Cellphone-Mate, Inc.

REVISED TEST REPORT TO 97222-11

Mobile Wideband Consumer Booster
Model: Fusion2go

Tested To The Following Standards:

FCC Part 20.21(e)8

Report No.: 97222-11A

Date of issue: March 27, 2019

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.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR:

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

Representative: Dennis Findley
Customer Reference Number: SC20150623

REPORT PREPARED BY:

Darcy Thompson
CKC Laboratories, Inc.
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Mariposa, CA 95338

Project Number: 97222

DATE OF EQUIPMENT RECEIPT: June 23, 2015
DATE(S) OF TESTING: June 23-30, 2015
March 5, 2019

Revision History

Original: Testing of the Mobile Wideband Consumer Booster Model: Fusion2go to FCC Parts: 20.21(e)8, 22, 24 and 27.
Revision A: To replace section 7.4 with corrected test data.

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	5.02.00
EMITest Emissions	5.03.11
EMITest Immunity	5.02.00

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

KDB 935210 D03 Wideband Consumer Signal Booster Measurement Guidance v03, June 5, 2015		FCC Part 20.21 Section Correlation		Modifications	Results
Guidance Sec #	**Guidance Description**	**FCC Sec #**	**FCC Rule Description**		
7.1 a) – k)	Authorized Frequency band Verification test	20.21(e)(3)	Frequency Bands	NA	Pass
7.2.2 a) - k)	Maximum Power Measurement procedure	20.21(e)(8)(i)(D)	Power Limit	NA	Pass
7.3 a) – d)	Maximum Booster Gain Computation	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) – e)	Conducted Spurious emission	Part 22/24/27	Spurious Emission	NA	NA[1]
7.7.1 a) – g) 7.7.1 h) – n) 7.7.2 a) – g)	Noise Limit procedure Variable Noise Variable Noise Timing	20.21(e)(8)(i)(A)(2)(ii) 20.21(e)(8)(i)(A)(1) 20.21(e)(8)(i)(H)	Noise Limits Transmit Power Off Mode	NA	Pass Pass Pass
7.8 a) – l)	Uplink inactivity	20.21(e)(8)(i)(I)	Uplink inactivity	NA	Pass
7.9.1 a) –l) 7.9.2 a) – f)	Variable Booster gain Variable Uplink Gain Timing	20.21(e)(8)(i)(C)(1), (2)(iii) 20.21(e)(8)(i)(H)	Booster Gain Transmit Power Off Mode	NA	Pass Pass
7.10.a) – j)	Occupied Band width.	2.1049 Part 22/24/27	Occupied Bandwidth	NA	NA[1]
7.11.2 a) – r) 7.11.3 a) – h) 7.11.4 a) – h) (Alternate to 7.11.3)	Anti-Oscillation	20.21(e)(8)(ii)(A)	Anti Oscillation	NA	Pass Pass
7.12a) – f)	Radiated Spurious emission	Part 22/24/27	Spurious Emission	NA	NA[1]
7.13 a) – c)	Spectrum block filter	NA	NA	NA	NA[2]

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)

During testing numerous configurations may have been utilized. The configurations listed below support compliance to the standard(s) listed in the Summary of Results section.

Configuration 1

Equipment Tested:

Device	Manufacturer	Model #	S/N
Mobile Wideband Consumer Booster	Cellphone-Mate, Inc.	Fusion2go	1

Support Equipment:

Device	Manufacturer	Model #	S/N
Switching Power Adapter	SureCall	GFP451DA-1238-1	1406-0000611
Signal Generator	Agilent	E4438C	MY42082260
Signal Generator	Agilent	E4433B	US40052164

Configuration 1-for tests performed on March 5, 2019 only

Equipment Tested:

Device	Manufacturer	Model #	S/N
Mobile Wideband Consumer Booster	Cellphone-Mate, Inc.	Fusion2go	1

Support Equipment:

Device	Manufacturer	Model #	S/N
Switching Power Adapter	SureCall	GFP451DA-1238-1	1406-0000611

FCC PART 20.21

Clause 7.1 Authorized Frequency Band Verification

Test Equipment					
Asset #	**Description**	**Model**	**Manufacturer**	**Cal Date**	**Cal Due**
ANP05389	Attenuator	766-10	Narda	02/27/2014	02/27/2016
ANP05713	Attenuator	PE7015-20	Pasternack	03/24/2015	03/24/2017
ANP06709	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
ANP06710	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
AN02869	Spectrum Analyzer	E4440A	Agilent	07/10/2014	07/10/2015

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**
Work Order #: **97222** Date: 6/23/2015
Test Type: **Conducted Emissions** Time: 11:54:28
Tested By: Daniel Bertran Sequence#: 1
Software: EMITest 5.02.00

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Configuration 1
The equipment under test (EUT) is a Mobile Wideband Consumer Booster.
The EUT is placed on the test bench. Evaluation performed at the Outside (Donor) and Inside (Server) antenna port.

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

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

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

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

Test environment conditions: Temperature: 20.8°C, Relative Humidity: 42%, Atmospheric Pressure: 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 v03 Dated June 5, 2015.

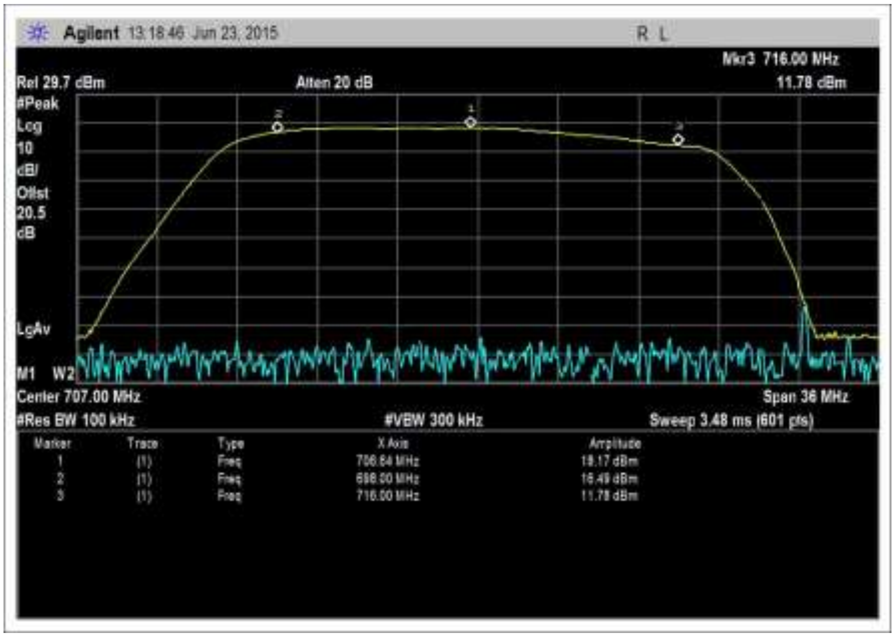
Firmware: V1.0

Summary of Results

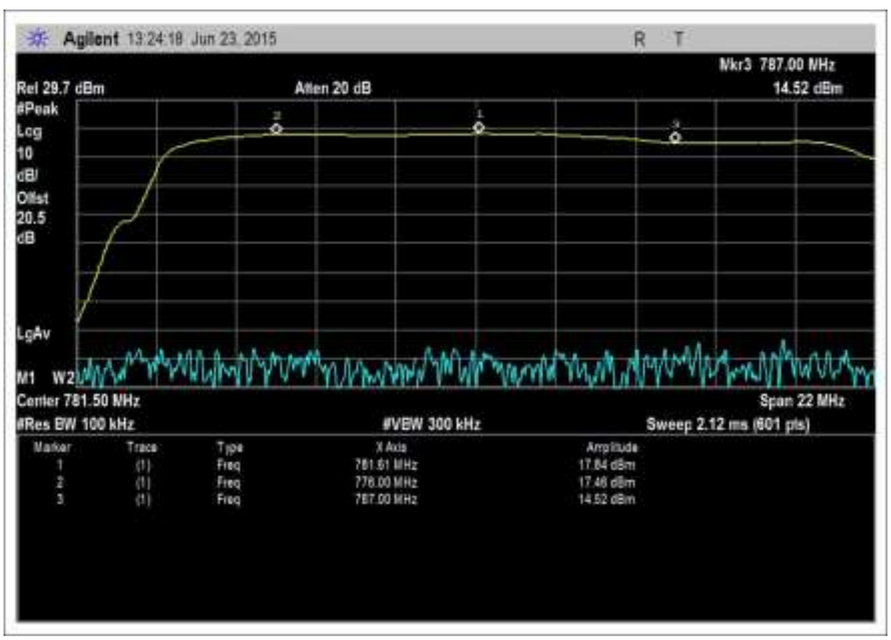
Pass: The plots above show the device only operates on the CMRS frequency bands authorized for use by the NPS.

Test Data

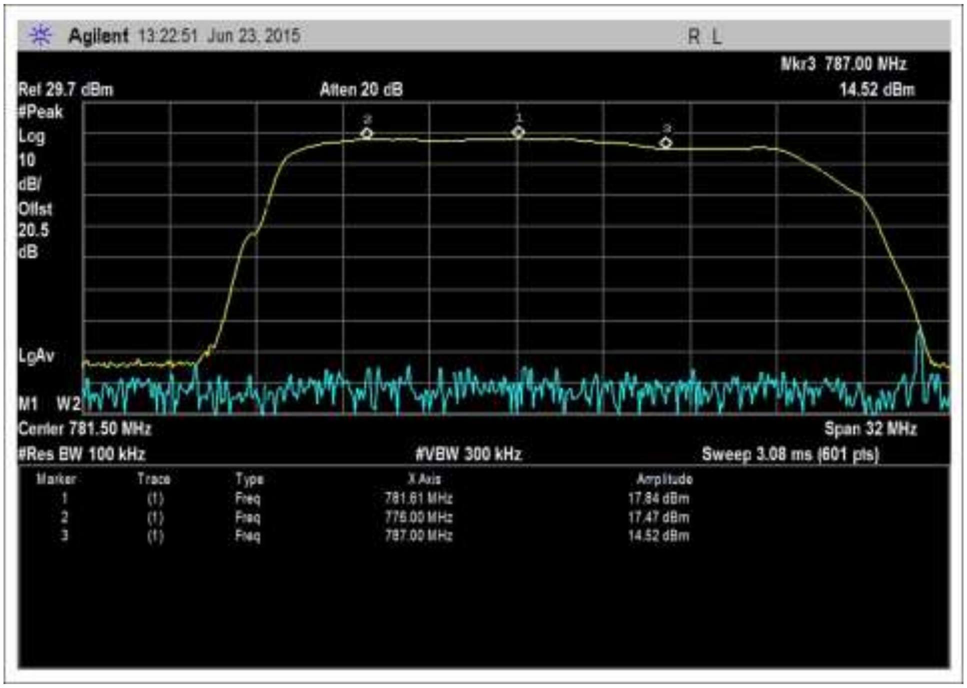
UL



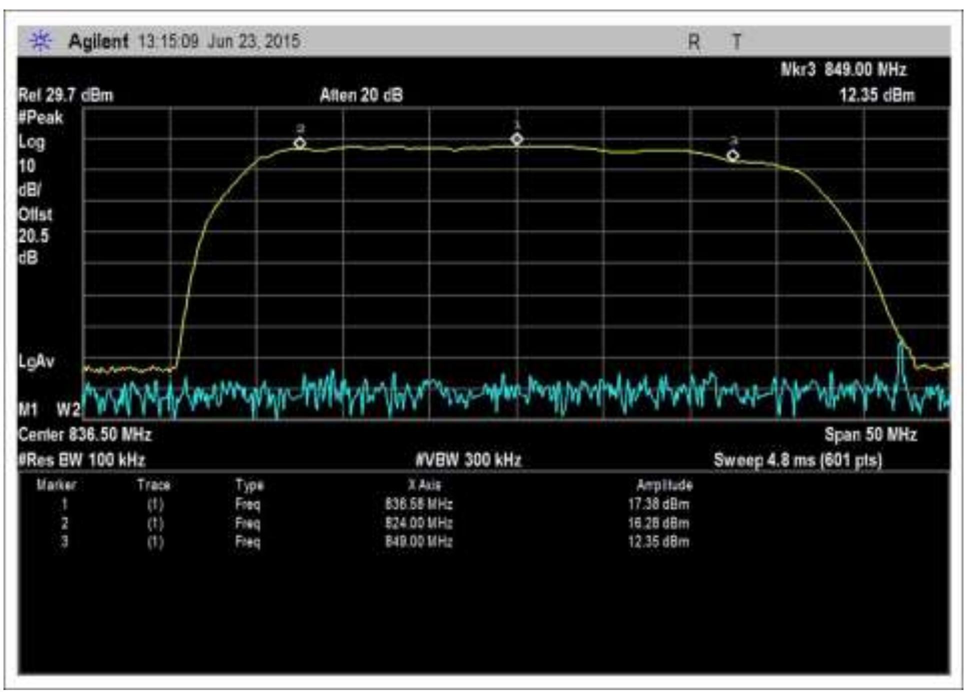
UL_698-716MHz



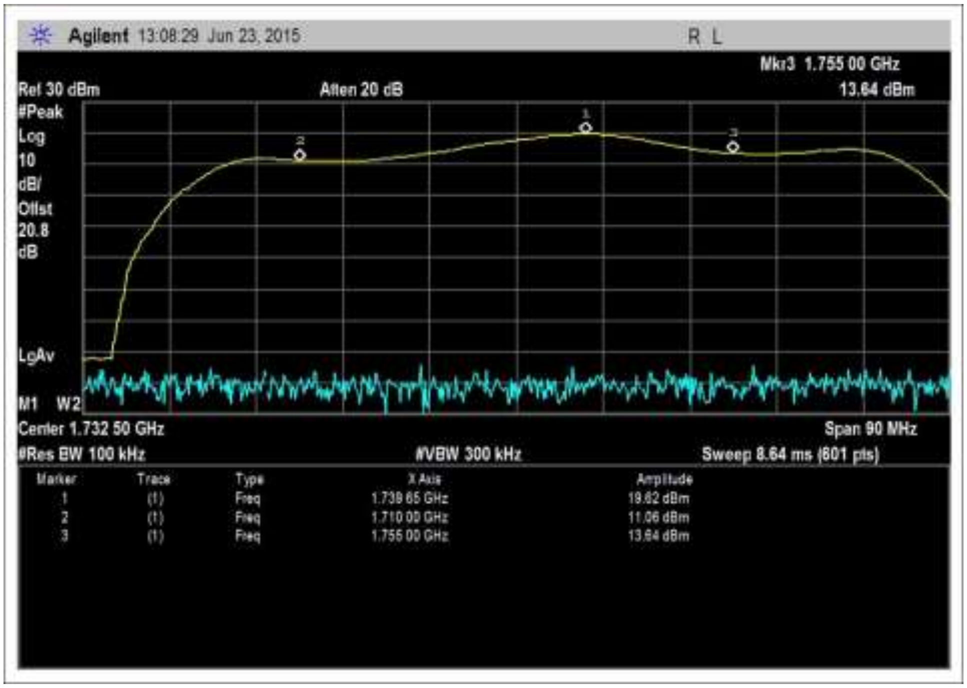
UL_776-787MHz



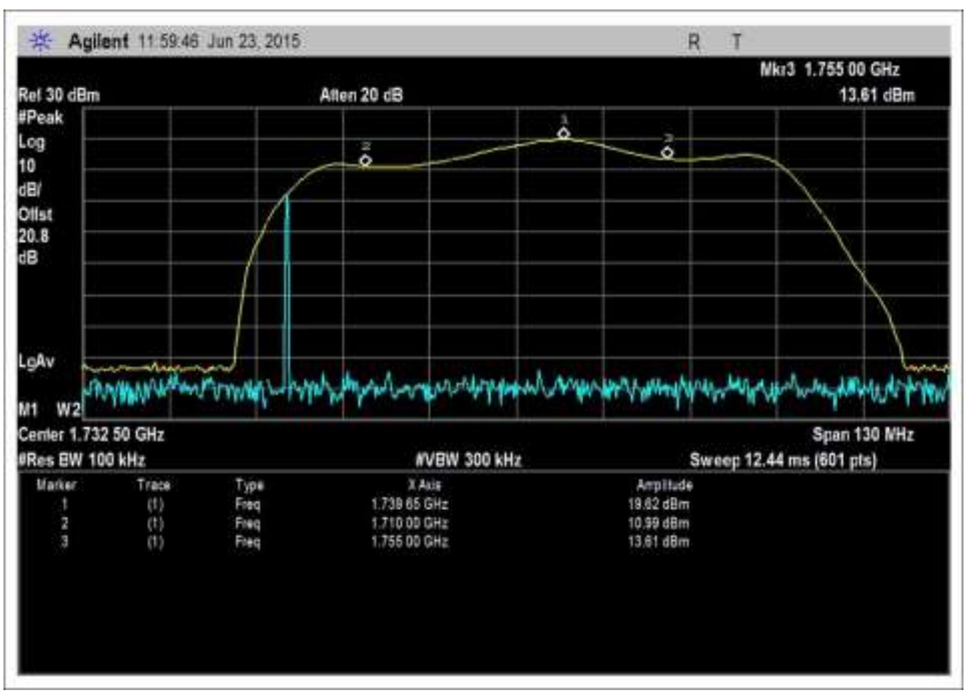
UL_776-787MHz_Zoom



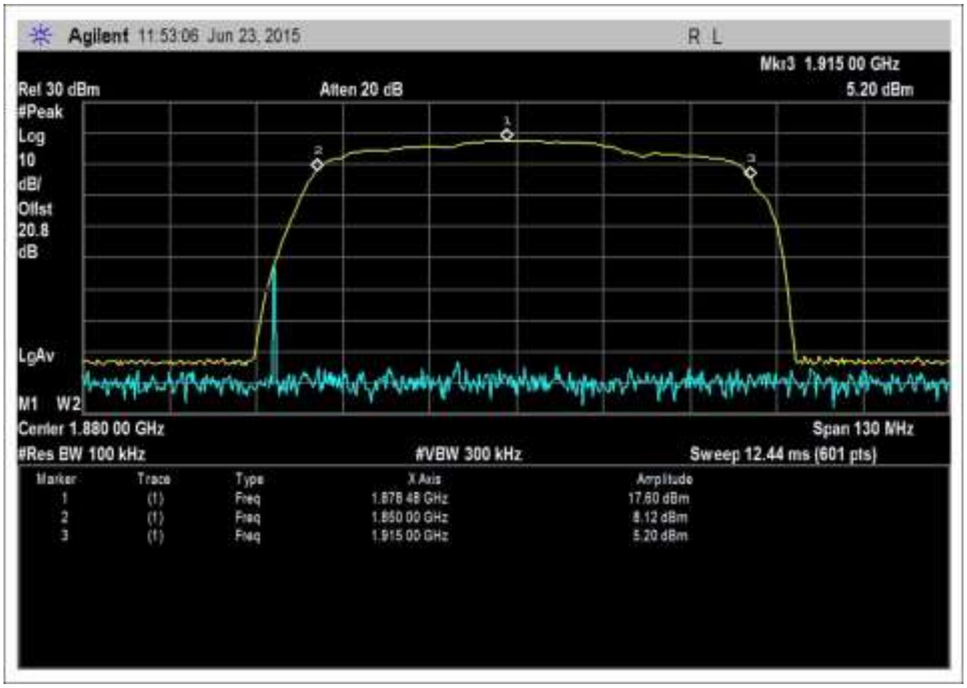
UL_824-849MHz



UL_1710-1755MHz

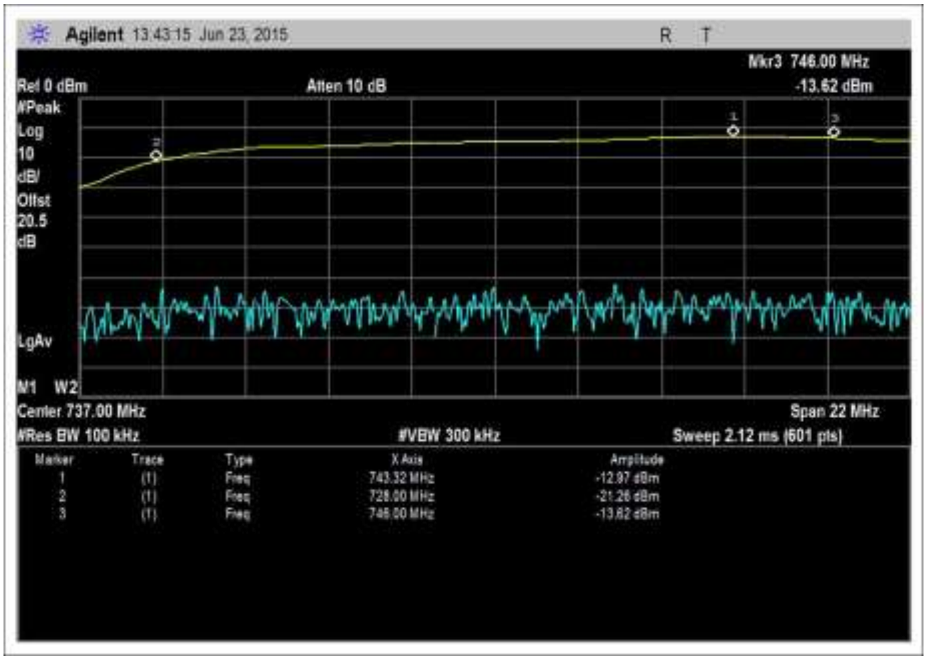


UL_1710-1755MHz_Zoom

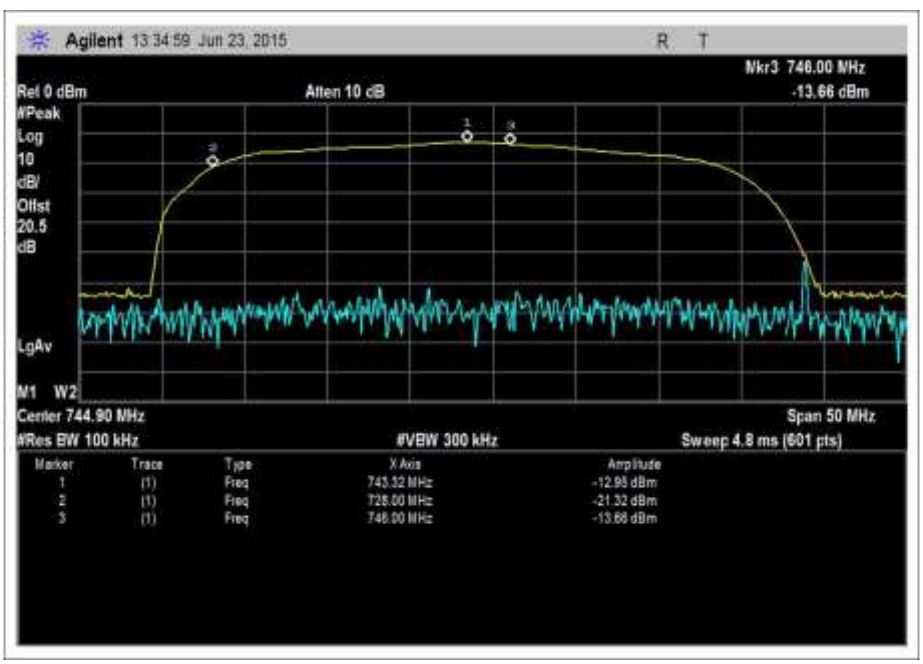


UL_1850-1915MHz

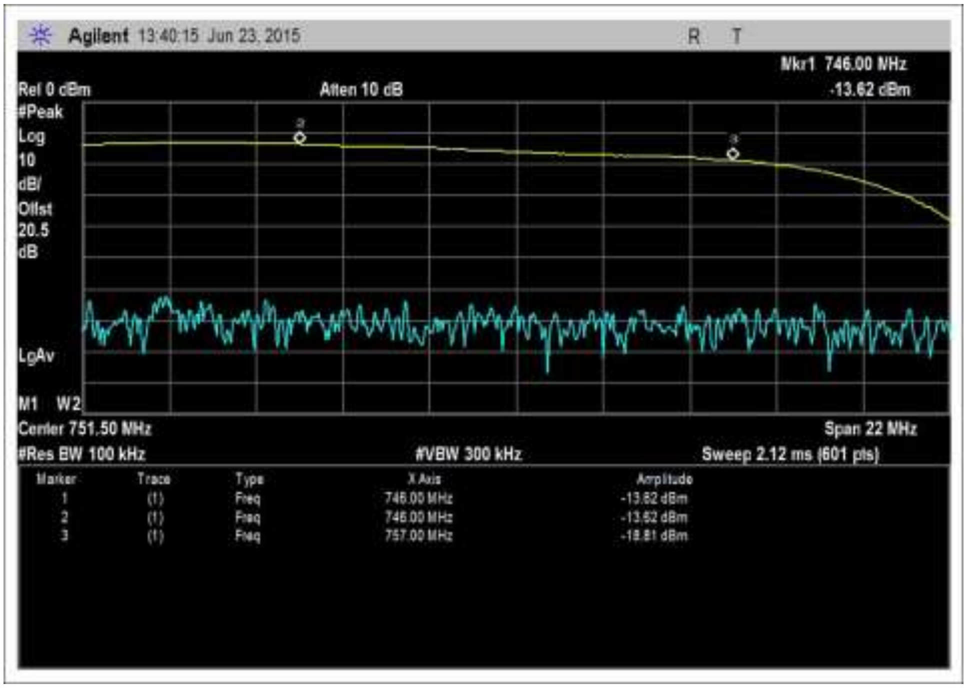
DL



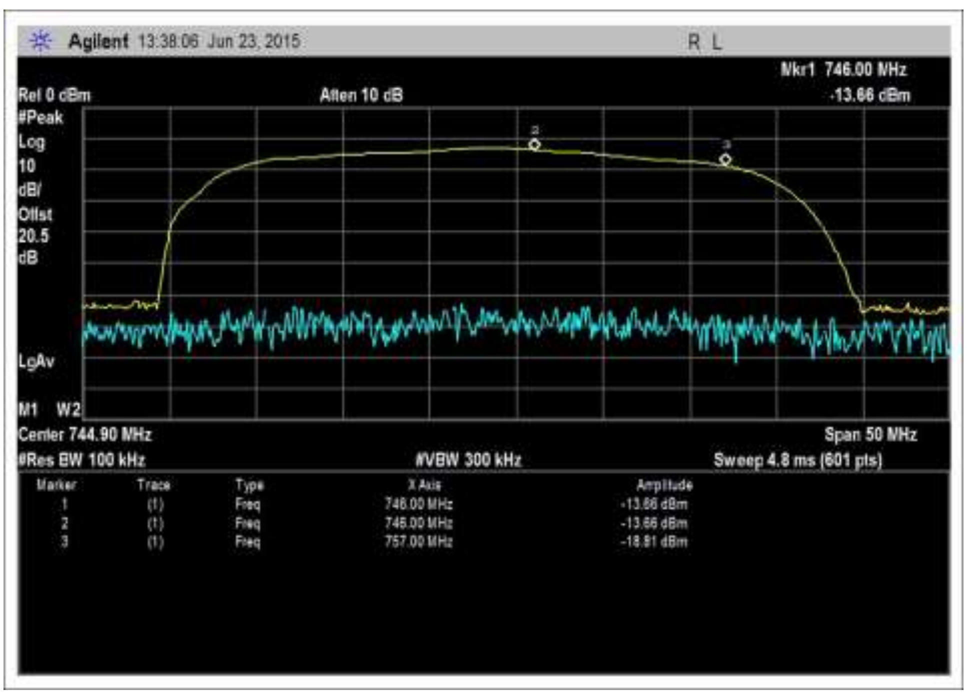
DL_728-746MHz



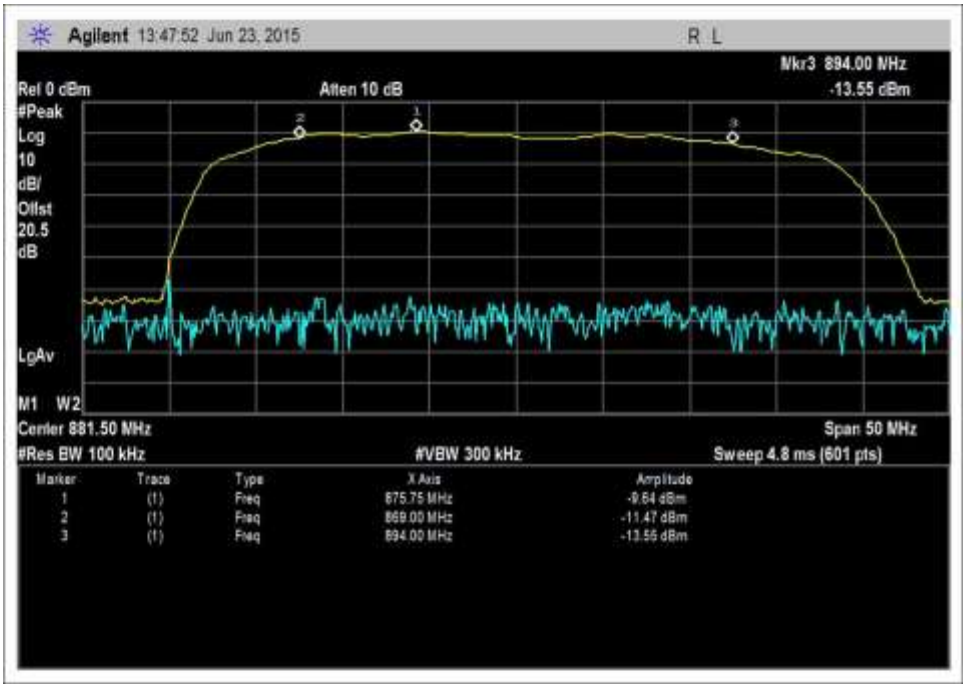
DL_728-746MHz_Zoom



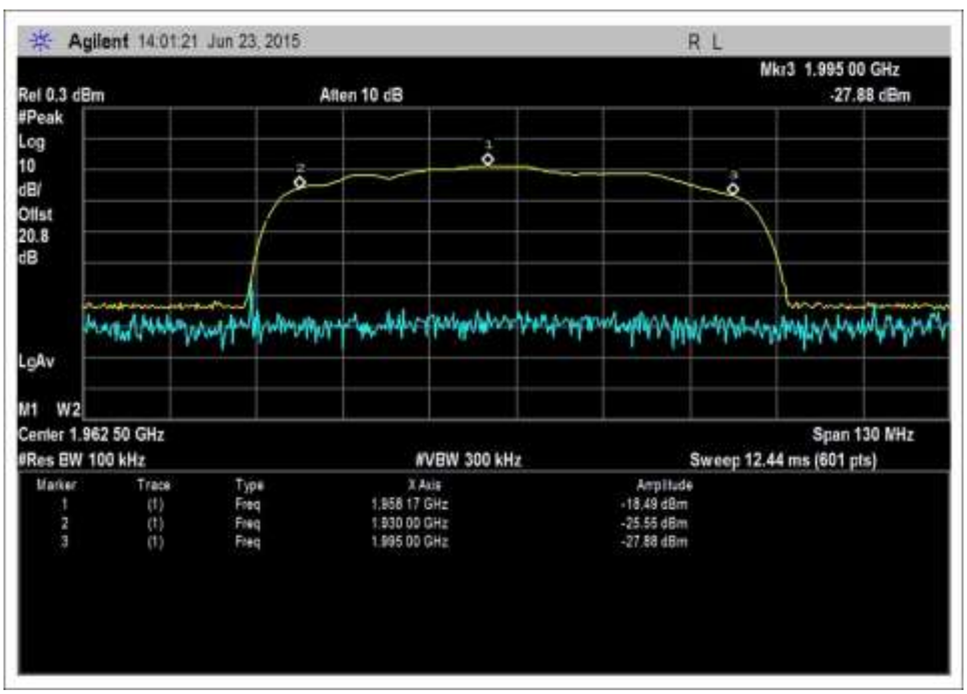
DL_746-757MHz



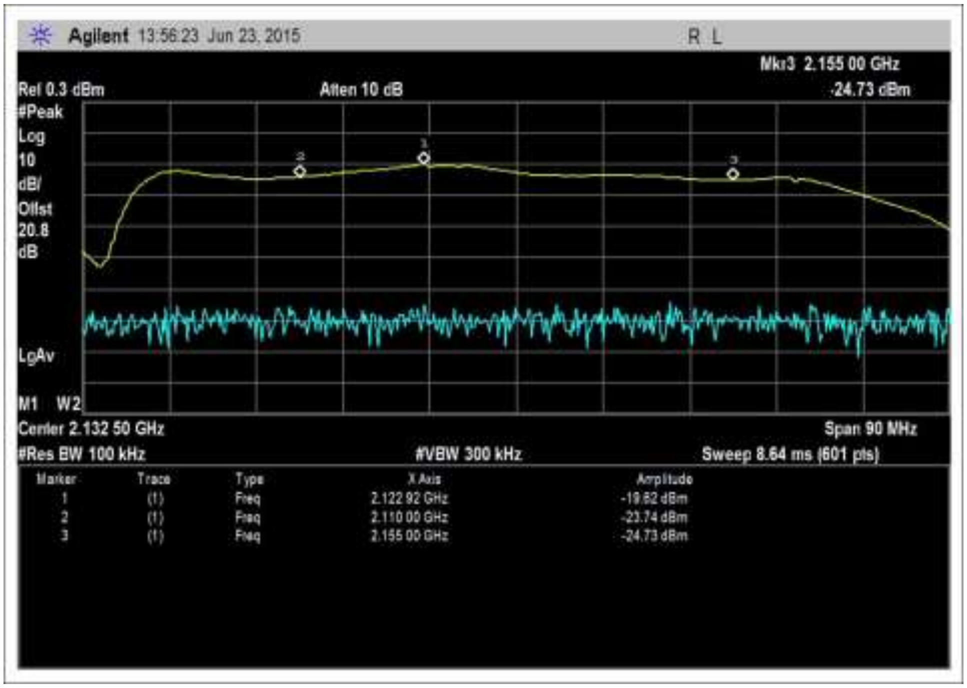
DL_746-757MHz_Zoom



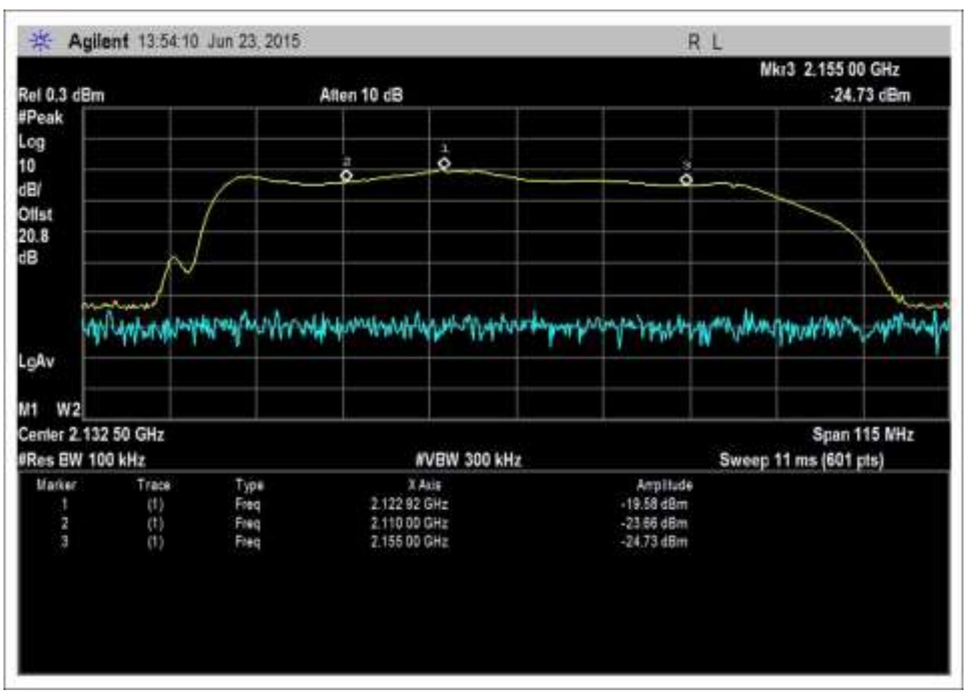
DL_869-894MHz



DL_1930-1995MHz



DL_2110-2155MHz



DL_2110-2155MHz_Zoom

Clause 7.2 Maximum Power

Test Equipment

Asset #	Description	Model	Manufacturer	Cal Date	Cal Due
ANP05389	Attenuator	766-10	Narda	02/27/2014	02/27/2016
ANP05713	Attenuator	PE7015-20	Pasternack	03/24/2015	03/24/2017
ANP06709	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
ANP06710	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
AN02869	Spectrum Analyzer	E4440A	Agilent	07/10/2014	07/10/2015

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**
Work Order #: **97222** Date: 6/23/2015
Test Type: **Conducted Emissions** Time: 11:54:28
Tested By: Daniel Bertran Sequence#: 1
Software: EMITest 5.02.00

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Configuration 1

The equipment under test (EUT) is a Mobile Wideband Consumer Booster.

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

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

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

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

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

Test environment conditions: Temperature: 20.8°C, Relative Humidity: 42%, Atmospheric Pressure: 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 v03 Dated June 5, 2015.

Firmware: V1.0

The booster is to be deployed with antenna kit with the following characteristic:

Antenna Kitting Information

Vehicle Kit							
Component	**Prod No. Description**	**Gain/Loss**					**Notes**
		LTE-A	**LTE-V**	**800MHz**	**1900MHz**	**1700MHz\2100MHz**	
Outdoor Antenna	SC-200W	3dBi	3dBi	3dBi	5dBi	5dBi\5dBi	
Outdoor Cable	RG-174-10FT 10Feet	3.8dB	3.8dB	4.3dB	8.8dB	6.98dB\8.96dB	
Indoor Antenna	SC-110W	1.1dBi	1.1dBi	1.1dBi	3dBi	3dBi\3dBi	Table Top Antenna
Indoor Cable	RG-174-10FT 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	SC-288W or Galaxy 5412-P	3dBi	3dBi	3dBi	4dBi	4dBi\4dBi	
Outdoor Cable	RG-240-40FN 40Feet	3.52dB	3.52dB	3.98dB	6.52dB	6.12dB\6.92dB	
Indoor Antenna	SC-248W	7dBi	7dBi	7dBi	10dBi	10dBi\10dBi	Wall Mounted Antenna
Indoor Cable	RG-240-20FN 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	SC-288W	3dBi	3dBi	3dBi	4dBi	4dBi\4dBi	
Outdoor Cable	RG-240-40FN 40Feet	3.52dB	3.52dB	3.98dB	6.52dB	6.12dB\6.92dB	
Indoor Antenna	SC-120W	1.2dBi	1.2dBi	1.2dBi	3dBi	3dBi\3dBi	Table Top Antenna

Summary of Results

Pass: as summarized in table below, measured EIRP, Gain and UL/DL gain ratio are within limits.

Pre AGC						
	Pulse GSM			4.1 MHz AWGN		
Frequency (MHz)	Input (dBm)	Output (dBm)	Gain (dB)	Input (dBm)	Output (dBm)	Gain (dB)
UL1710-1755	-25.6	18.6	44.2	-25.7	18.3	44.0
UL1850-1915	-24.3	17.5	41.8	-24.1	18.1	42.2
UL824-894	-23.4	19.3	42.7	-23.1	18.2	41.3
UL 698-716	-21.5	19.6	41.1	-21.8	18.8	40.6
UL776-787	-25.9	18.8	44.7	-26.4	18.2	44.6
DL2110-2155	-59.9	-18.8	41.2	-59.4	-17.8	41.7
DL1930-1995	-58.7	-17.6	41.1	-60.1	-18.7	41.4
DL869-894	-54.1	-9.5	44.6	-52.0	-8.8	43.2
DL:728-746	-57.0	-11.6	45.4	-57.4	-12.4	45.0
DL 746-757	-57.5	-13.5	44.0	-58.0	-14.0	44.0

Pulse GSM						
					Conducted	Conducted and EIRP
Frequency (MHz)	Output Power (dBm)	Ant Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit Min (dBm)	Limit Max (dBm)
UL1710-1755	18.6	5	6.5	**17.1**	17	30
UL1850-1915	17.5	5	6.1	**16.4**	17	30
UL824-894	19.3	3	4	**18.3**	17	30
UL 698-716	19.6	3	3.5	**19.1**	17	30
UL776-787	18.8	3	3.5	**18.3**	17	30
DL2110-2155	-18.8	10	3.5	**-12.3**	NA	17
DL1930-1995	-17.6	10	3.4	**-11.0**	NA	17
DL869-894	-9.5	7	2.3	**-4.8**	NA	17
DL:728-746	-11.6	7	2	**-6.6**	NA	17
DL 746-757	-13.5	7	2	**-8.5**	NA	17

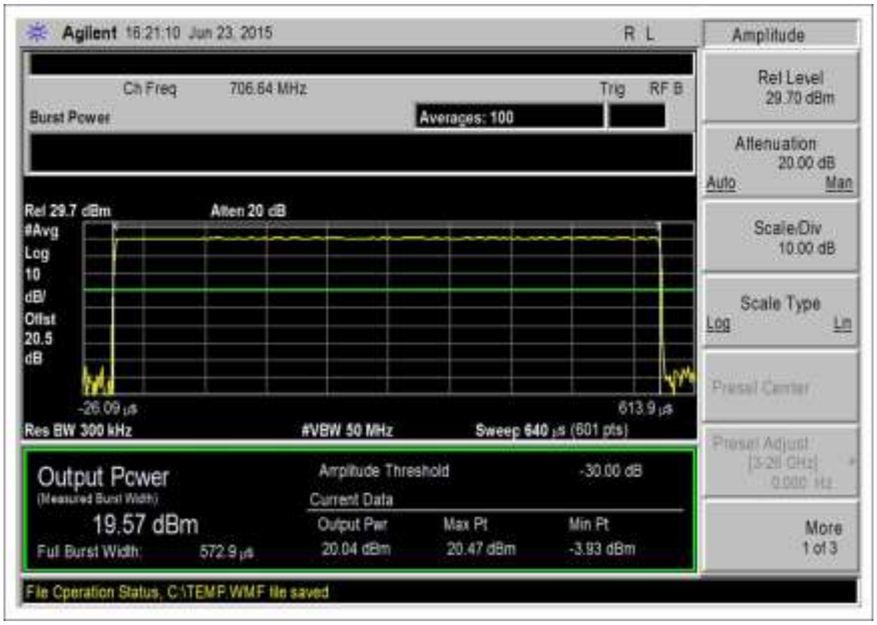
4.1MHz AWGN						
					Conducted	Conducted and EIRP
Frequency (MHz)	Output Power (dBm)	Ant Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit Min (dBm)	Limit Max (dBm)
UL1710-1755	18.3	5	6.12	**17.2**	17	30
UL1850-1915	18.1	5	6.52	**16.6**	17	30
UL824-894	18.2	3	3.98	**17.2**	17	30
UL 698-716	18.8	3	3.52	**18.3**	17	30
UL776-787	18.2	3	3.52	**17.7**	17	30
DL2110-2155	-17.8	10	3.76	**-11.5**	NA	17
DL1930-1995	-18.7	10	3.56	**-12.2**	NA	17
DL869-894	-8.8	7	2.29	**-4.1**	NA	17
DL:728-746	-12.4	7	2.06	**-7.5**	NA	17
DL 746-757	-14.0	7	2.06	**-9.1**	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)
UL1710-1755	-13.5	18.3	31.8	-14.0	17.9	31.9
UL1850-1915	-12.3	18.3	30.6	-12.5	19.3	31.8
UL824-894	-11.5	18.9	30.4	-12.2	17.8	30.0
UL 698-716	-11.3	19.7	31.0	-11.0	19.0	30.0
UL776-787	-14.0	18.2	32.2	-14.6	18.0	32.6
DL2110-2155	-54.2	-18.2	36.1	-54.1	-20.5	33.7
DL1930-1995	-53.9	-18.2	35.7	-53.9	-17.5	36.5
DL869-894	-47.7	-8.7	39.0	-50.0	-9.0	41.0
DL:728-746	-51.9	-11.9	40.0	-52.8	-15.1	37.8
DL 746-757	-51.7	-12.4	39.3	-53.4	-13.5	39.9

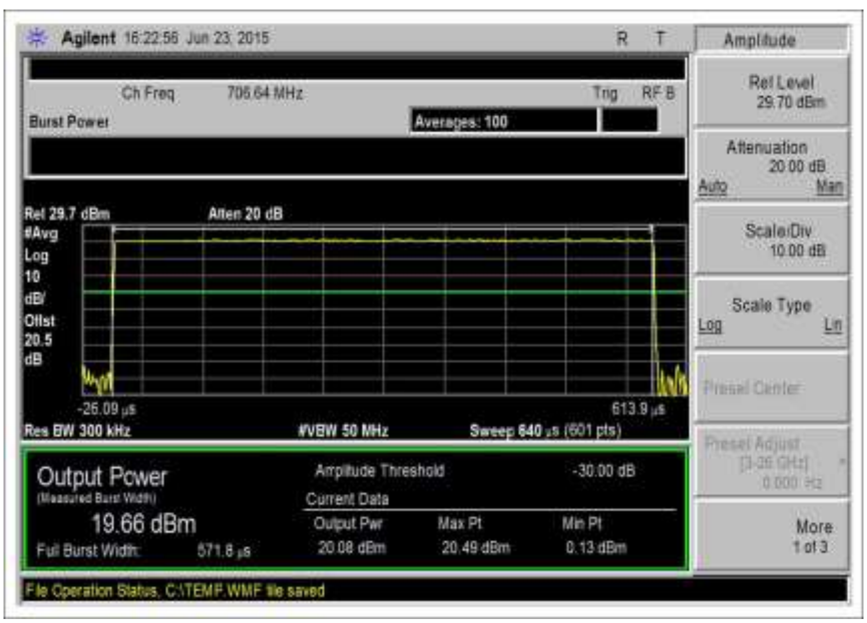
Note: The booster went into Transmitter off mode at Max input power of +10dBm (UL) and -20dBm (DL). Results presented on the above table are at 1 dB below the Transmit off RF input level. This table it is for reference only.

