Cellphone-Mate, Inc.

TEST REPORT FOR

Mobile Wideband Consumer Booster
Model: Fusion2Go

Tested To The Following Standards:

FCC Part 20.21

Report No.: 96696-16

Date of issue: March 12, 2015

ACCREDITED
Testing Certificates:
803.01, 803.02, 803.05, 803.06

This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

Testing the Future
CKC LABORATORIES, INC.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR:

Cellphone-Mate, Inc.
48346 Milmont Drive
Fremont, CA 94538

Representative: Hongtao Zhan
Customer Reference Number: CKC20150204

REPORT PREPARED BY:

Dianne Dudley
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Project Number: 96696

DATE OF EQUIPMENT RECEIPT: February 4, 2015
DATE(S) OF TESTING: February 4-25, 2015
March 3-5, 2015

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.

Steve Behm
Director of Quality Assurance & Engineering Services
CKC Laboratories, Inc.

Test Facility Information

Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S):
CKC Laboratories, Inc.
1120 Fulton Place
Fremont, CA 94539

Software Versions

CKC Laboratories Proprietary Software	Version
EMITest Emissions	5.00.14
Immunity	5.00.07

Site Registration & Accreditation Information

Location	CB #	TAIWAN	CANADA	FCC	JAPAN
Fremont	US0082	SL2-IN-E-1148R	3082B-1	958979	A-0149

SUMMARY OF RESULTS

Standard / Specification: FCC Part 20.21

Test Procedure for Draft KDB 935210 D03 Wideband Consumer Signal Booster Measurement v02r01, (July 24,2014)		FCC Part 20.21 Section Correlation		Modifications*	Results
Procedure Sec #	**Guidance Description**	**FCC Sec #**	**FCC Rule Description**		
7.1 A) – k)	Authorized Frequency Band Verification and Authorized CMRS Provider	20.21(e)(3)	Frequency Bands	NA	Pass
7.2.2 a) - r)	Maximum Power Measurement	20.21(e)(8)(i)(D)	Power Limit	NA	Pass
7.3 a) – d)	Maximum Booster Gain	20.21(e)(8)(i)(B)	Bidirectional Capabilities	NA	Pass
7.4 a) – n)	Intermodulation Product	20.21(e)(8)(i)(F)	Intermodulation Limit	NA	Pass
7.5 a) – n)	Out of Band Emissions	20.21(e)(8)(i)(E)	Out of Band Emission	NA	Pass
7.6 a) – m)*	Conducted Spurious Emission	Part 22/24/27 [1]	Spurious emission[1]	NA	NA[1]
7.7 a) – g) 7.7 h) – m) 7.7 n) – u)	Noise Limits	20.21(e)(8)(i)(A)(2) 20.21(e)(8)(i)(A)(1) 20.21(e)(8)(i)(H)	Noise Limits Transmit power off mode	NA	Pass
7.8 a) – l)	Uplink Inactivity	20.21(e)(8)(i)(I)	Uplink inactivity	NA	Pass
7.9 a) –l) 7.9 m) – s)	Variable Booster Gain	20.21(e)(8)(i)(C) (1), (2) 20.21(e)(8)(i)(H)	Booster Gain Transmit power off mode	NA	Pass
7.10.a) – j)	Occupied Band Width	2.1049 Part 22/24/27 [1]	Occupied bandwidth[1]	NA	NA[1]
7.11 a) – r)	Oscillation Detection	20.21(e)(8)(ii)(A)	Anti Oscillation	NA	Pass
7.12a) – f)*	Radiated Spurious Emission	Part 22/24/27 [1]	Spurious emission[1]	NA	NA[1]
7.13 a) – d)	Spectrum Block Filter	NA	NA	NA	NA[2]

NA = Not applicable.
NA[1] = A different standard applies; see applicable test report.
NA[2] = Not applicable. See the section in the report for the reason.

Modifications* During Testing

This list is a summary of the modifications made to the equipment during testing.

Summary of Conditions
No modifications were made during testing.

***Modifications listed above must be incorporated into all production units.**

Conditions During Testing

This list is a summary of the conditions noted to the equipment during testing.

Summary of Conditions
None

EQUIPMENT UNDER TEST (EUT)

The following model was tested by CKC Laboratories:
Mobile Wideband Consumer Booster -Model: Fusion 5S Mobile

Since the time of testing the manufacturer has chosen to use the following model name in its place. Any difference between the names does not affect their EMC characteristics and therefore meets the level of testing equivalent to the tested model name shown on the data. Model: Fusion2Go

EQUIPMENT UNDER TEST

Mobile Wideband Consumer Booster
Manuf: Cellphone-Mate, Inc.
Model: Fusion2Go
Serial: NA

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Switching Power Adapter
Manuf: SureCall
Model: GFP451DA-1238-1
Serial: NA

Signal Generator
Manuf: Agilent
Model: E4438C
Serial: MY42082260

Signal Generator
Manuf: Agilent
Model: E4433B
Serial: US40052164

FCC PART 20.21

Clause 7.1 Authorized Frequency Band Verification

Test Conditions / Setup

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

Customer: **Cellphone-Mate, Inc.**
Specification: **7.1 Authorized Frequency band Verification 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

***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

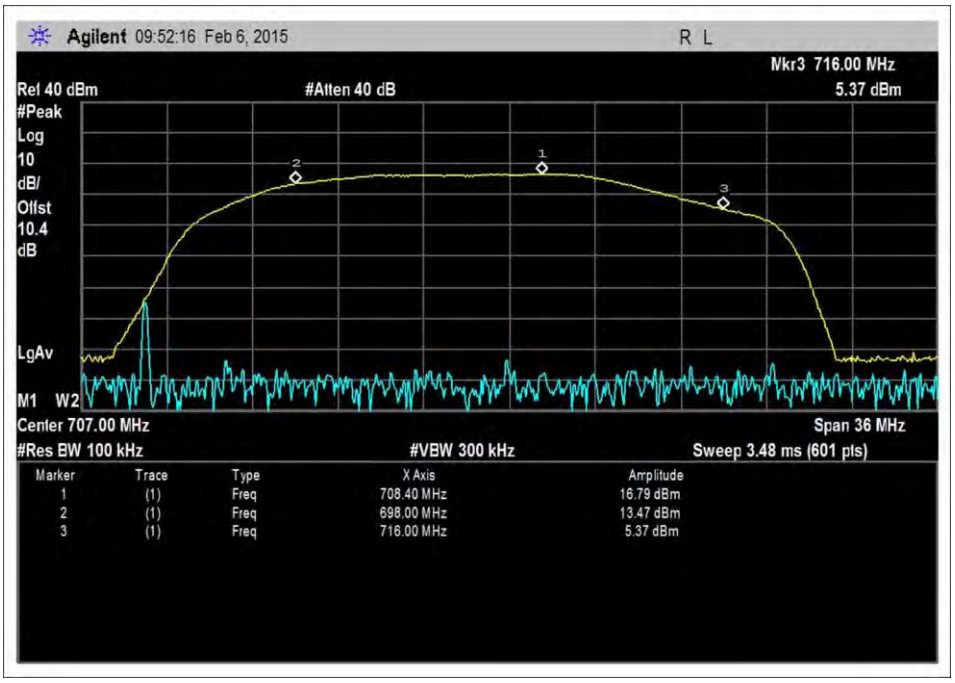
Test procedure:
The test was performed in accordance with section 7.1 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014.

Firmware: V1.0

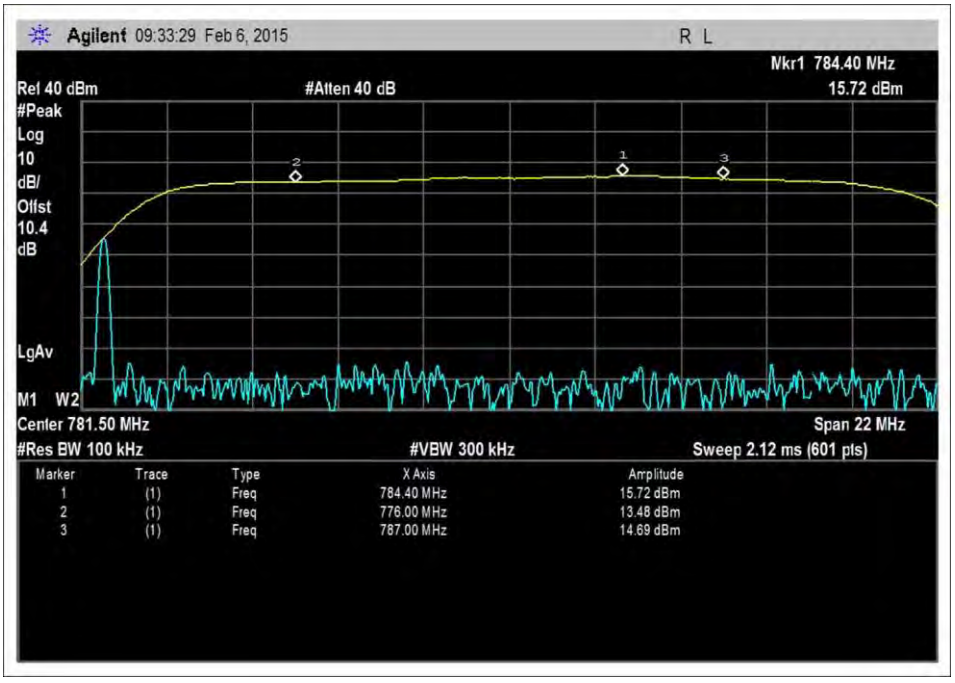
Summary of Results

Pass: The plots that follow shows the device only operates on the CMRS frequency bands authorized for use by the NPS.

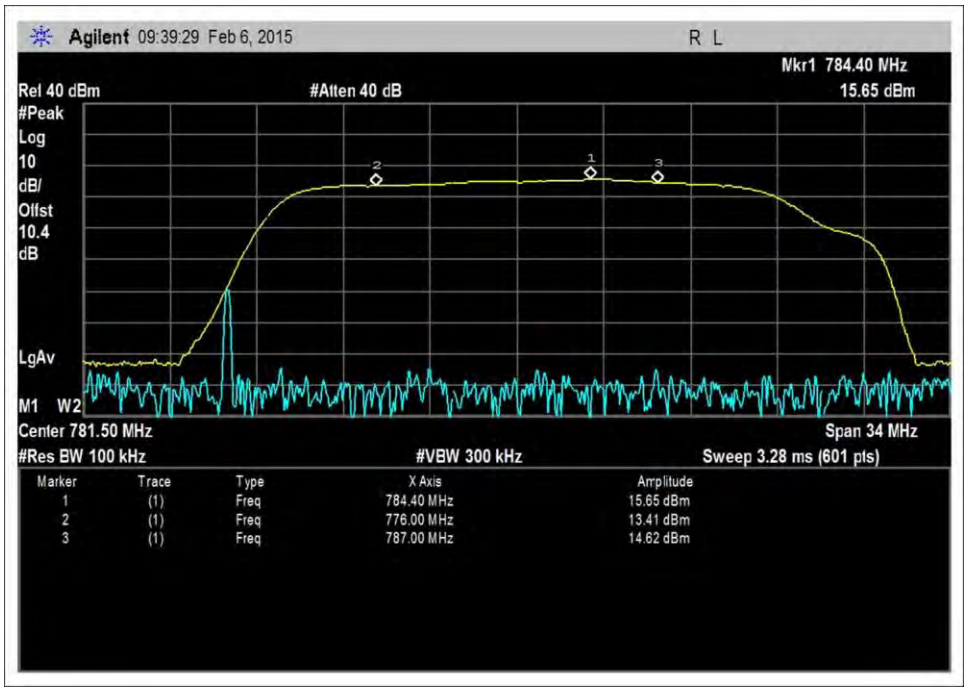
Band Verify, UL



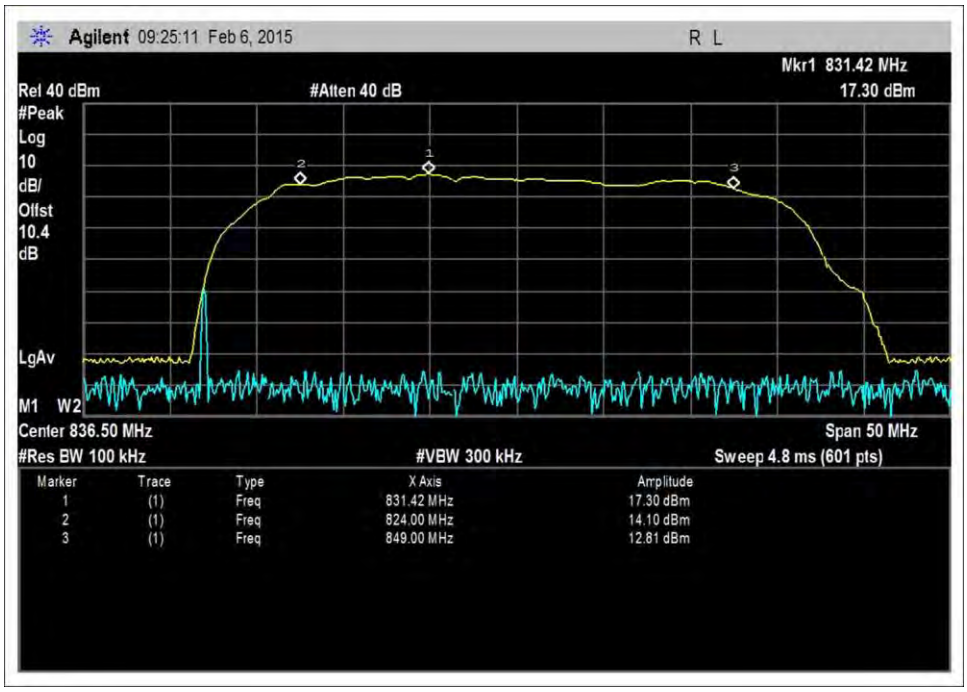
7.1_band verify_UL_698-716MHz



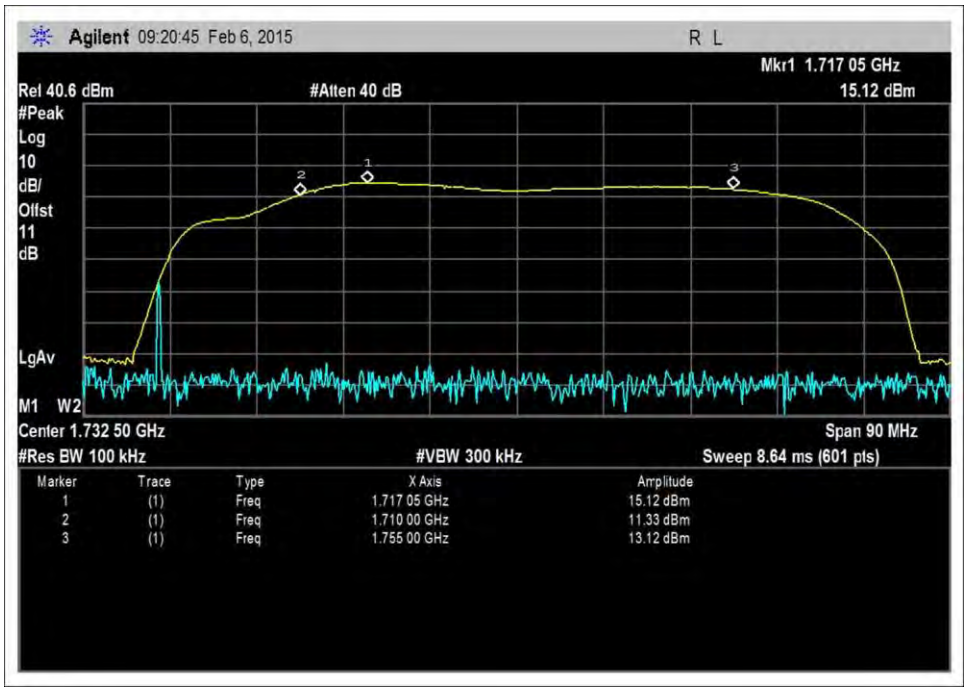
7.1_band verify_UL_776-787MHz



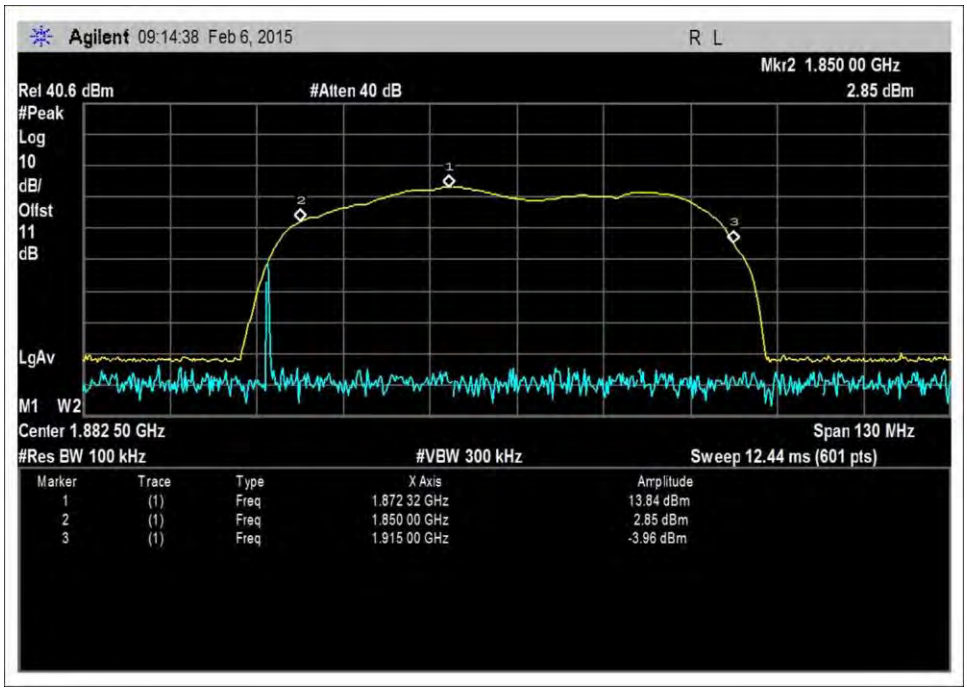
7.1_band verify_UL_776-787MHz-Zoom



7.1_band verify_UL_824-849MHz

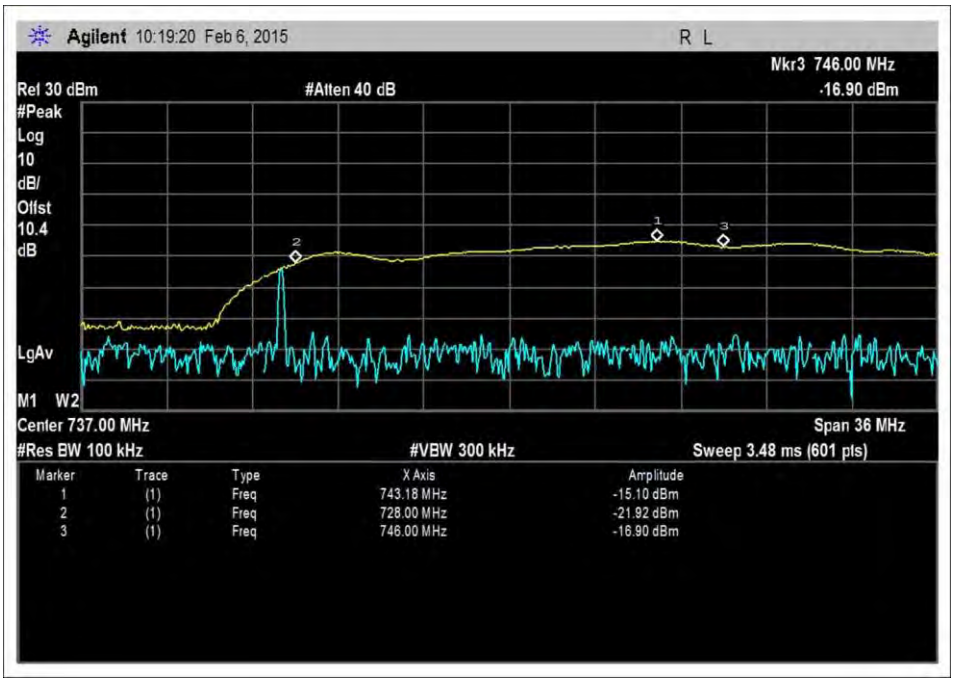


7.1_band verify_UL_1710-1755MHz

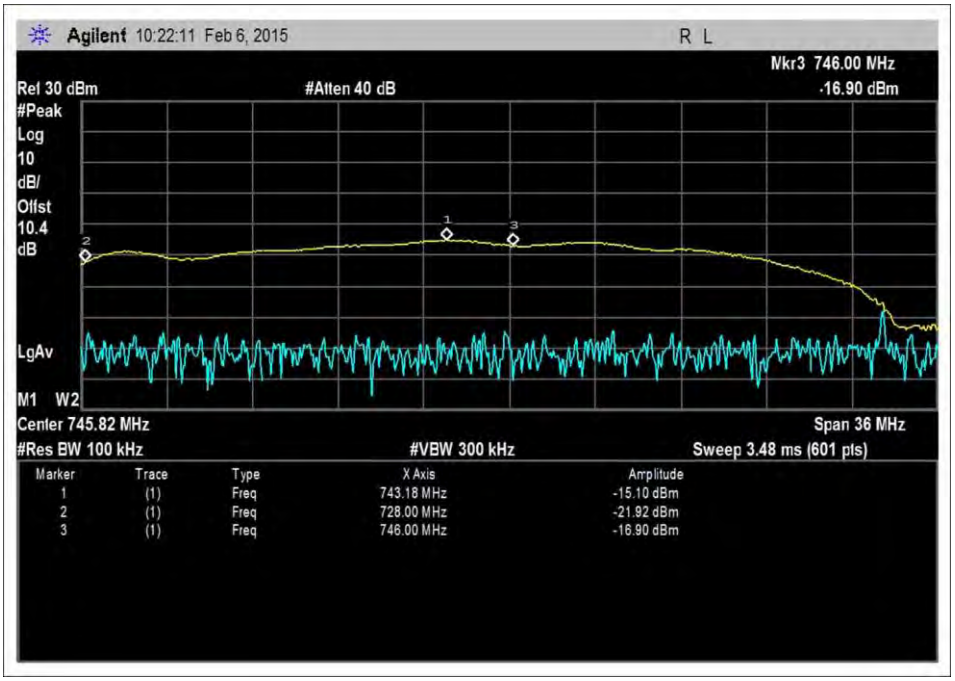


7.1_band verify_UL_1850-1915MHz

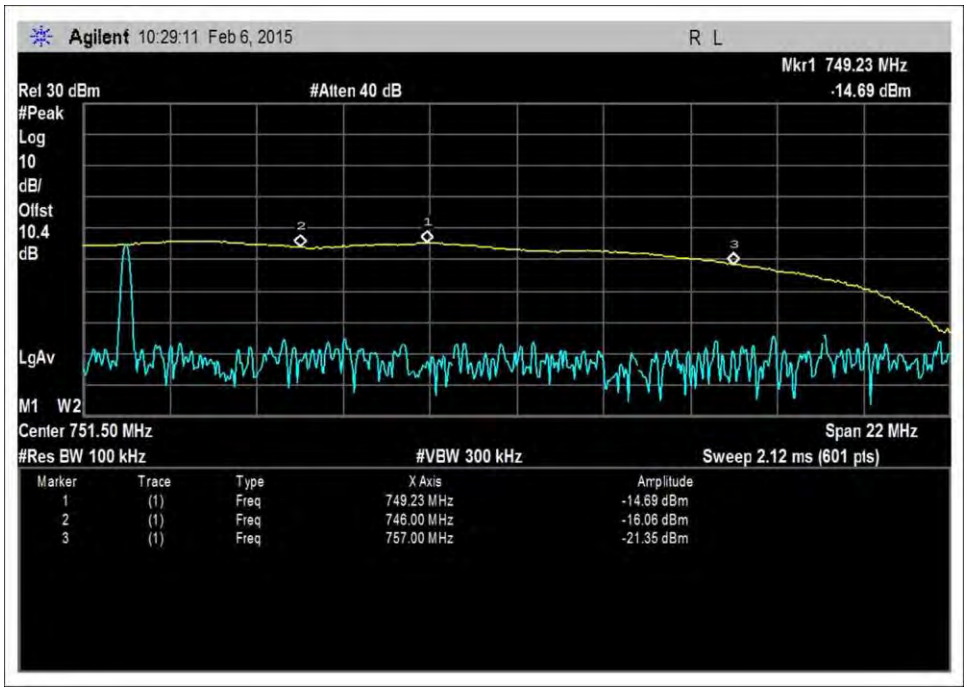
Band Verify, DL



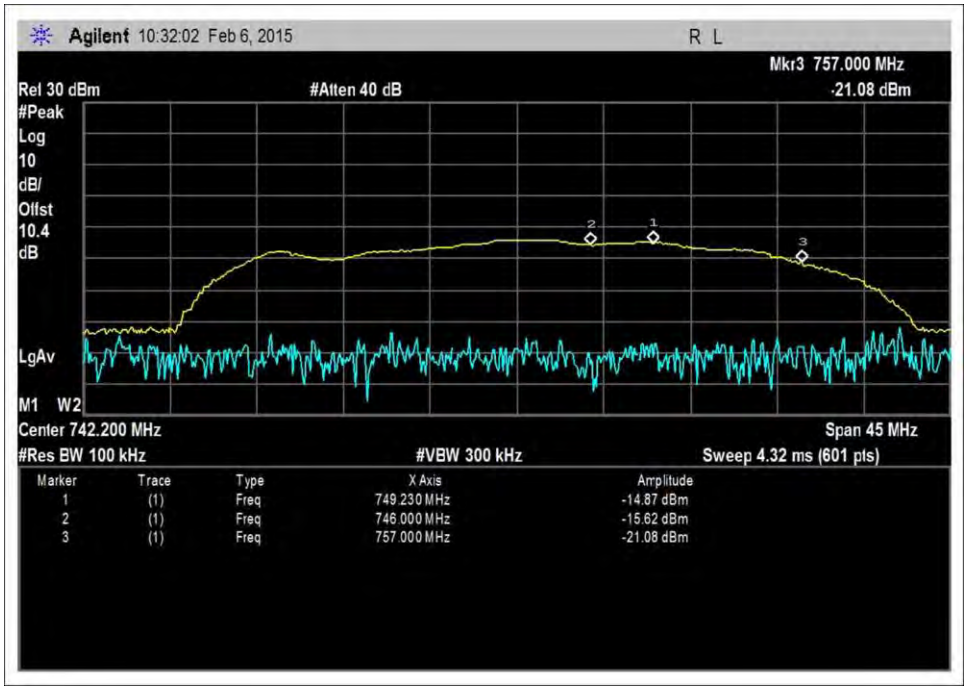
7.1_band verify_DL_728-746MHz



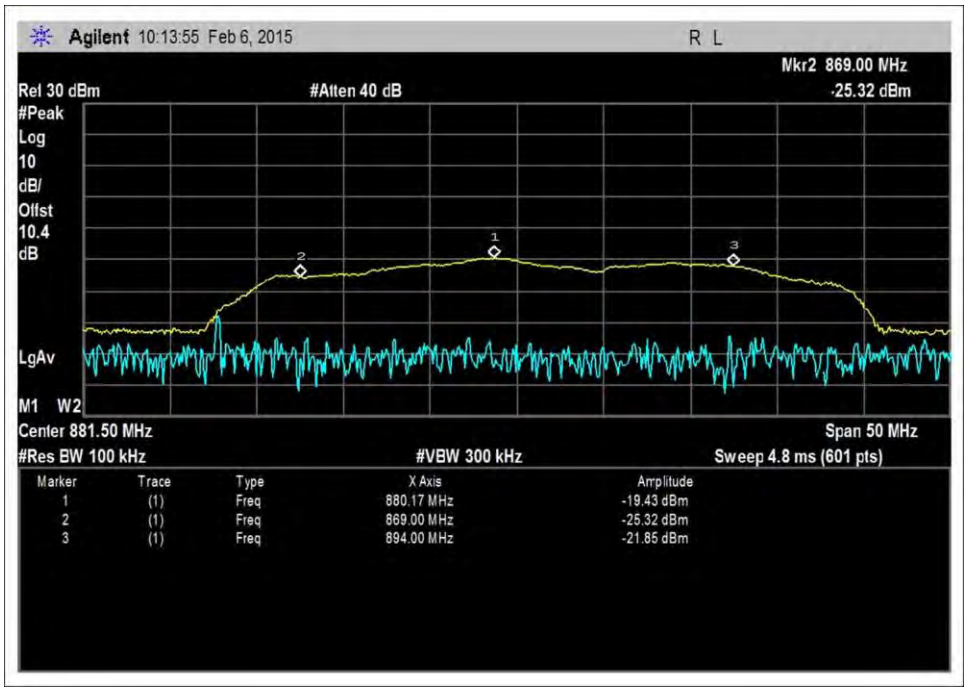
7.1_band verify_DL_728-746MHz-Zoom



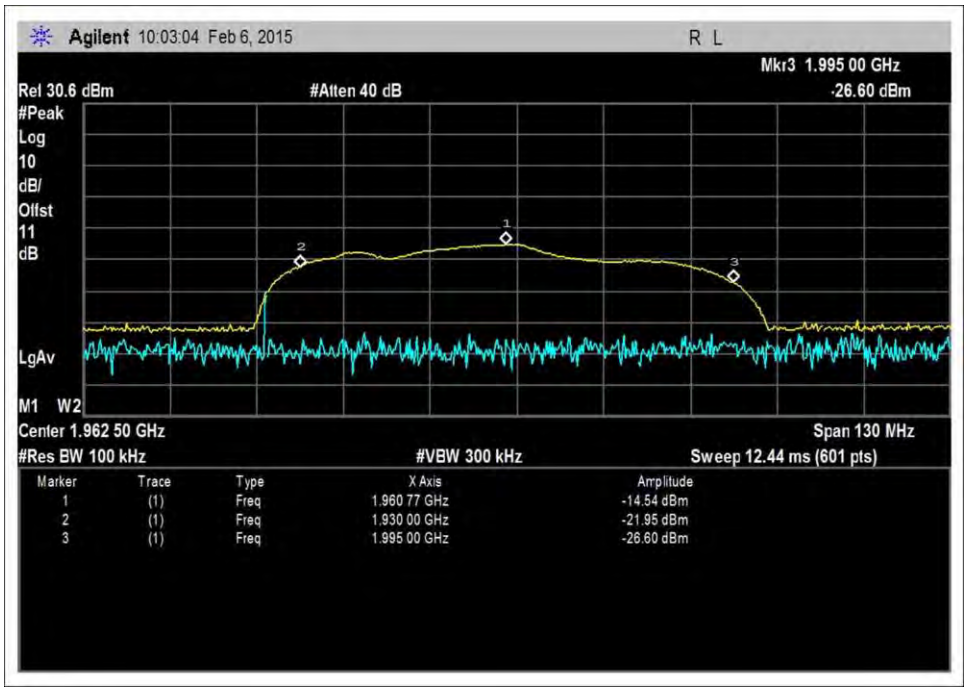
7.1_band verify_DL_746-757MHz



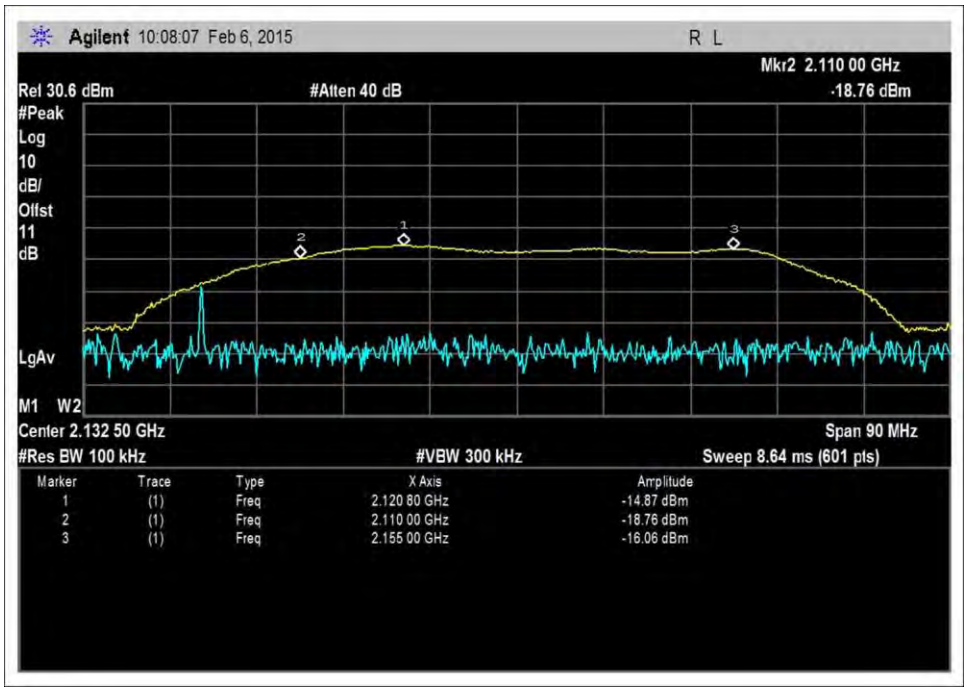
7.1_band verify_DL_746-757MHz-Zoom



7.1_band verify_DL_869-894MHz



7.1_band verify_DL_1930-1995MHz



7.1_band verify_DL_2110-2155MHz

Clause 7.2.2 Maximum Power Measurement Procedure

Test Conditions / Setup

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

Customer: **Cellphone-Mate, Inc.**
Specification: **7.2 Maximum Power Measurement procedure**
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 7.2 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014.

