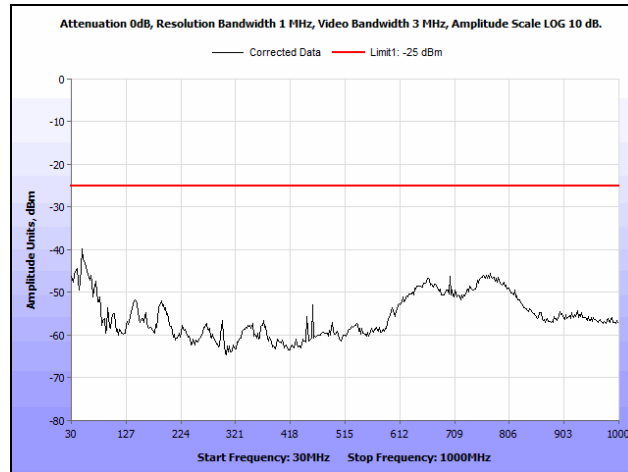
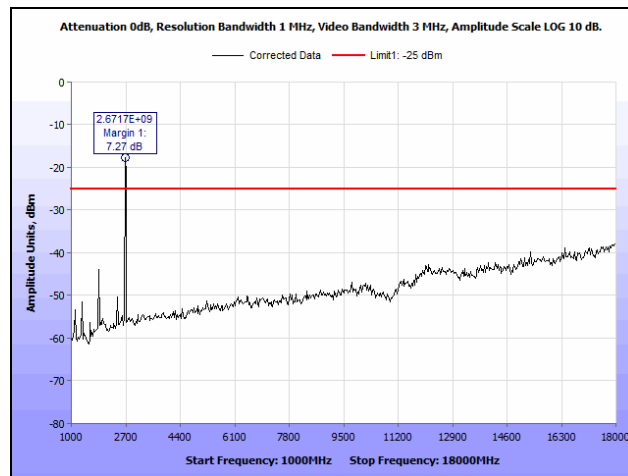


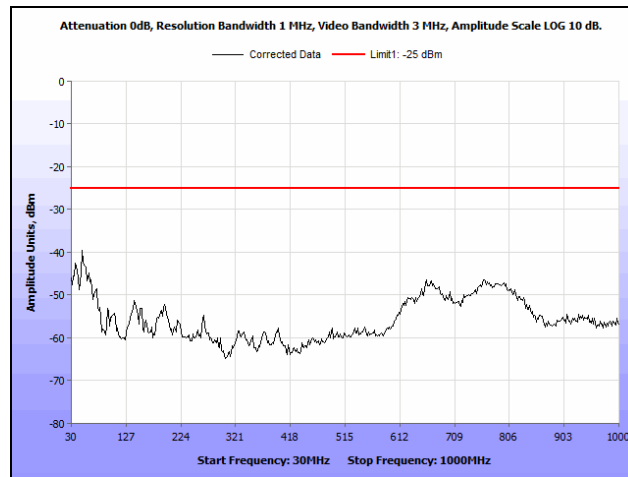
Plot 64. Radiated Spurious Emissions, QPSK, Mid Channel, Port 1, 1 GHz – 18 GHz



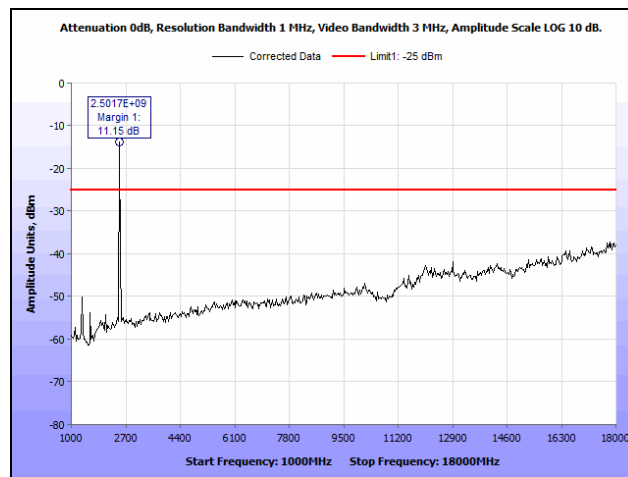
Plot 65. Radiated Spurious Emissions, QPSK, High Channel, Port 1, 30 MHz – 1 GHz



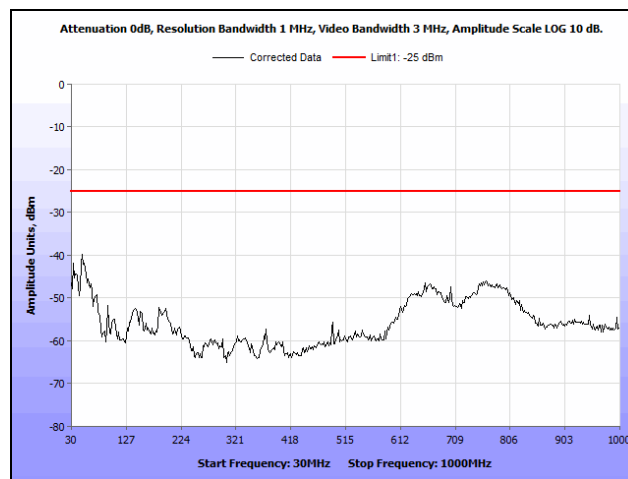
Plot 66. Radiated Spurious Emissions, QPSK, High Channel, Port 1, 1 GHz – 18 GHz



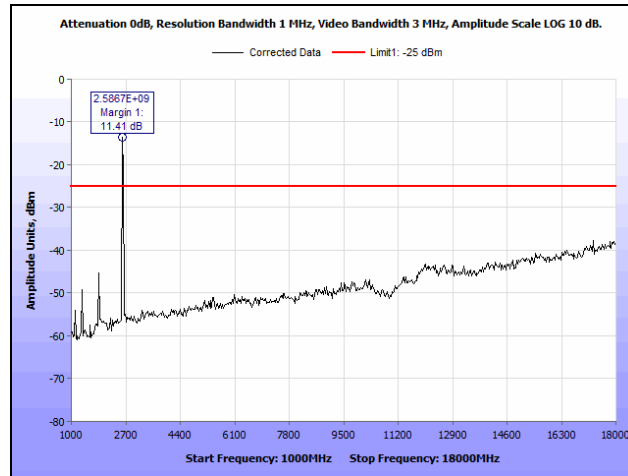
Plot 67. Radiated Spurious Emissions, QPSK, Low Channel, Port 2, 30 MHz – 1 GHz



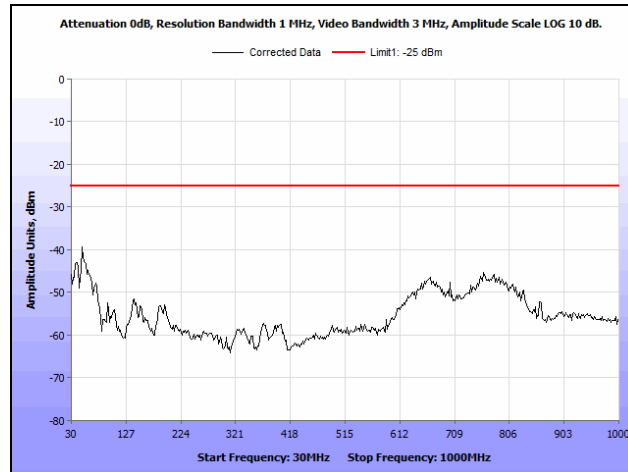
Plot 68. Radiated Spurious Emissions, QPSK, Low Channel, Port 2, 1 GHz – 18 GHz



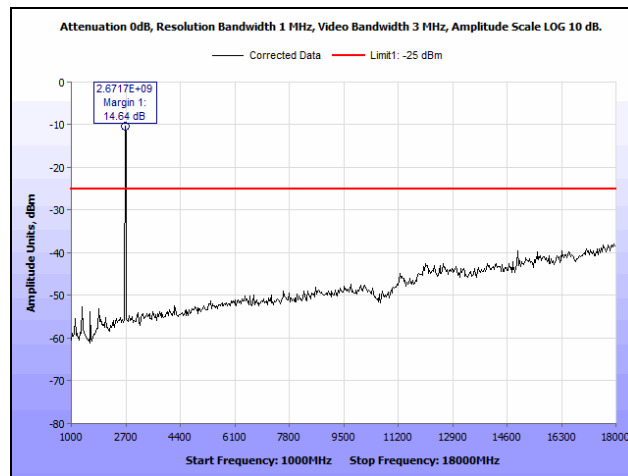
Plot 69. Radiated Spurious Emissions, QPSK, Mid Channel, Port 2, 30 MHz – 1 GHz



Plot 70. Radiated Spurious Emissions, QPSK, Mid Channel, Port 2, 1 GHz – 18 GHz



Plot 71. Radiated Spurious Emissions, QPSK, High Channel, Port 2, 30 MHz – 1 GHz



Plot 72. Radiated Spurious Emissions, QPSK, High Channel, Port 2, 1 GHz – 18 GHz



## Electromagnetic Compatibility Criteria for Intentional Radiators

### § 2.1051 Spurious Emissions at Antenna Terminals

**Test Requirement(s):** § 2.1051 and 27.53(l) **Measurements required: Spurious emissions at antenna terminals:** The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in § 2.1049 as appropriate.

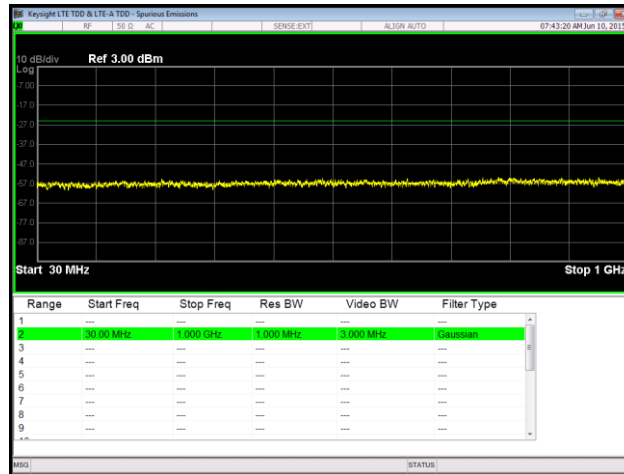
**Test Procedures:** A modulated carrier generated by the EUT/its support equipment; a spectrum analyzer was connected to the Downlink RF port. The spectrum analyzer was set to 1MHz RBW and 3MHz VBW. The spectrum was investigated from 30MHz to the 10<sup>th</sup> harmonic of the carrier.

**Test Results:** Equipment complies with Section 2.1051 and 27.53(g). The following pages show measurements of Spurious Emission plots. All Spurious Emissions are below -25dBm (the 1-26GHz plots were unable to display the limit line at -25dBm for instrumentation configuration reasons).

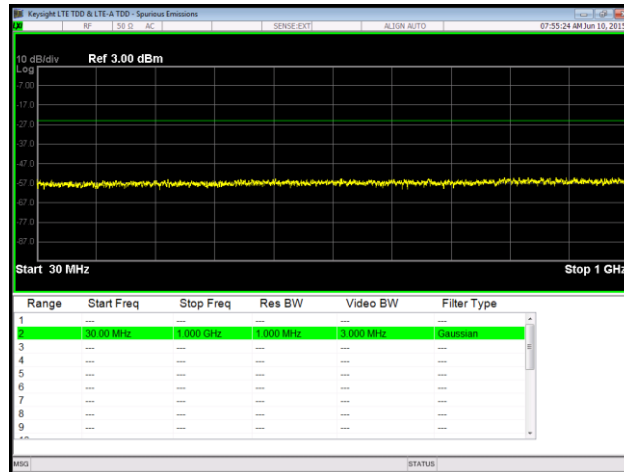
The following analysis and plots are included below to illustrate compliance with the required rule parts.

