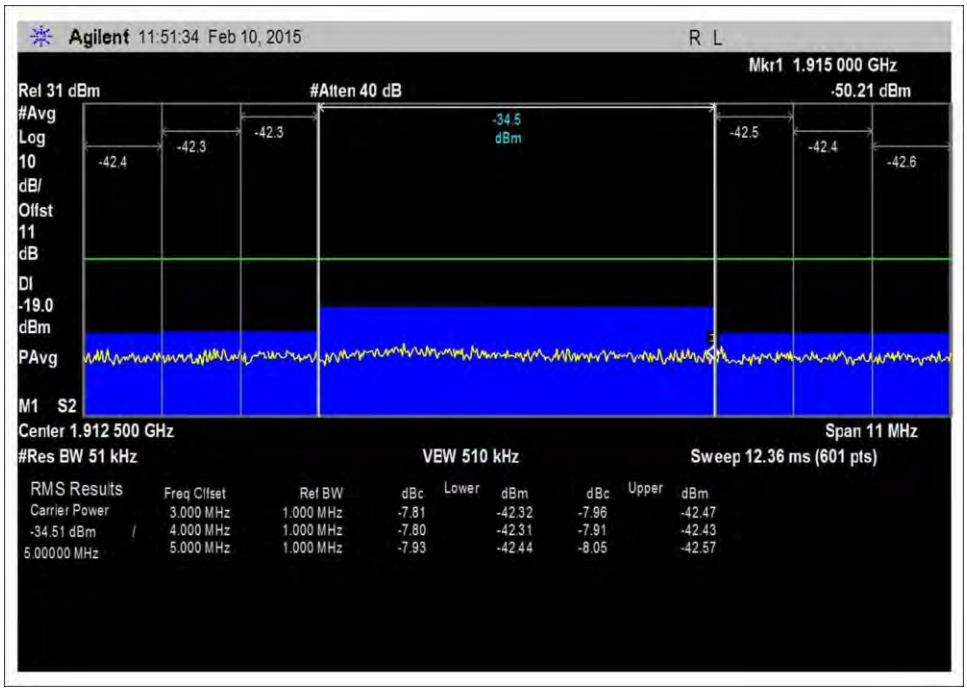
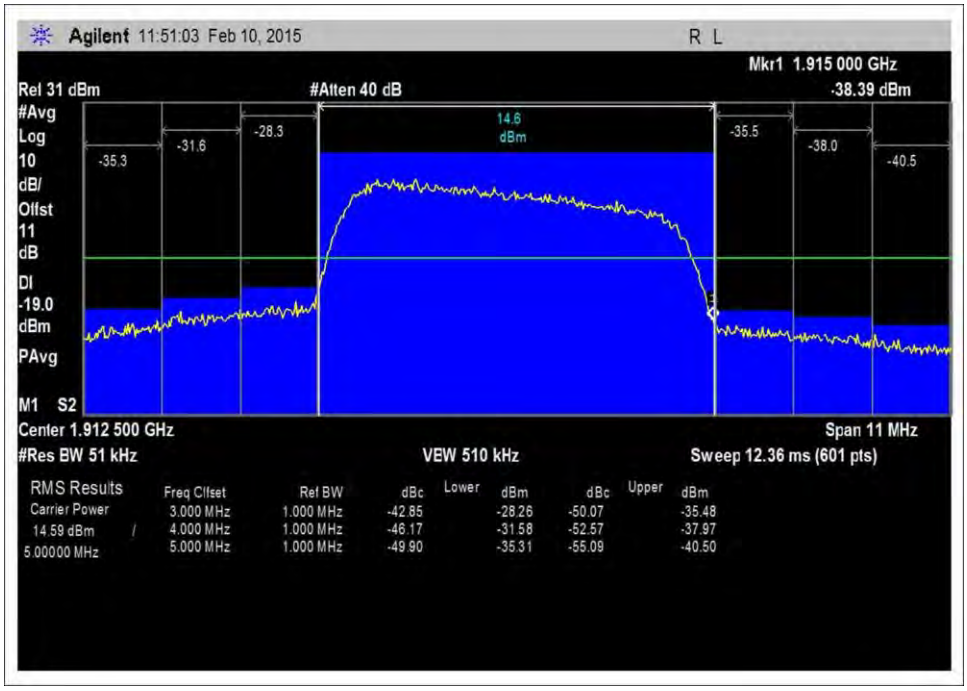
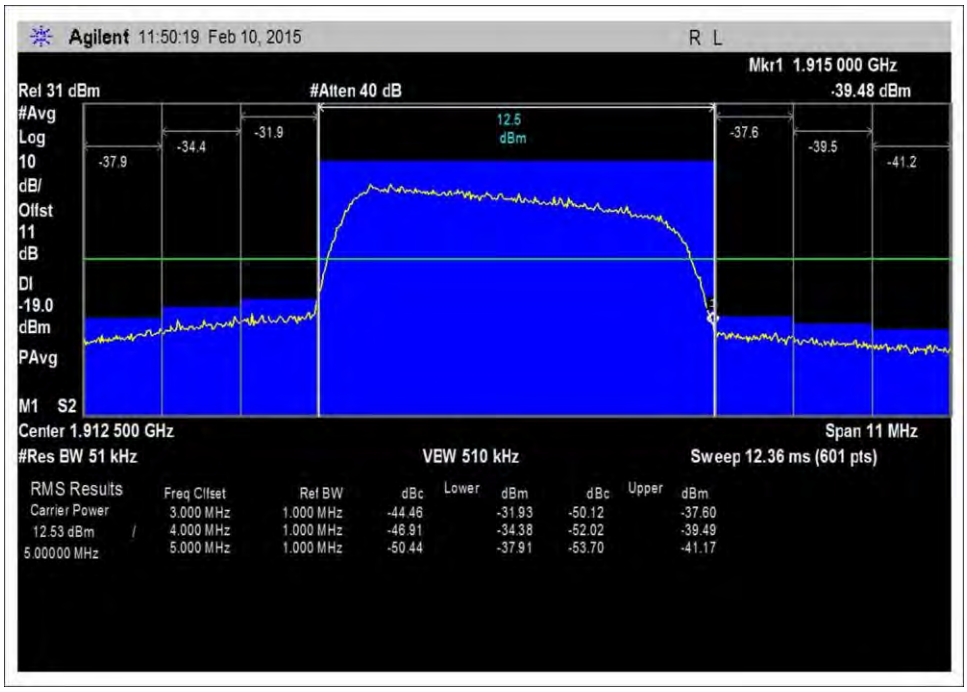


