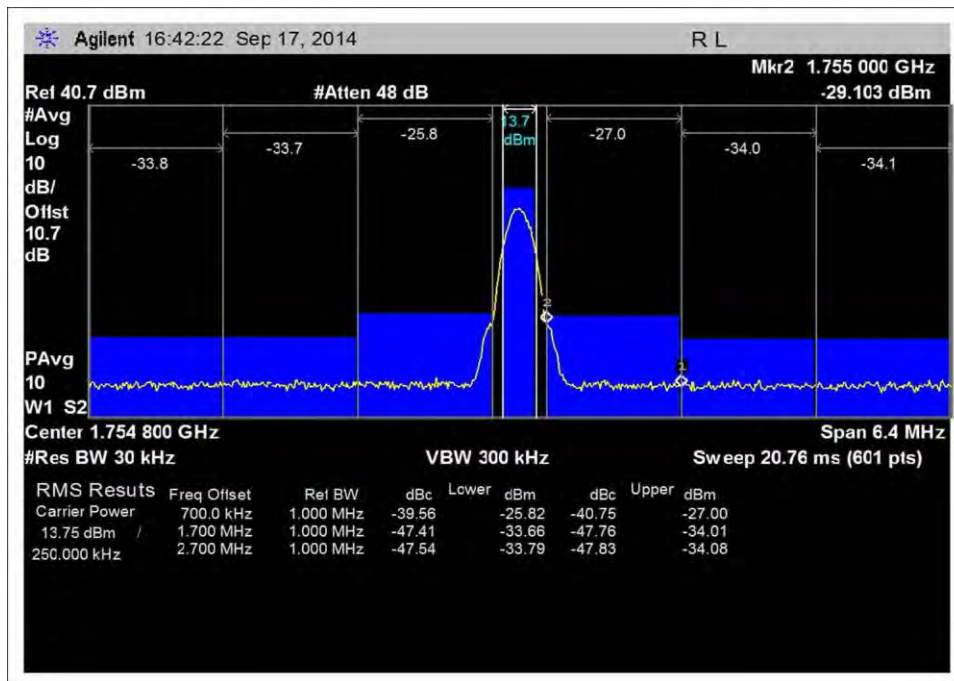
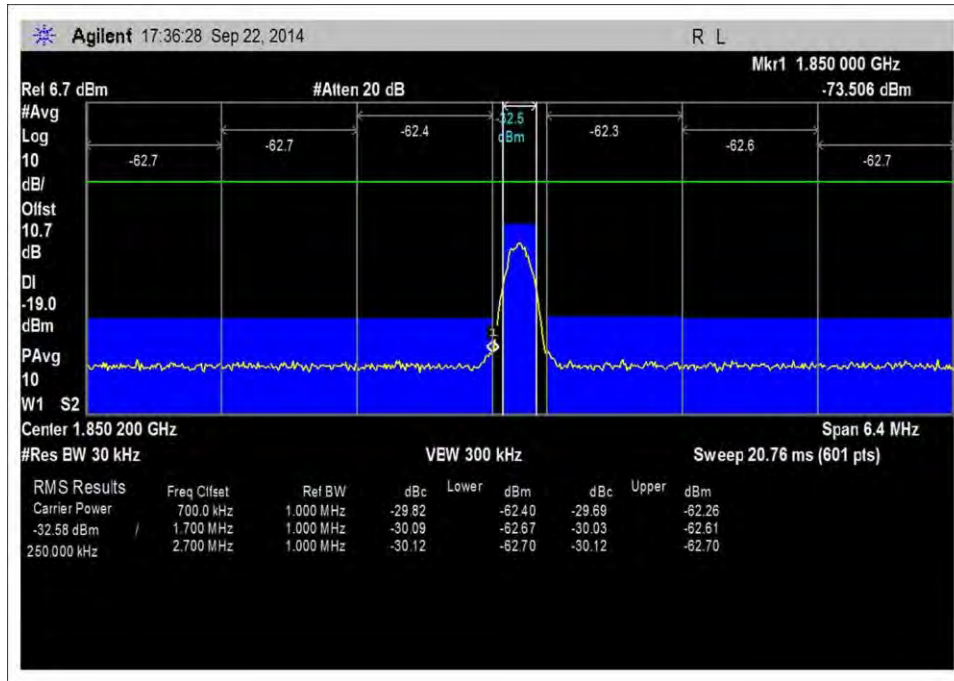


