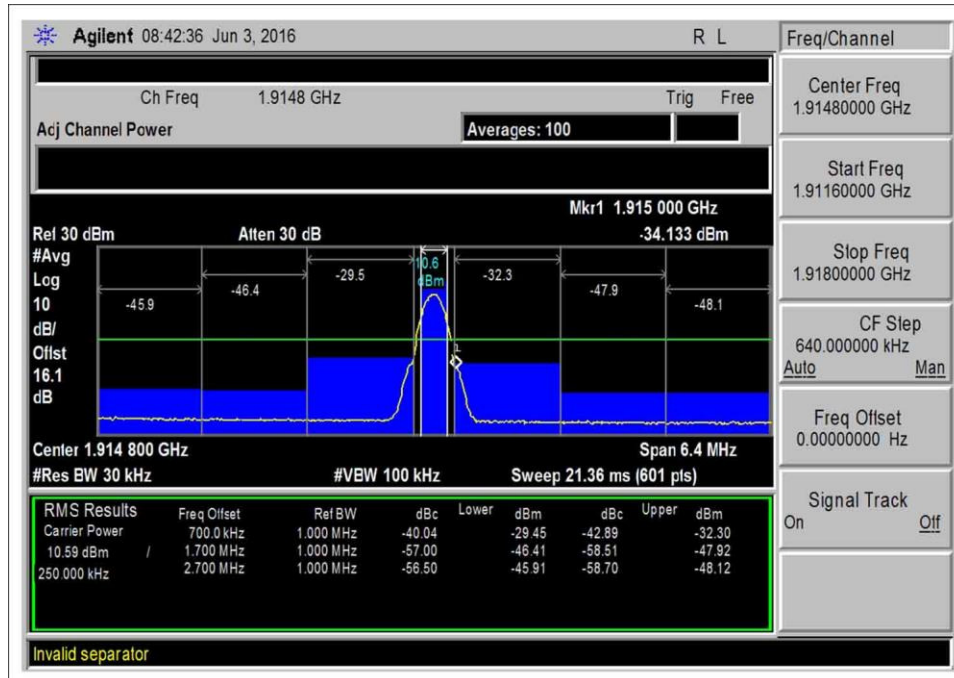
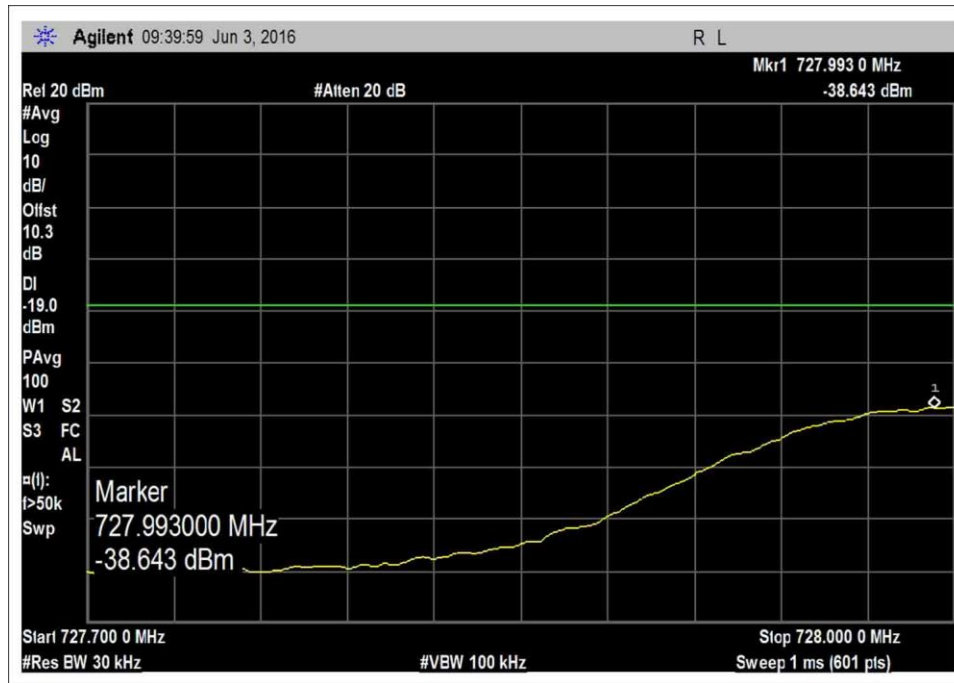