Firmware: V1.0

Note: See Appendix A, customer provided information for Manufacturer's Fusion 5s (50dB) Antenna Kitting information.

Summary of Results

Pass: as summarized in table below, Measure EIRP, Gain, UL/DL gain ratio are within limit

Pre AGC						
	Pulse GSM			4.1 MHz AWGN		
Frequency (MHz)	Input (dBm)	Output (dBm)	Gain (dB)	Input (dBm)	Output (dBm)	Gain (dB)
UL						
UL1710-1755	-28.1	17.4	45.5	-28.2	17.3	45.5
UL1850-1915	-28.8	17.2	46.0	-28.2	17.5	45.7
UL824-894	-28.8	18.5	47.3	-28.1	17.9	46.0
UL 698-716	-28.0	19.0	47.0	-27.8	18.8	46.6
UL776-787	-28.5	17.9	46.4	-28.0	18.0	46.0
DL						
DL2110-2155	-55.6	-12.3	43.3	-54.8	-13.1	41.7
DL1930-1995	-56.6	-14.1	42.5	-56.7	-12.8	43.9
DL869-894	-58.2	-18.2	40.0	-58.6	-19.3	39.3
DL:728-746	-56.4	-13.0	43.4	-56.9	-13.9	43.0
DL 746-757	-57.0	-14.1	42.9	-56.9	-14.9	42.0

					Conducted	Conducted and EIRP
Pulse GSM						
Frequency (MHz)	Output Power (dBm)	Ant Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit Min (dBm)	Limit Max (dBm)
UL						
UL1710-1755	17.4	5	6.12	**16.3**	17	30
UL1850-1915	17.2	5	6.52	**15.7**	17	30
UL824-894	18.5	3	3.98	**17.5**	17	30
UL 698-716	19.0	3	3.52	**18.4**	17	30
UL776-787	17.9	3	3.52	**17.4**	17	30
DL						
DL2110-2155	-12.3	10	3.76	**-6.0**	NA	17
DL1930-1995	-14.1	10	3.56	**-7.6**	NA	17
DL869-894	-18.2	7	2.29	**-13.5**	NA	17
DL:728-746	-13.0	7	2.06	**-8.1**	NA	17
DL 746-757	-14.1	7	2.06	**-9.2**	NA	17

					Conducted	Conducted and EIRP
4.1MHz AWGN						
Frequency (MHz)	**Output Power (dBm)**	**Ant Gain (dBi)**	**Cable Loss (dB)**	**EIRP (dBm)**	**Limit Min (dBm)**	**Limit Max (dBm)**
UL						
UL1710-1755	17.3	5	6.12	**16.2**	17	30
UL1850-1915	17.5	5	6.52	**16.0**	17	30
UL824-894	17.9	3	3.98	**16.9**	17	30
UL 698-716	18.8	3	3.52	**18.3**	17	30
UL776-787	18.0	3	3.52	**17.5**	17	30
DL						
DL2110-2155	-13.1	10	3.76	**-6.9**	NA	17
DL1930-1995	-12.8	10	3.56	**-6.4**	NA	17
DL869-894	-19.3	7	2.29	**-14.6**	NA	17
DL:728-746	-13.9	7	2.06	**-9.0**	NA	17
DL 746-757	-14.9	7	2.06	**-9.9**	NA	17

Section 5.5 power						
		Pulse GSM			**4.1 MHz AWGN**	
Frequency (MHz)	**Input (dBm)**	**Output (dBm)**	**Gain (dB)**	**Input (dBm)**	**Output (dBm)**	**Gain (dB)**
UL						
UL1710-1755	-50.0	-12.5	37.5	-49.2	-12.3	36.9
UL1850-1915	-23.9	17.9	41.8	-23.9	16.9	40.8
UL824-894	-23.9	18.8	42.7	-22.3	18.5	40.8
UL 698-716	-22.2	19.8	42.0	-22.3	19.5	41.8
UL776-787	-23.1	18.3	41.4	-22.6	18.5	41.1
DL						
DL2110-2155	-50.6	-13.3	37.3	-49.4	-13.3	36.1
DL1930-1995	-51.5	-14.3	37.2	-51.1	-12.7	38.4
DL869-894	-51.0	-16.4	34.6	-50.6	-16.5	34.1
DL:728-746	-50.4	-11.7	38.7	-48.6	-11.2	37.4
DL 746-757	-50.0	-12.5	37.5	-49.2	-12.3	36.9

Note: The booster went into Transmitter off mode at Max input power of +10dBm (UL) and -20dBm (DL). Result presented in the above table is at 1 dB below the Transmit off RF input level. This table it is for reference only.

Test Data

Note 1: The booster is to be deployed with antenna kit with the following characteristic:
Note 2: See Appendix B for information about the antenna kitting.