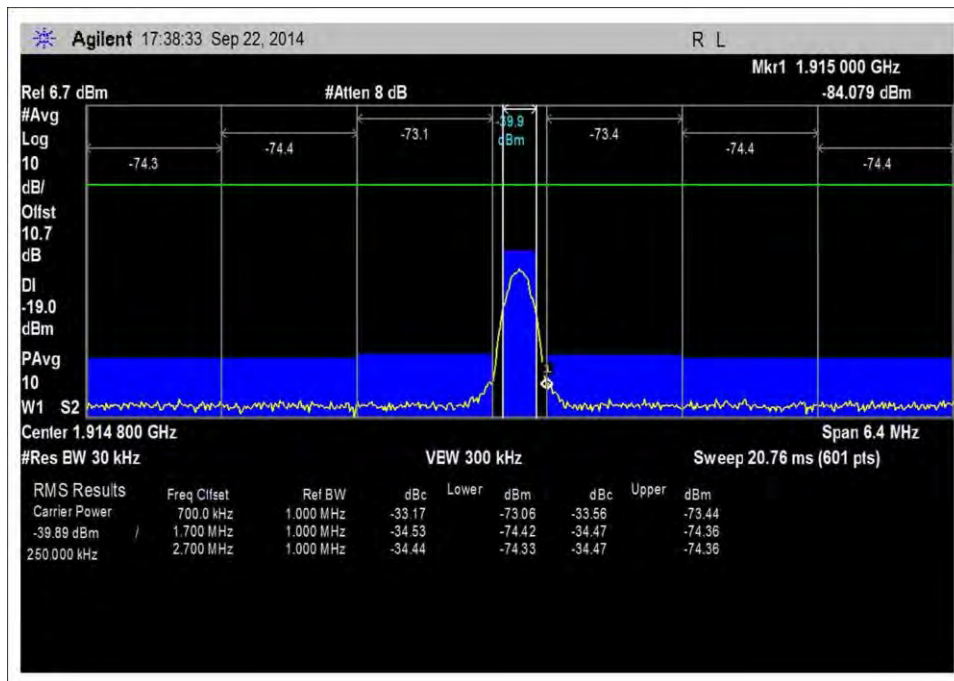
UL_1710-1755MHz_GSM_L PreAGC



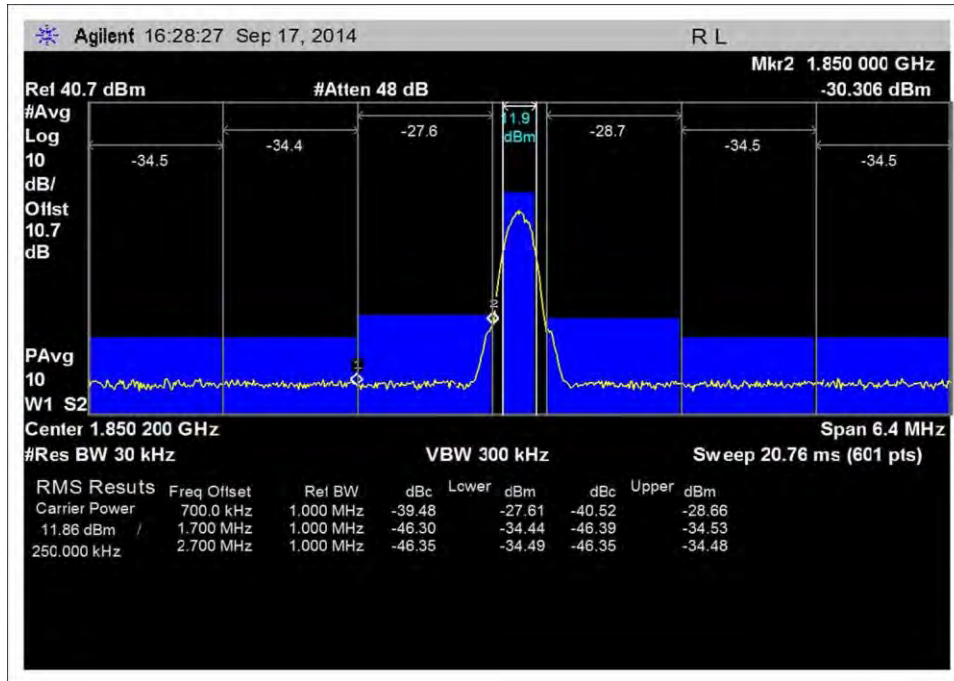
UL_1710-1755MHz_GSM_H PreAGC



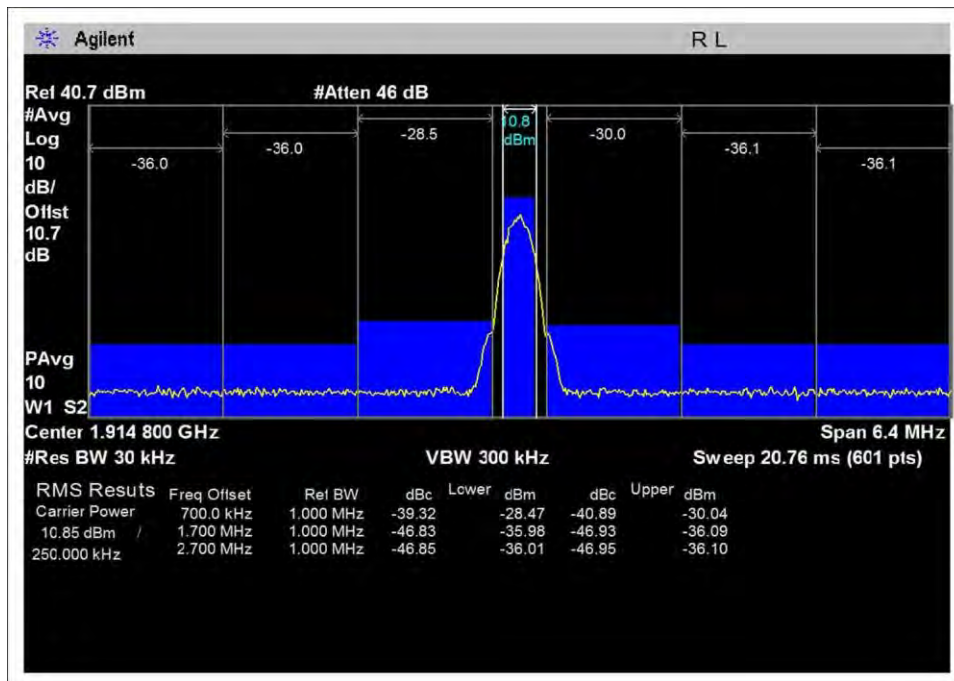
UL_1850-1915MHz_GSM_L_0dBm



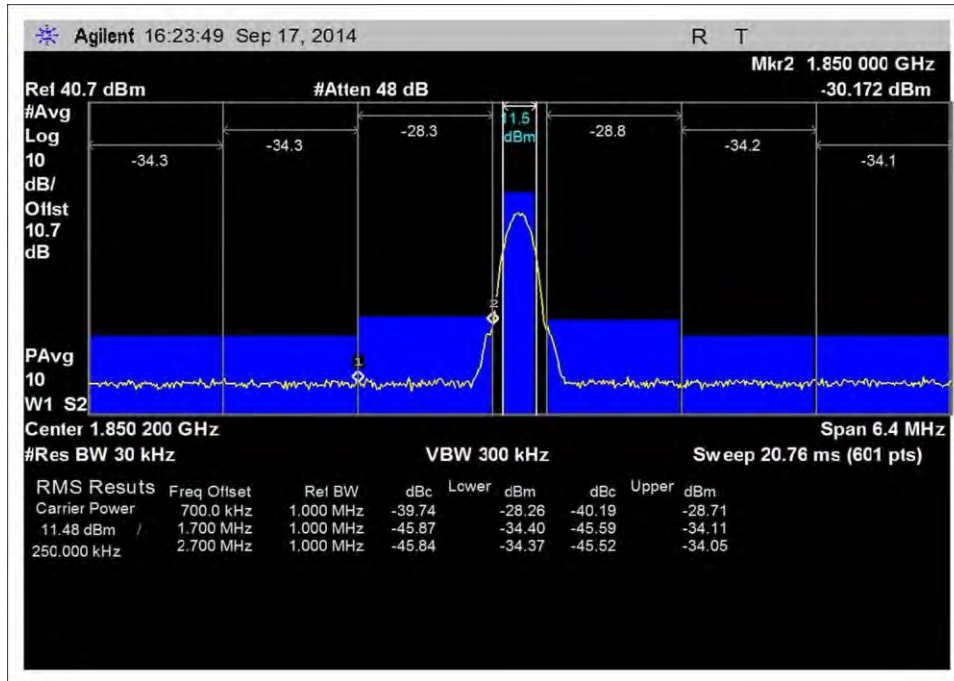
UL_1850-1915MHz_GSM_H_0dBm



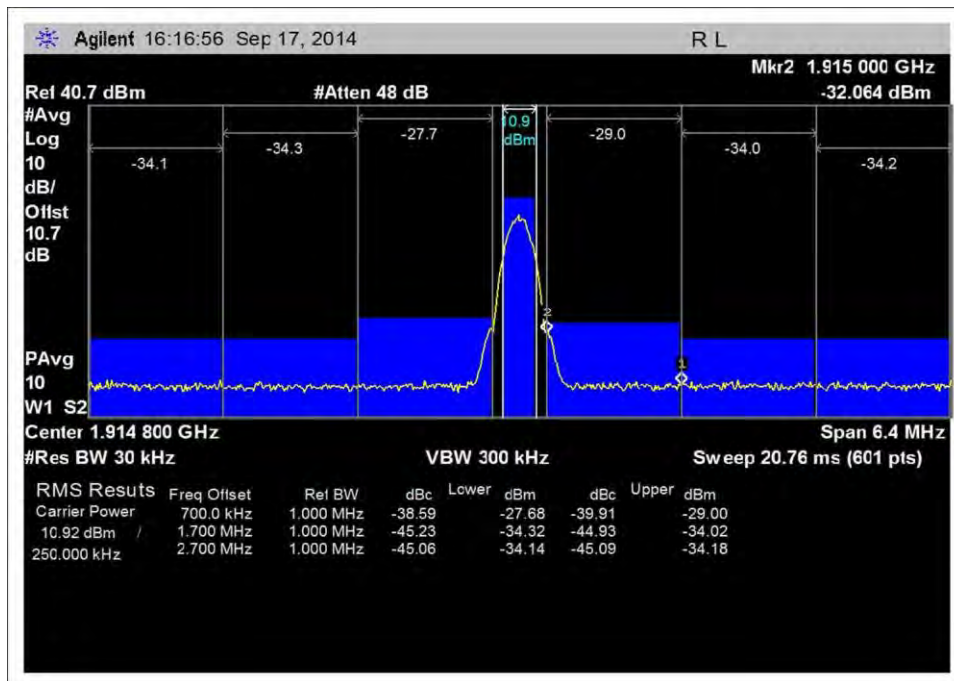
UL_1850-1915MHz_GSM_L -37dBm



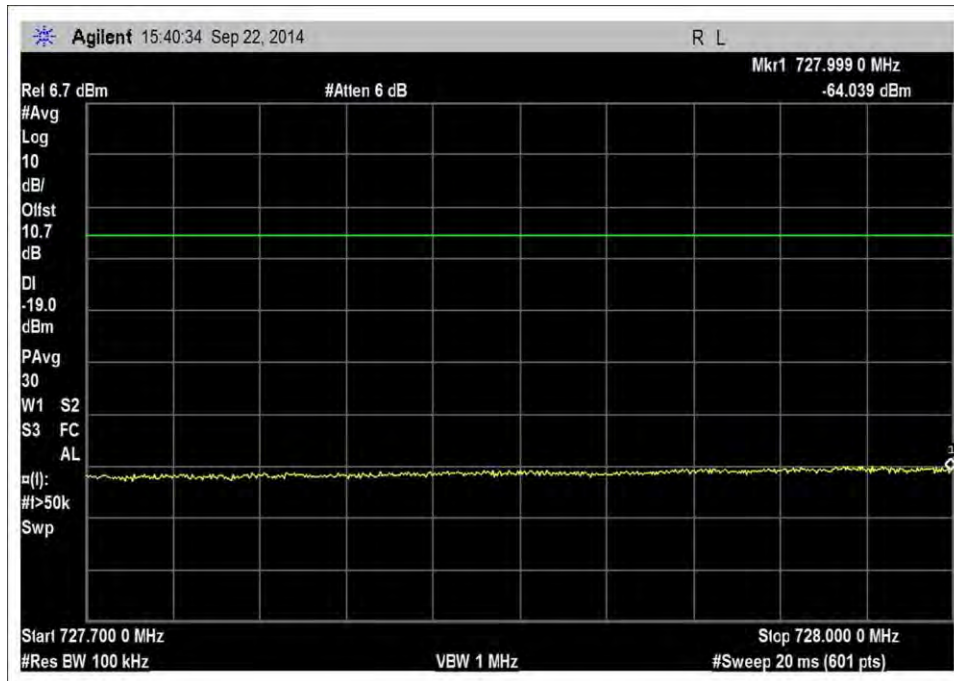
UL_1850-1915MHz_GSM_H -31dBm



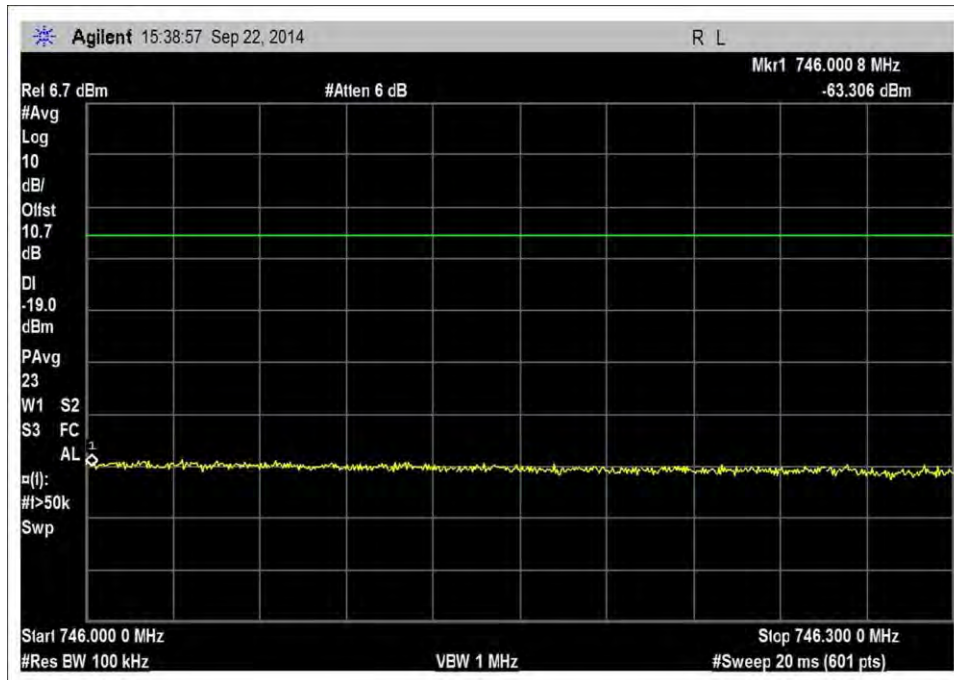
UL_1850-1915MHz_GSM_L PreACP



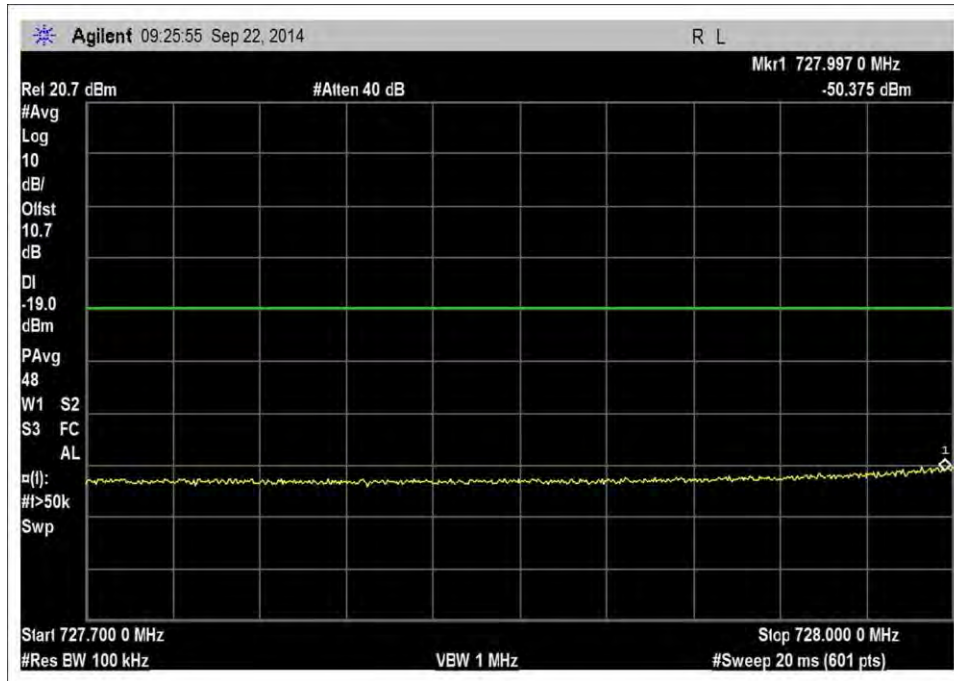
UL_1850-1915MHz_GSM_H PreAGC



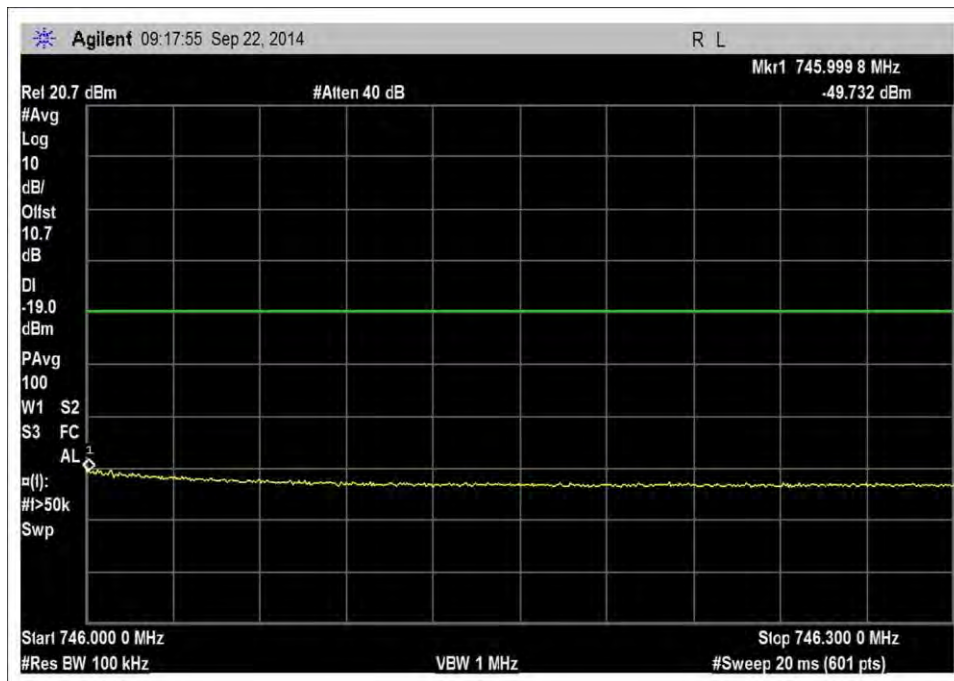
DL_728-746MHz_LTE_L -20dBm_2



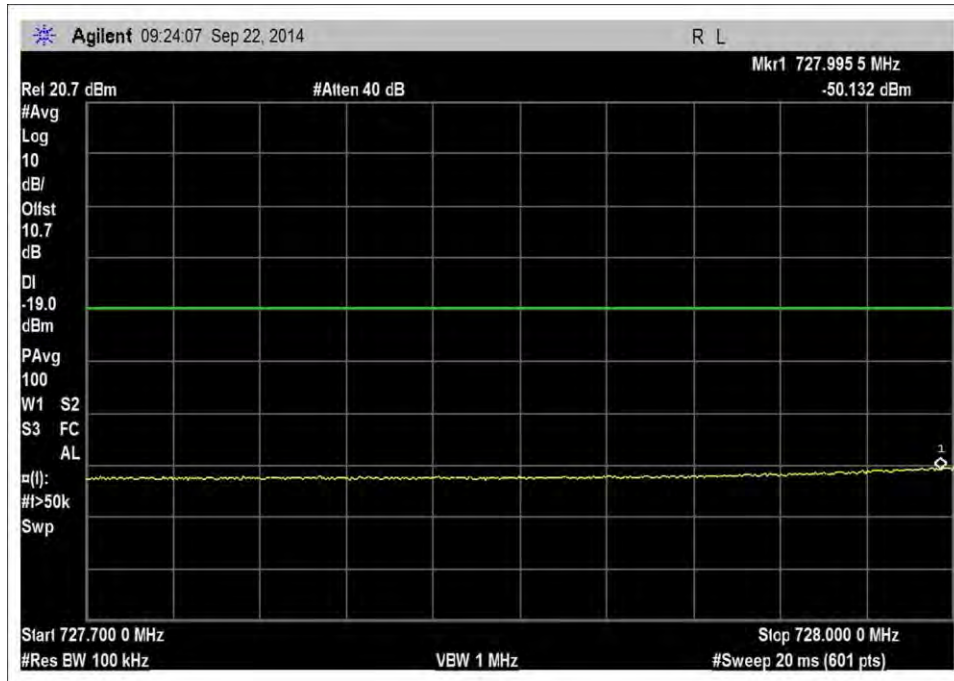
DL_728-746MHz_LTE_H -20dBm



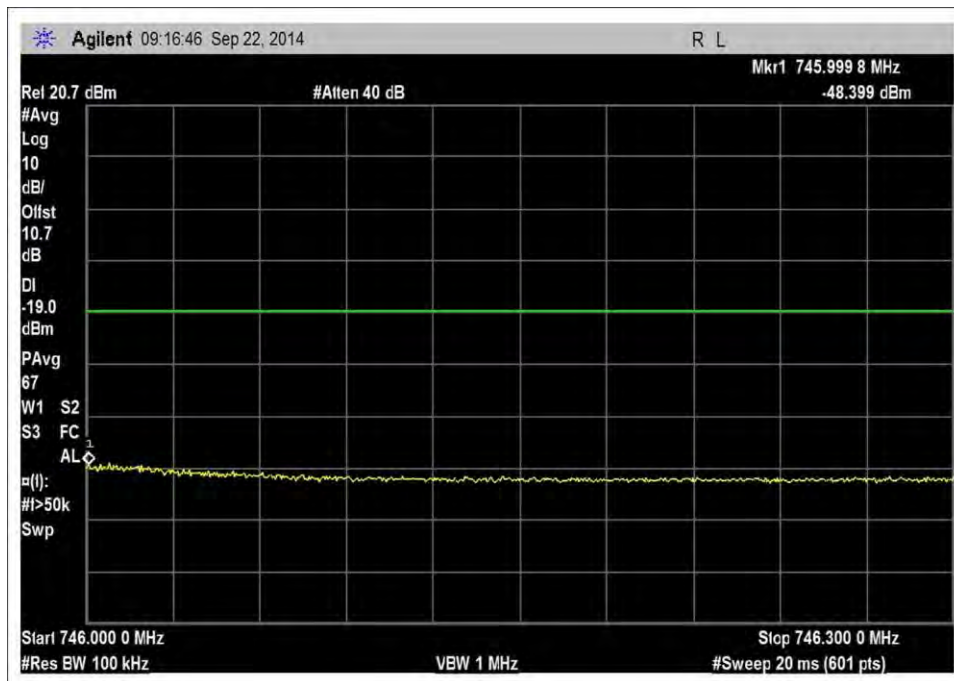
DL_728-746MHz_LTE_L_-48dBm



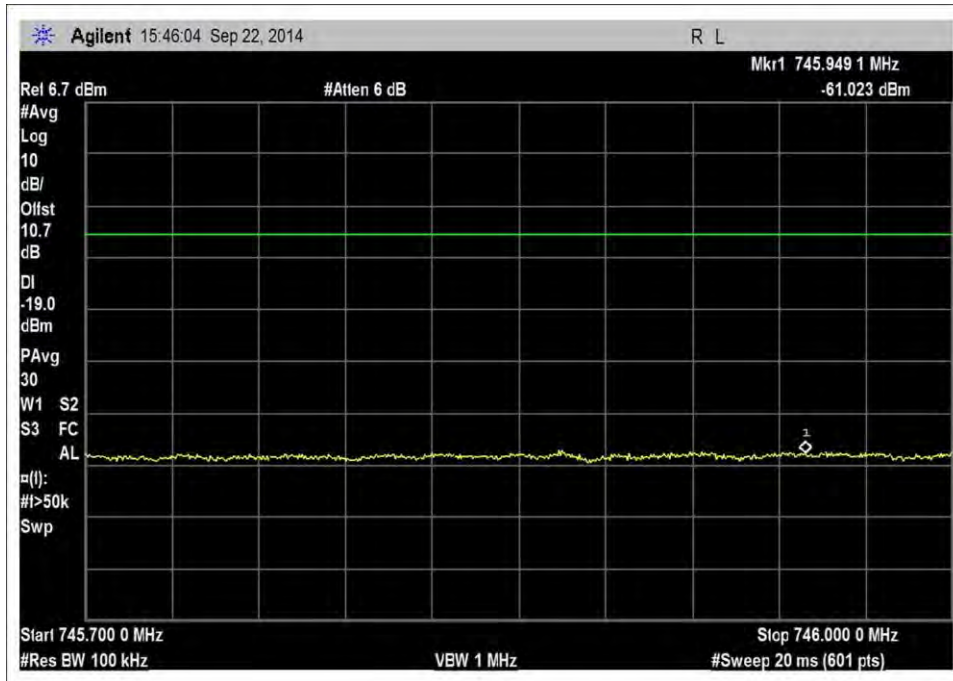
DL_728-746MHz_LTE_H_-47dBm



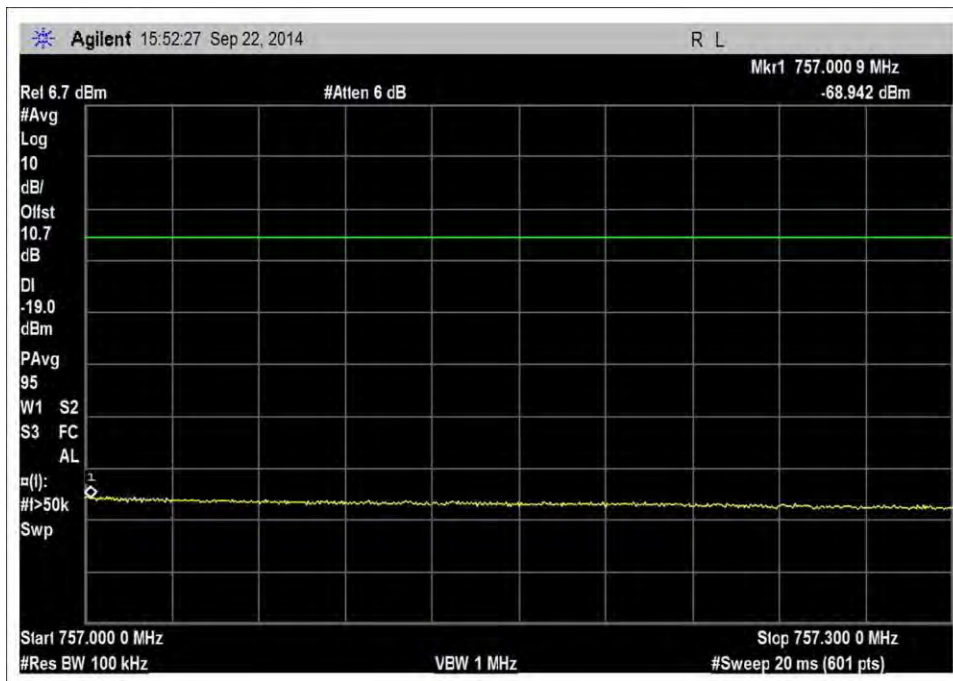
DL_728-746MHz_LTE_L_pre AGC



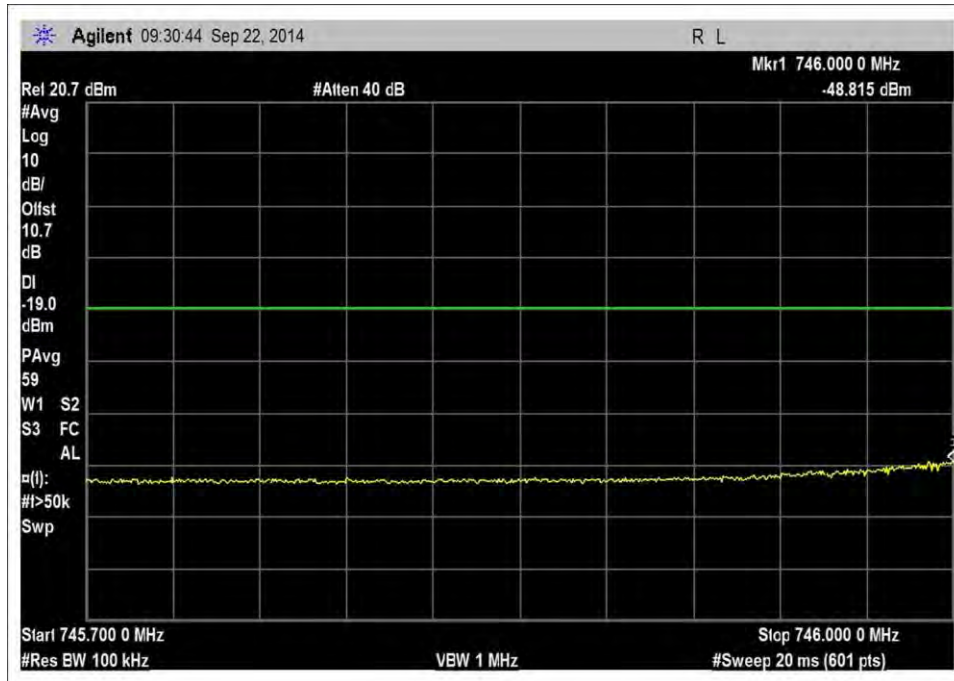
DL_728-746MHz_LTE_H_pre AGC



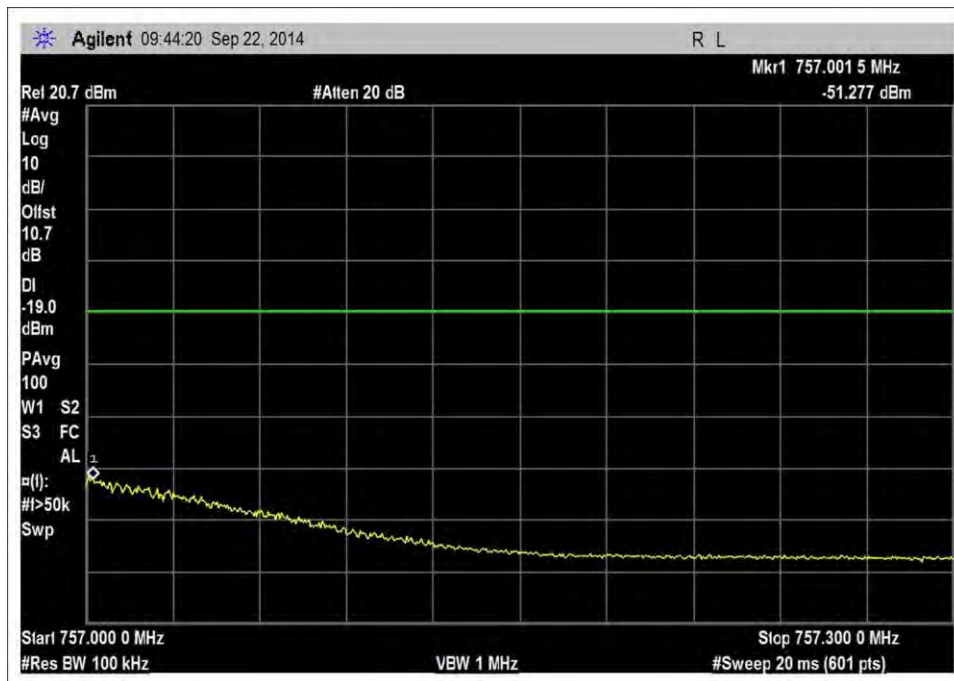
DL_746-757MHz_LTE_L -20dBm



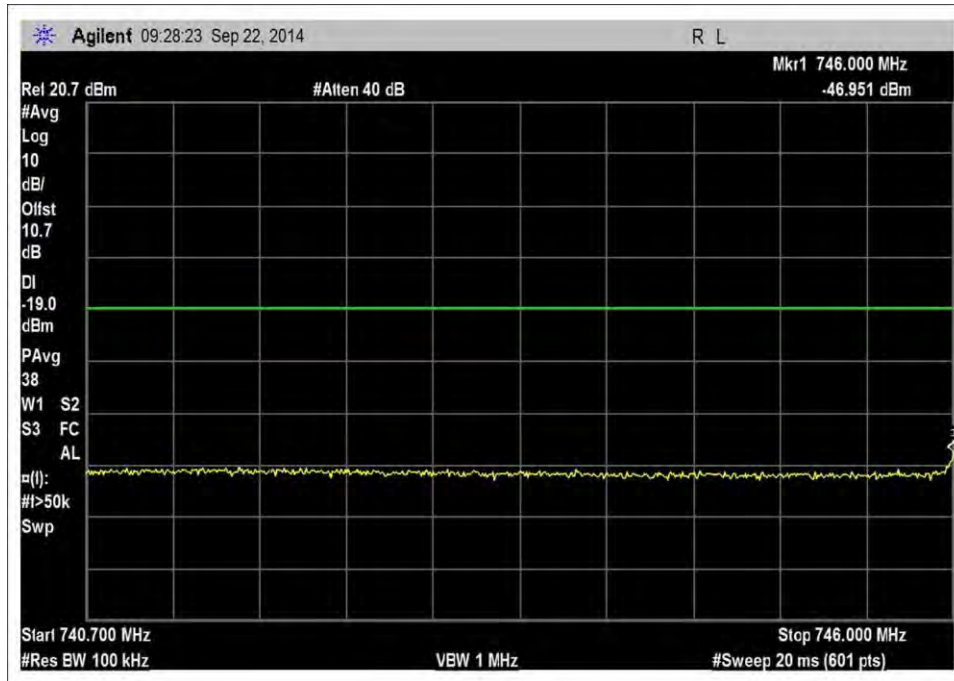
DL_746-757MHz_LTE_H -20dBm



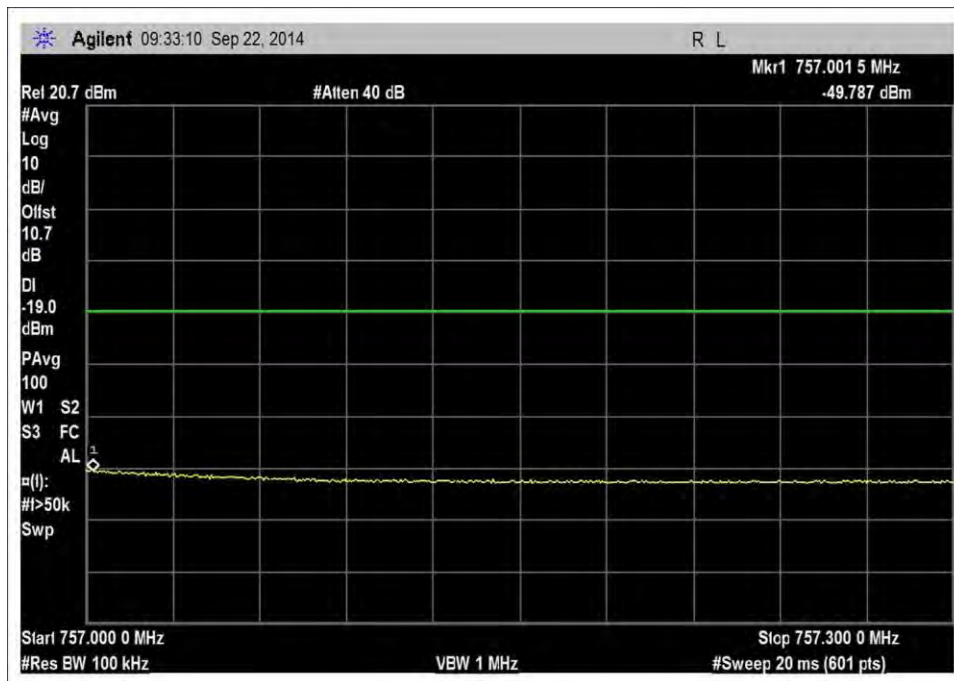
DL_746-757MHz_LTE_L_-47dBm



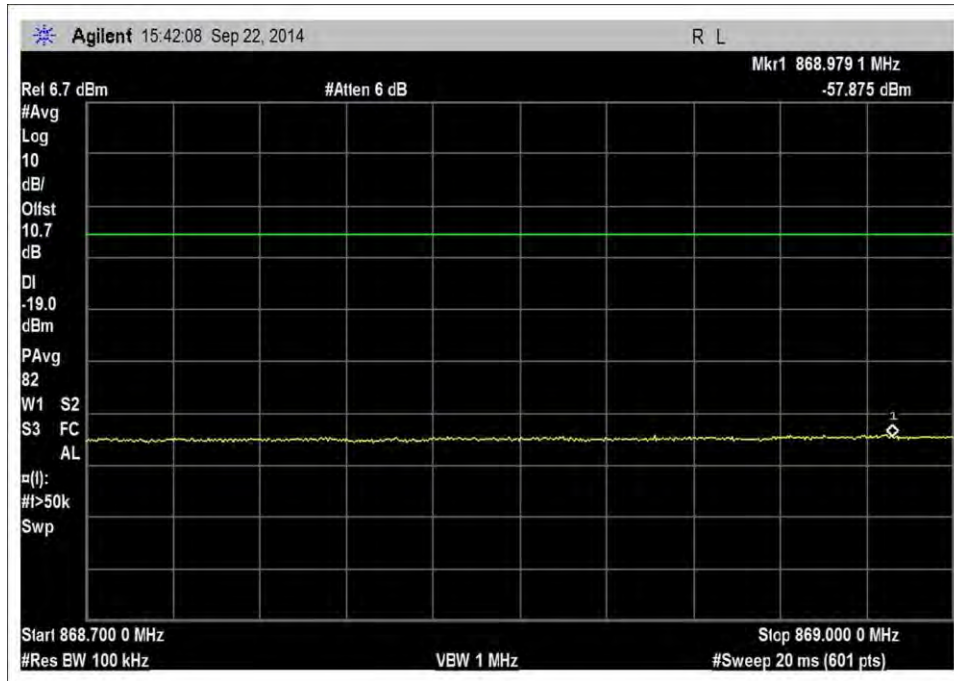
DL_746-757MHz_LTE_H_46dBm



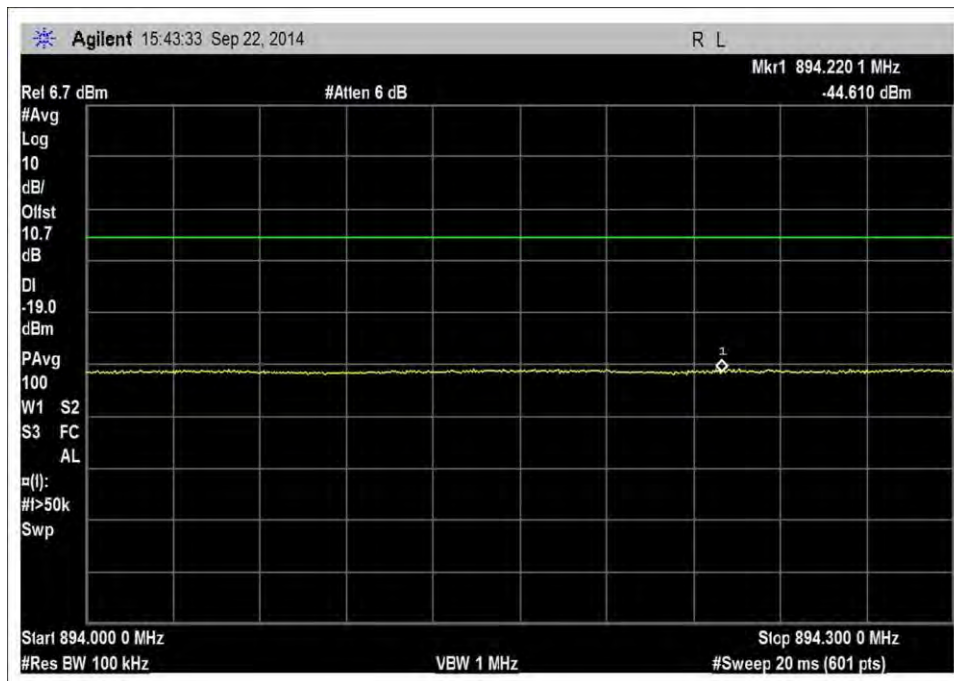
DL_746-757MHz_LTE_L_pre AGC



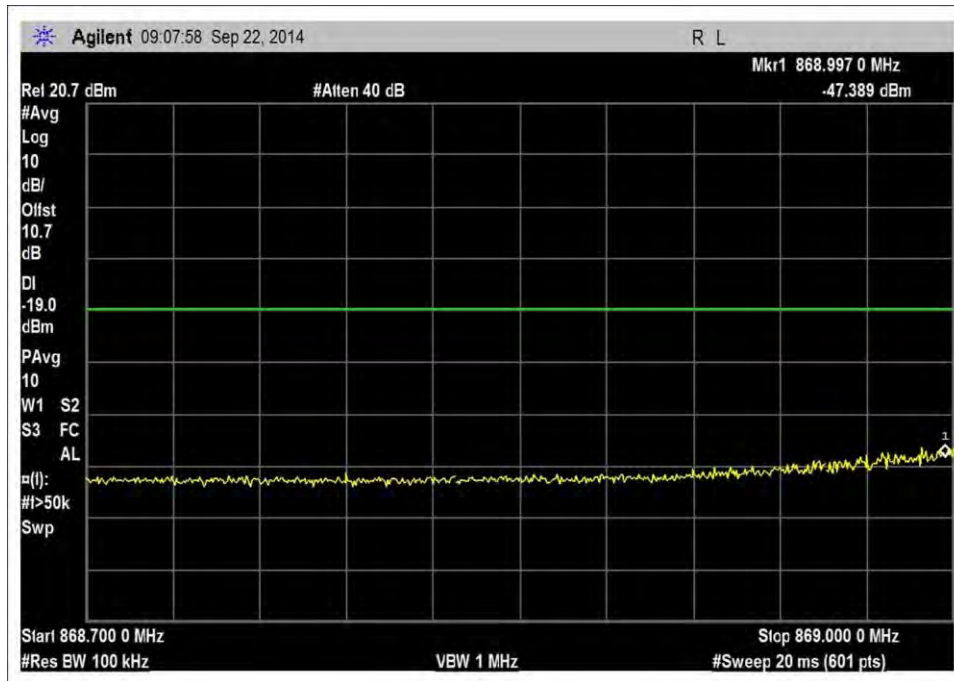
DL_746-757MHz_LTE_H_pre AGC



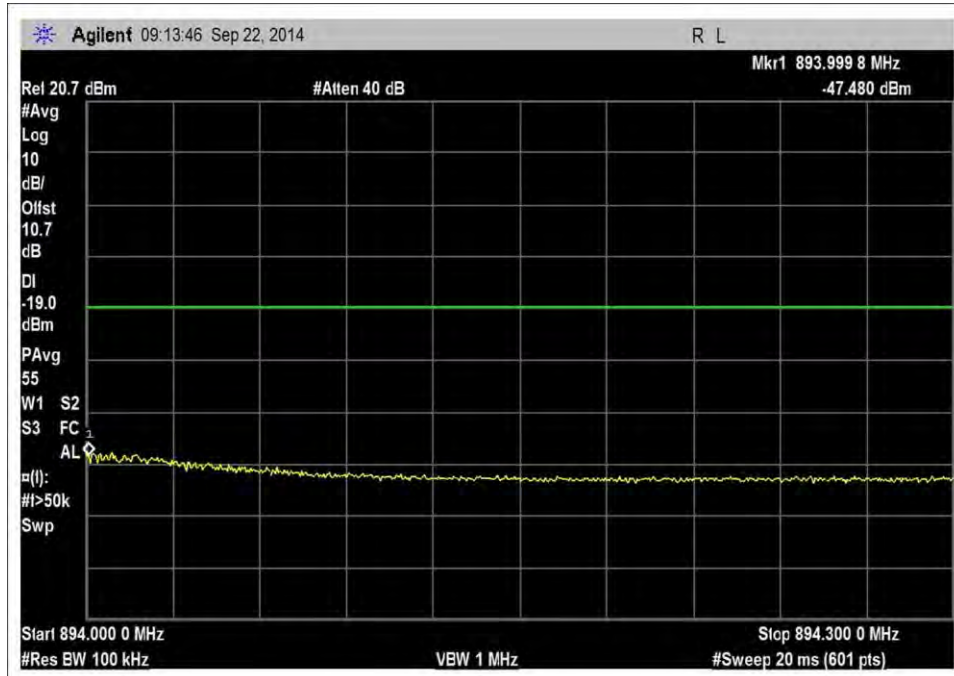
DL_869-894MHz_LTE_L -20dBm2



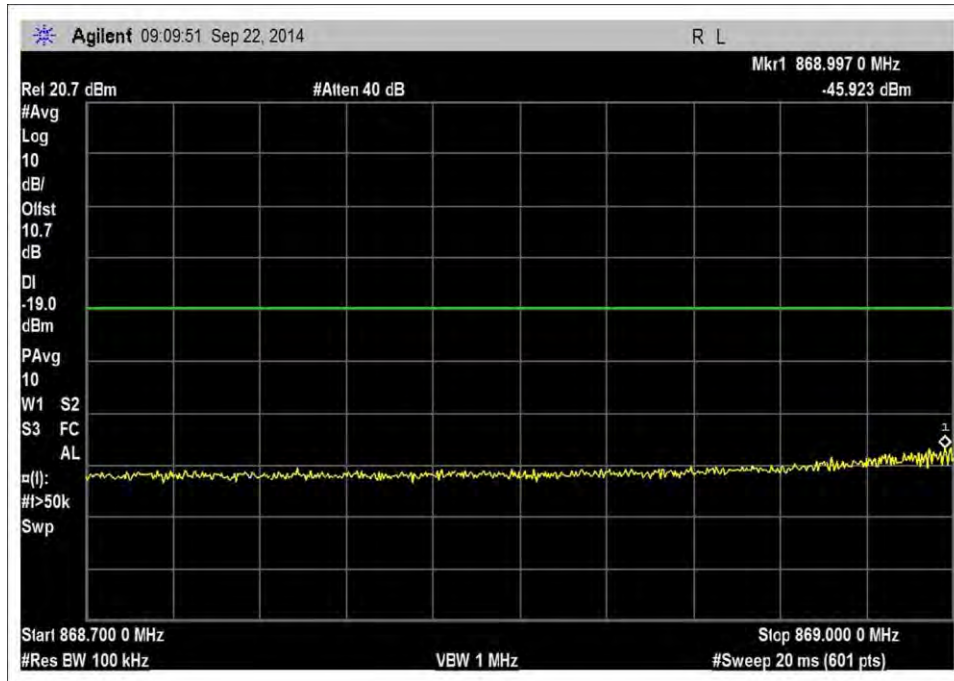
DL_869-894MHz_LTE_H -20dBm2



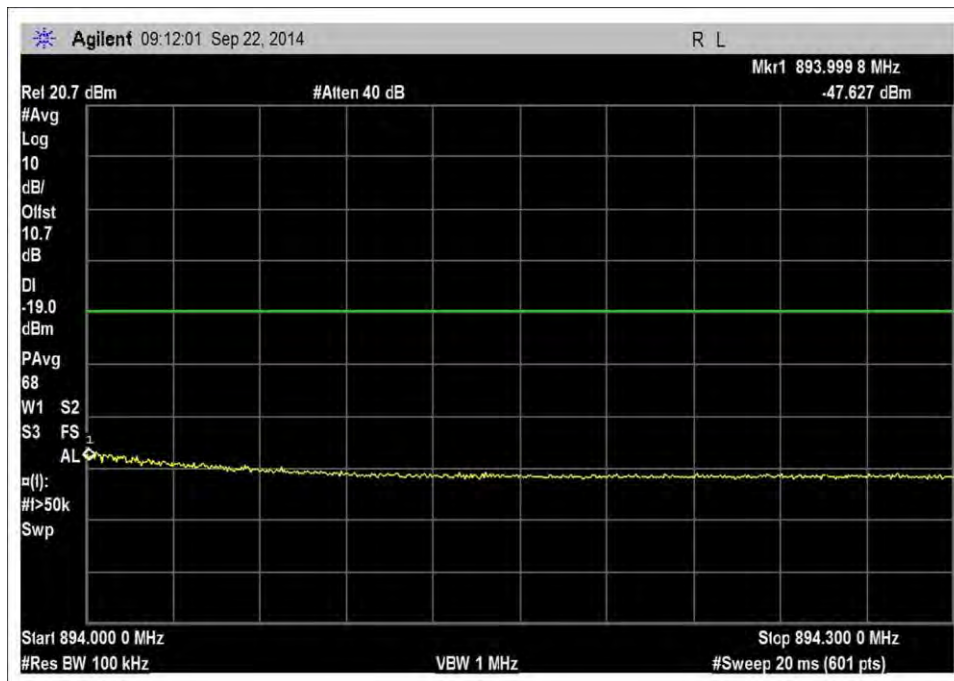
DL_869-894MHz_LTE_L_-47dBm



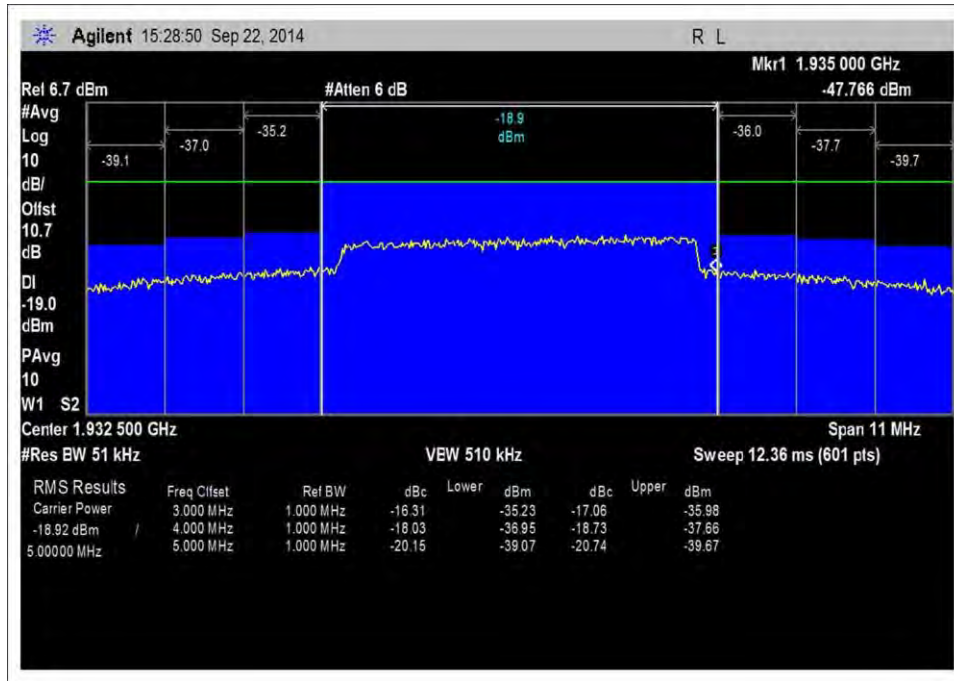
DL_869-894MHz_LTE_H_-48dBm



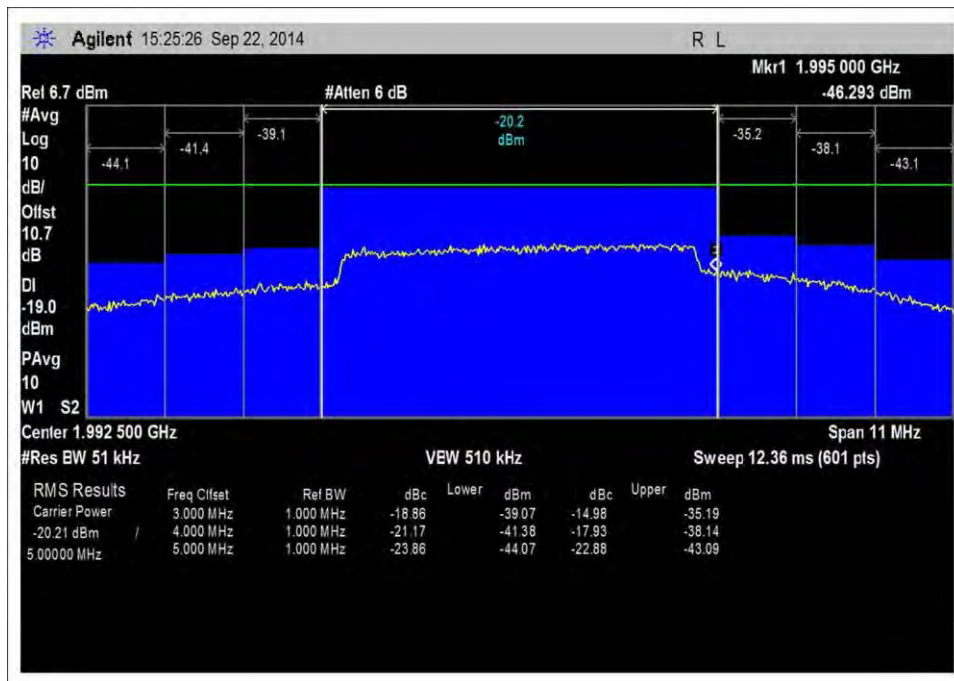
DL_869-894MHz_LTE_L_pre AGC2



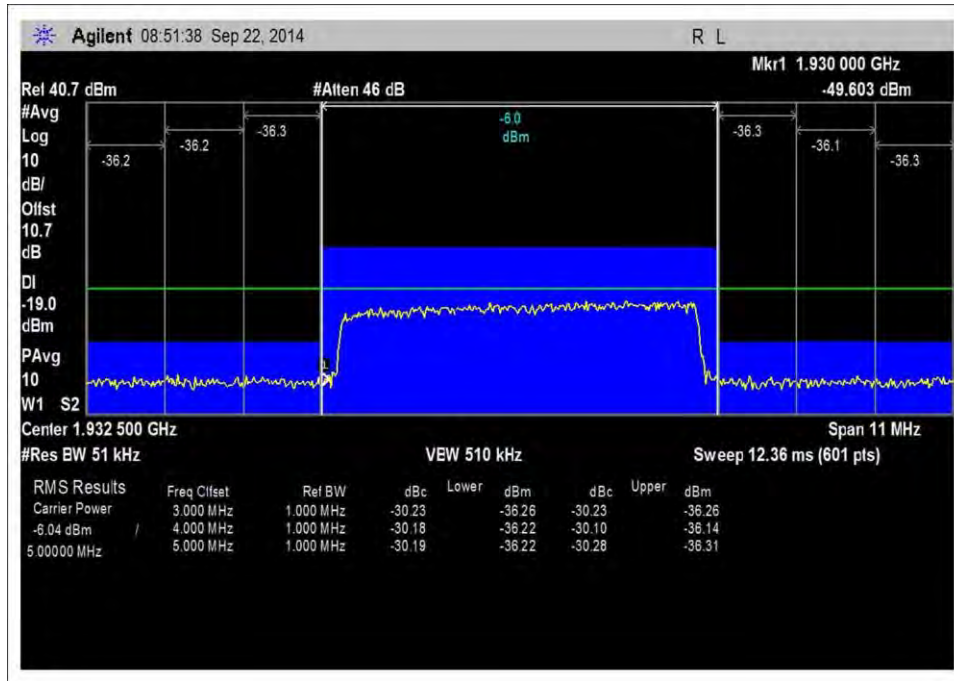
DL_869-894MHz_LTE_H_pre AGC



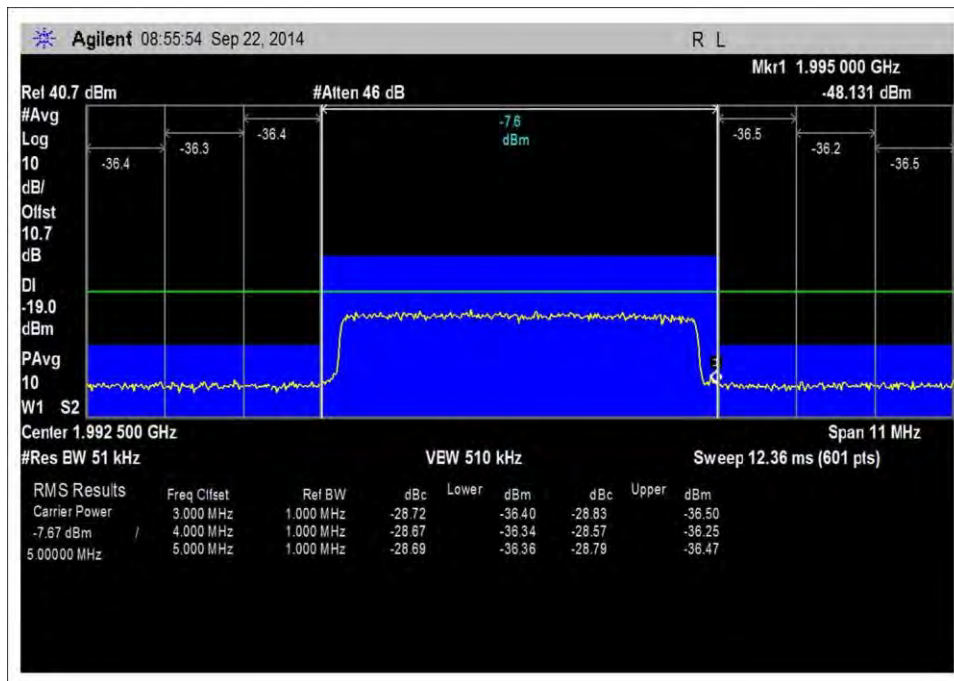
DL_1930-1995MHz_LTE_L -20dBm



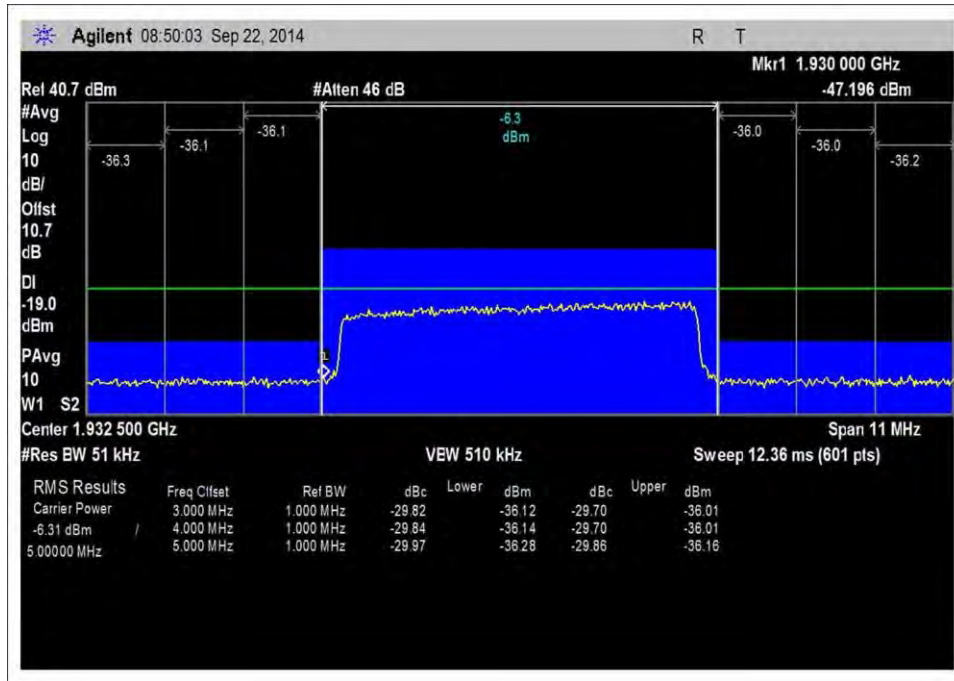
DL_1930-1995MHz_LTE_H -20dBm



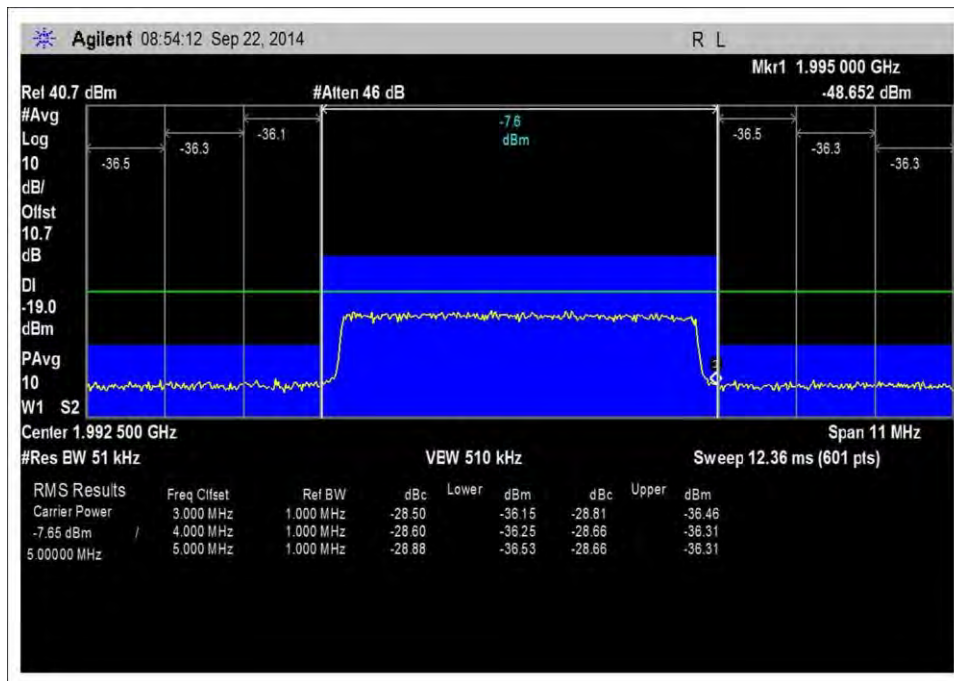
DL_1930-1995MHz_LTE_L_-54dBm



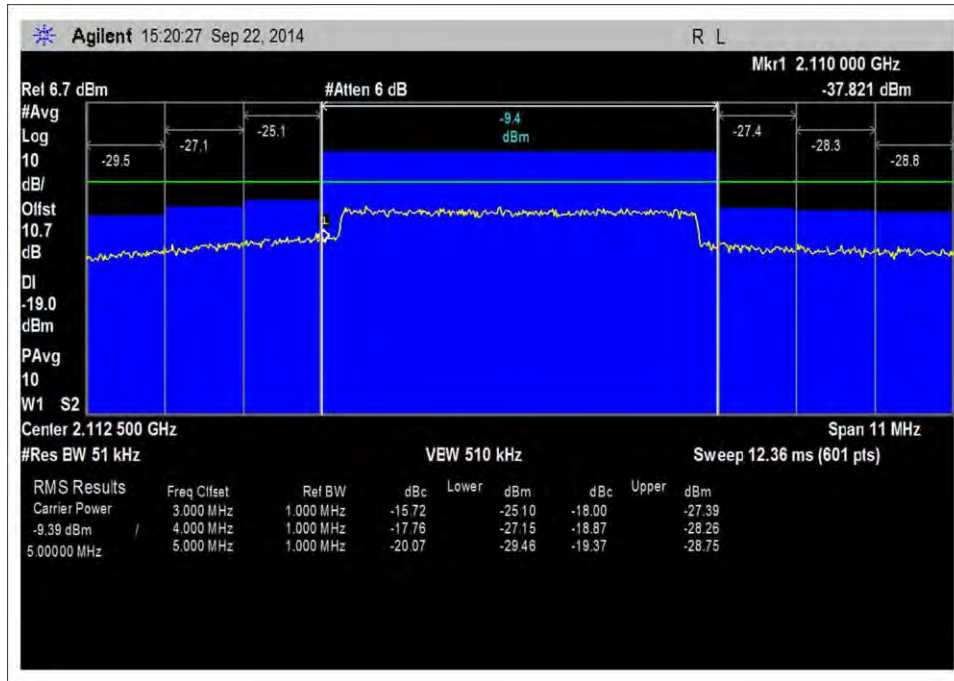
DL_1930-1995MHz_LTE_H_-53dBm



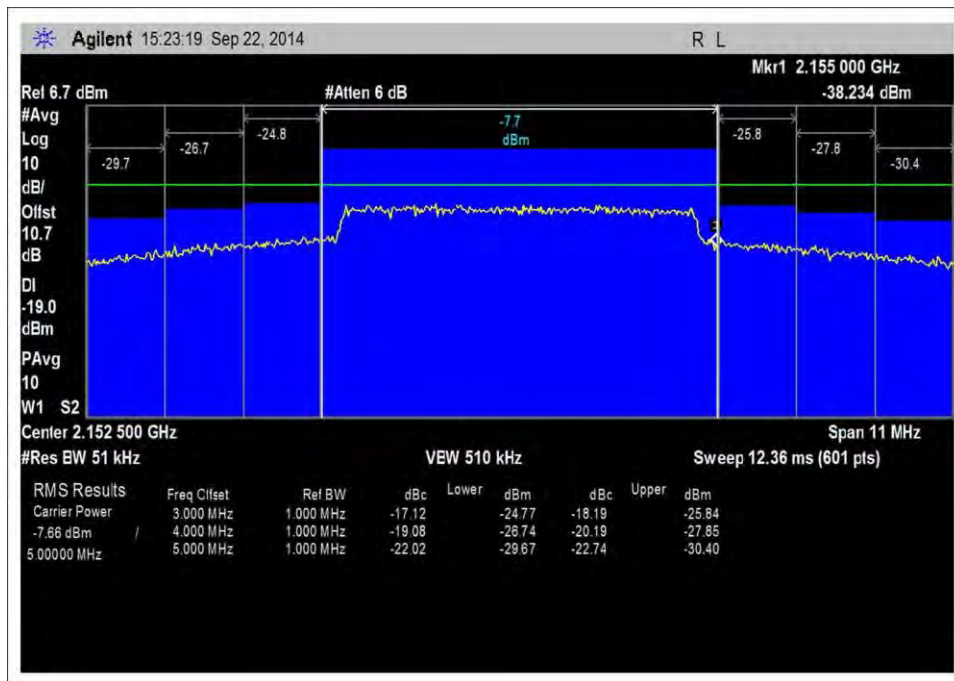
DL_1930-1995MHz_LTE_L_pre AGC



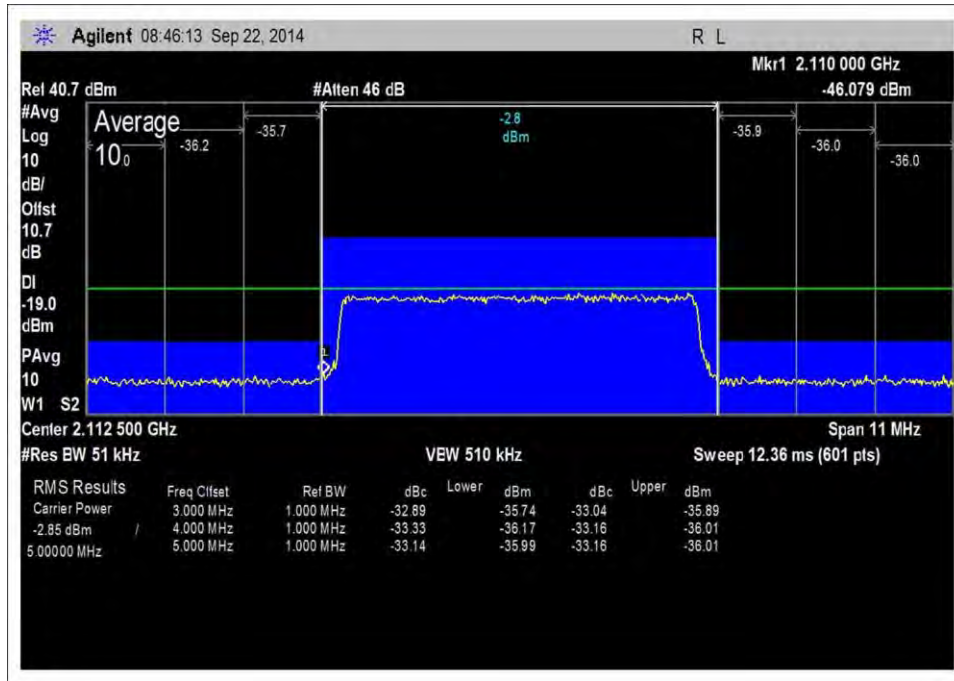
DL_1930-1995MHz_LTE_H_pre AGC



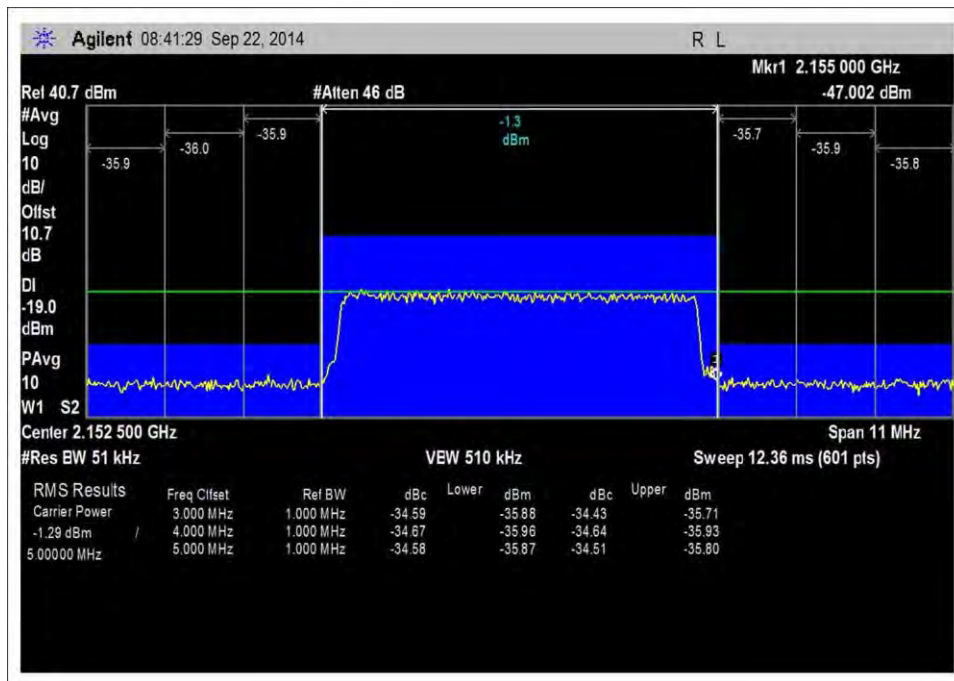
DL_2110-2155MHz_LTE_L_-20dBm



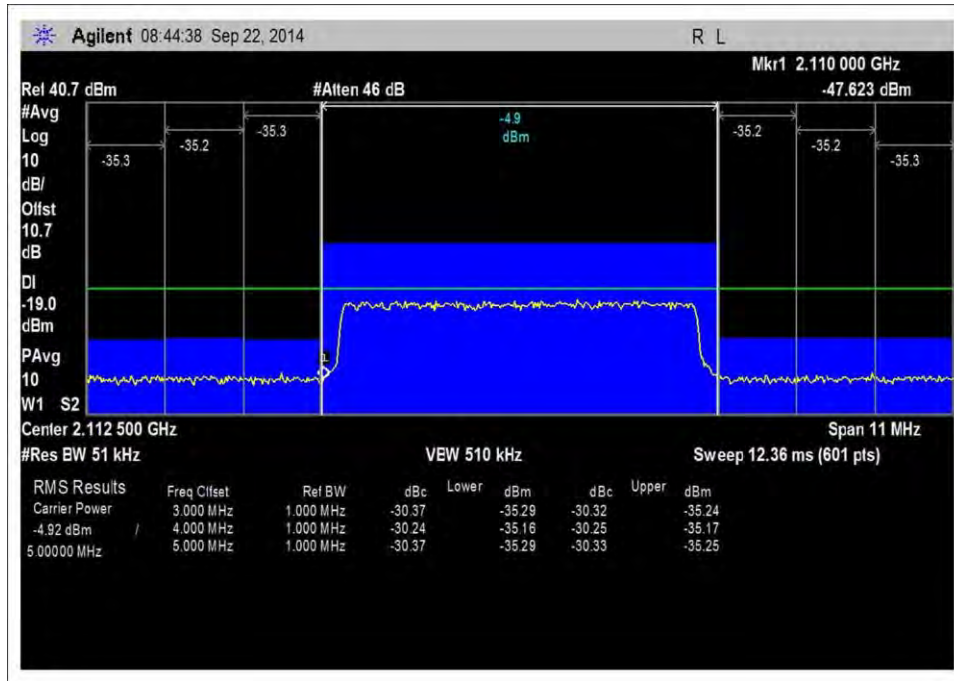
DL_2110-2155MHz_LTE_H_-20dBm



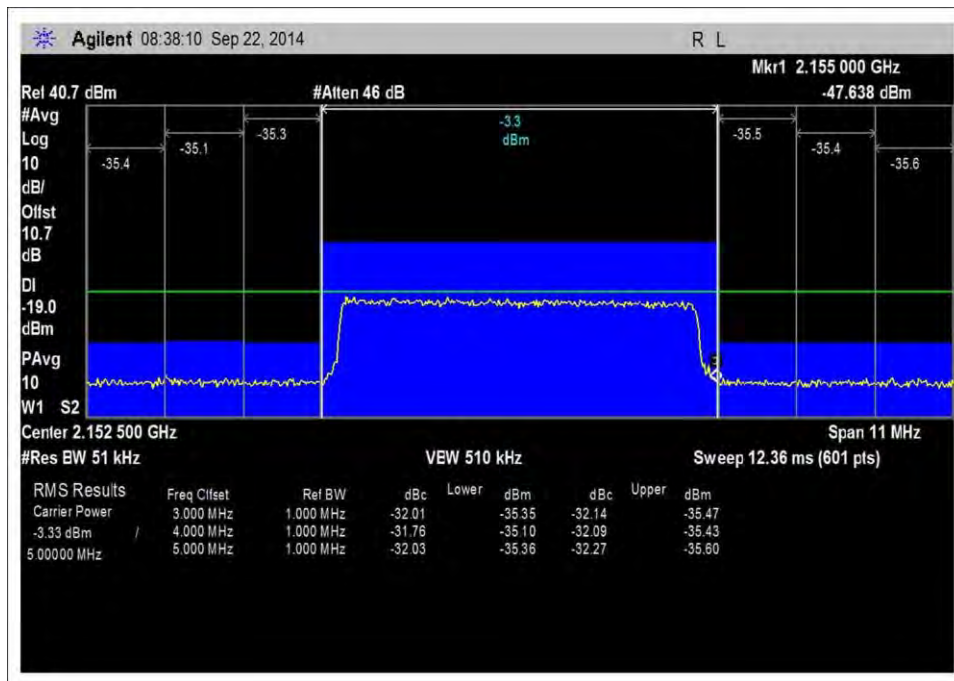
DL_2110-2155MHz_LTE_L_-56dBm



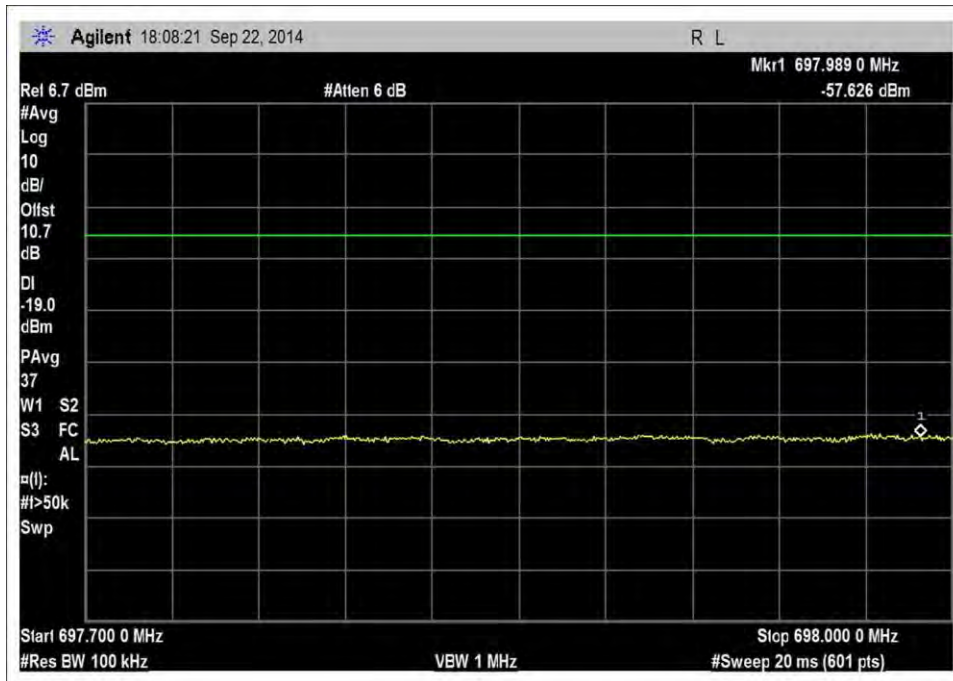
DL_2110-2155MHz_LTE_H_-53dBm