**Test Engineer(s):** Benjamin Taylor

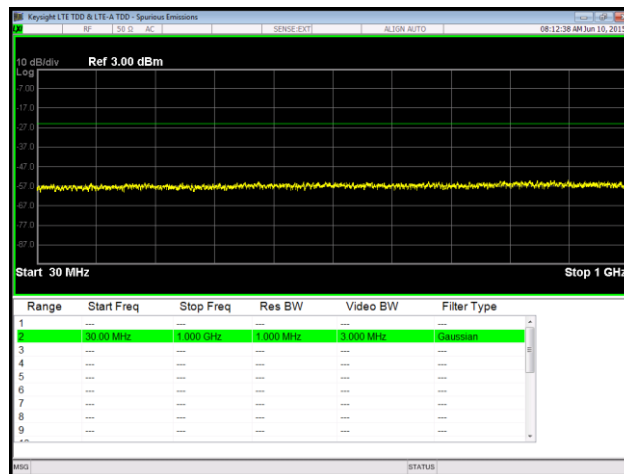
**Test Date(s):** 06/11/15



Plot 73. Spurious Emissions at Antenna Terminal, 16QAM, Low Channel, Port 1, 30 MHz – 1 GHz, RBW



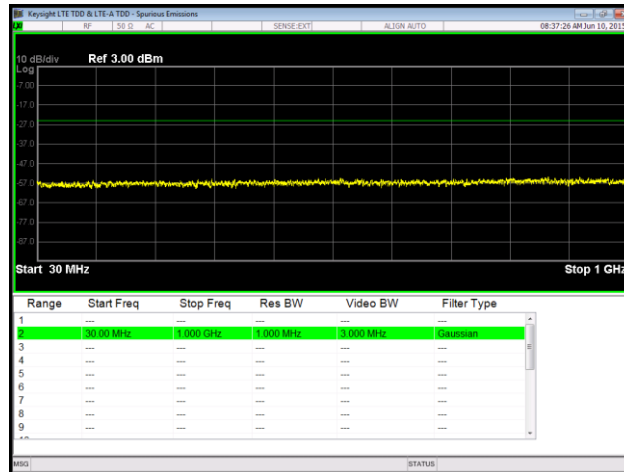
Plot 74. Spurious Emissions at Antenna Terminal, 16QAM, Mid Channel, Port 1, 30 MHz – 1 GHz, RBW



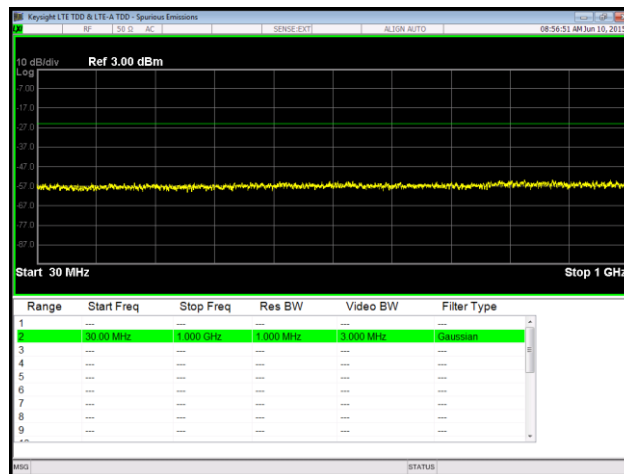
Plot 75. Spurious Emissions at Antenna Terminal, 16QAM, High Channel, Port 1, 30 MHz – 1 GHz, RBW



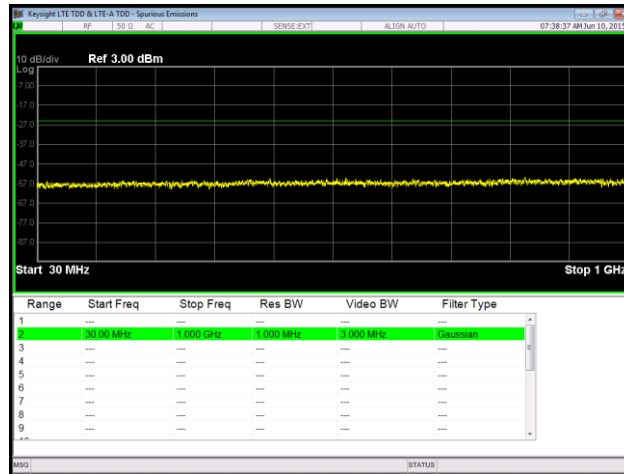
Plot 76. Spurious Emissions at Antenna Terminal, 16QAM, Low Channel, Port 2, 30 MHz – 1 GHz, RBW



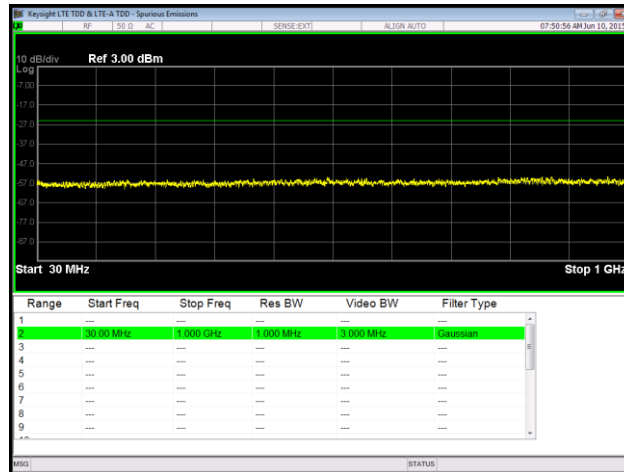
Plot 77. Spurious Emissions at Antenna Terminal, 16QAM, Mid Channel, Port 2, 30 MHz – 1 GHz, RBW



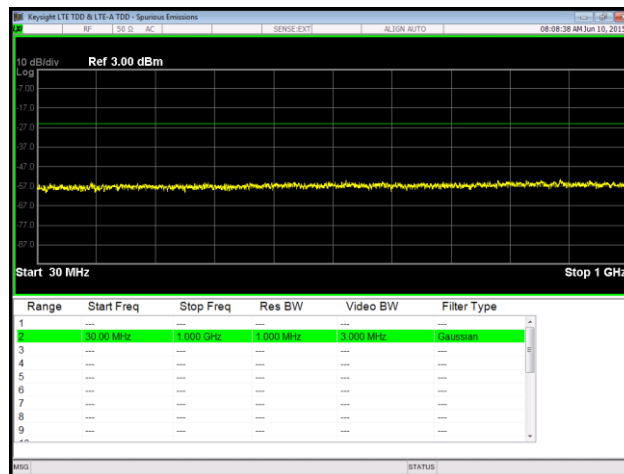
Plot 78. Spurious Emissions at Antenna Terminal, 16QAM, High Channel, Port 2, 30 MHz – 1 GHz, RBW



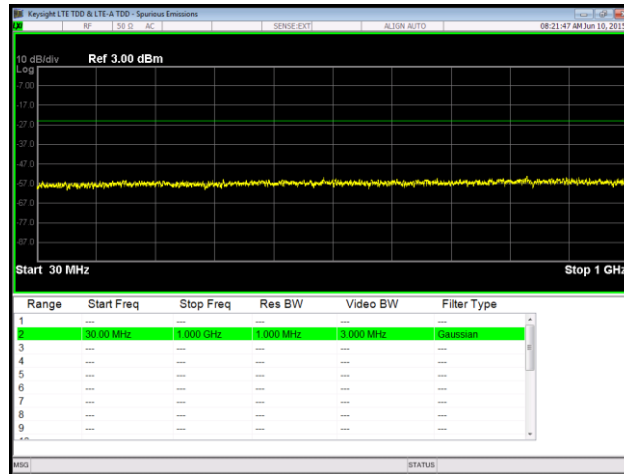
Plot 79. Spurious Emissions at Antenna Terminal, 64QAM, Low Channel, Port 1, 30 MHz – 1 GHz, RBW



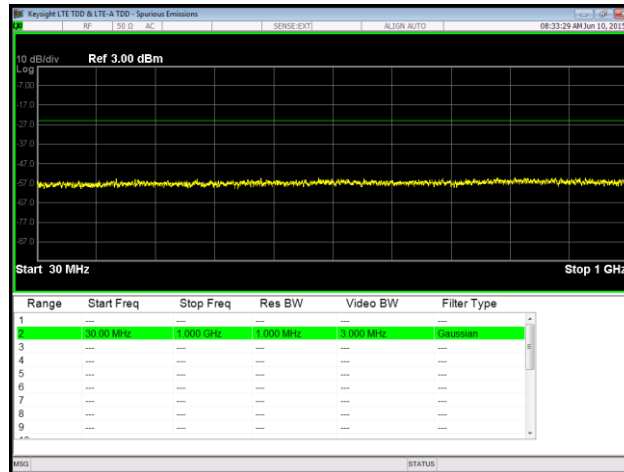
Plot 80. Spurious Emissions at Antenna Terminal, 64QAM, Mid Channel, Port 1, 30 MHz – 1 GHz, RBW



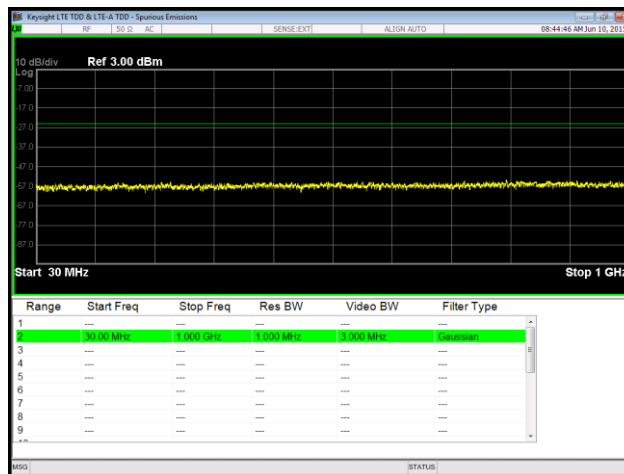
Plot 81. Spurious Emissions at Antenna Terminal, 64QAM, High Channel, Port 1, 30 MHz – 1 GHz, RBW



Plot 82. Spurious Emissions at Antenna Terminal, 64QAM, Low Channel, Port 2, 30 MHz – 1 GHz, RBW

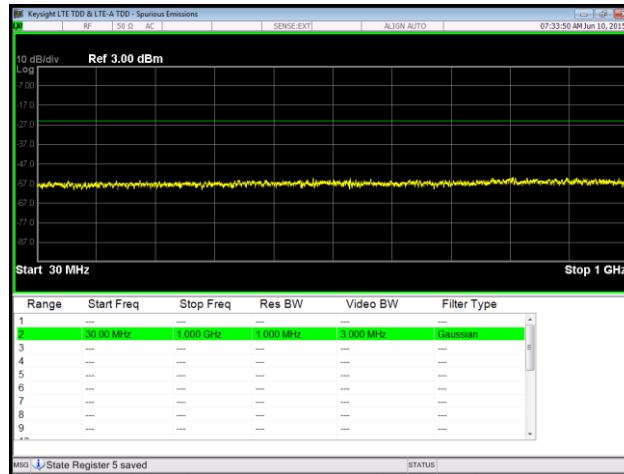


Plot 83. Spurious Emissions at Antenna Terminal, 64QAM, Mid Channel, Port 2, 30 MHz – 1 GHz, RBW