Vehicle Kit

Component	Prod # 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	

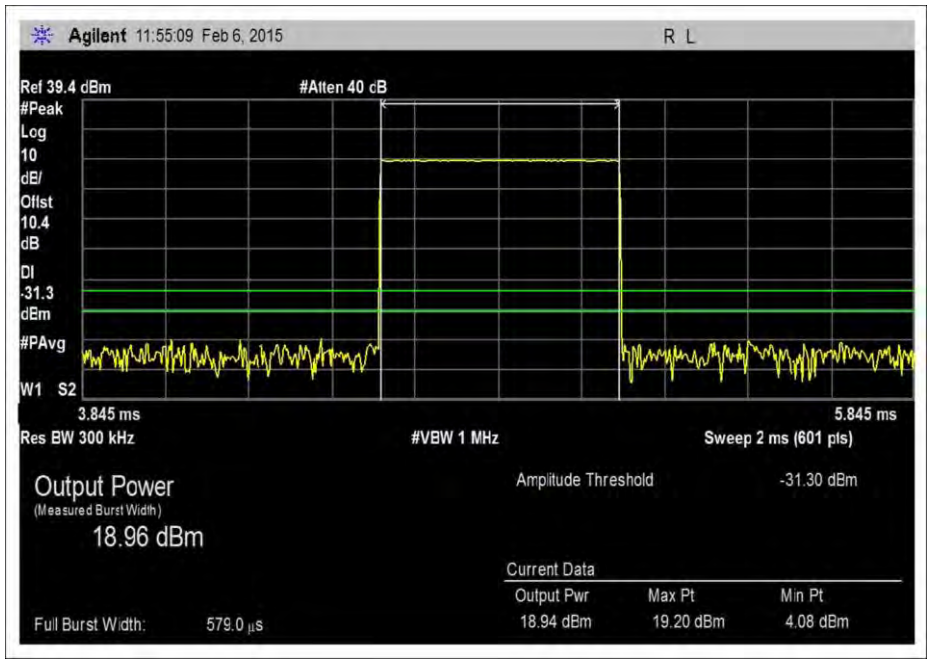
Marine Kit

Component	Prod # 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	

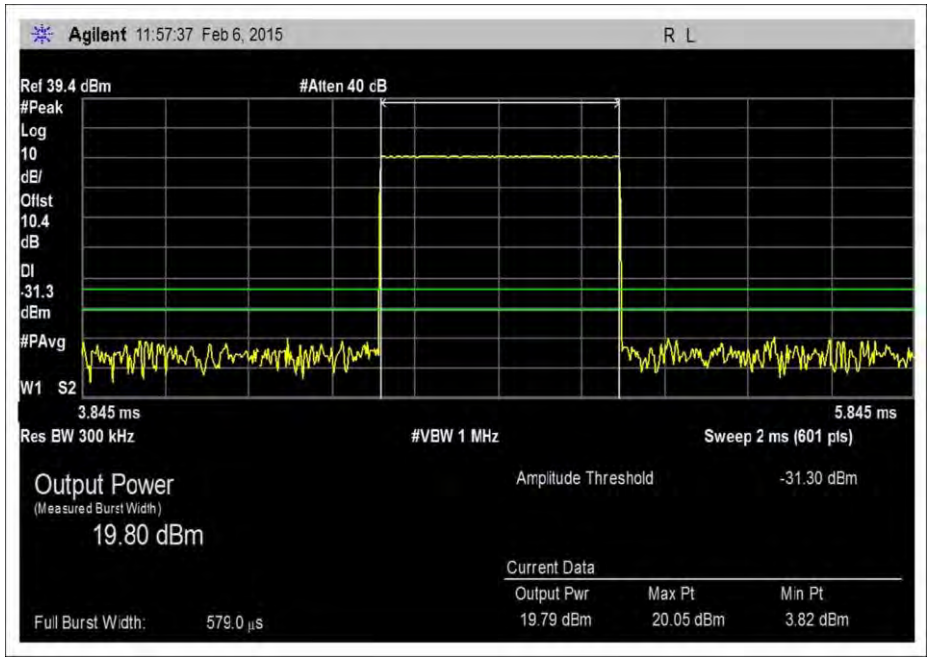
Desk Top / RV Kit

Component	Prod # 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

GSM / GSM MAX, UL

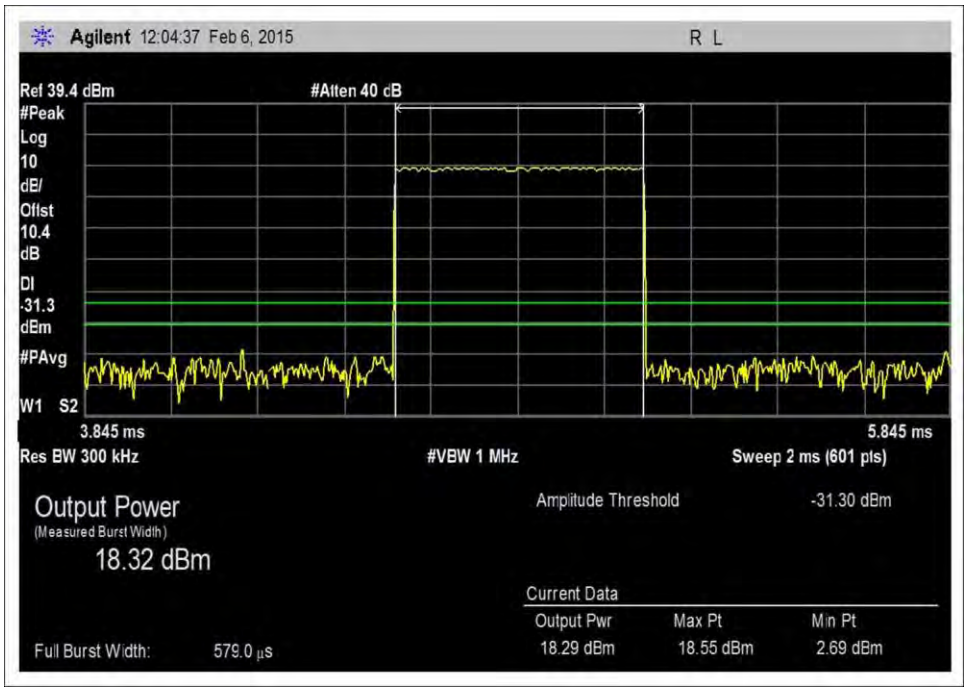


7.2_Power_UL_698-716_GSM

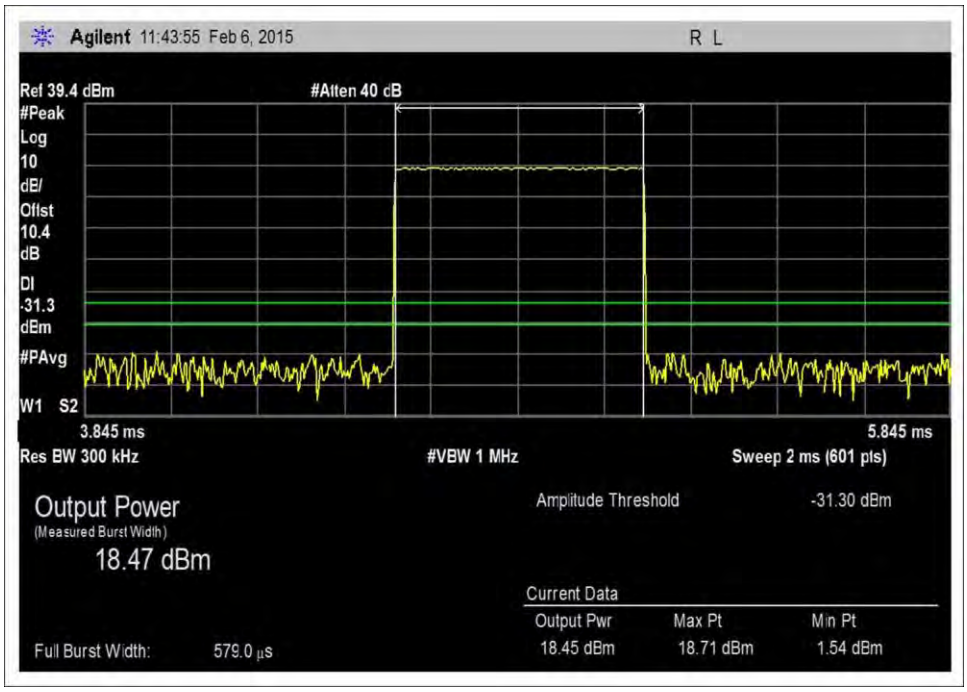


7.2_Power_UL_698-716_GSM-MAX

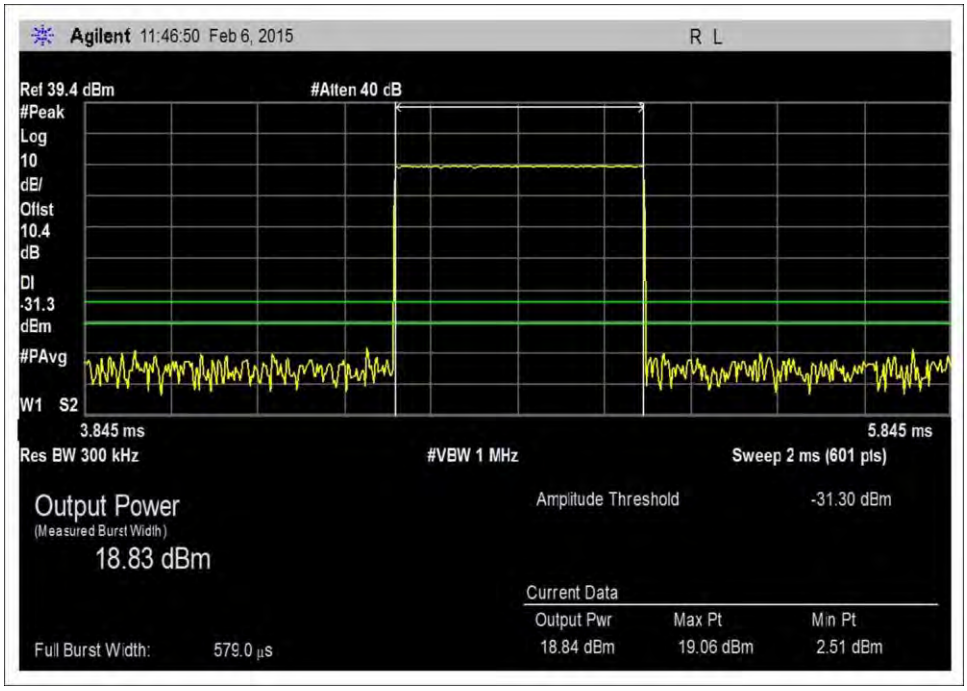
7.2_Power_UL_776-787_GSM



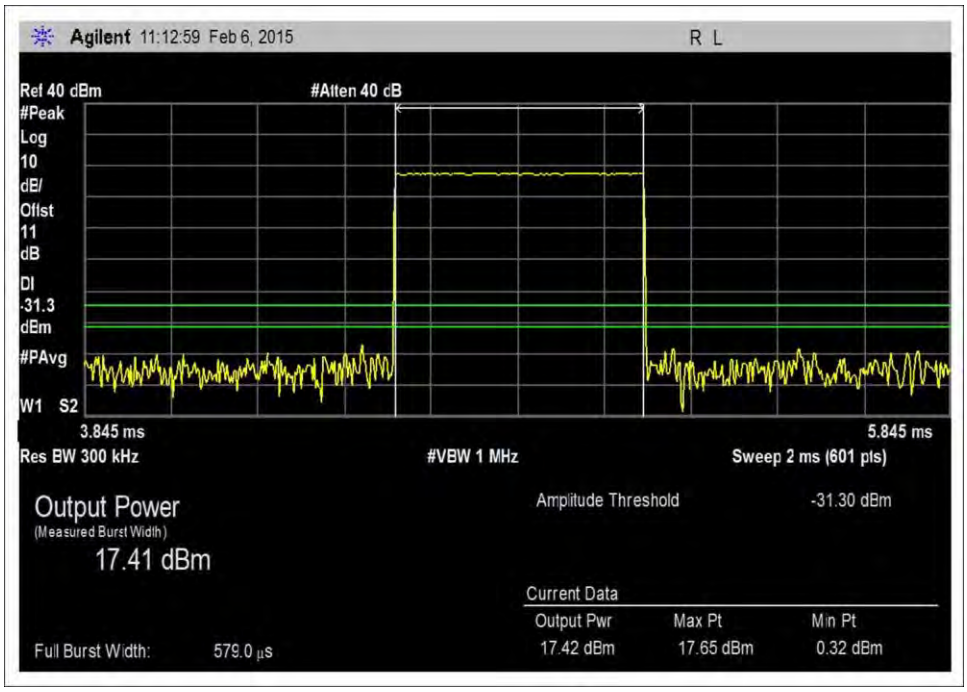
7.2_Power_UL_776-787_GSM-MAX



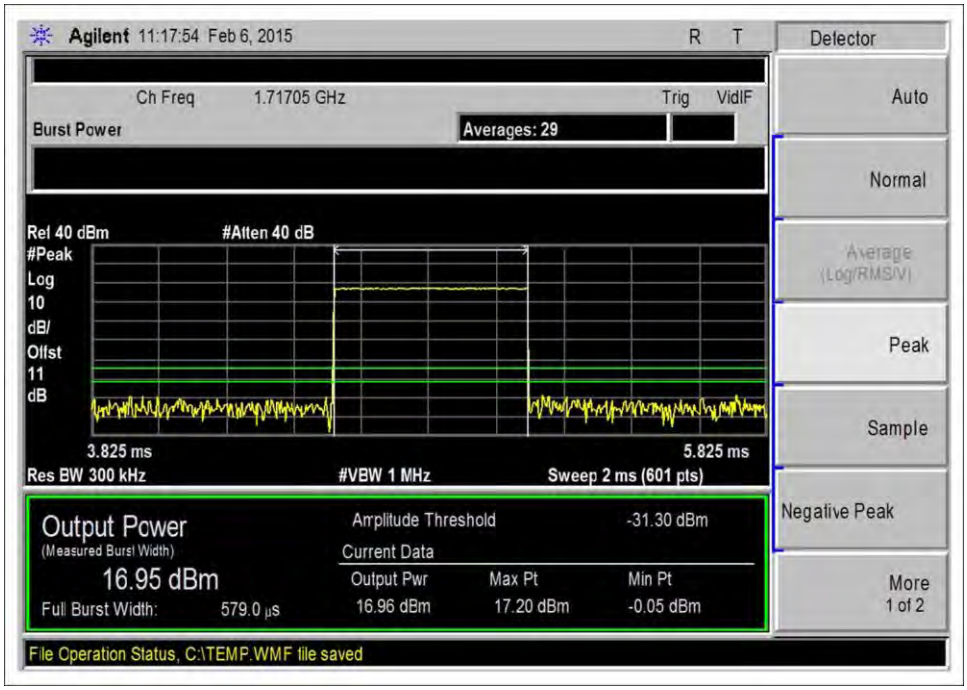
7.2_Power_UL_824-849_GSM



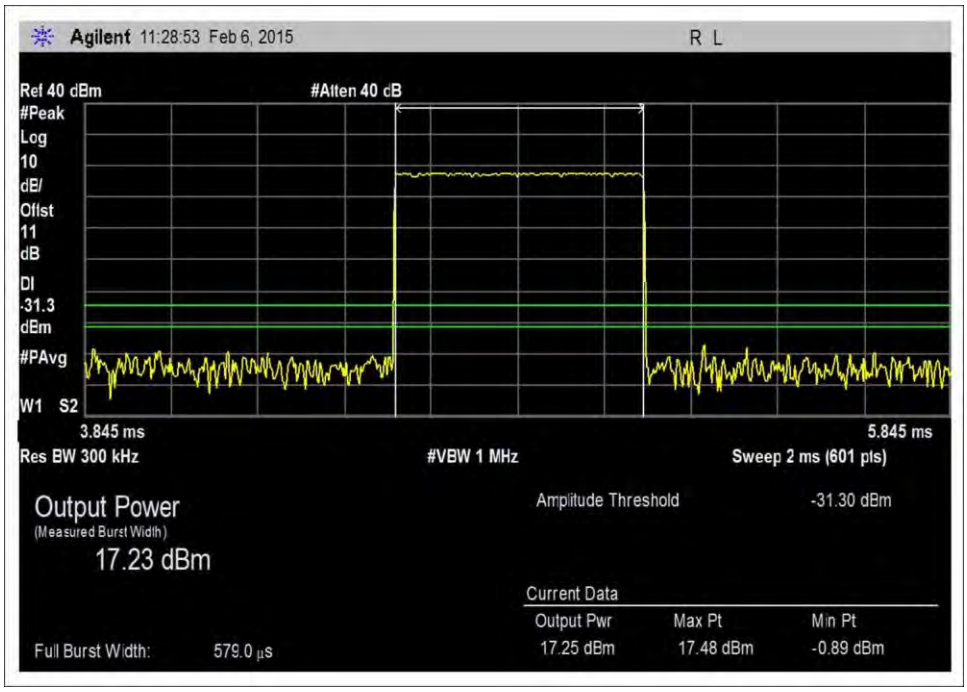
7.2_Power_UL_824-849_GSM-MAX



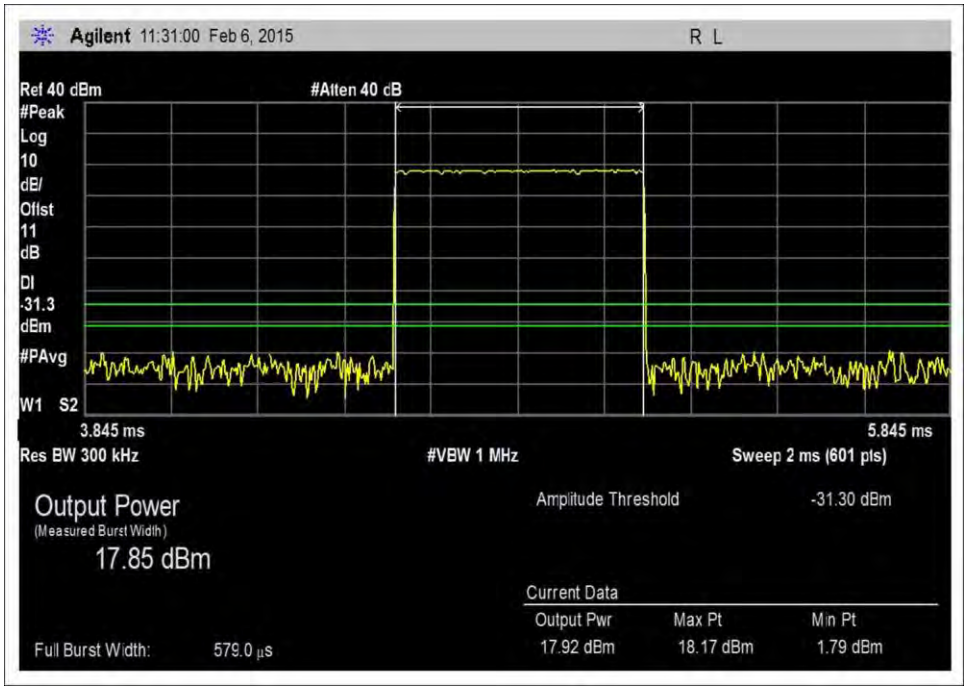
7.2_Power_UL_1710-1755_GSM



7.2_Power_UL_1710-1755_GSM-MAX

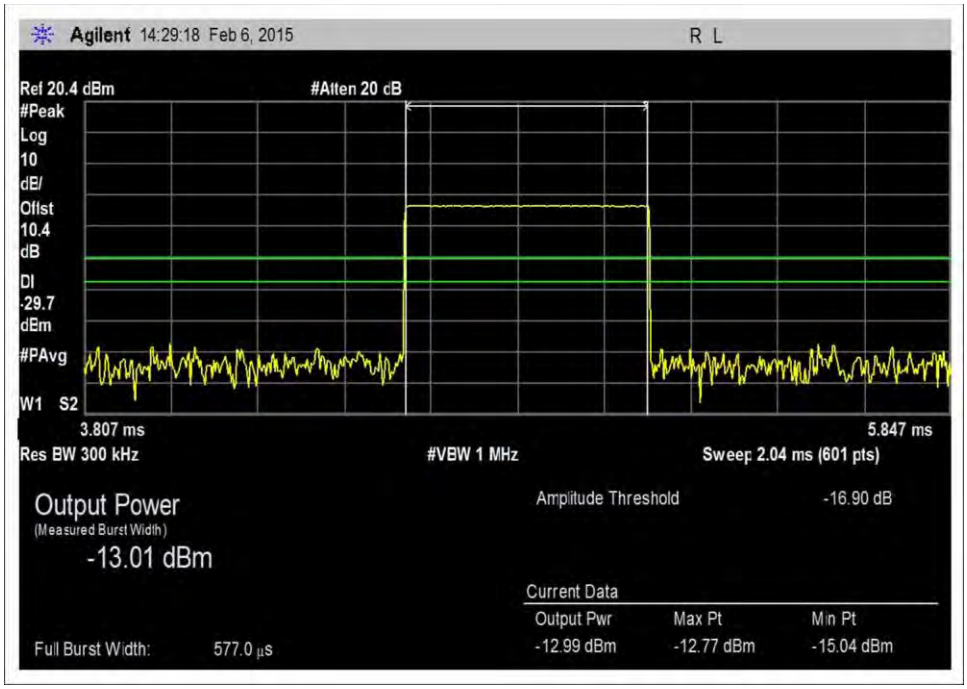


7.2_Power_UL_1850-1915_GSM

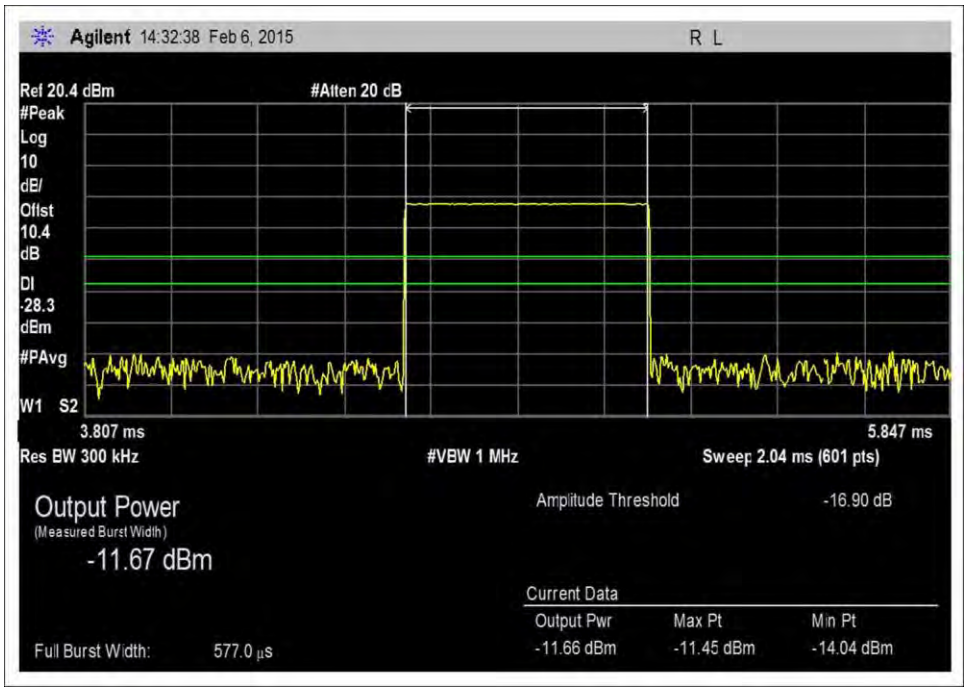


7.2_Power_UL_1850-1915_GSM-MAX

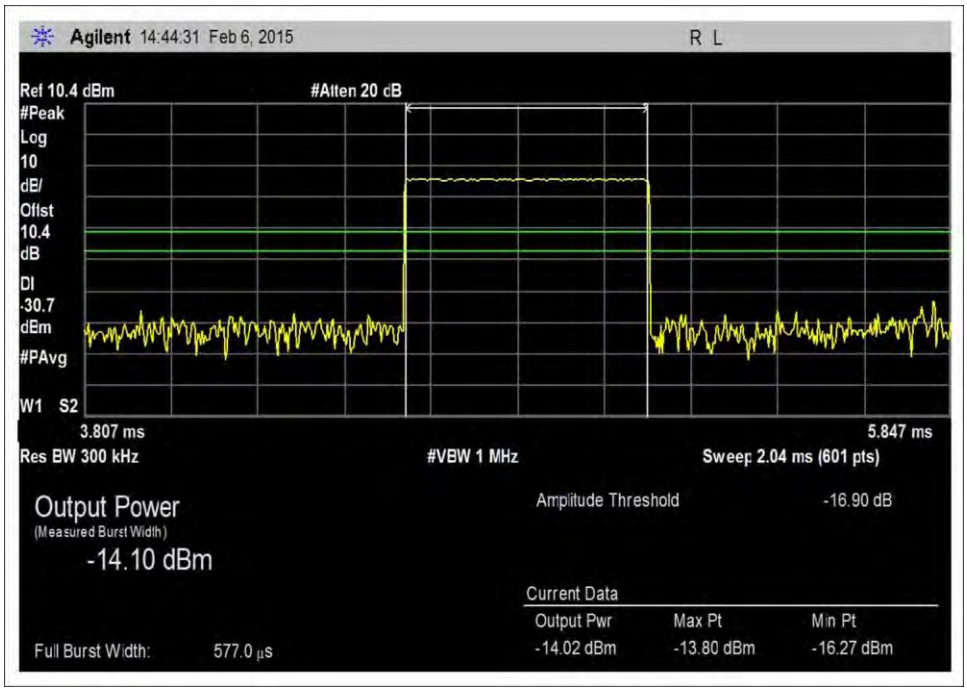
GSM / GSM MAX, DL



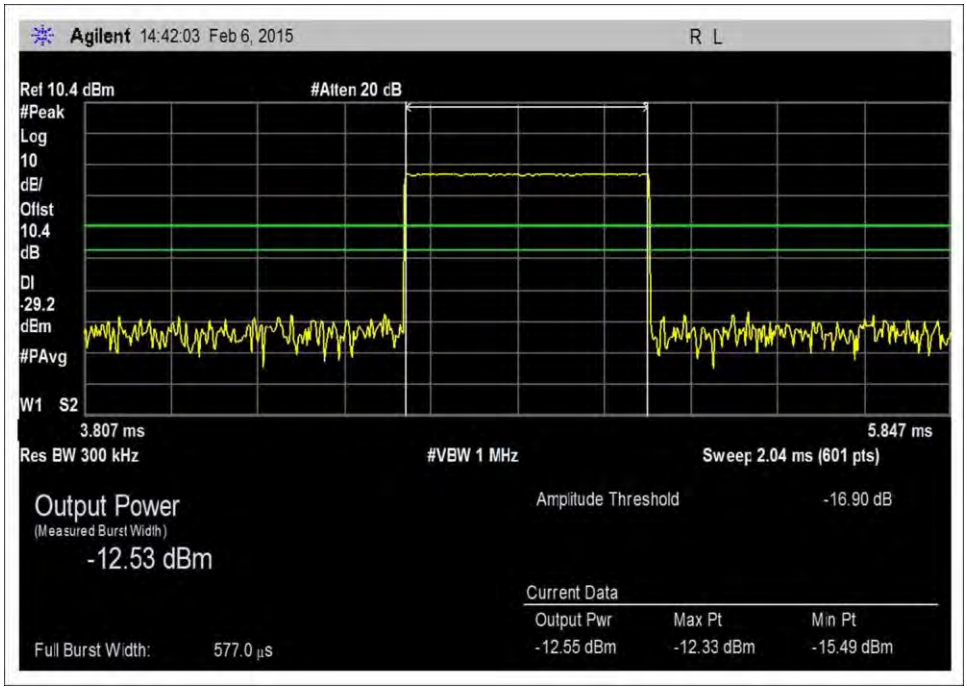
7.2_Power_DL_728-746_GSM



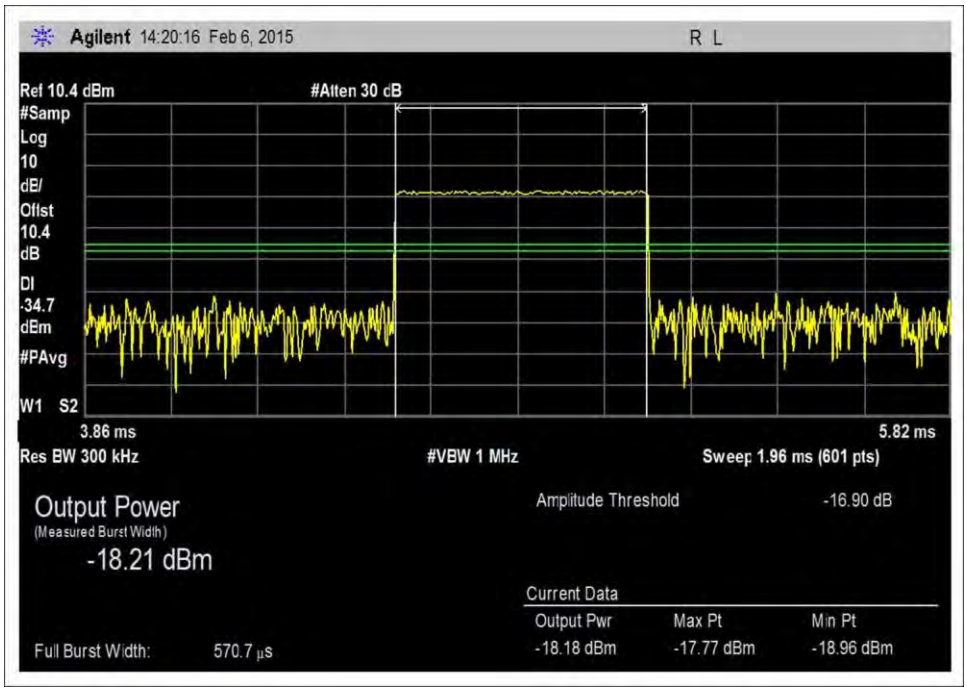
7.2_Power_DL_728-746_GSM-MAX



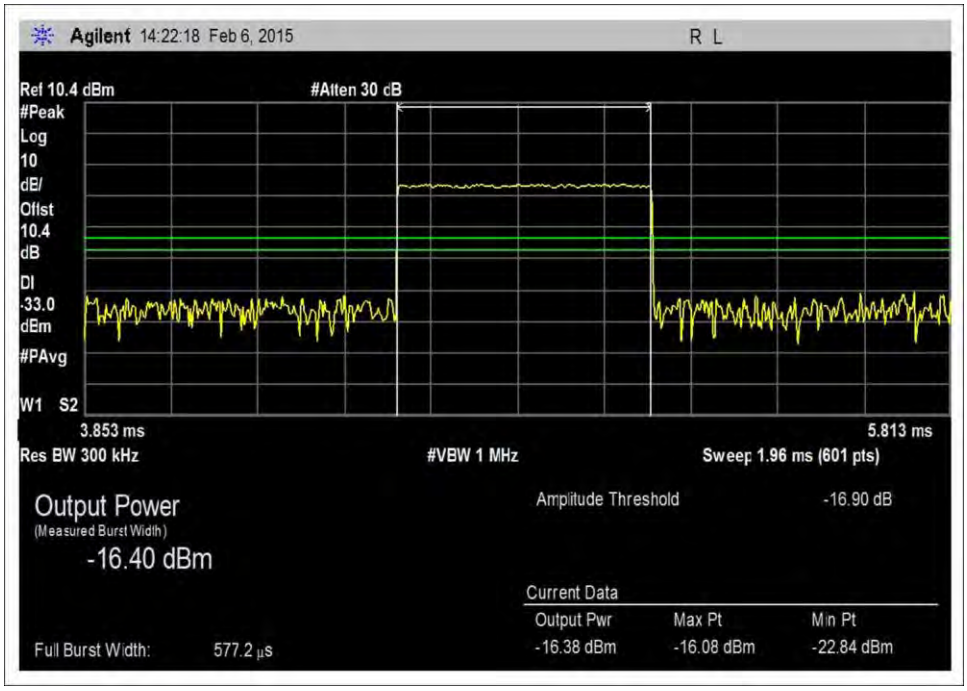
7.2_Power_DL_746-757_GSM



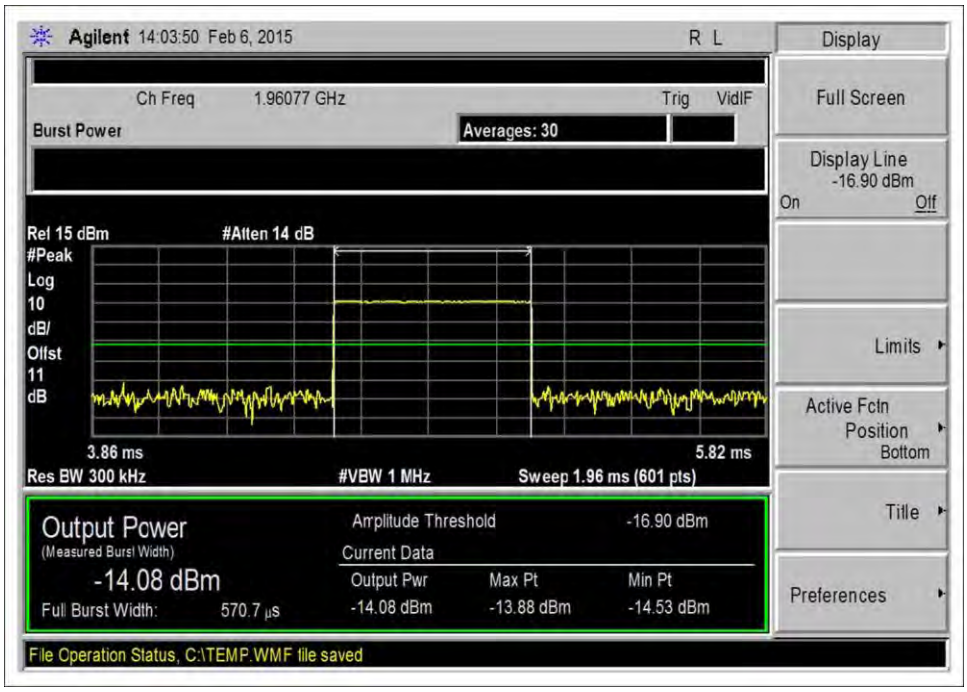
7.2_Power_DL_746-757_GSM-MAX



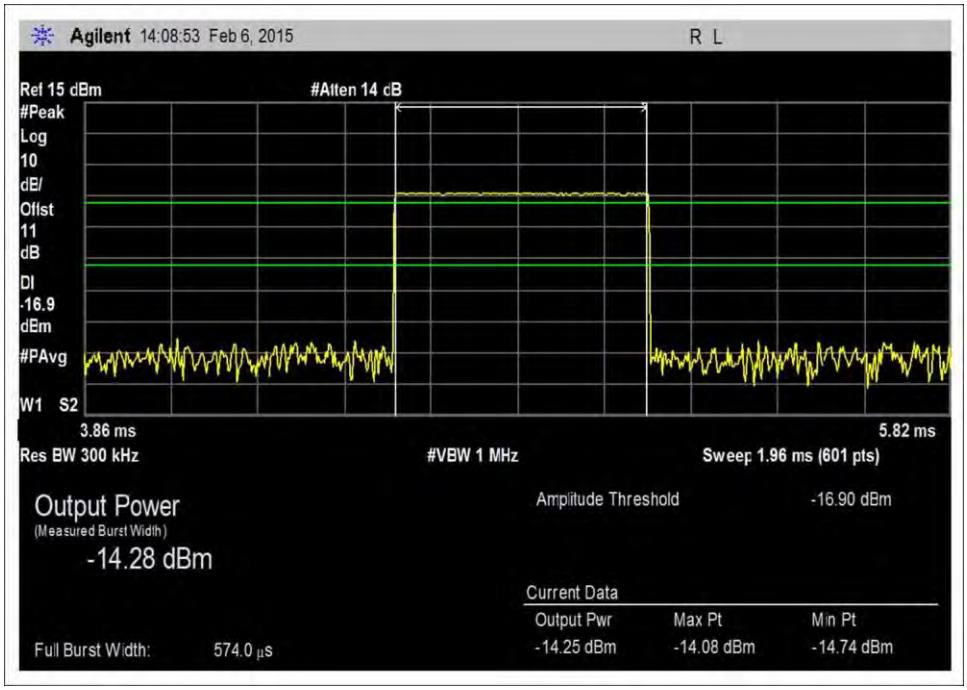
7.2_Power_DL_869-894_GSM



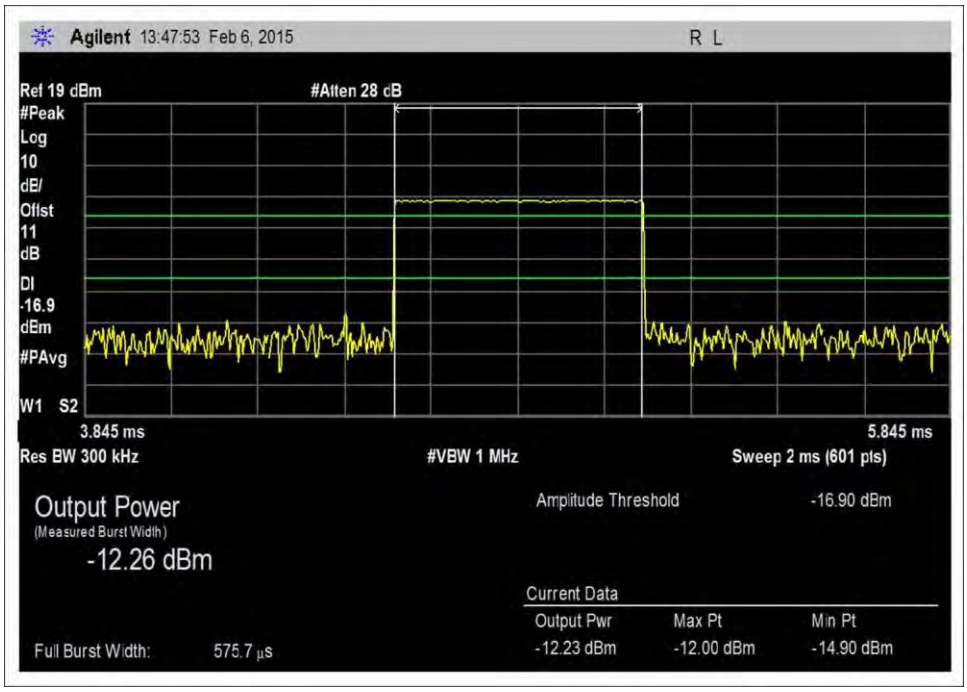
7.2_Power_DL_869-894_GSM-MAX



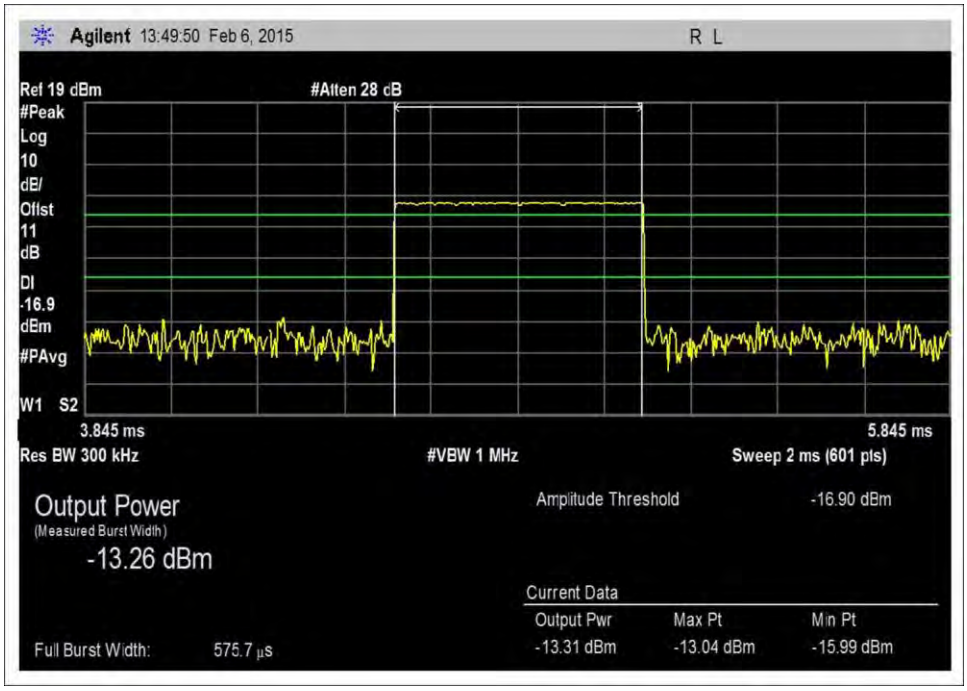
7.2_Power_DL_1930-1995_GSM



7.2_Power_DL_1930-1995_GSM-MAX

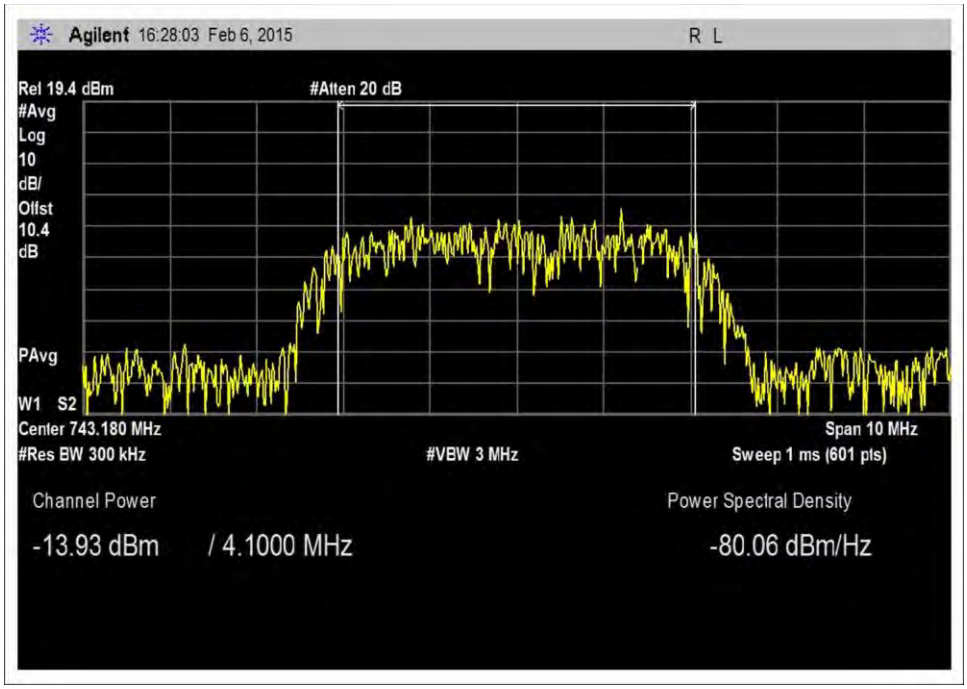


7.2_Power_DL_2110-2155_GSM

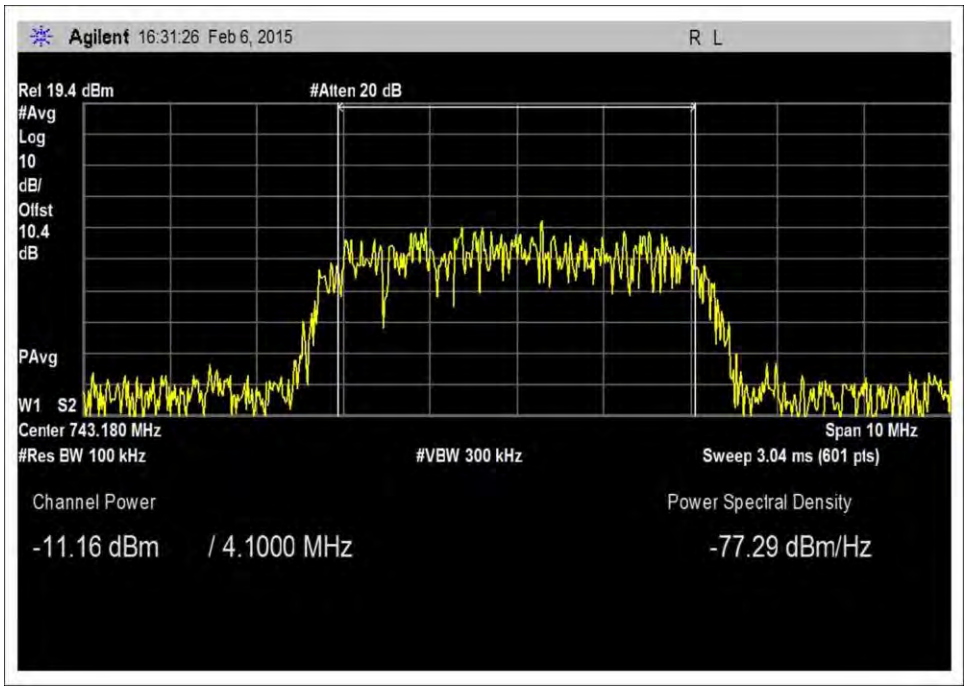


7.2_Power_DL_2110-2155_GSM-MAX

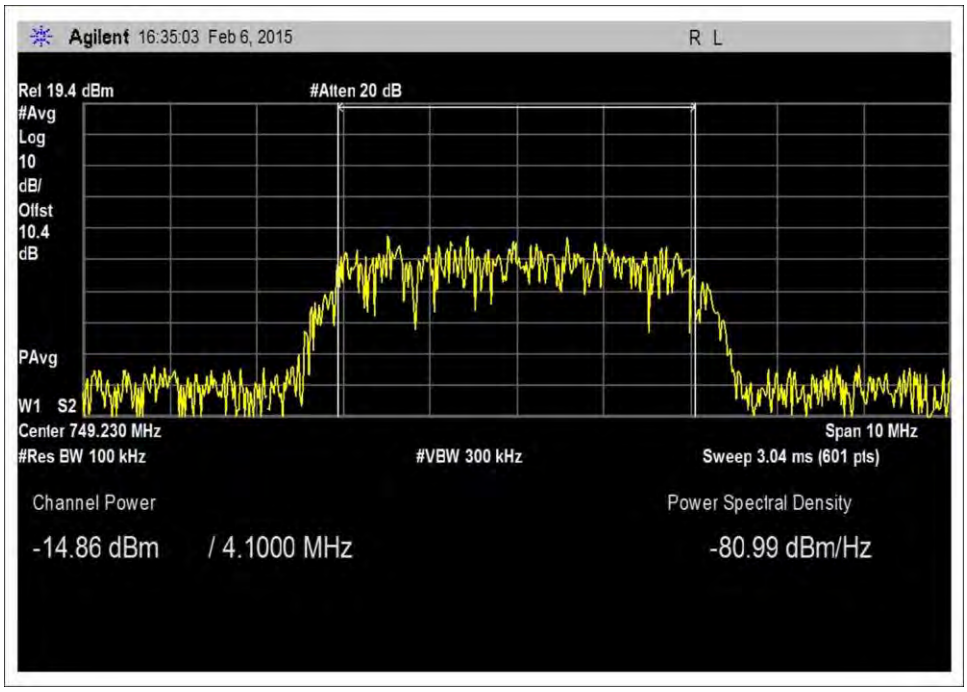
AWGN / AWGN MAX, DL



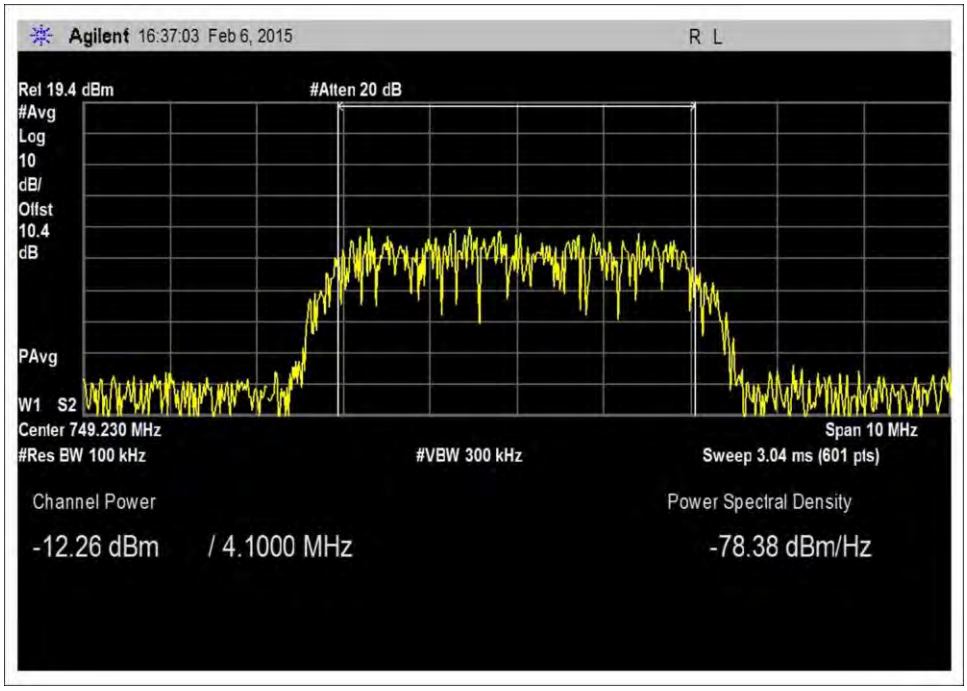
7.2_Power_DL_728-746_AWGN



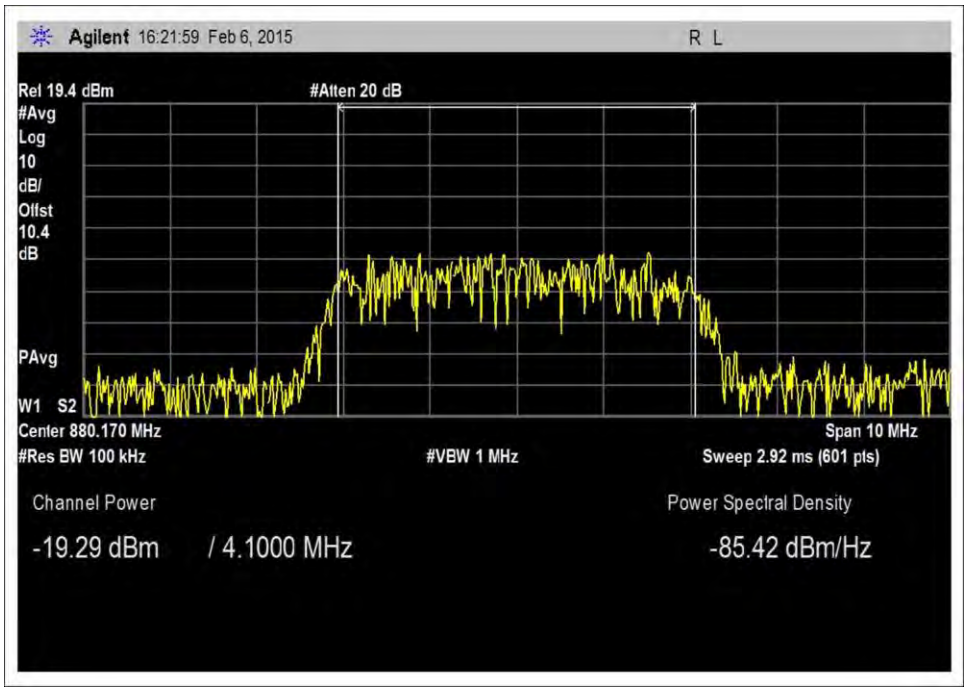
7.2_Power_DL_728-746_AWGN-MAX



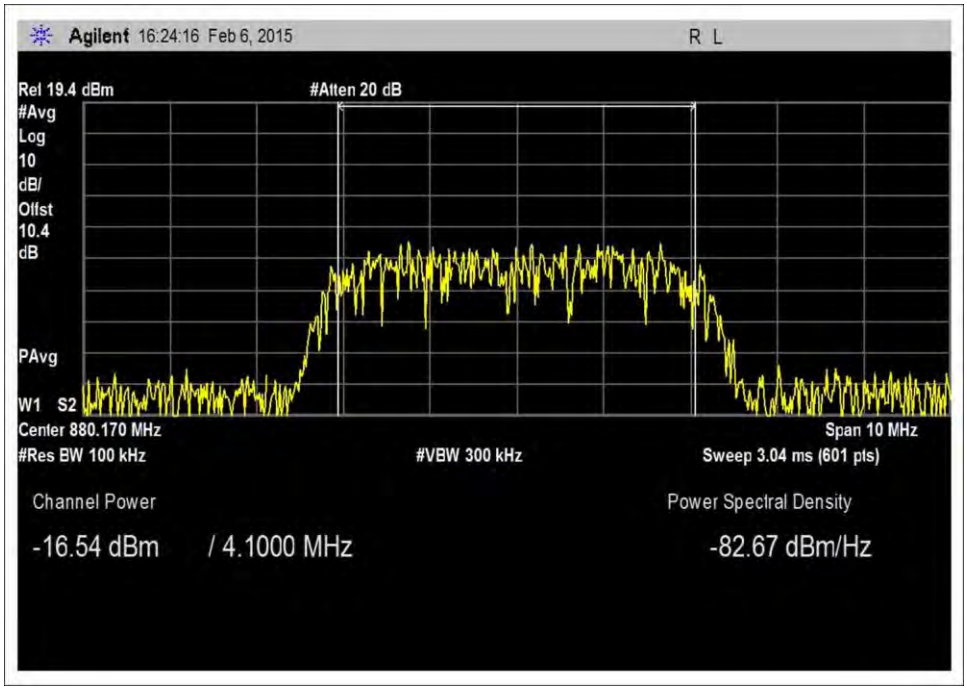
7.2_Power_DL_746-757_AWGN



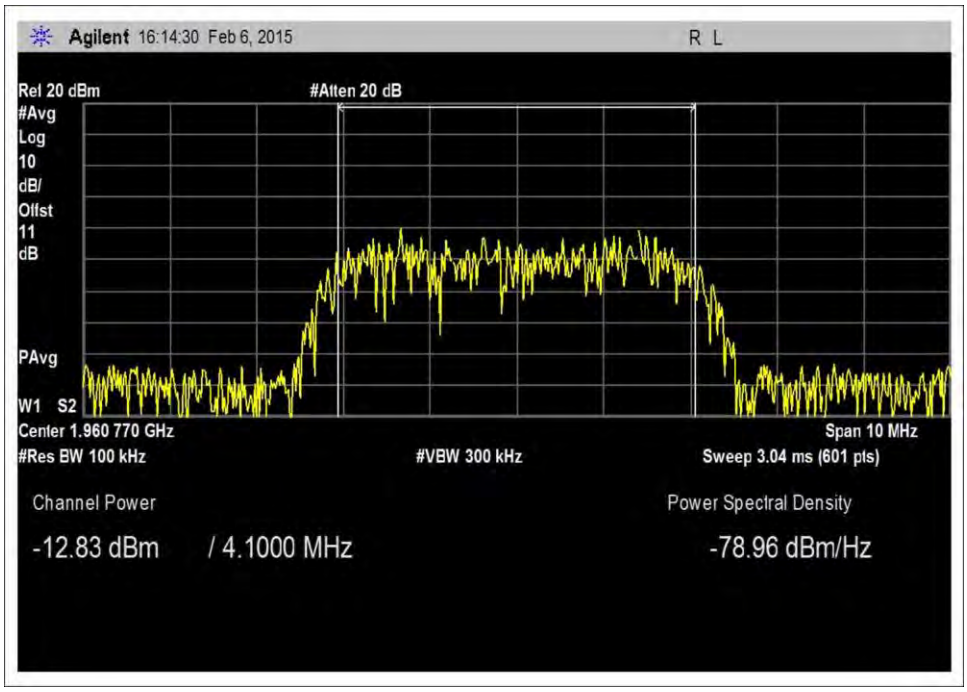
7.2_Power_DL_746-757_AWGN-MAX



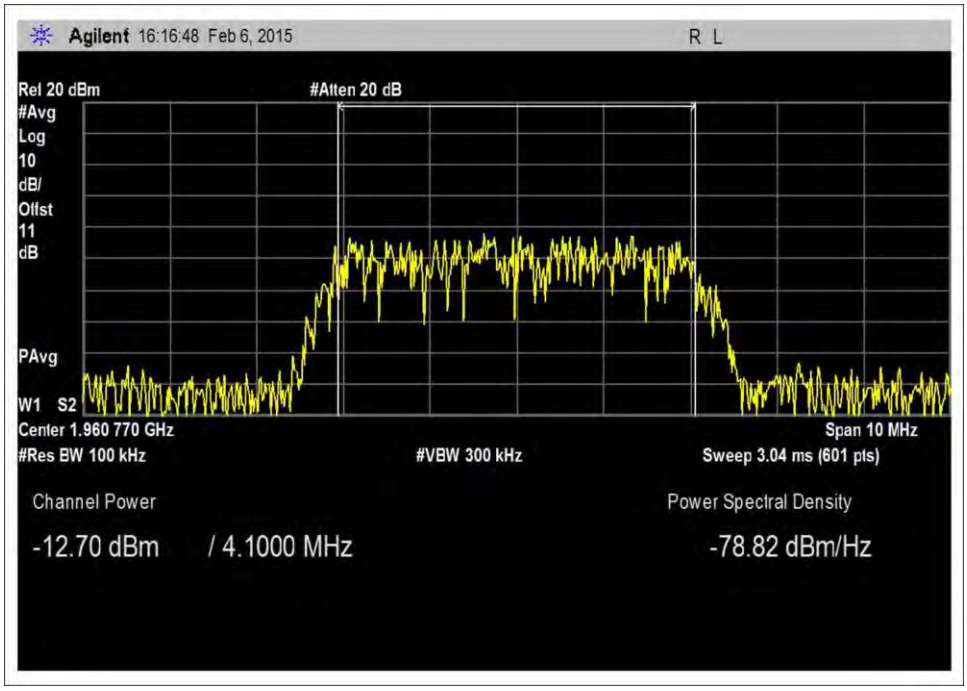
7.2_Power_DL_869-894_AWGN



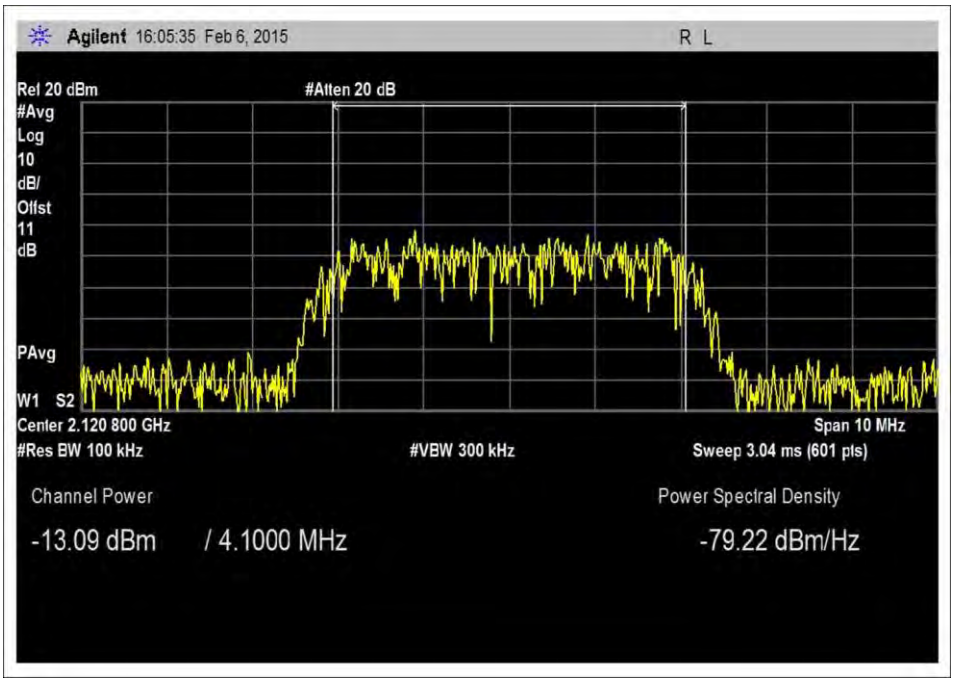
7.2_Power_DL_869-894_AWGN-MAX



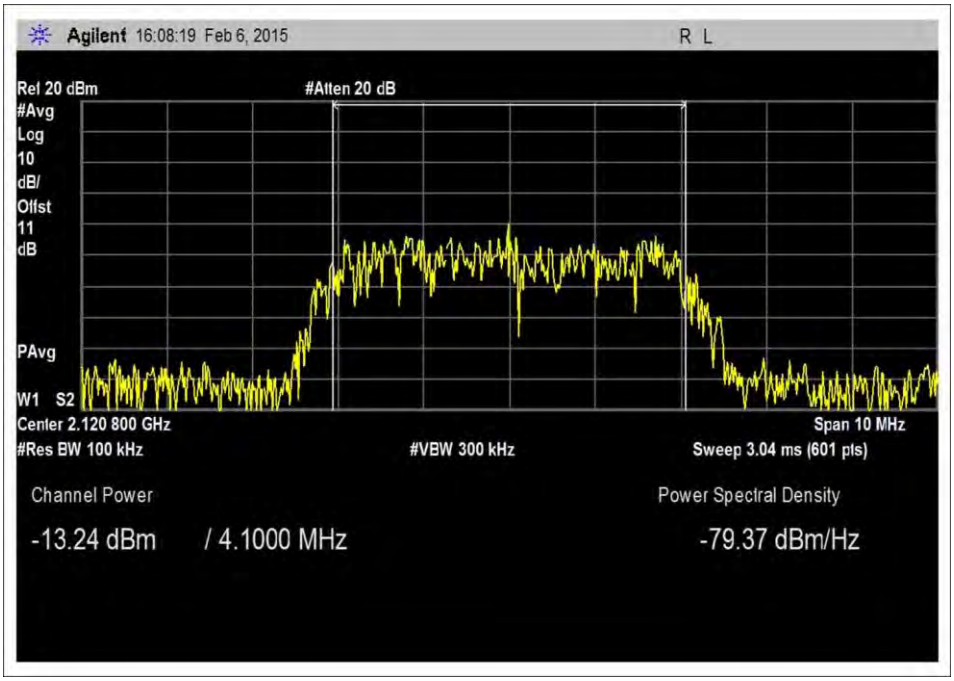
7.2_Power_DL_1930-1995_AWGN



7.2_Power_DL_1930-1995_AWGN-MAX



7.2_Power_DL_2110-2155_AWGN



7.2_Power_DL_2110-2155_AWGN-MAX

Clause 7.3 Maximum Booster Gain Computation

Test Conditions / Setup

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

Customer: **Cellphone-Mate, Inc.**
Specification: **7.3 Maximum Booster Gain Computation**
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 7.3 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 summarized in table below.