Test Data

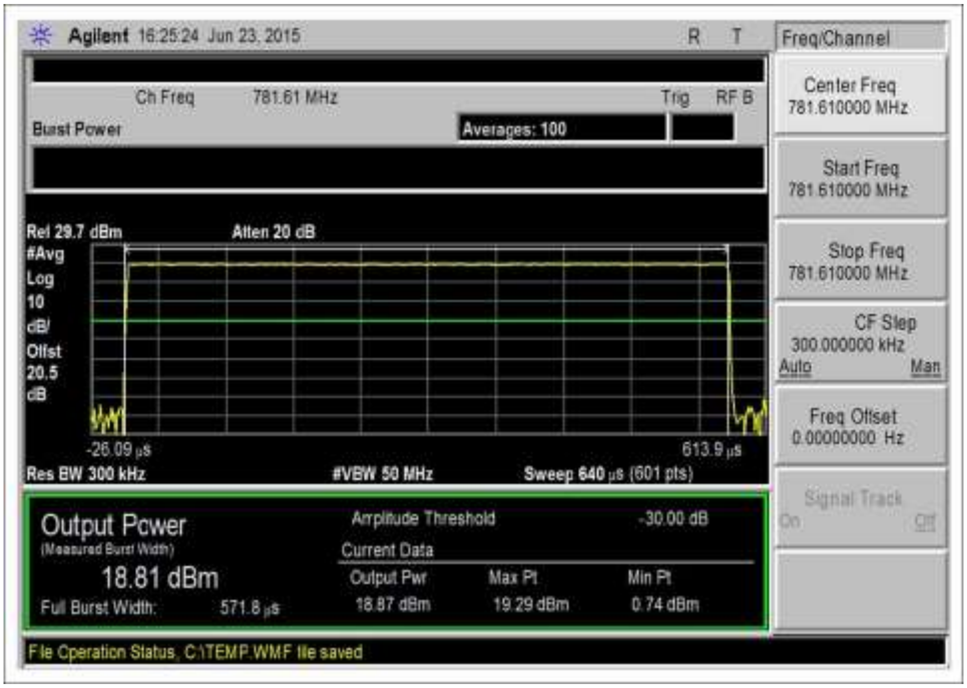
UL-GSM



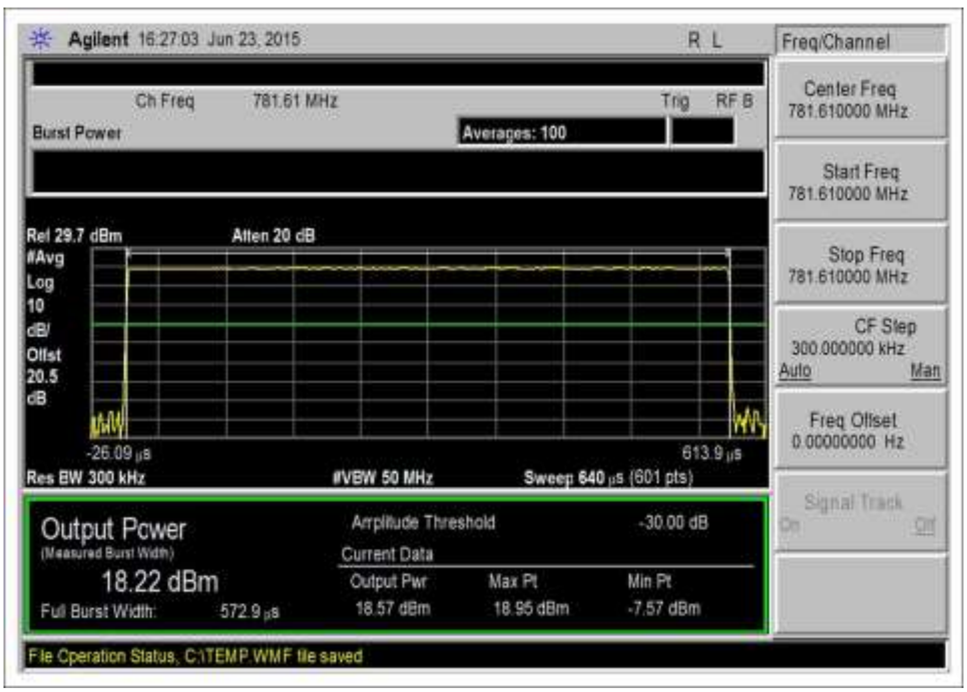
UL_698-716_GSM



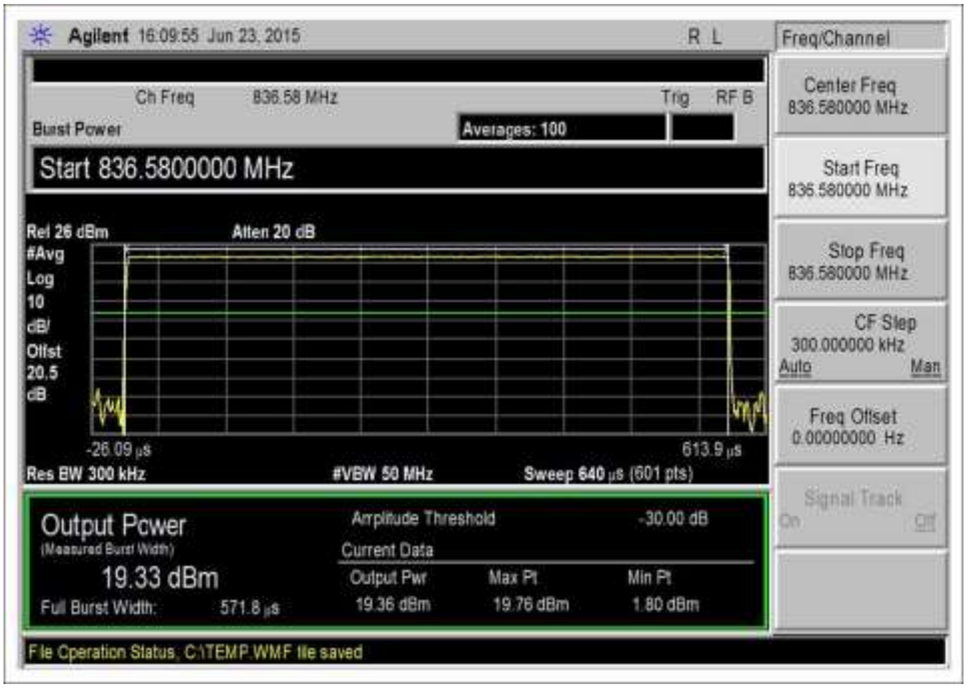
UL_698-716_GSM-Max



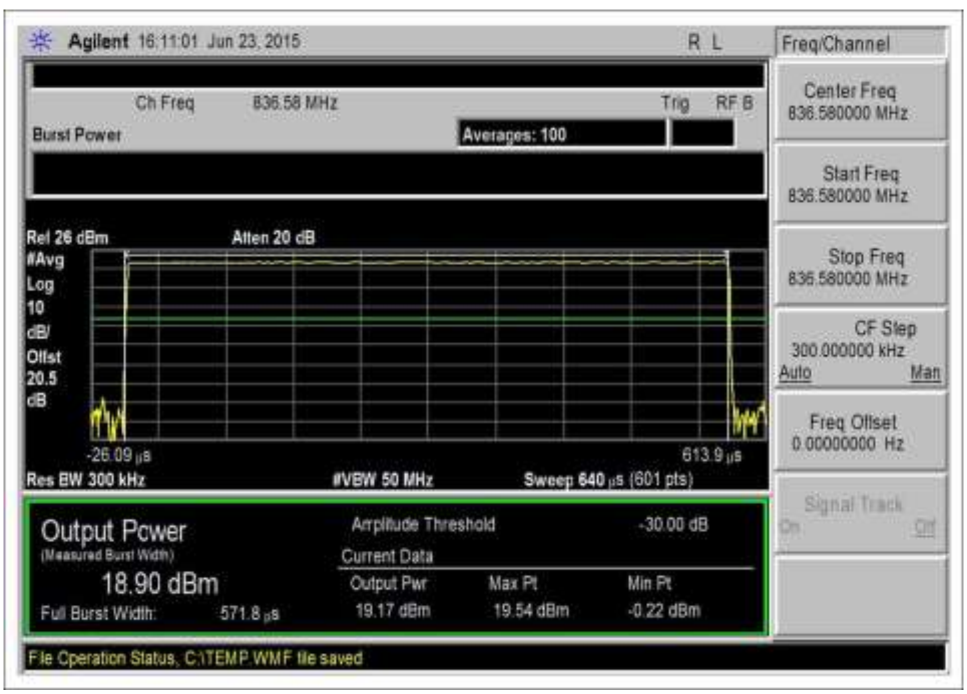
UL_776-787_GSM



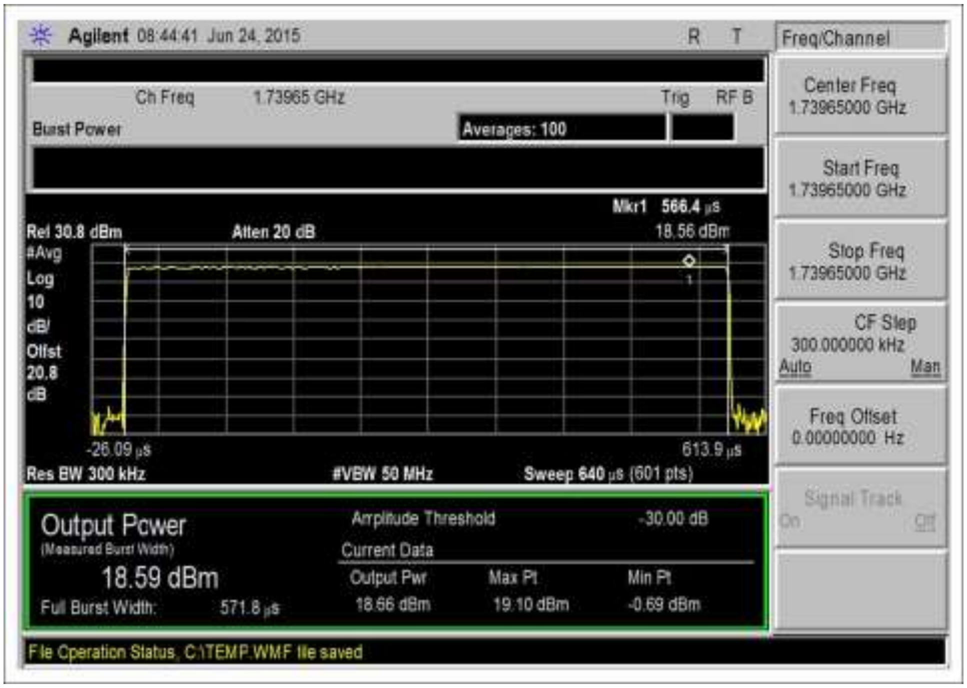
UL_776-787_GSM-Max



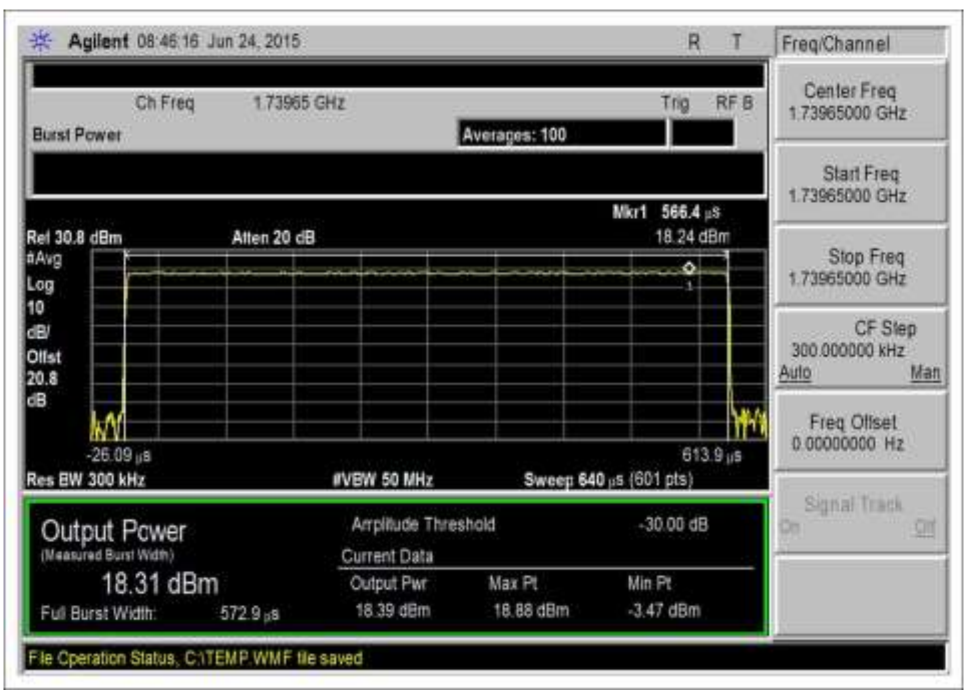
UL_824-849_GSM



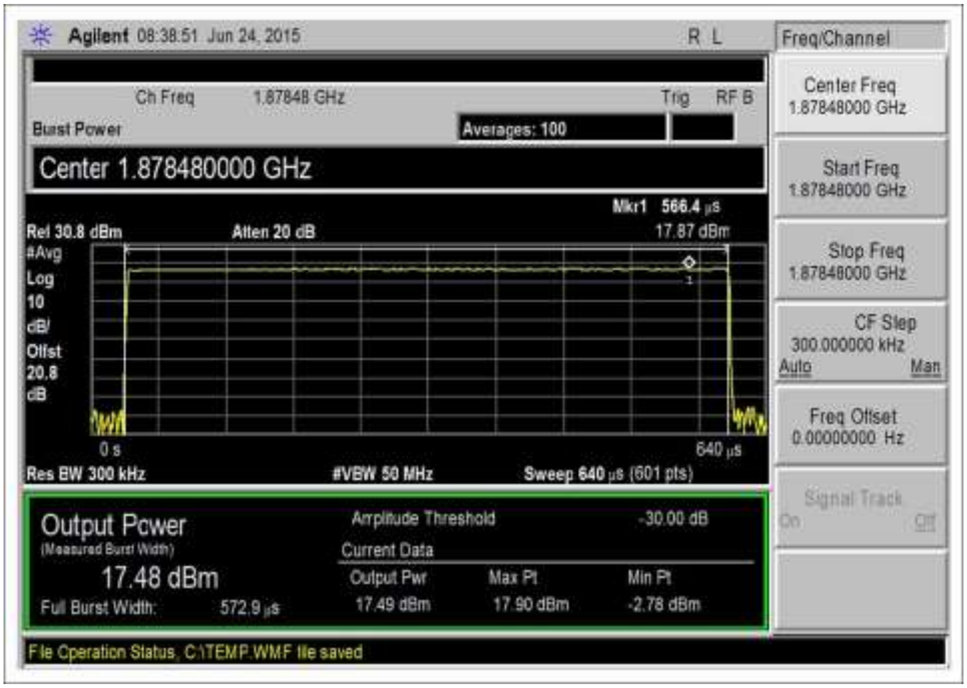
UL_824-849_GSM-Max



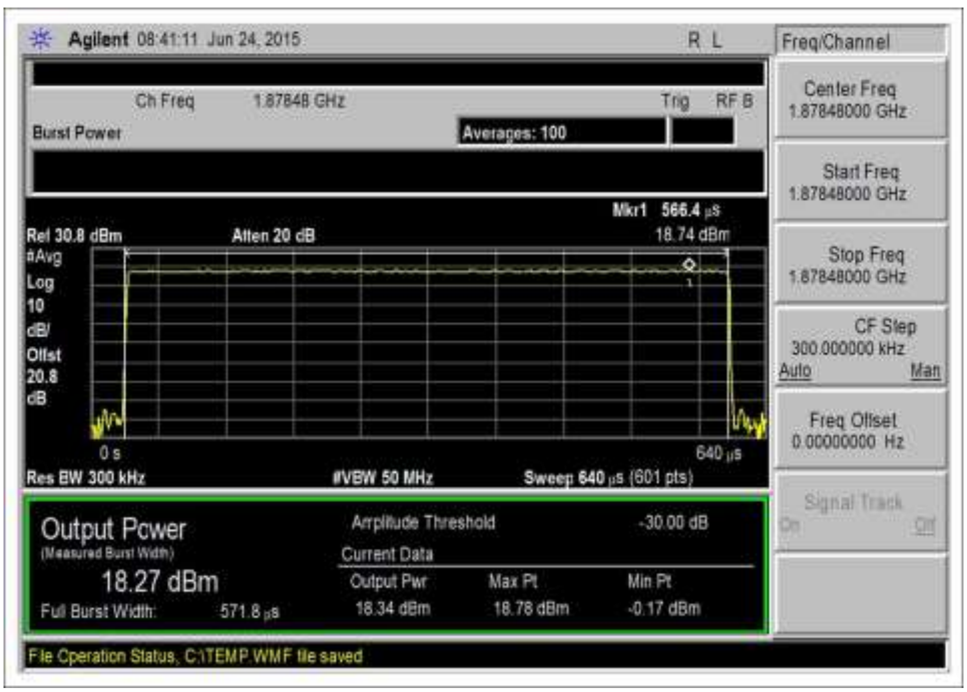
UL_1710-1755_GSM



UL_1710-1755_GSM-Max

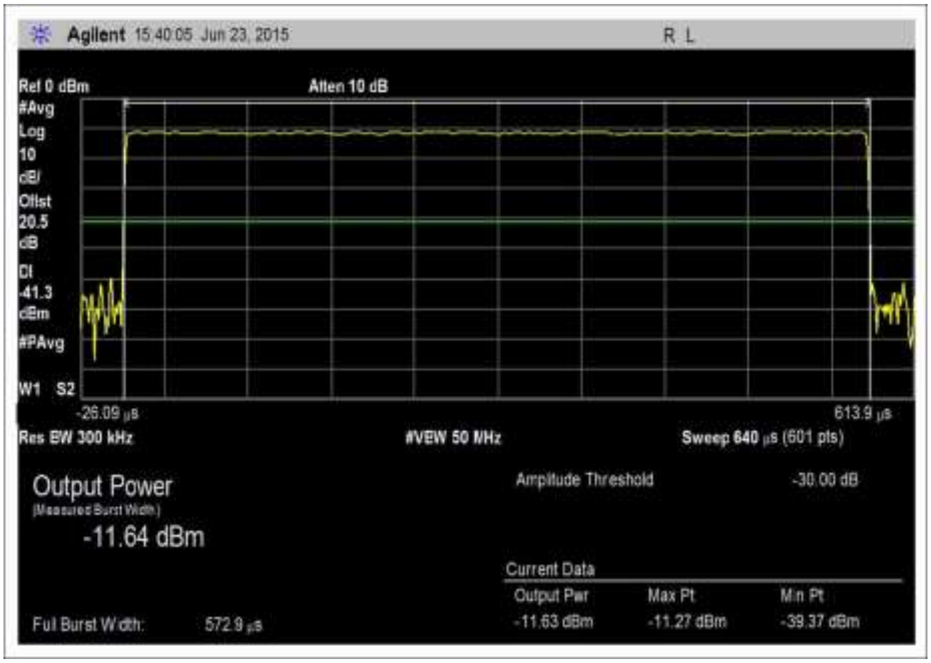


UL_1850-1915_GSM

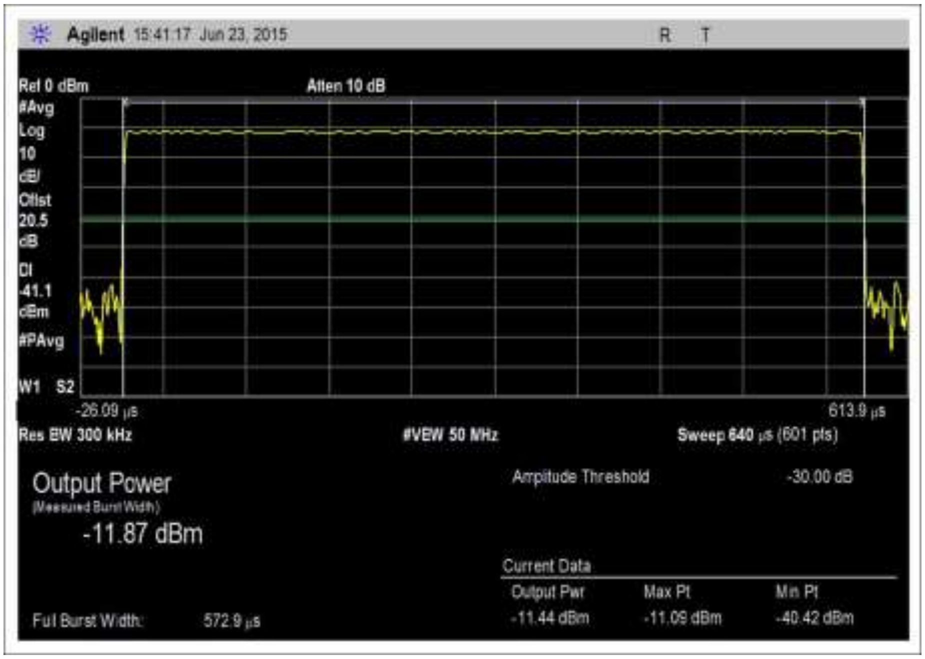


UL_1850-1915_GSM-Max

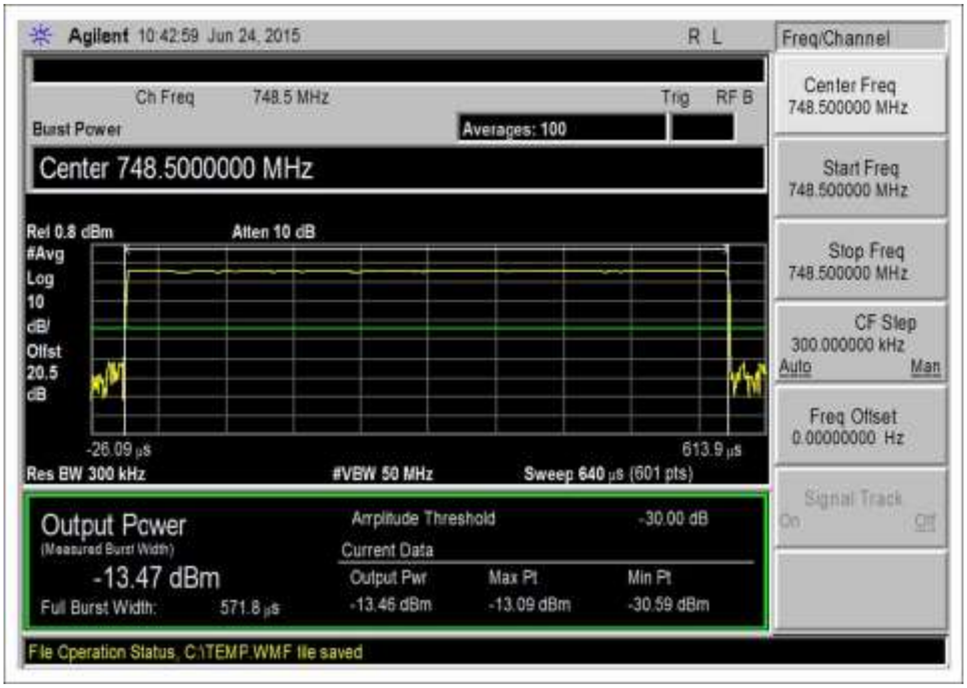
DL-GSM



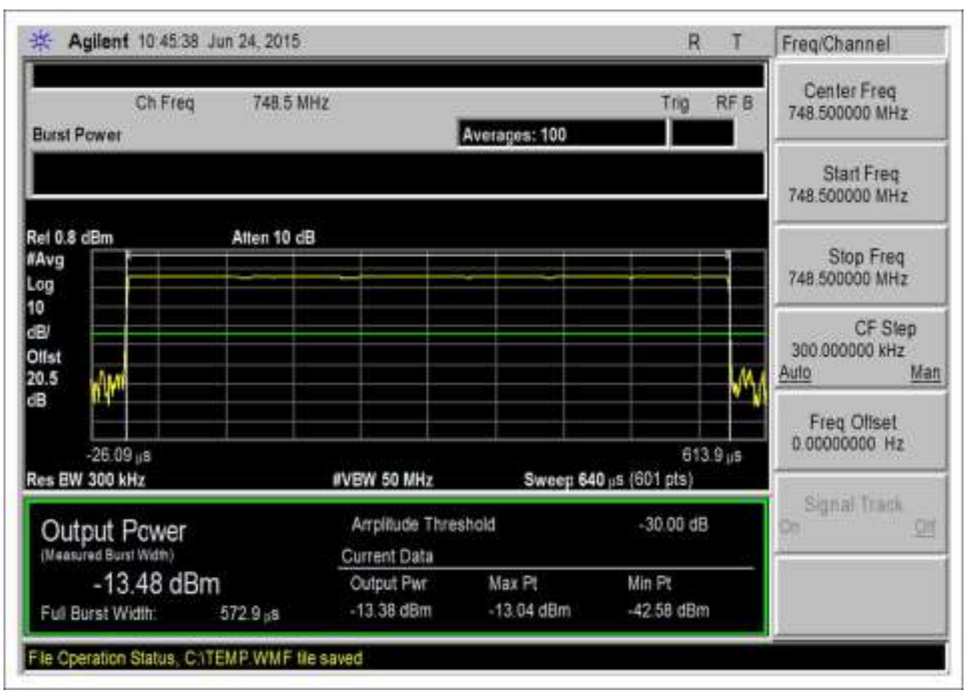
DL_728-746_GSM



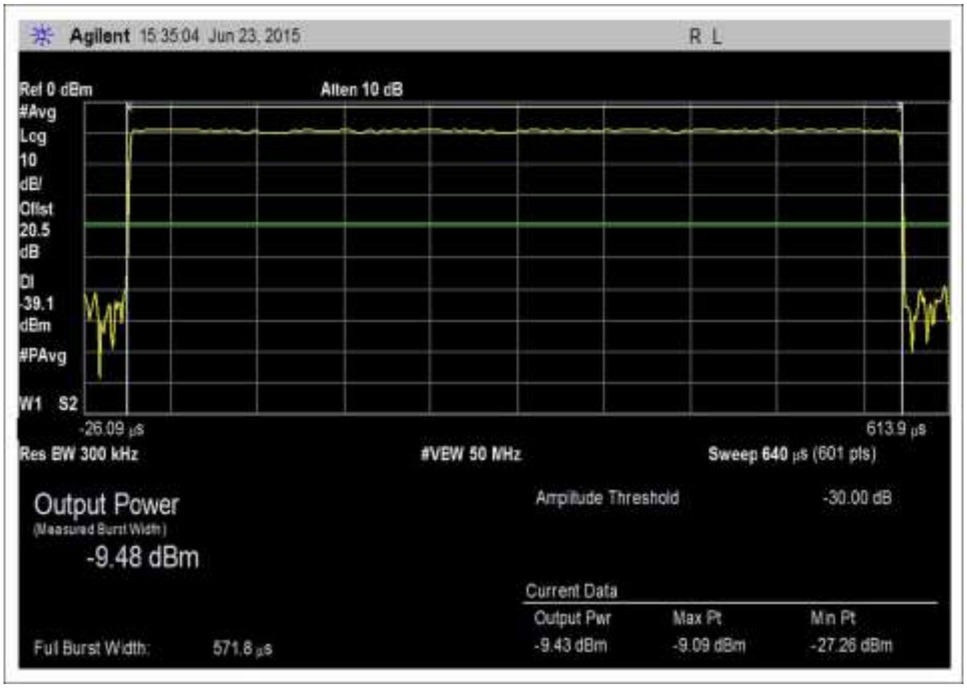
DL_728-746_GSM-Max



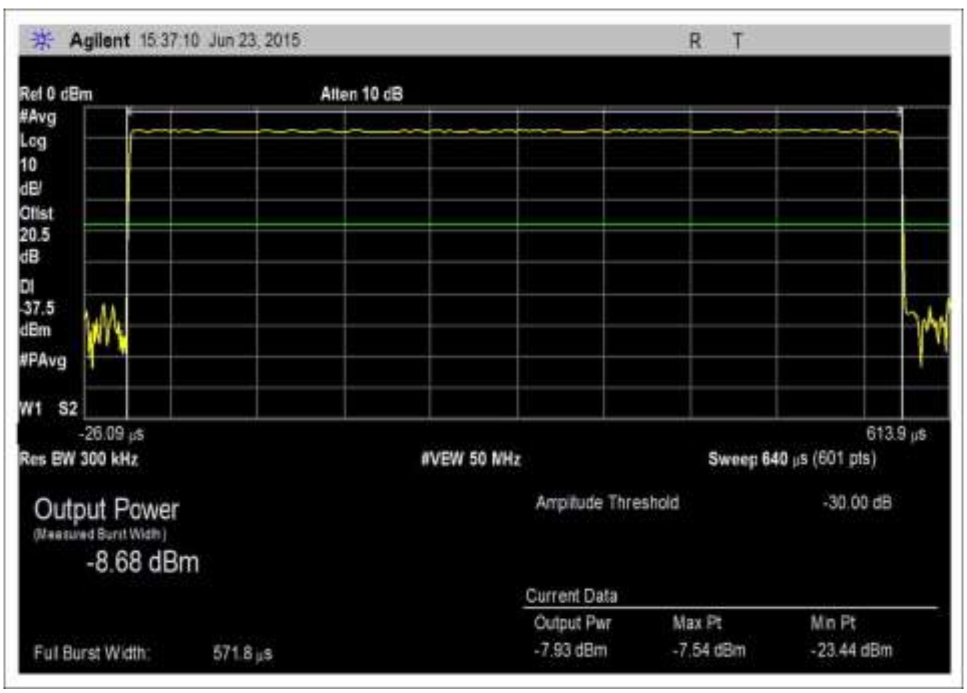
DL_746-757_GSM



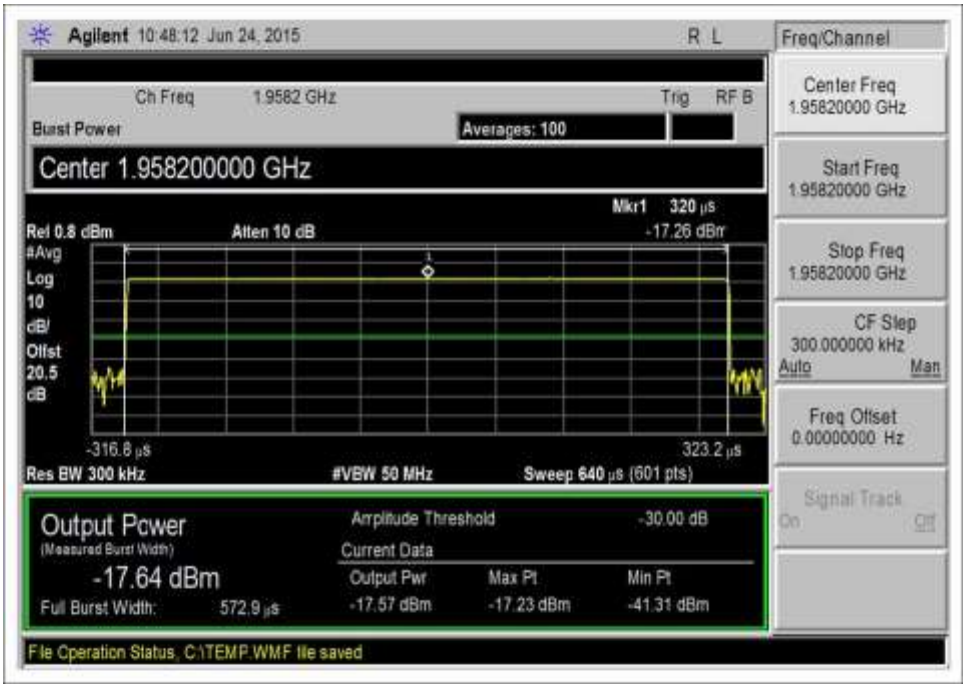
DL_746-757_GSM-Max



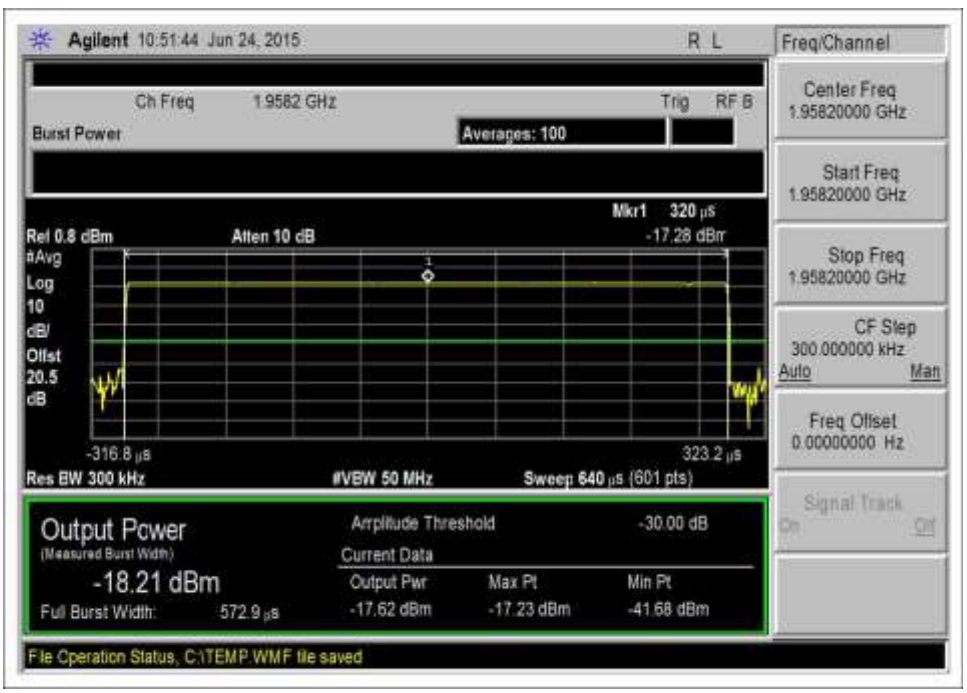
DL_869-894_GSM



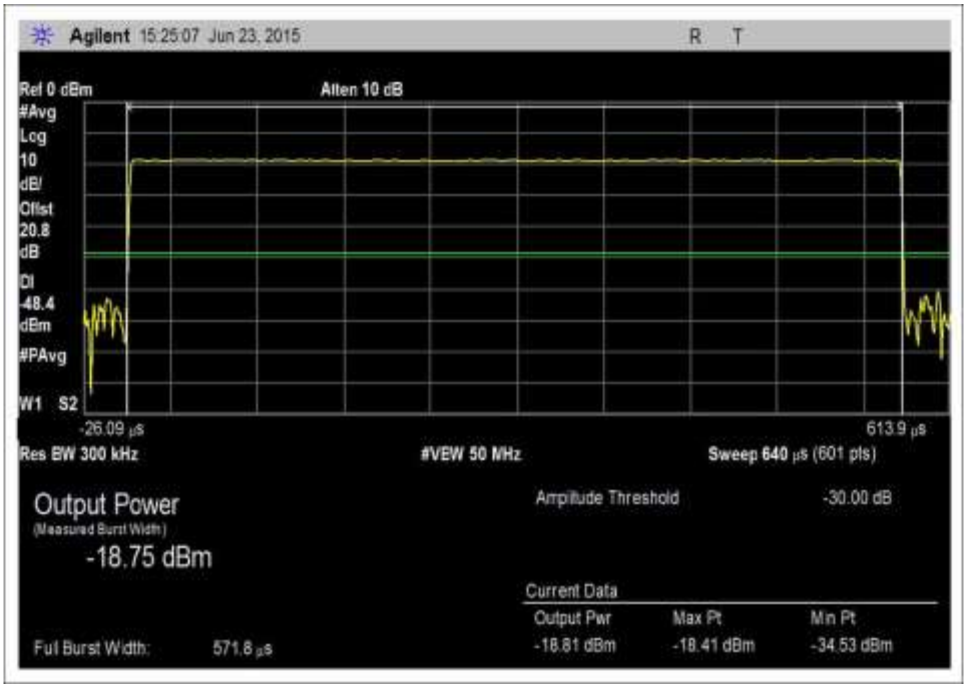
DL_869-894_GSM-Max



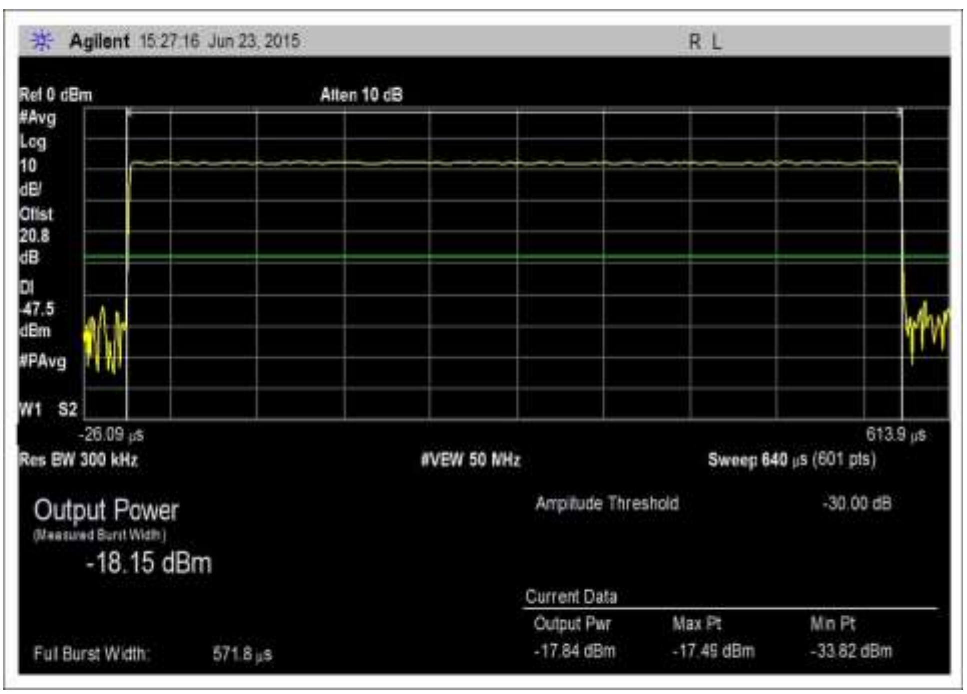
DL_1930-1995_GSM



DL_1930-1995_GSM-Max

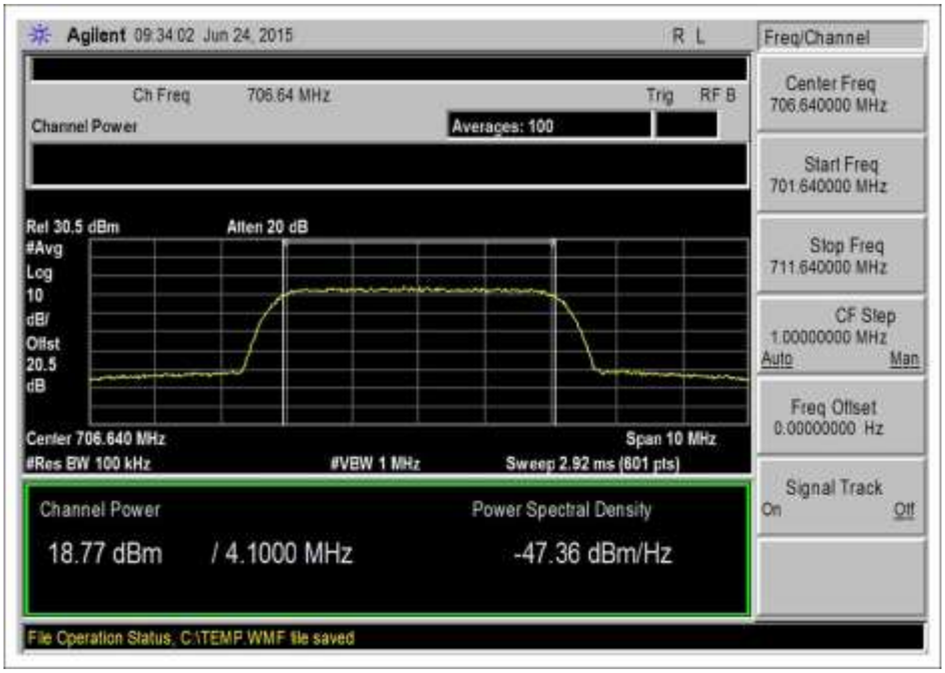


DL_2110-2155_GSM

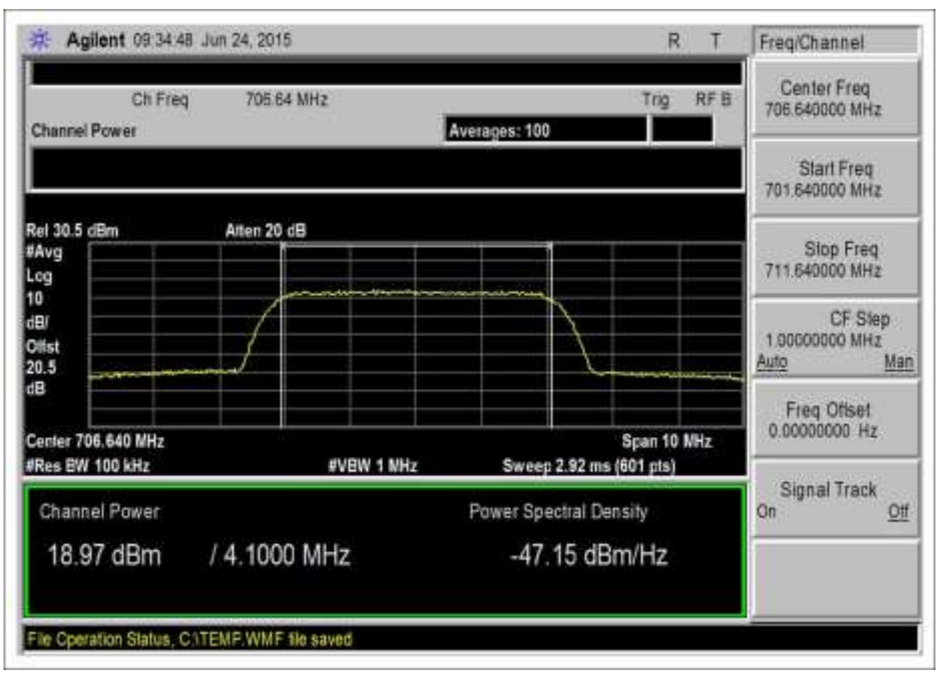


DL_2110-2155_GSM-Max

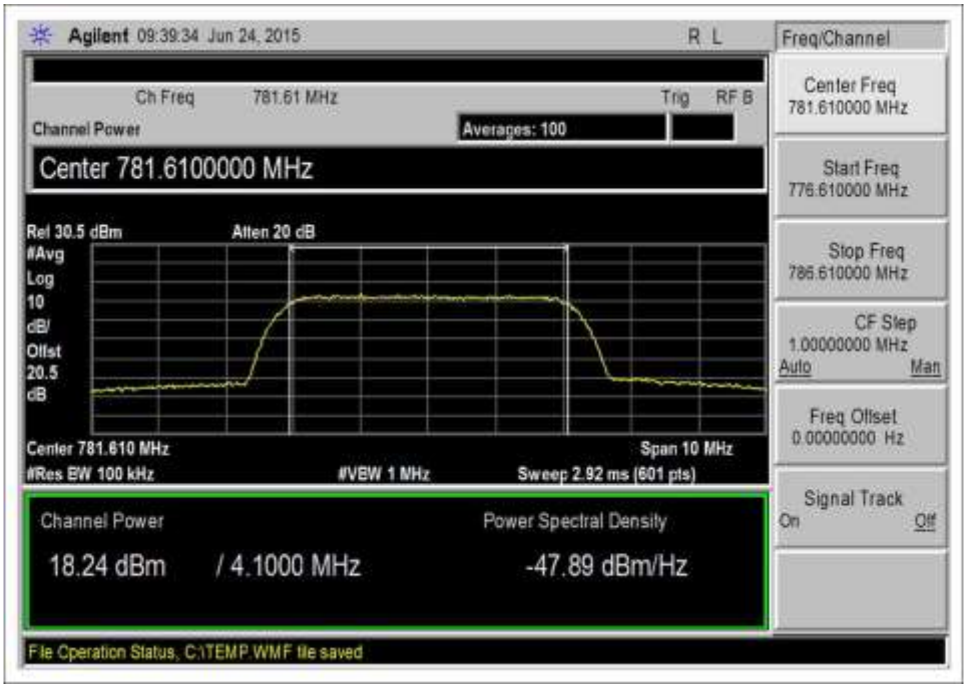
UL-AWGN



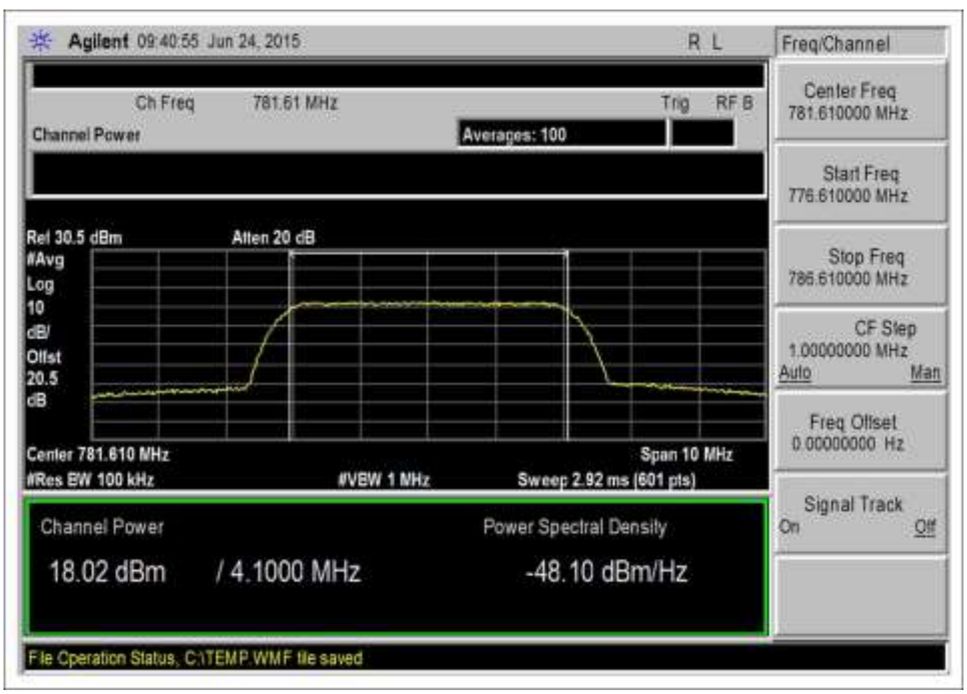
UL_698-716_AWGN



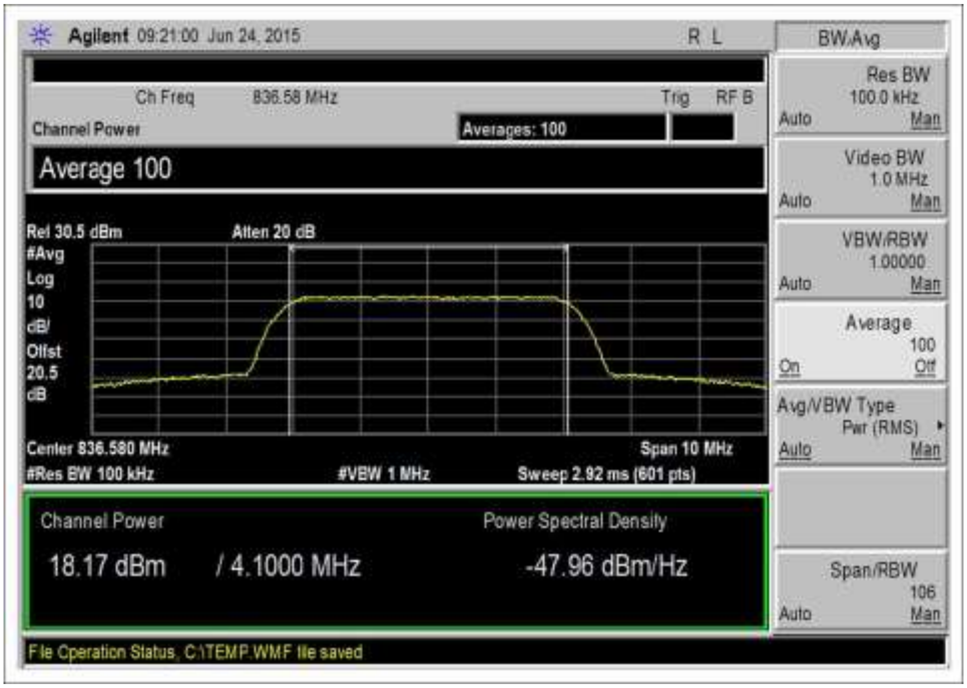
UL_698-716_AWGN-Max



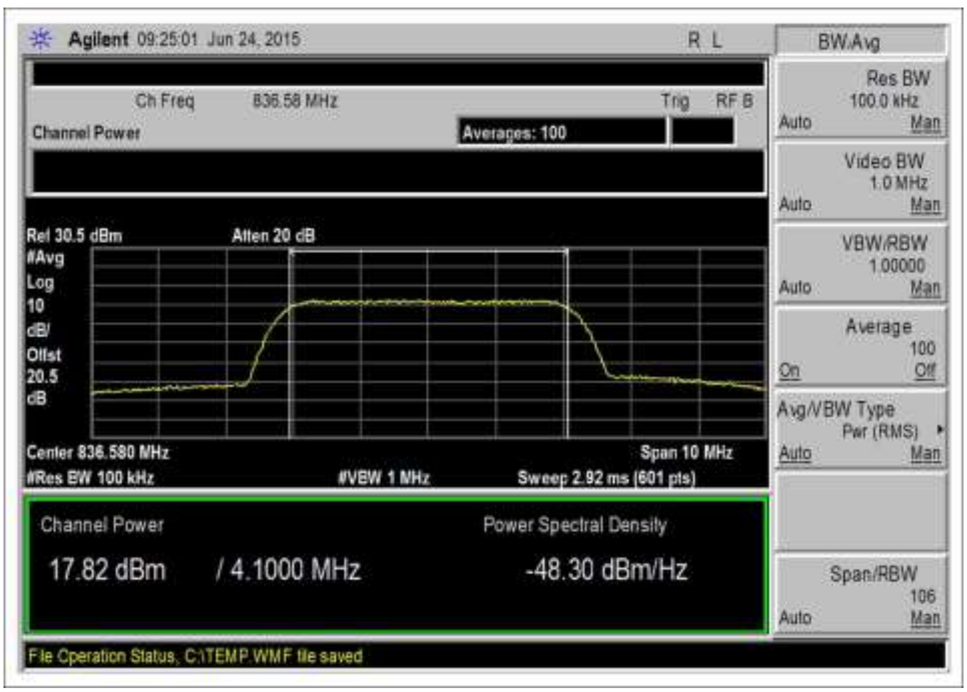
UL_776-787_AWGN



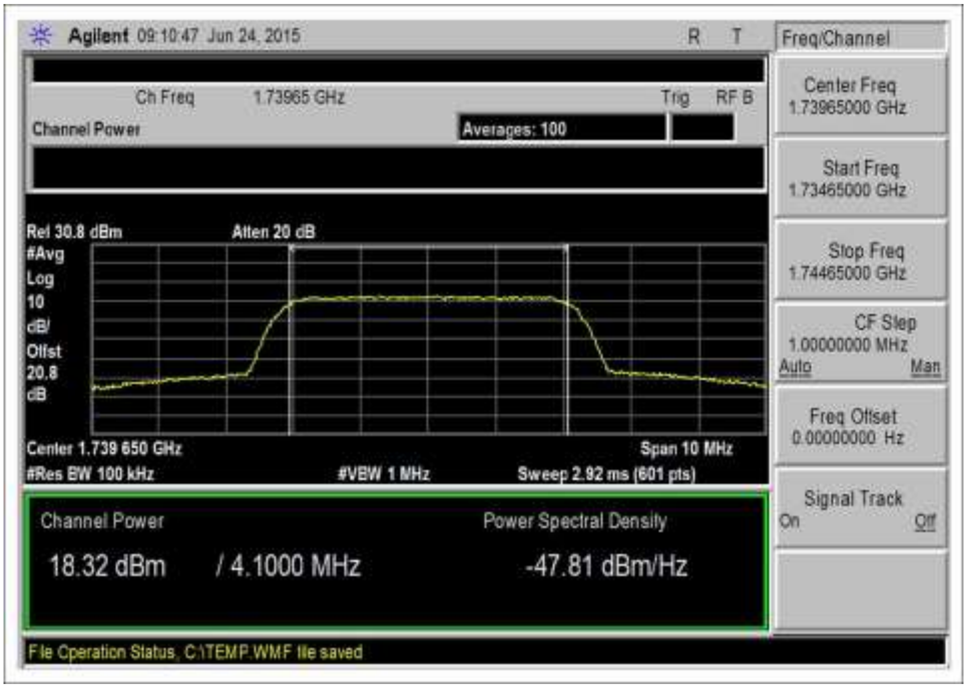
UL_776-787_AWGN-Max



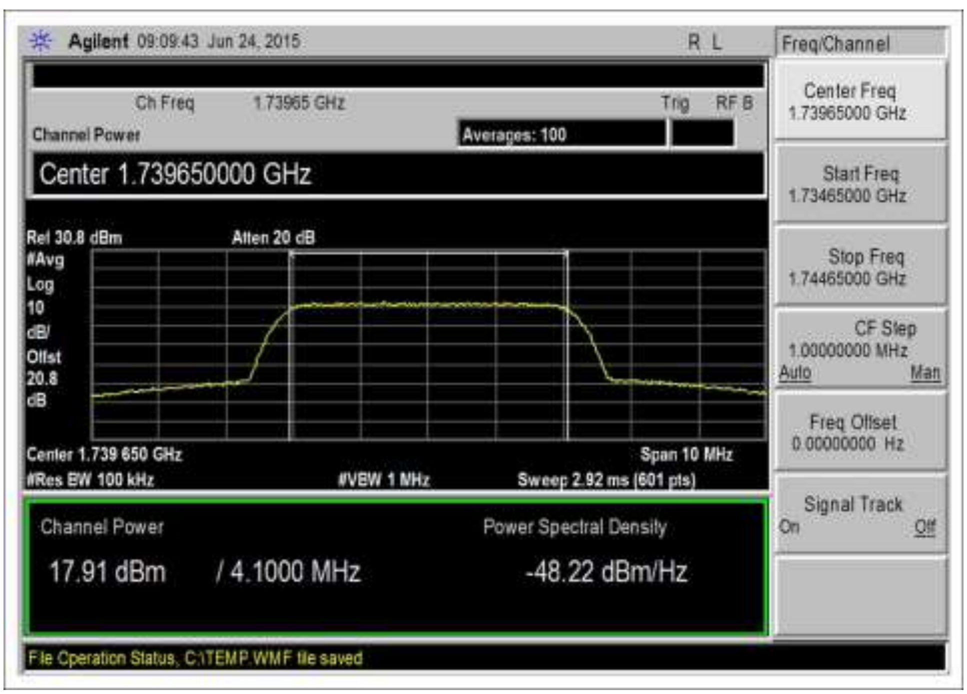
UL_824-829_AWGN



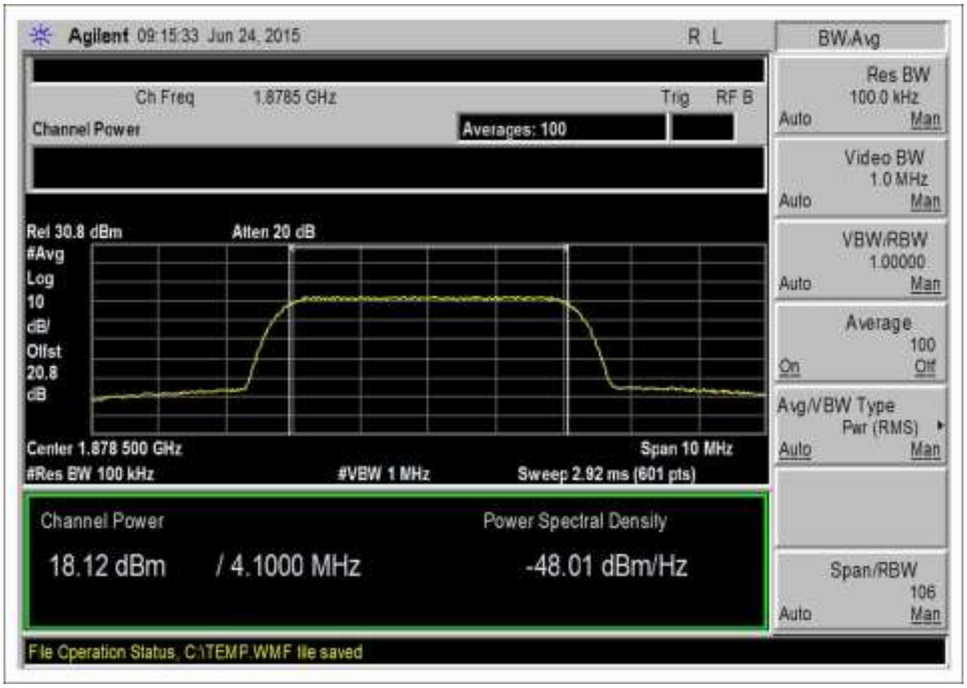
UL_824-849_AWGN-Max



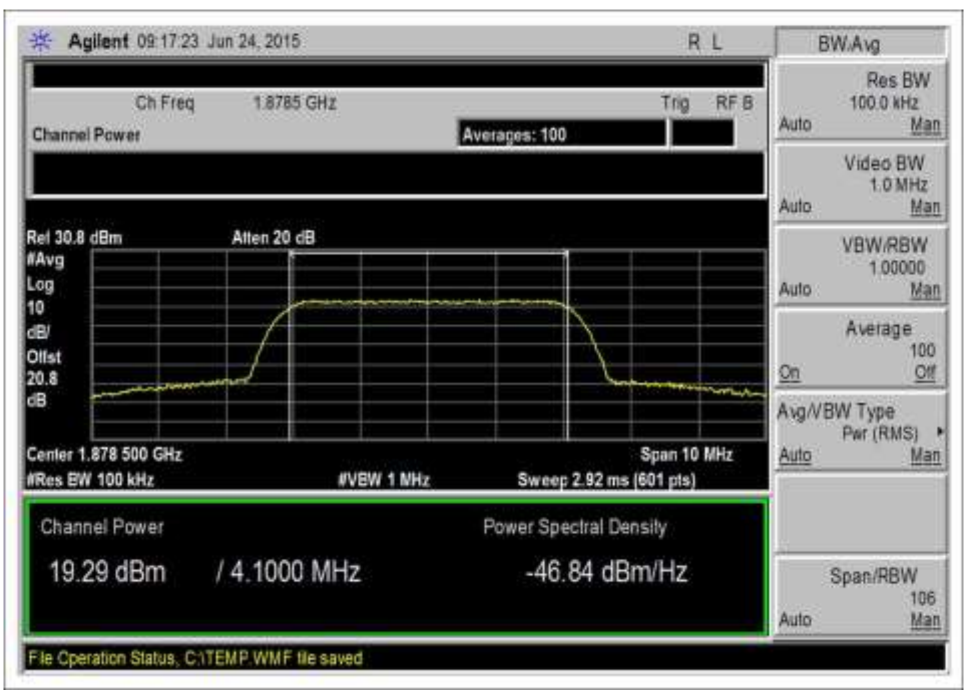
UL_1710-1755_AWGN



UL_1710-1755_AWGN-Max

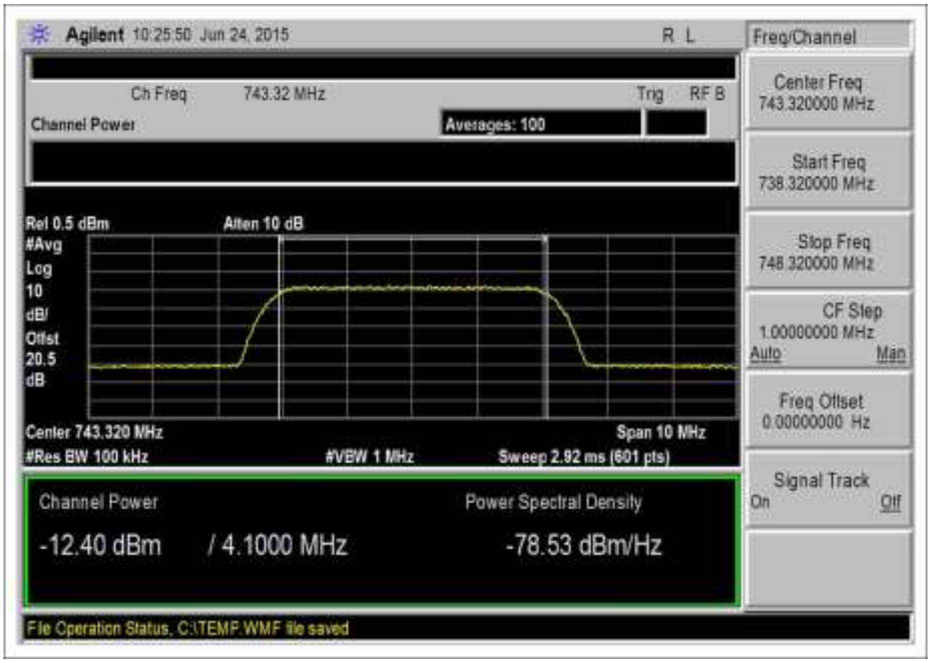


UL_1850-1915_AWGN

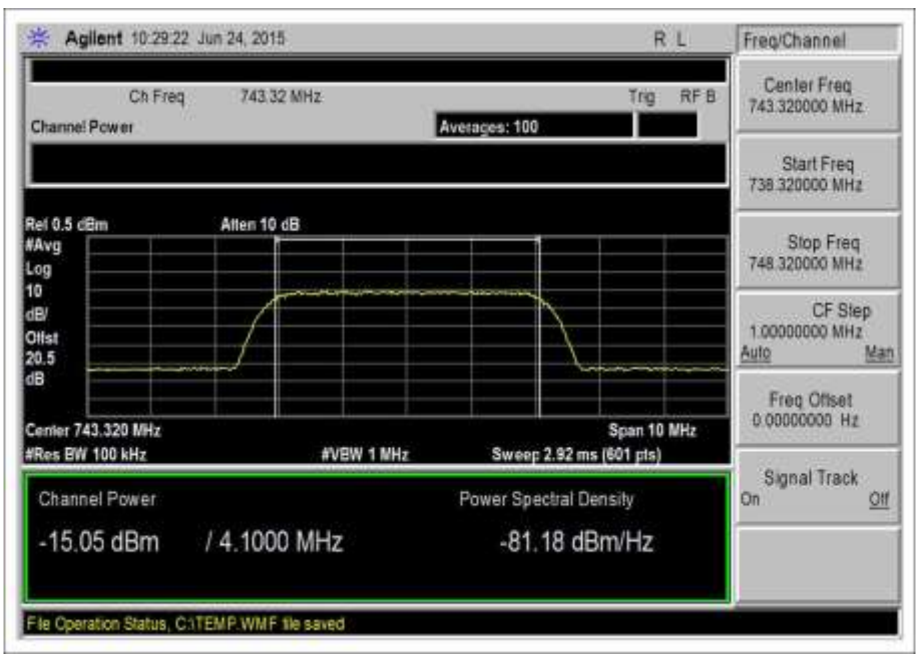


UL_1850-1915_AWGN-Max

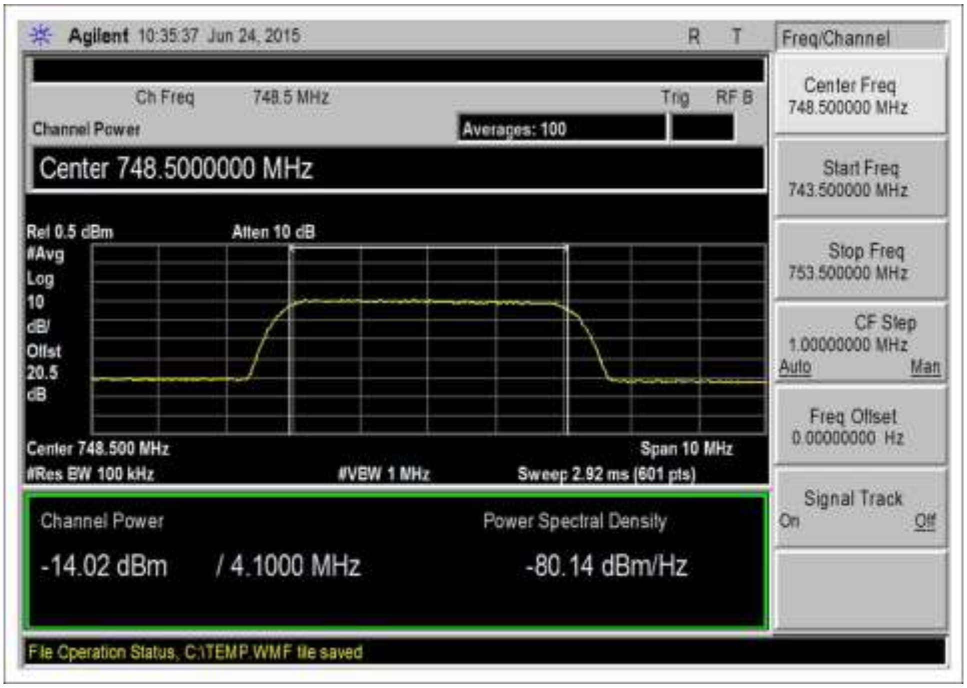
DL-AWGN



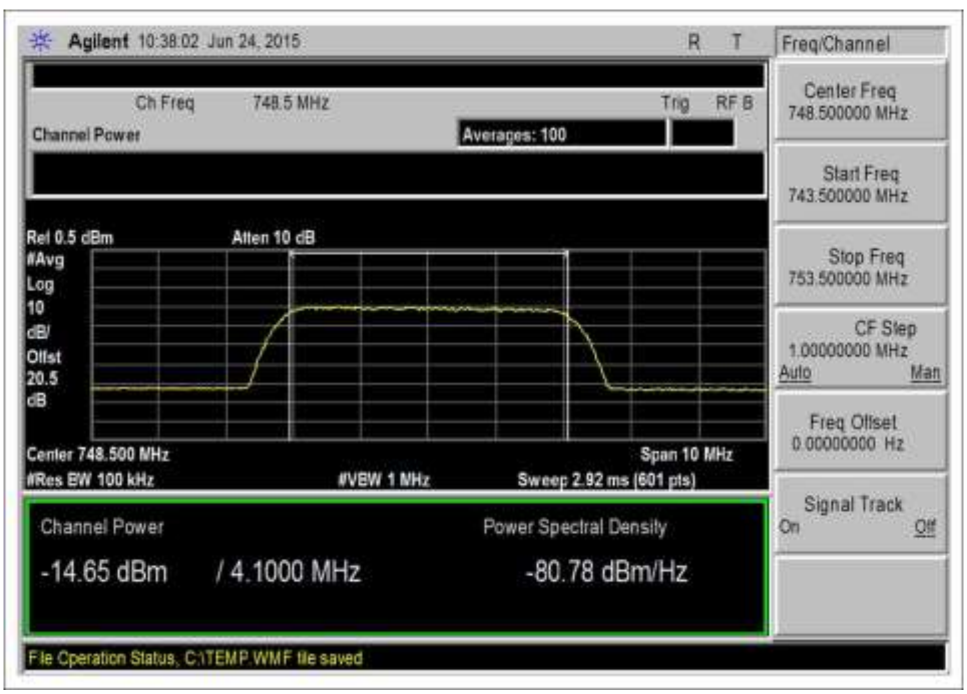
DL_728-746_AWGN



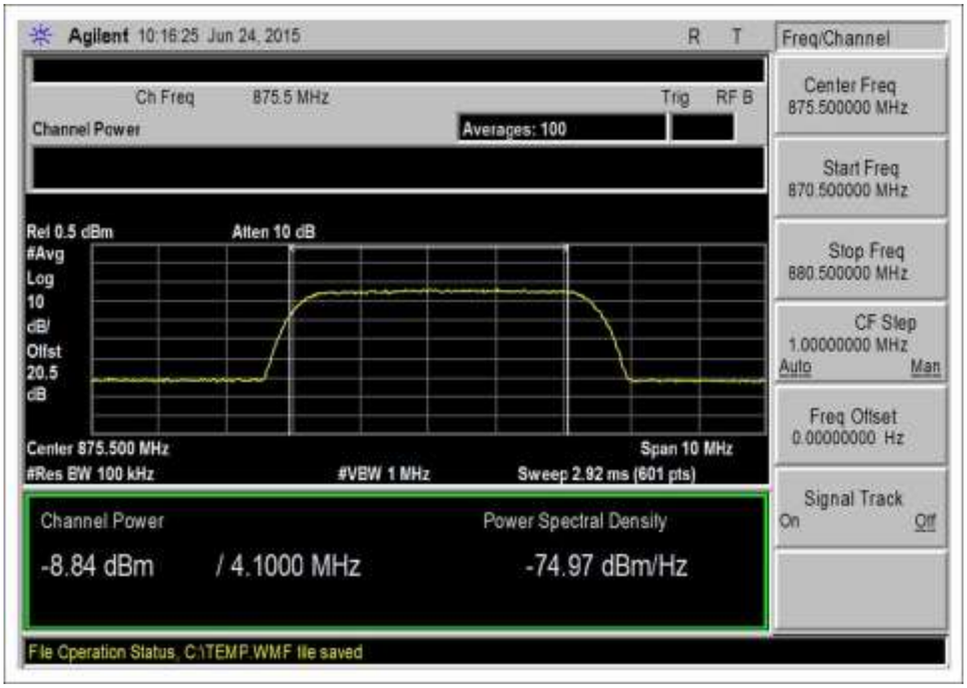
DL_728-746_AWGN-Max



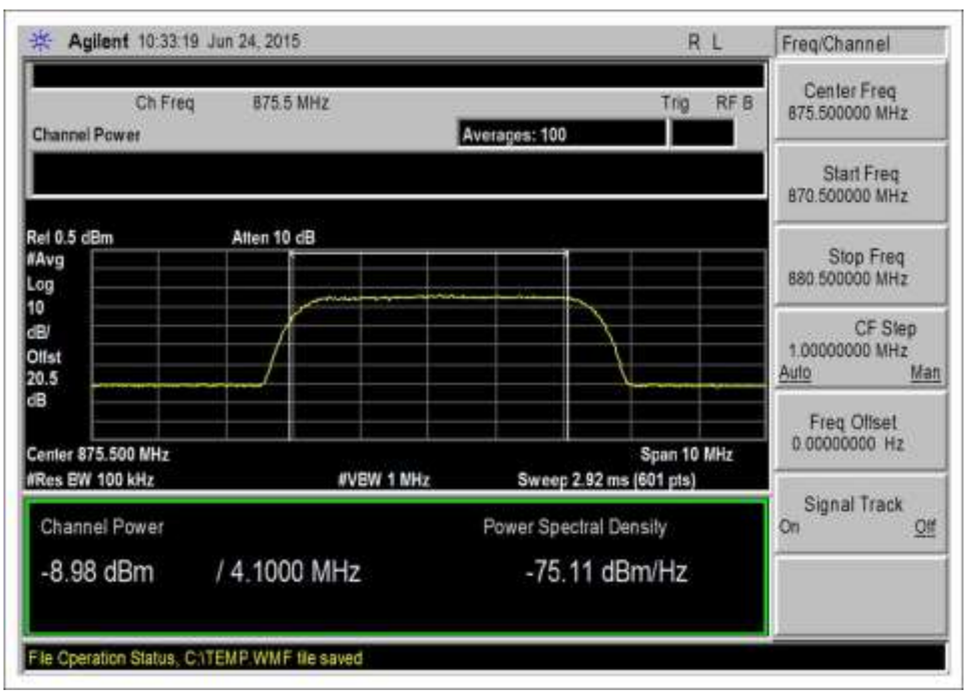
DL_746-757_AWGN



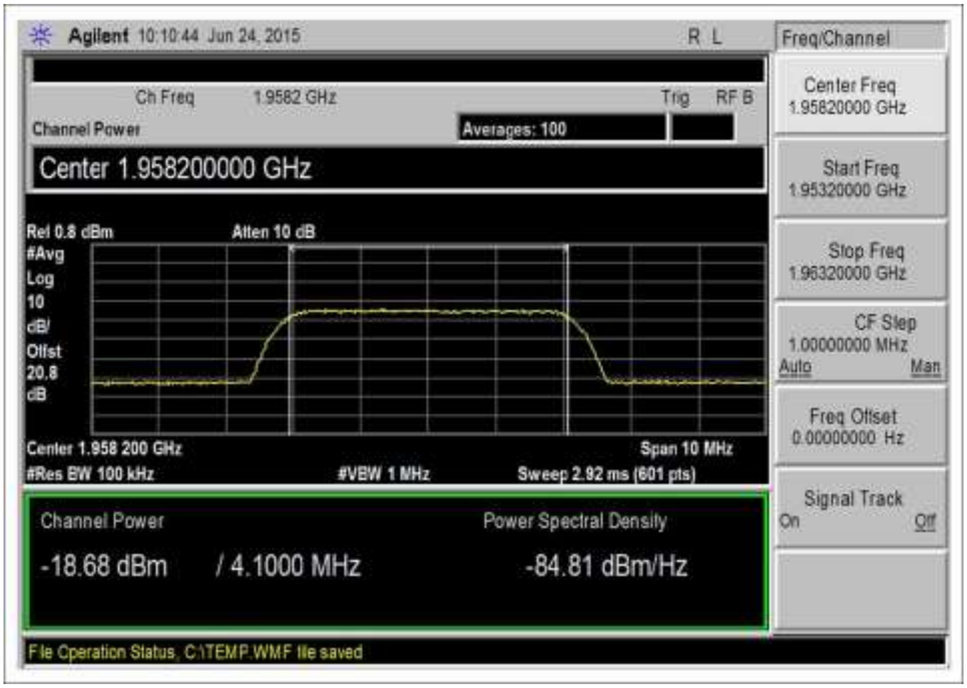
DL_746-757_AWGN-Max



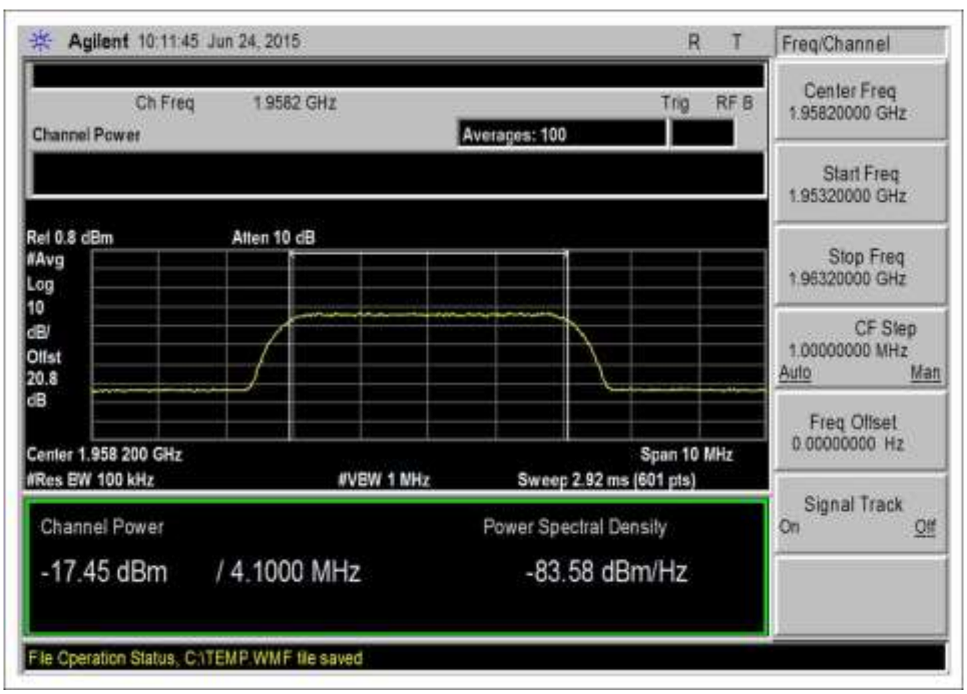
DL_869-894_AWGN



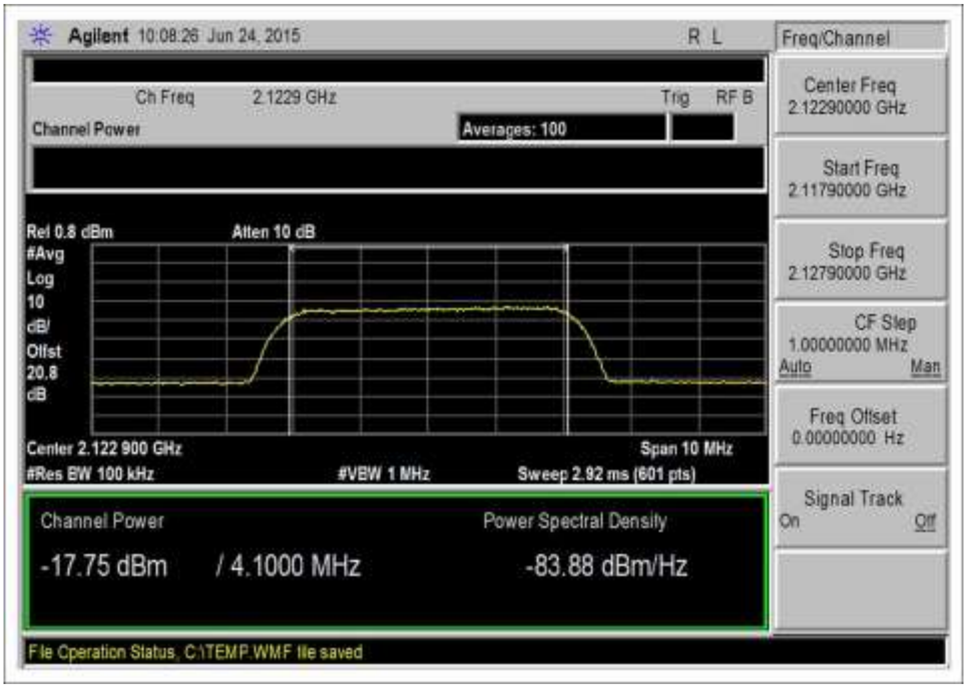
DL_869-894_AWGN-Max



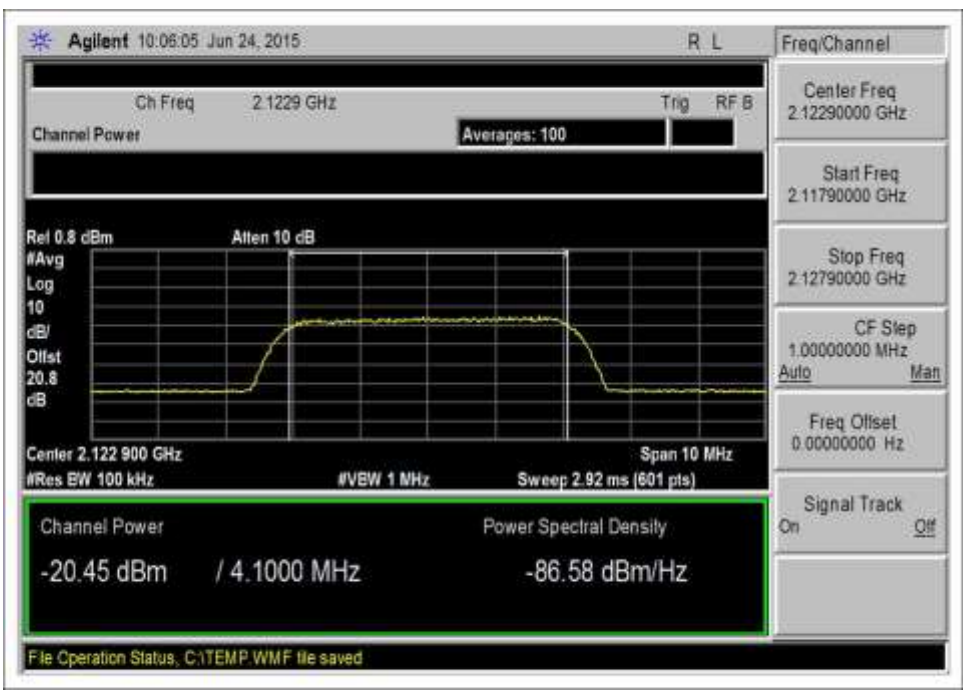
DL_1930-1995_AWGN



DL_1930-1995_AWGN-Max



DL_2110-2155_AWGN



DL_2110-2155_AWGN-Max

Clause 7.3 Maximum Gain

Test Equipment

Asset #	Description	Model	Manufacturer	Cal Date	Cal Due
ANP05389	Attenuator	766-10	Narda	02/27/2014	02/27/2016
ANP05713	Attenuator	PE7015-20	Pasternack	03/24/2015	03/24/2017
ANP06709	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
ANP06710	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
AN02869	Spectrum Analyzer	E4440A	Agilent	07/10/2014	07/10/2015

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 #:	**97222**	Date:	6/23/2015
Test Type:	**Conducted Emissions**	Time:	11:54:28
Tested By:	Daniel Bertran	Sequence#:	1
Software:	EMITest 5.02.00		

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Configuration 1
The equipment under test (EUT) is a Mobile Wideband Consumer Booster.
The EUT is placed on the test bench. Evaluation performed at the Outside (Donor) and Inside (Server) antenna port.

Part 22
UL: 824-849MHz
DL: 869-894MHz
Part 24
UL: 1850-1915MHz
DL: 1930-1995MHz
Part 27
UL: 1710-1755MHz, 698-716MHz, 776-787MHz
DL: 2110-2155MHz, 728-746MHz, 746-757MHz

All adjustable settings on the test sample are set at max gain.
Test environment conditions: Temperature: 20.8°C, Relative Humidity: 42%, Atmospheric Pressure: 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 v03 Dated June 5, 2015.

Firmware: V1.0

Summary of Results

Pass: as summarized in table below.

Test Data

	Pre AGC			Pre AGC		
	Pulse GSM			4.1 MHz AWGN		
Frequency (MHz)	**Input (dBm)**	**Output (dBm)**	***Gain (dB)**	**Input (dBm)**	**Output (dBm)**	***Gain (dB)**
UL1710-1755	-25.6	18.6	44.2	-25.7	18.3	44.0
UL1850-1915	-24.3	17.5	41.8	-24.1	18.1	42.2
UL824-894	-23.4	19.3	42.7	-23.1	18.2	41.3
UL 698-716	-21.5	19.6	41.1	-21.8	18.8	40.6