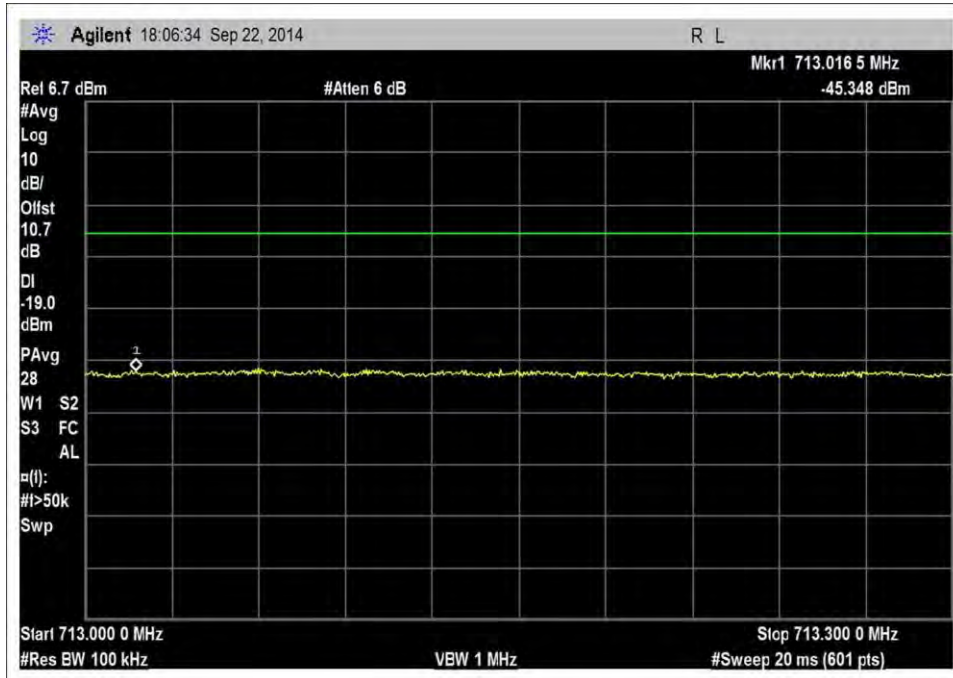
DL_2110-2155MHz_LTE_L_pre AGC



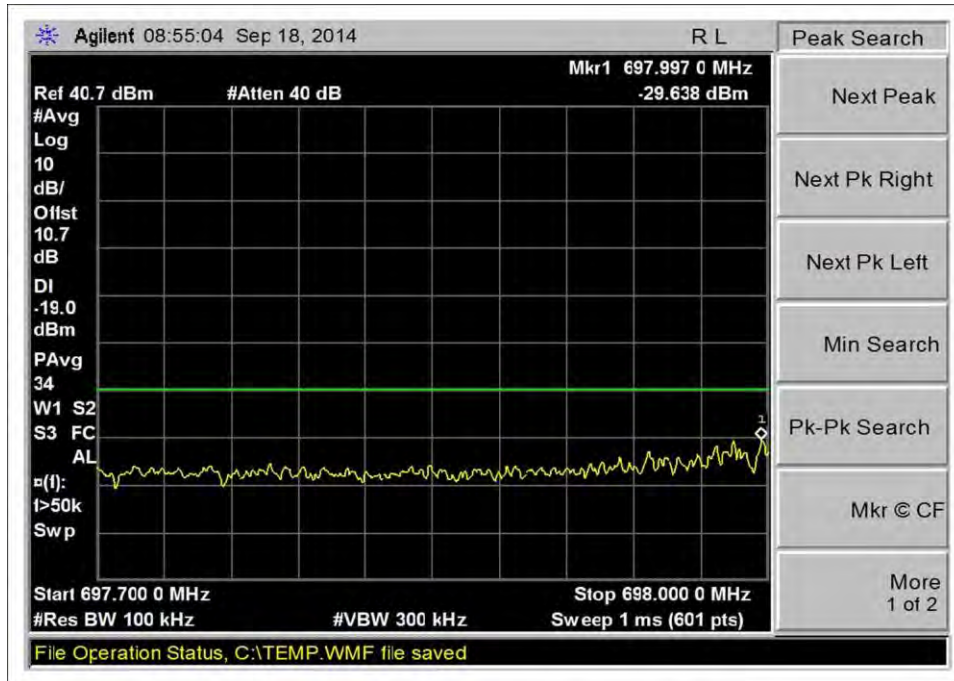
DL_2110-2155MHz_LTE_H_pre AGC



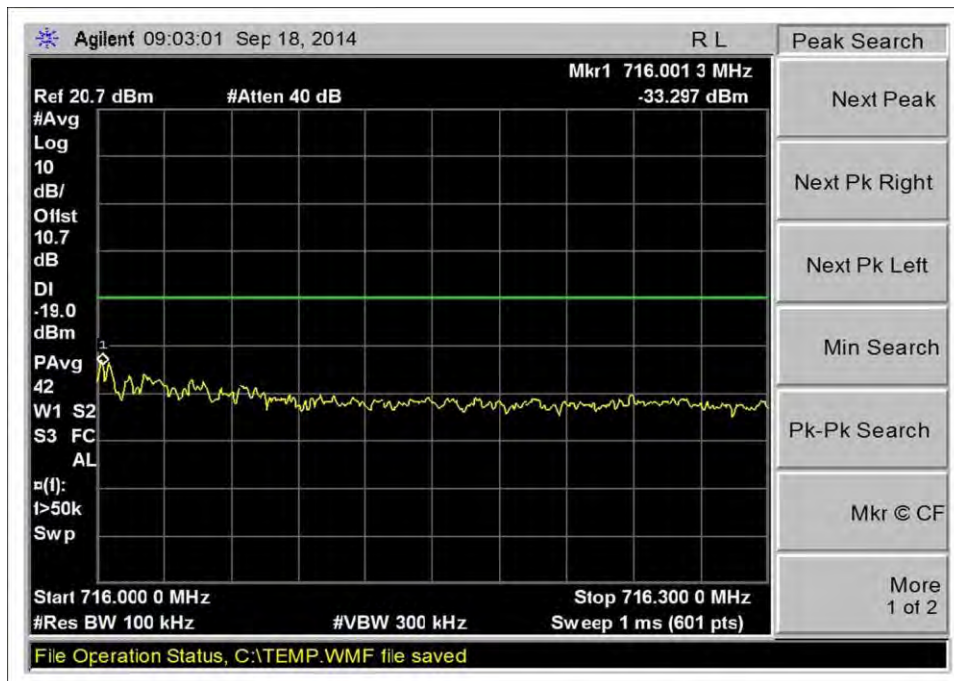
UL_698-716MHz_LTE_L_OdBm



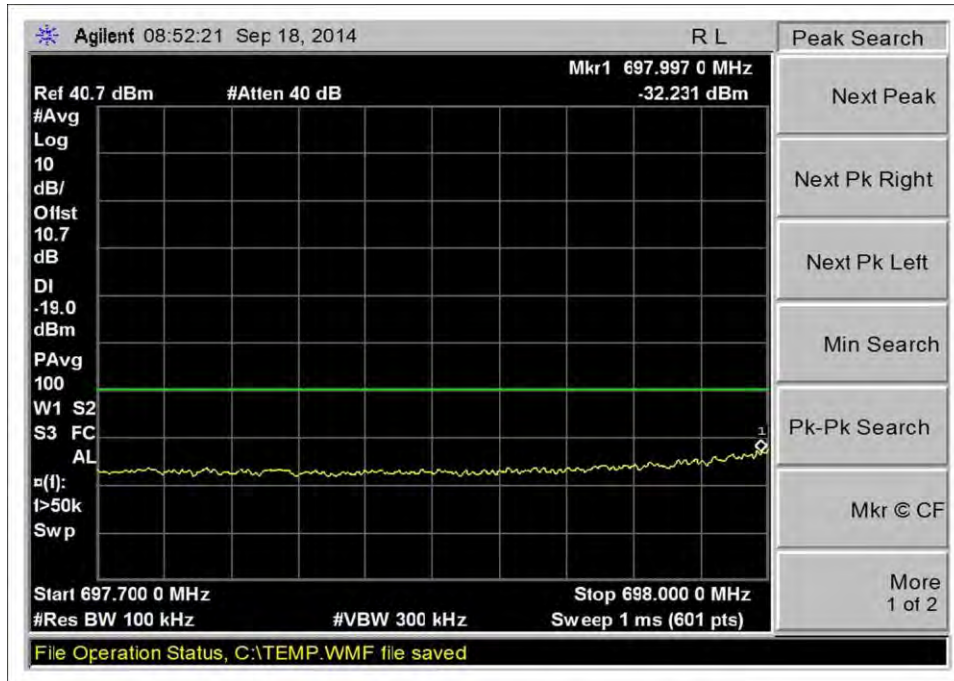
UL_698-716MHz_LTE_H_OdBm



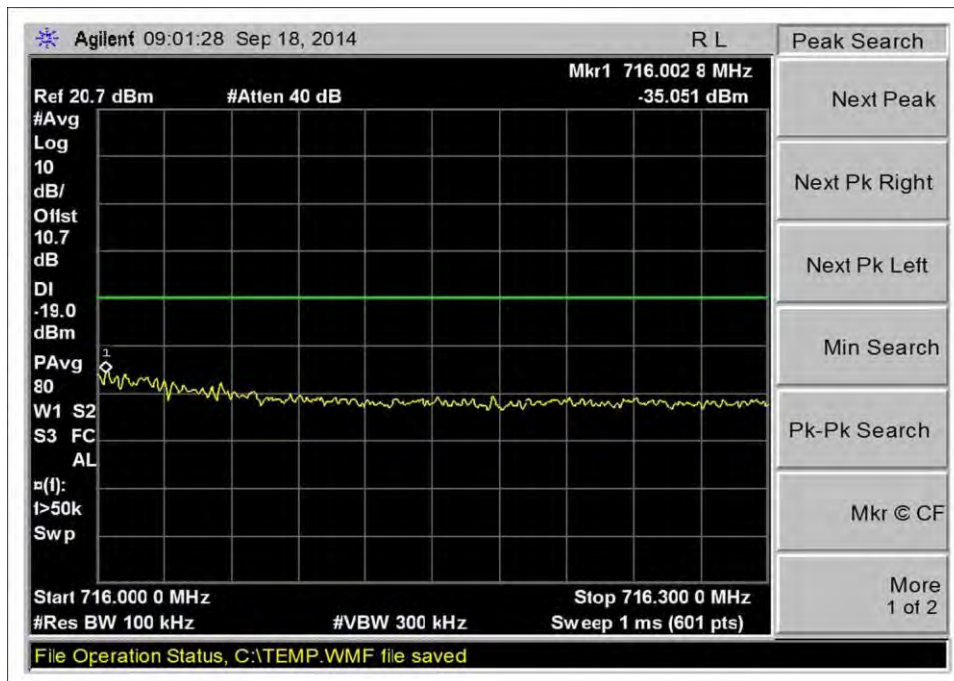
UL_698-716MHz_LTE_L AGC -31



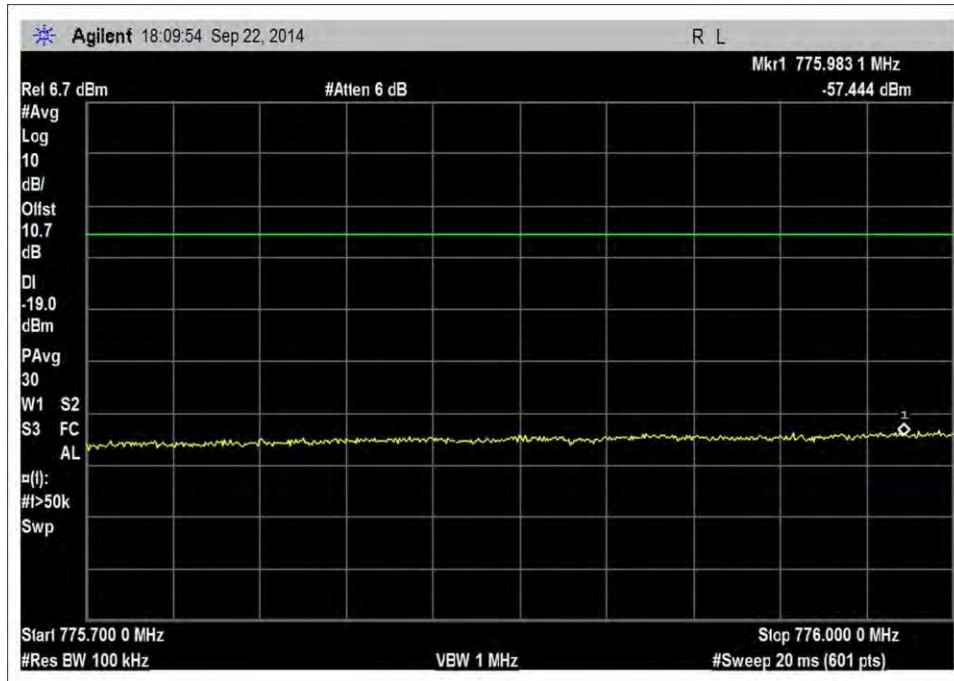
UL_698-716MHz_LTE_H AGC -325



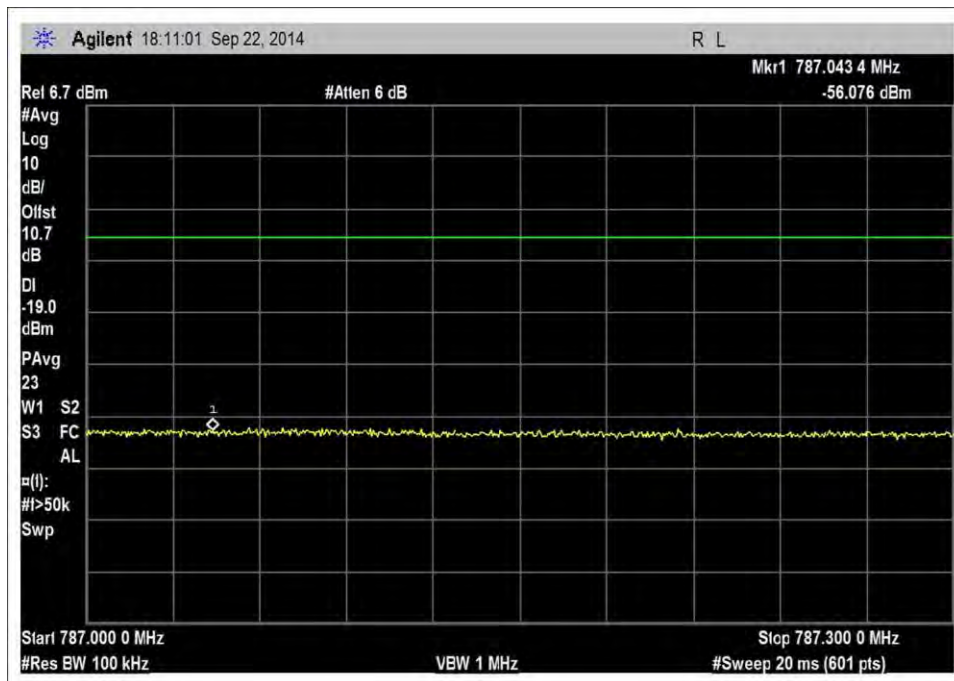
UL_698-716MHz_LTE_L PreAGC



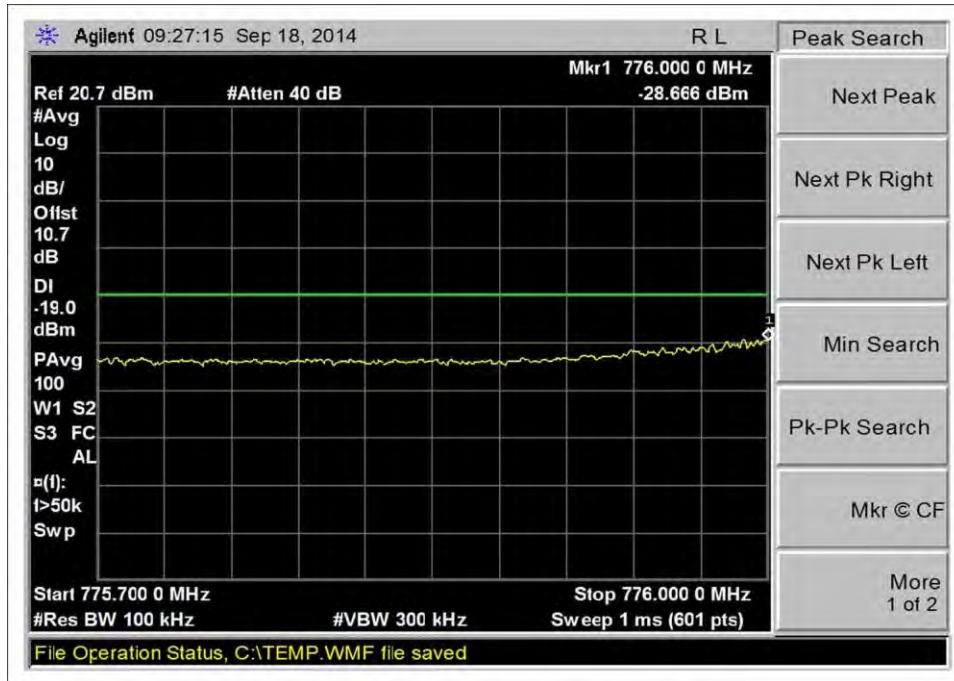
UL_698-716MHz_LTE_H PreAGC



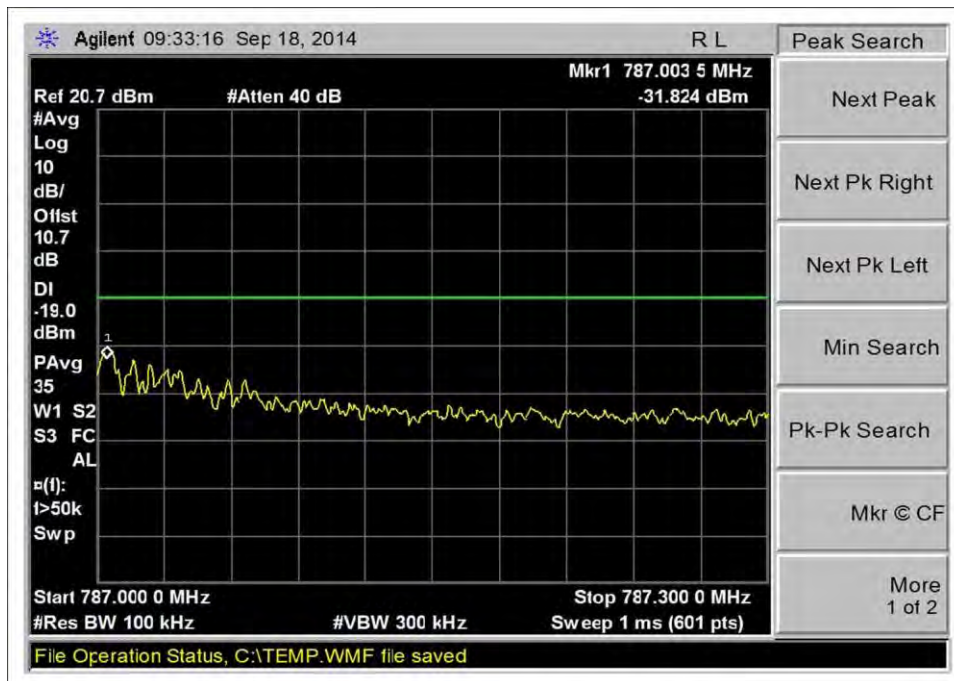
UL_776-787MHz_LTE_L_OdBm



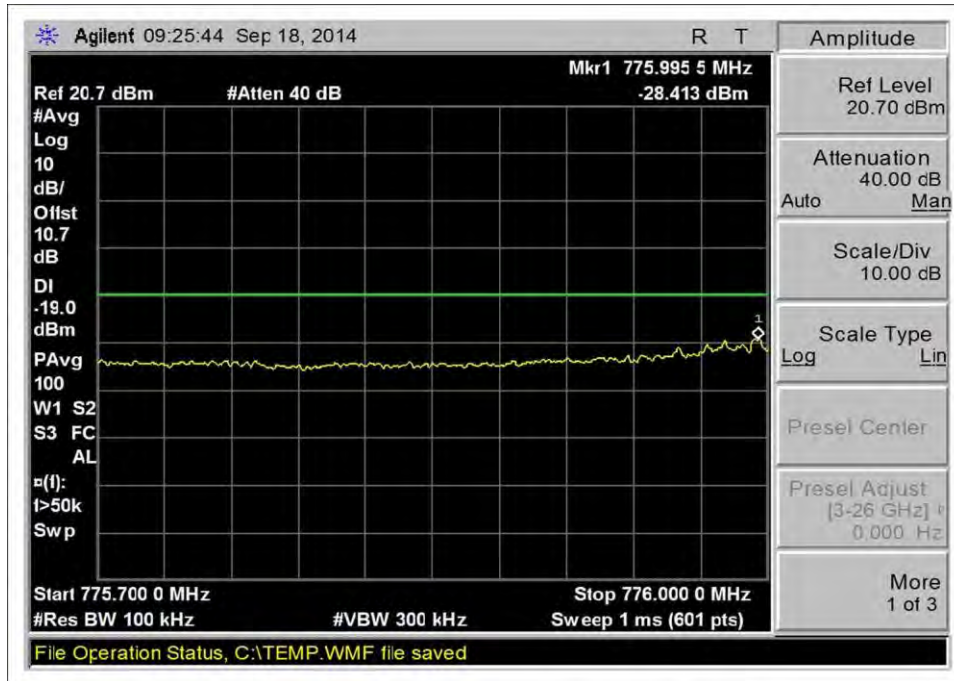
UL_776-787MHz_LTE_H_OdBm



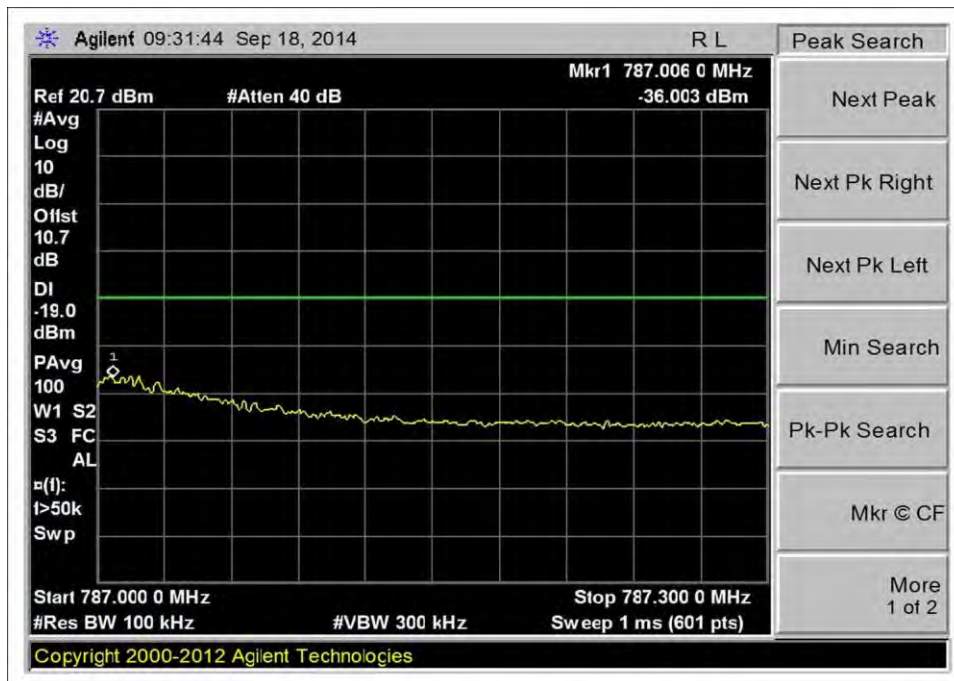
UL_776-787MHz_LTE_L AGC -29



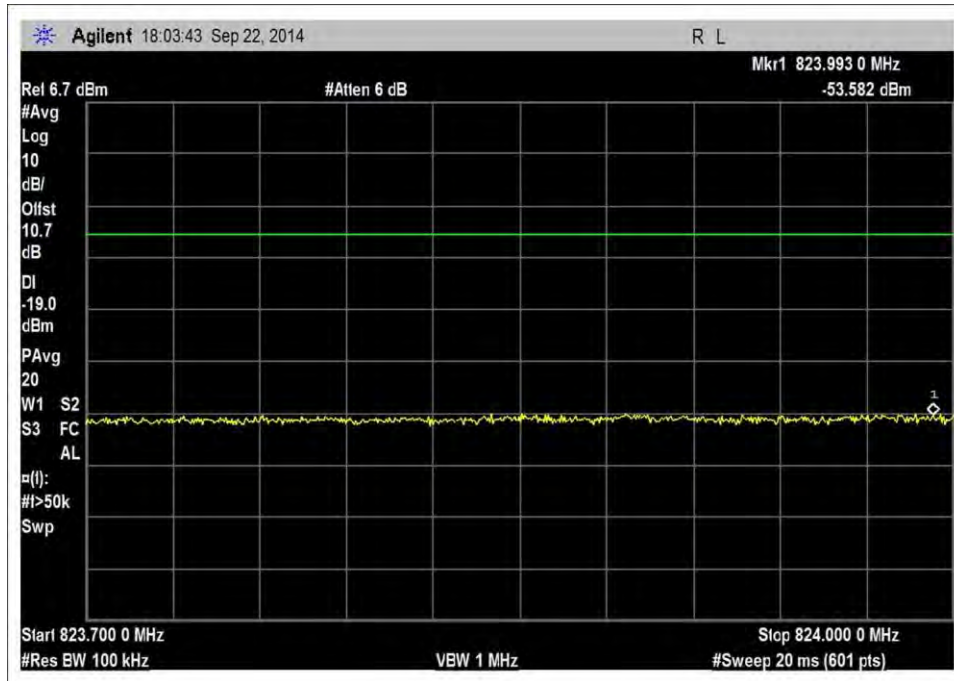
UL_776-787MHz_LTE_H AGC -29



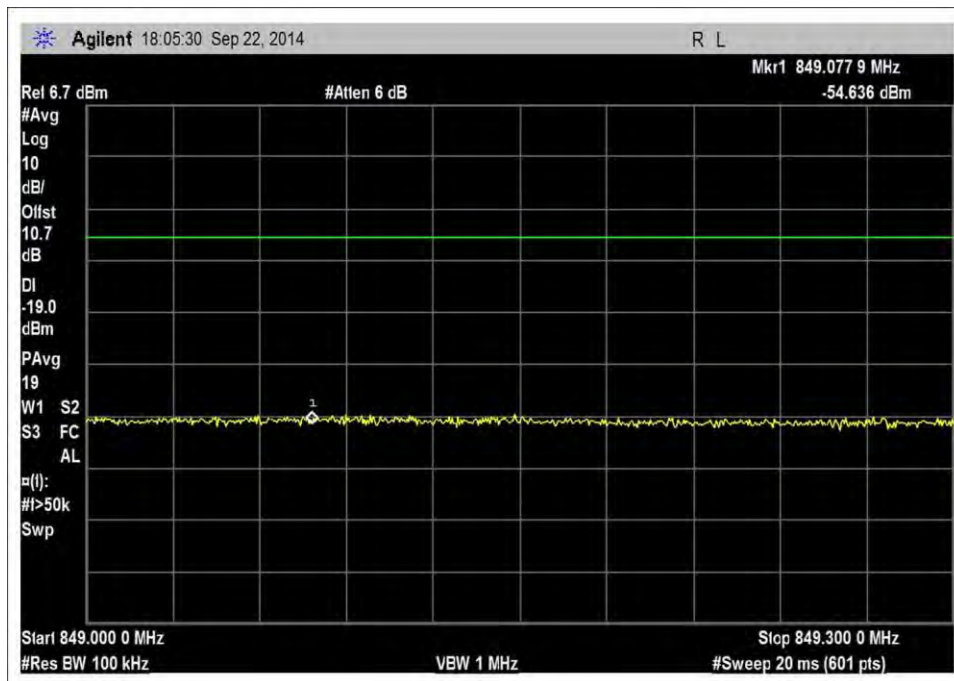
UL_776-787MHz_LTE_L PreAGC



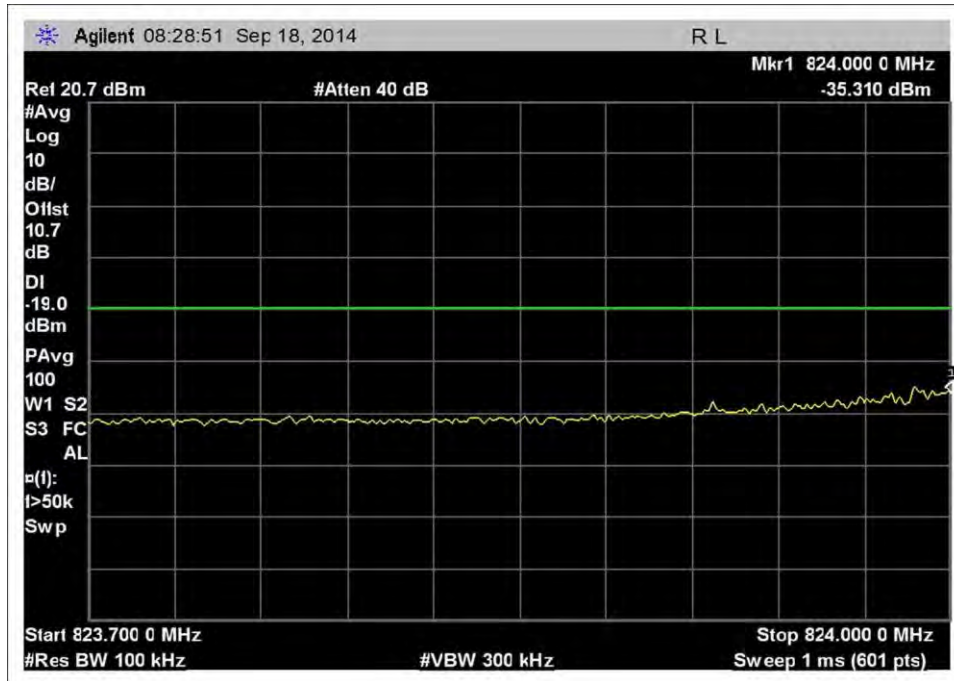
UL_776-787MHz_LTE_H PreAGC



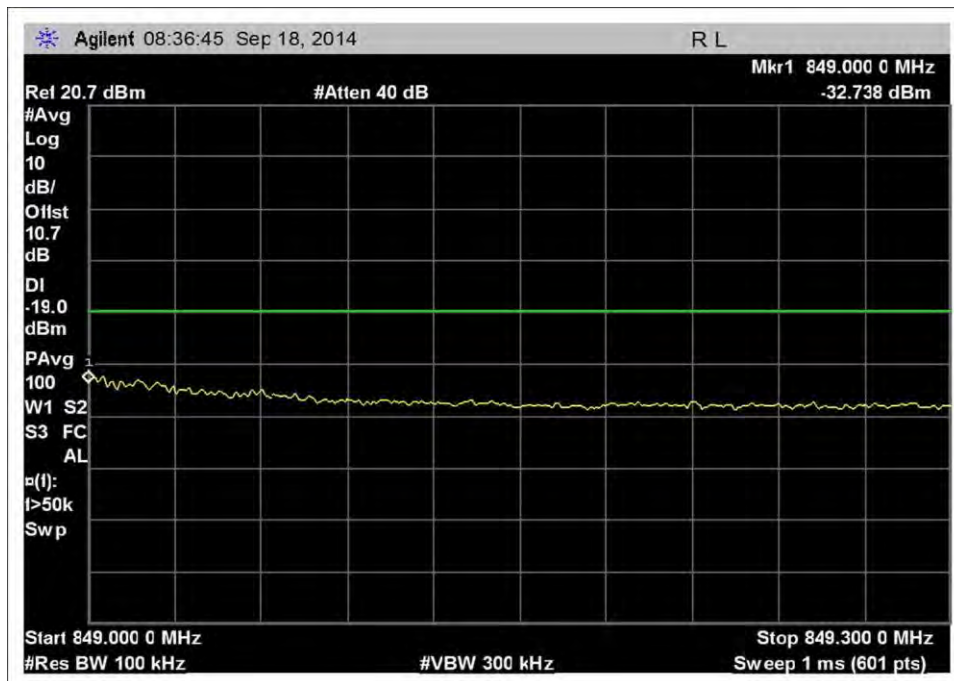
UL_824-849MHz_LTE_L_OdBm



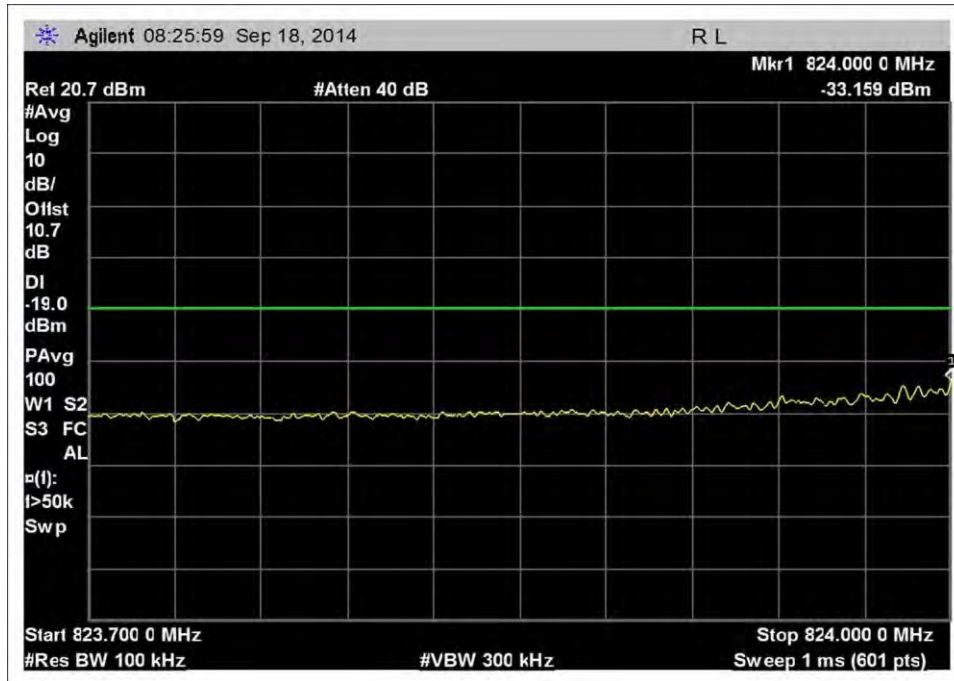
UL_824-849MHz_LTE_H_OdBm



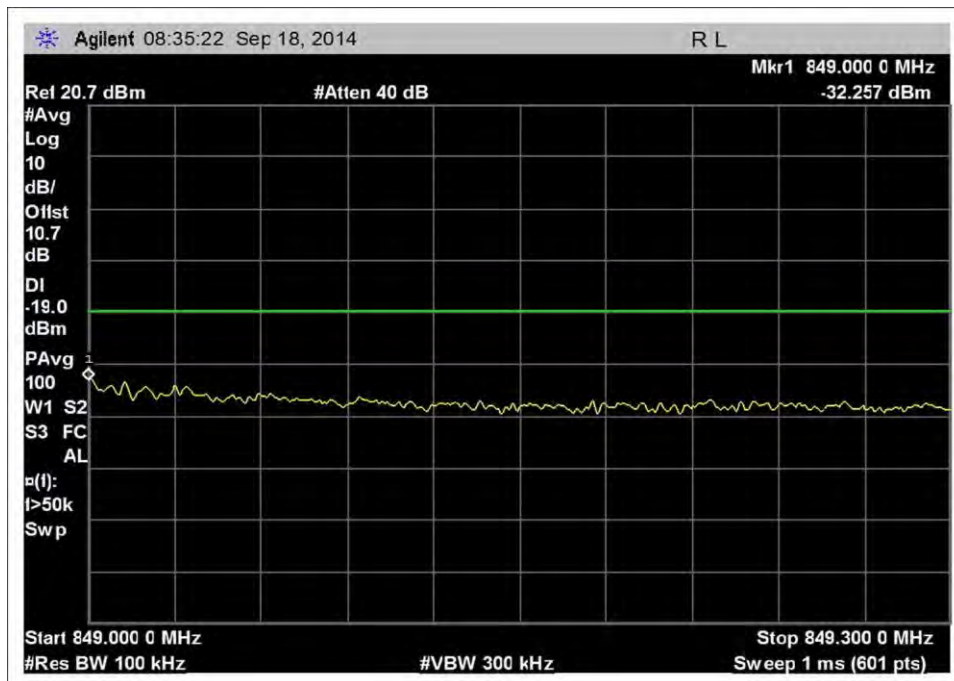
UL_824-849MHz_LTE_L AGC-28



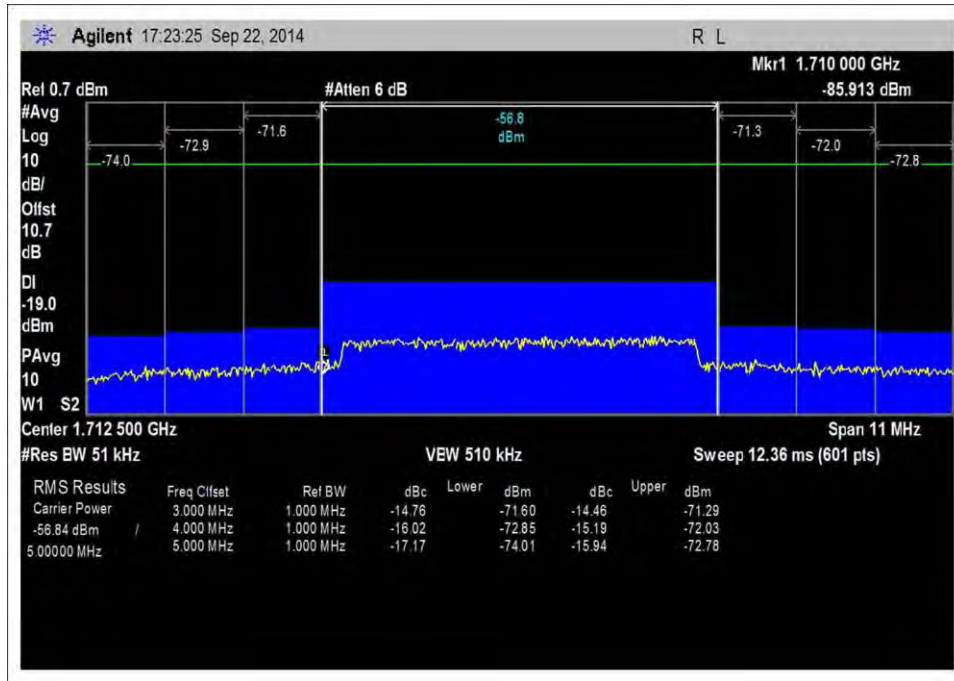
UL_824-849MHz_LTE_H PreAGC -26



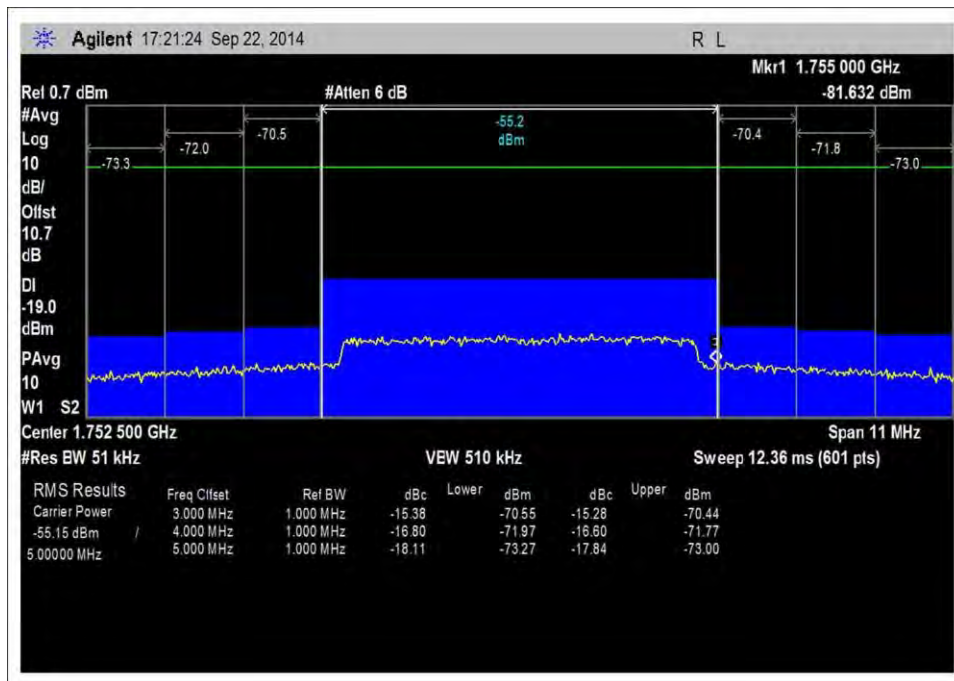
UL_824-849MHz_LTE_L PreAGC



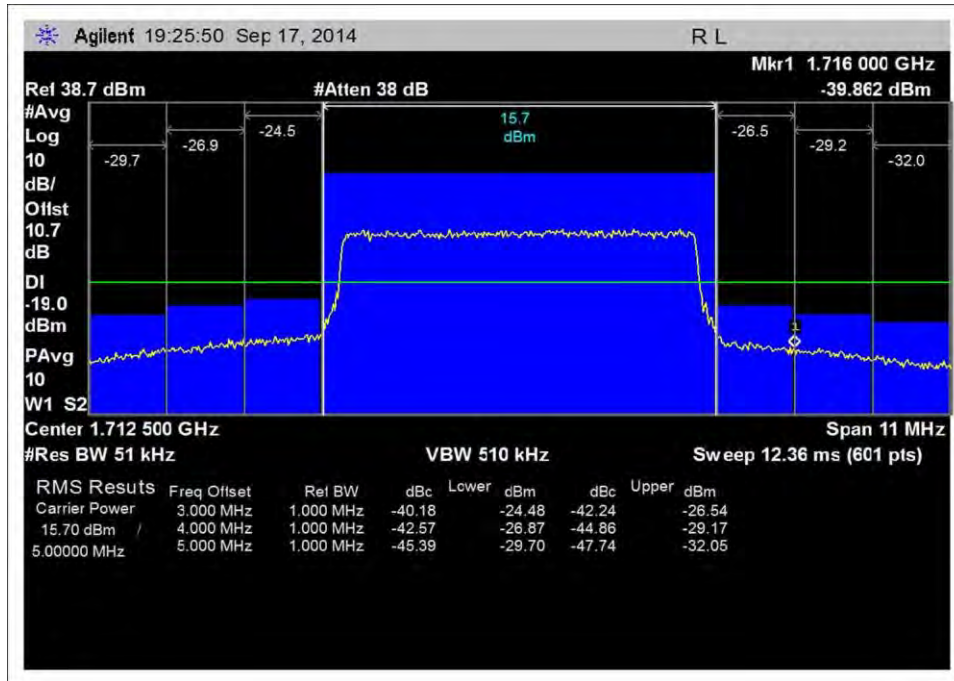
UL_824-849MHz_LTE_H PreAGC



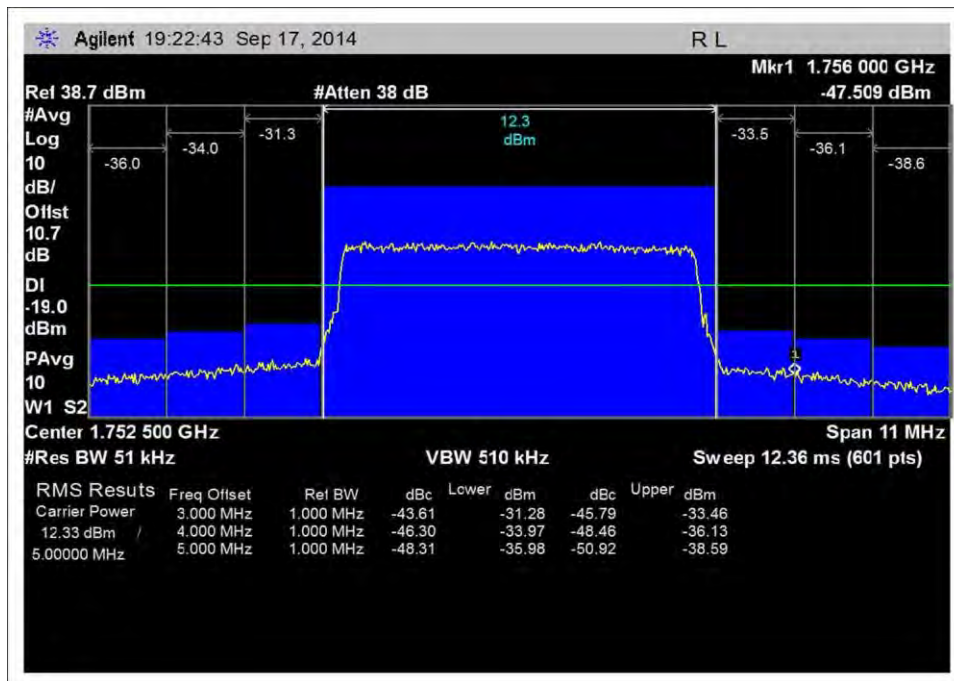
UL_1710-1755MHz_LTE_L_OdBm



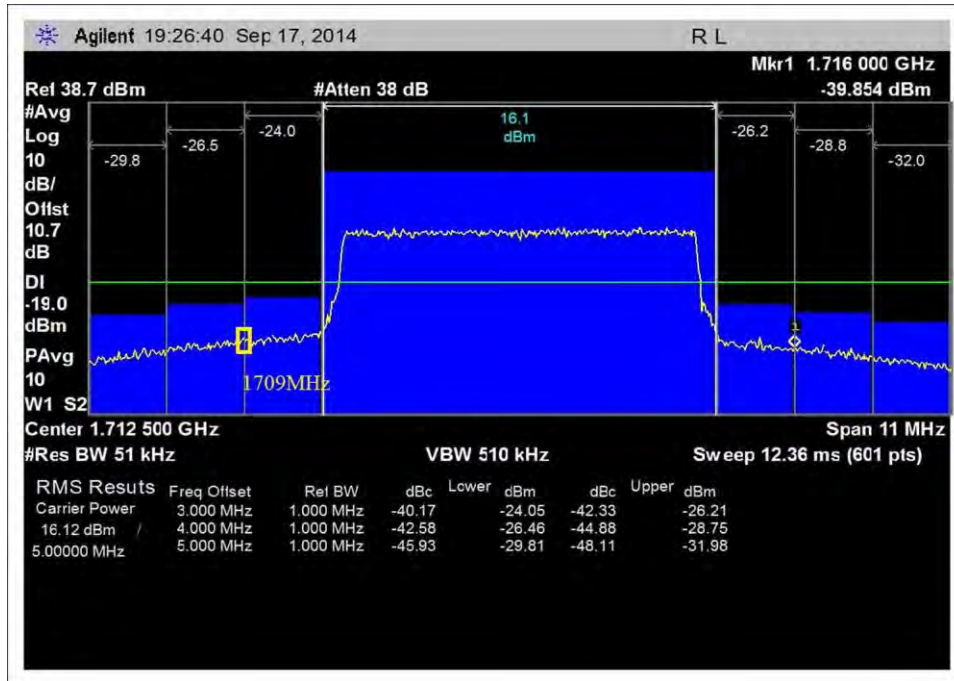
UL_1710-1755MHz_LTE_H_OdBm



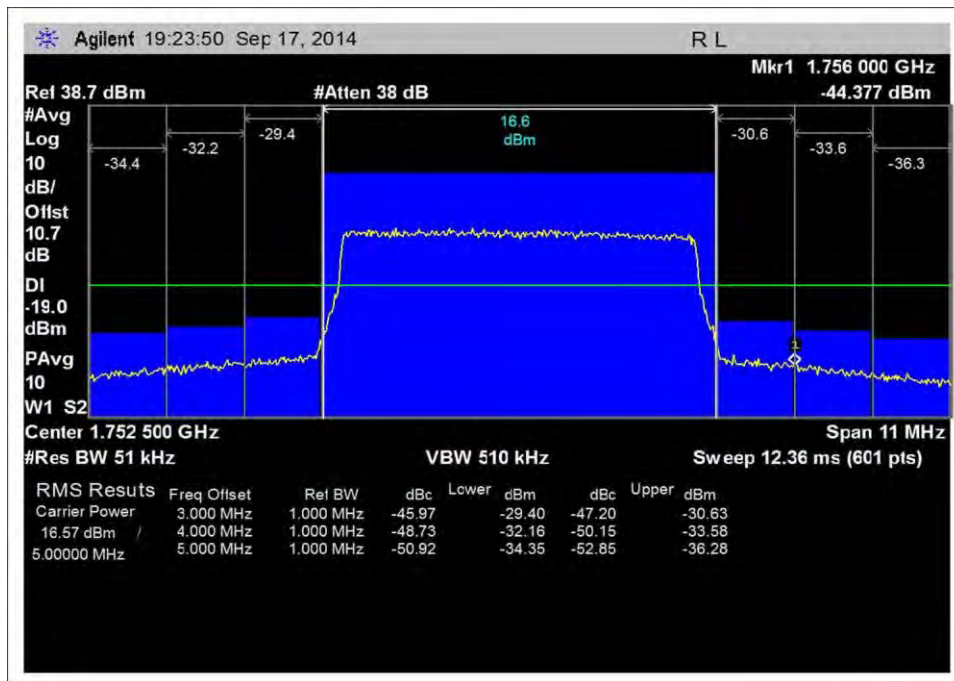
UL_1710-1755MHz_LTE_L PreAGC



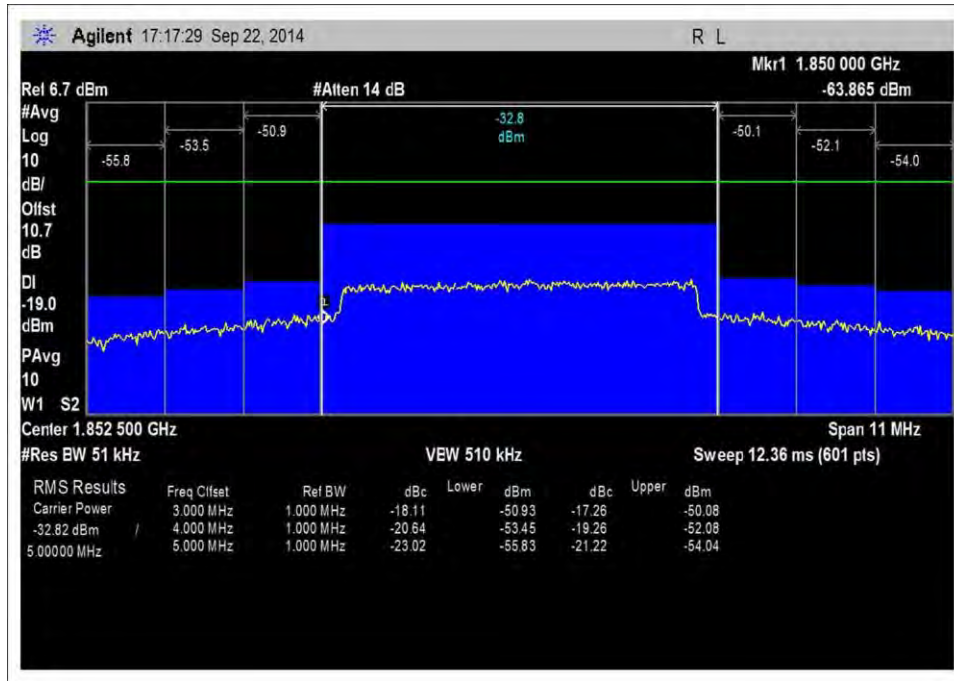
UL_1710-1755MHz_LTE_H PreAGC



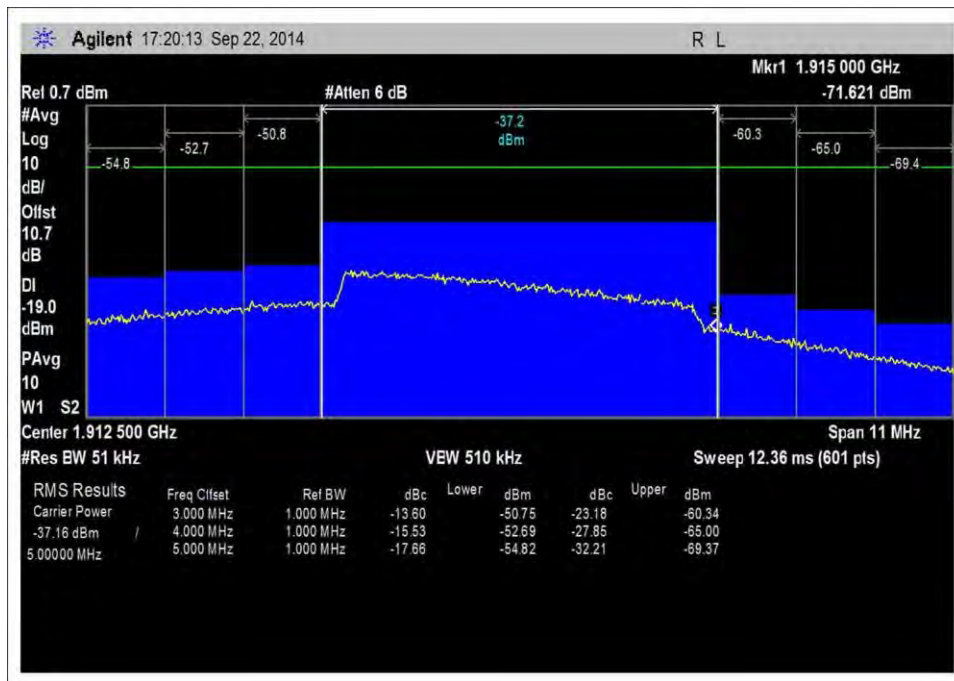
UL_1710-1755MHz_LTE_L ACP -39dBm



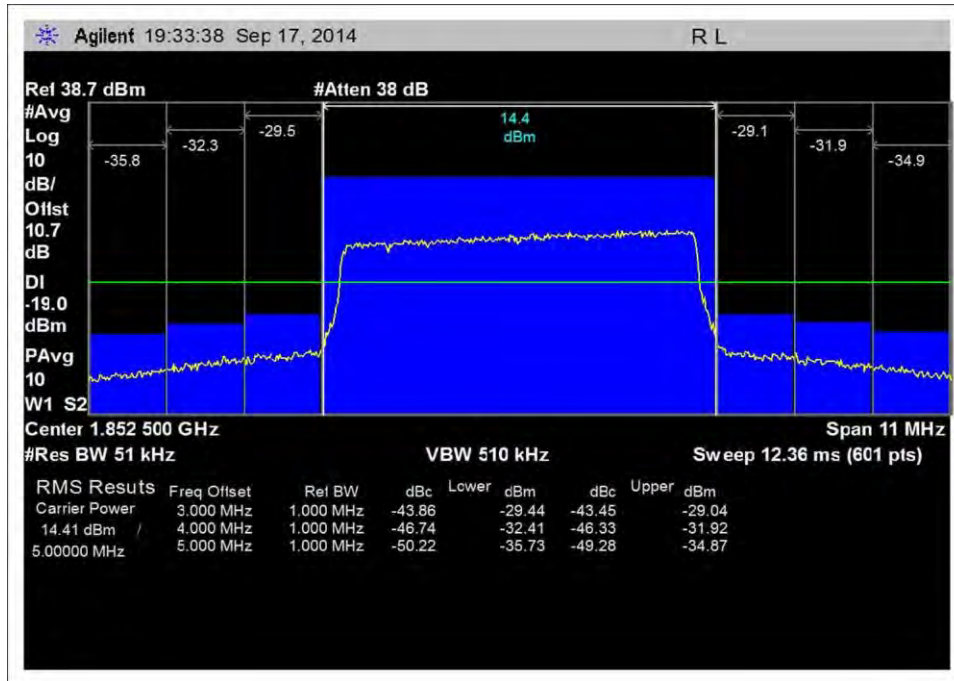
UL_1710-1755MHz_LTE_H -39dBm



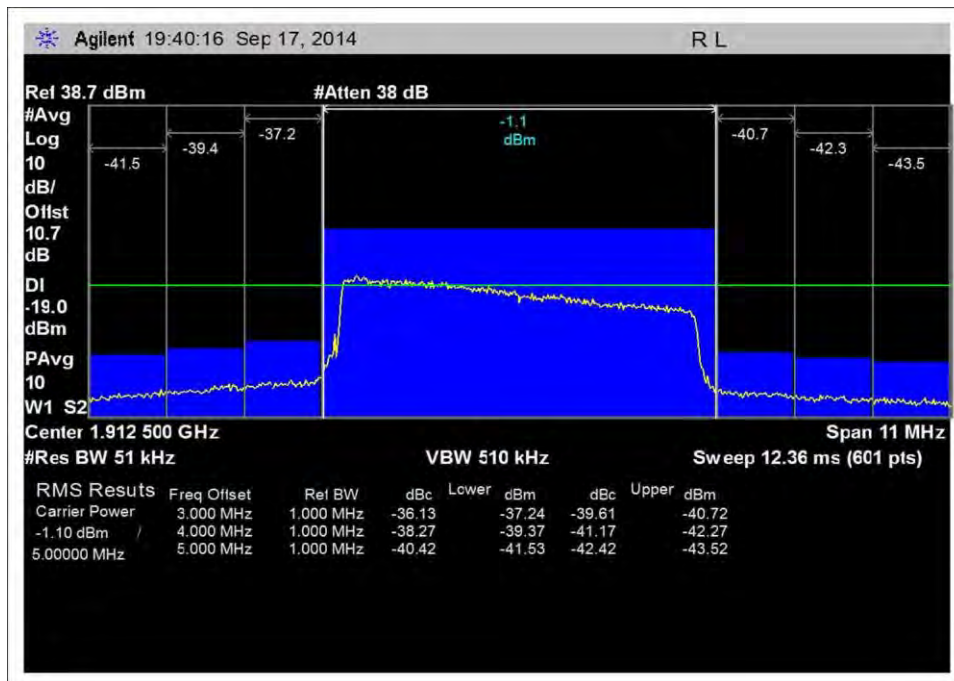
UL_1850-1915MHz_LTE_L_OdBm



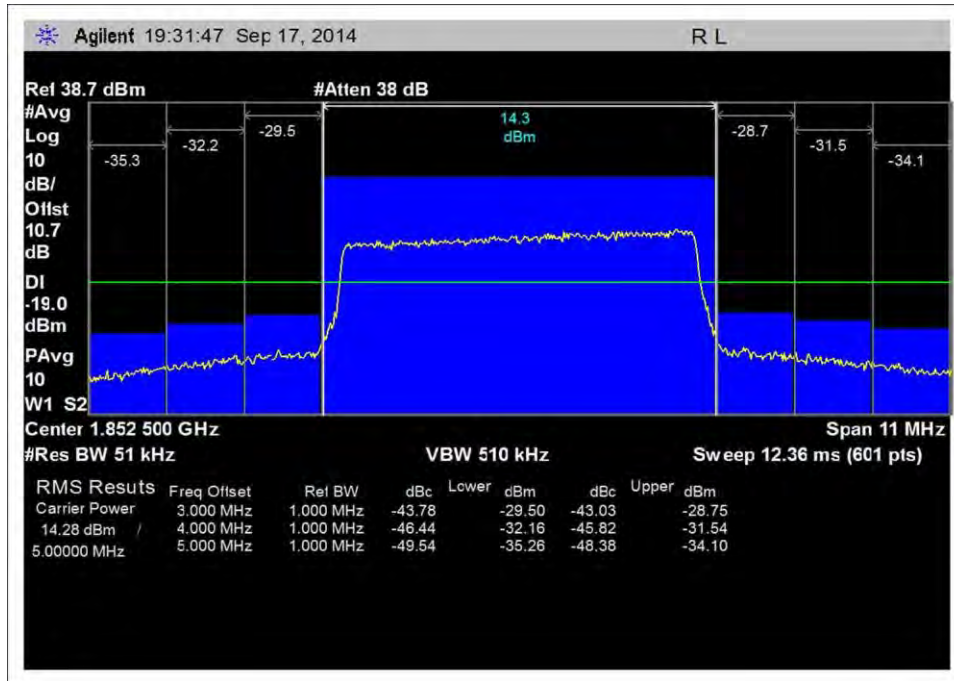
UL_1850-1915MHz_LTE_H_OdBm



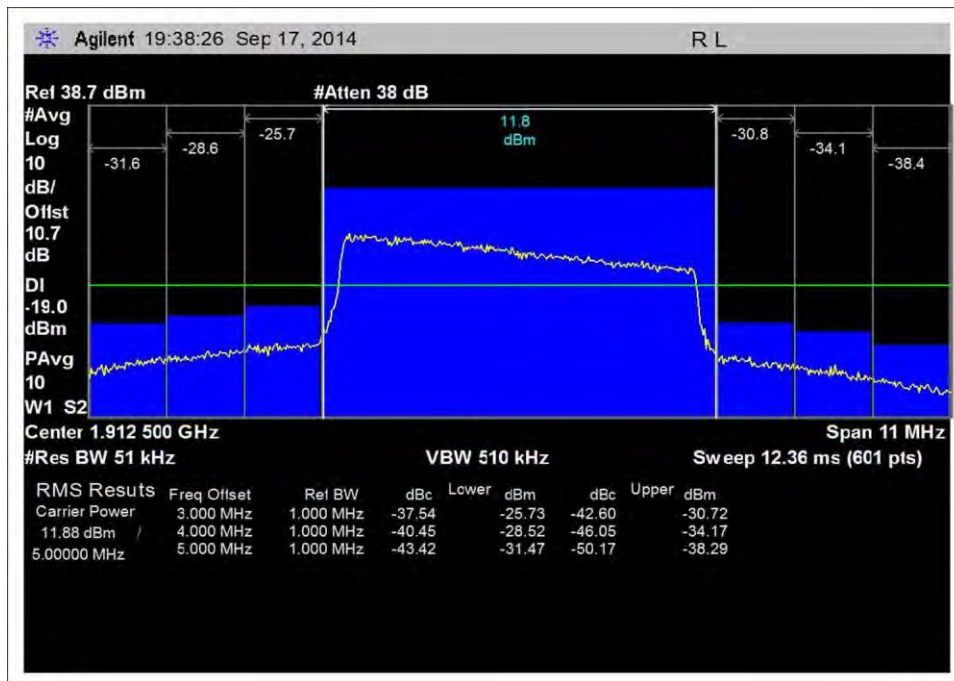
UL_1850-1915MHz_LTE_L -38dBm



UL_1850-1915MHz_LTE_H ACP -304



UL_1850-1915MHz_LTE_L PreAGC



UL_1850-1915MHz_LTE_H PreAGC

Clause 7.7 Noise limit

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92821 • 714-993-6112

Customer: **SolidRF Communication Co., Ltd**

Specification: **7.7 Noise Limit procedure**

Variable Noise

Variable Noise Timing

Work Order #: **95763**

Date: 9/16/2014

Test Type: **Conducted Emissions**

Time: 08:40:44

Equipment: **Signal Booster**

Sequence#: 1

Manufacturer: SolidRF Communication Co., Ltd

Tested By: E. Wong