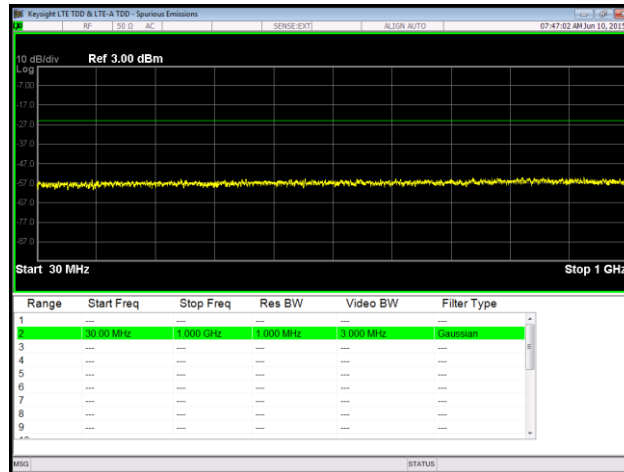


Plot 84. Spurious Emissions at Antenna Terminal, 64QAM, High Channel, Port 2, 30 MHz – 1 GHz, RBW

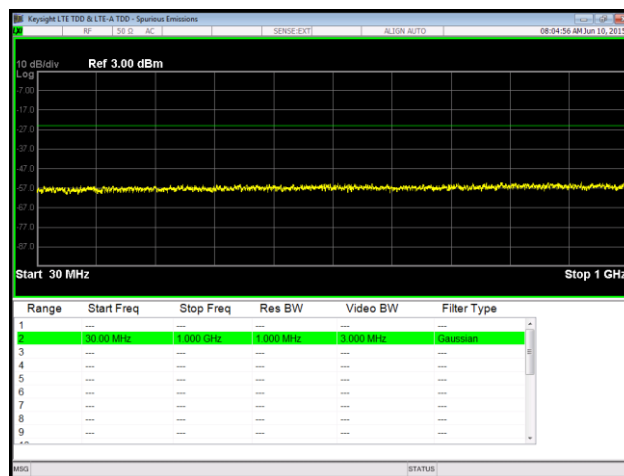




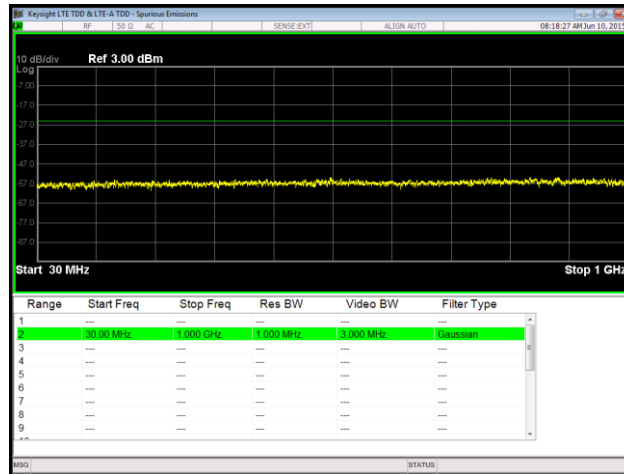
Plot 85. Spurious Emissions at Antenna Terminal, QPSK, Low Channel, Port 1, 30 MHz – 1 GHz, RBW



Plot 86. Spurious Emissions at Antenna Terminal, QPSK, Mid Channel, Port 1, 30 MHz – 1 GHz, RBW



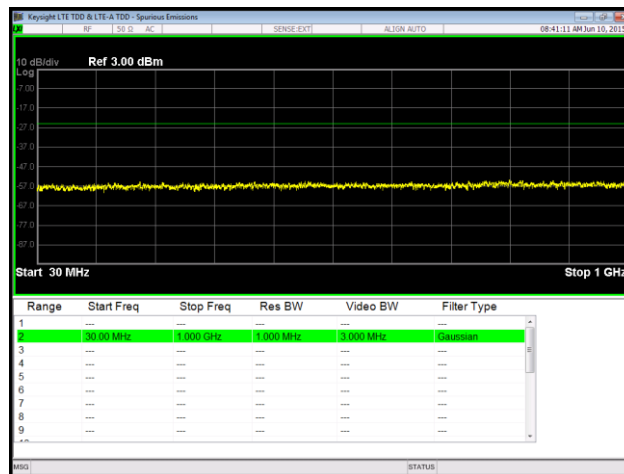
Plot 87. Spurious Emissions at Antenna Terminal, QPSK, High Channel, Port 1, 30 MHz – 1 GHz, RBW



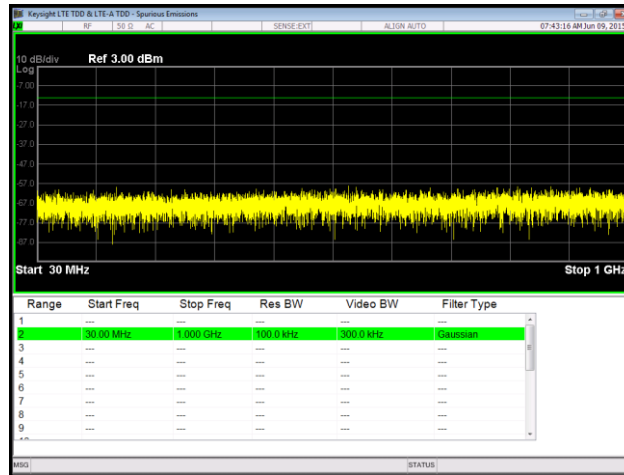
Plot 88. Spurious Emissions at Antenna Terminal, QPSK, Low Channel, Port 2, 30 MHz – 1 GHz, RBW



Plot 89. Spurious Emissions at Antenna Terminal, QPSK, Mid Channel, Port 2, 30 MHz – 1 GHz, RBW



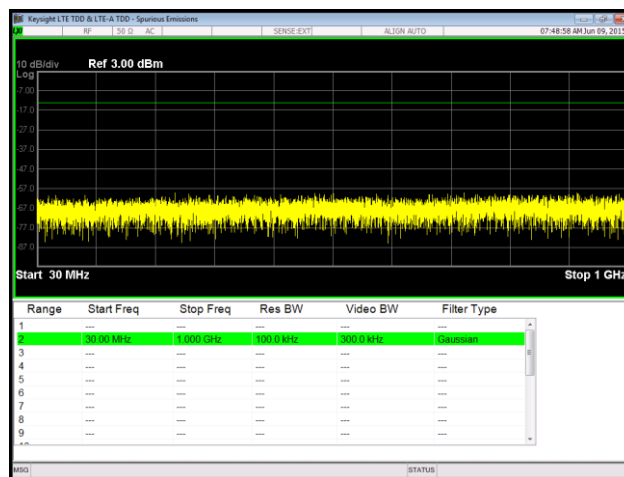
Plot 90. Spurious Emissions at Antenna Terminal, QPSK, High Channel, Port 2, 30 MHz – 1 GHz, RBW



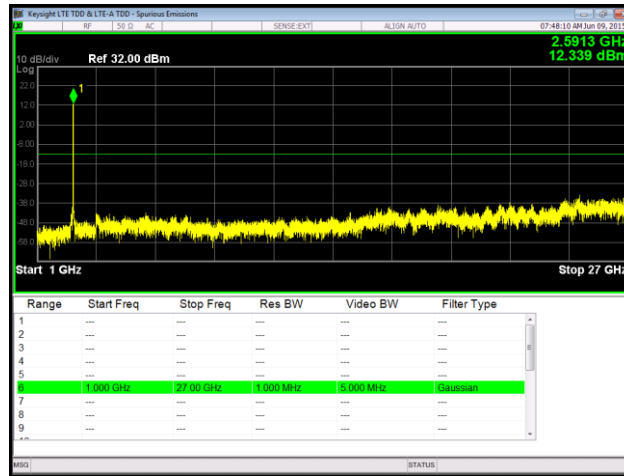
Plot 91. Spurious Emissions at Antenna Terminal, 16QAM, Low Channel, Port 1, 30 MHz – 1 GHz



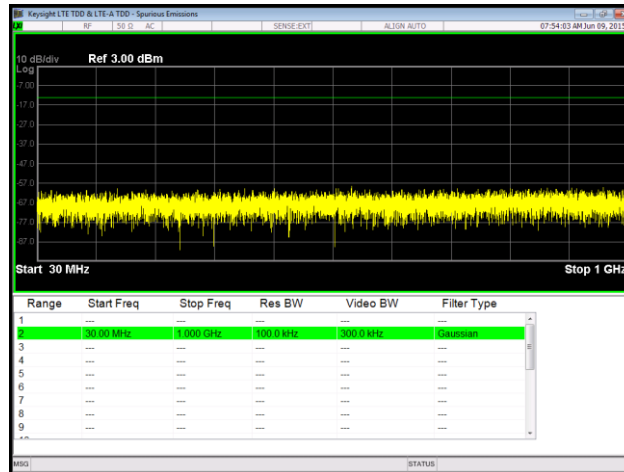
Plot 92. Spurious Emissions at Antenna Terminal, 16QAM, Low Channel, Port 1, 1 GHz – 27 GHz



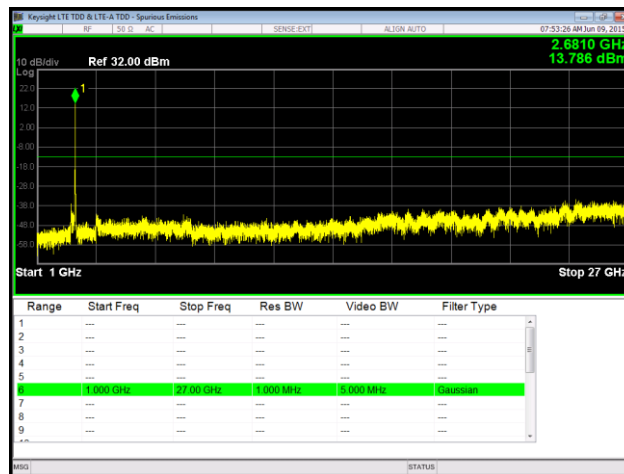
Plot 93. Spurious Emissions at Antenna Terminal, 16QAM, Mid Channel, Port 1, 30 MHz – 1 GHz



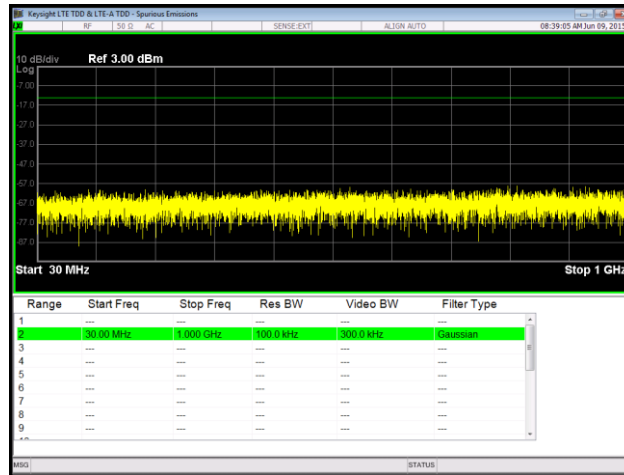
Plot 94. Spurious Emissions at Antenna Terminal, 16QAM, Mid Channel, Port 1, 1 GHz – 27 GHz