7.5_OBE_UL_1850-1915MHz_L_PreAGC

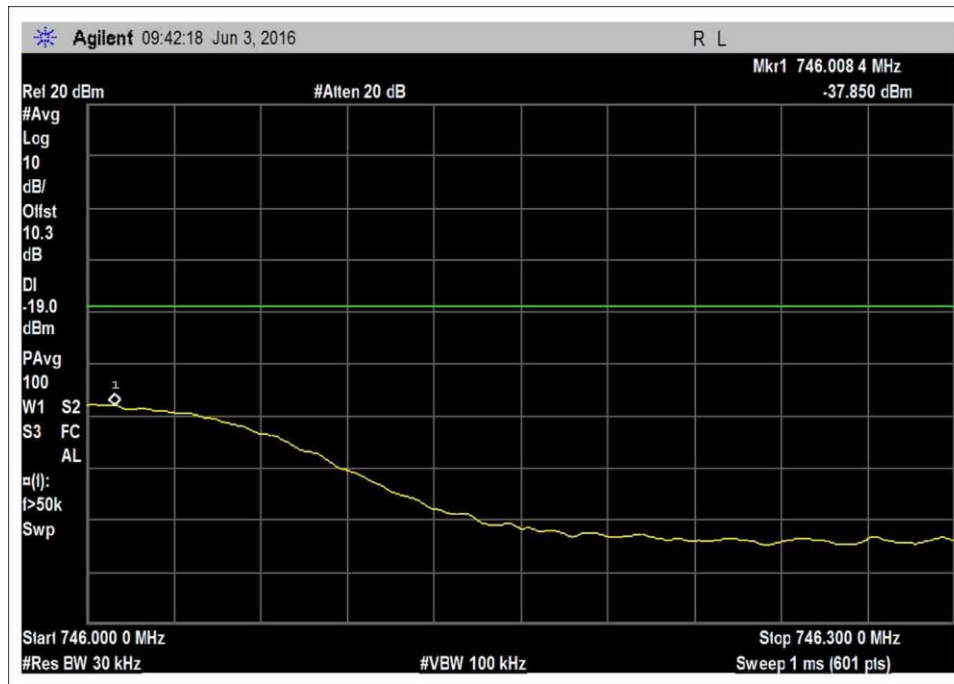


7.5_OBE_UL_1850-1915MHz_H_PreAGC

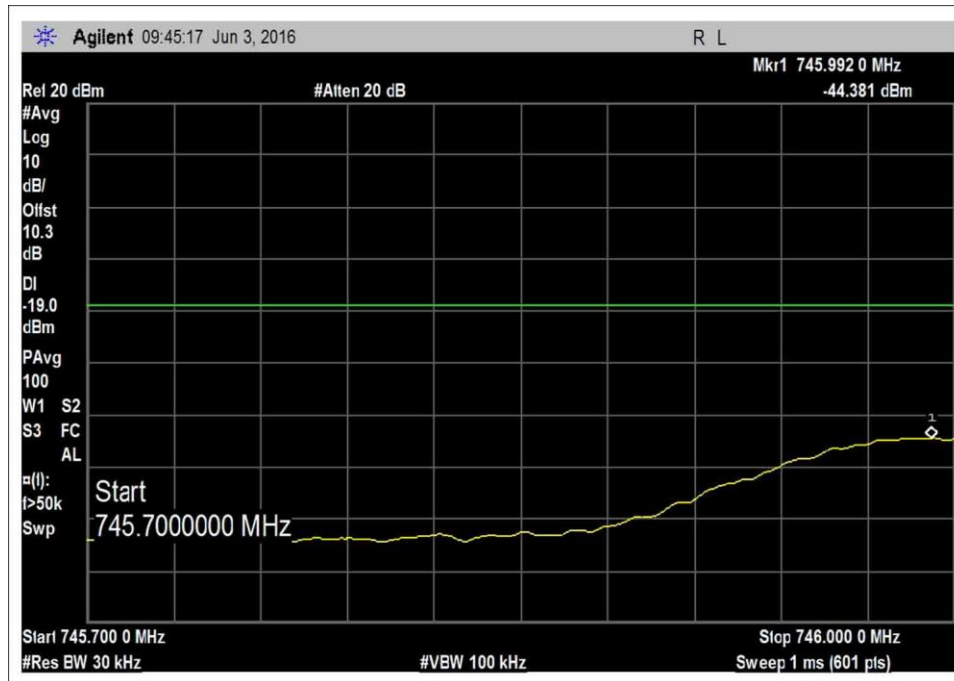
GSM, DL



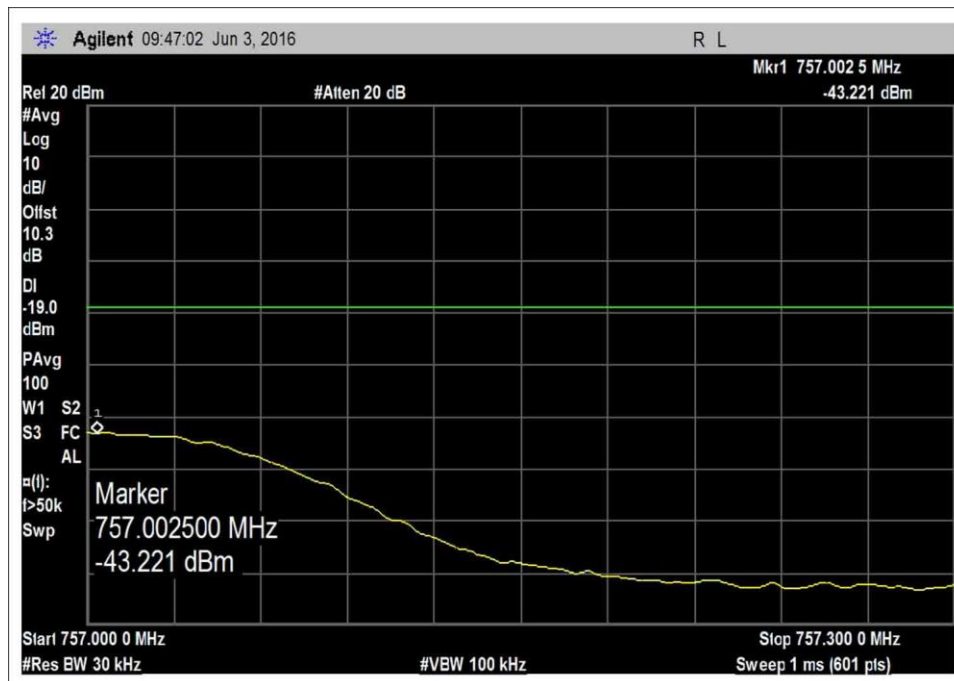
7.5_OBE_DL_728-746MHz_L_PreAGC



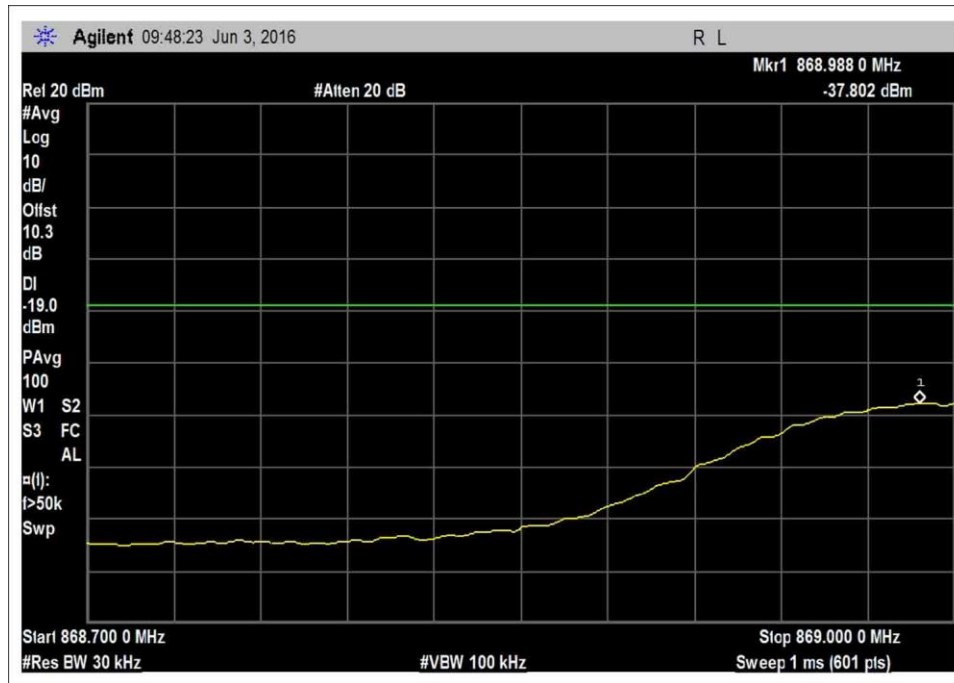
7.5_OBE_DL_728-746MHz_H_PreAGC



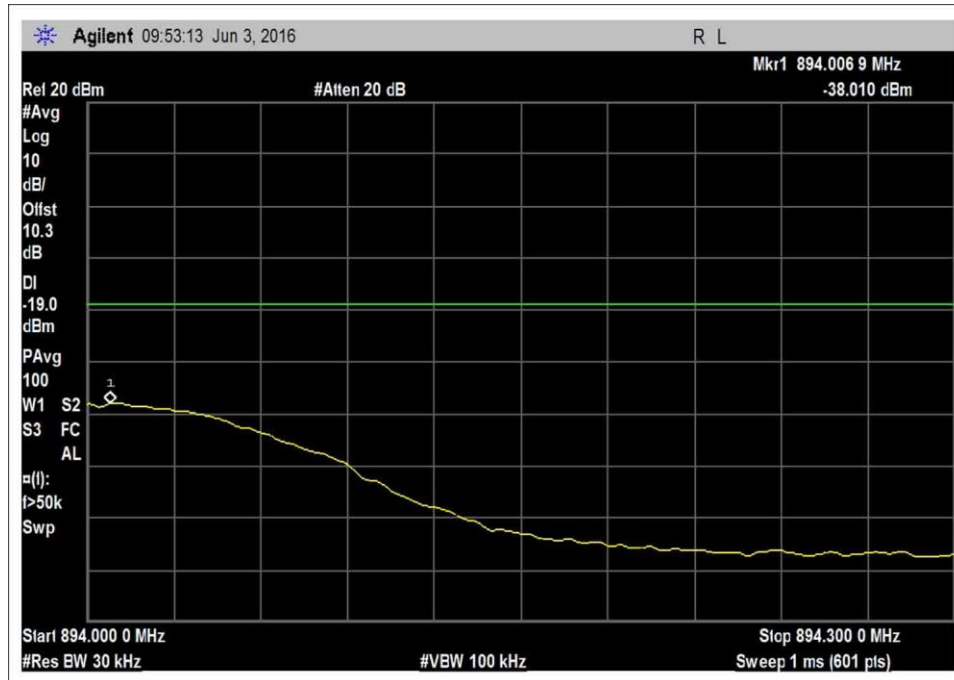
7.5_OBE_DL_746-757MHz_L_PreAGC



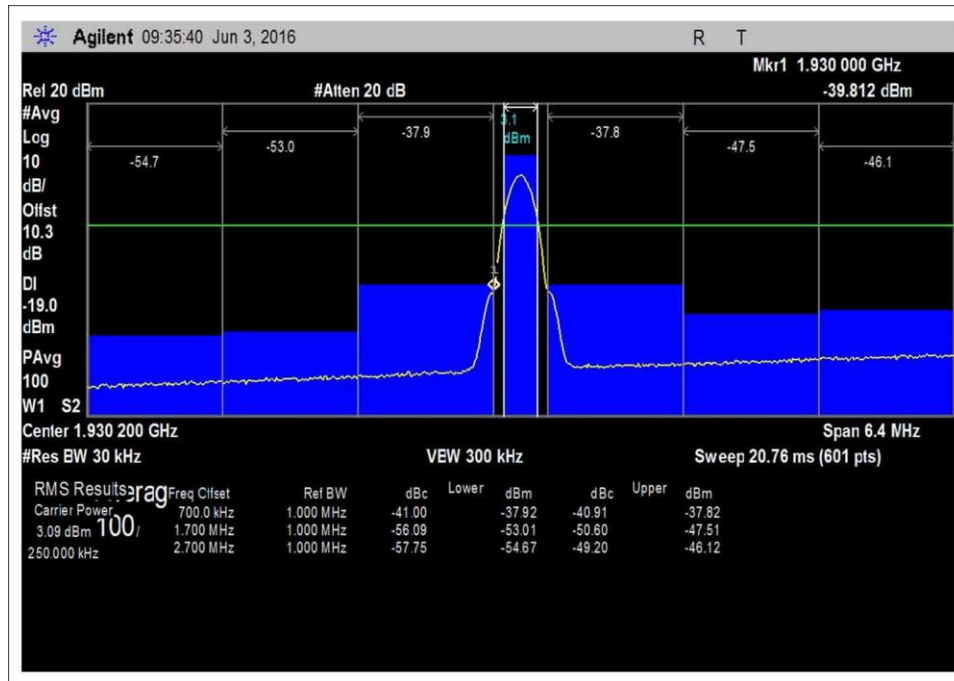
7.5_OBE_DL_746-757MHz_H_PreAGC



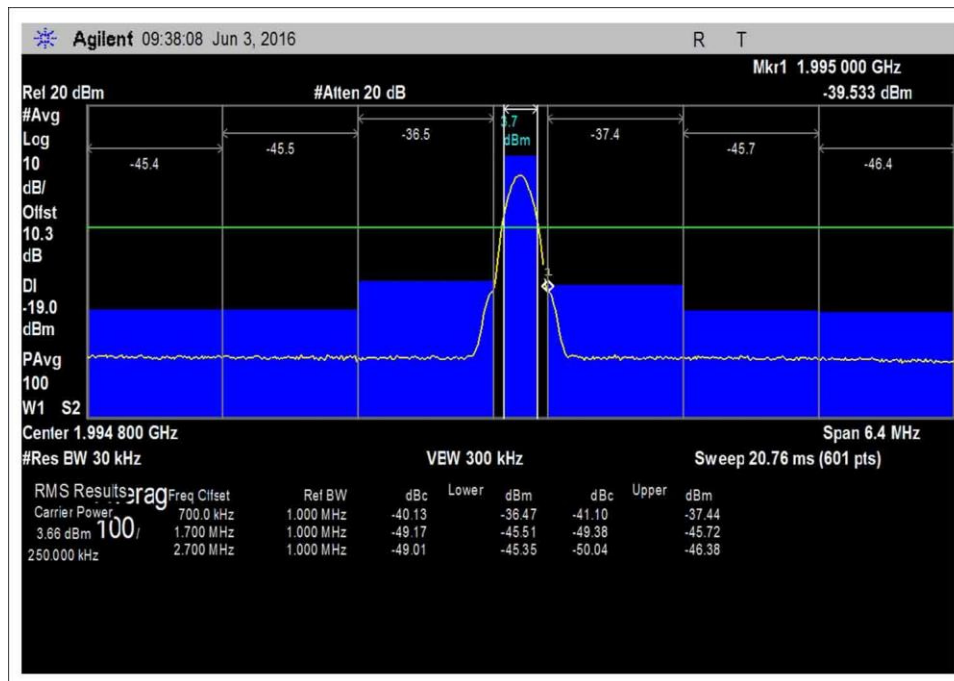
7.5_OBE_DL_869-894MHz_L_PreAGC



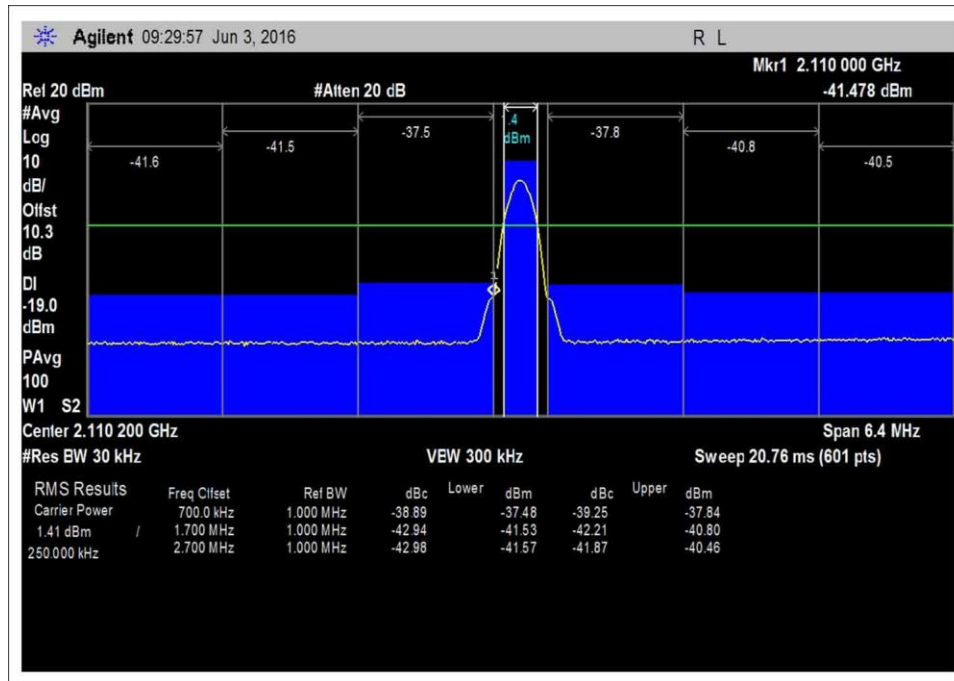
7.5_OBE_DL_869-894MHz_H_PreAGC



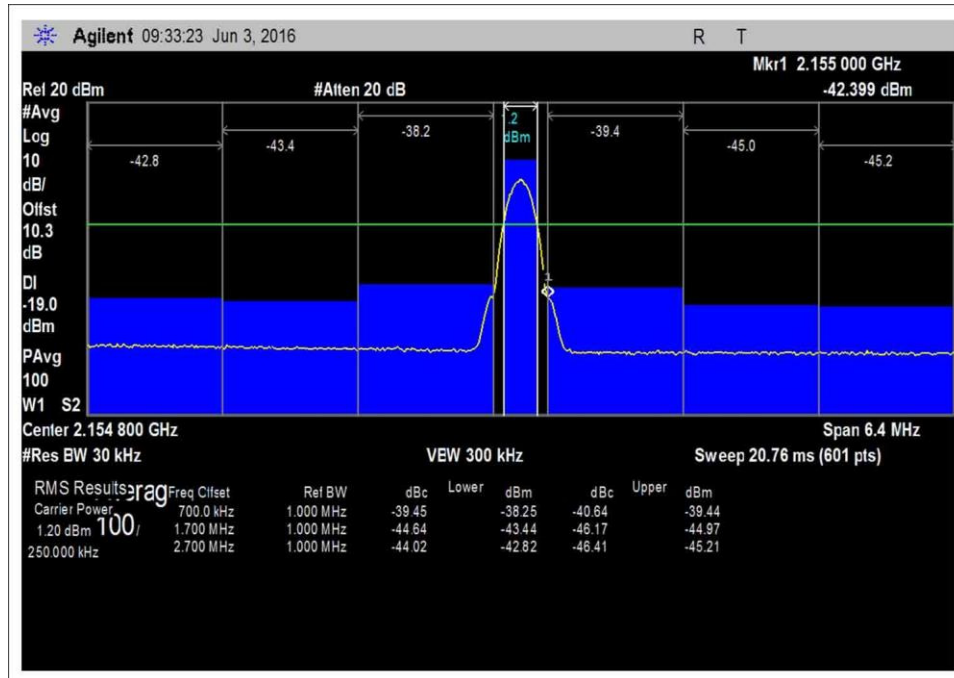
7.5_OBE_DL_1930-1995MHz_L_PreAGC



7.5_OBE_DL_1930-1995MHz_H_PreAGC

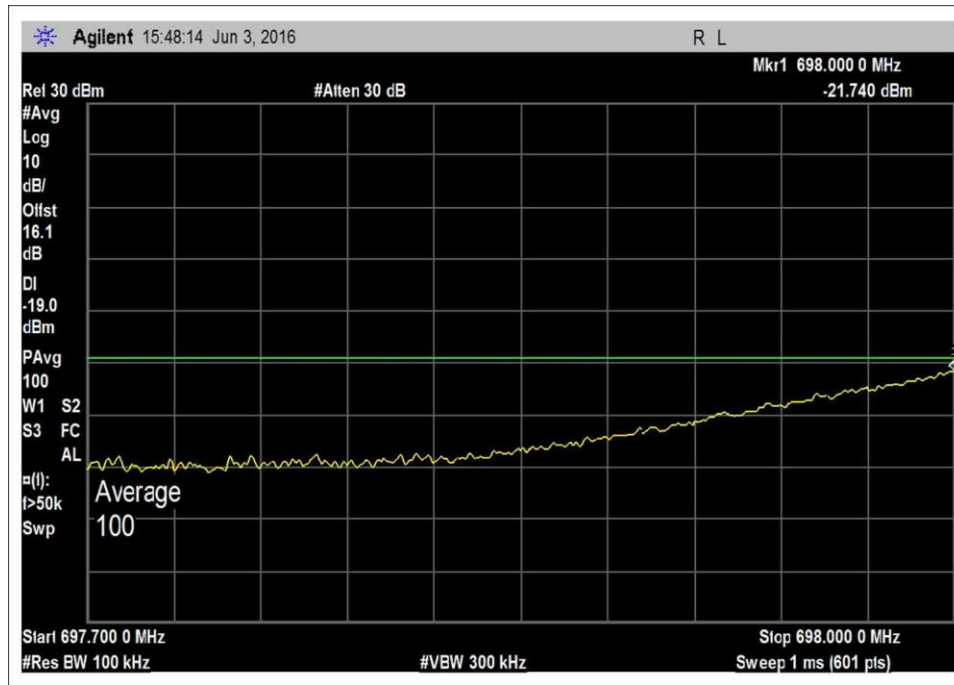


7.5_OBE_DL_2110-2155MHz_L_PreAGC

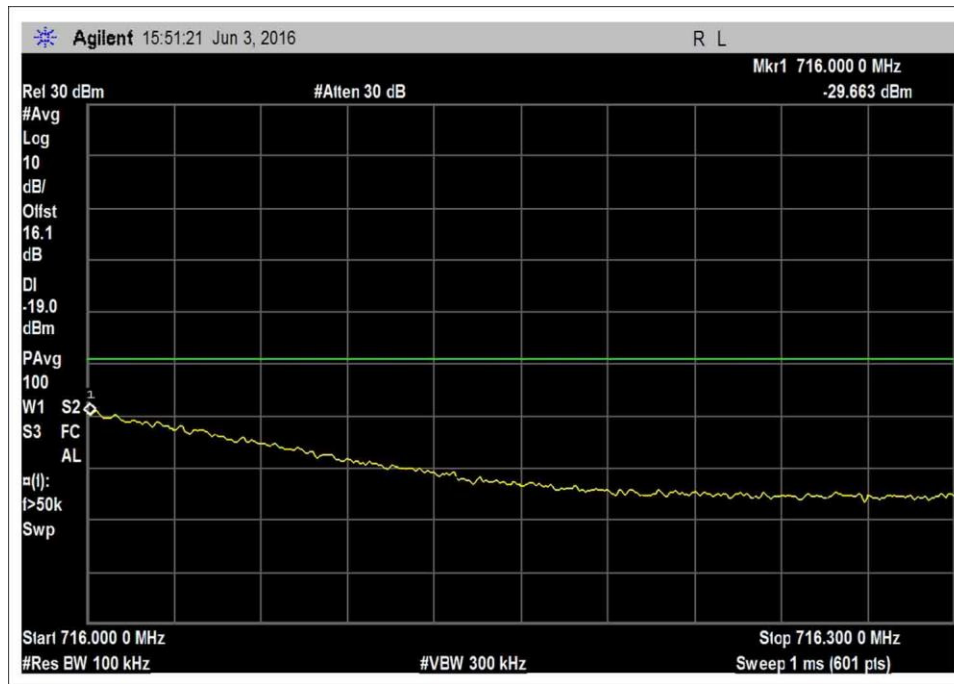


7.5_OBE_DL_2110-2155MHz_H_PreAGC

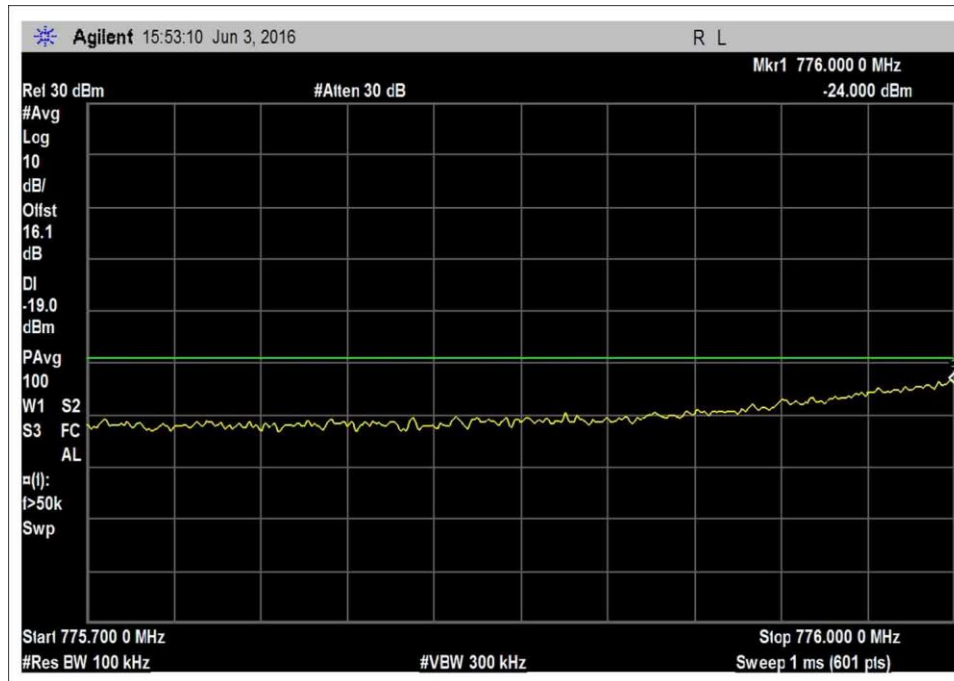
LTE, UL



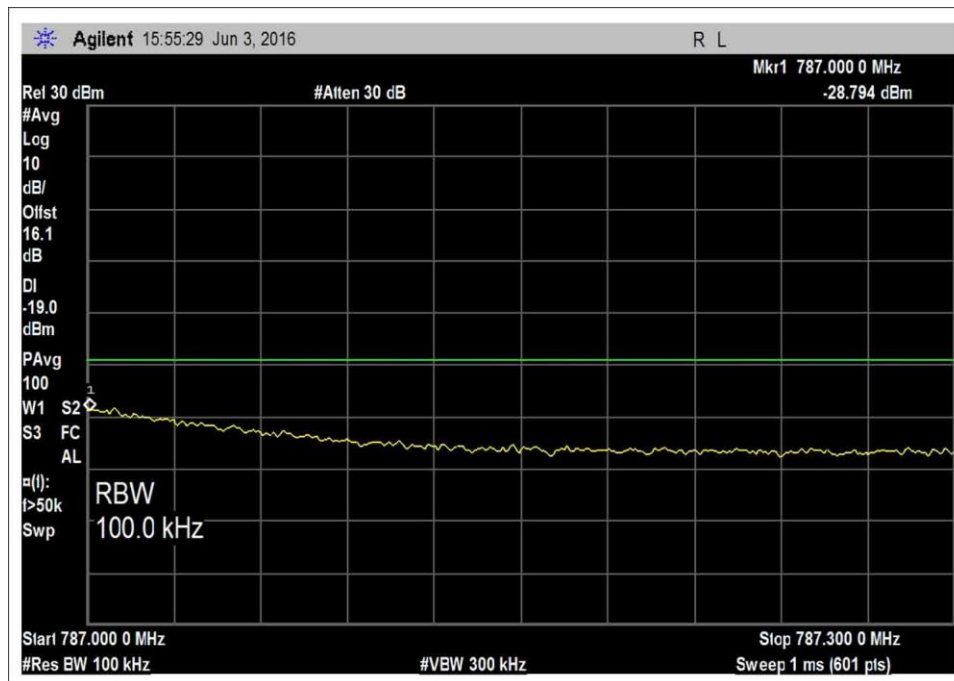
7.5_OBE_UL_698-716MHz_L_PreAGC



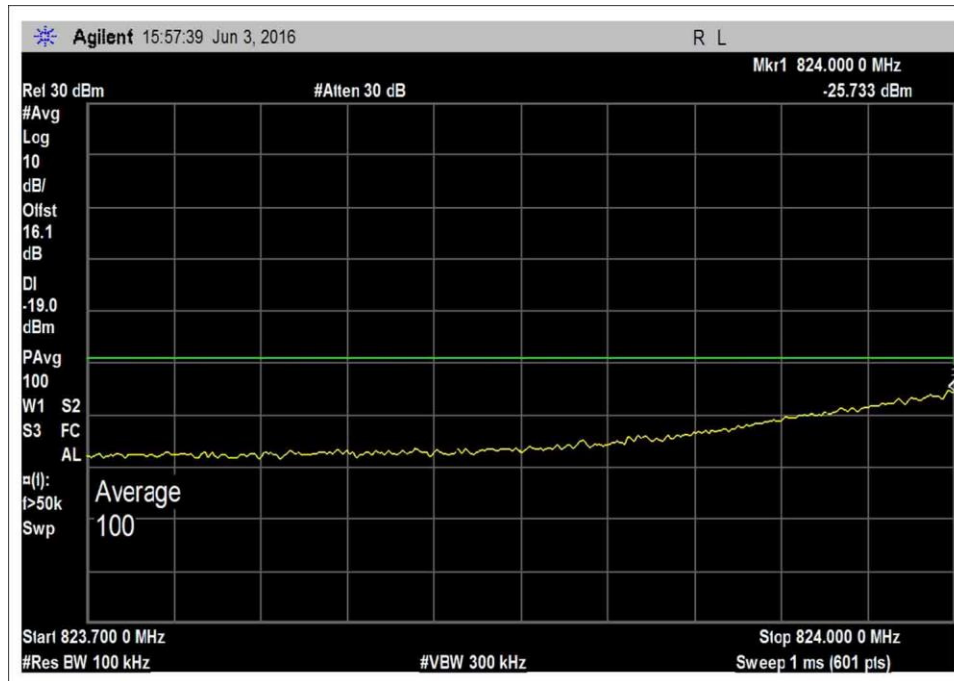
7.5_OBE_UL_698-716MHz_H_PreAGC



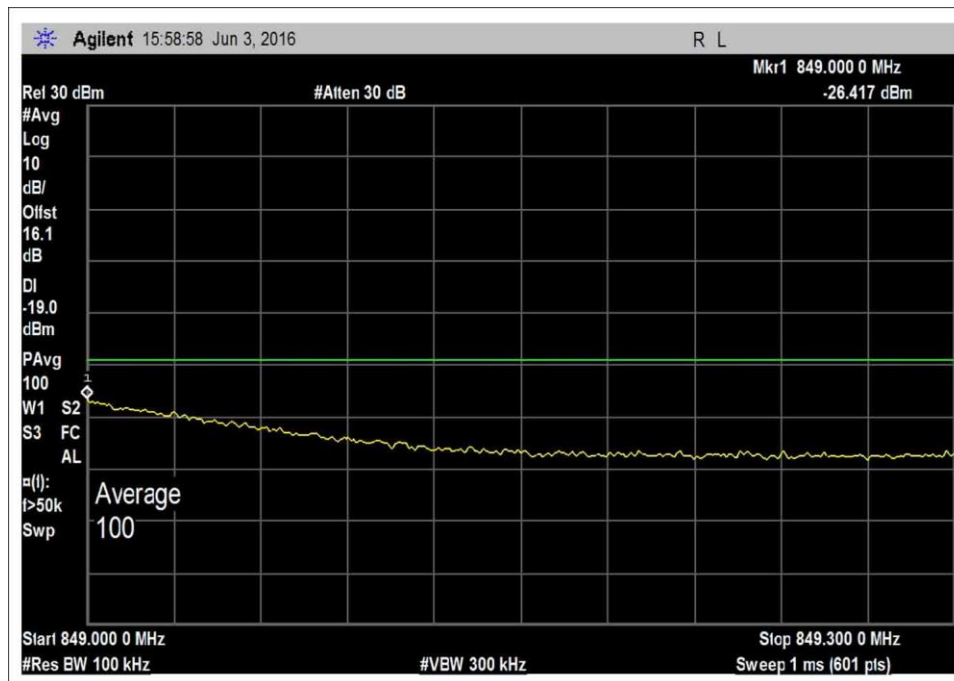
7.5_OBE_UL_776-787MHz_L_PreAGC



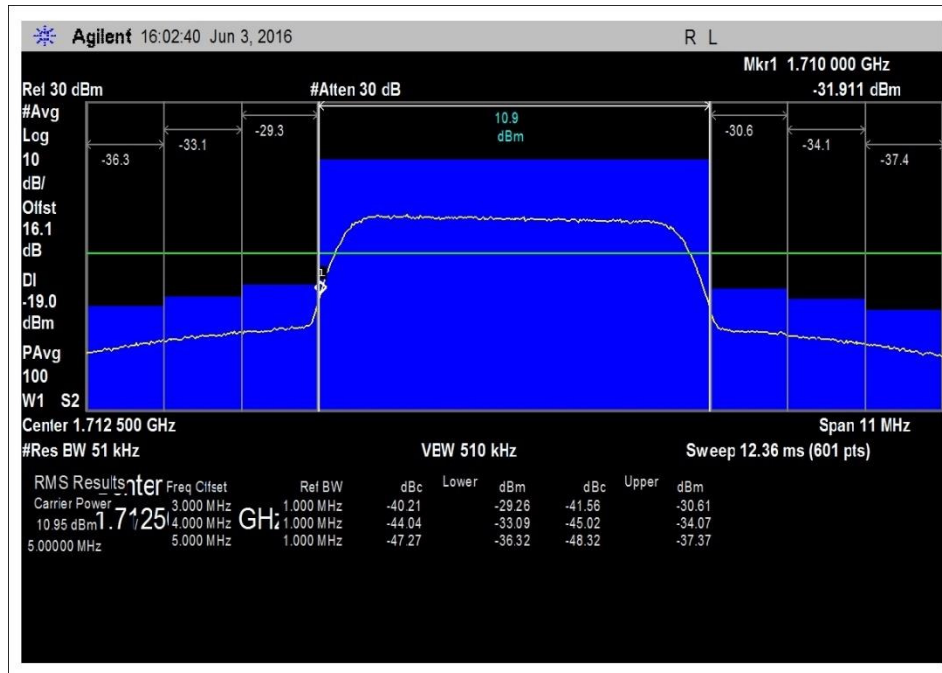
7.5_OBE_UL_776-787MHz_H_PreAGC



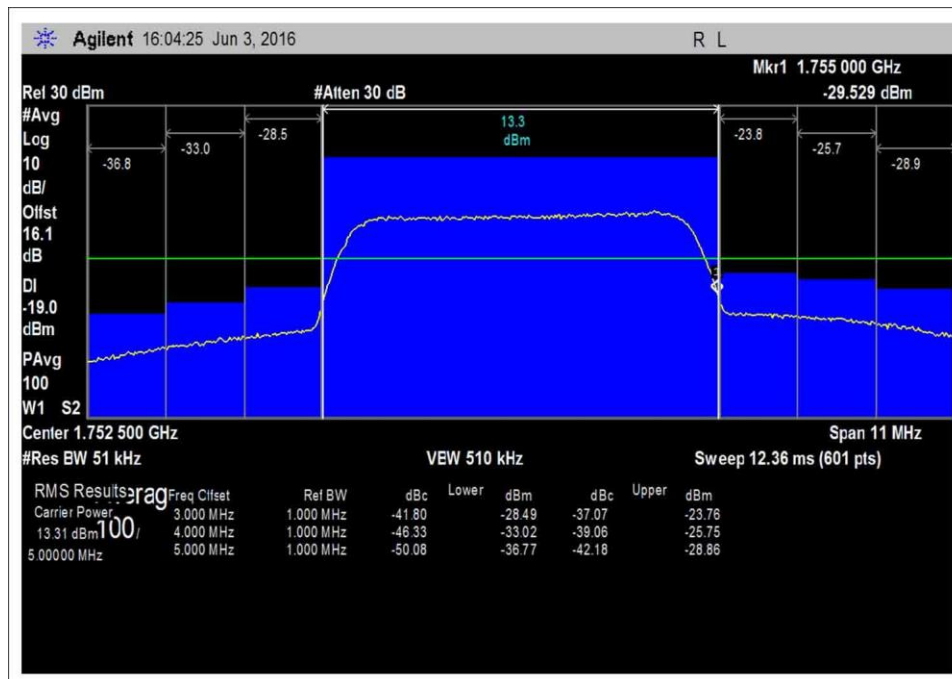
7.5_OBE_UL_824-849MHz_L_PreAGC



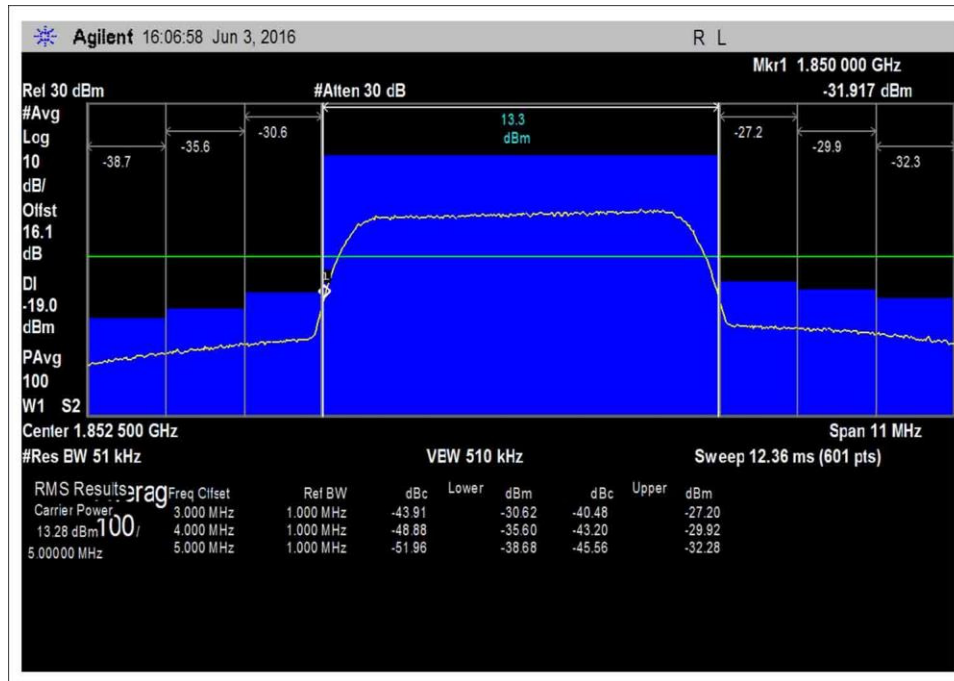
7.5_OBE_UL_824-849MHz_H_PreAGC



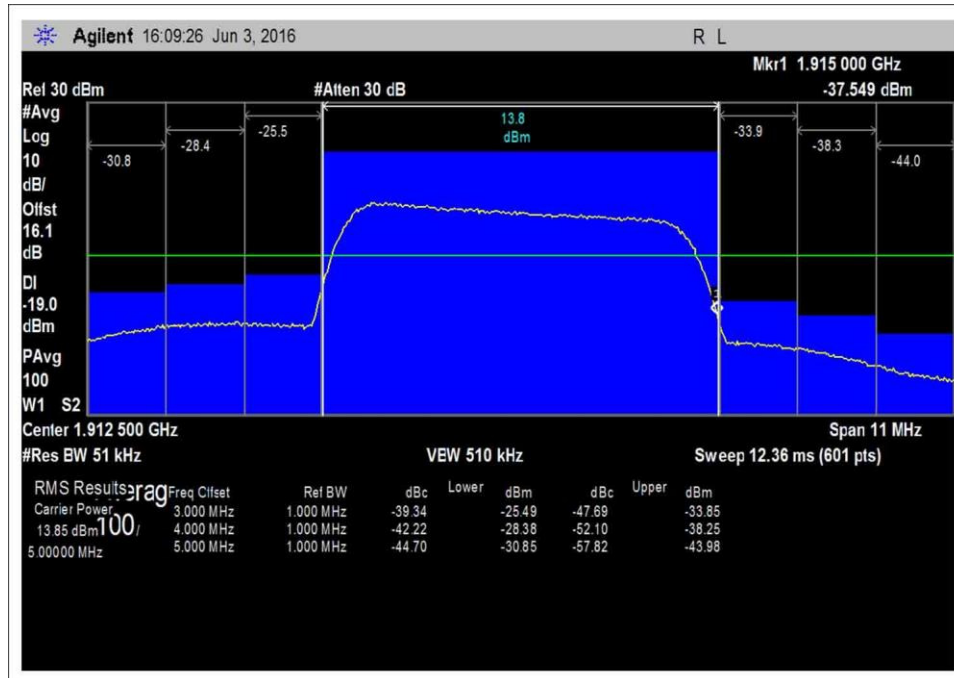