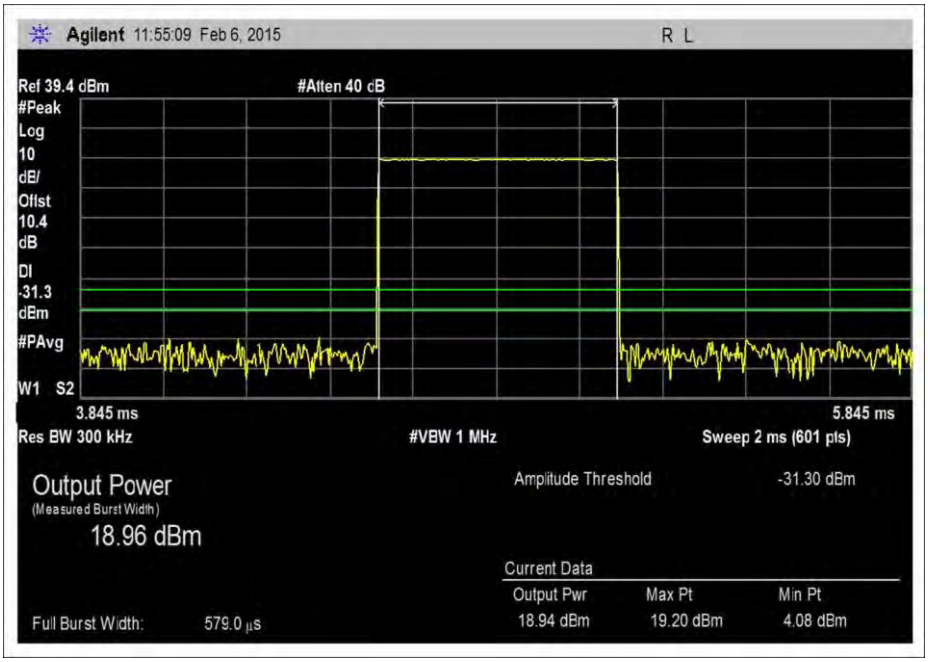
Pre AGC							
	Pulse GSM			4.1 MHz AWGN			UL Gain*
Frequency	Input(dBm)	Output (dBm)	Gain (dB)	Input(dBm)	Output (dBm)	Gain(dB)	limit
UL							
UL1710-1755	-28.1	17.4	45.5	-28.2	17.3	45.5	50.0
UL1850-1915	-28.8	17.2	46.0	-28.2	17.5	45.7	50.0
UL824-894	-28.8	18.5	47.3	-28.1	17.9	46.0	50.0
UL 698-716	-28.0	19.0	47.0	-27.8	18.8	46.6	50.0
UL776-787	-28.5	17.9	46.4	-28.0	18.0	46.0	50.0
DL							DL Gain*
DL2110-2155	-55.6	-12.3	43.3	-54.8	-13.1	41.7	50.0
DL1930-1995	-56.6	-14.1	42.5	-56.7	-12.8	43.9	50.0
DL869-894	-58.2	-18.2	40.0	-58.6	-19.3	39.3	50.0
DL:728-746	-56.4	-13.0	43.4	-56.9	-13.9	43.0	50.0
DL 746-757	-57.0	-14.1	42.9	-56.9	-14.9	42.0	50.0

*Mobile Booster maximum gain using an inside antenna

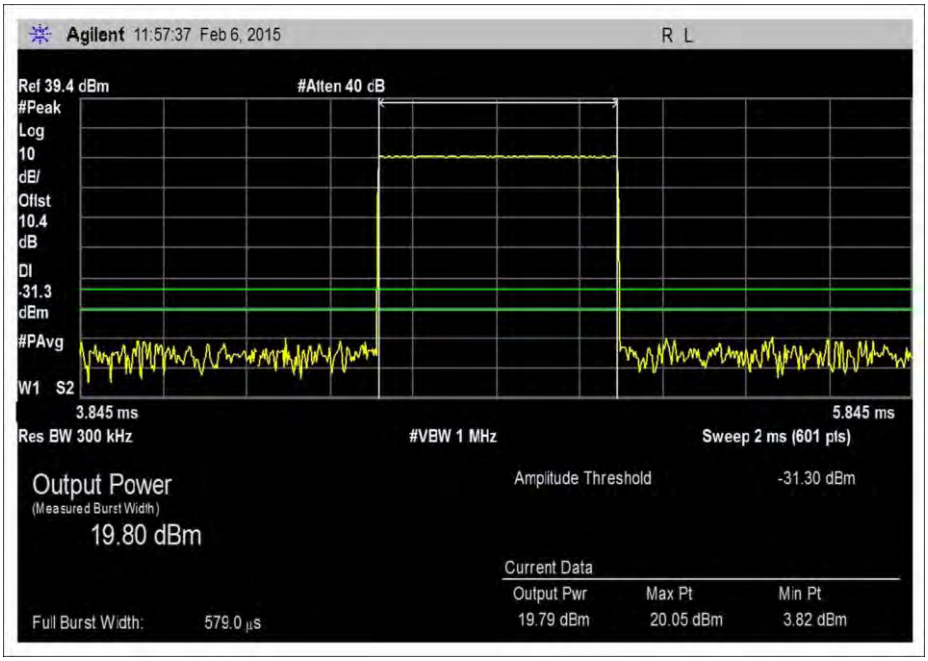
		Pulse GSM	4.1MHz AWGN	Limit (dB)
UL gain vs DL gain	1710/2110	2.2	3.8	9.0
UL gain vs DL gain	1850/1930	3.5	1.8	9.0
UL gain vs DL gain	824/869	7.3	6.7	9.0
UL gain vs DL gain	776/728	3.6	3.7	9.0
UL gain vs DL gain	776/746	3.5	3.9	9.0

