RF Test Report

For

Applicant Name:	**CEREVO TECHNOLOGY LIMITED**
Address:	F22, Tower B, RuiChuangGuoJi Plaza, No.8 WangJing East Road, Chaoyang District, Beijing, China 100102
EUT Name:	Cell Phone Signal Booster
Brand Name:	Smart Booster, Full signal, CellBoost
Model Number:	S5-A

Issued By

Company Name:	**BTF Testing Lab (Shenzhen) Co., Ltd.**
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Report Number:	BTF230710R00501
Test Standards:	47 CFR Part 20.21
Test Conclusion:	Pass
FCC ID:	2BB6MS5-A
Test Date:	2023-06-12 to 2023-07-27
Date of Issue:	2023-08-04
Prepared By:	Elma yang / Project Engineer
Date:	2023-08-04
Approved By:	Ryan.CJ / EMC Manager
Date:	2023-08-04

Note: All the test results in this report only related to the testing samples. Which can be duplicated completely for the legal use with approval of applicant; it shall not be reproduced except in full without the written approval of BTF Testing Lab (Shenzhen) Co., Ltd., All the objections should be raised within thirty days from the date of issue. To validate the report, you can contact us.

Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-08-04	Original
Note: Once the revision has been made, then previous versions reports are invalid.		

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Table of Contents

BTF Testing Lab (Shenzhen) Co., Ltd.
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BTF Testing Lab (Shenzhen) Co., Ltd.
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1 Introduction

1.1 Identification of Testing Laboratory

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130

1.2 Identification of the Responsible Testing Location

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130
FCC Registration Number:	518915
Designation Number:	CN1330

1.3 Announcement

(1) The test report reference to the report template version v0.
(2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
(3) The test report is invalid if there is any evidence and/or falsification.
(4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
(5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
(6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 Product Information

2.1 Application Information

Company Name:	CEREVO TECHNOLOGY LIMITED
Address:	F22, Tower B, RuiChuangGuoJi Plaza, No.8 WangJing East Road, Chaoyang District, Beijing, China 100102

2.2 Manufacturer Information

Company Name:	CEREVO TECHNOLOGY LIMITED
Address:	F22, Tower B, RuiChuangGuoJi Plaza, No.8 WangJing East Road, Chaoyang District, Beijing, China 100102

2.3 Factory Information

Company Name:	CEREVO TECHNOLOGY LIMITED
Address:	F22, Tower B, RuiChuangGuoJi Plaza, No.8 WangJing East Road, Chaoyang District, Beijing, China 100102

2.4 General Description of Equipment under Test (EUT)

EUT Name:	Cell Phone Signal Booster
Test Model Number:	S5-A
Series Model Number:	N/A

2.5 Technical Information

Power Supply:	DC 5V from Switching Power Supply		
Power Adaptor:	Model number:XSD-0503000NUSD INPUT: AC 100-240V, 50/60Hz, 0.5A MAX OUTPUT: DC 5V3A		
Operation Frequency:	Frequency	Uplink (MHz)	Downlink (MHz)
	Cellular	824-849	869-894
	Broadband PCS	1850-1915	1930-1995
	AWS-1	1710-1755	2110-2155
	Low A-E Blocks	699-716	729-746
	700 MHz Upper C Block	777-787	746-756

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Mode	Frequency(MHz)	Antenna Gain(dBi)	Cable loss(dB)
UP LINK	824-849	10	3
	1850-1915	10	3
	1710-1755	10	3
	699-716	10	3
	777-787	10	3
DOWNLINK	869-894	9	3
	1930-1995	9	3
	2110-2155	9	3
	729-746	9	3
	746-756	9	3

Note:
#: The antenna gain provided by the applicant, and the laboratory will not be responsible for the accumulated calculation results which covers the information provided by the applicant.

