

FCC Radio Test Report

FCC ID: R9C-CPH2365

This report concerns: Original Grant

Project No. : 2108C136
Equipment : Mobile Phone
Brand Name : OPPO
Test Model : CPH2365
Series Model : N/A
Applicant : Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address : NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China
Manufacturer : Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address : NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China
Factory : Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address : NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China
Date of Receipt : Dec. 23, 2020
Date of Test : Dec. 24, 2020 ~ Aug. 24, 2021
Issued Date : Aug. 30, 2021
Report Version : R00
Test Sample : Engineering Sample No.: DG20201225140 for conducted, DG2020122314 for radiated.
Standard(s) : 47 CFR FCC Part 90 Subpart S
47 CFR FCC Part 2
ANSI/TIA/EIA-603-E-2016
FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Vegeta Li

Prepared by : Vegeta Li

Steven Lu

Approved by : Steven Lu



TESTING CERT #5123.02

Add: No. 3 Jinshagang 1st Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of China

Tel: +86-769-8318-3000

Web: www.newbtl.com

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

The report must not be used by the client to claim product certification, approval, or endorsement by NIST, A2LA, or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and is not use in determining the Pass/Fail results.

| Table of Contents | Page |
|--|-------------|
| REPORT ISSUED HISTORY | 5 |
| 1 . SUMMARY OF TEST RESULTS | 6 |
| 1.1 TEST FACILITY | 7 |
| 1.2 MEASUREMENT UNCERTAINTY | 7 |
| 1.3 TEST ENVIRONMENT CONDITIONS | 7 |
| 2 . GENERAL INFORMATION | 8 |
| 2.1 GENERAL DESCRIPTION OF EUT | 8 |
| 2.2 DESCRIPTION OF TEST MODES | 10 |
| 2.3 BLOCK DIGRAM SHOWING THE CONFIGURATIONOFSYSTEMTESTED | 11 |
| 2.4 DESCRIPTION OF SUPPORT UNITS | 11 |
| 3 . TEST RESULT | 12 |
| 3.1 OUTPUT POWER MEASUREMENT | 12 |
| 3.1.1 LIMIT | 12 |
| 3.1.2 TEST PROCEDURE | 12 |
| 3.1.3 TEST SETUP LAYOUT | 12 |
| 3.1.4 TEST DEVIATION | 12 |
| 3.1.5 TEST RESULTS | 12 |
| 3.2 OCCUPIED BANDWIDTH MEASUREMENT | 13 |
| 3.2.1 TEST PROCEDURE | 13 |
| 3.2.2 TEST SETUP LAYOUT | 13 |
| 3.2.3 TEST DEVIATION | 13 |
| 3.2.4 TEST RESULTS | 13 |
| 3.3 CONDUCTED SPURIOUS EMISSIONS MEASUREMENT | 14 |
| 3.3.1 LIMIT | 14 |
| 3.3.2 TEST PROCEDURES | 14 |
| 3.3.3 TEST SETUP LAYOUT | 14 |
| 3.3.4 TEST DEVIATION | 14 |
| 3.3.5 TEST RESULTS | 14 |
| 3.4 RADIATED SPURIOUS EMISSIONS MEASUREMENT | 15 |
| 3.4.1 LIMIT | 15 |
| 3.4.2 TEST PROCEDURES | 15 |
| 3.4.3 TEST SETUP LAYOUT | 16 |
| 3.4.4 TEST DEVIATION | 17 |
| 3.4.5 TEST RESULTS (9KHZ TO 30MHZ) | 17 |
| 3.4.6 TEST RESULTS (30MHZ TO 1000MHZ) | 17 |
| 3.4.7 TEST RESULTS (ABOVE 1000MHZ) | 17 |
| 3.5 MASK MEASUREMENTS | 18 |
| 3.5.1 LIMIT | 18 |

| Table of Contents | Page |
|--|-------------|
| 3.5.2 TEST PROCEDURES | 18 |
| 3.5.3 TEST SETUP LAYOUT | 18 |
| 3.5.4 TEST DEVIATION | 18 |
| 3.5.5 TEST RESULTS | 18 |
| 3.6 PEAK TO AVERAGE RATIO MEASUREMENT | 19 |
| 3.6.1 LIMIT | 19 |
| 3.6.2 TEST PROCEDURES | 19 |
| 3.6.3 TEST SETUP LAYOUT | 19 |
| 3.6.4 TEST DEVIATION | 19 |
| 3.6.5 TEST RESULTS | 19 |
| 3.7 FREQUENCY STABILITY MEASUREMENT | 20 |
| 3.7.1 LIMIT | 20 |
| 3.7.2 TEST PROCEDURES | 20 |
| 3.7.3 TEST SETUP LAYOUT | 20 |
| 3.7.4 TEST DEVIATION | 20 |
| 3.7.5 TEST RESULTS | 20 |
| 4 . LIST OF MEASUREMENT EQUIPMENTS | 21 |
| APPENDIX A - OUTPUT POWER | 23 |
| APPENDIX B - OCCUPIED BANDWIDTH | 28 |
| APPENDIX C - CONDUCTED SPURIOUS EMISSIONS | 39 |
| APPENDIX D - RADIATED SPURIOUS EMISSIONS (9KHZ TO 30MHZ) | 43 |
| APPENDIX E - RADIATED SPURIOUS EMISSIONS (30MHZ TO 1000MHZ) | 48 |
| APPENDIX F - RADIATED SPURIOUS EMISSIONS (ABOVE 1000MHZ) | 61 |
| APPENDIX G - MASK | 74 |
| APPENDIX H - PEAK TO AVERAGE RATIO | 79 |
| APPENDIX I - FREQUENCY STABILITY | 87 |

REPORT ISSUED HISTORY

| Report Version | Description | Issued Date |
|----------------|-----------------|---------------|
| R00 | Original Issue. | Aug. 30, 2021 |

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

| FCC Part 90 Subpart S & Part 2 | | | |
|--------------------------------|------------------------------|----------|-------------|
| Standard(s) Section | Test Item | Judgment | Remark |
| 2.1046 & 90.635 (b) | Effective Radiated Power | PASS | ----- |
| 2.1049 & 90.209 | Occupied Bandwidth | PASS | ----- |
| 2.1053 & 90.669 | Conducted Spurious Emissions | PASS | ----- |
| 2.1053 & 90.669 | Radiated Spurious Emissions | PASS | ----- |
| 2.1053 & 90.691 | Mask Measurements | PASS | ----- |
| - | Peak To Average Ratio | PASS | Record Only |
| 2.1055 & 90.213 | Frequency Stability | PASS | ----- |

Note:

(1) "N/A" denotes test is not applicable in this test report.

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 3 Jinshagang 1st Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

A. Radiated Measurement :

| Test Site | Method | Measurement Frequency Range | Ant. H / V | U,(dB) |
|-----------------|--------|-----------------------------|------------|--------|
| DG-CB03 (3m) | CISPR | 9KHz ~ 30MHz | - | 2.36 |
| | | 30MHz ~ 200MHz | V | 4.36 |
| | | 30MHz ~ 200MHz | H | 3.32 |
| | | 200MHz ~ 1,000MHz | V | 4.08 |
| | | 200MHz ~ 1,000MHz | H | 3.96 |

| Test Site | Method | Measurement Frequency Range | U,(dB) |
|-----------------|--------|-----------------------------|--------|
| DG-CB03 (3m) | CISPR | 1GHz ~ 6GHz | 3.80 |
| | | 6GHz ~ 18GHz | 4.82 |

B. Other Measurement:

| Parameter | Uncertainty |
|------------------------|-------------|
| Spectrum Bandwidth | ±3.8 % |
| Maximum Output Power | ±0.95 dB |
| Power Spectral Density | ±0.86 dB |
| Frequency Stability | ±0.16 dB |
| Temperature | ±0.08 °C |
| Time | ±0.58 % |
| Supply voltages | ±0.3 % |

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.3 TEST ENVIRONMENT CONDITIONS

| Test Item | Temperature | Humidity | Test Voltage | Tested By |
|------------------------------|------------------|----------|------------------|-------------|
| Output Power & ERP | 21.6°C | 43% | DC 3.87V | Tate Liu |
| Occupied Bandwidth | 21.6°C | 43% | DC 3.87V | Tate Liu |
| Conducted Spurious Emissions | 21.6°C | 43% | DC 3.87V | Tate Liu |
| Radiated Spurious Emissions | 26°C | 52% | AC 120V/60Hz | Hayden Chen |
| Band Edge | 22.4°C | 45% | DC 3.87V | Abel Cao |
| Peak to Average Ratio | 22.4°C | 45% | DC 3.87V | Abel Cao |
| Frequency Stability | Normal & Extreme | 45% | Normal & Extreme | Abel Cao |

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

| | | | | | |
|---------------------|--|--|------------|-------------|-------------|
| Equipment | Mobile Phone | | | | |
| Brand Name | OPPO | | | | |
| Test Model | CPH2365 | | | | |
| Series Model | N/A | | | | |
| Model Difference(s) | N/A | | | | |
| Hardware Version | 11 | | | | |
| Software Version | ColorOS V11.1 | | | | |
| Power Source | 1. DC Voltage supplied from AC adapter. Model: VCB3HAUH 2. Supplied from Li-ion Polymer battery. 1# Manufacturer / Model: Sunwoda / BLP851 2# Manufacturer / Model: TWS / BLP851 3. Supplied from USB port. | | | | |
| Power Rating | 1. I/P: 100-240V~ 50/60Hz 1.2A O/P: 5V---2A or 5-11V---3A MAX 2. 3.87Vdc, 4880mAh 3. DC 5V | | | | |
| IEMI No. | Radiated | 864213050020910 | | | |
| | Conducted | 864213050021272 | | | |
| Modulation Type | LTE | UL: QPSK, 16QAM, 64QAM DL: QPSK, 16QAM, 64QAM | | | |
| Max. ERP | LTE Band 26 | Channel Bandwidth (MHz) | QPSK (dBm) | 16QAM (dBm) | 64QAM (dBm) |
| | | 1.4 | 18.37 | 17.72 | 16.72 |
| | | 3 | 18.31 | 17.65 | 16.68 |
| | | 5 | 18.39 | 17.74 | 16.65 |
| | | 10 | 18.50 | 17.86 | 16.65 |

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. Channel List:

| LTE Band 26 | | | | | |
|-------------------|-----------------|-----------------|---------------------------|-----------------|-----------------------------|
| Test Frequency ID | Bandwidth (MHz) | N _{UL} | Frequency of Uplink (MHz) | N _{DL} | Frequency of Downlink (MHz) |
| Low Range | 1.4 | 26697 | 814.7 | 8697 | 859.7 |
| | 3 | 26705 | 815.5 | 8705 | 860.5 |
| | 5 | 26715 | 816.5 | 8715 | 861.5 |
| Mid Range | 1.4/3/5/10 | 26740 | 819 | 8740 | 864 |
| High Range | 1.4 | 26783 | 823.3 | 8783 | 868.3 |
| | 3 | 26775 | 822.5 | 8775 | 867.5 |
| | 5 | 26765 | 821.5 | 8765 | 866.5 |

3. Table for Filed Antenna:

Main Antenna

| Brand | Model Name | Antenna Type | Connector | Gain (dBi) | Note |
|-------|------------|--------------|-----------|------------|-------------|
| N/A | N/A | PIFA | N/A | -4.7 | LTE Band 26 |

Second Antenna

| Brand | Model Name | Antenna Type | Connector | Gain (dBi) | Note |
|-------|------------|--------------|-----------|------------|-------------|
| N/A | N/A | PIFA | N/A | -3.1 | LTE Band 26 |

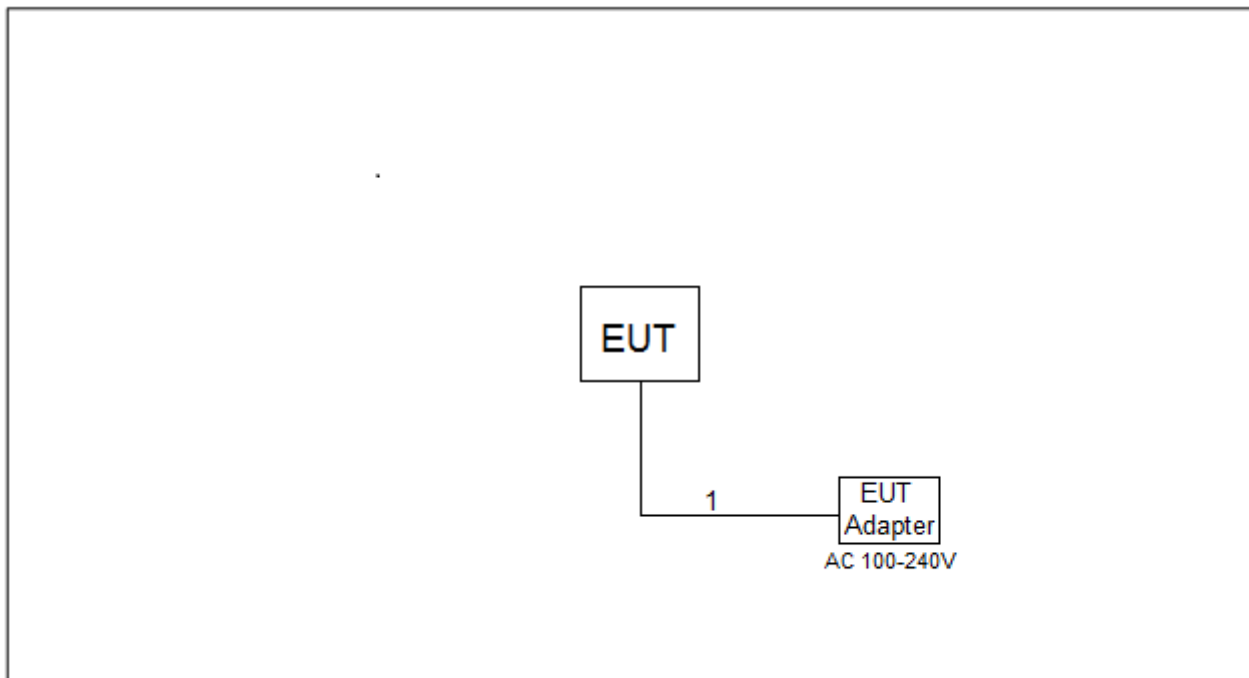
Note: The antenna gain is provided by the manufacturer.

2.2 DESCRIPTION OF TEST MODES

Following mode(s) is (were) found to be the worst case(s) and selected for the final test.

| LTE BAND 26 MODE | | | | | |
|------------------------------|-------------------|---------------------|-------------------|--------------------|---------------|
| Test Item | Available Channel | Tested Channel | Channel Bandwidth | Modulation | Mode |
| Output Power & ERP | 26697 to 26783 | 26697, 26740, 26783 | 1.4MHz | QPSK, 16QAM, 64QAM | 1RB/3RB/6RB |
| | 26705 to 26775 | 26705, 26740, 26775 | 3MHz | QPSK, 16QAM, 64QAM | 1RB/8RB/15RB |
| | 26715 to 26765 | 26715, 26740, 26765 | 5MHz | QPSK, 16QAM, 64QAM | 1RB/12RB/25RB |
| | 26740 | 26740 | 10MHz | QPSK, 16QAM, 64QAM | 1RB/25RB/50RB |
| Occupied Bandwidth | 26697 to 26783 | 26697, 26740, 26783 | 1.4MHz | QPSK, 16QAM, 64QAM | 6RB |
| | 26705 to 26775 | 26705, 26740, 26775 | 3MHz | QPSK, 16QAM, 64QAM | 15RB |
| | 26715 to 26765 | 26715, 26740, 26765 | 5MHz | QPSK, 16QAM, 64QAM | 25RB |
| | 26740 | 26740 | 10MHz | QPSK, 16QAM, 64QAM | 1RB/25RB/50RB |
| Conducted Spurious Emissions | 26697 to 26783 | 26740 | 1.4MHz | QPSK | 1RB |
| | 26705 to 26775 | 26740 | 5MHz | QPSK | 1RB |
| | 26715 to 26765 | 26740 | 10MHz | QPSK | 1RB |
| Radiated Spurious Emissions | 26697 to 26783 | 26740 | 1.4MHz | QPSK | 1RB |
| | 26705 to 26775 | 26740 | 5MHz | QPSK | 1RB |
| | 26715 to 26765 | 26740 | 10MHz | QPSK | 1RB |
| Mask | 26697 to 26783 | 26697, 26783 | 1.4MHz | QPSK | 1RB 6RB |
| | 26705 to 26775 | 26705, 26775 | 3MHz | QPSK | 1RB 15RB |
| | 26715 to 26765 | 26715, 26765 | 5MHz | QPSK | 1RB 25RB |
| | 26740 | 26740 | 10MHz | QPSK | 1RB |
| | | | | | 50RB |
| Peak To Average Ratio | 26697 to 26783 | 26697, 26740, 26783 | 1.4MHz | QPSK, 16QAM, 64QAM | 1RB |
| | 26705 to 26775 | 26705, 26740, 26775 | 3MHz | QPSK, 16QAM, 64QAM | 1RB |
| | 26715 to 26765 | 26715, 26740, 26765 | 5MHz | QPSK, 16QAM, 64QAM | 1RB |
| | 26740 | 26740 | 10MHz | QPSK, 16QAM, 64QAM | 1RB |
| Frequency Stability | 26697 to 26783 | 26740 | 1.4MHz | QPSK | 1RB |
| | 26705 to 26775 | 26740 | 3MHz | QPSK | 1RB |
| | 26715 to 26765 | 26740 | 5MHz | QPSK | 1RB |
| | 26740 | 26740 | 10MHz | QPSK | 1RB |

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment | Mfr/Brand | Model/Type No. | Series No. |
|------|-----------|-----------|----------------|------------|
| - | - | - | - | - |

| Item | Cable Type | Shielded Type | Ferrite Core | Length |
|------|------------|---------------|--------------|--------|
| 1 | USB Cable | NO | NO | 1m |

3. TEST RESULT

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMIT

Mobile / Portable station are limited to 100 watts e.r.p.

3.1.2 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 5.0.

ERP:

$EIRP = \text{Output Power} + \text{Antenan gain}$

$ERP = EIPR - 2.15\text{dBi}$.

Output Power:

The EUT was set up for the maximum power with GSM, GPRS, EDGE, WCDMA, CDMA, and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

3.1.3 TEST SETUP LAYOUT

Output Power Measurement



3.1.4 TEST DEVIATION

No deviation

3.1.5 TEST RESULTS

Please refer to the APPENDIX A.

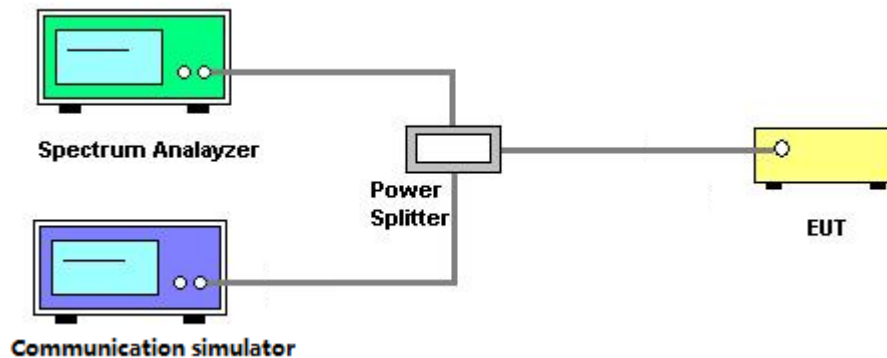
3.2 OCCUPIED BANDWIDTH MEASUREMENT

3.2.1 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 4.0.

1. The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth and 26dB bandwidth.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. $RBW=(1\% \sim 5\%)*EBW$
 $VBW \geq 3* RBW$
4. Set spectrum analyzer with RMS detector.

3.2.2 TEST SETUP LAYOUT



3.2.3 TEST DEVIATION

No deviation

3.2.4 TEST RESULTS

Please refer to the APPENDIX B.

3.3 CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

3.3.1 LIMIT

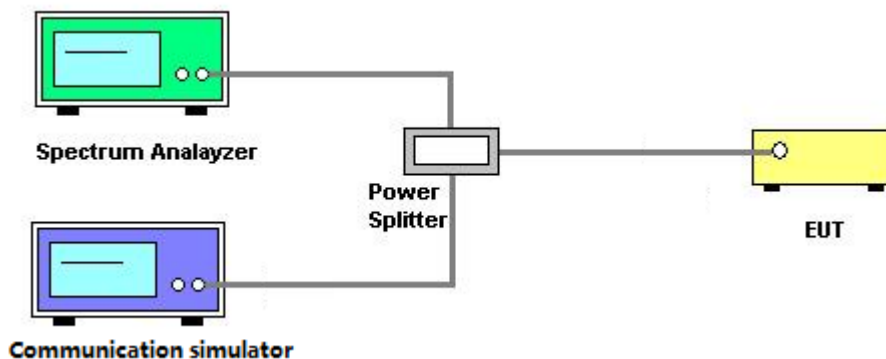
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

3.3.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 6.0.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The band edges of low and high channels for the highest RF powers were measured. Set RBW \geq 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
3. Set spectrum analyzer with RMS detector.
4. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.3.3 TEST SETUP LAYOUT



3.3.4 TEST DEVIATION

No deviation

3.3.5 TEST RESULTS

Please refer to the APPENDIX C.

3.4 RADIATED SPURIOUS EMISSIONS MEASUREMENT

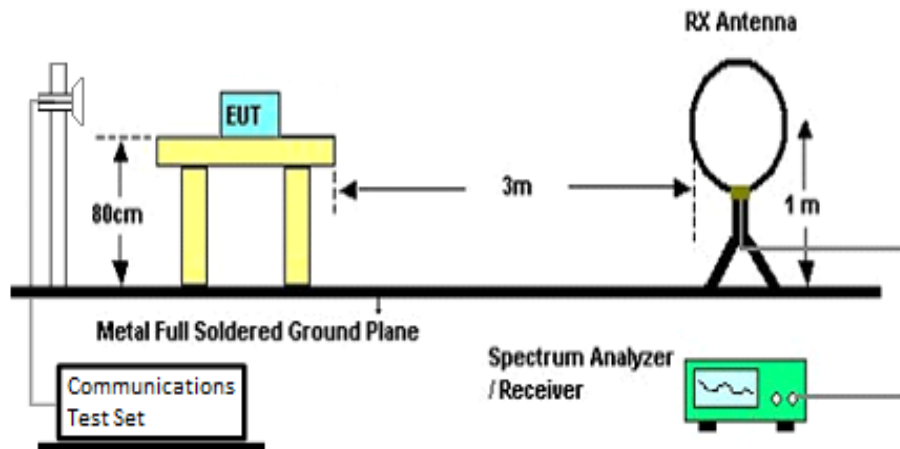
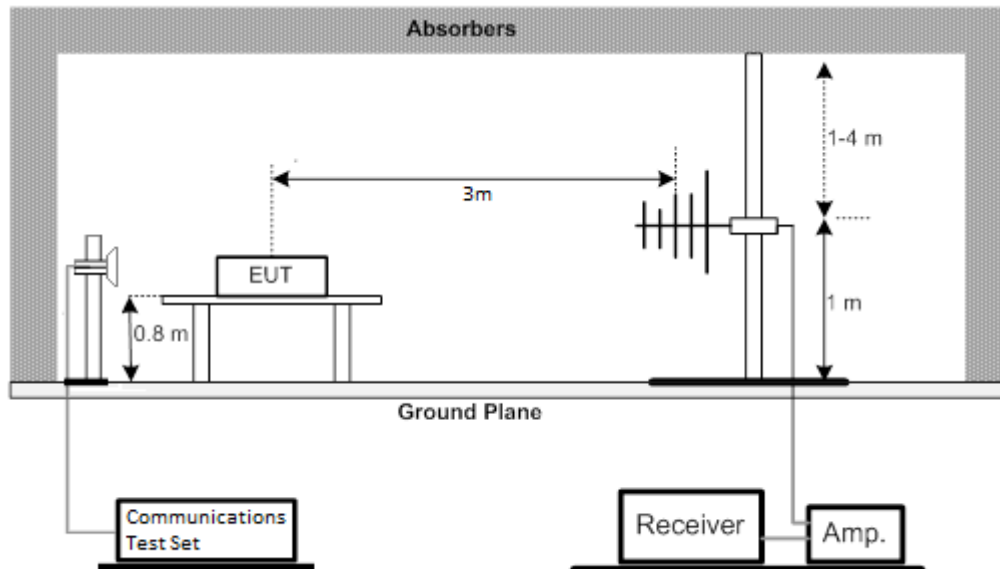
3.4.1 LIMIT

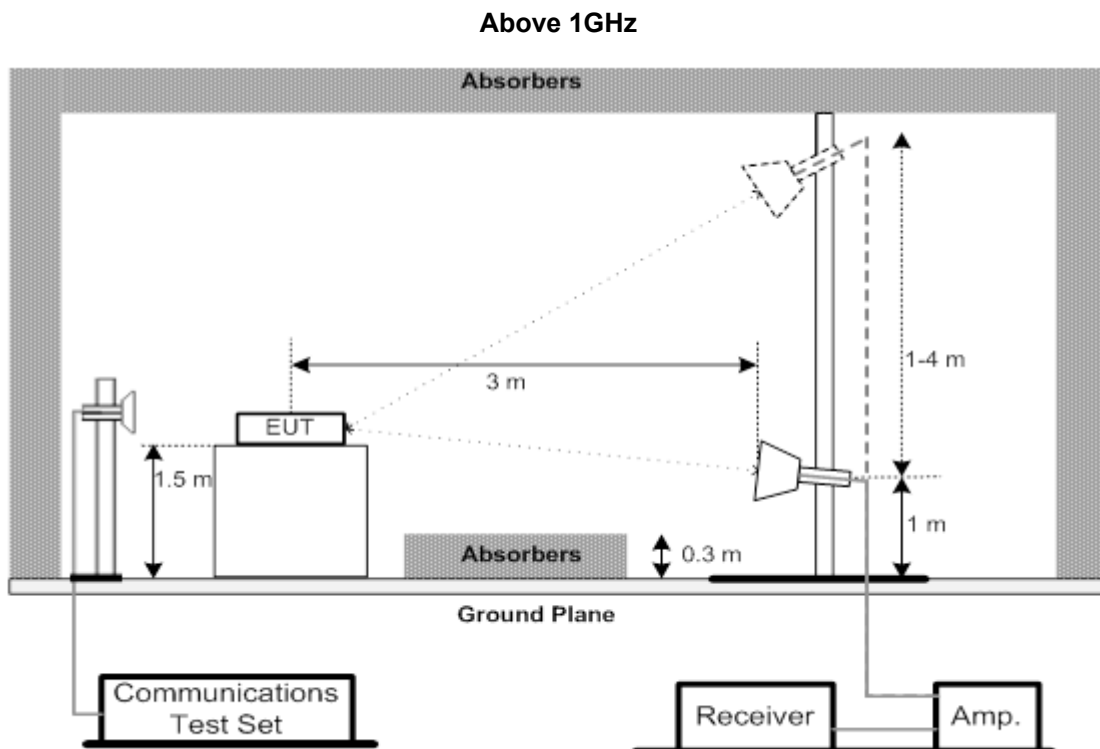
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

3.4.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 5.8.

1. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
2. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
3. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$.
4. ERP can be calculated form EIRP by subtracting the gain of dipole, $ERP = EIPR - 2.15\text{dBi}$.
5. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

3.4.3 TEST SETUP LAYOUT**Below 30MHz****30MHz to 1000MHz**



3.4.4 TEST DEVIATION

No deviation

3.4.5 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the APPENDIX D.

3.4.6 TEST RESULTS (30MHZ TO 1000MHZ)

Please refer to the APPENDIX E.

3.4.7 TEST RESULTS (ABOVE 1000MHZ)

Please refer to the APPENDIX F.

3.5 MASK MEASUREMENTS

3.5.1 LIMIT

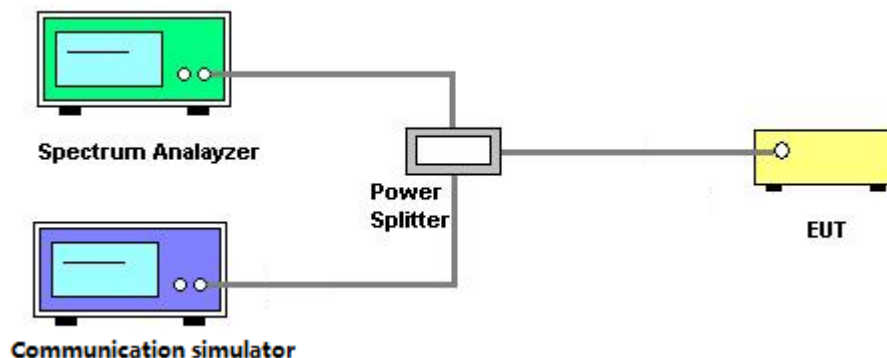
According to FCC part 90.691 shall be tested the emission mask. For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \text{ Log}_{10}(f/6.1)$ decibels or $50+10\text{Log}_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz. For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10\text{Log}_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

3.5.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 6.0.

1. All measurements were done at low and high operational frequency range.
2. Set RBW=1% of 26dBc bandwidth, VBW=3 X RBW, detector=RMS, Sweep time = Auto. For Section 90.691(a) compliance testing, use RBW = 300 Hz for offsets less than 37.5 kHz from a channel edge; RBW = 100 kHz for offsets greater than 37.5 kHz is allowed.
3. Record the max trace plot into the test report.

3.5.3 TEST SETUP LAYOUT



3.5.4 TEST DEVIATION

No deviation

3.5.5 TEST RESULTS

Please refer to the APPENDIX G.

3.6 PEAK TO AVERAGE RATIO MEASUREMENT

3.6.1 LIMIT

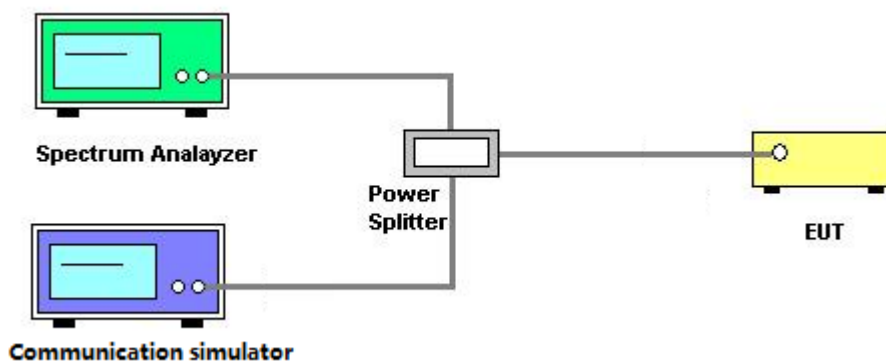
In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.6.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 5.7.

1. Set resolution/measurement bandwidth \geq signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

3.6.3 TEST SETUP LAYOUT



3.6.4 TEST DEVIATION

No deviation

3.6.5 TEST RESULTS

Please refer to the APPENDIX H.

3.7 FREQUENCY STABILITY MEASUREMENT

3.7.1 LIMIT

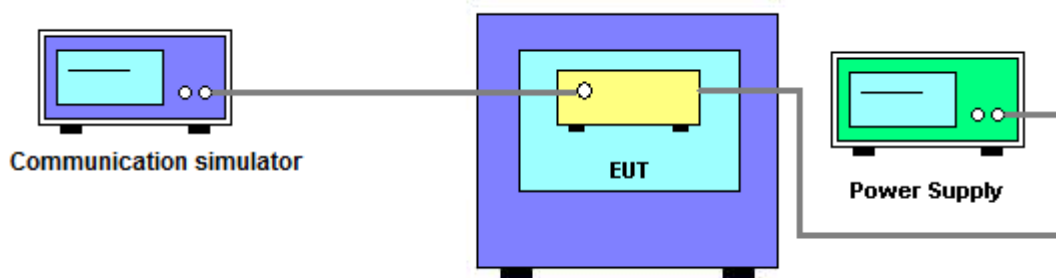
± 1.5 ppm is for base and fixed station. ± 2.5 ppm is for mobile station.

3.7.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 9.0.

1. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
2. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
3. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.
4. The frequency error was recorded frequency error from the communication simulator.

3.7.3 TEST SETUP LAYOUT



3.7.4 TEST DEVIATION

No deviation

3.7.5 TEST RESULTS

Please refer to the APPENDIX I.

4. LIST OF MEASUREMENT EQUIPMENTS

| Radiated Spurious Emission Measurement | | | | | |
|--|-------------------------------------|-----------------------------|---|------------------|------------------|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Antenna | Schwarzbeck | VULB9160 | 9160-3231 | Apr. 14, 2022 |
| 2 | Amplifier | Agilent | 8449B | 3008A02334 | Feb. 27, 2022 |
| 3 | High Pass Filter | Wairwright Instruments Gmbh | WHK 1.5/15G-10ST | 11 | Feb. 27, 2022 |
| 4 | Band Reject Filter | Wairwright Instruments Gmbh | WRCG 1710/1785-1690/1805-60/ 12SS | 38 | Feb. 27, 2022 |
| 5 | Band Reject Filter | Wairwright Instruments Gmbh | WRCG 824/849-810/863-60/9SS | 7 | Feb. 27, 2022 |
| 6 | Band Reject Filter | Wairwright Instruments Gmbh | WRCG 880/915-860/935-60/9SS | 14 | Feb. 27, 2022 |
| 7 | Band Reject Filter | Wairwright Instruments Gmbh | WRCG 1850/1910-1830/1930-60/ 10SS | 17 | Feb. 27, 2022 |
| 8 | High Pass Filter | Wairwright Instruments Gmbh | WHK3.1/18G-10SS | 24 | Feb. 27, 2022 |
| 9 | Wireless Communication Test SET | Agilent | E5515C | MY48364183 | Feb. 28, 2022 |
| 10 | Microwave Preamplifier With Adaptor | EMC INSTRUMENT | EMC2654045 | 980039 & HA01 | Feb. 28, 2022 |
| 11 | Receiver | Agilent | N9038A | MY52130039 | Mar. 19, 2022 |
| 12 | wideband radio communication tester | R&S | CMW500 | 152372 | Feb. 27, 2022 |
| 13 | High pass filter | KANGMAIWEI | ZHPF-M3-12.75G-3869 | B2015073763 | Feb. 07, 2022 |
| 14 | High pass filter | KANGMAIWEI | ZHPF-M1000-4000-1 | B2015073762 | Feb. 07, 2022 |
| 15 | High pass filter | KANGMAIWEI | ZHPF-M6-186-1727 | B2015073764 | Feb. 07, 2022 |
| 16 | Cable | emci | LMR-400(30MHz-1GHz) (8m+5m) | N/A | May 20, 2022 |
| 17 | Cable | mitron | B10-01-01-12M | 18072744 | Oct. 16, 2021 |
| 18 | Controller | ETS-Lindgren | 2090 | N/A | N/A |
| 19 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |
| 20 | Loop Antenna | EM | EM-6876-1 | 230 | Oct. 16, 2021 |
| 21 | Double Ridged Guide Antenna | ETS | 3115 | 75846 | Mar. 17, 2022 |
| 22 | Broad-Band Horn Antenna | Schwarzbeck | BBHA 9170 | 9170319 | Jun. 30, 2022 |

| Conducted Measurement | | | | | |
|-----------------------|-------------------------------------|---------------|--------------|-------------|------------------|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Wireless Communication Test SET | Agilent | E5515C | MY48364183 | Feb. 28, 2022 |
| 2 | EXA Spectrum Analyzer | Agilent | N9010A | MY50520044 | Feb. 28, 2022 |
| 3 | POWER SPLITTER | Mini-Circuits | ZFRSC-123-S+ | 331000910-1 | Feb. 27, 2022 |
| 4 | wideband radio communication tester | R&S | CMW500 | 152372 | Feb. 27, 2022 |

| Frequency Stability Measurement | | | | | |
|---------------------------------|-------------------------------------|---------------|--------------|-------------|------------------|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Wireless Communication Test SET | Agilent | E5515C | MY48364183 | Feb. 28, 2022 |
| 2* | Multi-output DC Power Supply | GW Instek | GPC-3030DN | EK880675 | Jul. 25, 2023 |
| 3 | POWER SPLITTER | Mini-Circuits | ZFRSC-123-S+ | 331000910-1 | Feb. 27, 2022 |
| 4 | wideband radio communication tester | R&S | CMW500 | 152372 | Feb. 27, 2022 |
| 5 | Const Temp, & Humidity Chamber | Bell | BTH-50C | 20170306001 | Feb. 27, 2022 |

Remark: "N/A" denotes no model name, serial no. or calibration specified.

"*" calibration period of equipment list is three year.

Except * item, all calibration period of equipment list is one year.

APPENDIX A - OUTPUT POWER

Output Power (dBm):

| LTE Band / BW | Modulation | RB Size | RB Offset | Low CH | Mid CH | High CH |
|---------------|------------|---------|-----------|----------|---------|----------|
| | | | | 26697CH | 26740CH | 26783CH |
| | | | | 814.7MHz | 819MHz | 823.3MHz |
| 26 / 1.4M | QPSK | 1 | 0 | 23.45 | 23.49 | 23.48 |
| | | 1 | 2 | 23.54 | 23.62 | 23.50 |
| | | 1 | 5 | 23.45 | 23.57 | 23.48 |
| | | 3 | 0 | 23.46 | 23.52 | 23.40 |
| | | 3 | 1 | 23.50 | 23.55 | 23.46 |
| | | 3 | 2 | 23.38 | 23.54 | 23.45 |
| | 16QAM | 6 | 0 | 22.43 | 22.49 | 22.44 |
| | | 1 | 0 | 22.50 | 22.89 | 22.49 |
| | | 1 | 2 | 22.59 | 22.97 | 22.50 |
| | | 1 | 5 | 22.48 | 22.96 | 22.52 |
| | | 3 | 0 | 22.43 | 22.67 | 22.60 |
| | | 3 | 1 | 22.48 | 22.72 | 22.66 |
| | 64QAM | 3 | 2 | 22.37 | 22.67 | 22.61 |
| | | 6 | 0 | 21.64 | 21.44 | 21.64 |
| | | 1 | 0 | 21.80 | 21.54 | 21.69 |
| | | 1 | 2 | 21.97 | 21.65 | 21.68 |
| | | 1 | 5 | 21.78 | 21.57 | 21.71 |
| | | 3 | 0 | 21.77 | 21.61 | 21.35 |
| | | 3 | 1 | 21.82 | 21.66 | 21.40 |
| | | 3 | 2 | 21.69 | 21.65 | 21.36 |
| | | 6 | 0 | 20.43 | 20.80 | 20.50 |

| LTE Band / BW | Modulation | RB Size | RB Offset | Low CH | Mid CH | High CH |
|---------------|------------|---------|-----------|----------|---------|----------|
| | | | | 26705CH | 26740CH | 26775CH |
| | | | | 815.5MHz | 819MHz | 822.5MHz |
| 26 / 3M | QPSK | 1 | 0 | 23.49 | 23.54 | 23.50 |
| | | 1 | 7 | 23.56 | 23.54 | 23.55 |
| | | 1 | 14 | 23.46 | 23.51 | 23.45 |
| | | 8 | 0 | 22.39 | 22.51 | 22.53 |
| | | 8 | 4 | 22.43 | 22.55 | 22.55 |
| | | 8 | 7 | 22.47 | 22.58 | 22.47 |
| | | 15 | 0 | 22.43 | 22.54 | 22.53 |
| | 16QAM | 1 | 0 | 22.85 | 22.60 | 22.50 |
| | | 1 | 7 | 22.90 | 22.63 | 22.56 |
| | | 1 | 14 | 22.85 | 22.53 | 22.40 |
| | | 8 | 0 | 21.51 | 21.53 | 21.65 |
| | | 8 | 4 | 21.56 | 21.61 | 21.67 |
| | | 8 | 7 | 21.59 | 21.61 | 21.60 |
| | | 15 | 0 | 21.47 | 21.53 | 21.57 |
| | 64QAM | 1 | 0 | 21.53 | 21.80 | 21.90 |
| | | 1 | 7 | 21.70 | 21.80 | 21.93 |
| | | 1 | 14 | 21.52 | 21.72 | 21.86 |
| | | 8 | 0 | 20.43 | 20.46 | 20.57 |
| | | 8 | 4 | 20.51 | 20.52 | 20.63 |
| | | 8 | 7 | 20.54 | 20.54 | 20.52 |
| | | 15 | 0 | 20.48 | 20.58 | 20.53 |

| LTE Band / BW | Modulation | RB Size | RB Offset | Low CH | Mid CH | High CH |
|---------------|------------|---------|-----------|----------|---------|----------|
| | | | | 26715CH | 26740CH | 26765CH |
| | | | | 816.5MHz | 819MHz | 821.5MHz |
| 26 / 5M | QPSK | 1 | 0 | 23.57 | 23.58 | 23.64 |
| | | 1 | 13 | 23.52 | 23.61 | 23.58 |
| | | 1 | 24 | 23.52 | 23.63 | 23.55 |
| | | 12 | 0 | 22.42 | 22.59 | 22.58 |
| | | 12 | 6 | 22.54 | 22.55 | 22.54 |
| | | 12 | 11 | 22.47 | 22.53 | 22.55 |
| | | 25 | 0 | 22.44 | 22.57 | 22.53 |
| | 16QAM | 1 | 0 | 22.97 | 22.65 | 22.75 |
| | | 1 | 13 | 22.99 | 22.72 | 22.70 |
| | | 1 | 24 | 22.98 | 22.71 | 22.66 |
| | | 12 | 0 | 21.62 | 21.71 | 21.66 |
| | | 12 | 6 | 21.72 | 21.66 | 21.58 |
| | | 12 | 11 | 21.65 | 21.58 | 21.63 |
| | | 25 | 0 | 21.52 | 21.54 | 21.52 |
| | 64QAM | 1 | 0 | 21.90 | 21.77 | 21.53 |
| | | 1 | 13 | 21.89 | 21.86 | 21.44 |
| | | 1 | 24 | 21.88 | 21.87 | 21.44 |
| | | 12 | 0 | 20.40 | 20.66 | 20.58 |
| | | 12 | 6 | 20.54 | 20.61 | 20.56 |
| | | 12 | 11 | 20.45 | 20.58 | 20.60 |
| | | 25 | 0 | 20.43 | 20.60 | 20.49 |

| LTE Band / BW | Modulation | RB Size | RB Offset | Mid CH |
|---------------|------------|---------|-----------|---------|
| | | | | 26740CH |
| | | | | 819MHz |
| 26 / 10M | QPSK | 1 | 0 | 23.75 |
| | | 1 | 25 | 23.56 |
| | | 1 | 49 | 23.75 |
| | | 25 | 0 | 22.52 |
| | | 25 | 13 | 22.56 |
| | | 25 | 25 | 22.63 |
| | | 50 | 0 | 22.57 |
| | 16QAM | 1 | 0 | 23.11 |
| | | 1 | 25 | 22.90 |
| | | 1 | 49 | 23.08 |
| | | 25 | 0 | 21.58 |
| | | 25 | 13 | 21.65 |
| | | 25 | 25 | 21.67 |
| | | 50 | 0 | 21.65 |
| | 64QAM | 1 | 0 | 21.87 |
| | | 1 | 25 | 21.66 |
| | | 1 | 49 | 21.90 |
| | | 25 | 0 | 20.60 |
| | | 25 | 13 | 20.64 |
| | | 25 | 25 | 20.71 |
| | | 50 | 0 | 20.61 |

ERP (dBm):

| LTE Band / BW | Modulation | RB Size | RB Offset | Low CH | Mid CH | High CH |
|---------------|------------|---------|-----------|----------|---------|----------|
| | | | | 26697CH | 26740CH | 26783CH |
| | | | | 814.7MHz | 819MHz | 823.3MHz |
| 26 / 1.4M | QPSK | 1 | 0 | 18.20 | 18.24 | 18.23 |
| | | 1 | 2 | 18.29 | 18.37 | 18.25 |
| | | 1 | 5 | 18.20 | 18.32 | 18.23 |
| | | 3 | 0 | 18.21 | 18.27 | 18.15 |
| | | 3 | 1 | 18.25 | 18.30 | 18.21 |
| | | 3 | 2 | 18.13 | 18.29 | 18.20 |
| | | 6 | 0 | 17.18 | 17.24 | 17.19 |
| | 16QAM | 1 | 0 | 17.25 | 17.64 | 17.24 |
| | | 1 | 2 | 17.34 | 17.72 | 17.25 |
| | | 1 | 5 | 17.23 | 17.71 | 17.27 |
| | | 3 | 0 | 17.18 | 17.42 | 17.35 |
| | | 3 | 1 | 17.23 | 17.47 | 17.41 |
| | | 3 | 2 | 17.12 | 17.42 | 17.36 |
| | | 6 | 0 | 16.39 | 16.19 | 16.39 |
| | 64QAM | 1 | 0 | 16.55 | 16.29 | 16.44 |
| | | 1 | 2 | 16.72 | 16.40 | 16.43 |
| | | 1 | 5 | 16.53 | 16.32 | 16.46 |
| | | 3 | 0 | 16.52 | 16.36 | 16.10 |
| | | 3 | 1 | 16.57 | 16.41 | 16.15 |
| | | 3 | 2 | 16.44 | 16.40 | 16.11 |
| | | 6 | 0 | 15.18 | 15.55 | 15.25 |

| LTE Band / BW | Modulation | RB Size | RB Offset | Low CH | Mid CH | High CH |
|---------------|------------|---------|-----------|----------|---------|----------|
| | | | | 26705CH | 26740CH | 26775CH |
| | | | | 815.5MHz | 819MHz | 822.5MHz |
| 26 / 3M | QPSK | 1 | 0 | 18.24 | 18.29 | 18.25 |
| | | 1 | 7 | 18.31 | 18.29 | 18.30 |
| | | 1 | 14 | 18.21 | 18.26 | 18.20 |
| | | 8 | 0 | 17.14 | 17.26 | 17.28 |
| | | 8 | 4 | 17.18 | 17.30 | 17.30 |
| | | 8 | 7 | 17.22 | 17.33 | 17.22 |
| | | 15 | 0 | 17.18 | 17.29 | 17.28 |
| | 16QAM | 1 | 0 | 17.60 | 17.35 | 17.25 |
| | | 1 | 7 | 17.65 | 17.38 | 17.31 |
| | | 1 | 14 | 17.60 | 17.28 | 17.15 |
| | | 8 | 0 | 16.26 | 16.28 | 16.40 |
| | | 8 | 4 | 16.31 | 16.36 | 16.42 |
| | | 8 | 7 | 16.34 | 16.36 | 16.35 |
| | | 15 | 0 | 16.22 | 16.28 | 16.32 |
| | 64QAM | 1 | 0 | 16.28 | 16.55 | 16.65 |
| | | 1 | 7 | 16.45 | 16.55 | 16.68 |
| | | 1 | 14 | 16.27 | 16.47 | 16.61 |
| | | 8 | 0 | 15.18 | 15.21 | 15.32 |
| | | 8 | 4 | 15.26 | 15.27 | 15.38 |
| | | 8 | 7 | 15.29 | 15.29 | 15.27 |
| | | 15 | 0 | 15.23 | 15.33 | 15.28 |