Model: SR25652001

110V 60Hz

S/N: NA

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/14/2013	8/14/2015
	AN03430	Attenuator	75A-10-12	9/5/2013	9/5/2015
	AN02946	Cable	32022-2-2909K-36TC	7/31/2013	7/31/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Signal Booster*	SolidRF Communication Co., Ltd	SR25652001	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Generic	MX18W1	NA
Signal Generator	Agilent	E4438C	MY42081492
Signal Generator	Agilent	E4433B	US40052164

Test Conditions / Notes:

The EUT is placed on the test bench. Evaluation performed at the Outside (Donor) and Inside (Server) antenna port.

UL: 824-849, 1850-1915 MHz, 1710-1755MHz, 698-716MHz, 776-787MHz

DL: 869-894, 1930-1995 MHz, 2110-2155MHz, 728-746MHz, 746-757MHz

All adjustable settings on the test sample are set at max.

Test environment conditions: Temperature: 23.9°C, Relative Humidity: 40%, Atmospheric Pressure: 100kPa

Test procedure:

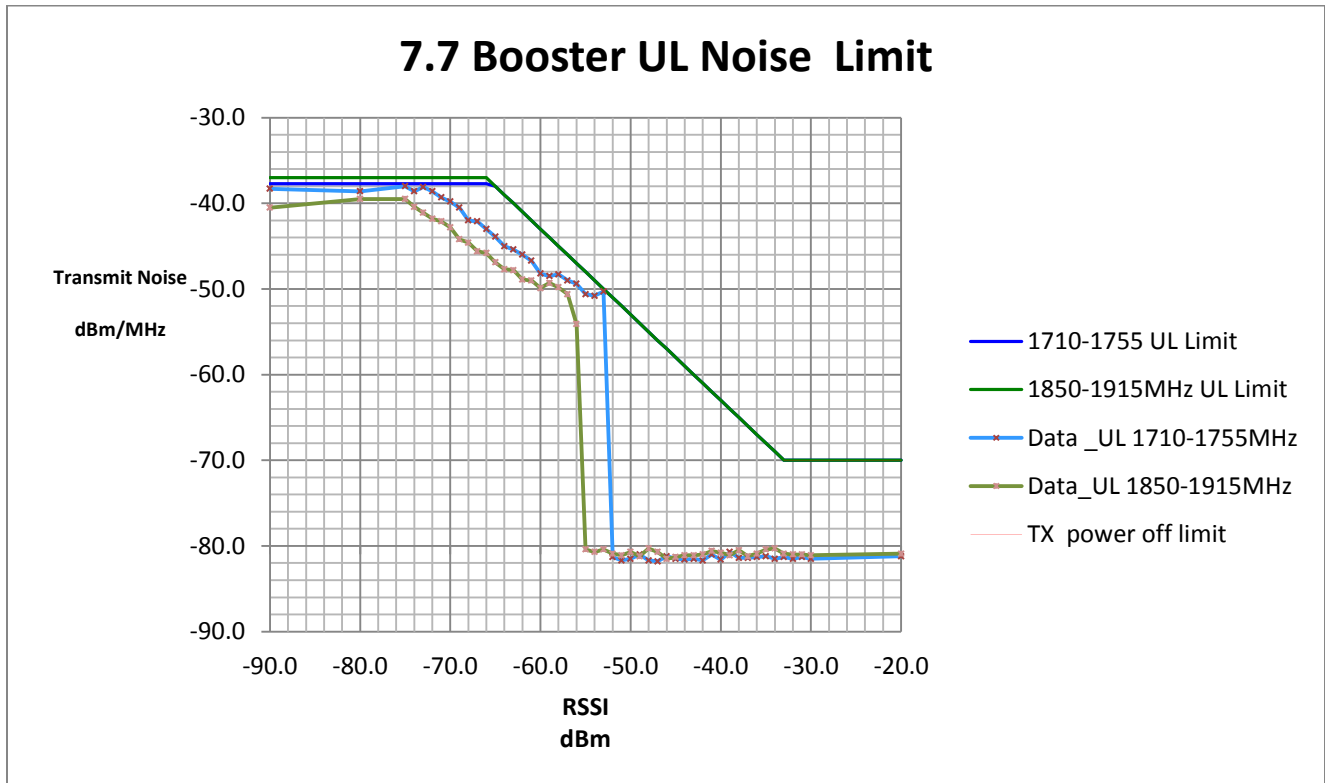
The test was performed IAW section 7.7 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014

Firmware: 092914 version

Modification: 10/6/14 By pass two stage of amplifier in UL/DL path to comply with Transmit Off mode requirement.

Summary of Results

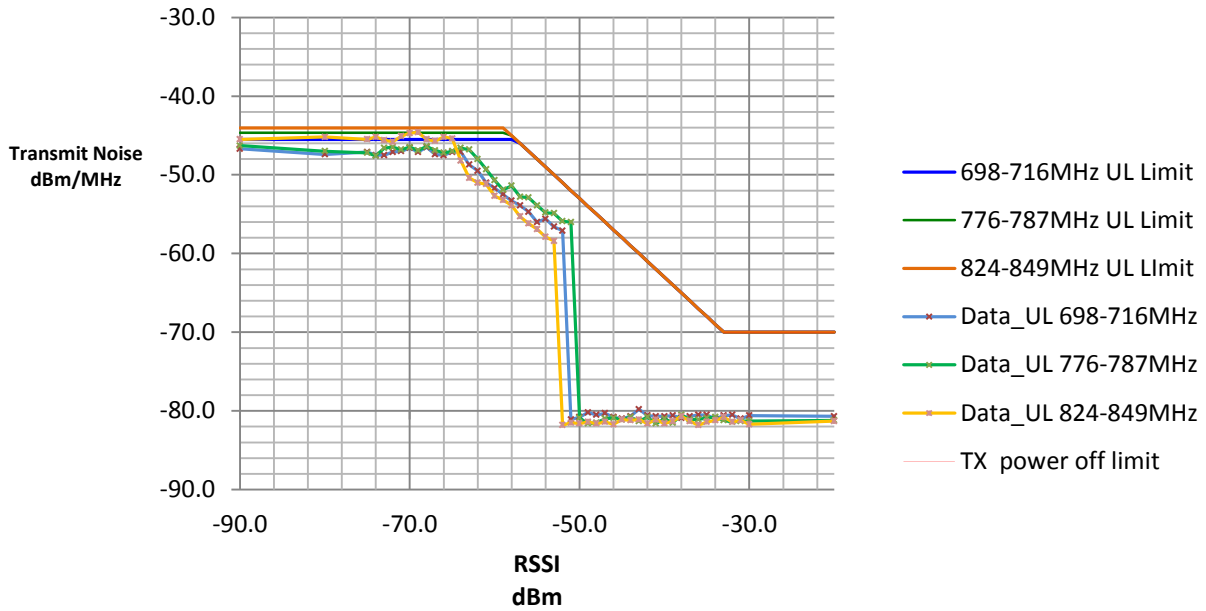
Maximum Noise Power			
Freq	Measured	Limit	Margin
MHz	dBm./MHz	dBm./MHz	
UL1710-1755	-38.8	-37.7	-1.1
UL1850-1915	-40.5	-37.0	-3.5
UL824-894	-44.8	-44.1	-0.7
UL 698-716	-46.0	-45.5	-0.5
UL776-787	-46.0	-44.6	-1.4
DL2110-2155	-41.6	-37.7	-3.9
DL1930-1995	-41.0	-37.0	-4.0
DL869-894	-46.0	-44.1	-1.9
DL:728-746	-47.5	-45.5	-2.0
DL 746-757	-49.4	-44.6	-4.8



1710.0		1755.0		MHz			
				Limit		Margin	
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Freq Dependent	TX off			
-75.0	-38.0		-37.7				-0.3
-73.0	-38.1		-37.7				-0.4
-90.0	-38.3		-37.7				-0.6
-80.0	-38.6		-37.7				-0.9
-53.0	-50.3	-50.0					-0.3
-54.0	-50.8	-49.0					-1.8
-20.0	-81.2			-70			-11.2

1850.0		1915.0		MHz			
				Limit		Margin	
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Freq Dependent	TX off			
-80.0	-39.5		-37.0				-2.5
-75.0	-39.5		-37.0				-2.5
-74.0	-40.4		-37.0				-3.4
-90.0	-40.5		-37.0				-3.5
-57.0	-50.6	-46.0					-4.6
-58.0	-49.8	-45.0					-4.8
-20.0	-80.9			-70			-10.9

7.7 Booster UL Noise Limit



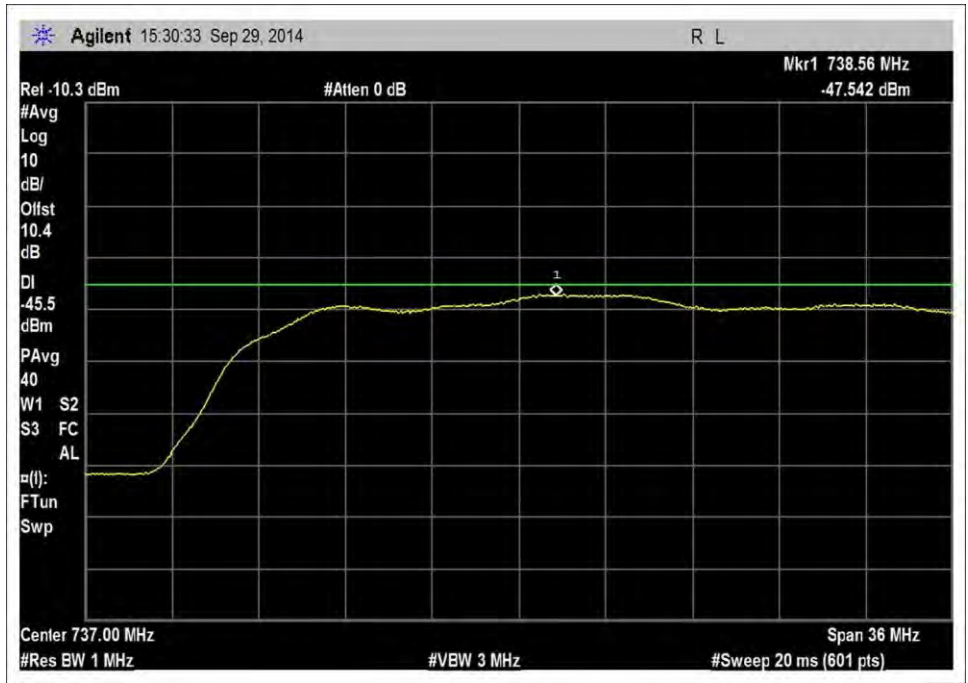
698.0		716.0		MHz		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Freq Dependent	TX off					
-68.0	-46.5		-45.5					-1.0	
-70.0	-46.6		-45.5					-1.1	
-90.0	-46.7		-45.5					-1.2	
-52.0	-57.1	-51.0						-6.1	
-54.0	-55.6	-49.0						-6.6	
-32.0	-80.5			-70				-10.5	