7.5_OBE_UL_1710-1755MHz_L_PreAGC



7.5_OBE_UL_1710-1755MHz_H_PreAGC

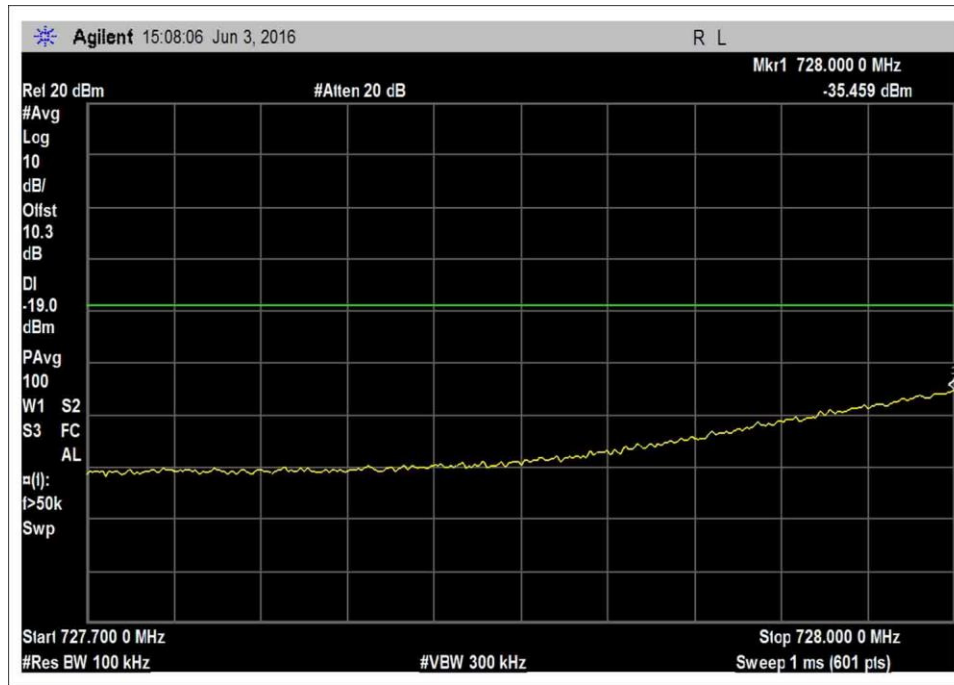


7.5_OBE_UL_1850-1915MHz_L_PreAGC

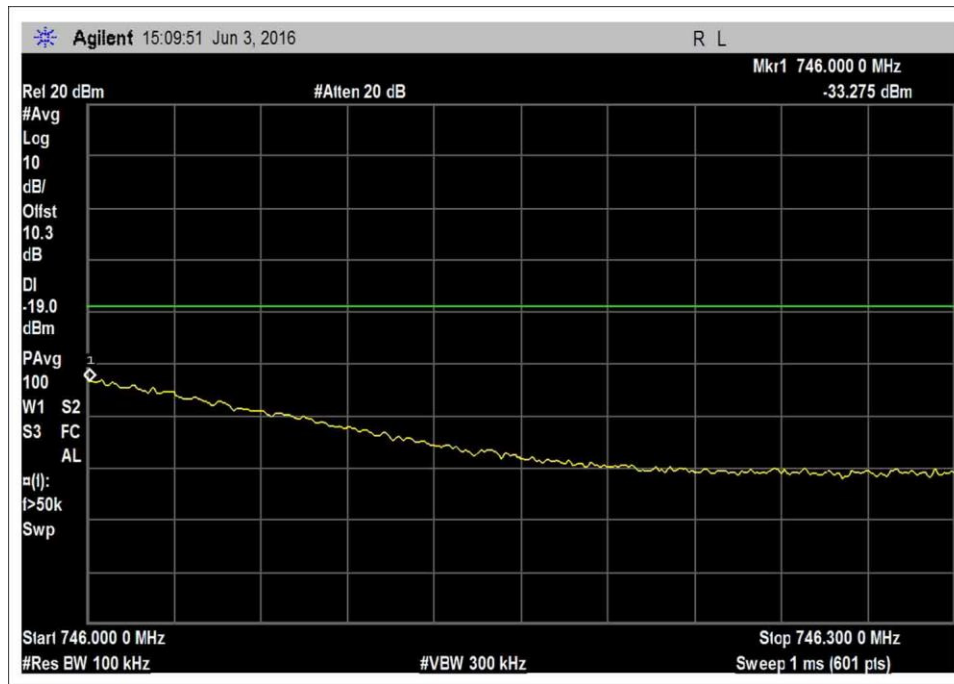


7.5_OBE_UL_1850-1915MHz_H_PreAGC

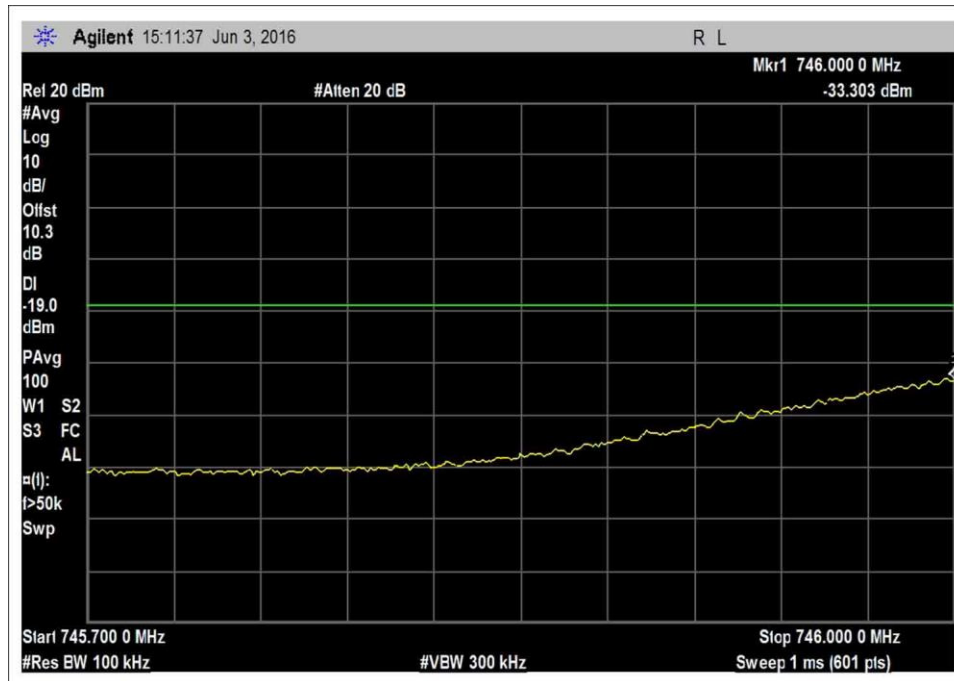
LTE, DL



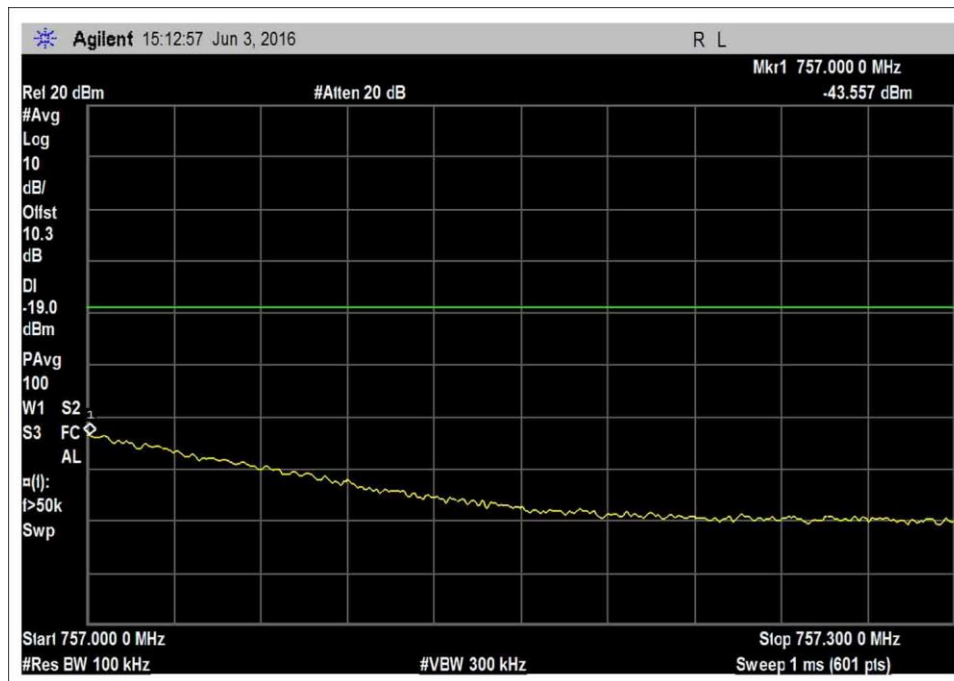
7.5_OBE_DL_728-746MHz_L_PreAGC



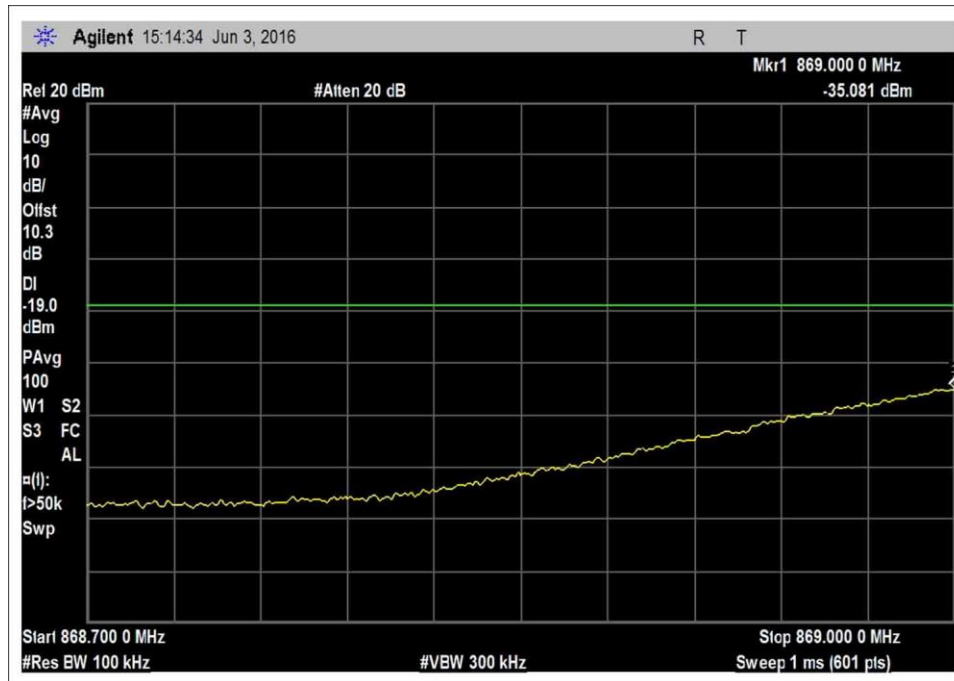
7.5_OBE_DL_728-746MHz_H_PreAGC



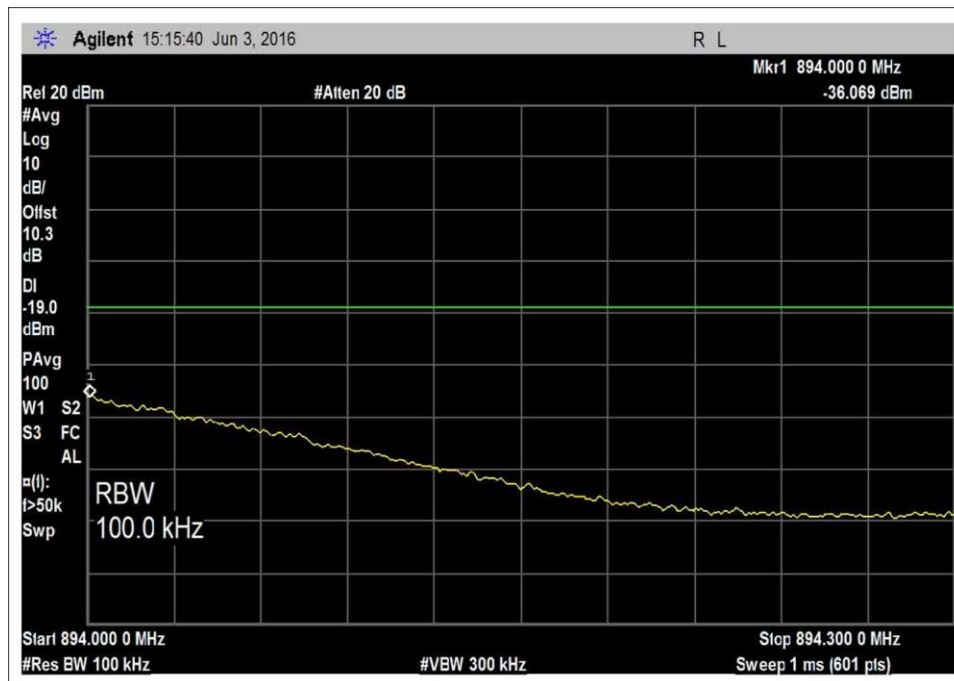
7.5_OBE_DL_746-757MHz_L_PreAGC



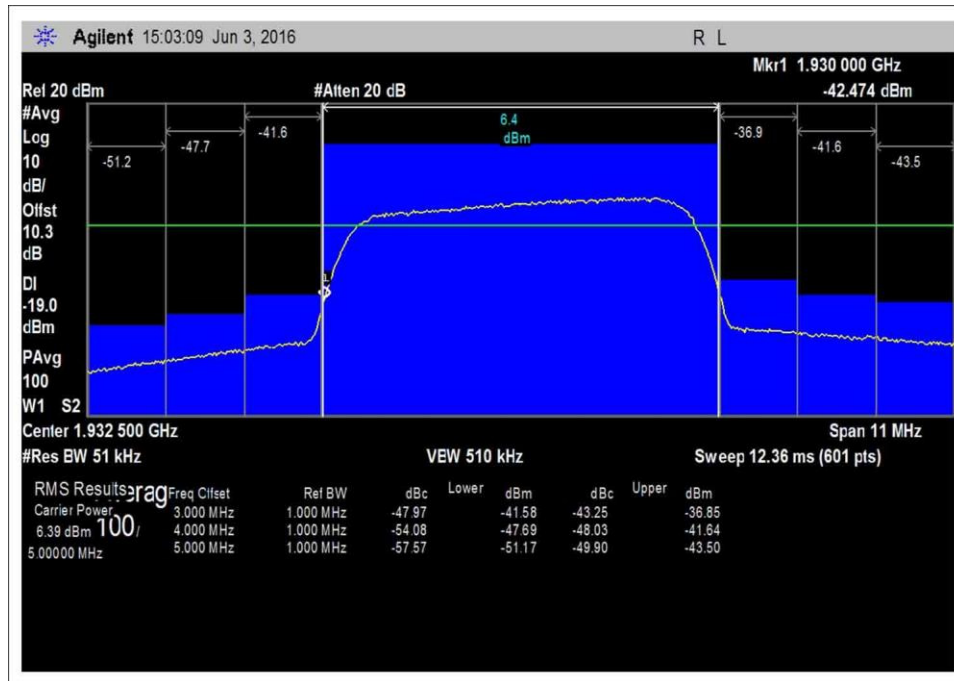
7.5_OBE_DL_746-757MHz_H_PreAGC



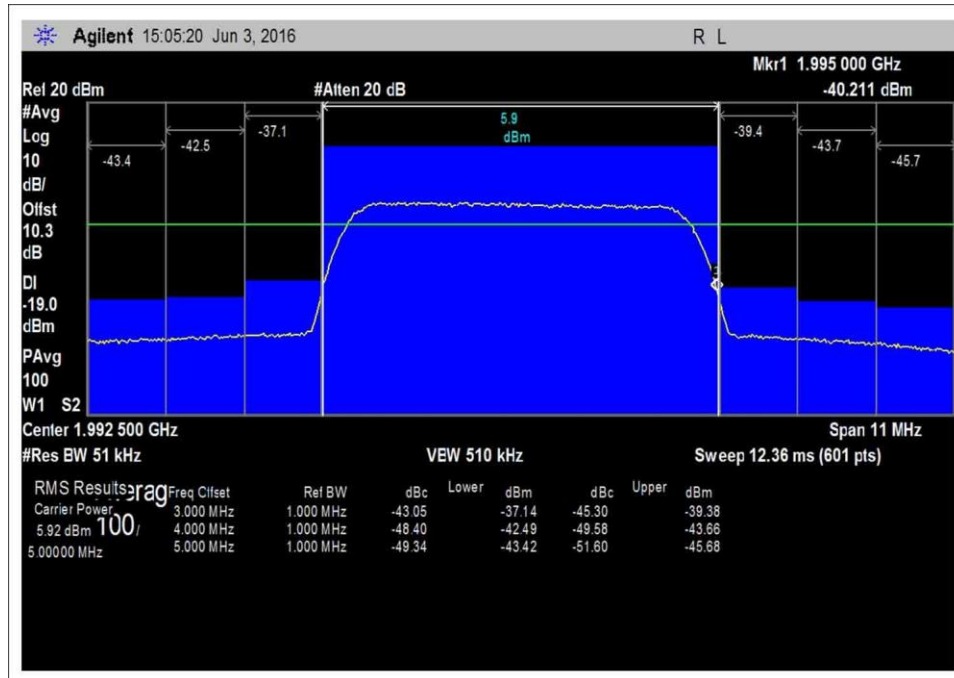
7.5_OBE_DL_869-894MHz_L_PreAGC



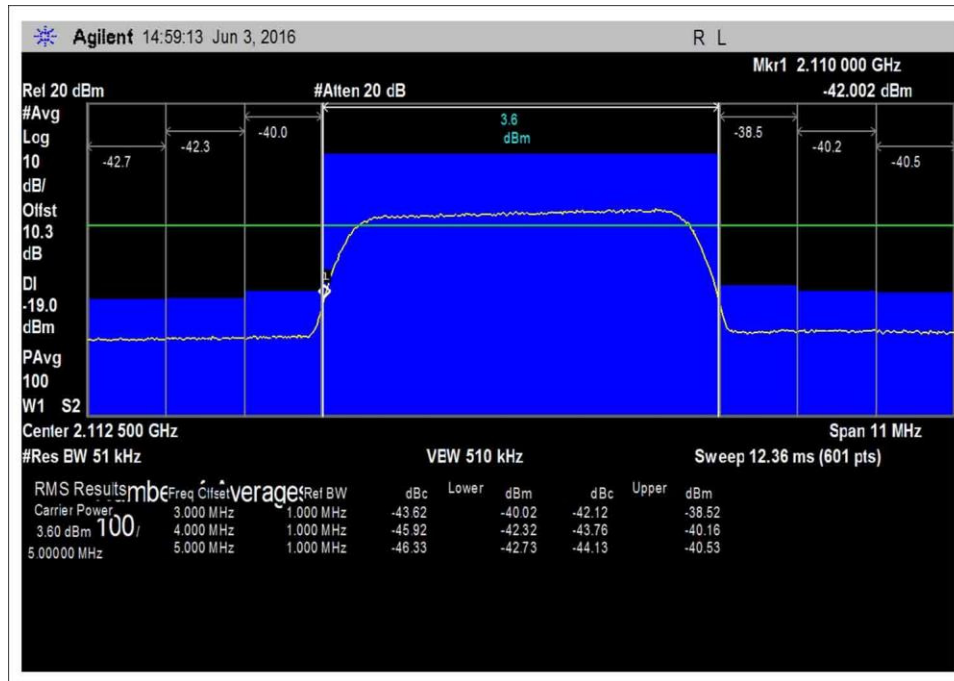
7.5_OBE_DL_869-894MHz_H_PreAGC



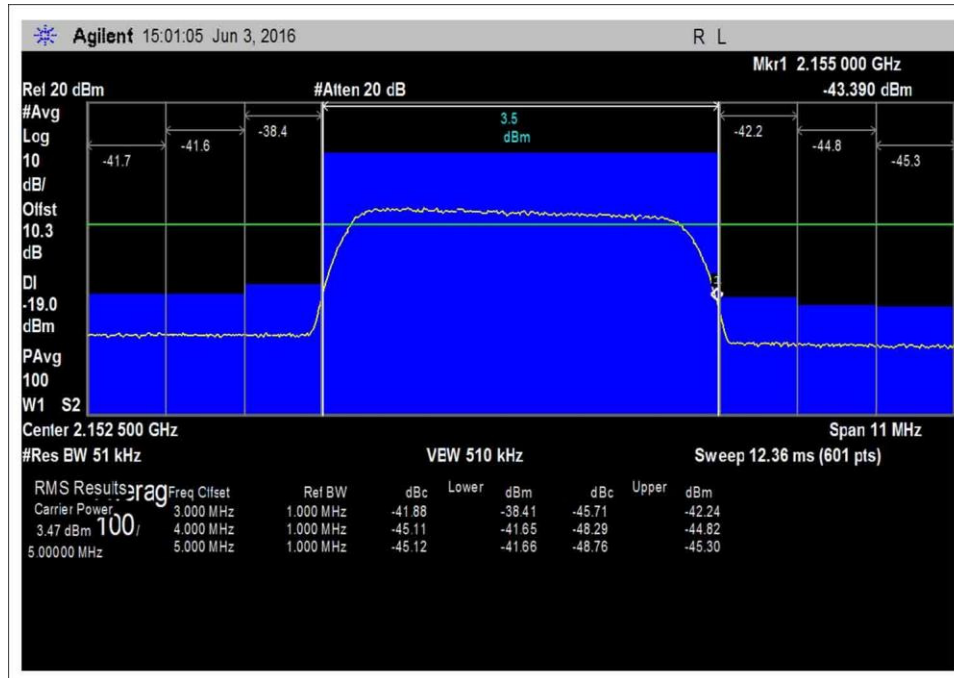
7.5_OBE_DL_1930-1995MHz_L_PreAGC



7.5_OBE_DL_1930-1995MHz_H_PreAGC



7.5_OBE_DL_2110-2155MHz_L_PreAGC



7.5_OBE_DL_2110-2155MHz_H_PreAGC

7.6 Conducted Spurious

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170
 Customer: Cellphone-Mate, Inc.
 Specification: **7.6 Conducted Spurious Emissions / 47 CFR §2.1051 Spurious Emissions at Antenna Terminals**
 Work Order #: **98648** Date: 06/08/2016
 Test Type: **Conducted Emissions** Time: 10:11:02
 Tested by: Daniel Bertran Sequence#: 1
 Software: EMITest 5.03.02

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

The equipment under test (EUT) is a Fixed Wideband Consumer Booster.
