |
|                                     |                    | Middle(155.025MHz) | 46.79                    |
|                                     |                    | Middle(161.610MHz) | 46.83                    |
|                                     |                    | Top (173.975MHz)   | 46.78                    |

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/



| Radiated Power Measurement Results |                    |                    |                          |
|------------------------------------|--------------------|--------------------|--------------------------|
| Mode                               | Channel Separation | Test Channel       | Measurement Result (dBm) |
|                                    |                    |                    | For 47.40dBm(55W)        |
| Analog +Vioce                      | 12.5 kHz           | Bottom(136.025MHz) | 46.51                    |
|                                    |                    | Middle(151.850MHz) | 46.52                    |
|                                    |                    | Middle(155.025MHz) | 46.47                    |
|                                    |                    | Middle(161.610MHz) | 46.50                    |
|                                    |                    | Top (173.975MHz)   | 46.49                    |
| Digital +Vioce                     | 12.5 kHz           | Bottom(136.025MHz) | 46.41                    |
|                                    |                    | Middle(151.850MHz) | 46.45                    |
|                                    |                    | Middle(155.025MHz) | 46.39                    |
|                                    |                    | Middle(161.610MHz) | 46.37                    |
|                                    |                    | Top (173.975MHz)   | 46.35                    |
| Digital+ Data                      | 12.5 kHz           | Bottom(136.025MHz) | 46.28                    |
|                                    |                    | Middle(151.850MHz) | 46.23                    |
|                                    |                    | Middle(155.025MHz) | 46.24                    |
|                                    |                    | Middle(161.610MHz) | 46.27                    |
|                                    |                    | Top (173.975MHz)   | 46.22                    |

**Note:** Calculation Formula:  $CP = R + A + L$

(1) CP: The final Conducted Power

(2) R : The reading value from spectrum analyzer

(3) A : The attenuation value of the used attenuator

(4) L : The loss of all connection cables

(5) Measurement Result=Peak Power(Max)

(6) All polarities of radiated power have been evaluated, and only the worst vertical polarity data is 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 "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/



## 11. SPURIOUS EMISSION ON ANTENNA PORT

### 11.1 PROVISIONS APPLICABLE

Please refer to FCC 47 CFR 2.1051, 2.1057, 22.359 & 90.210 for specification details.  
Emissions shall be attenuated below the mean output power of the transmitter as follows:

| FCC Rules | Attenuation Limit (dBc)       |
|-----------|-------------------------------|
| § 22.359  | At least $43 + 10 \log(P)$ dB |
| § 90.210  | At least $50 + 10 \log(P)$ dB |

$50 + 10 \log(P_{\text{watts}})$

Note: In general, the worse case attenuation requirement shown above was applied.

Calculation: Limit (dBm) =  $EL - 50 - 10 \log_{10}(TP)$

EL is the emission level of the Output Power expressed in dBm,

In this application, the EL is P (dBm)

Limit (dBm) =  $P(\text{dBm}) - 50 - 10 \log(P_{\text{watts}}) = -20 \text{ dBm}$

$43 + 10 \log(P_{\text{watts}})$

Calculation: Limit (dBm) =  $EL - 43 - 10 \log_{10}(TP)$

Notes: EL is the emission level of the Output Power expressed in dBm,

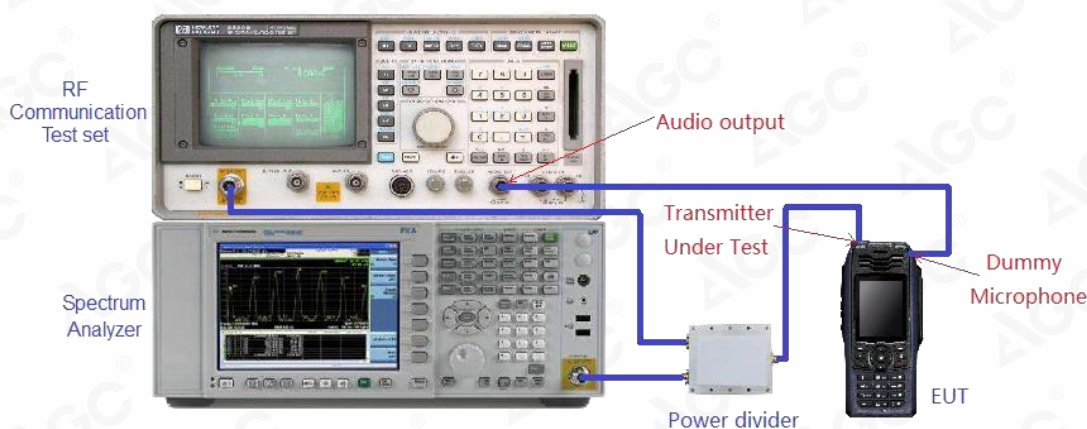
In this application, the EL is P (dBm).