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3 Summary of Test Results

3.1 Test Standards

The tests were performed according to following standards:
47 CFR Part 20.21: Signal boosters
KDB935210 D03: Wideband Consumer Signal Booster Measurement Guidance

3.2 Uncertainty of Test

Item	Measurement Uncertainty
RF output power, conducted	0.63 dB
Conducted spurious emissions	0.94 dB
Radiated emissions (< 1 GHz)	4.12 dB
Radiated emissions (> 1 GHz)	4.16 dB
Occupied Channel Bandwidth	69 KHz
Frequency Stability	0.4 KHz
Temperature	0.82 °C
Humidity	4.1 %
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3.3 Summary of Test Result

Item	Standard	Result
Authorized Frequency Band Verification	Part 20.21(e)(3)	Pass
Maximum Power	Part 20.21(e)(8)(i)(D), Part 20.21(e)(8)(i)(B), Part 20.21(e)(4)	Pass
Maximum Booster Gian Computation	Part 20.21(e)(8)(i)(C)(2), Part 20.21(e)(8)(i)(B), Part 20.21(e)(4)	Pass
Intermodulation Product	Part 20.21(e)(8)(i)(F)	Pass
Out Of Band Emissions	Part 20.21(e)(8)(i)(E)	Pass
Spurious Emissions At Antenna Terminals	Part 2.1051	Pass
Noise Limits	Part 20.21(e)(8)(i)(A), Part 20.21(e)(8)(i)(H), Part 20.21(e)(4)	Pass
Uplink Inactivity	Part 20.21(e)(8)(i)(I), Part 20.21(e)(4)	Pass
Variable Booster Gain	Part 20.21(e)(8)(i)(C)(1), Part 20.21(e)(8)(i)(H)	Pass
Occupied Bandwidth	Part 2.1049	Pass
Oscillation Detection	Part 20.21(e)(8)(ii)(A), Part 20.21(e)(5)	Pass
Radiated Spurious Emissions	Part 2.1053	Pass
Spectrum block filtering test procedure	Part 20.21(e)(8)(i)(B), Part 20.21(e)(3)	N/A

Note:*1. PASS: Test item meets the requirement.*
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.

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4 Test Configuration

4.1 Test Equipment List

Conducted Method Test						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2022.11.24	2023.11.23	☒
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2022.11.24	2023.11.23	☒
ESG VECTOR SIGNAL GENERATOR	Agilent	E4438C	MY45094854	2022.11.24	2023.11.23	☒
MXG Vector Signal Generator	Agilent	N5182A	MY46240163	2022.11.24	2023.11.23	☒
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2022.11.25	2023.11.24	☒
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2022.11.24	2023.11.23	☒
RF Control Unit	TST	TST-Full	S01	/	/	☒
RF Test software	TST	V2.0	/	/	/	☒

Radiated Method Test						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
SIGNAL ANALYZER	ROHDE&SCHWARZ	FSQ40	100010	2022.11.24	2023.11.23	☒
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI7	101032	2022.11.24	2023.11.23	☒
Log periodic antenna	SCHWARZBECK	VULB 9168	01328	2021.11.28	2023.11.27	☒
Horn Antenna	SCHWARZBECK	BBHA9170	01157	2021.11.28	2023.11.27	☒
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/	☒
RE Cable	REBES Talent	UF2-NMNM-10m	21101570	2022.11.24	2023.11.23	☒
RE Cable	REBES Talent	UF2-NMNM-2.5m	21101573	2022.11.24	2023.11.23	☒
RE Cable	REBES Talent	UF2-NMNM-1m	21101576	2022.11.24	2023.11.23	☒
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	2023.3.24	2024.3.23	☒
RE Cable	Talent Microwave	A40-2.92M2.92 M-14M	22080539	2022.11.24	2023.11.23	☒
RE Cable	Talent Microwave	A81-SMAMNM-14M	22080538	2022.11.24	2023.11.23	☒
Preamplifier	SCHWARZBECK	BBV9744	00246	2022.11.24	2023.11.23	☒
Horn Antenna	Schwarzbeck	BBHA9120D	2597	2022.5.22	2024.5.21	☒
Broadband Preamplilifier	Schwarzbeck	BBV9718D	00008	2023.3.24	2024.3.23	☒

4.2 Test Auxiliary Equipment

The EUT was tested as an independent device.