 The EUT is placed on the test bench. Evaluation performed at the Outside (Donor) and Inside (Server) antenna port.
 The EUT Server port is a type SMA connector and 50-ohm impedance.
 The EUT Donor port is type F connector and 75-ohm impedance.
 During testing there is a 75 ohm to 50 ohm matching pad connected to the EUT type F connector.
 This matching pad has a 5.8dB correction factor.
 Firmware: V1.0

Test environment conditions:
 Temperature: 23.1°C
 Relative Humidity: 42%
 101.2 kPa

Part 22
 UL: 824-849MHz
 DL: 869-894MHz

Part 24
 UL: 1850-1915MHz
 DL: 1930-1995MHz

Part 27
 UL: 1710-1755MHz, 698-716MHz, 776-787MHz
 DL: 2110-2155MHz, 728-746MHz, 746-757MHz

Frequency range of measurement = 9kHz- 22GHz.
 9 kHz - 150 kHz -> RBW= 200Hz VBW= 200Hz
 150 kHz - 30 MHz -> RBW= 9kHz VBW= 9kHz
 30 MHz - 1000MHz -> RBW*= 1MHz VBW= 3MHz
 1000 MHz - 22000MHz ->RBW= 1MHz VBW= 3MHz

Test Conditions / Notes Continued:

*Note: As specified on 7.6 Conducted spurious emissions test procedure of 935210 D03 Signal Booster Measurements v04, for frequencies below 1 GHz, an RBW of 1 MHz may be used in a preliminary measurement. If non-compliant emissions are detected, a final measurement shall be made with a 100 kHz RBW. Additionally, a peak detector may also be used for the preliminary measurement. If non-compliant emissions are detected, then a final measurement of these emissions shall be made with the power averaging (RMS) detector.