Limit (dBm) =  $P(\text{dBm}) - 43 - 10 \log(P_{\text{watts}}) = -13 \text{ dBm}$

### 11.2 MEASUREMENT METHOD

1. The RF output of the EUT was connected to a spectrum analyzer through appropriate attenuation.
2. The resolution bandwidth of the spectrum analyzer was set to 100 kHz. Sufficient scans were taken to show any out of band emission up to 10th . Harmonic for the lower and the highest frequency range.
3. Set RBW 100 kHz, VBW 300 kHz in the frequency band 30MHz to 1GHz, while set RBW=1MHz, VBW=3MHz from the 1GHz to 10th Harmonic.
4. The audio input was set the unmodulated carrier, the resulting picture is print out for each channel separation.

### 11.3 MEASUREMENT SETUP



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

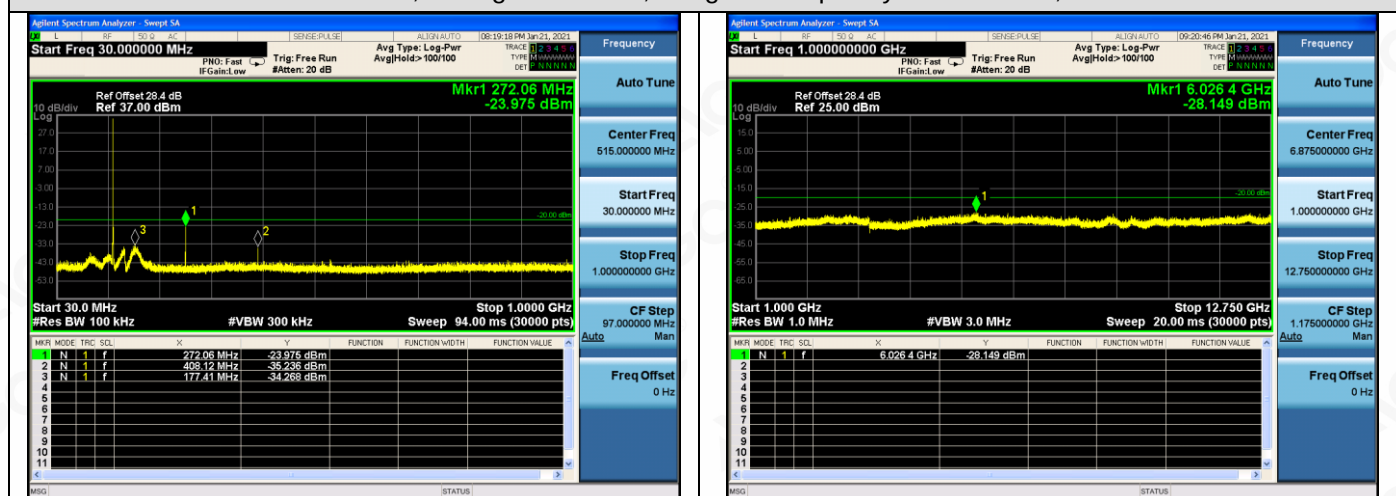
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