UL776-787	-25.9	18.8	44.7	-26.4	18.2	44.6
DL2110-2155	-59.9	-18.8	41.2	-59.4	-17.8	41.7
DL1930-1995	-58.7	-17.6	41.1	-60.1	-18.7	41.4
DL869-894	-54.1	-9.5	44.6	-52.0	-8.8	43.2
DL:728-746	-57.0	-11.6	45.4	-57.4	-12.4	45.0
DL 746-757	-57.5	-13.5	44.0	-58.0	-14.0	44.0

*50 dB limit for Mobile Booster maximum gain using an inside antenna

		Pulse GSM	**4.1MHz AWGN**	**Limit (dB)**
UL gain vs DL gain	1710/2110	3.04	2.37	9
UL gain vs DL gain	1850/1930	0.72	0.8	9
UL gain vs DL gain	824/869	-1.89	-1.89	9
UL gain vs DL gain	776/728	-4.29	-4.43	9
UL gain vs DL gain	776/746	0.68	0.66	9

Clause 7.4 Intermodulation Product

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 #:	**97222** Date 03/05/2019
Test Type:	**Conducted Emissions**
Tested By:	**Hieu S. Nguyenpham**
Software:	EMITest 5.03.11

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Test environment conditions:
Temperature: 20.02° C
Relative Humidity: 45%
Pressure: 101.8 kPa

Test Equipment:

Asset #	Description	Manufacturer	Model	Calibration Date	Cal Due Date
P05411	Attenuator	Weinschel	54A-10	1/19/2018	1/19/2020
P07192	Cable	Astro	32022-29094K-29094K-48TC	10/9/2017	10/9/2019
P07191	Cable	Astro	32022-29094K-29094K-48TC	10/30/2017	10/30/2019
03418	Signal Generator	Agilent	E4438C	6/19/2017	6/19/2019
03471	Spectrum Analyzer	Agilent	E4440A	1/18/2018	1/18/2020

Summary of Results

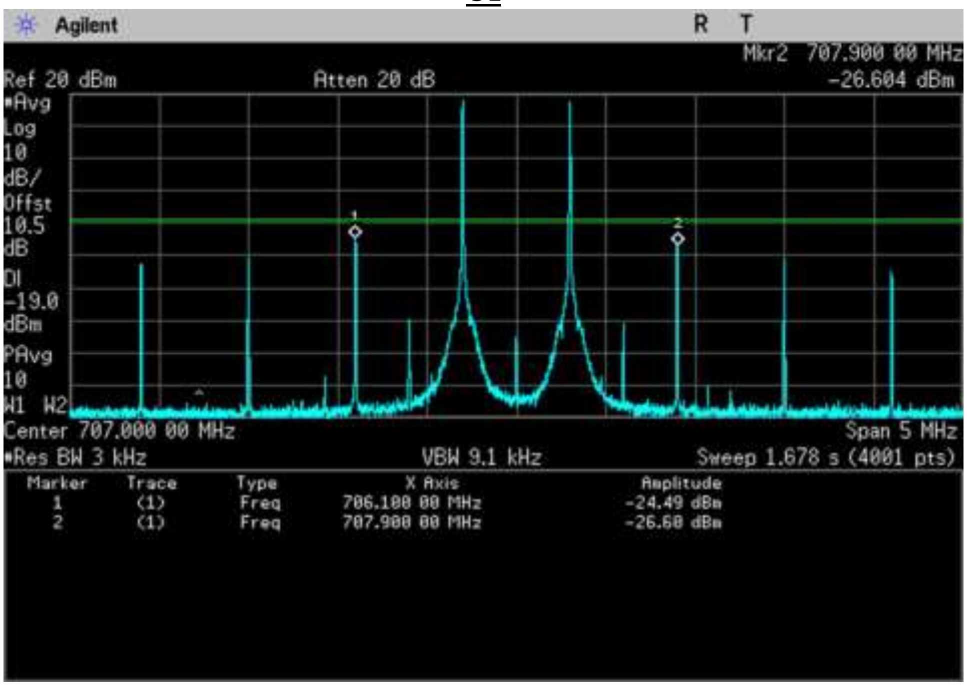
Pass: As shown on the plots, all intermodulation products are measured below -19dbm limit.

Inter Modulation Product			
Frequency (MHz)	Pre AGC (dBm)	Limit (dBm)	Results
UL 1710-1755	-24.4	-19	Pass
UL 1850-1915	-23.7	-19	Pass
UL 824-894	-22.0	-19	Pass
UL 698-716	-24.5	-19	Pass
UL 776-787	-19.2	-19	Pass
DL 2110-2155	-50.0	-19	Pass
DL 1930-1995	-56.2	-19	Pass
DL 869-894	-58.3	-19	Pass
DL 728-746	-59.6	-19	Pass
DL 746-757	-56.8	-19	Pass

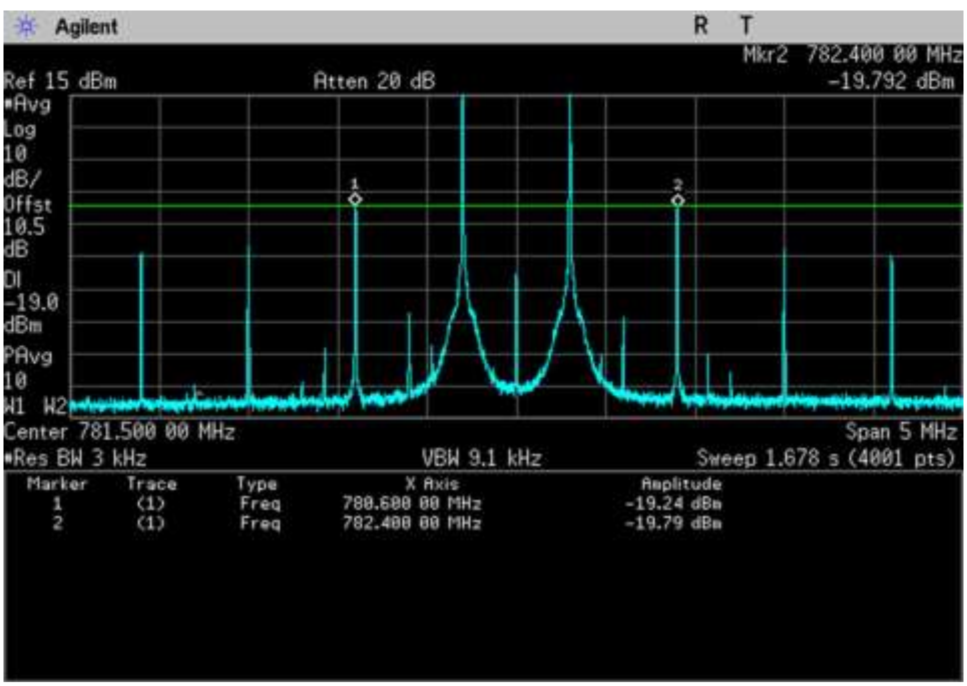
Note: The EUT maintains compliance with the intermodulation limit at input power of AGC+10dB

Test Data

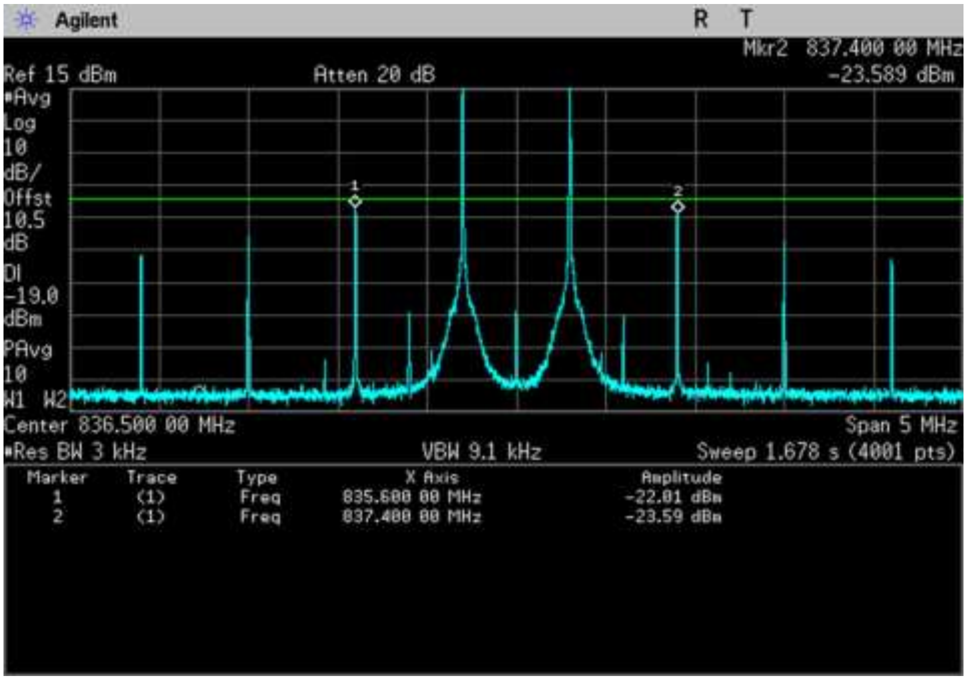
UL



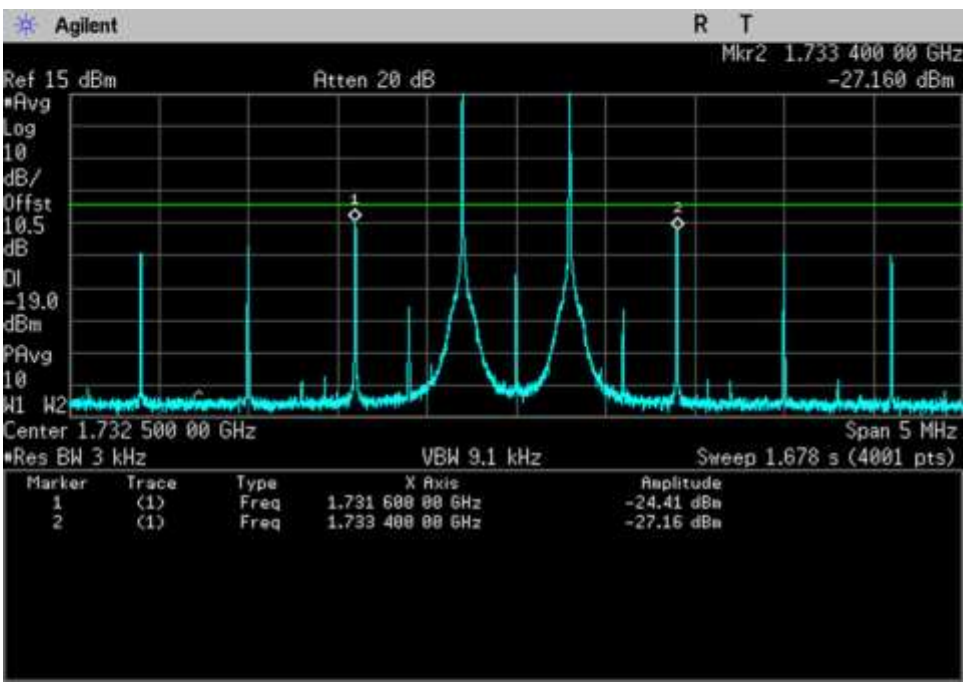
UL_698-716MHz



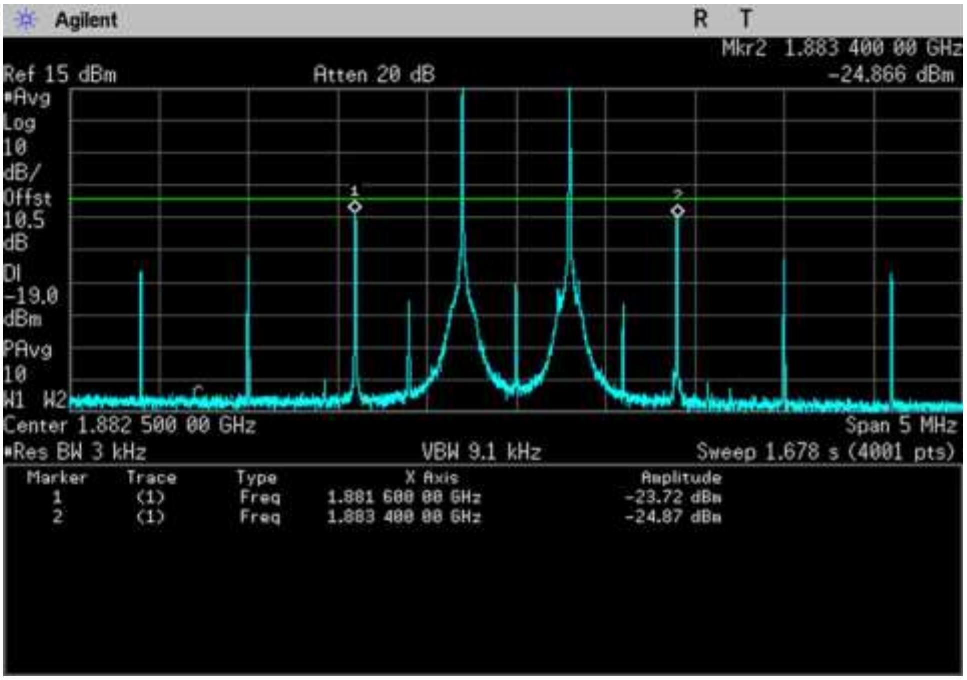
UL_776-787MHz



UL_824-849MHz

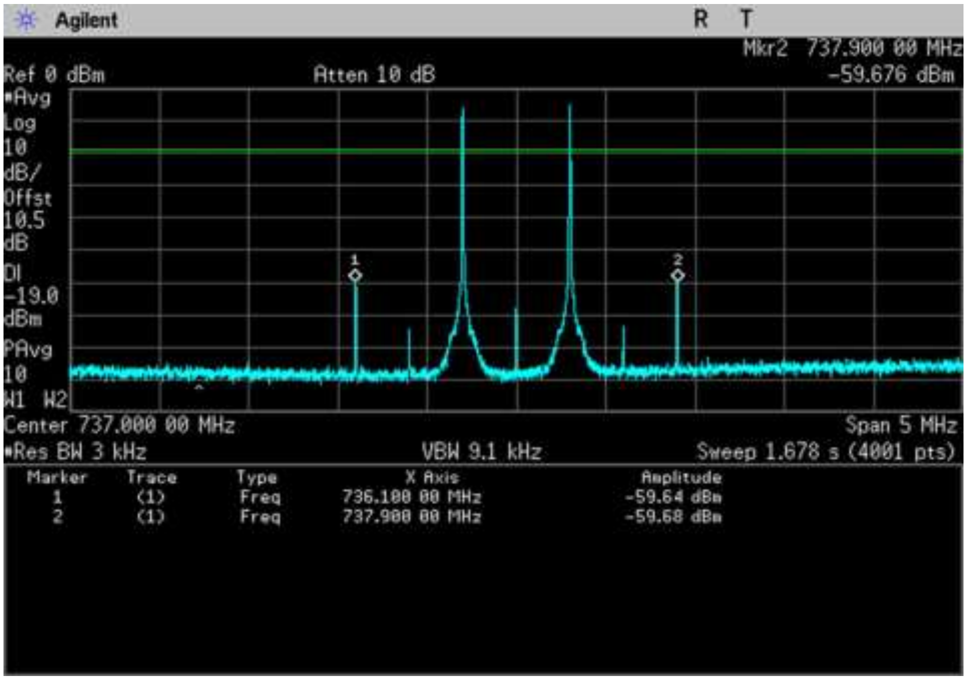


UL_1710-1755MHz

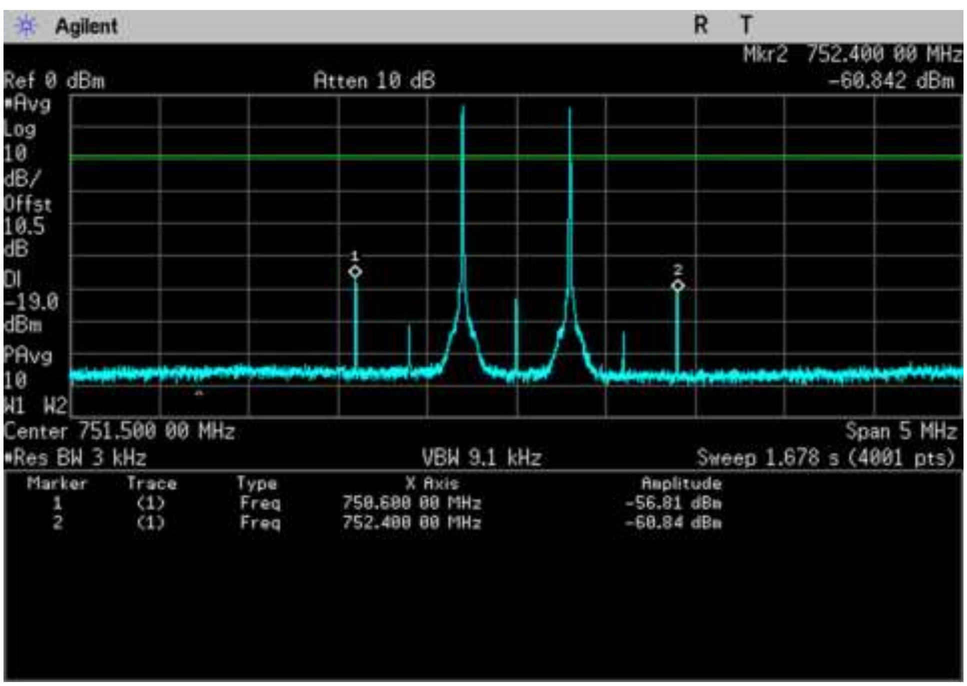


UL_1850-1915MHz

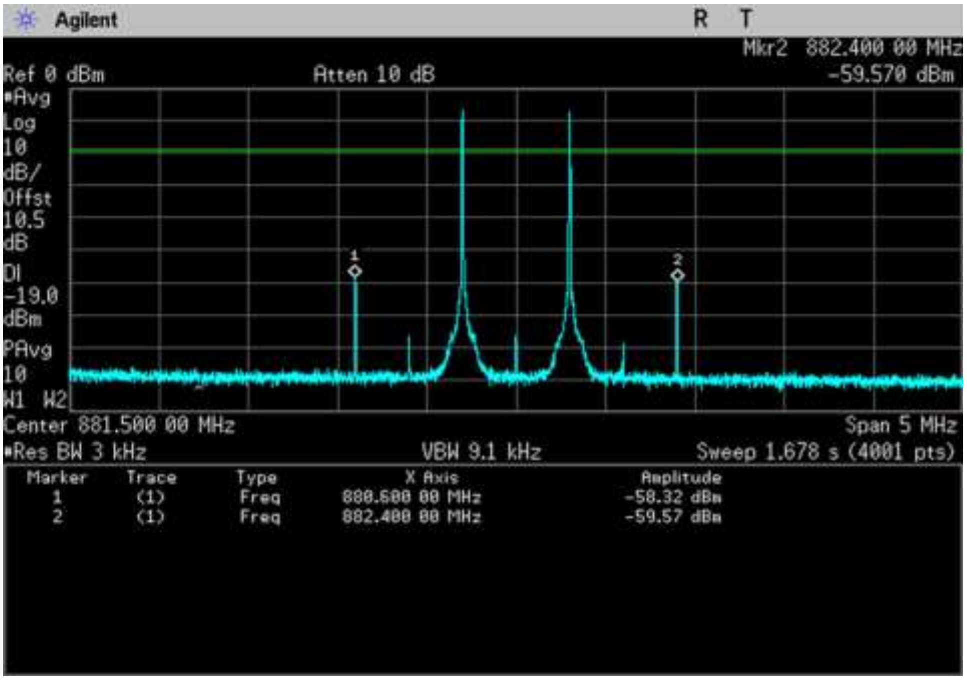
DL



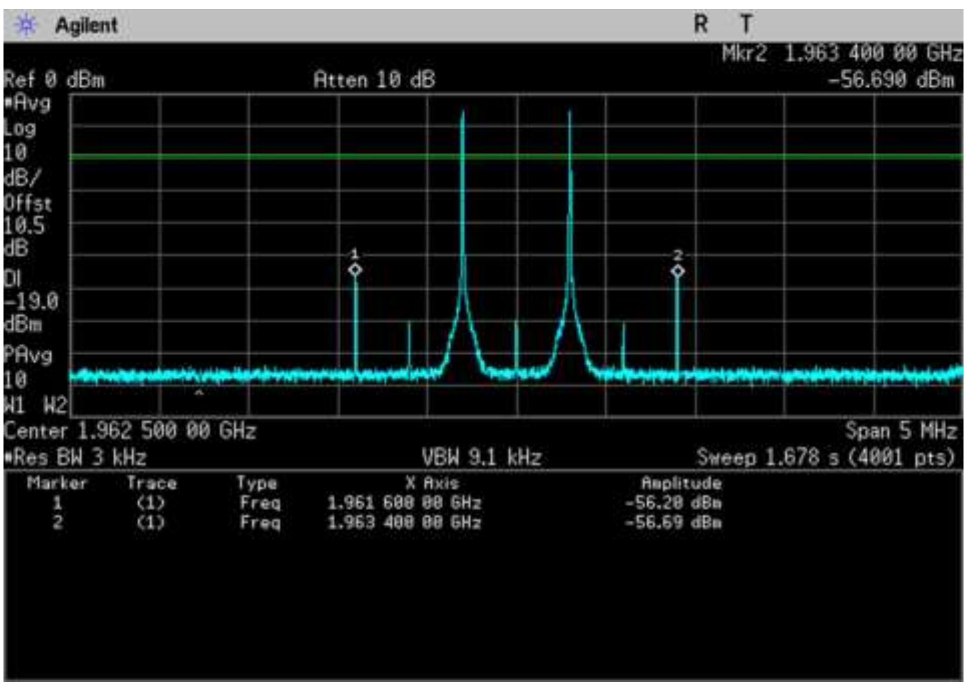
DL_728-746MHz



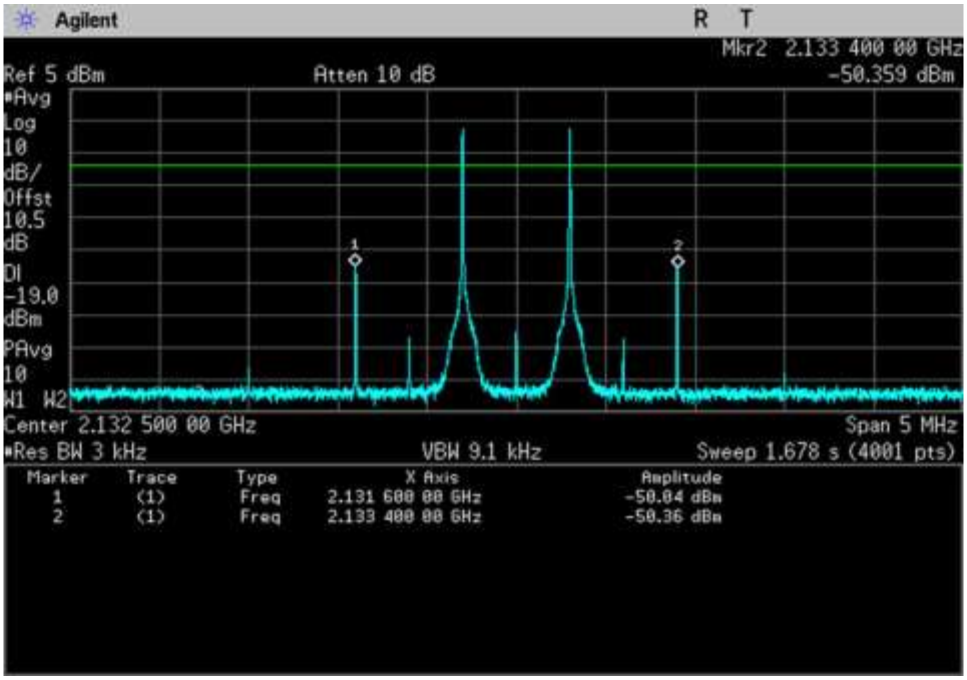
DL_746-757MHz



DL_869-894MHz



DL_1930-1995MHz



DL_2110-2155MHz

Clause 7.5 Out of Band Emissions

Test Equipment					
Asset #	**Description**	**Model**	**Manufacturer**	**Cal Date**	**Cal Due**
ANP05389	Attenuator	766-10	Narda	02/27/2014	02/27/2016
ANP05713	Attenuator	PE7015-20	Pasternack	3/24/2015	03/24/2017
ANP06709	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
ANP06710	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
AN02869	Spectrum Analyzer	E4440A	Agilent	07/10/2014	07/10/2015

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 #: **97222** Date: 6/24/2015
Test Type: **Conducted Emissions** Time: 15:36:20
Tested By: Daniel Bertran Sequence#: 1
Software: EMITest 5.02.00

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Configuration 1
The equipment under test (EUT) is a Mobile Wideband Consumer Booster.
The EUT is placed on the test bench. Evaluation performed at the Outside (Donor) and Inside (Server) antenna port.

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

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

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

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

Test environment conditions: Temperature: 20.8°C, Relative Humidity: 42%, Atmospheric Pressure: 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 v03 Dated June 5, 2015.

Firmware: V1.0

Additional plots taken at 1dB before EUT shuts down and before reaching the maximum input level indicated in section 5.5 of above document.

- Maximum uplink transmitter test levels for Mobile using inside antenna(s): +10 dBm
- The maximum downlink input level for all device types is −20 dBm

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.