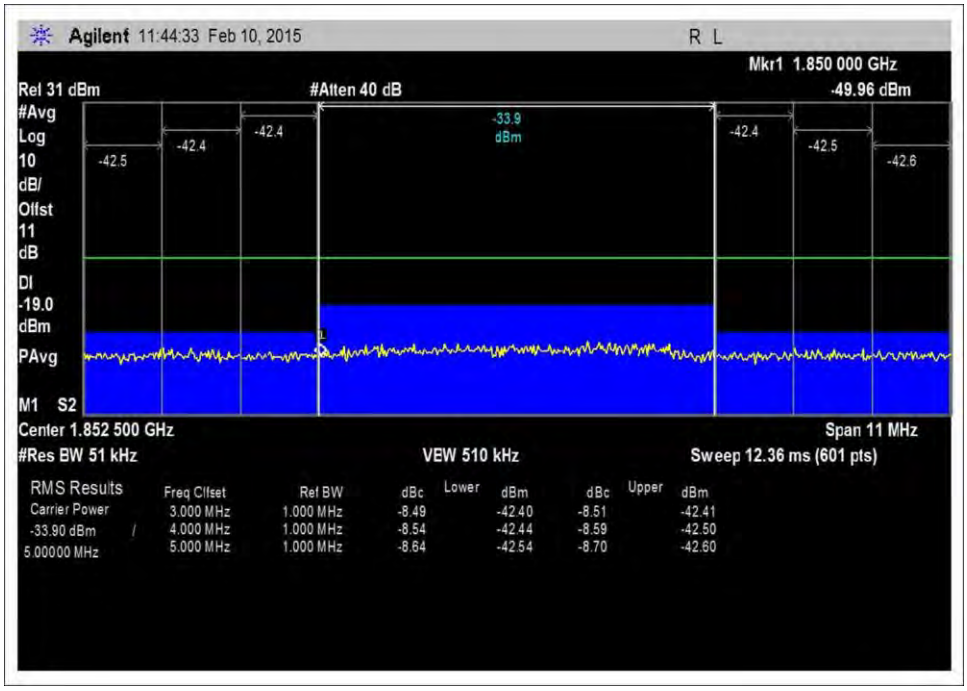
7.5_OBE_UL_1850-1915MHz_LTE_H_+10dBm



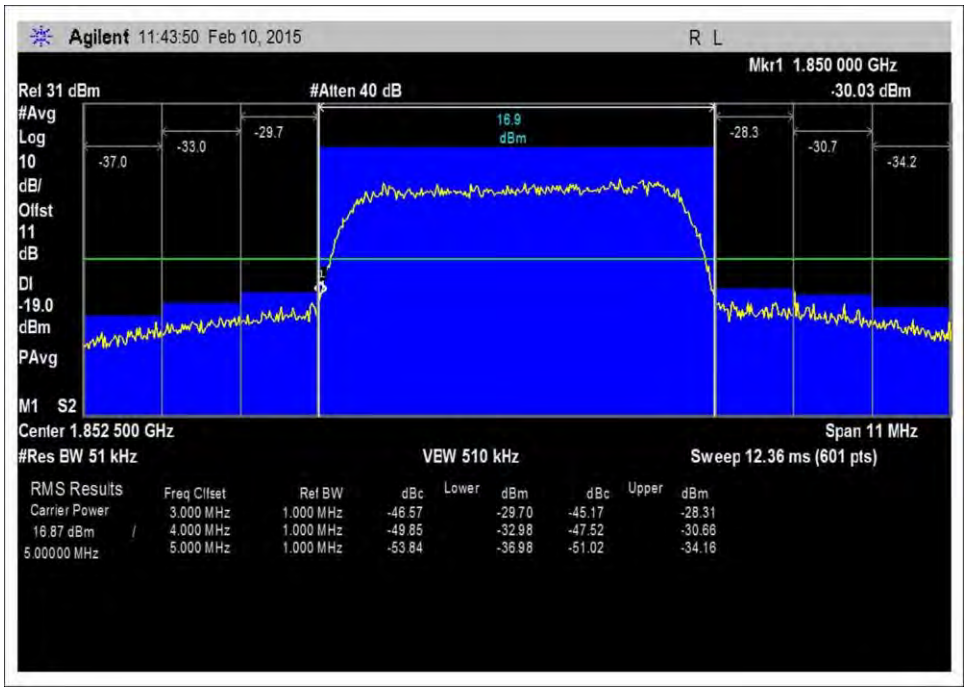
7.5_OBE_UL_1850-1915MHz_LTE_H_-15dBm



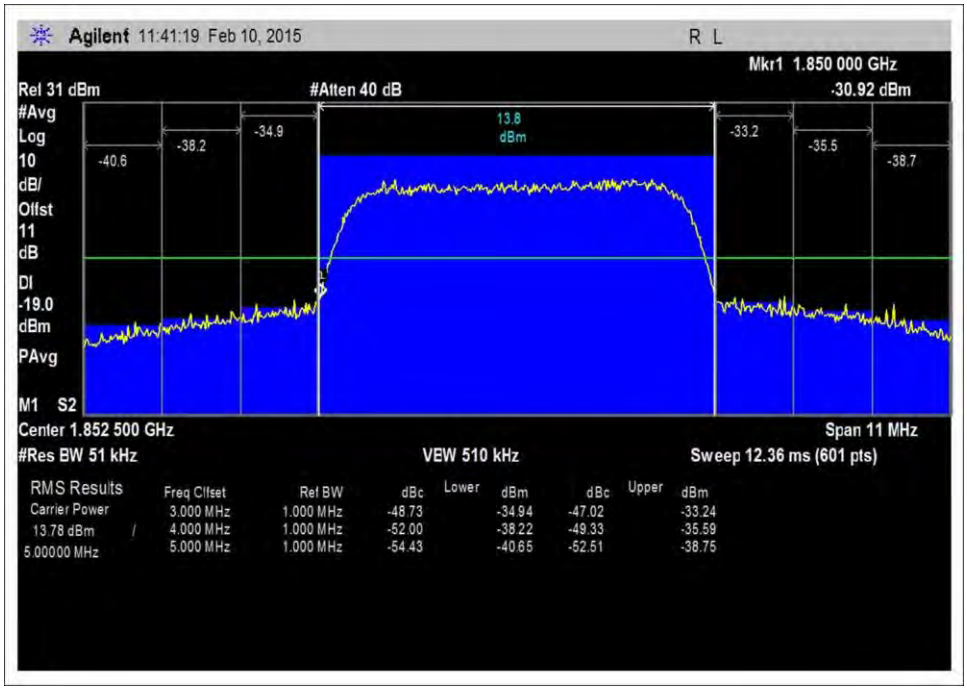
7.5_OBE_UL_1850-1915MHz_LTE_H_-20dBm



7.5_OBE_UL_1850-1915MHz_LTE_L_+10dBm

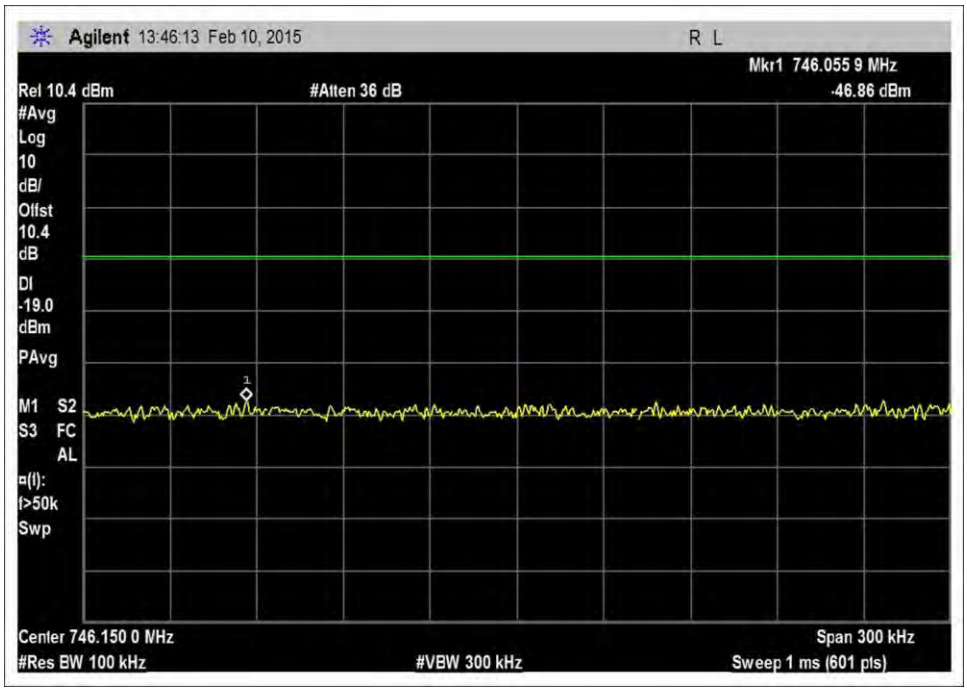


7.5_OBE_UL_1850-1915MHz_LTE_L_-17dBm

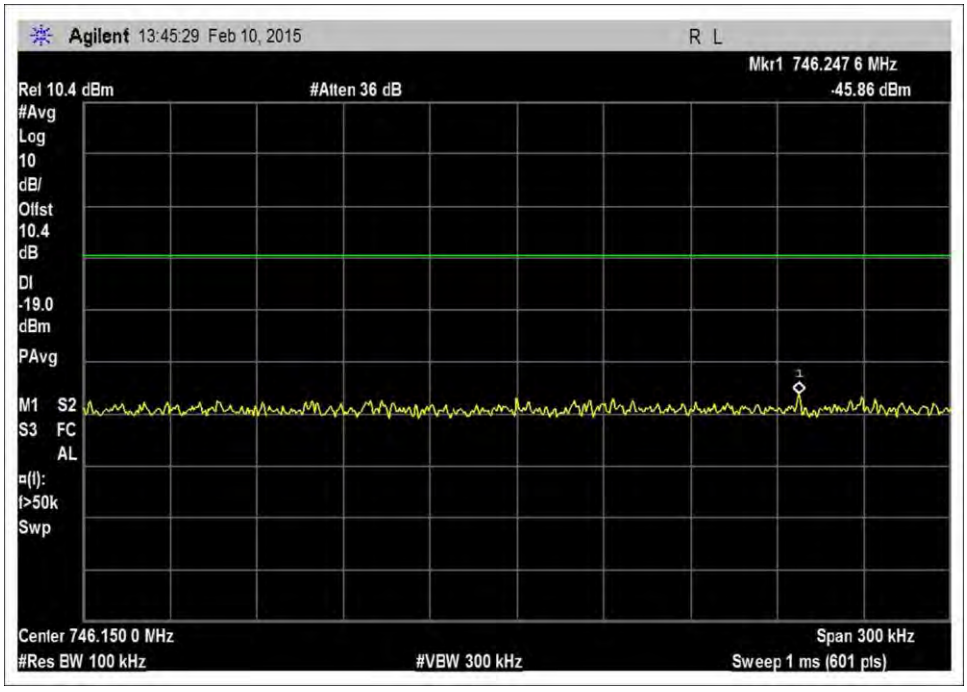


7.5_OBE_UL_1850-1915MHz_LTE_L_-26dBm

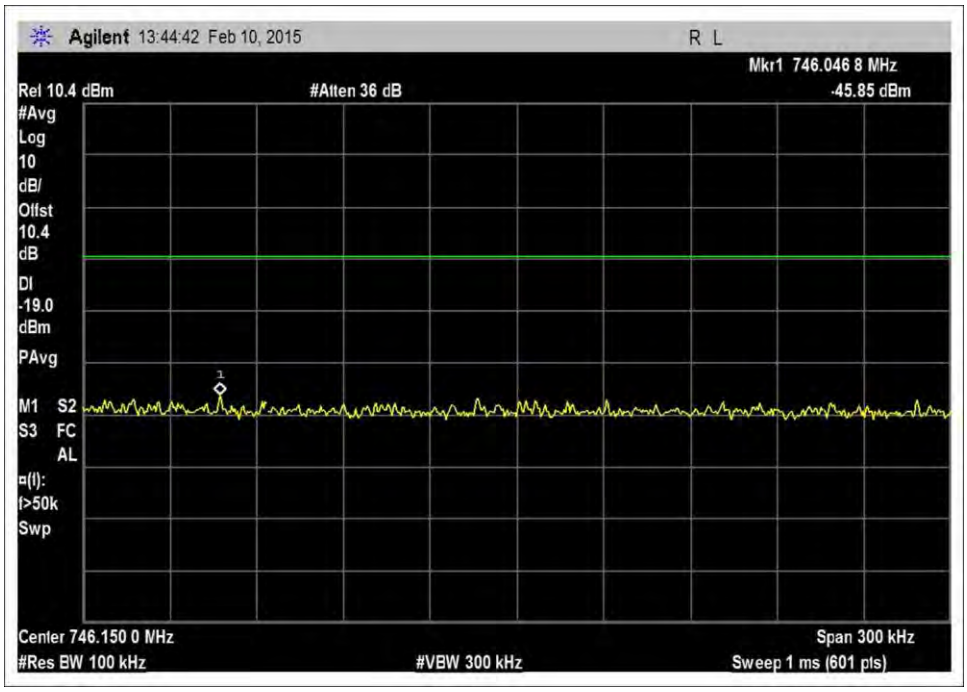
LTE, DL



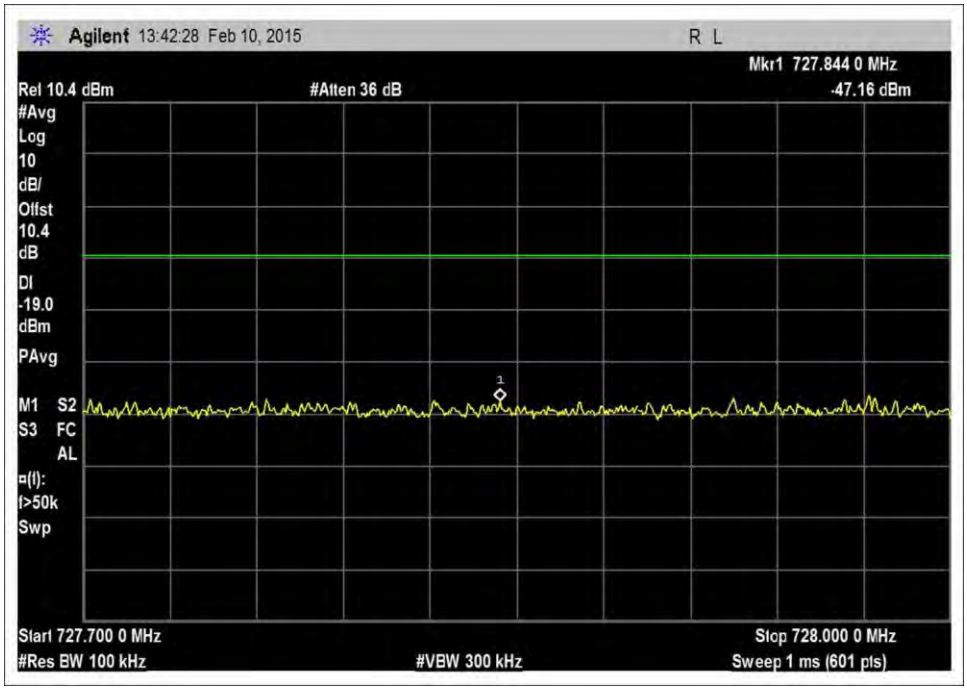
7.5_OBE_DL_728-746MHz_LTE_H_-20dBm



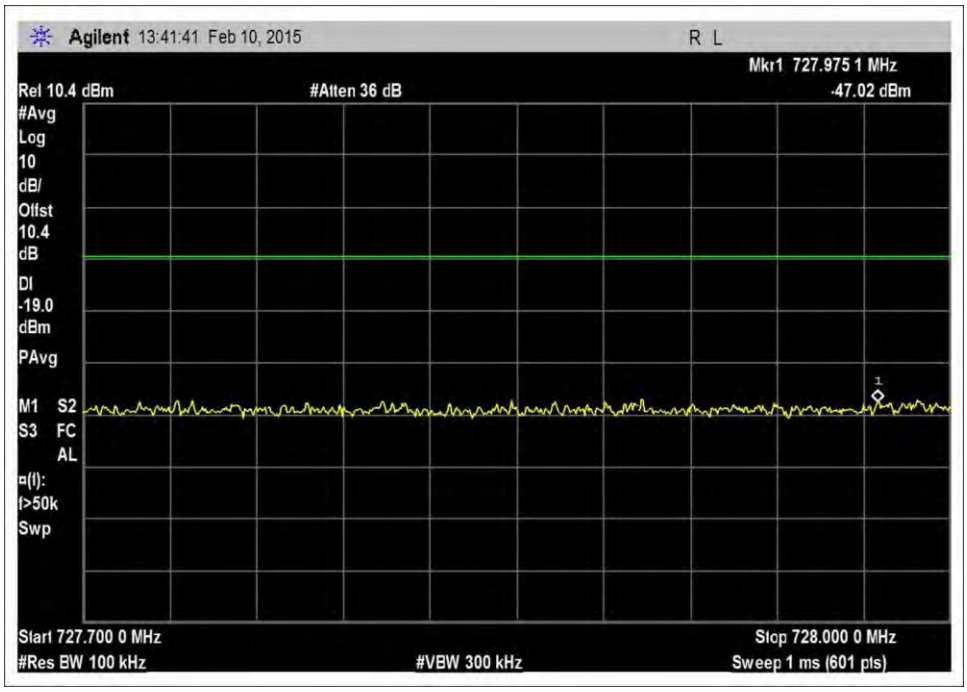
7.5_OBE_DL_728-746MHz_LTE_H_-48dBm



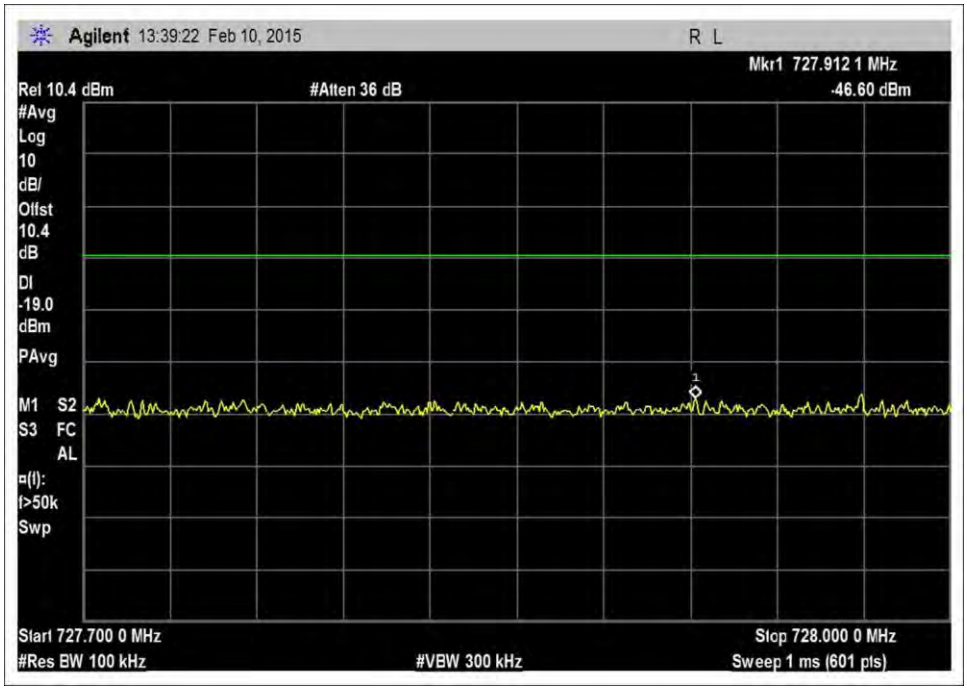
7.5_OBE_DL_728-746MHz_LTE_H_-55dBm



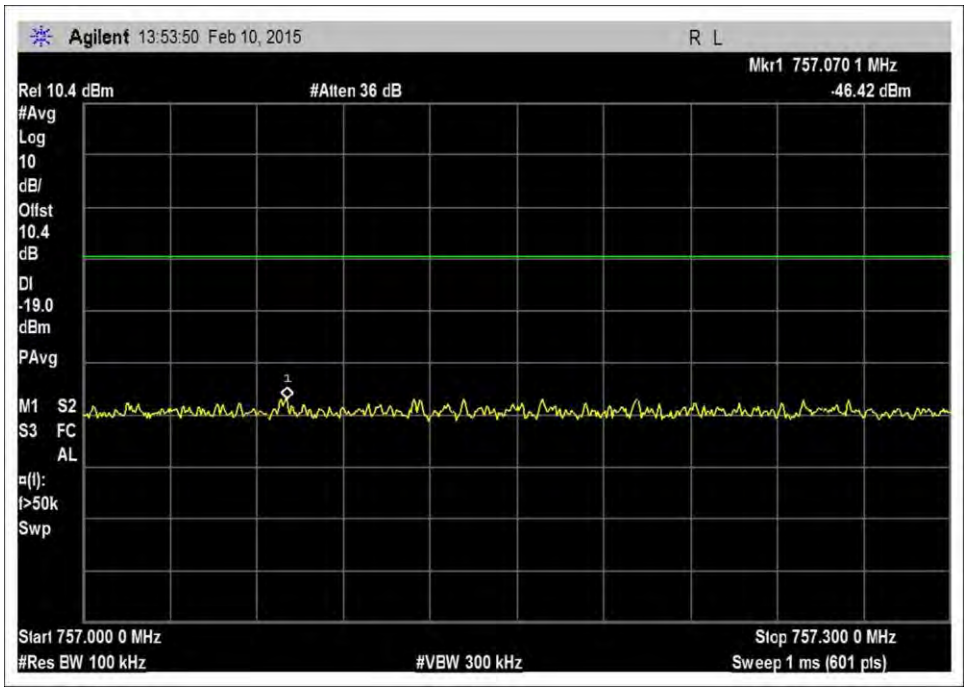
7.5_OBE_DL_728-746MHz_LTE_L_-20dBm



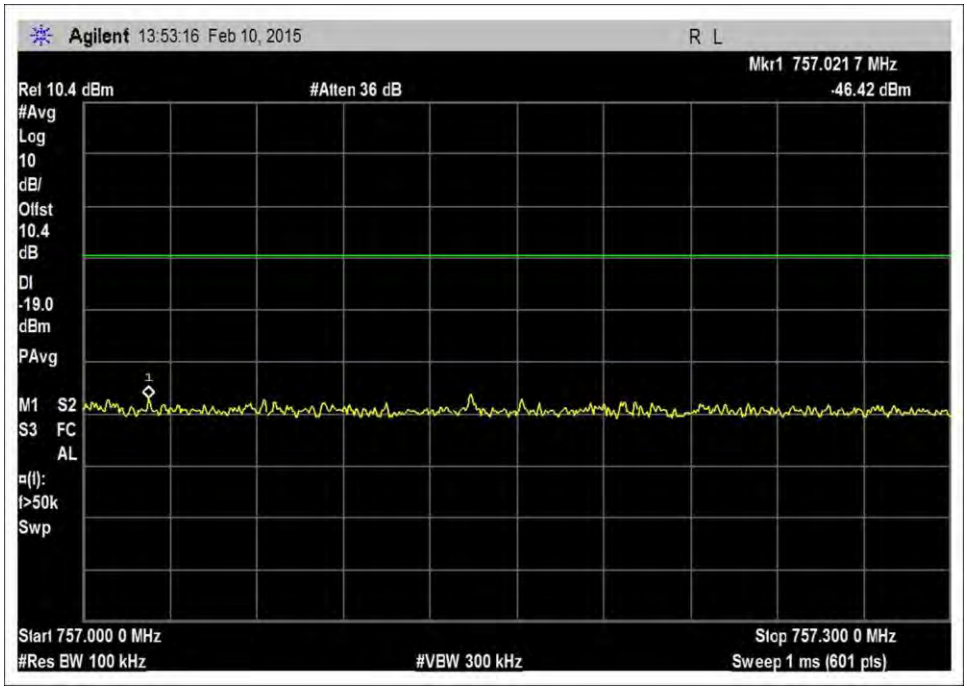
7.5_OBE_DL_728-746MHz_LTE_L_-46dBm



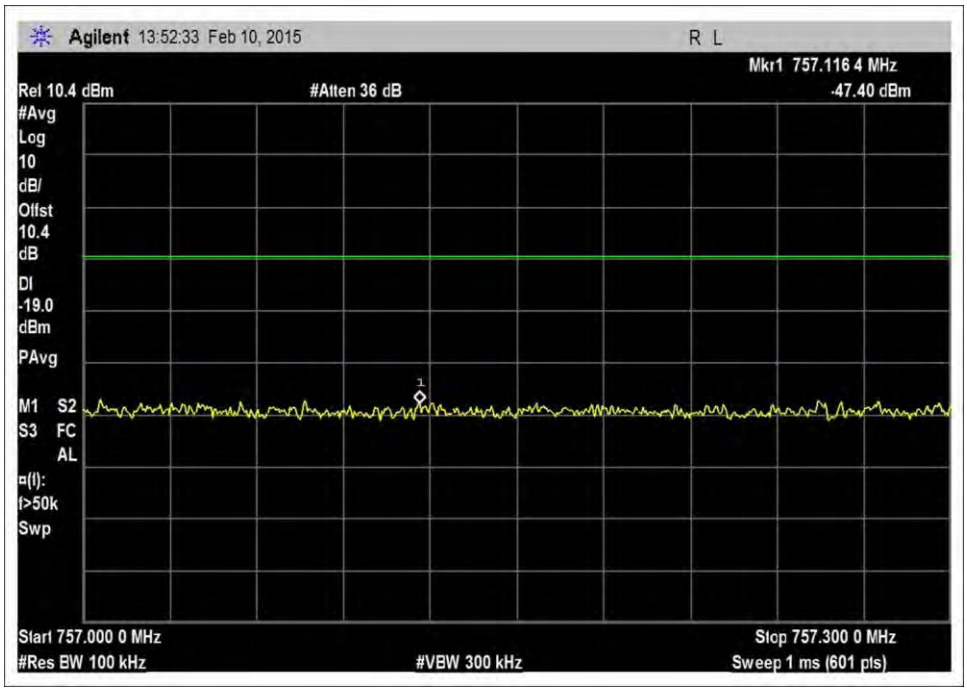
7.5_OBE_DL_728-746MHz_LTE_L_-56dBm



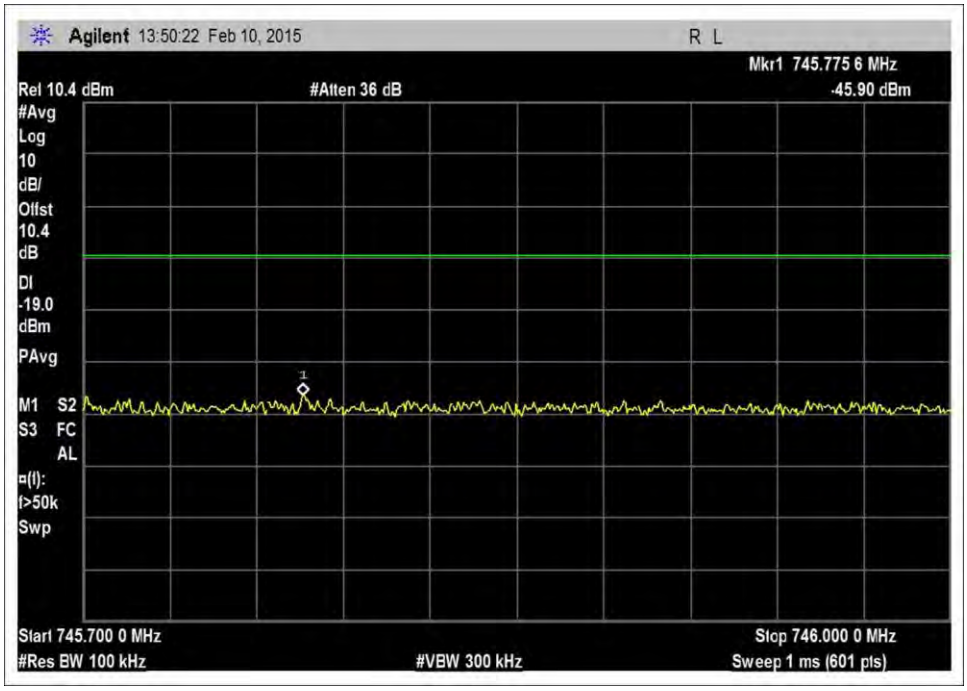
7.5_OBE_DL_746-757MHz_LTE_H_-20dBm



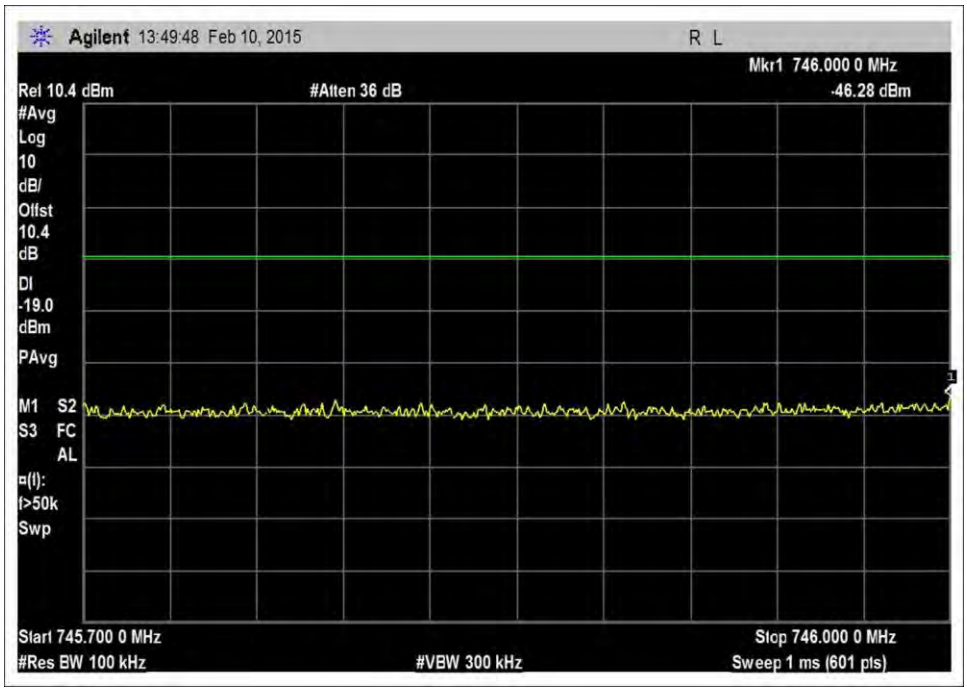
7.5_OBE_DL_746-757MHz_LTE_H_-46dBm



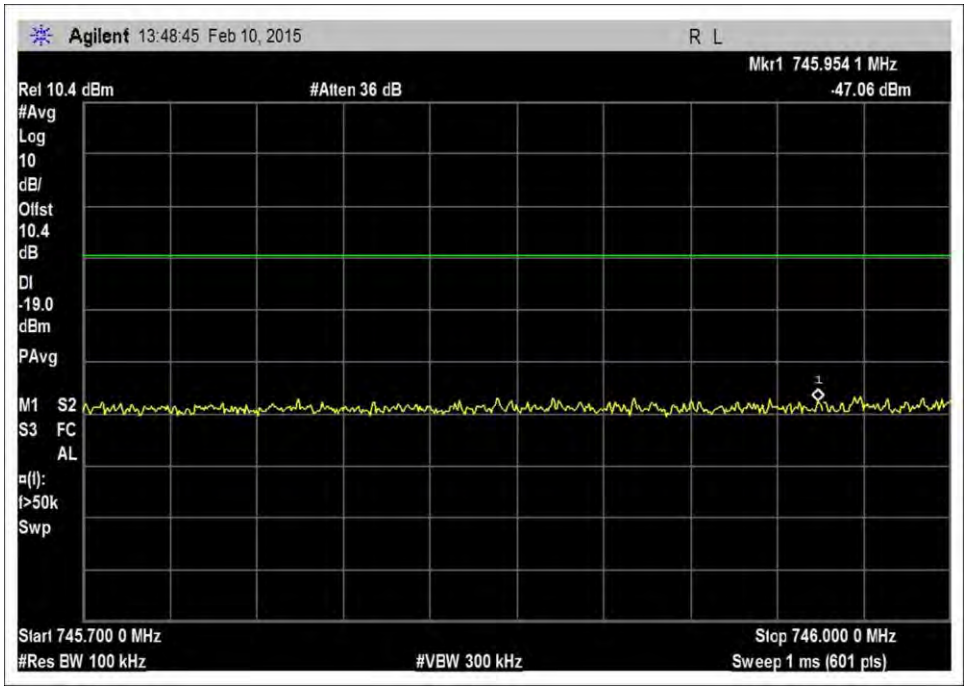
7.5_OBE_DL_746-757MHz_LTE_H_-56dBm



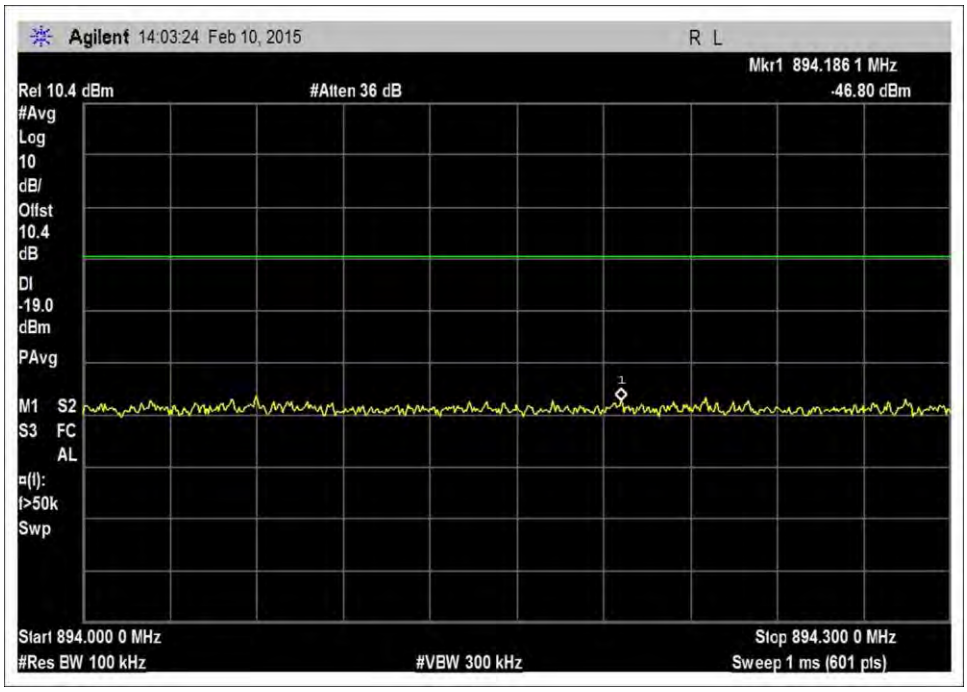
7.5_OBE_DL_746-757MHz_LTE_L_-20dBm



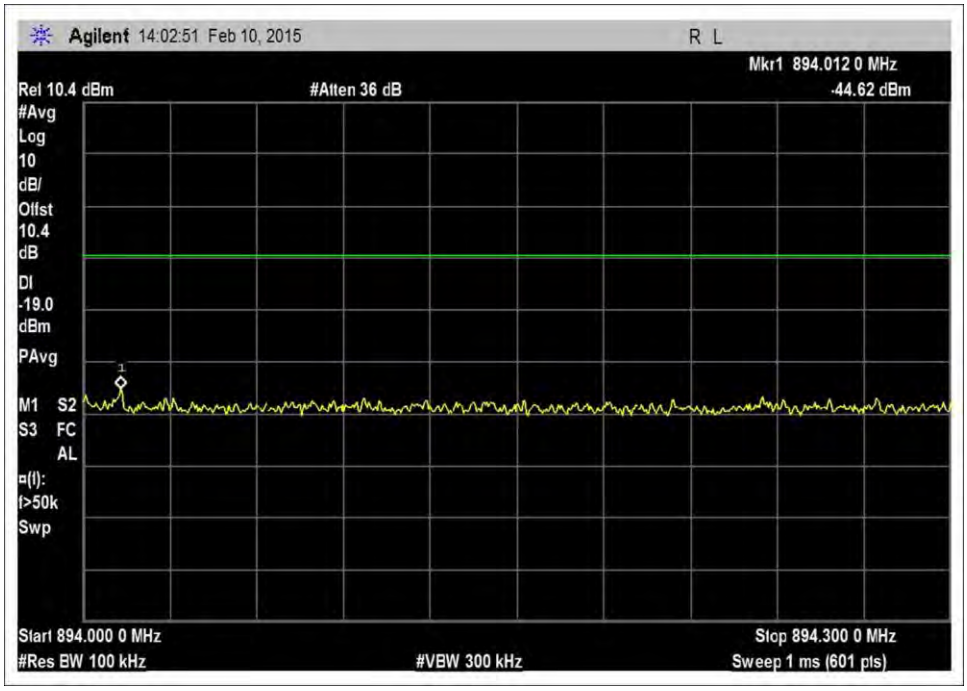
7.5_OBE_DL_746-757MHz_LTE_L_-49dBm



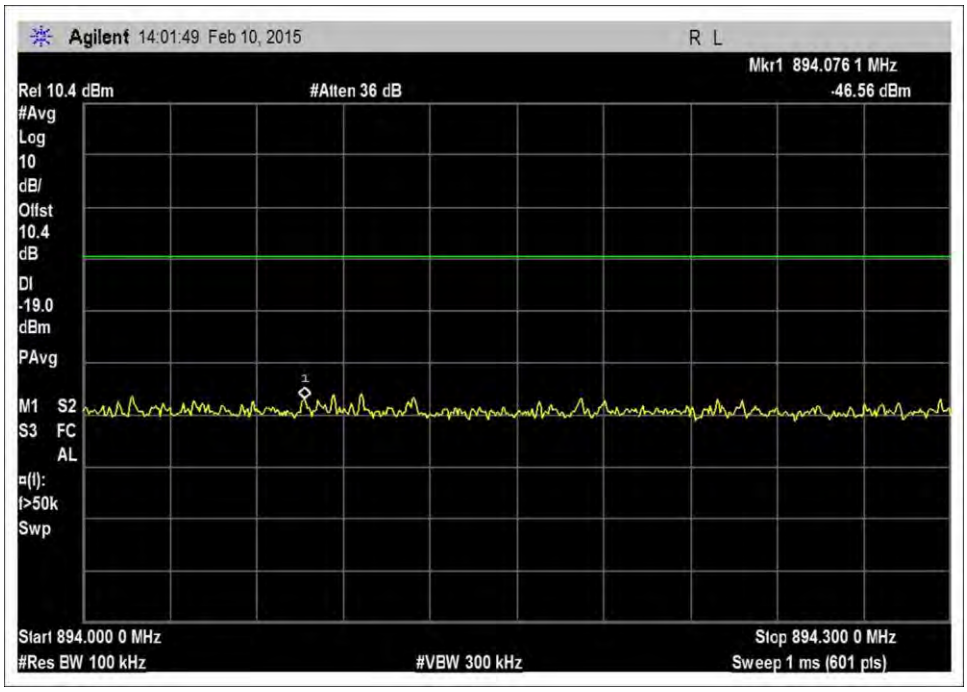
7.5_OBE_DL_746-757MHz_LTE_L_-57dBm



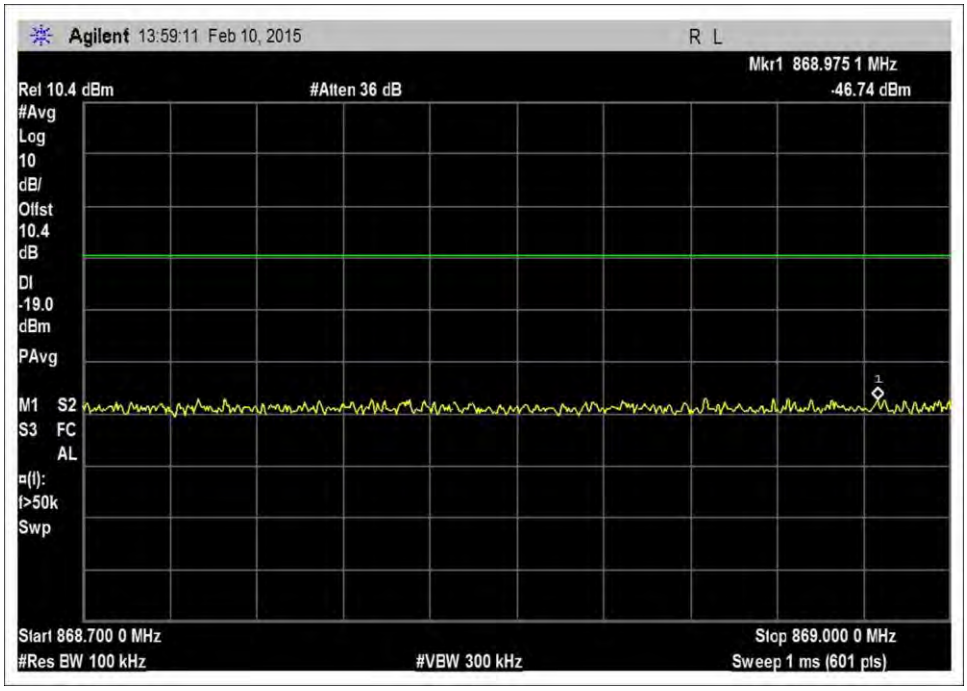
7.5_OBE_DL_869-894MHz_LTE_H_-20dBm



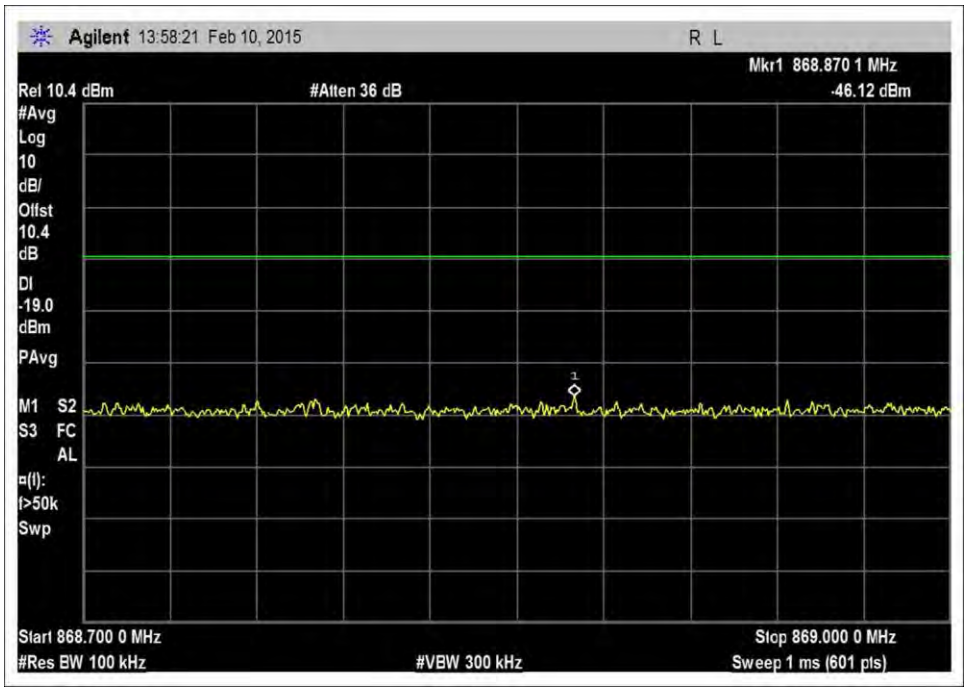
7.5_OBE_DL_869-894MHz_LTE_H_-50dBm



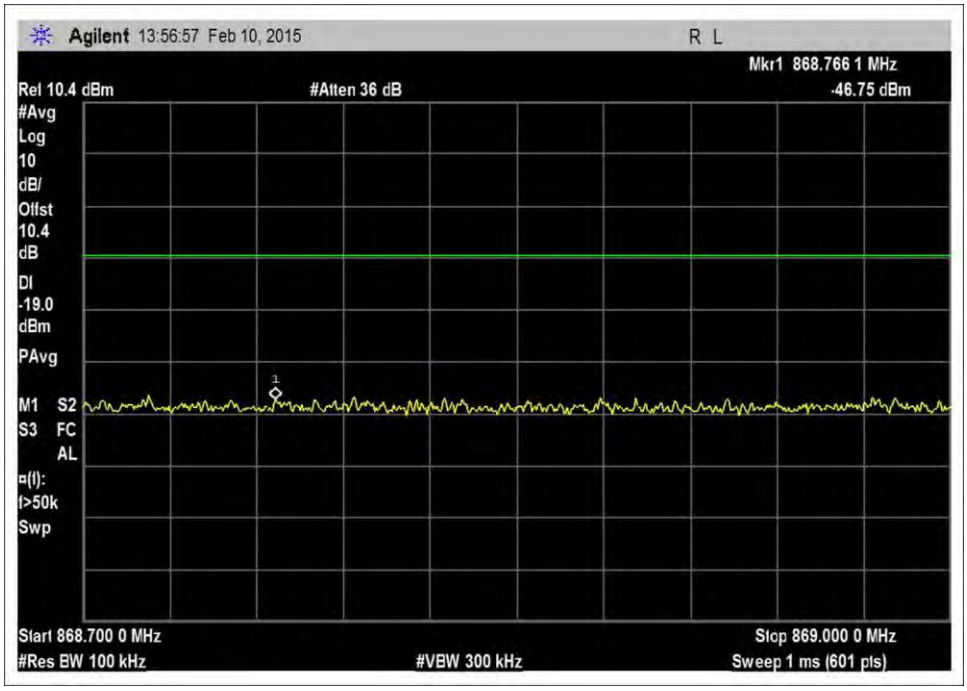
7.5_OBE_DL_869-894MHz_LTE_H_-56dBm



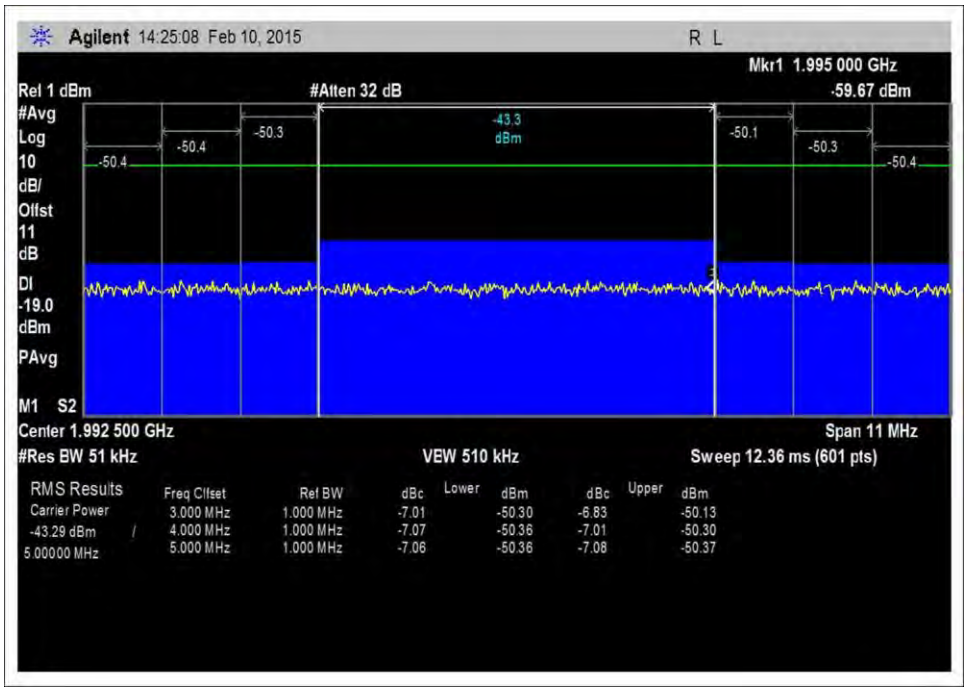
7.5_OBE_DL_869-894MHz_LTE_L_-20dBm



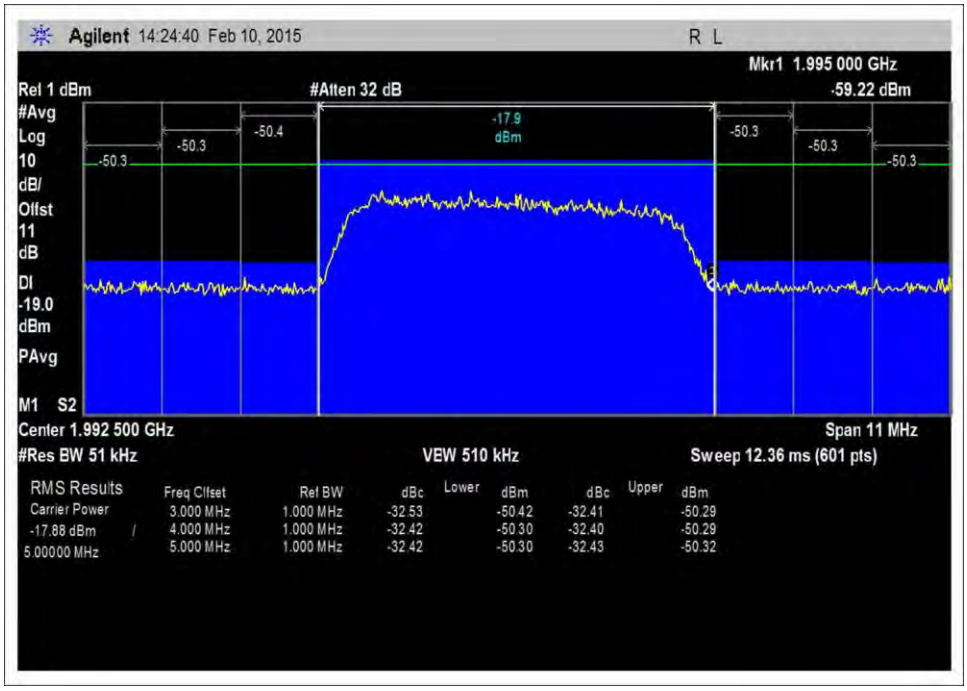
7.5_OBE_DL_869-894MHz_LTE_L_-46dBm



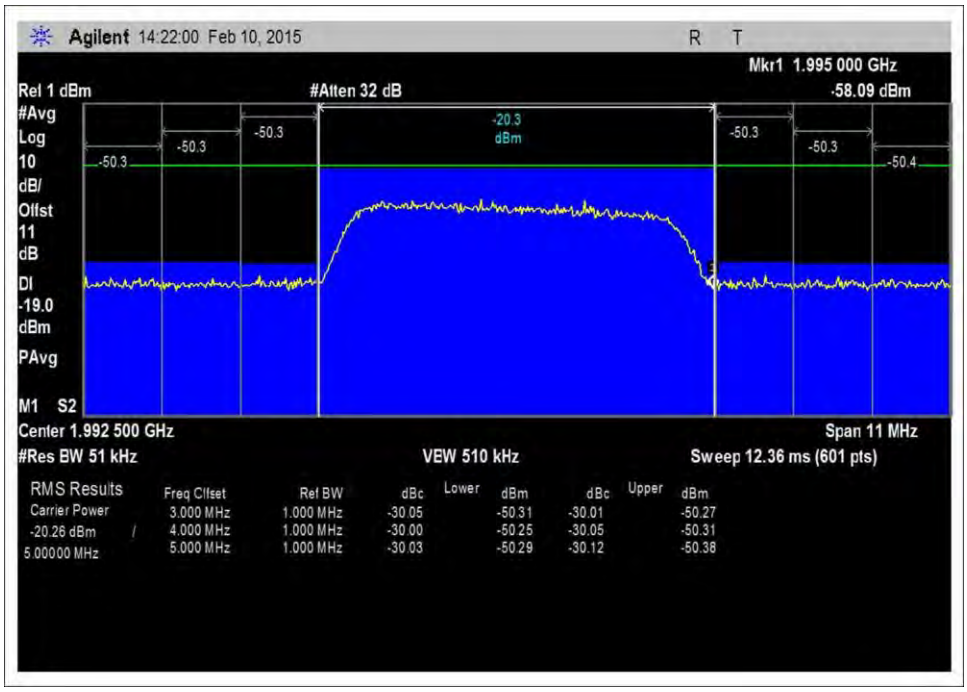
7.5_OBE_DL_869-894MHz_LTE_L_-53dBm



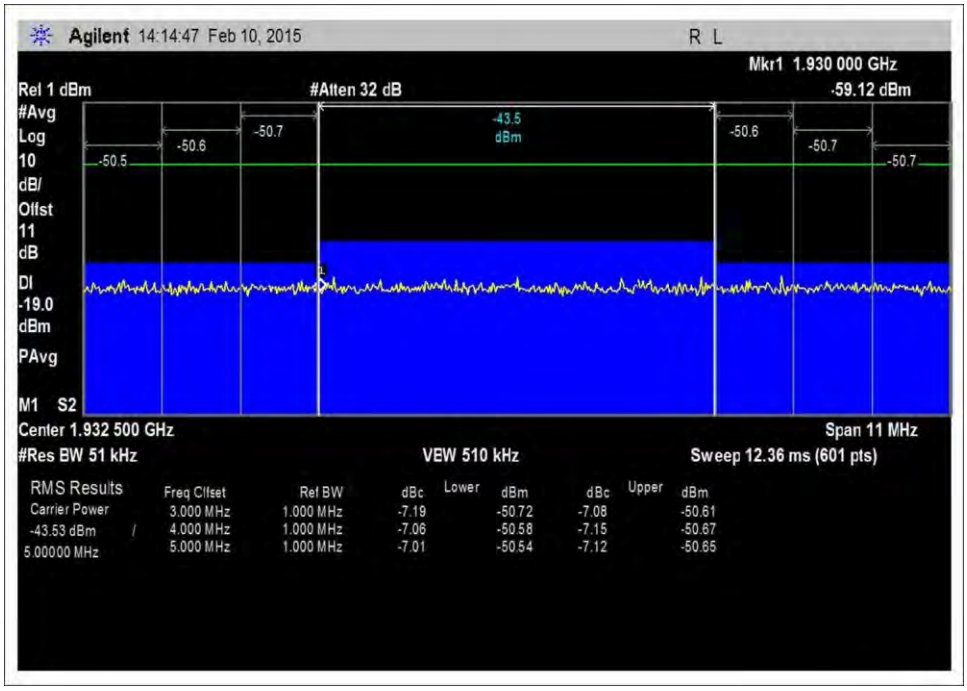
7.5_OBE_DL_1930-1995MHz_LTE_H_-20dBm



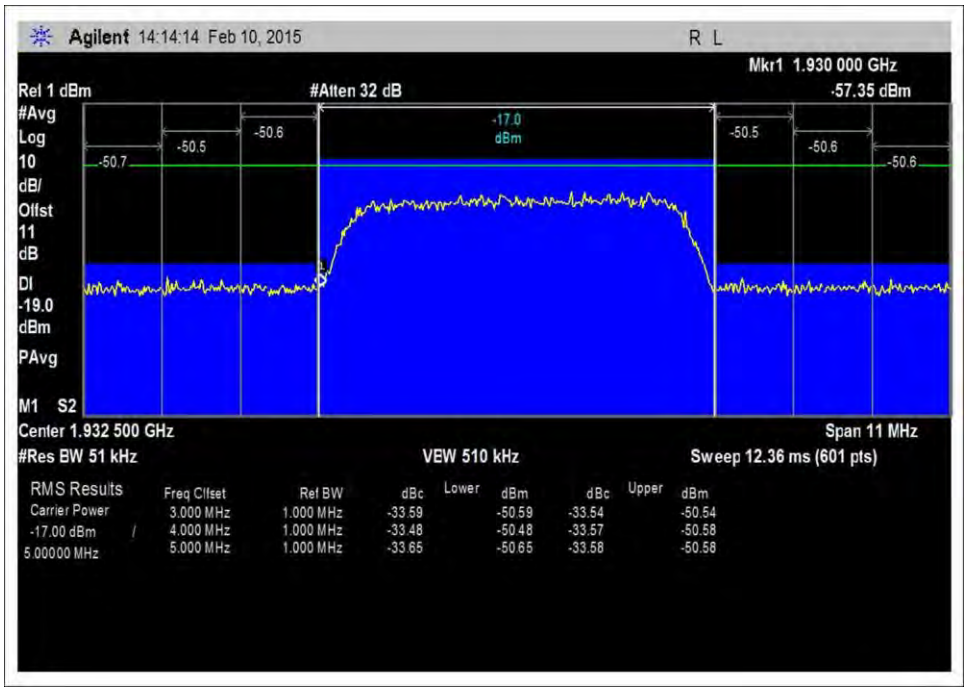
7.5_OBE_DL_1930-1995MHz_CDMA_L_-47dBm



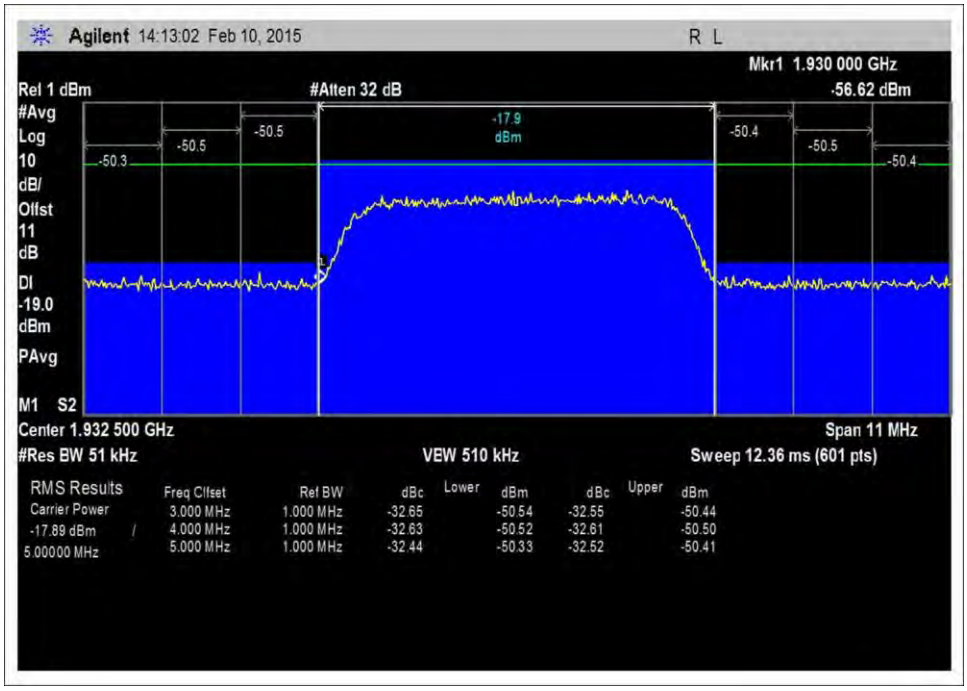
7.5_OBE_DL_1930-1995MHz_LTE_H_-54dBm



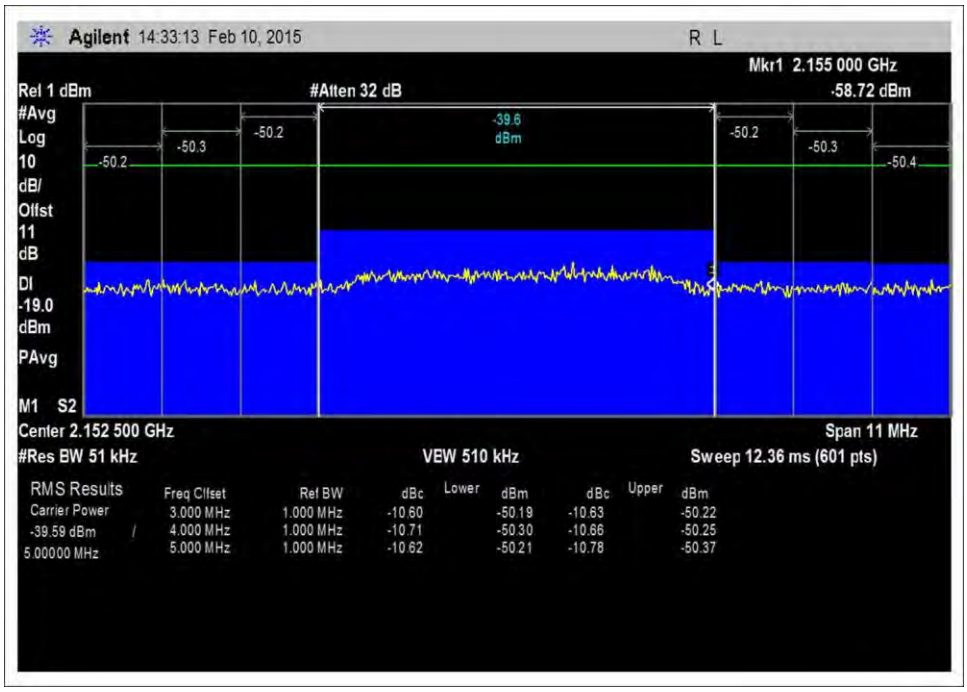
7.5_OBE_DL_1930-1995MHz_LTE_L_-20dBm



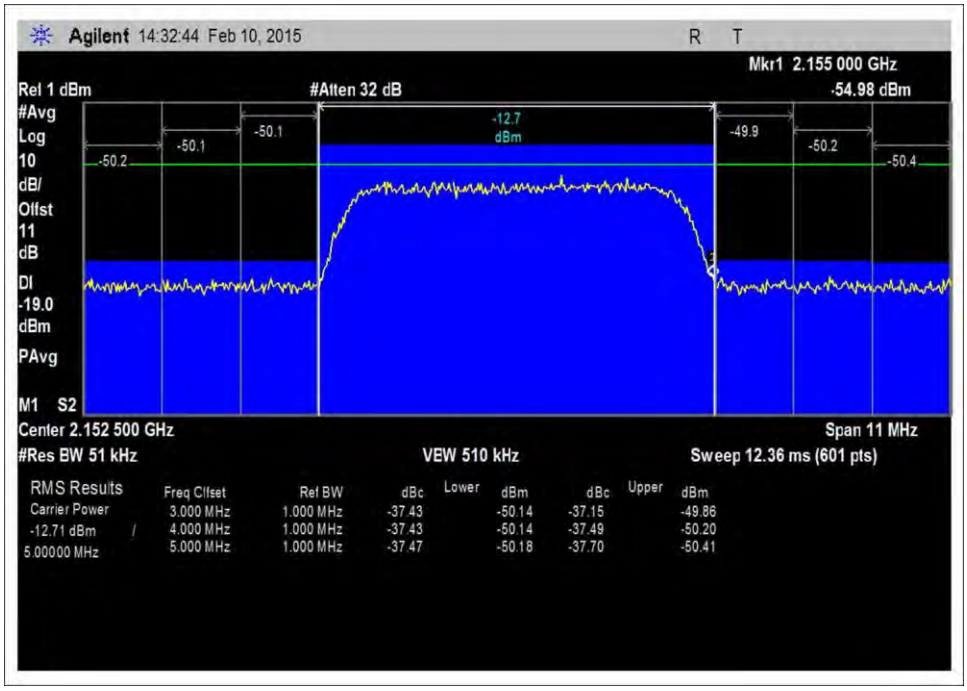
7.5_OBE_DL_1930-1995MHz_LTE_L_-47dBm



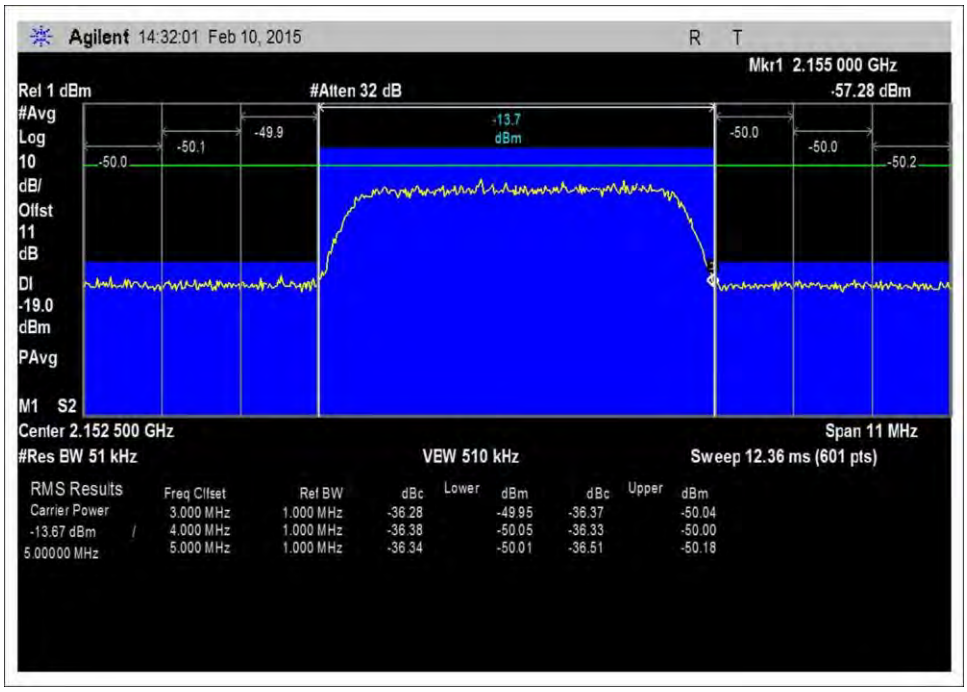
7.5_OBE_DL_1930-1995MHz_LTE_L_-53dBm



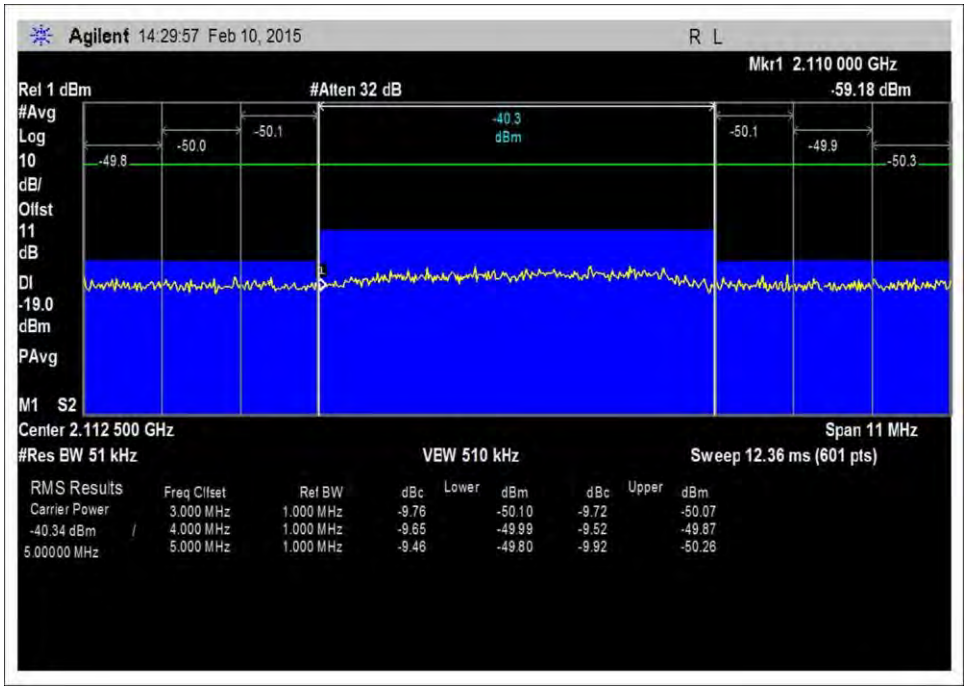
7.5_OBE_DL_2110-2155MHz_LTE_H_-20dBm



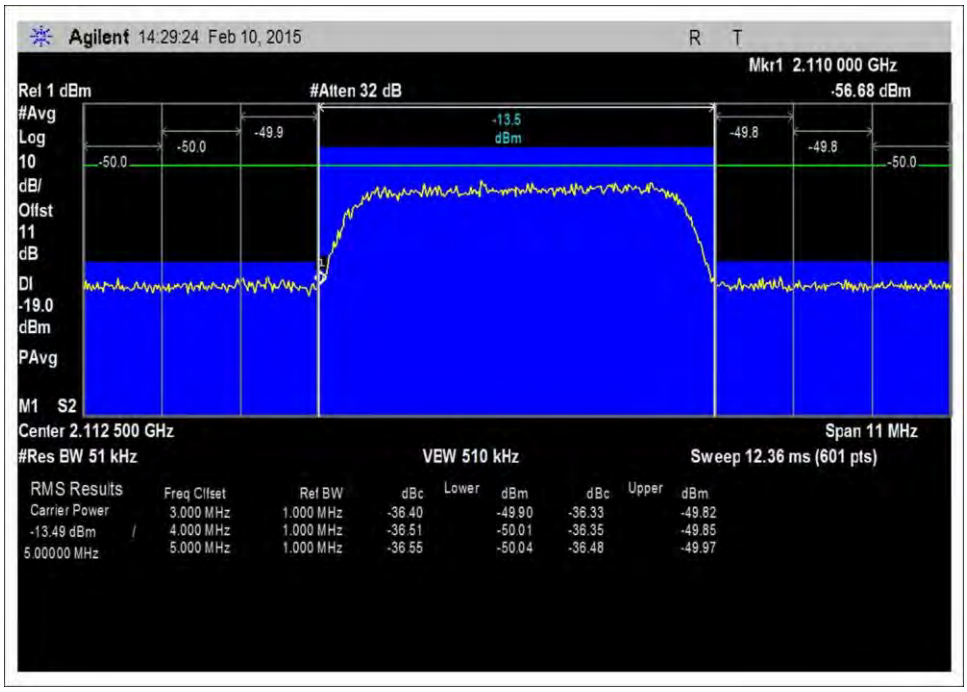
7.5_OBE_DL_2110-2155MHz_LTE_H_-48dBm



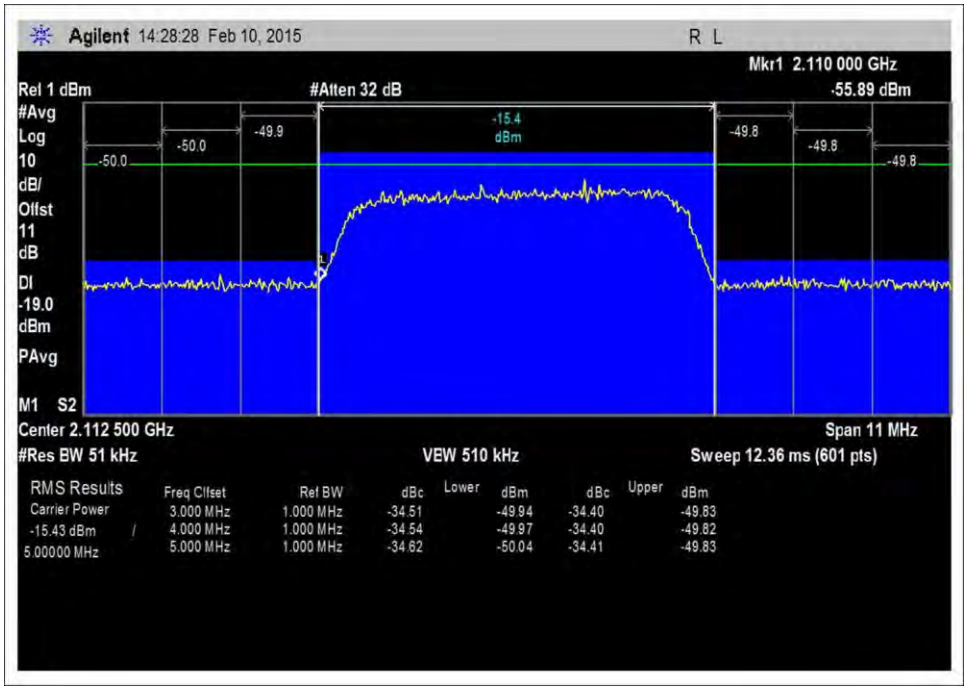
7.5_OBE_DL_2110-2155MHz_LTE_H_-53dBm



7.5_OBE_DL_2110-2155MHz_LTE_L_-20dBm



7.5_OBE_DL_2110-2155MHz_LTE_L_-47dBm



7.5_OBE_DL_2110-2155MHz_LTE_L_-54dBm

Clause 7.7 Noise limit Procedure

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Cellphone-Mate, Inc.**