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



## 11.4 MEASUREMENT RESULTS

### 12.5kHz, Analog modulation, Assigned Frequency:136.025MHz,5W



### 12.5kHz, Analog modulation, Assigned Frequency:151.850MHz, 5W



### 12.5kHz, Analog modulation, Assigned Frequency:155.025MHz, 5W

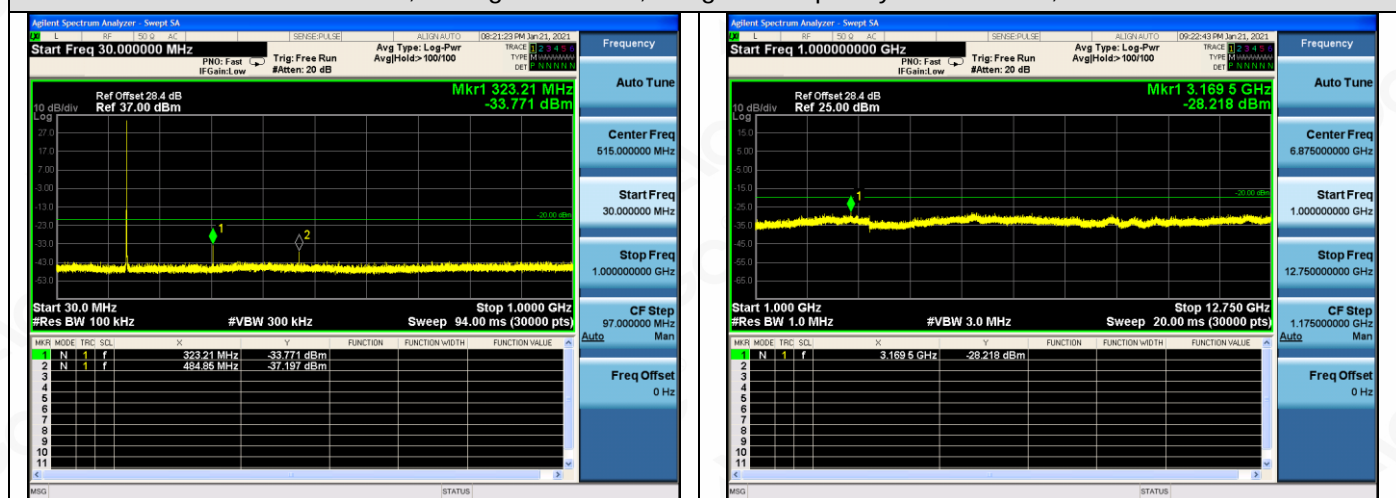


Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the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

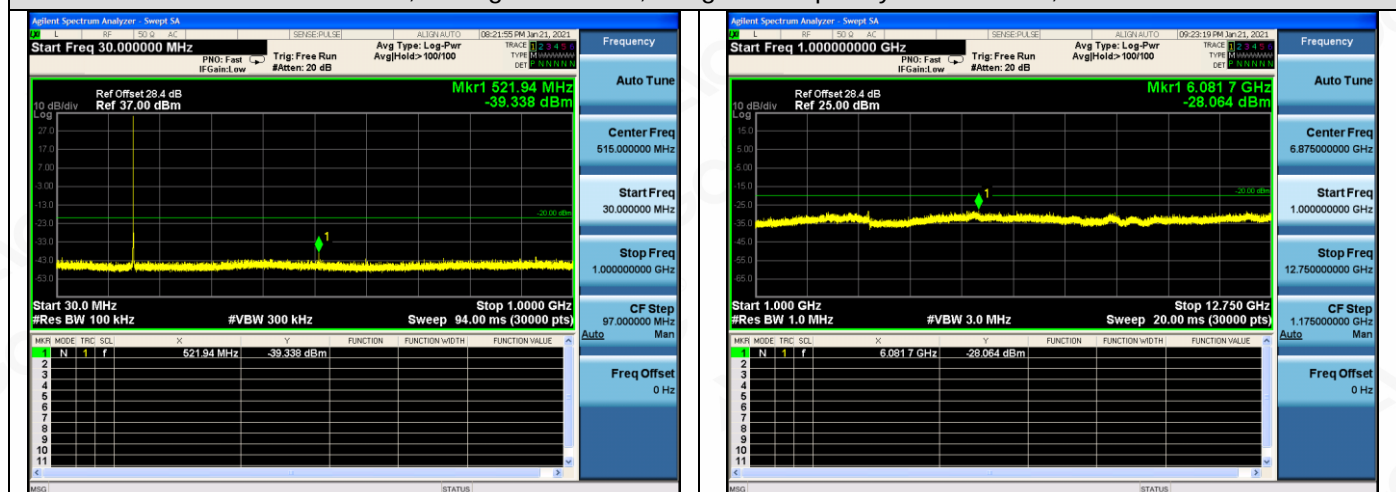
Attestation of Global Compliance(Shenzhen)Co., Ltd  
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd  
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: <http://cn.agc-cert.com/>



## 12.5kHz, Analog modulation, Assigned Frequency:161.610MHz, 5W



## 12.5kHz, Analog modulation, Assigned Frequency:173.975MHz, 5W



## 12.5kHz, Analog modulation, Assigned Frequency:136.025MHz, 25W



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.