776.0		787.0		MHz			
				Limit		Margin	
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Freq Dependent	TX off			
-90.0	-46.3		-44.6				-1.7
-68.0	-46.4		-44.6				-1.8
-72.0	-46.5		-44.6				-1.9
-51.0	-56.0	-52.0					-4.0
-53.0	-54.9	-50.0					-4.9
-20.0	-81.2			-70			-11.2

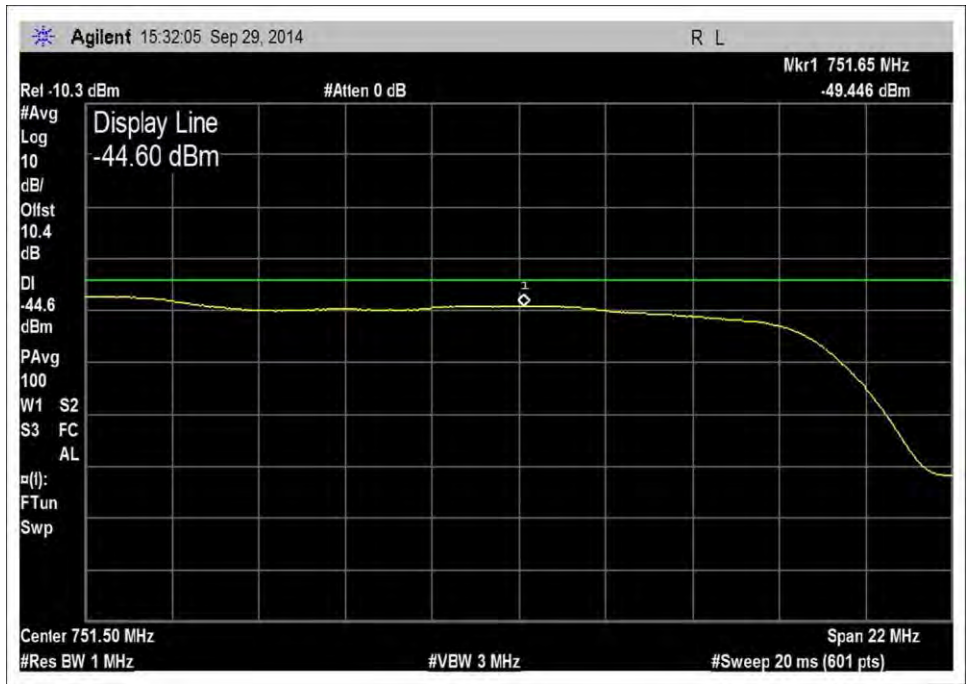
824.0		849.0		MHz			
				Limit		Margin	
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Freq Dependent	TX off			
-69.0	-44.6		-44.1				-0.5
-70.0	-44.7		-44.1				-0.6
-71.0	-45.1		-44.1				-1.0
-80.0	-45.2		-44.1				-1.1
-53.0	-58.4	-50.0					-8.4
-58.0	-53.9	-45.0					-8.9
-31.0	-81.2			-70			-11.2

Uplink /Downlink Noise timing		
Freq	Measured	Limit
MHz	Sec	sec
UL1710-1755	0.23	3.0
UL1850-1915	0.13	3.0
UL824-894	0.13	3.0
UL 698-716	0.14	3.0
UL776-787	0.22	3.0
DL2110-2155	0.32	3.0
DL1930-1995	0.27	3.0
DL869-894	0.29	3.0
DL:728-746	0.34	3.0
DL 746-757	0.25	3.0

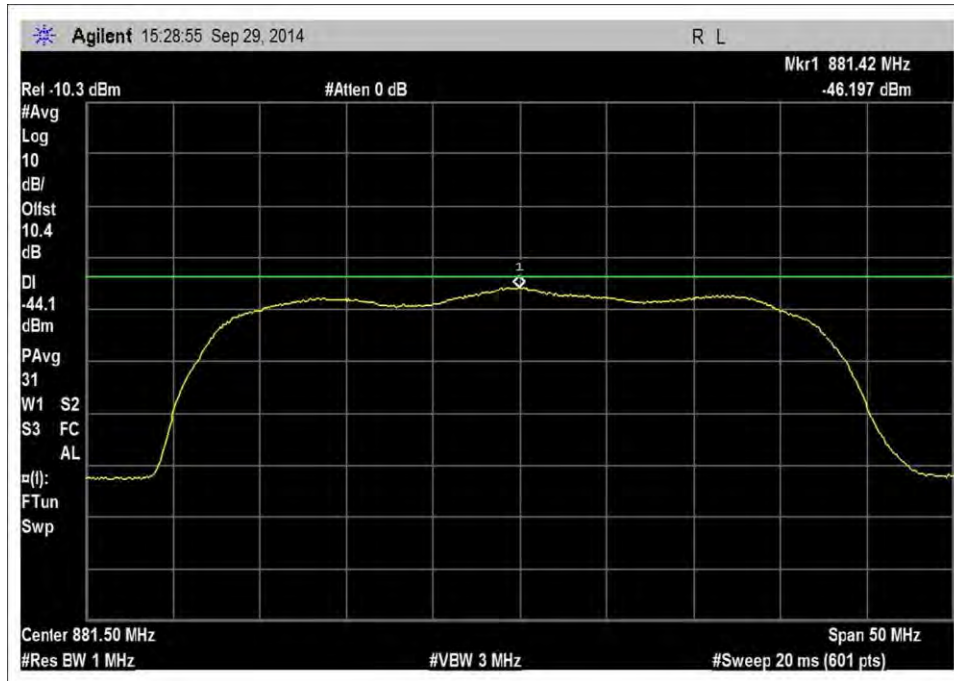
Test Data



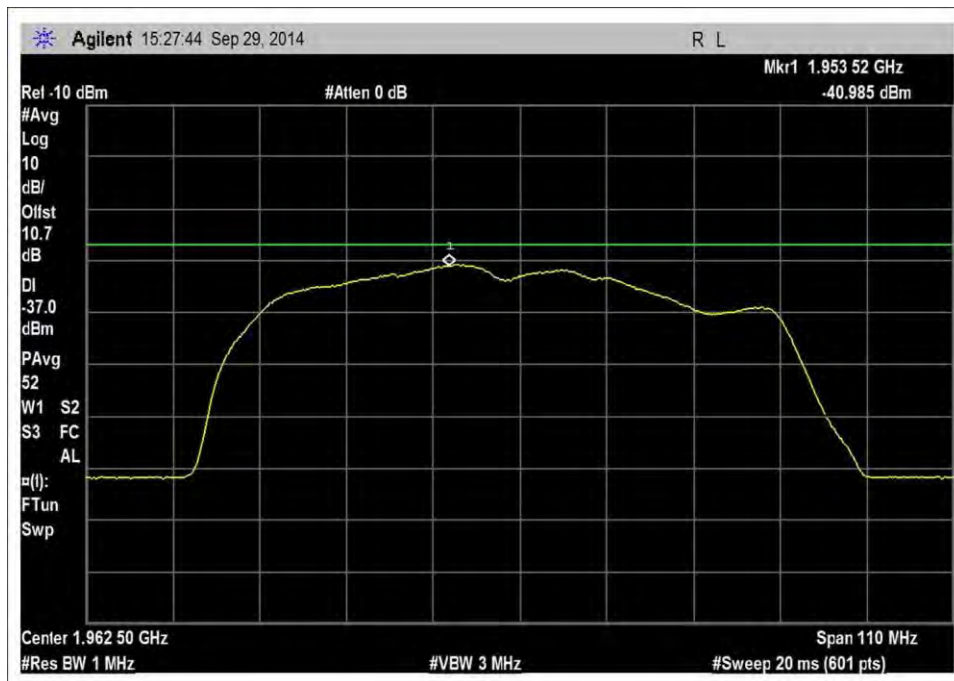
DL_728-746MHz_Noise



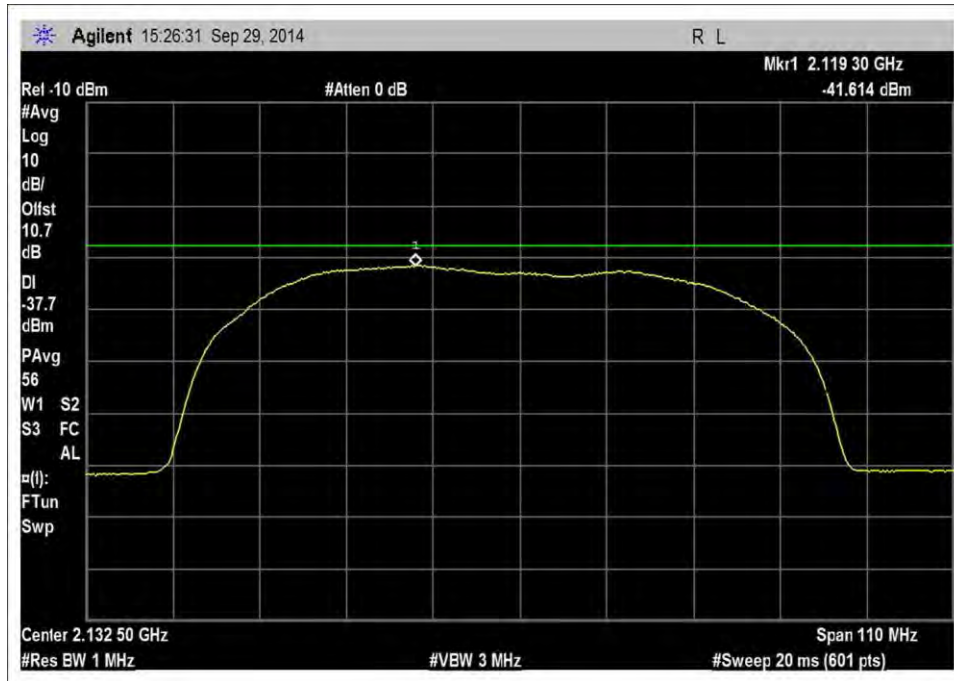
DL_746-757MHz



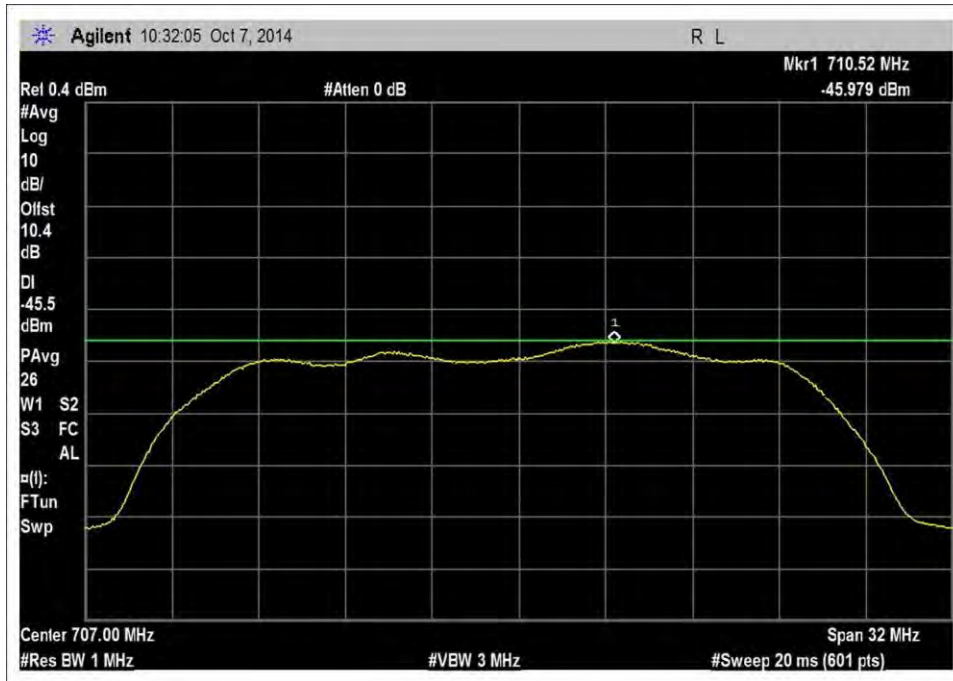
DL_869-894MHz



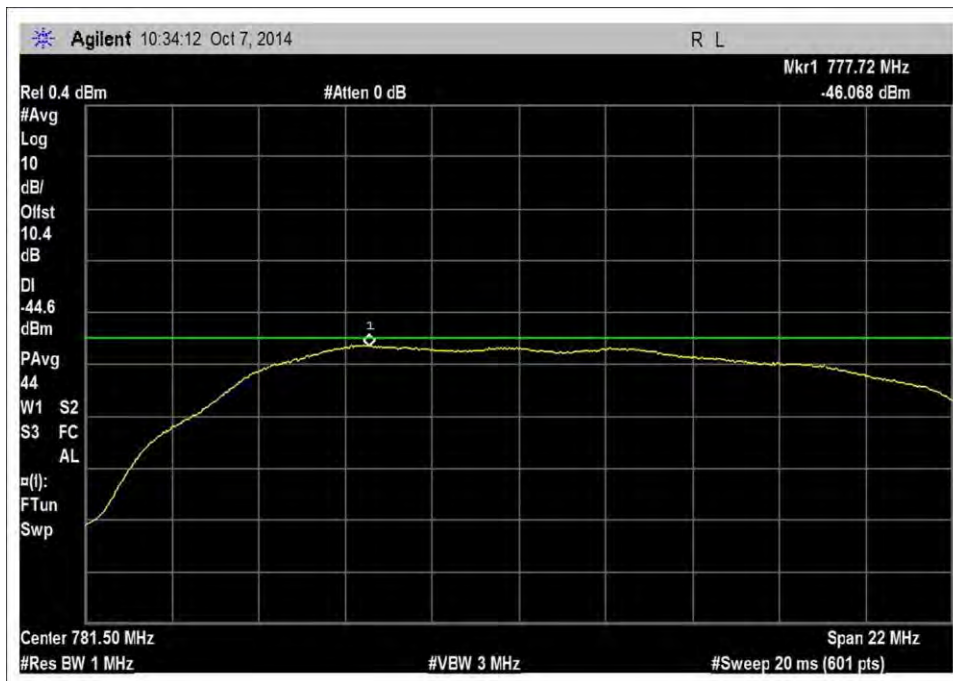
DL_1930-1995MHz



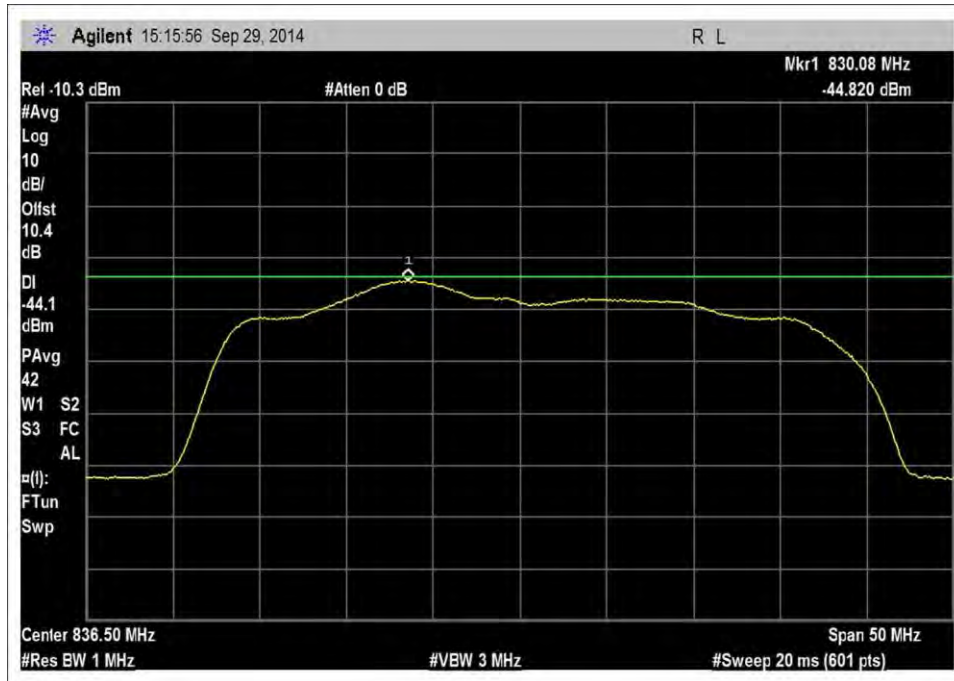
DL_2110-2155MHz



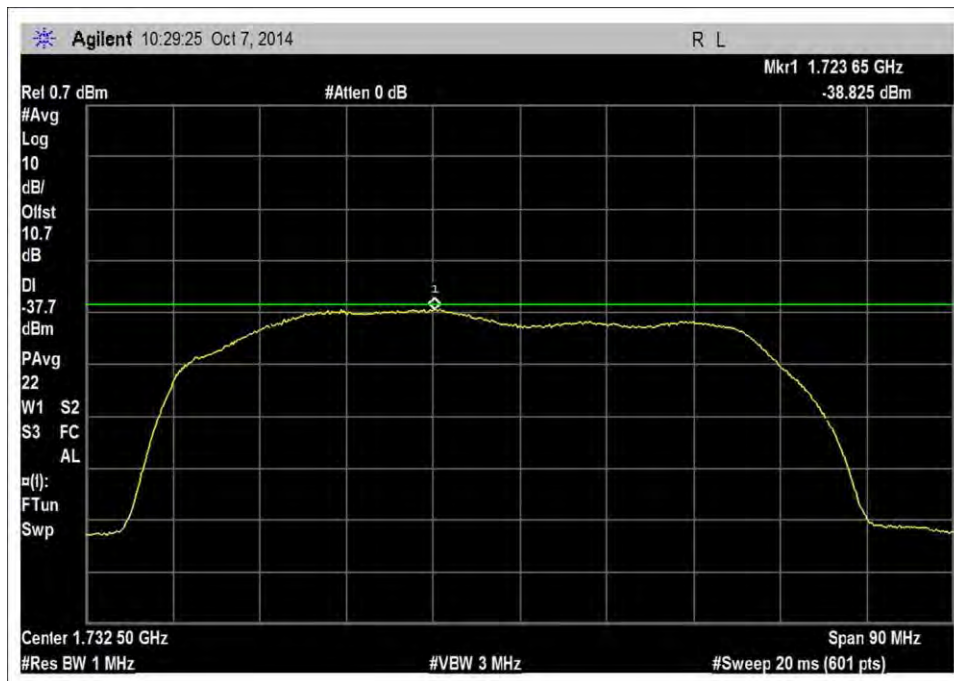
UL_698-716MHz_Noise



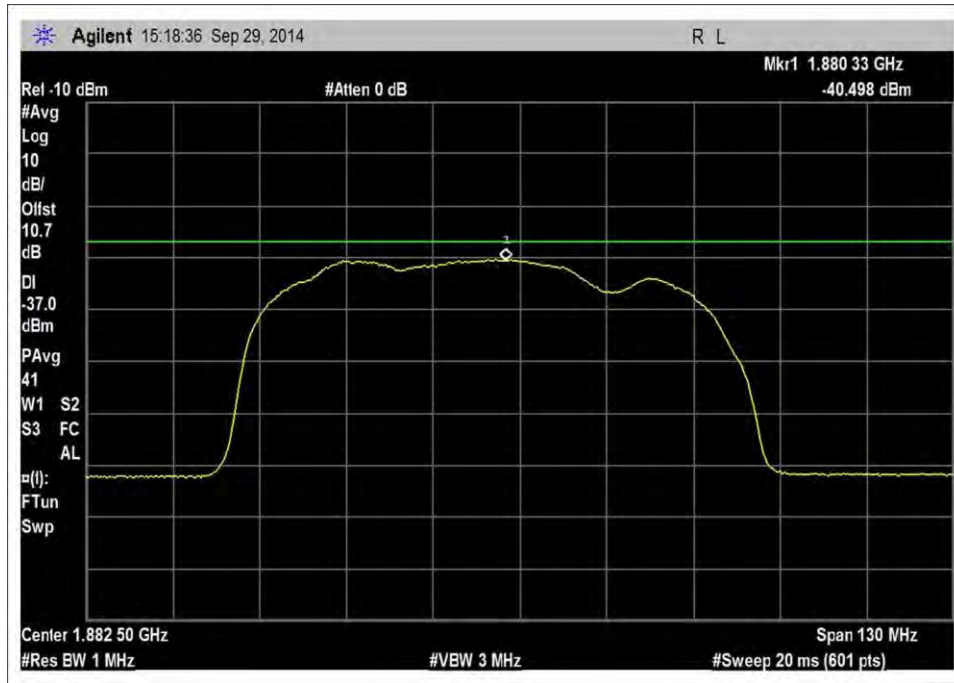
UL_776-787MHz



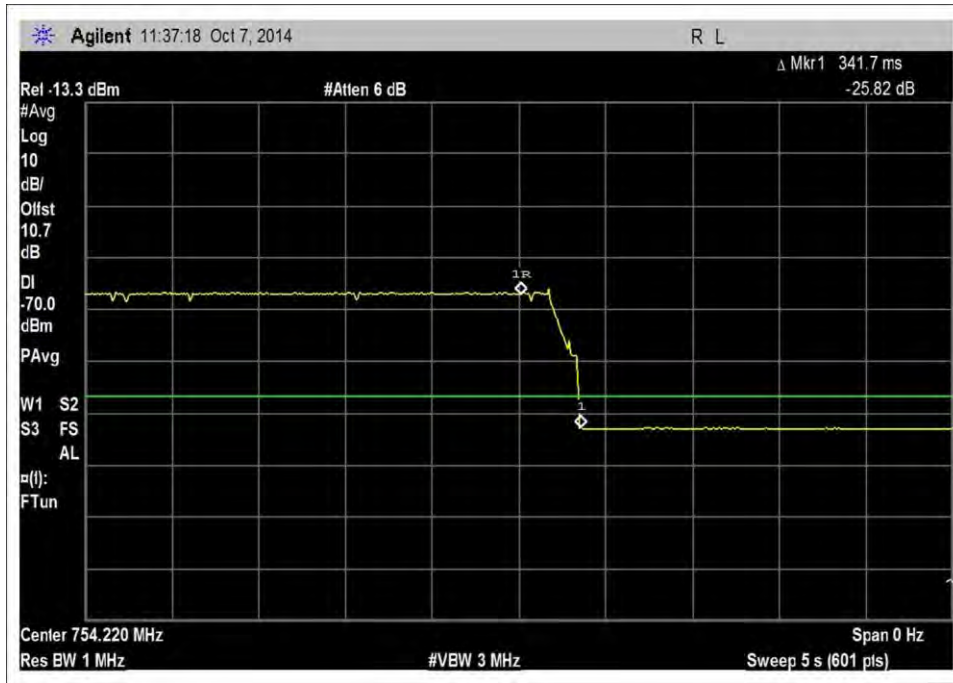
UL_824-849MHz



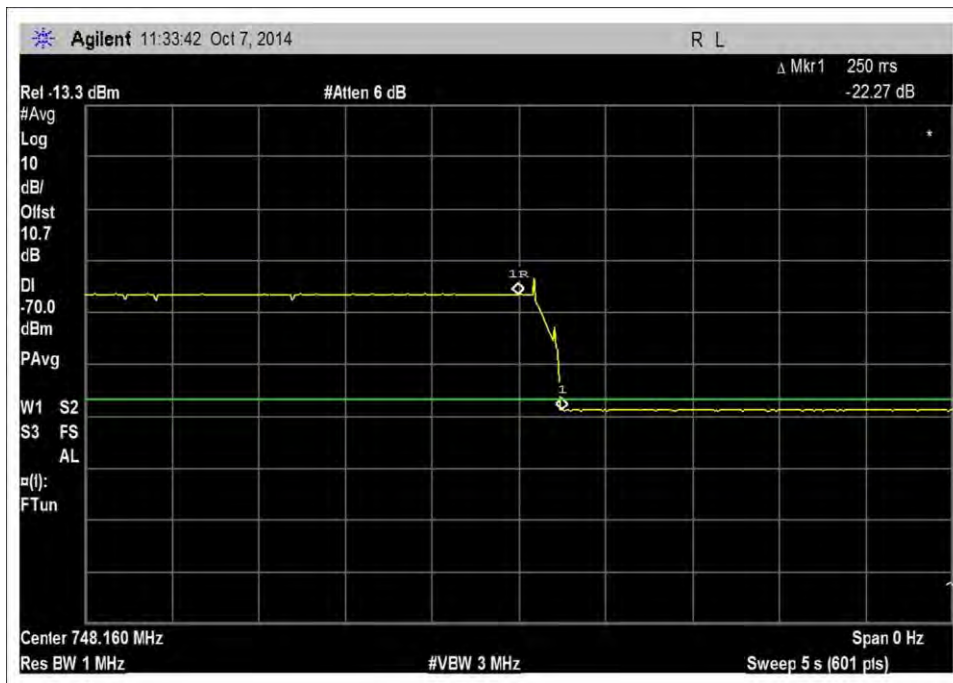
UL_1710-1755MHz



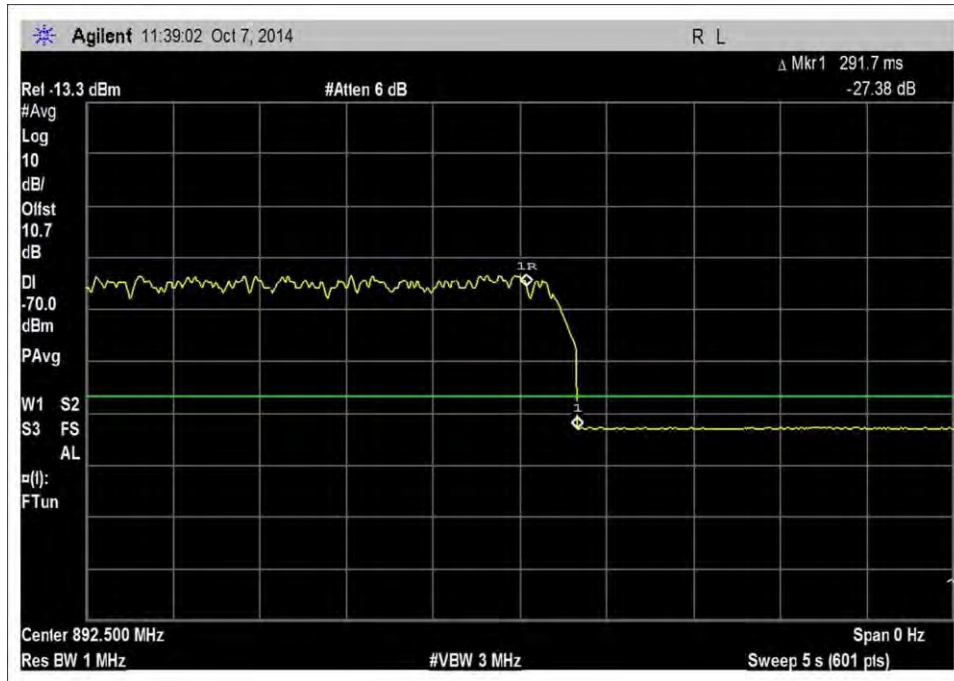
UL_1850-1915MHz



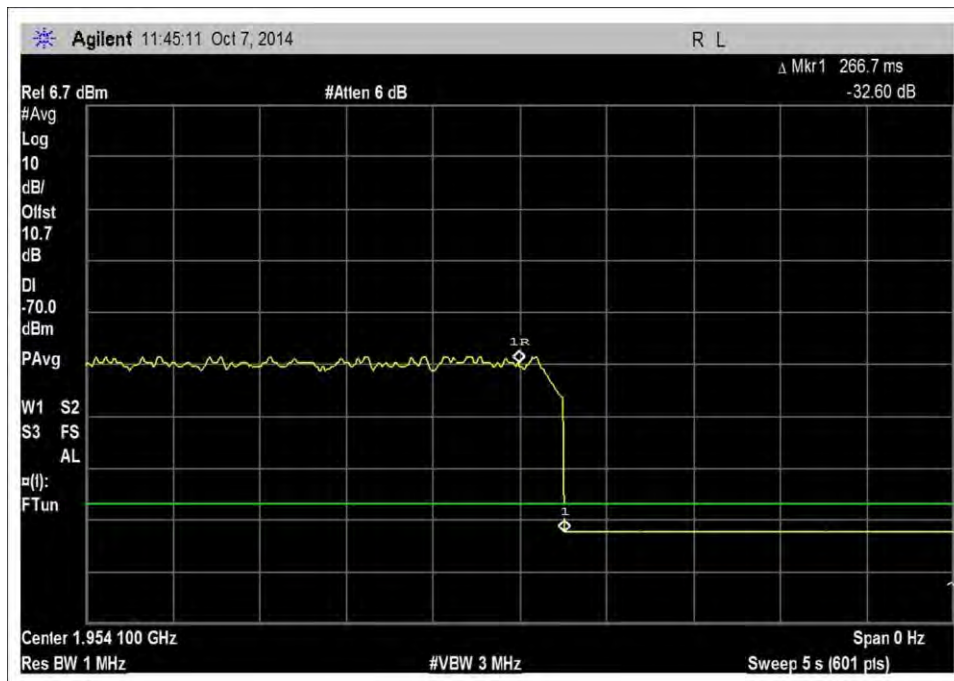
DL_728-757MHz_Noise Time



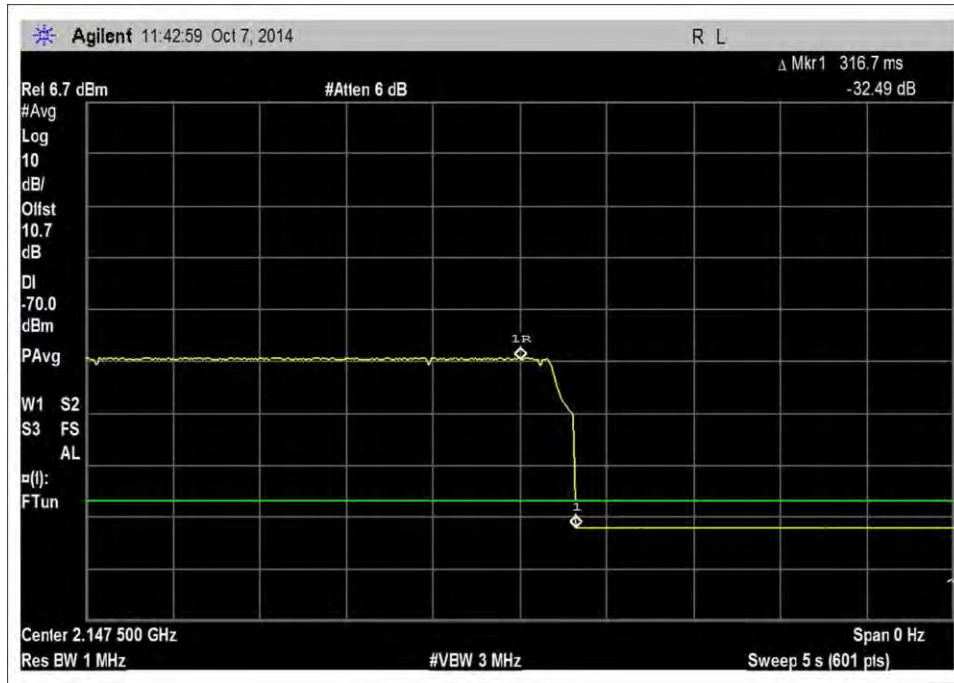
DL_746-757MHz



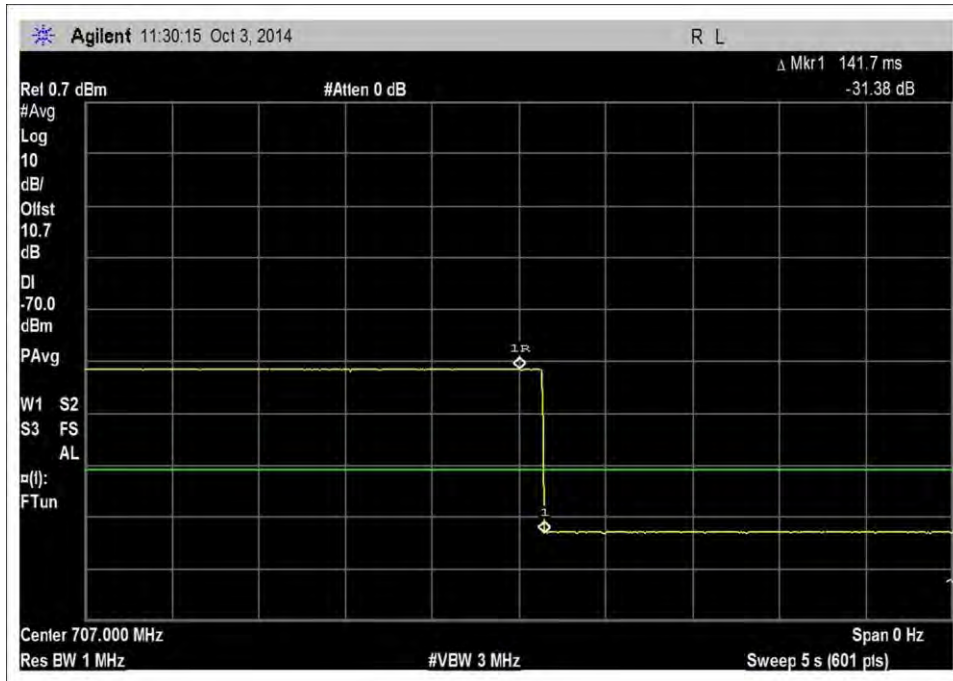
DL_869-894MHz



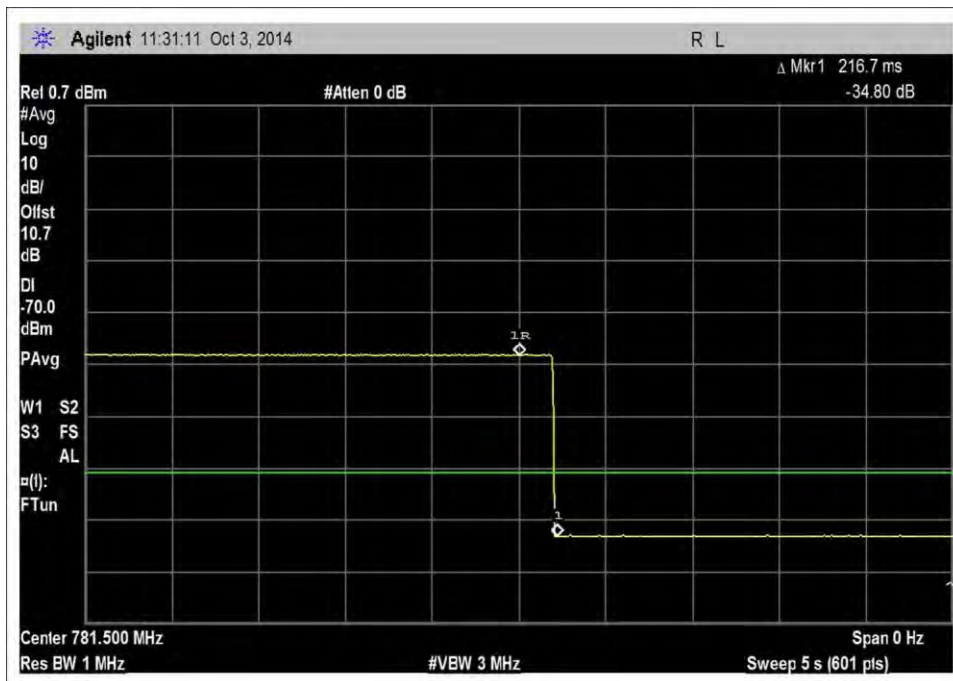
DL_1930-1995MHz



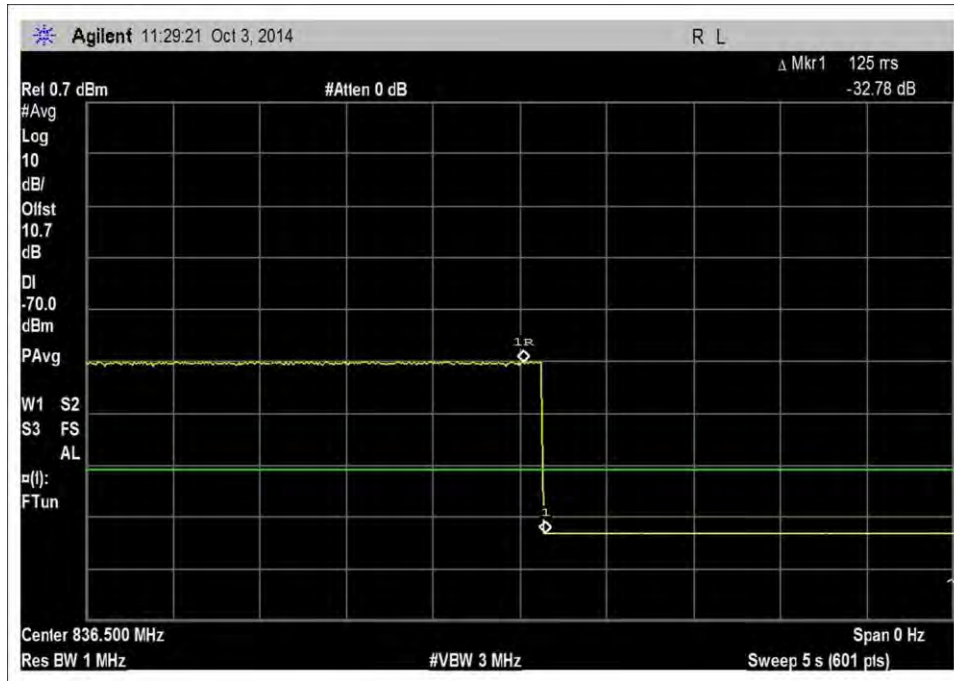
DL_2110-2155MHz



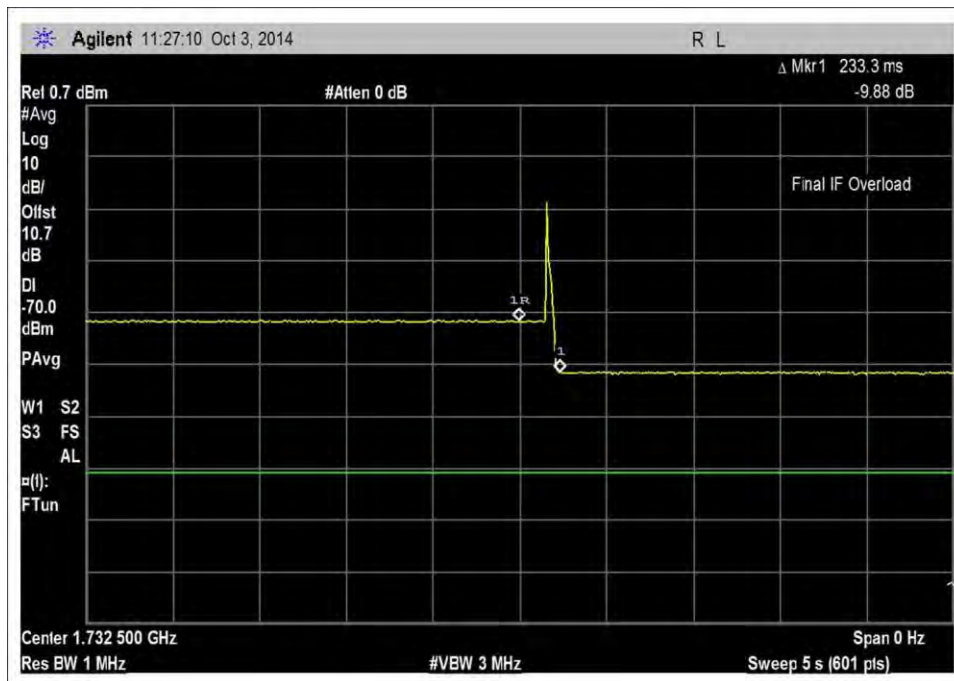
UL_698-716MHz_B_Noise Time



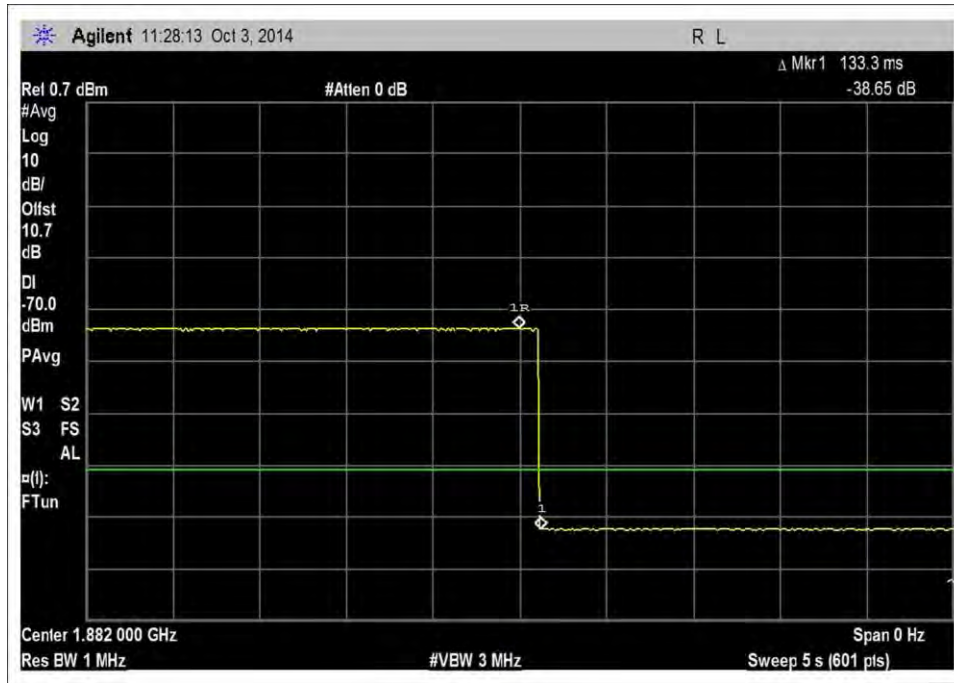
UL_776-787MHz_B



UL_824-849MHz_B



UL_1710-1755MHz_B



UL_1850-1915MHz_B

Clause 7.8 Uplink Inactivity

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92821 • 714-993-6112

Customer: **SolidRF Communication Co., Ltd**

Specification: **7.8 Uplink inactivity**

Work Order #: **95763**

Date: 9/16/2014

Test Type: **Conducted Emissions**

Time: 08:40:44

Equipment: **Signal Booster**

Sequence#: 1

Manufacturer: SolidRF Communication Co., Ltd

Tested By: E. Wong

Model: SR25652001

110V 60Hz

S/N: NA

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/14/2013	8/14/2015
	AN03430	Attenuator	75A-10-12	9/5/2013	9/5/2015
	AN02946	Cable	32022-2-2909K-36TC	7/31/2013	7/31/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Signal Booster*	SolidRF Communication Co., Ltd	SR25652001	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Generic	MX18W1	NA
Signal Generator	Agilent	E4438C	MY42081492
Signal Generator	Agilent	E4433B	US40052164

Test Conditions / Notes:

The EUT is placed on the test bench. Evaluation performed at the Outside (Donor) and Inside (Server) antenna port.