Specification: **7.7 Noise Limit procedure**
Variable Noise
Variable Noise Timing

Work Order #:	**96696**	Date:	2/16/2015
Test Type:	**Conducted Emissions**	Time:	16:41:22
Equipment:	**Mobile Wideband Consumer Booster**	Sequence#:	1
Manufacturer:	Cellphone-Mate, Inc.	Tested By:	Daniel Bertran
Model:	Fusion 5S Mobile		120V 60Hz
S/N:	NA		

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN03430	Attenuator	75A-10-12	9/5/2013	9/5/2015
	ANP06709	Cable	32026-29094K-29094K-72TC	9/18/2014	9/18/2016
	AN03470	Spectrum Analyzer	E4440A	12/2/2013	12/2/2015

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Mobile Wideband Consumer Booster*	Cellphone-Mate, Inc.	Fusion 5S Mobile	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Switching Power Adapter	SureCall	GFP451DA-1238-1	NA
Signal Generator	Agilent	E4433B	US40052164
Signal Generator	Agilent	E4438C	MY42082260

Test Conditions / Notes:

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

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

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

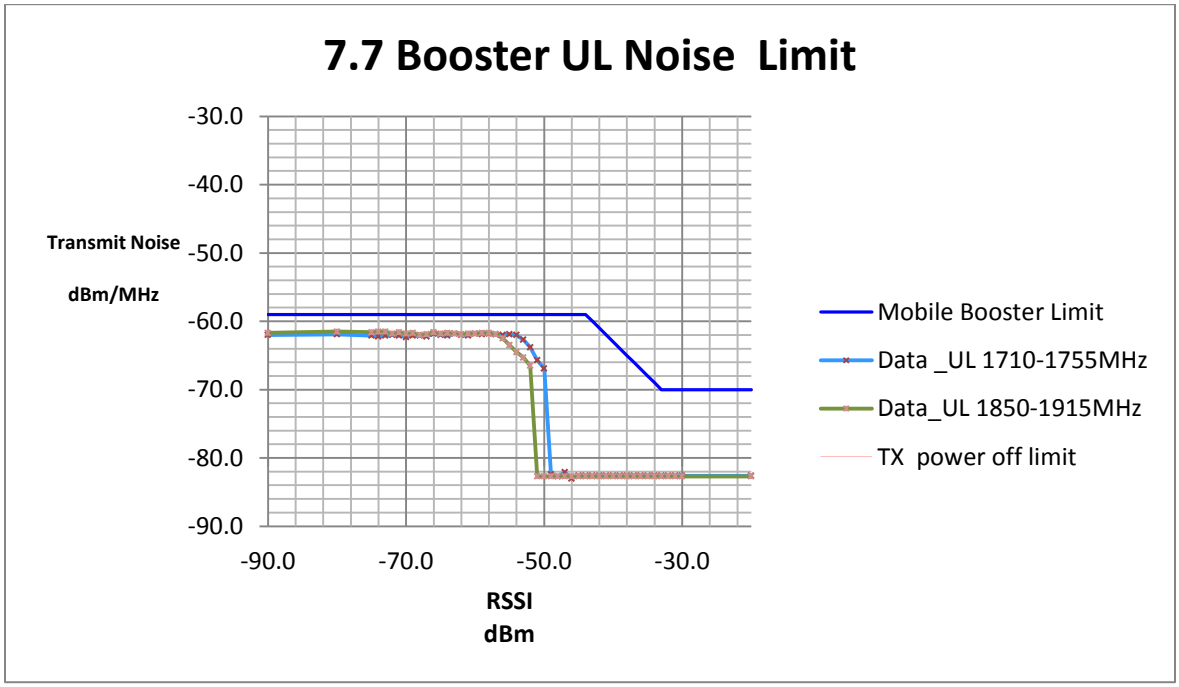
Test environment conditions: 25°C, 40% Relative Humidity,101.5kPa

Test procedure:
The test was performed in accordance with section 7.7 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014.

Firmware: V1.0

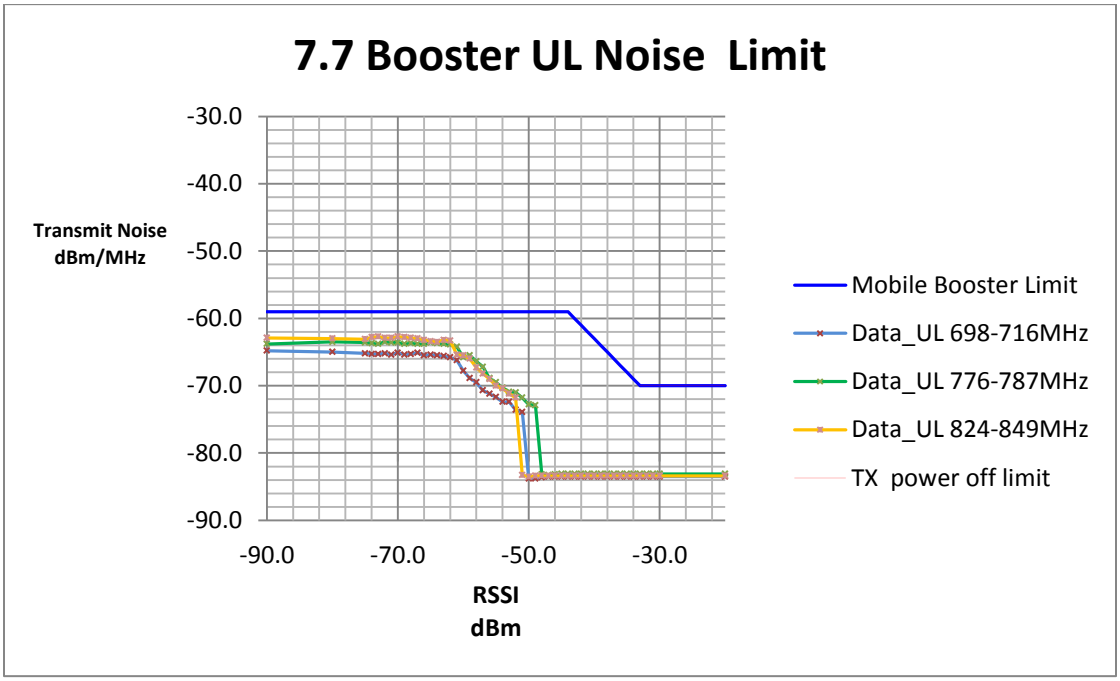
Summary of Results

Maximum Noise Power			
Freq	**Measured**	**Limit**	**Margin**
MHz	**dBm./MHz**	**dBm/MHz**	
UL			
UL1710-1755	-62.2	-59	-3.2
UL1850-1915	-61.9	-59	-2.9
UL824-894	-61.4	-59	-2.4
UL 698-716	-63.1	-59	-4.1
UL776-787	-61.7	-59	-2.7
DL			
DL2110-2155	-63.0	-59	-4.0
DL1930-1995	-62.0	-59	-3.0
DL869-894	-66.9	-59	-7.9
DL:728-746	-61.0	-59	-2.3
DL 746-757	-61.3	-59	-2.3



1710.0	1755.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-66.0	-61.8		-59.0		-2.8
-63.0	-61.8		-59.0		-2.8
-60.0	-61.8		-59.0		-2.8
-55.0	-61.9		-59.0		-2.9
-35.0	-82.6	-68.0			-14.6
-34.0	-82.6	-69.0			-13.6
-20.0	-82.6			-70.0	-12.6

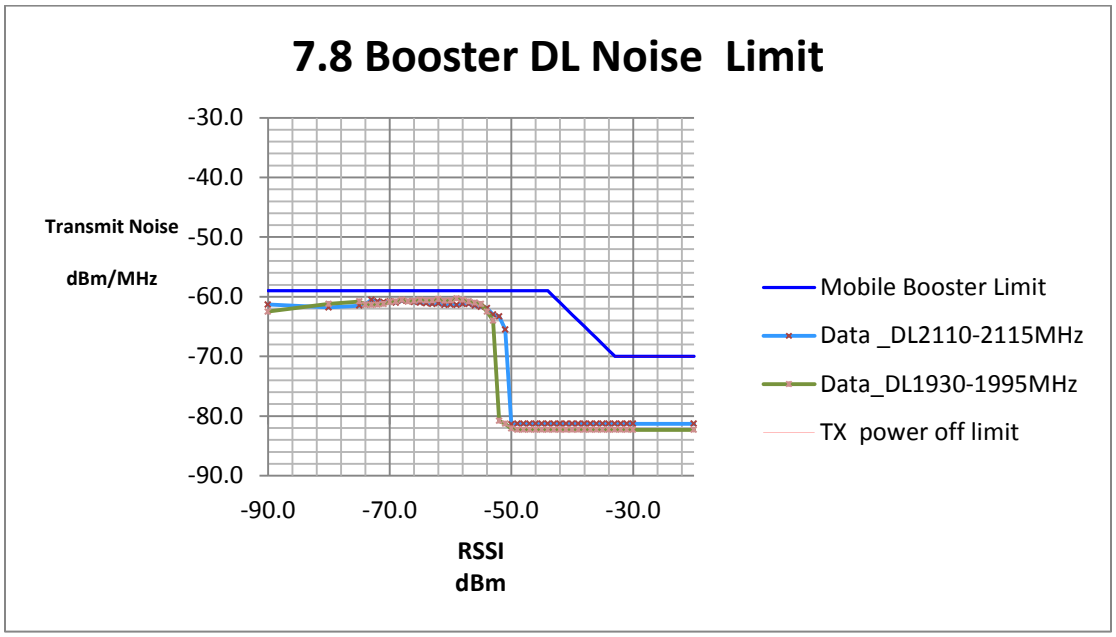
1850.0	1915.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-80.0	-61.5		-59.0		-2.5
-74.0	-61.5		-59.0		-2.5
-73.0	-61.5		-59.0		-2.5
-66.0	-61.6		-59.0		-2.6
-35.0	-82.7	-68.0			-14.7
-34.0	-82.7	-69.0			-13.7
-20.0	-82.7			-70.0	-23.7



698.0	716.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-90.0	-64.8		-59.0		-5.8
-80.0	-65.0		-59.0		-6.0
-70.0	-65.1		-59.0		-6.1
-67.0	-65.1		-59.0		-6.1
-35.0	-83.5	-68.0			-15.5
-34.0	-83.5	-69.0			-14.5
-20.0	-83.5			-70.0	-13.5

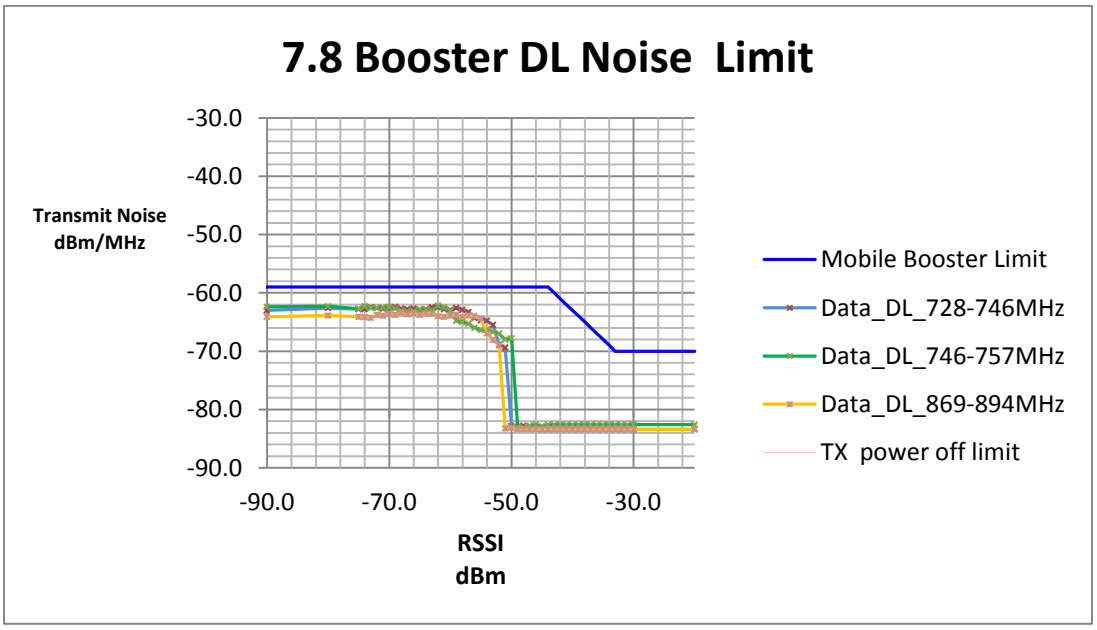
776.0	787.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-80.0	-63.5		-59.0		-4.5
-75.0	-63.6		-59.0		-4.6
-72.0	-63.5		-59.0		-4.5
-65.0	-63.6		-59.0		-4.6
-35.0	-83.1	-68.0			-15.1
-34.0	-83.1	-69.0			-14.1
-20.0	-83.1			-70.0	-13.1