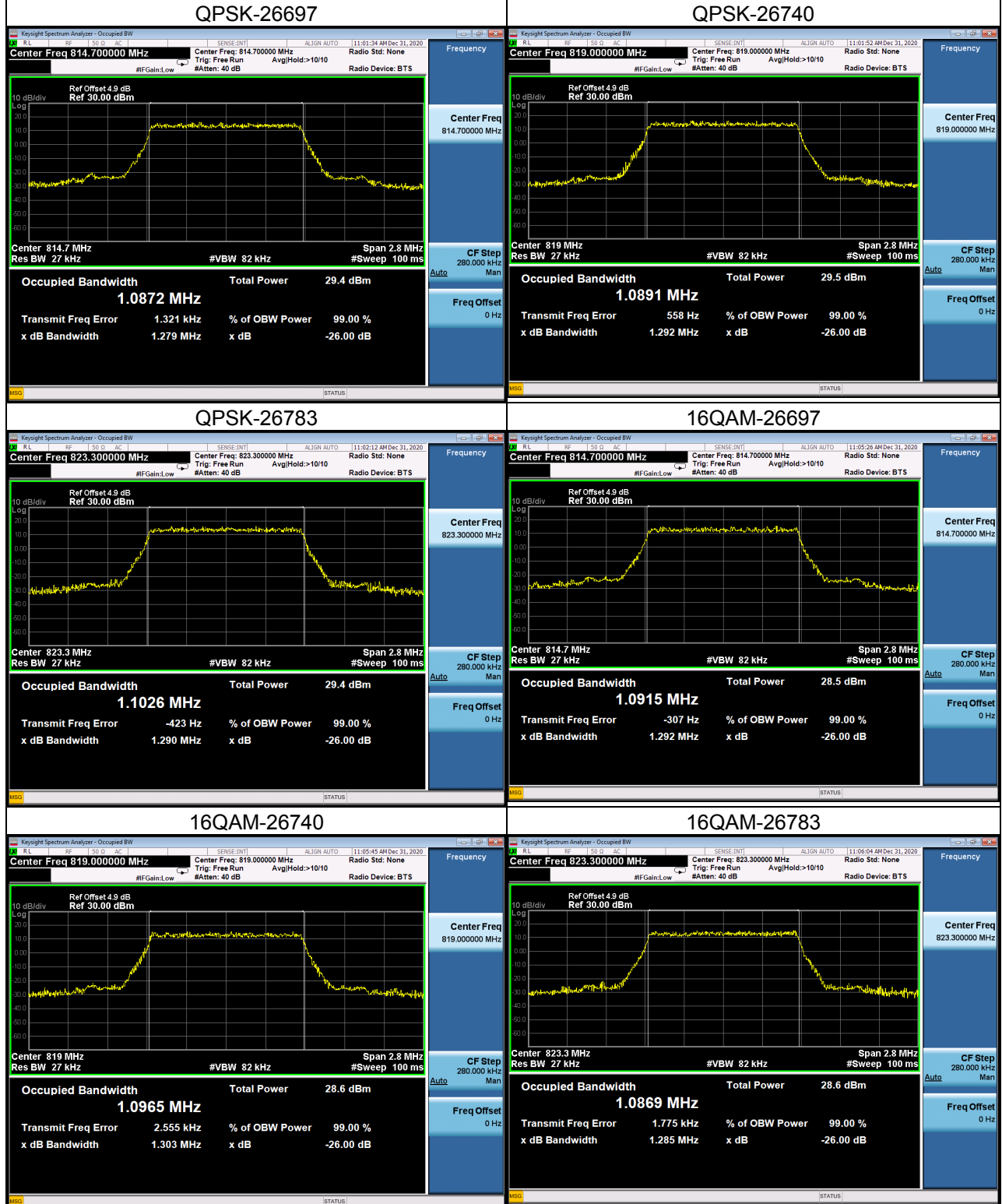
| LTE Band / BW | Modulation | RB Size | RB Offset | Low CH | Mid CH | High CH |
|---------------|------------|---------|-----------|----------|---------|----------|
| | | | | 26715CH | 26740CH | 26765CH |
| | | | | 816.5MHz | 819MHz | 821.5MHz |
| 26 / 5M | QPSK | 1 | 0 | 18.32 | 18.33 | 18.39 |
| | | 1 | 13 | 18.27 | 18.36 | 18.33 |
| | | 1 | 24 | 18.27 | 18.38 | 18.30 |
| | | 12 | 0 | 17.17 | 17.34 | 17.33 |
| | | 12 | 6 | 17.29 | 17.30 | 17.29 |
| | | 12 | 11 | 17.22 | 17.28 | 17.30 |
| | | 25 | 0 | 17.19 | 17.32 | 17.28 |
| | 16QAM | 1 | 0 | 17.72 | 17.40 | 17.50 |
| | | 1 | 13 | 17.74 | 17.47 | 17.45 |
| | | 1 | 24 | 17.73 | 17.46 | 17.41 |
| | | 12 | 0 | 16.37 | 16.46 | 16.41 |
| | | 12 | 6 | 16.47 | 16.41 | 16.33 |
| | | 12 | 11 | 16.40 | 16.33 | 16.38 |
| | | 25 | 0 | 16.27 | 16.29 | 16.27 |
| | 64QAM | 1 | 0 | 16.65 | 16.52 | 16.28 |
| | | 1 | 13 | 16.64 | 16.61 | 16.19 |
| | | 1 | 24 | 16.63 | 16.62 | 16.19 |
| | | 12 | 0 | 15.15 | 15.41 | 15.33 |
| | | 12 | 6 | 15.29 | 15.36 | 15.31 |
| | | 12 | 11 | 15.20 | 15.33 | 15.35 |
| | | 25 | 0 | 15.18 | 15.35 | 15.24 |

| LTE Band / BW | Modulation | RB Size | RB Offset | Mid CH |
|---------------|------------|---------|-----------|---------|
| | | | | 26740CH |
| | | | | 819MHz |
| 26 / 10M | QPSK | 1 | 0 | 18.50 |
| | | 1 | 25 | 18.31 |
| | | 1 | 49 | 18.50 |
| | | 25 | 0 | 17.27 |
| | | 25 | 13 | 17.31 |
| | | 25 | 25 | 17.38 |
| | | 50 | 0 | 17.32 |
| | 16QAM | 1 | 0 | 17.86 |
| | | 1 | 25 | 17.65 |
| | | 1 | 49 | 17.83 |
| | | 25 | 0 | 16.33 |
| | | 25 | 13 | 16.40 |
| | | 25 | 25 | 16.42 |
| | | 50 | 0 | 16.40 |
| | 64QAM | 1 | 0 | 16.62 |
| | | 1 | 25 | 16.41 |
| | | 1 | 49 | 16.65 |
| | | 25 | 0 | 15.35 |
| | | 25 | 13 | 15.39 |
| | | 25 | 25 | 15.46 |
| | | 50 | 0 | 15.36 |

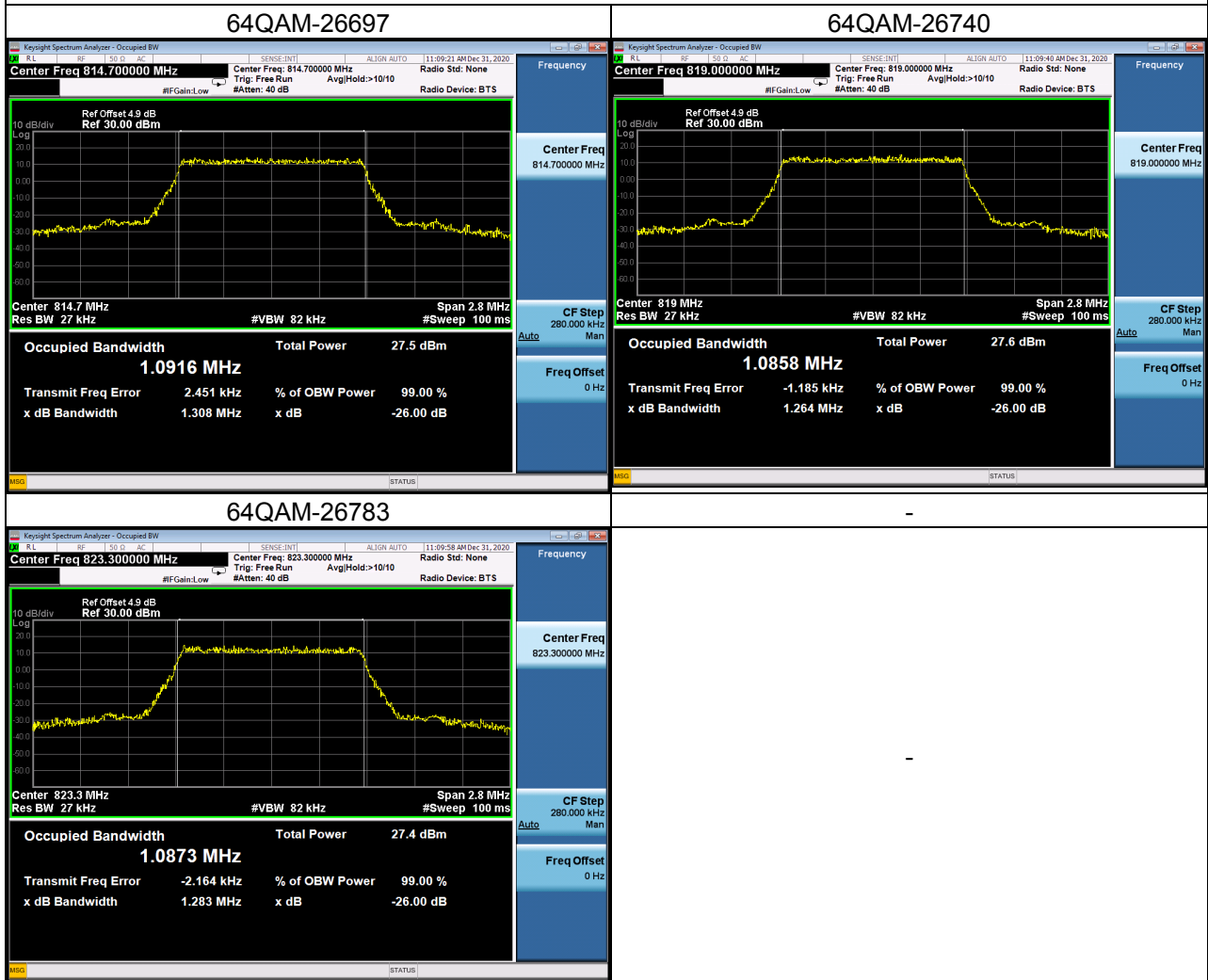
APPENDIX B - OCCUPIED BANDWIDTH

| LTE Band 26_1.4M | | | | | |
|------------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26697 | 814.7 | 1.0872 | 26697 | 814.7 | 1.279 |
| 26740 | 819 | 1.0891 | 26740 | 819 | 1.292 |
| 26783 | 823.3 | 1.1026 | 26783 | 823.3 | 1.290 |
| 16QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26697 | 814.7 | 1.0915 | 26697 | 814.7 | 1.292 |
| 26740 | 819 | 1.0965 | 26740 | 819 | 1.303 |
| 26783 | 823.3 | 1.0869 | 26783 | 823.3 | 1.285 |
| 64QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26697 | 814.7 | 1.0916 | 26697 | 814.7 | 1.308 |
| 26740 | 819 | 1.0858 | 26740 | 819 | 1.264 |
| 26783 | 823.3 | 1.0873 | 26783 | 823.3 | 1.283 |

Spectrum Plot

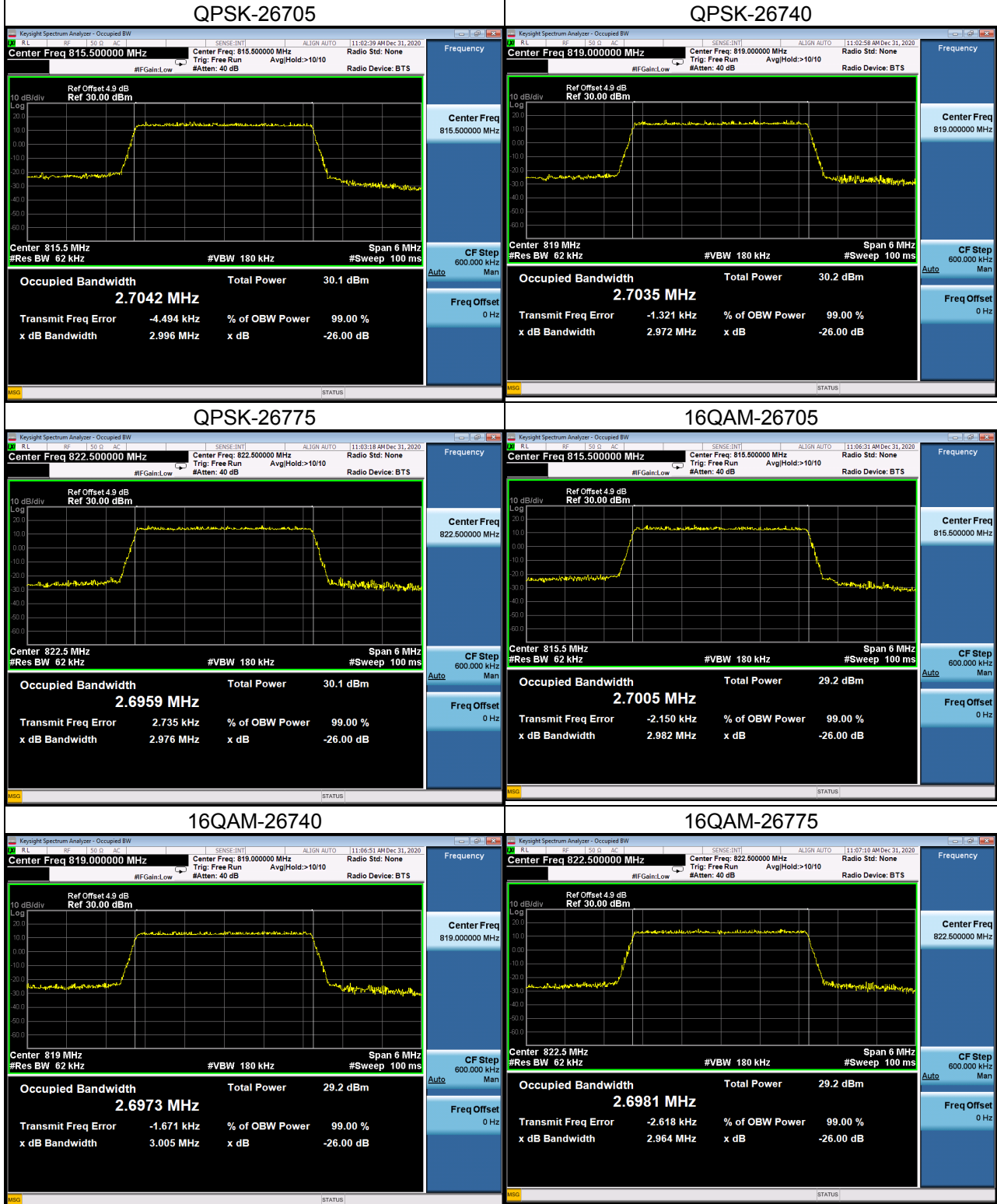


Spectrum Plot

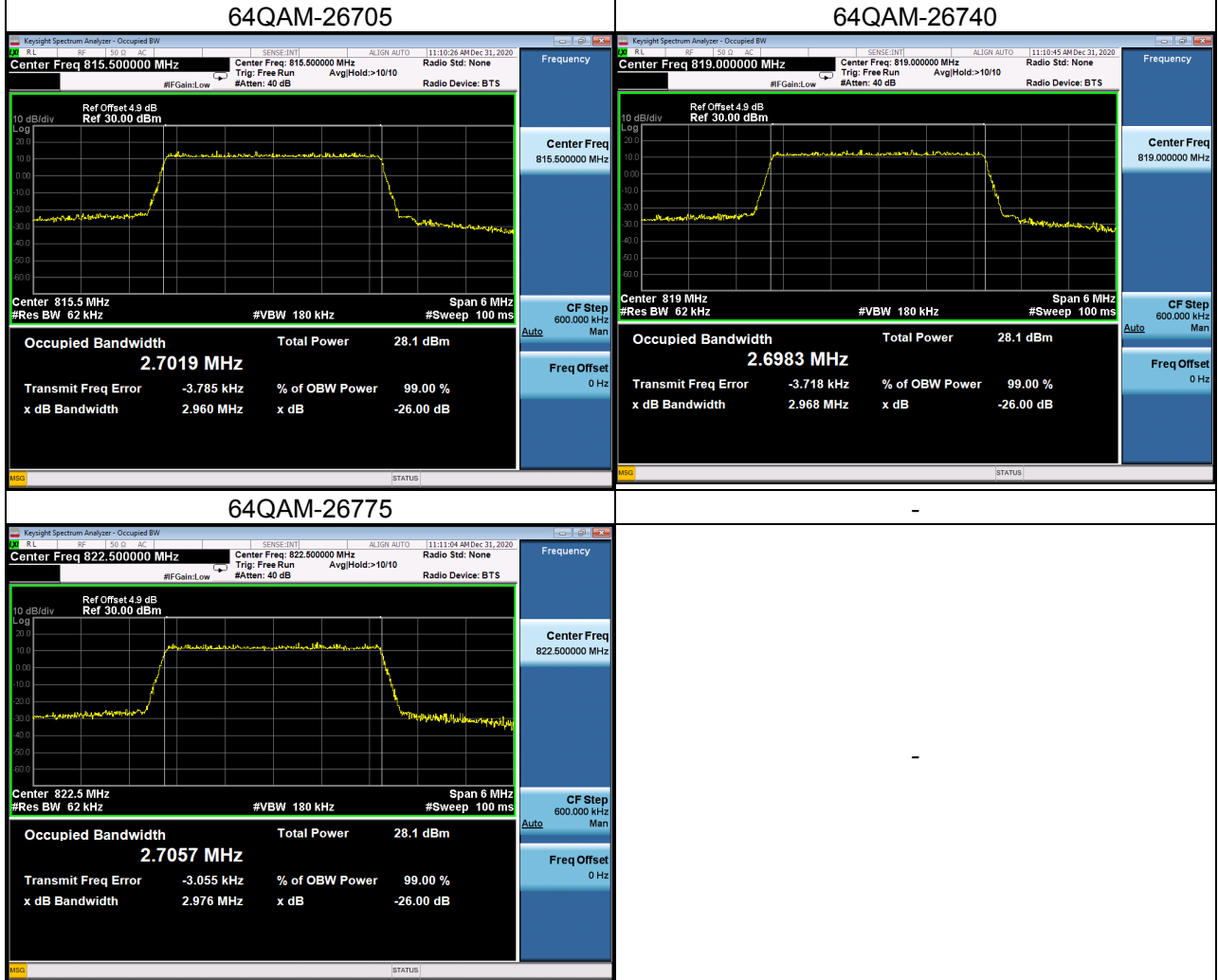


| LTE Band 26_3M | | | | | |
|----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26705 | 815.5 | 2.7042 | 26705 | 815.5 | 2.996 |
| 26740 | 819 | 2.7035 | 26740 | 819 | 2.972 |
| 26775 | 822.5 | 2.6959 | 26775 | 822.5 | 2.976 |
| 16QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26705 | 815.5 | 2.7005 | 26705 | 815.5 | 2.982 |
| 26740 | 819 | 2.6973 | 26740 | 819 | 3.005 |
| 26775 | 822.5 | 2.6981 | 26775 | 822.5 | 2.964 |
| 64QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26705 | 815.5 | 2.7019 | 26705 | 815.5 | 2.960 |
| 26740 | 819 | 2.6983 | 26740 | 819 | 2.968 |
| 26775 | 822.5 | 2.7057 | 26775 | 822.5 | 2.976 |

Spectrum Plot

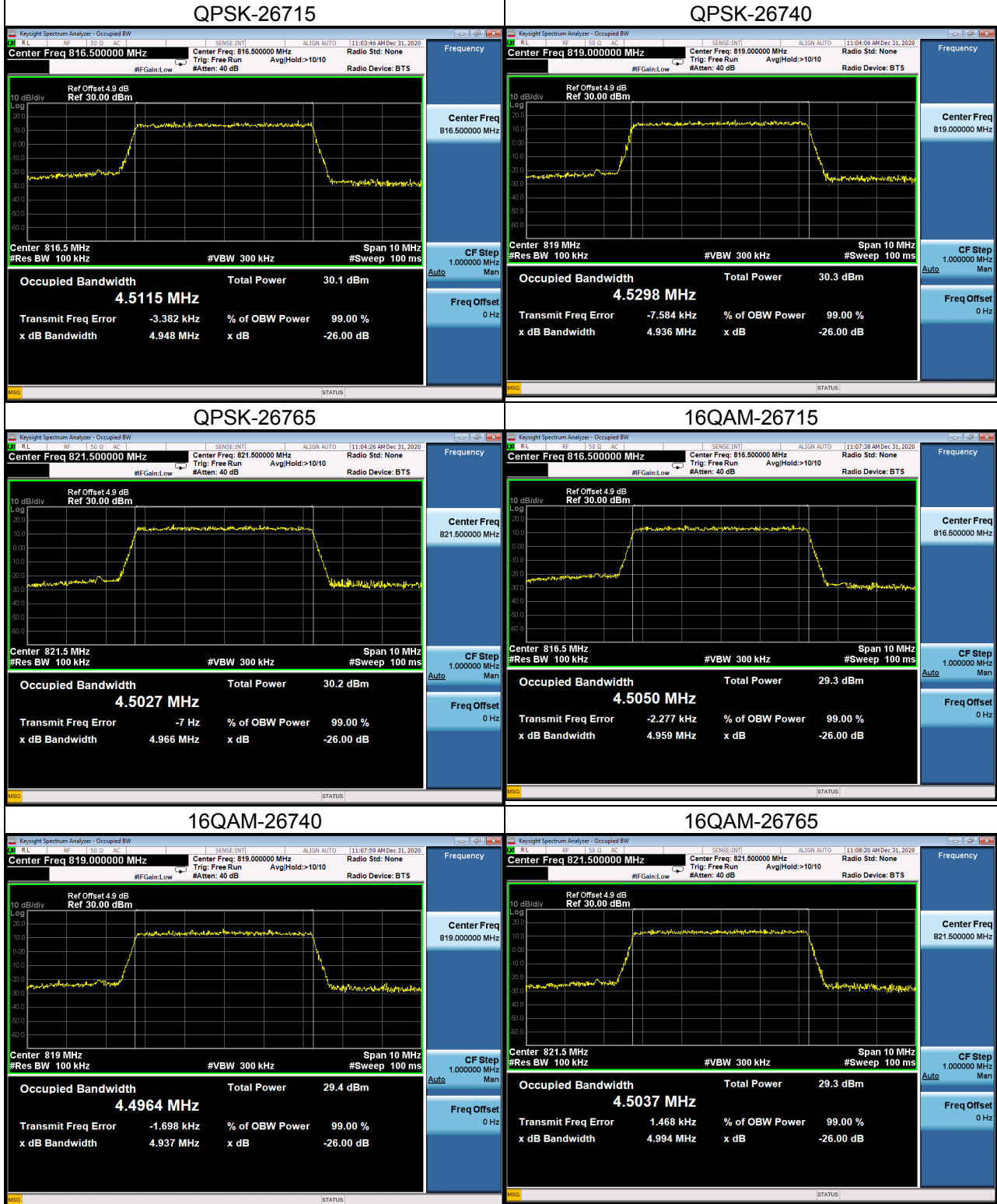


Spectrum Plot



| LTE Band 26_5M | | | | | |
|----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26715 | 816.5 | 4.5115 | 26715 | 816.5 | 4.948 |
| 26740 | 819 | 4.5298 | 26740 | 819 | 4.936 |
| 26765 | 821.5 | 4.5027 | 26765 | 821.5 | 4.966 |
| 16QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26715 | 816.5 | 4.5050 | 26715 | 816.5 | 4.959 |
| 26740 | 819 | 4.4964 | 26740 | 819 | 4.937 |
| 26765 | 821.5 | 4.5037 | 26765 | 821.5 | 4.994 |
| 64QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26715 | 816.5 | 4.5083 | 26715 | 816.5 | 5.024 |
| 26740 | 819 | 4.5005 | 26740 | 819 | 4.976 |
| 26765 | 821.5 | 4.5034 | 26765 | 821.5 | 5.034 |