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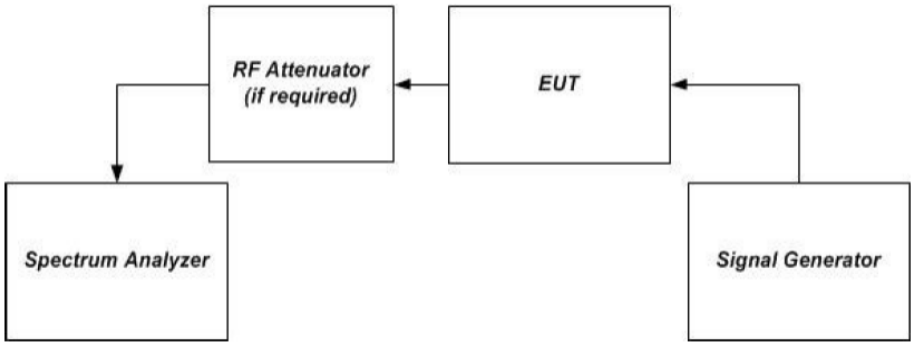
5 Radio Spectrum Matter Test Results (RF)

5.1 Authorized Frequency Band Verification

Test Requirement:	This test is intended to confirm that the signal booster only operates on the CMRS frequency bands authorized for use by the NPS. In other words, the signal booster shall reject amplification of other signals outside of its passband. In addition, this test will identify the frequency at which the maximum gain is realized within each CMRS operational band, which then serves as a basis for subsequent tests.
Test Setup:	
Procedure:	a) Connect the EUT to the test equipment as shown in Figure 1. Begin with the uplink output (donor) port connected to the spectrum analyzer. b) Set the spectrum analyzer resolution bandwidth (RBW) for 100 kHz with the video bandwidth (VBW) ⩾ 3 the RBW, using a PEAK detector with the MAX HOLD function. c) Set the center frequency of the spectrum analyzer to the center of the operational band under test with a span of 1MHz. d) Set the signal generator for CW mode and tune to the center frequency of the operational band under test. e) Set the initial signal generator power to a level that is at least 6 dB below the AGC level specified by the manufacturer. f) Slowly increase the signal generator power level until the output signal reaches the AGC operational level. g) Reduce the signal generator power to a level that is 3 dB below the level noted above, then manually reset the EUT (e.g., cycle ac/dc power). h) Reset the spectrum analyzer span to 2 the width of the CMRS band under test. Adjust the tuned frequency of the signal generator to sweep 2 the width of the CMRS band using the sweep function. The AGC must be deactivated throughout the entire sweep. i) Using three markers, identify the CMRS band edges and the frequency with the highest power. Affirm that the values of all markers are visible on the display of the spectrum analyzer (e.g., marker table set to on). j) Capture the spectrum analyzer trace for inclusion in the test report. k) Repeat 7.1c) to 7.1j) for all operational uplink and downlink bands.

5.1.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.8 °C
Humidity:	49.9 %
Atmospheric Pressure:	1010 mbar