UL: 824-849, 1850-1915 MHz, 1710-1755MHz, 698-716MHz, 776-787MHz

DL: 869-894, 1930-1995 MHz, 2110-2155MHz, 728-746MHz, 746-757MHz

All adjustable settings on the test sample are set at max.

Test environment conditions: Temperature: 23.9°C, Relative Humidity: 40%, Atmospheric Pressure: 100kPa

Test procedure:

The test was performed IAW section 7.8 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014

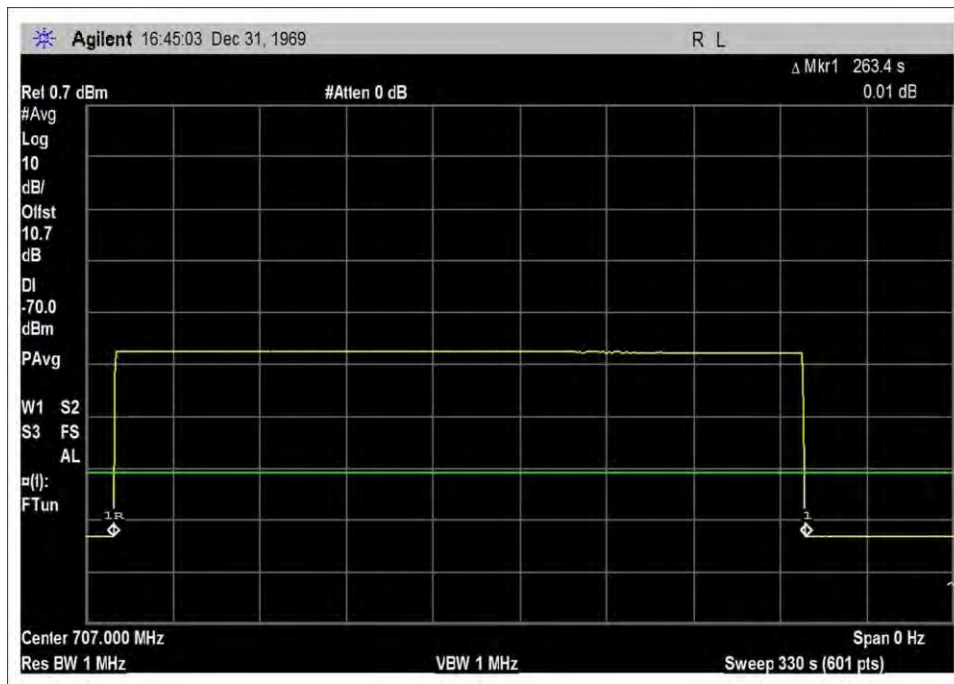
Firmware: Original

Summary of Results

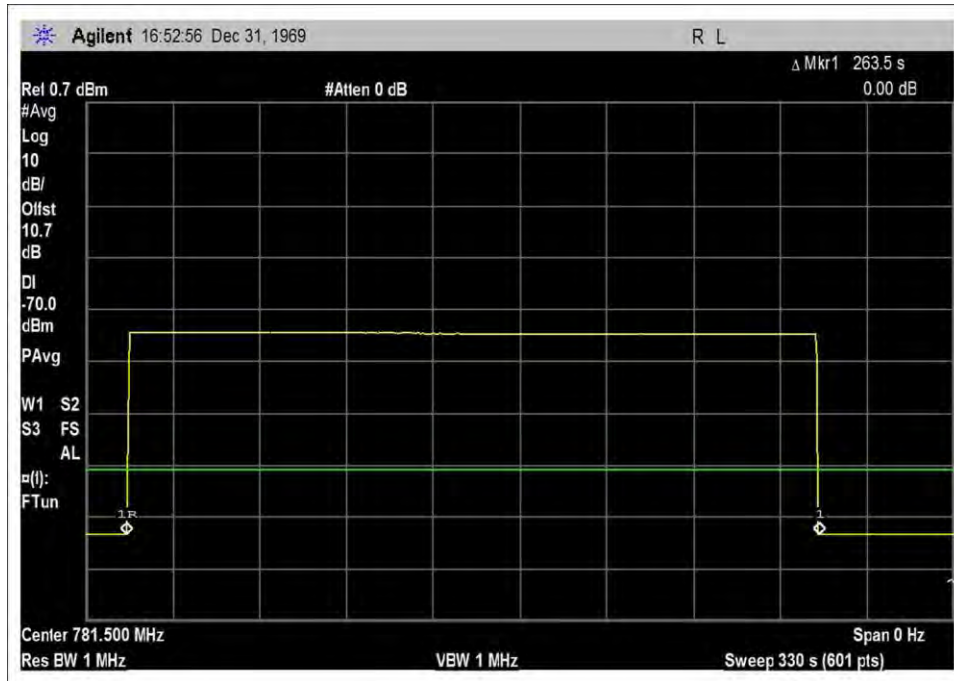
Pass: As demonstrated, when the booster is not serving an active device connection after 5 minutes the uplink noise power does not exceed -70dbm/MHz

Uplink Inactivity		
Freq	Measured	Limit
MHz	Sec	Sec
UL1710-1755	4.4	5.0
UL1850-1915	4.4	5.0
UL824-894	4.4	5.0
UL 698-716	4.4	5.0
UL776-787	4.4	5.0

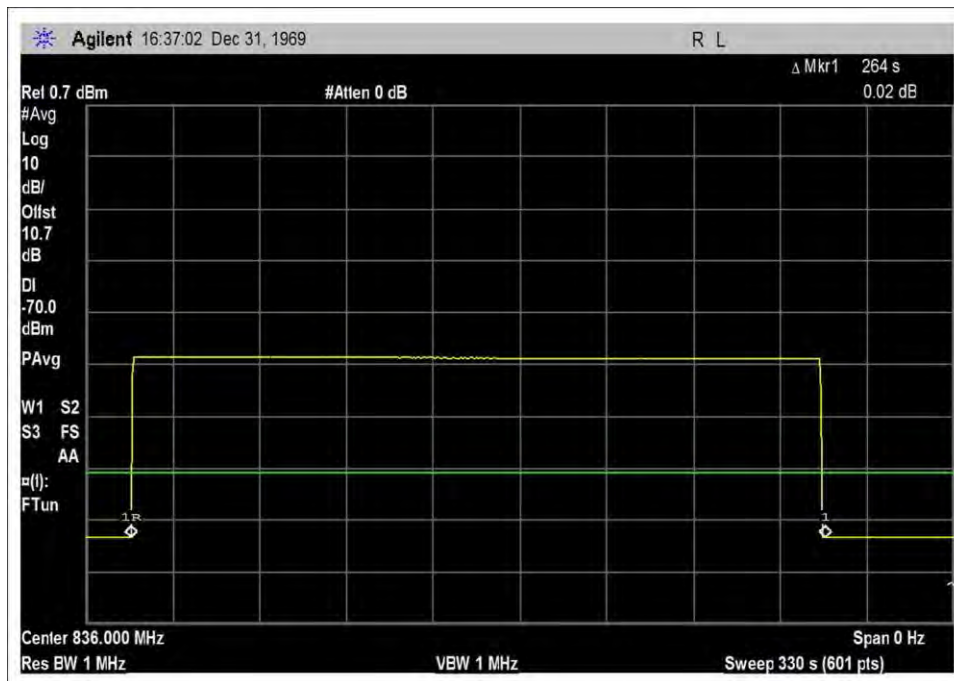
Test Data



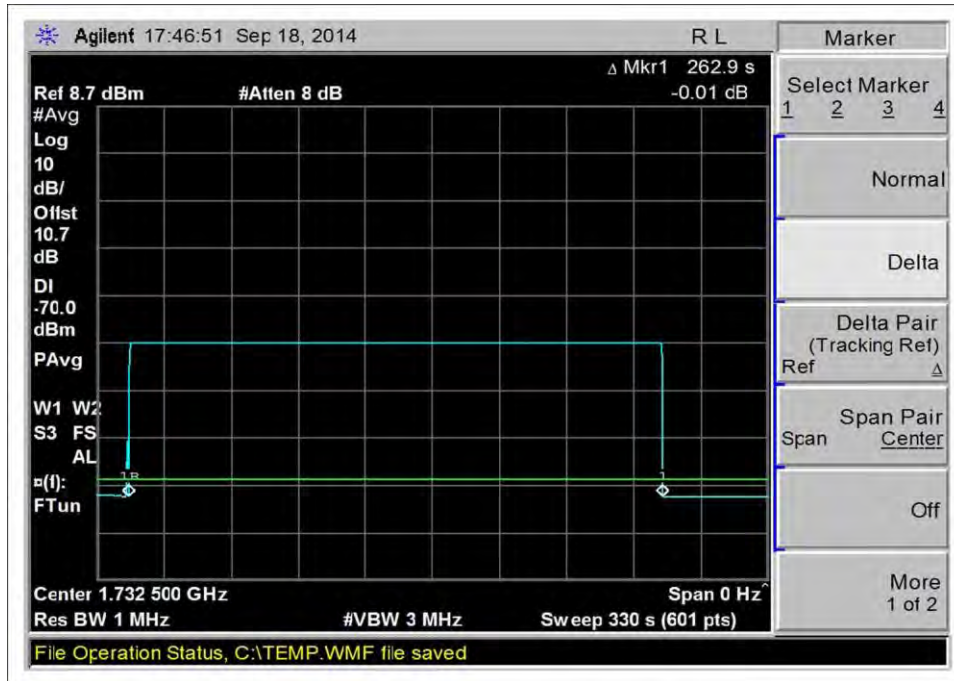
UL_698-716MHz



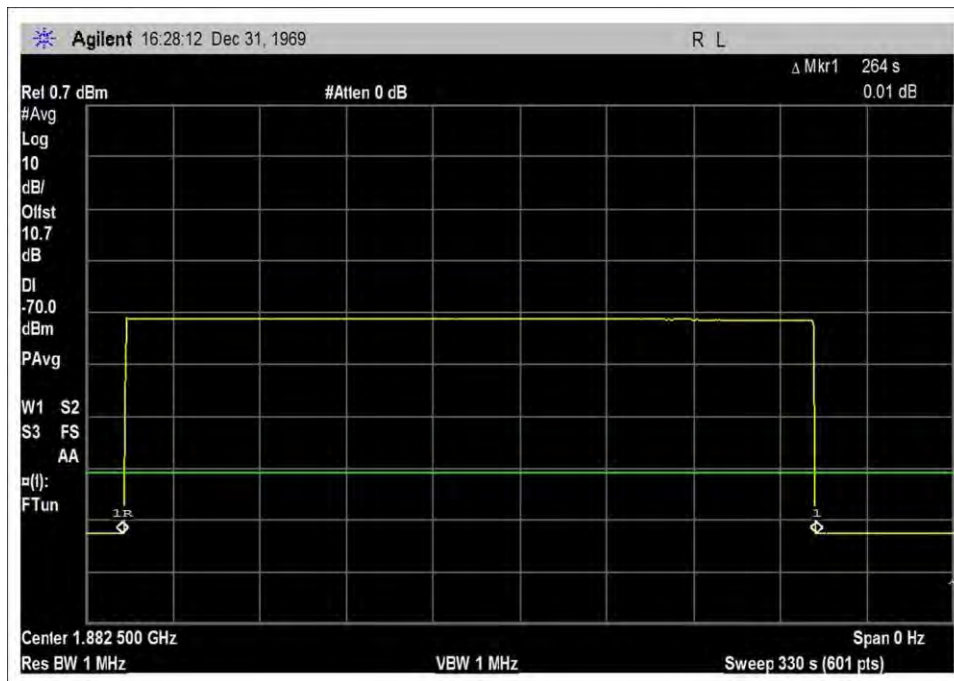
UL_776-787MHz



UL_824-849MHz



UL_1710-1755MHz



UL_1850-1915MHz

Clause 7.9 Booster Gain Limit

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92821 • 714-993-6112

Customer: **SolidRF Communication Co., Ltd**
 Specification: **7.9 Variable Booster gain**
Variable Uplink Gain Timing

Work Order #:	95763	Date:	9/16/2014
Test Type:	Conducted Emissions	Time:	08:40:44
Equipment:	Signal Booster	Sequence#:	1
Manufacturer:	SolidRF Communication Co., Ltd	Tested By:	E. Wong
Model:	SR25652001		110V 60Hz
S/N:	NA		

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/14/2013	8/14/2015
	AN03430	Attenuator	75A-10-12	9/5/2013	9/5/2015
	AN02946	Cable	32022-2-2909K-36TC	7/31/2013	7/31/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Signal Booster*	SolidRF Communication Co., Ltd	SR25652001	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Generic	MX18W1	NA
Signal Generator	Agilent	E4438C	MY42081492
Signal Generator	Agilent	E4433B	US40052164

Test Conditions / Notes:

The EUT is placed on the test bench. Evaluation performed at the Outside (Donor) and Inside (Server) antenna port.

UL: 824-849, 1850-1915 MHz, 1710-1755MHz, 698-716MHz, 776-787MHz
 DL: 869-894, 1930-1995 MHz, 2110-2155MHz, 728-746MHz, 746-757MHz

All adjustable settings on the test sample are set at max.

Test environment conditions: Temperature: 23.9°C, Relative Humidity: 40%, Atmospheric Pressure: 100kPa

Test procedure:
 The test was performed IAW section 7.9 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014
 Firmware: Original

MSCL provided by the manufacturer, MSCL as follows.

Mobile station coupling loss (MSCL): the minimum coupling loss (in dB) between the wireless device and the input (server) port of the consumer booster. MSCL must be calculated or measured for each band of operation and provided in compliance test reports. MSCL includes the path loss from the wireless device, and the booster’s server antenna gain and cable loss. The wireless device is assumed to be an isotropic (0 dBi) antenna reference. Minimum standoff distances from inside wireless devices to the booster’s server antenna must be reasonable and specified by the manufacturer in customer provided installation manuals.

$$L P = 20\log f + 20\log d - 27.5$$

where:

L P = basic free space path loss,

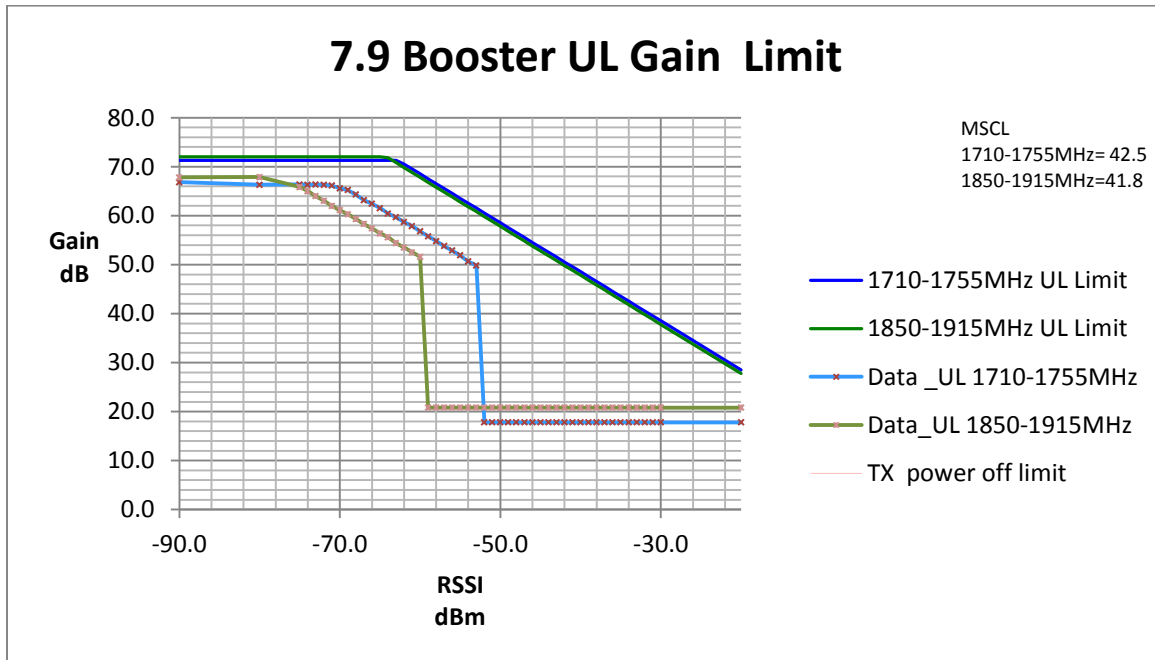
f = Center frequency,

d = 1.5 meters.

Frequency	MSCL
DL2110-2155	42.53
DL1930-1995	41.81
DL869-894	34.86
DL:728-746	33.31
DL 746-757	33.47

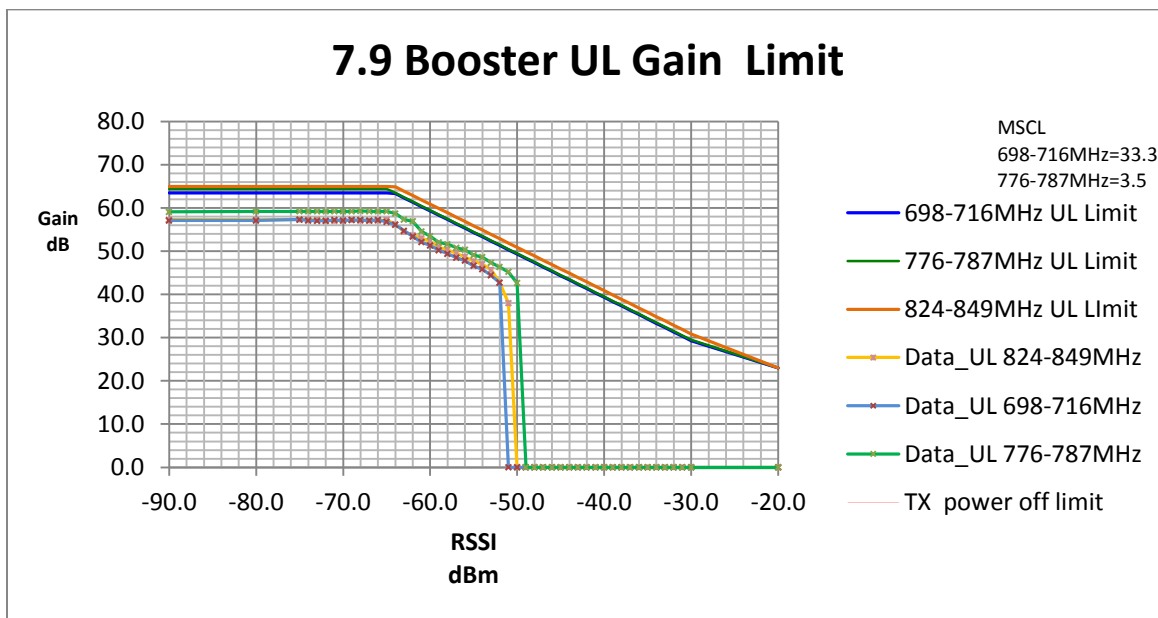
Summary of Results

Pass: As demonstrated, Computed gains are within the gain limit. all maximum variable uplink gain timings are within 1 second limit.



1850.0		1915.0		MHz			
				Limit			Margin
RSSI (dBm)	Input (dBm)	Measured Output(dBm)	Measured Gain (dB)	RSSI Dependent	Freq Dependent	TX off	
-80.0	-57.0	10.9	67.9		72.0		-4.1
-90.0	-57.0	10.8	67.8		72.0		-4.2
-60.0	-57.0	-5.4	51.6	67.8			-16.2
-64.0	-57.0	-1.4	55.6	71.8			-16.2
-61.0	-57.0	-4.5	52.5	68.8			-16.3
-62.0	-57.0	-3.5	53.5	69.8			-16.3

1710.0				1755.0		MHz			
				Limit			Margin		
RSSI (dBm)	Input (dBm)	Measured Output(dBm)	Measured Gain (dB)	RSSI Dependent	Freq Dependent	TX off			
-90.0	-54.0	12.8	66.8		71.3		-4.5		
-75.0	-54.0	12.4	66.4		71.3		-4.9		
-20.0	-54.0	-36.2	17.8	28.5			-10.7		
-61.0	-54.0	3.9	57.9	69.5			-11.6		
-55.0	-54.0	-2.1	51.9	63.5			-11.6		
-56.0	-54.0	-1.1	52.9	64.5			-11.7		



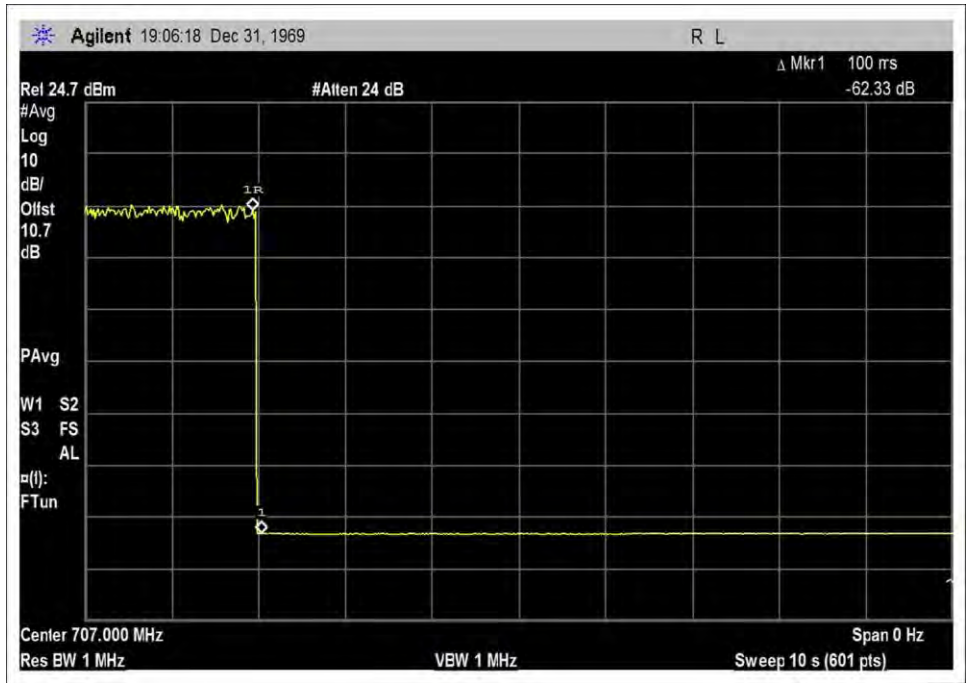
824.0				849.0		MHz			
				Limit			Margin		
RSSI (dBm)	Input (dBm)	Measured Output(dBm)	Measured Gain (dB)	RSSI Dependent	Freq Dependent	TX off			
-90.0	-47.0	10.3	57.3		64.9		-7.6		
-75.0	-47.0	10.3	57.3		64.9		-7.6		
-54.0	-47.0	0.0	47.0	54.9			-7.9		
-56.0	-47.0	1.7	48.7	56.9			-8.2		
-55.0	-47.0	0.7	47.7	55.9			-8.2		
-53.0	-47.0	-1.3	45.7	53.9			-8.2		

698.0				716.0		MHz		
				Limit			Margin	
RSSI (dBm)	Input (dBm)	Measured Output(dBm)	Measured Gain (dB)	RSSI Dependent	Freq Dependent	TX off		
-75.0	-47.0	10.3	57.3		63.5		-6.2	
-71.0	-47.0	10.2	57.2		63.5		-6.3	
-64.0	-47.0	9.1	56.1	63.3			-7.2	
-56.0	-47.0	0.8	47.8	55.3			-7.5	
-54.0	-47.0	-1.2	45.8	53.3			-7.5	
-63.0	-47.0	7.7	54.7	62.3			-7.6	

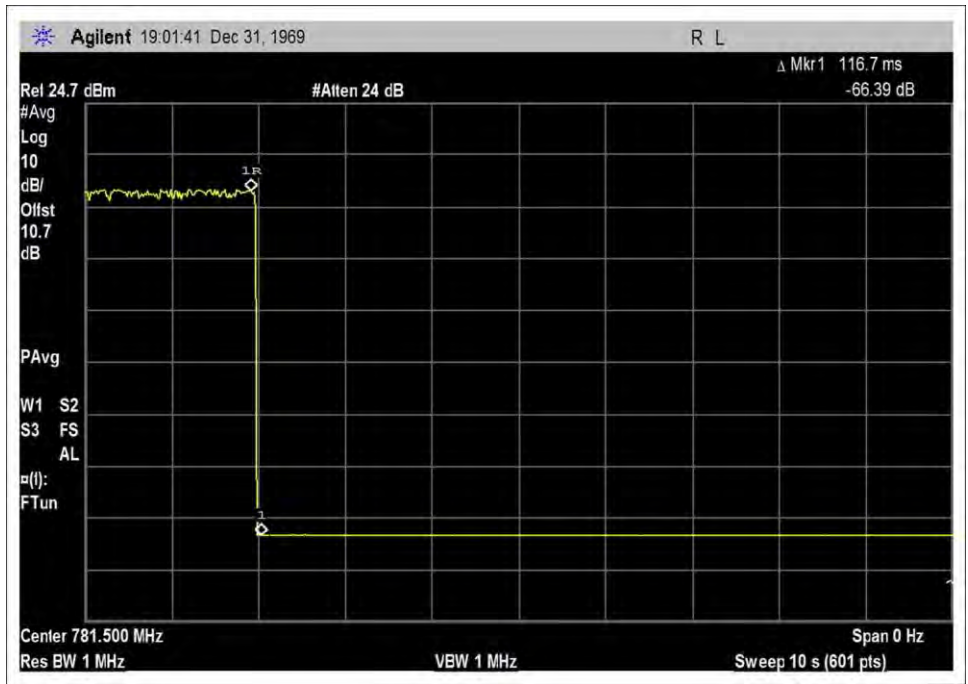
776.0				787.0		MHz		
				Limit			Margin	
RSSI (dBm)	Input (dBm)	Measured Output(dBm)	Measured Gain (dB)	RSSI Dependent	Freq Dependent	TX off		
-68.0	-46.0	13.3	59.3		64.4		-5.1	
-80.0	-46.0	13.2	59.2		64.4		-5.2	
-62.0	-46.0	10.9	56.9	61.5			-4.6	
-64.0	-46.0	12.7	58.7	63.5			-4.8	
-54.0	-46.0	2.6	48.6	53.5			-4.9	
-63.0	-46.0	11.3	57.3	62.5			-5.2	

Uplink Inactivity		
Freq	Measured	Limit
MHz	Sec	Sec
UL1710-1755	4.4	5.0
UL1850-1915	4.4	5.0
UL824-894	4.4	5.0
UL 698-716	4.4	5.0
UL776-787	4.4	5.0

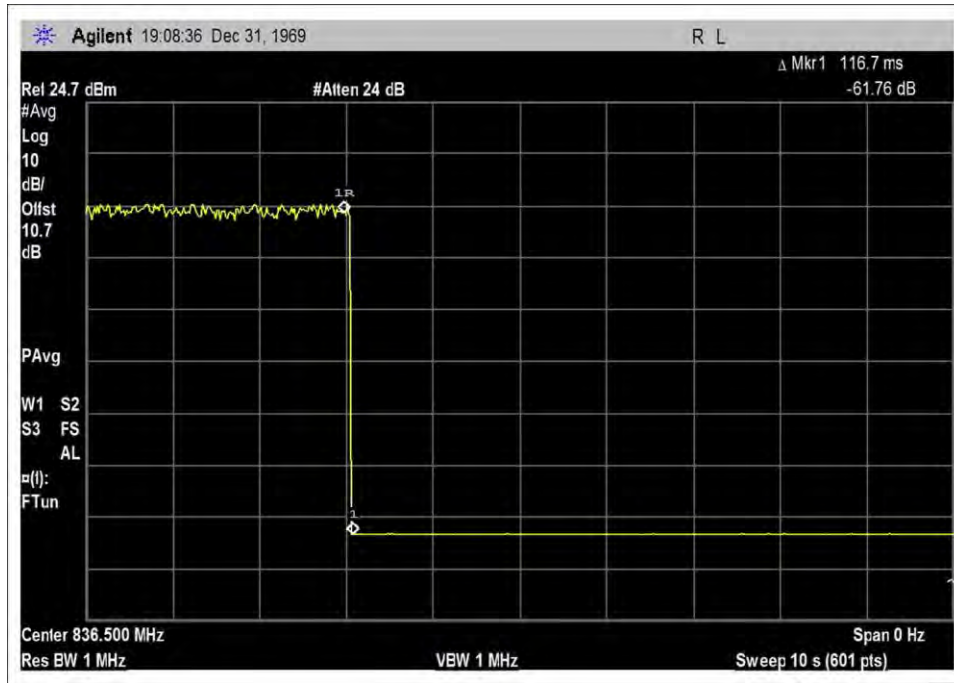
Test Data



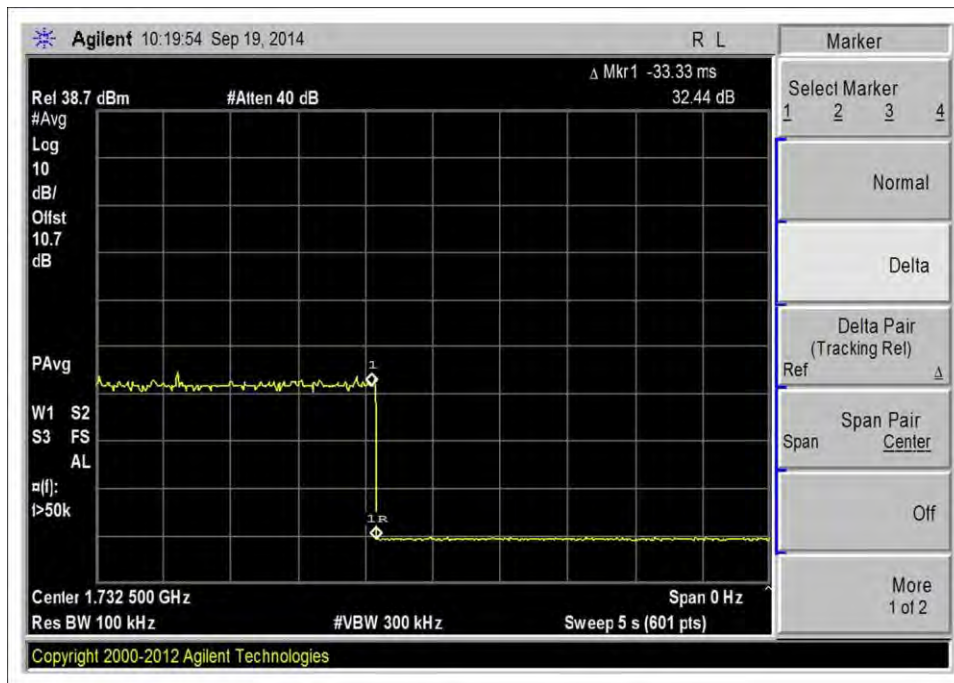
UL_698-716MHz_20dB



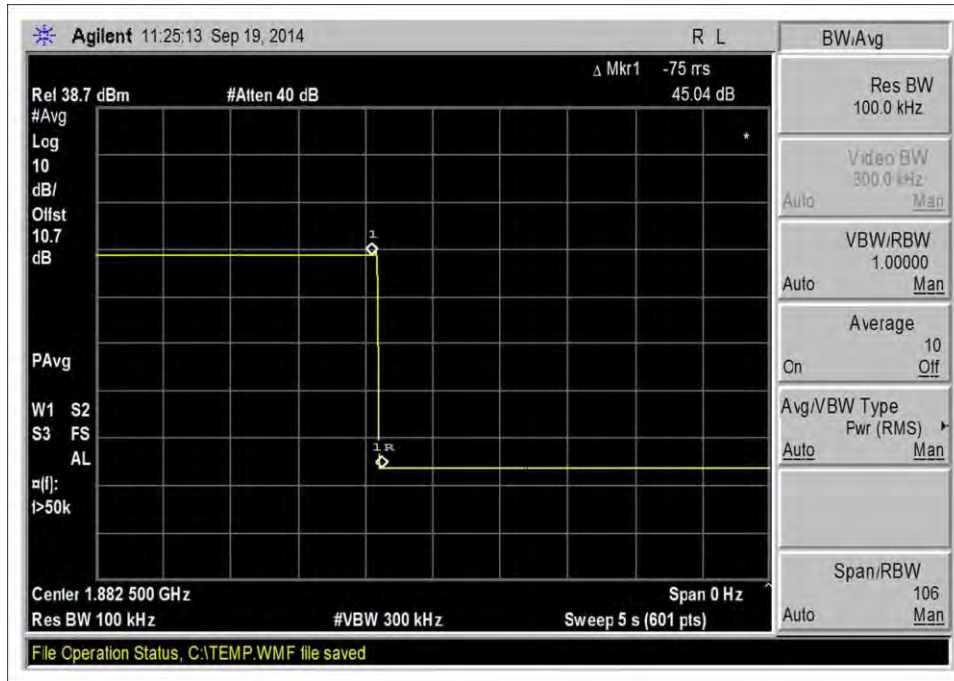
UL_776-787MHz_20dB



UL_824-849MHz_20dB



UL_1710-1755MHz_20dB



UL_1850-1915MHz_20dB

Clause 7.11 Oscillation Detection

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92821 • 714-993-6112

Customer: **SolidRF Communication Co., Ltd**

Specification: **7.11 Anti-Oscillation**

Work Order #: **95763**

Date: 9/16/2014

Test Type: **Conducted Emissions**

Time: 08:40:44

Equipment: **Signal Booster**

Sequence#: 1

Manufacturer: SolidRF Communication Co., Ltd

Tested By: E. Wong

Model: SR25652001

110V 60Hz

S/N: NA

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/14/2013	8/14/2015
	AN03430	Attenuator	75A-10-12	9/5/2013	9/5/2015
	AN02946	Cable	32022-2-2909K-36TC	7/31/2013	7/31/2015
	AN03412	Band Pass Filter	PE8705	8/26/2013	8/26/2015
	AN03413	Band Pass Filter	PE8706	8/26/2013	8/26/2015
	AN03414	Band Pass Filter	PE8707	8/26/2013	8/26/2015
	AN03415	Band Pass Filter	PE8708	8/26/2013	8/26/2015
	AN03447	Band Pass Filter	PE8710	9/20/2013	9/20/2015
	AN03448	Band Pass Filter	PE8711	9/20/2013	9/20/2015
	AN03446	Band Pass Filter	4FV50-707/H18-O/O	01/06/2014	01/06/2016
	AN03467	Band Pass Filter	4FV50-731/H30-O/O	01/06/2014	01/06/2016
	AN03468	Band Pass Filter	4CS10-781.5/E12.2-O/O	01/06/2014	01/06/2016
	AN03469	Band Pass Filter	4CS10-751.5/E12-O/O	01/06/2014	01/06/2016
	C00082	RF Coupler	722-10-1.500V	8/21/2013	8/21/2015
	AN02475	1 dB step Attenuator	8494B	6/17/2013	6/17/2015
	AN03429	10dB step Attenuator	8496B	9/5/2013	9/5/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Signal Booster*	SolidRF Communication Co., Ltd	SR25652001	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Generic	MX18W1	NA

Test Conditions / Notes:

The EUT is placed on the test bench. Evaluation performed at the Outside (Donor) and Inside (Server) antenna port.