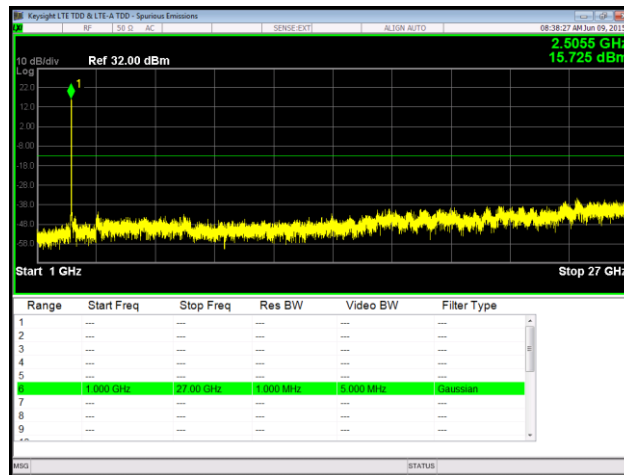
Plot 95. Spurious Emissions at Antenna Terminal, 16QAM, High Channel, Port 1, 30 MHz – 1 GHz



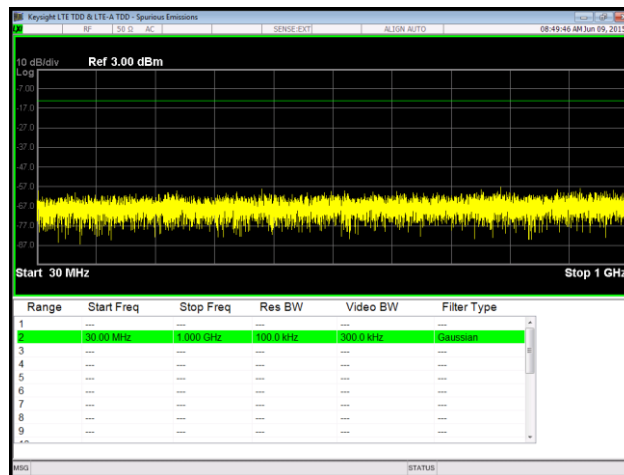
Plot 96. Spurious Emissions at Antenna Terminal, 16QAM, High Channel, Port 1, 1 GHz – 27 GHz



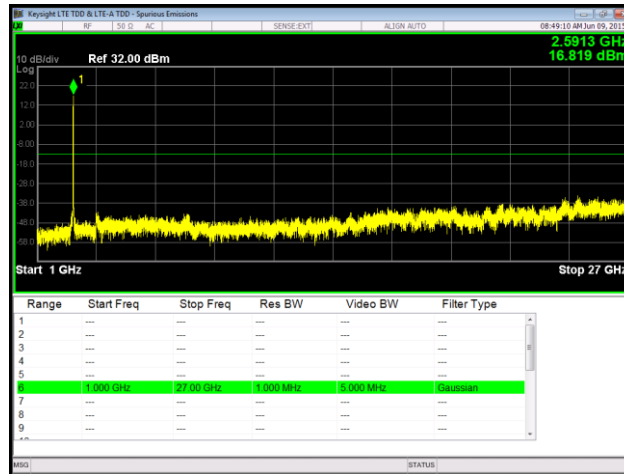
Plot 97. Spurious Emissions at Antenna Terminal, 16QAM, Low Channel, Port 2, 30 MHz – 1 GHz



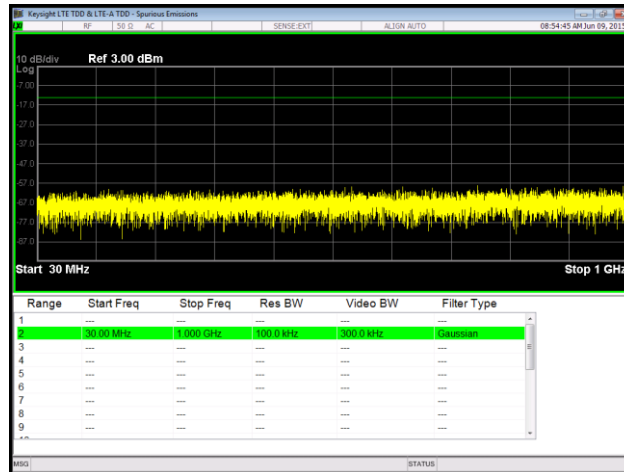
Plot 98. Spurious Emissions at Antenna Terminal, 16QAM, Low Channel, Port 2, 1 GHz – 27 GHz



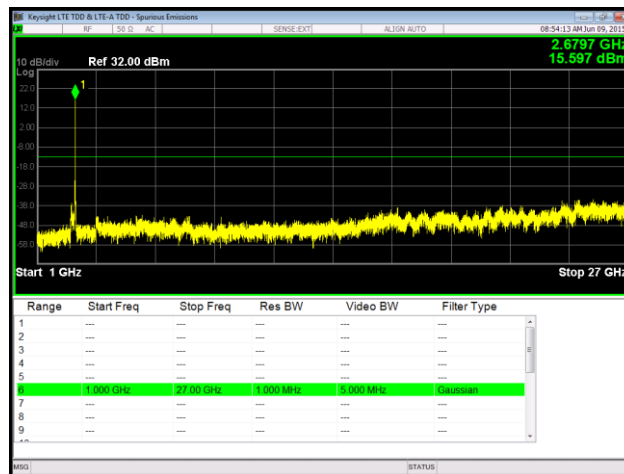
Plot 99. Spurious Emissions at Antenna Terminal, 16QAM, Mid Channel, Port 2, 30 MHz – 1 GHz



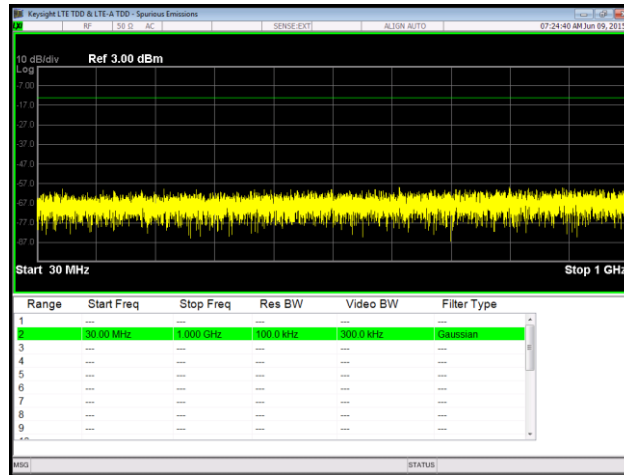
Plot 100. Spurious Emissions at Antenna Terminal, 16QAM, Mid Channel, Port 2, 1 GHz – 27 GHz



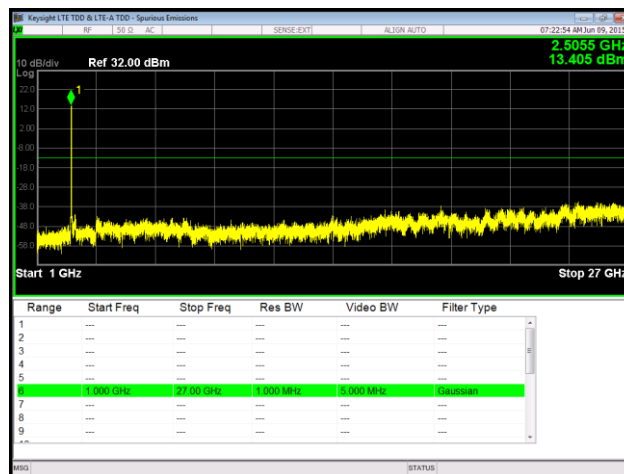
Plot 101. Spurious Emissions at Antenna Terminal, 16QAM, High Channel, Port 2, 30 MHz – 1 GHz



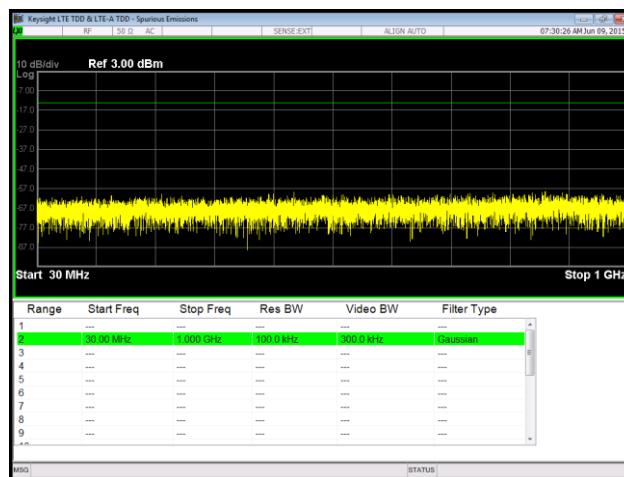
Plot 102. Spurious Emissions at Antenna Terminal, 16QAM, High Channel, Port 2, 1 GHz – 27 GHz



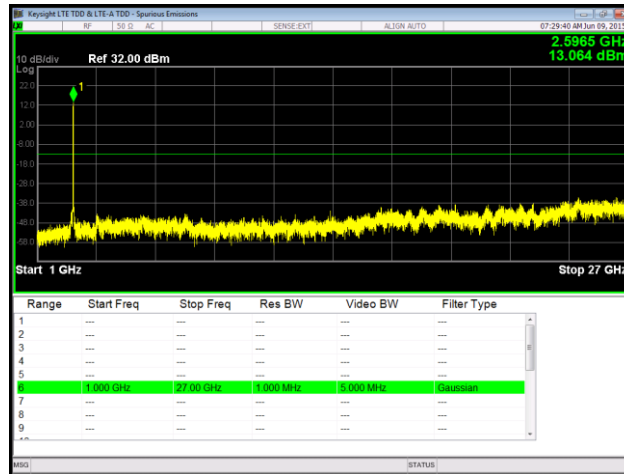
Plot 103. Spurious Emissions at Antenna Terminal, 64QAM, Low Channel, Port 1, 30 MHz – 1 GHz



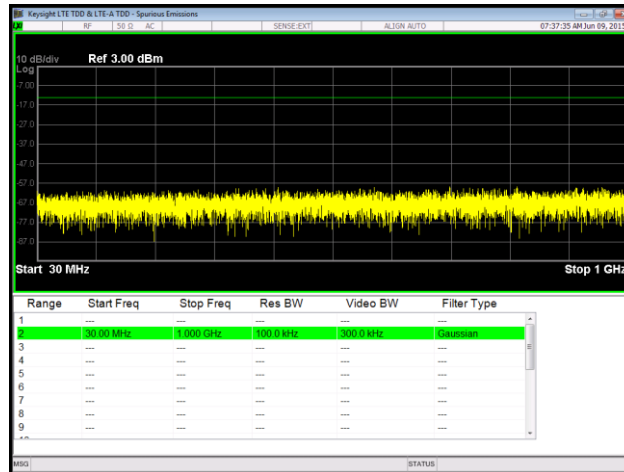
Plot 104. Spurious Emissions at Antenna Terminal, 64QAM, Low Channel, Port 1, 1 GHz – 27 GHz