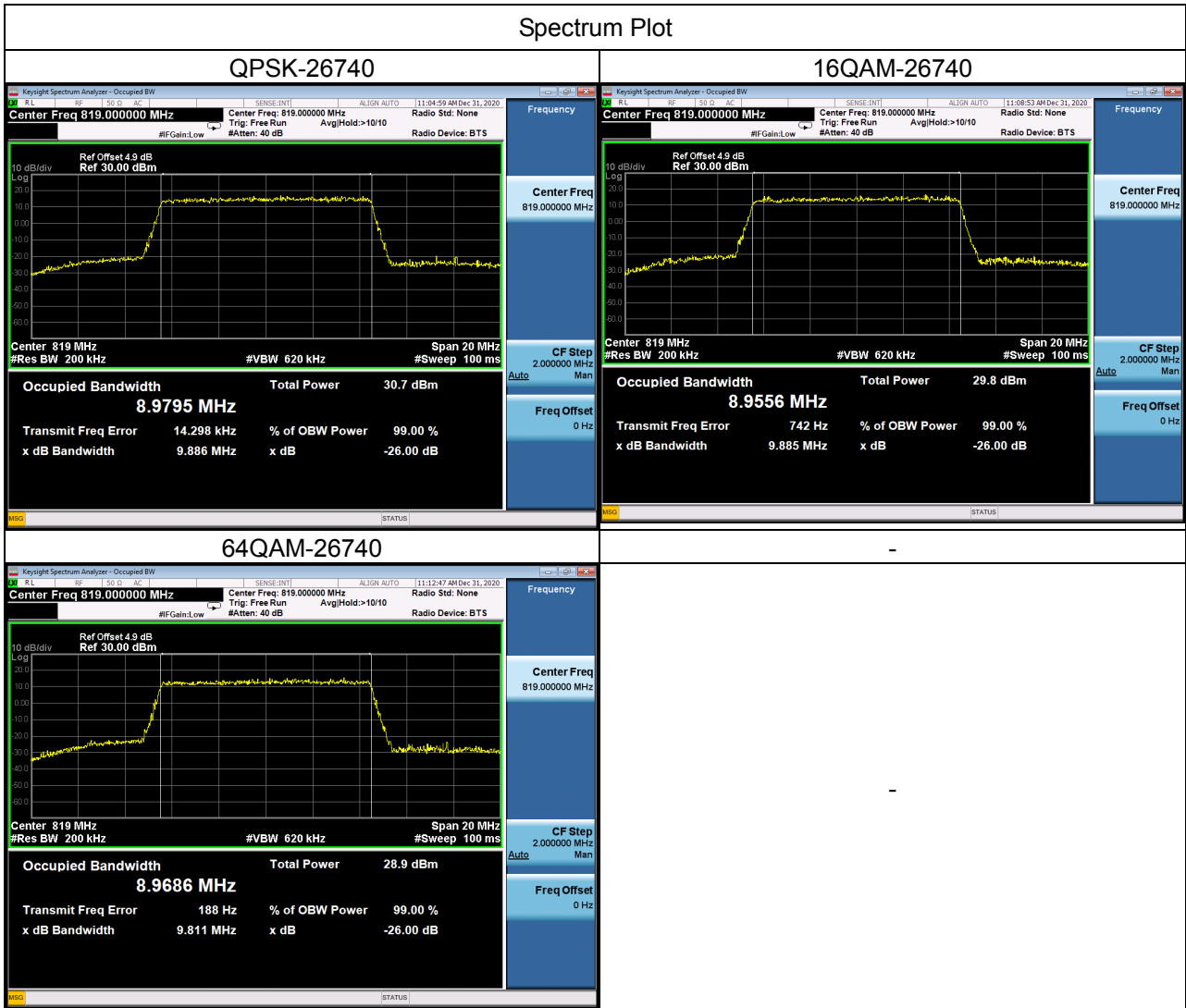
Spectrum Plot



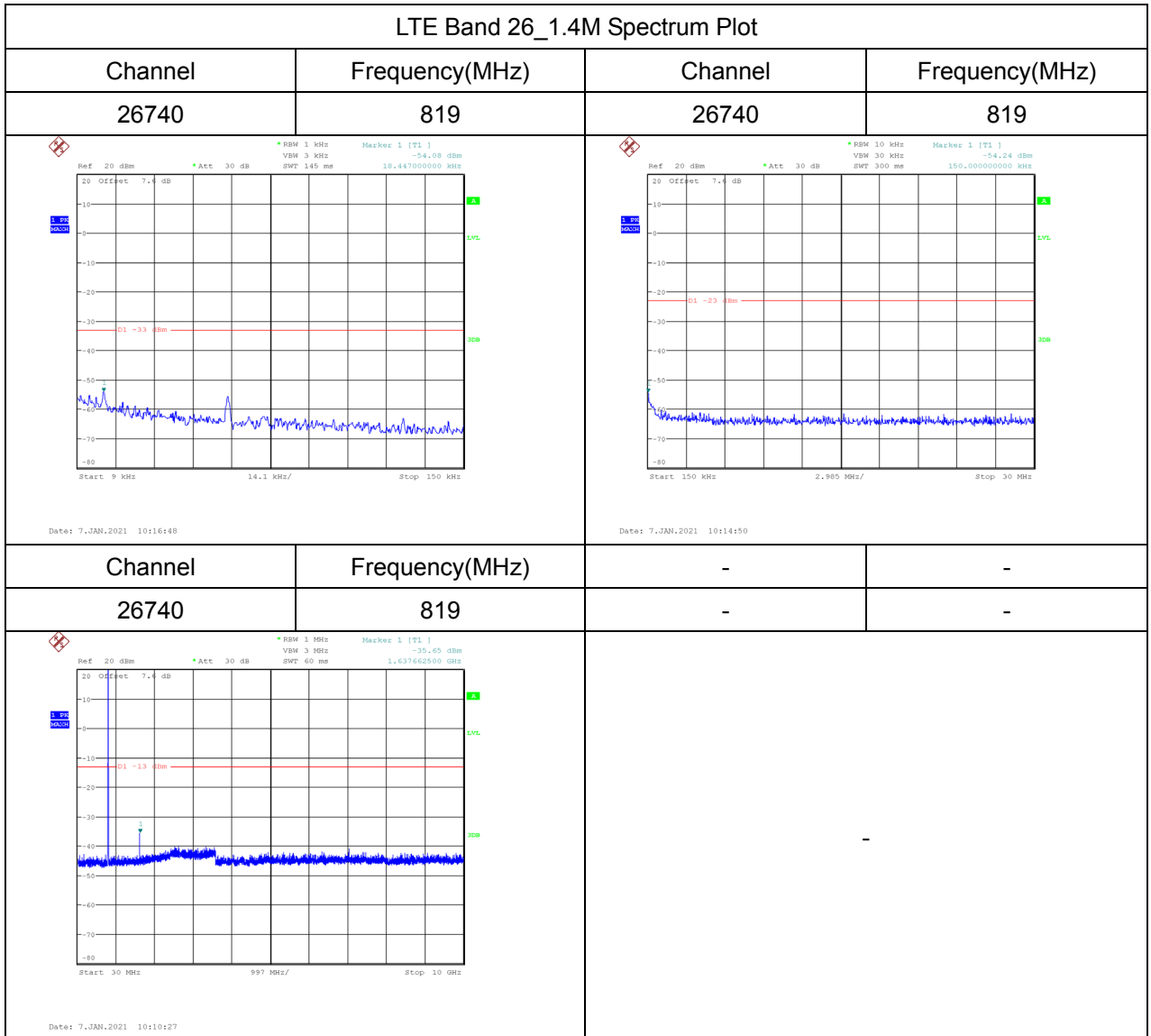
Spectrum Plot

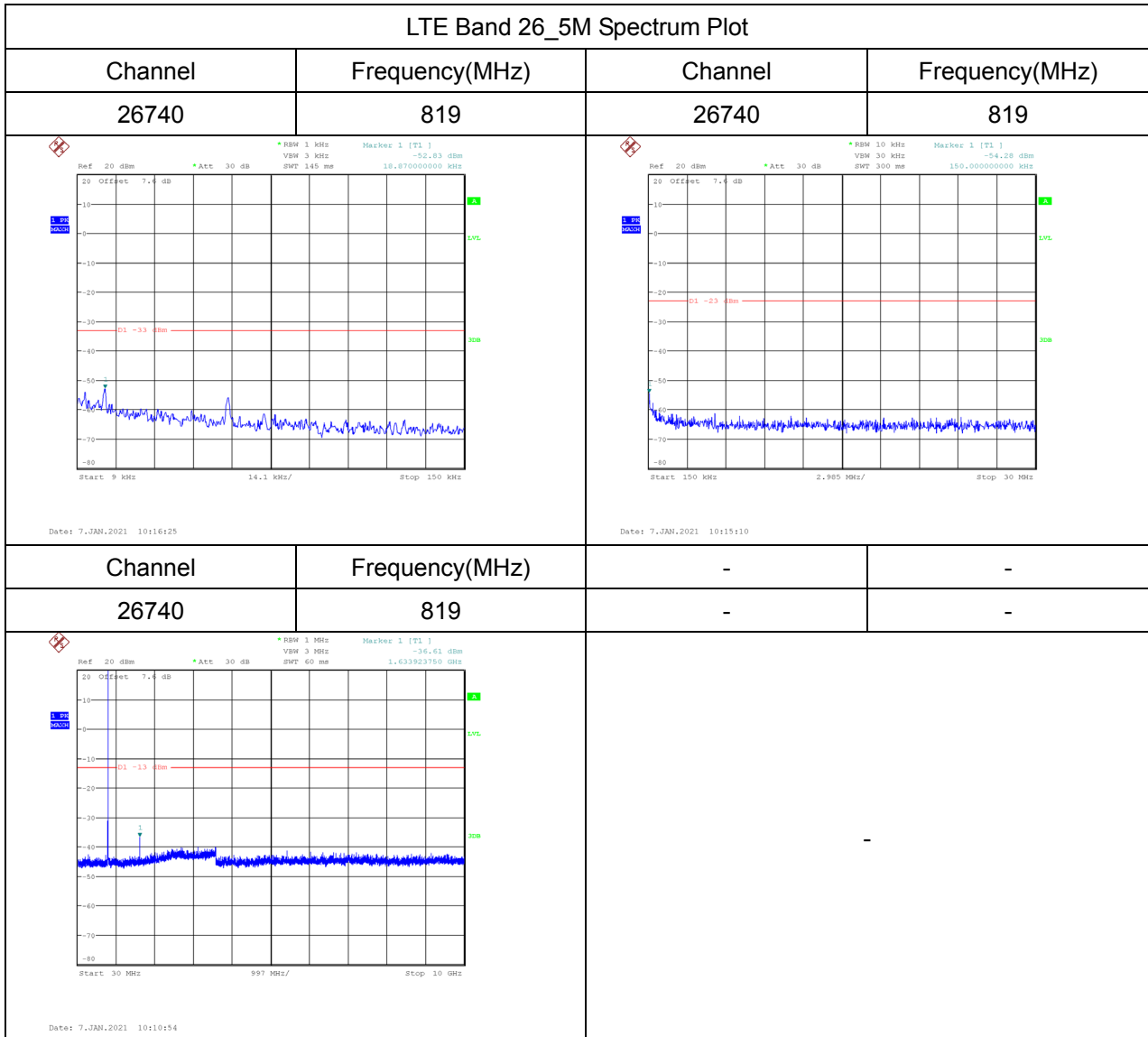


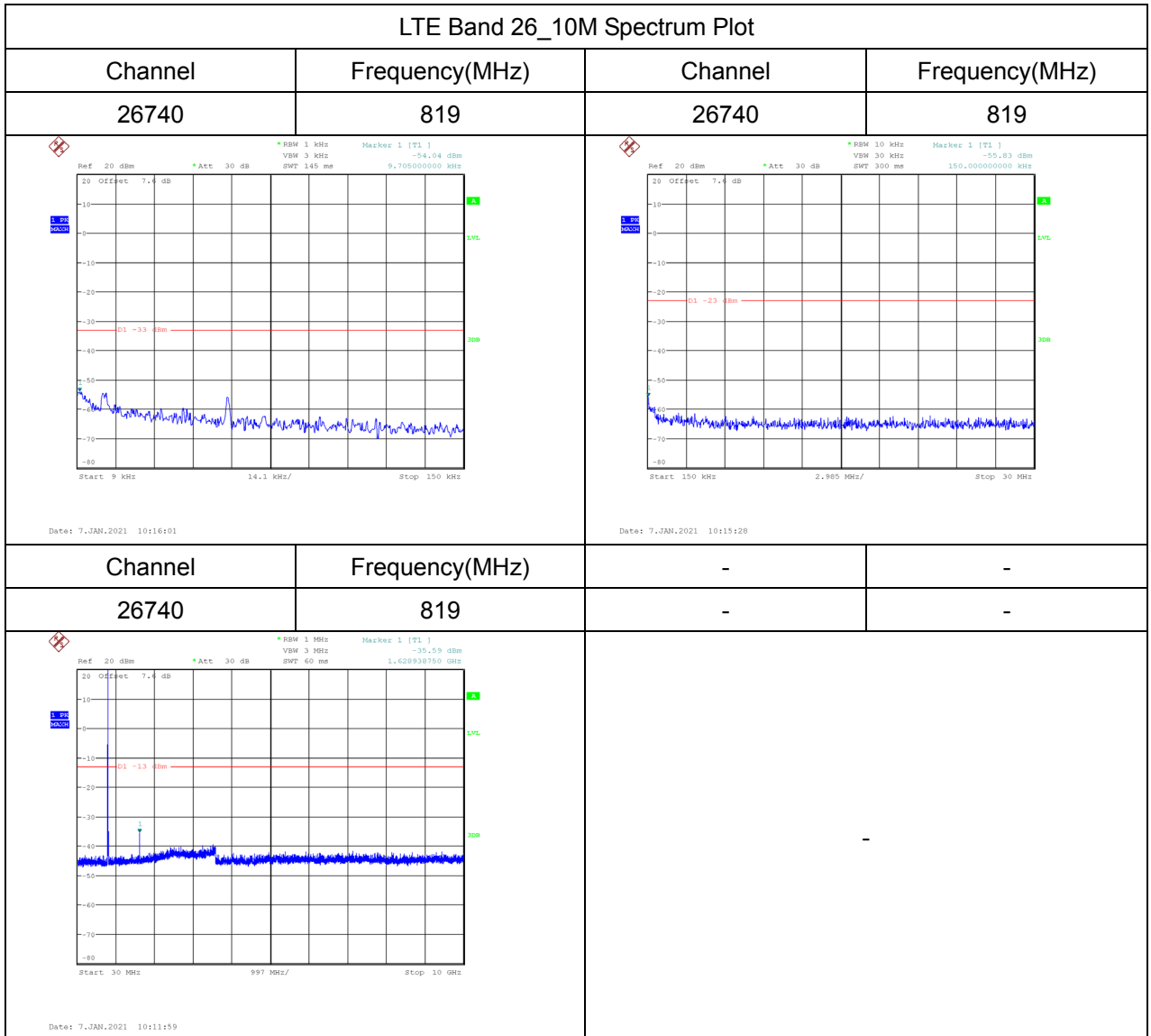
| LTE Band 26_10M | | | | | |
|-----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26740 | 819 | 8.9795 | 26740 | 819 | 9.886 |
| 16QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26740 | 819 | 8.9556 | 26740 | 819 | 9.885 |
| 64QAM | | | | | |
| Channel | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 26740 | 819 | 8.9686 | 26740 | 819 | 9.811 |



APPENDIX C - CONDUCTED SPURIOUS EMISSIONS







APPENDIX D - RADIATED SPURIOUS EMISSIONS (9KHZ TO 30MHZ)

| | |
|-----------|---------|
| Test Mode | TX Mode |
|-----------|---------|

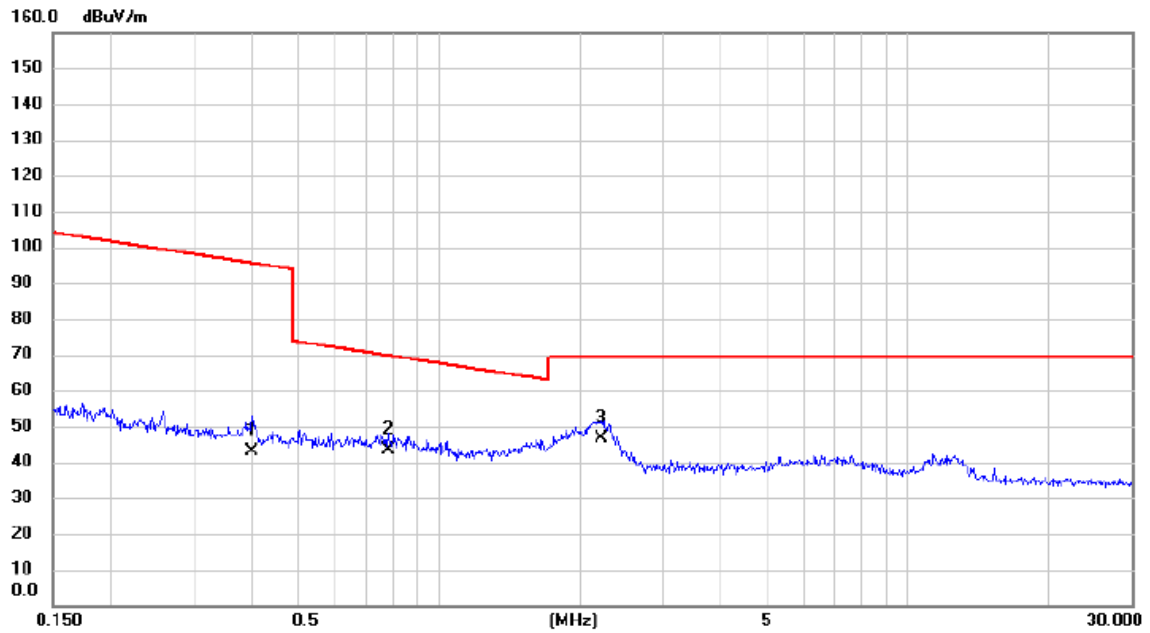
Ant 0°



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | Antenna Height | Table Degree | |
|-----|-----|--------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | cm | degree | Comment |
| 1 | | 0.0182 | 45.61 | 13.78 | 59.39 | 122.40 | -63.01 | AVG | | |
| 2 | * | 0.0451 | 39.25 | 12.55 | 51.80 | 114.52 | -62.72 | AVG | | |
| 3 | | 0.0901 | 28.47 | 12.66 | 41.13 | 108.51 | -67.38 | AVG | | |

| | |
|-----------|---------|
| Test Mode | TX Mode |
|-----------|---------|

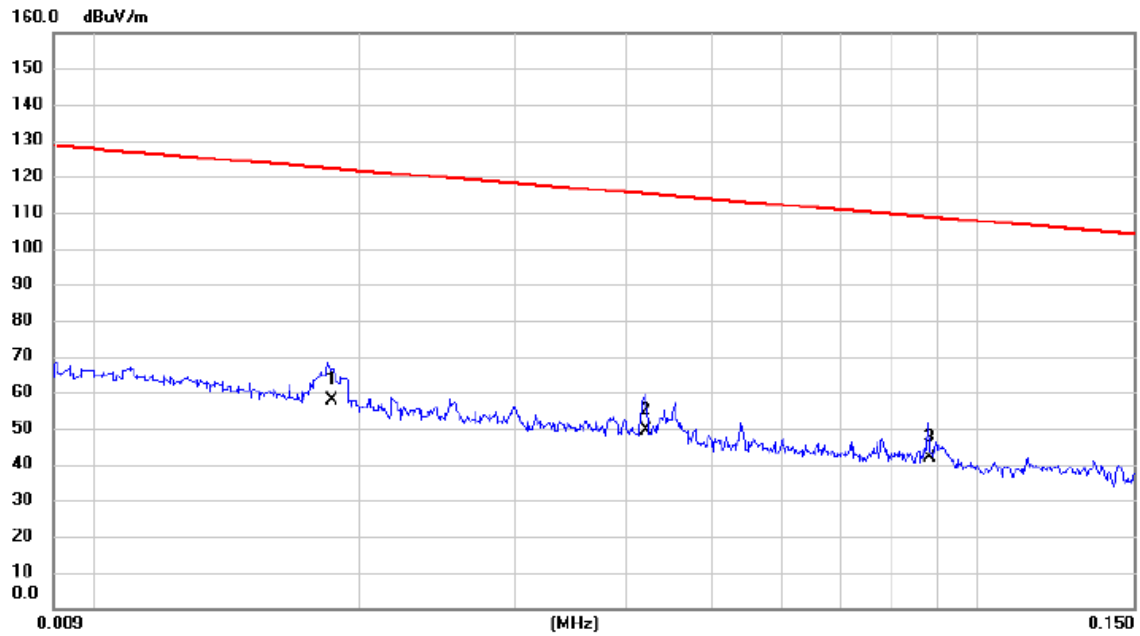
Ant 0°



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | Antenna Height | Table Degree | |
|-----|-----|--------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | cm | degree | Comment |
| 1 | | 0.3997 | 30.57 | 12.26 | 42.83 | 95.57 | -52.74 | AVG | | |
| 2 | | 0.7793 | 31.64 | 11.89 | 43.53 | 69.77 | -26.24 | QP | | |
| 3 | * | 2.2250 | 35.22 | 11.20 | 46.42 | 69.54 | -23.12 | QP | | |

| | |
|-----------|---------|
| Test Mode | TX Mode |
|-----------|---------|

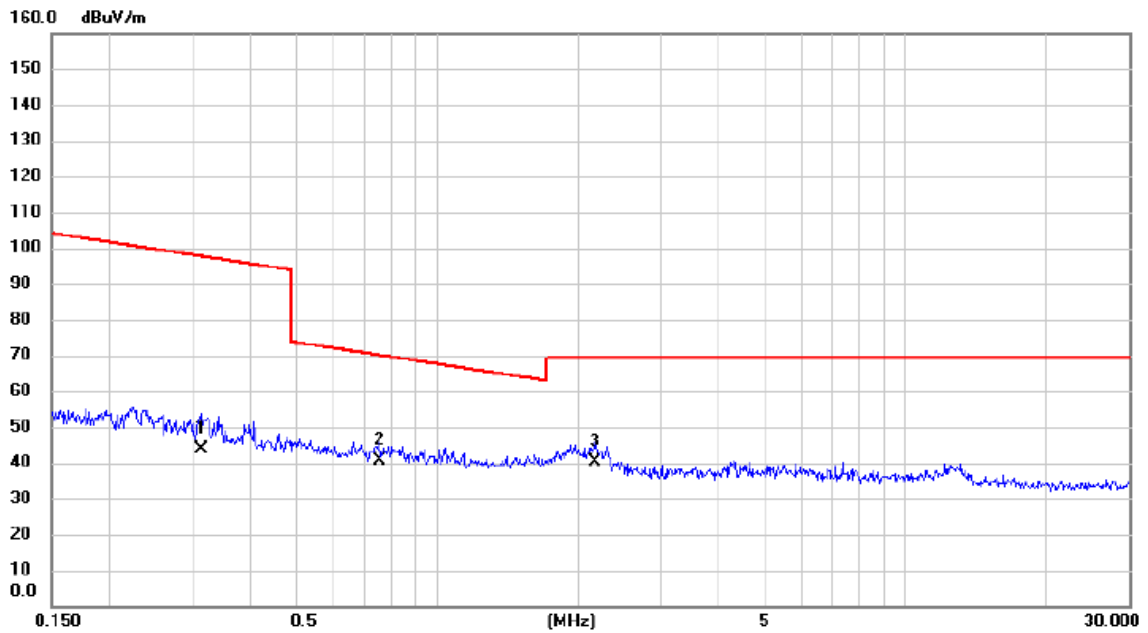
Ant 90°



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | Antenna Height | Table Degree | |
|-----|-----|--------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | cm | degree | Comment |
| 1 | * | 0.0186 | 44.13 | 13.65 | 57.78 | 122.21 | -64.43 | AVG | | |
| 2 | | 0.0421 | 36.72 | 12.63 | 49.35 | 115.12 | -65.77 | AVG | | |
| 3 | | 0.0881 | 29.03 | 12.65 | 41.68 | 108.71 | -67.03 | AVG | | |

| | |
|-----------|---------|
| Test Mode | TX Mode |
|-----------|---------|

Ant 90°

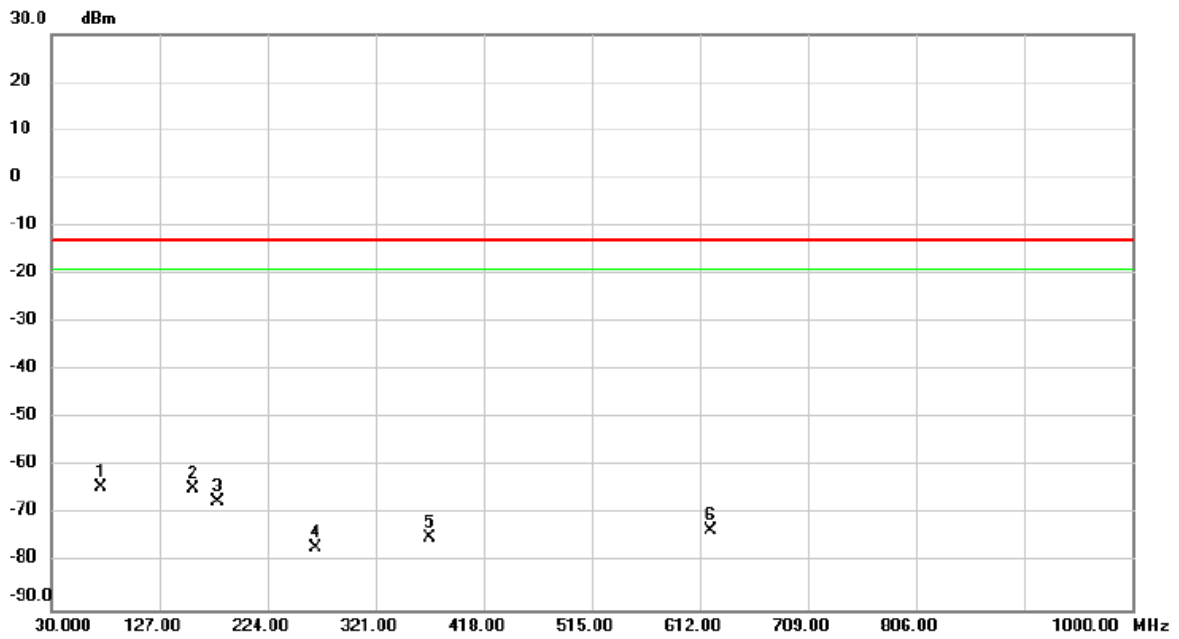


| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Antenna Height cm | Table Degree | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|-------------------------|-----------------|----------|---------|
| 1 | | 0.3133 | 31.25 | 12.48 | 43.73 | 97.69 | -53.96 | | | AVG | |
| 2 | | 0.7550 | 28.64 | 11.90 | 40.54 | 70.05 | -29.51 | | | QP | |
| 3 | * | 2.1668 | 29.16 | 11.22 | 40.38 | 69.54 | -29.16 | | | QP | |