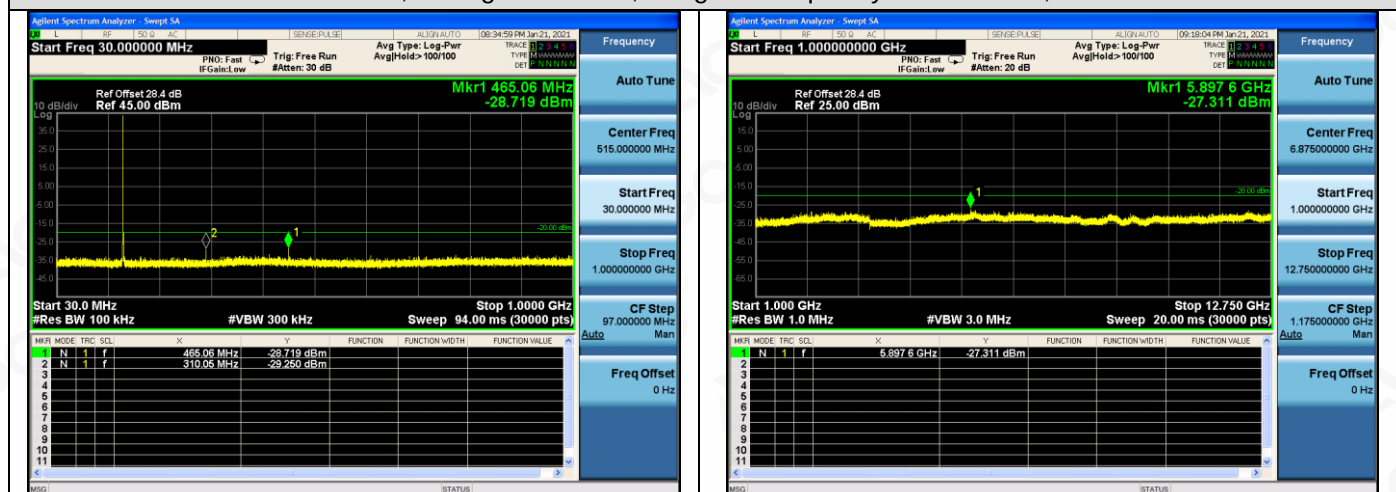
Attestation of Global Compliance(Shenzhen)Co., Ltd  
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd  
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