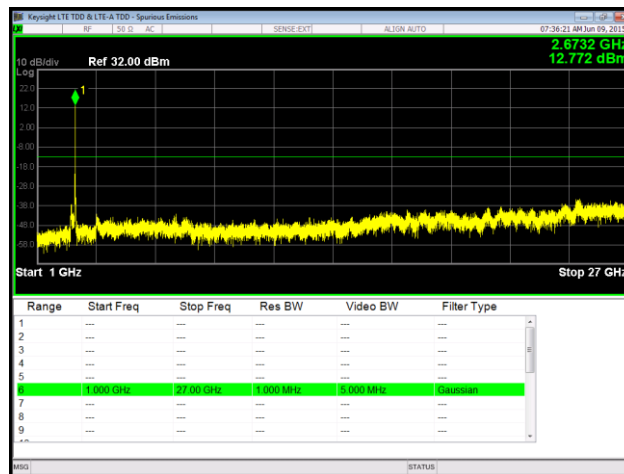
Plot 105. Spurious Emissions at Antenna Terminal, 64QAM, Mid Channel, Port 1, 30 MHz – 1 GHz



Plot 106. Spurious Emissions at Antenna Terminal, 64QAM, Mid Channel, Port 1, 1 GHz – 27 GHz

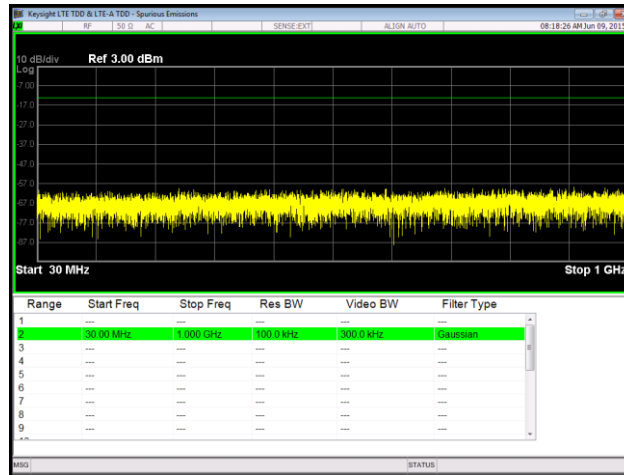


Plot 107. Spurious Emissions at Antenna Terminal, 64QAM, High Channel, Port 1, 30 MHz – 1 GHz

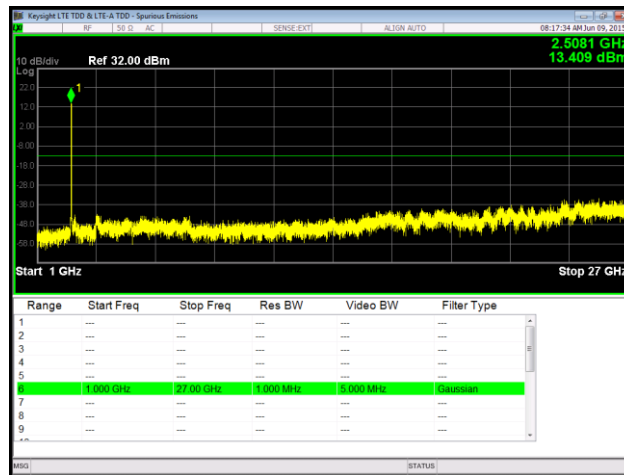


Plot 108. Spurious Emissions at Antenna Terminal, 64QAM, High Channel, Port 1, 1 GHz – 27 GHz

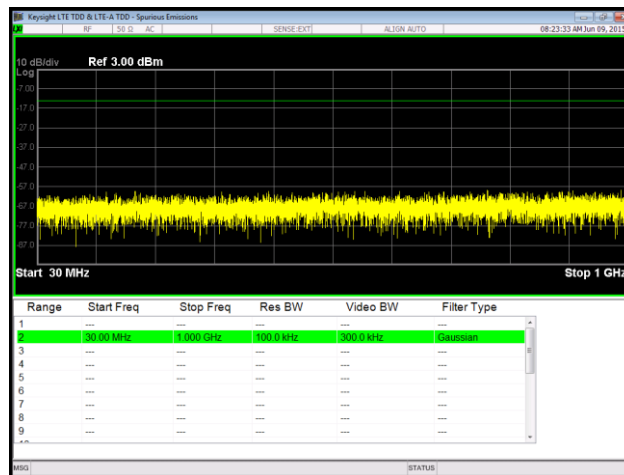




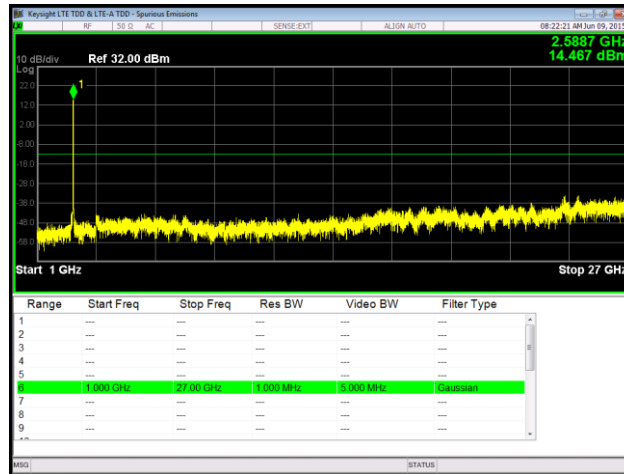
Plot 109. Spurious Emissions at Antenna Terminal, 64QAM, Low Channel, Port 2, 30 MHz – 1 GHz



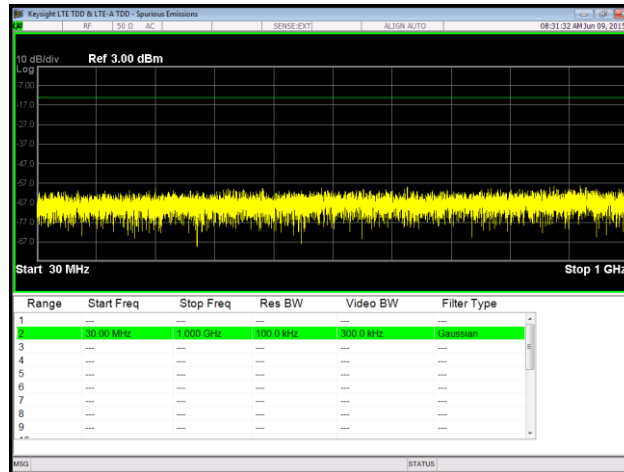
Plot 110. Spurious Emissions at Antenna Terminal, 64QAM, Low Channel, Port 2, 1 GHz – 27 GHz



Plot 111. Spurious Emissions at Antenna Terminal, 64QAM, Mid Channel, Port 2, 30 MHz – 1 GHz



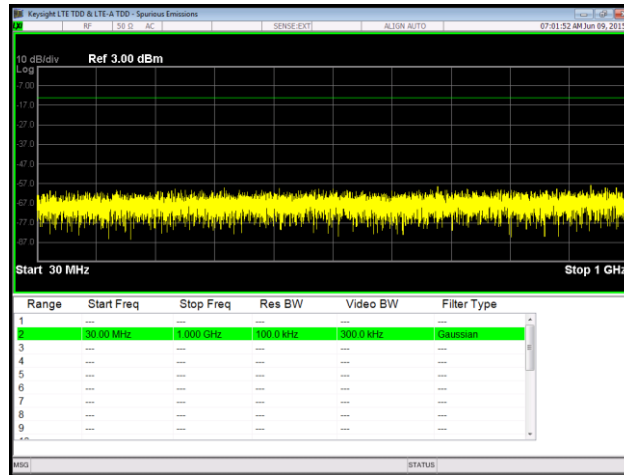
Plot 112. Spurious Emissions at Antenna Terminal, 64QAM, Mid Channel, Port 2, 1 GHz – 27 GHz



Plot 113. Spurious Emissions at Antenna Terminal, 64QAM, High Channel, Port 2, 30 MHz – 1 GHz



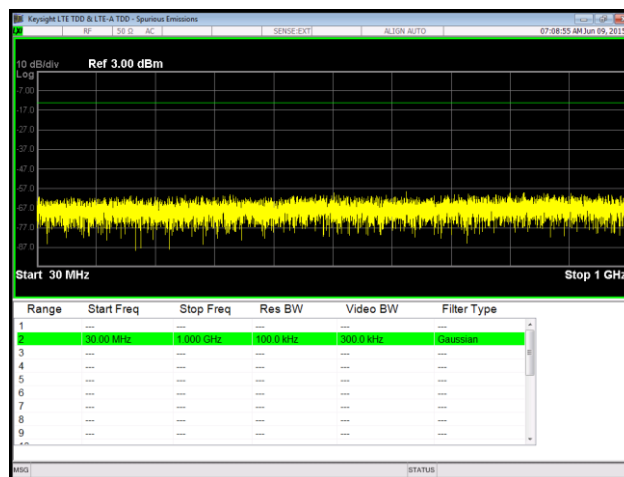
Plot 114. Spurious Emissions at Antenna Terminal, 64QAM, High Channel, Port 2, 1 GHz – 27 GHz



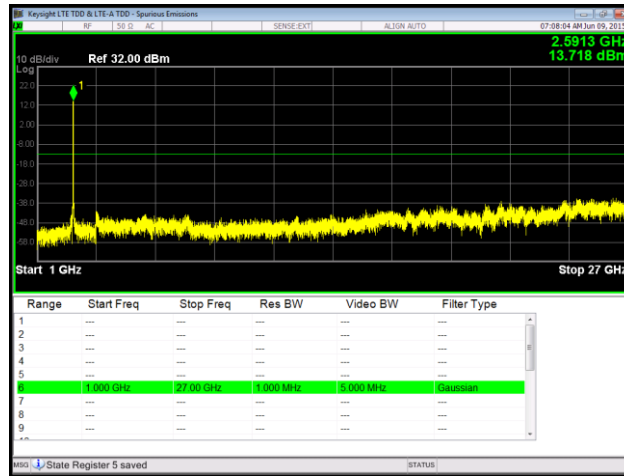
Plot 115. Spurious Emissions at Antenna Terminal, QPSK, Low Channel, Port 1, 30 MHz – 1 GHz



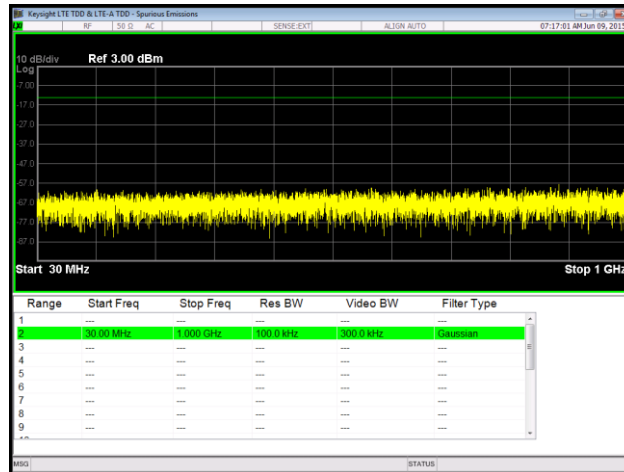
Plot 116. Spurious Emissions at Antenna Terminal, QPSK, Low Channel, Port 1, 1 GHz – 27 GHz