824.0	849.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-74.0	-62.8		-59.0		-3.8
-73.0	-62.7		-59.0		-3.7
-70.0	-62.7		-59.0		-3.7
-69.0	-62.8		-59.0		-3.8
-35.0	-83.4	-68.0			-15.4
-34.0	-83.4	-69.0			-14.4
-20.0	-83.4			-70.0	-13.4



2110.0	2155.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-72.0	-60.8		-59.0		-1.8
-70.0	-60.8		-59.0		-1.8
-67.0	-60.8		-59.0		-1.8
-66.0	-60.9		-59.0		-1.9
-34.0	-81.3	-69.0			-12.3
-35.0	-81.3	-68.0			-13.3
-20.0	-81.3			-70.0	-11.3

1930.0	1995.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-59.0	-60.3		-59.0		-1.3
-62.0	-60.4		-59.0		-1.4
-65.0	-60.5		-59.0		-1.5
-58.0	-60.5		-59.0		-1.5
-34.0	-82.3	-69.0			-13.3
-35.0	-82.3	-68.0			-14.3
-20.0	-82.3		-59.0	-70.0	-23.3



869.0	894.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-68.0	-63.4		-59.0		-4.4
-70.0	-63.5		-59.0		-4.5
-66.0	-63.5		-59.0		-4.5
-64.0	-63.5		-59.0		-4.5
-34.0	-83.4	-69.0			-14.4
-35.0	-83.4	-68.0			-15.4
-20.0	-83.4			-70.0	-13.4

728.0	746.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-69.0	-62.4		-59.0		-3.4
-73.0	-62.5		-59.0		-3.5
-63.0	-62.5		-59.0		-3.5
-62.0	-62.5		-59.0		-3.5
-34.0	-83.4	-69.0			-14.4
-35.0	-83.4	-68.0			-15.4
-20.0	-83.4			-70.0	-13.4

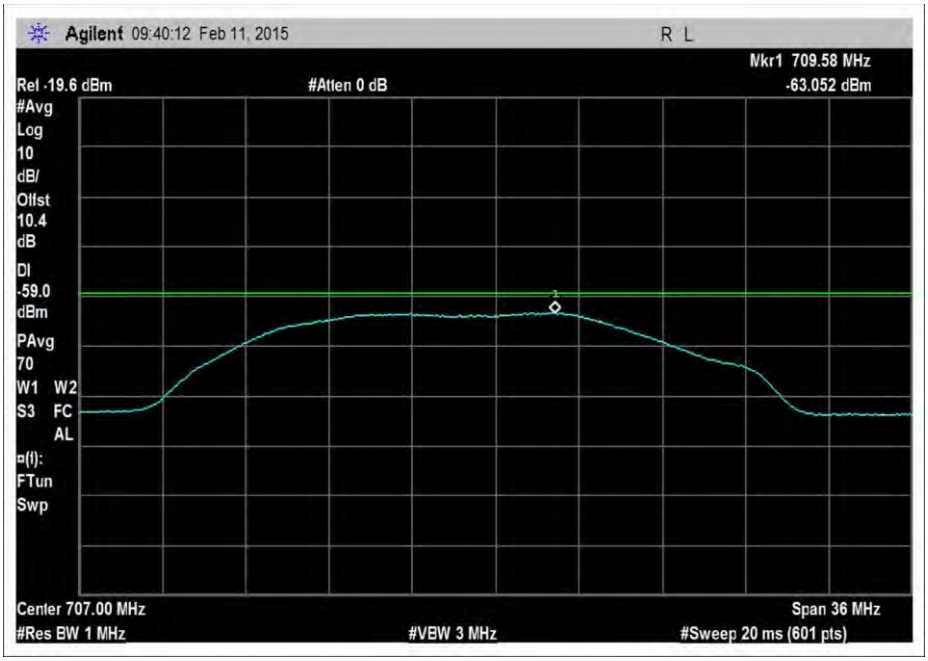
746.0	757.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-80.0	-62.3		-59.0		-3.3
-74.0	-62.3		-59.0		-3.3
-90.0	-62.4		-59.0		-3.4
-70.0	-62.4		-59.0		-3.4
-34.0	-82.6	-69.0			-13.6
-35.0	-82.6	-68.0			-14.6
-20.0	-82.6			-70.0	-12.6

Uplink Noise Timing		
Freq	Measured	Limit
MHz	Sec	sec
UL1710-1755	0.28	1
UL1850-1915	0.17	1
UL824-894	0.30	1
UL 698-716	0.27	1
UL776-787	0.29	1

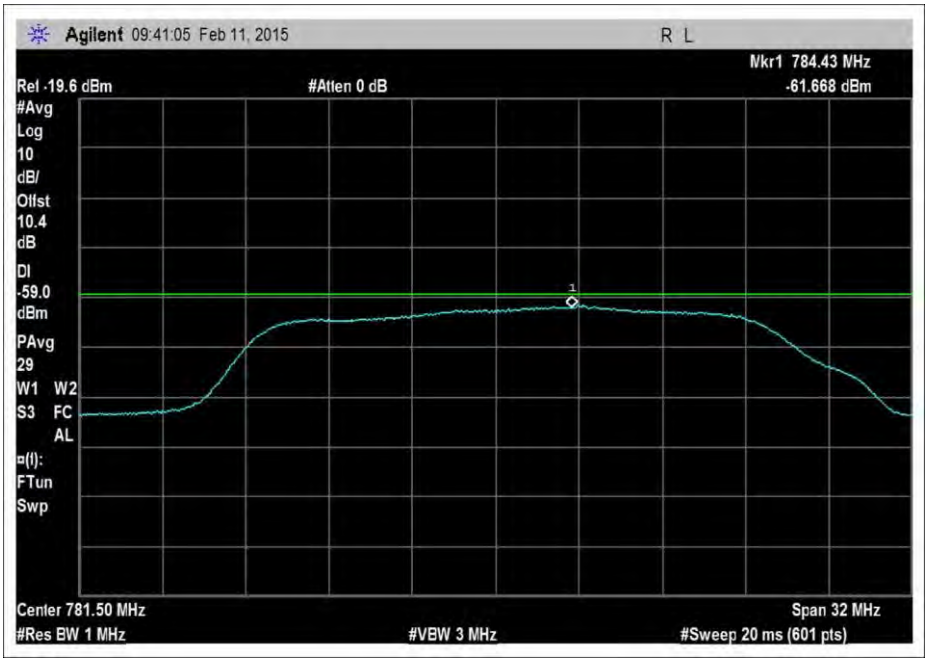
Downlink Noise Timing		
Freq	Measured	Limit
MHz	Sec	sec
DL2110-2155	0.24	1
DL1930-1995	0.17	1
DL869-894	0.22	1
DL:728-746	0.17	1
DL 746-757	0.33	1