Used for testing the alternative test modulation types:

- CDMA (alternative 1.25 MHz AWGN*)
- LTE 5 MHz (alternative 4.1 MHz AWGN*)

*AWGN test signal, the bandwidth was measured 99% occupied 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
UL1710-1755	-25.9	-23.8	-19.0		UL1710-1755	-24.9	-22.9	-19.0
UL1850-1915	-29.3	-27.6	-19.0		UL1850-1915	-30.6	-29.9	-19.0
UL824-894	-35.1	-31.4	-19.0		UL824-894	-38.9	-39.0	-19.0
UL 698-716	-23.2	-26.3	-19.0		UL 698-716	-24.6	-24.8	-19.0
UL776-787	-24.9	-24.1	-19.0		UL776-787	-25.6	-24.7	-19.0
		-20dBm					-20dBm	
DL2110-2155	-57.6	-55.3	-19.0		DL2110-2155	-57.9	-54.0	-19.0
DL1930-1995	-61.9	-56.7	-19.0		DL1930-1995	-58.6	-61.2	-19.0
DL869-894	-31.7	-32.5	-19.0		DL869-894	-36.1	-34.1	-19.0
DL:728-746	-38.2	-37.8	-19.0		DL:728-746	-35.0	-35.0	-19.0
DL 746-757	-35.1	-35.3	-19.0		DL 746-757	-37.1	-37.3	-19.0

CDMA

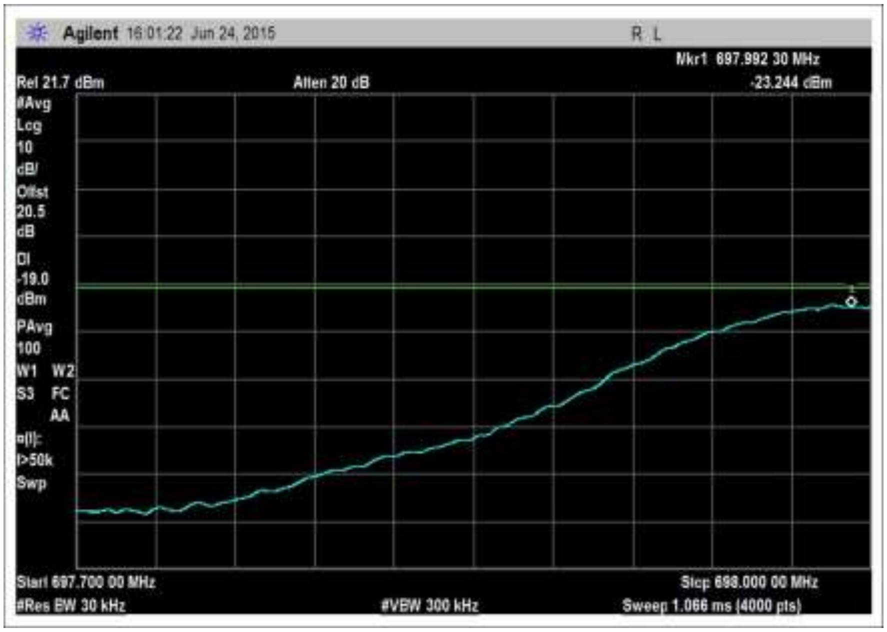
Low					High			
Out of Band Emission					Out of Band Emission			
Freq	Pre AGC	Max input	Limit		Freq	Pre AGC	Max input	Limit
MHz	dBm	+10dBm	dBm		MHz	dBm	+10dBm	dBm
UL1710-1755	-25.7	-21.9	-19.0		UL1710-1755	-38.1	-37.1	-19.0
UL1850-1915	-38.8	-39.4	-19.0		UL1850-1915	-41.2	-41.9	-19.0
UL824-894	-31.0	-31.6	-19.0		UL824-894	-43.3	-42.4	-19.0
UL 698-716	-44.1	-42.5	-19.0		UL 698-716	-46.0	-43.5	-19.0
UL776-787	-44.4	-44.6	-19.0		UL776-787	-43.5	-43.4	-19.0
		-20dBm					-20dBm	
DL2110-2155	-62.7	-62.8	-19.0		DL2110-2155	-61.9	-62.6	-19.0
DL1930-1995	-62.6	-62.5	-19.0		DL1930-1995	-63.3	-63.7	-19.0
DL869-894	--69.6	-69.9	-19.0		DL869-894	-70.8	-70.8	-19.0
DL:728-746	-72.4	-73.3	-19.0		DL:728-746	-70.5	-71.1	-19.0
DL 746-757	-70.5	-71.2	-19.0		DL 746-757	-71.7	-72.5	-19.0

LTE

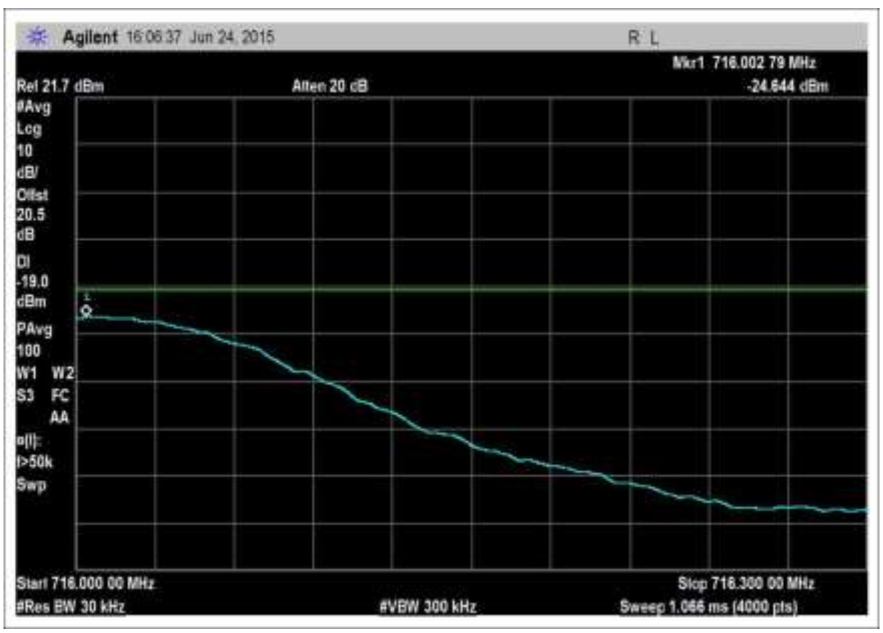
Low					High			
Out of Band Emission					Out of Band Emission			
Freq	Pre AGC	Max input	Limit		Freq	Pre AGC	Max input	Limit
MHz	dBm	+10dBm	dBm		MHz	dBm	+10dBm	dBm
UL1710-1755	-19.7	-19.5	-19.0		UL1710-1755	-31.5	-29.2	-19.0
UL1850-1915	-30.9	-29.9	-19.0		UL1850-1915	-39.8	-37.1	-19.0
UL824-894	-26.0	-24.0	-19.0		UL824-894	-32.0	-32.2	-19.0
UL 698-716	-29.5	-30.2	-19.0		UL 698-716	-30.7	-30.7	-19.0
UL776-787	-29.6	-29.3	-19.0		UL776-787	-32.2	-31.9	-19.0
		-20dBm					-20dBm	
DL2110-2155	-60.9	-60.5	-19.0		DL2110-2155	-60.7	-60.1	-19.0
DL1930-1995	-62.8	-62.0	-19.0		DL1930-1995	-61.8	-62.9	-19.0
DL869-894	-50.9	-51.1	-19.0		DL869-894	-54.1	-53.3	-19.0
DL:728-746	-60.7	-59.1	-19.0		DL:728-746	-53.6	-54.4	-19.0
DL 746-757	-62.1	-60.8	-19.0		DL 746-757	-65.1	-65.1	-19.0

Test Data

UL-GSM

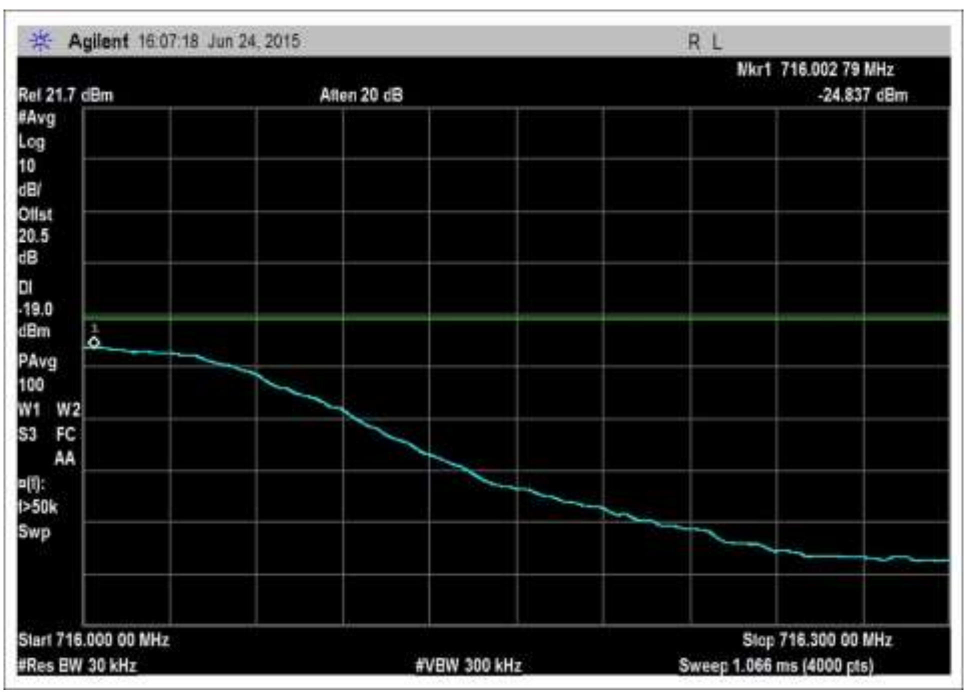


UL_698-716MHz_L_PreAGC



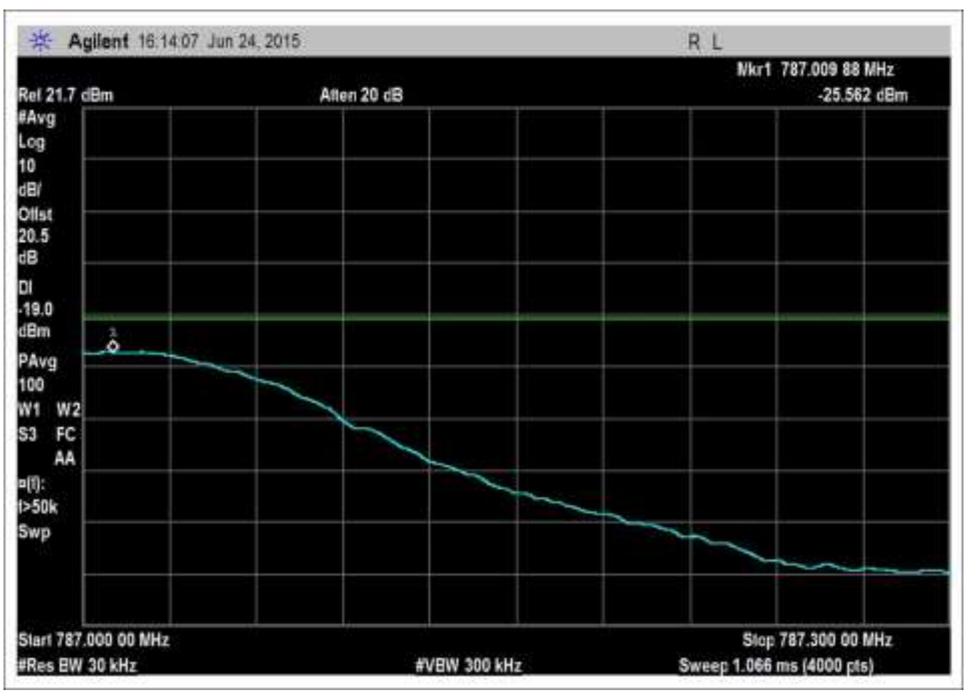
UL_698-716MHz_H_PreAGC

UL_698-716MHz_L_Max



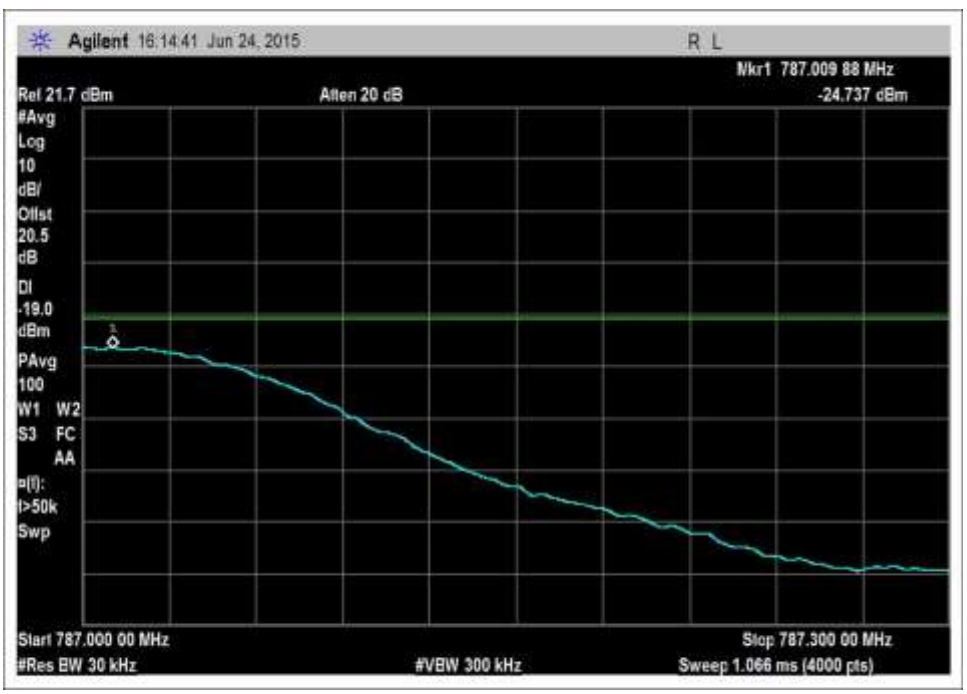
UL_698-716MHz_H_Max

UL_776-787MHz_L_PreAGC

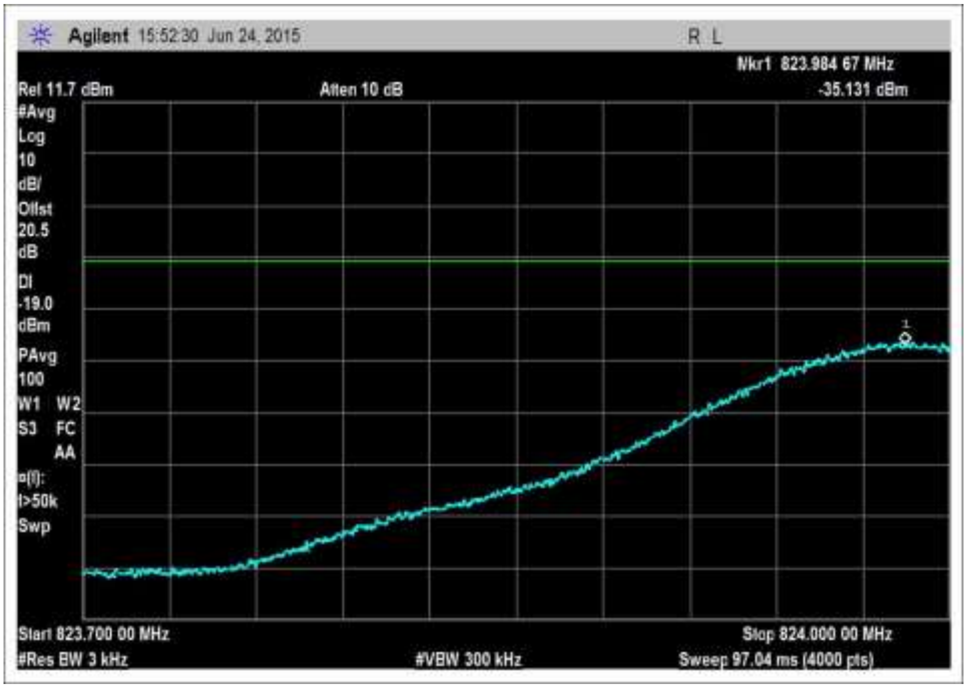


UL_776-787MHz_H_PreAGC

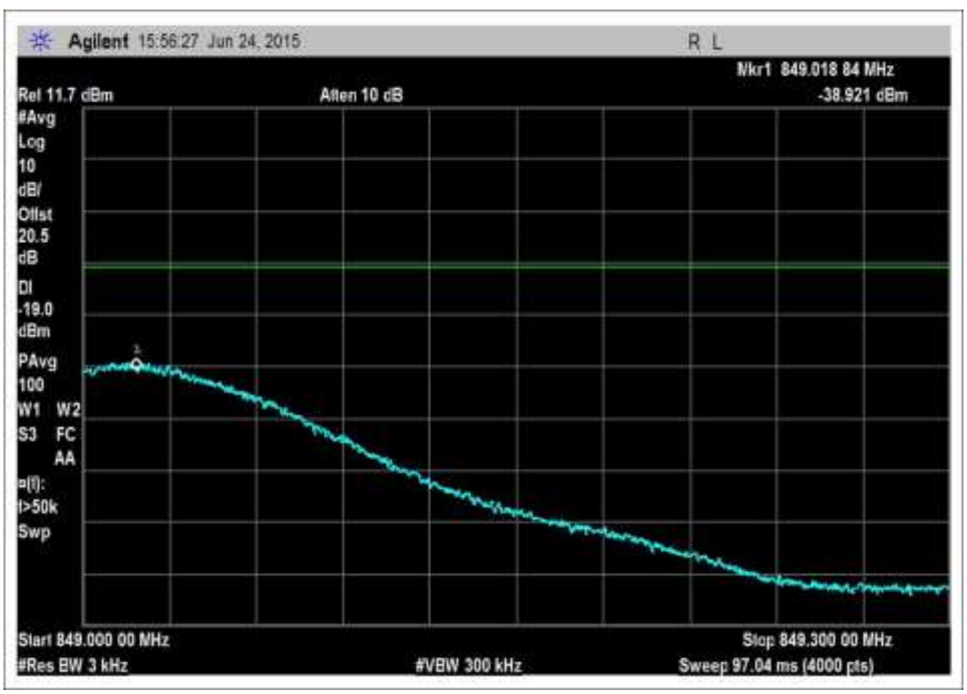
UL_776-787MHz_L_Max



UL_776-787MHz_H_Max

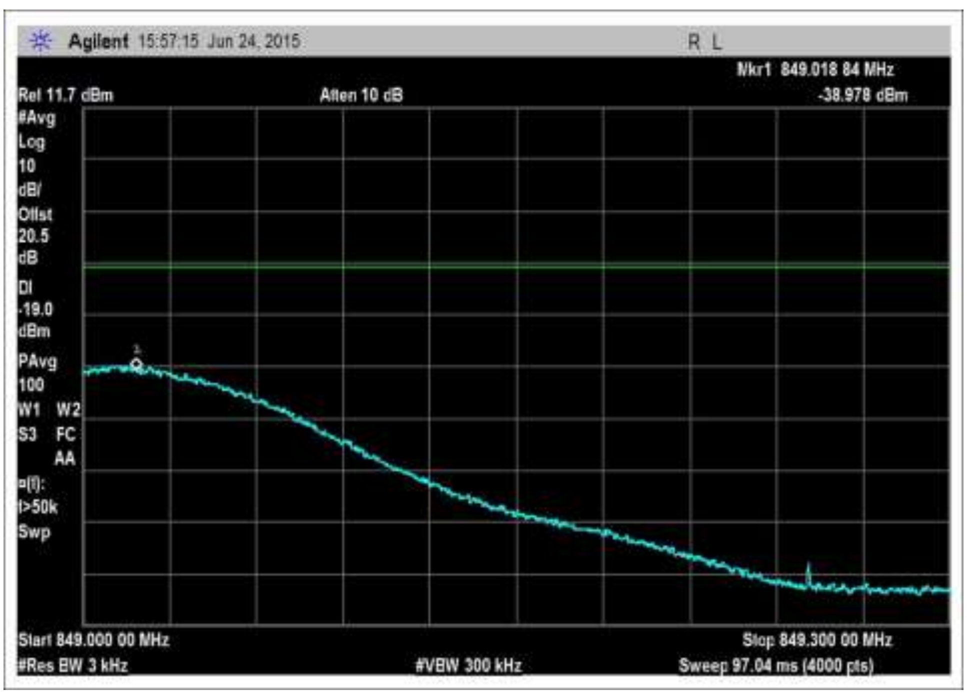


UL_824-849_L_PreAGC

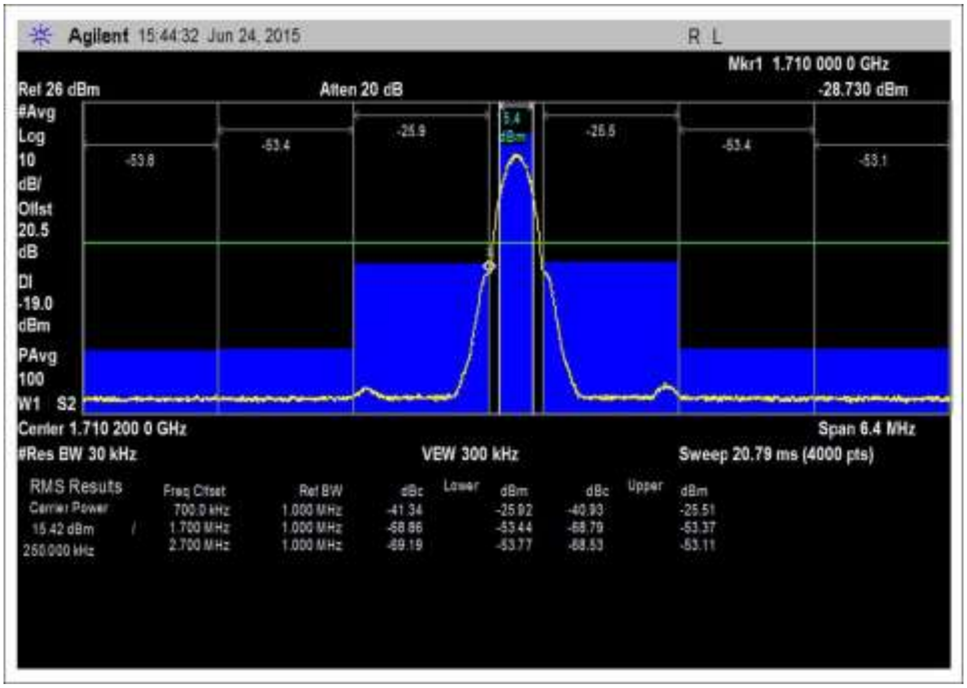


UL_824-849_H_PreAGC

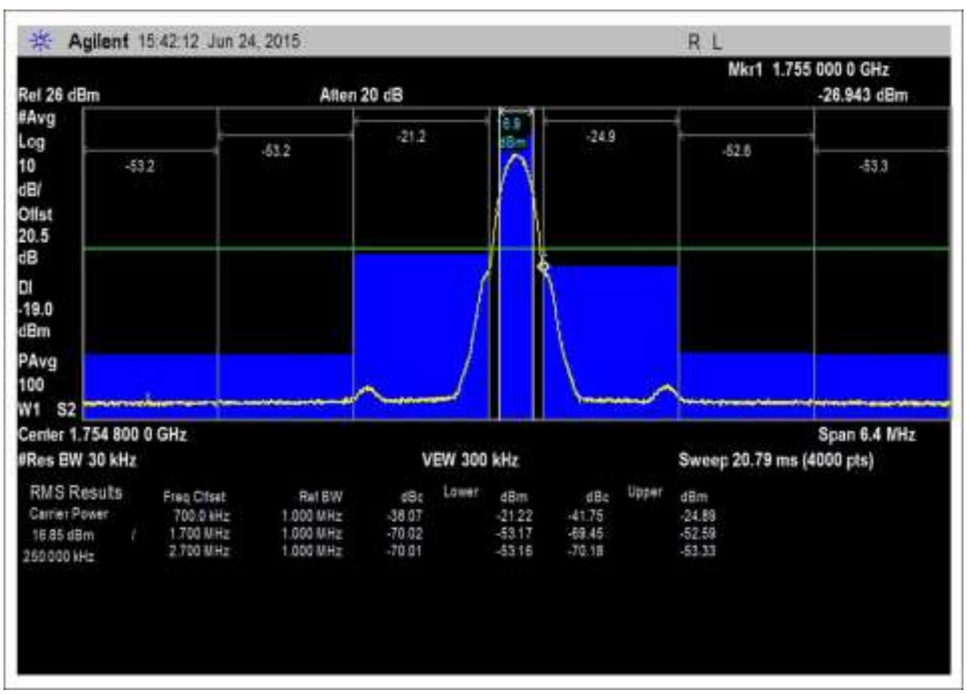
UL_824-849MHz_L_Max



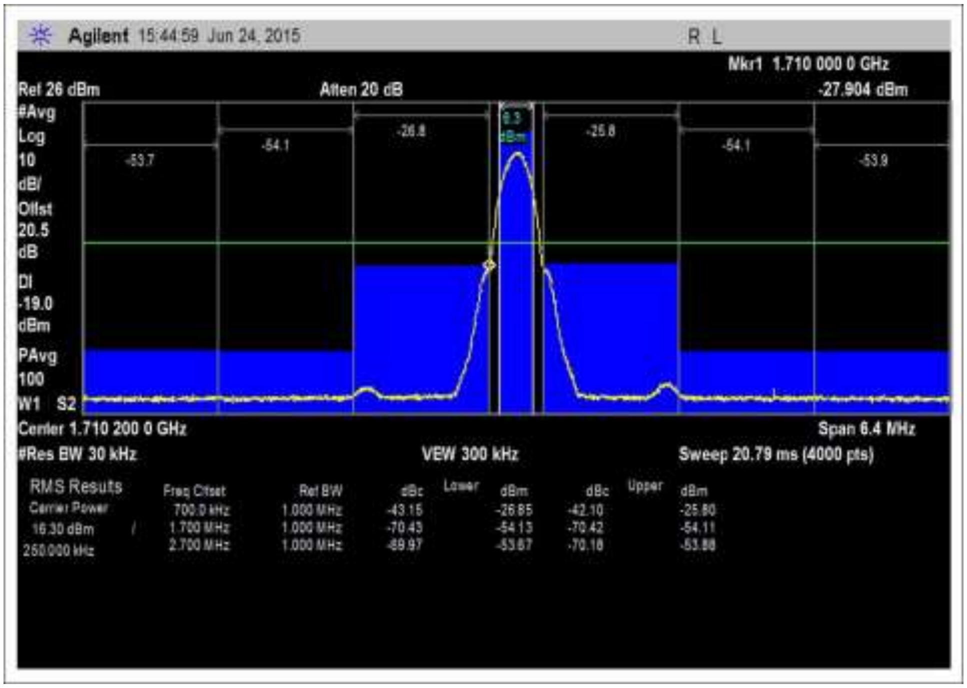
UL_824-849MHz_H_Max



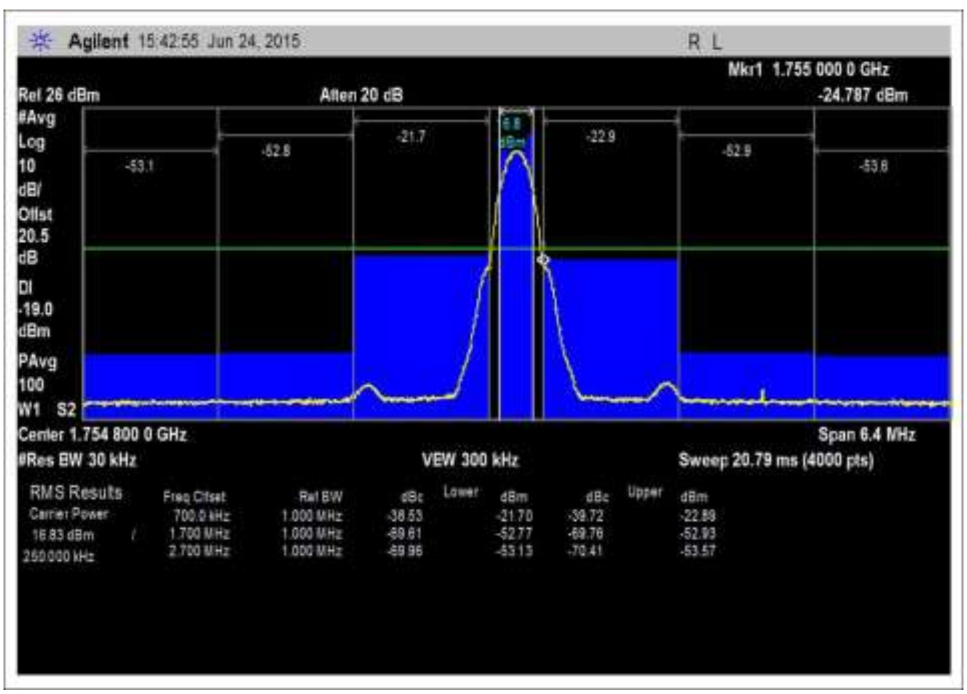
UL_1710-1755MHz_L_PreAGC



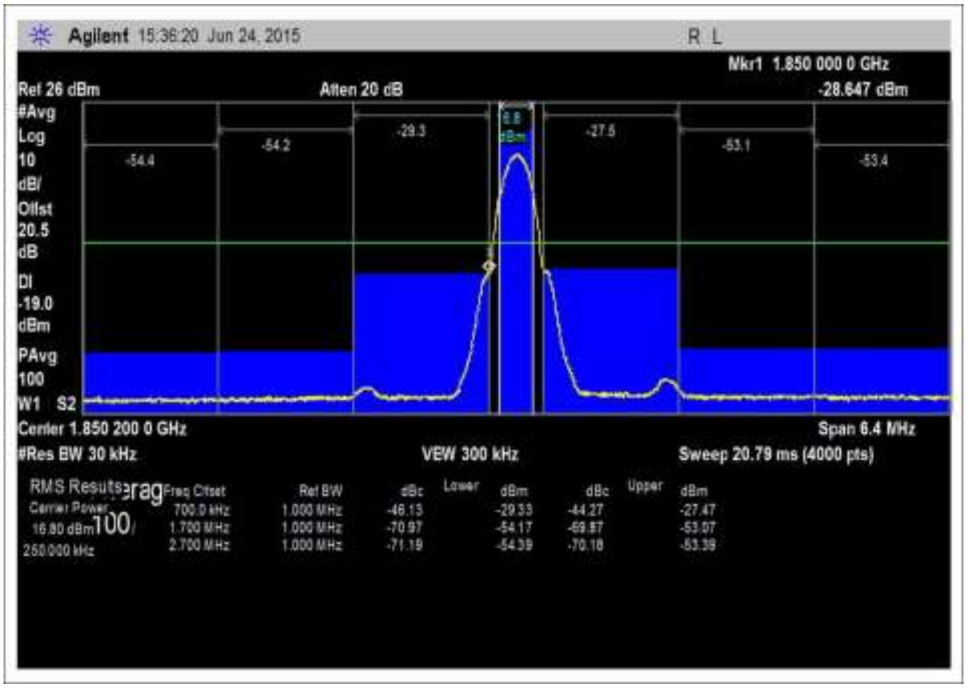
UL_1710-1755MHz_H_PreAGC



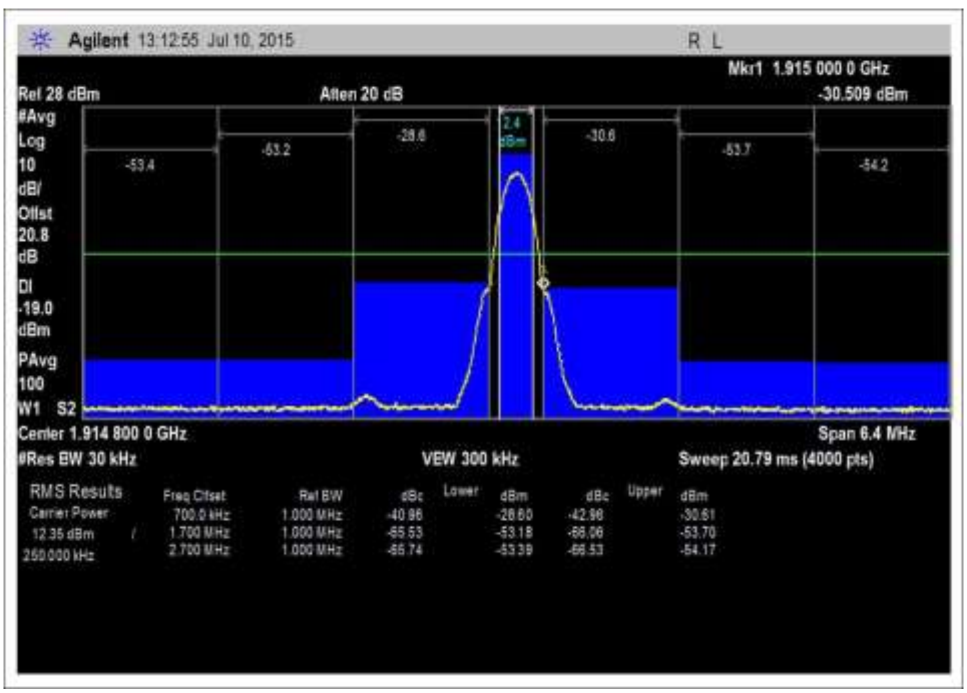
UL_1710-1755MHz_L_Max



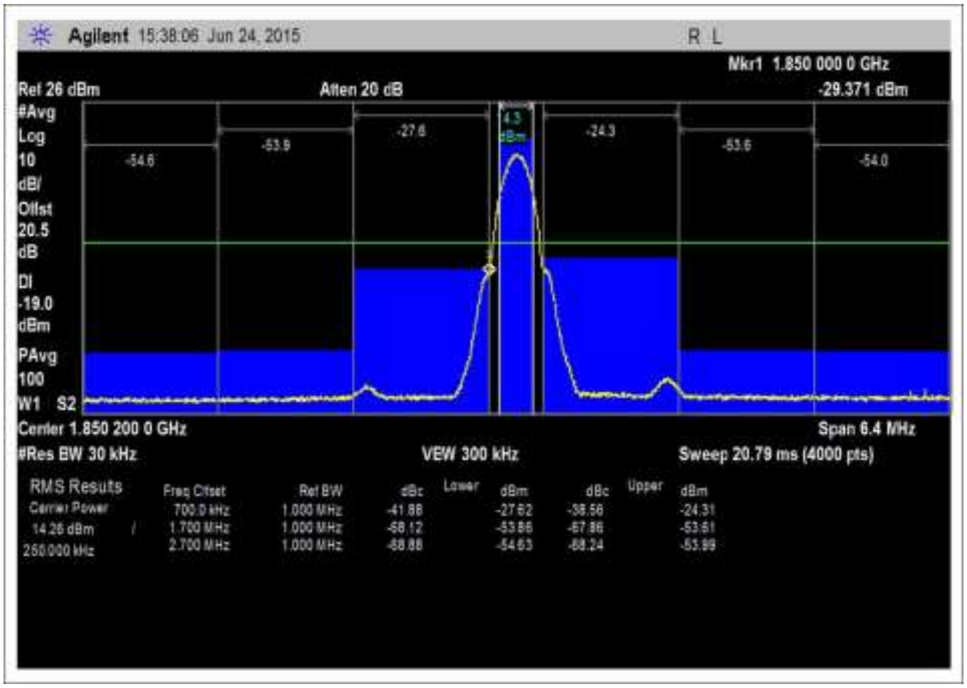
UL_1710-1755MHz_H_Max



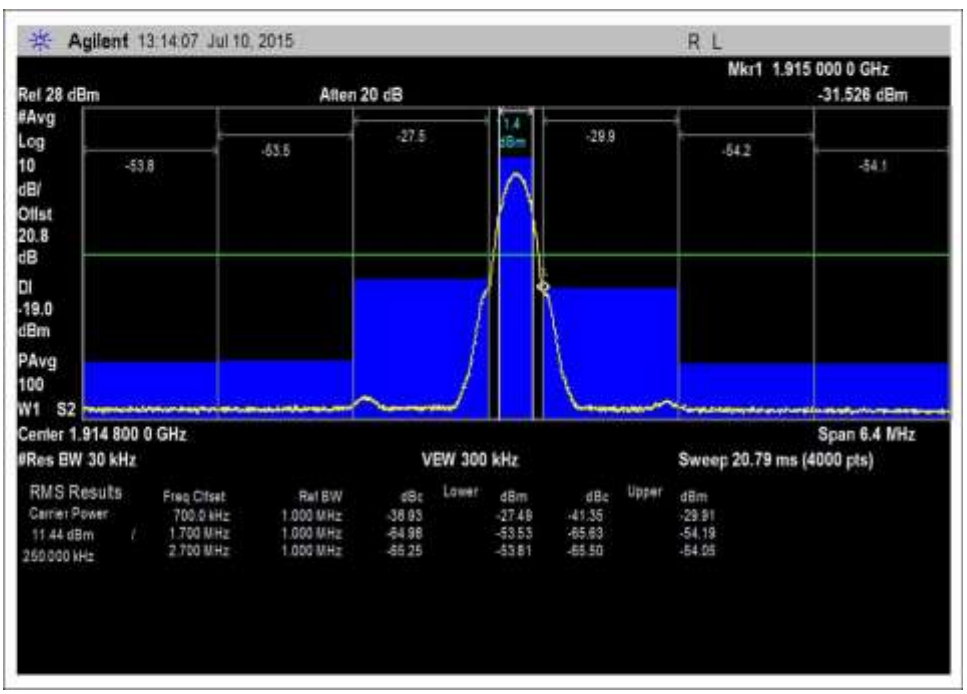
UL_1850-1915MHz_L_PreAGC



UL_1850-1915MHz_H_PreAGC

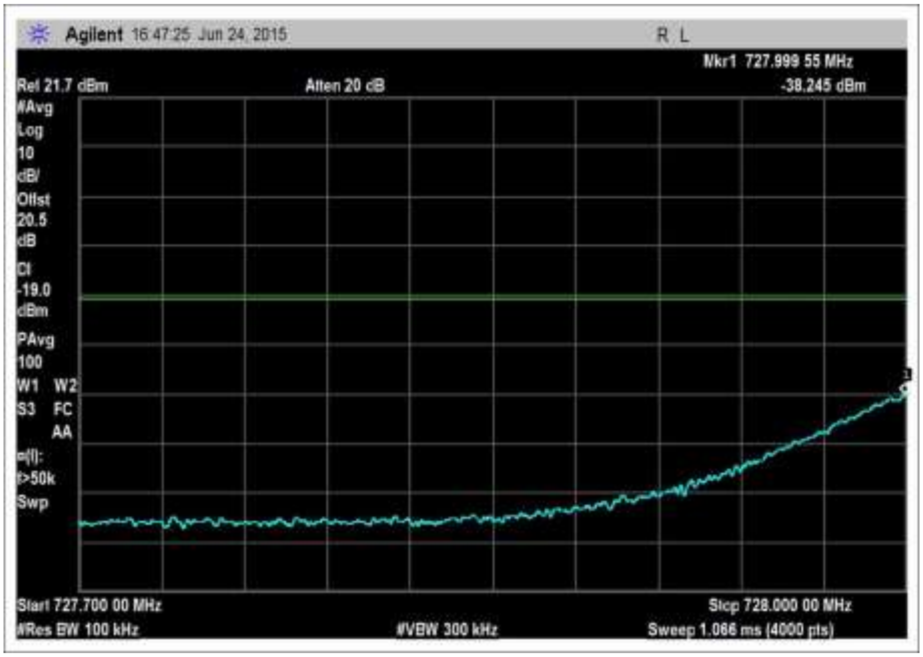


UL_1850-1915MHz_L_Max

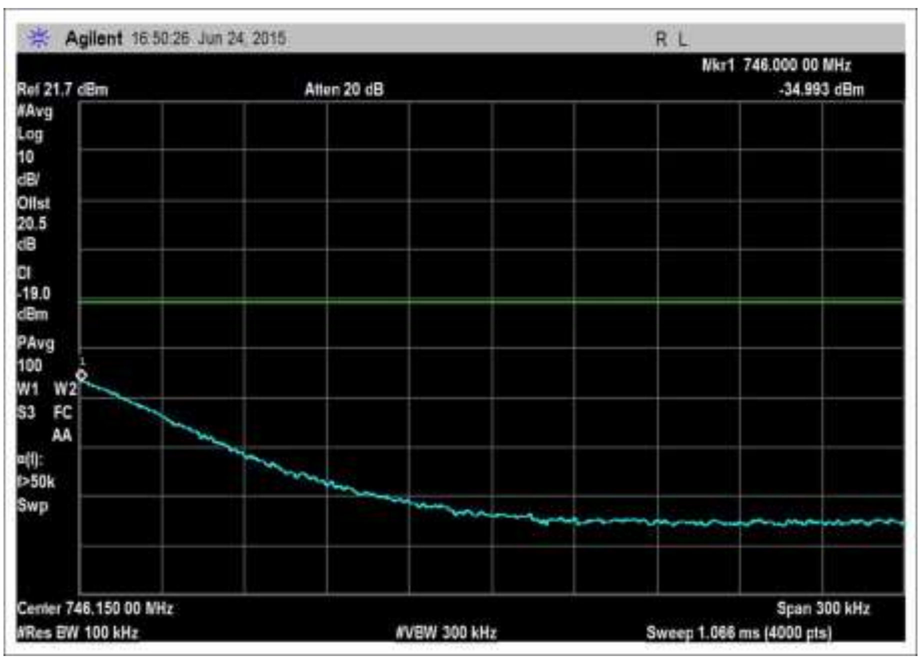


UL_1850-1915MHz_H_Max

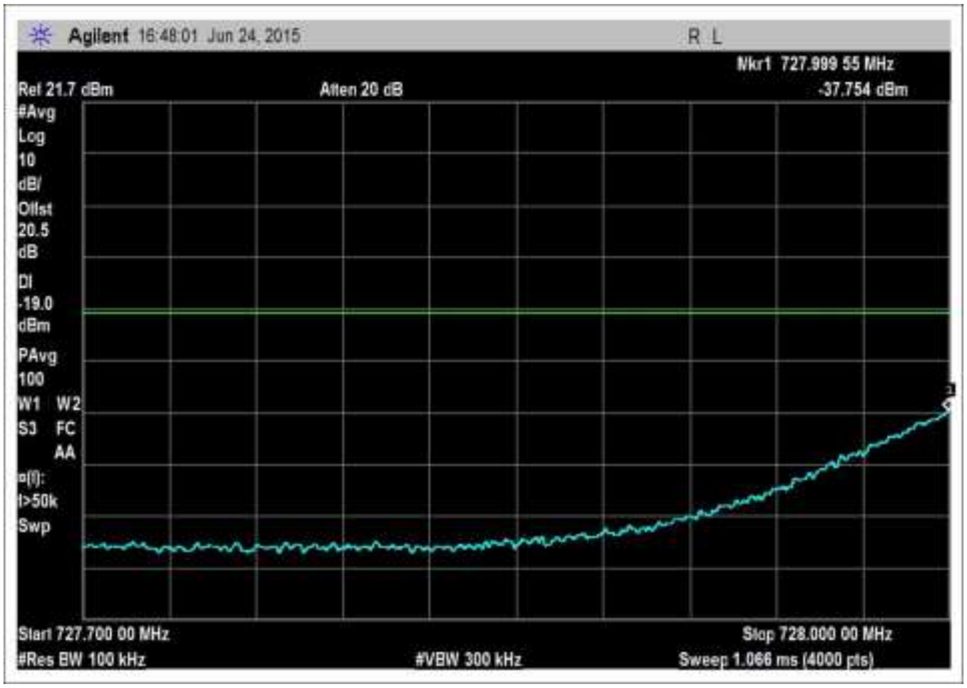
DL-GSM



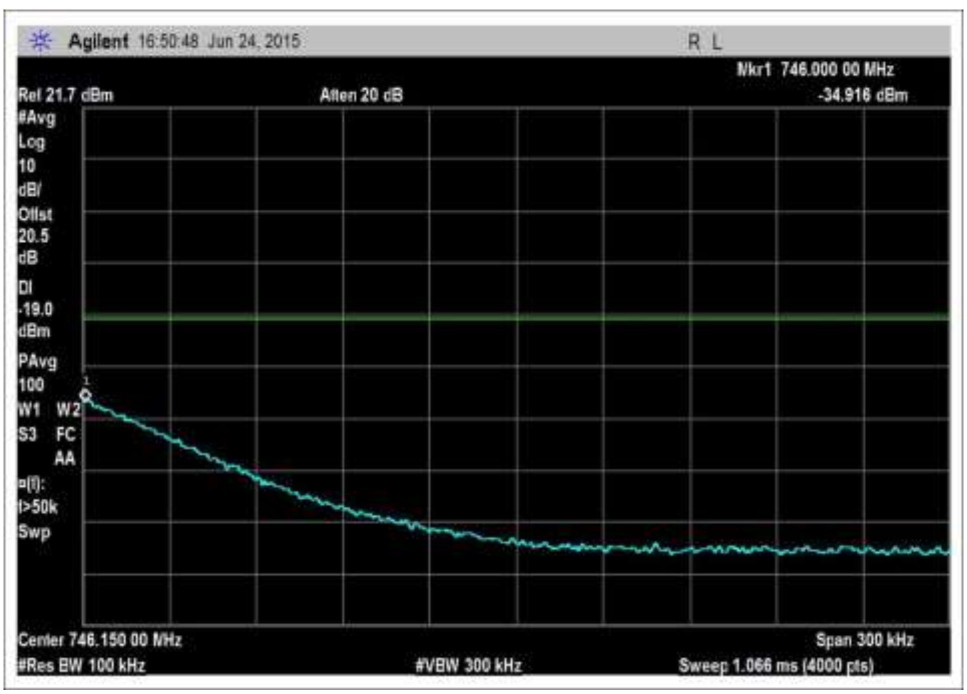
DL_728-746MHz_L_PreAGC



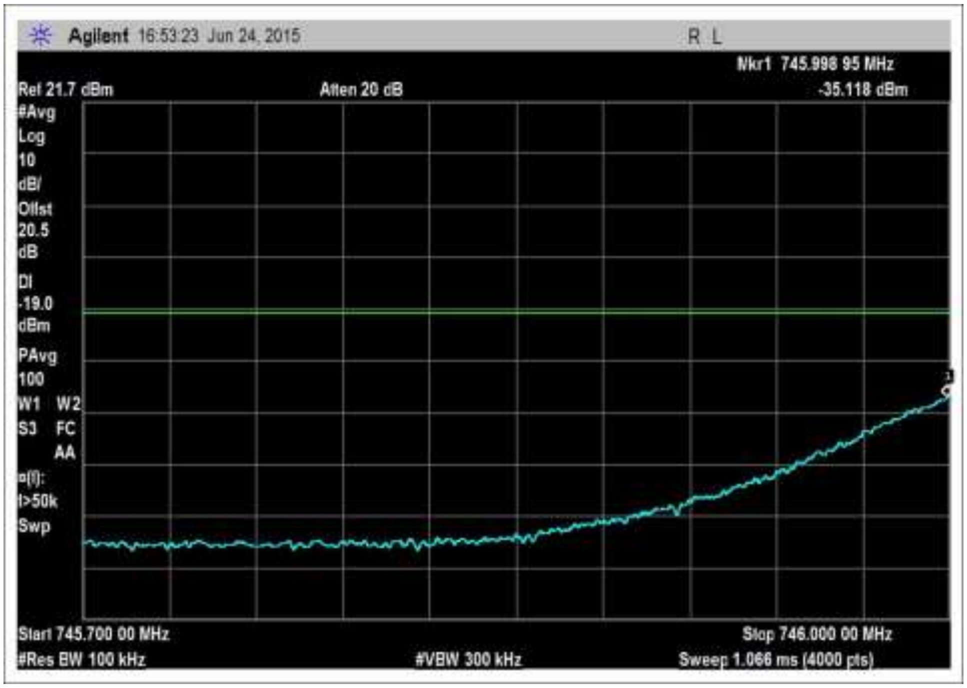
DL_728-746MHz_H_PreAGC



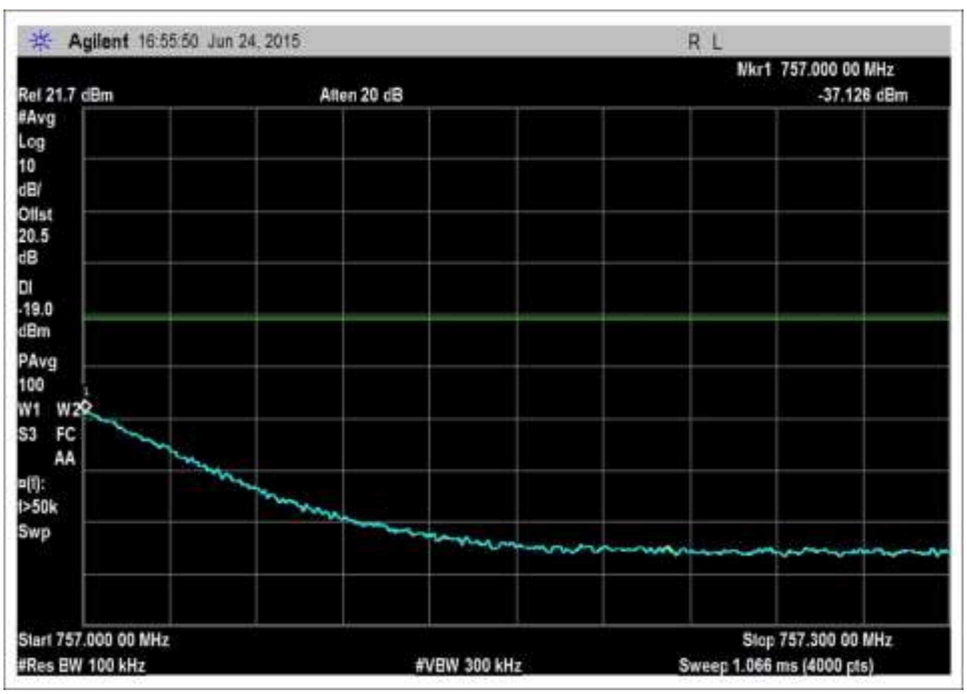
DL_728-746MHz_L_Max



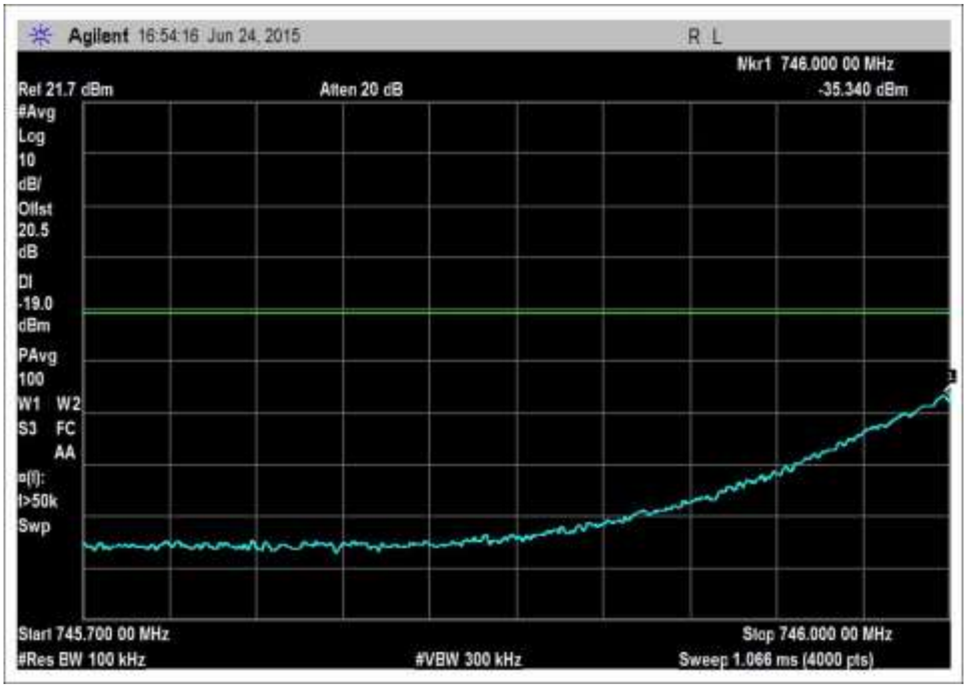
DL_728-746MHz_H_Max



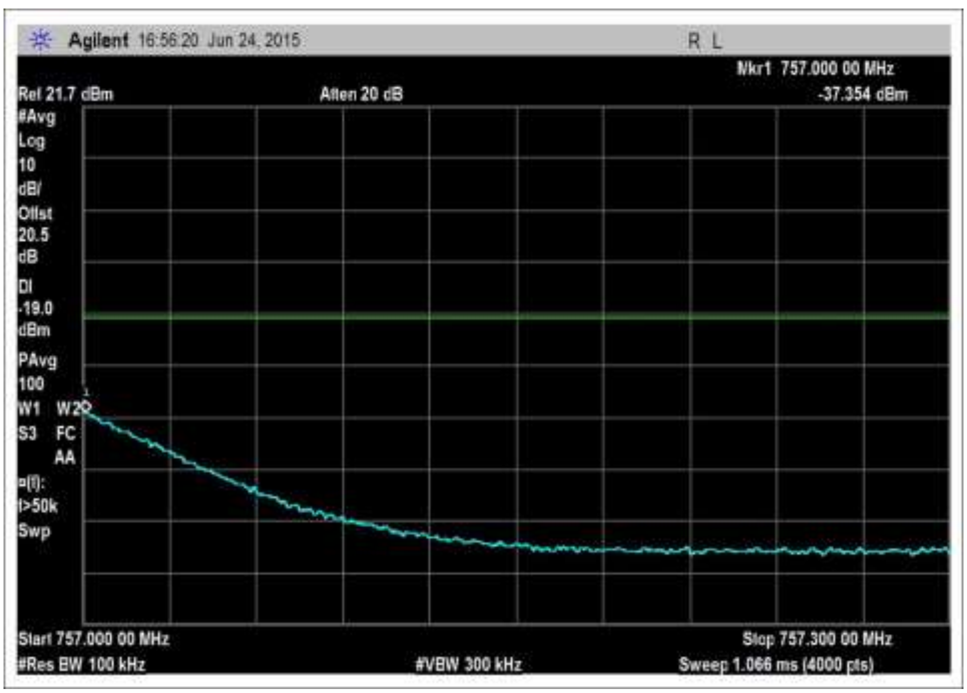
DL_746-757MHz_L_PreAGC



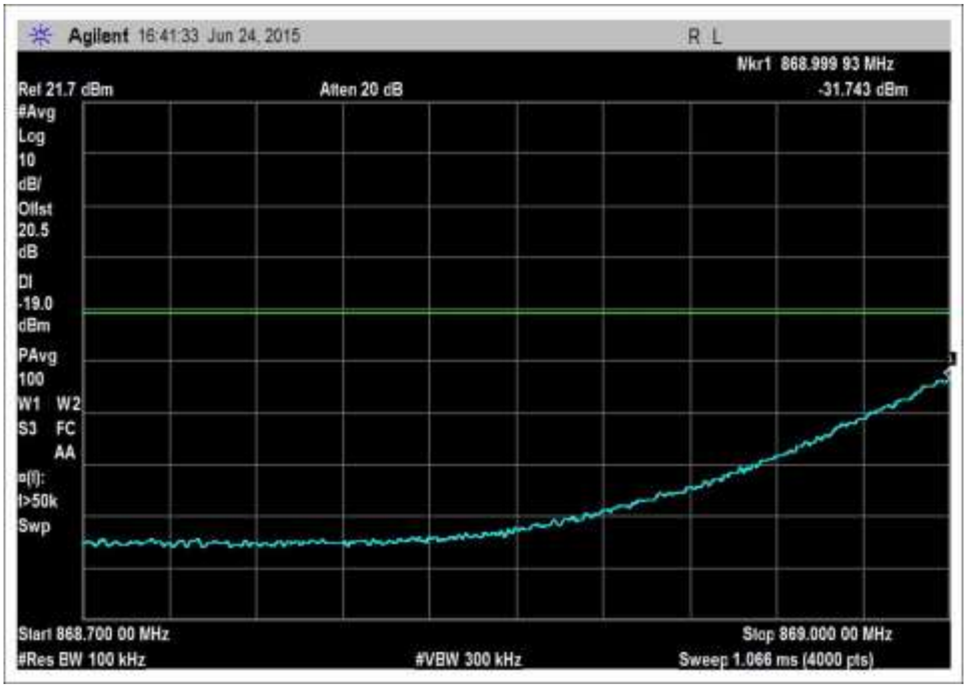
DL_746-757MHz_H_PreAGC



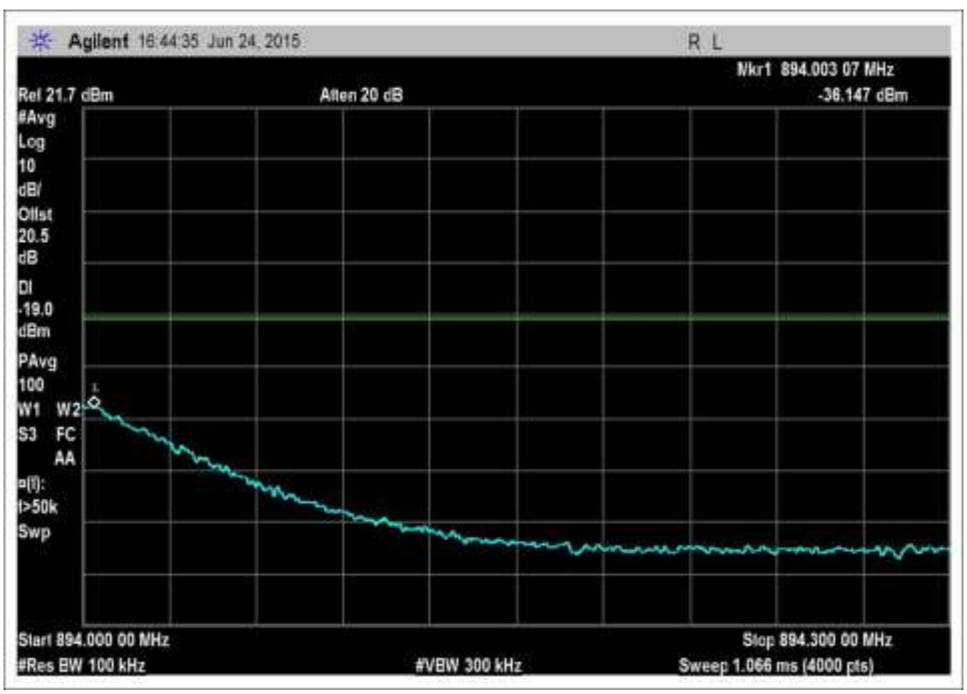
DL_746-757MHz_L_Max



DL_746-757MHz_H_Max



DL_869-894MHz_L_PreAGC



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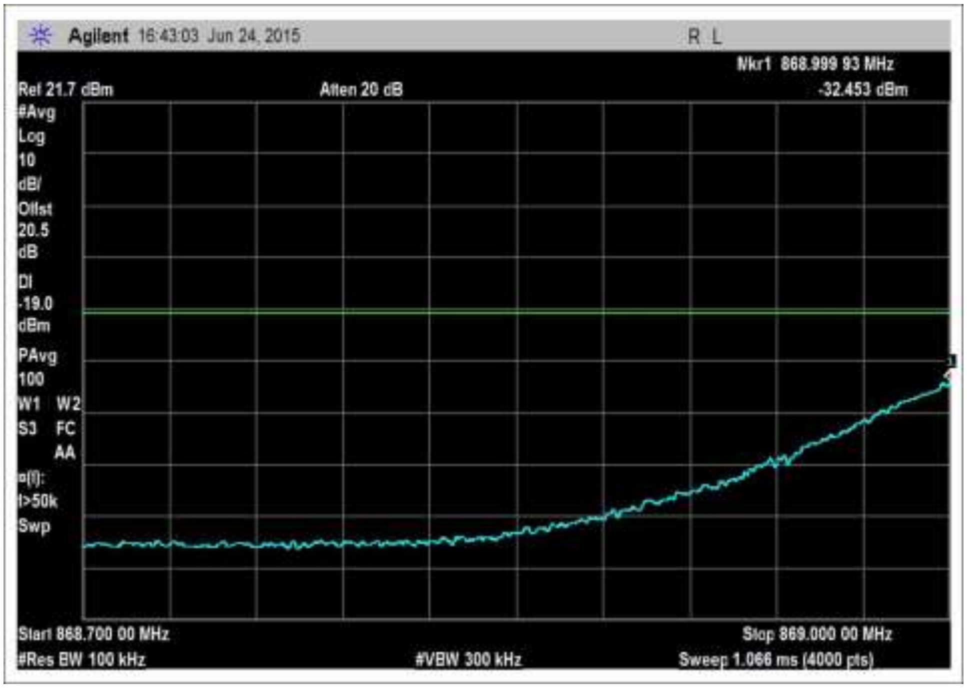
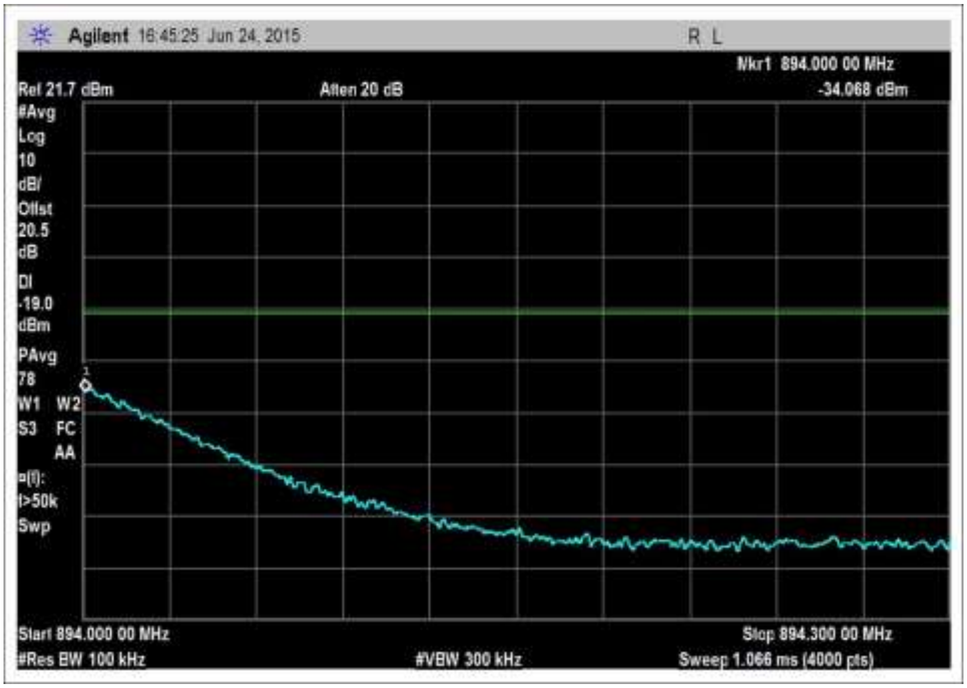
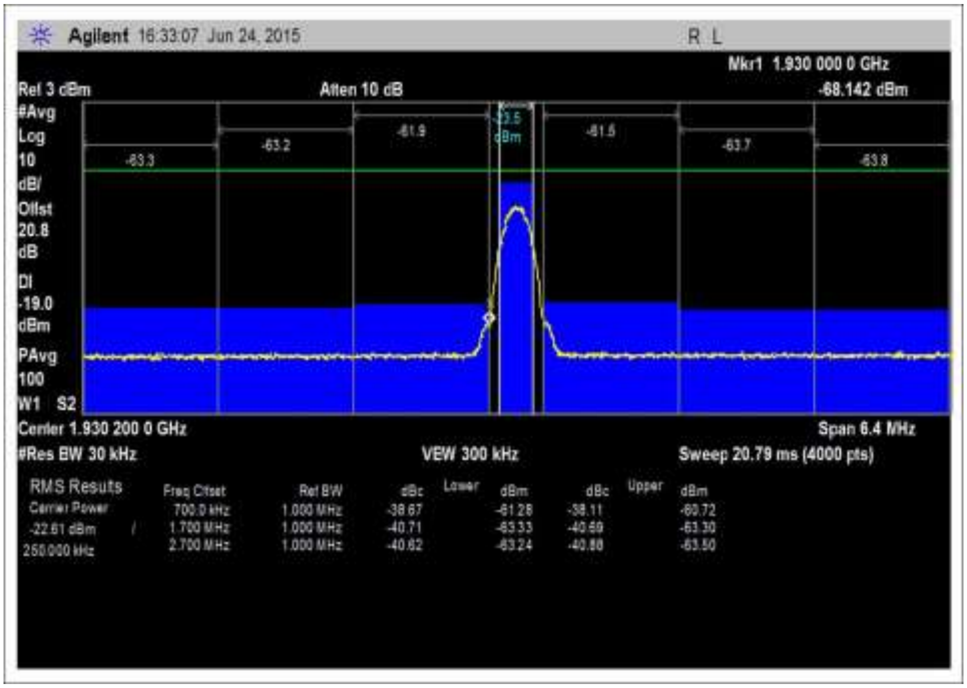