5.1.2 Test Data:

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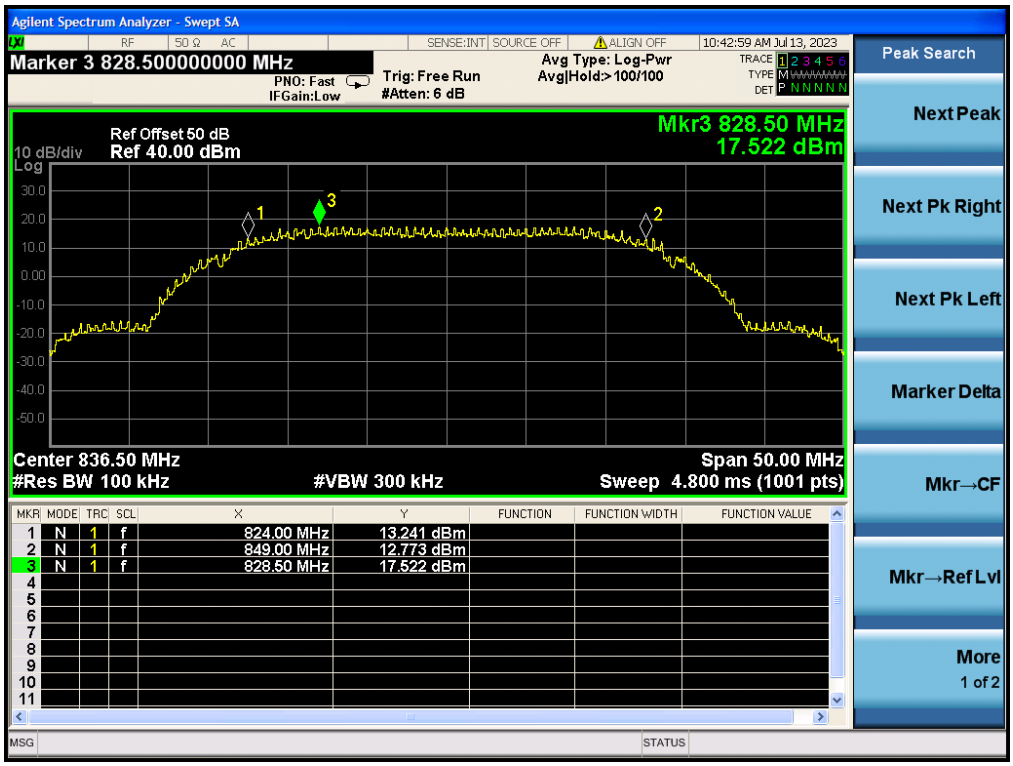
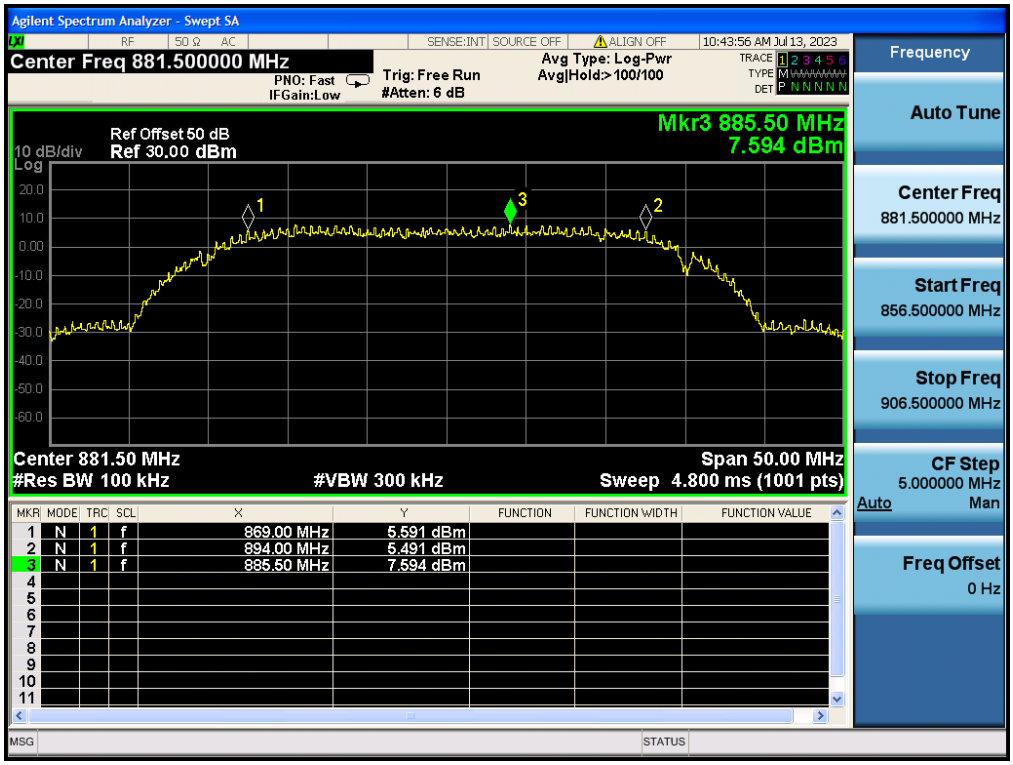
UL824-849MHz