Test Data

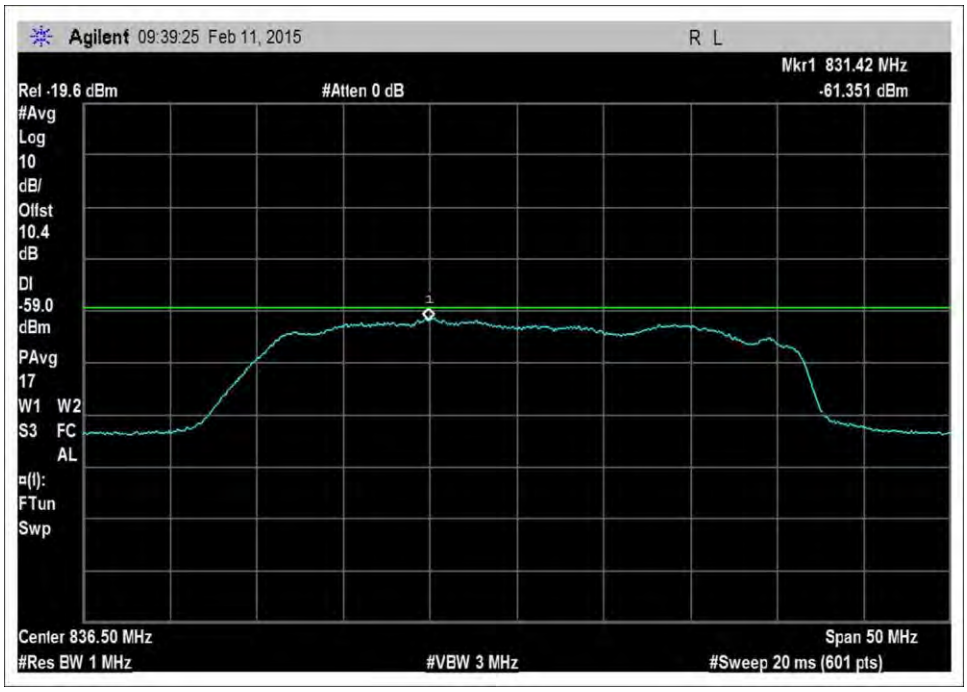
a-g Noise_ 50, UL



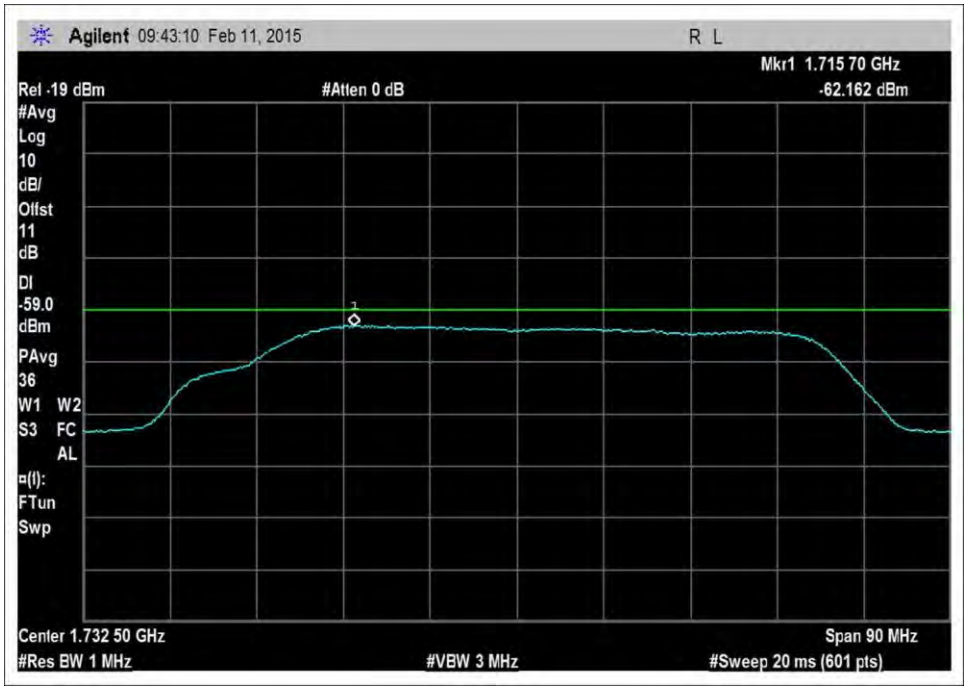
7.7_Noise_UL_698-716MHz



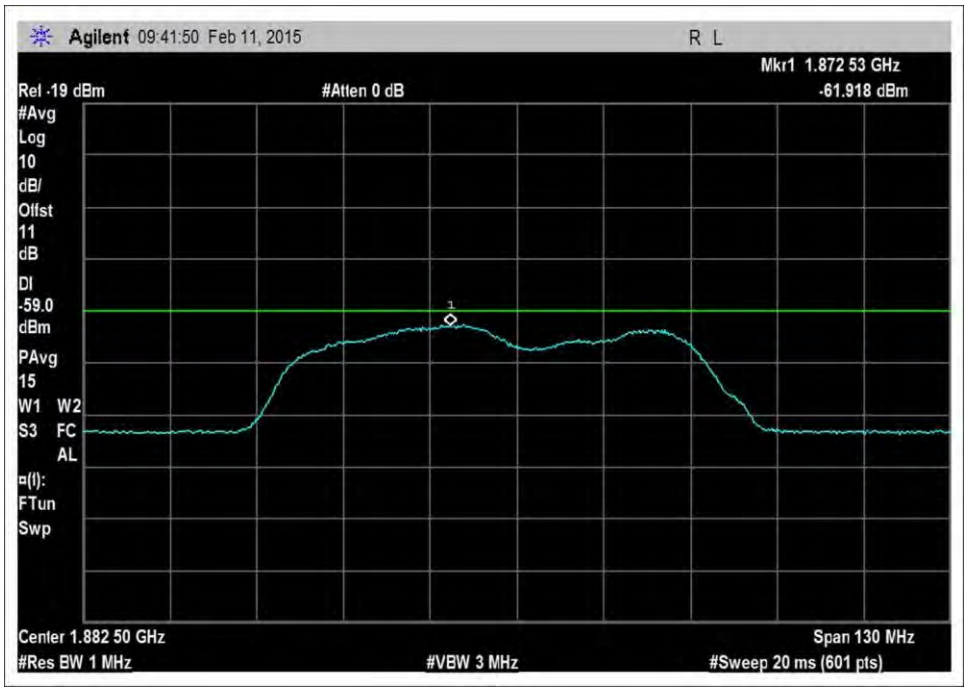
7.7_Noise_UL_776-787MHz



7.7_Noise_UL_824-849MHz

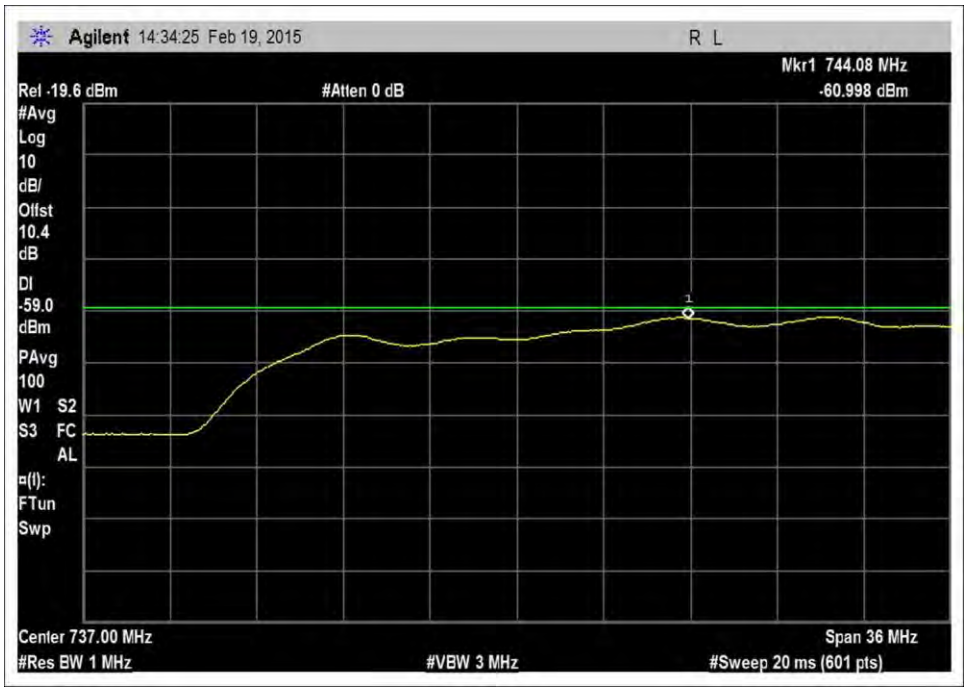


7.7_Noise_UL_1710-1755MHz

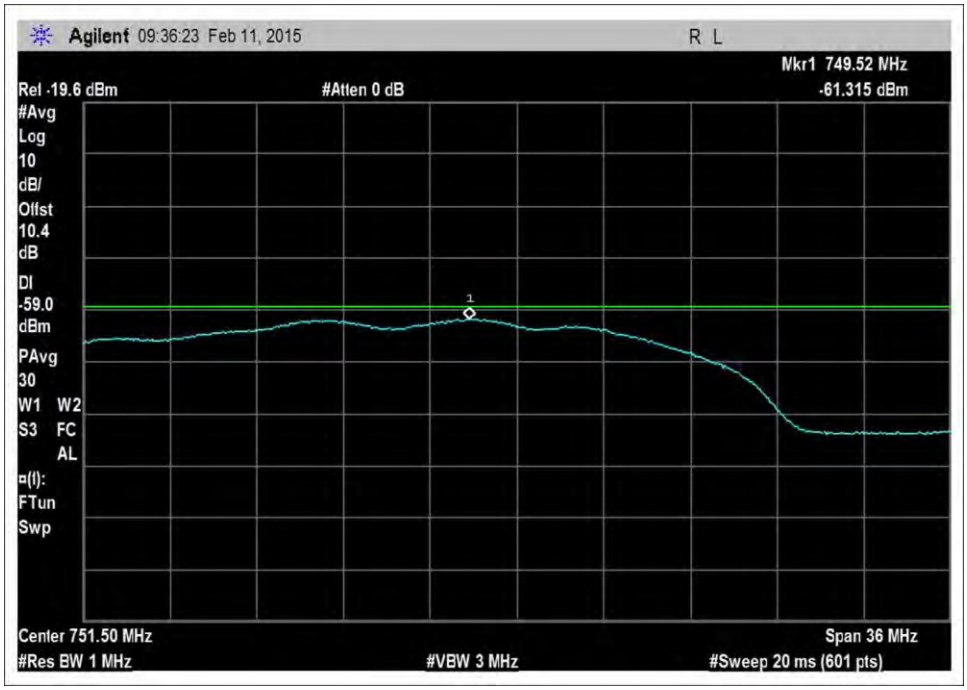


7.7_Noise_UL_1850-1915MHz

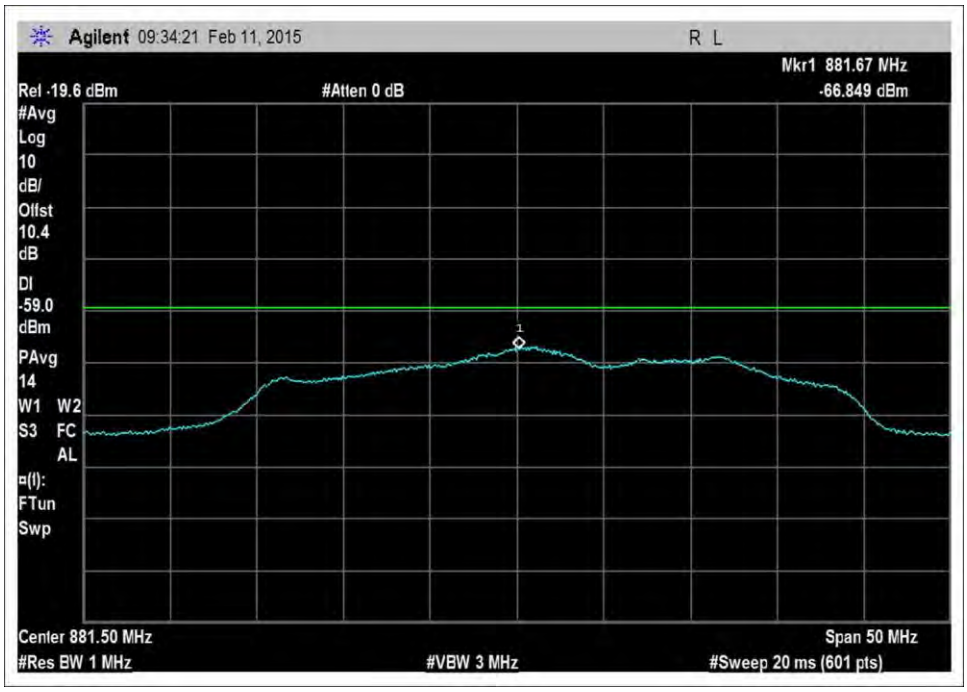
a-g Noise_ 50, DL



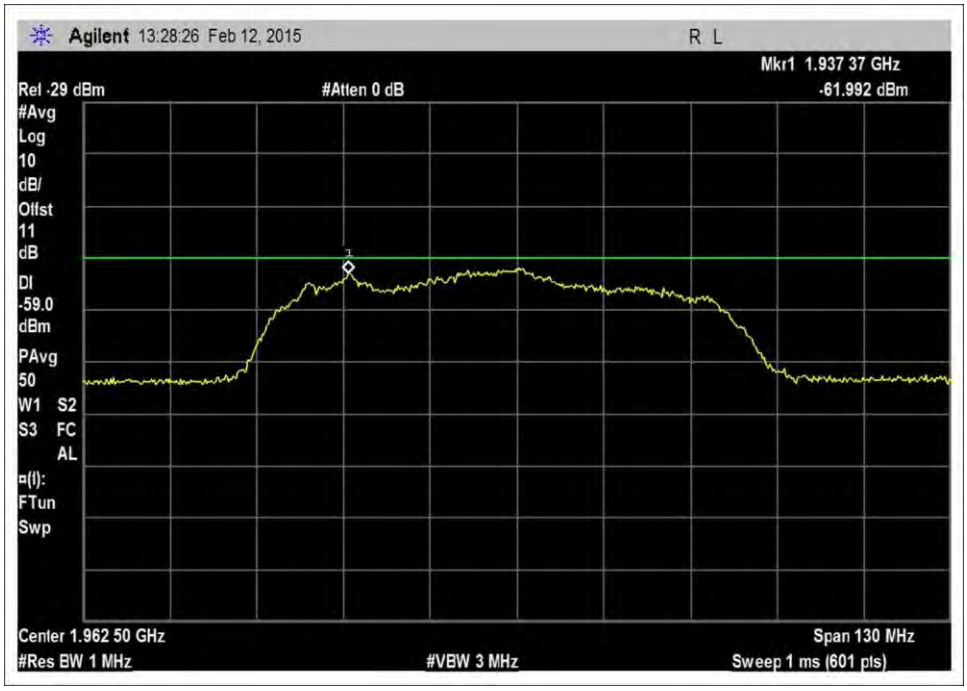
7.7_Noise_DL_728-746MHz



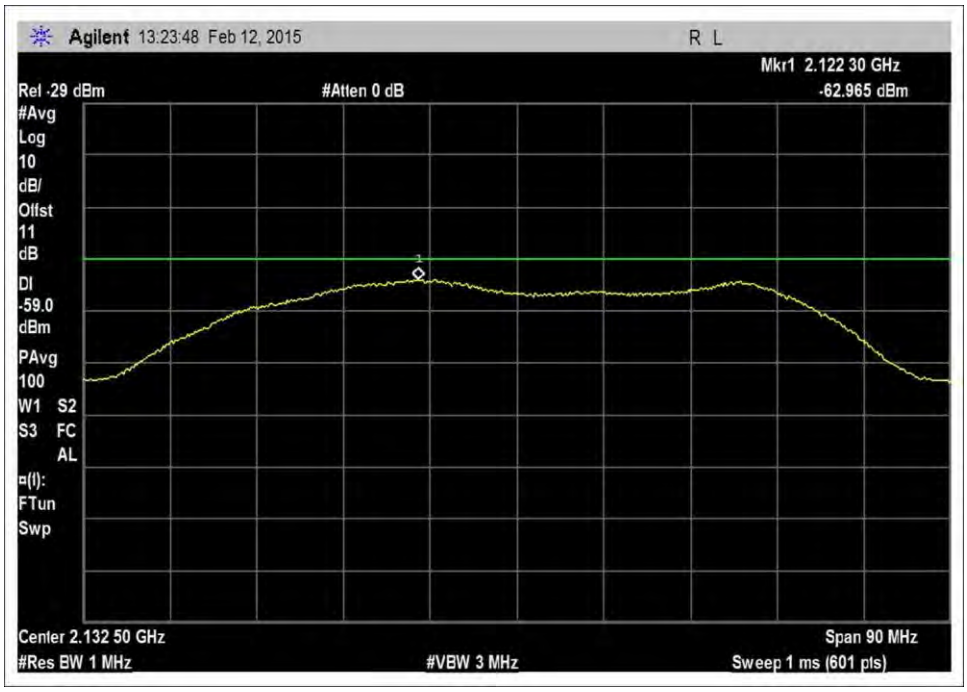
7.7_Noise_DL_746-757MHz



7.7_Noise_DL_869-894MHz

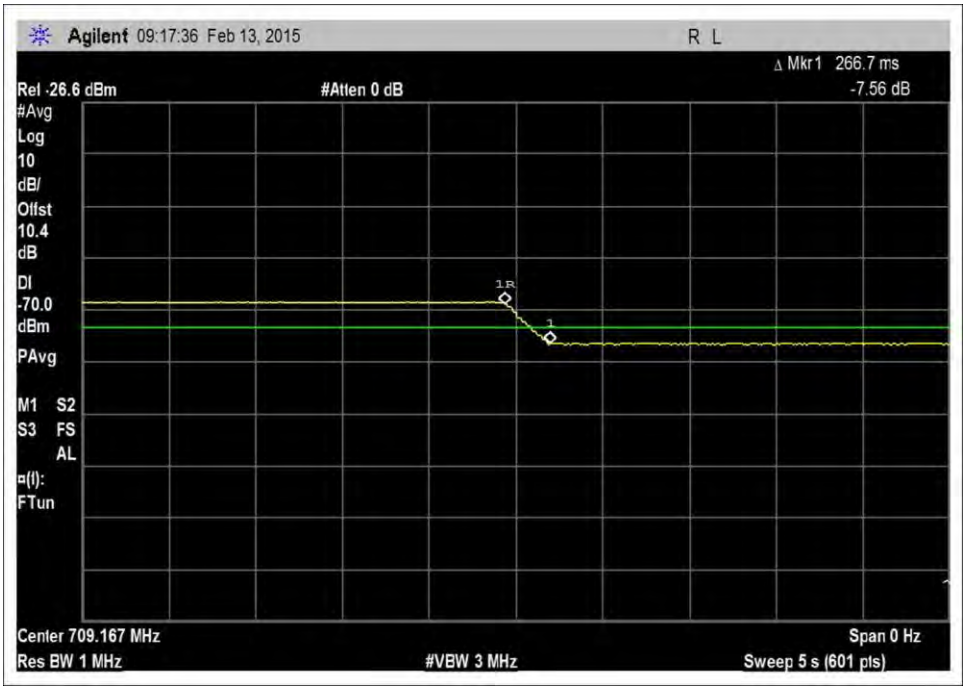


7.7_Noise_DL_1930-1995MHz

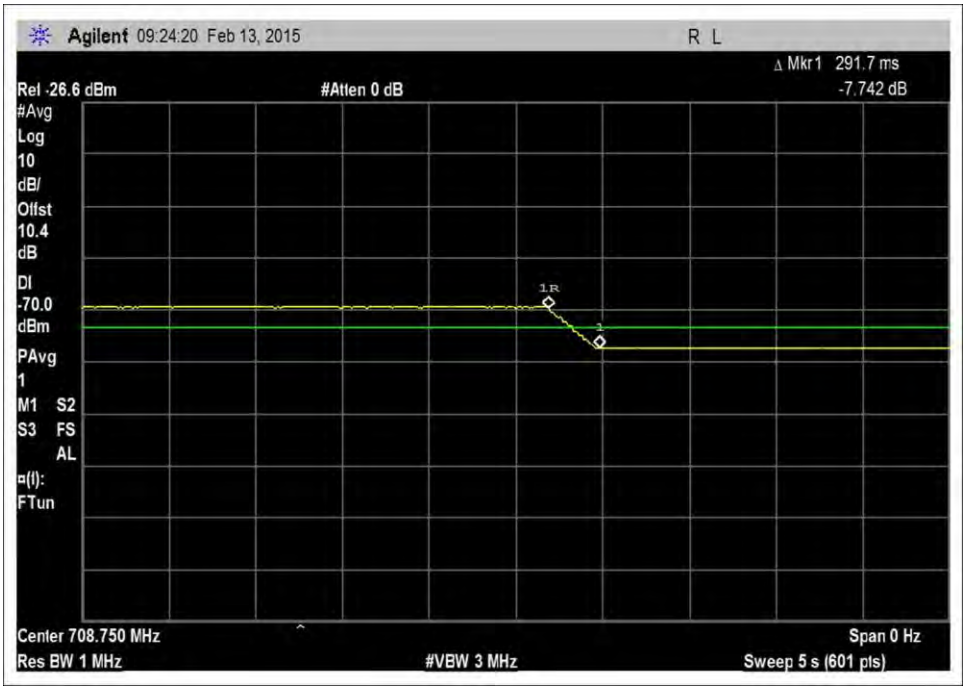


7.7_Noise_DL_2110-2155MHz

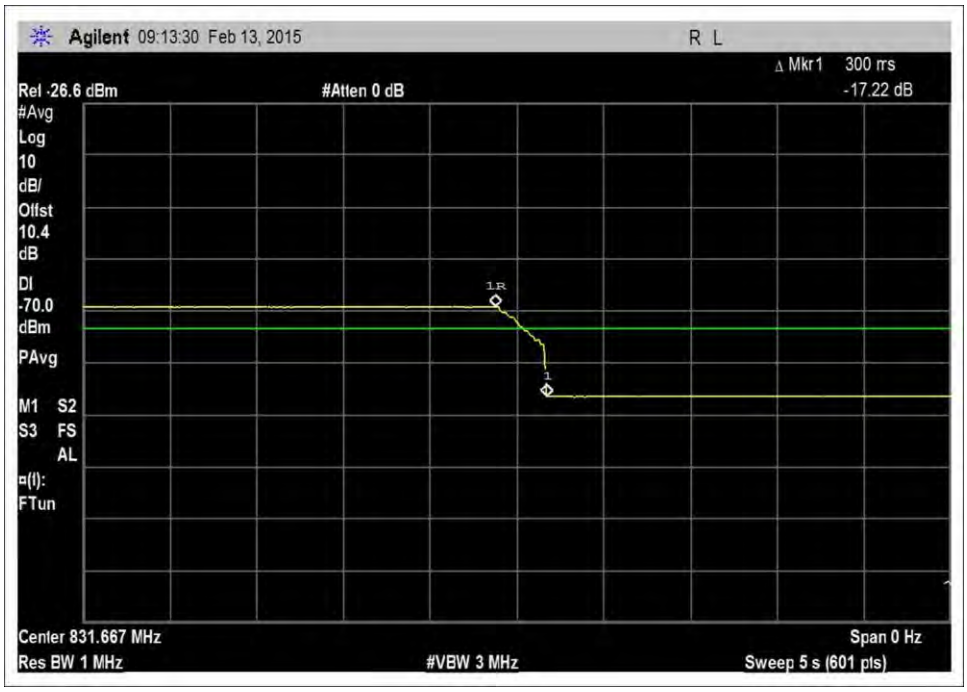
n-t Timing, UL



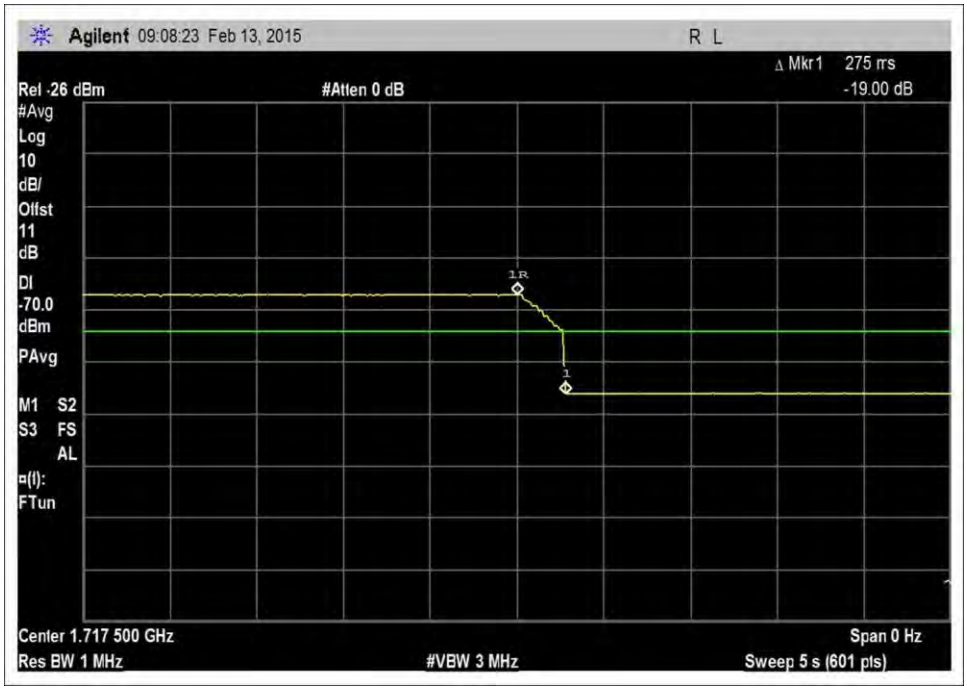
7.7_VarNoise_UL_698-716MHz



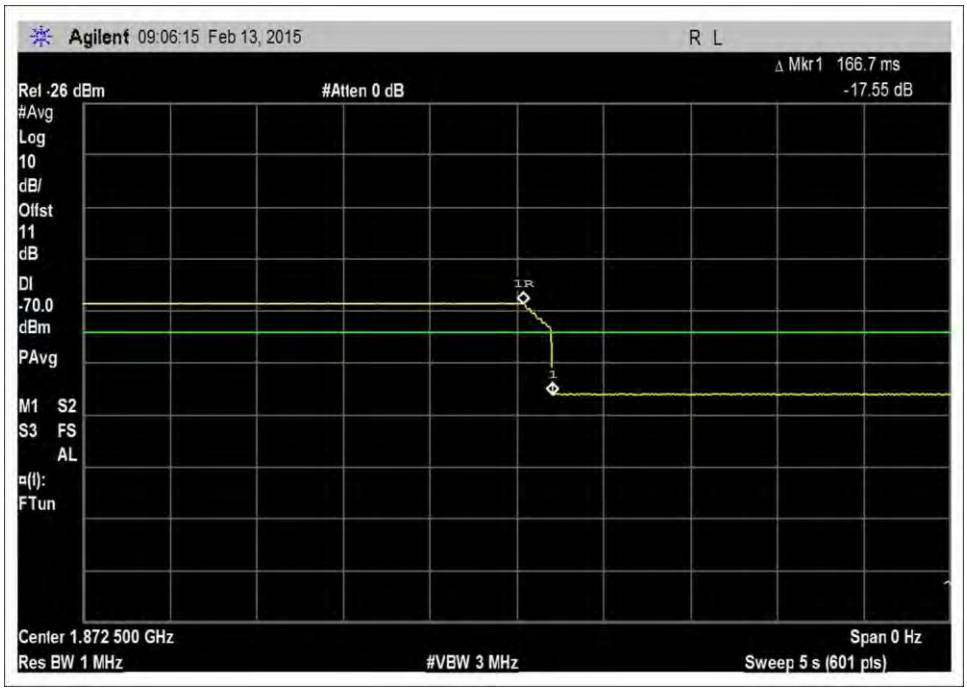
7.7_VarNoise_UL_776-787MHz



7.7_VarNoise_UL_824-849MHz

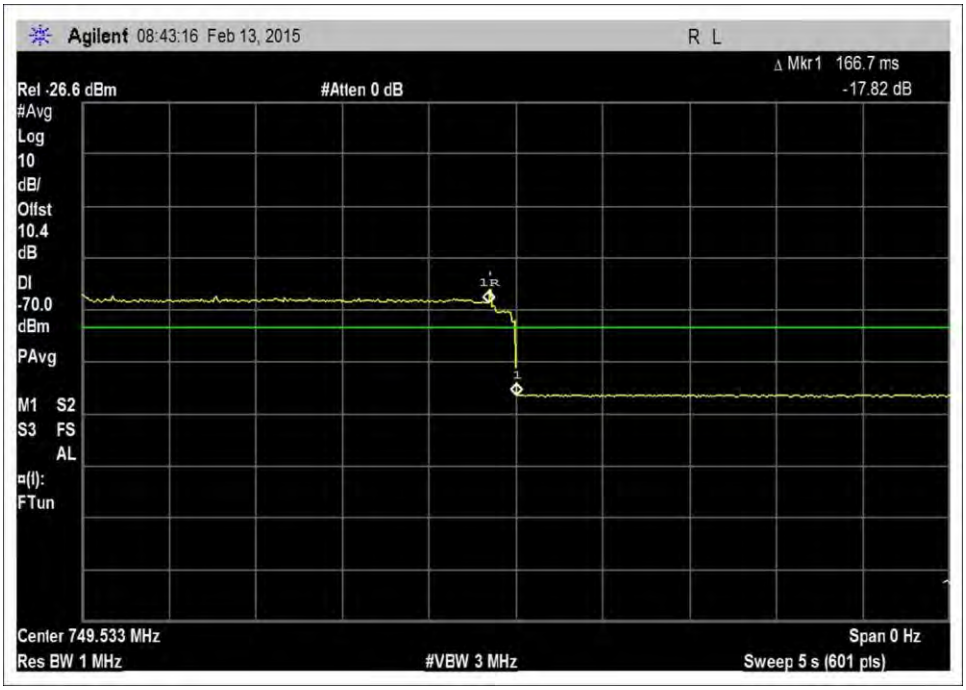


7.7_VarNoise_UL_1710-1755MHz

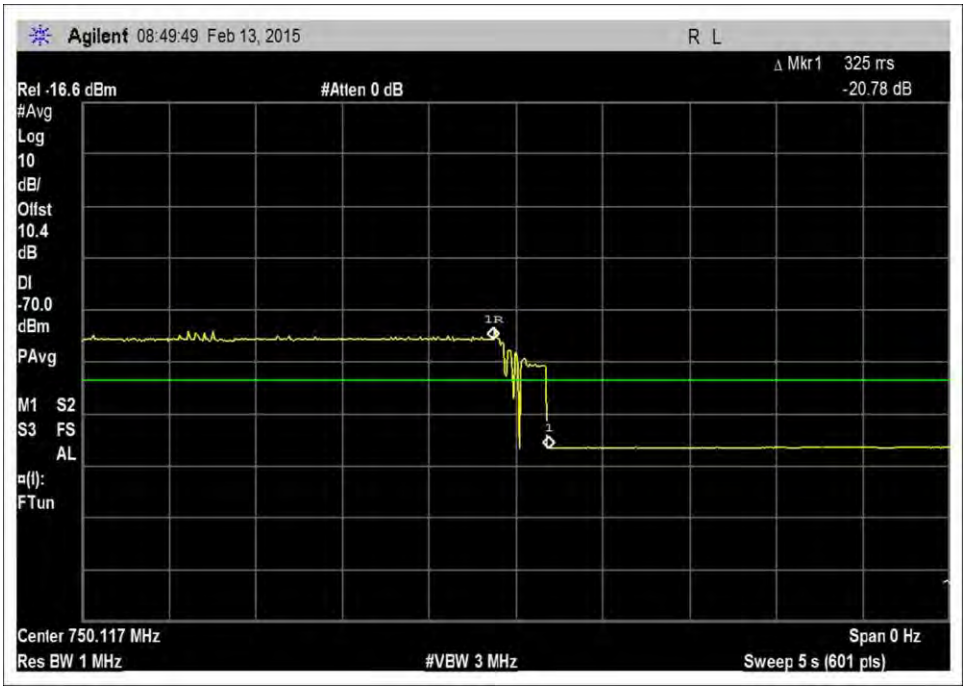


7.7_VarNoise_UL_1850-1915MHz

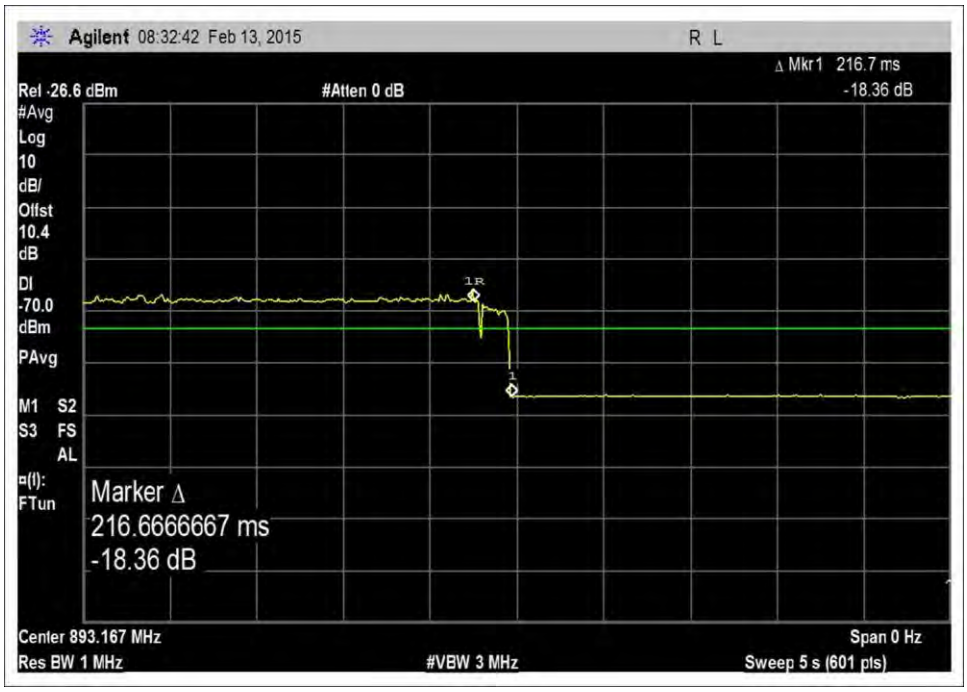
n-t Timing, DL



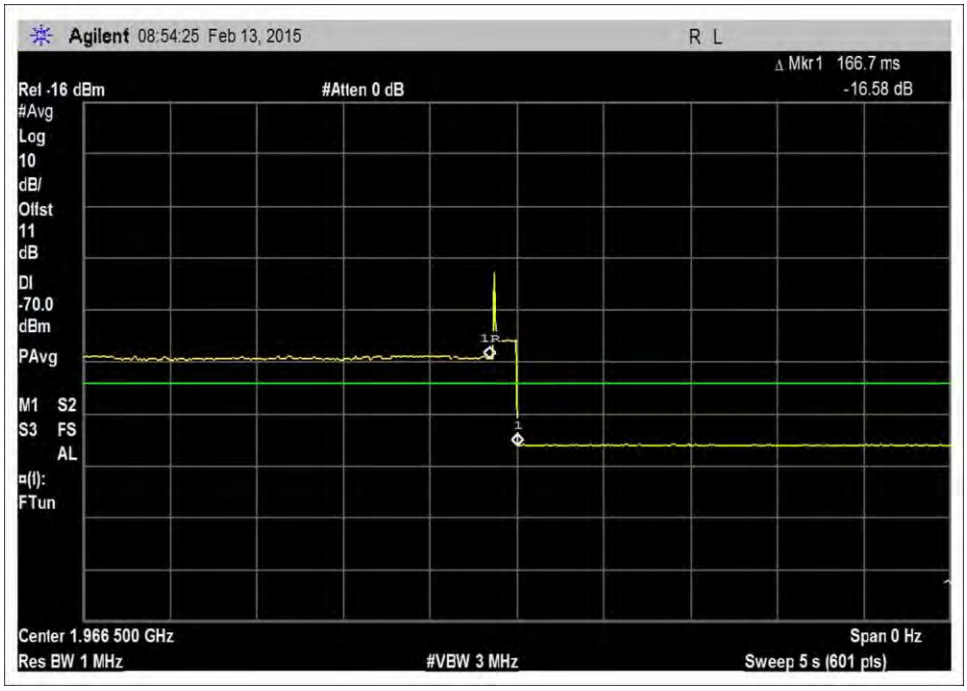
7.7_VarNoise_DL_728-746MHz



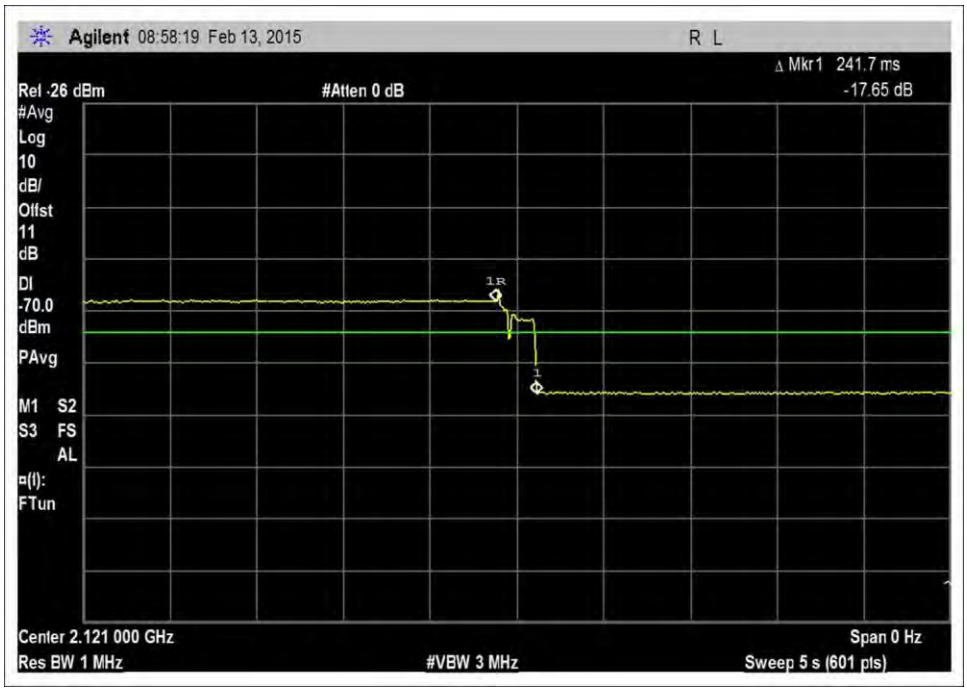
7.7_VarNoise_DL_746-757MHz



7.7_VarNoise_DL_869-894MHz



7.7_VarNoise_DL_1930-1995MHz



7.7_VarNoise_DL_2110-2155MHz

Clause 7.8 Uplink Inactivity

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Cellphone-Mate, Inc.**
Specification: **7.8 Uplink inactivity**
Work Order #: **96696** Date: 2/16/2015
Test Type: **Conducted Emissions** Time: 16:41:22
Equipment: **Mobile Wideband Consumer Booster** Sequence#: 1
Manufacturer: Cellphone-Mate, Inc. Tested By: Daniel Bertran
Model: Fusion 5S Mobile 120V 60Hz
S/N: NA

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN03430	Attenuator	75A-10-12	9/5/2013	9/5/2015
	ANP06709	Cable	32026-29094K-29094K-72TC	9/18/2014	9/18/2016
	AN03470	Spectrum Analyzer	E4440A	12/2/2013	12/2/2015

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Mobile Wideband Consumer Booster*	Cellphone-Mate, Inc.	Fusion 5S Mobile	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Switching Power Adapter	SureCall	GFP451DA-1238-1	NA
Signal Generator	Agilent	E4433B	US40052164
Signal Generator	Agilent	E4438C	MY42082260

Test Conditions / Notes:

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

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

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

Test environment conditions: 25°C, 40% Relative Humidity,101.5kPa

Test procedure:
The test was performed in accordance with section 7.8 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014.

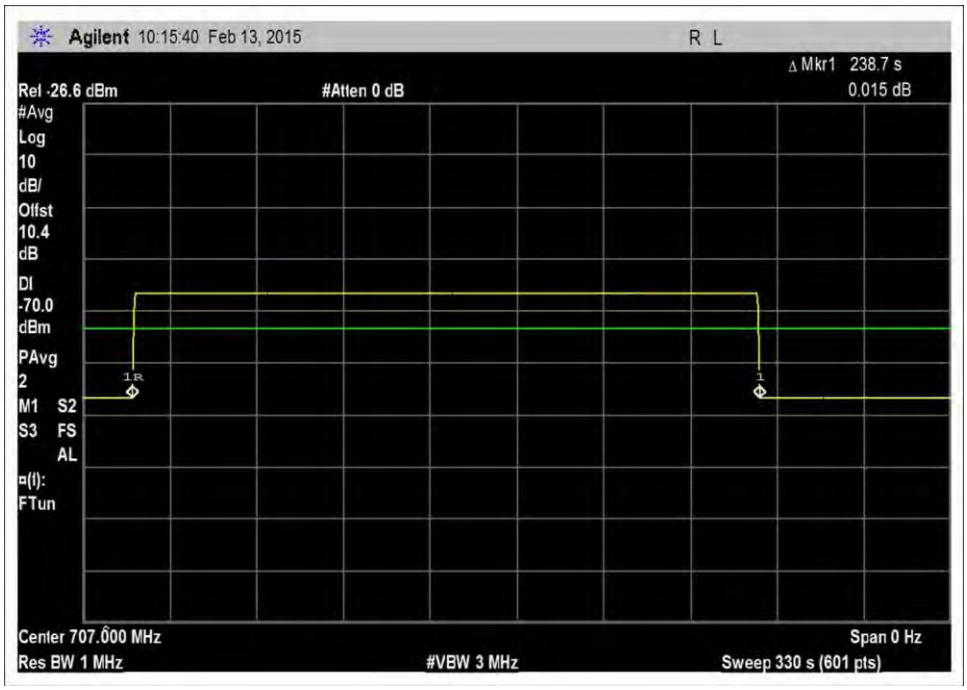
Firmware: V1.0

Summary of Results

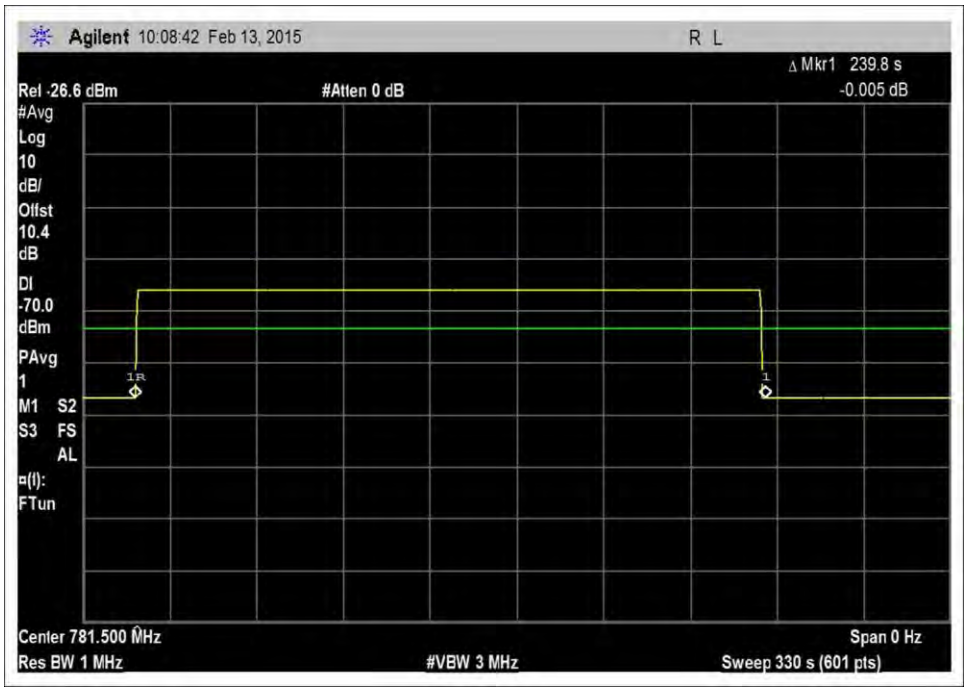
Pass: As demonstrated, when the booster is not serving an active device connection after 5 minutes the uplink noise power does not exceed -70dbm/MHz.

Uplink Inactivity		
Freq	**Measured**	**Limit**
MHz	**Min**	**Min**
UL1710-1755	3.8	5.0
UL1850-1915	3.9	5.0
UL824-894	4.0	5.0
UL 698-716	4.0	5.0
UL776-787	4.0	5.0

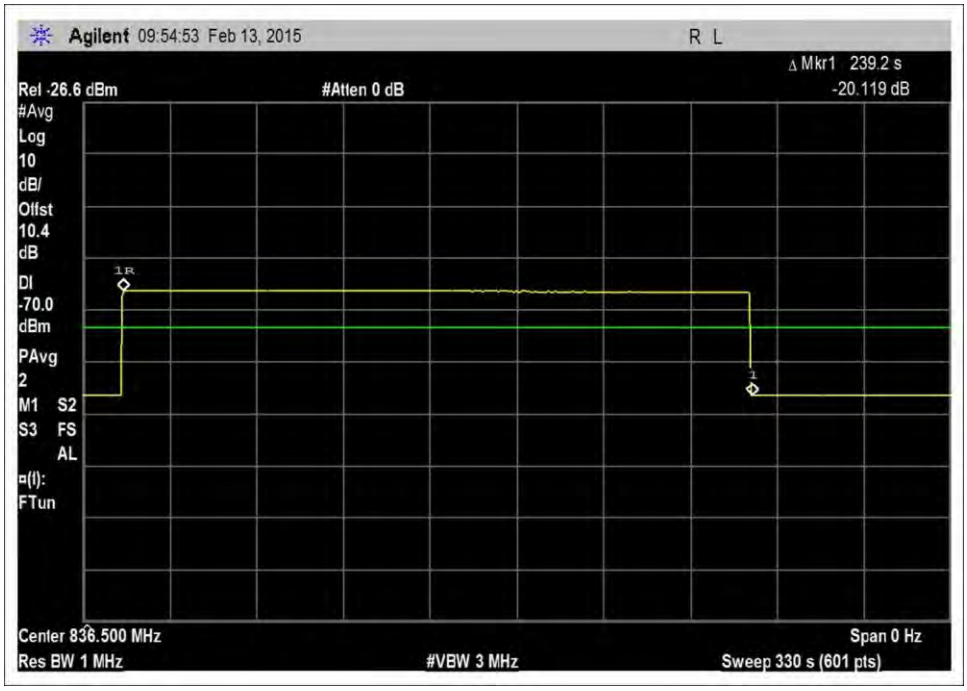
Test Data



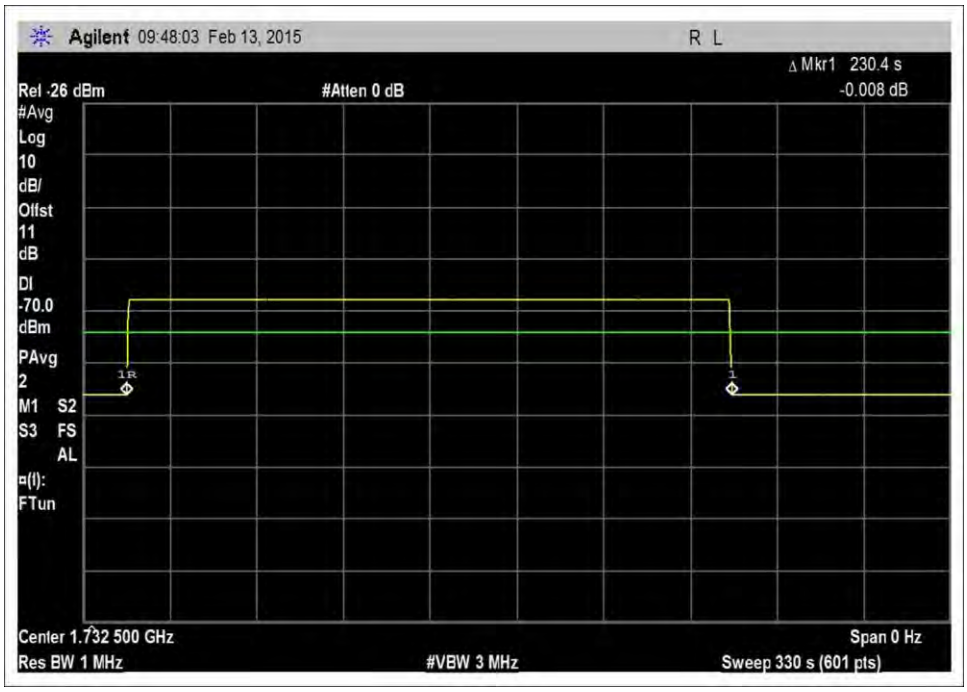
7.8_Inactivity_UL_698-707MHz



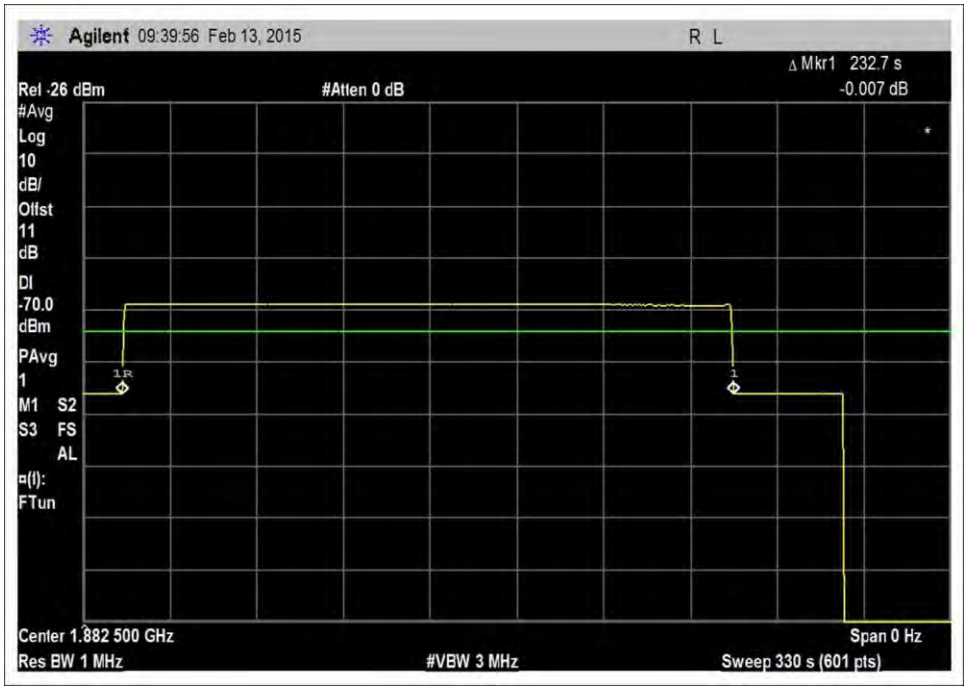
7.8_Inactivity_UL_776-787MHz



7.8_Inactivity_UL_824-849MHz



7.8_Inactivity_UL_1710-1755MHz



7.8_Inactivity_UL_1850-1915MHz

Clause 7.9 Variable Booster Gain

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Cellphone-Mate, Inc.**
Specification: **7.9 Variable Booster gain**
Variable Uplink Gain Timing
Work Order #: **96696** Date: 2/16/2015
Test Type: **Conducted Emissions** Time: 16:41:22
Equipment: **Mobile Wideband Consumer Booster** Sequence#: 1
Manufacturer: Cellphone-Mate, Inc. Tested By: Daniel Bertran
Model: Fusion 5S Mobile 120V 60Hz
S/N: NA

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN03430	Attenuator	75A-10-12	9/5/2013	9/5/2015
	ANP06709	Cable	32026-29094K-29094K-72TC	9/18/2014	9/18/2016
	AN03470	Spectrum Analyzer	E4440A	12/2/2013	12/2/2015

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Mobile Wideband Consumer Booster*	Cellphone-Mate, Inc.	Fusion 5S Mobile	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Switching Power Adapter	SureCall	GFP451DA-1238-1	NA
Signal Generator	Agilent	E4433B	US40052164
Signal Generator	Agilent	E4438C	MY42082260

Test Conditions / Notes:

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

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

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

Test environment conditions: 25°C, 40% Relative Humidity,101.5kPa

Test procedure:
The test was performed in accordance with section 7.9 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014.

Firmware: V1.0

Used lowest MSCL values from the list of authorized antennas provided by the manufacturer.

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.*

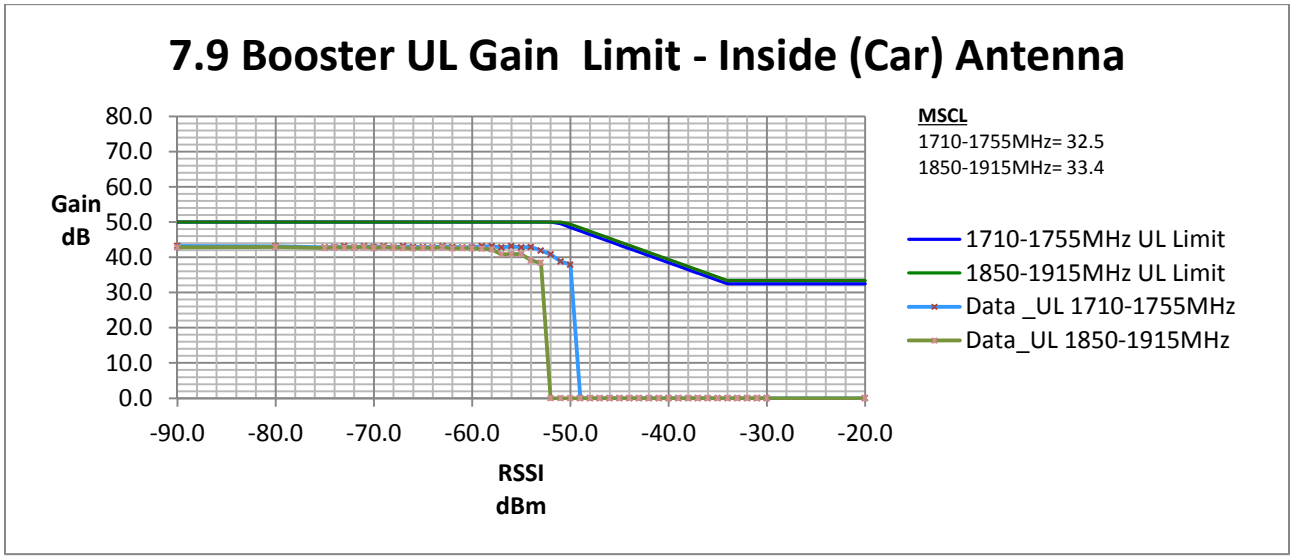
Lowest MSCL values are used from the list of authorized antennas provided by the manufacturer, MSCL as follows.