UL: 824-849, 1850-1915 MHz, 1710-1755MHz, 698-716MHz, 776-787MHz
 DL: 869-894, 1930-1995 MHz, 2110-2155MHz, 728-746MHz, 746-757MHz

All adjustable settings on the test sample are set at max.

Test environment conditions: Temperature: 23.9°C, Relative Humidity: 40%, Atmospheric Pressure: 100kPa

Test procedure:
 The test was performed IAW section 7.11 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014

Firmware: 092914 version

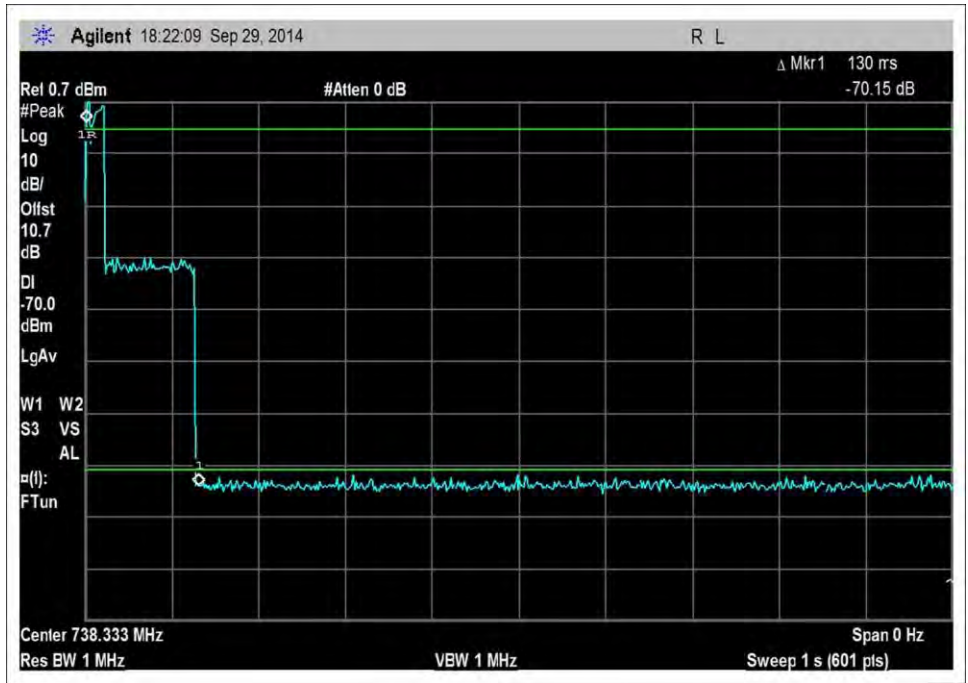
Summary of Results

Pass: All oscillations detection and mitigations occur within 0.3 seconds in uplink bands, within 1 second in the downlink bands and the noise level is below the -70dBm/MHz limit.

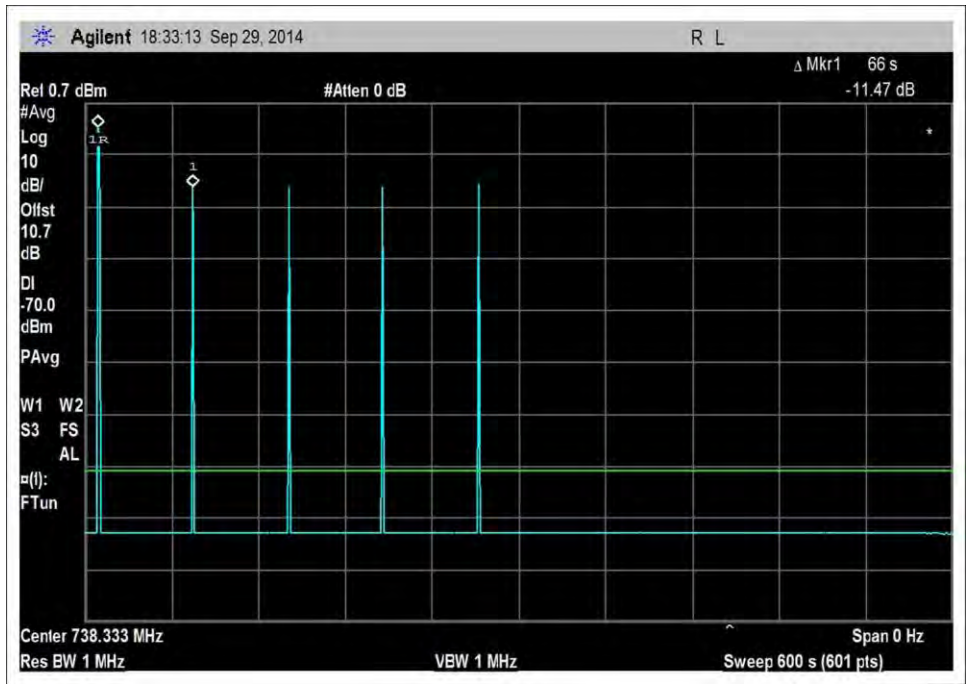
The booster continues to mitigation at least 1 minute before restarting. The plots demonstrate after 4 restarts (the limit is 5 restart) , the booster does not resume operation until manually.

Oscillation detection			Time Between restart		Number of restart	
Freq	Measured	Limit	Measured	Limit	Measured	Limit
MHz	Sec	Sec	Sec	At least sec		
UL1710-1755	0.13	0.30	65.4	60	4	5
UL1850-1915	0.12	0.30	65.0	60	4	5
UL824-894	0.12	0.30	65.0	60	4	5
UL 698-716	0.08	0.30	65.0	60	4	5
UL776-787	0.14	0.30	66.0	60	4	5
DL2110-2155	0.11	1.00	66.0	60	4	5
DL1930-1995	0.13	1.00	65.0	60	4	5
DL869-894	0.11	1.00	65.0	60	4	5
DL:728-746	0.13	1.00	66.0	60	4	5
DL 746-757	0.13	1.00	66.0	60	4	5