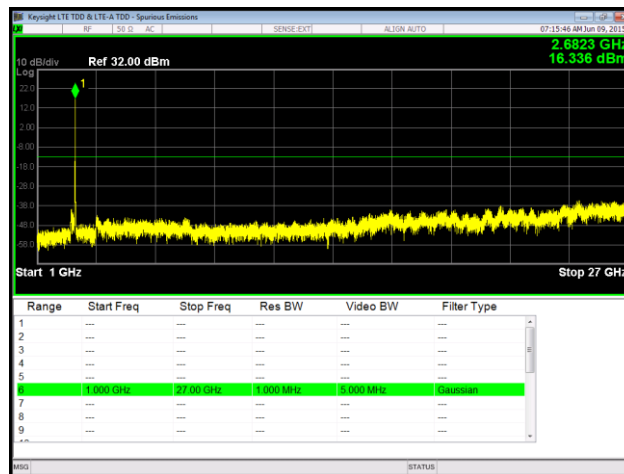
Plot 117. Spurious Emissions at Antenna Terminal, QPSK, Mid Channel, Port 1, 30 MHz – 1 GHz



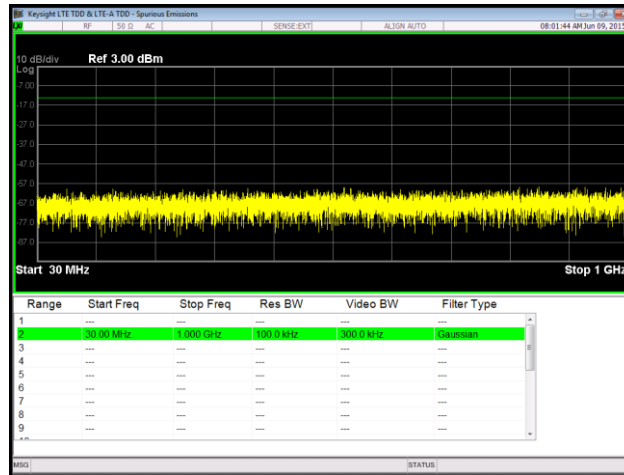
Plot 118. Spurious Emissions at Antenna Terminal, QPSK, Mid Channel, Port 1, 1 GHz – 27 GHz



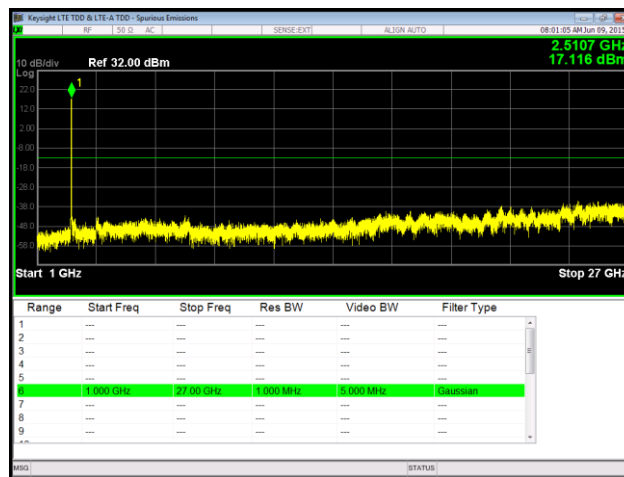
Plot 119. Spurious Emissions at Antenna Terminal, QPSK, High Channel, Port 1, 30 MHz – 1 GHz



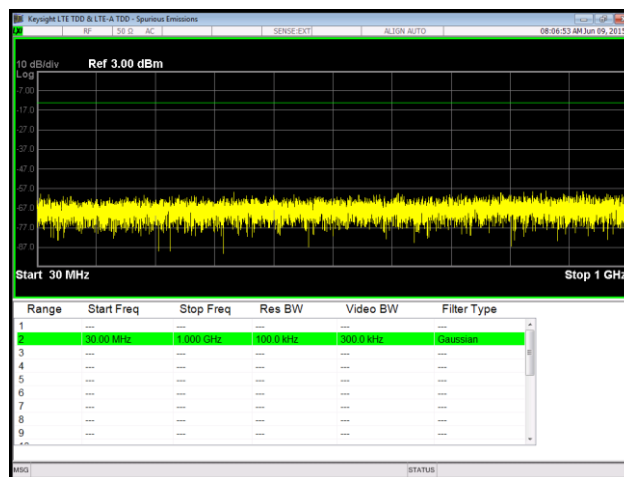
Plot 120. Spurious Emissions at Antenna Terminal, QPSK, High Channel, Port 1, 1 GHz – 27 GHz



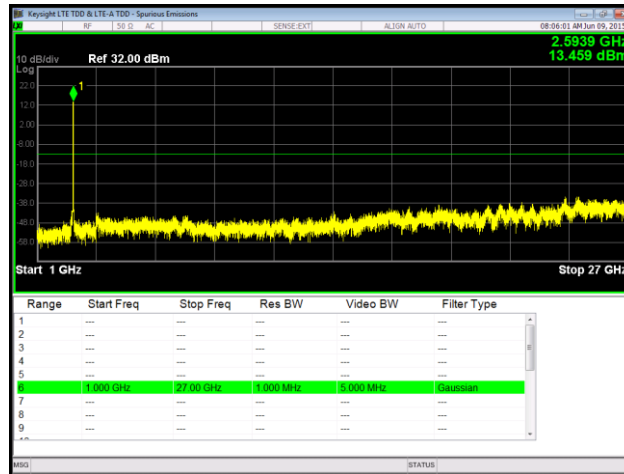
Plot 121. Spurious Emissions at Antenna Terminal, QPSK, Low Channel, Port 2, 30 MHz – 1 GHz



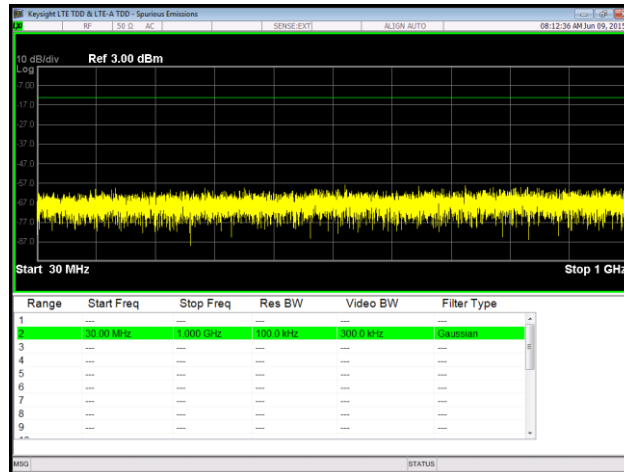
Plot 122. Spurious Emissions at Antenna Terminal, QPSK, Low Channel, Port 2, 1 GHz – 27 GHz



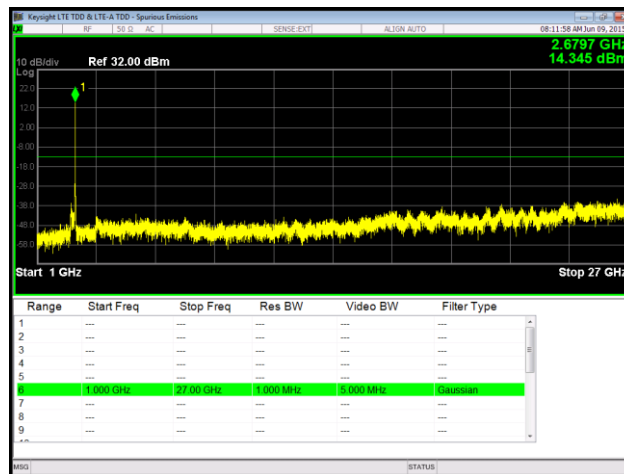
Plot 123. Spurious Emissions at Antenna Terminal, QPSK, Mid Channel, Port 2, 30 MHz – 1 GHz



Plot 124. Spurious Emissions at Antenna Terminal, QPSK, Mid Channel, Port 2, 1 GHz – 27 GHz



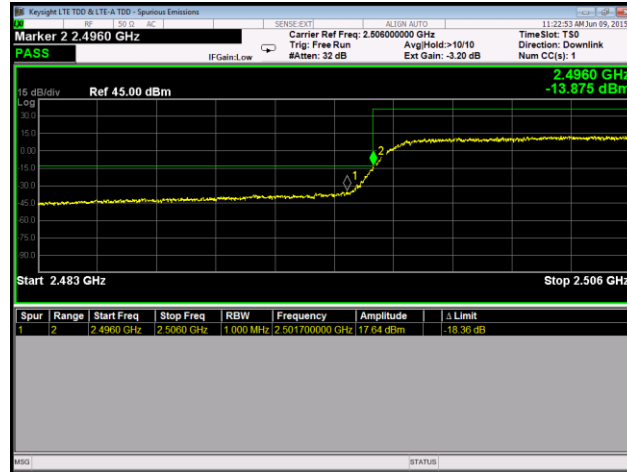
Plot 125. Spurious Emissions at Antenna Terminal, QPSK, High Channel, Port 2, 30 MHz – 1 GHz



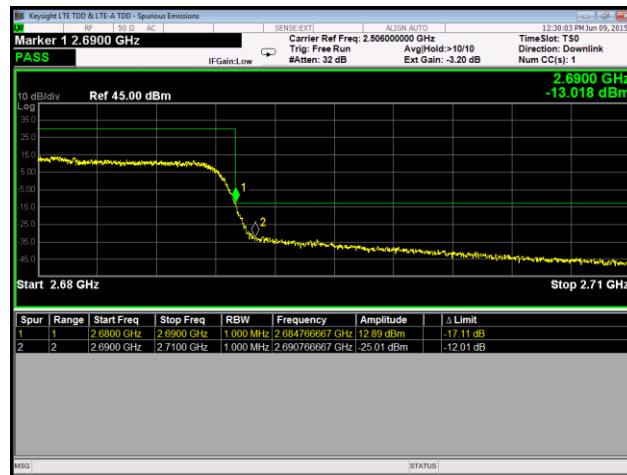
Plot 126. Spurious Emissions at Antenna Terminal, QPSK, High Channel, Port 2, 1 GHz – 27 GHz

## Band Edge Measurements

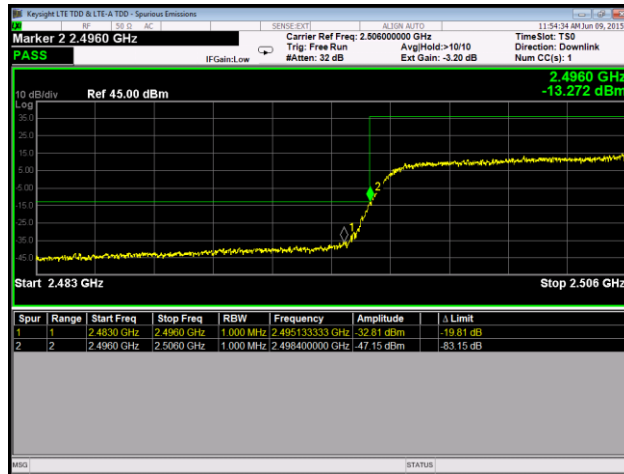
**Test Procedures:** The transmitter was turned on. Measurements were performed of the low and high Channels. The plots shown demonstrated that the EUT Emissions at the Band's Edges are below -13dBm.