APPENDIX E - RADIATED SPURIOUS EMISSIONS (30MHZ TO 1000MHZ)

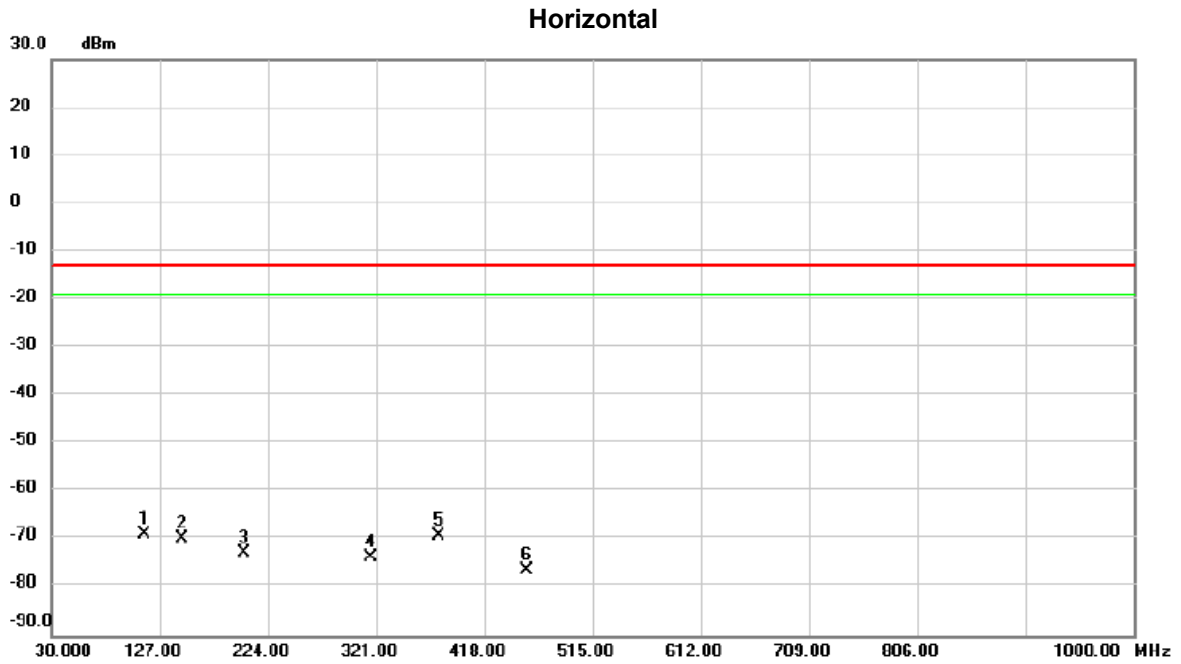
Test Mode LTE Band 26_TX CH26740_1.4M_Main Antenna

Vertical



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 75.1050 | -57.02 | -7.28 | -64.30 | -13.00 | -51.30 | peak | |
| 2 | | 157.0700 | -63.27 | -1.46 | -64.73 | -13.00 | -51.73 | peak | |
| 3 | | 178.8950 | -64.11 | -3.12 | -67.23 | -13.00 | -54.23 | peak | |
| 4 | | 267.1650 | -73.99 | -2.93 | -76.92 | -13.00 | -63.92 | peak | |
| 5 | | 369.5000 | -74.56 | -0.15 | -74.71 | -13.00 | -61.71 | peak | |
| 6 | | 622.1850 | -78.17 | 4.72 | -73.45 | -13.00 | -60.45 | peak | |

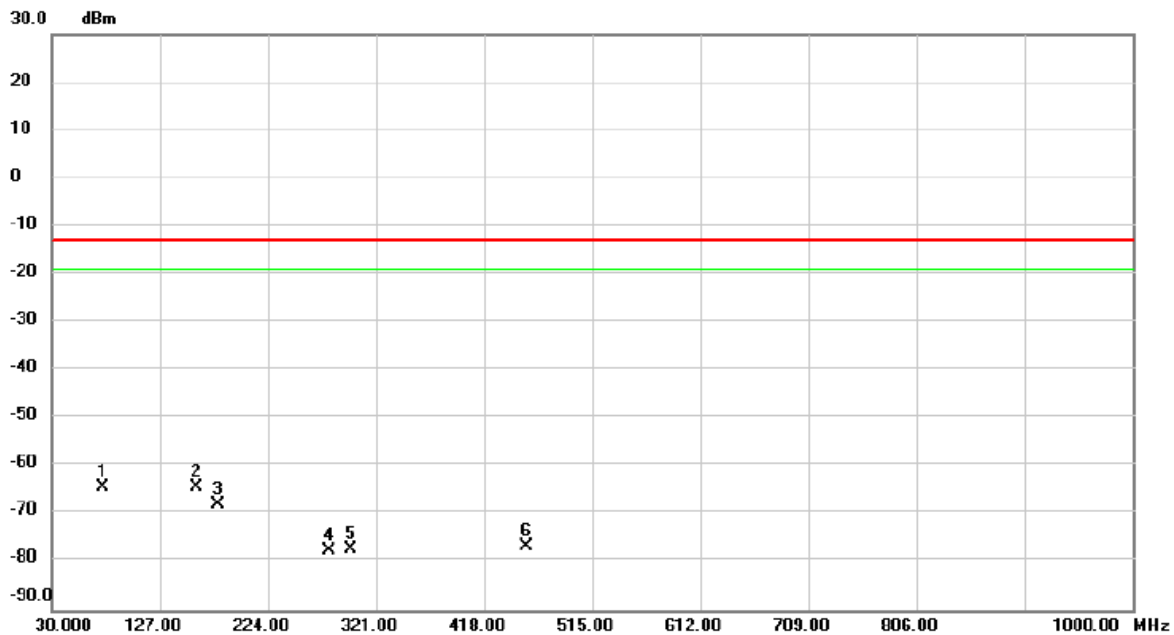
| | |
|-----------|--|
| Test Mode | LTE Band 26_TX CH26740_1.4M_Main Antenna |
|-----------|--|



| No. Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|---------|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 * | 113.9050 | -64.89 | -4.06 | -68.95 | -13.00 | -55.95 | peak | |
| 2 | 146.4000 | -67.24 | -2.59 | -69.83 | -13.00 | -56.83 | peak | |
| 3 | 202.6600 | -67.31 | -5.33 | -72.64 | -13.00 | -59.64 | peak | |
| 4 | 316.6350 | -72.41 | -1.15 | -73.56 | -13.00 | -60.56 | peak | |
| 5 | 377.2600 | -69.21 | 0.04 | -69.17 | -13.00 | -56.17 | peak | |
| 6 | 456.3150 | -78.37 | 2.01 | -76.36 | -13.00 | -63.36 | peak | |

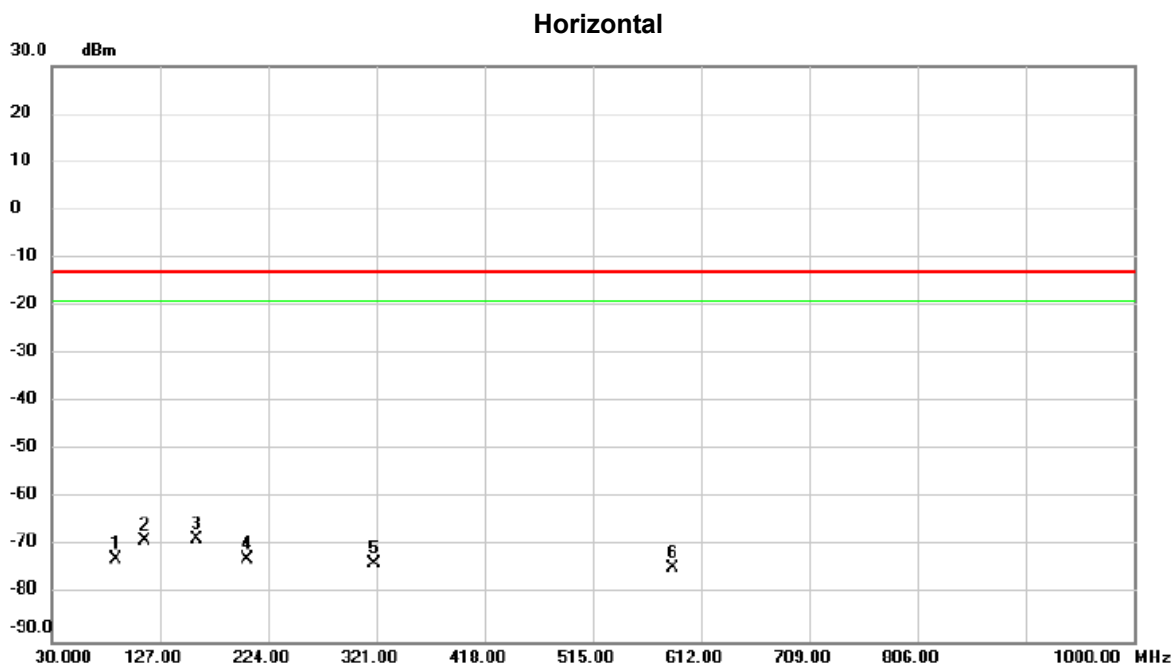
Test Mode LTE Band 26_TX CH26740_5M_Main Antenna

Vertical



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | | 76.0750 | -56.83 | -7.44 | -64.27 | -13.00 | -51.27 | peak | |
| 2 | * | 159.9800 | -63.13 | -1.08 | -64.21 | -13.00 | -51.21 | peak | |
| 3 | | 179.3800 | -64.89 | -3.16 | -68.05 | -13.00 | -55.05 | peak | |
| 4 | | 278.3200 | -74.98 | -2.66 | -77.64 | -13.00 | -64.64 | peak | |
| 5 | | 298.2050 | -75.63 | -1.50 | -77.13 | -13.00 | -64.13 | peak | |
| 6 | | 455.8300 | -78.54 | 2.00 | -76.54 | -13.00 | -63.54 | peak | |

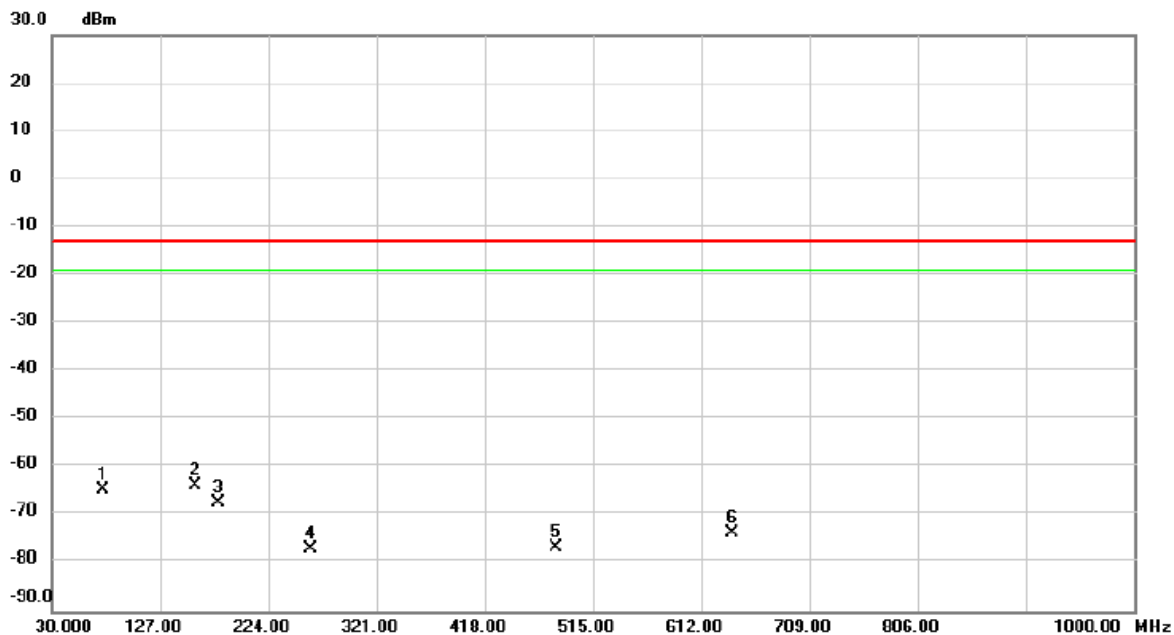
| | |
|-----------|--|
| Test Mode | LTE Band 26_TX CH26740_5M_Main Antenna |
|-----------|--|



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | | 87.7150 | -66.06 | -6.61 | -72.67 | -13.00 | -59.67 | peak | |
| 2 | | 112.9350 | -64.75 | -4.20 | -68.95 | -13.00 | -55.95 | peak | |
| 3 | * | 159.9800 | -67.39 | -1.08 | -68.47 | -13.00 | -55.47 | peak | |
| 4 | | 204.6000 | -67.34 | -5.41 | -72.75 | -13.00 | -59.75 | peak | |
| 5 | | 319.0600 | -72.56 | -1.11 | -73.67 | -13.00 | -60.67 | peak | |
| 6 | | 586.7800 | -78.38 | 3.85 | -74.53 | -13.00 | -61.53 | peak | |

Test Mode LTE Band 26_TX CH26740_10M_Main Antenna

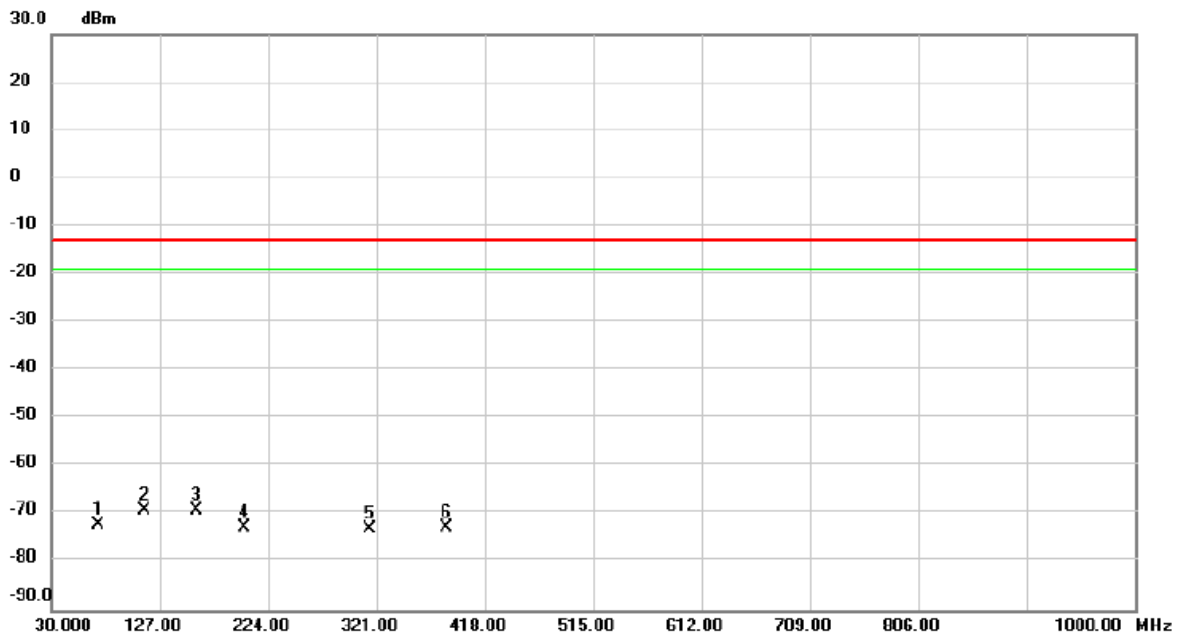
Vertical



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | | 75.5900 | -57.17 | -7.37 | -64.54 | -13.00 | -51.54 | peak | |
| 2 | * | 158.5250 | -62.45 | -1.27 | -63.72 | -13.00 | -50.72 | peak | |
| 3 | | 179.3800 | -64.32 | -3.16 | -67.48 | -13.00 | -54.48 | peak | |
| 4 | | 262.3150 | -74.14 | -2.73 | -76.87 | -13.00 | -63.87 | peak | |
| 5 | | 482.0200 | -78.92 | 2.20 | -76.72 | -13.00 | -63.72 | peak | |
| 6 | | 640.1300 | -78.60 | 5.10 | -73.50 | -13.00 | -60.50 | peak | |

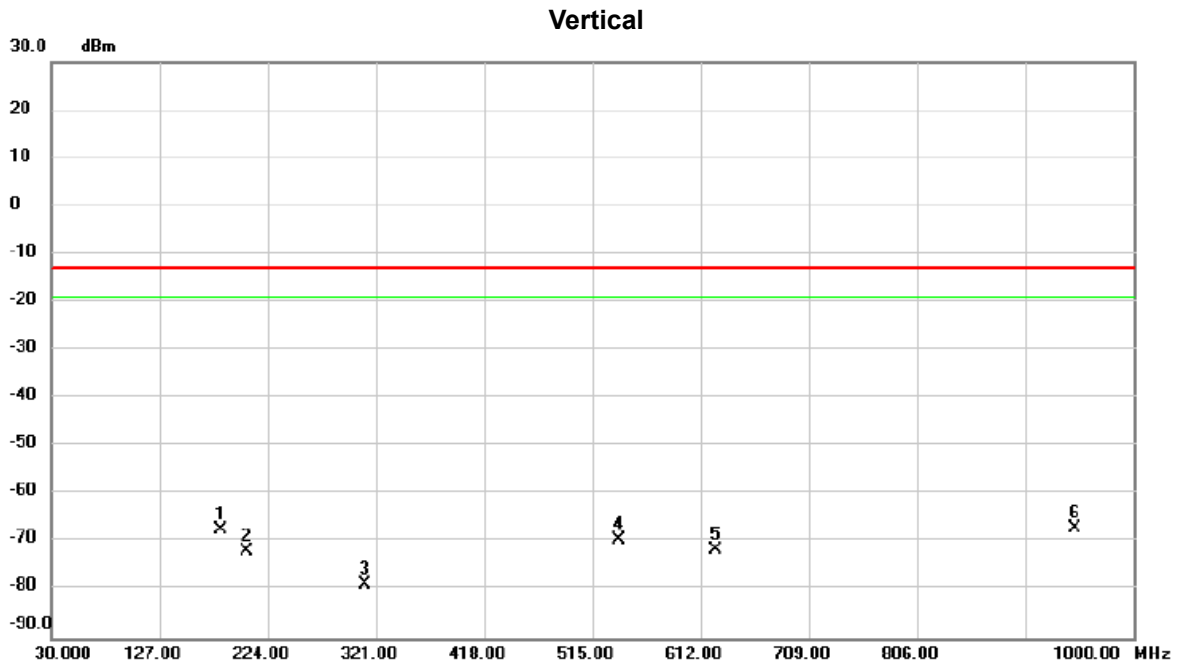
Test Mode | LTE Band 26_TX CH26740_10M_Main Antenna

Horizontal



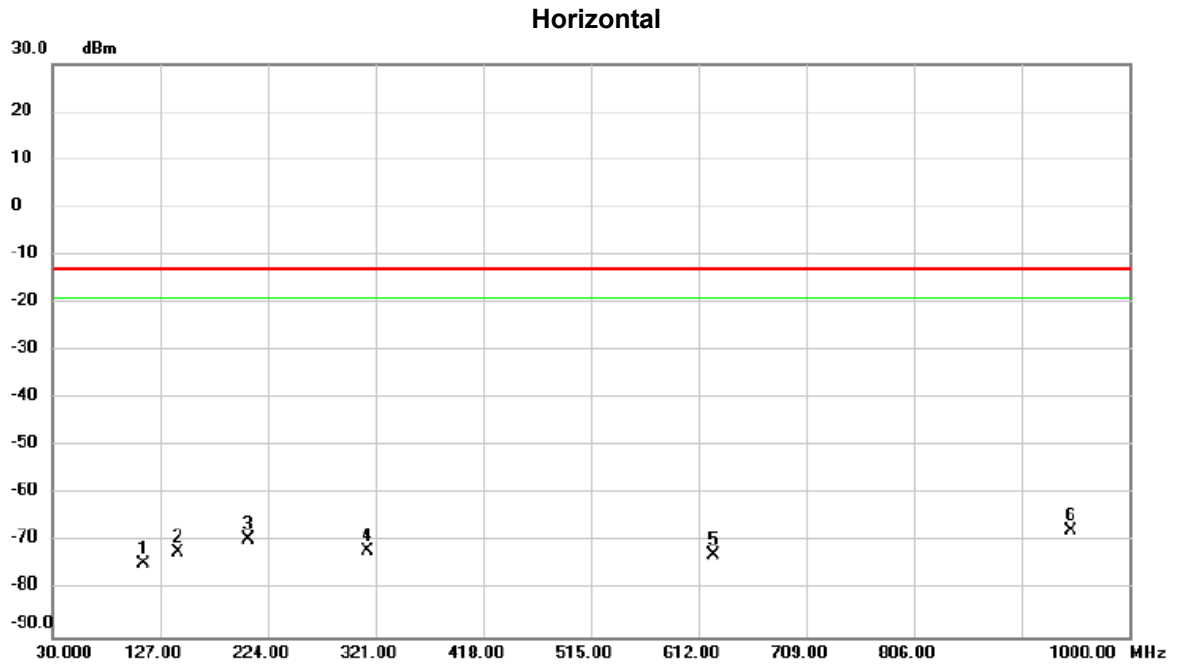
| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | | 71.7100 | -65.40 | -6.64 | -72.04 | -13.00 | -59.04 | peak | |
| 2 | * | 113.9050 | -64.99 | -4.06 | -69.05 | -13.00 | -56.05 | peak | |
| 3 | | 159.9800 | -67.97 | -1.08 | -69.05 | -13.00 | -56.05 | peak | |
| 4 | | 203.1450 | -67.33 | -5.35 | -72.68 | -13.00 | -59.68 | peak | |
| 5 | | 315.1800 | -71.80 | -1.17 | -72.97 | -13.00 | -59.97 | peak | |
| 6 | | 383.5650 | -73.03 | 0.20 | -72.83 | -13.00 | -59.83 | peak | |

Test Mode | LTE Band 26_TX CH26740_1.4M_Second Antenna



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | | 181.3200 | -63.86 | -3.36 | -67.22 | -13.00 | -54.22 | peak | |
| 2 | | 205.5700 | -66.50 | -5.45 | -71.95 | -13.00 | -58.95 | peak | |
| 3 | | 311.3000 | -77.52 | -1.23 | -78.75 | -13.00 | -65.75 | peak | |
| 4 | | 538.2800 | -72.07 | 2.67 | -69.40 | -13.00 | -56.40 | peak | |
| 5 | | 625.0950 | -76.34 | 4.78 | -71.56 | -13.00 | -58.56 | peak | |
| 6 | * | 948.1050 | -76.67 | 9.67 | -67.00 | -13.00 | -54.00 | peak | |

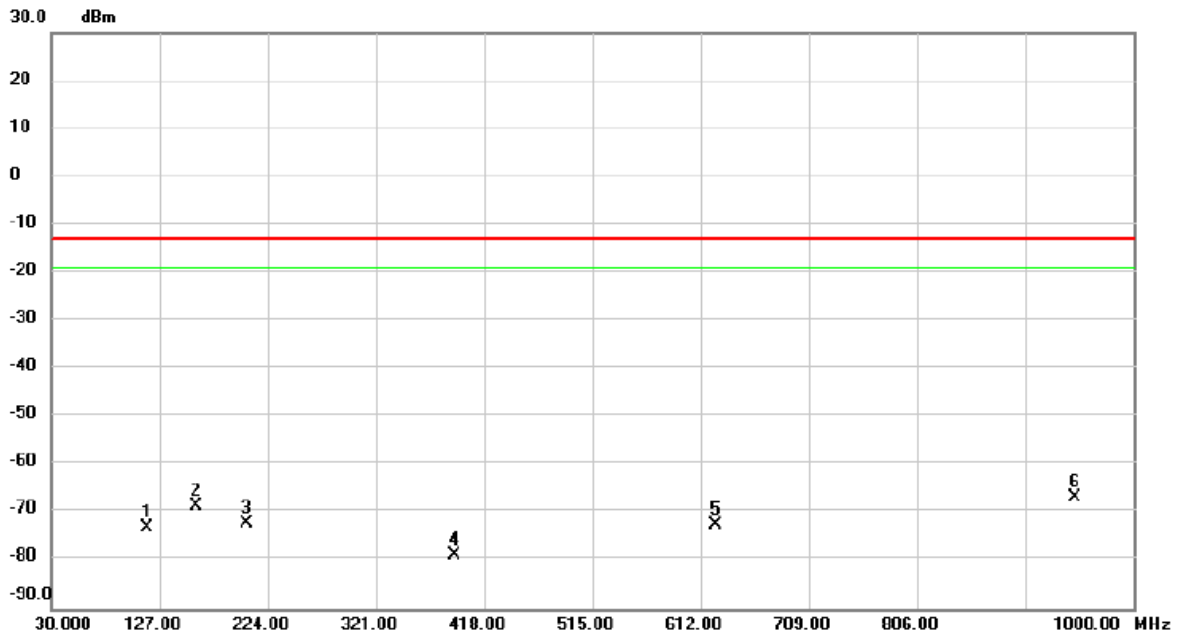
| | |
|-----------|--|
| Test Mode | LTE Band 26_TX CH26740_1.4M_Second Antenna |
|-----------|--|