DL869-894MHz



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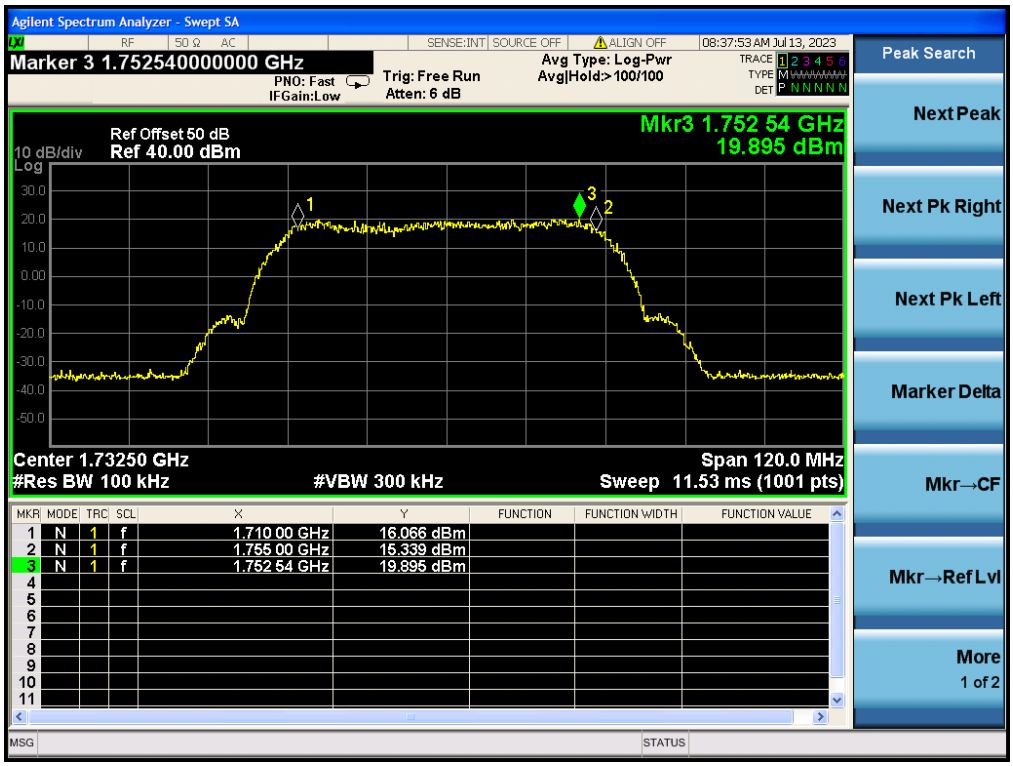
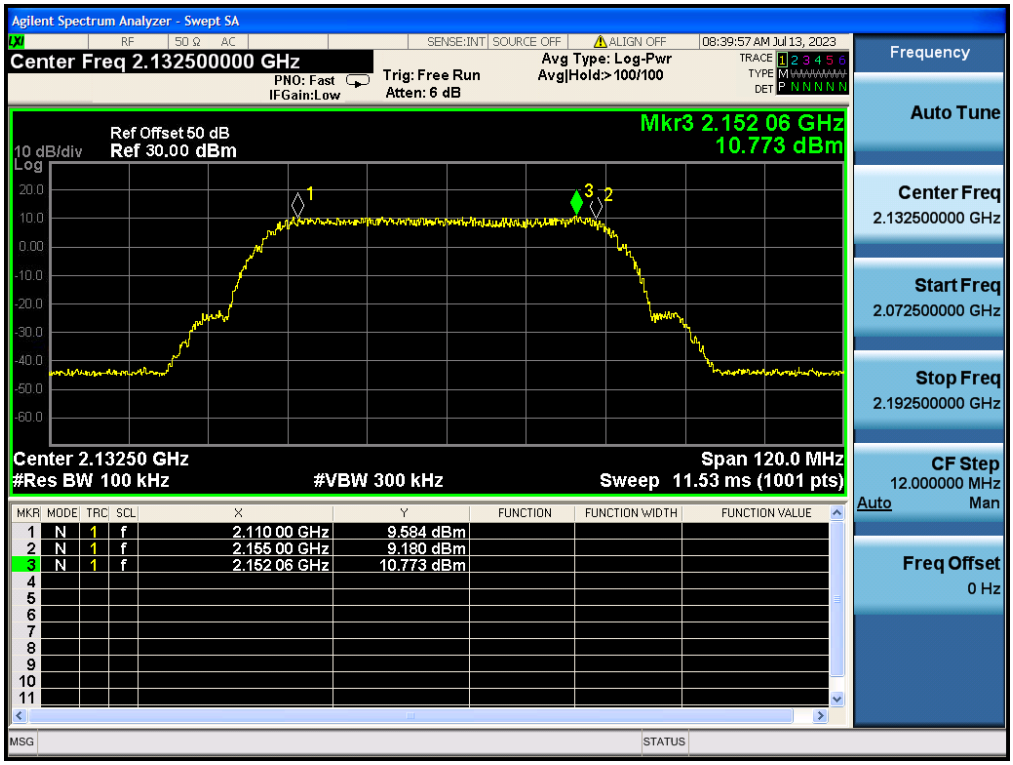
UL1710-1755MHz