Test Data

GSM / GSM MAX, UL

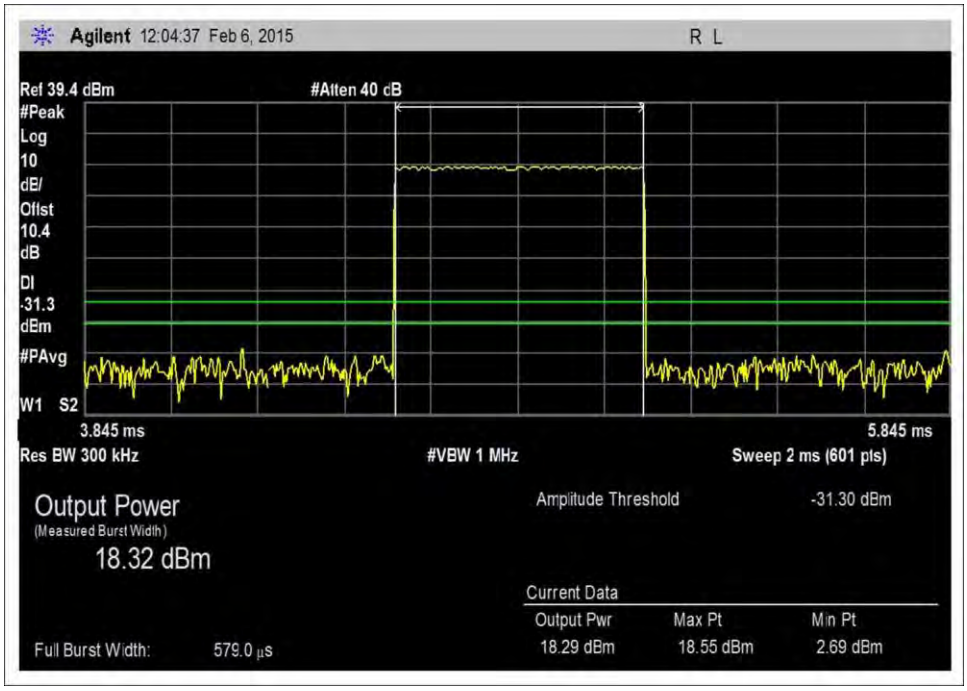


7.3_Power_UL_698-716_GSM

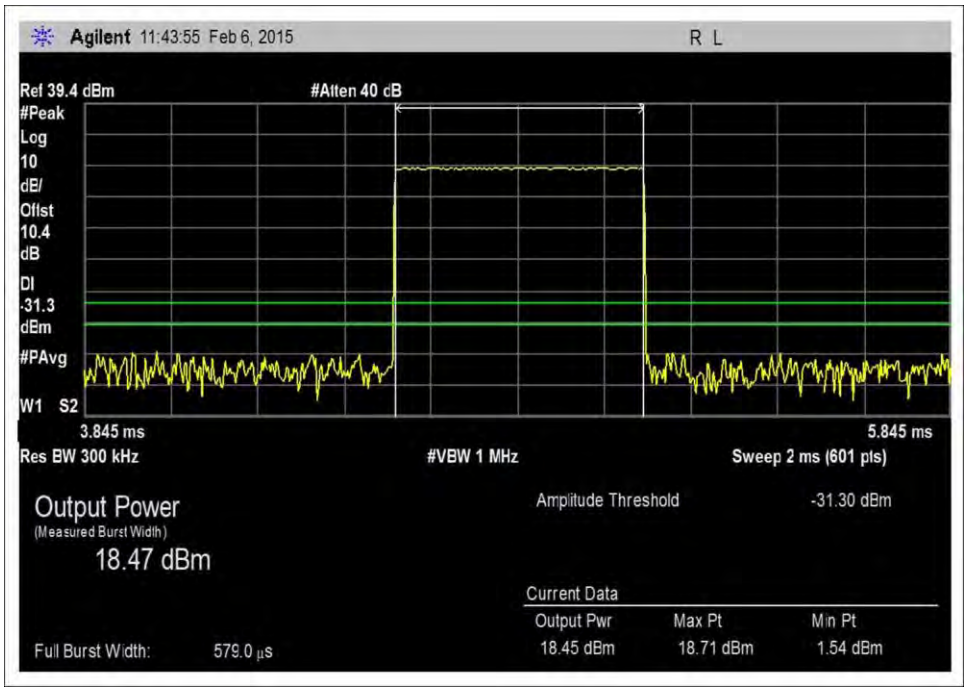


7.3_Power_UL_698-716_GSM-MAX

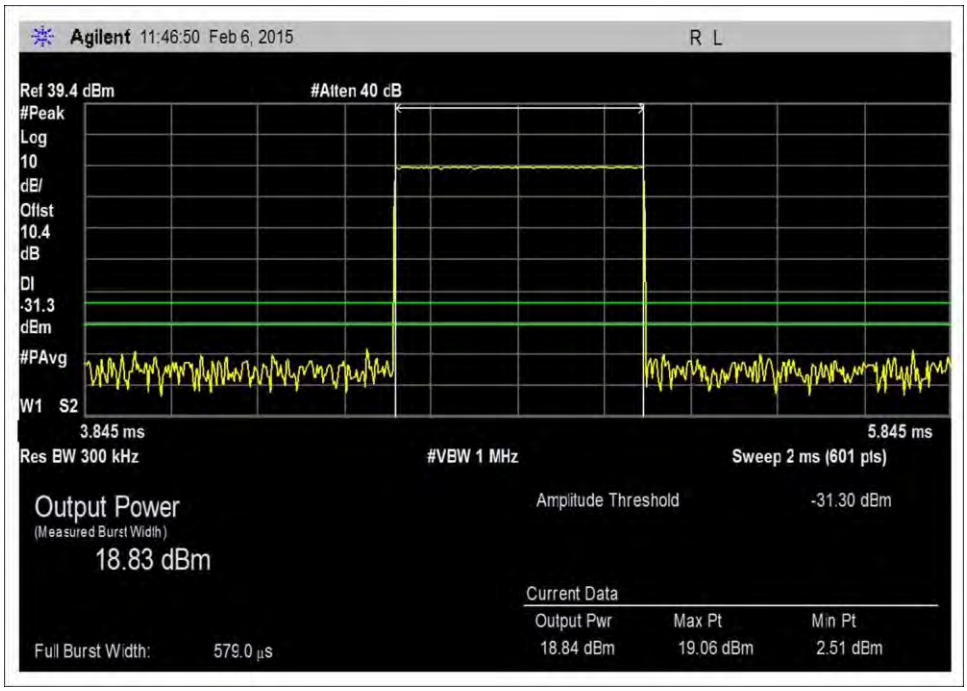
7.3_Power_UL_776-787_GSM



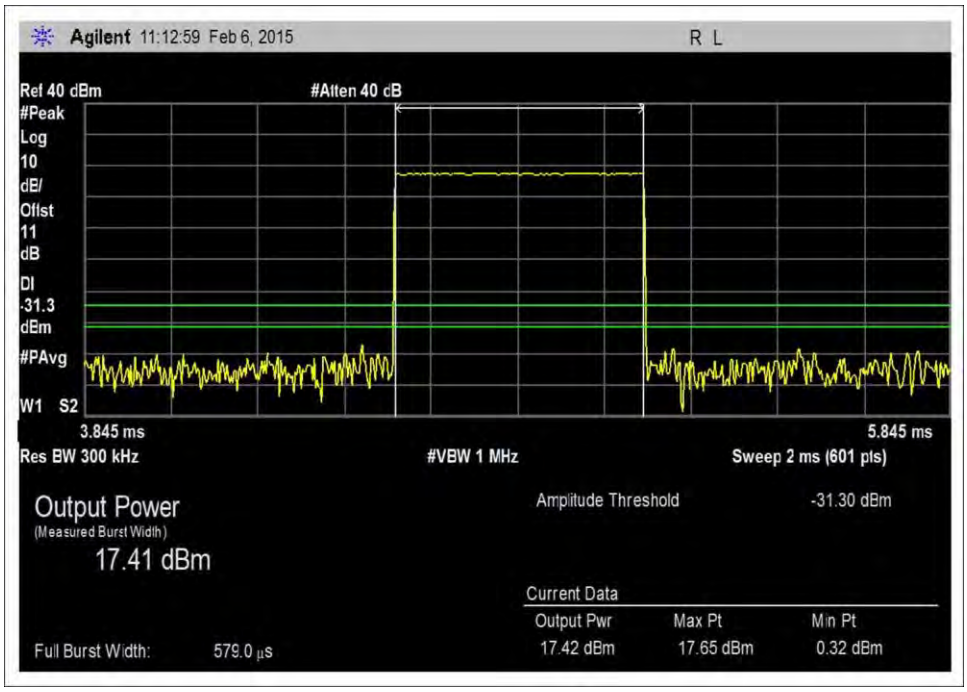
7.3_Power_UL_776-787_GSM-MAX



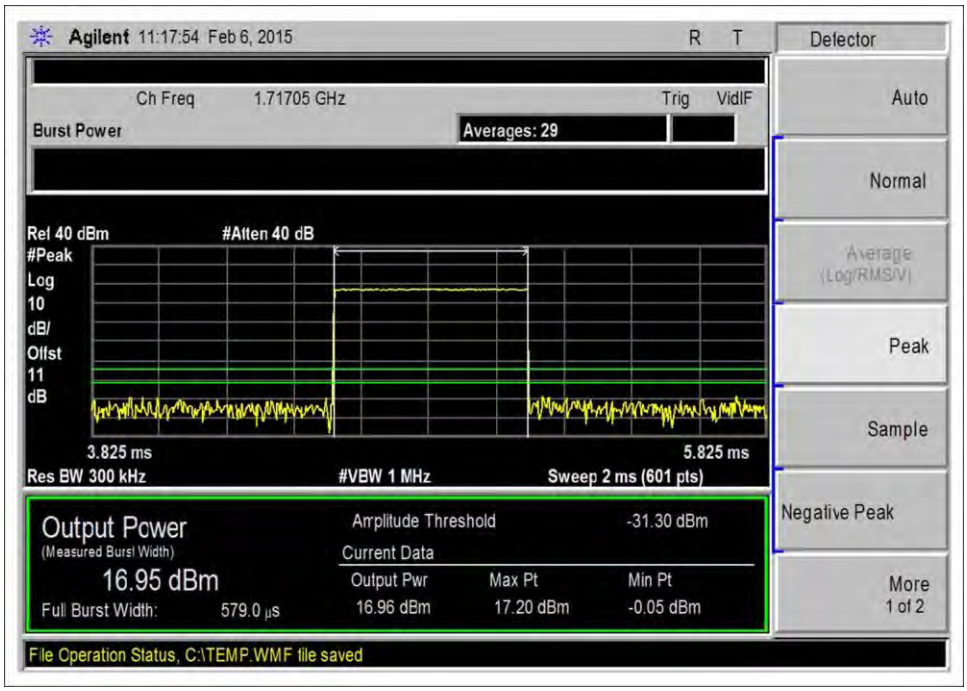
7.3_Power_UL_824-849_GSM



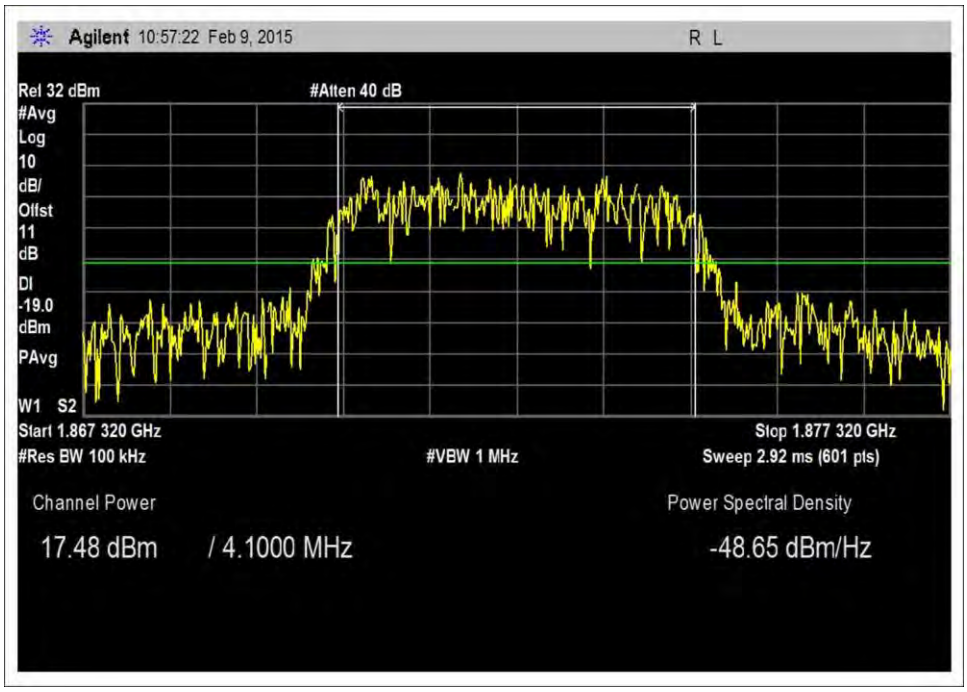
7.3_Power_UL_824-849_GSM-MAX



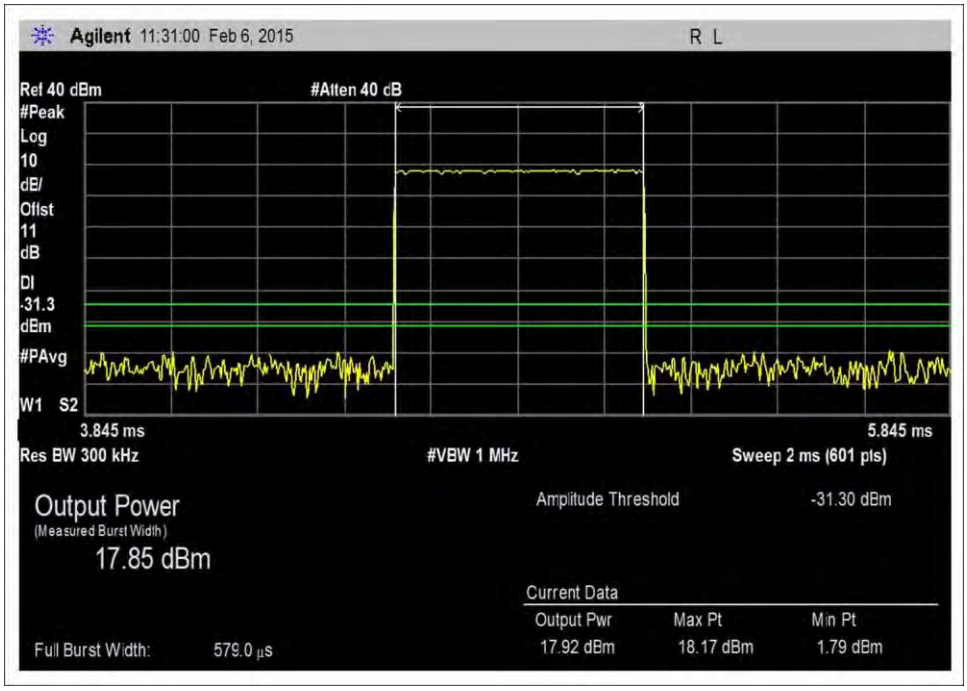
7.3_Power_UL_1710-1755_GSM



7.3_Power_UL_1710-1755_GSM-MAX

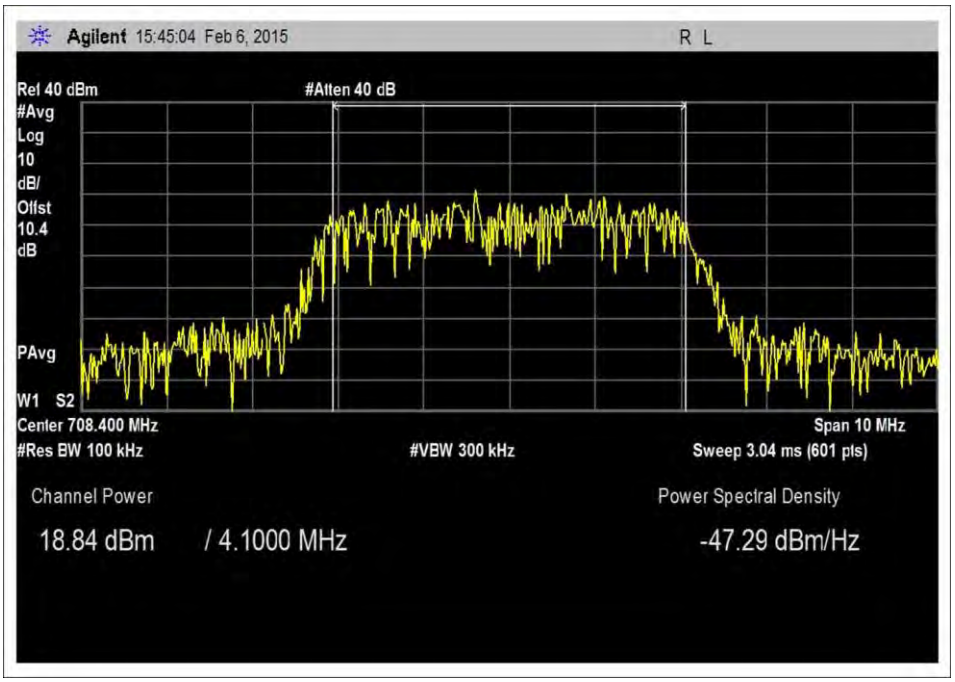


7.3_Power_UL_1850-1915_GSM

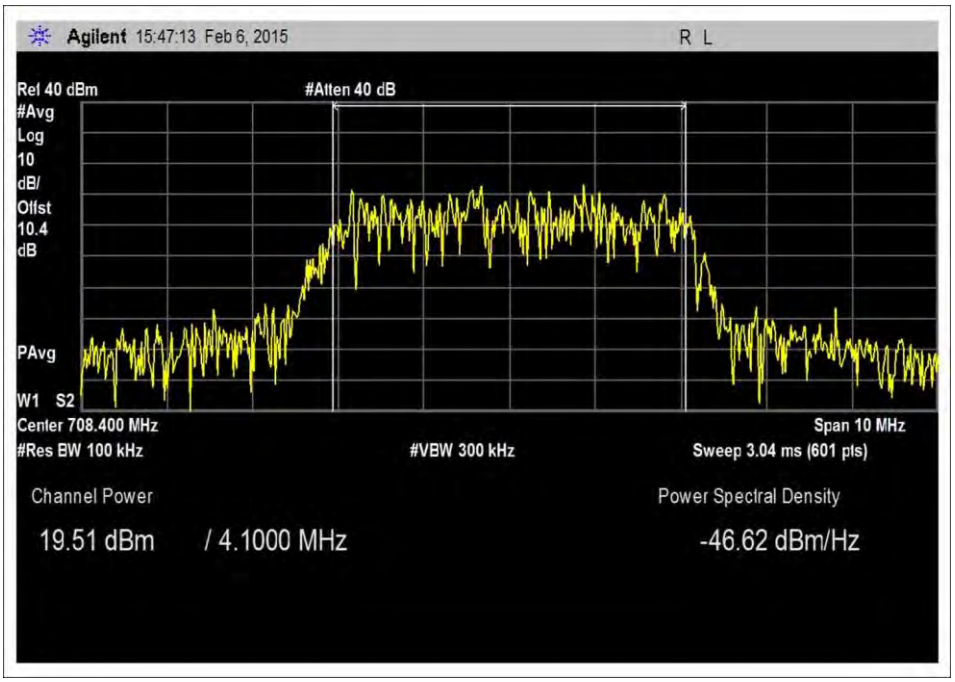


7.3_Power_UL_1850-1915_GSM-MAX

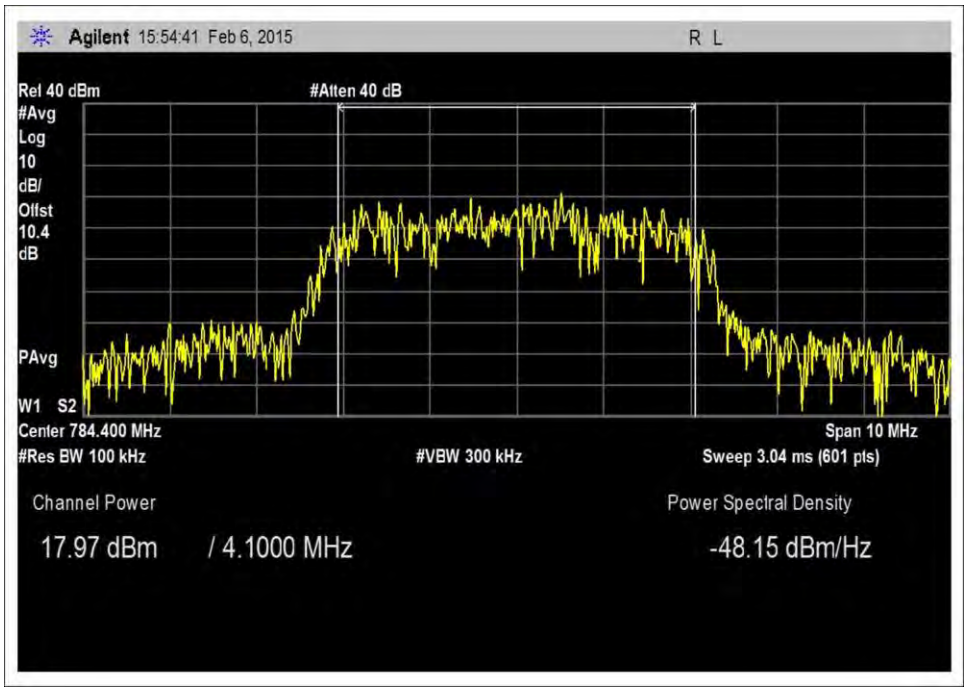
AWGN / AWGN MAX, UL



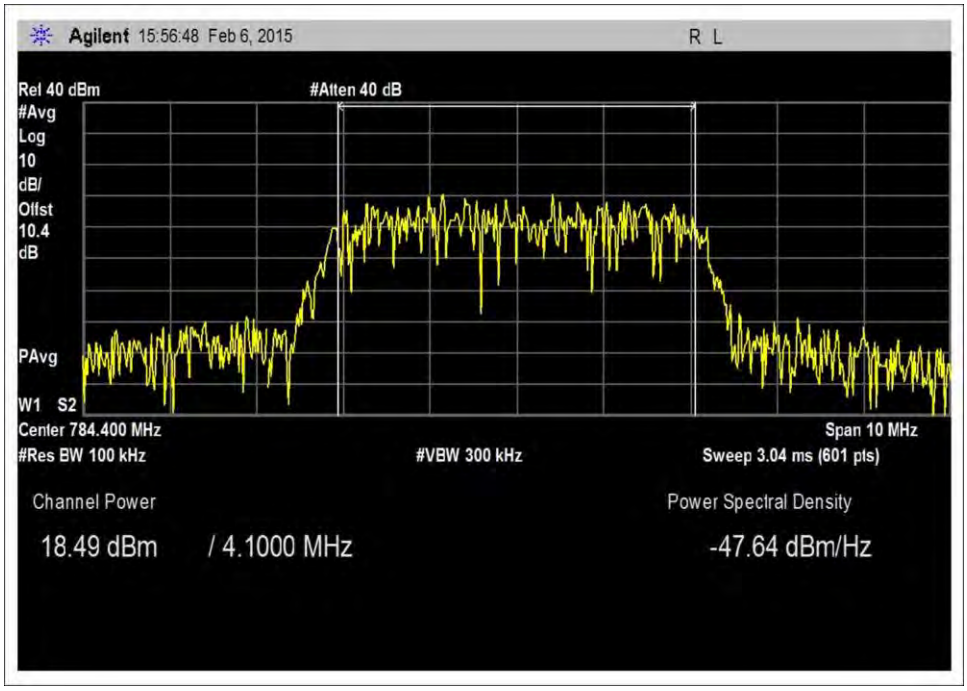
7.3_Power_UL_698-716_AWGN



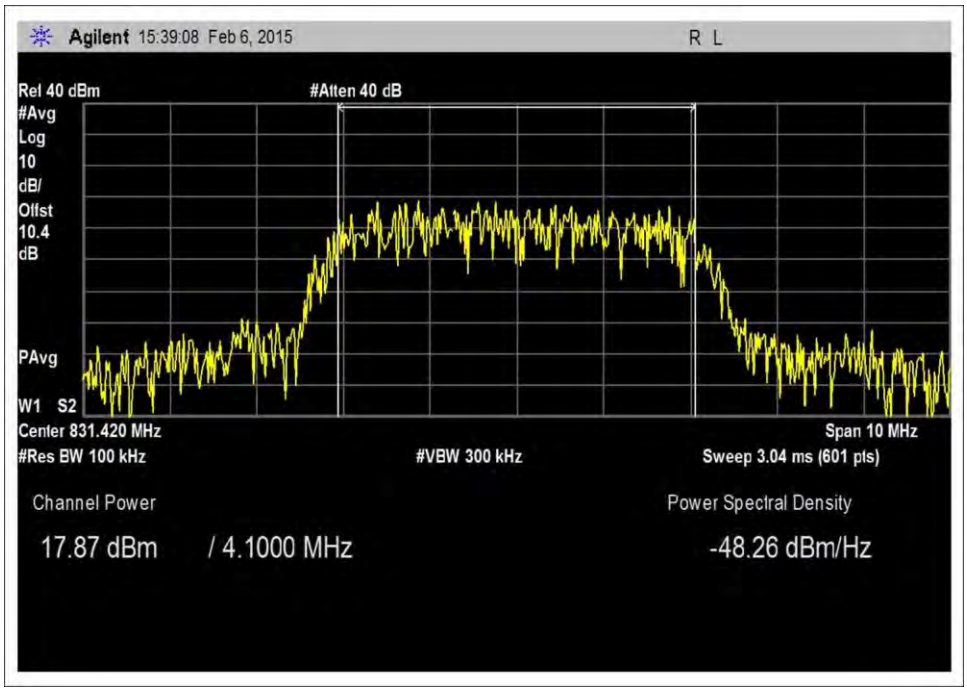
7.3_Power_UL_698-716_AWGN-MAX



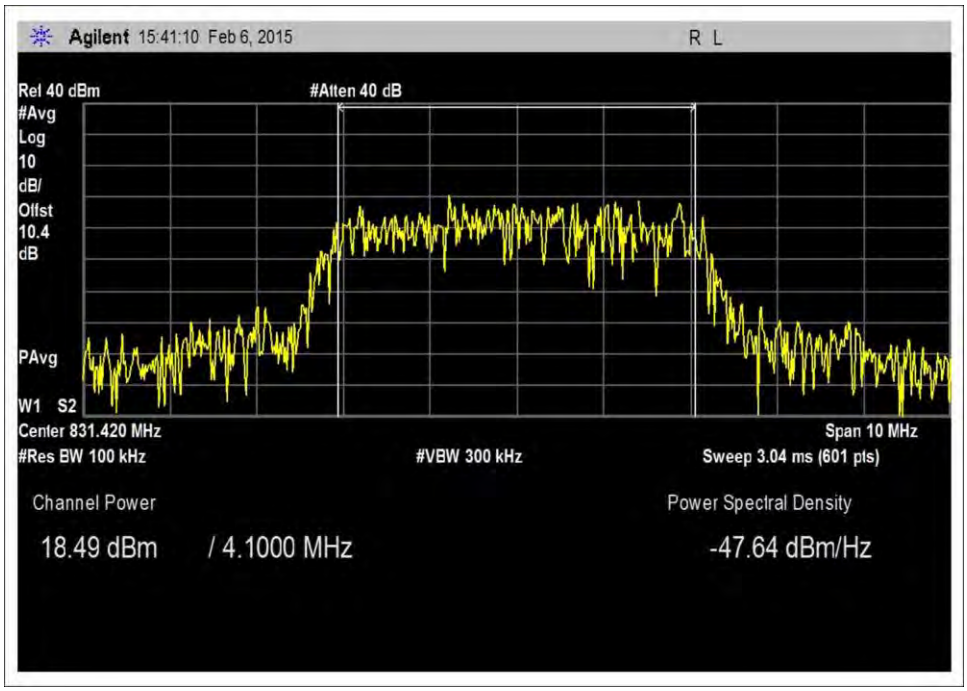
7.3_Power_UL_776-787_AWGN



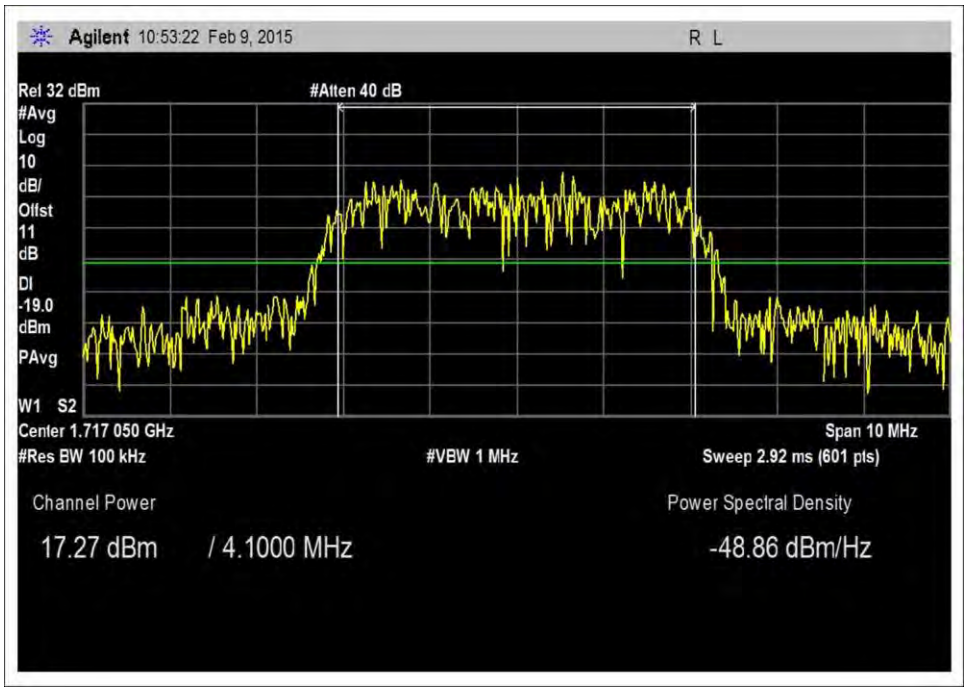
7.3_Power_UL_776-787_AWGN-MAX



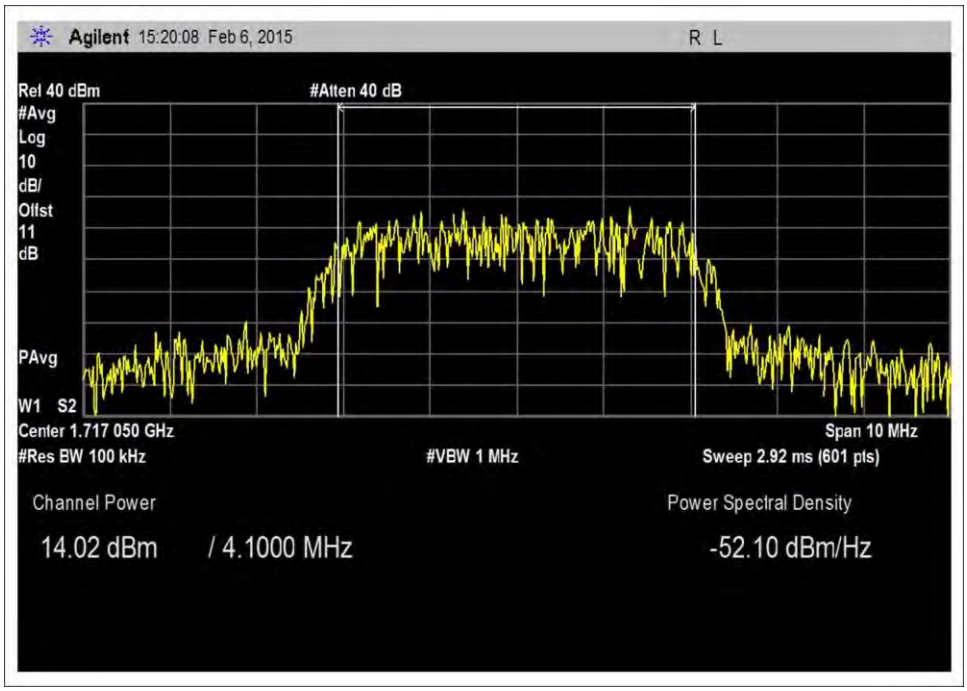
7.3_Power_UL_824-849_AWGN



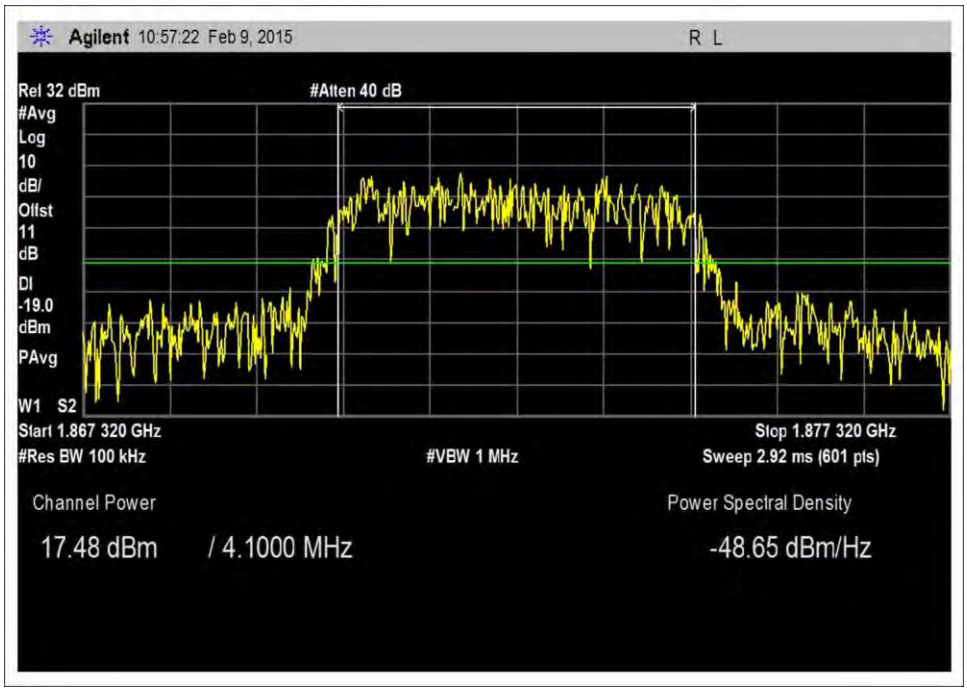
7.3_Power_UL_824-849_AWGN-MAX



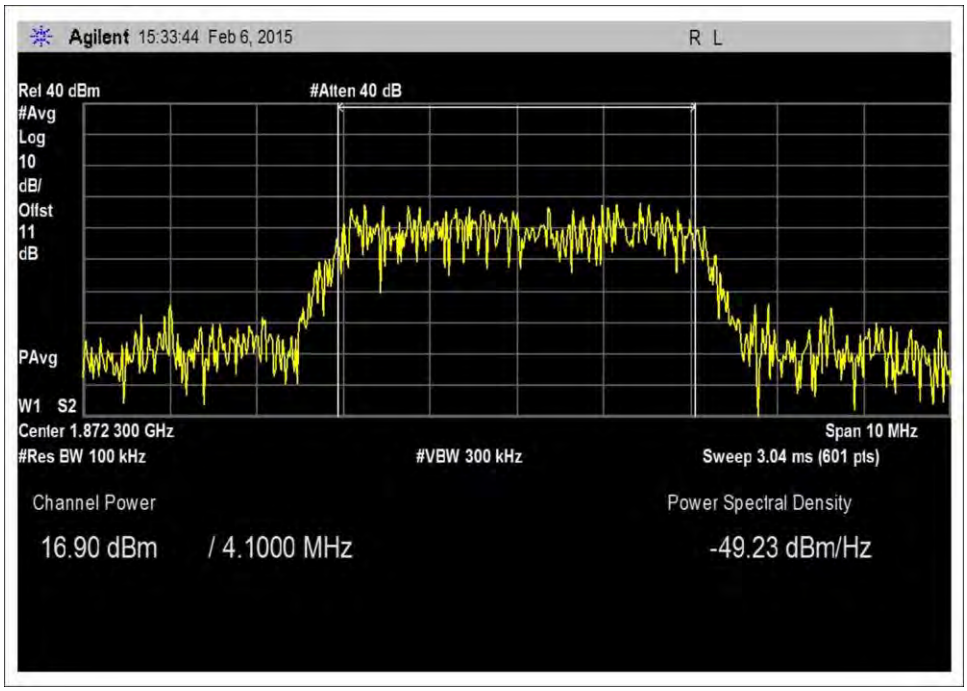
7.3_Power_UL_1710-1755_AWGN



7.3_Power_UL_1710-1755_AWGN_MAX

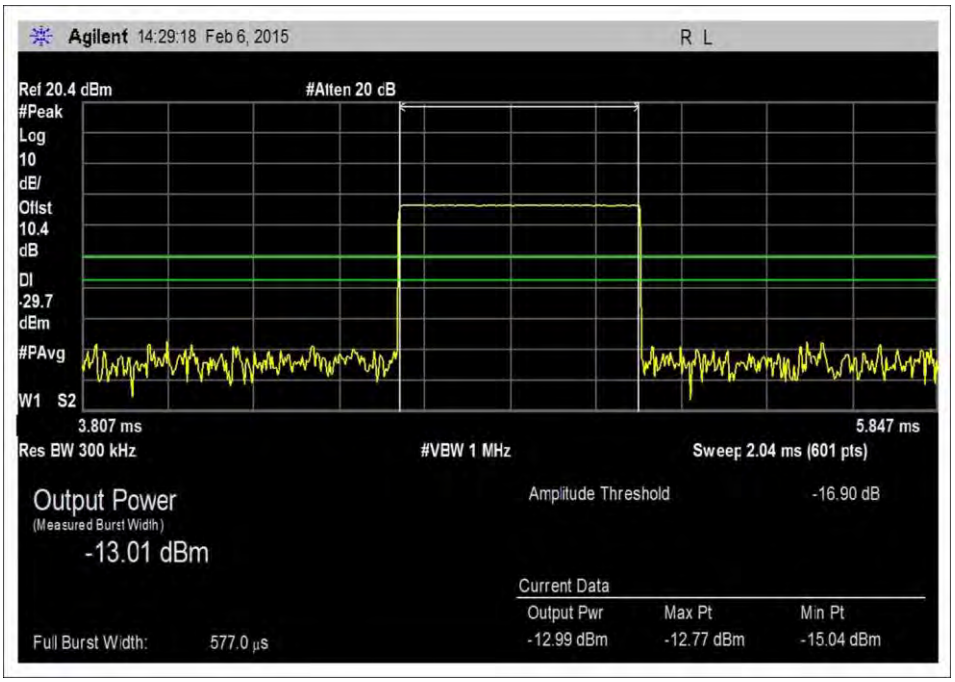


7.3_Power_UL_1850-1915_AWGN

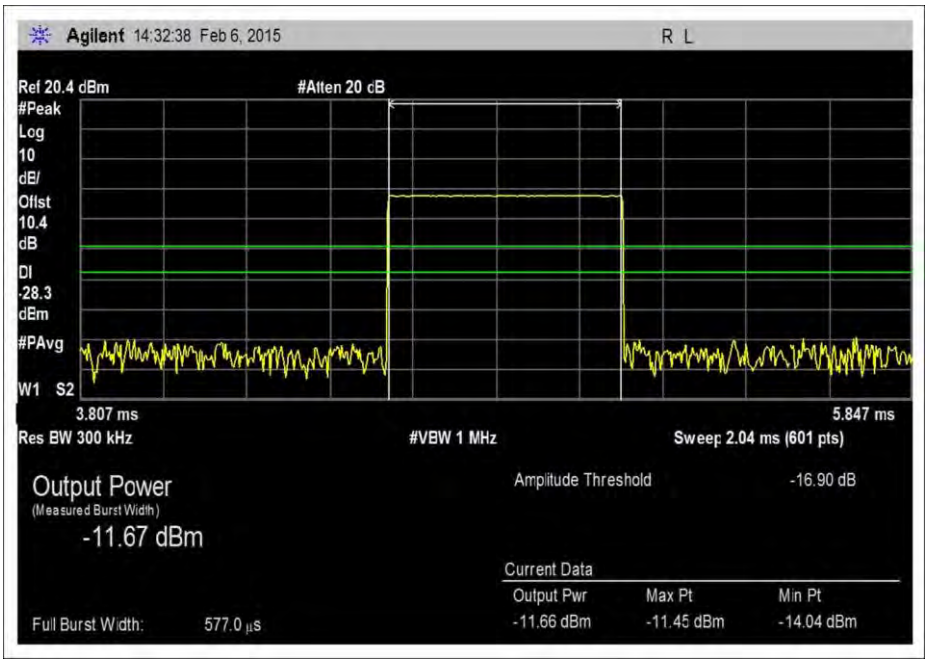


7.3_Power_UL_1850-1915_AWGN-MAX

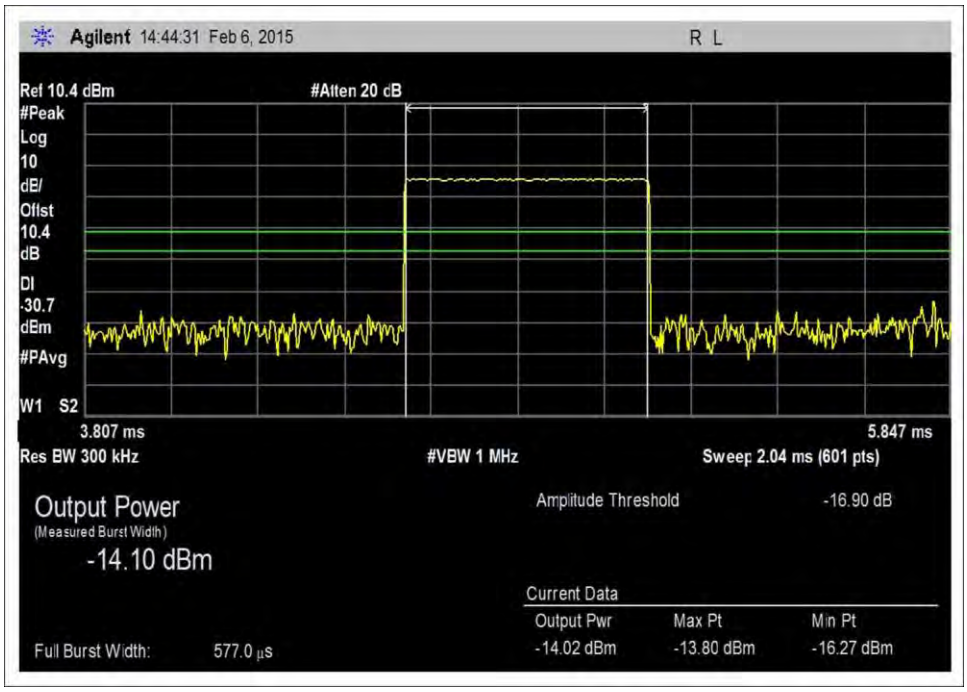
GSM / GSM MAX, DL



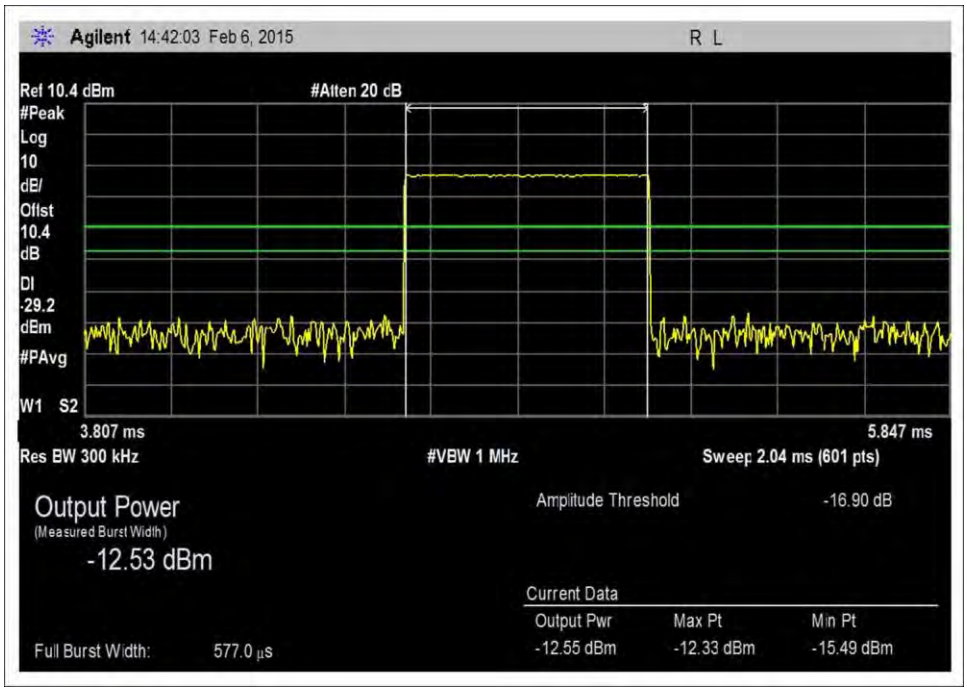
7.3_Power_DL_728-746_GSM



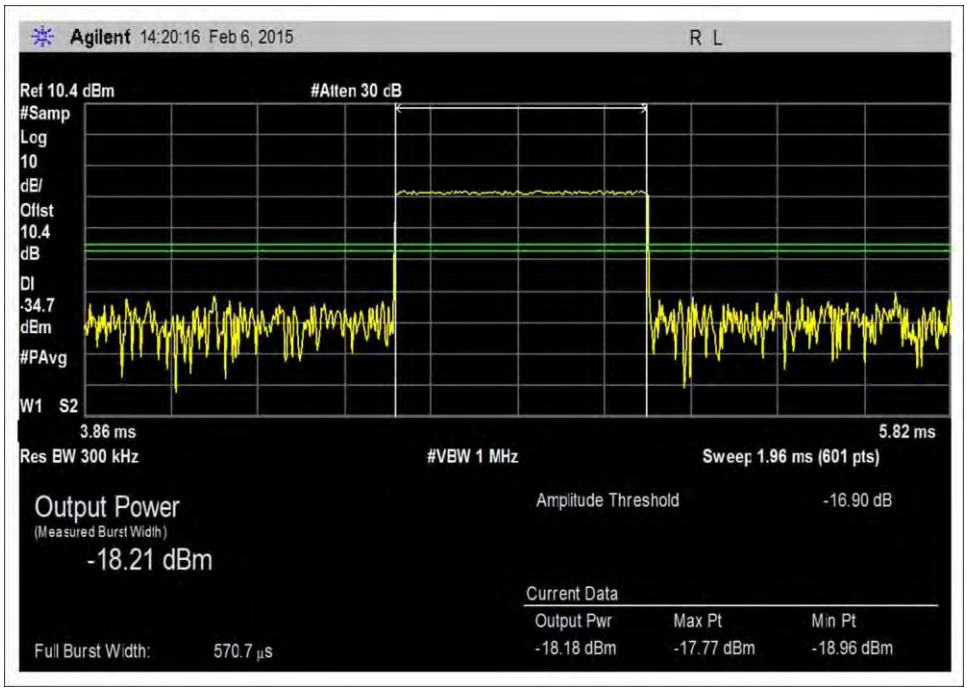
7.3_Power_DL_728-746_GSM-MAX



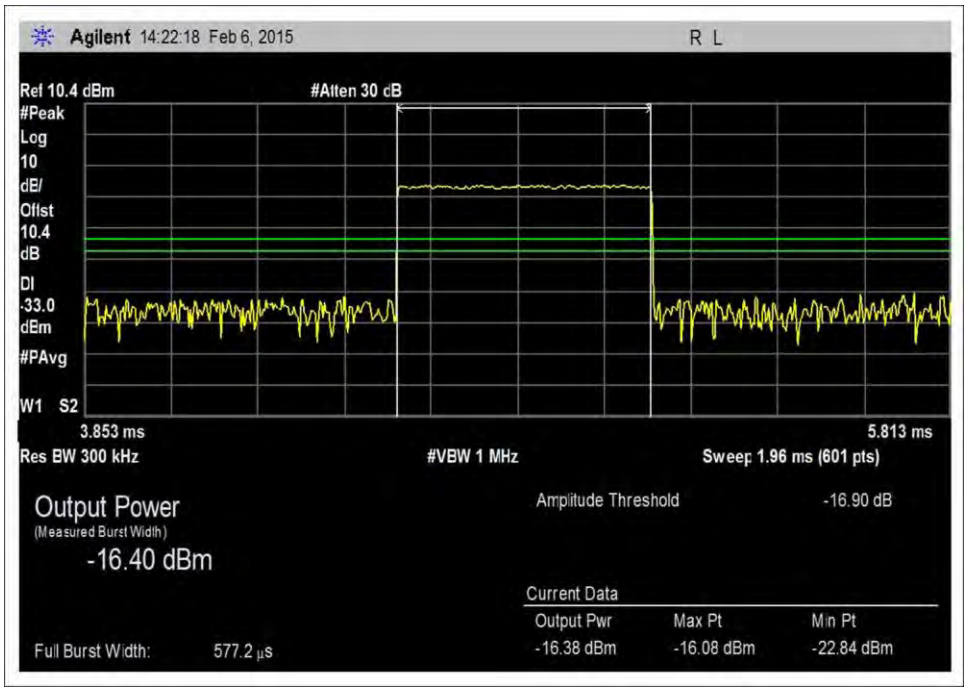
7.3_Power_DL_746-757_GSM



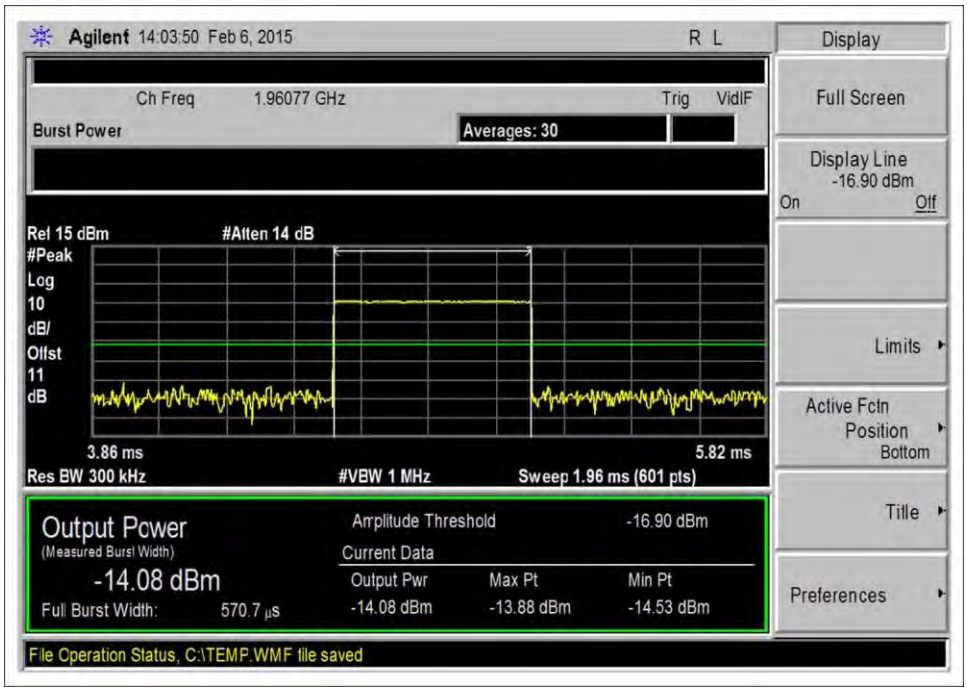
7.3_Power_DL_746-757_GSM-MAX



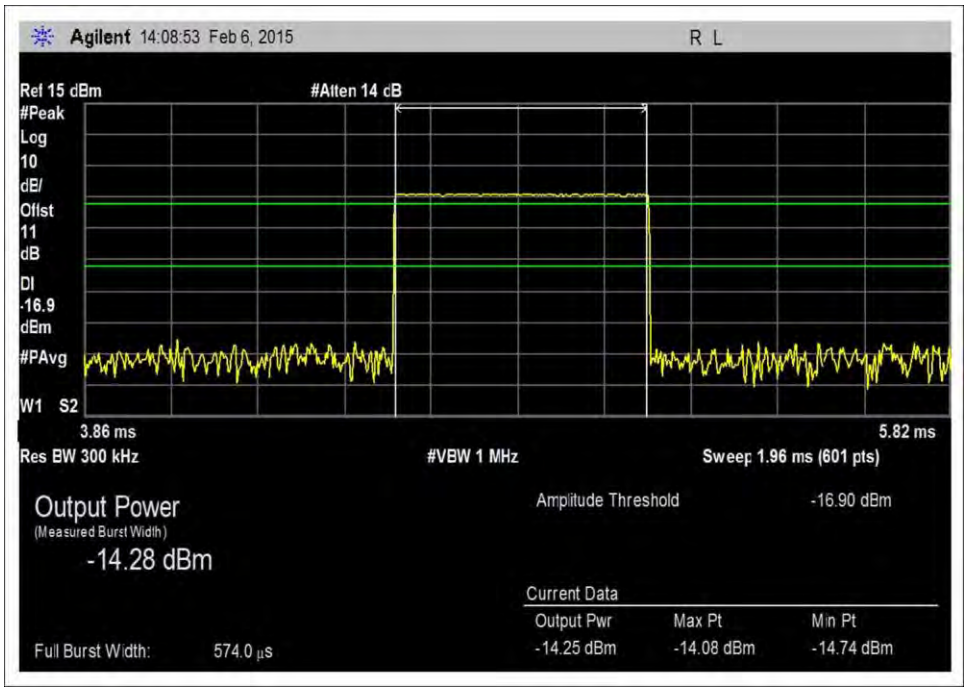
7.3_Power_DL_869-894_GSM



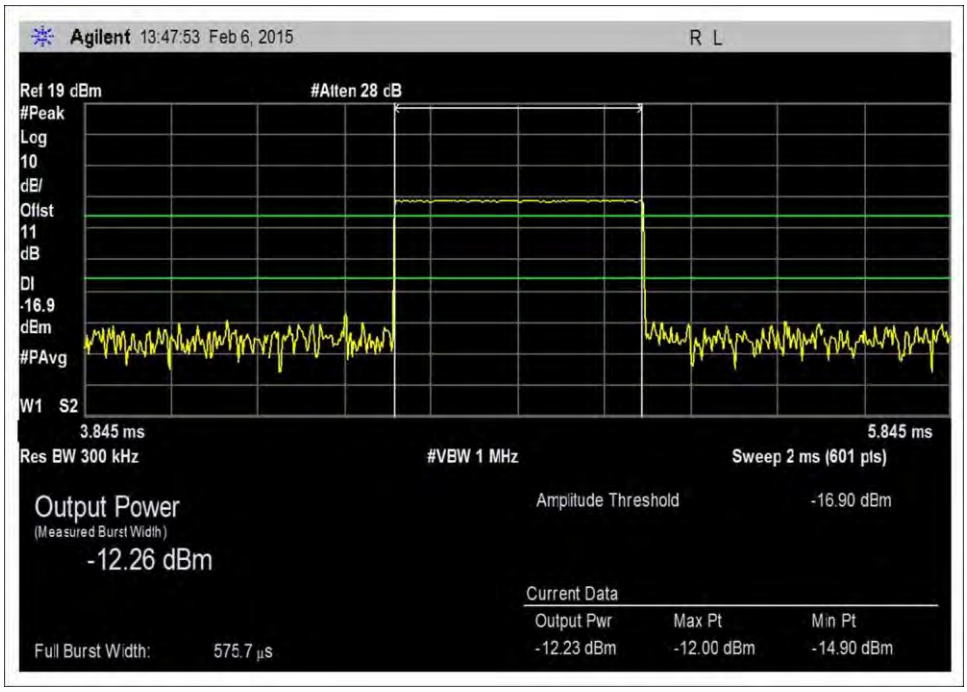
7.3_Power_DL_869-894_GSM-MAX