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | | 111.9650 | -70.19 | -4.34 | -74.53 | -13.00 | -61.53 | peak | |
| 2 | | 143.4900 | -69.50 | -2.76 | -72.26 | -13.00 | -59.26 | peak | |
| 3 | | 207.0250 | -63.81 | -5.50 | -69.31 | -13.00 | -56.31 | peak | |
| 4 | | 313.7250 | -70.80 | -1.19 | -71.99 | -13.00 | -58.99 | peak | |
| 5 | | 625.0950 | -77.54 | 4.78 | -72.76 | -13.00 | -59.76 | peak | |
| 6 | * | 948.1050 | -77.36 | 9.67 | -67.69 | -13.00 | -54.69 | peak | |

Test Mode | LTE Band 26_TX CH26740_5M_Second Antenna

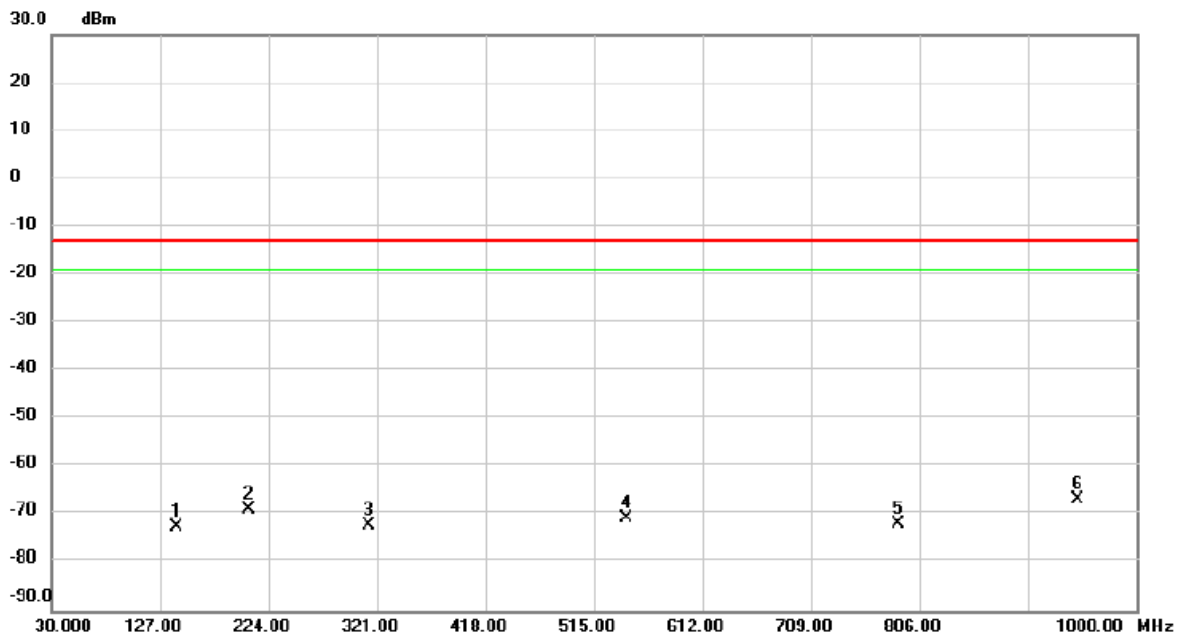
Vertical



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | | 116.3300 | -69.38 | -3.69 | -73.07 | -13.00 | -60.07 | peak | |
| 2 | | 160.4650 | -67.27 | -1.15 | -68.42 | -13.00 | -55.42 | peak | |
| 3 | | 205.5700 | -66.65 | -5.45 | -72.10 | -13.00 | -59.10 | peak | |
| 4 | | 390.8400 | -79.04 | 0.37 | -78.67 | -13.00 | -65.67 | peak | |
| 5 | | 625.0950 | -77.35 | 4.78 | -72.57 | -13.00 | -59.57 | peak | |
| 6 | * | 948.1050 | -76.36 | 9.67 | -66.69 | -13.00 | -53.69 | peak | |

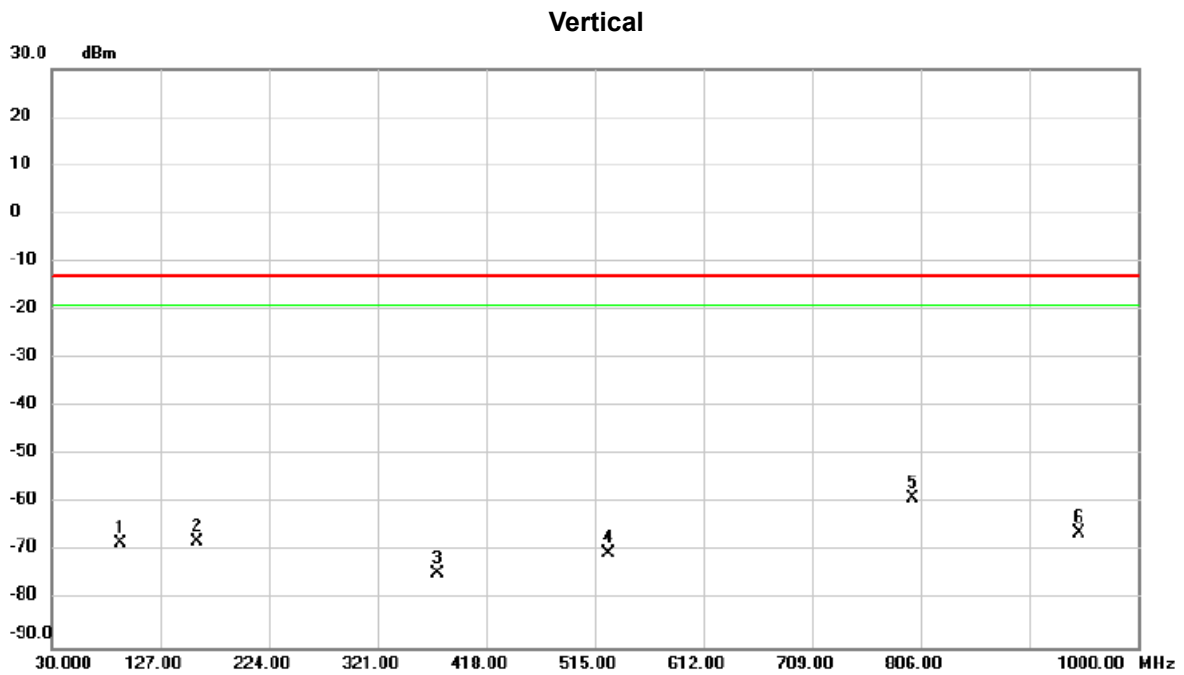
Test Mode | LTE Band 26_TX CH26740_5M_Second Antenna

Horizontal



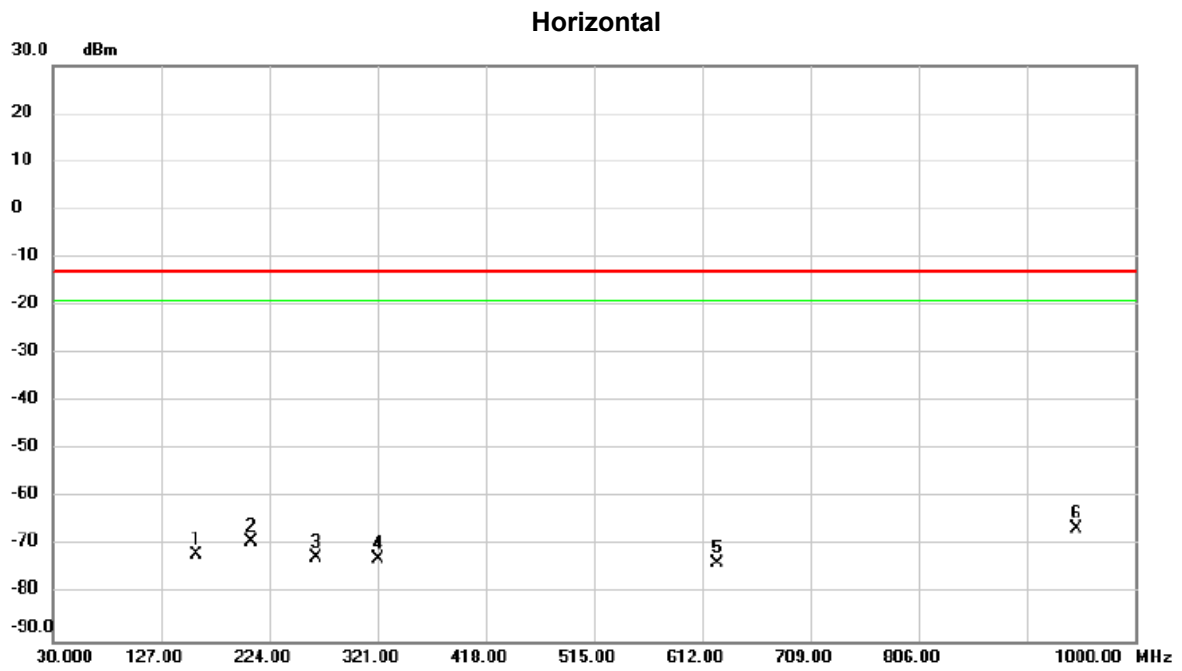
| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | | 141.5500 | -69.62 | -2.87 | -72.49 | -13.00 | -59.49 | peak | |
| 2 | | 206.5400 | -63.45 | -5.50 | -68.95 | -13.00 | -55.95 | peak | |
| 3 | | 314.2100 | -70.90 | -1.18 | -72.08 | -13.00 | -59.08 | peak | |
| 4 | | 544.1000 | -73.32 | 2.73 | -70.59 | -13.00 | -57.59 | peak | |
| 5 | | 787.0850 | -78.81 | 6.89 | -71.92 | -13.00 | -58.92 | peak | |
| 6 | * | 948.1050 | -76.44 | 9.67 | -66.77 | -13.00 | -53.77 | peak | |

| | |
|-----------|---|
| Test Mode | LTE Band 26_TX CH26740_10M_Second Antenna |
|-----------|---|



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | X | 91.5950 | -62.13 | -5.98 | -68.11 | -13.00 | -55.11 | peak | |
| 2 | X | 159.4950 | -66.94 | -1.15 | -68.09 | -13.00 | -55.09 | peak | |
| 3 | X | 374.3500 | -74.44 | -0.04 | -74.48 | -13.00 | -61.48 | peak | |
| 4 | X | 527.6100 | -72.89 | 2.58 | -70.31 | -13.00 | -57.31 | peak | |
| 5 | * X | 799.2100 | -66.10 | 7.05 | -59.05 | -13.00 | -46.05 | peak | |
| 6 | X | 948.1050 | -75.86 | 9.67 | -66.19 | -13.00 | -53.19 | peak | |

| | |
|-----------|---|
| Test Mode | LTE Band 26_TX CH26740_10M_Second Antenna |
|-----------|---|

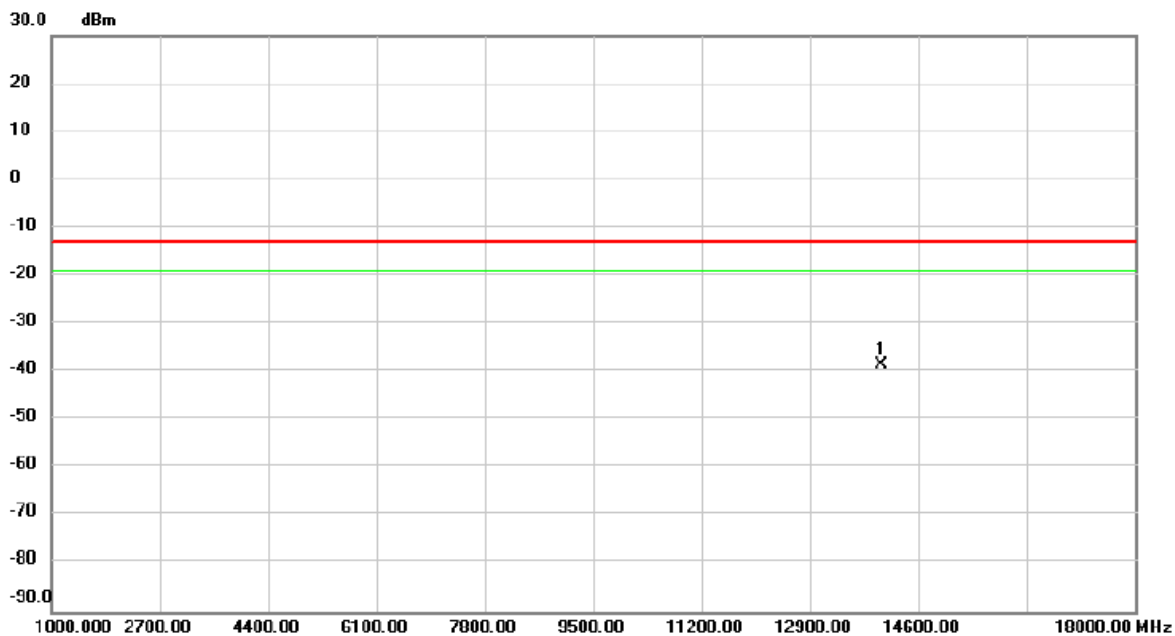


| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | | 159.0100 | -70.78 | -1.21 | -71.99 | -13.00 | -58.99 | peak | |
| 2 | | 207.9950 | -63.60 | -5.55 | -69.15 | -13.00 | -56.15 | peak | |
| 3 | | 265.7100 | -69.50 | -2.87 | -72.37 | -13.00 | -59.37 | peak | |
| 4 | | 321.4850 | -71.59 | -1.07 | -72.66 | -13.00 | -59.66 | peak | |
| 5 | | 625.0950 | -78.29 | 4.78 | -73.51 | -13.00 | -60.51 | peak | |
| 6 | * | 948.1050 | -76.01 | 9.67 | -66.34 | -13.00 | -53.34 | peak | |

APPENDIX F - RADIATED SPURIOUS EMISSIONS (ABOVE 1000MHZ)

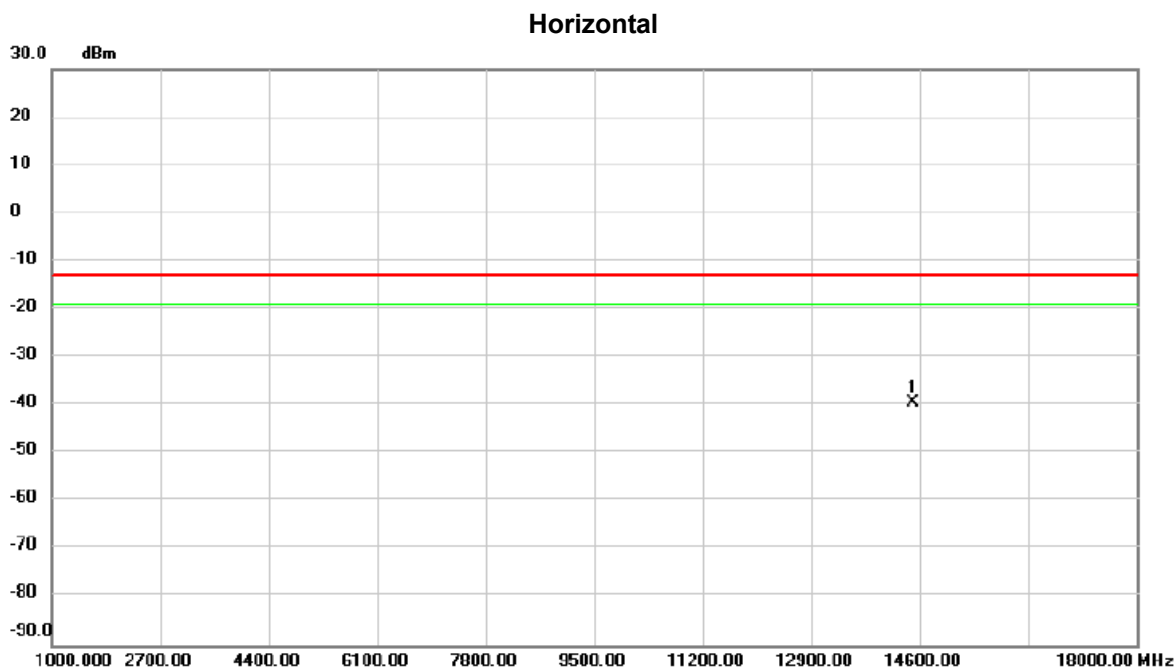
Test Mode | LTE Band 26_TX CH26740_1.4M_Main Antenna

Vertical



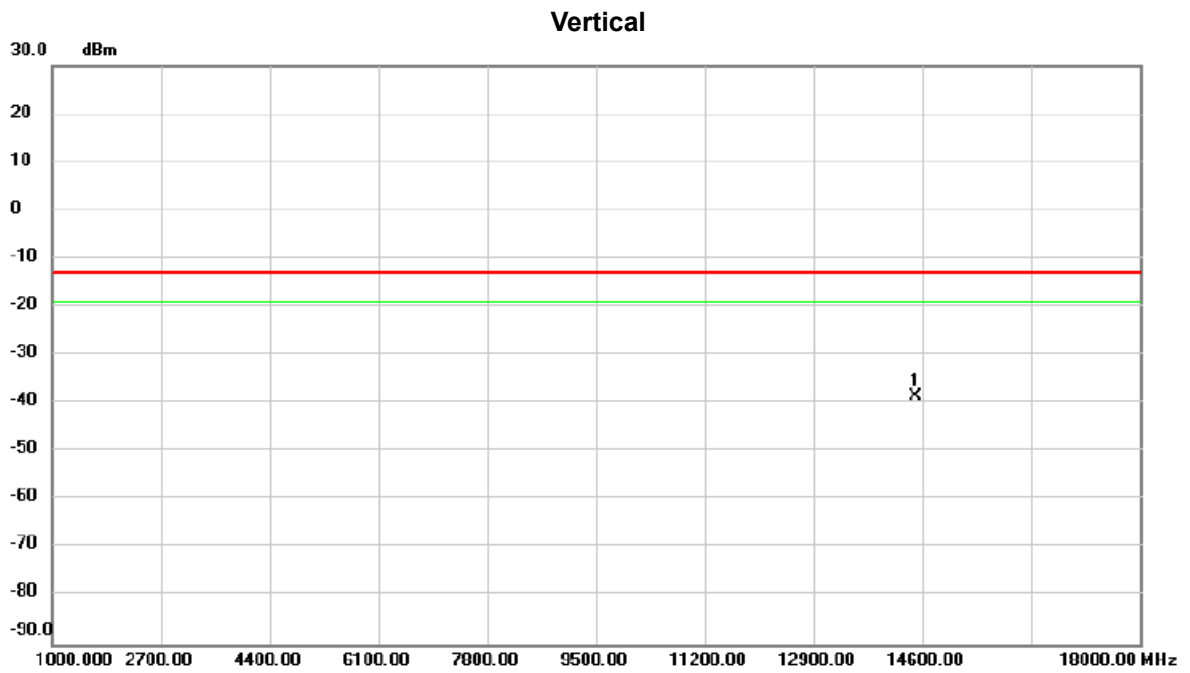
| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 14030.50 | -68.77 | 30.19 | -38.58 | -13.00 | -25.58 | peak | |

Test Mode | LTE Band 26_TX CH26740_1.4M_Main Antenna



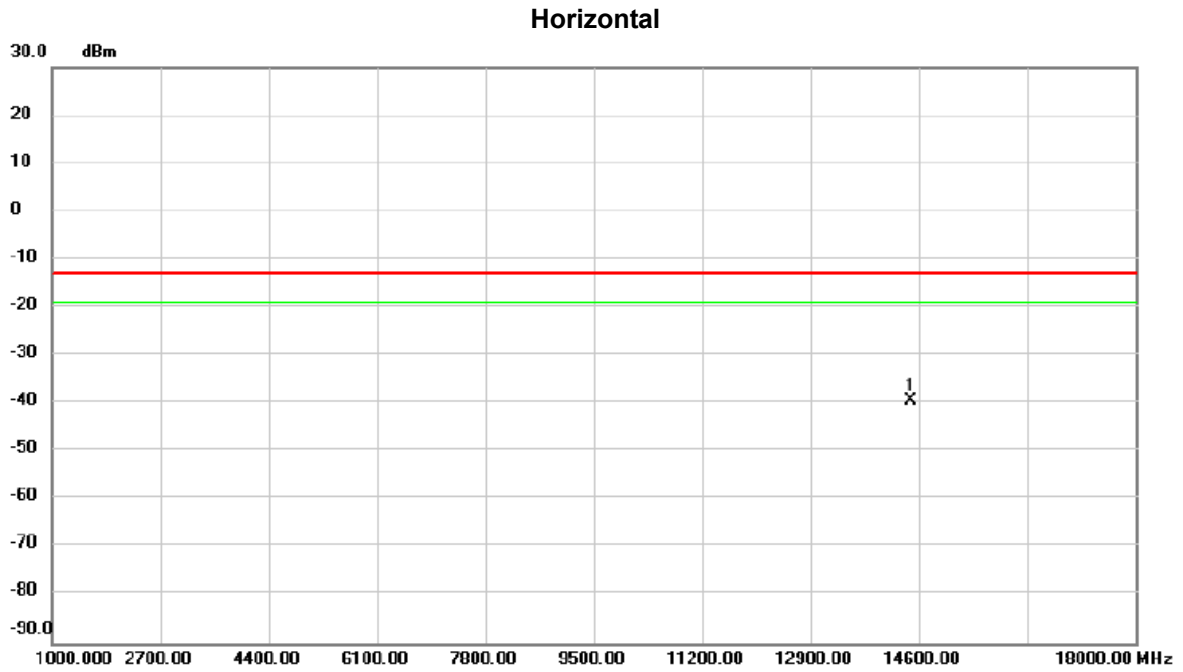
| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
| | | MHz | dBm | dB | dBm | dBm | dB | | |
| 1 | * | 14498.00 | -69.25 | 29.86 | -39.39 | -13.00 | -26.39 | peak | |

Test Mode | LTE Band 26_TX CH26740_5M_Main Antenna



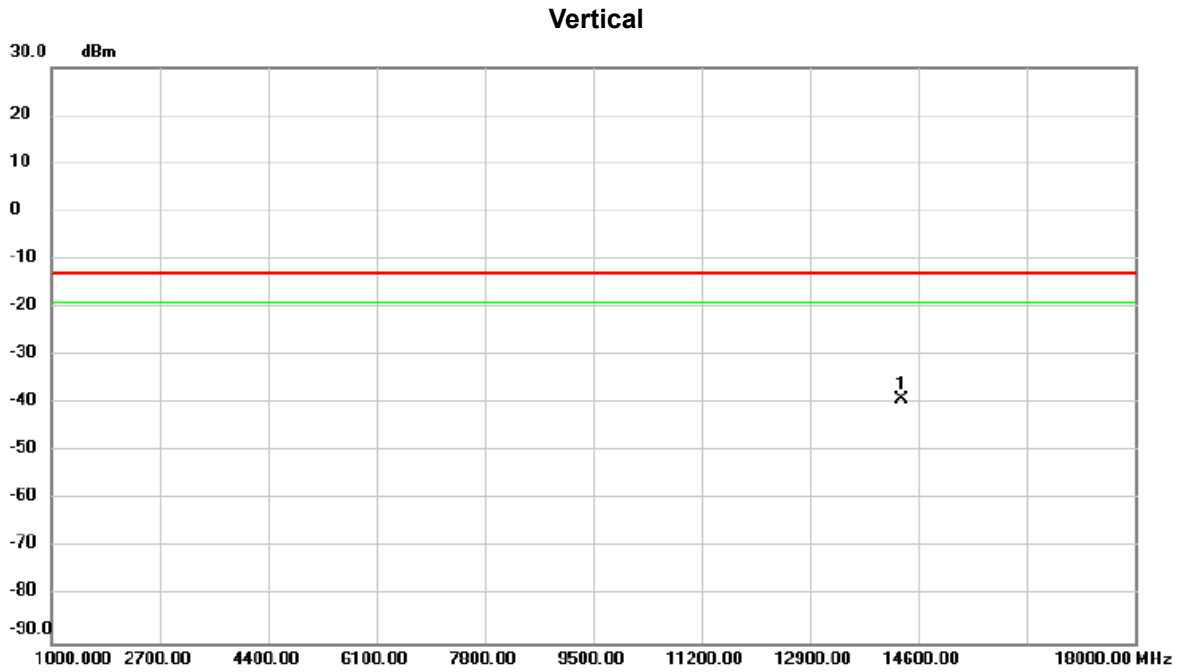
| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 14489.50 | -68.39 | 29.86 | -38.53 | -13.00 | -25.53 | peak | |

| | |
|-----------|--|
| Test Mode | LTE Band 26_TX CH26740_5M_Main Antenna |
|-----------|--|