DL2110-2155MHz



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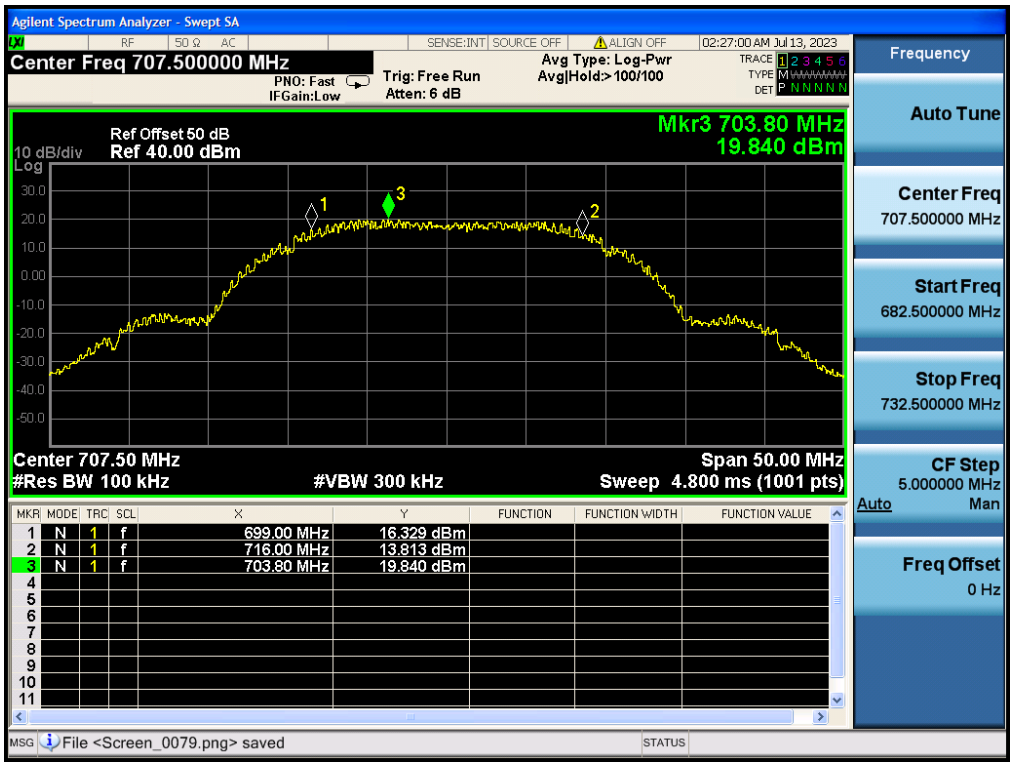
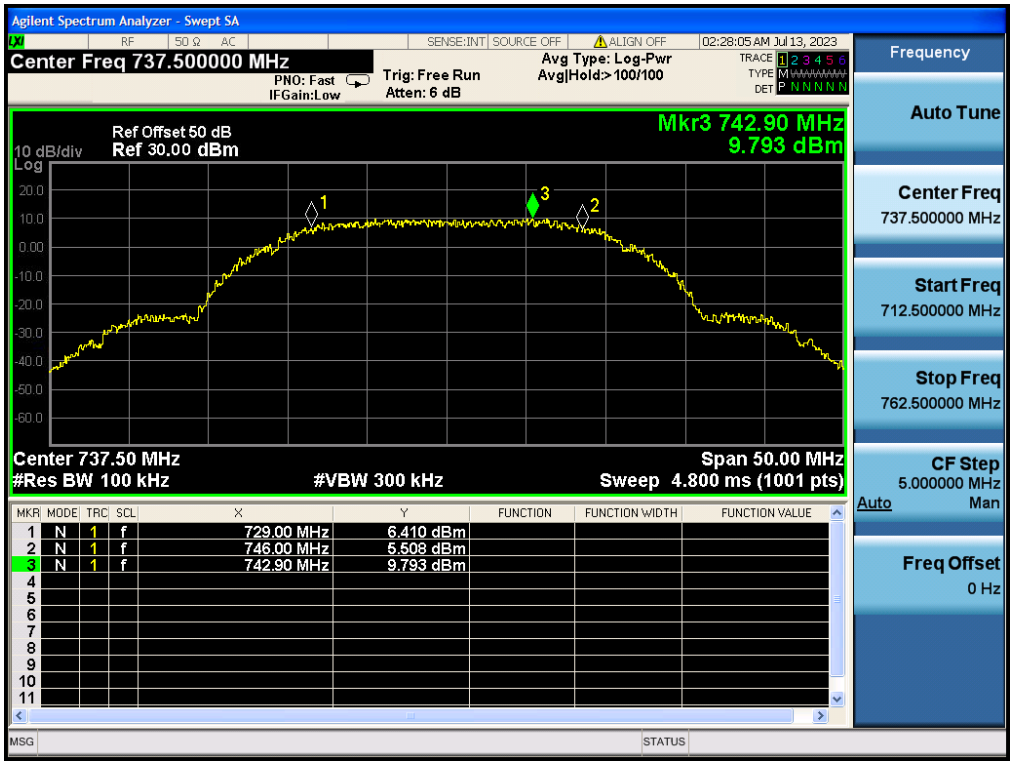
UL699-716MHz