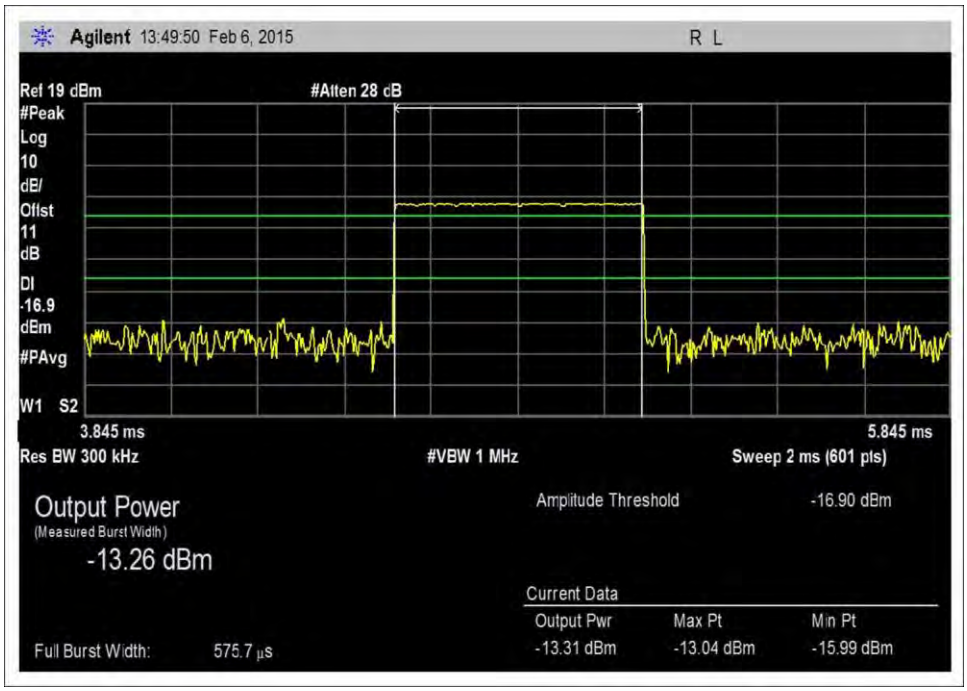
7.3_Power_DL_1930-1995_GSM



7.3_Power_DL_1930-1995_GSM-MAX

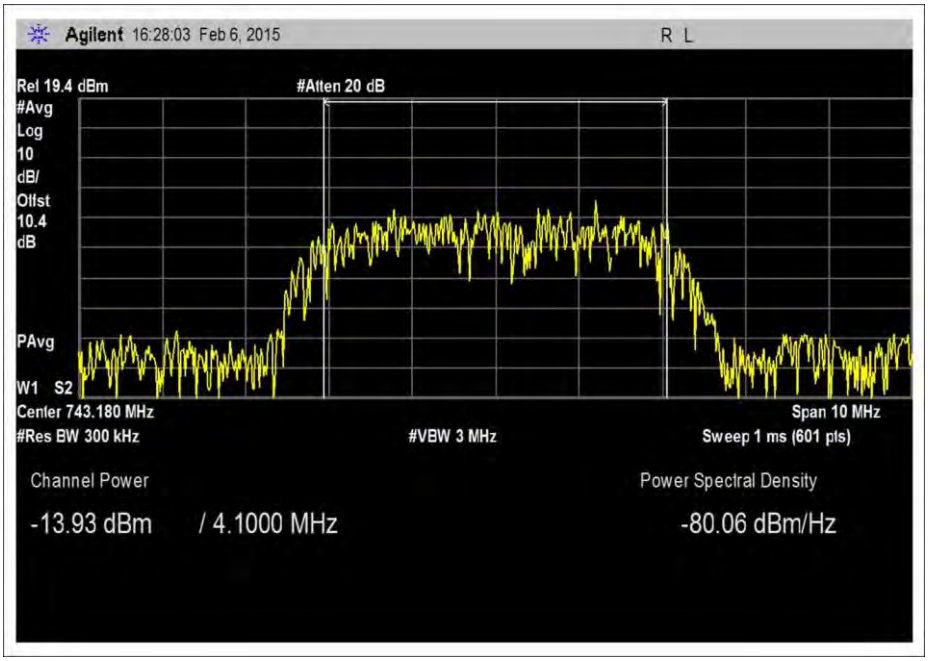


7.3_Power_DL_2110-2155_GSM

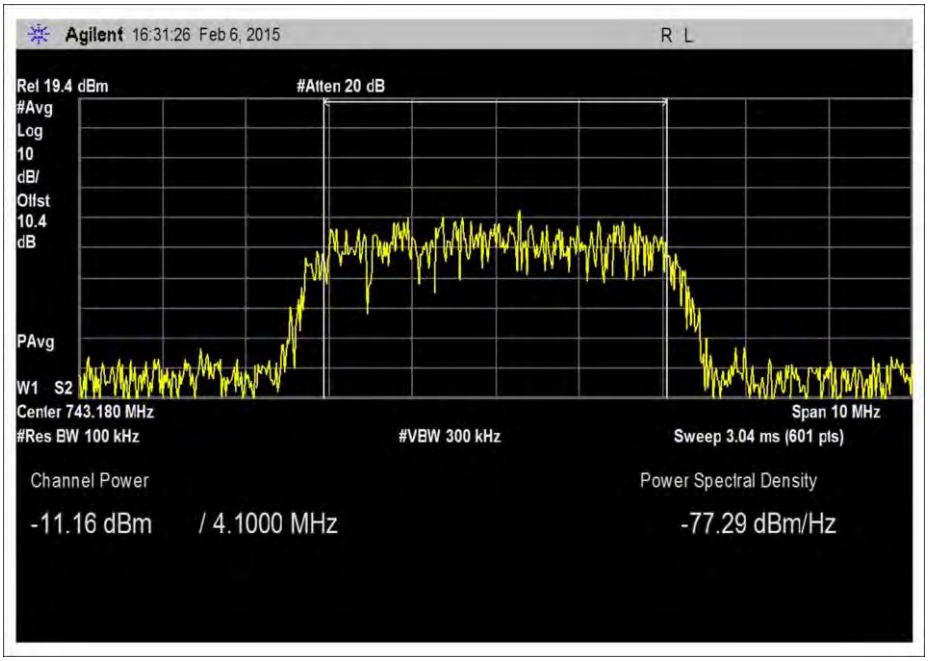


7.3_Power_DL_2110-2155_GSM-MAX

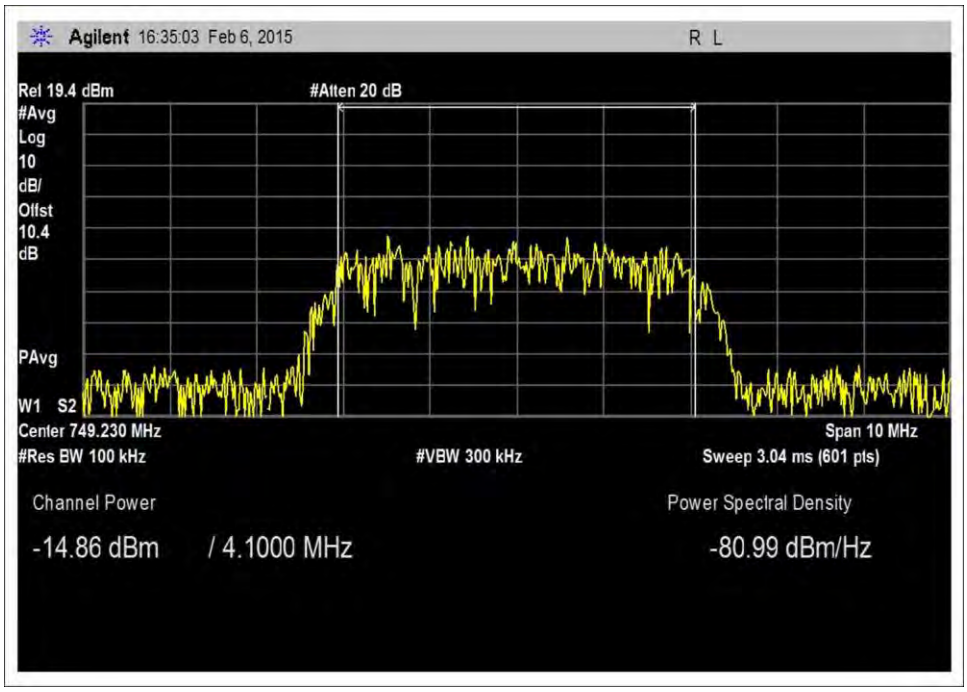
AWGN / AWGN MAX, DL



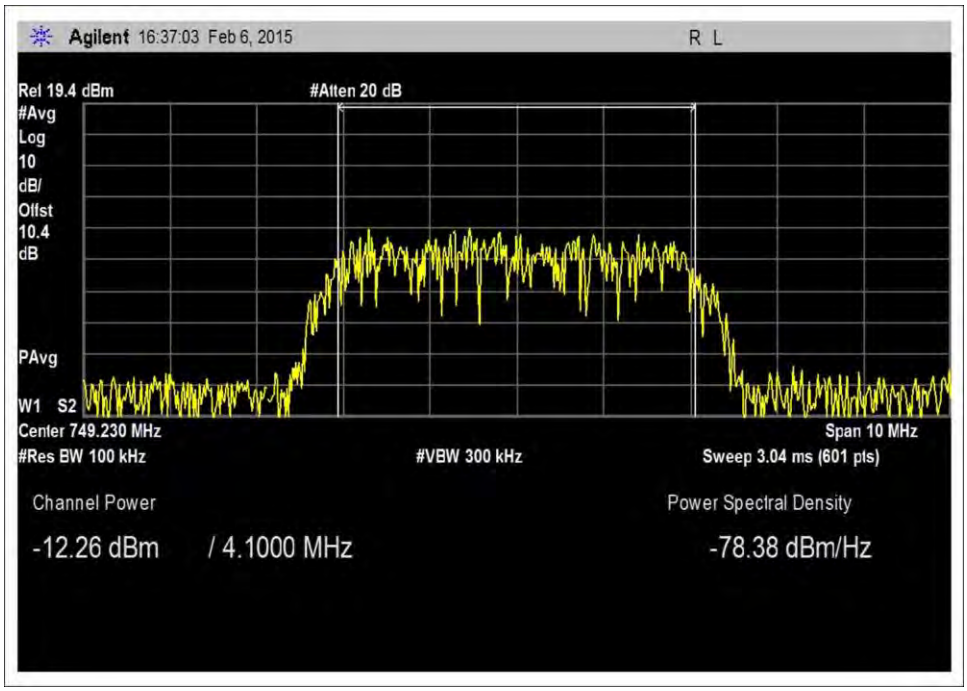
7.3_Power_DL_728-746_AWGN



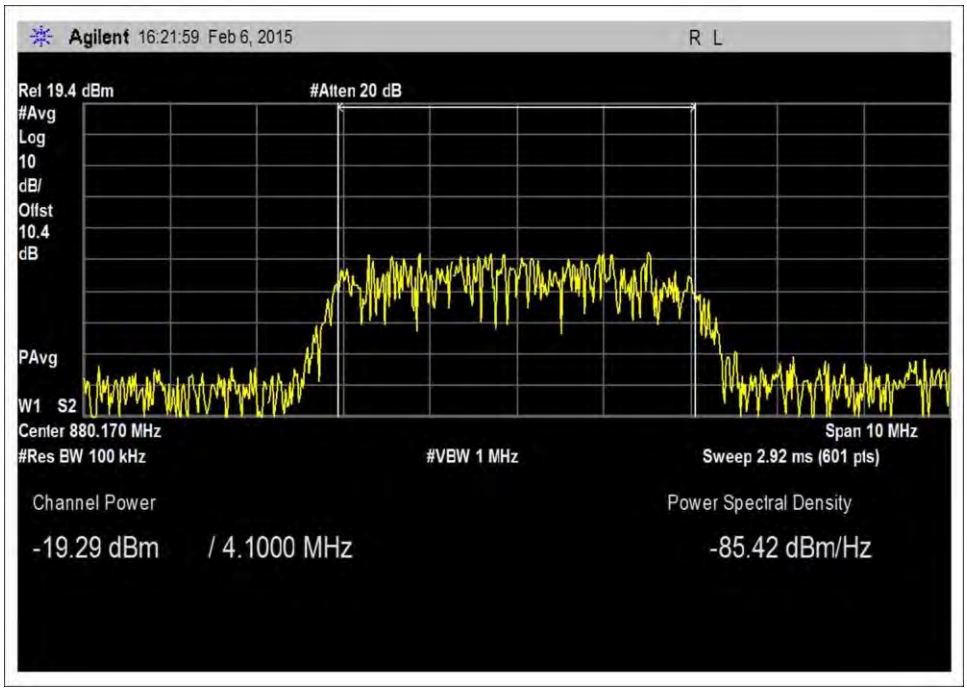
7.3_Power_DL_728-746_AWGN-MAX



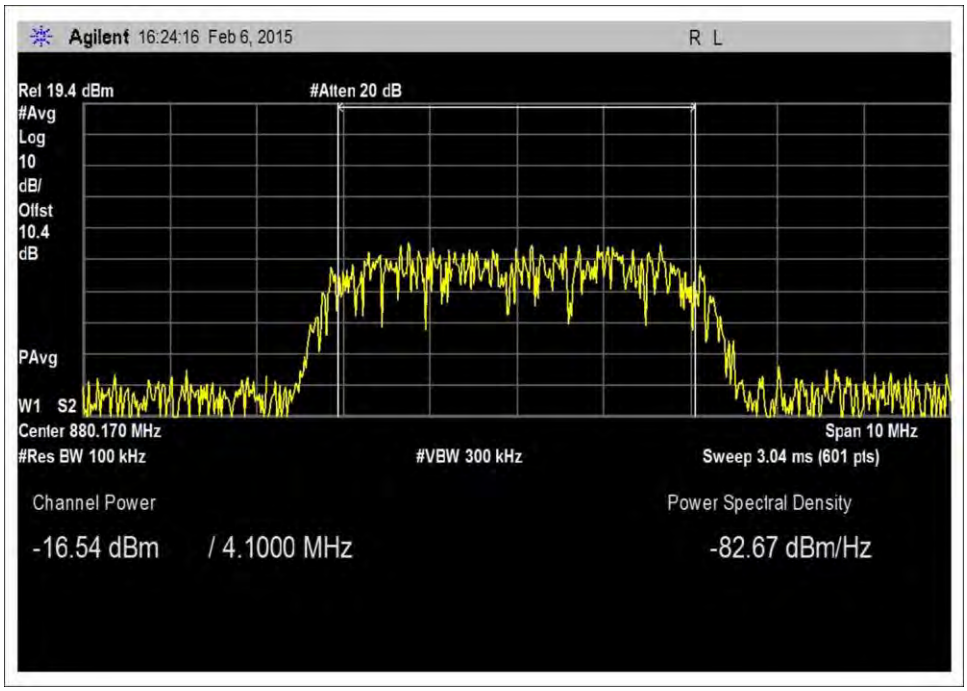
7.3_Power_DL_746-757_AWGN



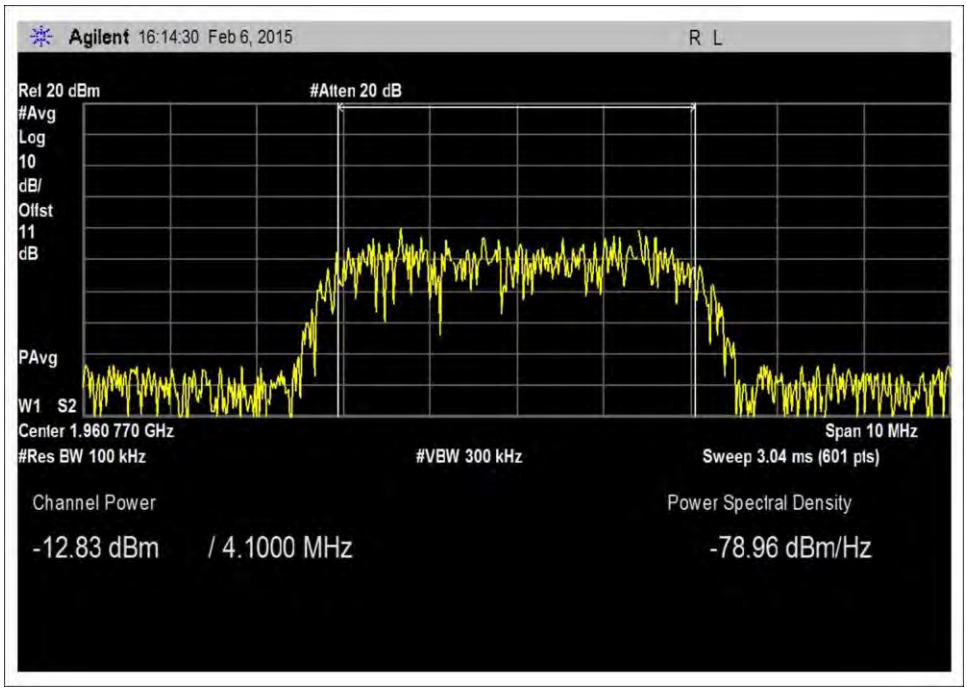
7.3_Power_DL_746-757_AWGN-MAX



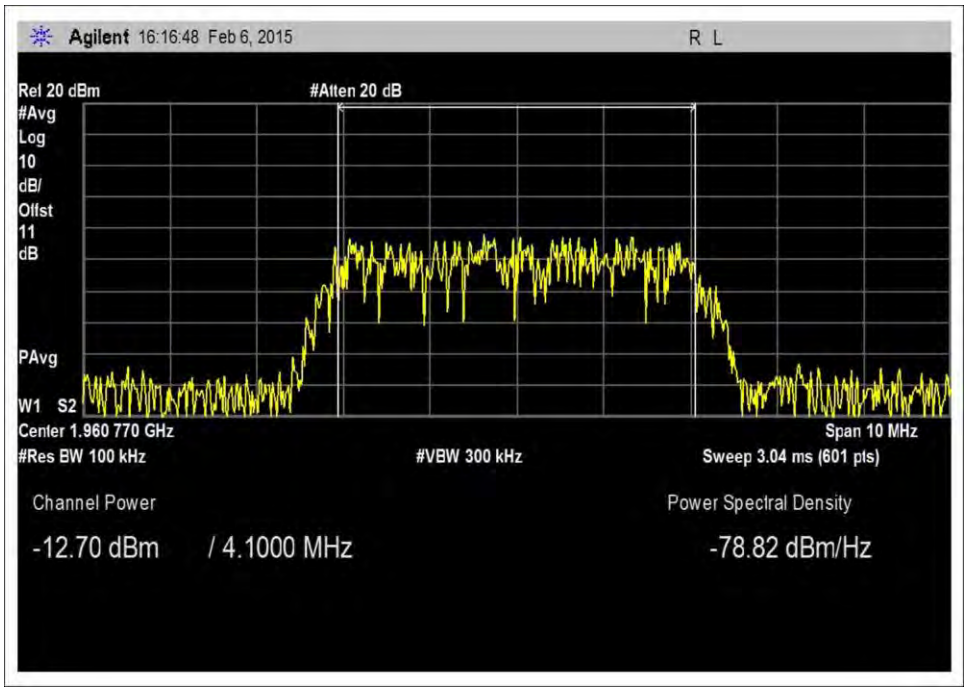
7.3 _Power_DL_869-894_AWGN



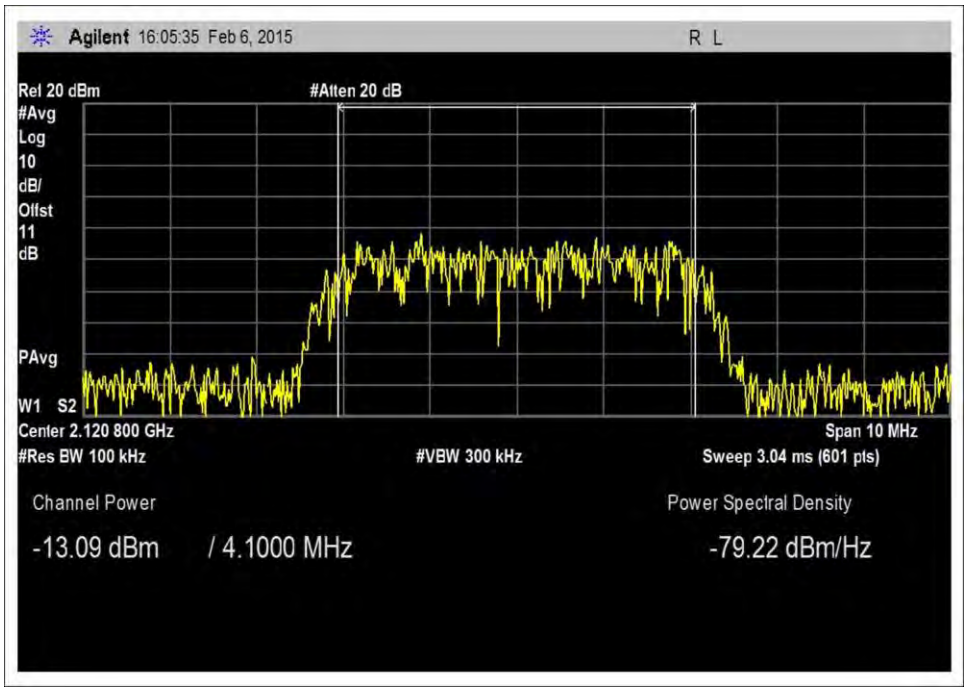
7.3_Power_DL_869-894_AWGN-MAX



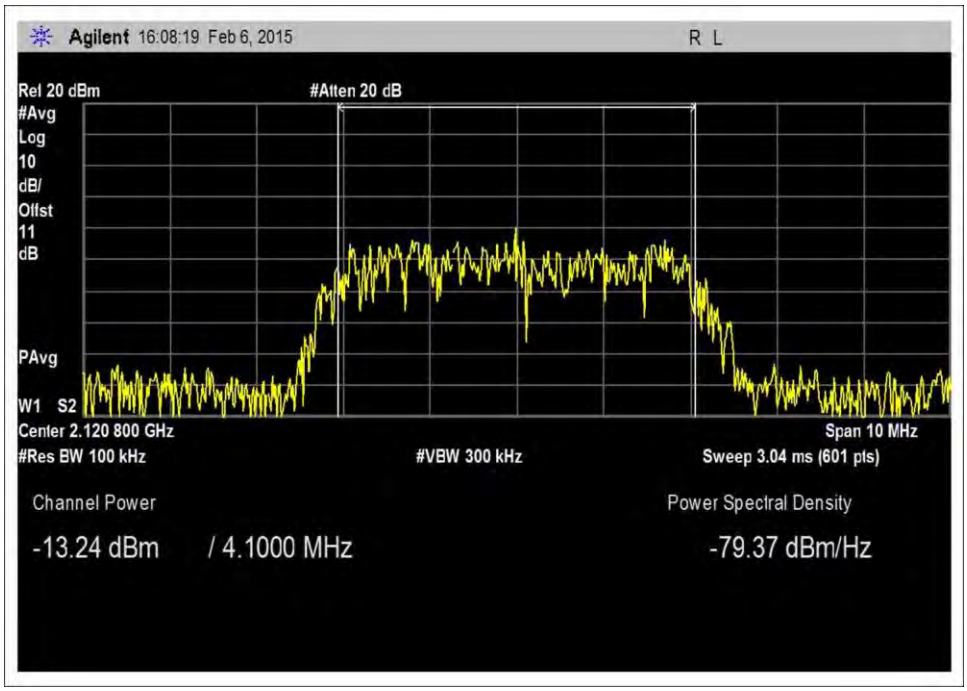
7.3_Power_DL_1930-1995_AWGN



7.3_Power_DL_1930-1995_AWGN-MAX



7.3_Power_DL_2110-2155_AWGN



7.3_Power_DL_2110-2155_AWGN-MAX

Clause 7.4 Intermodulation Product

Test Conditions / Setup

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

Customer: **Cellphone-Mate, Inc.**
Specification: **7.4 Intermodulation Product**
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
	C00087	Combiner	44000	010914	1/9/2016

***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 7.4 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014.

Firmware: V1.0

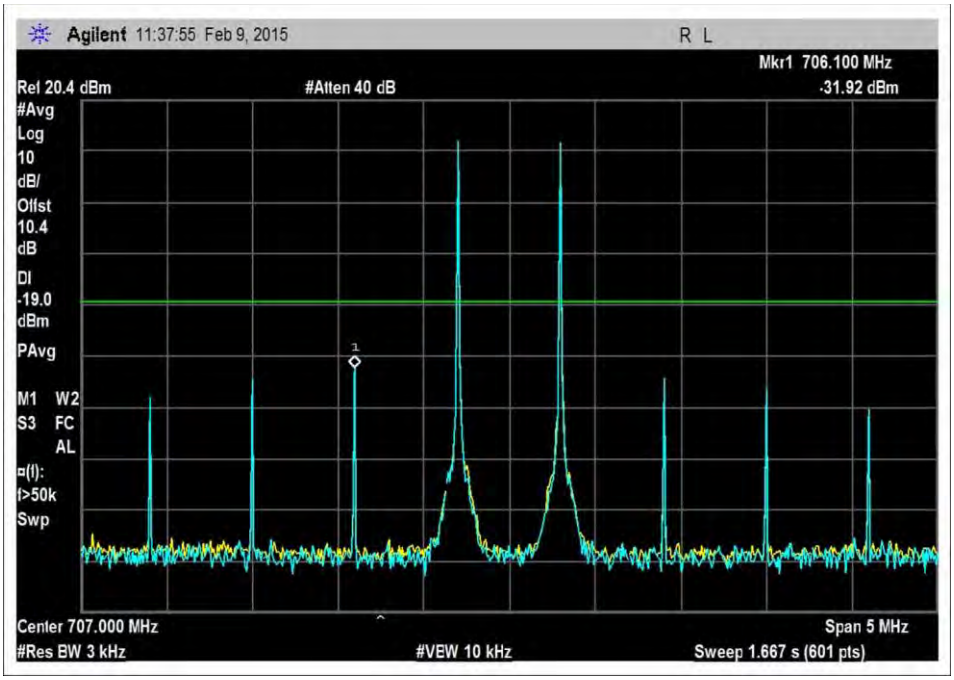
Summary of Results

Pass: All intermodulation products are measured below -19dbm limit.

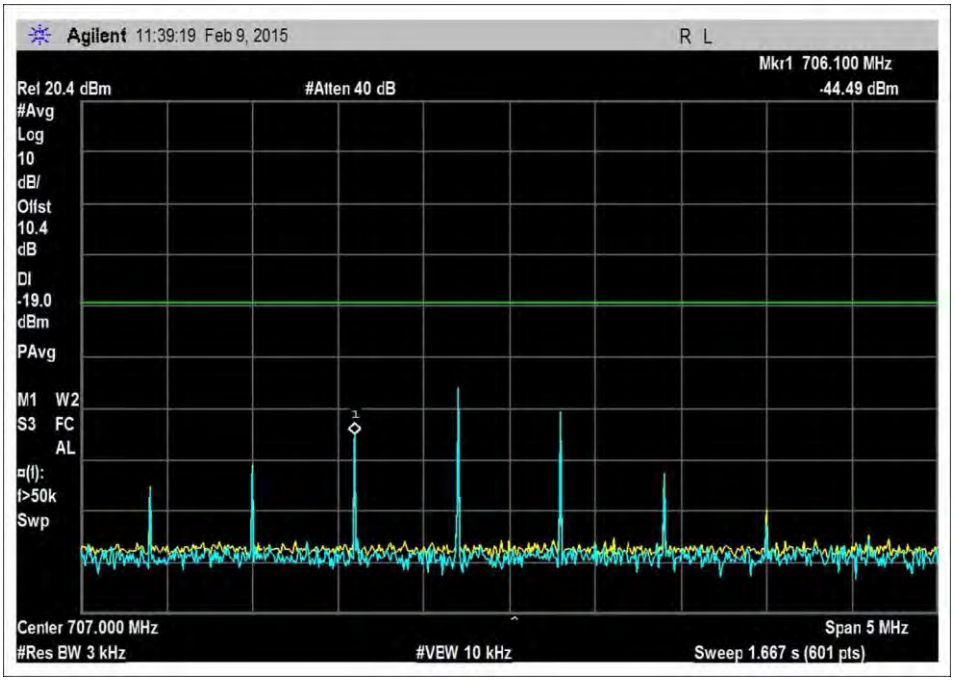
Max Intermodulation Product			
Freq	**Pre AGC**	**AGC+10**	**Limit**
MHz	**dBm**	**dBm**	**dBm**
UL			
UL1710-1755	-26.02	-61.35	-19.0
UL1850-1915	-29.30	-52.35	-19.0
UL824-894	-29.01	-47.86	-19.0
UL 698-716	-31.92	-44.49	-19.0
UL776-787	-27.66	-45.35	-19.0
DL			
DL2110-2155	-64.24	-64.74	-19.0
DL1930-1995	-64.49	-65.12	-19.0
DL869-894	-66.10	-67.67	-19.0
DL:728-746	-66.77	-69.56	-19.0
DL 746-757	-65.42	-69.07	-19.0