L P = 20logf + 20logd – 27.5
where:
L P = basic free space path loss,
f = Center frequency,
d = 0.3

Frequency	MSCL
PCS(1850-1910)	33.4
Cellular(824-849)	28.1
LTE(698-716)	26.5
LTE(776-787)	27.4
AWS(1710-1755)	32.5

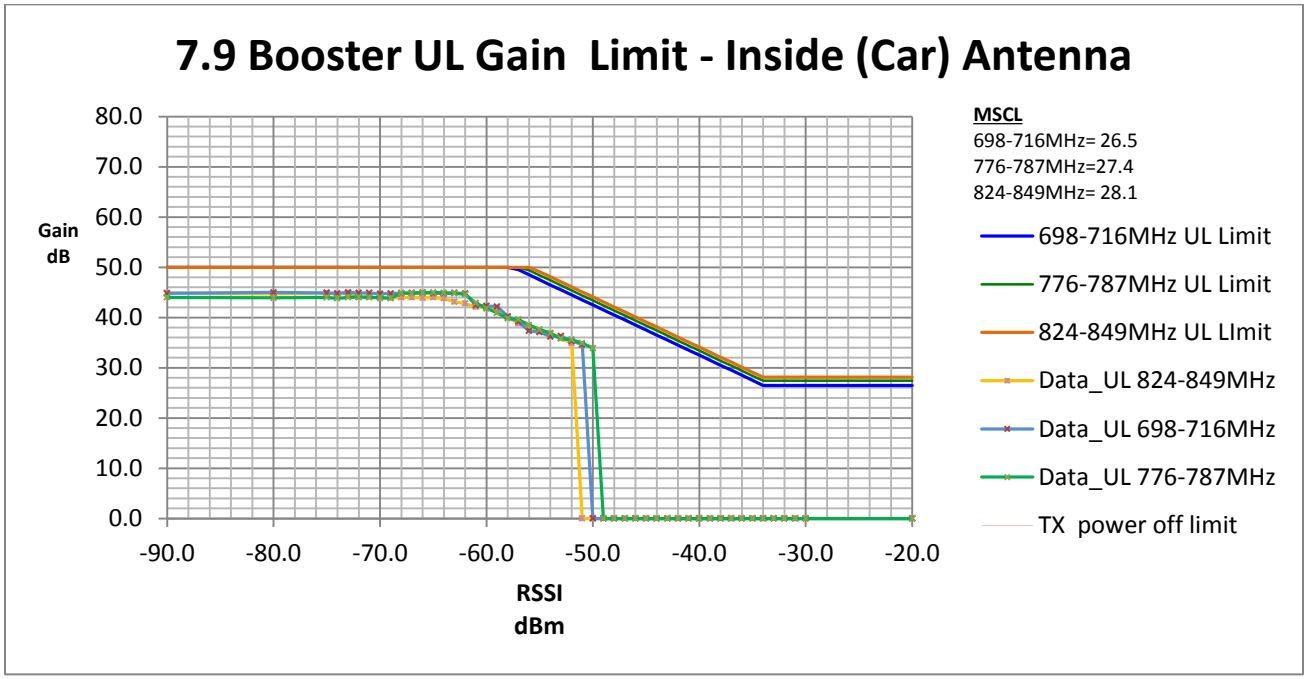
Summary of Results

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 (dBm)	RSSI Dependent	Mobile Booster Limit	TX off	
-80.0	-33.0	9.9	42.9		50.0		-7.1
-71.0	-33.0	9.9	42.9		50.0		-7.1
-35.0	-33.0	-36.4	0.0	34.4			-34.4
-36.0	-33.0	-36.4	0.0	35.4			-35.4
-37.0	-33.0	-36.4	0.0	36.4			-36.4
-38.0	-33.0	-36.4	0.0	37.4			-37.4

1710.0				1755.0 MHz			
				Limit			Margin
RSSI (dBm)	Input (dBm)	Measured Output (dBm)	Measured Gain (dBm)	RSSI Dependent	Mobile Booster Limit	TX off	
-90.0	-33.0	10.2	43.2		50.0		-6.8
-73.0	-33.0	10.1	43.1		50.0		-6.9
-50.0	-33.0	4.9	37.9	48.5			-10.6
-51.0	-33.0	5.8	38.8	49.5			-10.7
-35.0	-33.0	-36.4	0.0	33.5			-33.5
-36.0	-33.0	-36.4	0.0	34.5			-34.5



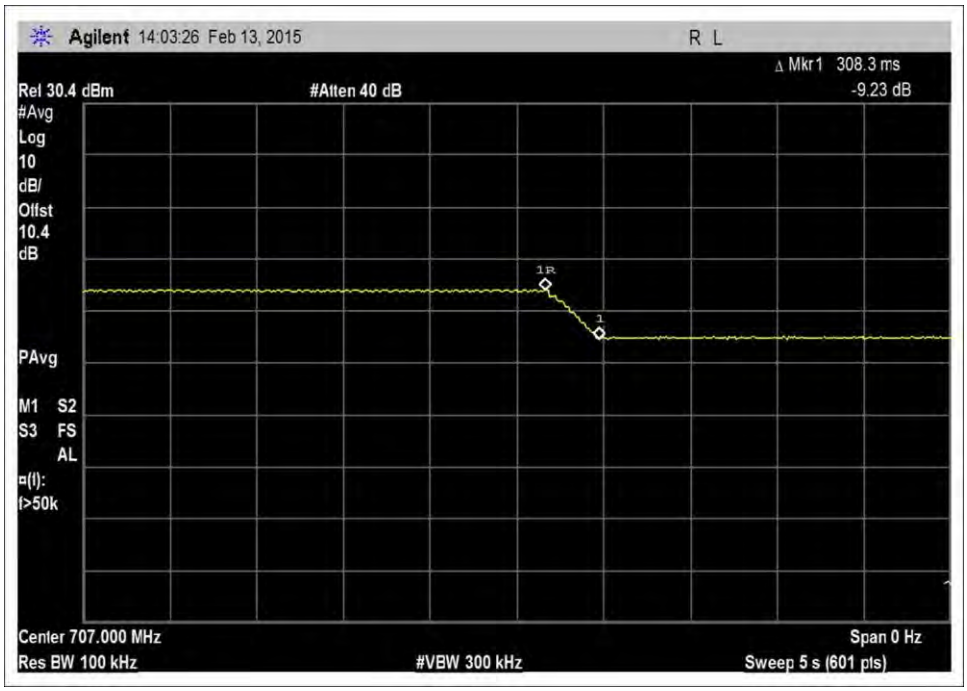
824.0				849.0 MHz			
				Limit			Margin
RSSI (dBm)	Input (dBm)	Measured Output (dBm)	Measured Gain (dBm)	RSSI Dependent	Mobile Booster Limit	TX off	
-90.0	-33.0	11.9	44.9		50.0		-5.1
-73.0	-33.0	11.9	44.9		50.0		-5.1
-53.0	-33.0	2.9	35.9	47.1			-11.2
-52.0	-33.0	1.9	34.9	46.1			-11.2
-54.0	-33.0	3.8	36.8	48.1			-11.3
-55.0	-33.0	4.2	37.2	49.1			-11.9

698.0				716.0 MHz			
				Limit			Margin
RSSI (dBm)	Input (dBm)	Measured Output (dBm)	Measured Gain (dBm)	RSSI Dependent	Mobile Booster Limit	TX off	
-73.0	-32.0	13.0	45.0		50.0		-5.0
-66.0	-32.0	13.0	45.0		50.0		-5.0
-51.0	-32.0	2.6	34.6	43.5			-8.9
-53.0	-32.0	4.3	36.3	45.5			-9.2
-52.0	-32.0	3.3	35.3	44.5			-9.2
-57.0	-32.0	7.2	39.2	49.5			-10.3

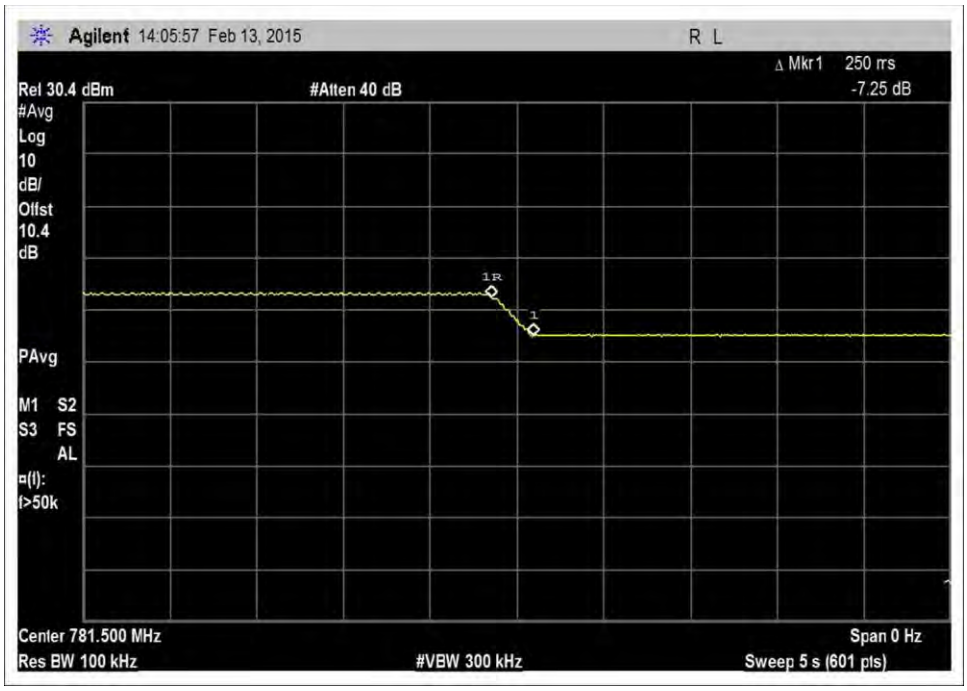
776.0			787.0 MHz				
				Limit			Margin
RSSI (dBm)	Input (dBm)	Measured Output (dBm)	Measured Gain (dBm)	RSSI Dependent	Mobile Booster Limit	TX off	
-65.0	-32.0	13.0	45.0		50.0		-5.0
-68.0	-32.0	12.9	44.9		50.0		-5.1
-51.0	-32.0	2.9	34.9	44.4			-9.5
-50.0	-32.0	1.9	33.9	43.4			-9.5
-52.0	-32.0	3.6	35.6	45.4			-9.8
-54.0	-32.0	4.9	36.9	47.4			-10.5

Uplink Gain Timing		
Freq MHz	Measured Sec	Limit sec
UL1710-1755	0.26	1
UL1850-1915	0.30	1
UL824-894	0.31	1
UL 698-716	0.31	1
UL776-787	0.25	1

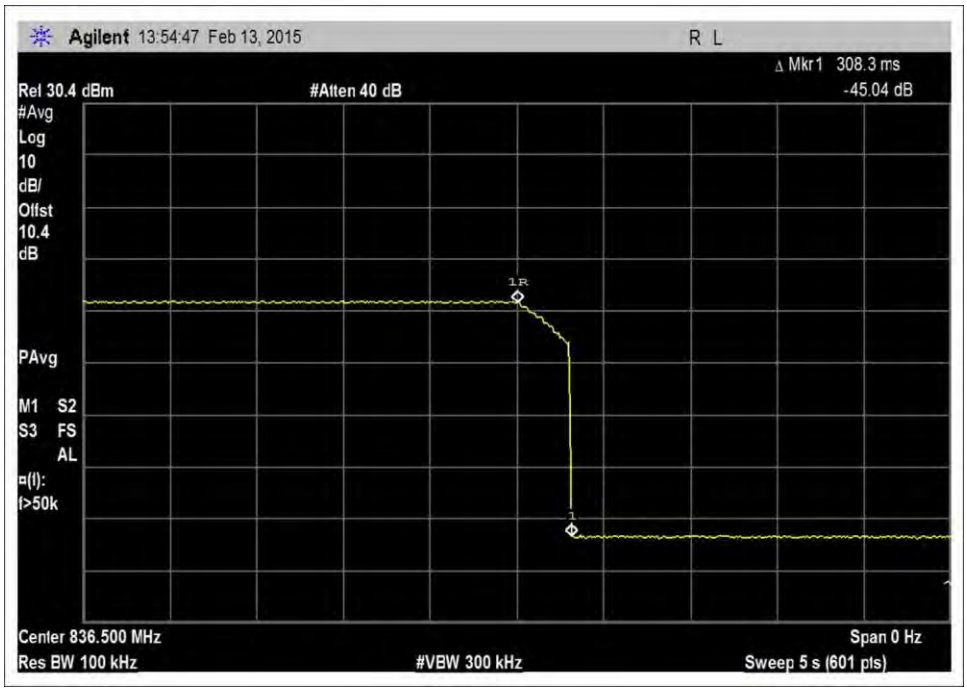
Test Data



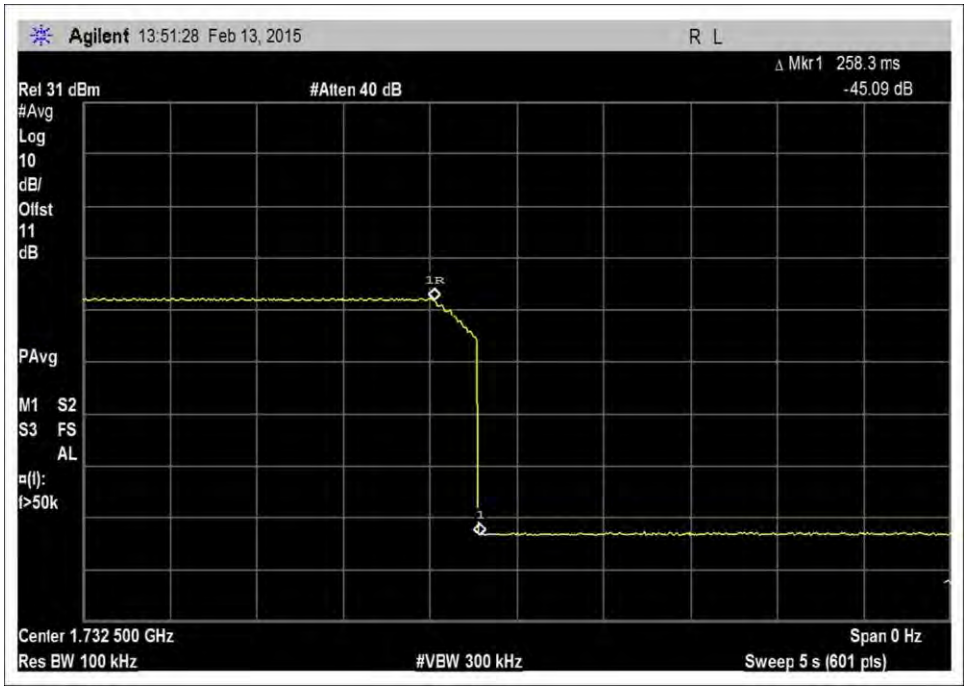
7.9_VarULGainTiming_UL_698-716MHz



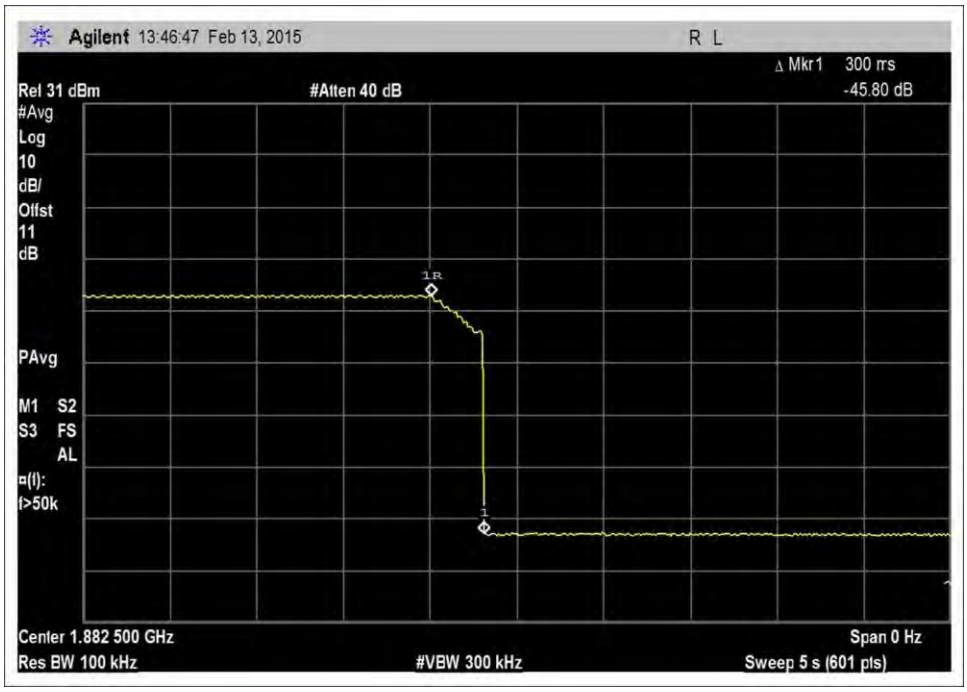
7.9_VarULGainTiming_UL_776-787MHz



7.9_VarULGainTiming_UL_824-849MHz



7.9_VarULGainTiming_UL_1710-1755MHz



7.9_VarULGainTiming_UL_1850-1915MHz

Clause 7.11 Anti-Oscillation

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Cellphone-Mate, Inc.**
Specification: **7.11 Anti-Oscillation test**
Work Order #: **96696** Date: 2/16/2015
Test Type: **Conducted Emissions** Time: 16:41:22
Equipment: **Mobile Wideband Consumer Booster** Sequence#: 1
Manufacturer: Cellphone-Mate, Inc. Tested By: Daniel Bertran
Model: Fusion 5S Mobile 120V 60Hz
S/N: NA

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN03430	Attenuator	75A-10-12	9/5/2013	9/5/2015
	ANP06709	Cable	32026-29094K-29094K-72TC	9/18/2014	9/18/2016
	AN03470	Spectrum Analyzer	E4440A	12/2/2013	12/2/2015
	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	01/06/201
	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
Mobile Wideband Consumer Booster*	Cellphone-Mate, Inc.	Fusion 5S Mobile	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Switching Power Adapter	SureCall	GFP451DA-1238-1	NA
Signal Generator	Agilent	E4433B	US40052164
Signal Generator	Agilent	E4438C	MY42082260

Test Conditions / Notes:

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

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

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

Test environment conditions: 25°C, 40% Relative Humidity,101.5kPa

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

Firmware: V1.0

Summary of Results

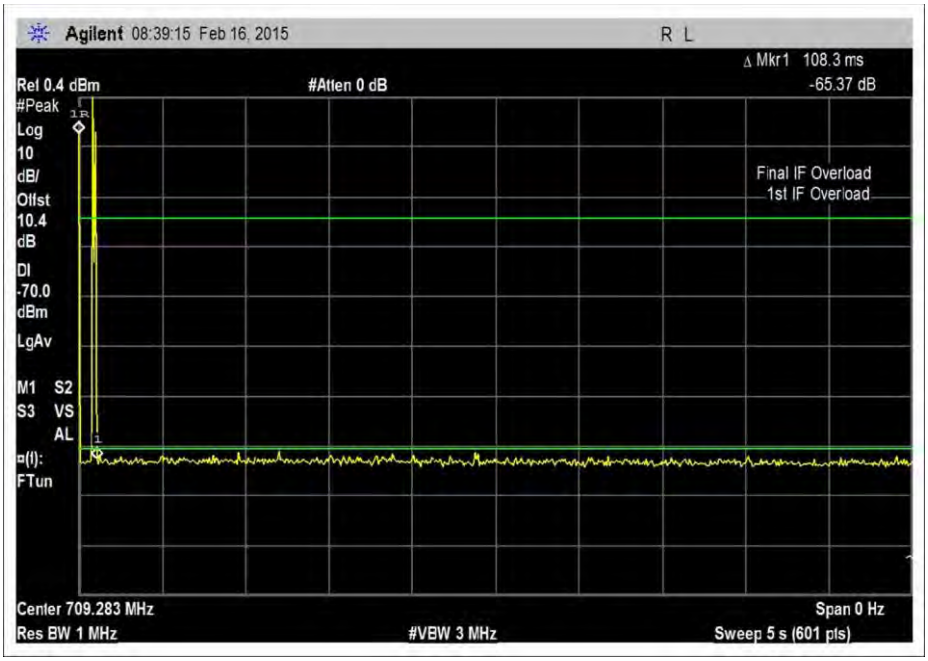
Pass: All oscillations detection and mitigations occur within 0.3 seconds in uplink bands, within 1 second in the downlink bands and the noise level is below the -70dBm/MHz limit.

The booster continues to mitigation at least 1 minute before restarting. The plots demonstrate after 3 restarts (the limit is 5 restart), the booster does not resume operation until manually.

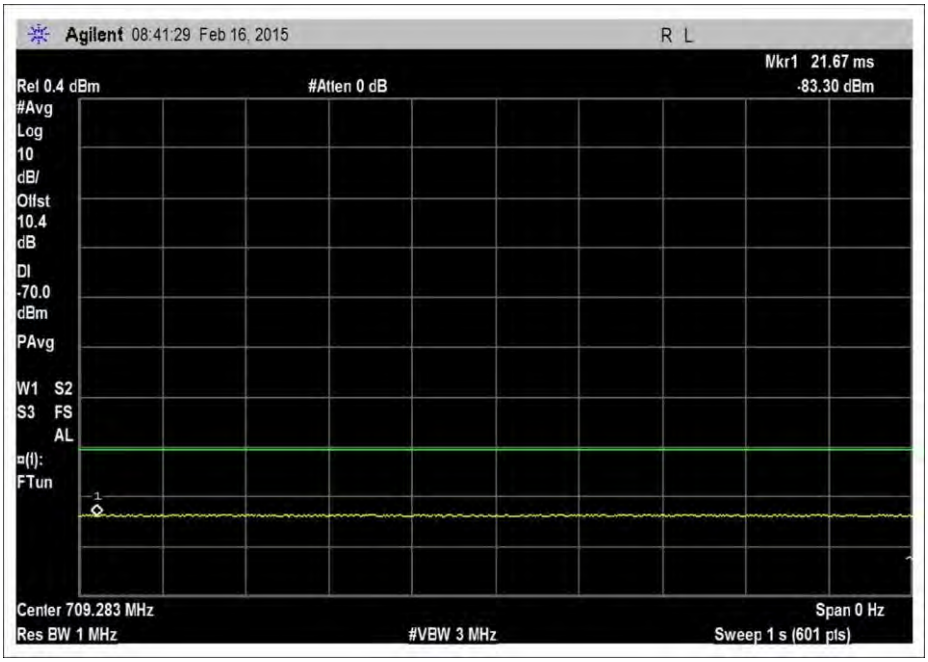
Oscillation detection			Time Between restart		Number of restart	
Freq	**Measured**	**Limit**	**Measured**	**Limit**	**Measured**	**Limit**
MHz	**Sec**	**Sec**	**Sec**	**At least sec**		
UL						
UL1710-1755	0.13	0.30	68	60	3	5
UL1850-1915	0.18	0.30	69	60	3	5
UL824-894	0.17	0.30	70	60	3	5
UL 698-716	0.11	0.30	67	60	3	5
UL776-787	0.19	0.30	66	60	3	5
DL						
DL2110-2155	0.14	1.00	68	60	3	5
DL1930-1995	0.15	1.00	70	60	3	5
DL869-894	0.14	1.00	69	60	3	5
DL:728-746	0.12	1.00	66	60	3	5
DL 746-757	0.17	1.00	67	60	3	5