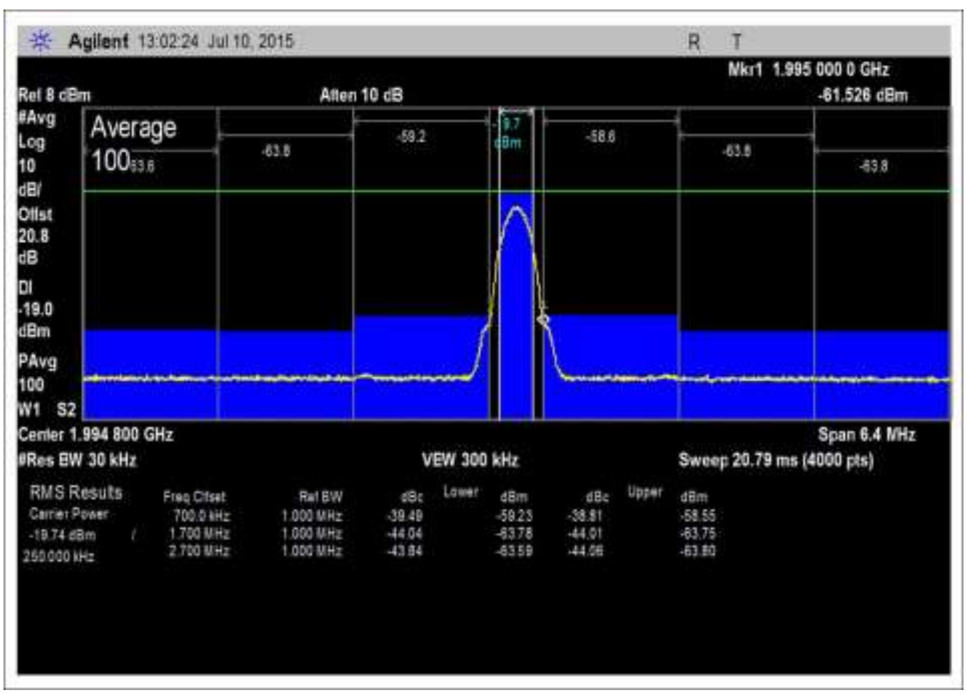
DL_869-894MHz_L_Max



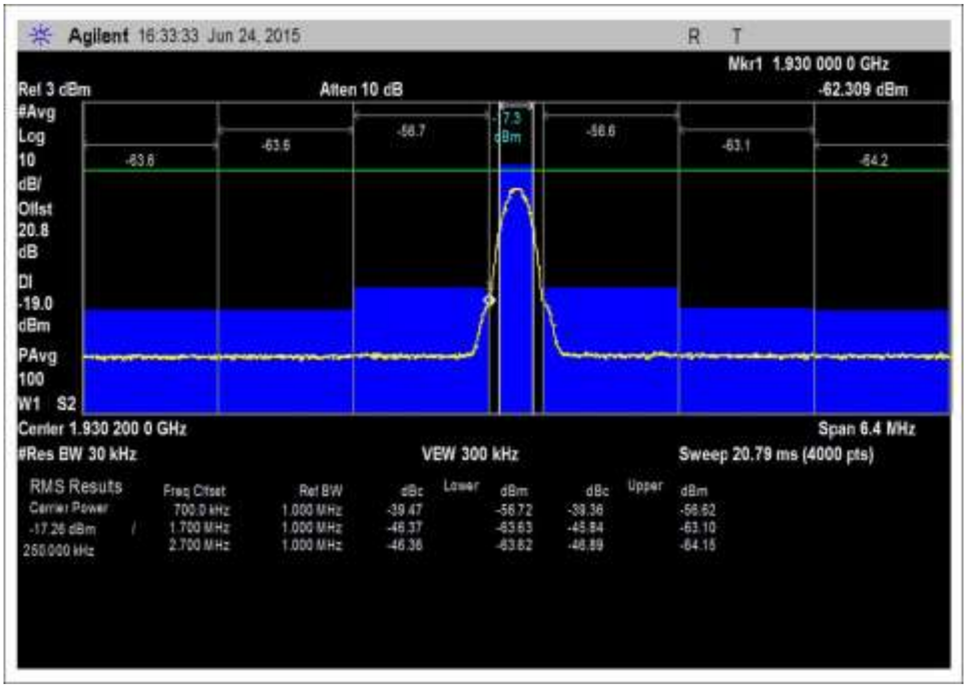
DL_869-894MHz_H_Max



DL_1930-1995MHz_L_PreAGC



DL_1930-1995MHz_H_PreAGC



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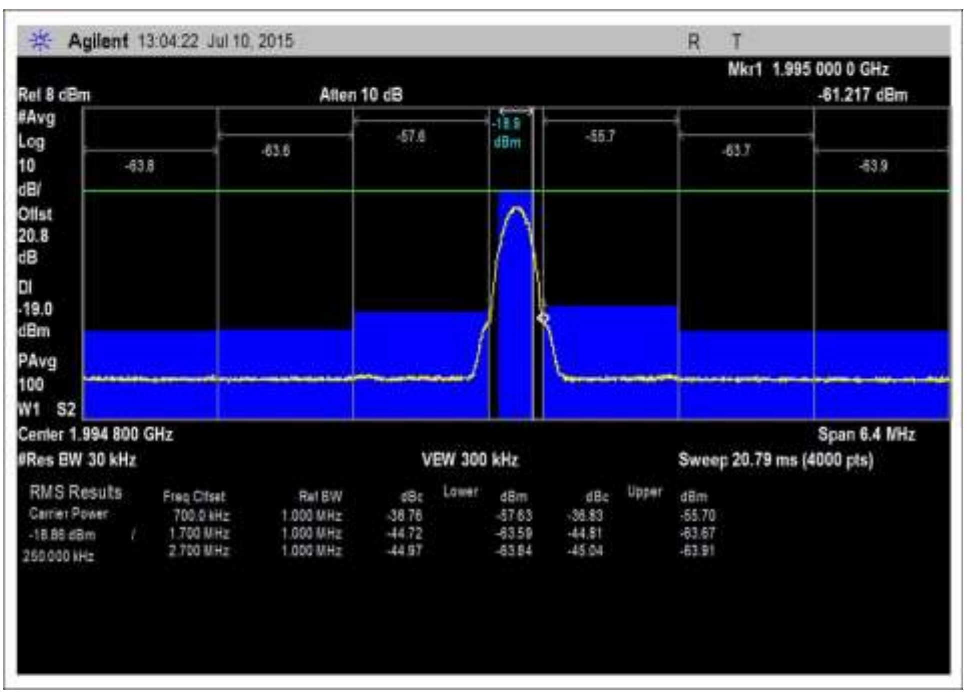
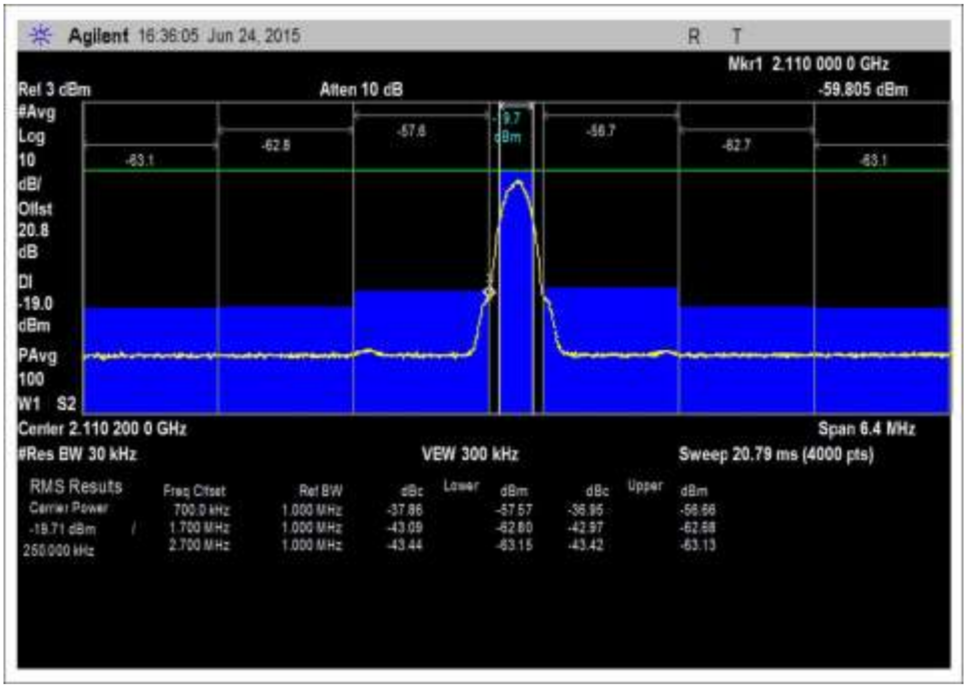
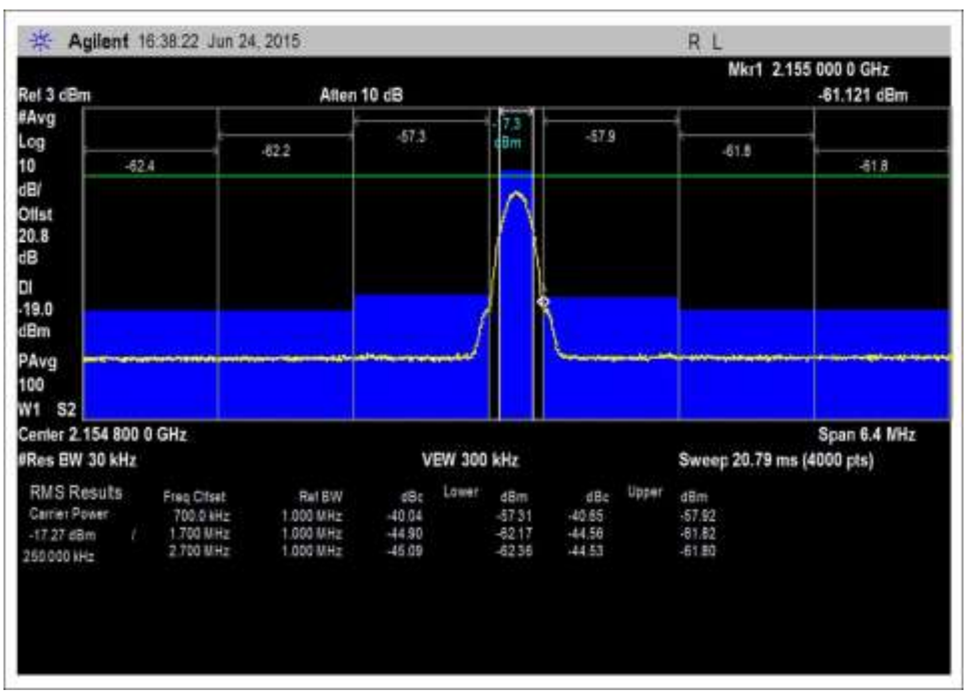


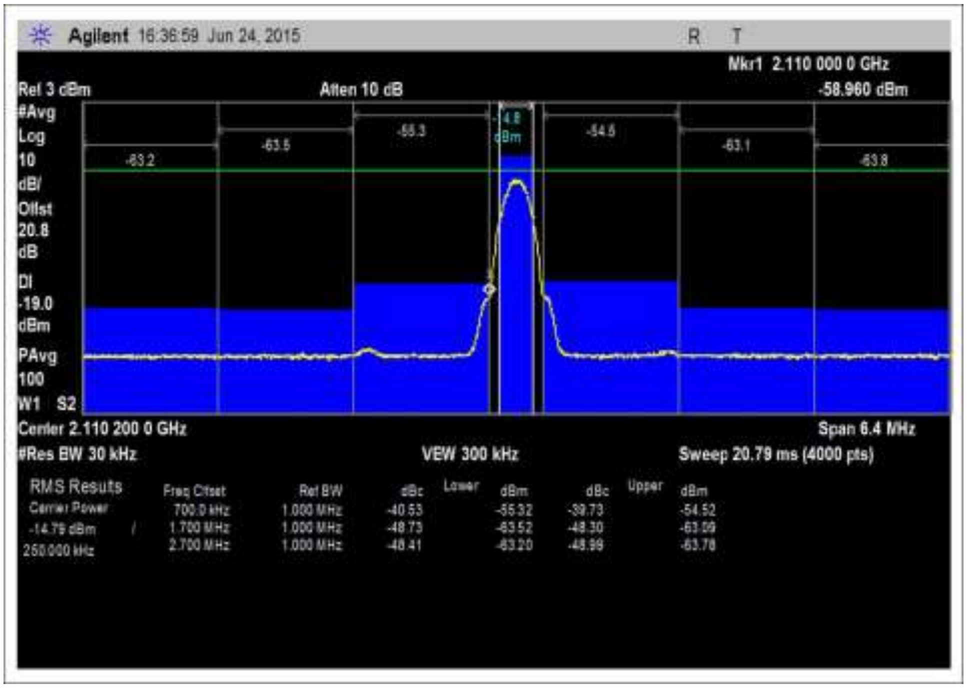
DL_1930-1995MHz_L_Max



DL_2110-2155MHz_L_PreAGC



DL_2110-2155MHz_H_PreAGC



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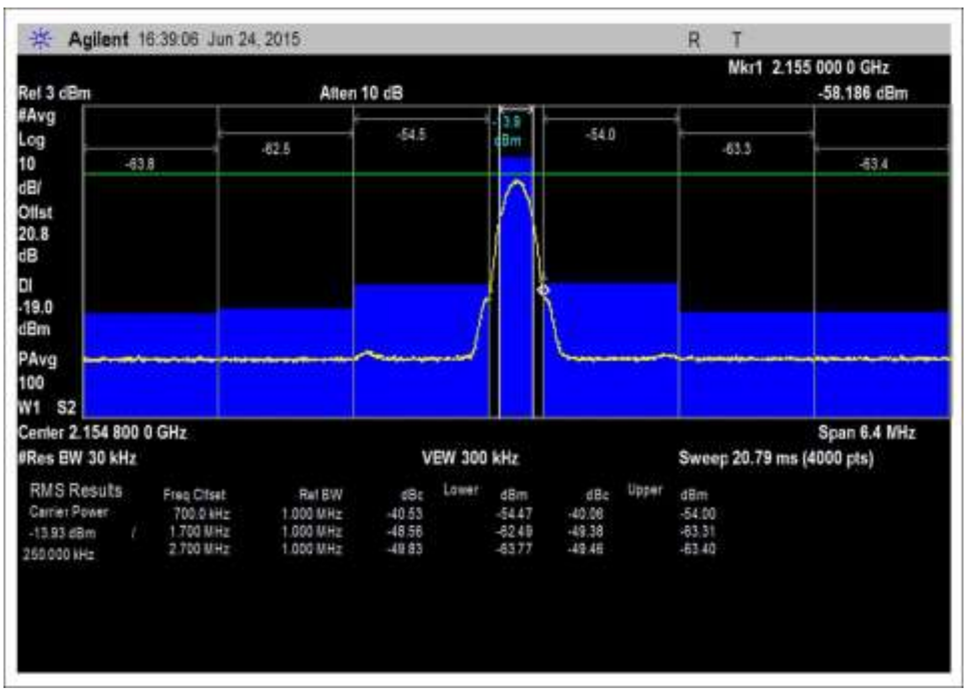
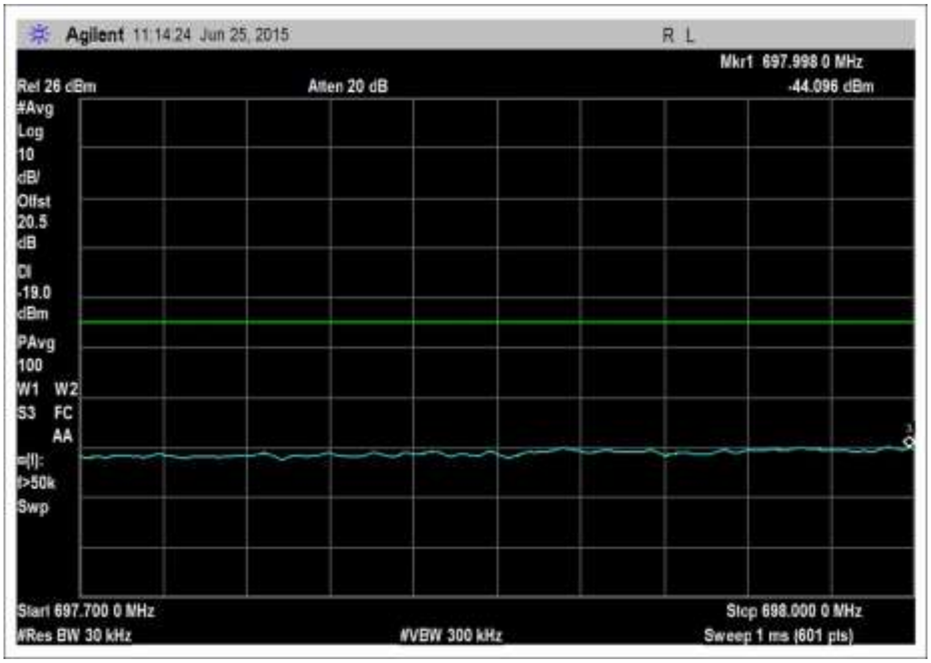
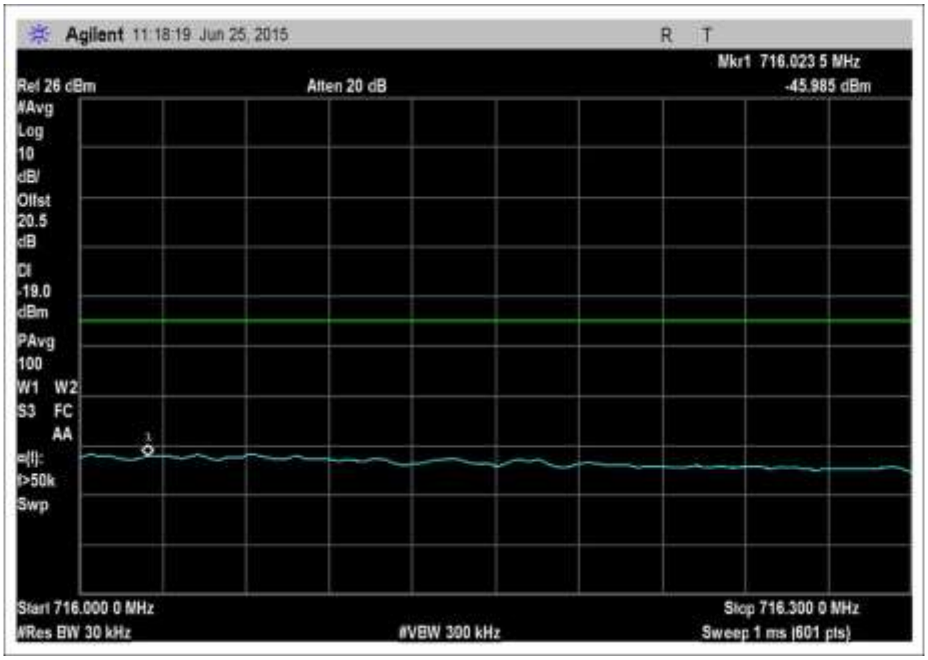


DL_2110-2155MHz_H_Max

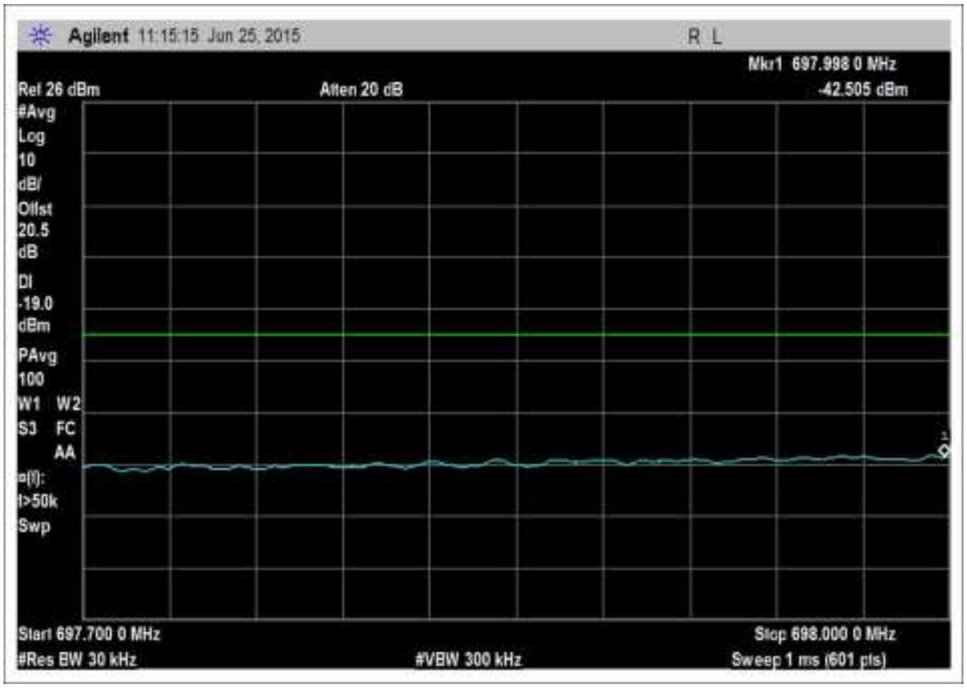
UL-CDMA



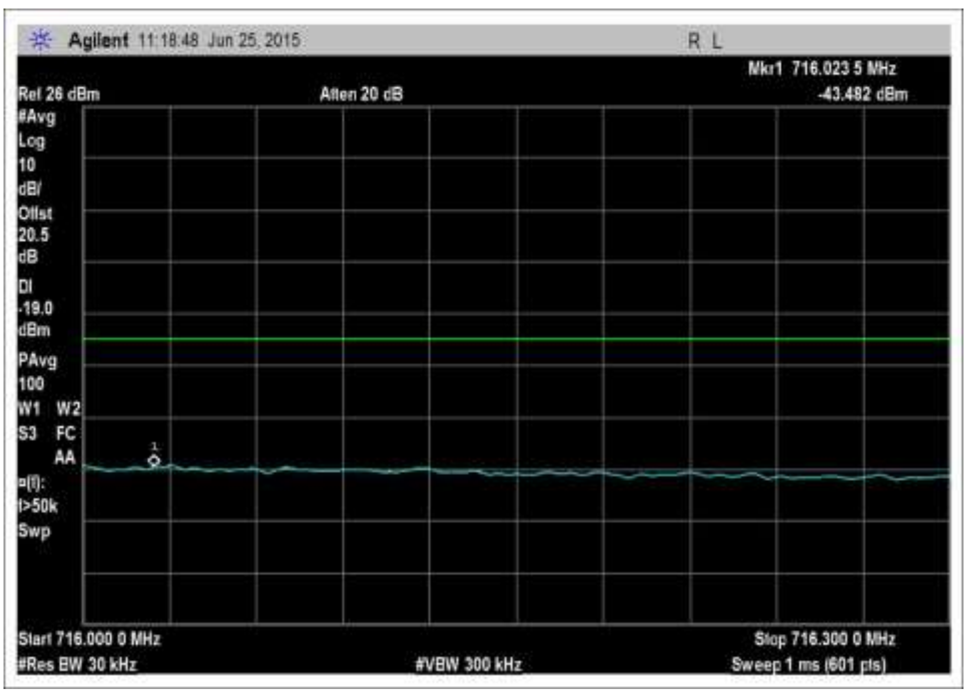
UL_698-716MHz_L_PreAGC



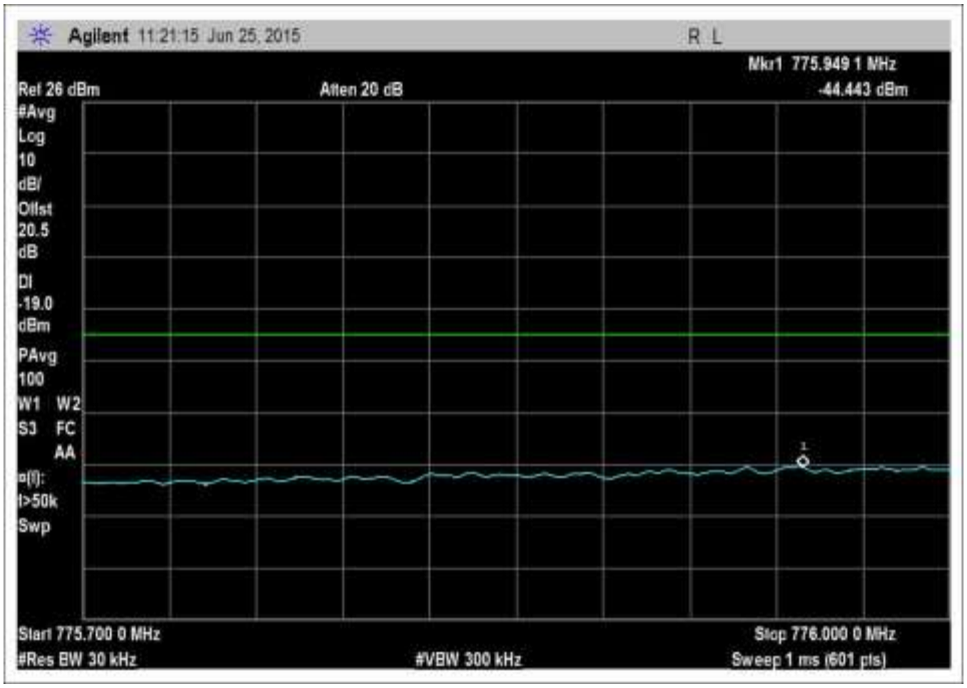
UL_698-716MHz_H_PreAGC



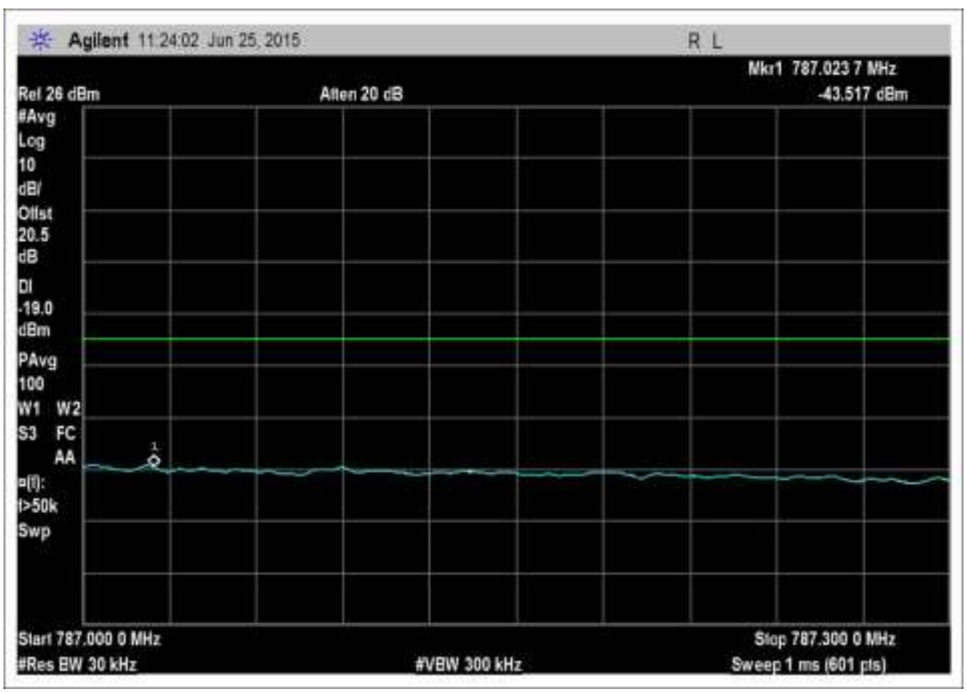
UL_698-716MHz_L_Max



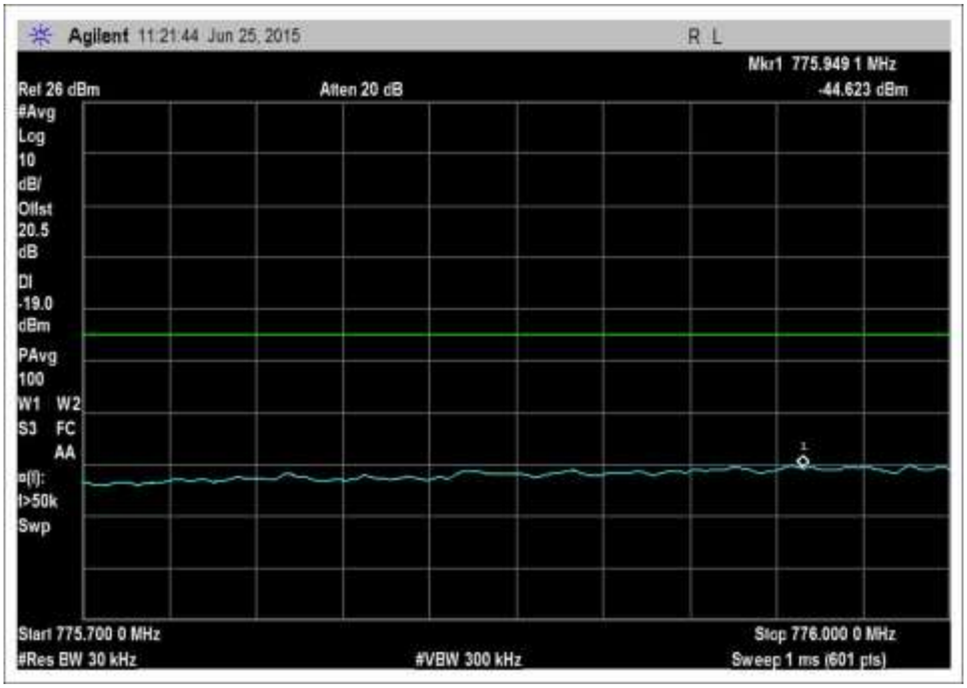
UL_698-716MHz_H_Max



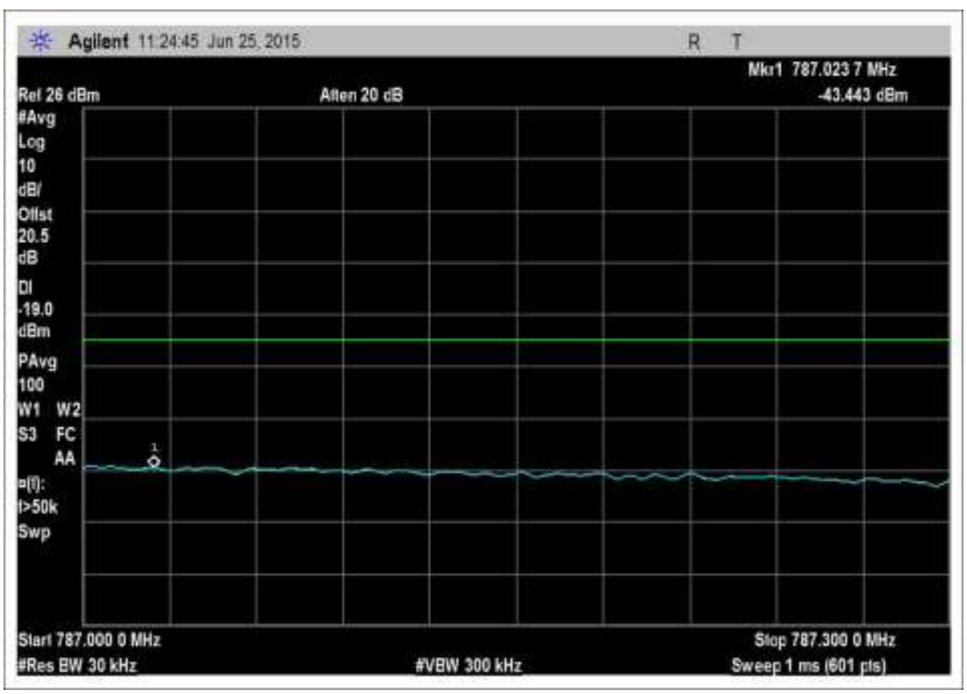
UL_776-787MHz_L_PreAGC



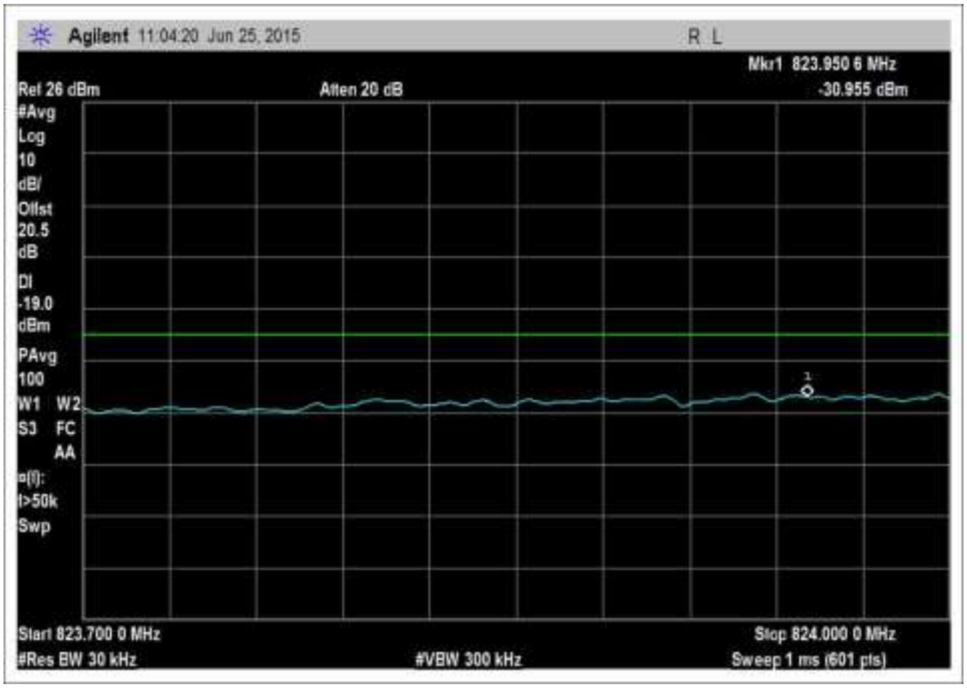
UL_776-787MHz_H_PreAGC



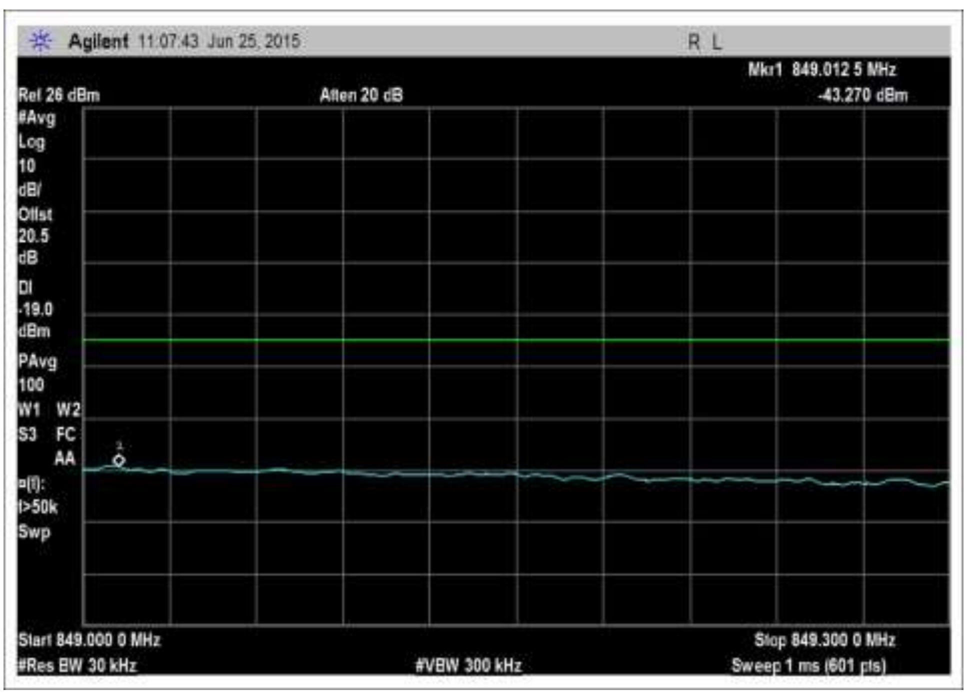
UL_776-787MHz_L_Max



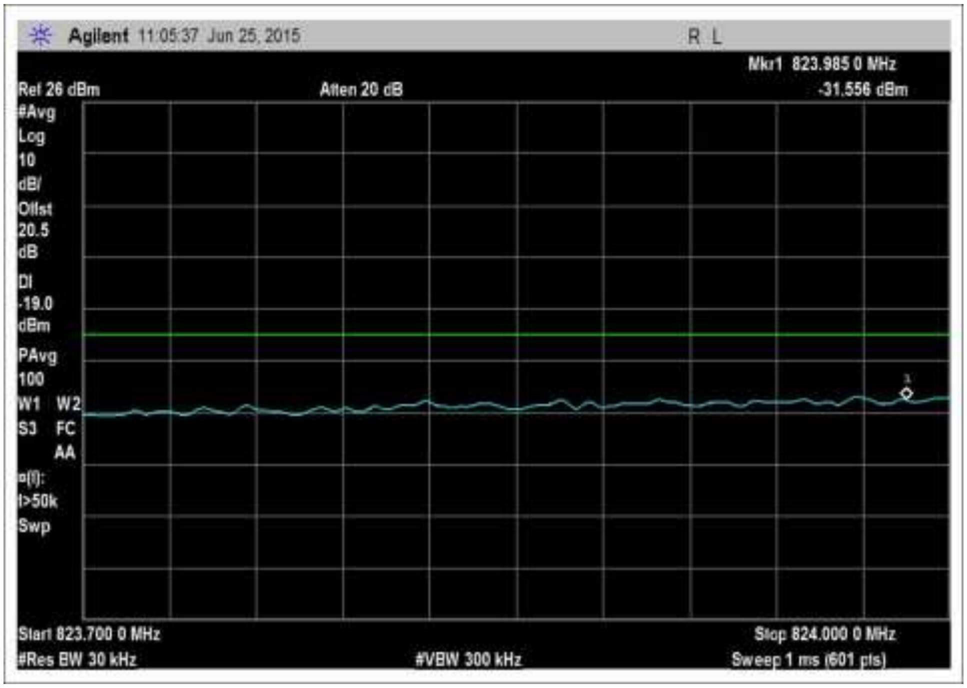
UL_776-787MHz_H_Max



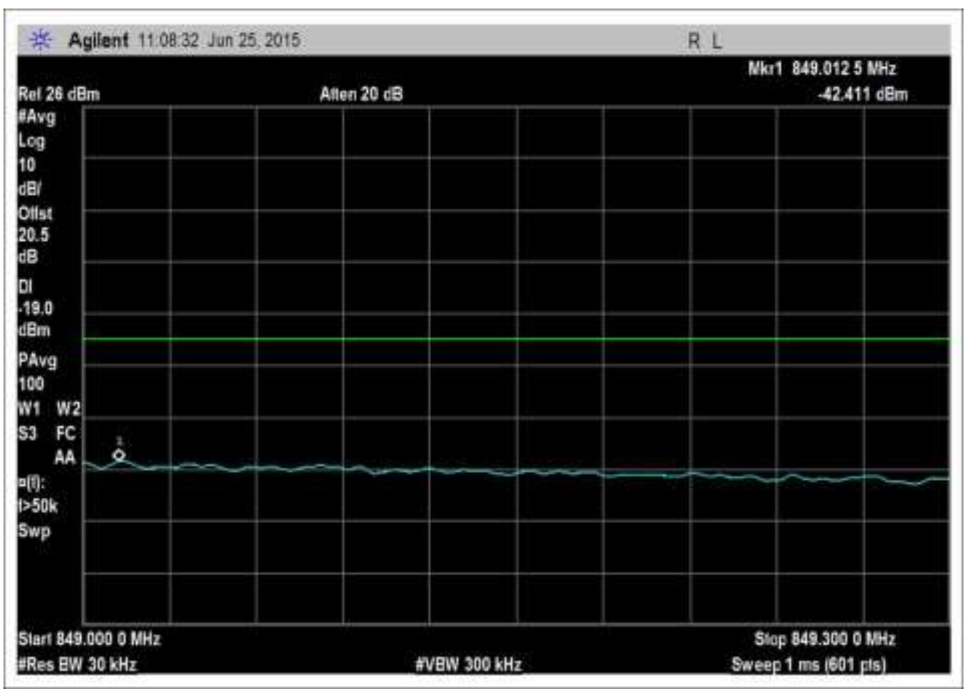
UL_824-849MHz_L_PreAGC



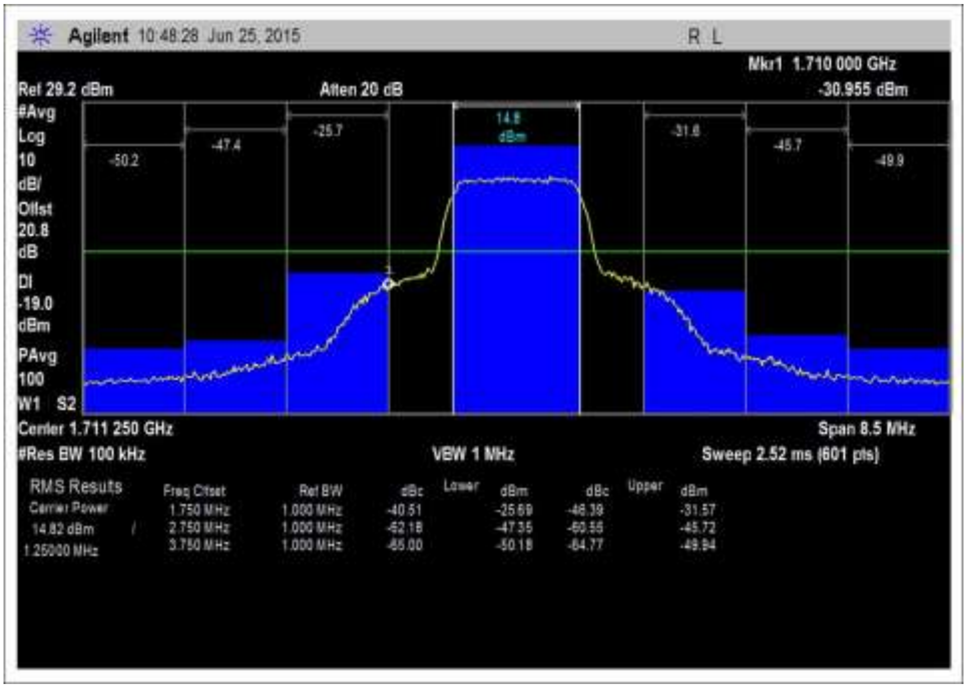
UL_824-849MHz_H_PreAGC



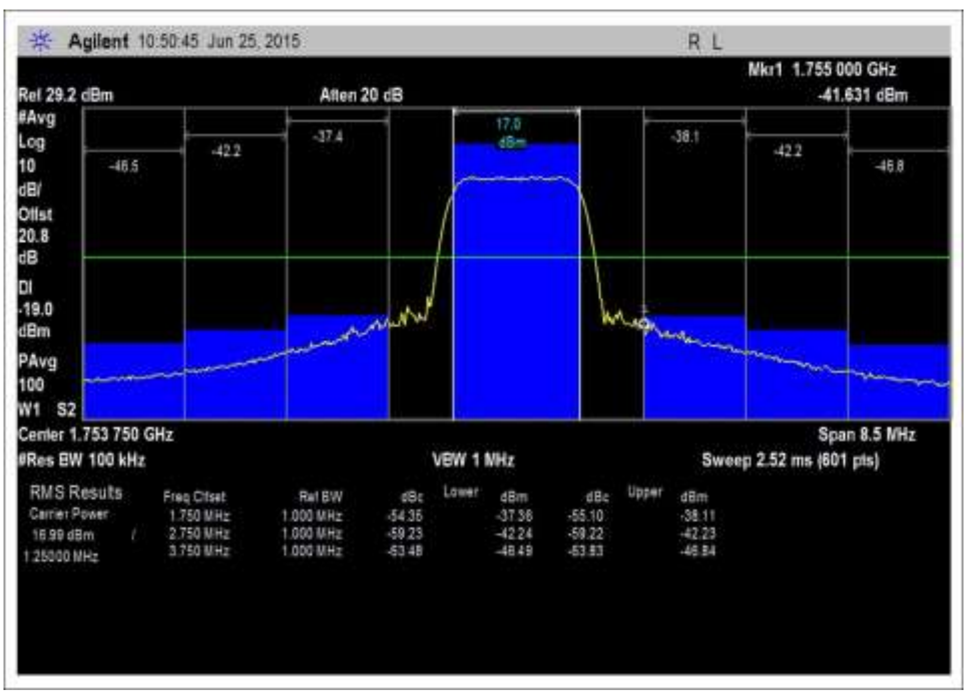
UL_824-849MHz_L_Max



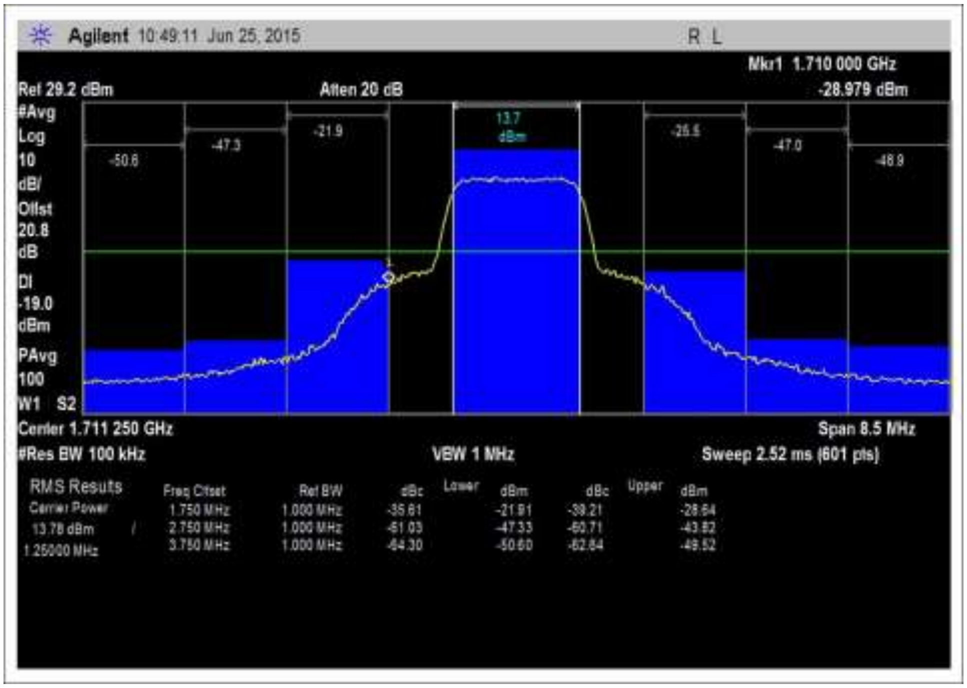
UL_824-849MHz_H_Max



UL_1710-1755MHz_L_PreAGC



UL_1710-1755MHz_H_PreAGC



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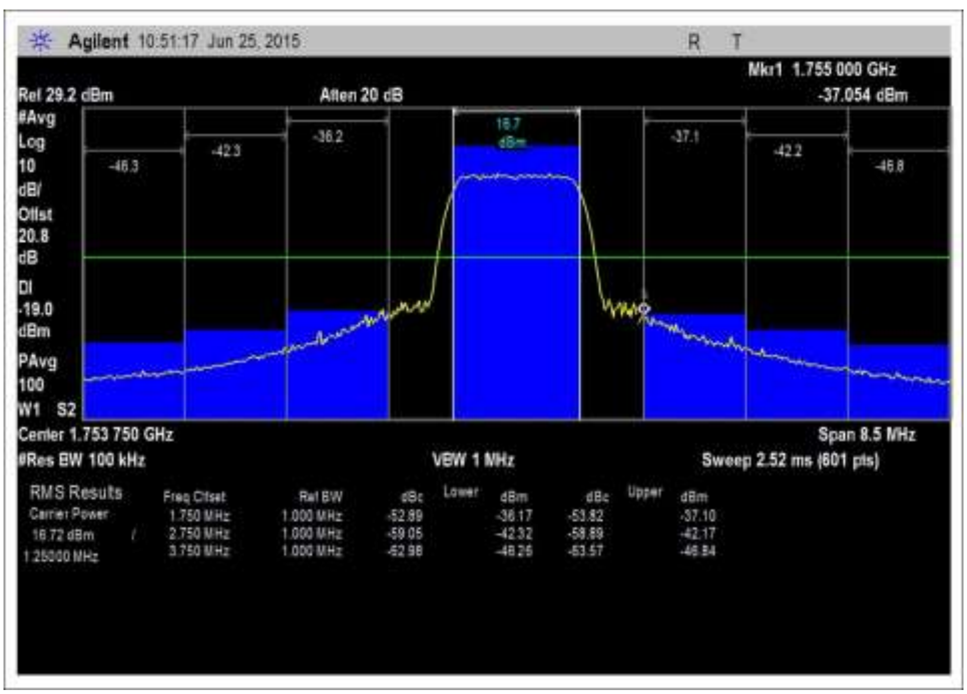
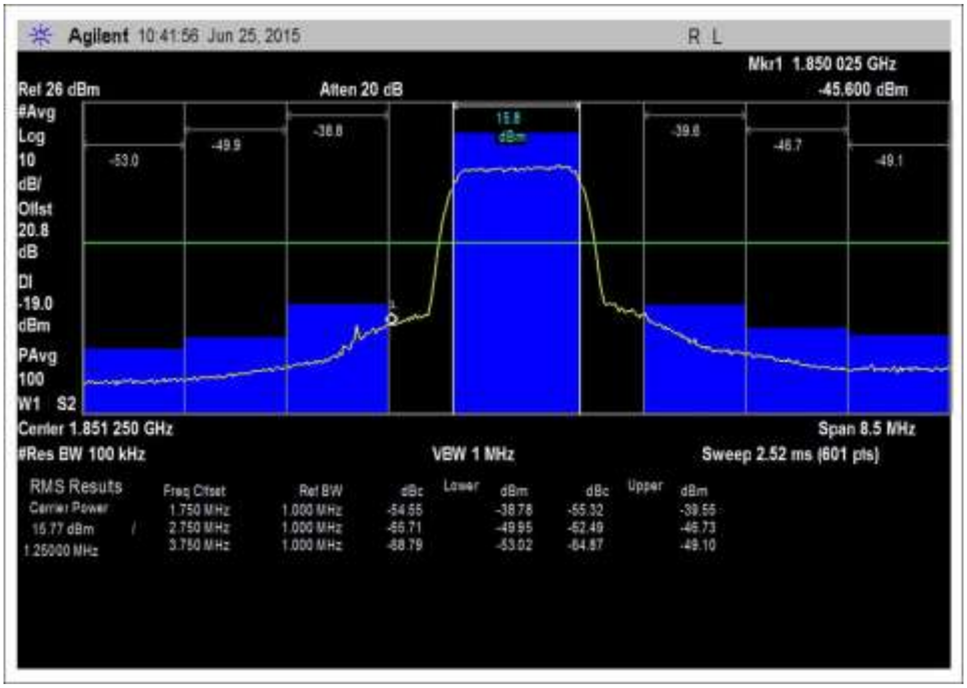
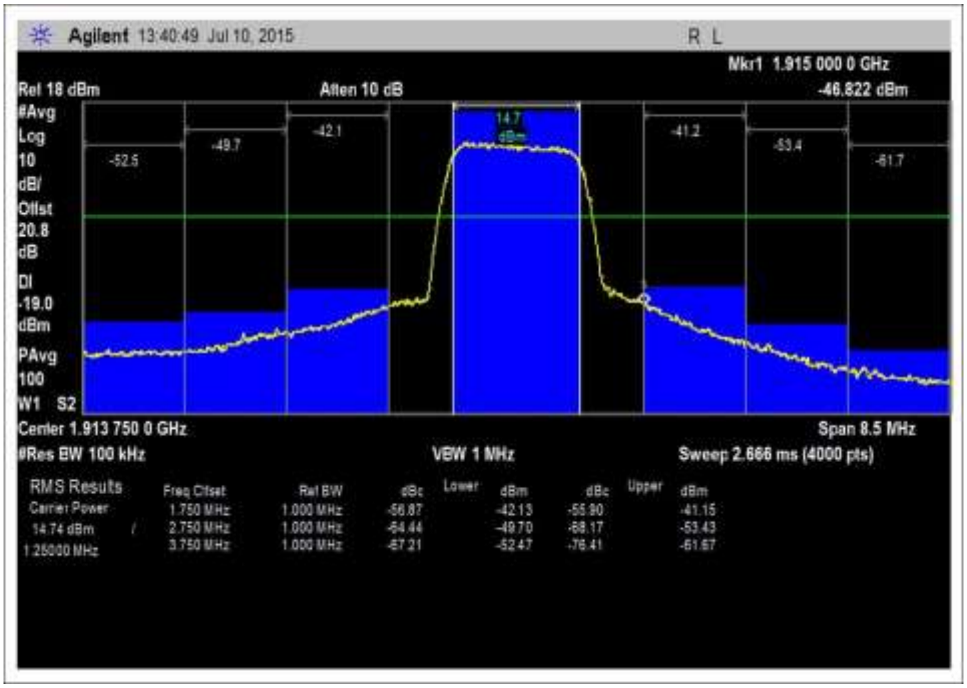