Test procedure:

The test was performed in accordance with section 7.6 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v04 Dated February 12, 2016

Note:

27.53 (f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN03418	Signal Generator	E4438C	7/30/2015	7/30/2017
	ANC00032	Signal Generator	E4433B	2/26/2016	2/26/2018
	ANP06709	Cable	32026-29094K-29094K-72TC	9/18/2014	9/18/2016
	ANP06710	Cable	32026-29094K-29094K-72TC	9/18/2014	9/18/2016
	AN03471	Spectrum Analyzer	E4440A	1/4/2016	1/4/2018
	ANP06467	Attenuator	PE7014-10	5/13/2015	5/13/2017
	ANP05411	Attenuator	54A-10	1/18/2016	1/18/2018

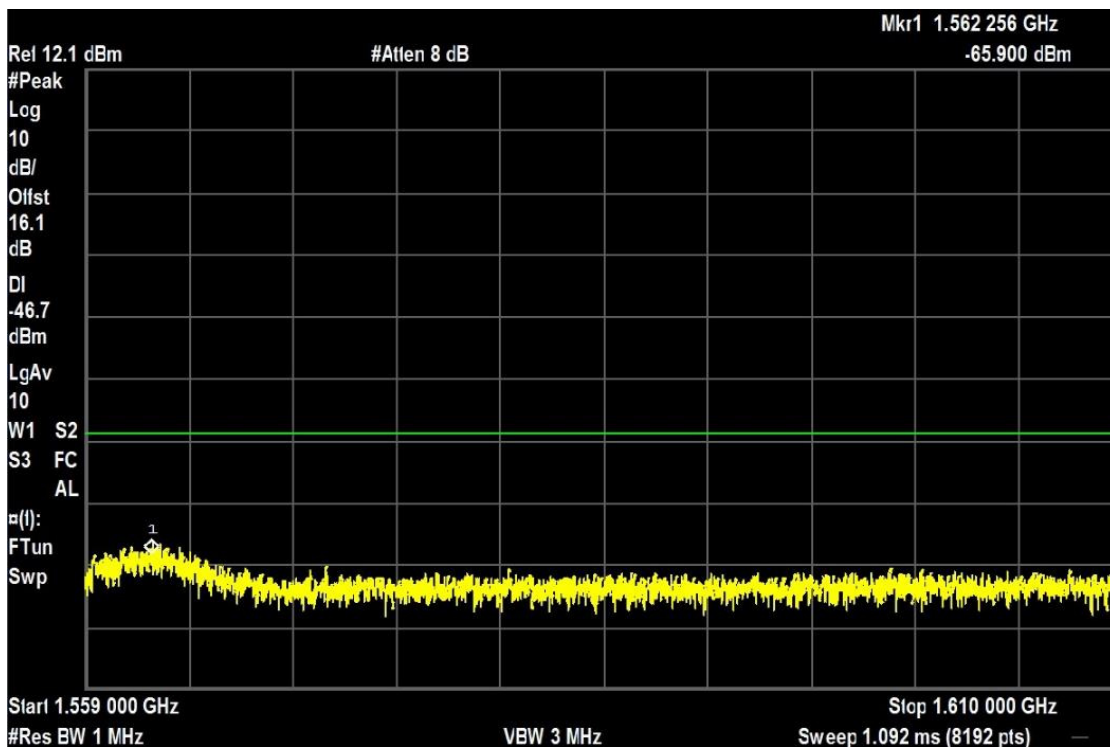
Summary of Results

Pass: As summarized in plots below, the conducted spurious emissions are within limits.

9 KHz-30 MHz

No Conducted Spurious Emissions were found within 20dB of the limit.

Per section 27.53 (f), the 1559-1610 band was also investigated and found emission within limits using applied correction (see calculation below).



Calculation:

UL776-787MHz=>

Limit line EIRP on this band 1559-1610MHz =>

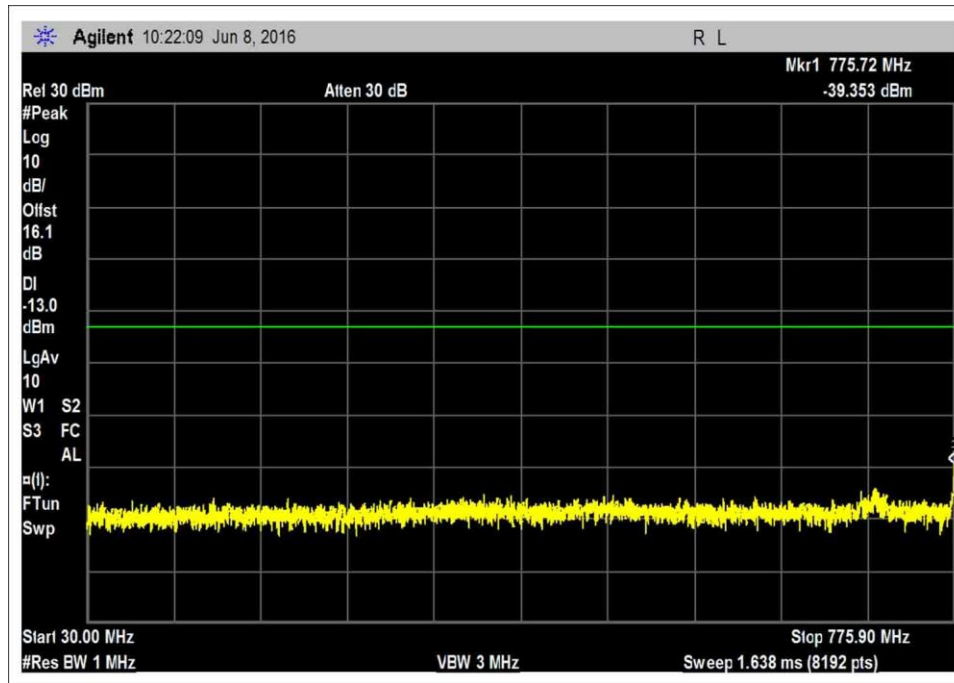
Limit line EIRP corrected =>

Antenna Gain (10dB) / Cable Loss (3.32dB)