Test Data

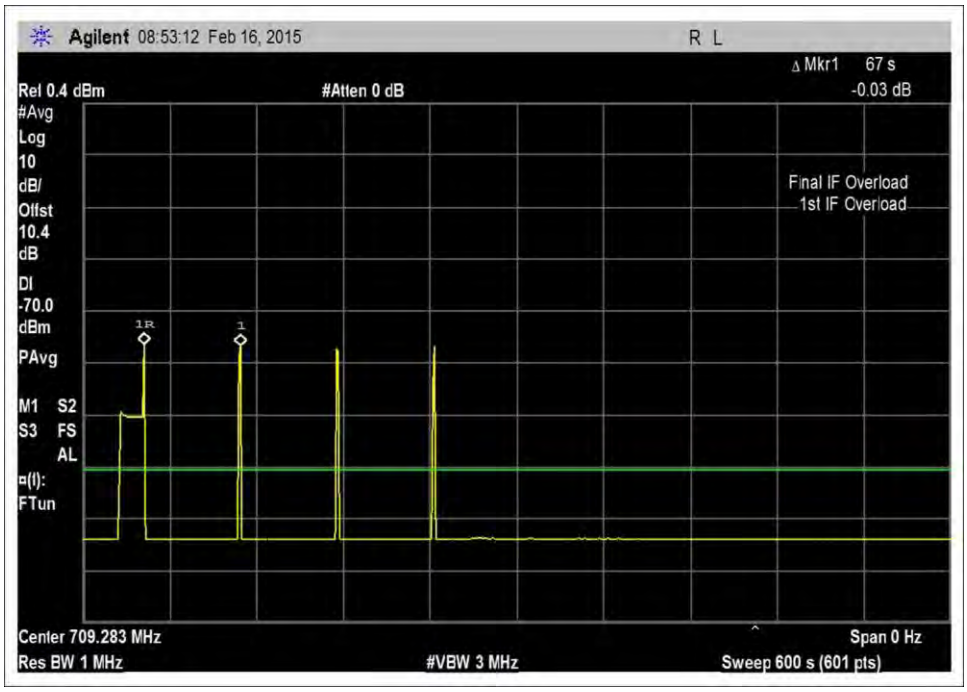
Oscillation Detection, UL



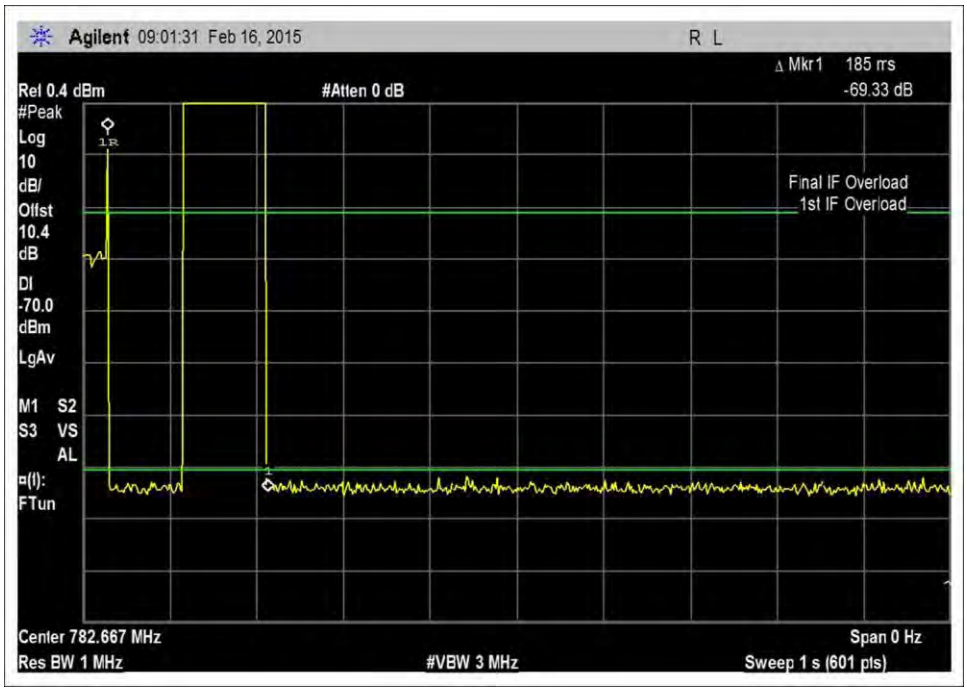
7.11_osc_UL-698-716MHz



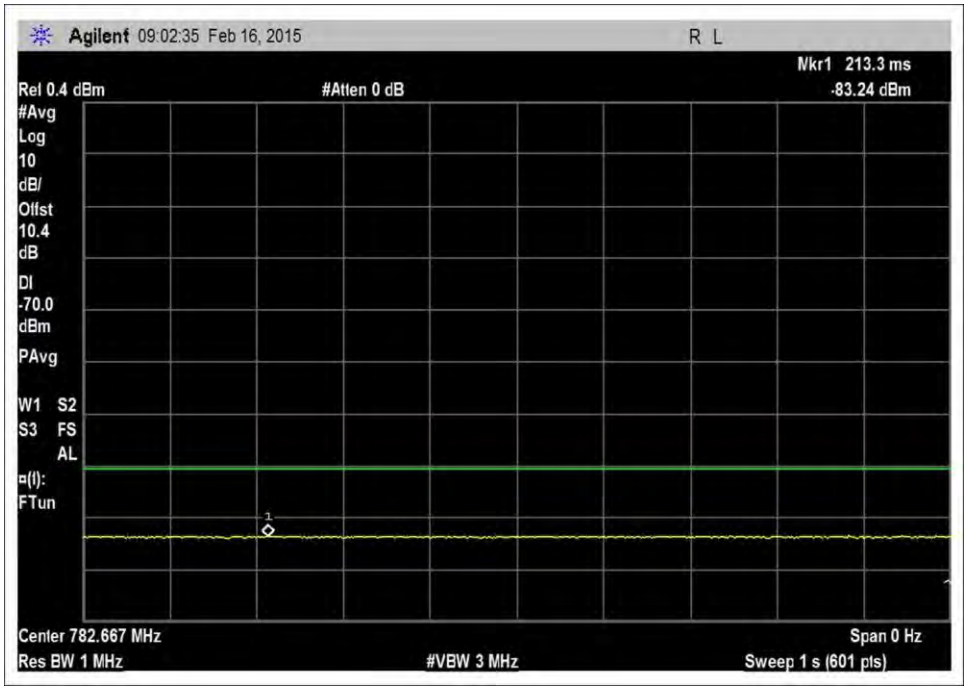
7.11_osc_UL-698-716MHz_-70dBm



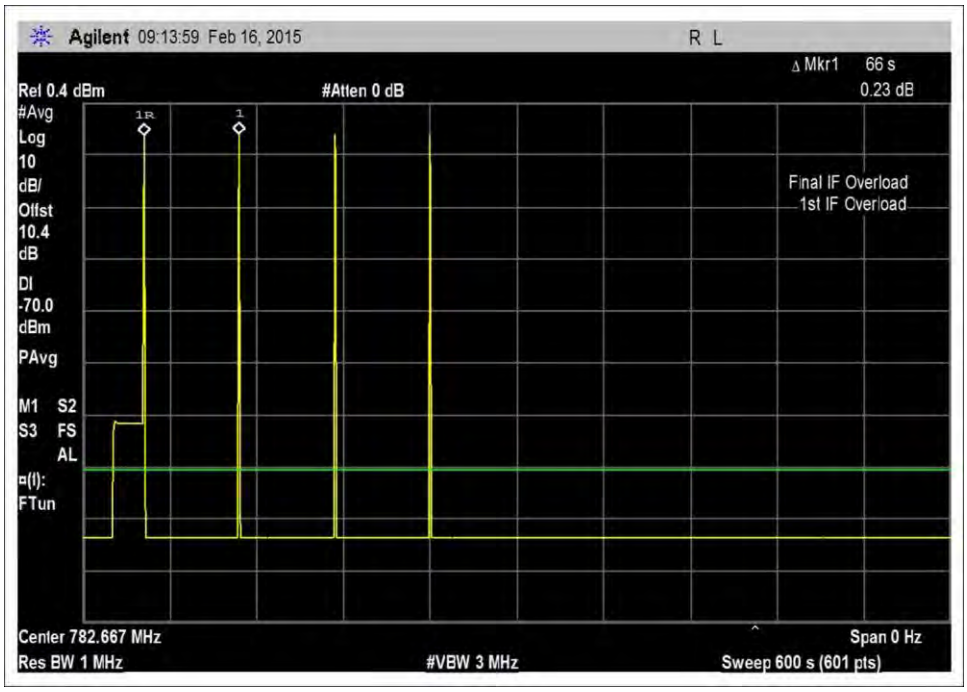
7.11_osc_UL-698-716MHz_600sec



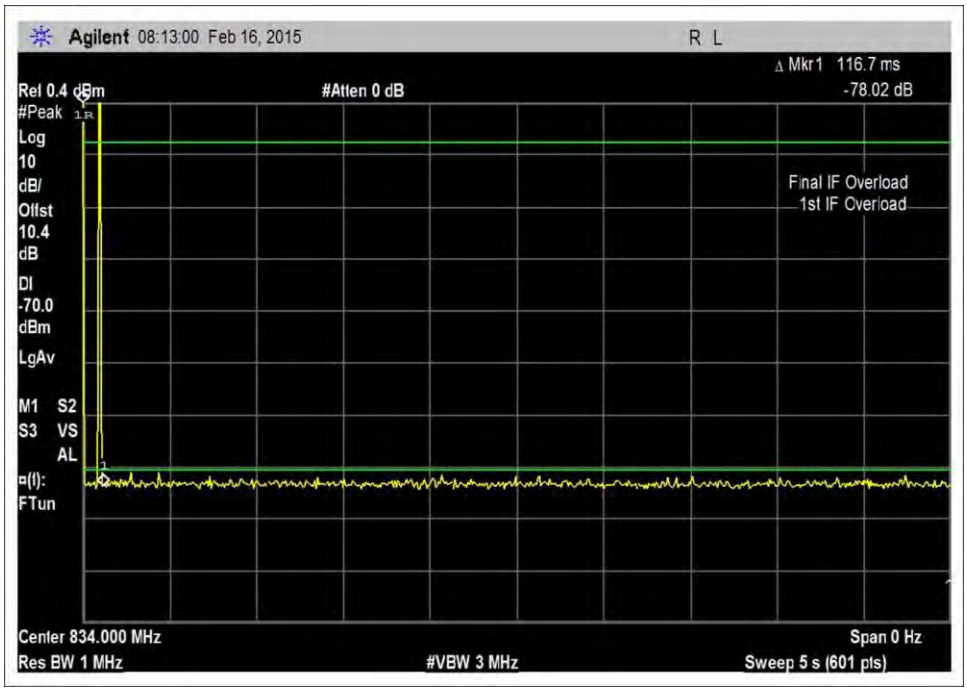
7.11_osc_UL-776-787MHz



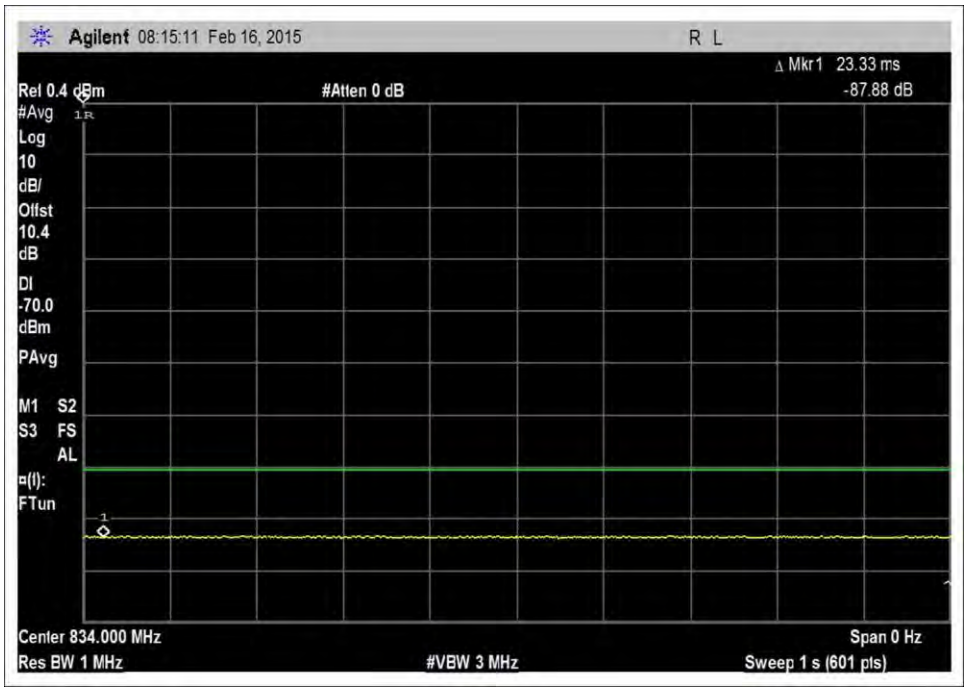
7.11_osc_UL-776-787MHz_-70dBm



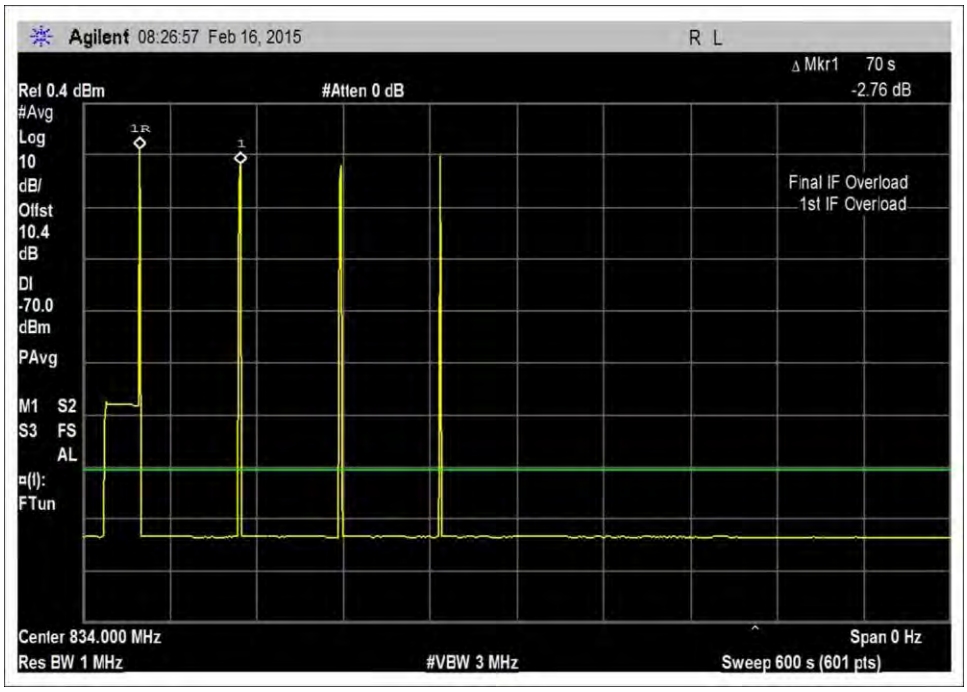
7.11_osc_UL-776-787MHz_600sec



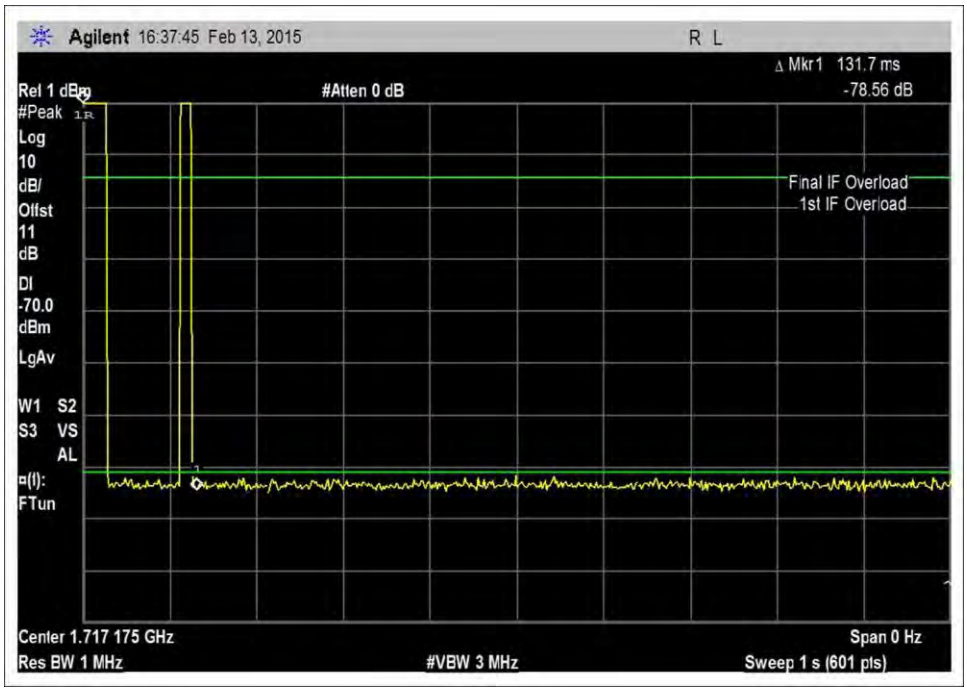
7.11_osc_UL-824-849MHz



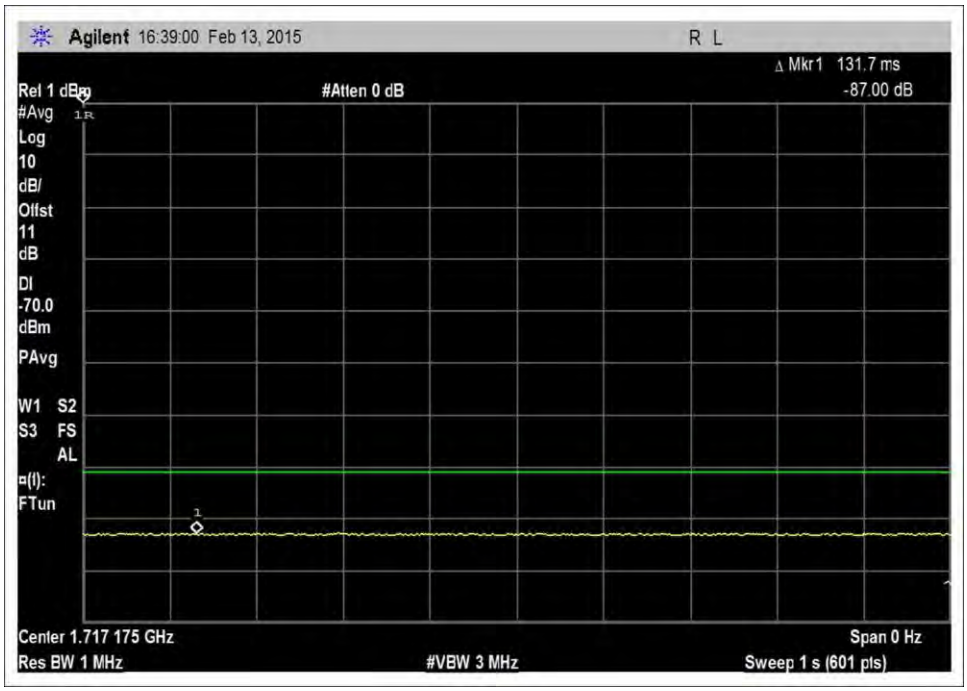
7.11_osc_UL-824-849MHz_-70dBm



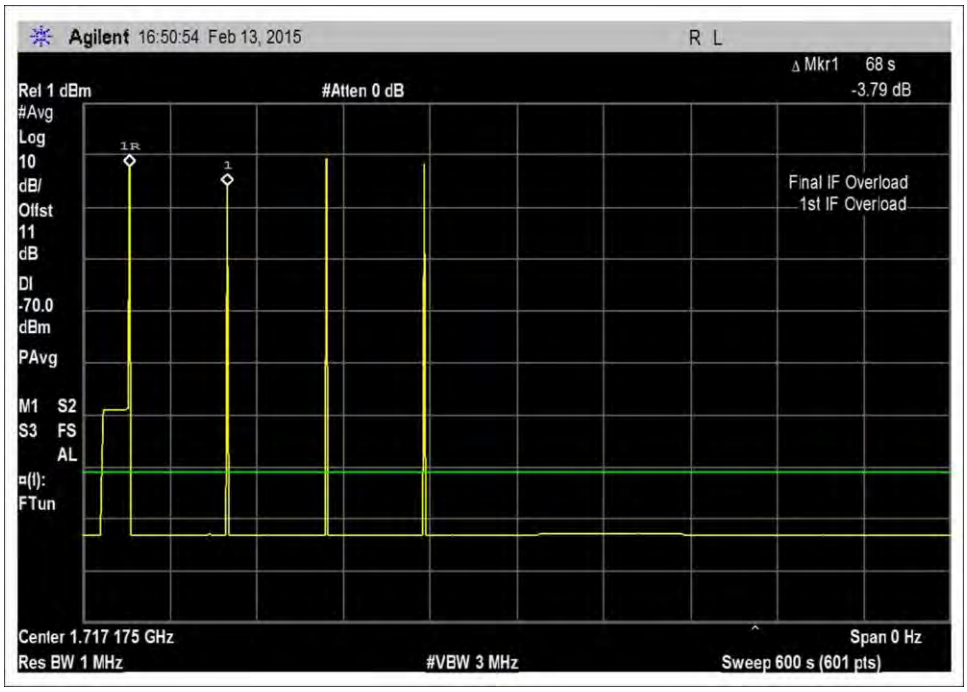
7.11_osc_UL-824-849MHz_600sec



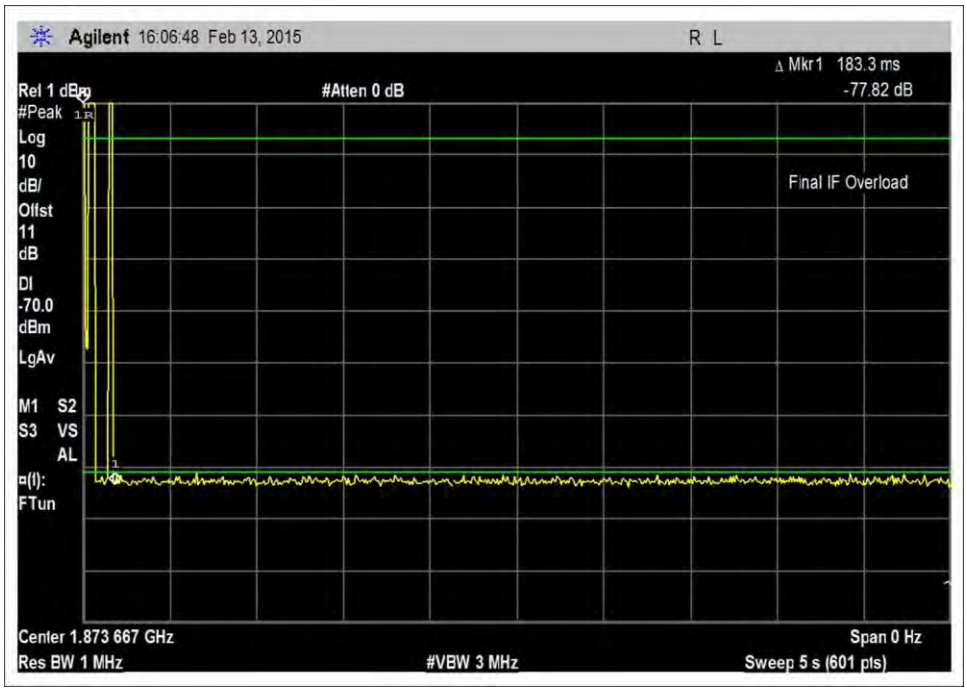
7.11_osc_UL-1710-1755MHz



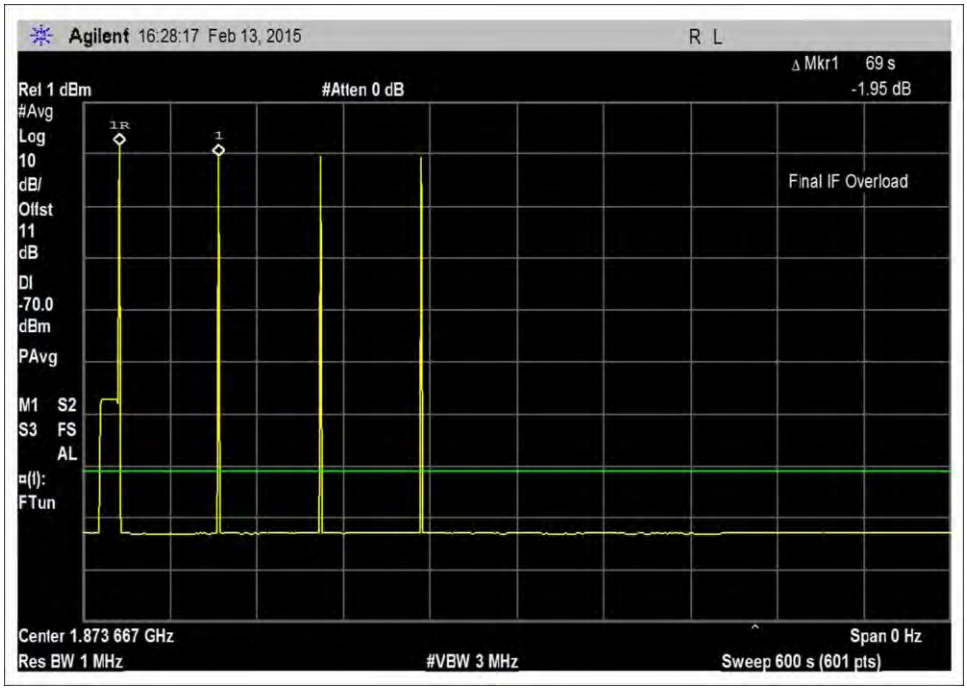
7.11_osc_UL-1710-1755MHz_-70dBm



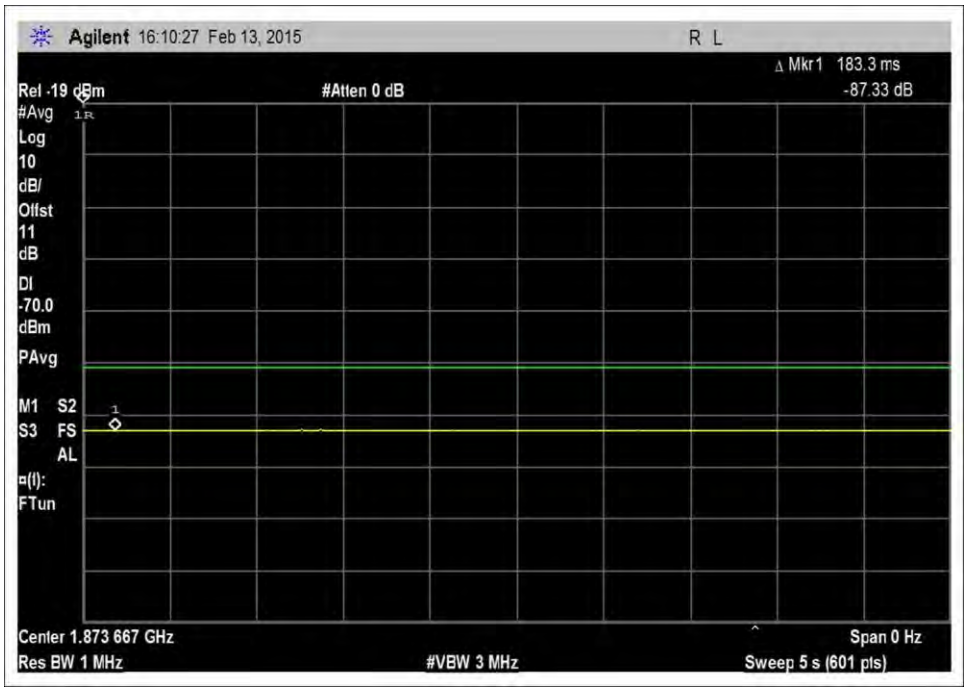
7.11_osc_UL-1710-1755MHz_600sec



7.11_osc_UL-1850-1915MHz

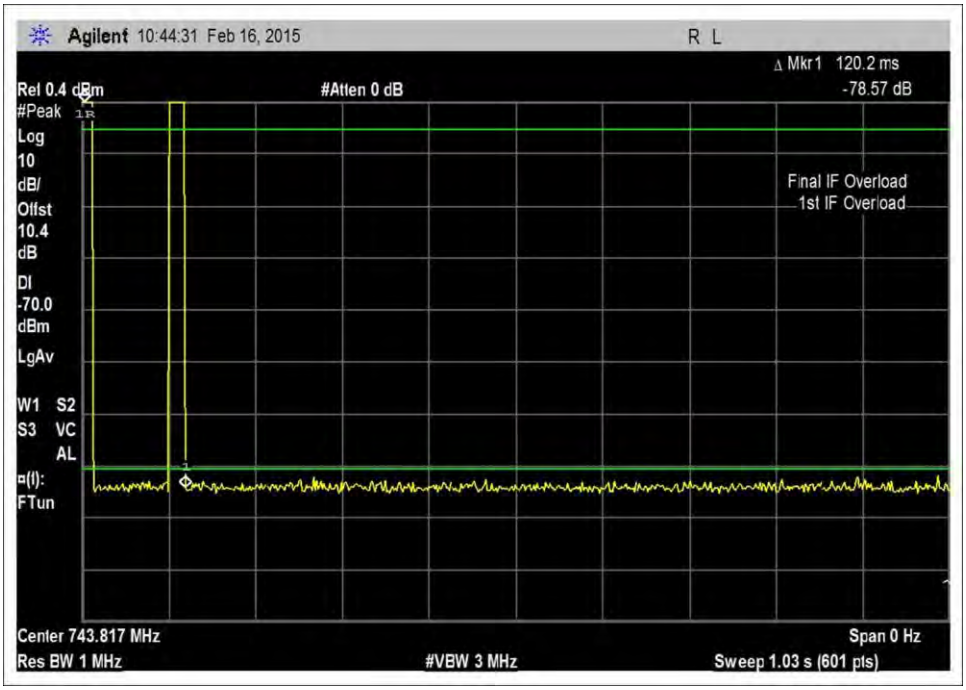


7.11_osc_UL-1850-1915MHz_600sec

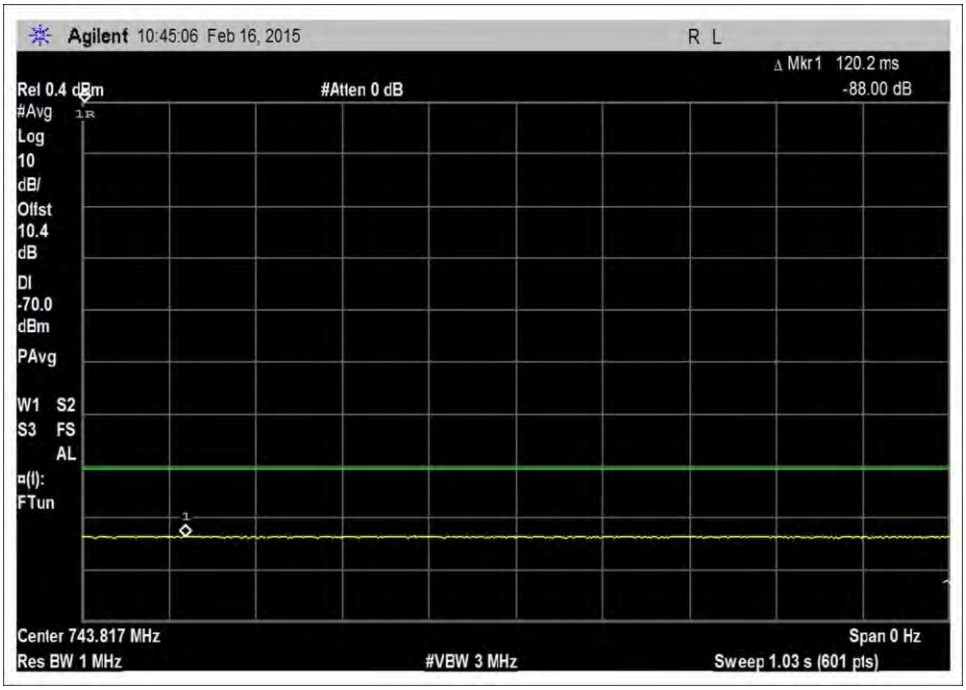


7.11_osc_UL-1850-1915MHz-70dBm

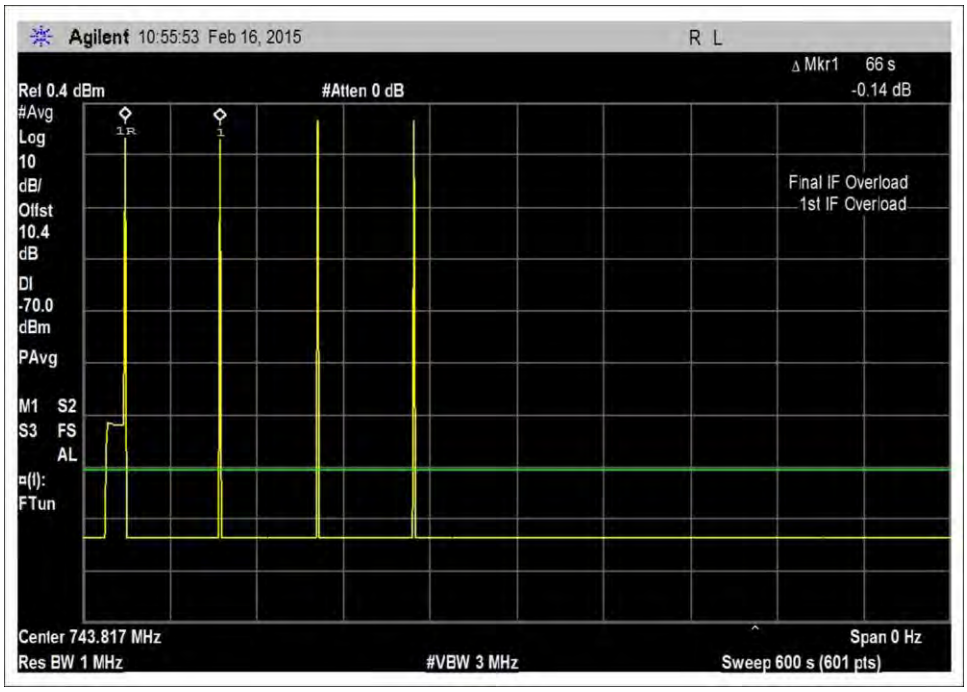
Oscillation Detection, DL



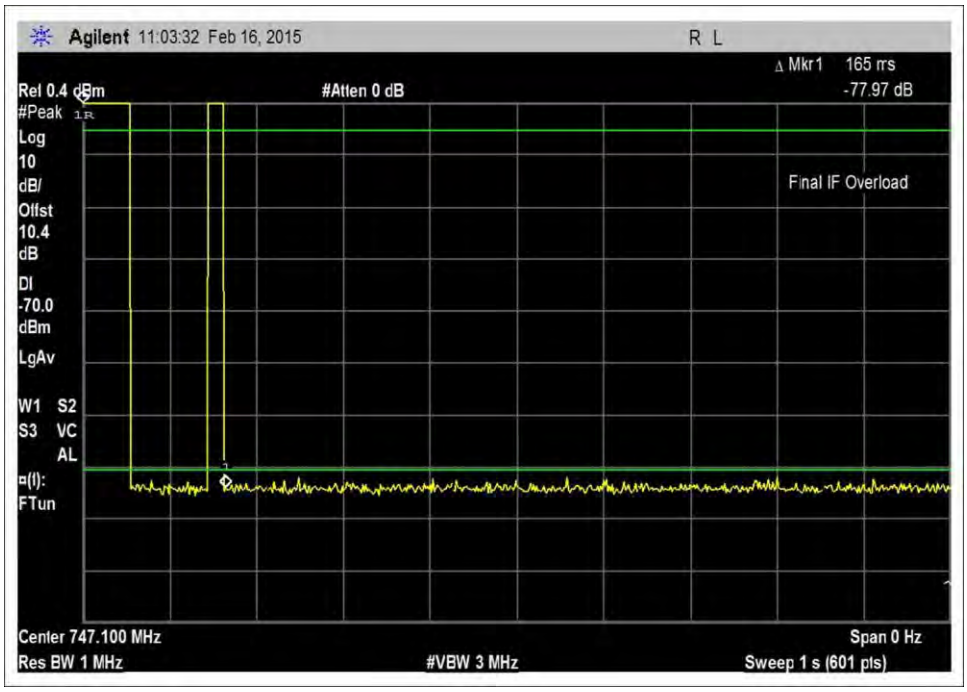
7.11_osc_DL-728-746MHz



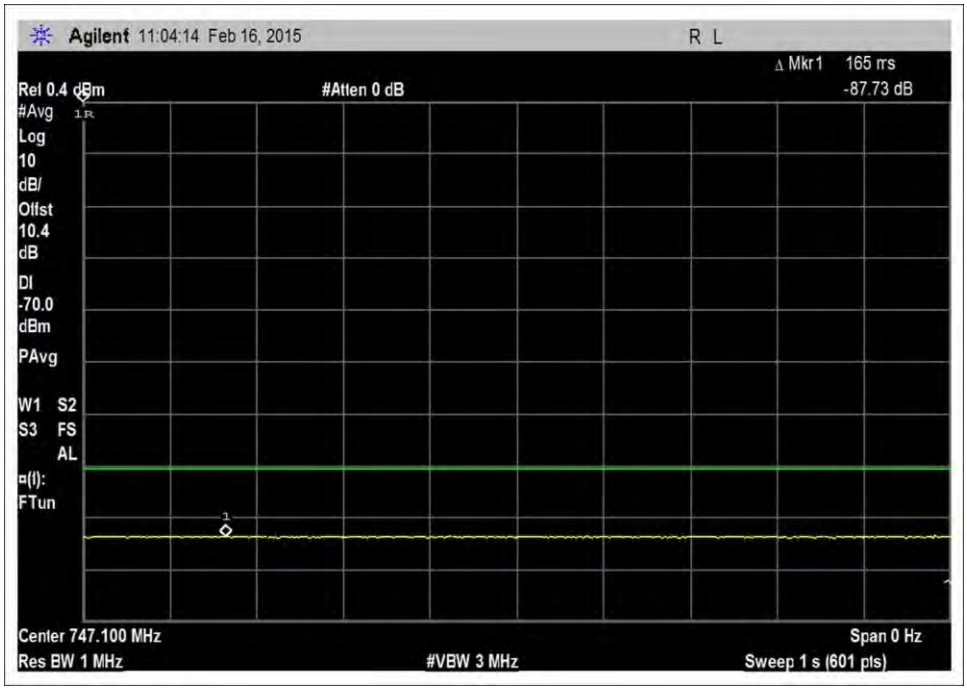
7.11_osc_DL-728-746MHz_-70dBm



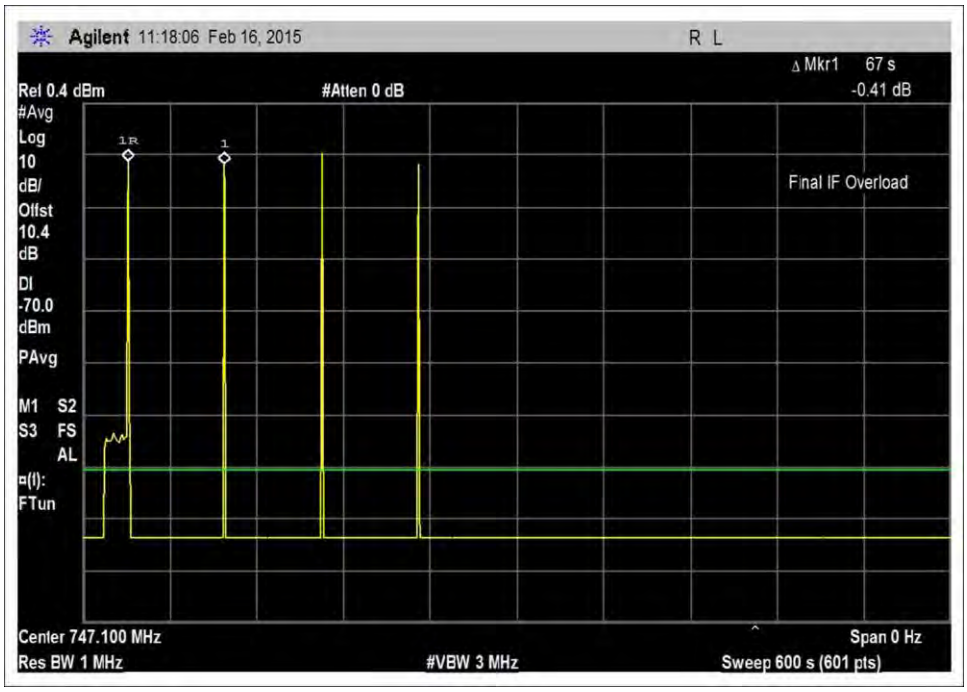
7.11_osc_DL-728-746MHz_600sec



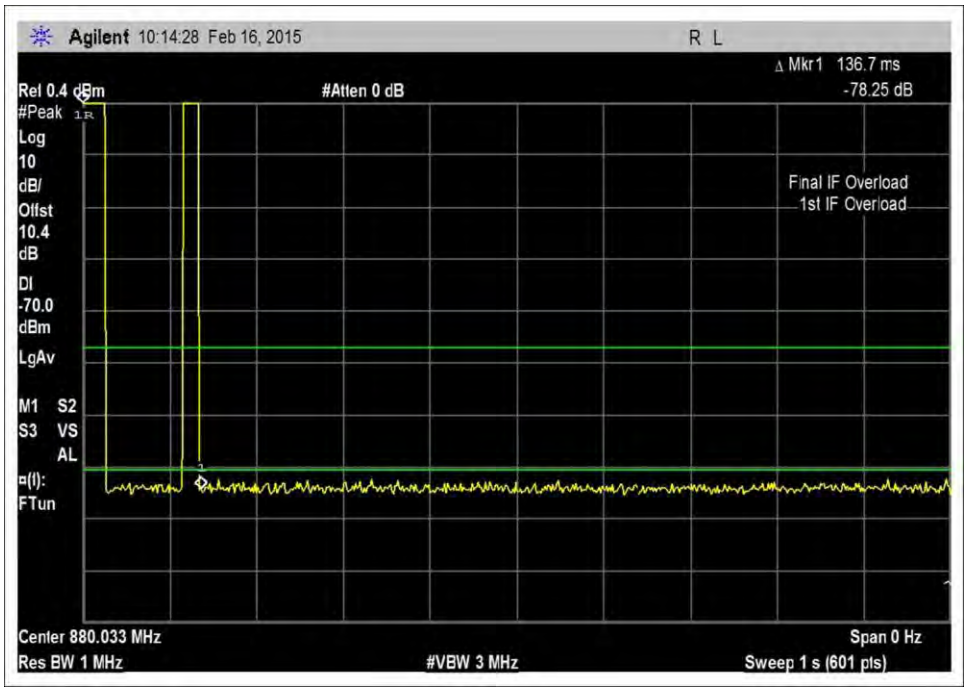
7.11_osc_DL-746-757MHz



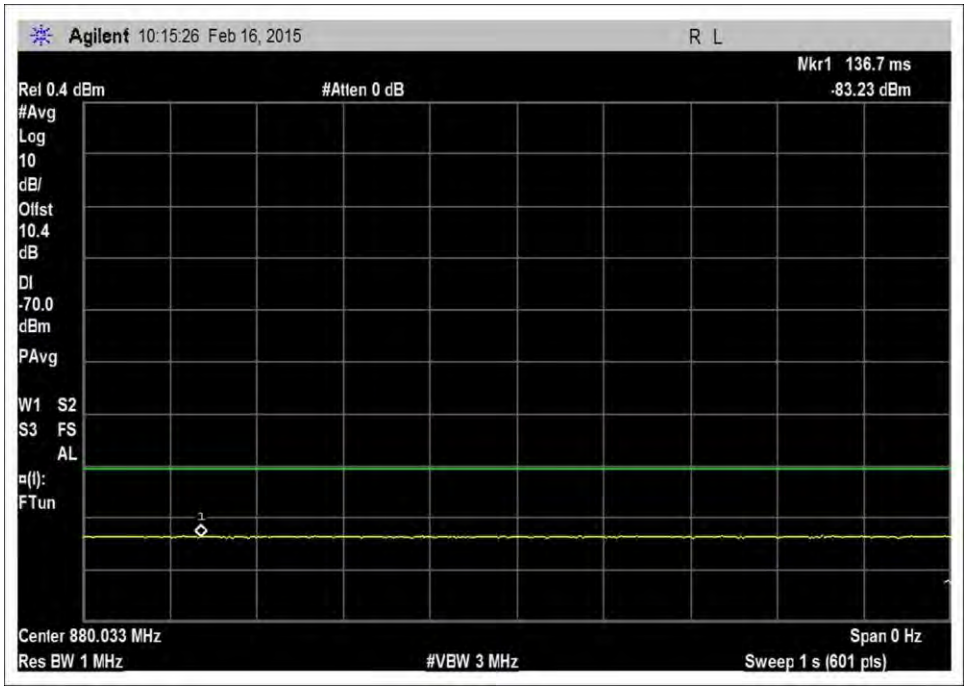
7.11_osc_DL-746-757MHz_-70dBm



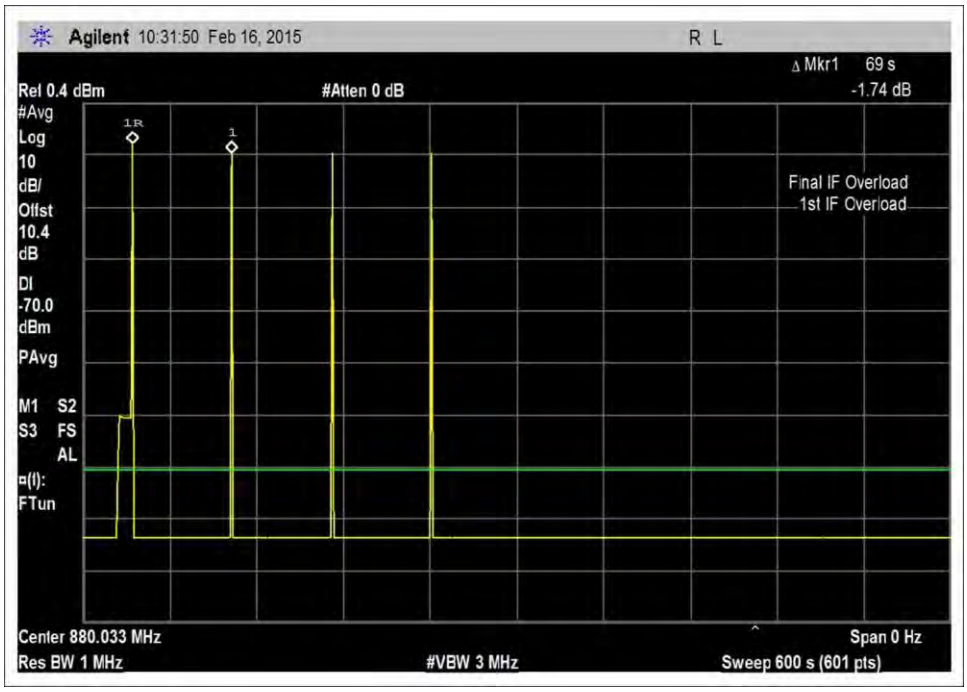
7.11_osc_DL-746-757MHz_600sec



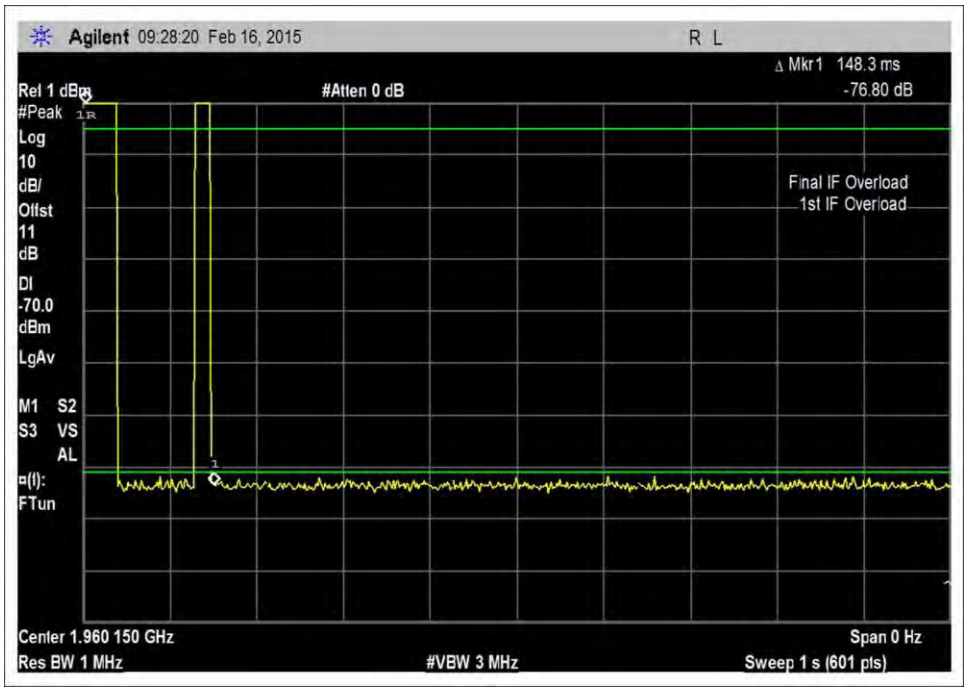
7.11_osc_DL-869-894MHz



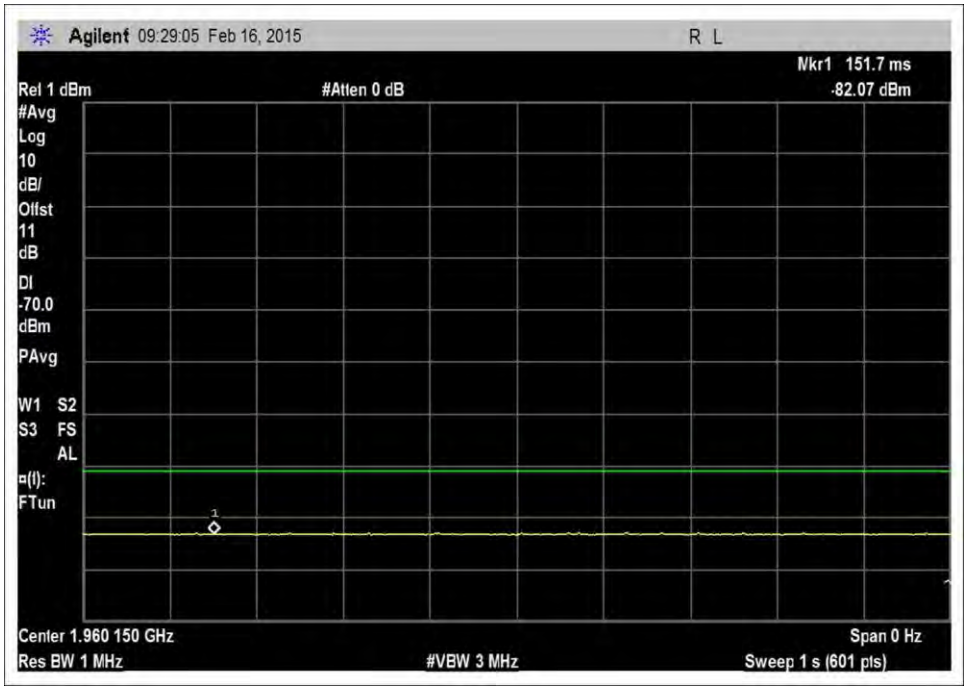
7.11_osc_DL-869-894MHz_-70dBm



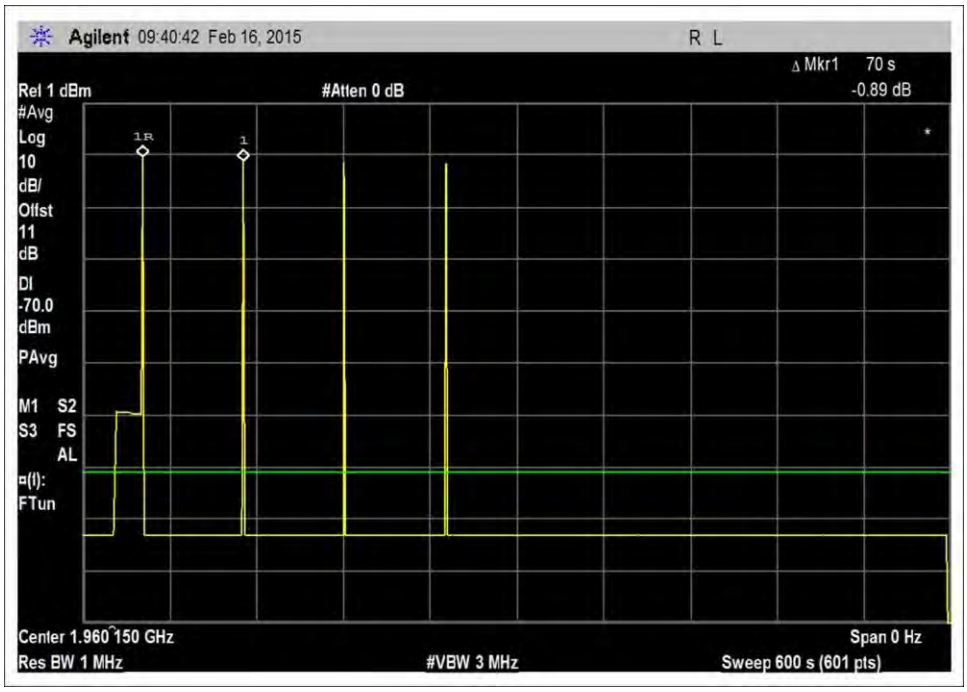
7.11_osc_DL-869-894MHz_-600sec



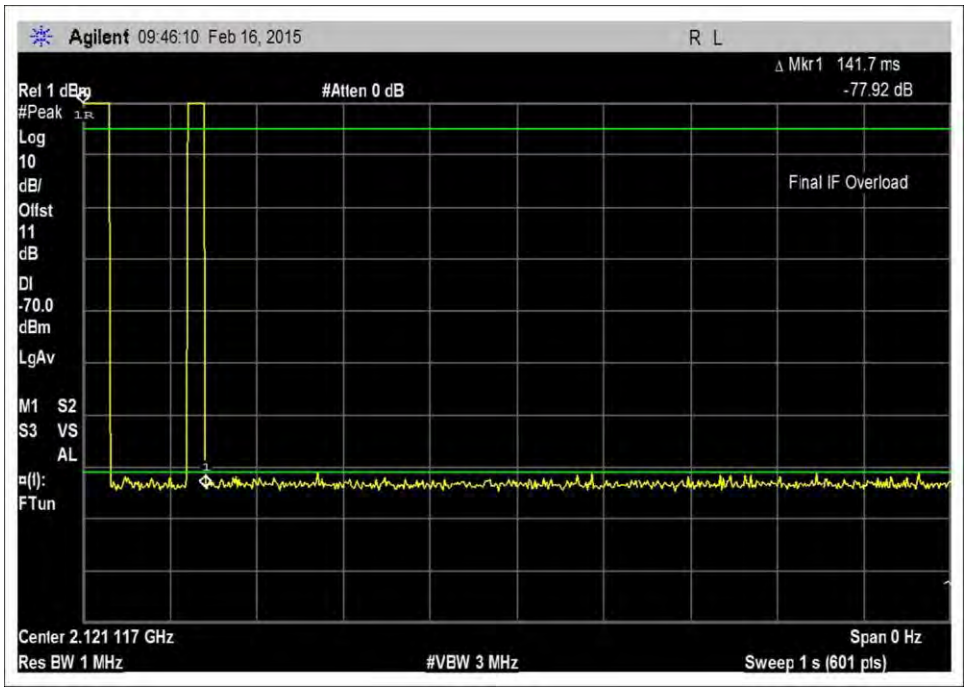
7.11_osc_DL-1930-1995MHz



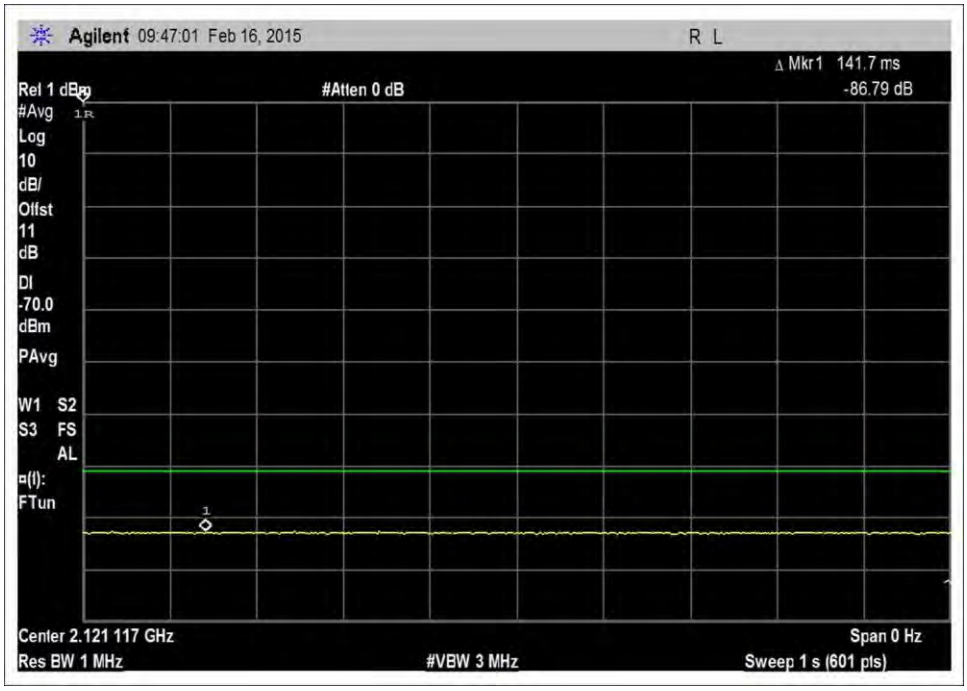
7.11_osc_DL-1930-1995MHz_-70dBm



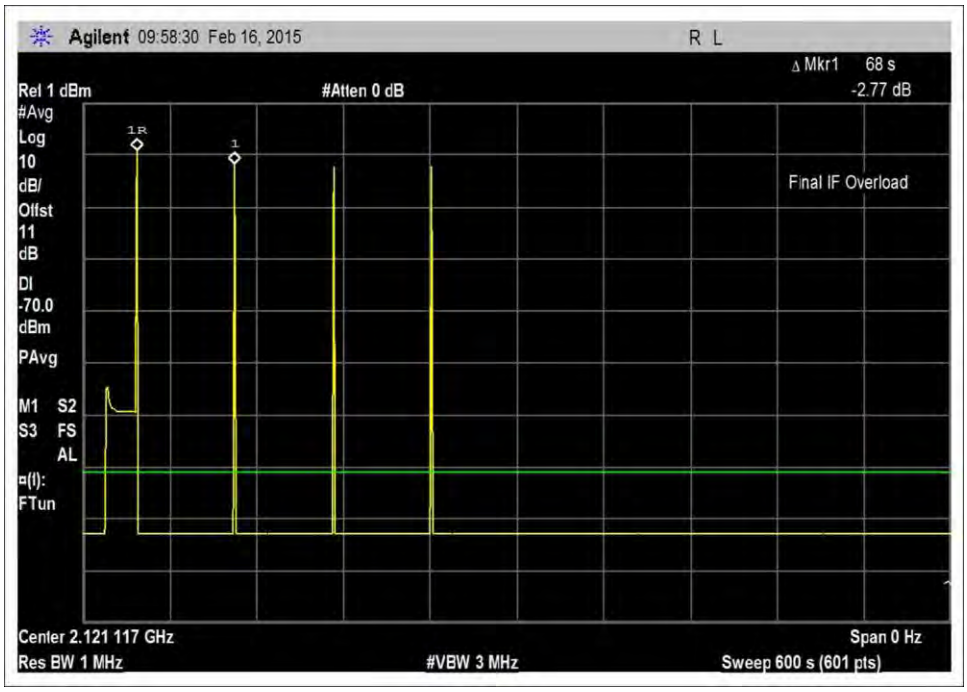