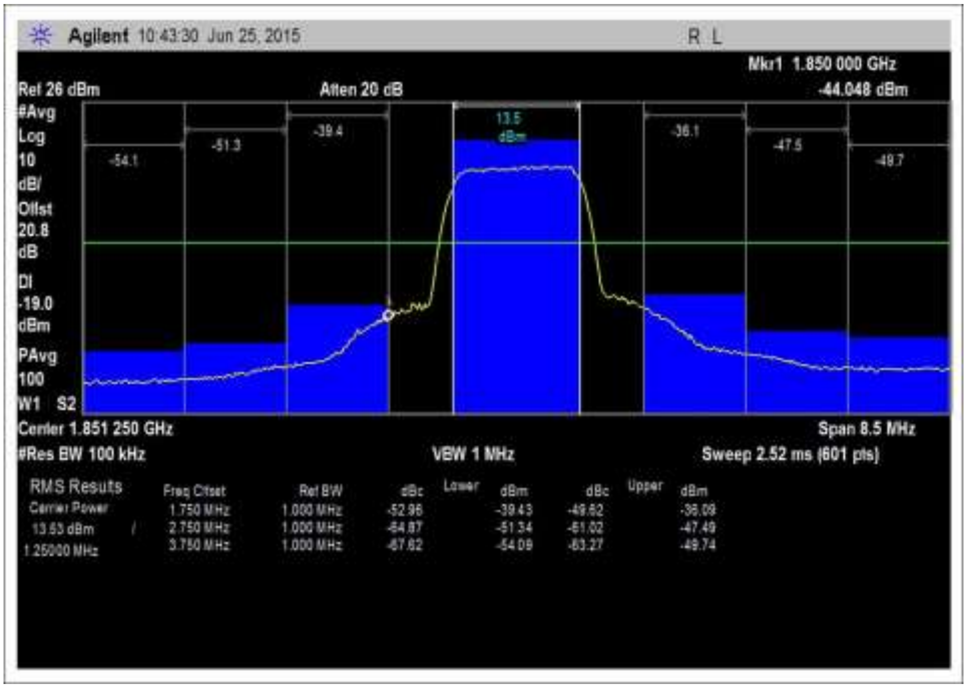
UL_1710-1755MHz_H_Max



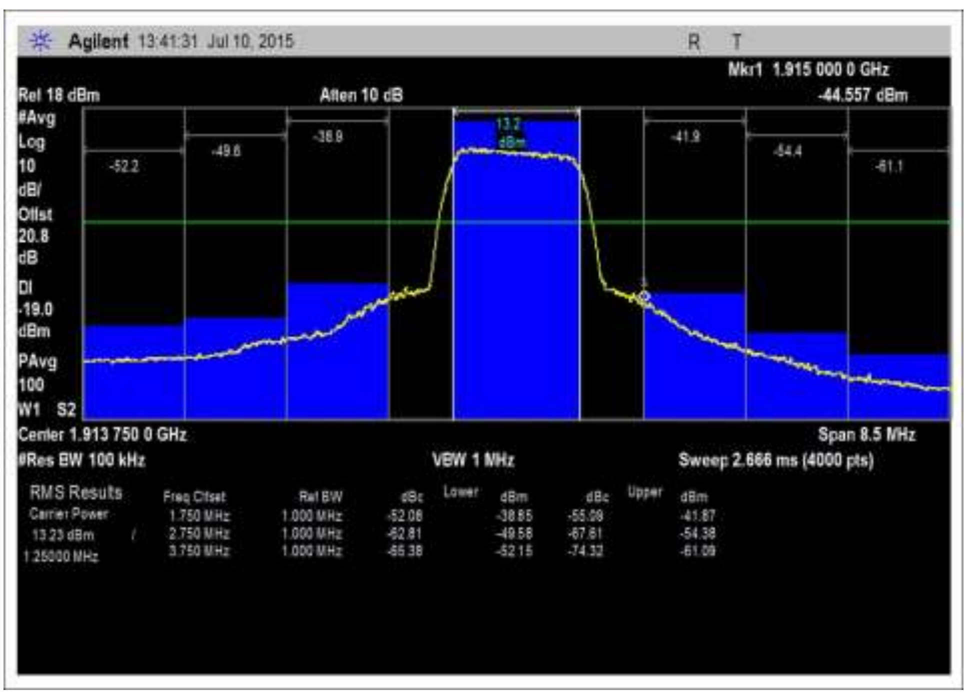
UL_1850-1915MHz_L_PreAGC



UL_1850-1915MHz_H_PreAGC

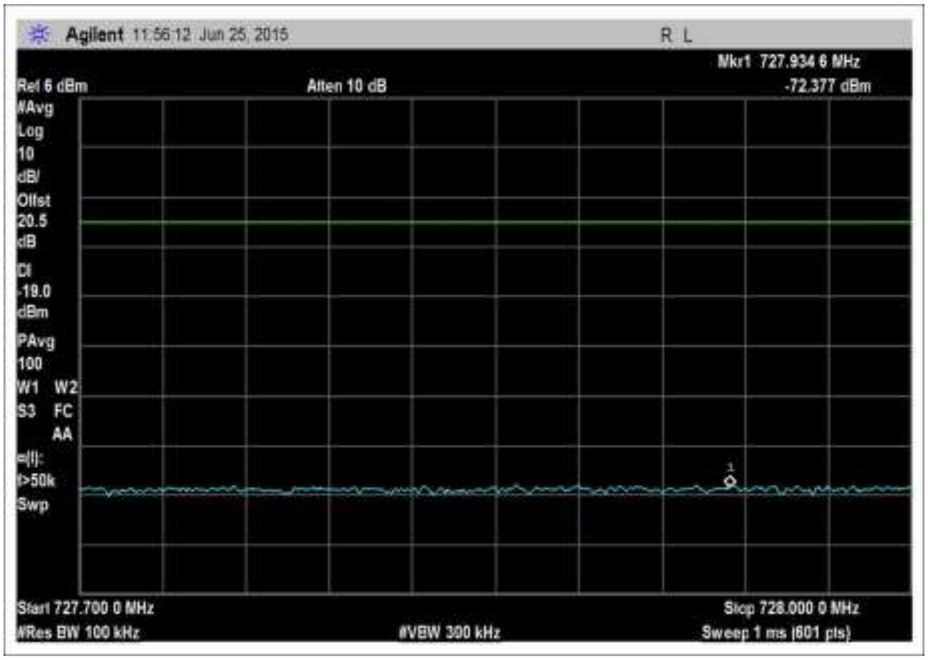


UL_1850-1915MHz_L_Max

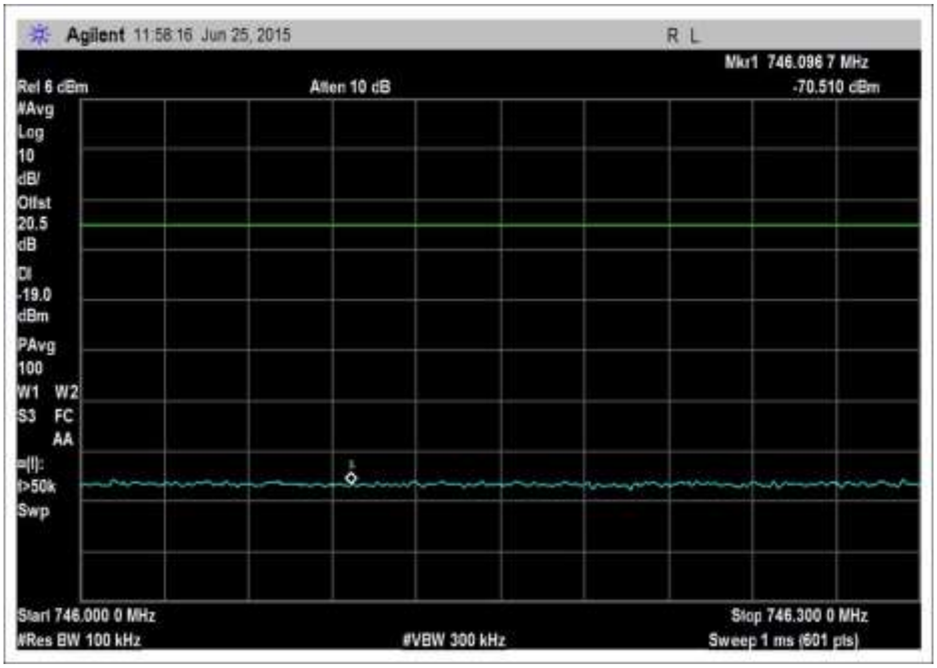


UL_1850-1915MHz_H_Max

DL-CDMA



DL_728-746MHz_L_PreAGC



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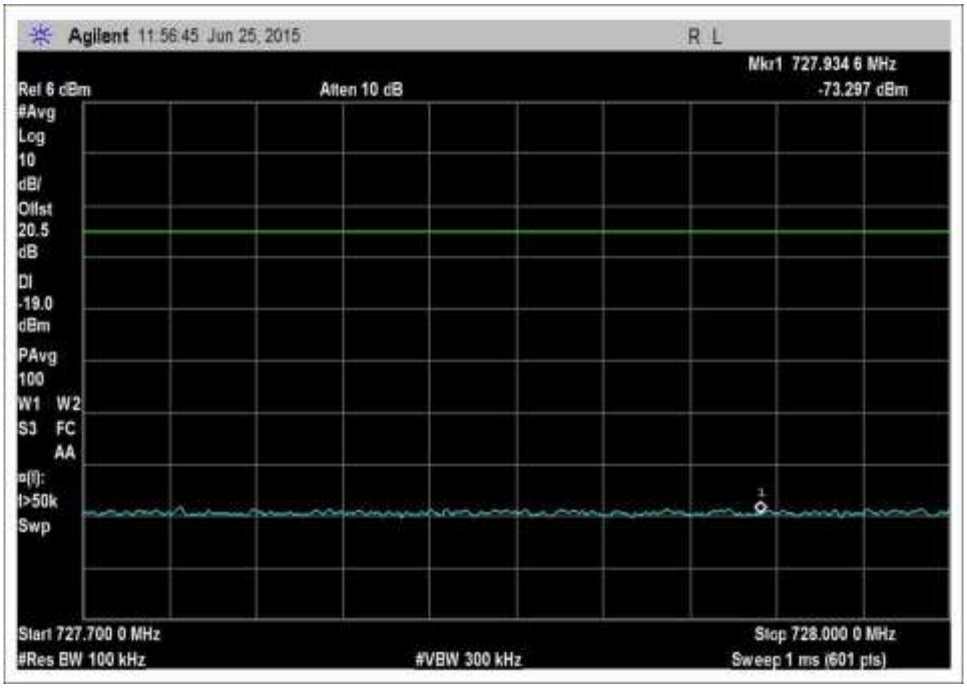
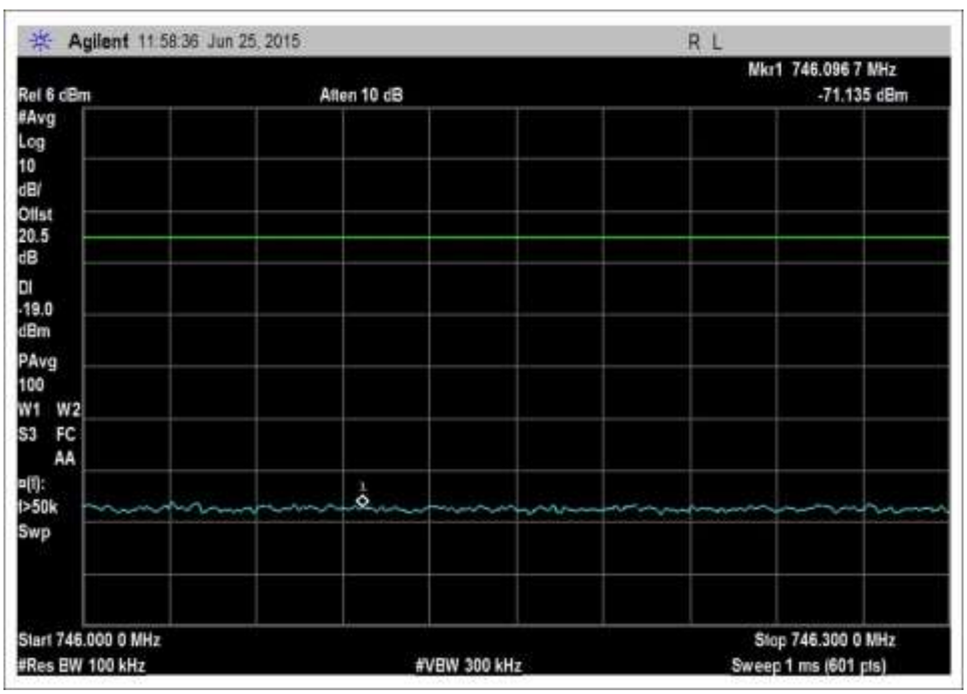
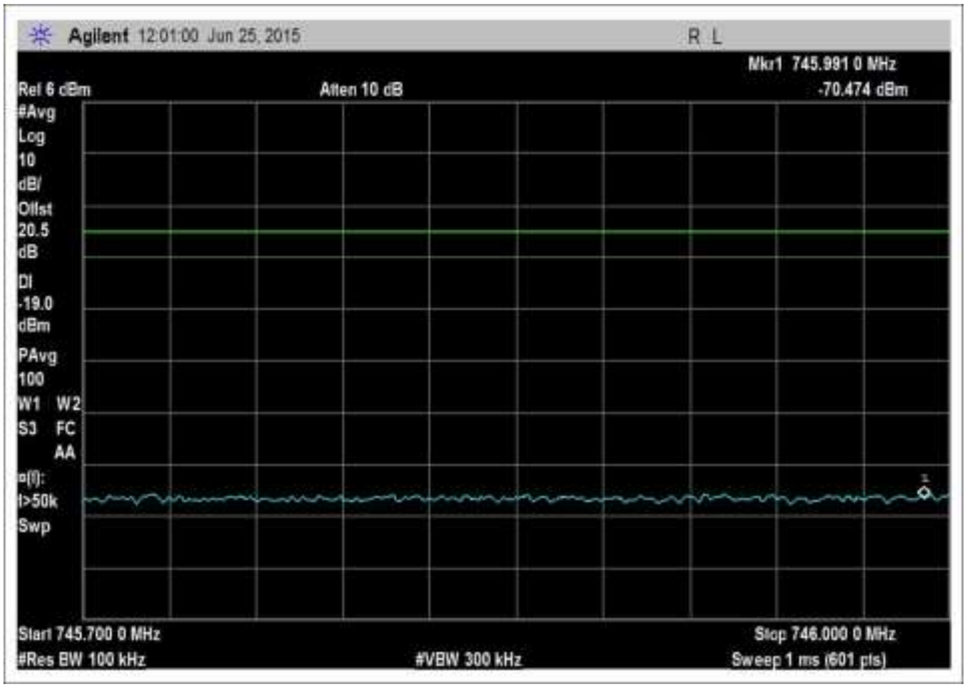


DL_728-746MHz_L_Max



DL_728-746MHz_H_Max



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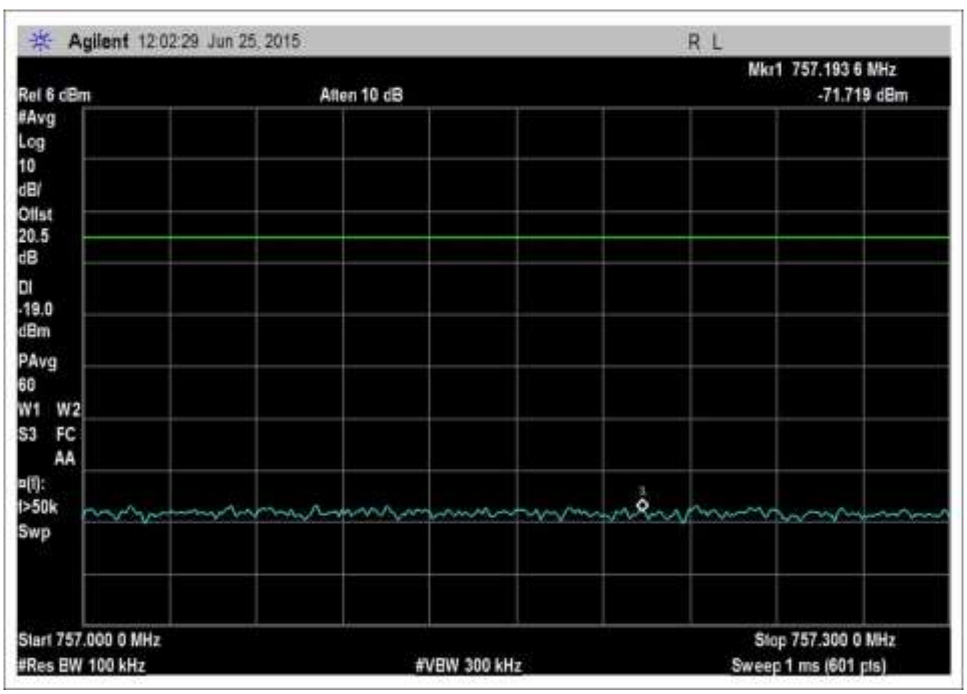

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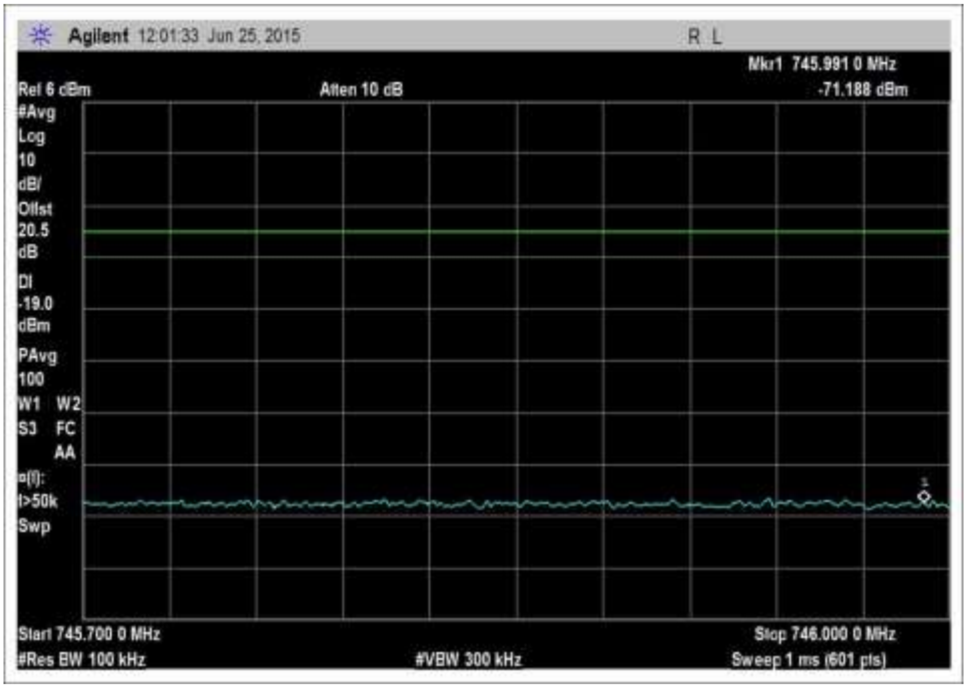

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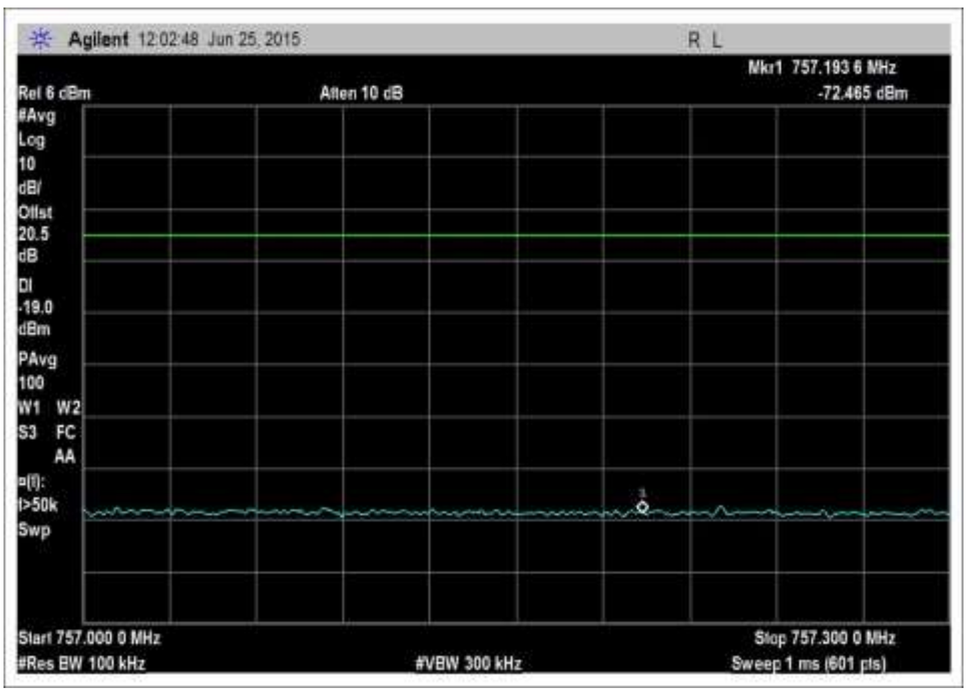

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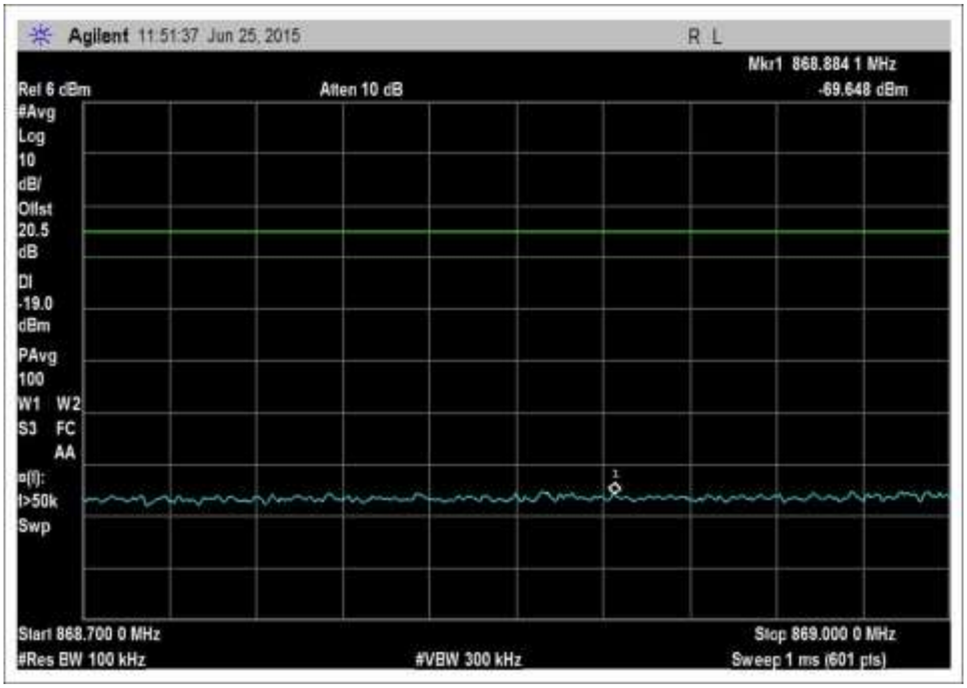

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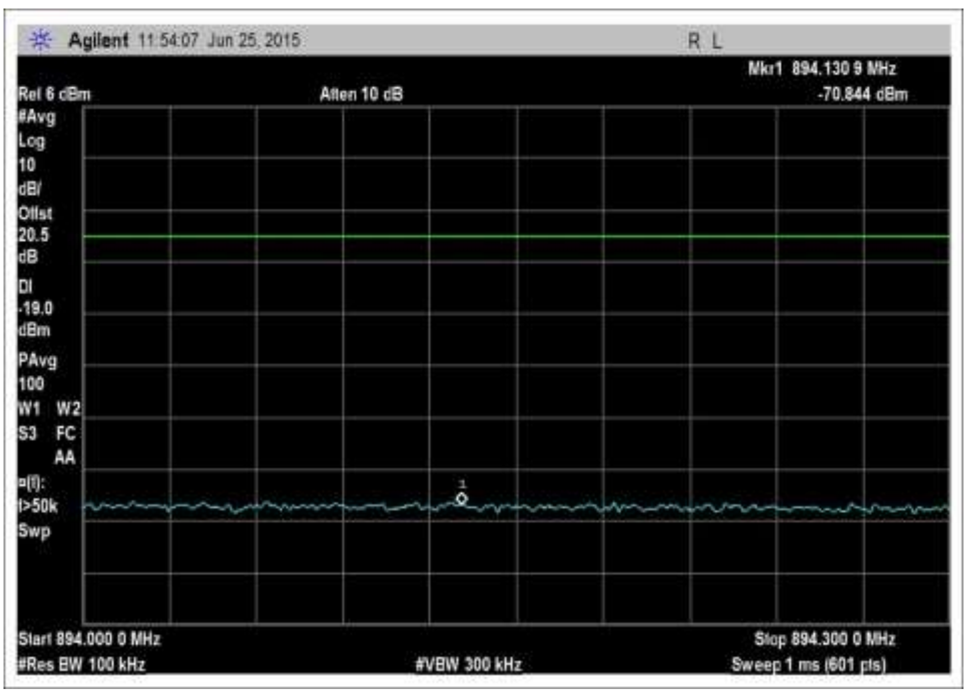

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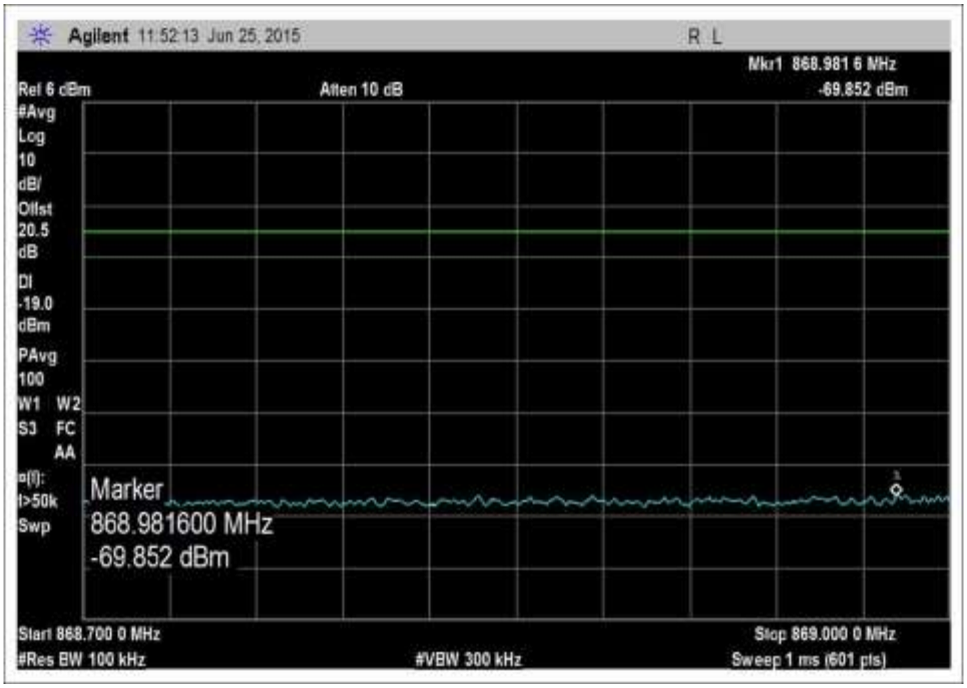

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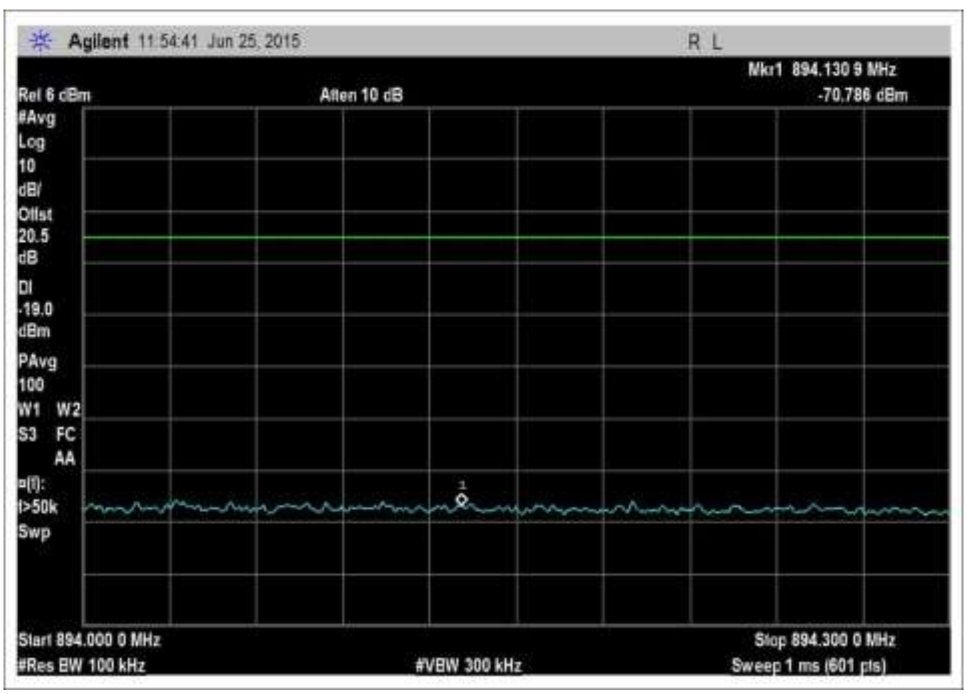

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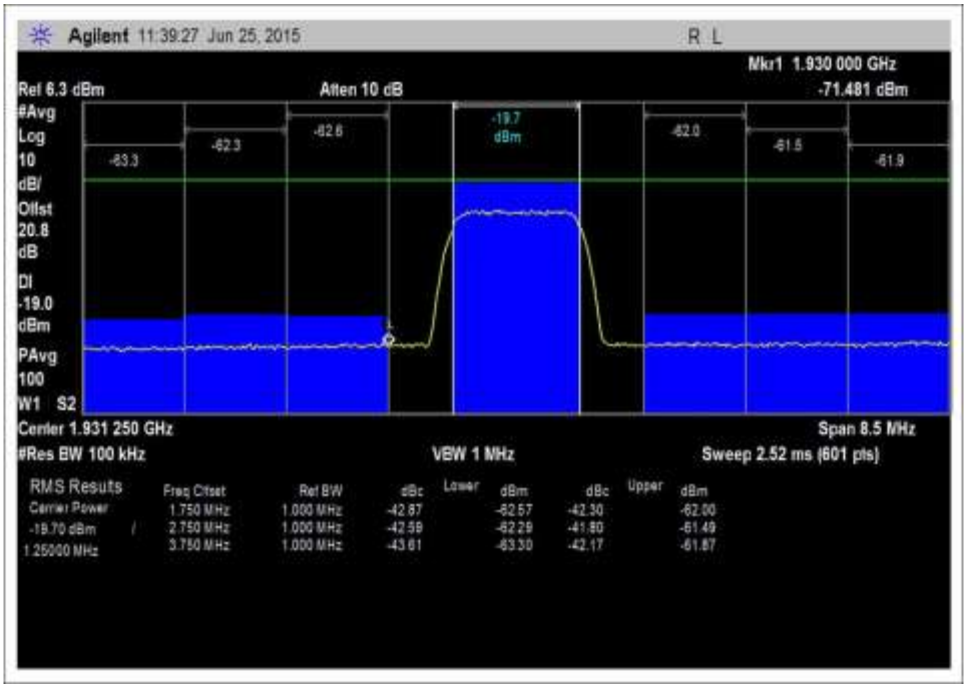

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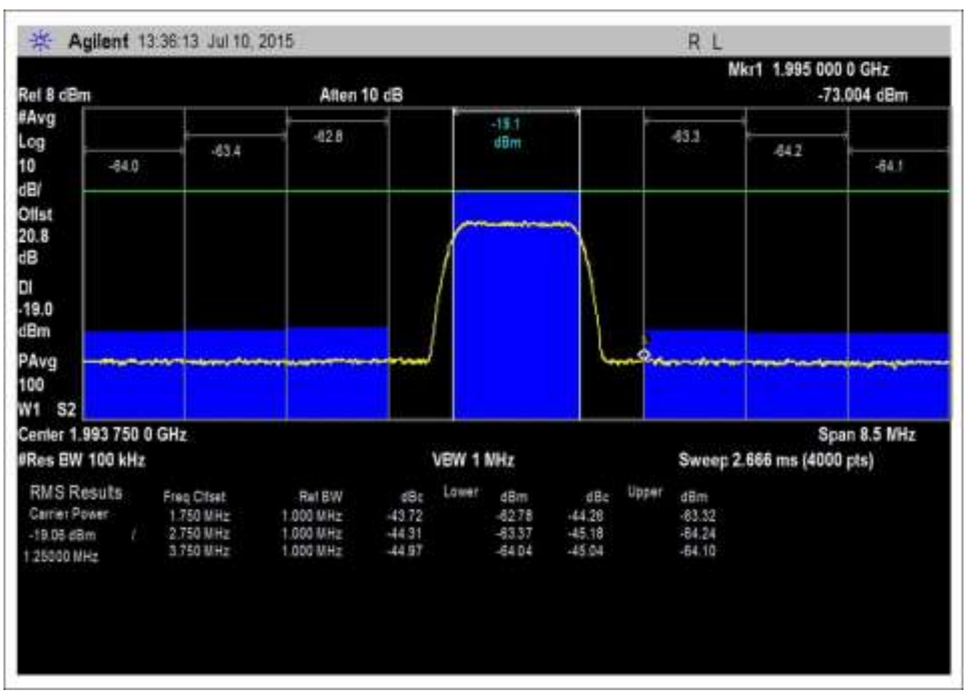

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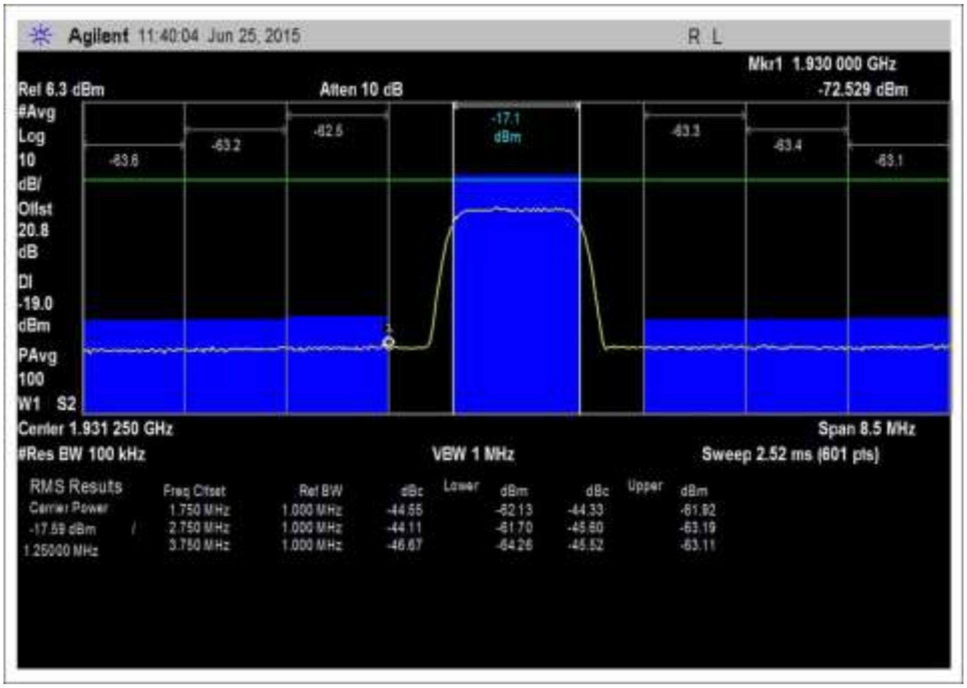

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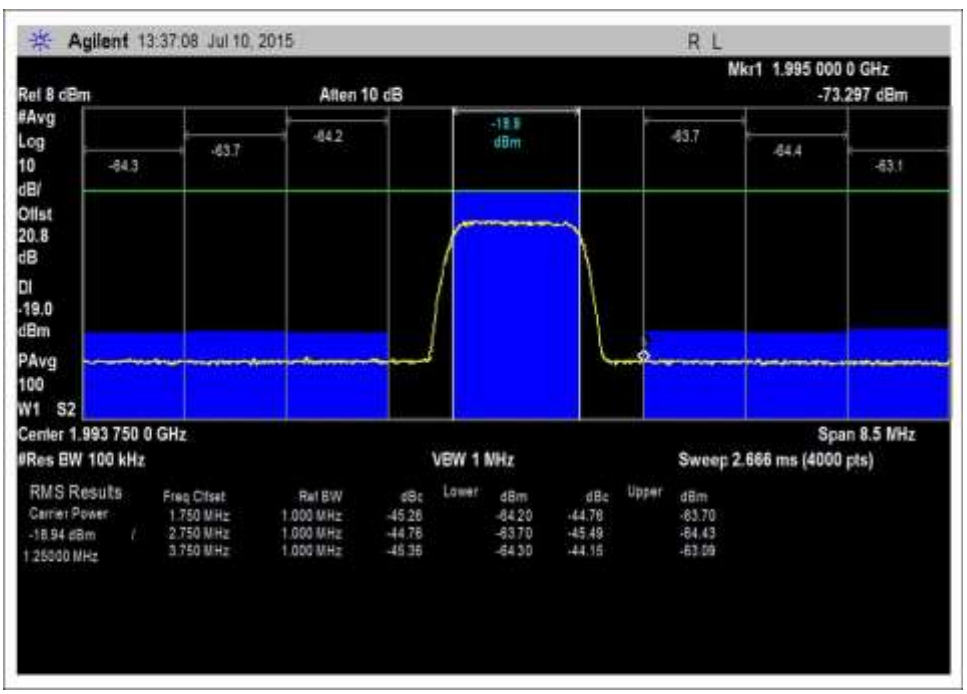
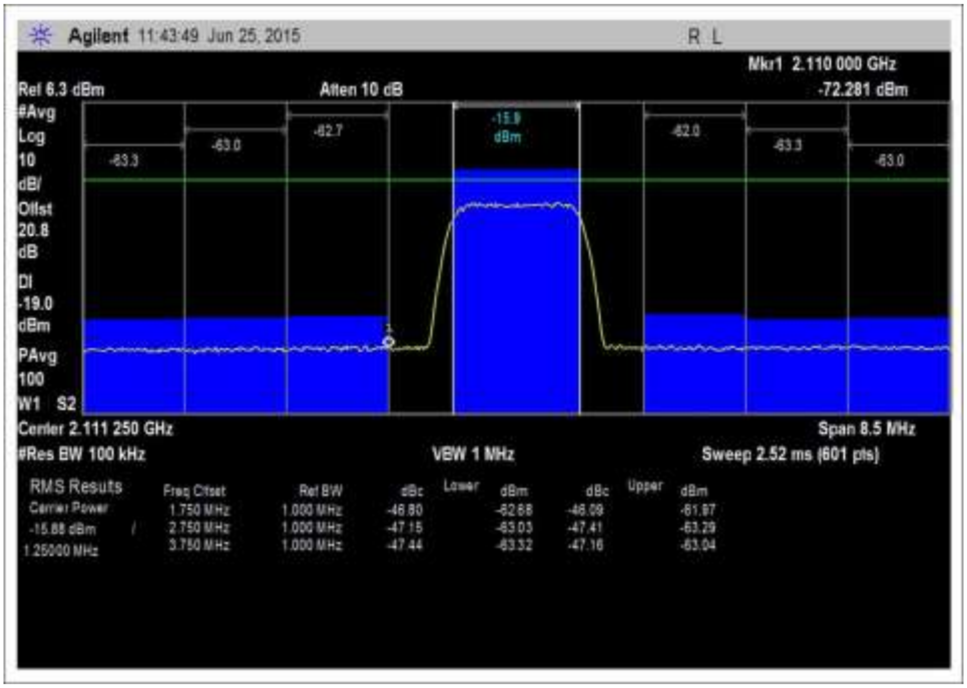
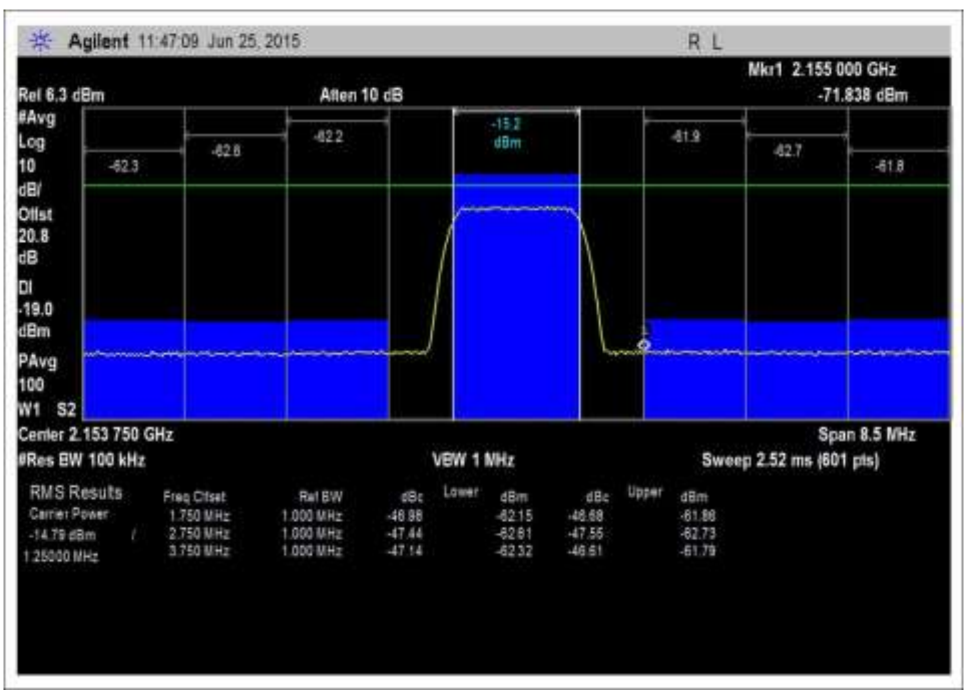