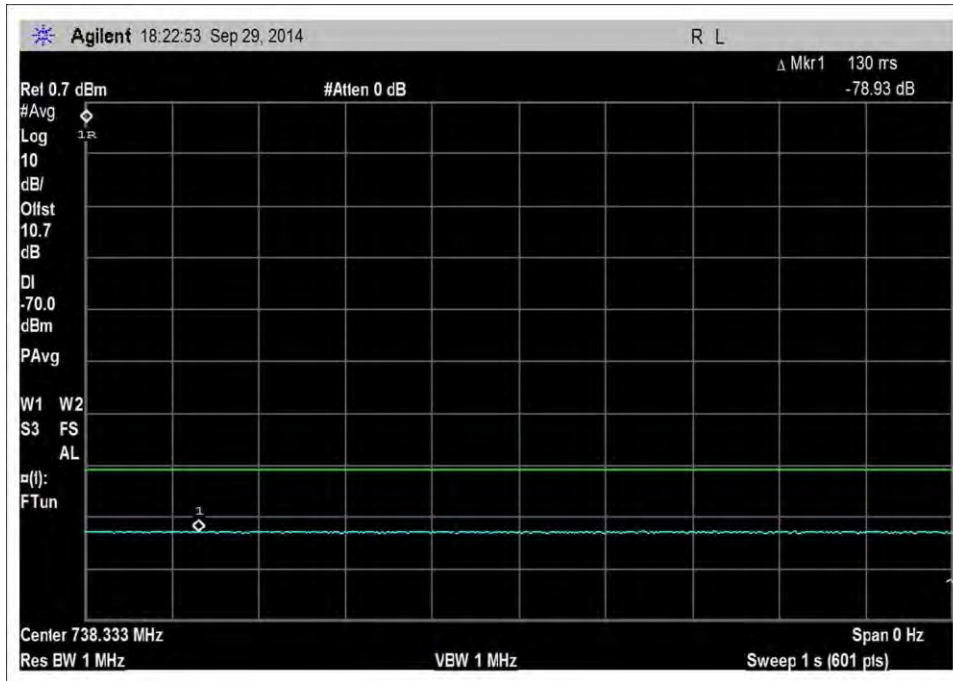
Test Data



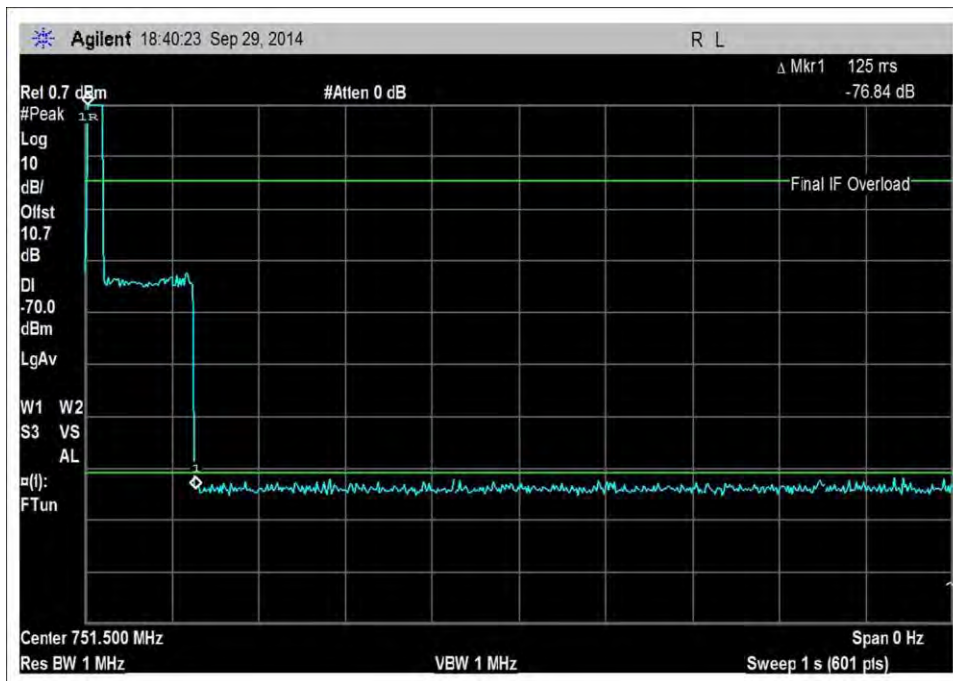
DL-728-746MHz



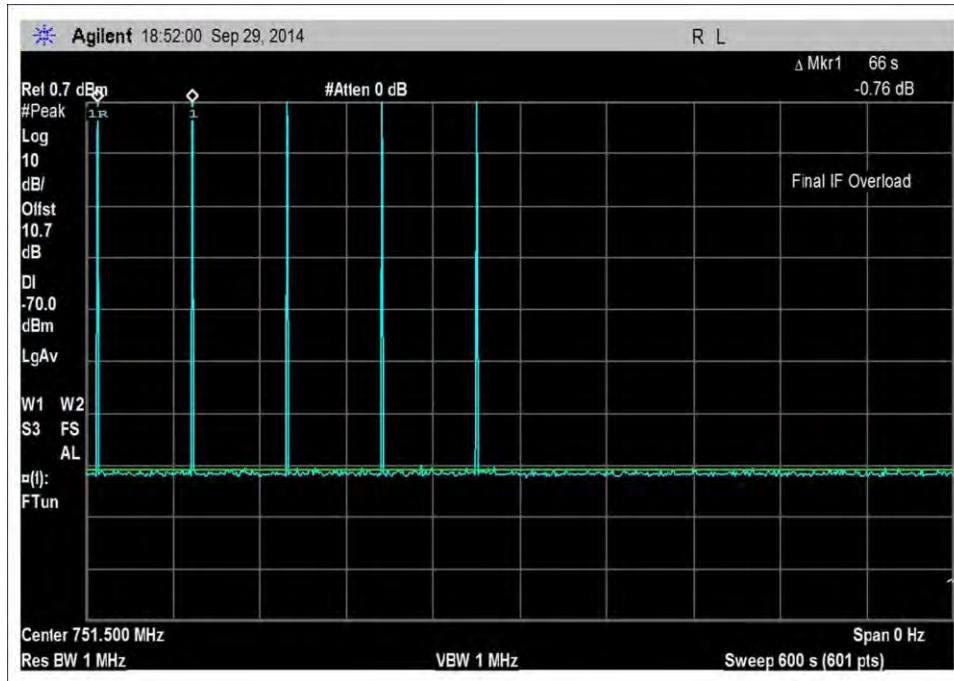
DL-728-746MHz_600sec



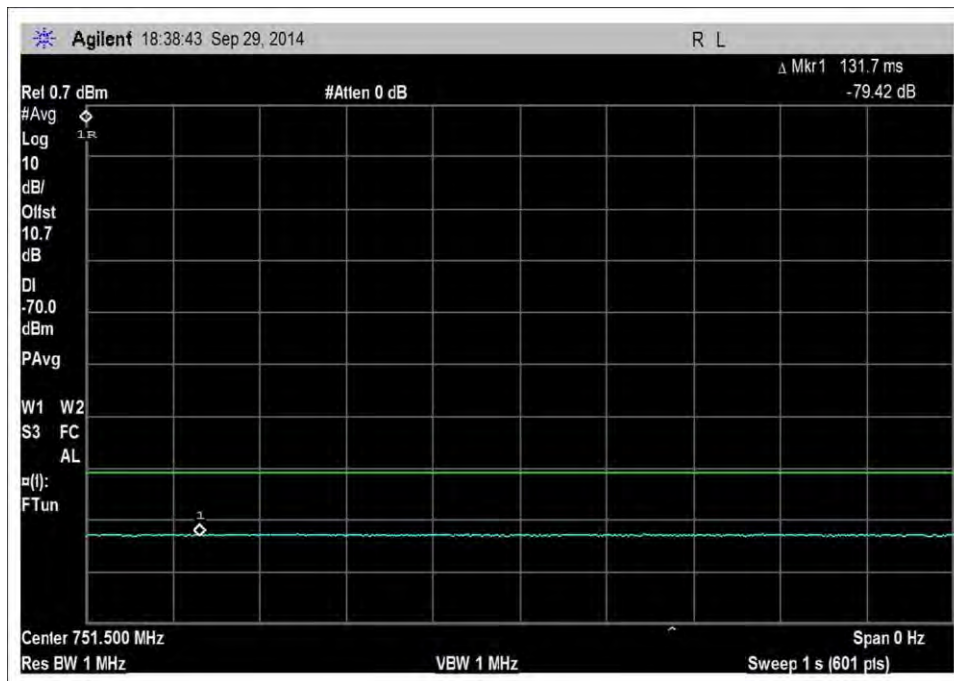
DL-728-746MHz_-70dBm



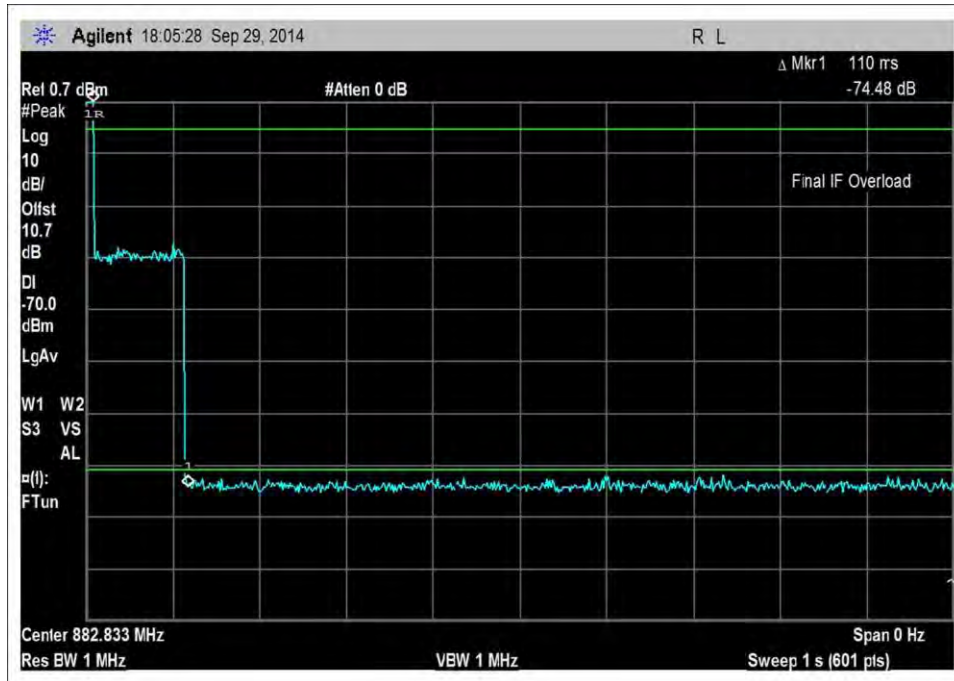
DL-746-757MHz



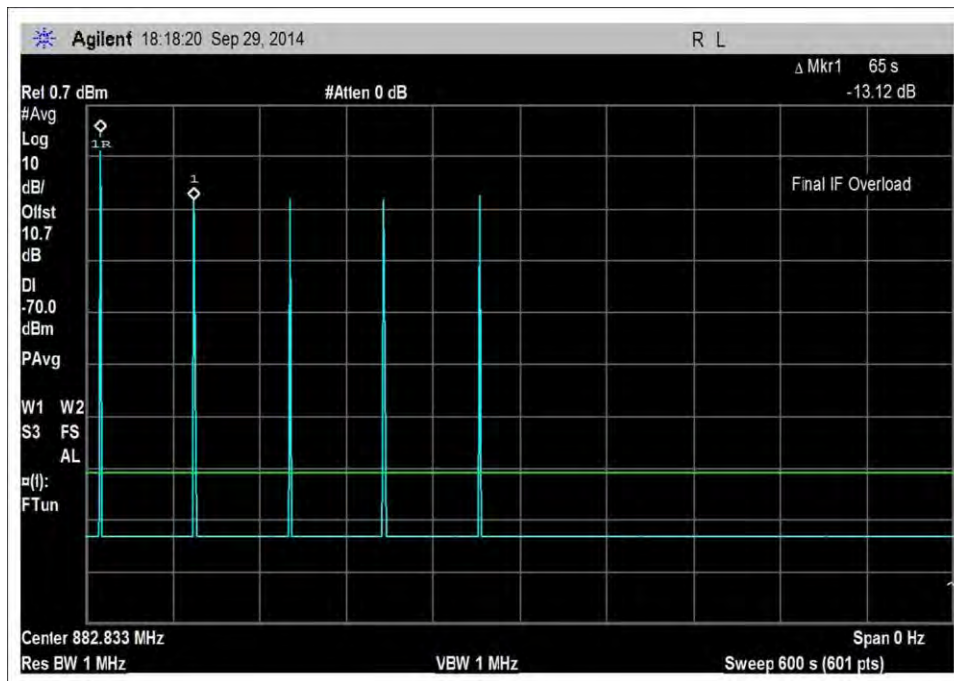
DL-746-757MHz_600sec



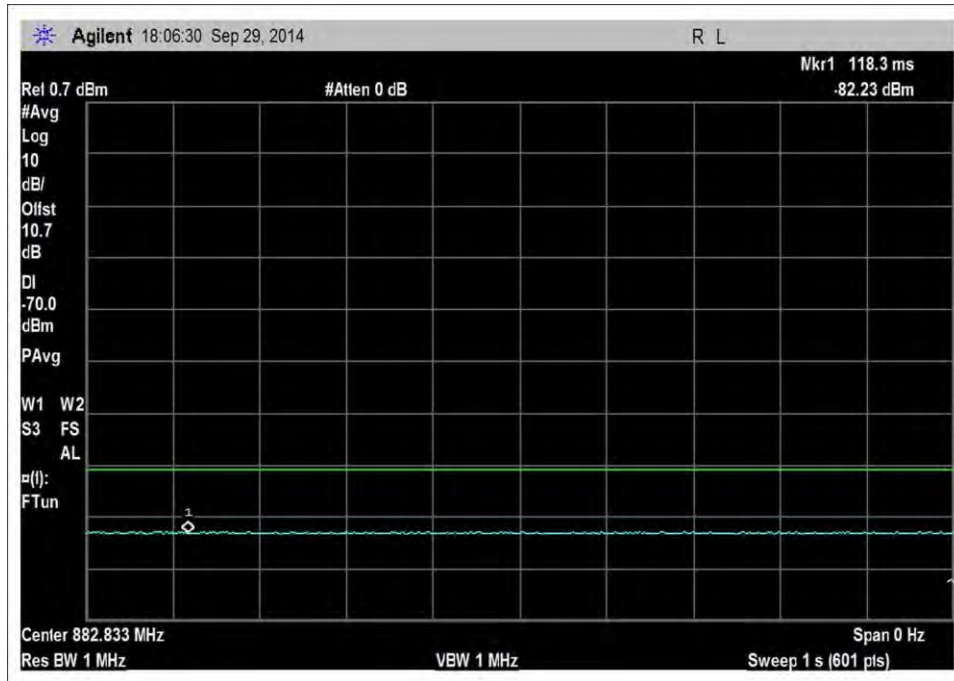
DL-746-757_-70dBm



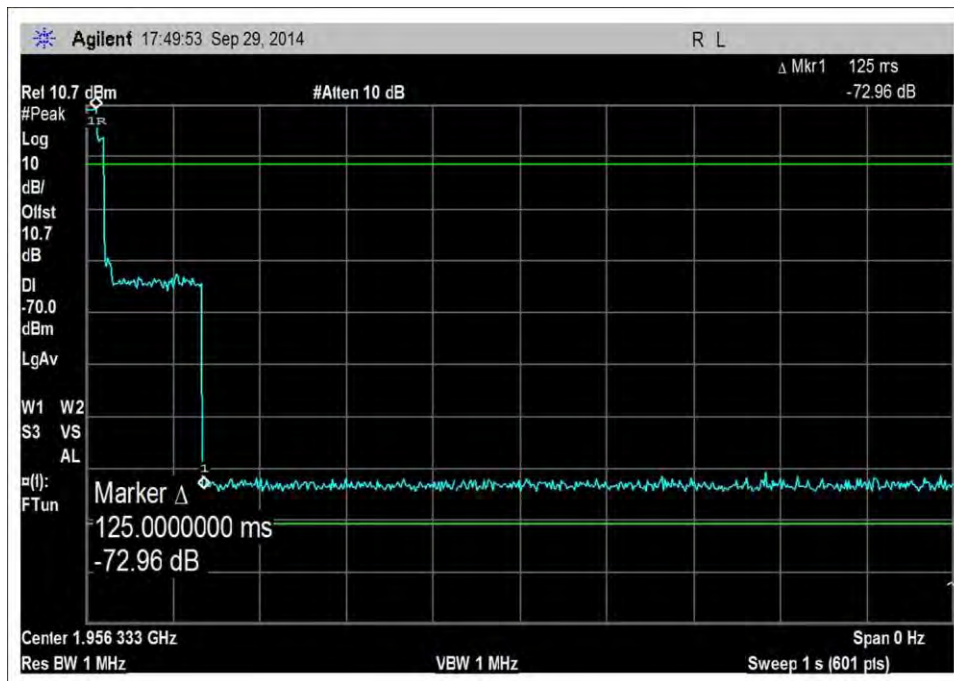
DL-869-894MHz



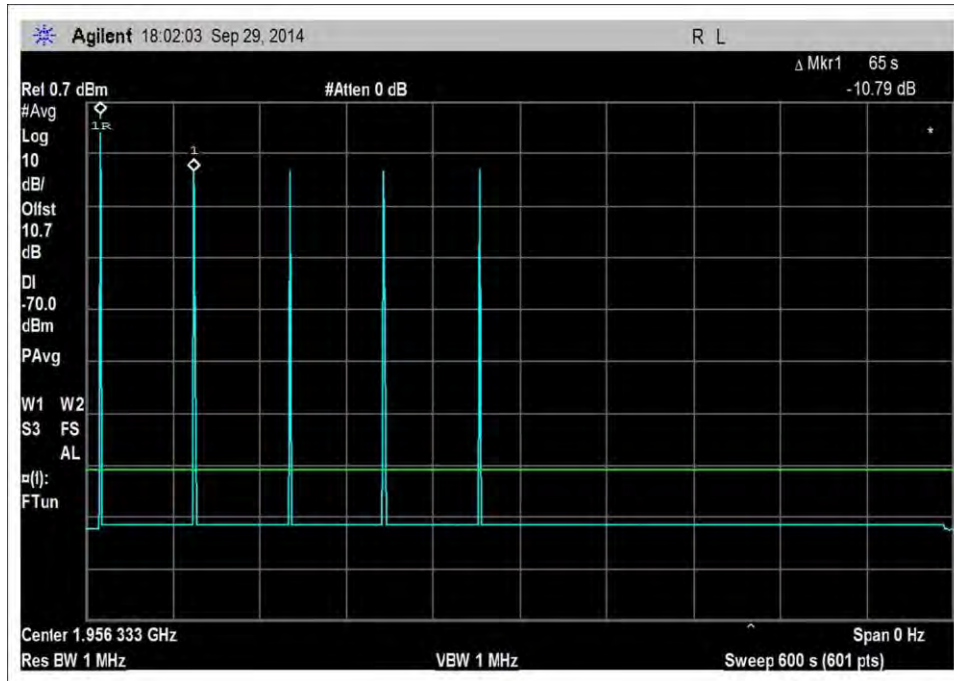
DL-869-894MHz_-600sec



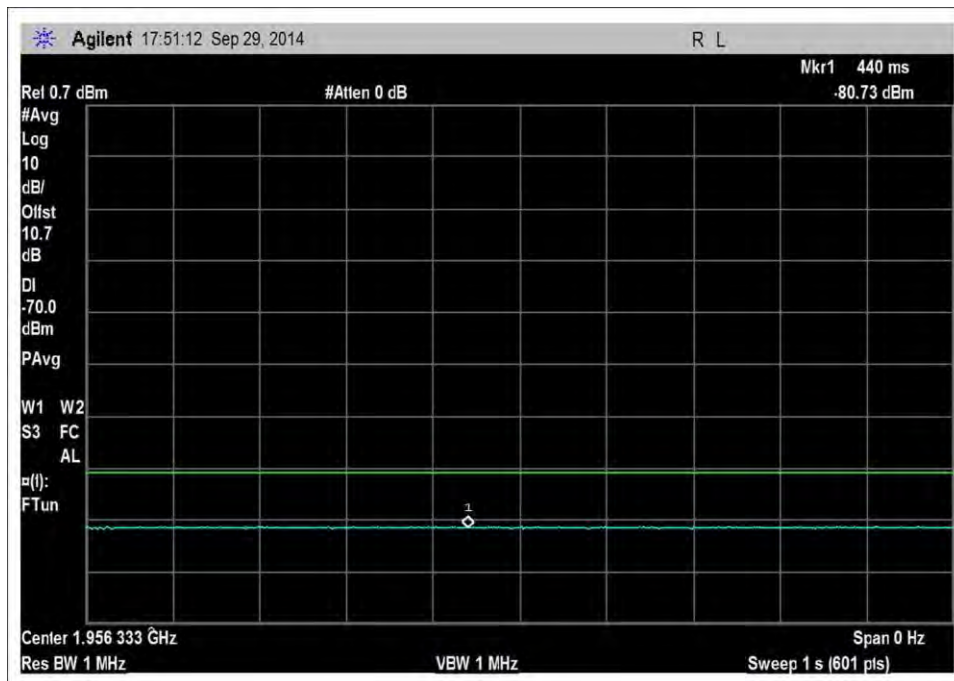
DL-869-894MHz_-70dBm



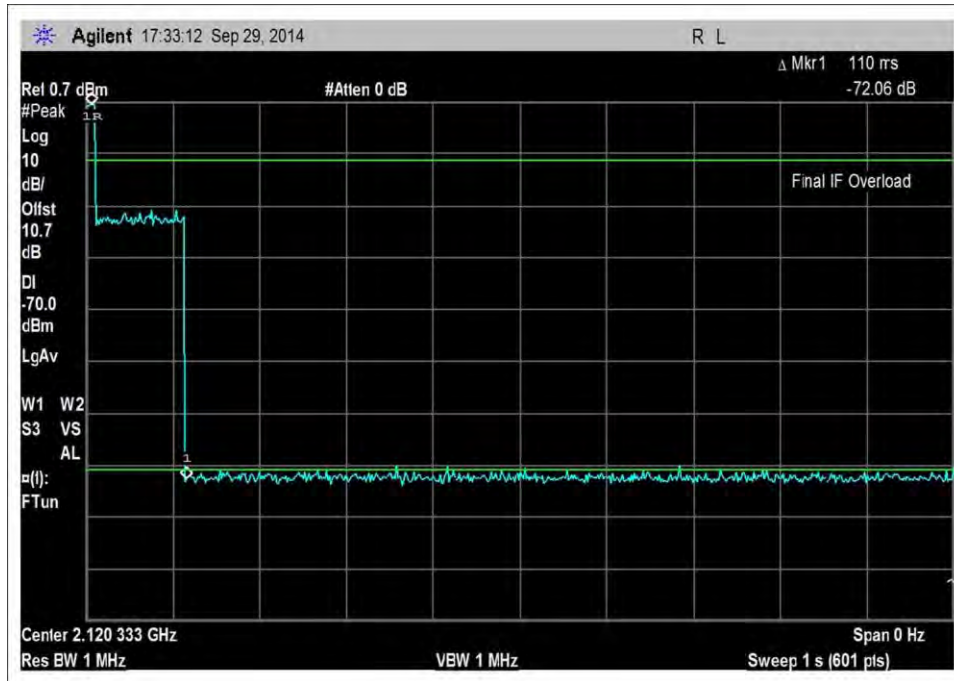
DL-1930-1995MHz



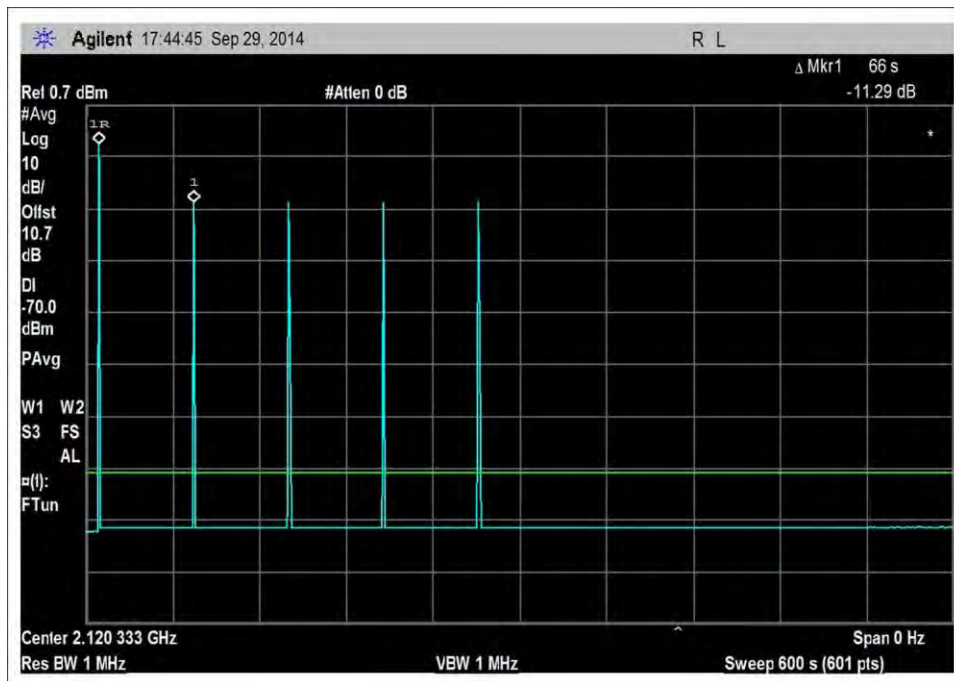
DL-1930-1995MHz_60sec



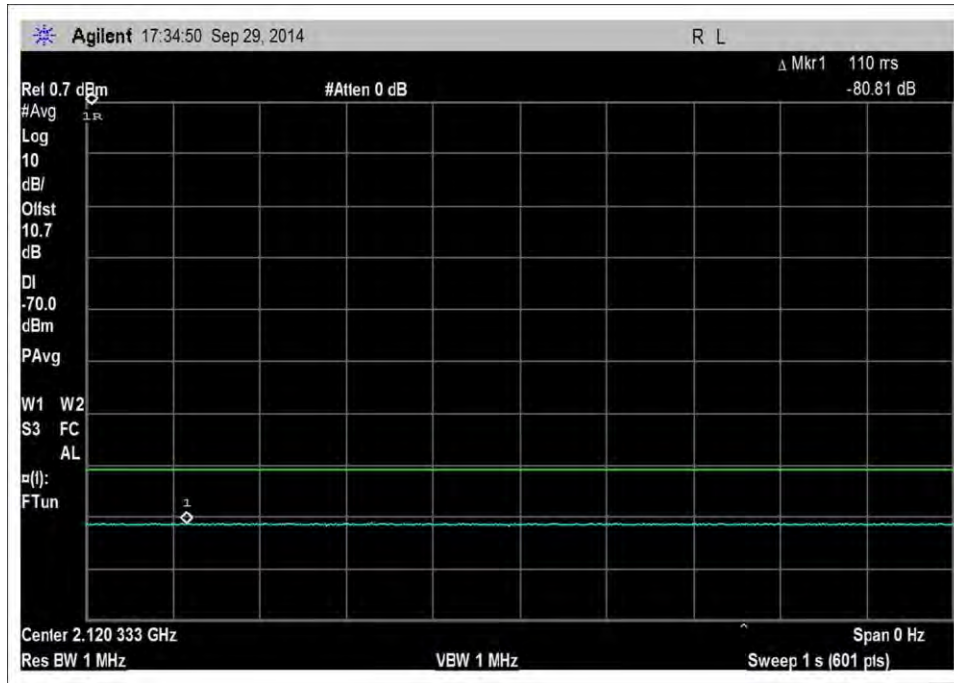
DL-1930-1995MHz_-70dBm



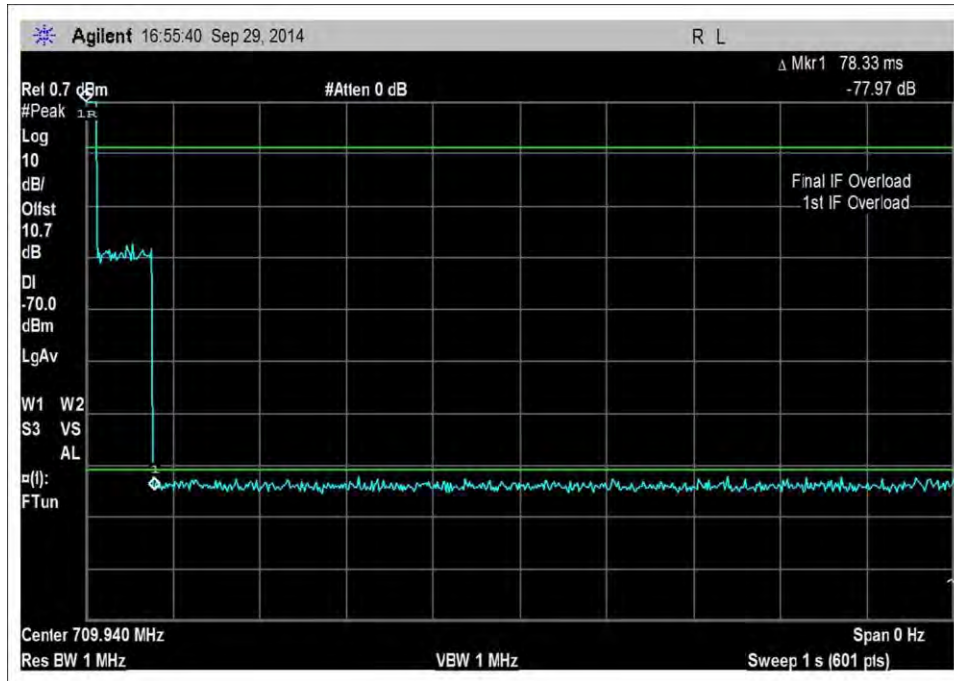
DL-2110-2155MHz



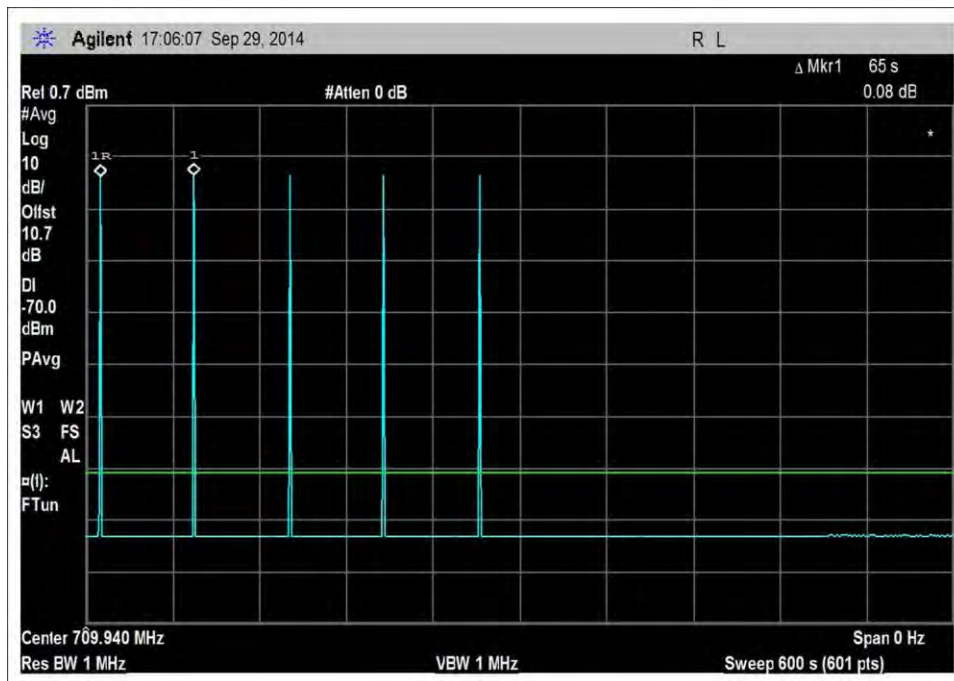
DL-2110-2155MHz_600sec



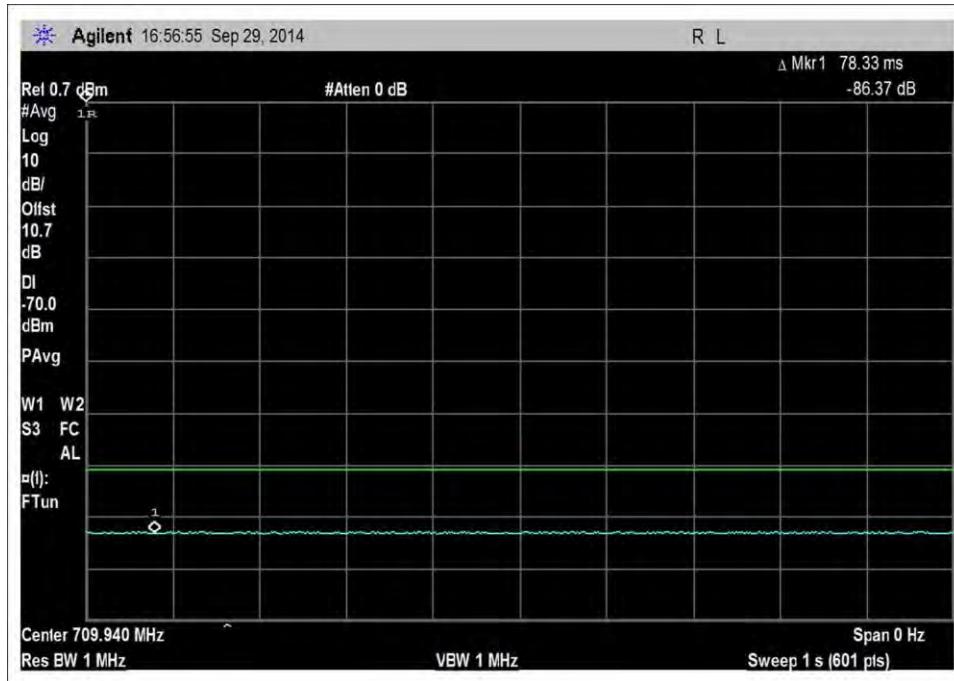
DL-2110-2155MHz_-70dBm



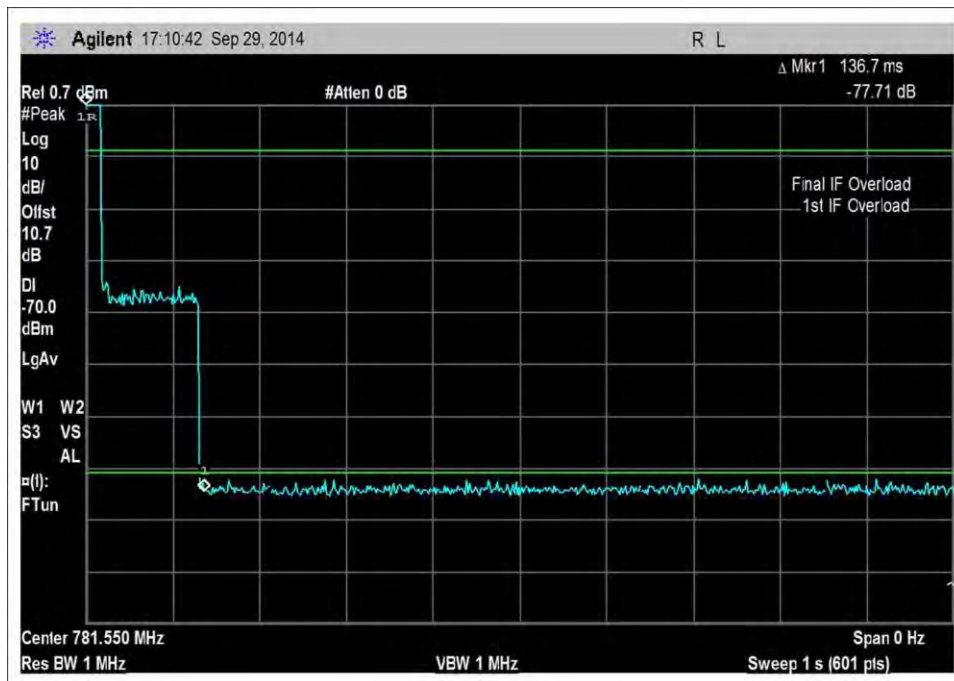
UL-698-716MHz



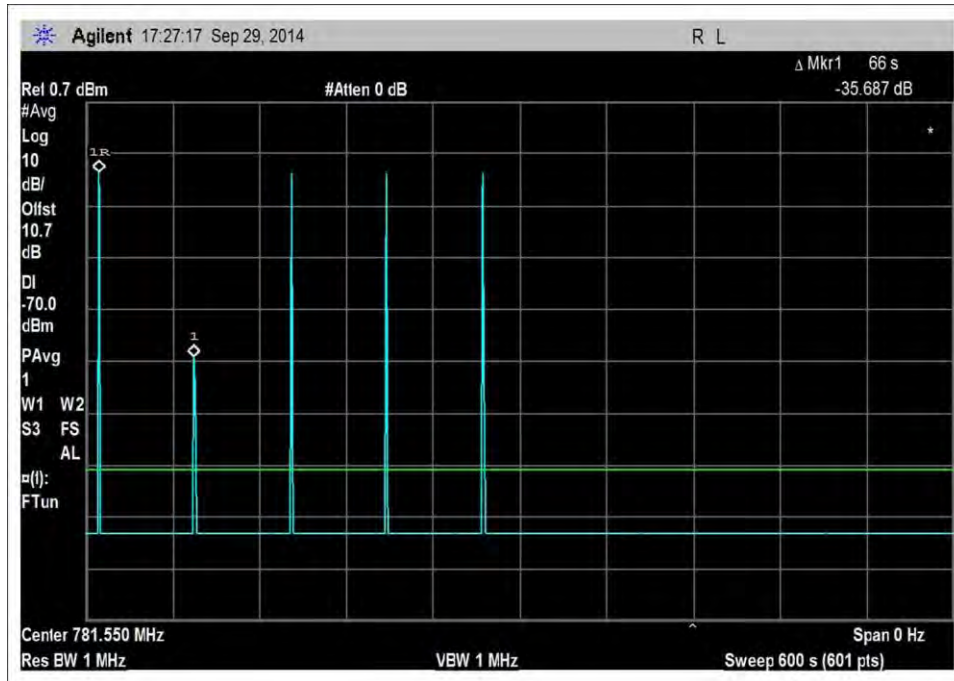
UL-698-716MHz_600sec



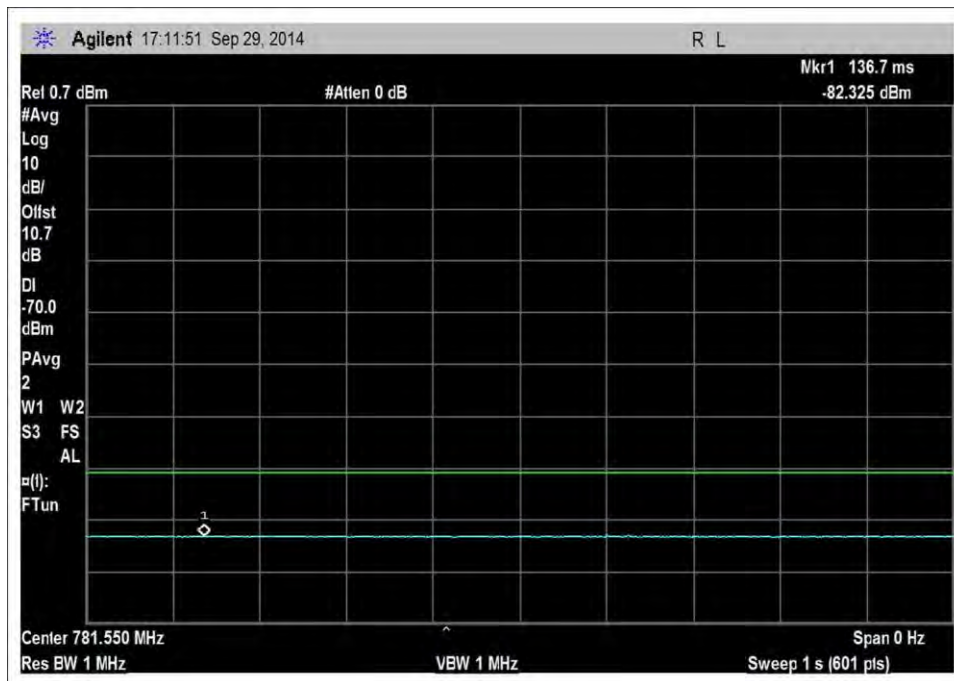
UL-698-716MHz_-70dBm



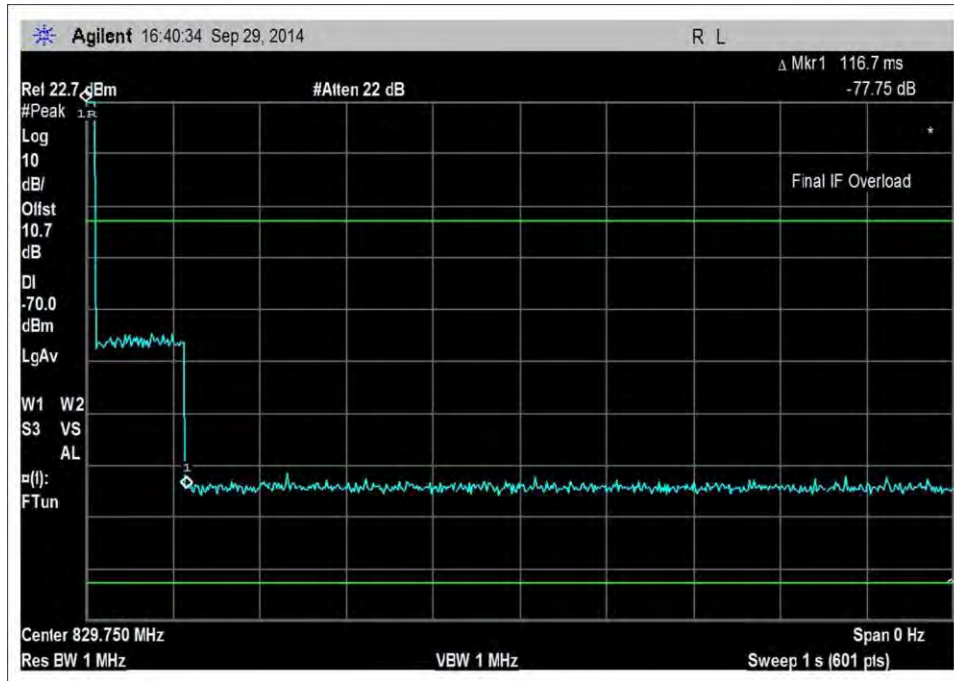
UL-776-787MHz



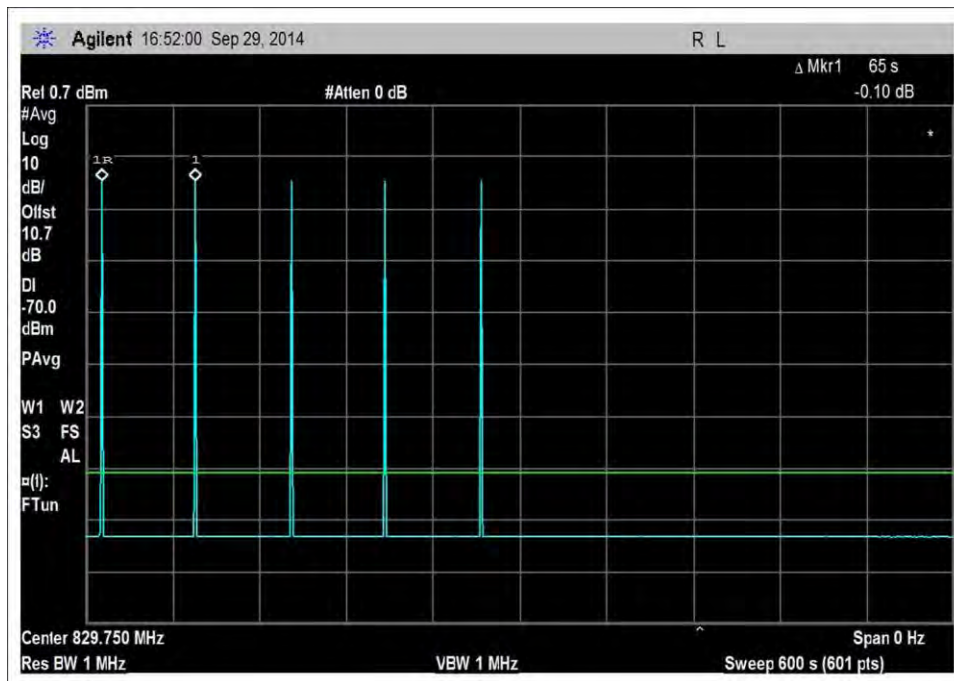
UL-776-787MHz_600sec



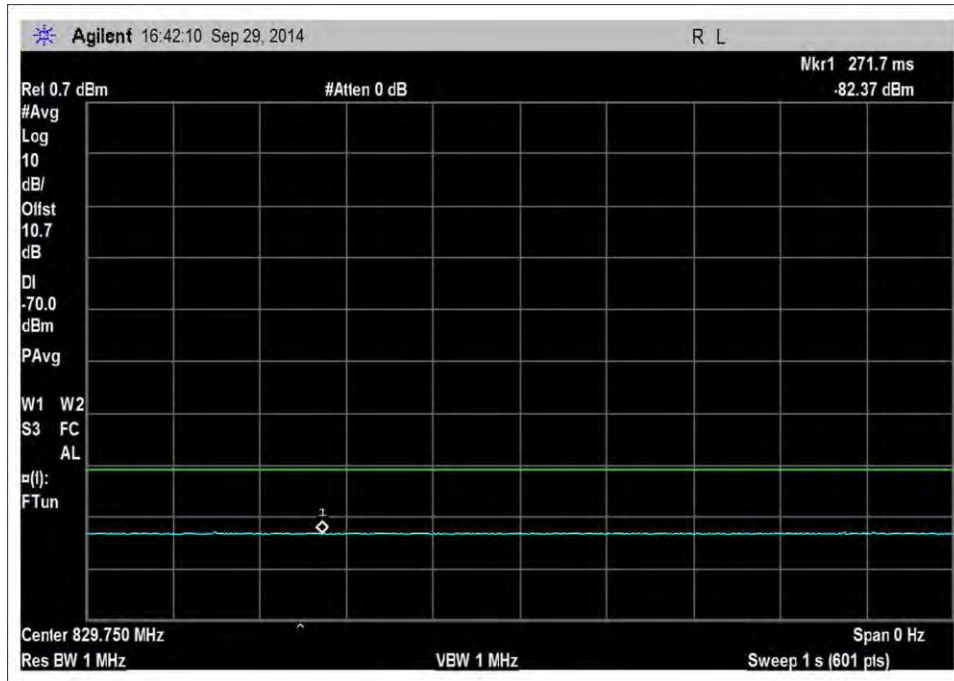
UL-776-787MHz_-70dBm



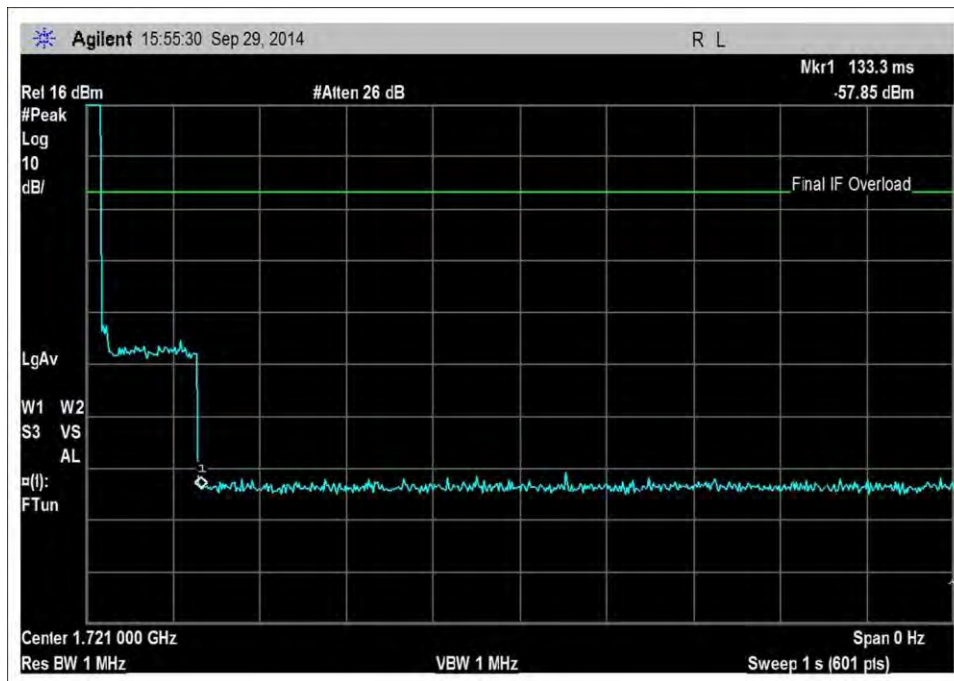
UL-824-849MHz



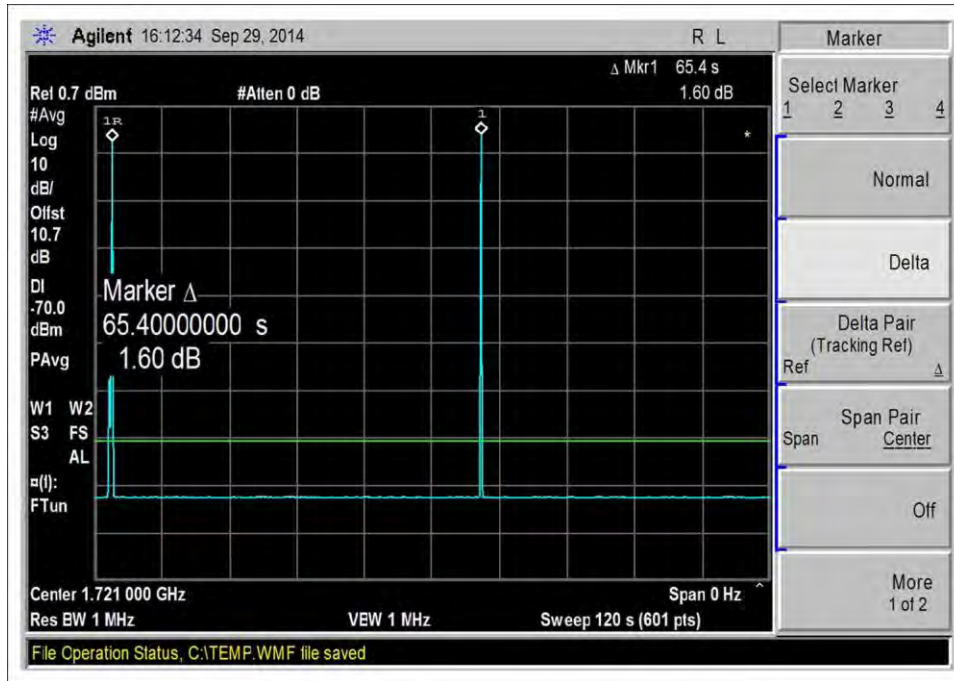
UL-824-849MHz_600sec



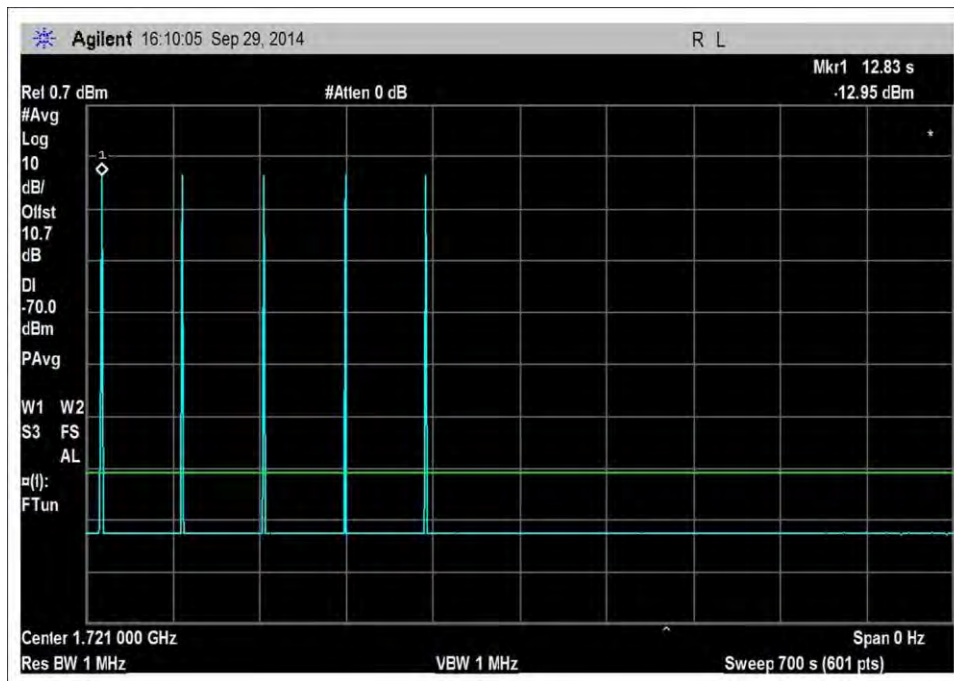
UL-824-849MHz_-70dBm



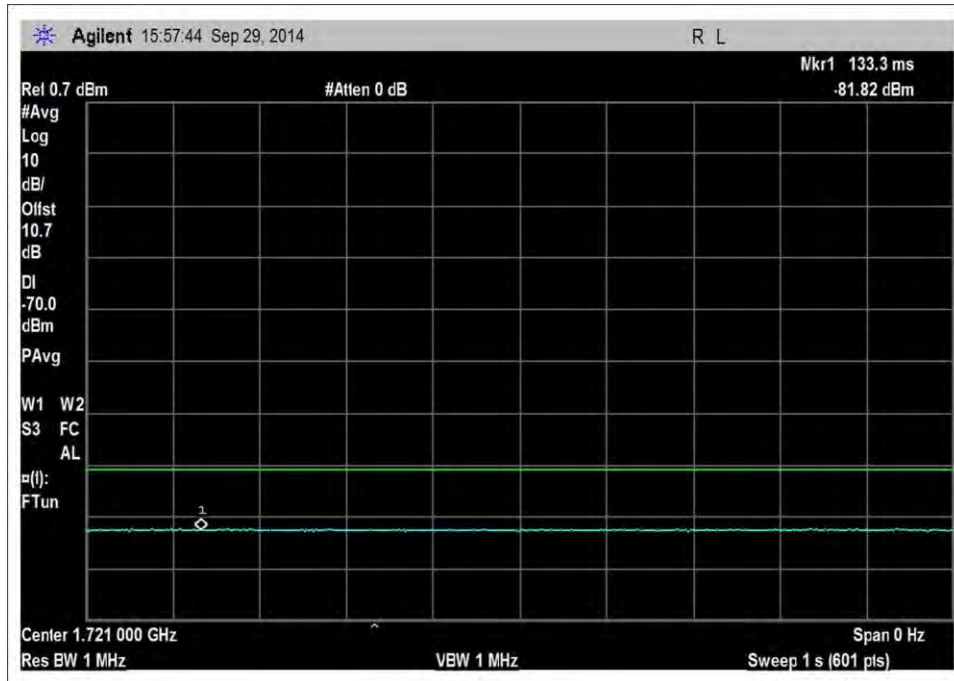
UL-1710-1755MHz



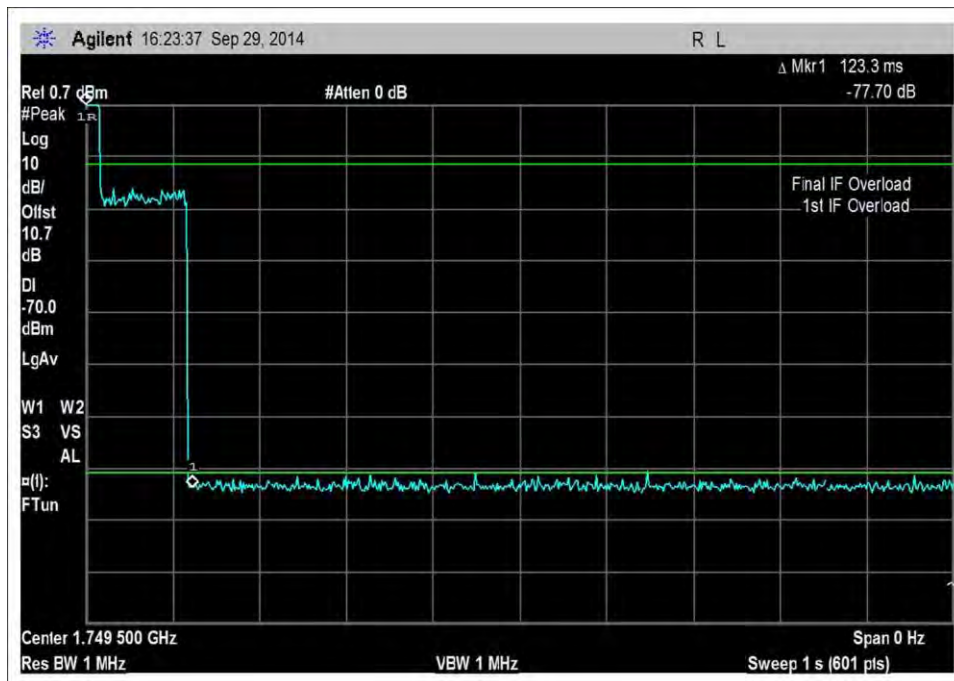
UL-1710-1755MHz_120sec



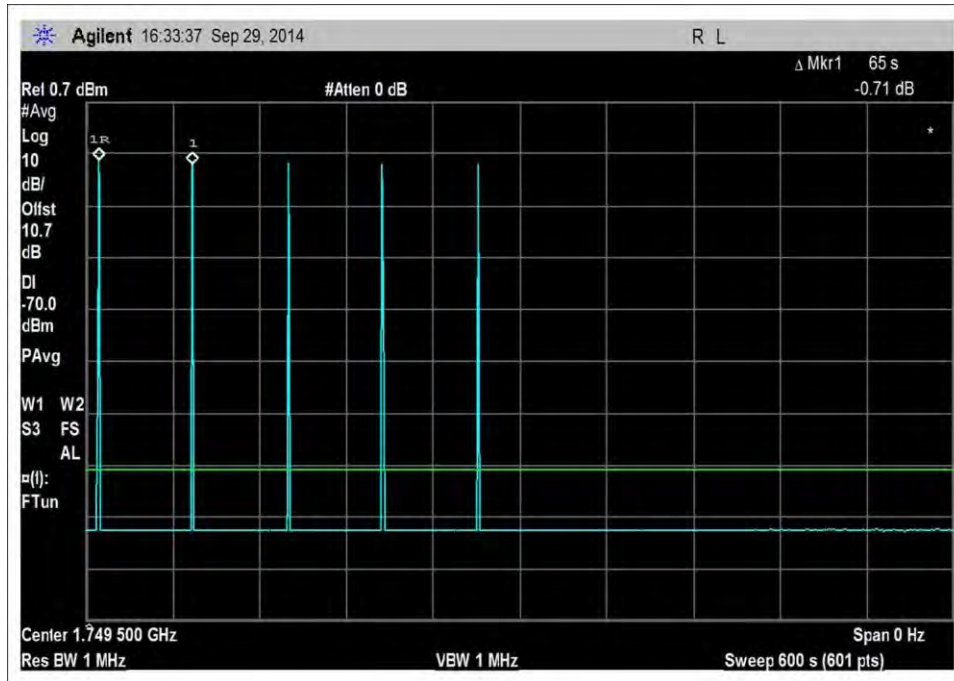
UL-1710-1755MHz_700sec



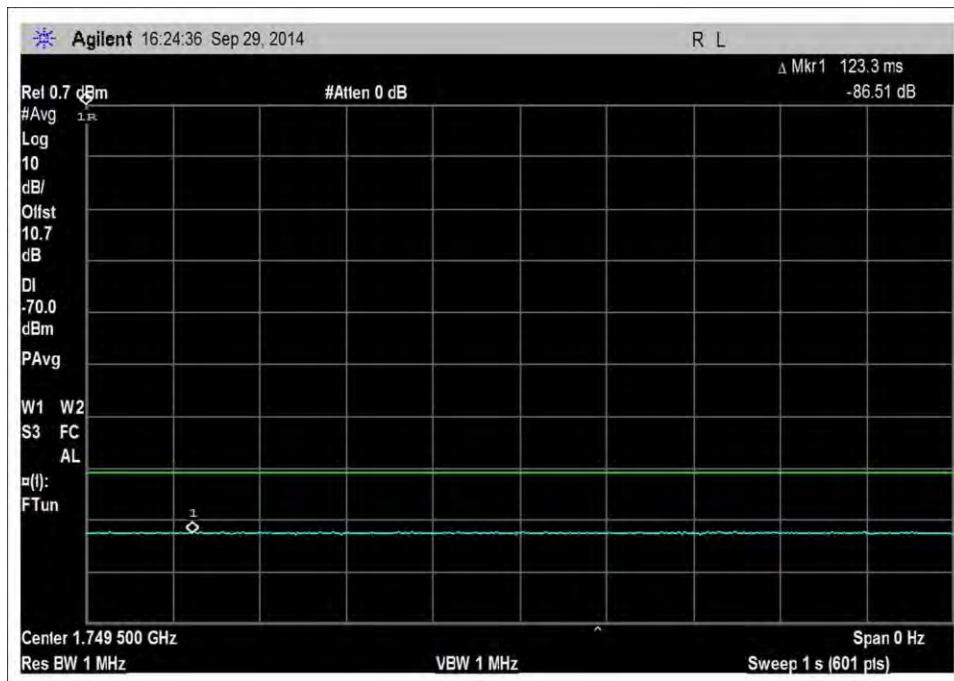
UL-1710-1755MHz_-70dBm



UL-1850-1915MHz

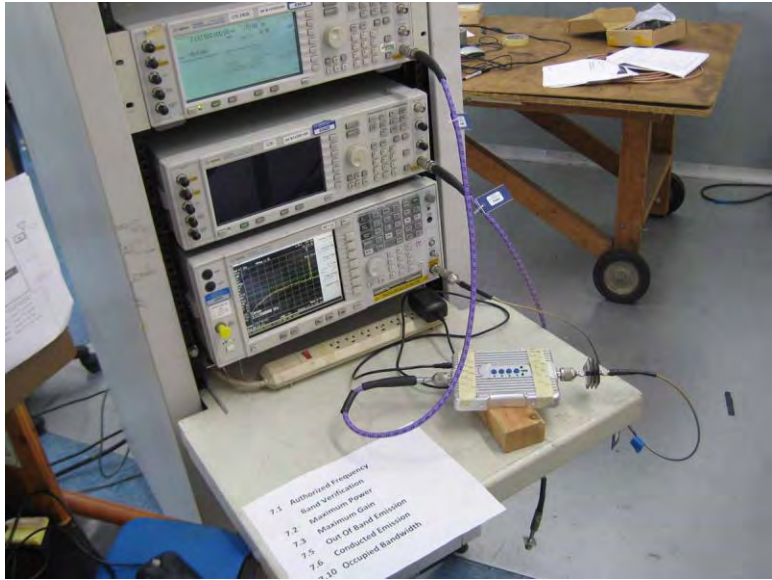


UL-1850-1915MHz_600sec

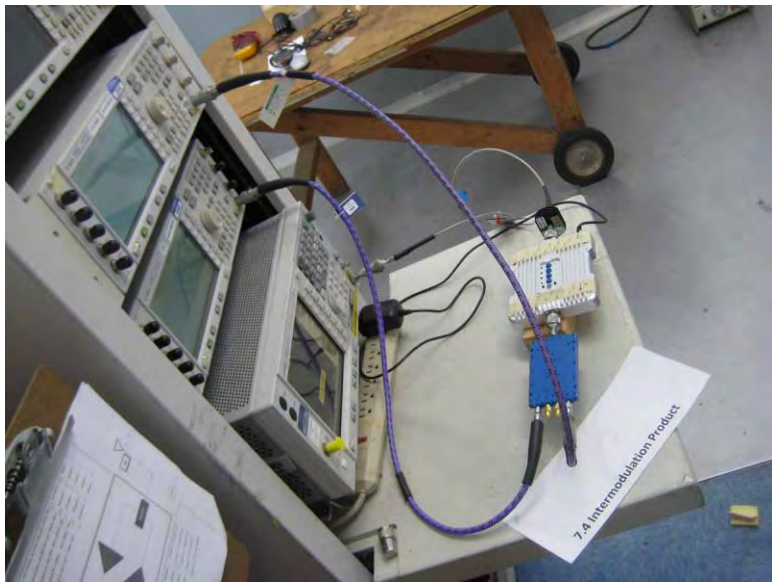


UL-1850-1915MHz_-70dBm

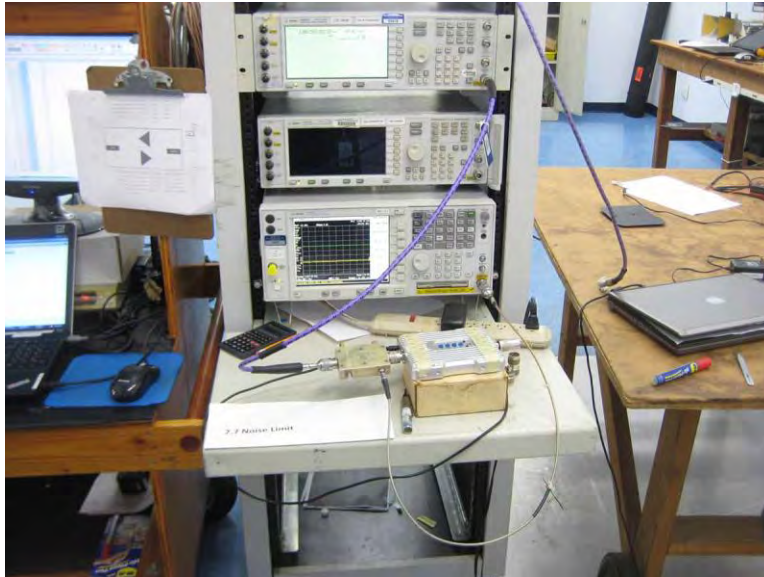
EXHIBIT A: TEST SETUP PHOTOS



Sections 7.1, 7.2, 7.3 & 7.5



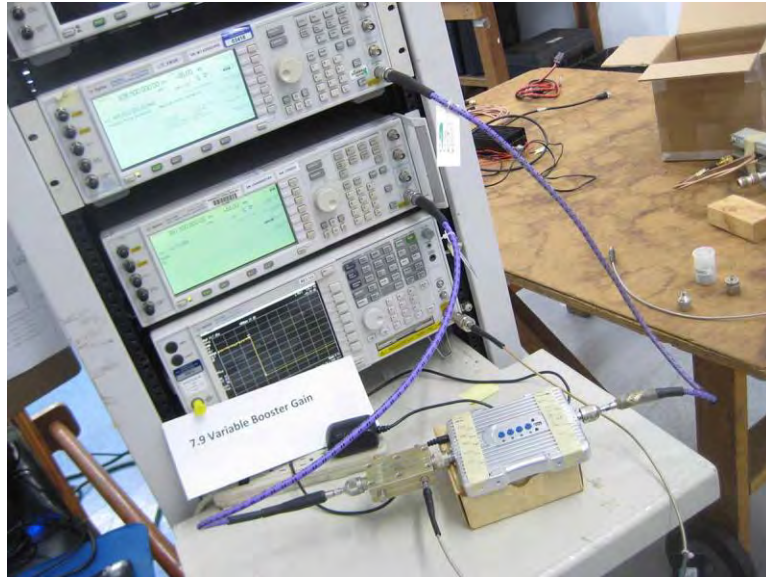
Section 7.4



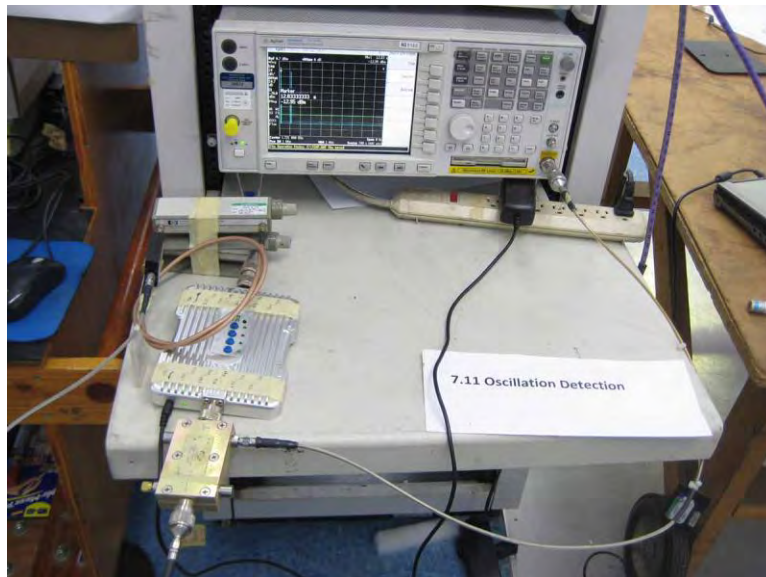
Section 7.7



Section 7.8



Section 7.9



Section 7.11

APPENDIX A: CUSTOMER PROVIDED INFORMATION

Antenna Kitting Information

Component	Prod No. Description	Gain/Loss					Notes
		LTE-707	LTE-781	800MHz	1900MHz	1700MHz 2100MHz	
Outside Antenna	SR-31400100	7dBi	7dBi	8dBi	10dBi	10dBi\10dBi	Directional Antenna
Outside Antenna	SR-31300100	3dBi	3dBi	3dBi	3.5dBi	3.5dBi\3.5dBi	Omni-Directional Antenna
Outdoor Cable	SRG58-30FN	4.5dB	4.5dB	4.9dB	7.6dB	7.2dB\8dB	
Outdoor Cable	SRLMR400-	4.2dB	4.2dB	4.4dB	6.1dB	5.8dB\6.5dB	
Inside Cable	SRG58-15FN	2.35dB	2.4dB	2.56dB	3.9dB	3.7dB\ 4.1dB	
Inside Cable	SRLMR400-	1.9dB	1.9dB	1.95dB	2.8dB	2.55dB\2.9dB	
Inside Antenna	SR-21200100	7dBi	7dBi	7dBi	10dBi	10dBi\10dBi	Directional Antenna
Inside Antenna	SR-21300100	3dBi	3dBi	3dBi	3.5dBi	3.5dBi\3.5dBi	Omni-Directional Antenna
Lightning Protector	SR-LP35000090	0.1 dB	0.1 dB	0.1 dB	0.18dB	0.16dB\0.2dB	Ideal for any External Antenna
All equivalent antennas and cables are suitable for use with the SR25652001 booster.							

SUPPLEMENTAL INFORMATION

Measurement Uncertainty

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2. Compliance is deemed to occur provided measurements are below the specified limits.

Emissions Test Details

TESTING PARAMETERS

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dB μ V/m, the spectrum analyzer reading in dB μ V was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS		
	Meter reading	(dB μ V)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dB μ V/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	9 kHz	150 kHz	200 Hz
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or carrot ("^") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. If the specification or test procedure requires trace averaging, then the averaging was performed using 100 samples or as required by the specification. All other average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.