Test Data

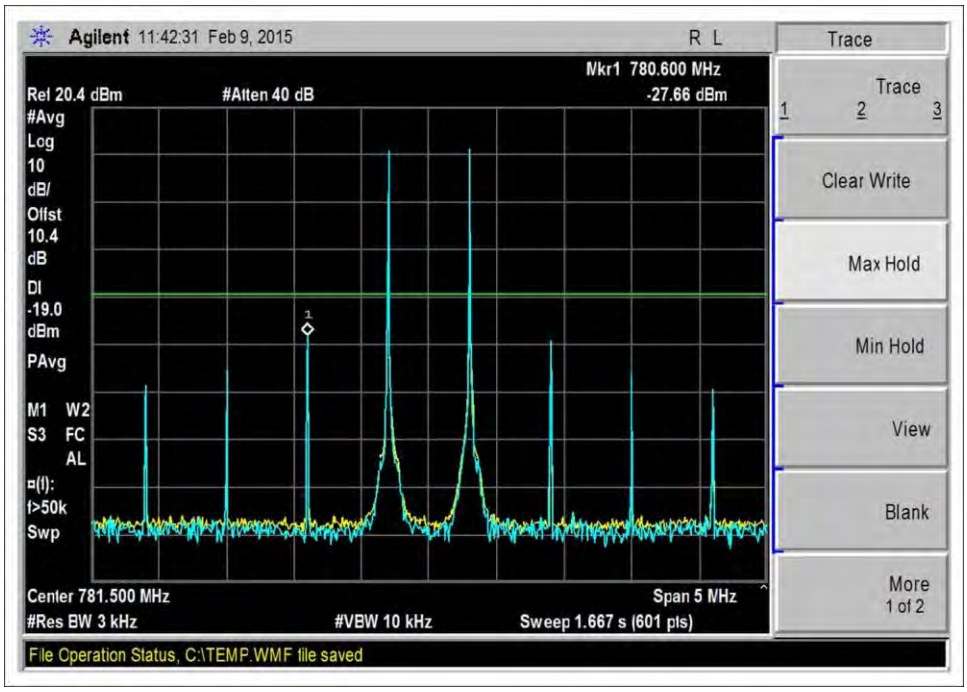
Intermodulation, UL



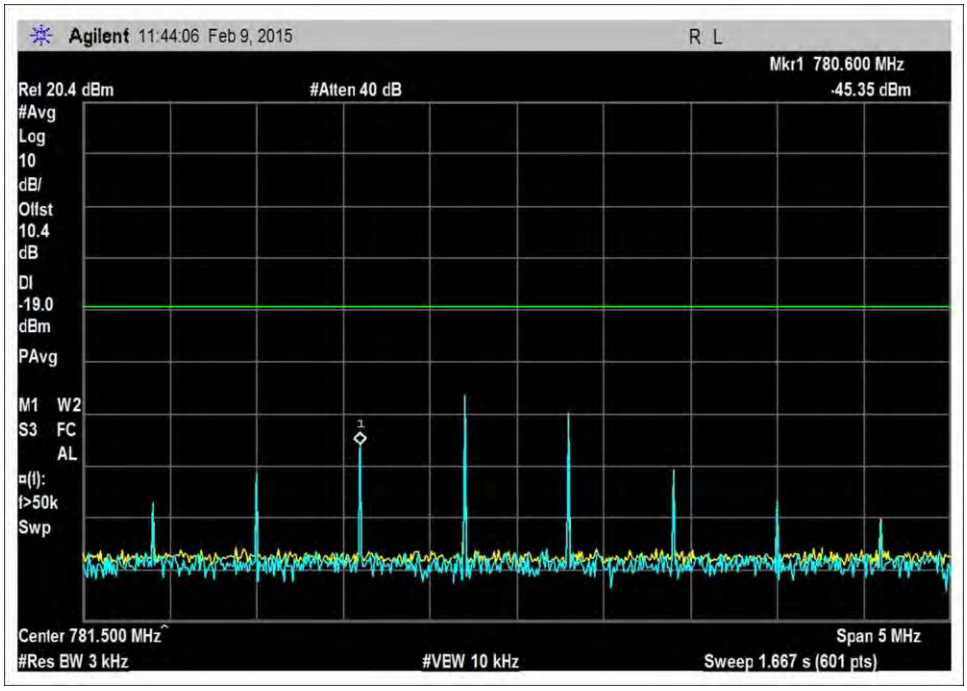
7.4_Intermod_UL_698-716MHz



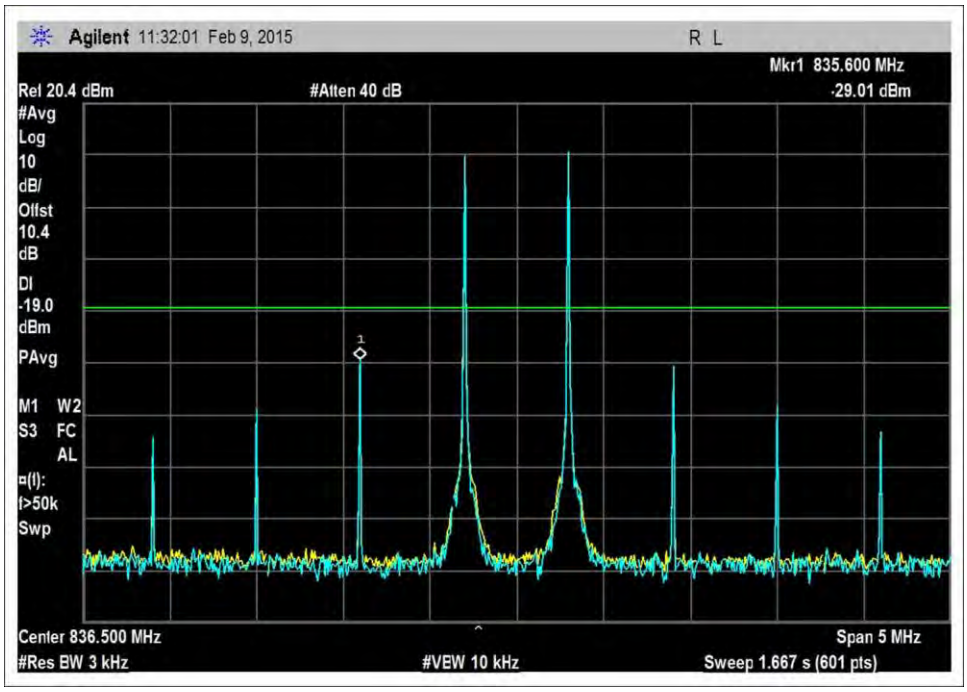
7.4_Intermod_UL_698-716MHz+10dB



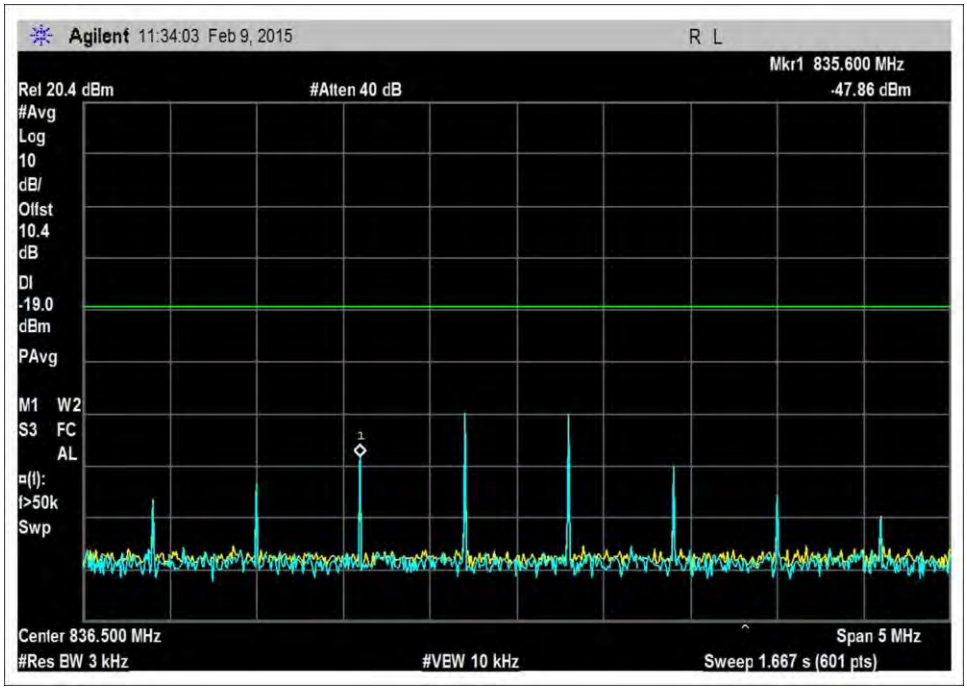
7.4_Intermod_UL_776-787MHz



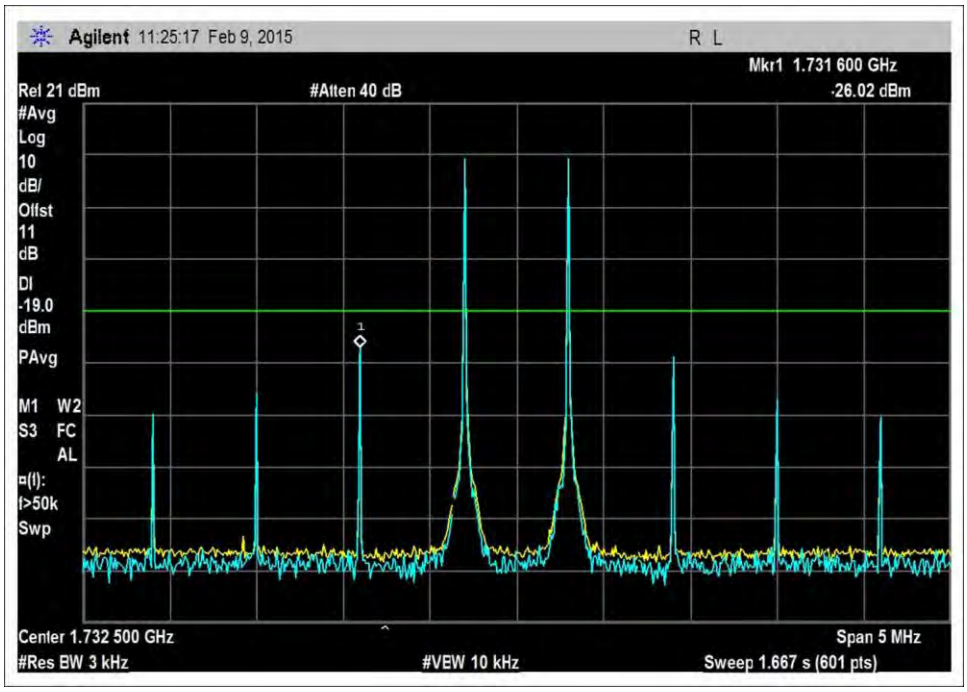
7.4_Intermod_UL_776-787MHz+10dBm



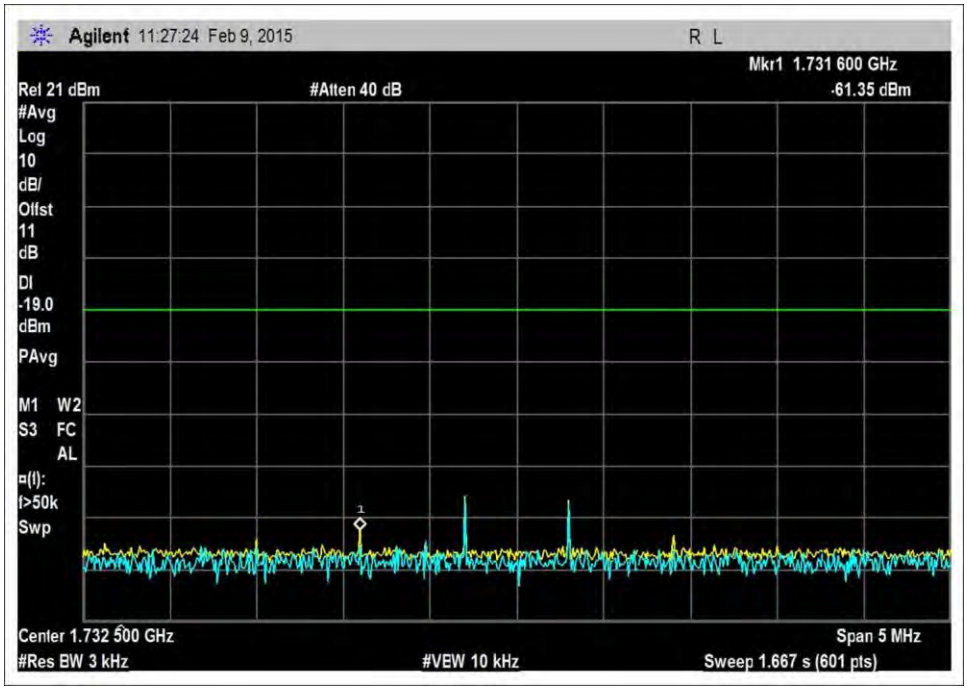
7.4_Intermod_UL_824-849MHz



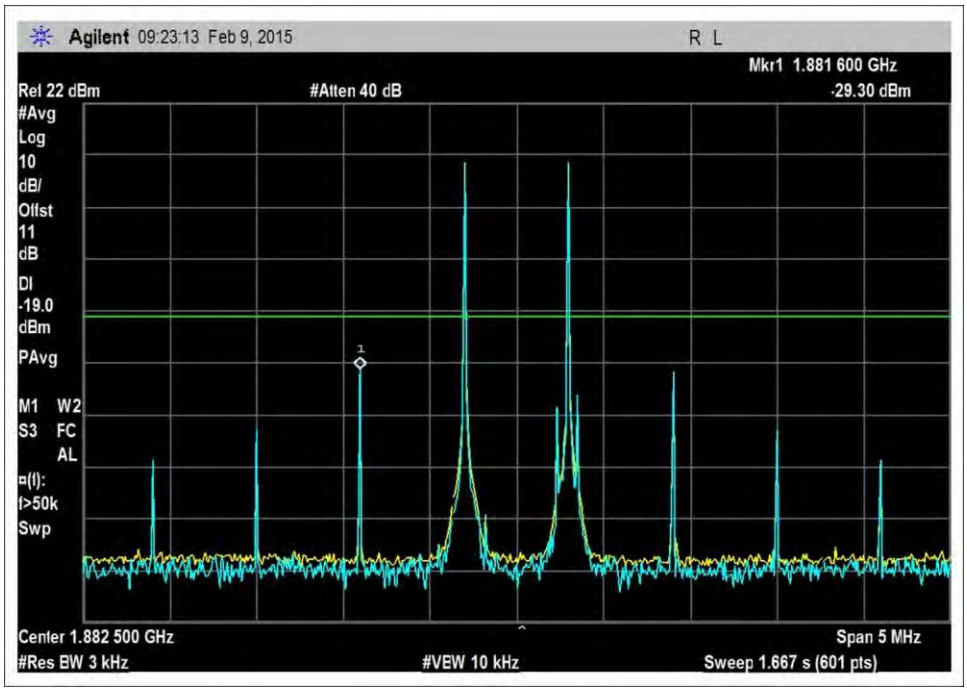
7.4_Intermod_UL_824-849MHz+10dB



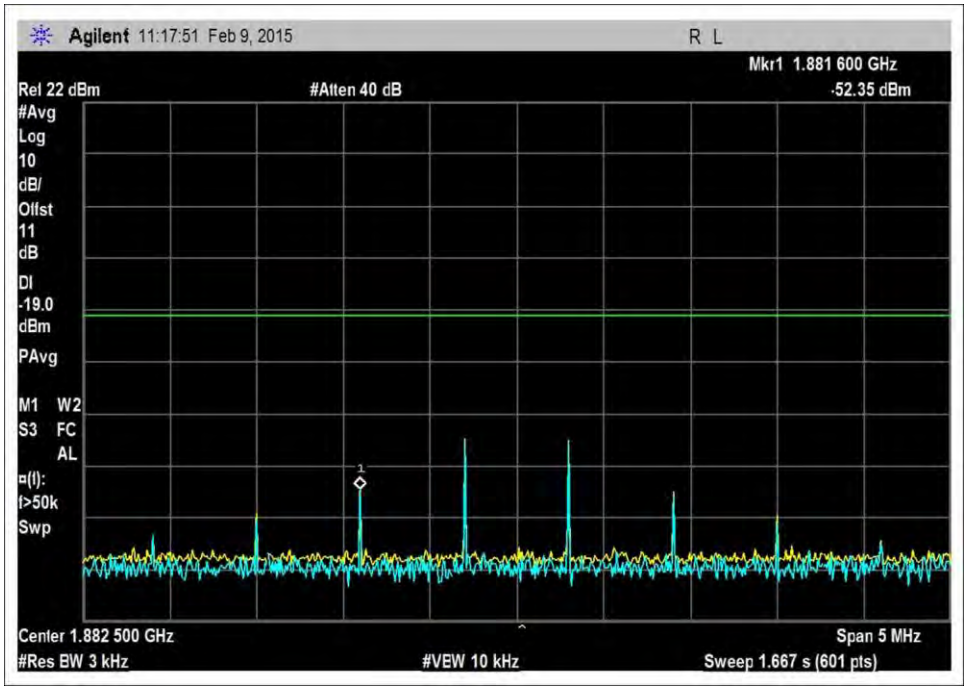
7.4_Intermod_UL_1710-1755MHz



7.4_Intermod_UL_1710-1755MHz+10dB

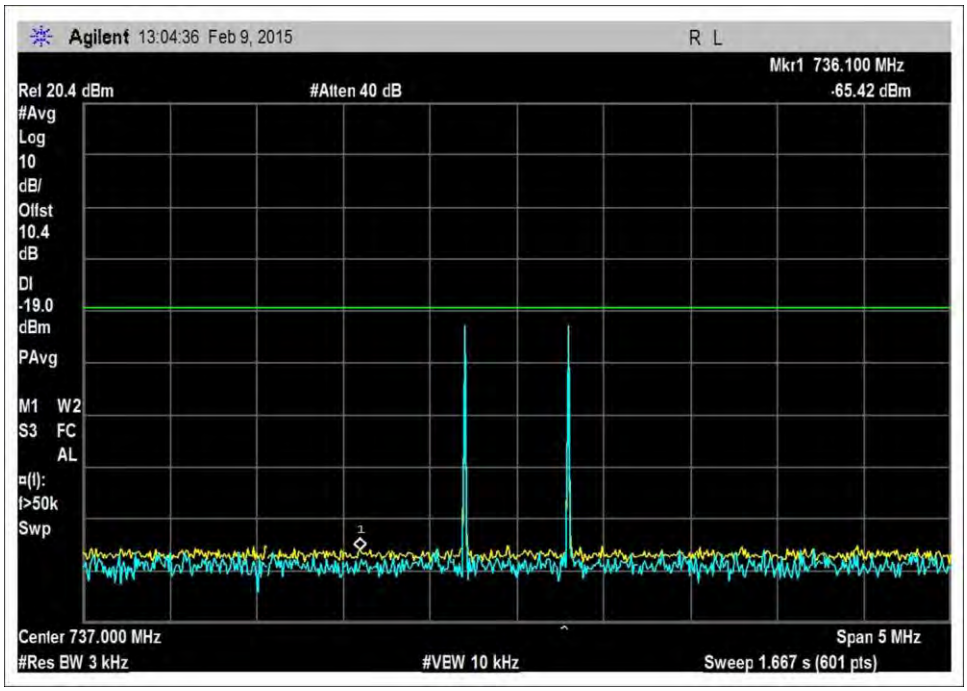


7.4_Intermod_UL_1850-1915MHz

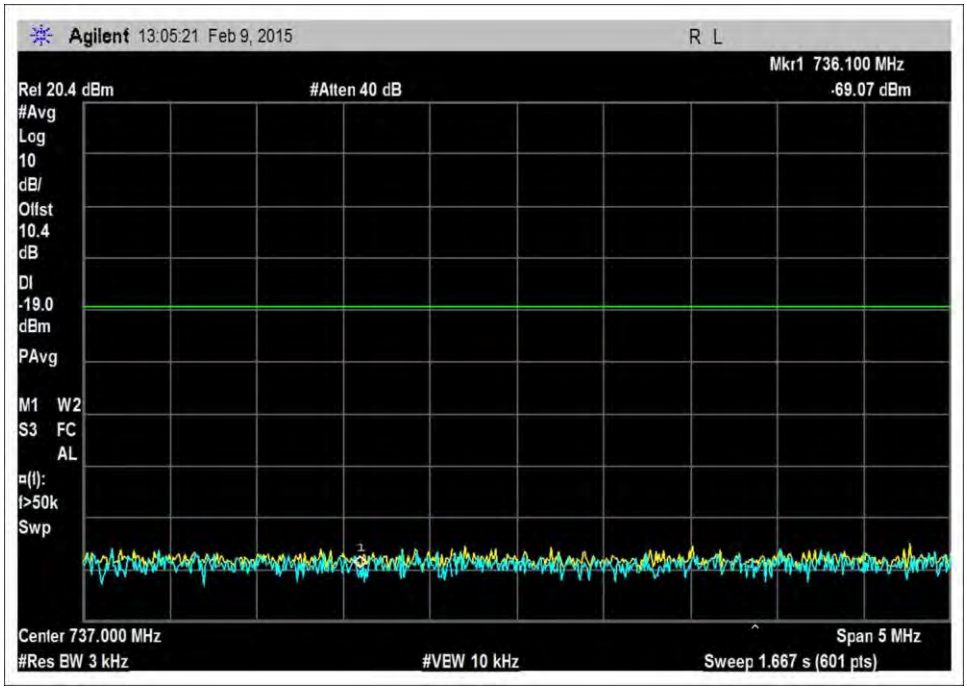


7.4_Intermod_UL_1850-1915MHz+10dB

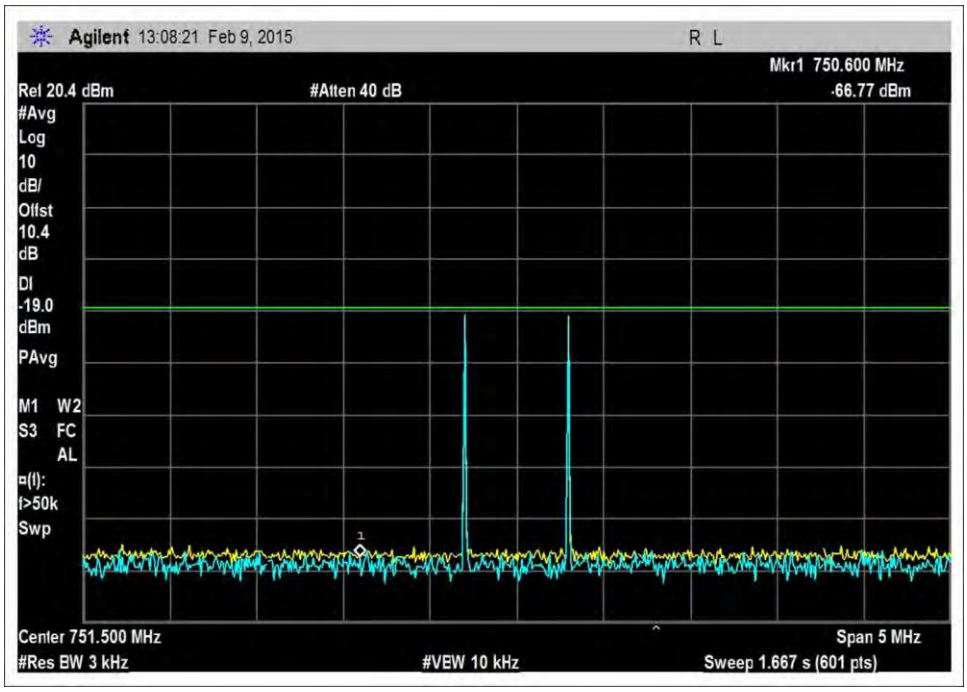
Intermodulation, DL



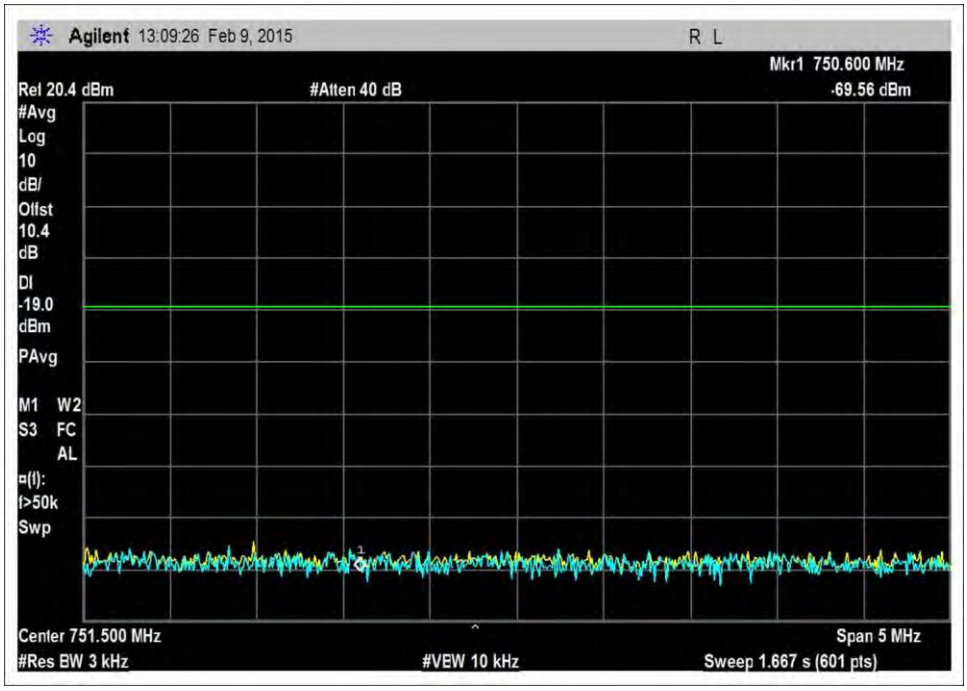
7.4_Intermod_DL_728-746MHz



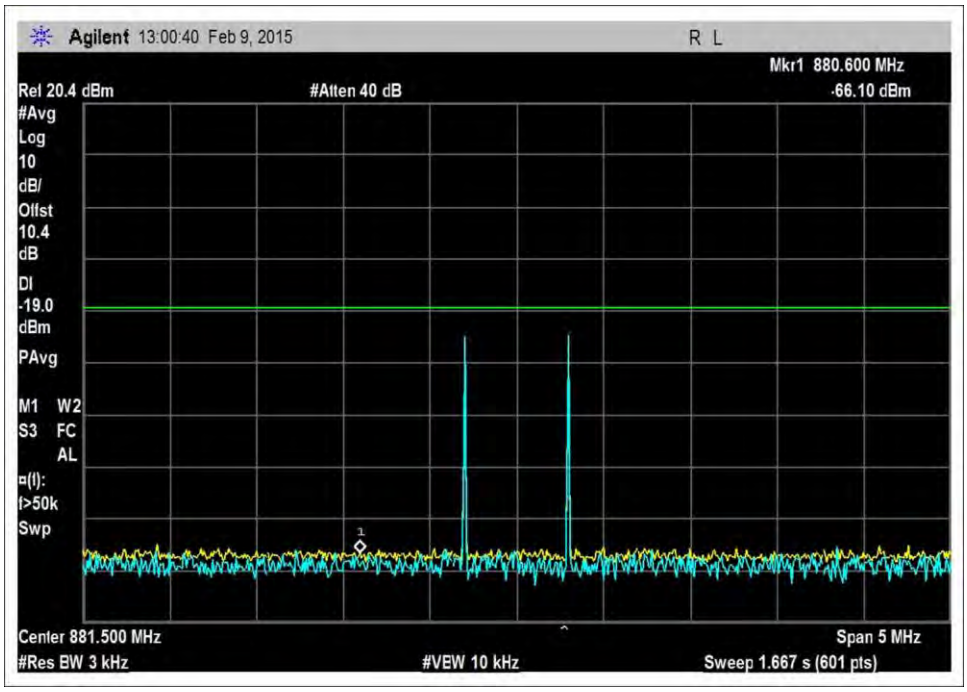
7.4_Intermod_DL_728-746MHz+10dB



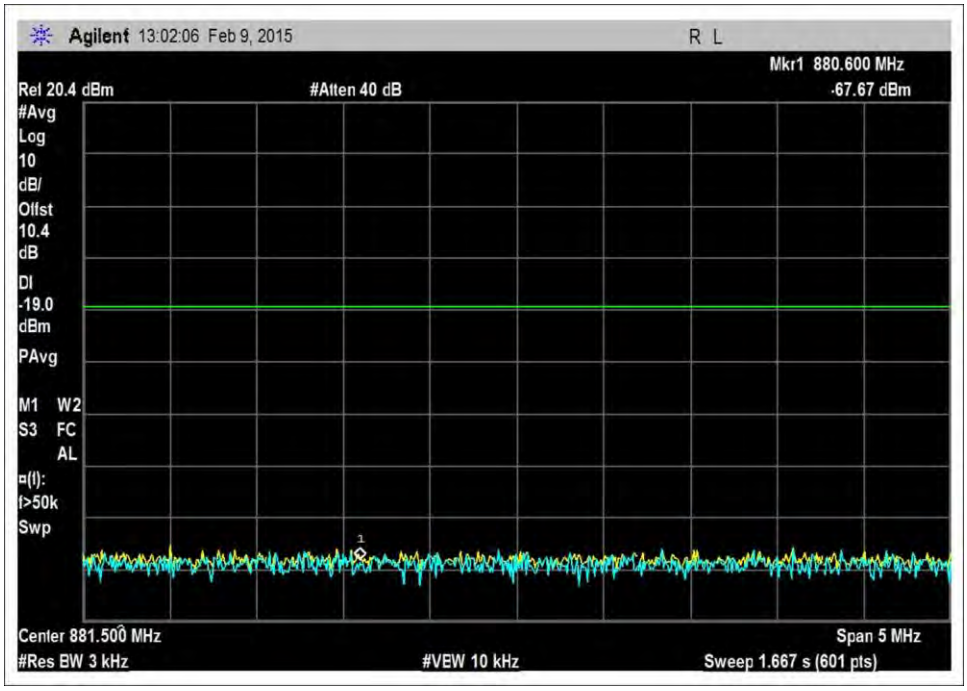
7.4_Intermod_DL_746-757MHz



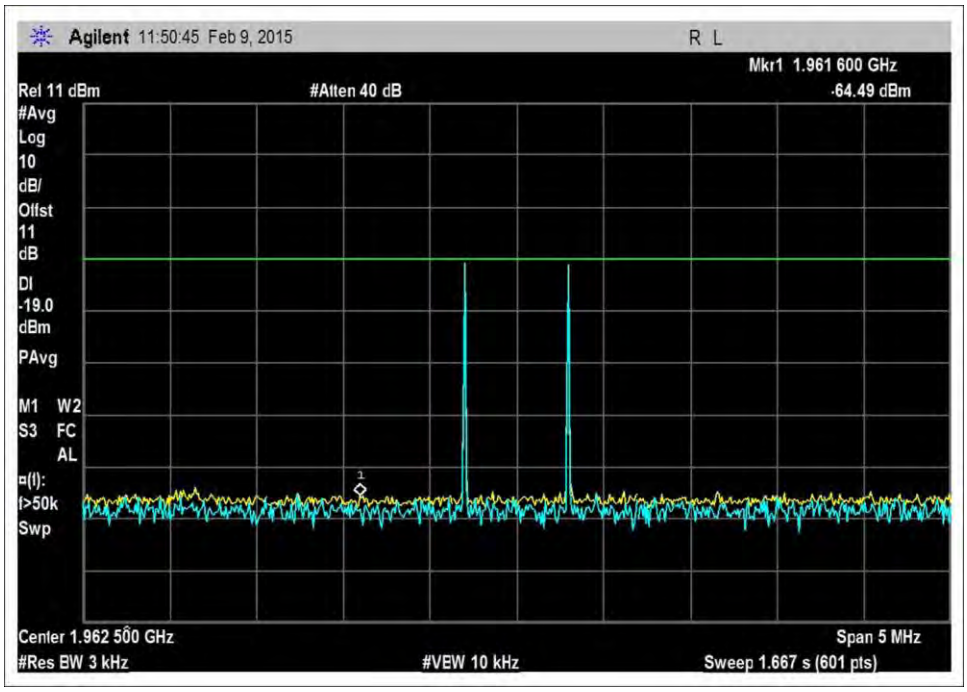
7.4_Intermod_DL_746-757MHz+10dB



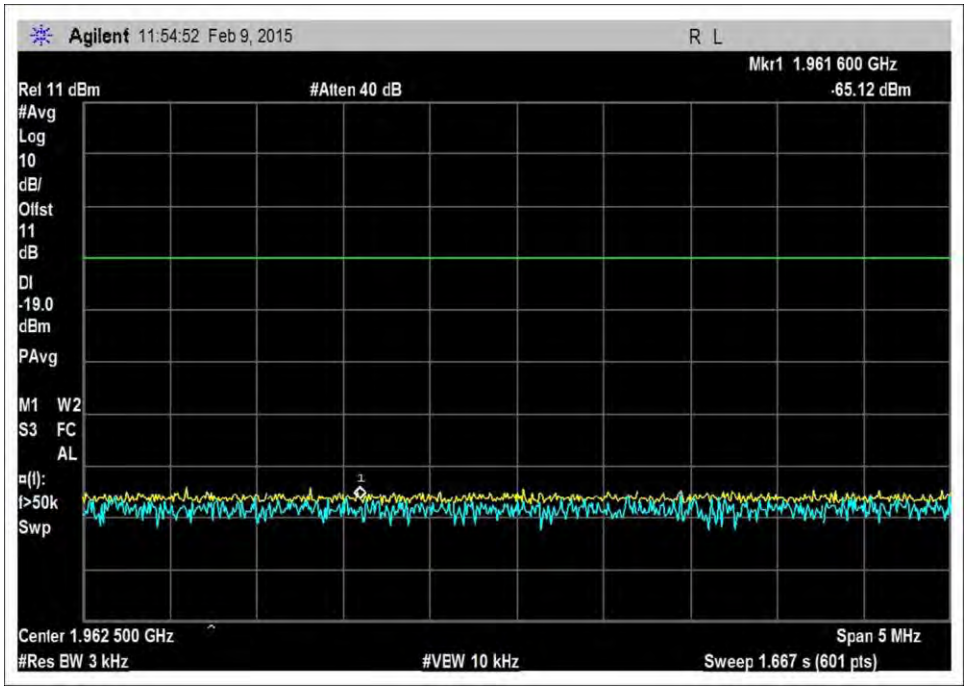
7.4_Intermod_DL_869-894MHz



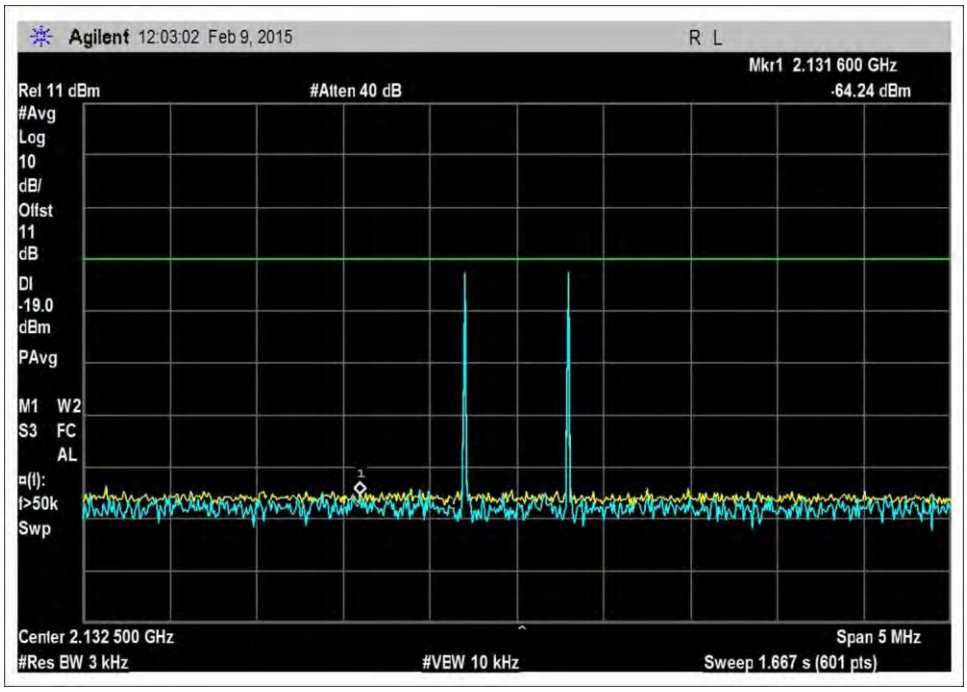
7.4_Intermod_DL_869-894MHz+10dB



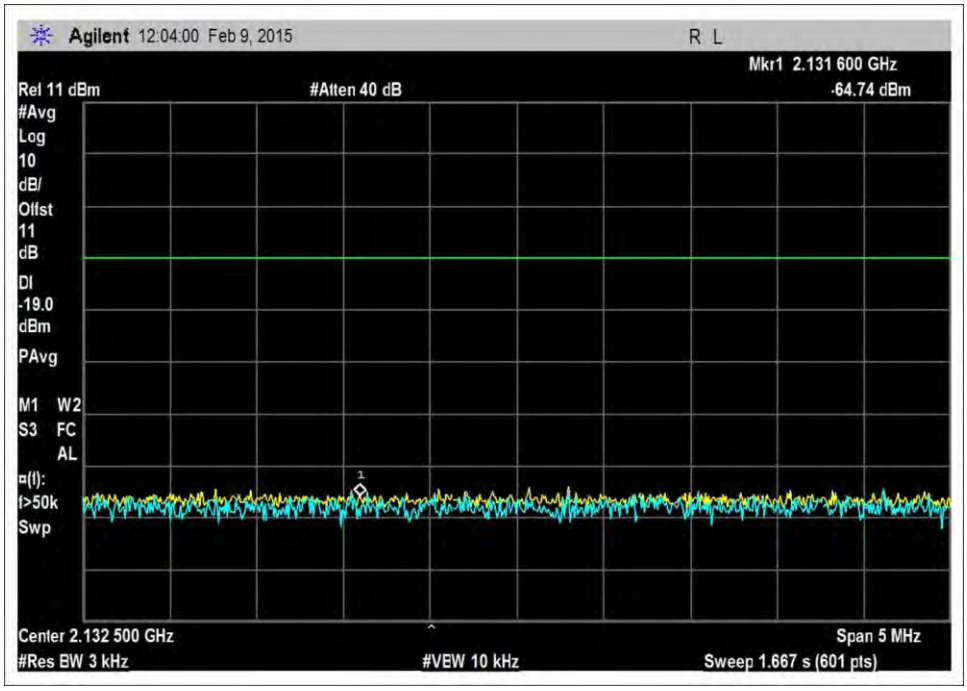
7.4_Intermod_DL_1930-1995MHz



7.4_Intermod_DL_1930-1995MHz+10dB



7.4_Intermod_DL_2110-2155MHz



7.4_Intermod_DL_2110-2155MHz+10dB

Clause 7.5 Out of Band Emissions

Test Conditions / Setup

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

Customer: **Cellphone-Mate, Inc.**
Specification: **7.5 Out of Band Emissions**
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 7.5 of the FCC document: 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v02r01 Dated July 24, 2014
Firmware: V1.0

* Additional plots taken at 1dB before shut down.

Lower RBW was used as applicable per rule part, in addition integration power function of the Spectrum Analyzers' Adjacent Channel Power tool was used to show compliance in instances where accuracy can be improved by integrating power measured in smaller RBW and linearly summed into standard bandwidth.

Summary of Results

Pass: as indicated in plots above, all OBE are under the limit of -19dBm.