Plot 127. Conducted Band Edge, 16QAM, Low Channel, Port 1



Plot 128. Conducted Band Edge, 16QAM, High Channel, Port 1



Plot 129. Conducted Band Edge, 16QAM, Low Channel, Port 2



Plot 130. Conducted Band Edge, 16QAM, High Channel, Port 2

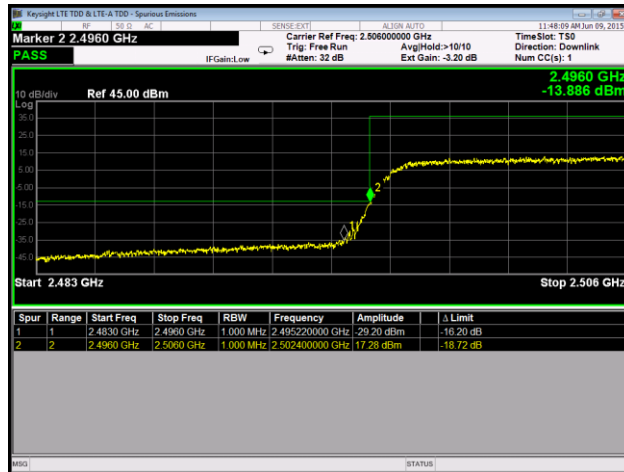


Plot 131. Conducted Band Edge, 64QAM, Low Channel, Port 1





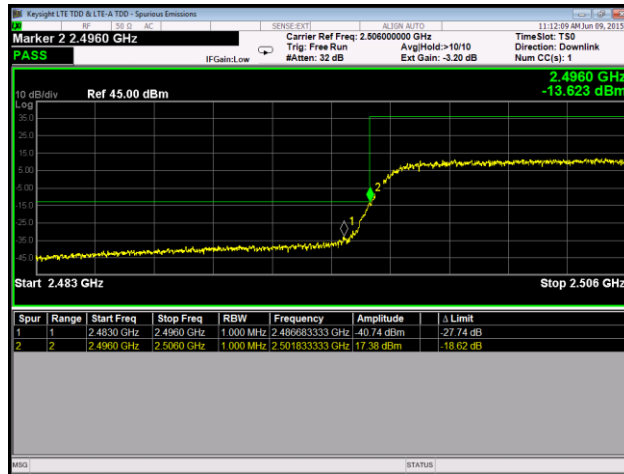
Plot 132. Conducted Band Edge, 64QAM, High Channel, Port 1



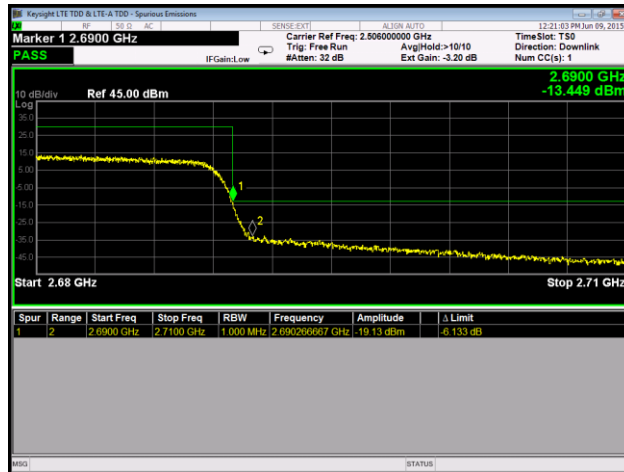
Plot 133. Conducted Band Edge, 64QAM, Low Channel, Port 2



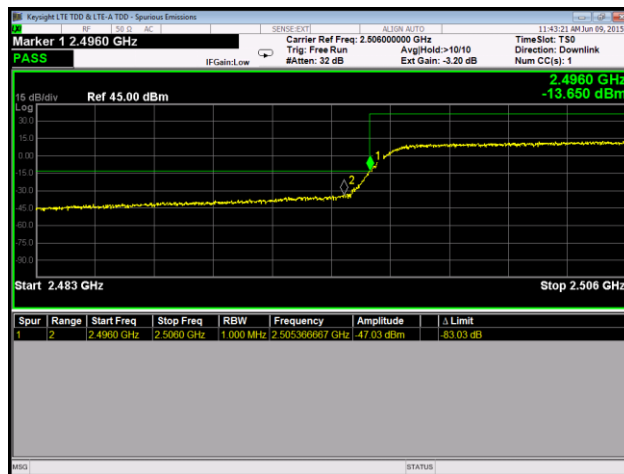
Plot 134. Conducted Band Edge, 64QAM, High Channel, Port 2



Plot 135. Conducted Band Edge, QPSK, Low Channel, Port 1



Plot 136. Conducted Band Edge, QPSK, High Channel, Port 1



Plot 137. Conducted Band Edge, QPSK, Low Channel, Port 2



Plot 138. Conducted Band Edge, QPSK, High Channel, Port 2



## Electromagnetic Compatibility Criteria for Intentional Radiators

### §2.1055 Frequency Stability

**Test Requirement(s):** §2.1055

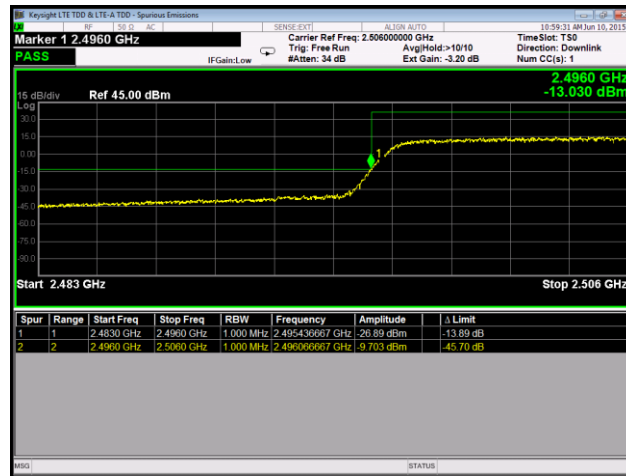
**Test Procedures:** As required by 47 CFR 2.1055, *Frequency Stability measurements* were made at the RF output terminals using a Spectrum Analyzer.

The EUT was set up in an Environmental chamber with the support equipment outside the chamber. The EUT was set to transmit on the low channel. The out of band emissions were then compared to the -13dBm limit. The same procedure was repeated on the high channel. This procedure was done at a temperature range of -30C to +50C. At the ambient temperature, in addition to the measurements at the nominal voltage, the voltage was varied to +/- 15% and measurements were taken at those voltages.

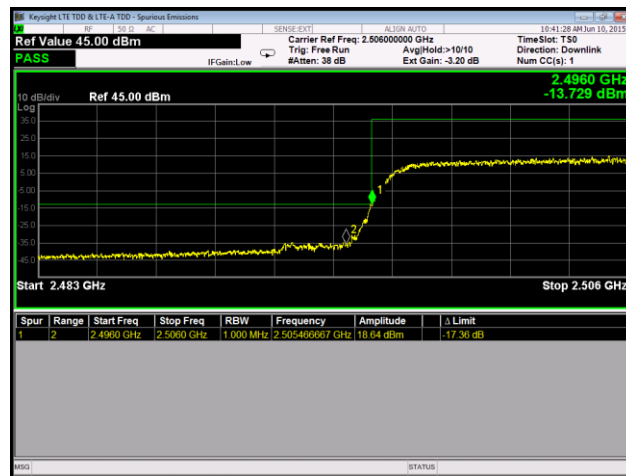
**Test Results:** Equipment is compliant with Section 2.1055. The EUT intentionally disabled itself from operating at -20 C and below (there is no measurement shown for -20 and -30C).

**Test Engineer(s):** Benjamin Taylor

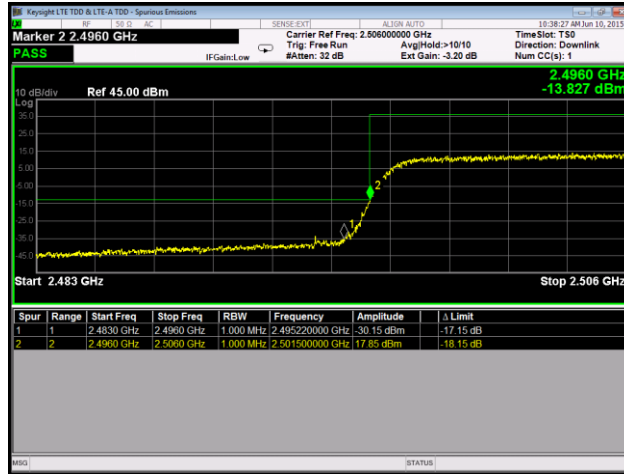
**Test Date(s):** 06/20/15



Plot 140. Frequency Stability, QPSK, Low Channel, Port 1, -10°C



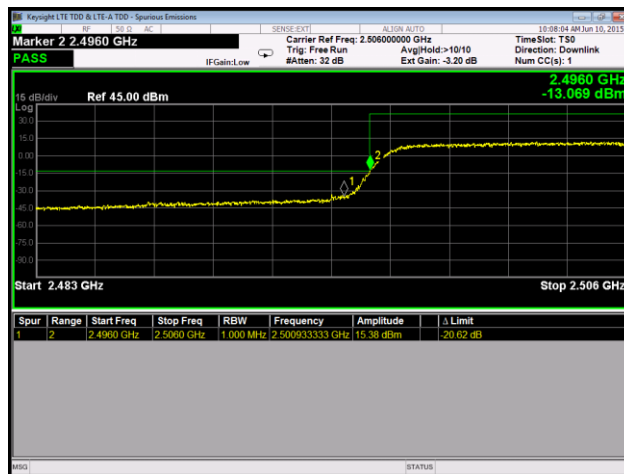
Plot 139. Frequency Stability, QPSK, Low Channel, Port 1, 0°C



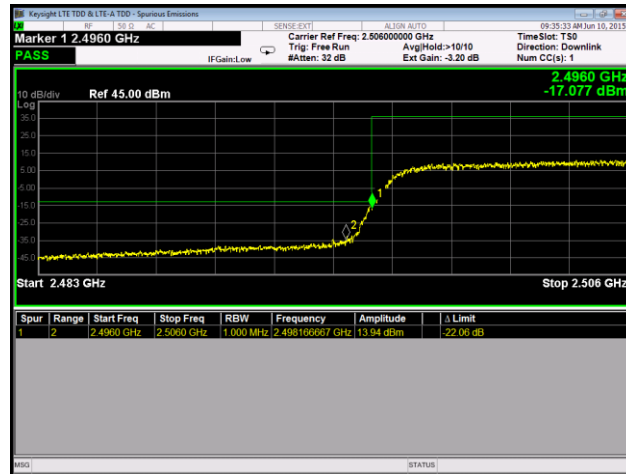
Plot 140. Frequency Stability, QPSK, Low Channel, Port 1, 10°C



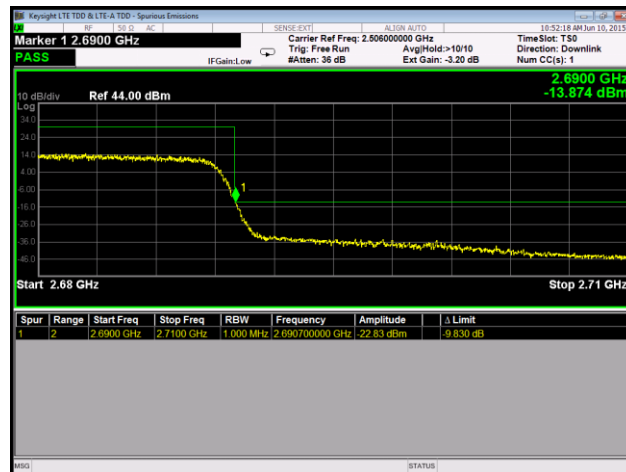
Plot 141. Frequency Stability, QPSK, Low Channel, Port 1, 30°C