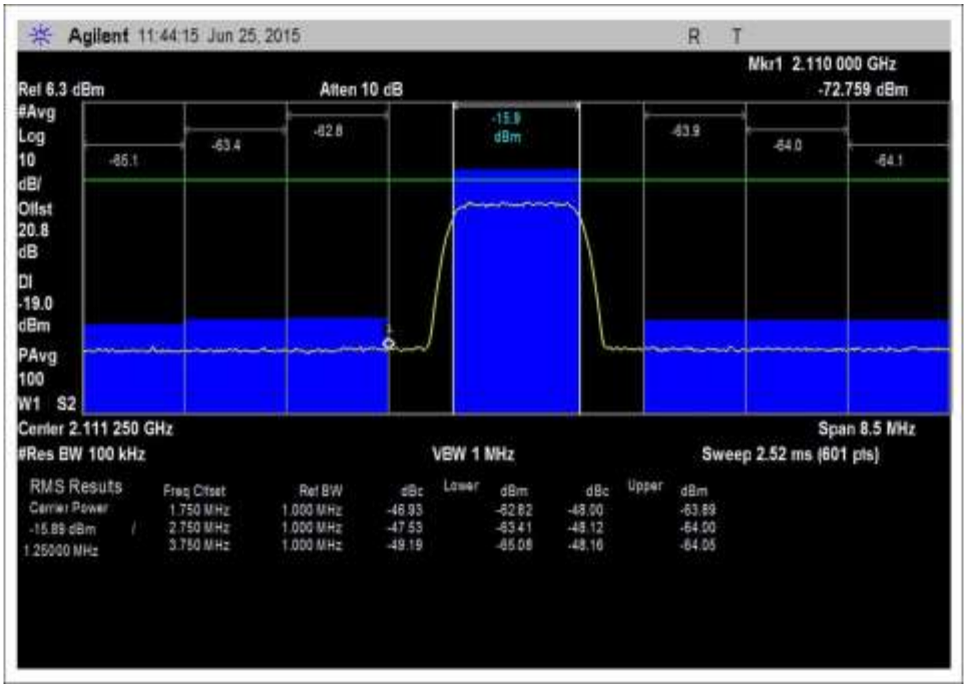
DL_1930-1995MHz_H_Max



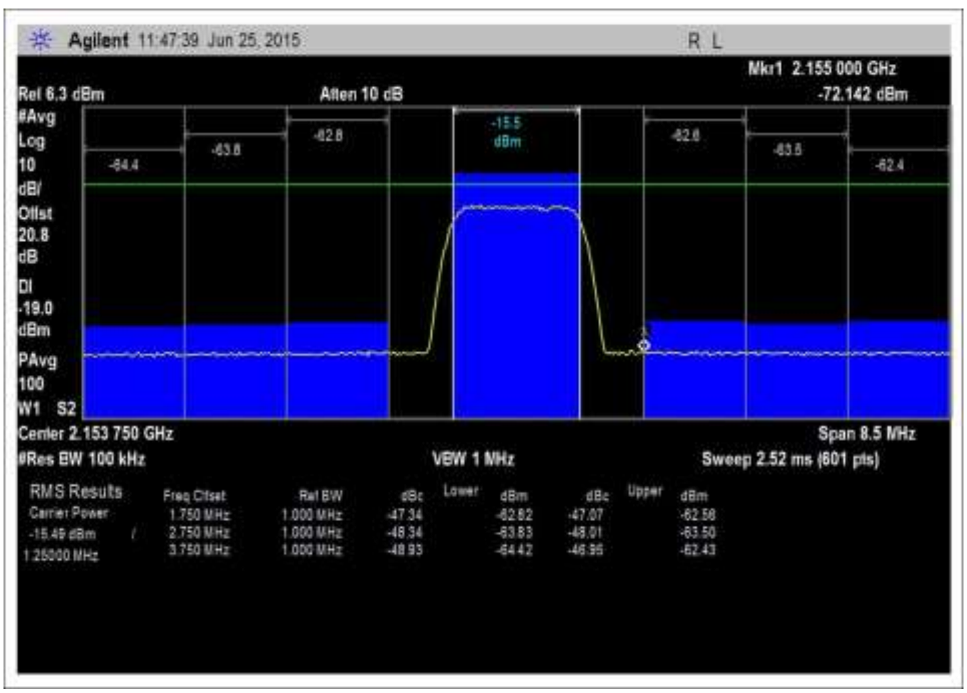
DL_2110-2155MHz_L_PreAGC



DL_2110-2155MHz_H_PreAGC

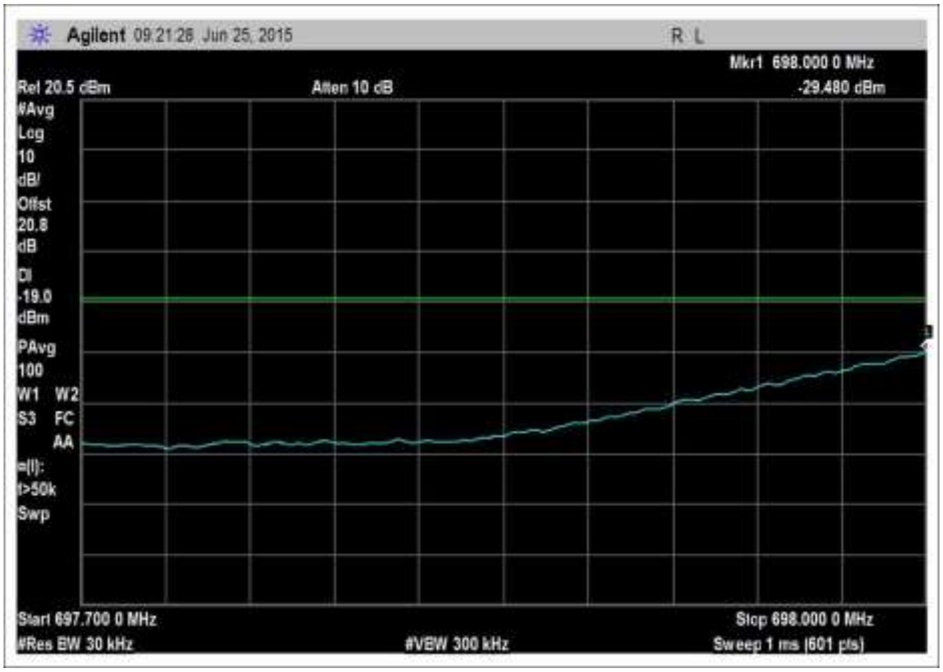


DL_2110-2155MHz_L_Max

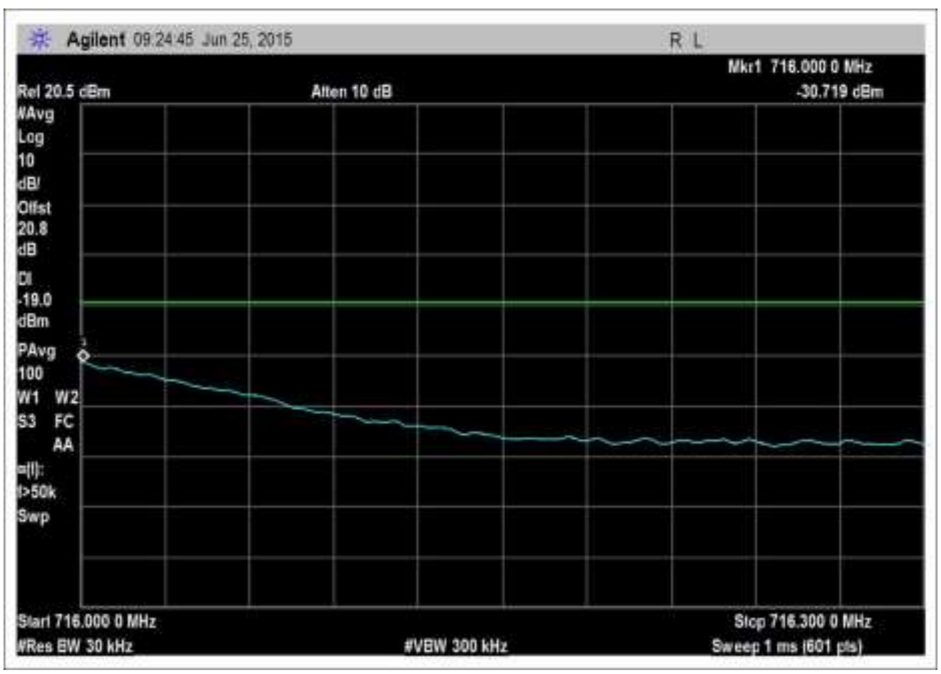


DL_2110-2155MHz_H_Max

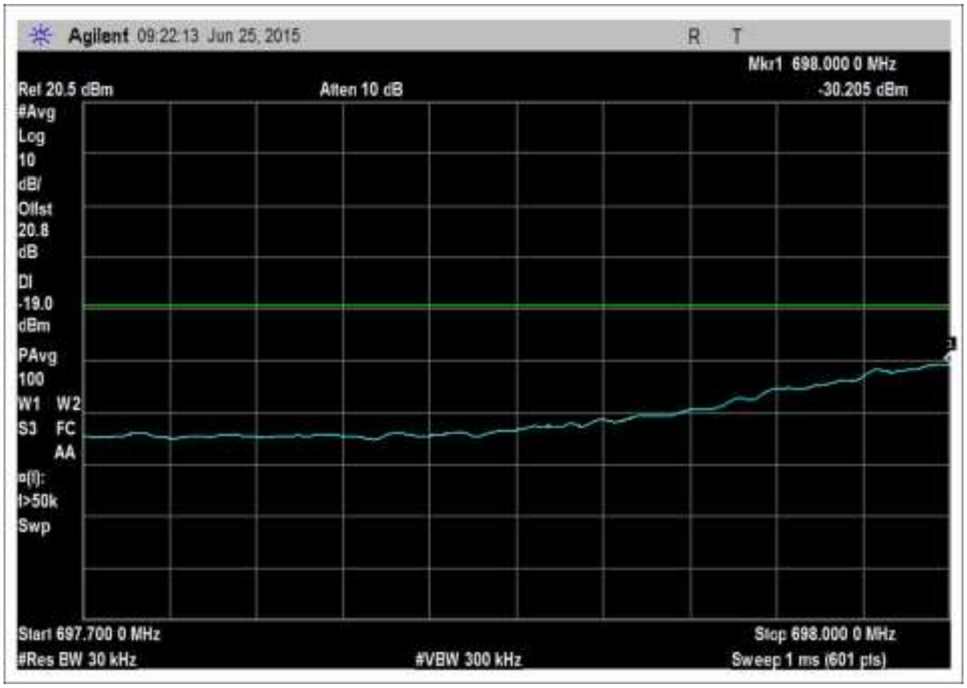
UL-LTE



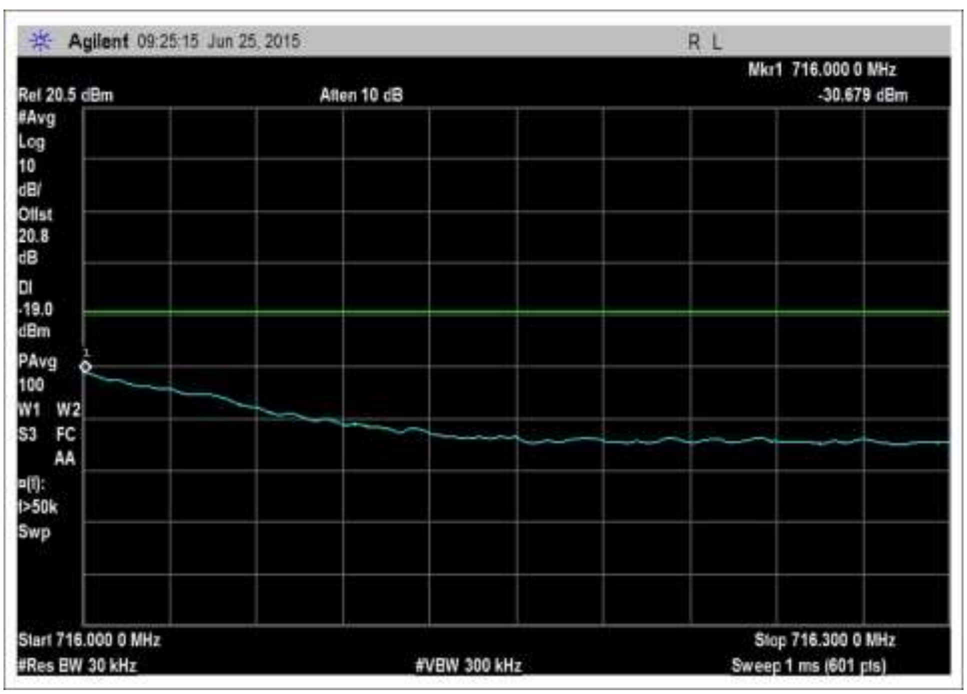
UL_698-716MHz_L_PreAGC



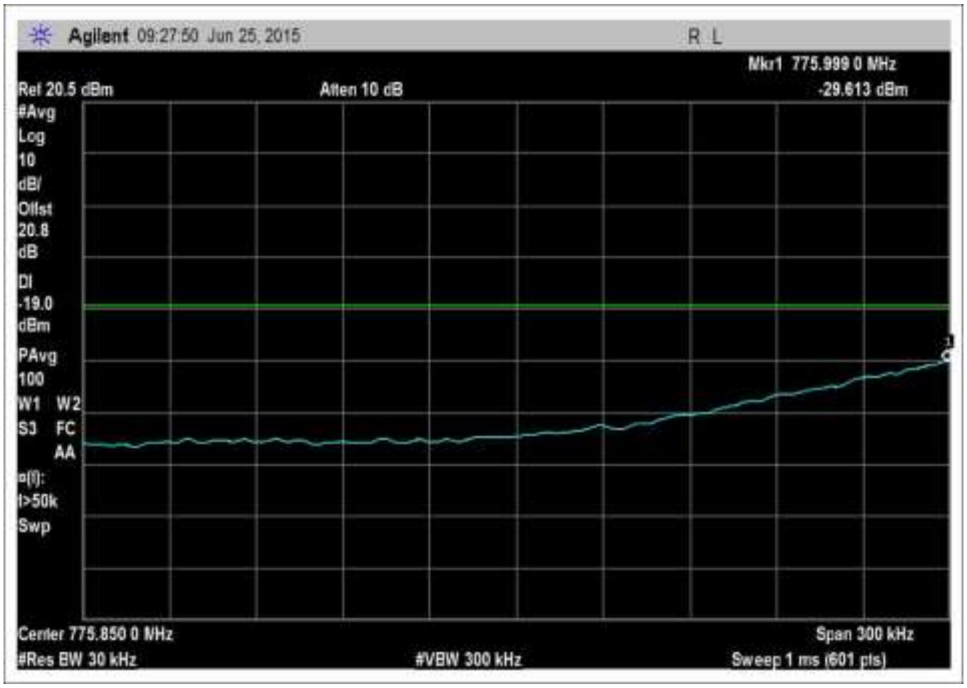
UL_698_H_PreAGC



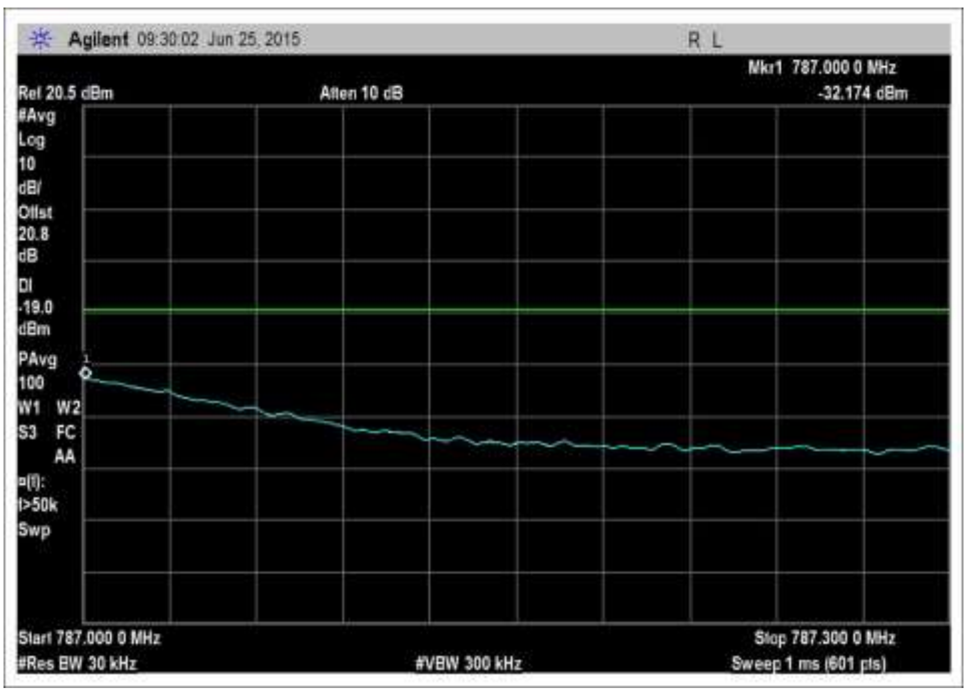
UL_698-716MHz_L_Max



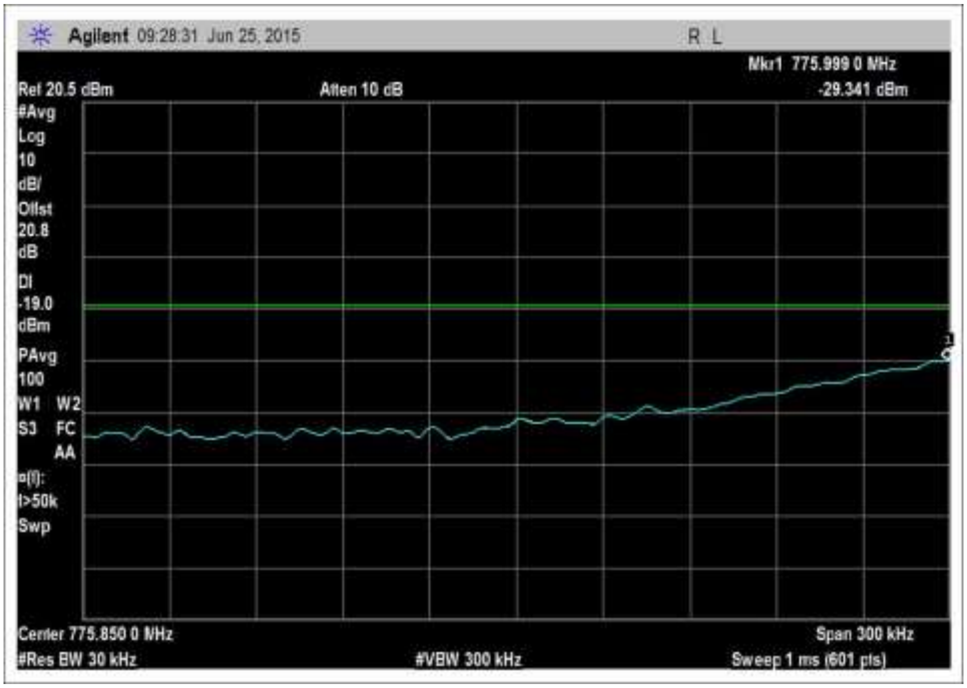
UL_698-716MHz_H_Max



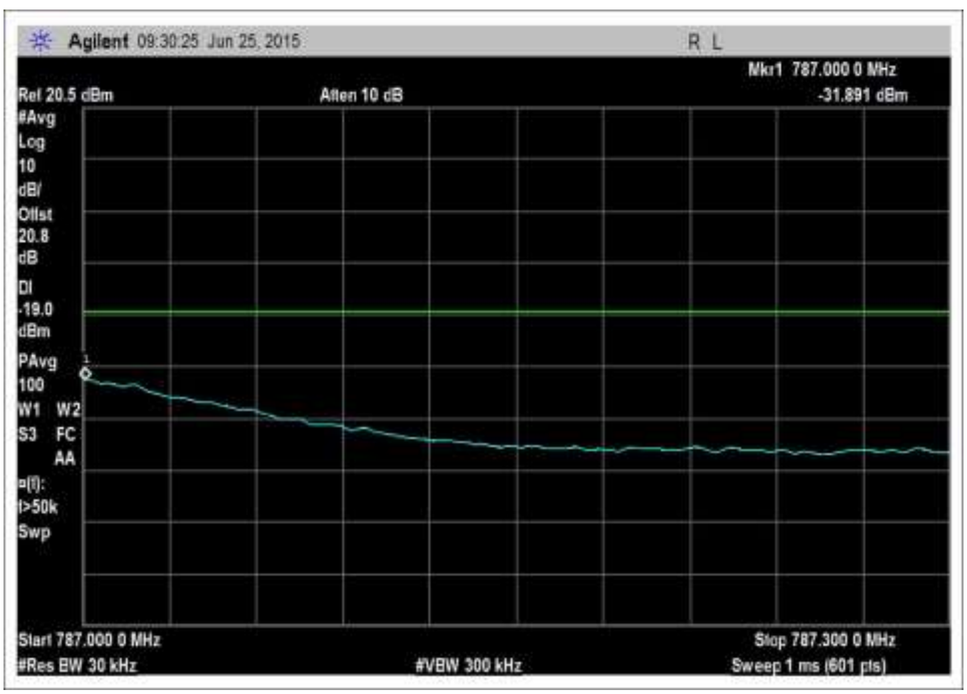
UL_776-787MHz_L_PreAGC



UL_776-787MHz_H_PreAGC



UL_776-787MHz_L_Max



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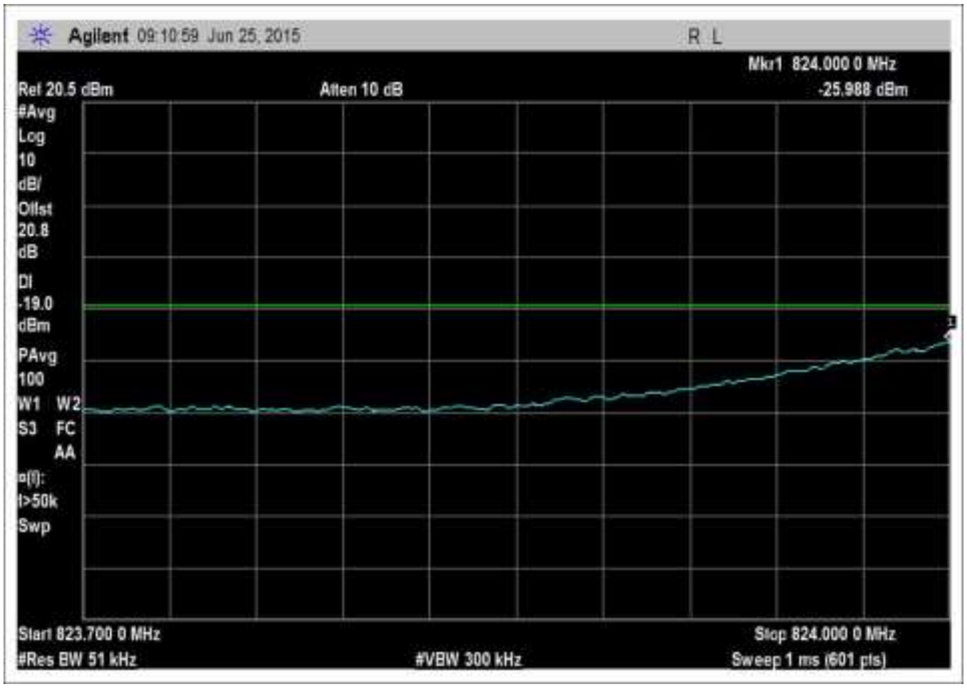
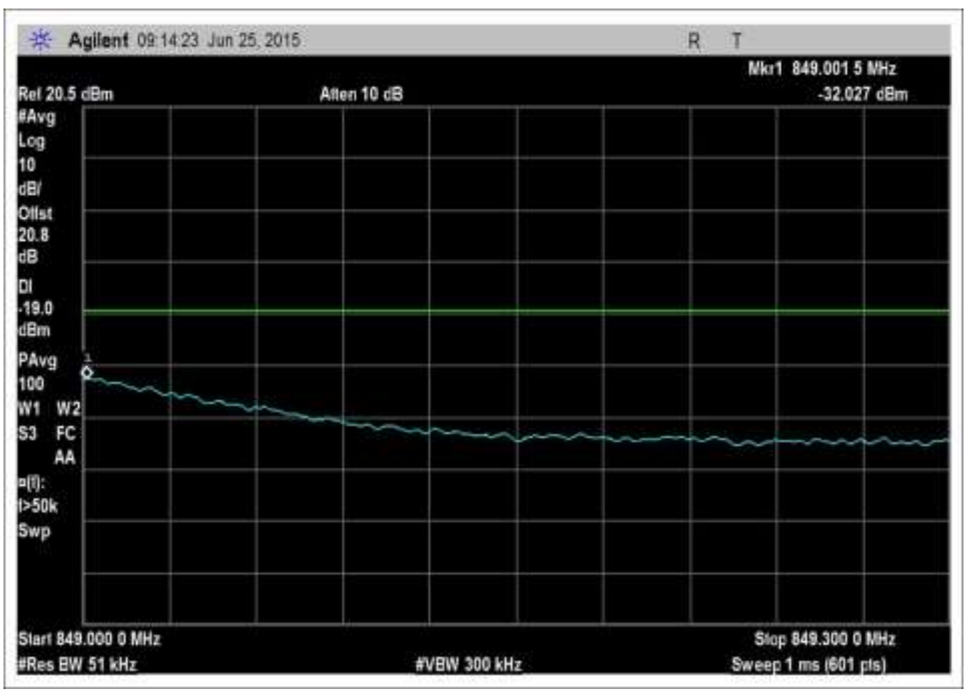
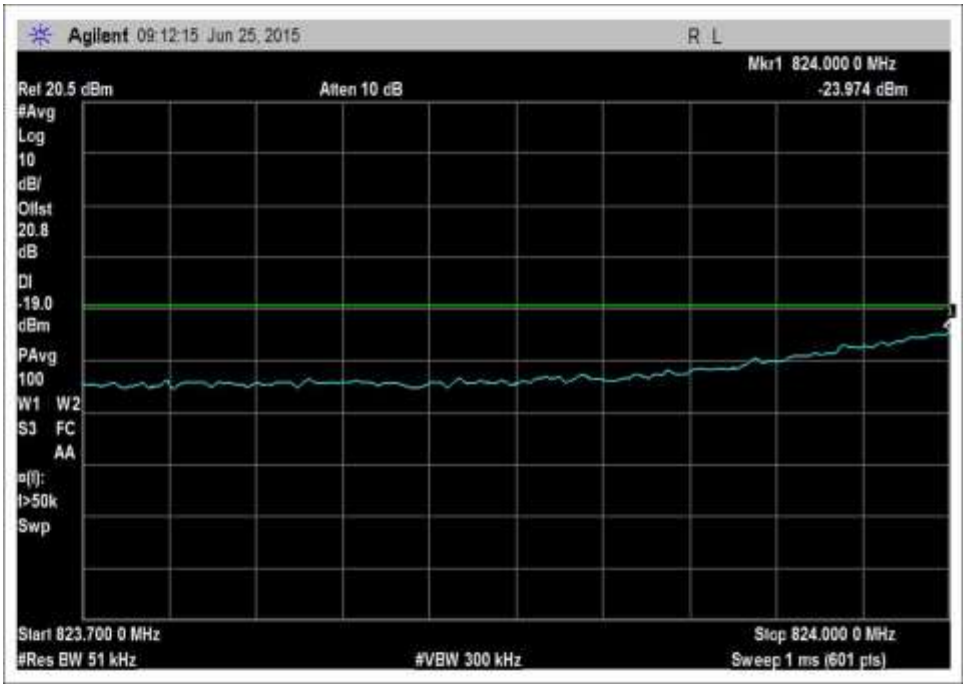


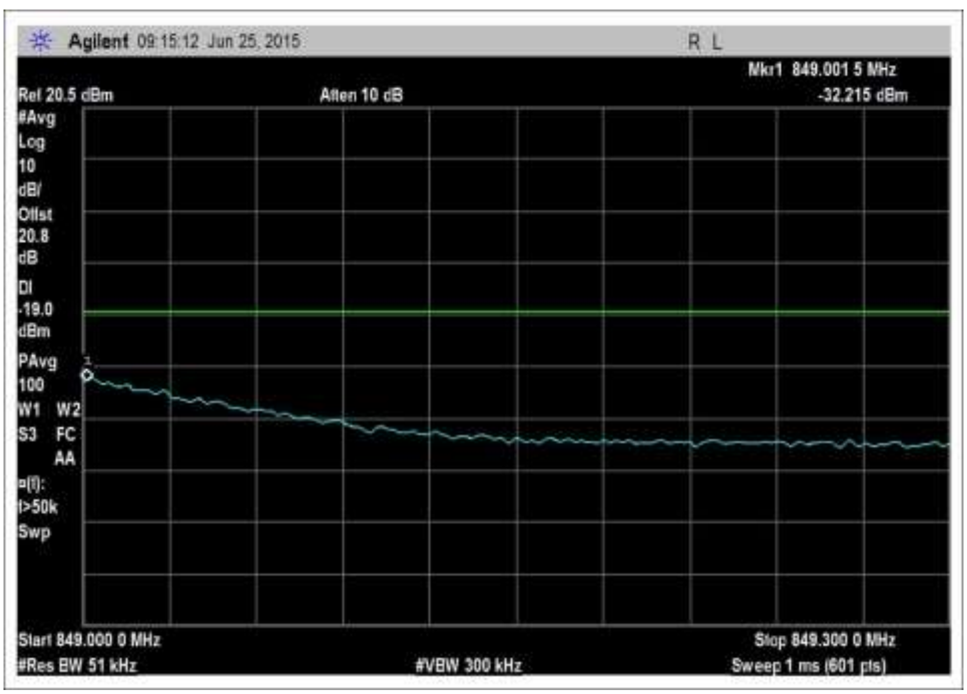
UL_824-849MHz_L_PreAGC



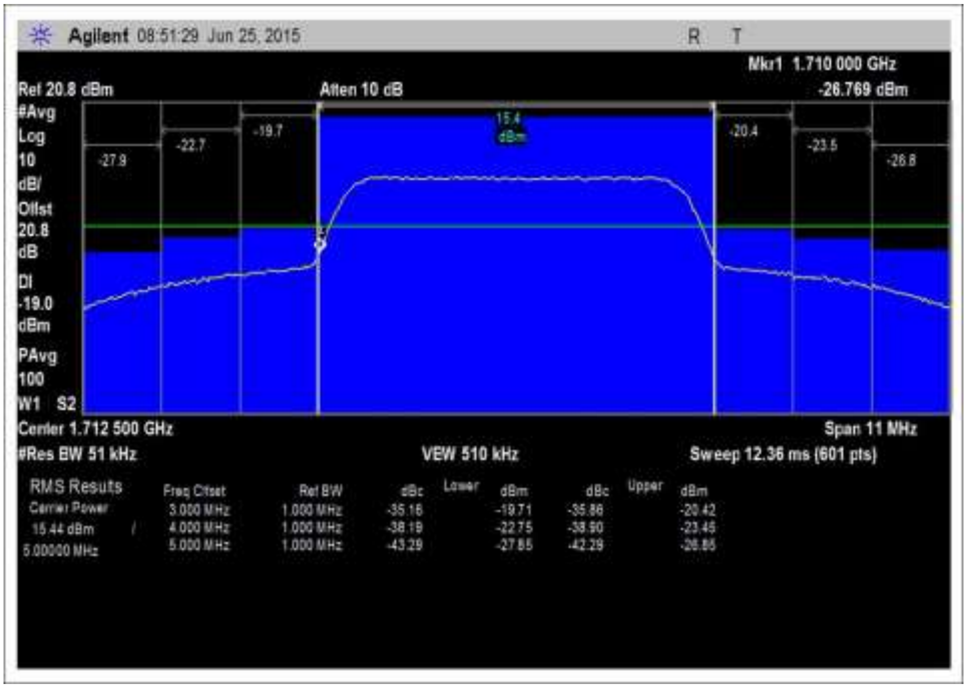
UL_824-849MHz_H_PreAGC



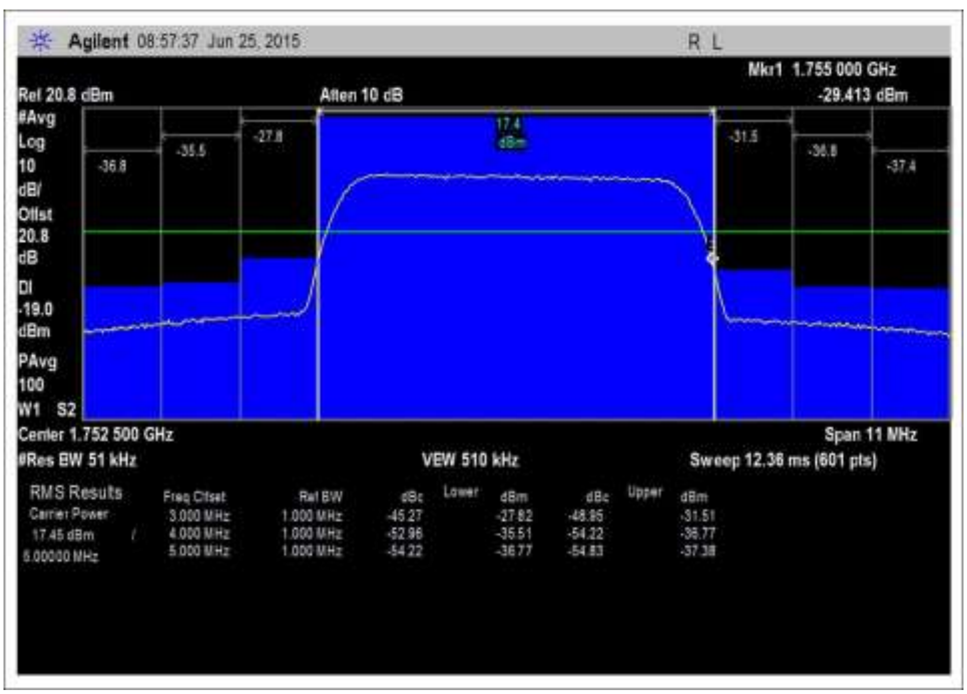
UL_824-849MHz_L_Max



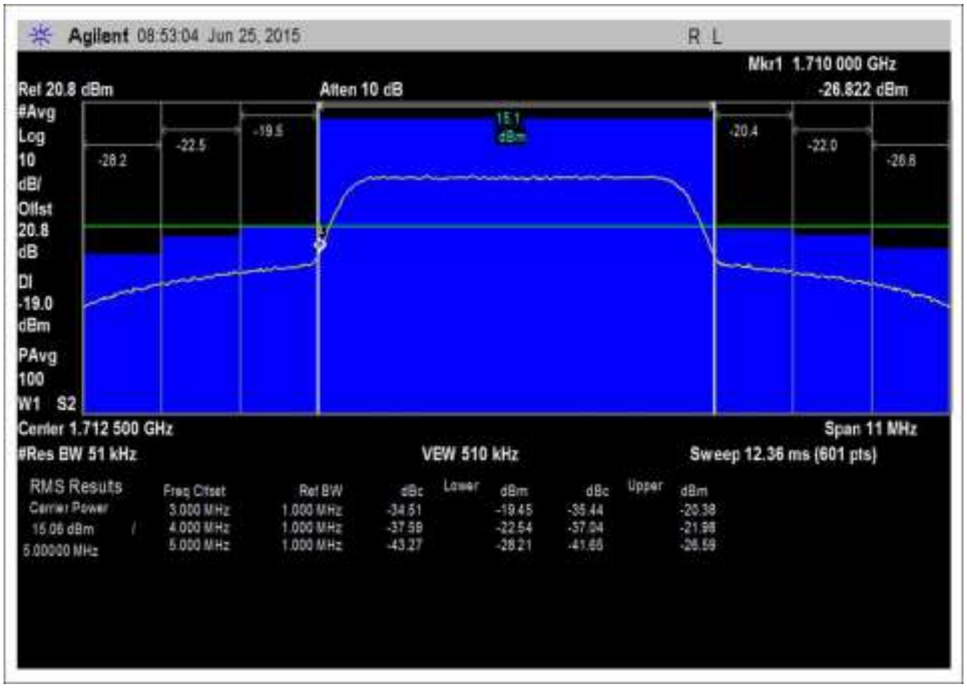
UL_824-849MHz_H_Max



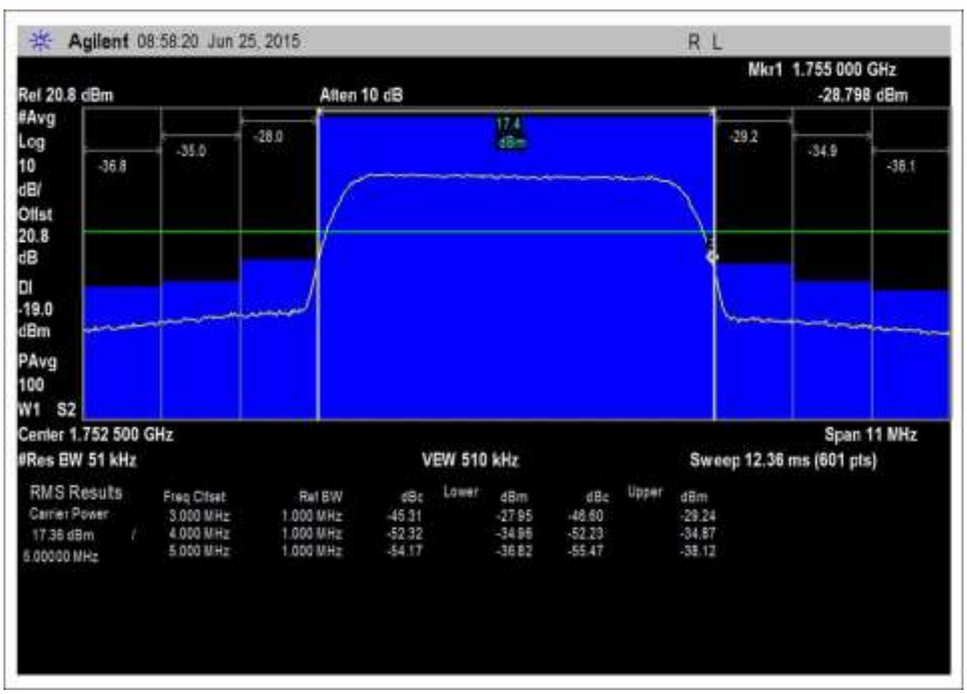
UL_1710-1755MHz_L_PreAGC



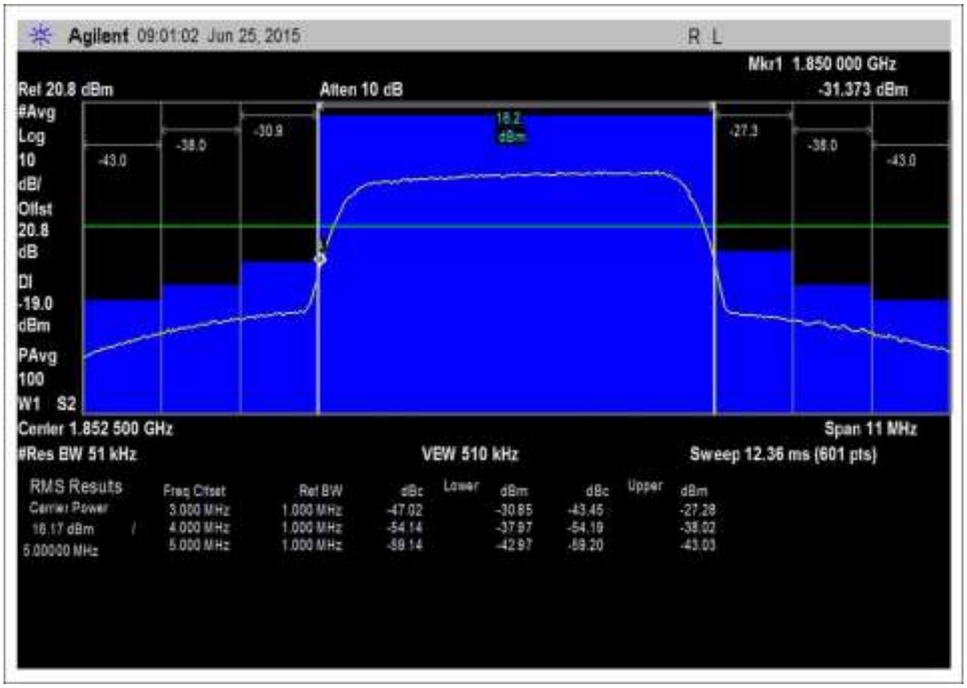
UL_1710-1755MHz_H_PreAGC



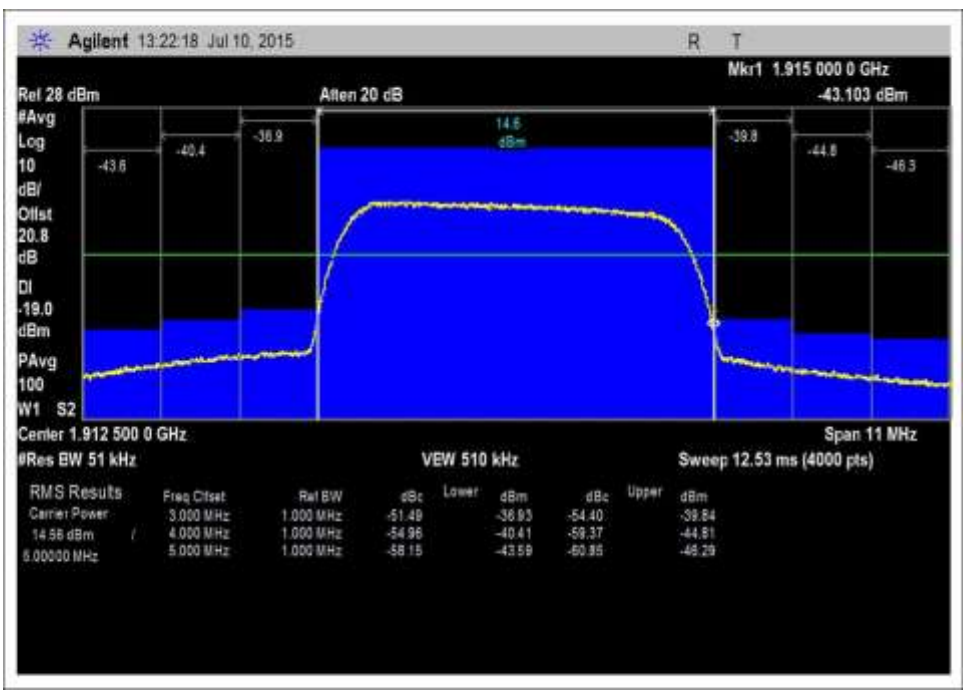
UL_1710-1755MHz_L_Max



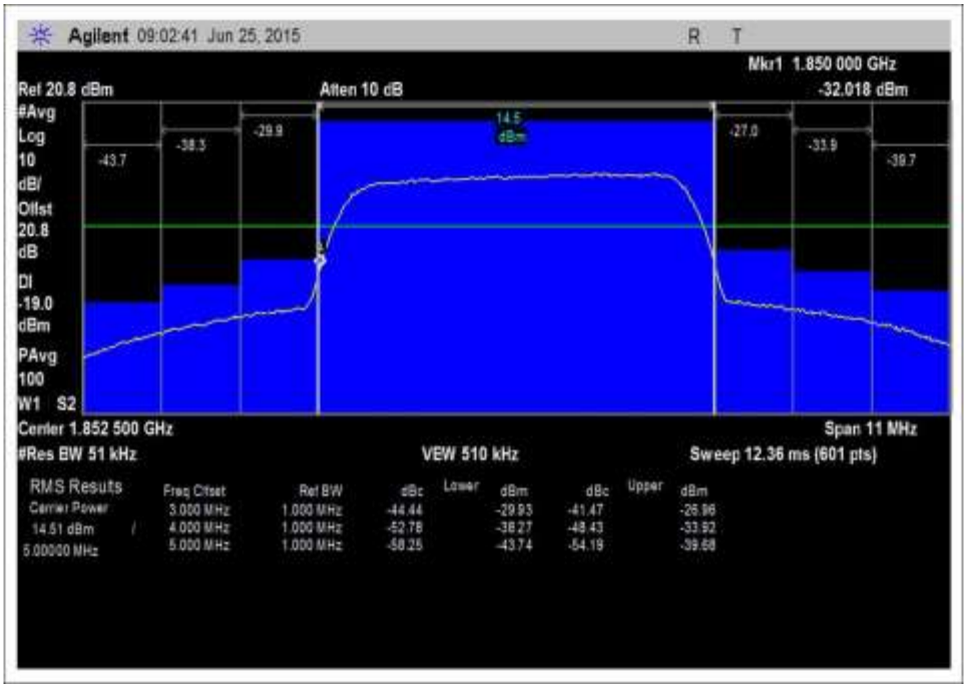
UL_1710-1755MHz_H_Max



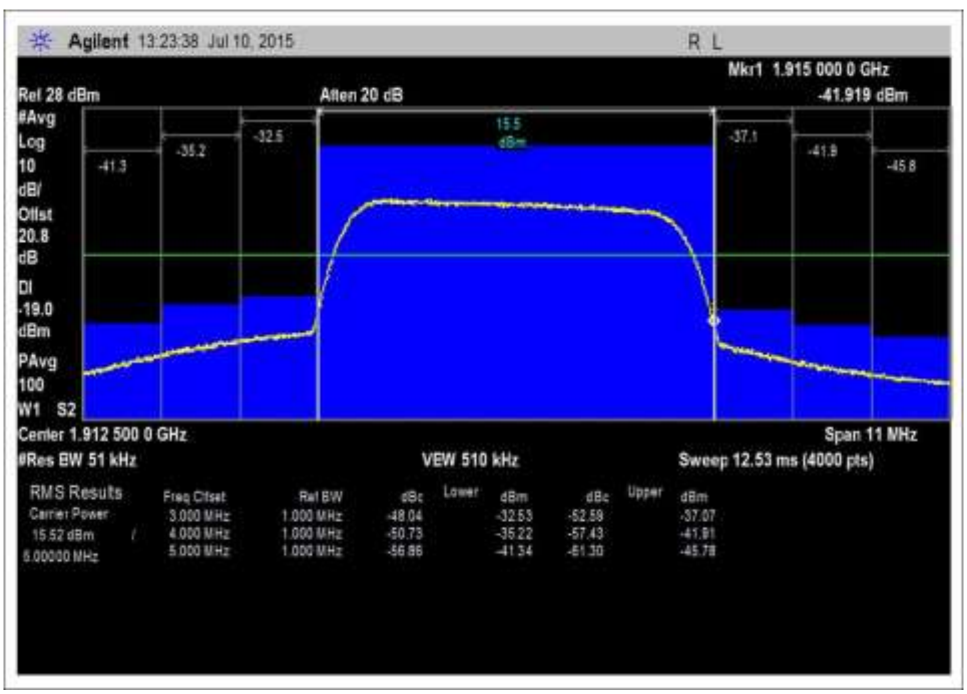
UL_1850-1915MHz_L_PreAGC



UL_1850-1915MHz_H_PreAGC

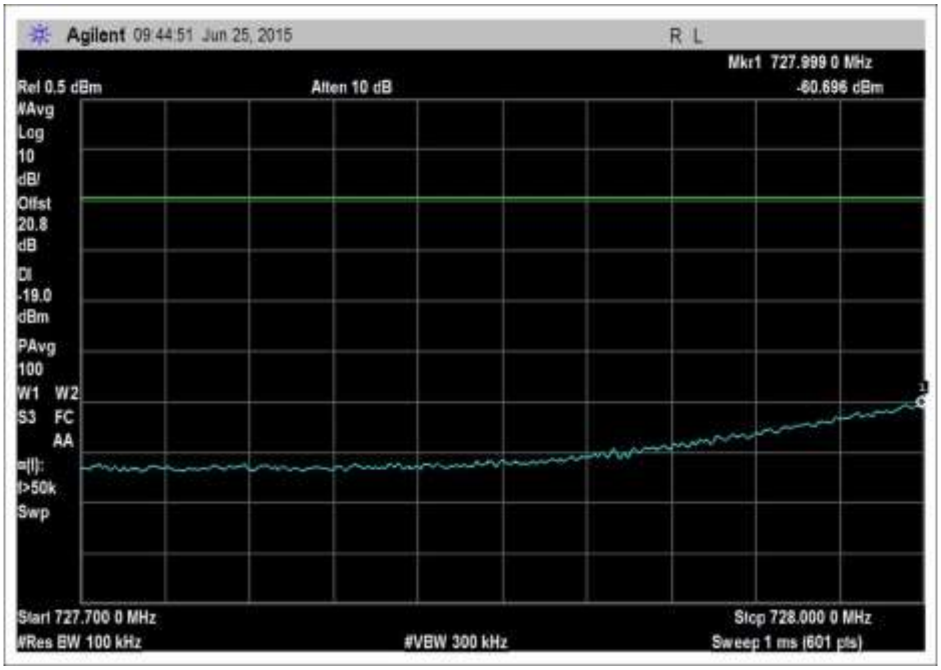


UL_1850-1915MHz_L_Max

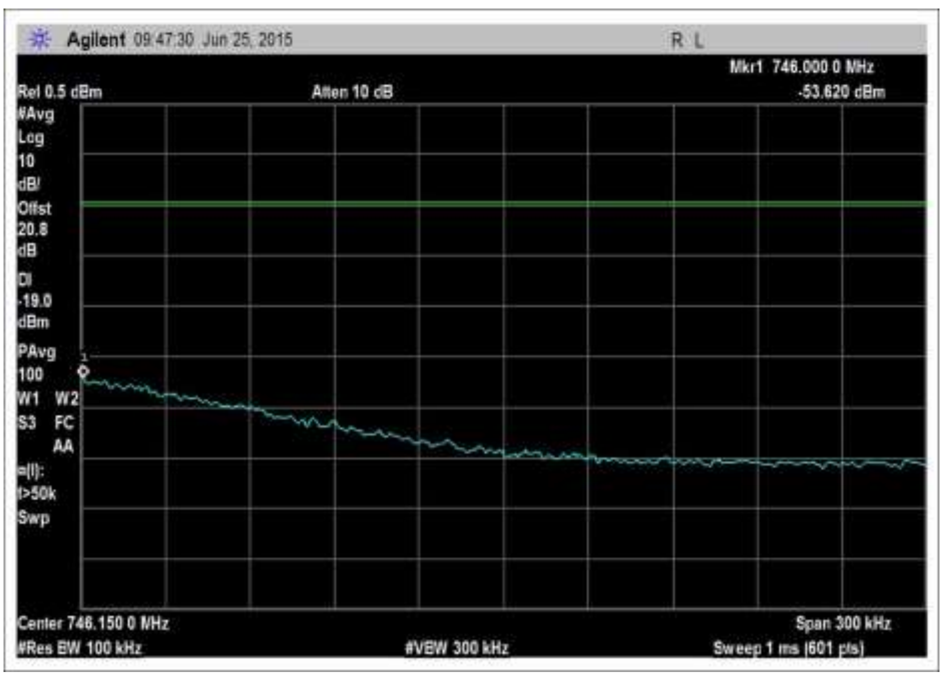


UL_1850-1915MHz_H_Max

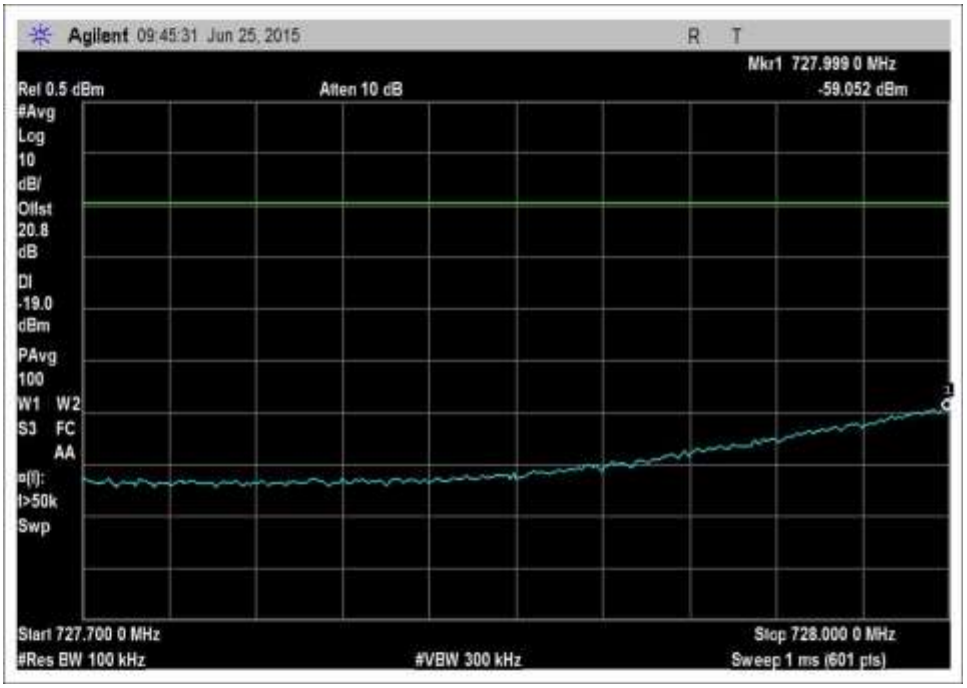
DL-LTE



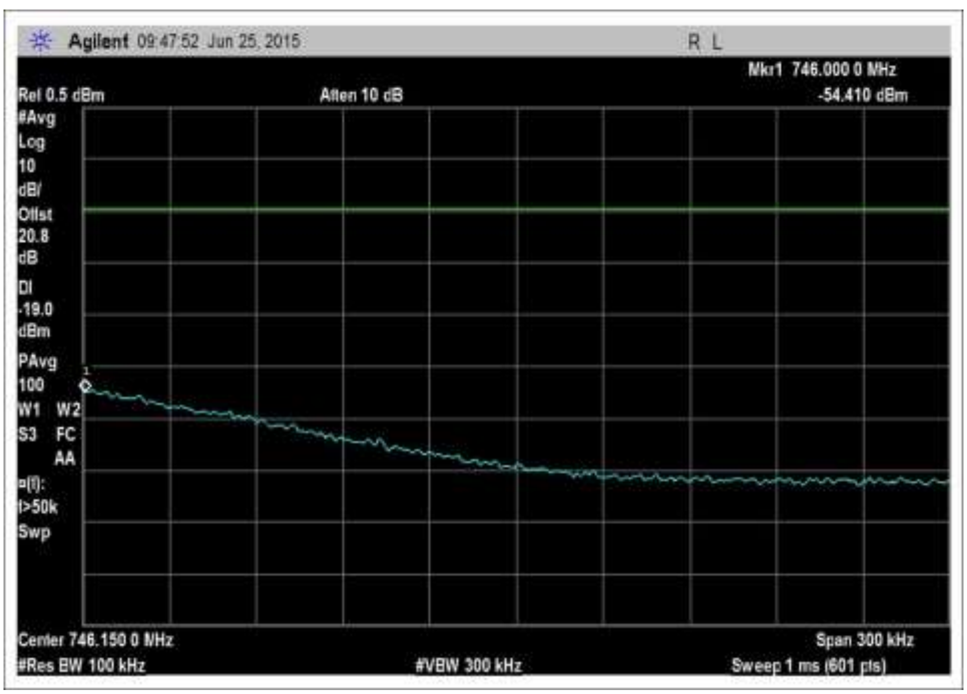
DL_728-746MHz_L_PreAGC



DL_728-746MHz_H_PreAGC



DL_728-746MHz_L_Max



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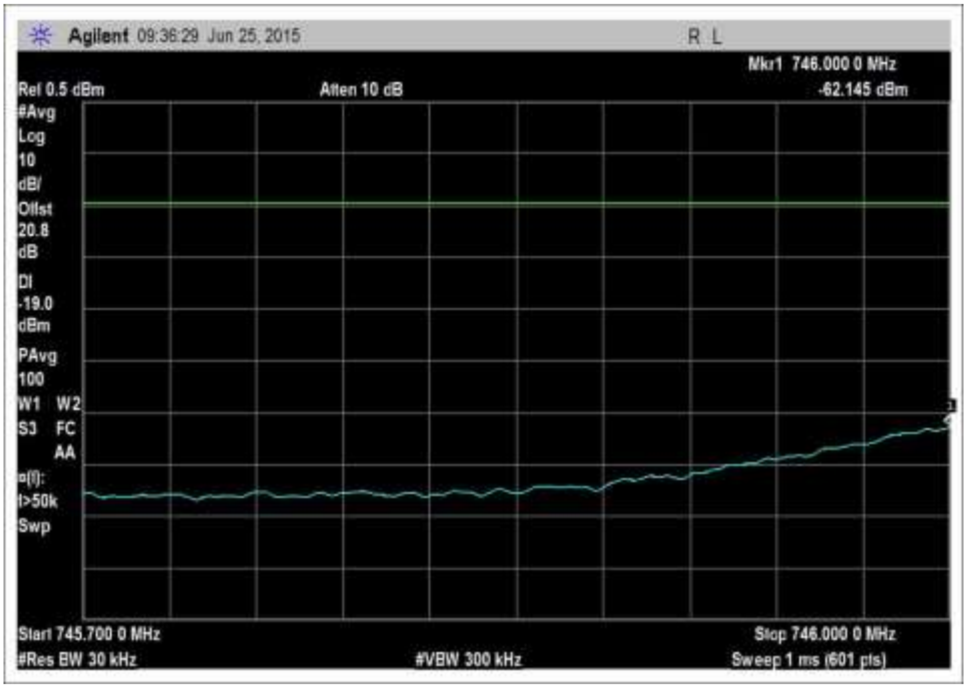

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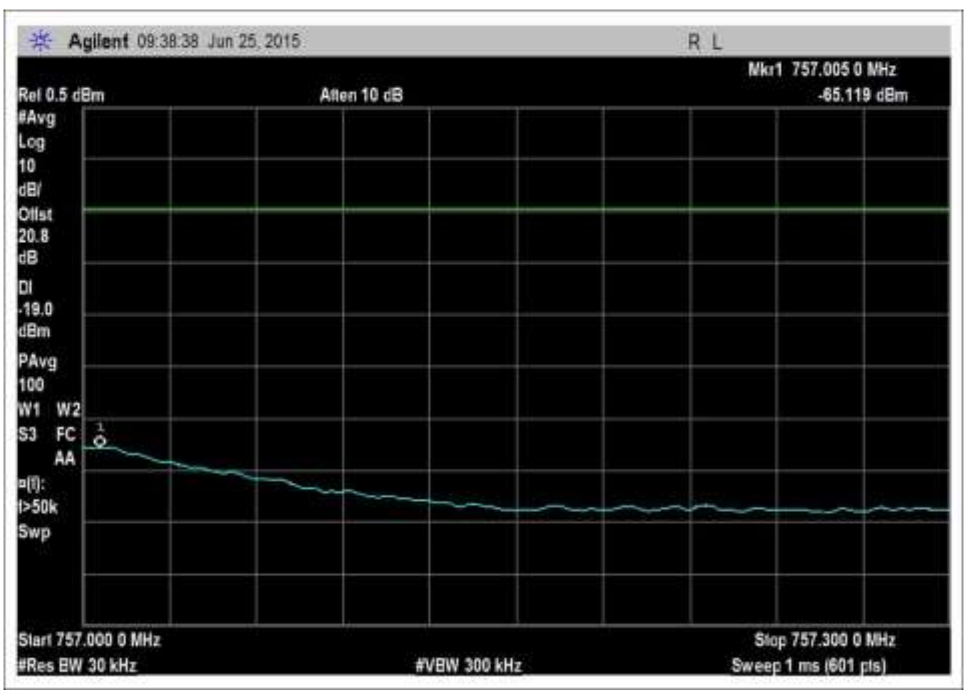
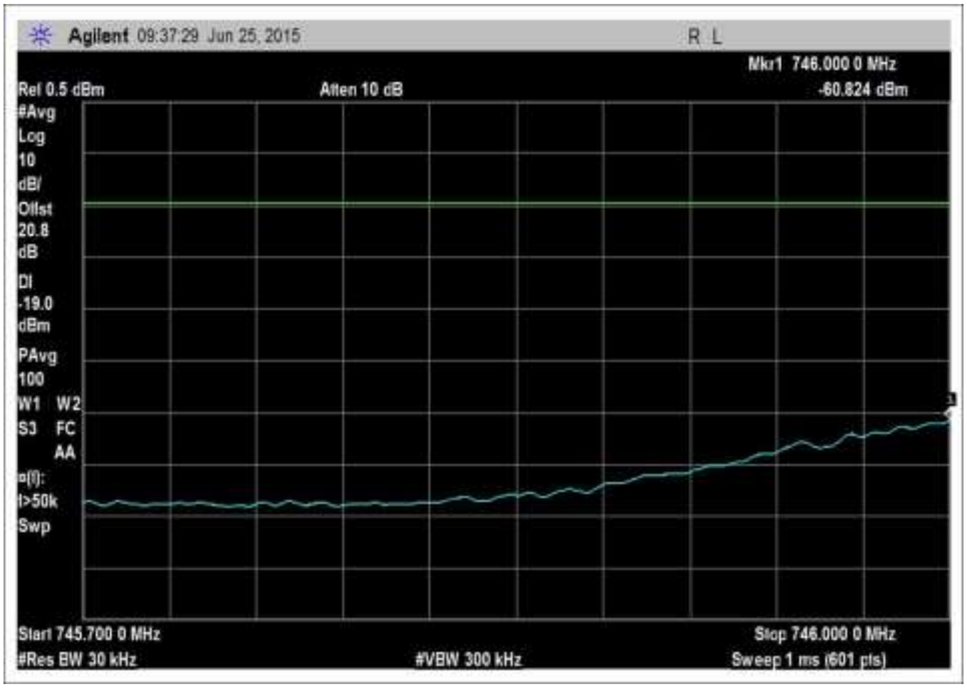