DL729-746MHz



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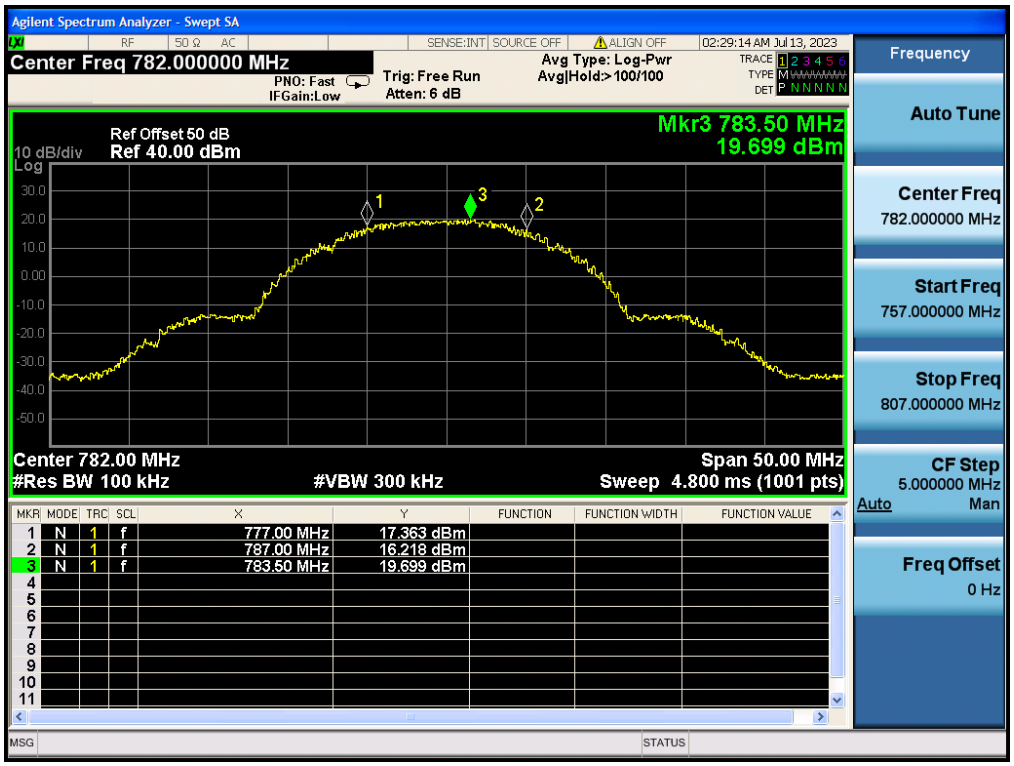