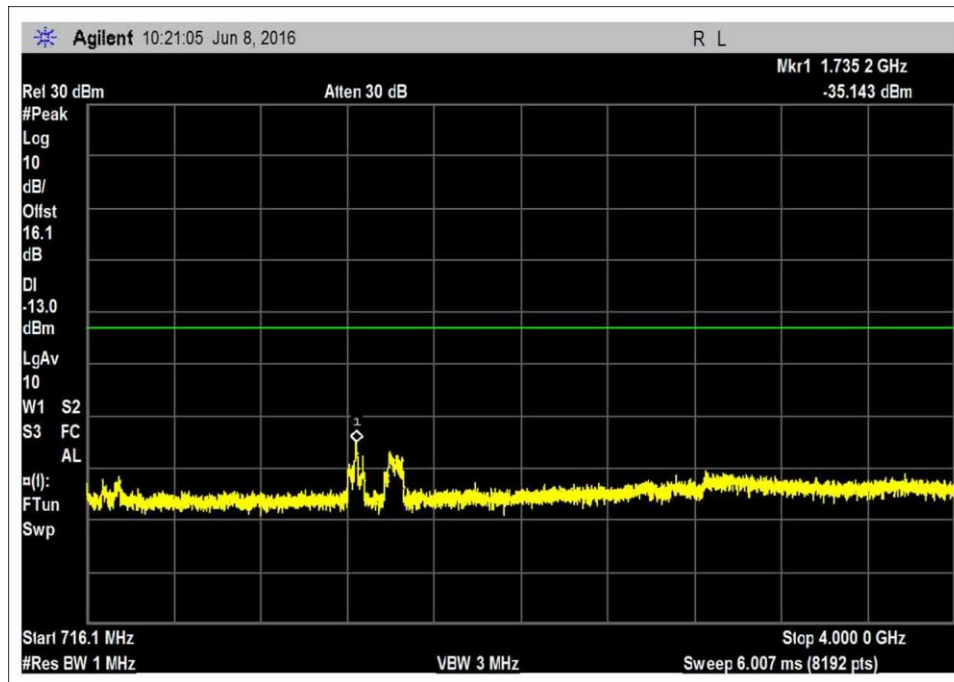
-70 dBW/MHz =>-40dBm

-40dBm-10dBi+3.32dB=> -46.68dBm

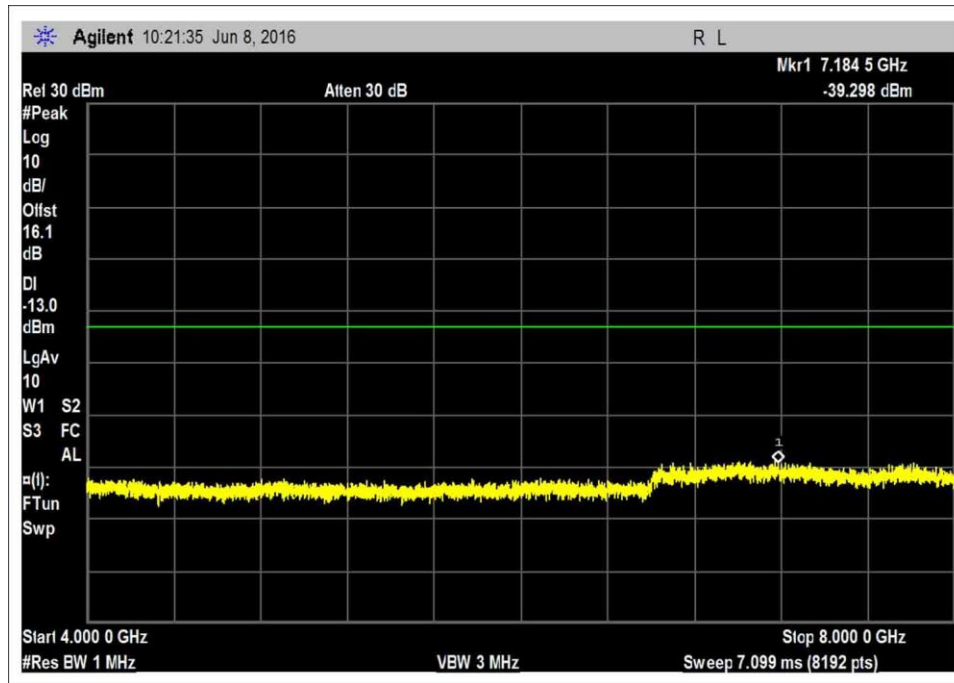
UL



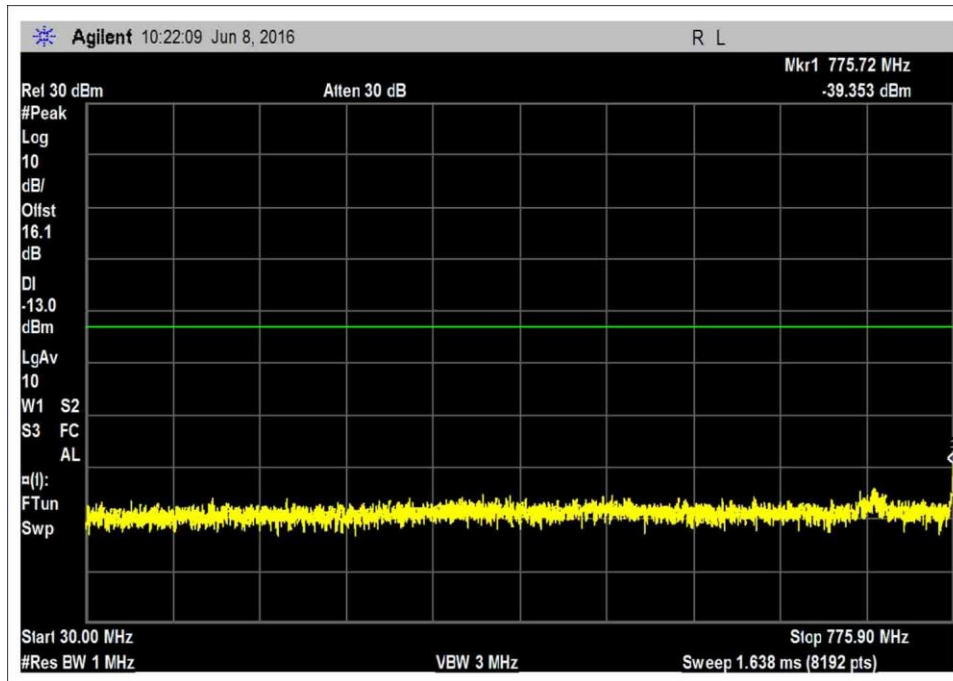
UL_698-716L



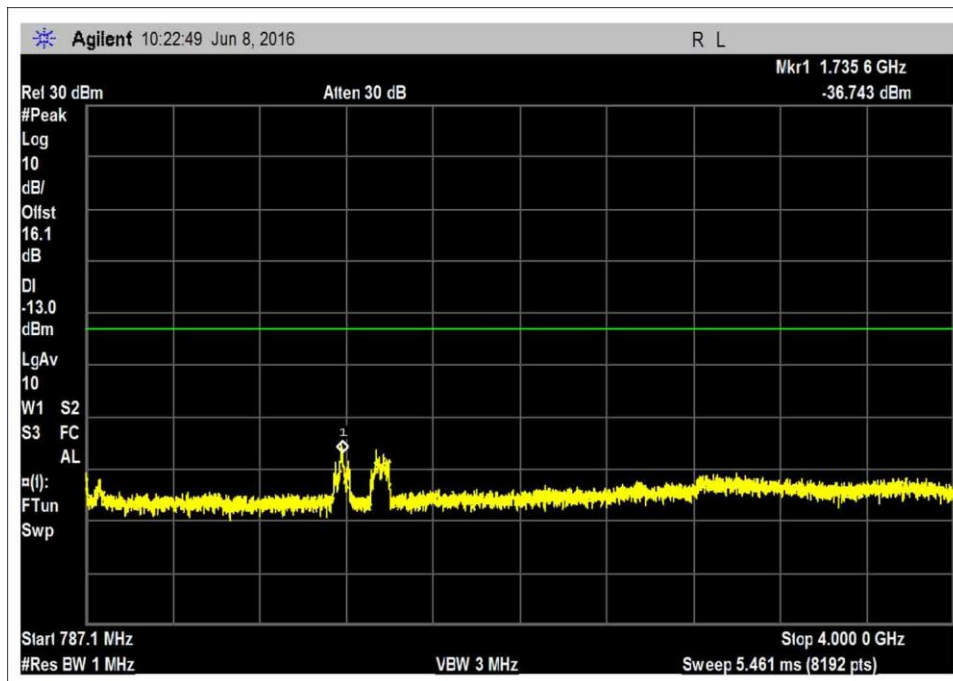
UL_698-716R1



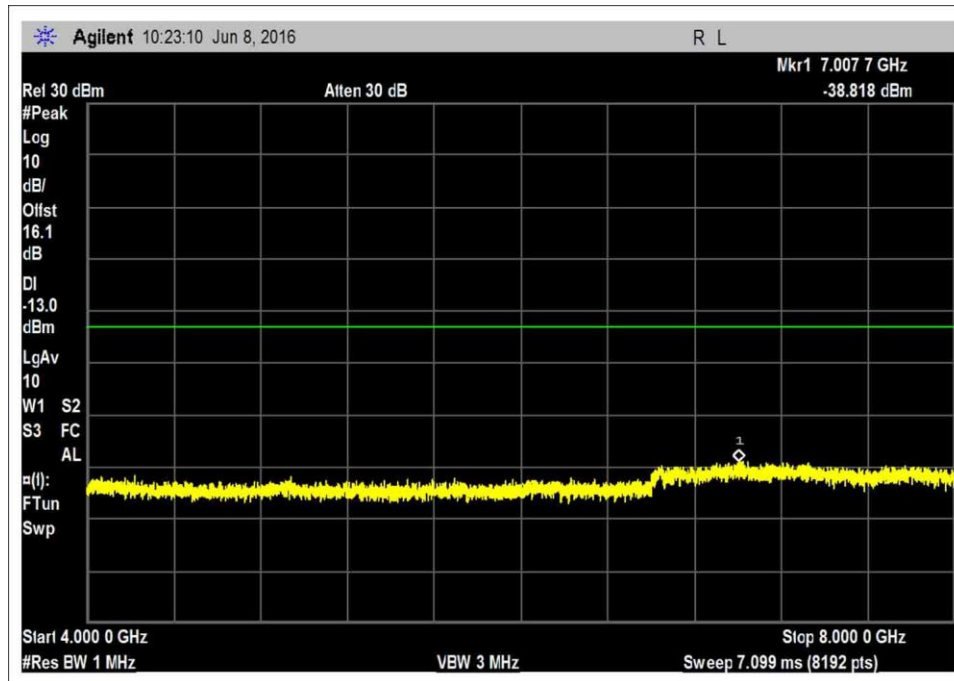
UL_698-716R2



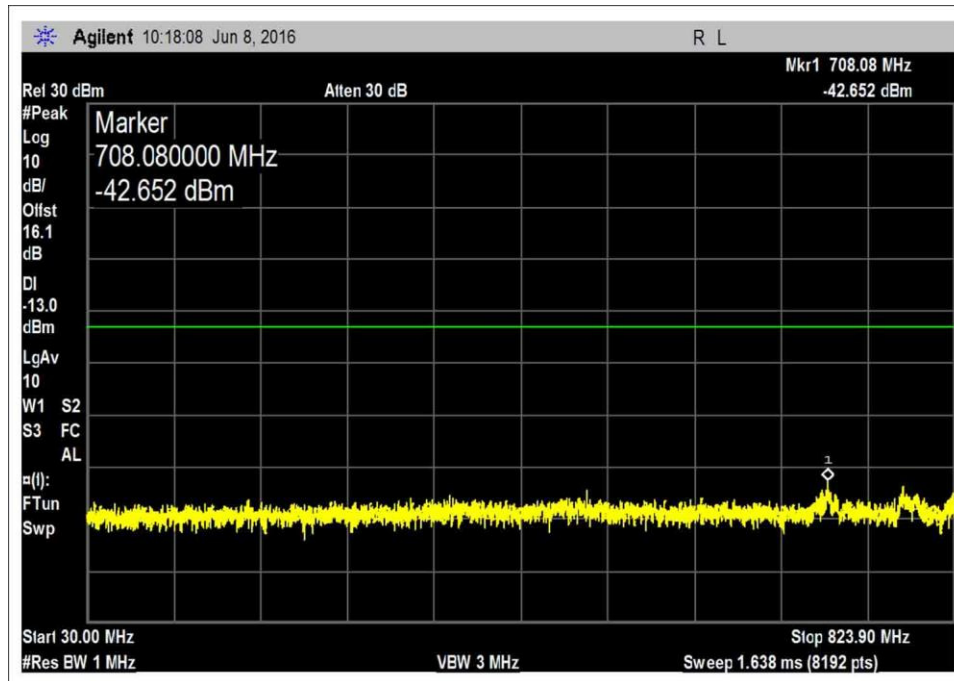
UL_776-787L



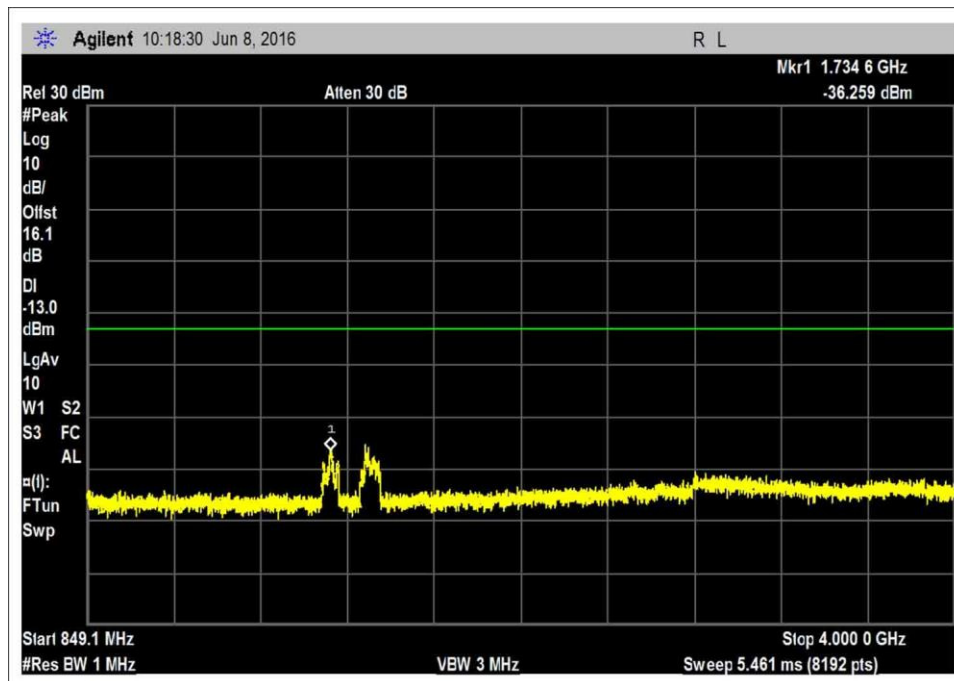
UL_776-787R1



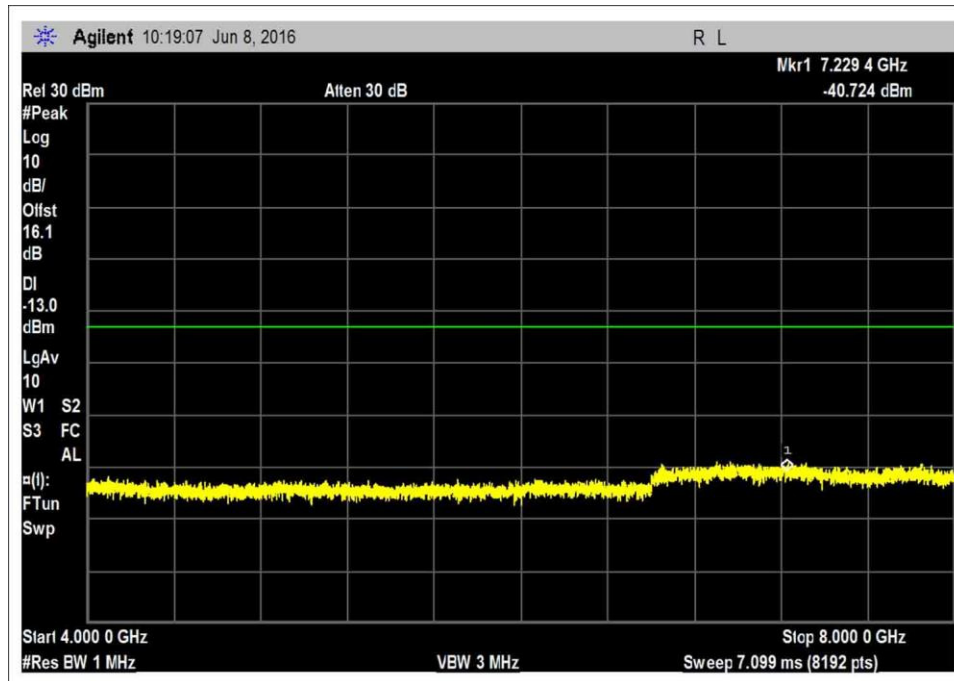
UL_776-787R2



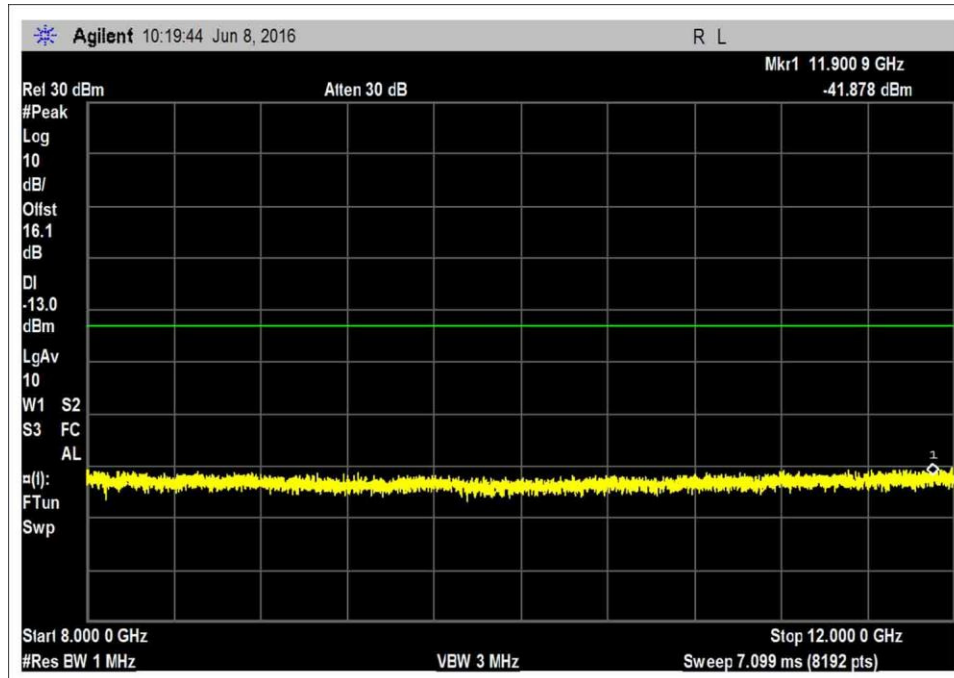
UL_824-849L



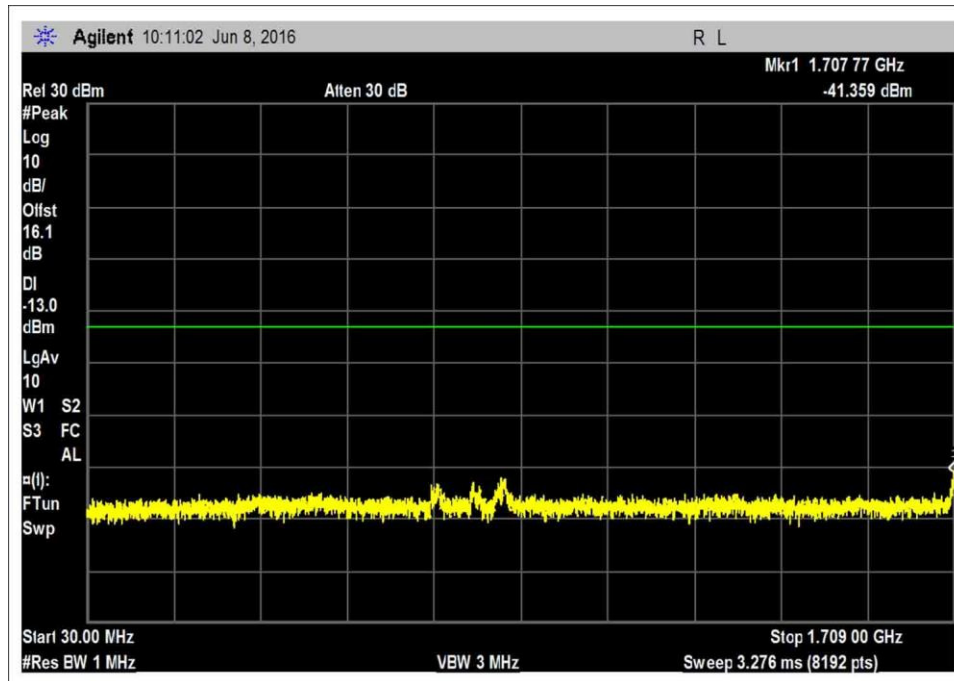