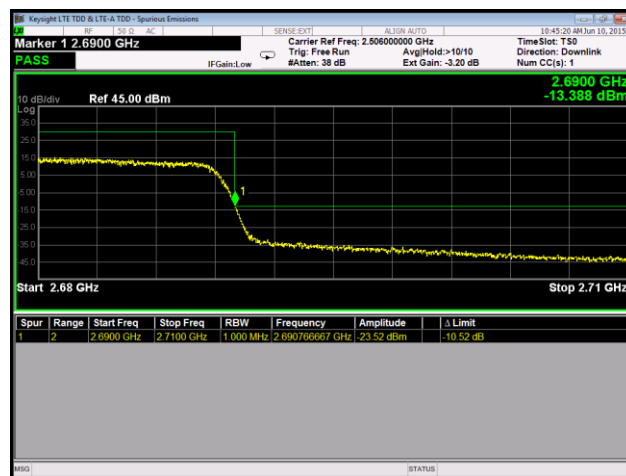
Plot 142. Frequency Stability, QPSK, Low Channel, Port 1, 40°C



Plot 143. Frequency Stability, QPSK, Low Channel, Port 1, 50°C



Plot 144. Frequency Stability, QPSK, High Channel, Port 1, -10°C



Plot 145. Frequency Stability, QPSK, High Channel, Port 1, 0°C



Plot 146. Frequency Stability, QPSK, High Channel, Port 1, 10°C



Plot 147. Frequency Stability, QPSK, High Channel, Port 1, 30°C



Plot 148. Frequency Stability, QPSK, High Channel, Port 1, 40°C





Plot 149. Frequency Stability, QPSK, High Channel, Port 1, 50°C



## IV. Test Equipment



## Test Equipment

Calibrated test equipment utilized during testing was maintained in a current state of calibration per the requirements of ISO/IEC 17025:2005.

MET #	Equipment	Manufacturer	Model#	Cal Date	Cal Due
RENTAL	10HZ-26.5GHZ MXA SPECTRUM/SIGNAL ANALYZER	AGILENT	MXA N9020A-526	04/09/2015	04/09/2016
1T4300A	SEMI-ANECHOIC CHAMBER # 1 (FCC)	EMC TEST SYSTEMS	NONE	07/24/2012	07/24/2015
1T4751	ANTENNA - BILOG	SUNOL SCIENCES	JB6	07/29/2014	01/29/2016
1T4409	EMI RECEIVER	ROHDE & SCHWARZ	ESIB7	10/29/2014	10/29/2016
1T4149	HIGH-FREQUENCY ANECHOIC CHAMBER	RAY-PROOF	81	NOT REQUIRED	
1T4771	PSA SPECTRUM ANALYZER	AGILENT TECHNOLOGIES	E4446A	11/25/2014	05/25/2016
1T4483	ANTENNA; HORN	ETS-LINDGREN	3117	02/28/2014	08/28/2015
1T4442	PRE-AMPLIFIER, MICROWAVE	MITEQ	AFS42-01001800-30-10P	SEE NOTE	
1T4505	TEMPERATURE CHAMBER	TEST EQUITY	115	02/11/2015	02/11/2016
1T4859	DIGITAL BAROMETER, HYGROMETER, THERMOMETER	CONTROL COMPANY	15-078-198, FB70423, 245CD	12/19/2013	12/19/2015

**Table 9. Test Equipment List**

Note: Functionally tested equipment is verified using calibrated instrumentation at the time of testing.



## **V. Certification & User's Manual Information**



---

## Certification & User's Manual Information

### A. Certification Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 2, Subpart I — Marketing of Radio frequency devices:

#### § 2.801 Radio-frequency device defined.

As used in this part, a radio-frequency device is any device which in its operation is capable of Emitting radio-frequency energy by radiation, conduction, or other means. Radio- frequency devices include, but are not limited to:

- (a) The various types of radio communication transmitting devices described throughout this chapter.
- (b) *The incidental, unintentional and intentional radiators defined in Part 15 of this chapter.*
- (c) The industrial, scientific, and medical equipment described in Part 18 of this chapter.
- (d) Any part or component thereof which in use emits radio-frequency energy by radiation, conduction, or other means.

#### § 2.803 Marketing of radio frequency devices prior to equipment authorization.

- (a) Except as provided elsewhere in this chapter, no person shall sell or lease, or offer for sale or lease (including advertising for sale or lease), or import, ship or distribute for the purpose of selling or leasing or offering for sale or lease, any radio frequency device unless:
  - (1) In the case of a device subject to certification, such device has been authorized by the Commission in accordance with the rules in this chapter and is properly identified and labeled as required by §2.925 and other relevant sections in this chapter; or
  - (2) In the case of a device that is not required to have a grant of equipment authorization issued by the Commission, but which must comply with the specified technical standards prior to use, such device also complies with all applicable administrative (including verification of the equipment or authorization under a Declaration of Conformity, where required), technical, labeling and identification requirements specified in this chapter.
- (d) Notwithstanding the provisions of paragraph (a) of this section, the offer for sale solely to business, commercial, industrial, scientific or medical users (but not an offer for sale to other parties or to end users located in a residential environment) of a radio frequency device that is in the conceptual, developmental, design or pre-production stage is permitted prior to equipment authorization or, for devices not subject to the equipment authorization requirements, prior to a determination of compliance with the applicable technical requirements *provided* that the prospective buyer is advised in writing at the time of the offer for sale that the equipment is subject to the FCC rules and that the equipment will comply with the appropriate rules before delivery to the buyer or to centers of distribution.



- (e)(1) Notwithstanding the provisions of paragraph (a) of this section, prior to equipment authorization or determination of compliance with the applicable technical requirements any radio frequency device may be operated, but not marketed, for the following purposes and under the following conditions:
- (i) *Compliance testing;*
  - (ii) Demonstrations at a trade show provided the notice contained in paragraph (c) of this section is displayed in a conspicuous location on, or immediately adjacent to, the device;
  - (iii) Demonstrations at an exhibition conducted at a business, commercial, industrial, scientific or medical location, but excluding locations in a residential environment, provided the notice contained in paragraphs (c) or (d) of this section, as appropriate, is displayed in a conspicuous location on, or immediately adjacent to, the device;
  - (iv) Evaluation of product performance and determination of customer acceptability, provided such operation takes place at the manufacturer's facilities during developmental, design or pre-production states; or
  - (v) Evaluation of product performance and determination of customer acceptability where customer acceptability of a radio frequency device cannot be determined at the manufacturer's facilities because of size or unique capability of the device, provided the device is operated at a business, commercial, industrial, scientific or medical user's site, but not at a residential site, during the development, design or pre-production stages.
- (e)(2) For the purpose of paragraphs (e)(1)(iv) and (e)(1)(v) of this section, the term *manufacturer's facilities* includes the facilities of the party responsible for compliance with the regulations and the manufacturer's premises, as well as the facilities of other entities working under the authorization of the responsible party in connection with the development and manufacture, but not the marketing, of the equipment.
- (f) For radio frequency devices subject to verification and sold solely to business, commercial, industrial, scientific and medical users (excluding products sold to other parties or for operation in a residential environment), parties responsible for verification of the devices shall have the option of ensuring compliance with the applicable technical specifications of this chapter at each end user's location after installation, provided that the purchase or lease agreement includes a proviso that such a determination of compliance be made and is the responsibility of the party responsible for verification of the equipment.



---

## Certification & User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 2, Subpart J — Equipment Authorization Procedures:

### § 2.901 Basis and Purpose

- (a) In order to carry out its responsibilities under the Communications Act and the various treaties and international regulations, and in order to promote efficient use of the radio spectrum, the Commission has developed technical standards for radio frequency equipment and parts or components thereof. The technical standards applicable to individual types of equipment are found in that part of the rules governing the service wherein the equipment is to be operated.<sup>1</sup> *In addition to the technical standards provided, the rules governing the service may require that such equipment be verified by the manufacturer or importer, be authorized under a Declaration of Conformity, or receive an equipment authorization from the Commission by one of the following procedures: certification or registration.*
- (b) The following sections describe the verification procedure, the procedure for a Declaration of Conformity, and the procedures to be followed in obtaining certification from the Commission and the conditions attendant to such a grant.

### § 2.907 Certification.

- (a) Certification is an equipment authorization issued by the Commission, based on representation and test data submitted by the applicant.
- (b) Certification attaches to all units subsequently marketed by the grantee which are identical (see Section 2.908) to the sample tested except for permissive changes or other variations authorized by the Commission pursuant to Section 2.1043.

---

<sup>1</sup> In this case, the equipment is subject to the rules of Part 15. More specifically, the equipment falls under Subpart B (of Part 15), which deals with unintentional radiators.



---

## Certification & User's Manual Information

### § 2.948 Description of measurement facilities.

- (a) Each party making measurements of equipment that is subject to an equipment authorization under Part 15 or Part 18 of this chapter, regardless of whether the measurements are filed with the Commission or kept on file by the party responsible for compliance of equipment marketed within the U.S. or its possessions, shall compile a description of the measurement facilities employed.
  - (1) If the measured equipment is subject to the verification procedure, the description of the measurement facilities shall be retained by the party responsible for verification of the equipment.
    - (i) *If the equipment is verified through measurements performed by an independent laboratory, it is acceptable for the party responsible for verification of the equipment to rely upon the description of the measurement facilities retained by or placed on file with the Commission by that laboratory. In this situation, the party responsible for the verification of the equipment is not required to retain a duplicate copy of the description of the measurement facilities.*
    - (ii) If the equipment is verified based on measurements performed at the installation site of the equipment, no specific site calibration data is required. It is acceptable to retain the description of the measurement facilities at the site at which the measurements were performed.
  - (2) If the equipment is to be authorized by the Commission under the certification procedure, the description of the measurement facilities shall be filed with the Commission's Laboratory in Columbia, Maryland. The data describing the measurement facilities need only be filed once but must be updated as changes are made to the measurement facilities or as otherwise described in this section. At least every three years, the organization responsible for filing the data with the Commission shall certify that the data on file is current.





---

## Certification & User's Manual Information

### Label and User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 15, Subpart A — General:

#### § 15.19 Labeling requirements.

(a) *In addition to the requirements in Part 2 of this chapter, a device subject to certification or verification shall be labeled as follows:*

- (1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under Part 73 of this chapter, land mobile operation under Part 90, etc., shall bear the following statement in a conspicuous location on the device:

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

- (2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:

This device is verified to comply with Part 15 of the FCC Rules for use with cable television service.

- (3) All other devices shall bear the following statement in a conspicuous location on the device:

*This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.*

- (4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.

- (5) When the device is so small or for such use that it is not practicable to place the statement specified under paragraph (a) of this section on it, the information required by this paragraph shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.

#### § 15.21 Information to user.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



## Verification & User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 15, Subpart B — Unintentional Radiators:

### § 15.105 Information to the user.

- (a) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



# End of Report