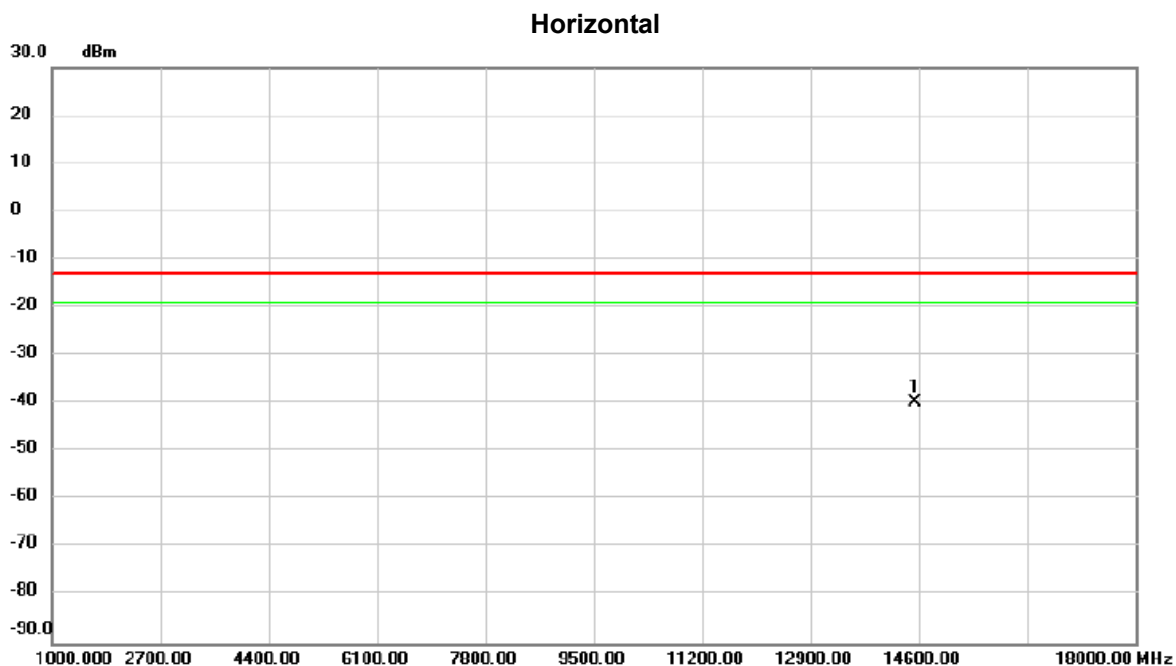
| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 14481.00 | -69.21 | 29.88 | -39.33 | -13.00 | -26.33 | peak | |

| | |
|-----------|---|
| Test Mode | LTE Band 26_TX CH26740_10M_Main Antenna |
|-----------|---|



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 14328.00 | -69.04 | 29.98 | -39.06 | -13.00 | -26.06 | peak | |

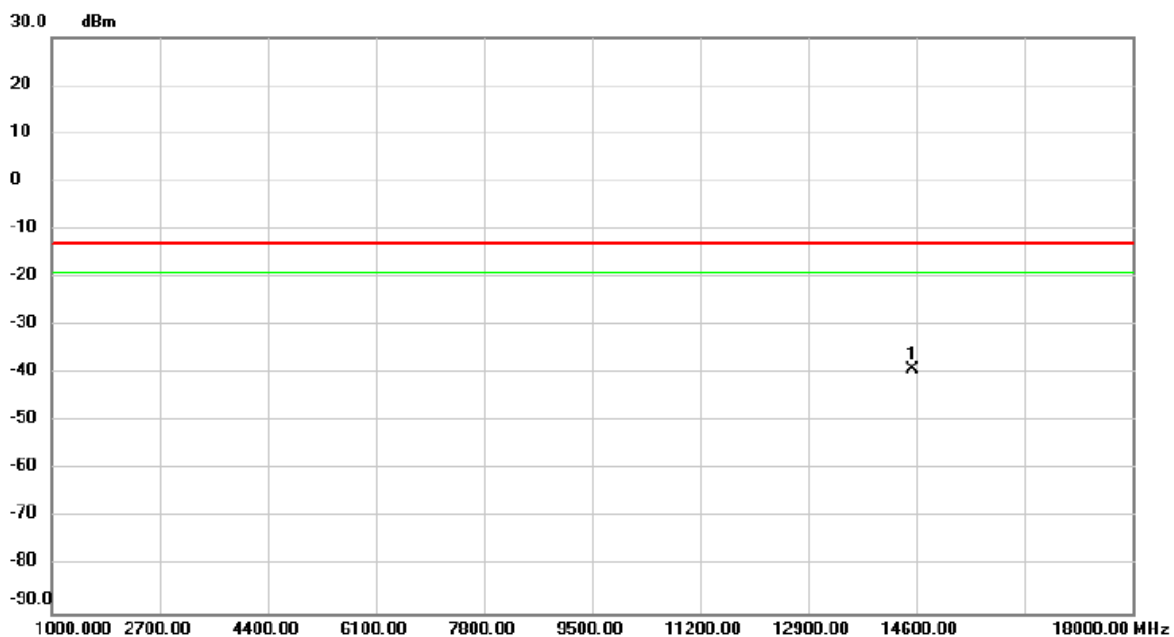
Test Mode | LTE Band 26_TX CH26740_10M_Main Antenna



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
| | | MHz | dBm | dB | dBm | dBm | dB | | |
| 1 | * | 14549.00 | -69.36 | 29.68 | -39.68 | -13.00 | -26.68 | peak | |

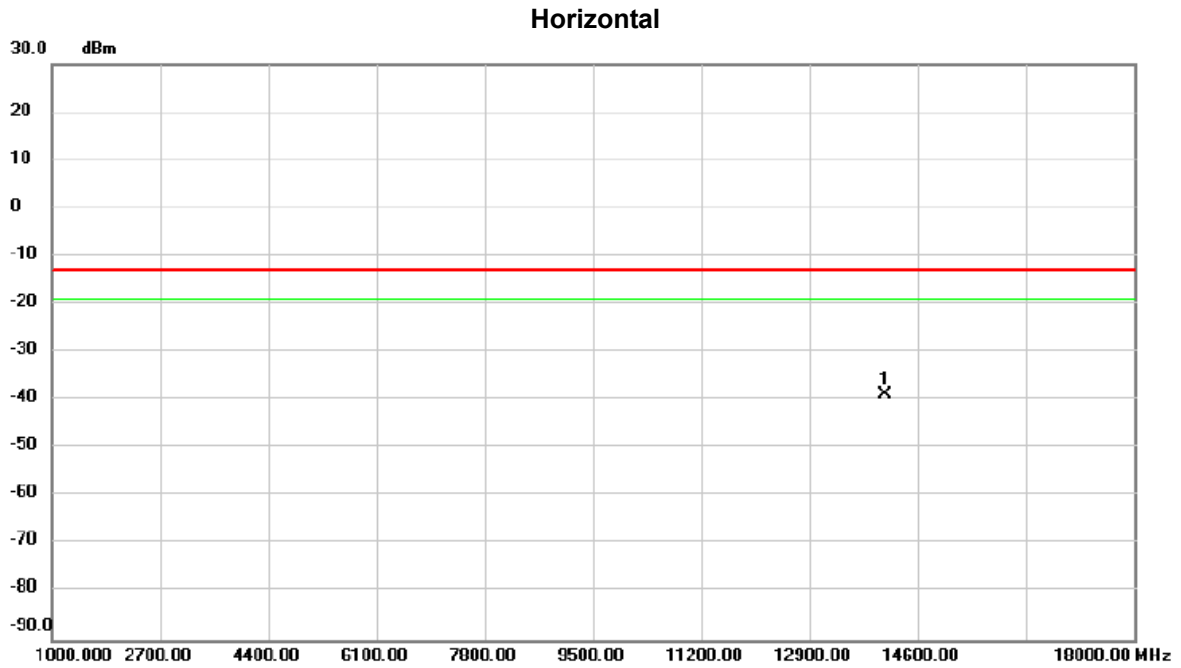
Test Mode | LTE Band 26_TX CH26740_1.4M_Second Antenna

Vertical



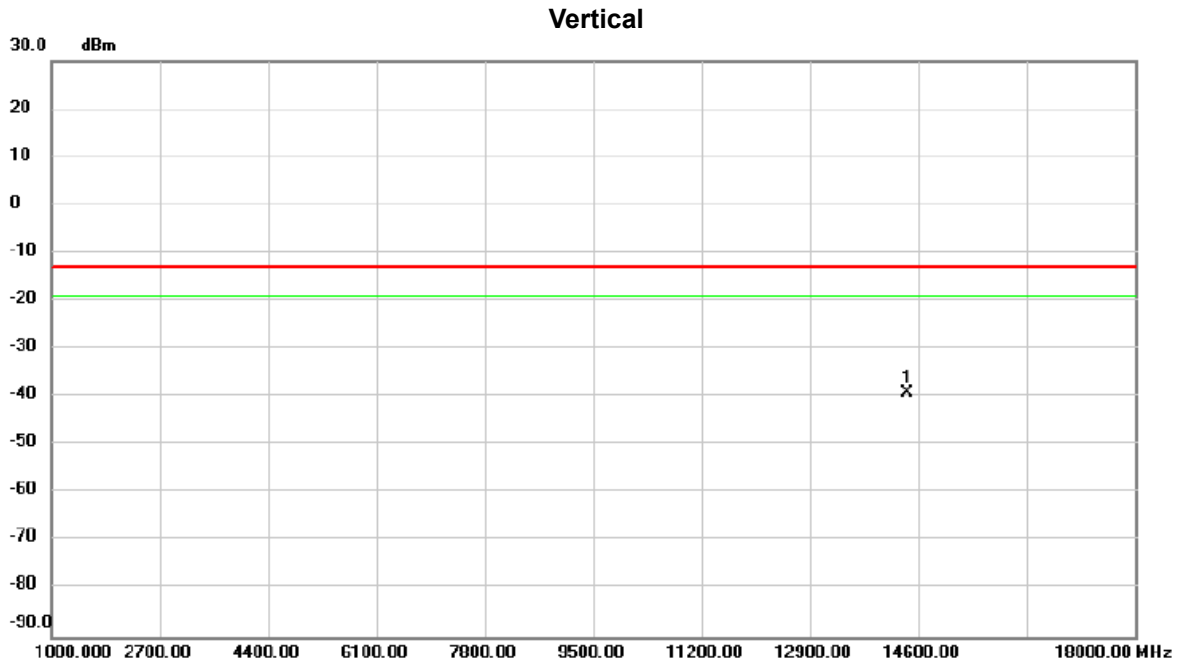
| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 14549.00 | -68.76 | 29.68 | -39.08 | -13.00 | -26.08 | peak | |

| | |
|-----------|--|
| Test Mode | LTE Band 26_TX CH26740_1.4M_Second Antenna |
|-----------|--|



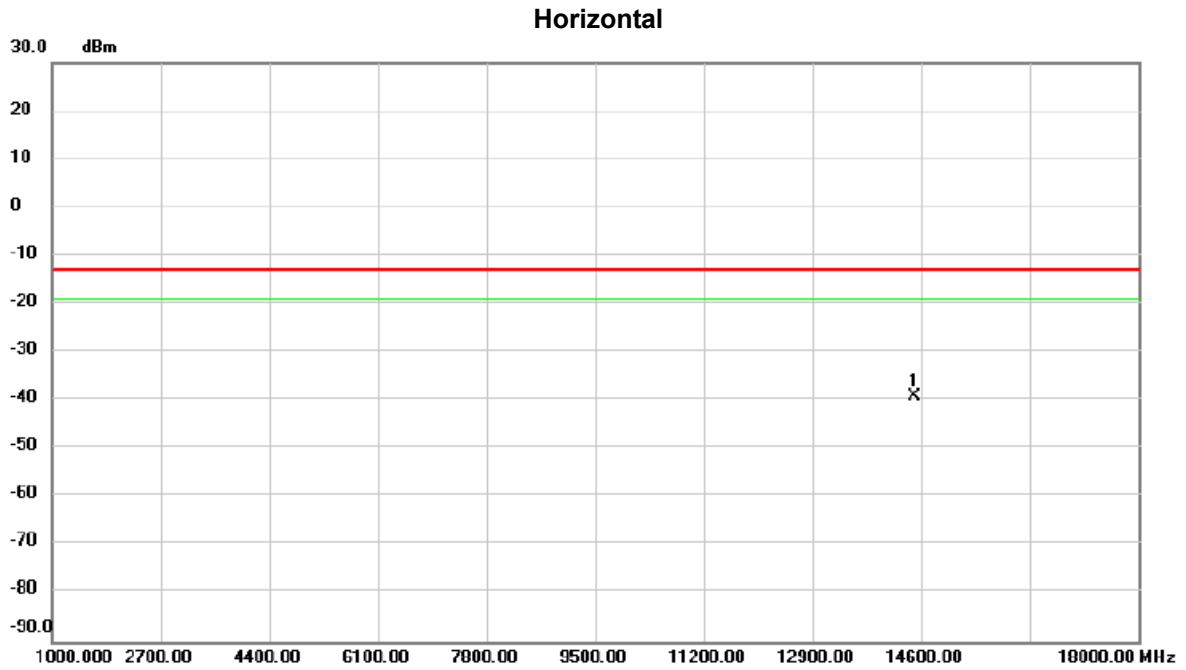
| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 14098.50 | -69.04 | 30.14 | -38.90 | -13.00 | -25.90 | peak | |

Test Mode LTE Band 26_TX CH26740_5M_Second Antenna



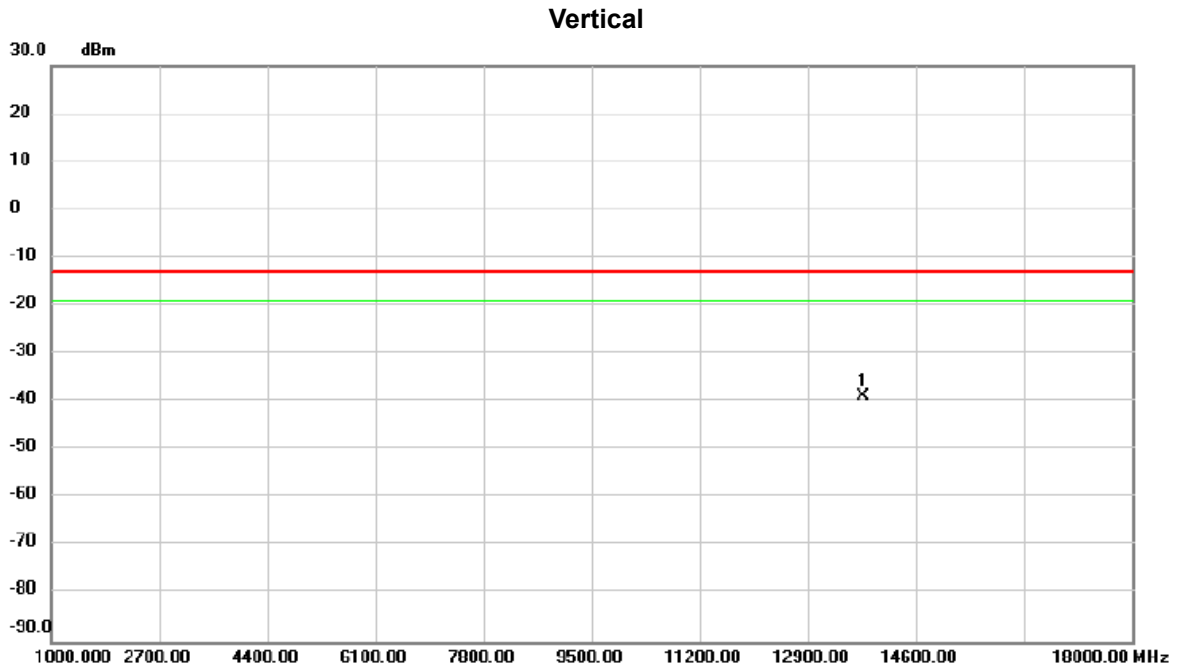
| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 14421.50 | -69.01 | 29.91 | -39.10 | -13.00 | -26.10 | peak | |

Test Mode | LTE Band 26_TX CH26740_5M_Second Antenna



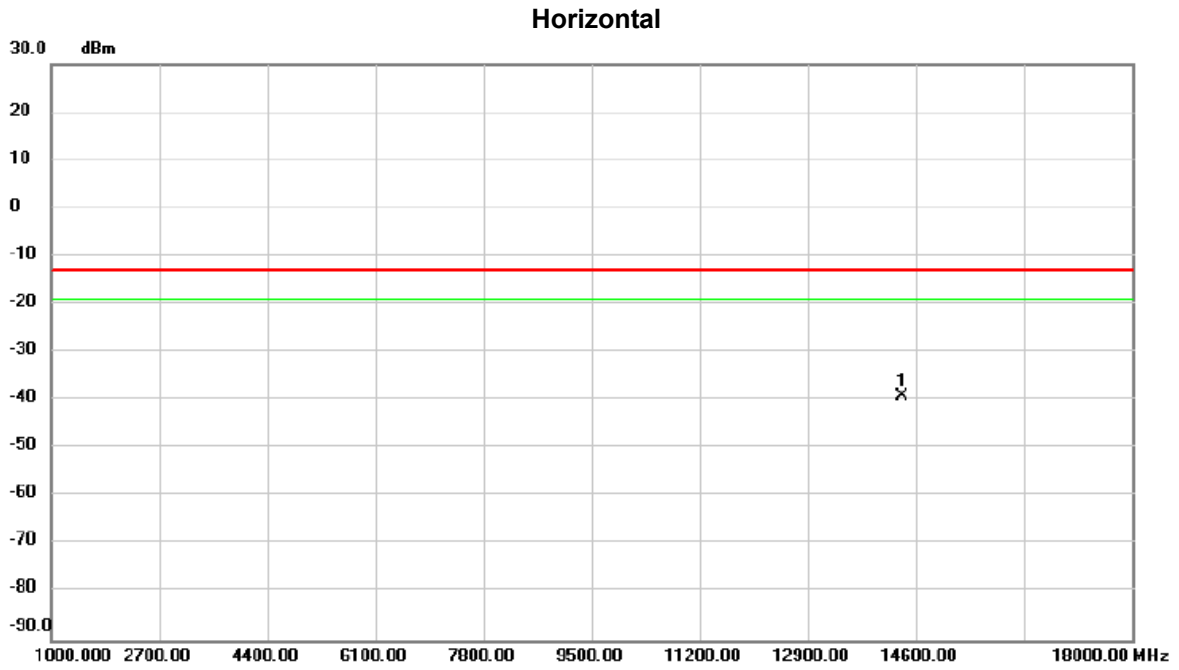
| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 14498.00 | -68.97 | 29.86 | -39.11 | -13.00 | -26.11 | peak | |

| | |
|-----------|---|
| Test Mode | LTE Band 26_TX CH26740_10M_Second Antenna |
|-----------|---|



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 13767.00 | -68.37 | 29.38 | -38.99 | -13.00 | -25.99 | peak | |

Test Mode | LTE Band 26_TX CH26740_10M_Second Antenna



| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Margin dB | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|--------------|----------|---------|
| 1 | * | 14379.00 | -69.20 | 29.95 | -39.25 | -13.00 | -26.25 | peak | |

APPENDIX G - MASK

LTE Band 26_1.4M

1RB#0

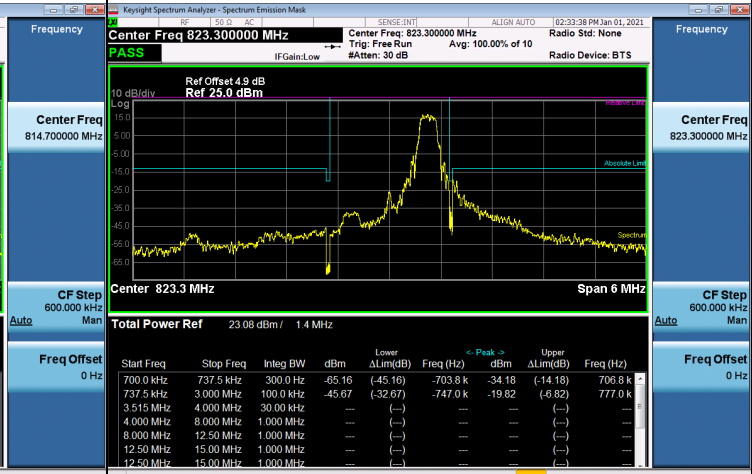
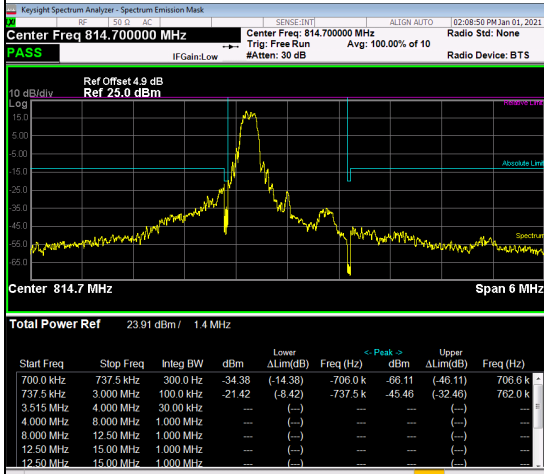
1RB#5

Channel

26697

Channel

26783



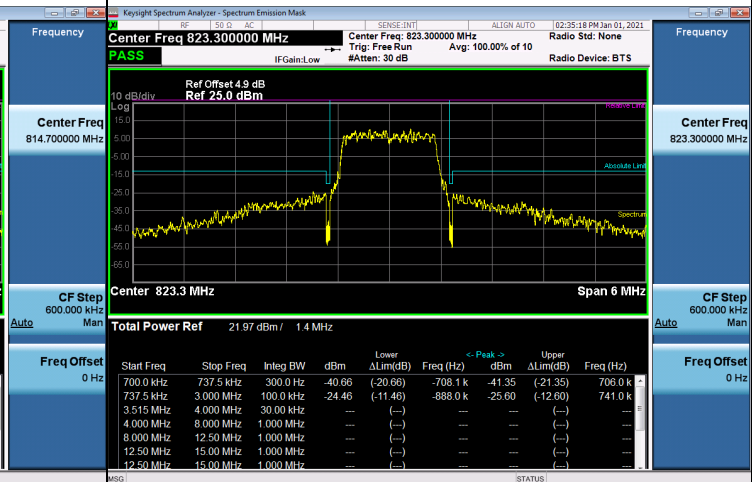
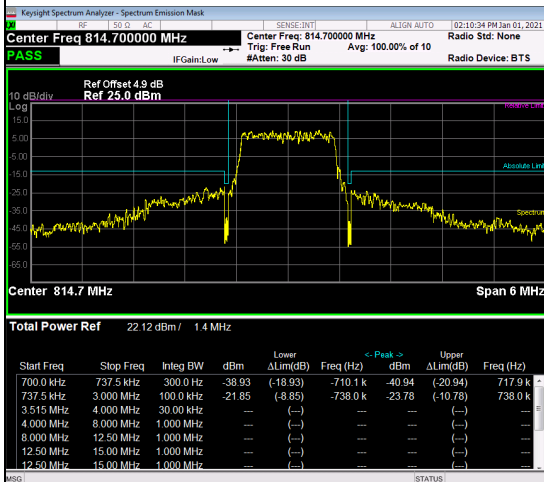
6RB#0