UL_824-849R1



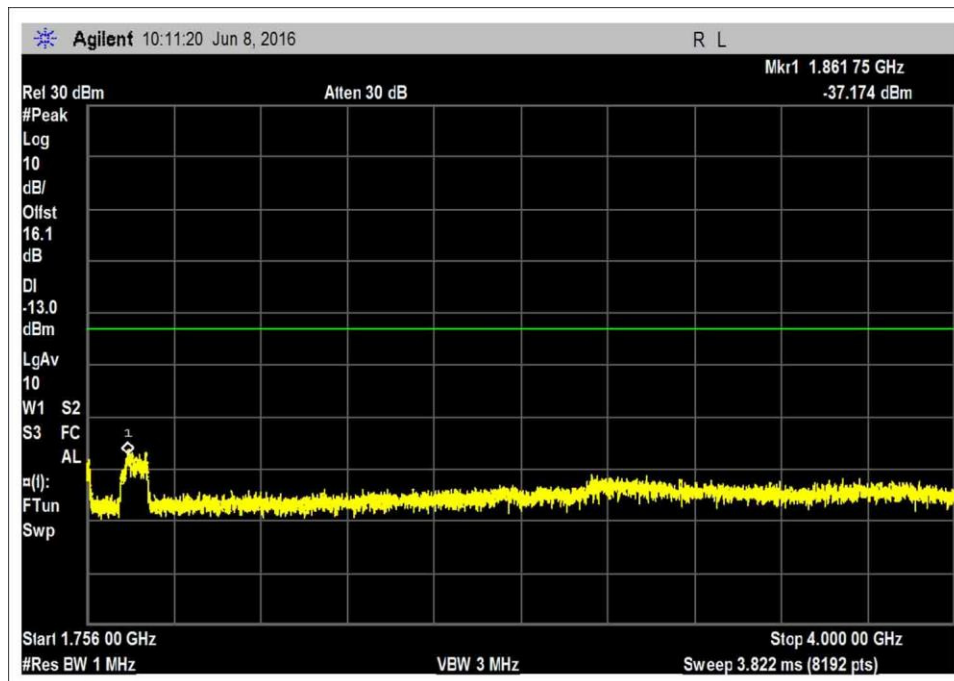
UL_824-849R2



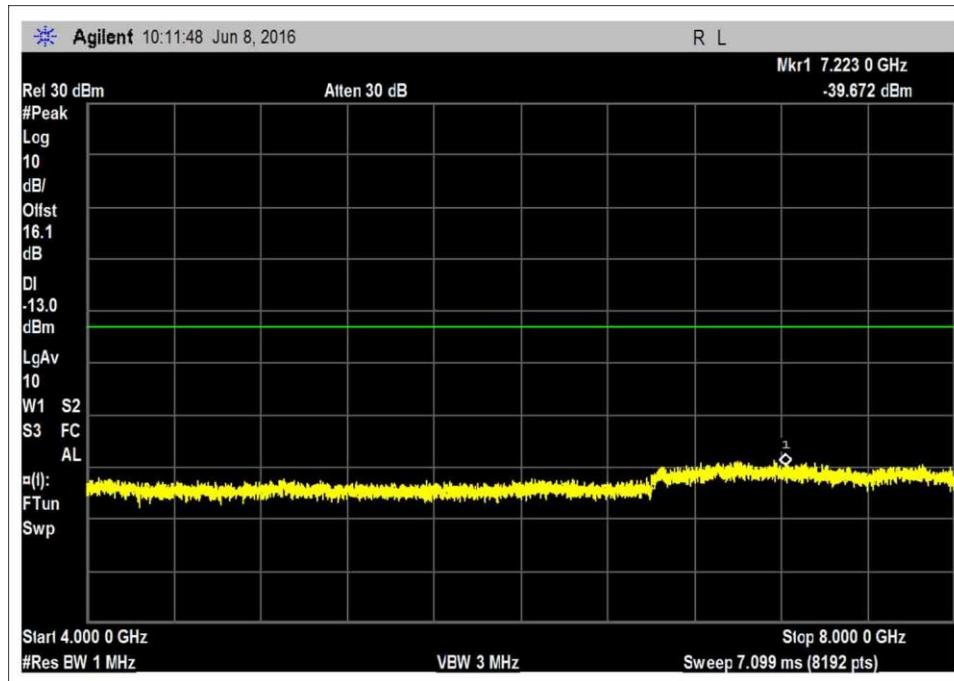
UL_824-849R3



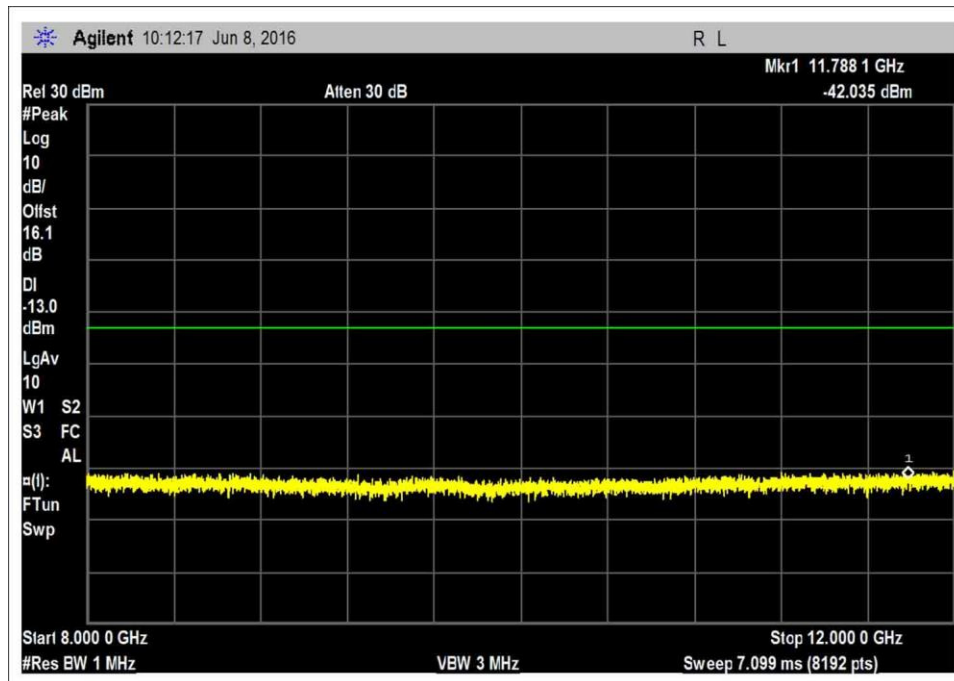
UL_1710-1755L



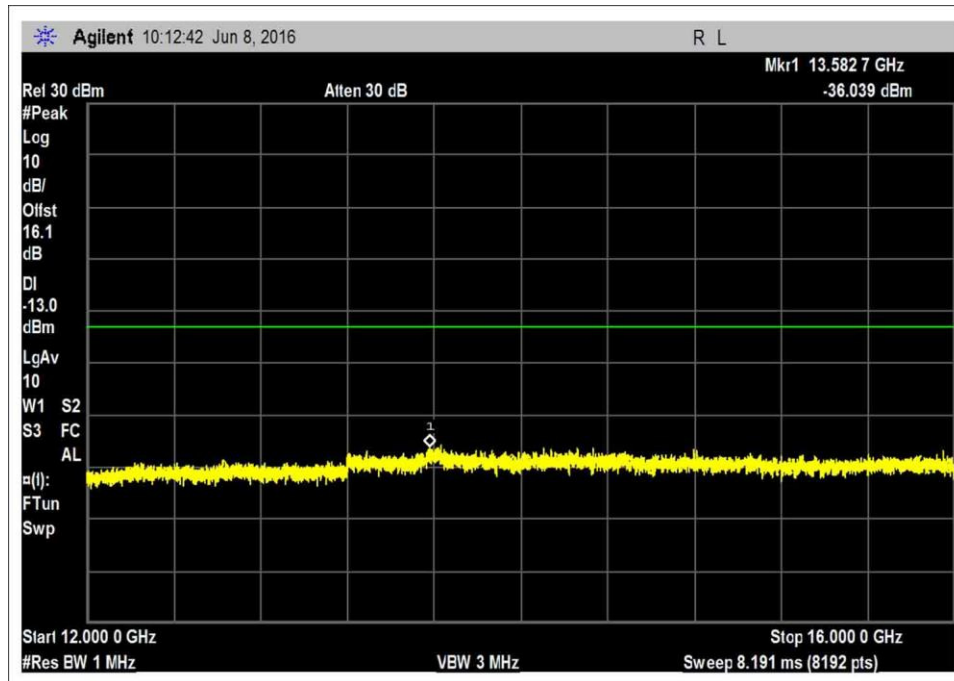
UL_1710-1755R1



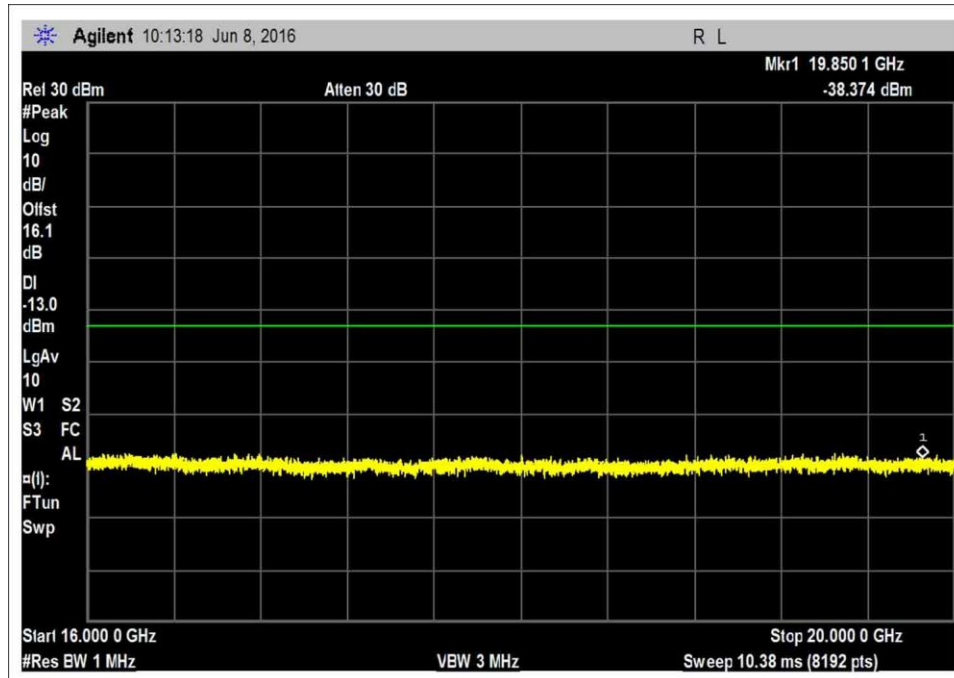
UL_1710-1755R2



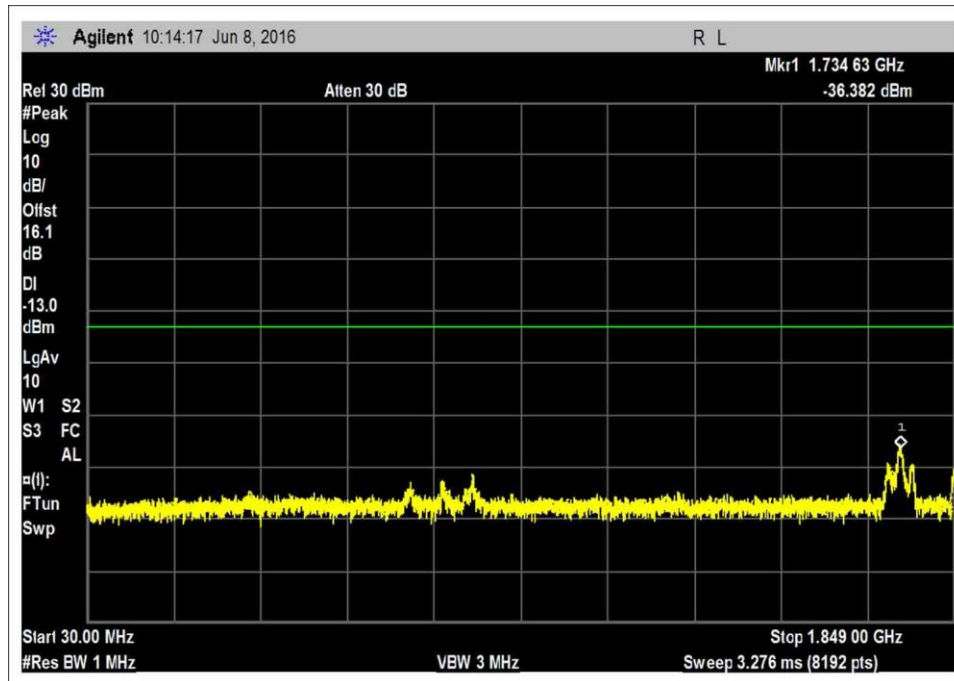
UL_1710-1755R3



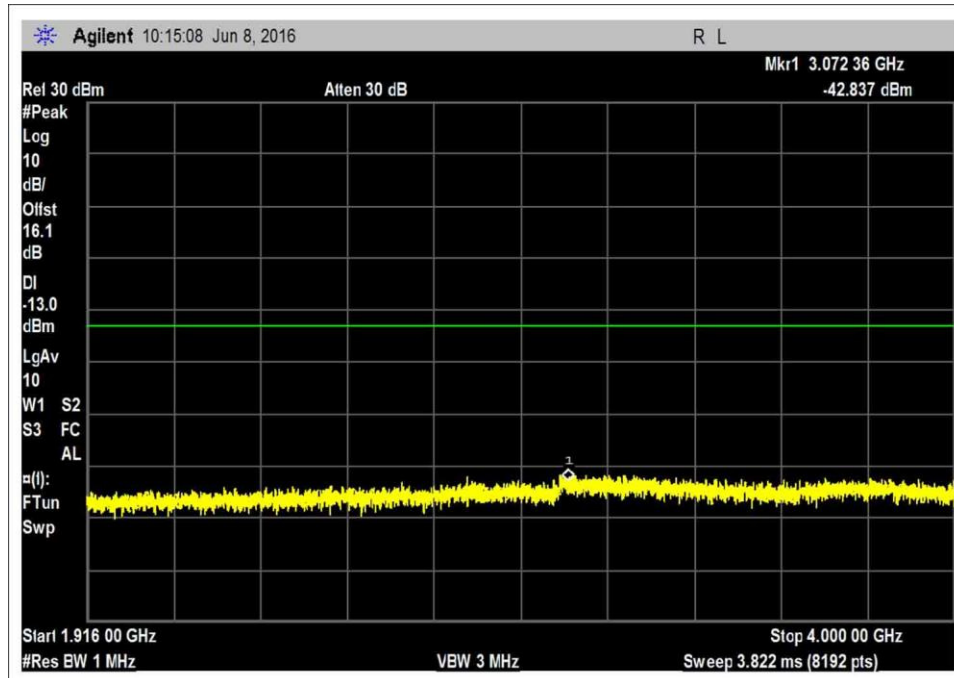
UL_1710-1755R4



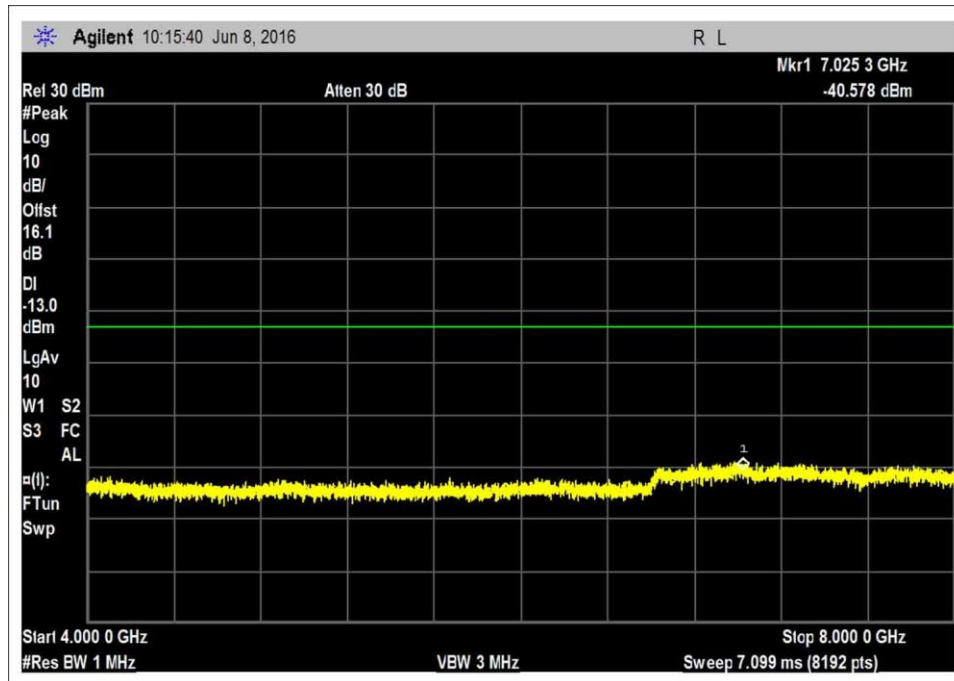
UL_1710-1755R5



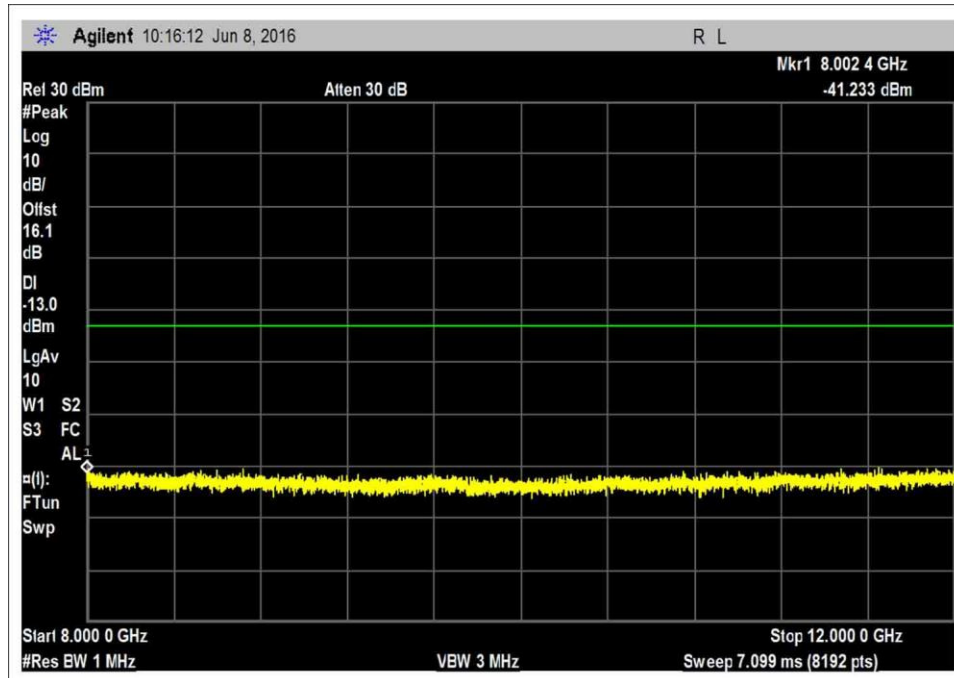
UL-1850-1915L