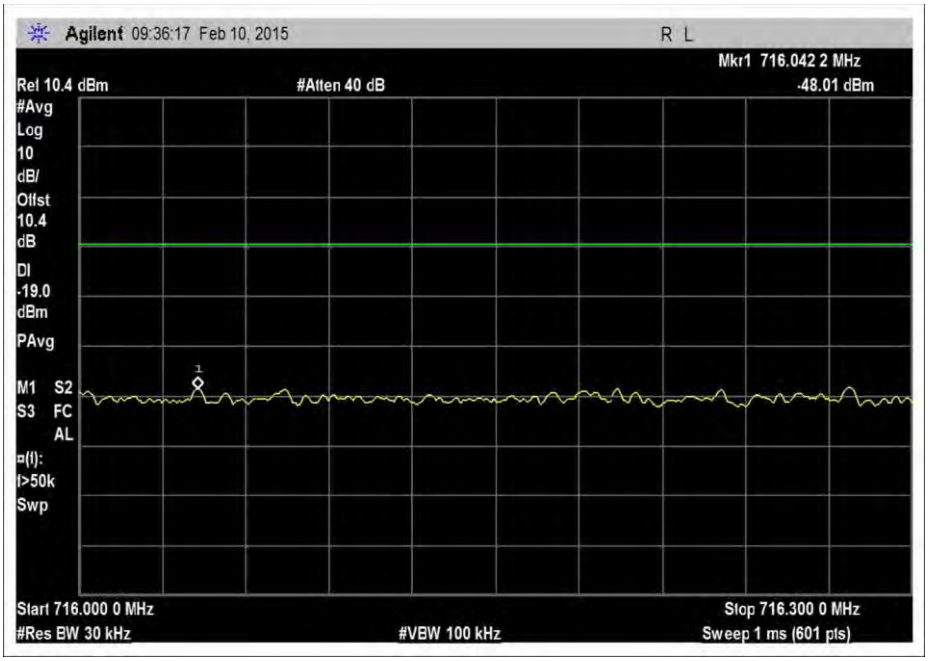
GSM								
Low					**High**			
	Out of Band Emission					**Out of Band Emission**		
Freq	**Pre AGC**	**Max input**	**Limit**		**Freq**	**Pre AGC**	**Max input**	**Limit**
MHz	**dBm**	**+10dBm**	**dBm**		**MHz**	**dBm**	**+10dBm**	**dBm**
UL								
UL1710-1755	-26.9	-42.5	-19.0		UL1710-1755	-24.4	-42.7	-19.0
UL1850-1915	-28.7	-50.5	-19.0		UL1850-1915	-42.9	-50.6	-19.0
UL824-894	-26.3	-65.6	-19.0		UL824-894	-31.2	-65.6	-19.0
UL 698-716	-24.8	-42.5	-19.0		UL 698-716	-25.4	-48.0	-19.0
UL776-787	-23.7	-53.4	-19.0		UL776-787	-23.4	-53.6	-19.0
		-20dBm					**-20dBm**	
DL								
DL2110-2155	-54.8	-64.5	-19.0		DL2110-2155	-53.7	-64.6	-19.0
DL1930-1995	-49.9	-50.5	-19.0		DL1930-1995	-50.1	-50.0	-19.0
DL869-894	-34.0	-51.5	-19.0		DL869-894	-37.3	-50.3	-19.0
DL:728-746	-33.9	-50.0	-19.0		DL:728-746	-31.8	-51.1	-19.0
DL 746-757	-31.2	-49.9	-19.0		DL 746-757	-33.8	-51.1	-19.0

CDMA								
Low					High			
	Out of Band Emission					Out of Band Emission		
Freq	Pre AGC	Max input	Limit		Freq	Pre AGC	Max input	Limit
MHz	dBm	+10dBm	dBm		MHz	dBm	+10dBm	dBm
UL								
UL1710-1755	-30.8	-43	-19.0		UL1710-1755	-32.4	-42.2	-19.0
UL1850-1915	-35.6	-42.5	-19.0		UL1850-1915	-39.4	-41.7	-19.0
UL824-894	-25.9	-44.3	-19.0		UL824-894	-27.1	-46.4	-19.0
UL 698-716	-26.3	-47.8	-19.0		UL 698-716	-36.1	-46.7	-19.0
UL776-787	-29.0	-47.0	-19.0		UL776-787	-28.5	-46.8	-19.0
		-20dBm					-20dBm	
DL								
DL2110-2155	-50.1	-50.0	-19.0		DL2110-2155	-50.4	-50.3	-19.0
DL1930-1995	-50.6	-50.5	-19.0		DL1930-1995	-50.4	-50.2	-19.0
DL869-894	-49.4	-50.9	-19.0		DL869-894	-51.4	-51.8	-19.0
DL:728-746	-50.6	-50.4	-19.0		DL:728-746	-50.8	-50.0	-19.0
DL 746-757	-50.1	-49.6	-19.0		DL 746-757	-50.7	-50.5	-19.0

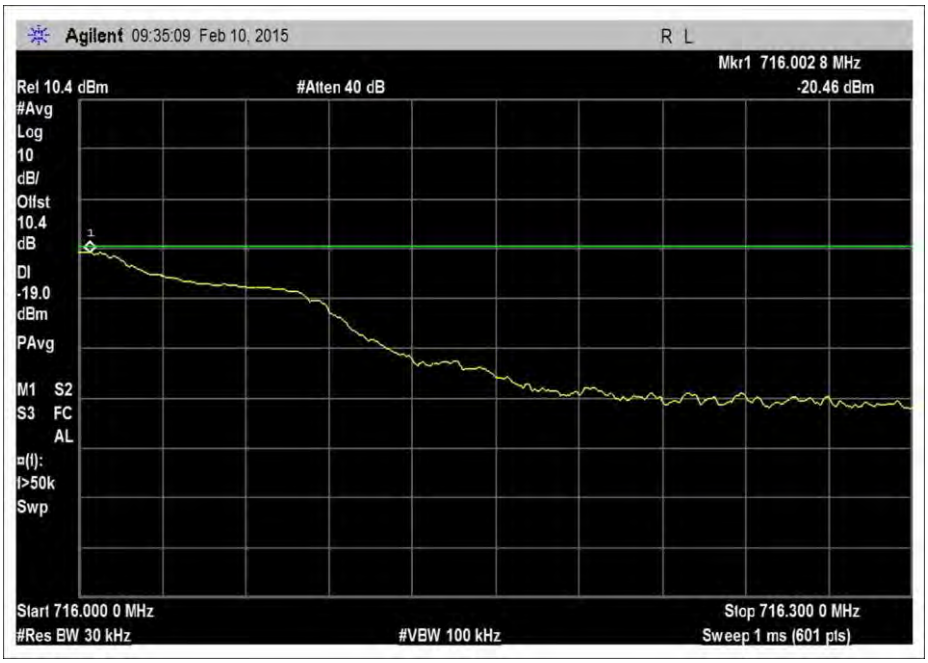
LTE								
Low					High			
	Out of Band Emission					Out of Band Emission		
Freq	Pre AGC	Max input	Limit		Freq	Pre AGC	Max input	Limit
MHz	dBm	+10dBm	dBm		MHz	dBm	+10dBm	dBm
UL								
UL1710-1755	-26.6	-42.4	-19.0		UL1710-1755	-26.2	-42.6	-19.0
UL1850-1915	-35.0	-42.4	-19.0		UL1850-1915	-37.6	-42.5	-19.0
UL824-894	-25.2	-44.1	-19.0		UL824-894	-26.0	-44.7	-19.0
UL 698-716	-27.7	-47.8	-19.0		UL 698-716	-34.3	-48.3	-19.0
UL776-787	-25.3	-46.1	-19.0		UL776-787	-26.4	-47.0	-19.0
		-20dBm					-20dBm	
DL								
DL2110-2155	-50.0	-50.1	-19.0		DL2110-2155	-50.0	-50.2	-19.0
DL1930-1995	-50.5	-50.7	-19.0		DL1930-1995	-50.3	-50.1	-19.0
DL869-894	-46.8	-46.7	-19.0		DL869-894	-46.6	-46.8	-19.0
DL:728-746	-46.6	-47.2	-19.0		DL:728-746	-45.9	-46.9	-19.0
DL 746-757	-47.1	-45.9	-19.0		DL 746-757	-47.4	-46.4	-19.0

Test Data

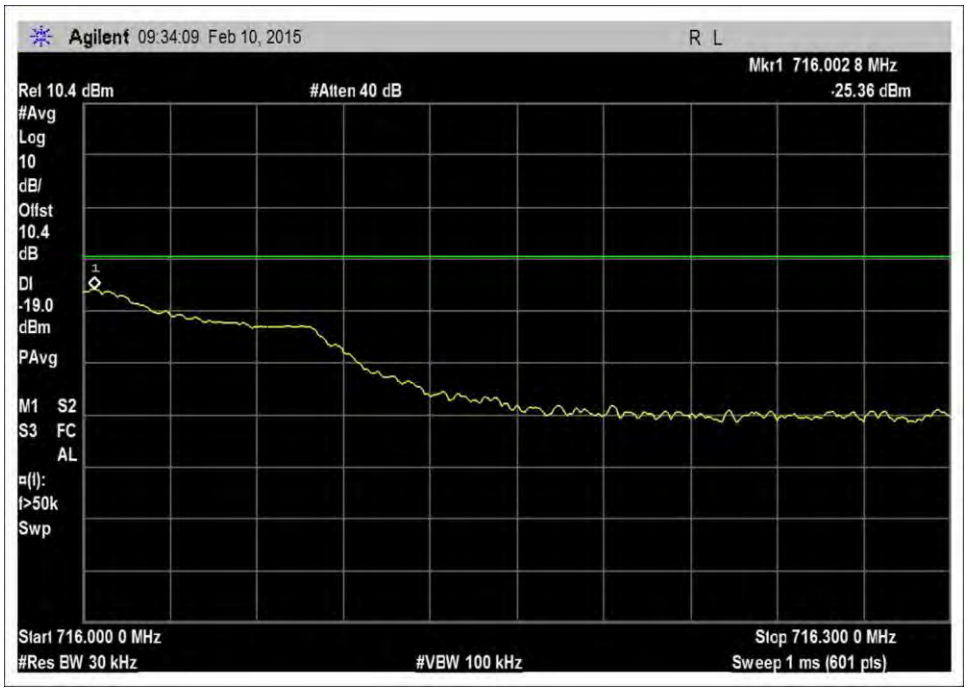
GSM, UL



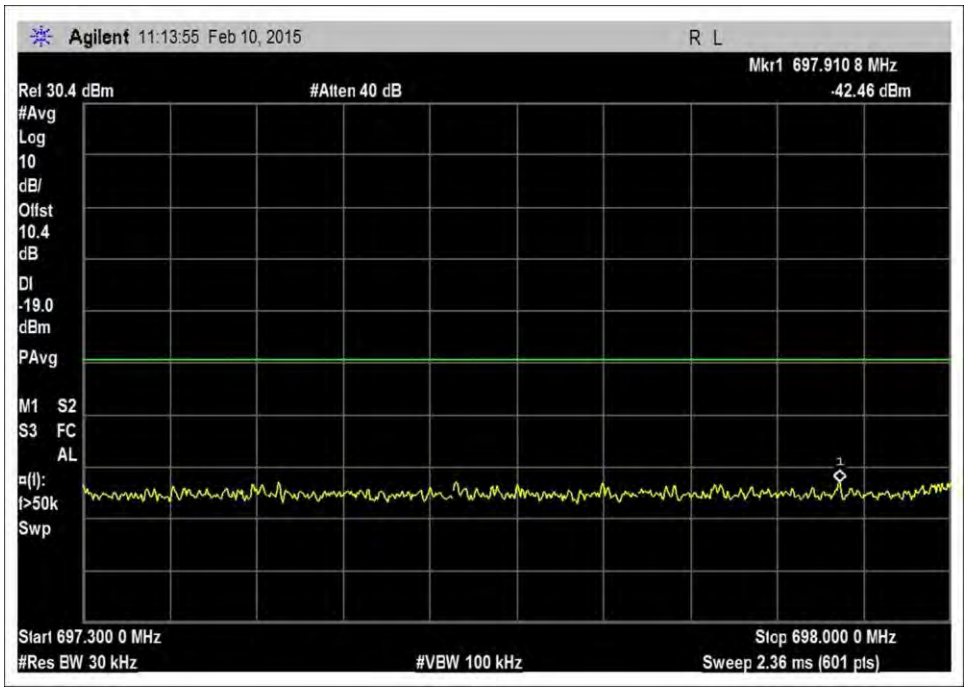
7.5_OBE_UL_698-716MHz_GSM_H_+10dBm



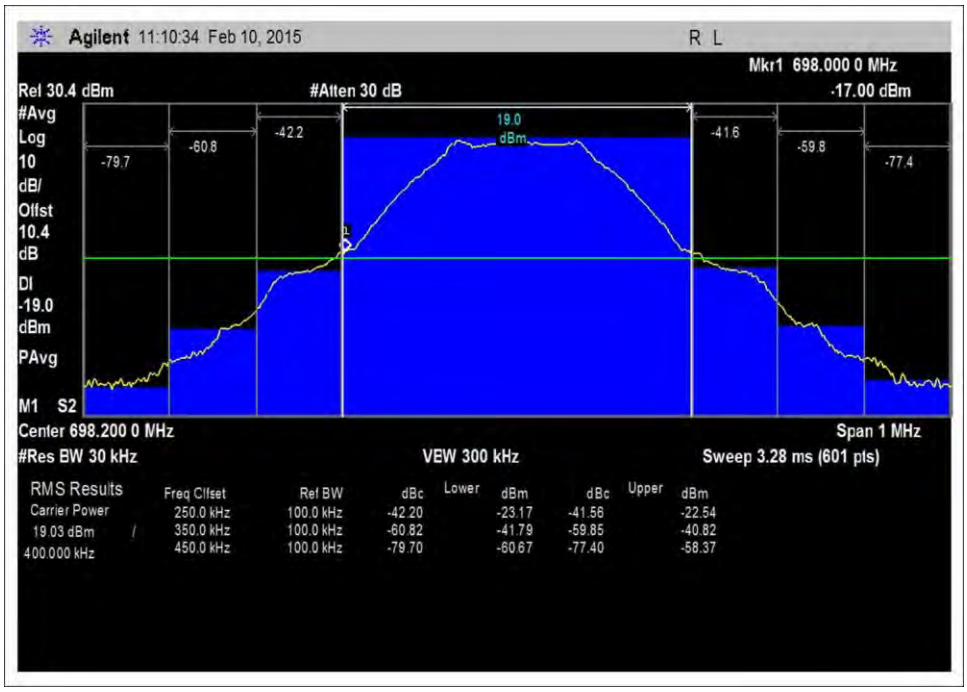
7.5_OBE_UL_698-716MHz_GSM_H_-16dBm



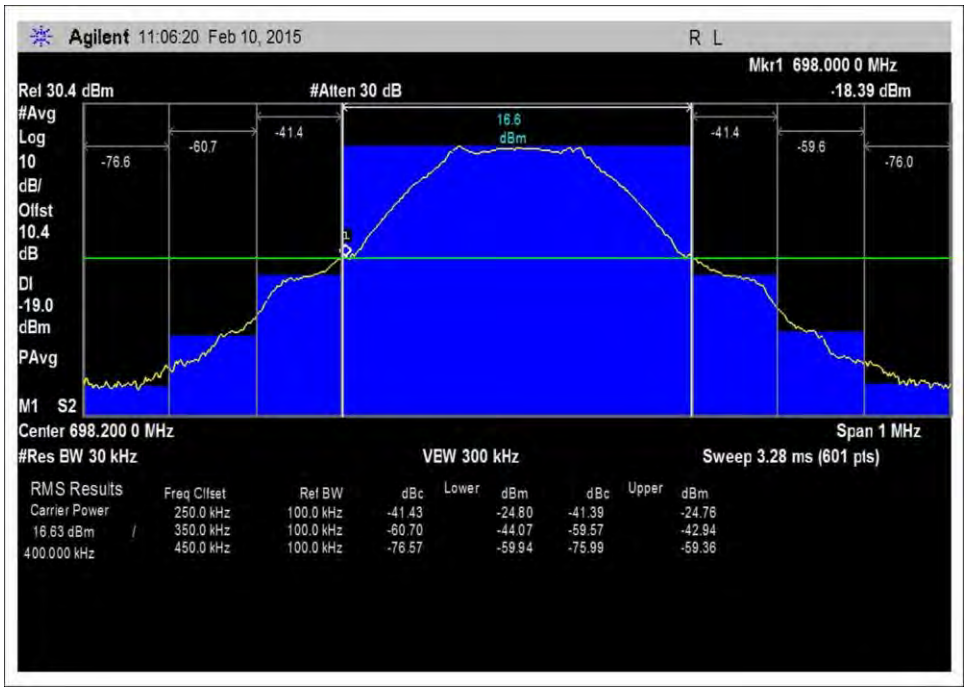
7.5_OBE_UL_698-716MHz_GSM_H_-25dBm



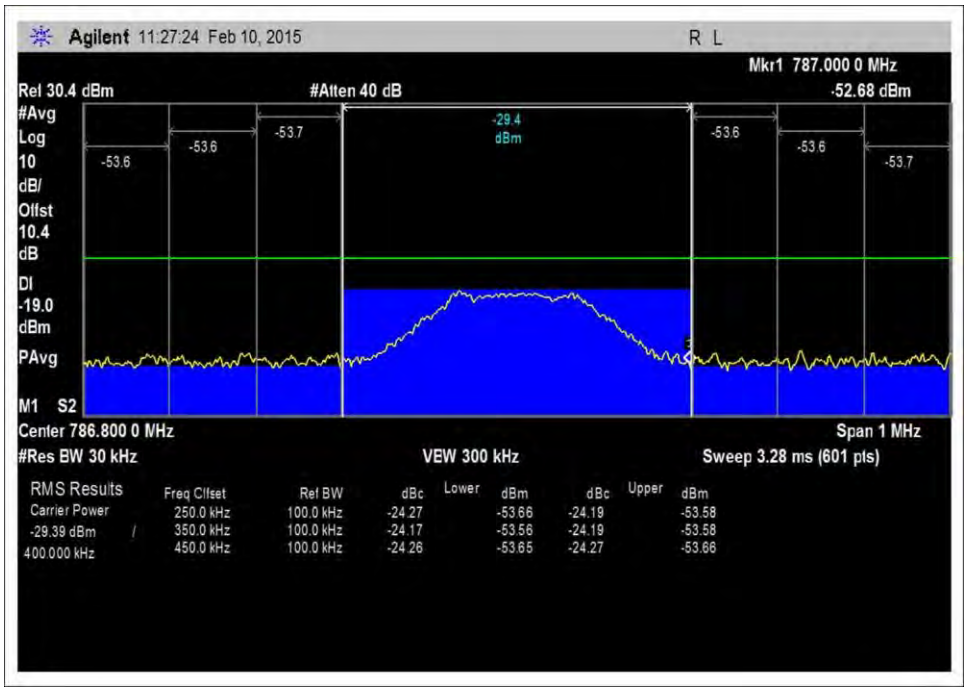
7.5_OBE_UL_698-716MHz_GSM_L_+10dBm



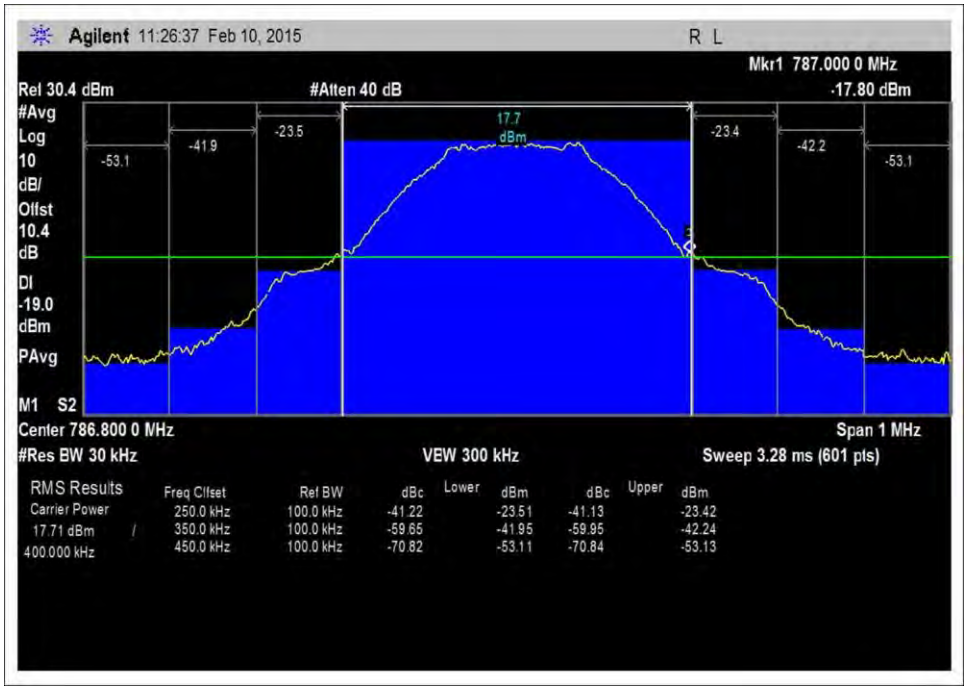
7.5_OBE_UL_698-716MHz_GSM_L_-21dBm



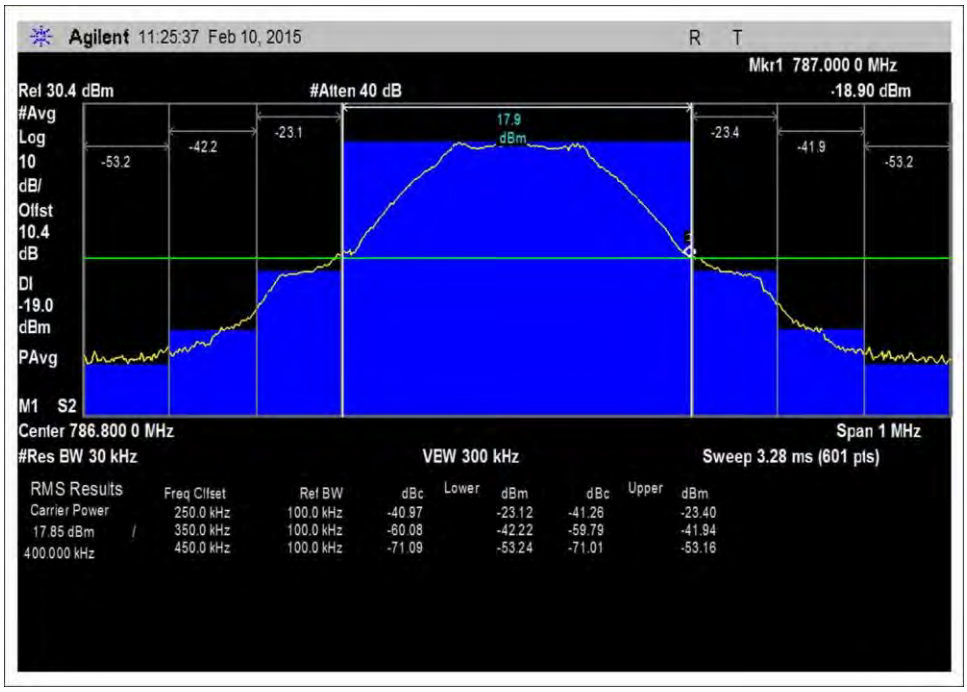
7.5_OBE_UL_698-716MHz_GSM_L_-27dBm



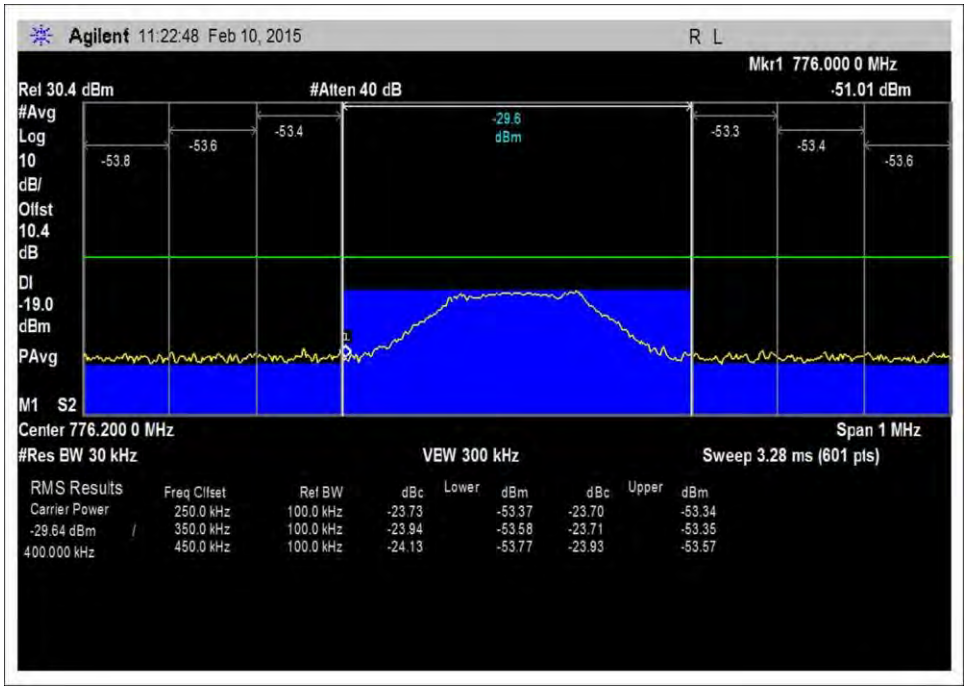
7.5_OBE_UL_776-787MHz_GSM_H_+10dBm



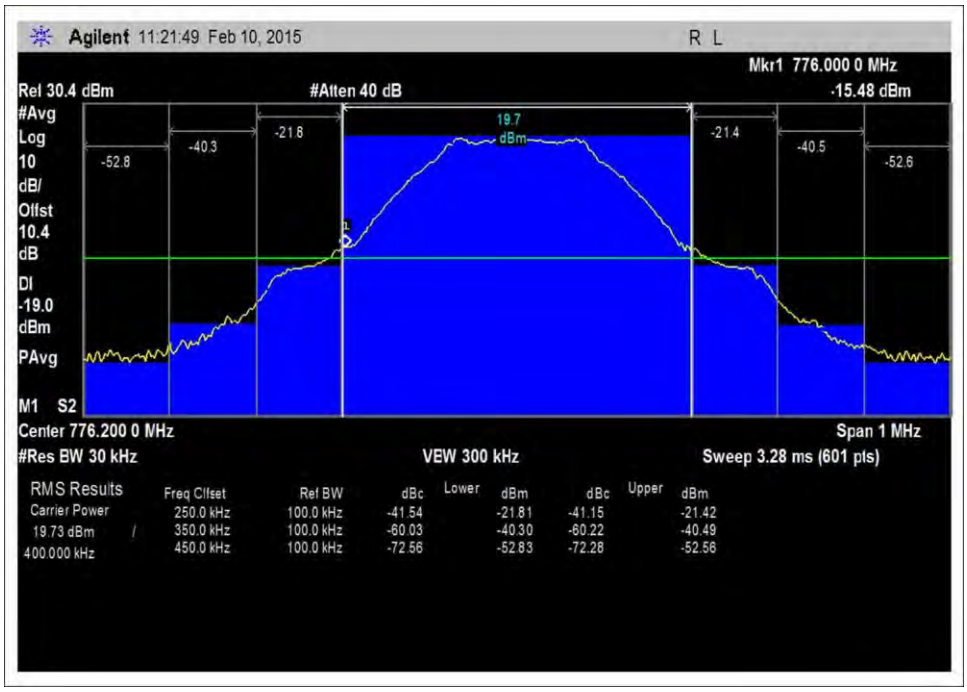
7.5_OBE_UL_776-787MHz_GSM_H_-22dBm



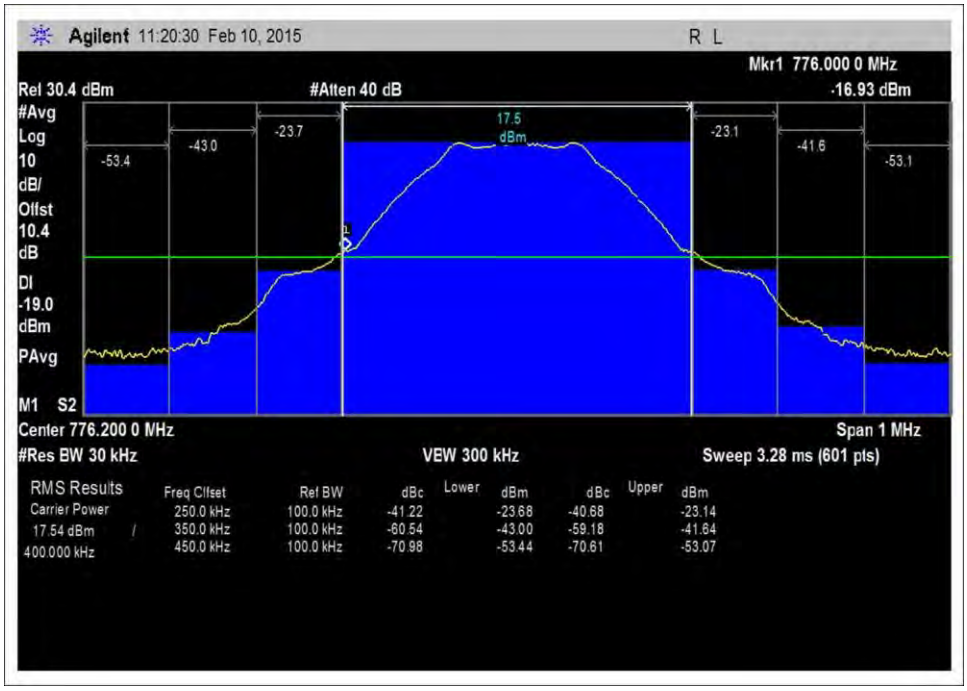
7.5_OBE_UL_776-787MHz_GSM_H_-26dBm



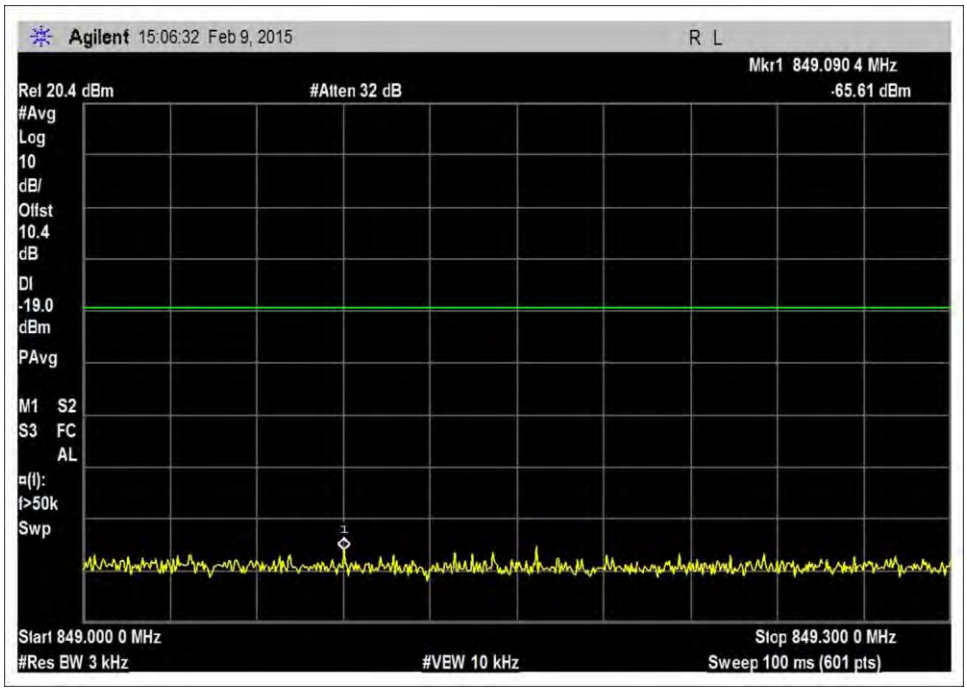
7.5_OBE_UL_776-787MHz_GSM_L_+10dBm



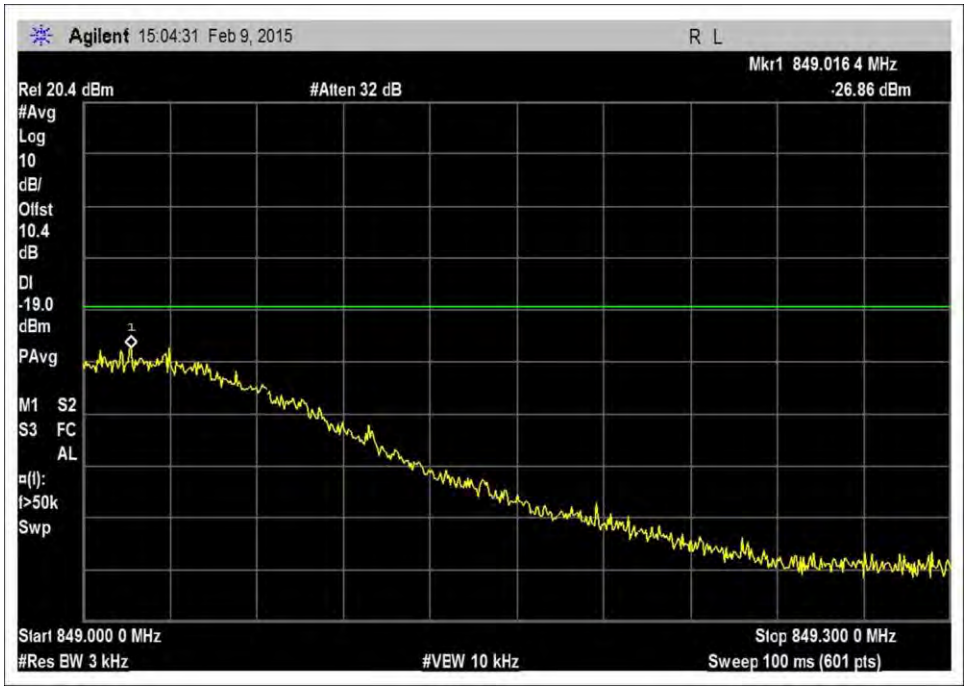
7.5_OBE_UL_776-787MHz_GSM_L_-19dBm



7.5_OBE_UL_776-787MHz_GSM_L_-26dBm



7.5_OBE_UL_824-849MHz_GSM_H_+10dBm



7.5_OBE_UL_824-849MHz_GSM_H_-20dBm