Channel

26697

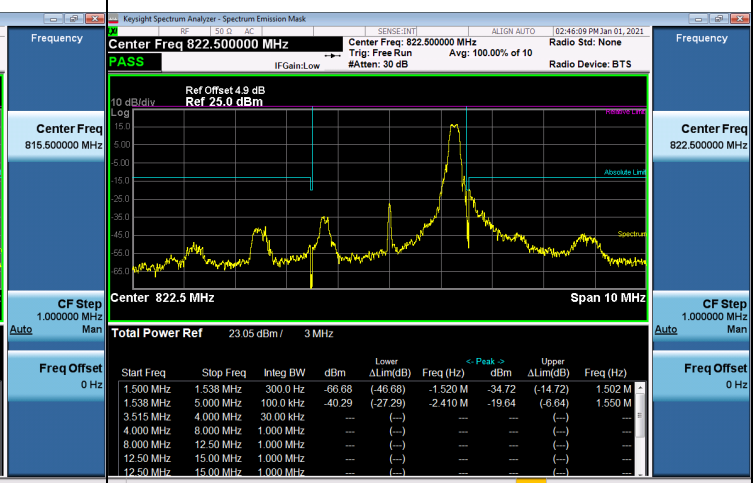
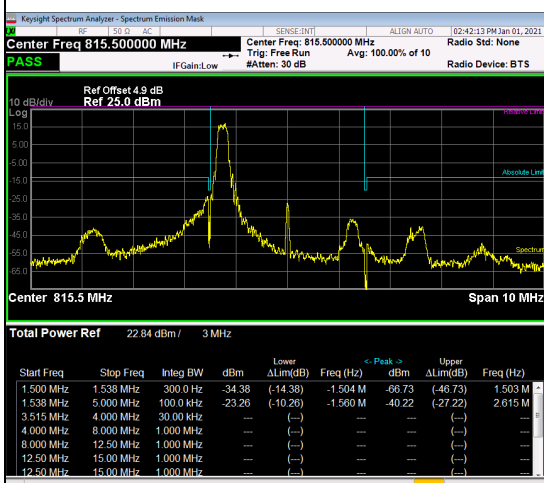
Channel

26783



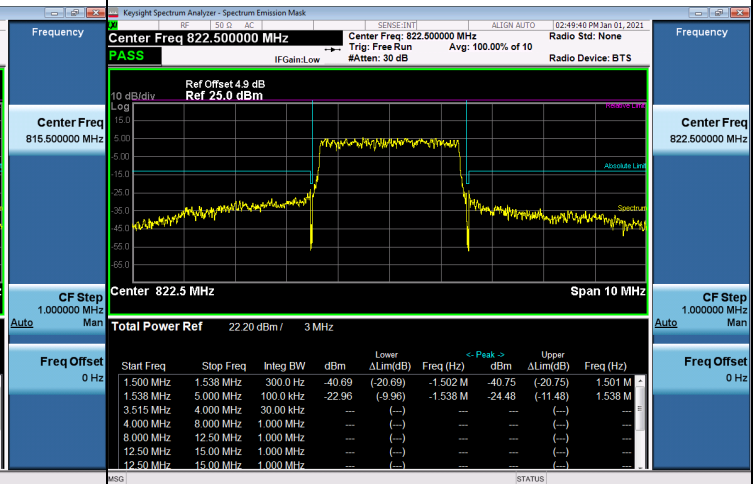
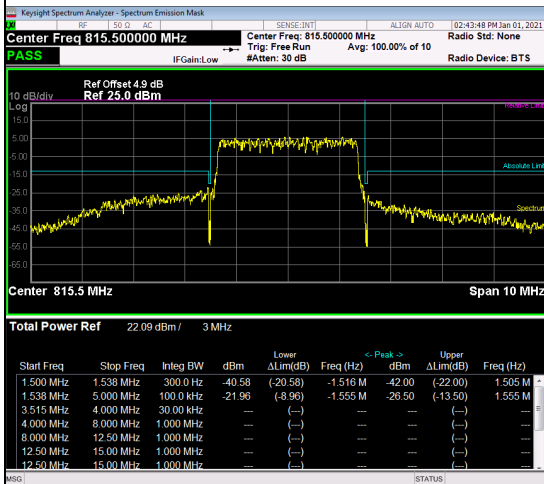
LTE Band 26_3M

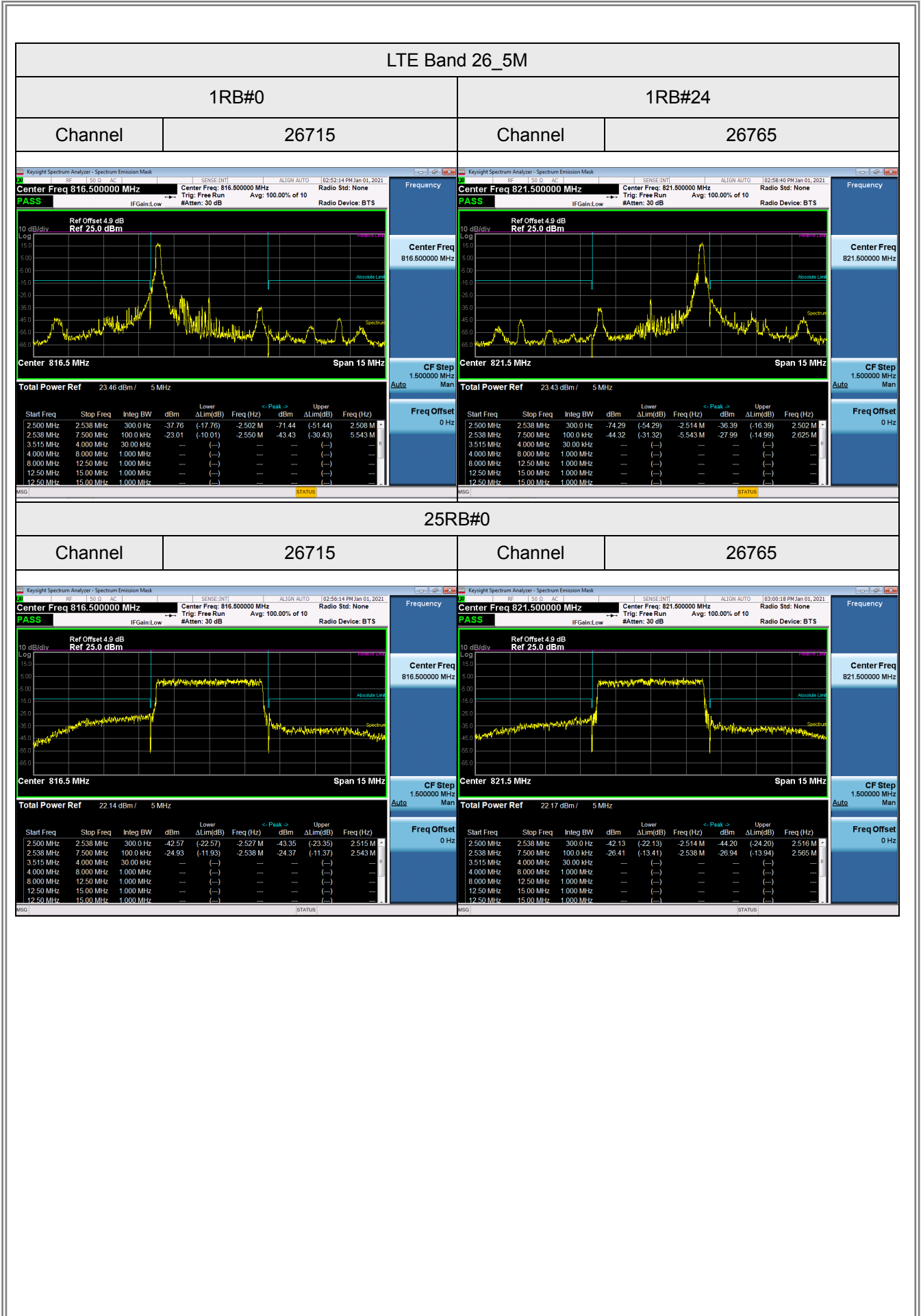
| | | | |
|---------|-------|---------|-------|
| 1RB#0 | | 1RB#14 | |
| Channel | 26705 | Channel | 26775 |



15RB#0

| | | | | | |
|---------|--|-------|---------|--|-------|
| Channel | | 26705 | Channel | | 26775 |
|---------|--|-------|---------|--|-------|



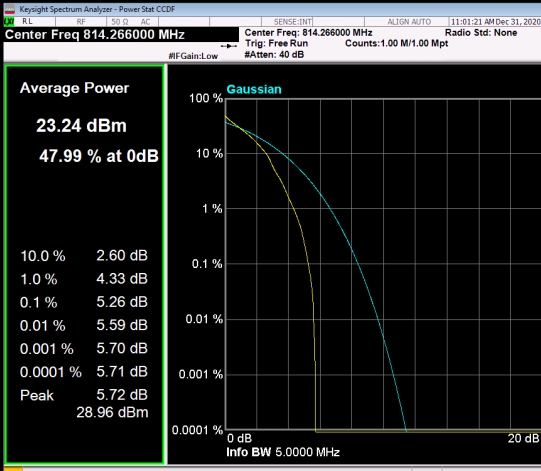


| LTE Band 26_10M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------|--|-----------|----------------|----------------|----------------|----------------|------------|-----------|-----------|-----------|----------|--------|----------|----------|--------|----------|-----------|-----------|-----------|--------|----------|----------|--------|----------|-----------|-----------|-----------|-----|-----|-----|-----|-----|-----------|-----------|-----------|-----|-----|-----|-----|-----|-----------|-----------|-----------|-----|-----|-----|-----|-----|-----------|-----------|-----------|-----|-----|-----|-----|-----|-----------|-----------|-----------|-----|-----|-----|-----|-----|---|--|------------|-----------|----------|-----|----------------|----------------|------------|-----------|-----------|-----------|----------|--------|----------|----------|--------|----------|-----------|-----------|-----------|--------|----------|----------|--------|----------|-----------|-----------|-----------|-----|-----|-----|-----|-----|-----------|-----------|-----------|-----|-----|-----|-----|-----|-----------|-----------|-----------|-----|-----|-----|-----|-----|-----------|-----------|-----------|-----|-----|-----|-----|-----|-----------|-----------|-----------|-----|-----|-----|-----|-----|
| 1RB#0 | | 1RB#49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Channel | 26740 | Channel | 26740 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Center Freq: 819.000000 MHz Ref Offset 4.9 dB Ref 25.0 dBm Total Power Ref: 23.37 dBm / 10 MHz</p> | | <p>Center Freq: 819.000000 MHz Ref Offset 4.9 dB Ref 25.0 dBm Total Power Ref: 23.36 dBm / 10 MHz</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Start Freq</th> <th>Stop Freq</th> <th>Inleg BW</th> <th>dBm</th> <th>Lower ΔLim(dB)</th> <th>Upper ΔLim(dB)</th> <th>Peak (dBm)</th> <th>Freq (Hz)</th> </tr> </thead> <tbody> <tr> <td>5.000 MHz</td> <td>5.038 MHz</td> <td>300.0 Hz</td> <td>-50.55</td> <td>(-30.55)</td> <td>-5.004 M</td> <td>-73.57</td> <td>(-53.57)</td> </tr> <tr> <td>5.038 MHz</td> <td>10.00 MHz</td> <td>100.0 kHz</td> <td>-30.26</td> <td>(-)</td> <td>-5.060 M</td> <td>-50.23</td> <td>(-37.23)</td> </tr> <tr> <td>3.515 MHz</td> <td>4.000 MHz</td> <td>30.00 kHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>4.000 MHz</td> <td>8.000 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>8.000 MHz</td> <td>12.50 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>12.50 MHz</td> <td>15.00 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>12.50 MHz</td> <td>15.00 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> </tbody> </table> | | Start Freq | Stop Freq | Inleg BW | dBm | Lower ΔLim(dB) | Upper ΔLim(dB) | Peak (dBm) | Freq (Hz) | 5.000 MHz | 5.038 MHz | 300.0 Hz | -50.55 | (-30.55) | -5.004 M | -73.57 | (-53.57) | 5.038 MHz | 10.00 MHz | 100.0 kHz | -30.26 | (-) | -5.060 M | -50.23 | (-37.23) | 3.515 MHz | 4.000 MHz | 30.00 kHz | (-) | (-) | (-) | (-) | (-) | 4.000 MHz | 8.000 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | 8.000 MHz | 12.50 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | <table border="1"> <thead> <tr> <th>Start Freq</th> <th>Stop Freq</th> <th>Inleg BW</th> <th>dBm</th> <th>Lower ΔLim(dB)</th> <th>Upper ΔLim(dB)</th> <th>Peak (dBm)</th> <th>Freq (Hz)</th> </tr> </thead> <tbody> <tr> <td>5.000 MHz</td> <td>5.038 MHz</td> <td>300.0 Hz</td> <td>-74.01</td> <td>(-54.01)</td> <td>-5.002 M</td> <td>-51.31</td> <td>(-31.31)</td> </tr> <tr> <td>5.038 MHz</td> <td>10.00 MHz</td> <td>100.0 kHz</td> <td>-55.03</td> <td>(-42.03)</td> <td>-8.750 M</td> <td>-31.67</td> <td>(-18.67)</td> </tr> <tr> <td>3.515 MHz</td> <td>4.000 MHz</td> <td>30.00 kHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>4.000 MHz</td> <td>8.000 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>8.000 MHz</td> <td>12.50 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>12.50 MHz</td> <td>15.00 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>12.50 MHz</td> <td>15.00 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> </tbody> </table> | | Start Freq | Stop Freq | Inleg BW | dBm | Lower ΔLim(dB) | Upper ΔLim(dB) | Peak (dBm) | Freq (Hz) | 5.000 MHz | 5.038 MHz | 300.0 Hz | -74.01 | (-54.01) | -5.002 M | -51.31 | (-31.31) | 5.038 MHz | 10.00 MHz | 100.0 kHz | -55.03 | (-42.03) | -8.750 M | -31.67 | (-18.67) | 3.515 MHz | 4.000 MHz | 30.00 kHz | (-) | (-) | (-) | (-) | (-) | 4.000 MHz | 8.000 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | 8.000 MHz | 12.50 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) |
| Start Freq | Stop Freq | Inleg BW | dBm | Lower ΔLim(dB) | Upper ΔLim(dB) | Peak (dBm) | Freq (Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.000 MHz | 5.038 MHz | 300.0 Hz | -50.55 | (-30.55) | -5.004 M | -73.57 | (-53.57) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.038 MHz | 10.00 MHz | 100.0 kHz | -30.26 | (-) | -5.060 M | -50.23 | (-37.23) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.515 MHz | 4.000 MHz | 30.00 kHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Start Freq | Stop Freq | Inleg BW | dBm | Lower ΔLim(dB) | Upper ΔLim(dB) | Peak (dBm) | Freq (Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.000 MHz | 5.038 MHz | 300.0 Hz | -74.01 | (-54.01) | -5.002 M | -51.31 | (-31.31) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.038 MHz | 10.00 MHz | 100.0 kHz | -55.03 | (-42.03) | -8.750 M | -31.67 | (-18.67) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.515 MHz | 4.000 MHz | 30.00 kHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50RB#0 | | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Channel | 26740 | | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Center Freq: 819.000000 MHz Ref Offset 4.9 dB Ref 25.0 dBm Total Power Ref: 22.01 dBm / 10 MHz</p> | | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Start Freq</th> <th>Stop Freq</th> <th>Inleg BW</th> <th>dBm</th> <th>Lower ΔLim(dB)</th> <th>Upper ΔLim(dB)</th> <th>Peak (dBm)</th> <th>Freq (Hz)</th> </tr> </thead> <tbody> <tr> <td>5.000 MHz</td> <td>5.038 MHz</td> <td>300.0 Hz</td> <td>-46.95</td> <td>(-26.95)</td> <td>-5.032 M</td> <td>-51.02</td> <td>(-31.02)</td> </tr> <tr> <td>5.038 MHz</td> <td>10.00 MHz</td> <td>100.0 kHz</td> <td>-27.18</td> <td>(-14.18)</td> <td>-5.070 M</td> <td>-31.59</td> <td>(-18.59)</td> </tr> <tr> <td>3.515 MHz</td> <td>4.000 MHz</td> <td>30.00 kHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>4.000 MHz</td> <td>8.000 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>8.000 MHz</td> <td>12.50 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>12.50 MHz</td> <td>15.00 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> <tr> <td>12.50 MHz</td> <td>15.00 MHz</td> <td>1.000 MHz</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> <td>(-)</td> </tr> </tbody> </table> | | Start Freq | Stop Freq | Inleg BW | dBm | Lower ΔLim(dB) | Upper ΔLim(dB) | Peak (dBm) | Freq (Hz) | 5.000 MHz | 5.038 MHz | 300.0 Hz | -46.95 | (-26.95) | -5.032 M | -51.02 | (-31.02) | 5.038 MHz | 10.00 MHz | 100.0 kHz | -27.18 | (-14.18) | -5.070 M | -31.59 | (-18.59) | 3.515 MHz | 4.000 MHz | 30.00 kHz | (-) | (-) | (-) | (-) | (-) | 4.000 MHz | 8.000 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | 8.000 MHz | 12.50 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Start Freq | Stop Freq | Inleg BW | dBm | Lower ΔLim(dB) | Upper ΔLim(dB) | Peak (dBm) | Freq (Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.000 MHz | 5.038 MHz | 300.0 Hz | -46.95 | (-26.95) | -5.032 M | -51.02 | (-31.02) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.038 MHz | 10.00 MHz | 100.0 kHz | -27.18 | (-14.18) | -5.070 M | -31.59 | (-18.59) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.515 MHz | 4.000 MHz | 30.00 kHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.000 MHz | 8.000 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.000 MHz | 12.50 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.50 MHz | 15.00 MHz | 1.000 MHz | (-) | (-) | (-) | (-) | (-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

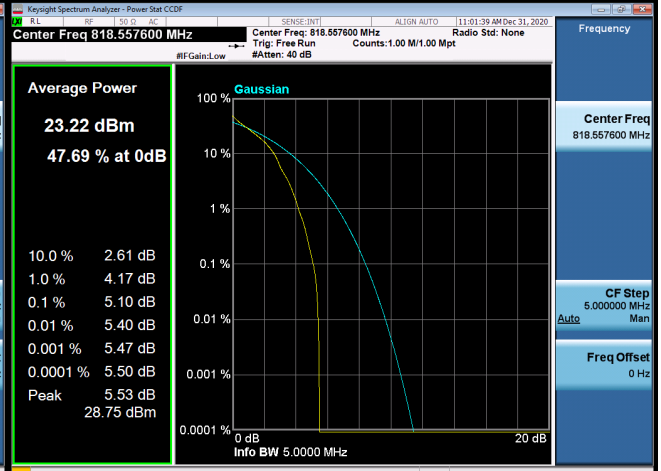
APPENDIX H - PEAK TO AVERAGE RATIO

LTE Band 26_1.4M Spectrum Plot

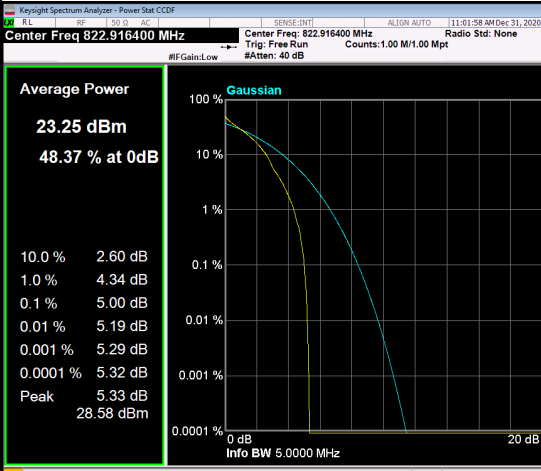
QPSK-26697



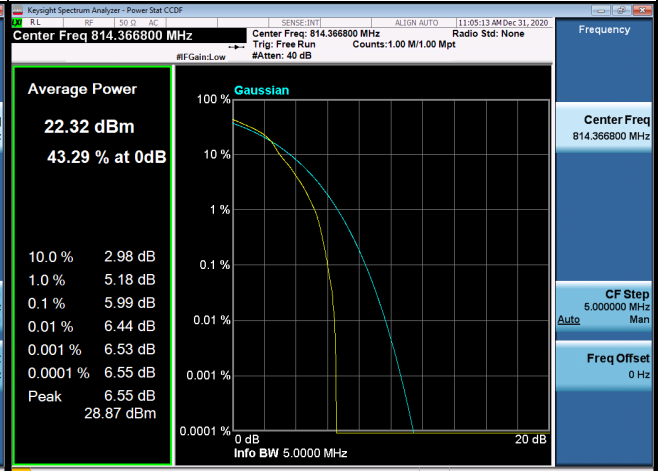
QPSK-26740



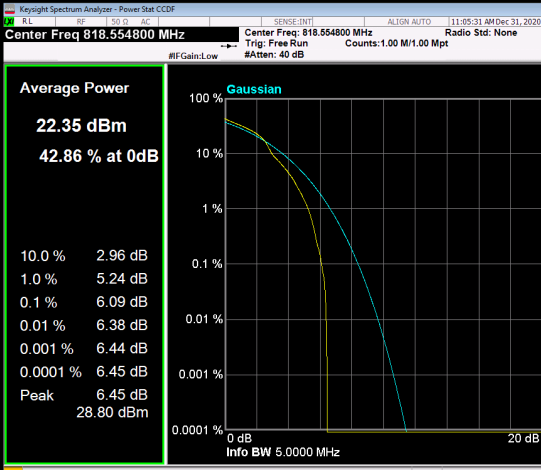
QPSK-26783



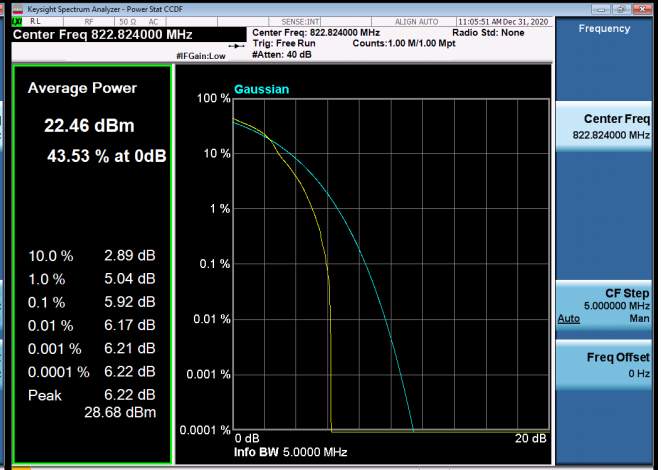
16QAM-26697



16QAM-26740

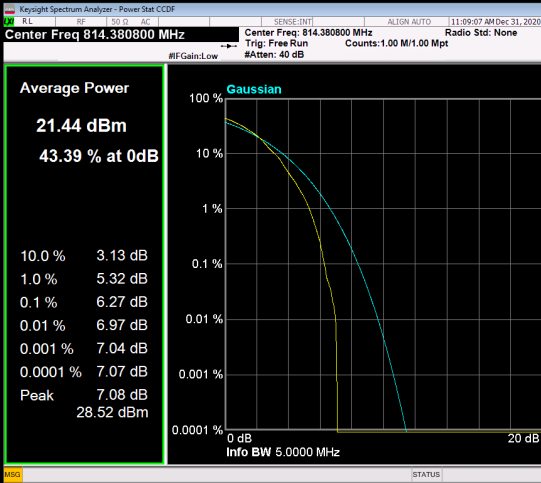


16QAM-26783

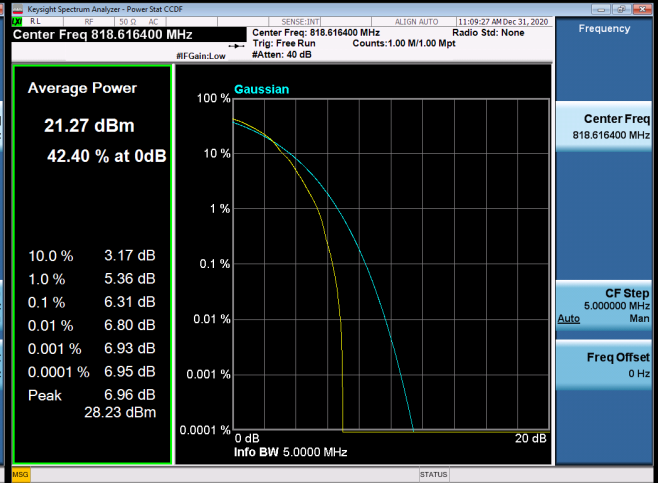


LTE Band 26_1.4M Spectrum Plot

64QAM-26697



64QAM-26740



64QAM-26783