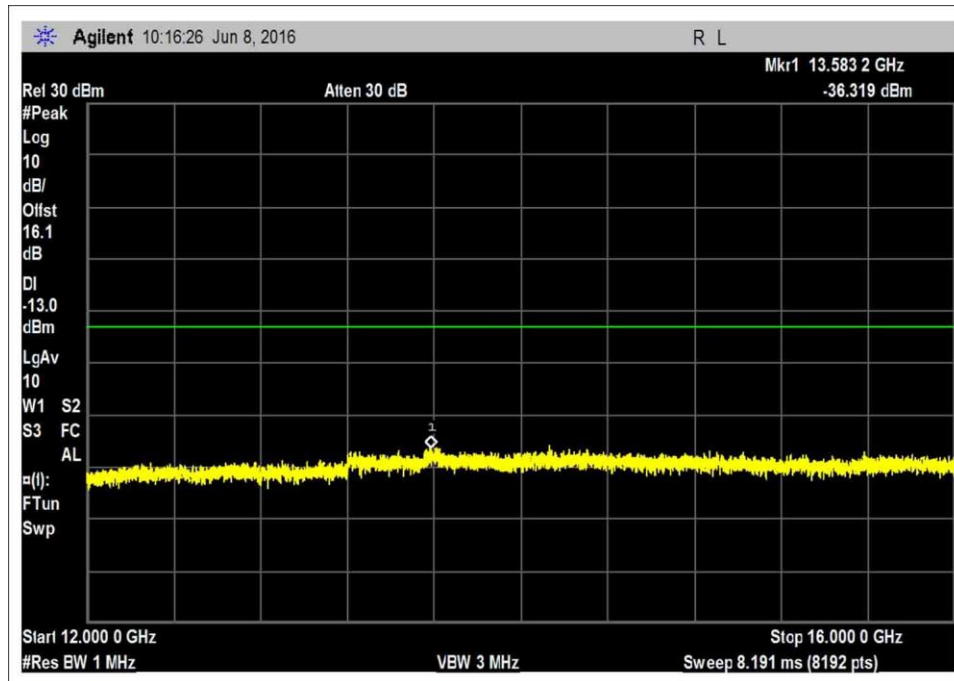
UL-1850-1915R1



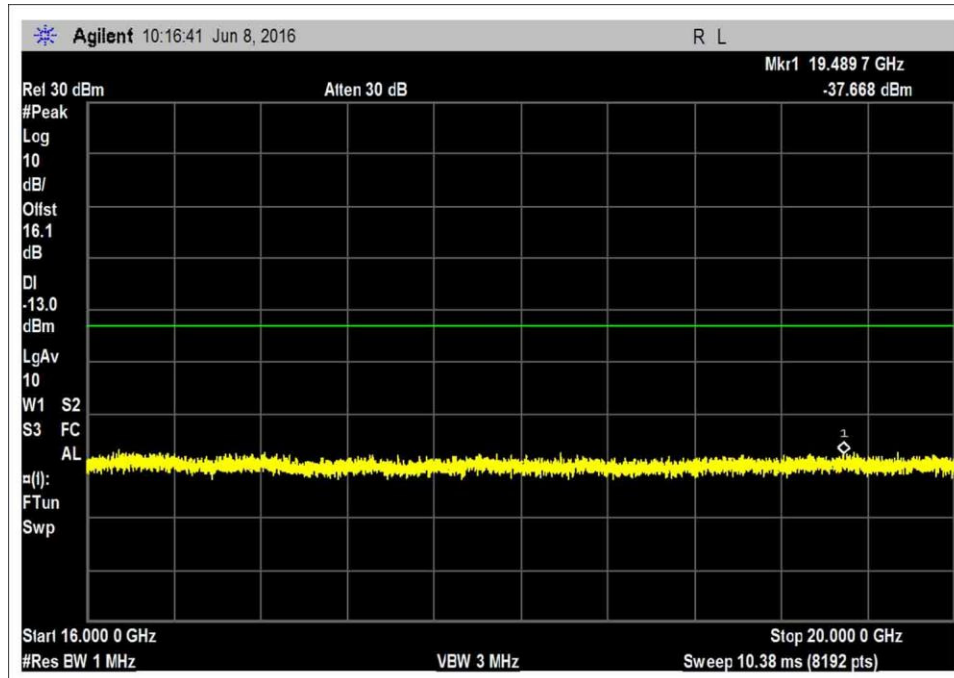
UL-1850-1915R2



UL-1850-1915R3

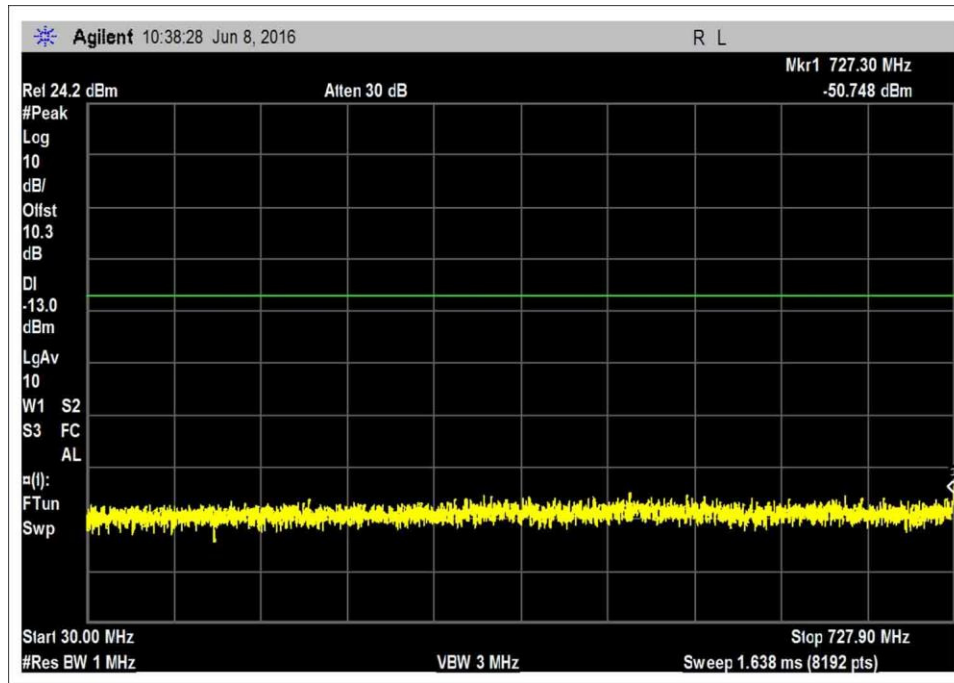


UL-1850-1915R4

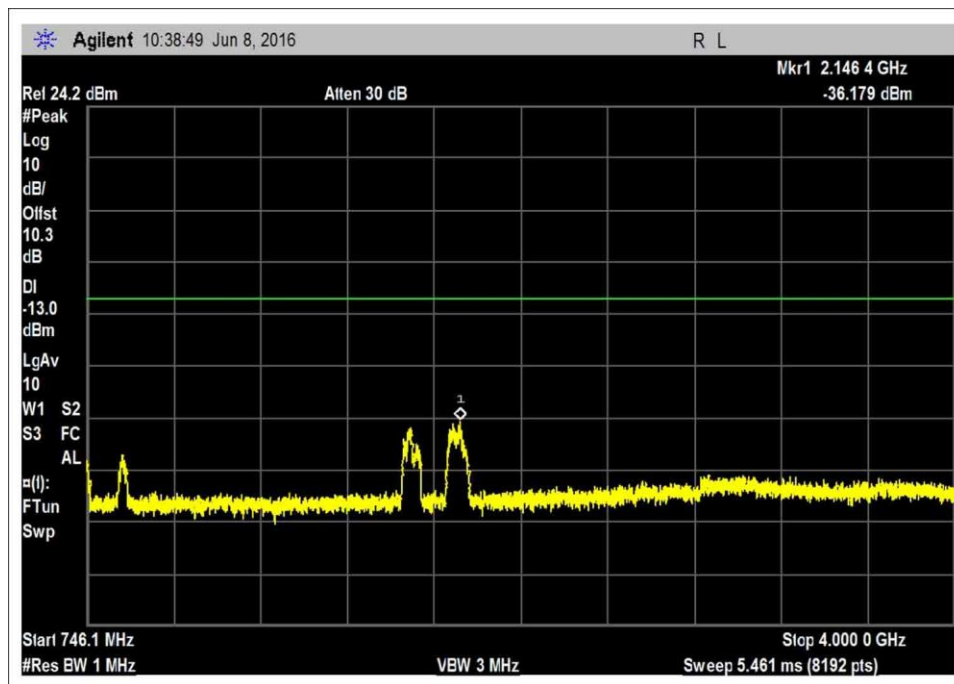


UL-1850-1915R5

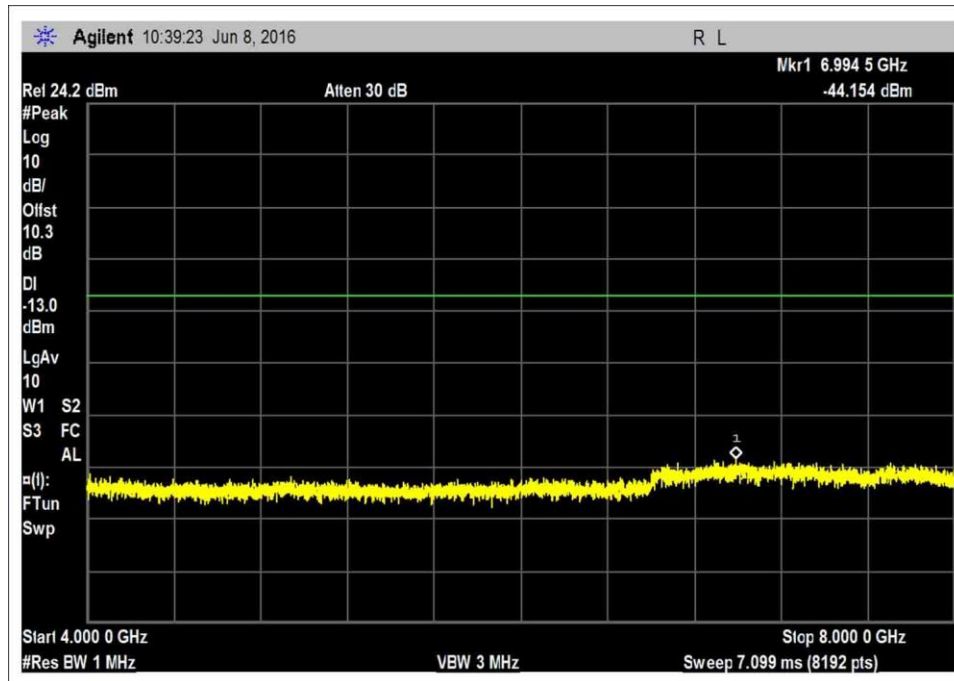
DL



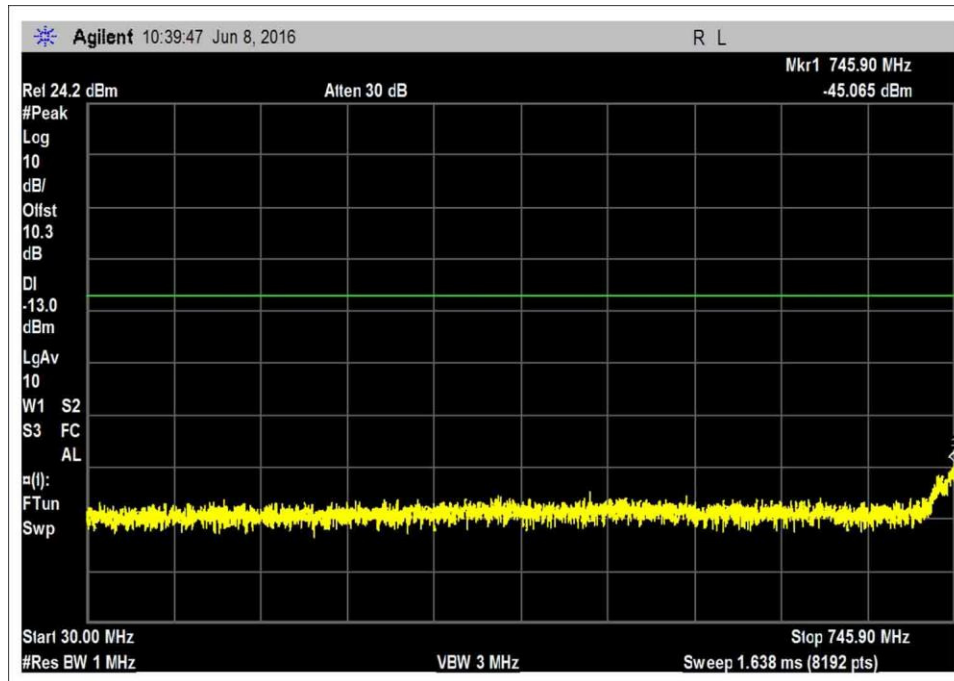
DL_728-746L



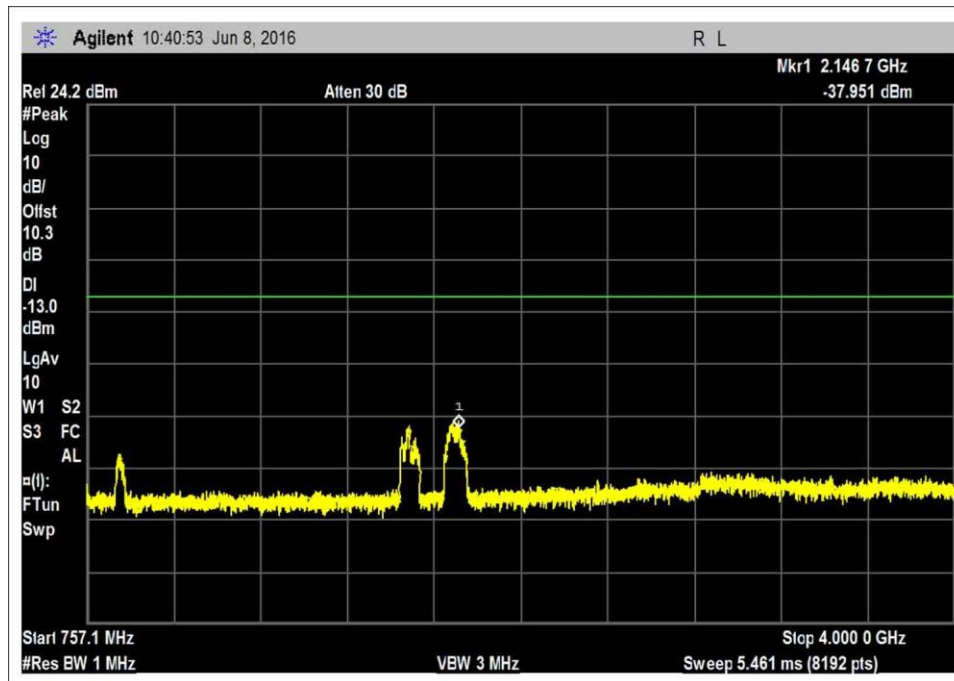
DL_728-746R1



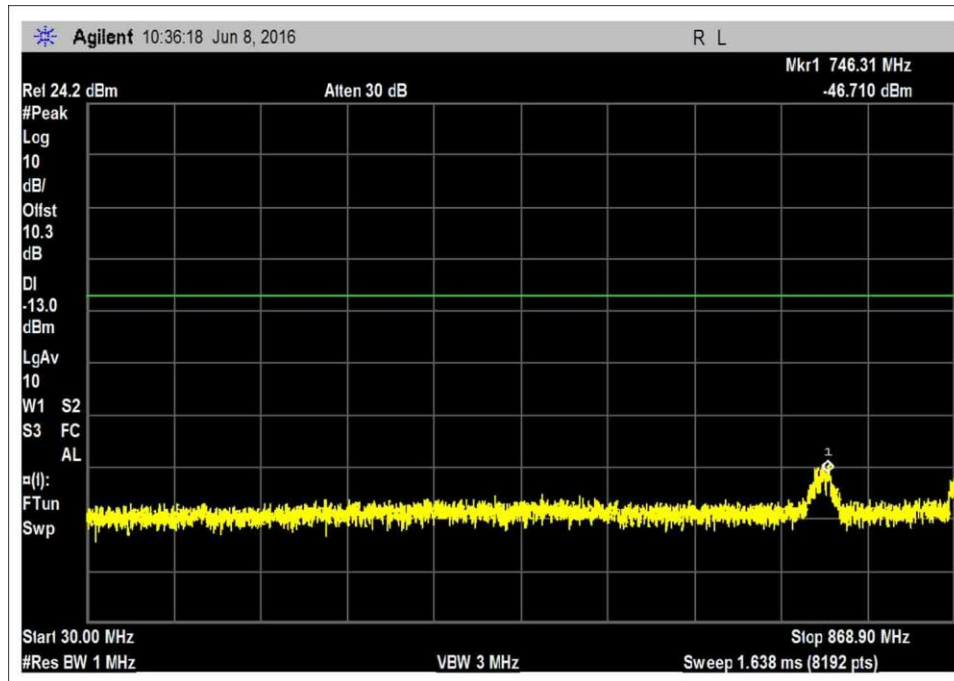
DL_728-746R2



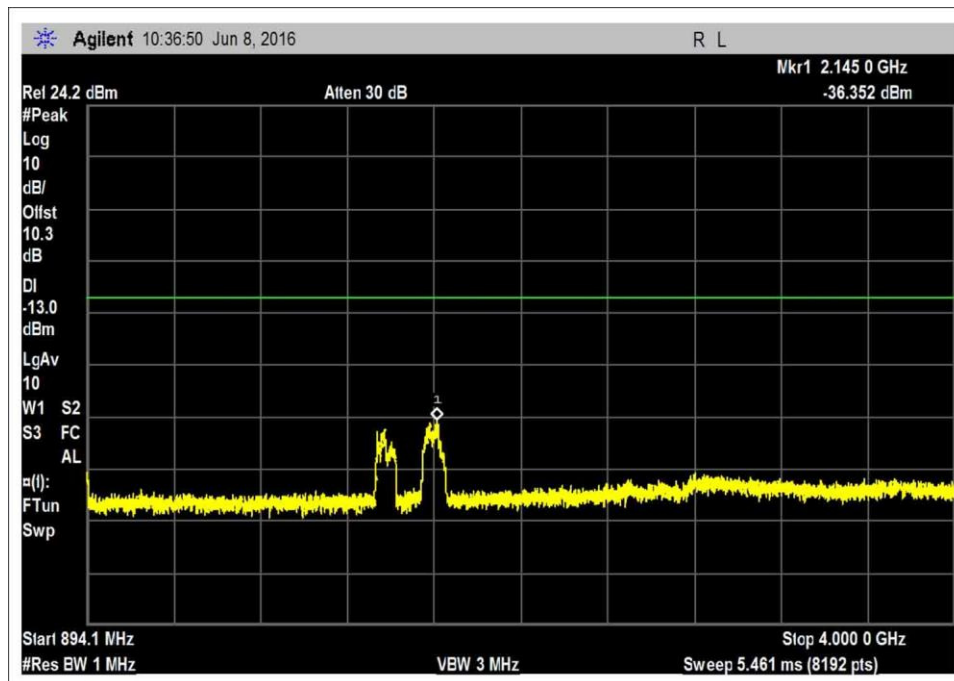
DL_746-757L



DL_746-757R2



DL_869-894L



DL_869-894R1