7.11_osc_DL-1930-1995MHz_600sec



7.11_osc_DL-2110-2155MHz



7.11_osc_DL-2110-2155MHz_-70dBm



7.11_osc_DL-2110-2155MHz_600sec

Clause 7.13 Spectrum Block Filter

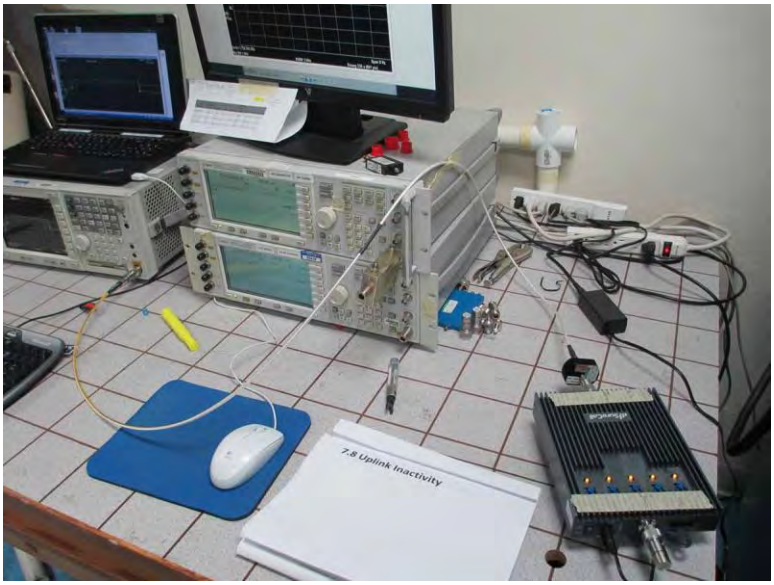
Section 7.13 is not applicable, the booster does not employ spectrum block filter.

APPENDIX A: TEST SETUP PHOTOS

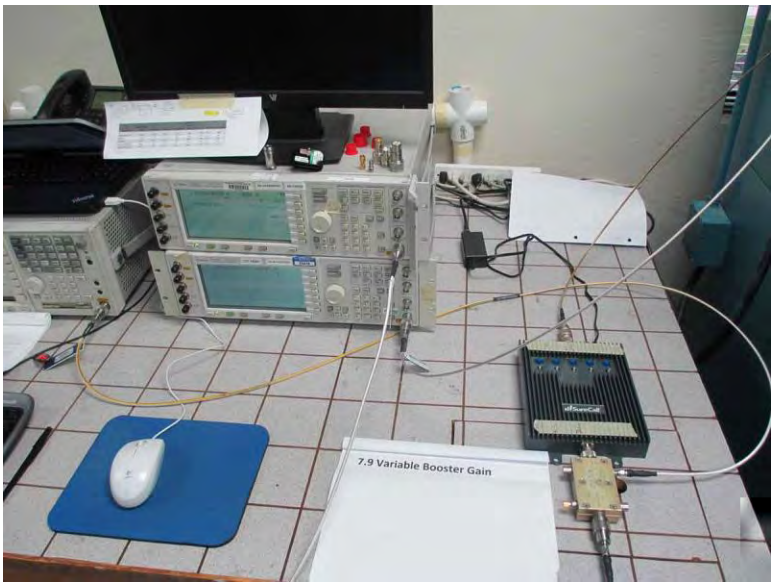
The above set up photo represents test sections 7.1, 7.2, 7.3 and 7.5

The above set up photo represents test section 7.4

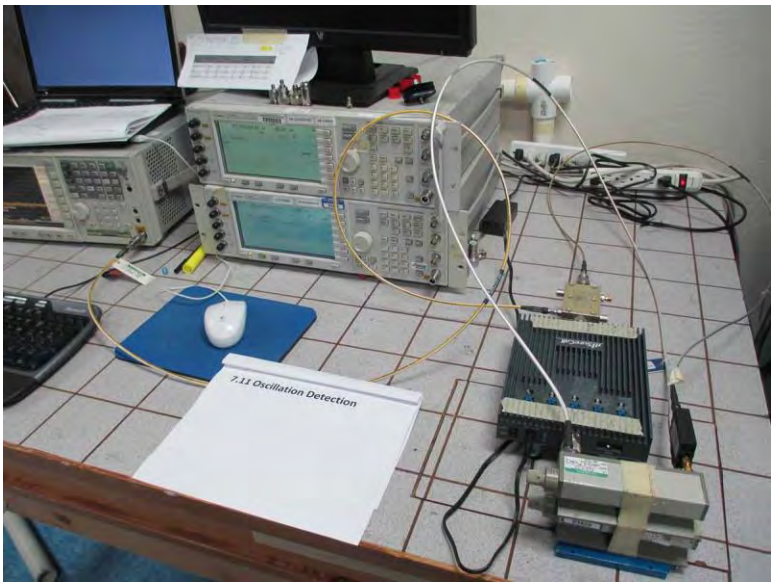
The above set up photo represents test section 7.7



The above set up photo represents test section 7.8



The above set up photo represents test section 7.9



The above set up photo represents test section 7.11

APPENDIX B: CUSTOMER PROVIDED INFORMATION – ANTENNA KITTING INFORMATION

48346 Milmont Dr., Fremont, CA 94538

Antenna Kitting Information

Fusion 5S(50dB)

Vehicle Kit

Component	Prod No. Description	**Gain/Loss**					**Notes**
		LTE-A	LTE-V	800MHz	1900MHz	1700MHz\2100MHz	
Outdoor Antenna	CM200	3dBi	3dBi	3dBi	5dBi	5dBi\5dBi	
Outdoor Cable	CM174-10FT 10Feet	3.8dB	3.8dB	4.3dB	8.8dB	6.98dB\8.96dB	
Indoor Antenna	CM110W	1.1dBi	1.1dBi	1.1dBi	3dBi	3dBi\3dBi	Table Top Antenna
Indoor Cable	CM174-10FT 10Feet	3.8dB	3.8dB	4.3dB	8.8dB	6.98dB\8.96dB	

Marine Kit

Component	**Prod No. Description**	**Gain/Loss**					**Notes**
		LTE-A	LTE-V	800MHz	1900MHz	1700MHz\2100MHz	
Outdoor Antenna	CM288W or Galaxy 5412-P	3dBi	3dBi	3dBi	4dBi	4dBi\4dBi	
Outdoor Cable	CM240-40FN 40Feet	3.52dB	3.52dB	3.98dB	6.52dB	6.12dB\6.92dB	
Indoor Antenna	CM248W	7dBi	7dBi	7dBi	10dBi	10dBi\10dBi	Wall Mounted Antenna
Indoor Cable	CM240-20FN 20Feet	2.06dB	2.06dB	2.29dB	3.56dB	3.36dB\ 3.76dB	

Desk top/RV Kit

Component	Prod No. Description	Gain/Loss					Notes
		LTE-A	LTE-V	800MHz	1900MHz	1700MHz\2100MHz	
Outdoor Antenna	CM288W	3dBi	3dBi	3dBi	4dBi	4dBi\4dBi	
Outdoor Cable	CM240-40FN 40Feet	3.52dB	3.52dB	3.98dB	6.52dB	6.12dB\6.92dB	
Indoor Antenna	CM120W	1.2dBi	1.2dBi	1.2dBi	3dBi	3dBi\3dBi	Table Top Antenna