DL_746-757MHz_H_PreAGC



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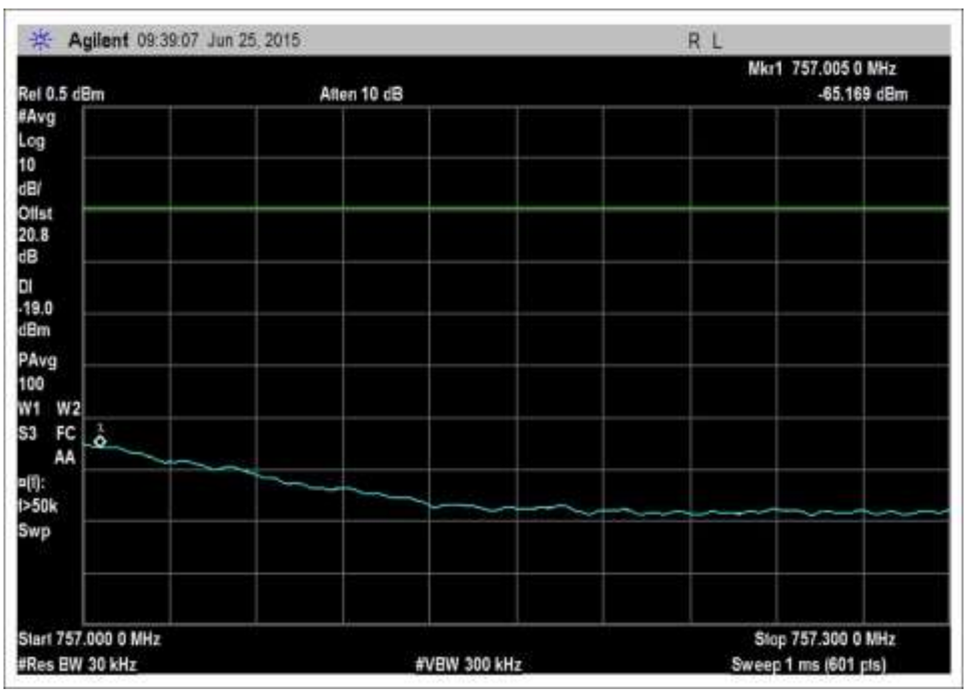
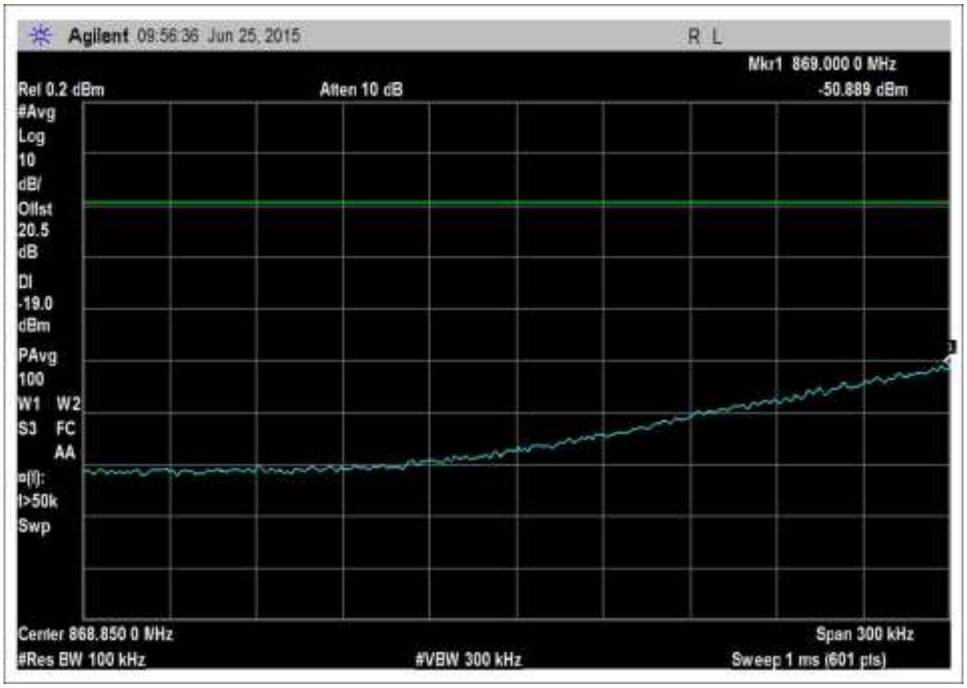
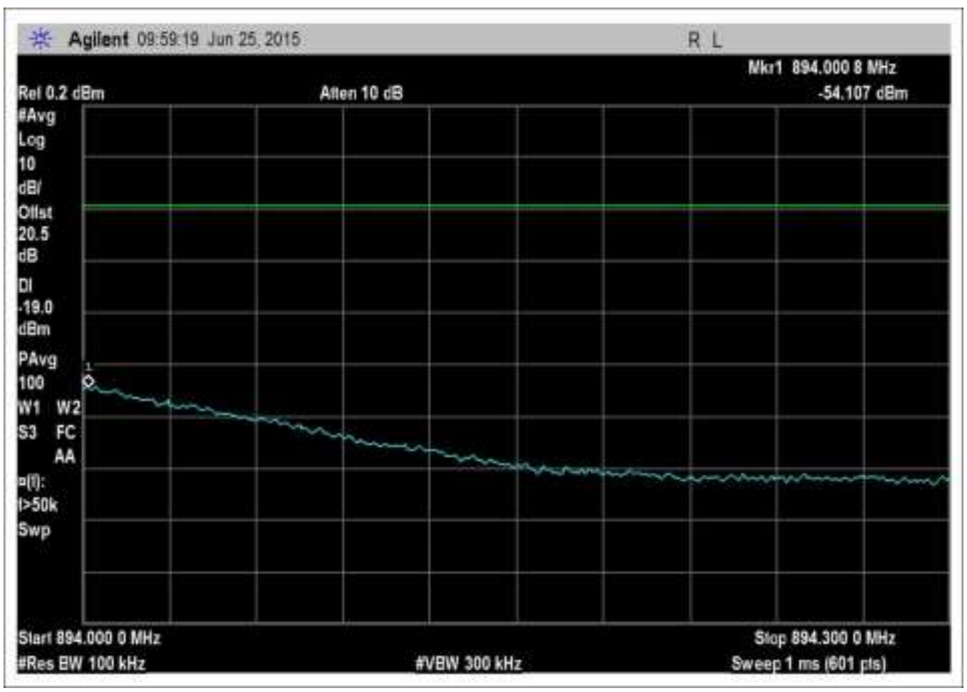


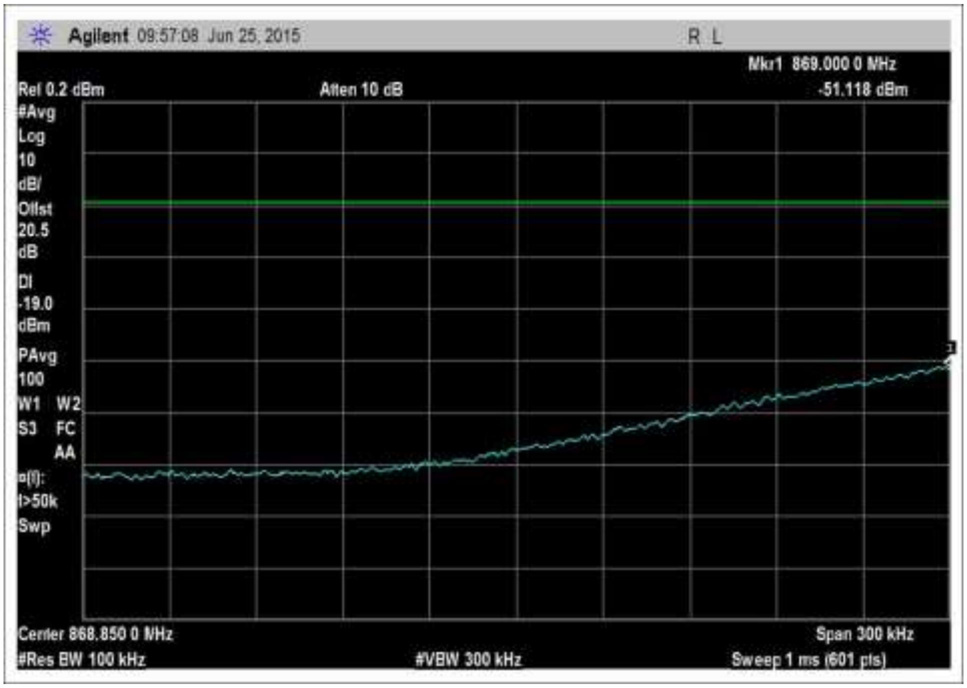
DL_746-757MHz_H_Max



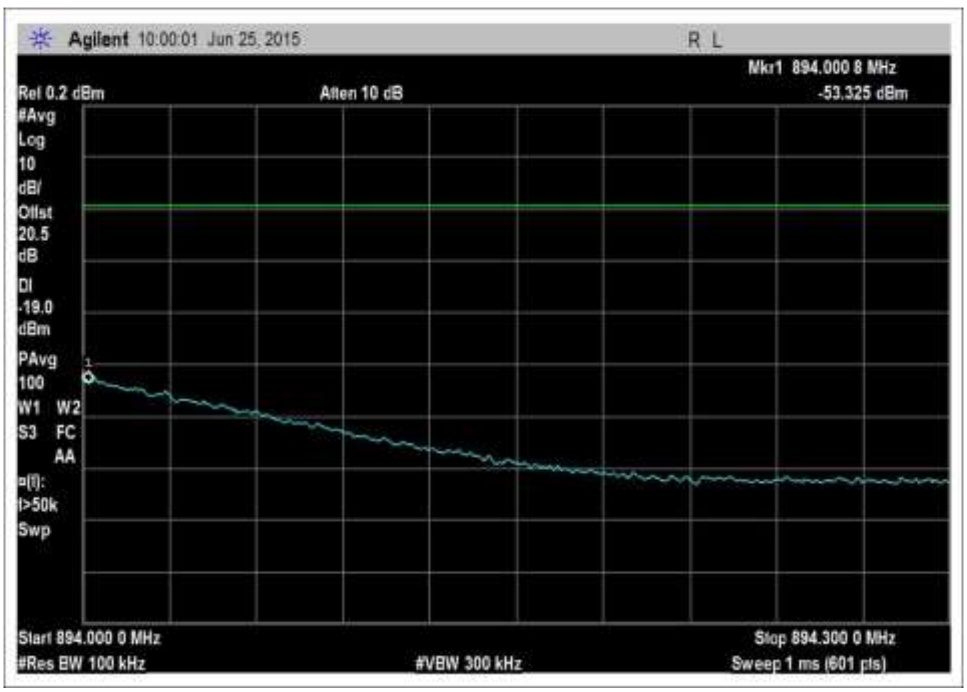
DL_869-894MHz_L_PreAGC



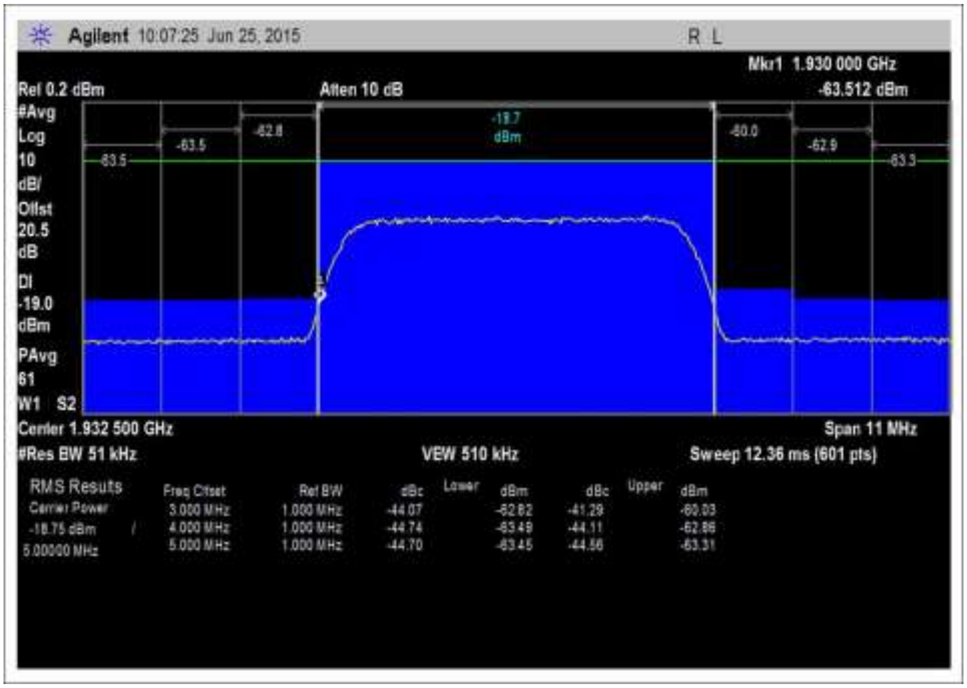
DL_869-894MHz_H_PreAGC



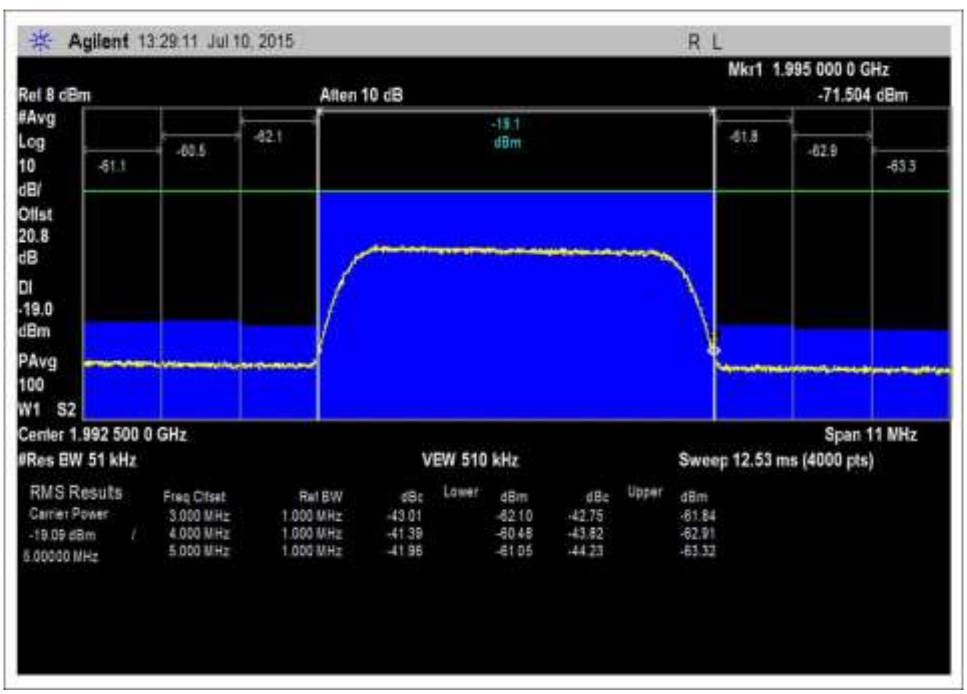
DL_869-894MHz_L_Max



DL_869-894MHz_H_Max



DL_1930-1995MHz_L_PreAGC



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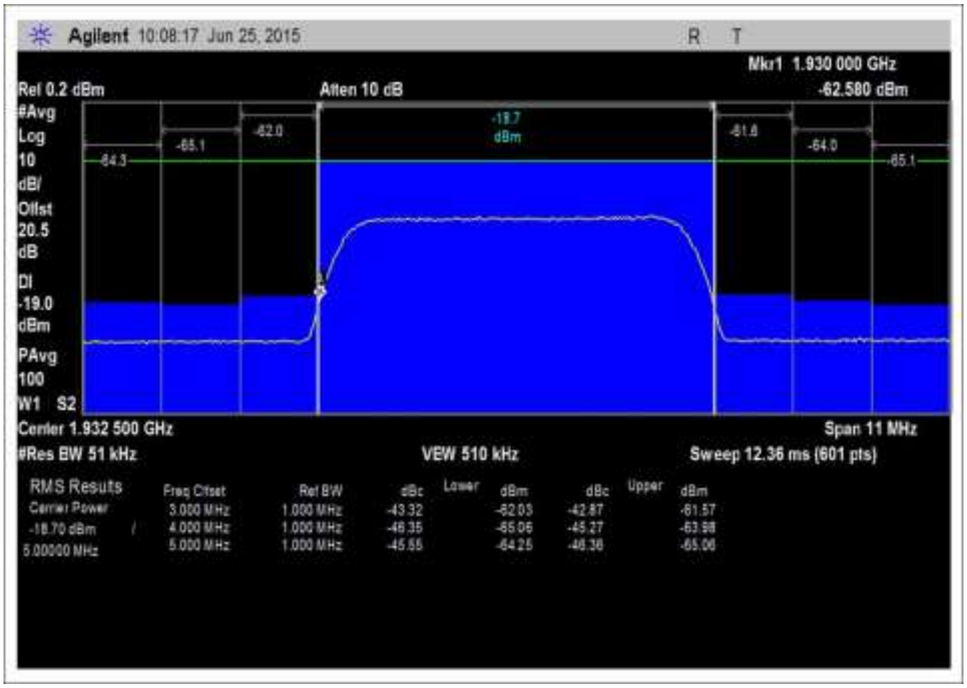

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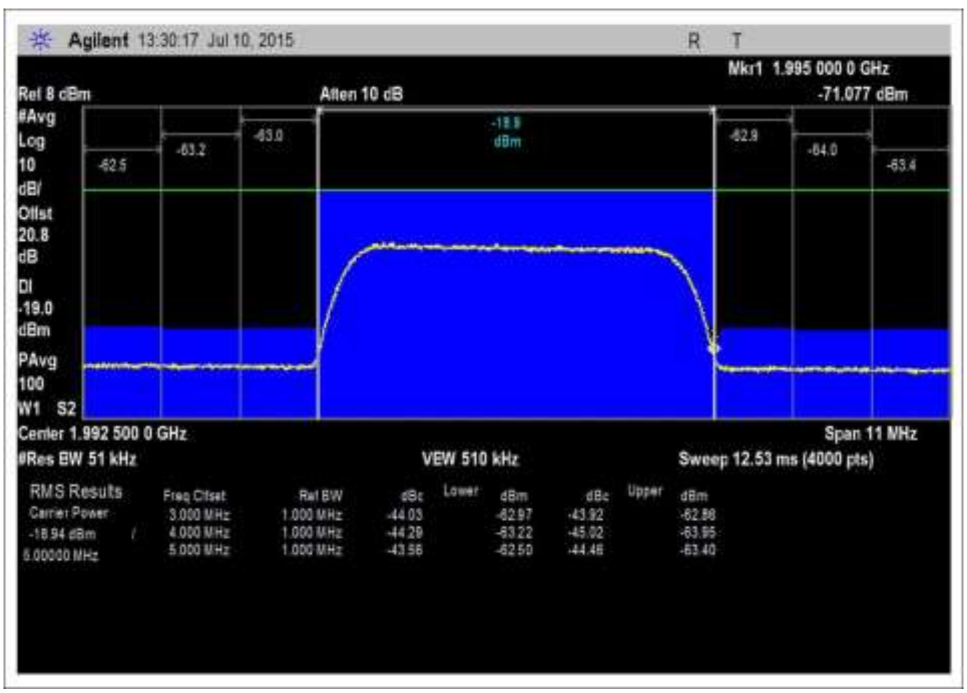
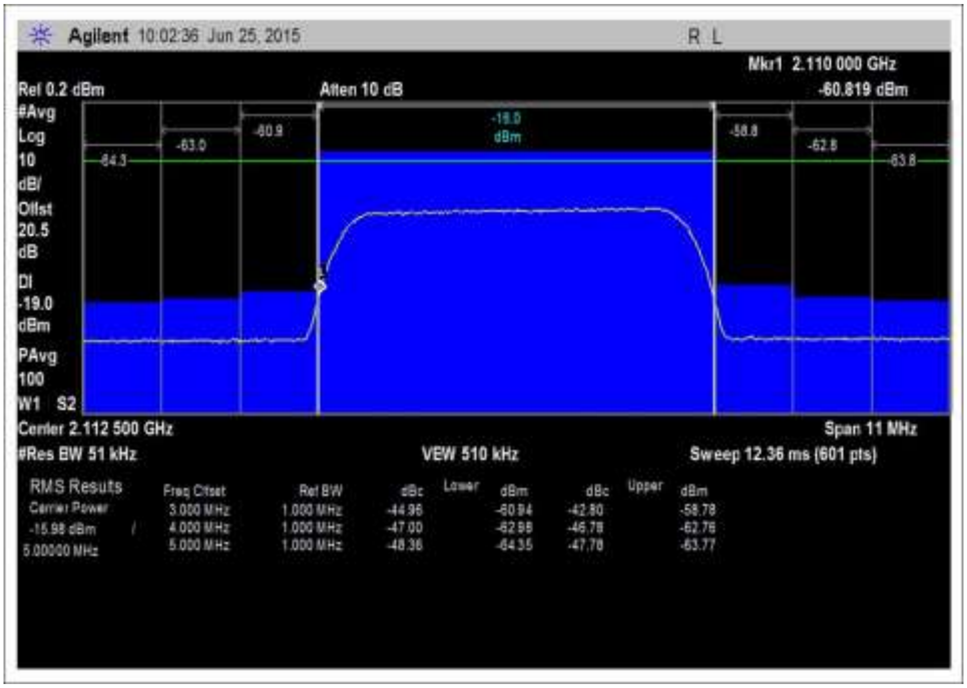
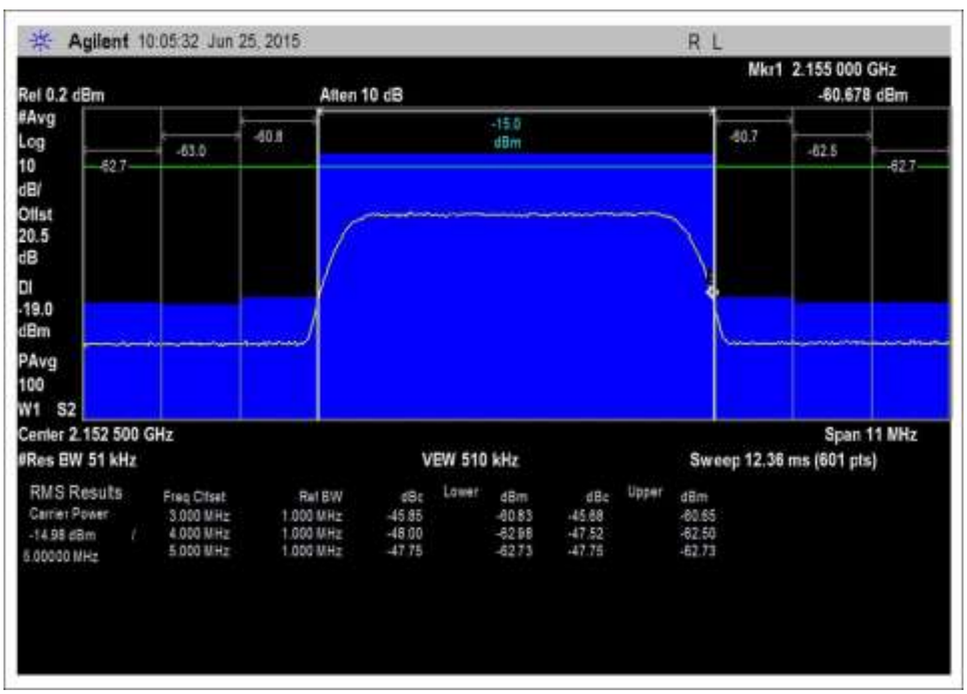


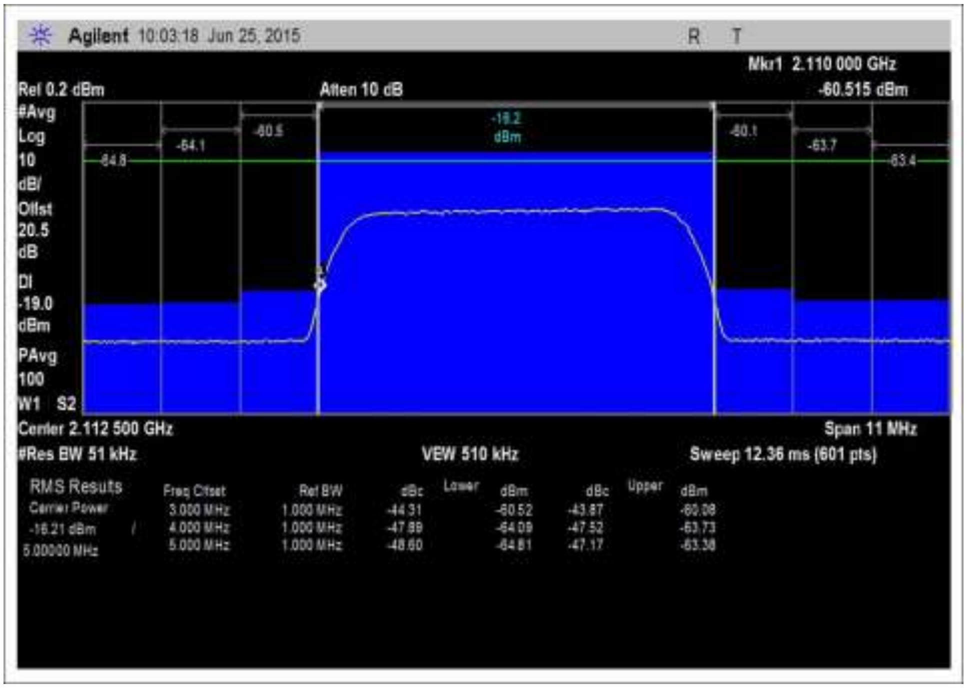
DL_1930-1995MHz_H_Max



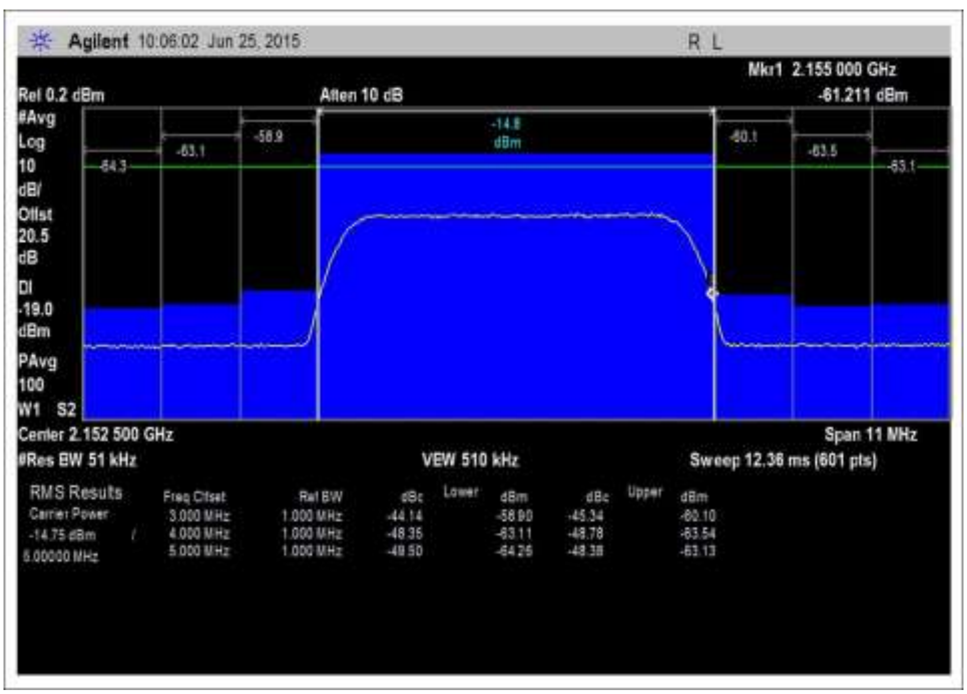
DL_2110-2155MHz_L_PreAGC



DL_2110-2155MHz_H_PreAGC



DL_2110-2155MHz_L_Max



DL_2110-2155MHz_H_Max

Clause 7.7 Noise limit

Test Equipment

Asset #	Description	Model	Manufacturer	Cal Date	Cal Due
ANP06709	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
ANP06710	Cable	32026-29094K-29094K-72TC	AstroLab	09/18/2014	09/18/2016
C00082	RF Coupler	722-10-1.500V	MECA Electronics, Inc.	08/21/2013	08/21/2015
AN02869	Spectrum Analyzer	E4440A	Agilent	07/10/2014	07/10/2015

Test Conditions / Setup

Test Location:	CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170		
Customer:	Cellphone-Mate, Inc.		
Specification:	**7.7 Noise Limit (Maximum Transmitter Noise Power Level / Variable UL Noise Timing)**		
Work Order #:	**97222**	Date:	6/25/2015
Test Type:	**Conducted Emissions**	Time:	13:53:01
Tested By:	Daniel Bertran	Sequence#:	1
Software:	EMITest 5.02.00		

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Configuration 1

The equipment under test (EUT) is a Mobile Wideband Consumer Booster.

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

7.7.1 Maximum Transmitter Noise Power Level

Per figure 3, input port was terminated with 50 Ohm Weinschel load (MN:1424-4 and SN:21874).

7.7.2 Variable UL Noise Timing

Per figure 4, server port was terminated with 50 Ohm Weinschel load (MN:1424-4 and SN:21874).

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

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

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

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

Test environment conditions: Temperature: 20.8°C, Relative Humidity: 42%, Atmospheric Pressure: 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 v03 Dated June 5, 2015.

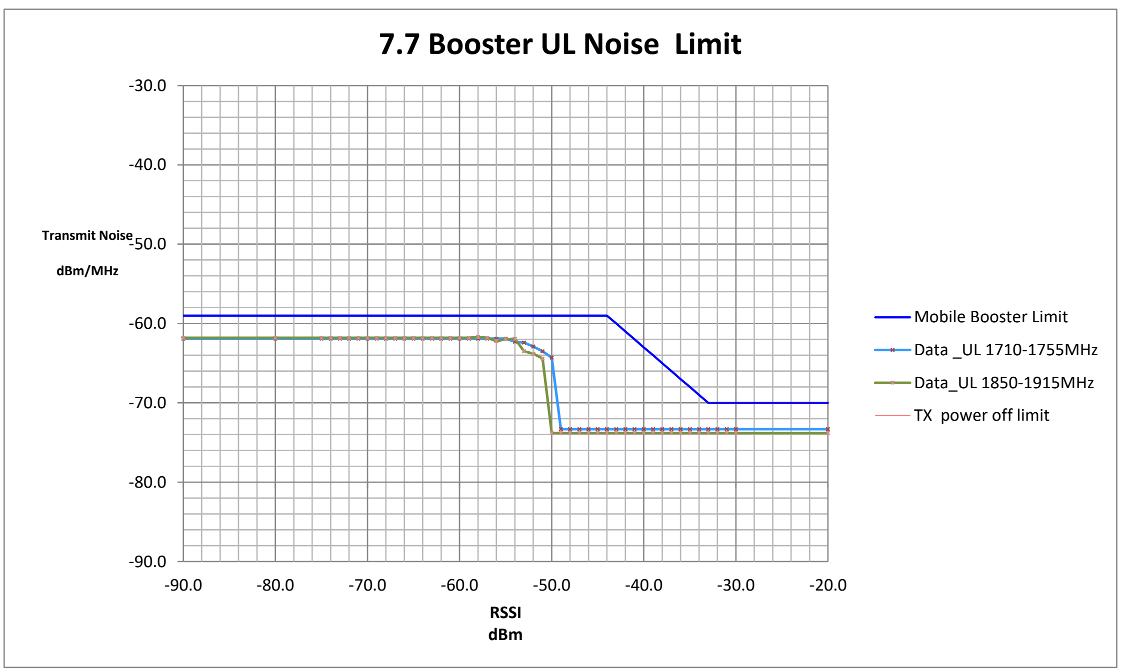
Firmware: V1.0

Summary of Results

7.7.1 Maximum transmitter noise power level

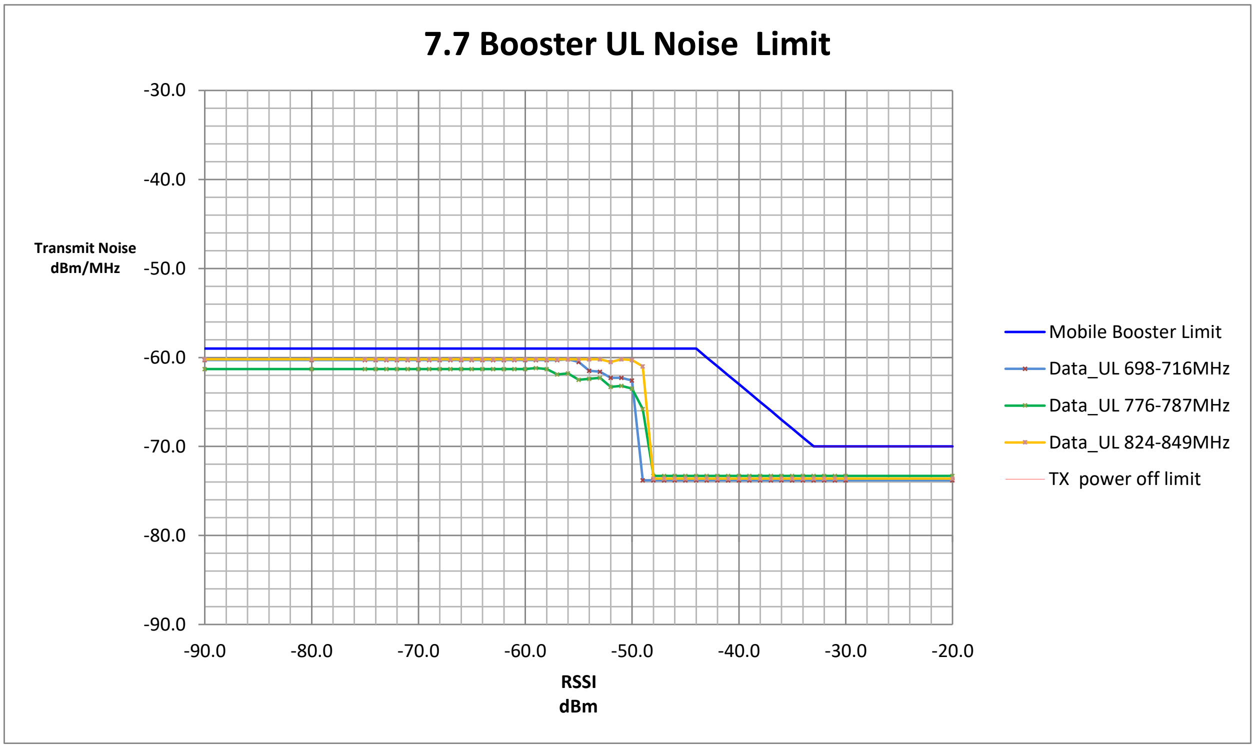
- 7.7.1 a-g: Maximum transmitter noise with 50-ohm shielded load.
- 7.7.1 h-n: Maximum transmitter noise when varying the DL signal generator output level with a 4.1MHz AWGN signal.

Maximum Noise Power			
Freq	Measured	Limit	Margin
MHz	dBm./MHz	dBm/MHz	
UL1710-1755	-62.5	-59	-3.5
UL1850-1915	-61.9	-59	-2.9
UL824-894	-59.3	-59	-0.3
UL 698-716	-59.8	-59	-0.8
UL776-787	-60.9	-59	-1.9
DL2110-2155	-64.6	-59	-5.6
DL1930-1995	-65.7	-59	-6.7
DL869-894	-62.4	-59	-3.4
DL:728-746	-61.8	-59	-2.8
DL 746-757	-62.0	-59	-3.0



1710.0	1755.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-69.0	-61.9		-59.0		-2.9
-59.0	-61.9		-59.0		-2.9
-37.0	-73.3	-66.0			-7.3
-36.0	-73.3	-67.0			-6.3
-35.0	-73.3	-68.0			-5.3
-34.0	-73.3	-69.0			-4.3
-20.0	-73.3			-70	-3.3

1850.0	1915.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-69.0	-61.8		-59.0		-2.8
-58.0	-61.7		-59.0		-2.7
-37.0	-73.8	-66.0			-7.8
-36.0	-73.8	-67.0			-6.8
-35.0	-73.8	-68.0			-5.8
-34.0	-73.8	-69.0			-4.8
-20.0	-73.8			-70	-3.8



698.0	716.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-73.0	-60.3		-59.0		-1.3
-64.0	-60.3		-59.0		-1.3
-37.0	-73.8	-66.0			-7.8
-36.0	-73.8	-67.0			-6.8
-35.0	-73.8	-68.0			-5.8
-34.0	-73.8	-69.0			-4.8
-20.0	-73.8			-70	-3.8

776.0	787.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-69.0	-61.3		-59.0		-2.3
-62.0	-61.3		-59.0		-2.3
-37.0	-73.3	-66.0			-7.3
-36.0	-73.3	-67.0			-6.3
-35.0	-73.3	-68.0			-5.3
-34.0	-73.3	-69.0			-4.3
-20.0	-73.3			-70	-3.3

824.0	849.0	MHz			
		Limit			Margin
RSSI (dBm)	Measured Noise (dBm/MHz)	RSSI Dependent	Mobile Booster Limit	TX off	
-72.0	-60.2		-59.0		-1.2
-62.0	-60.2		-59.0		-1.2
-37.0	-73.6	-66.0			-7.6
-36.0	-73.6	-67.0			-6.6
-35.0	-73.6	-68.0			-5.6
-34.0	-73.6	-69.0			-4.6
-20.0	-73.6			-70	-3.6

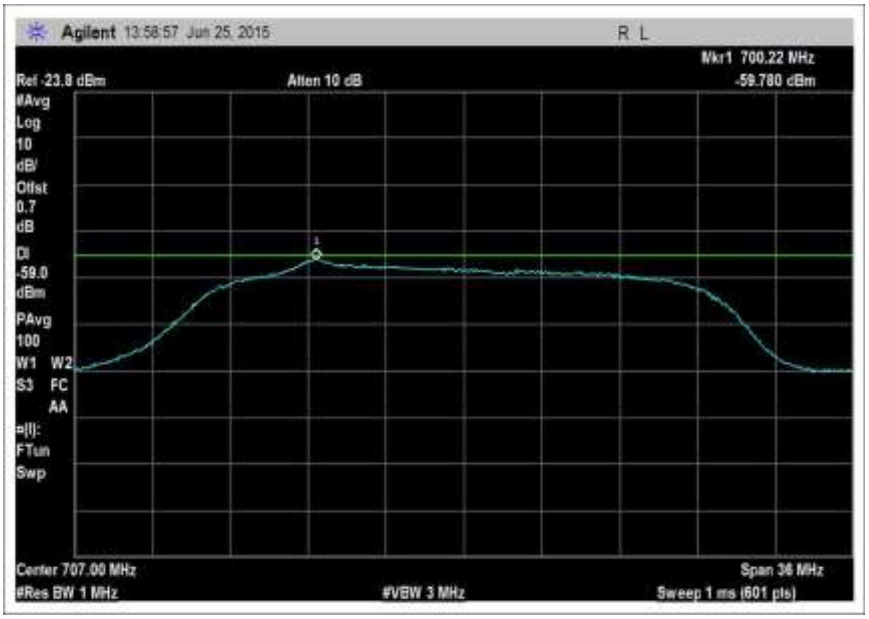
7.7.2 Variable uplink noise timing

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

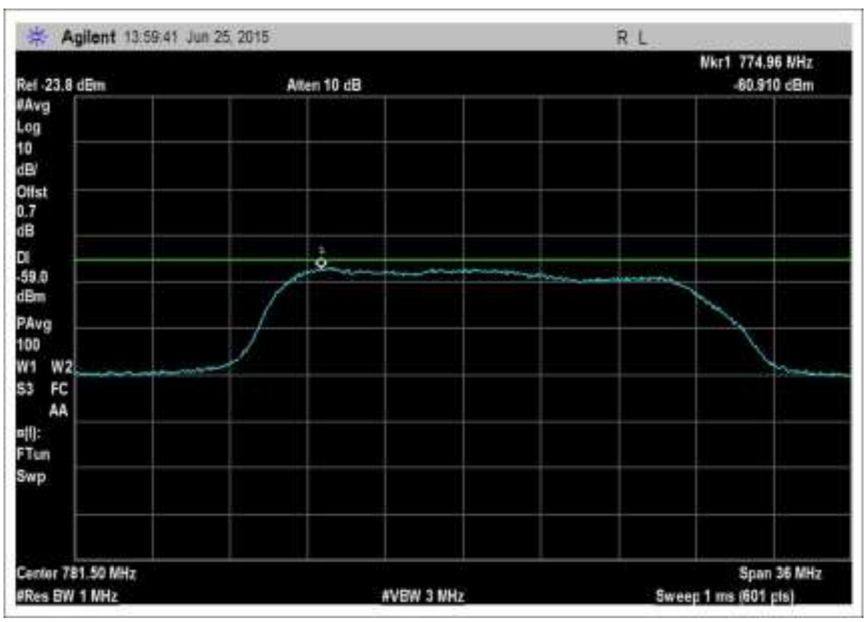
Downlink Noise timing		
Freq	Measured	Limit
MHz	Sec	sec
DL2110-2155	0.24	1
DL1930-1995	0.17	1
DL869-894	0.22	1
DL:728-746	0.17	1
DL 746-757	0.33	1

Test Data

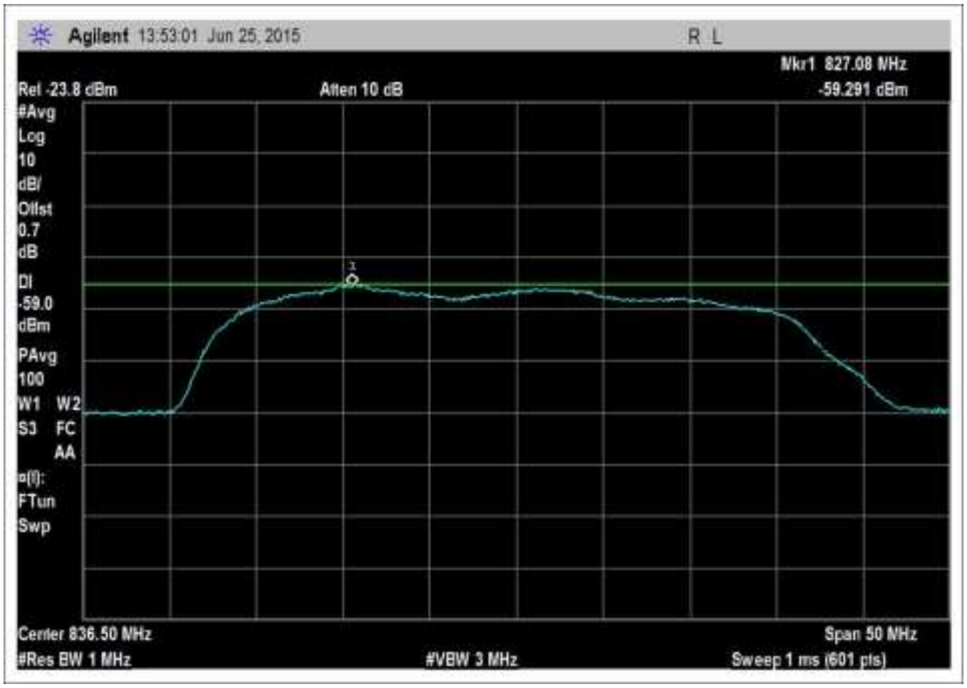
Section 7.7.1 - UL



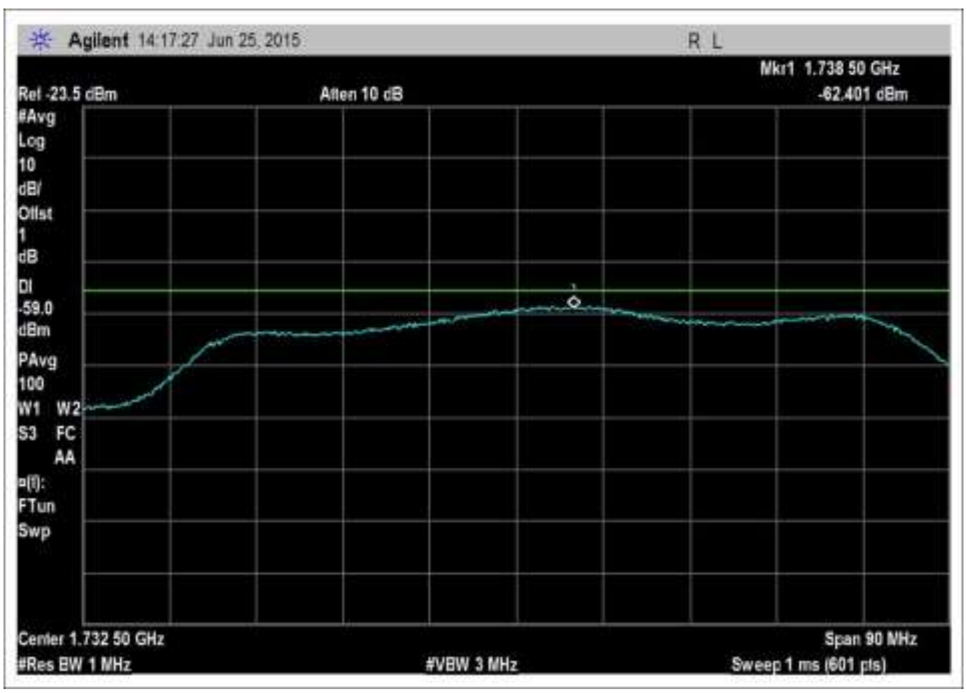
UL_698-716MHz_a-g_Noise_50



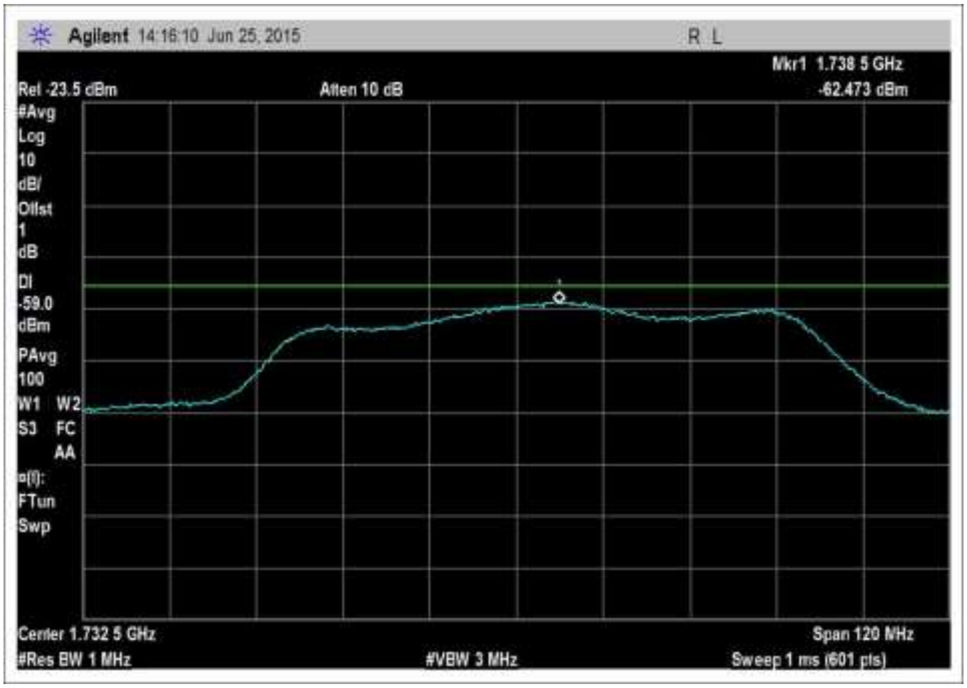
UL_776-787MHz_a-g_Noise_50



UL_824-849MHz_a-g_Noise_50



UL_1710-1755MHz_a-g_Noise_50



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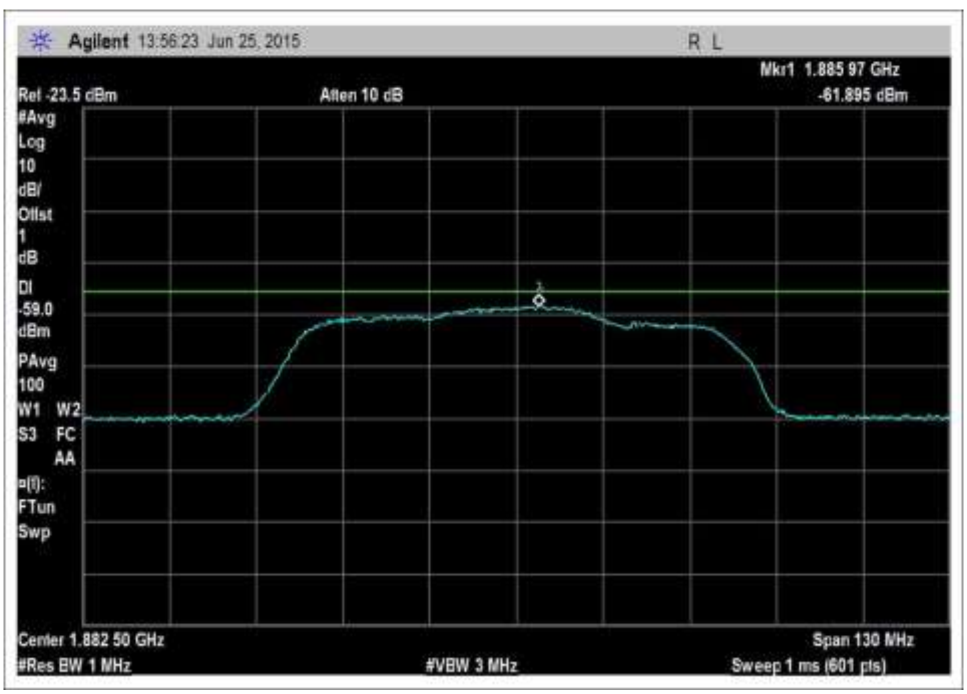
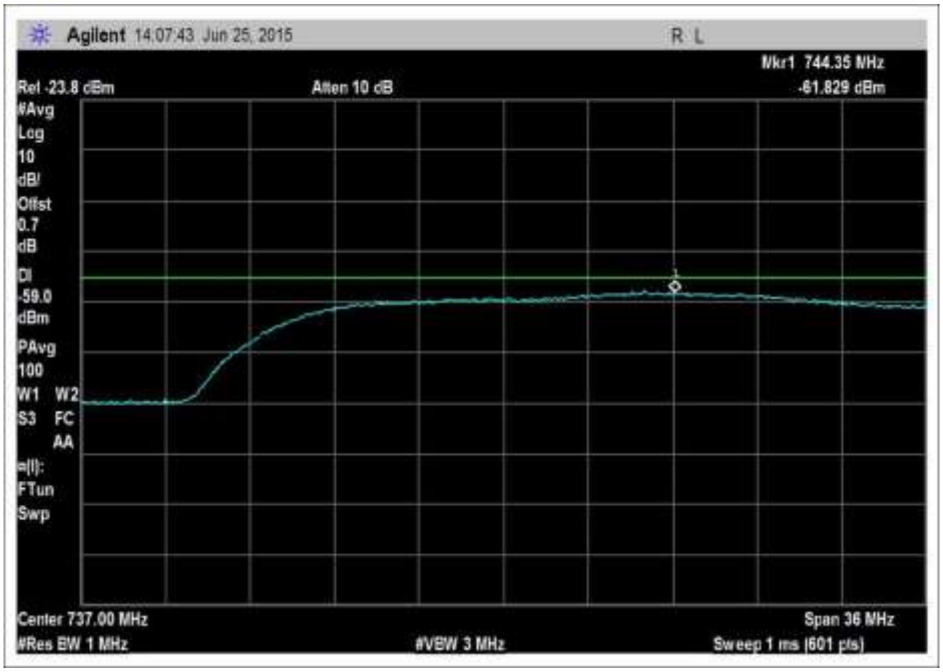
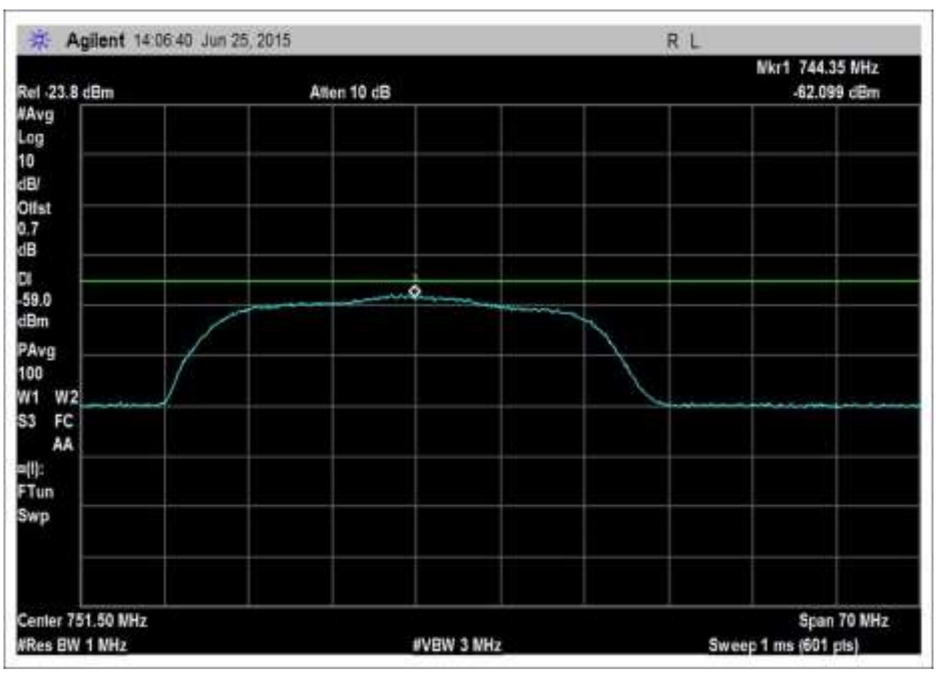


UL_1850-1915MHz_a-g_Noise_50

Section 7.7.1 - DL



DL_728-746MHz_a-g_Noise_50



DL_728-757MHz-Zoom_a-g_Noise_50