## 12.5kHz, Analog modulation, Assigned Frequency:151.850MHz, 25W



## 12.5kHz, Analog modulation, Assigned Frequency:155.025MHz, 25W



## 12.5kHz, Analog modulation, Assigned Frequency:161.610MHz, 25W



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/



### 12.5kHz, Analog modulation, Assigned Frequency:173.975MHz, 25W



### 12.5kHz, Analog modulation, Assigned Frequency:136.025MHz, 55W



### 12.5kHz, Analog modulation, Assigned Frequency:151.850MHz, 55W

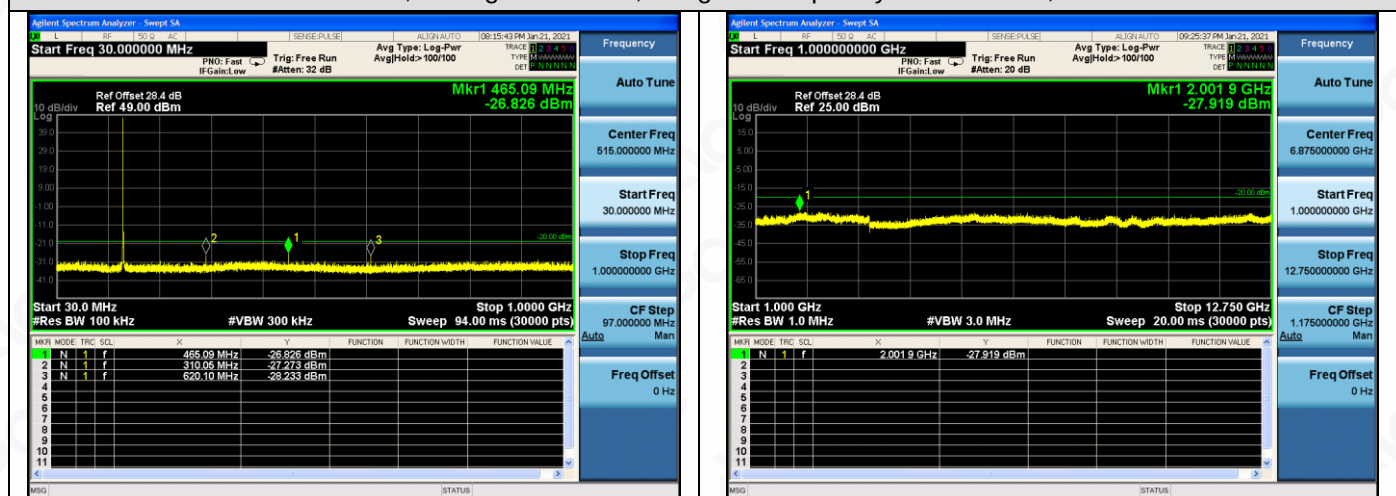


Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the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

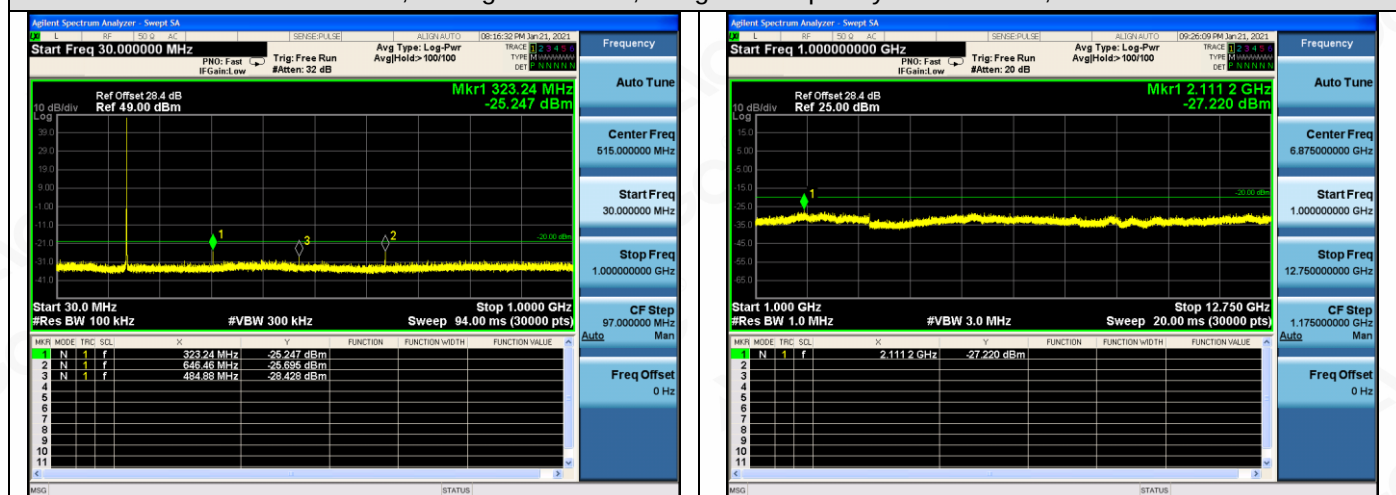
Attestation of Global Compliance(Shenzhen)Co., Ltd  
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd  
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



### 12.5kHz, Analog modulation, Assigned Frequency:155.025MHz,55W



### 12.5kHz, Analog modulation, Assigned Frequency:161.610MHz, 55W



### 12.5kHz, Analog modulation, Assigned Frequency:173.975MHz, 55W



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/