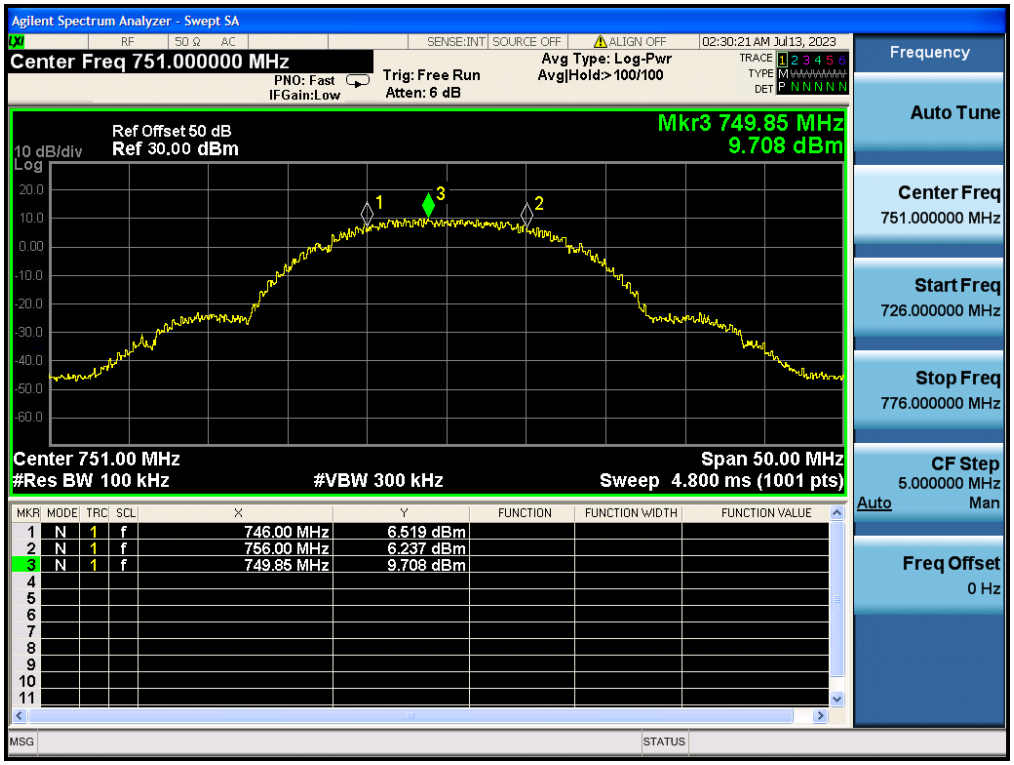
UL777-787MHz



DL746-756MHz



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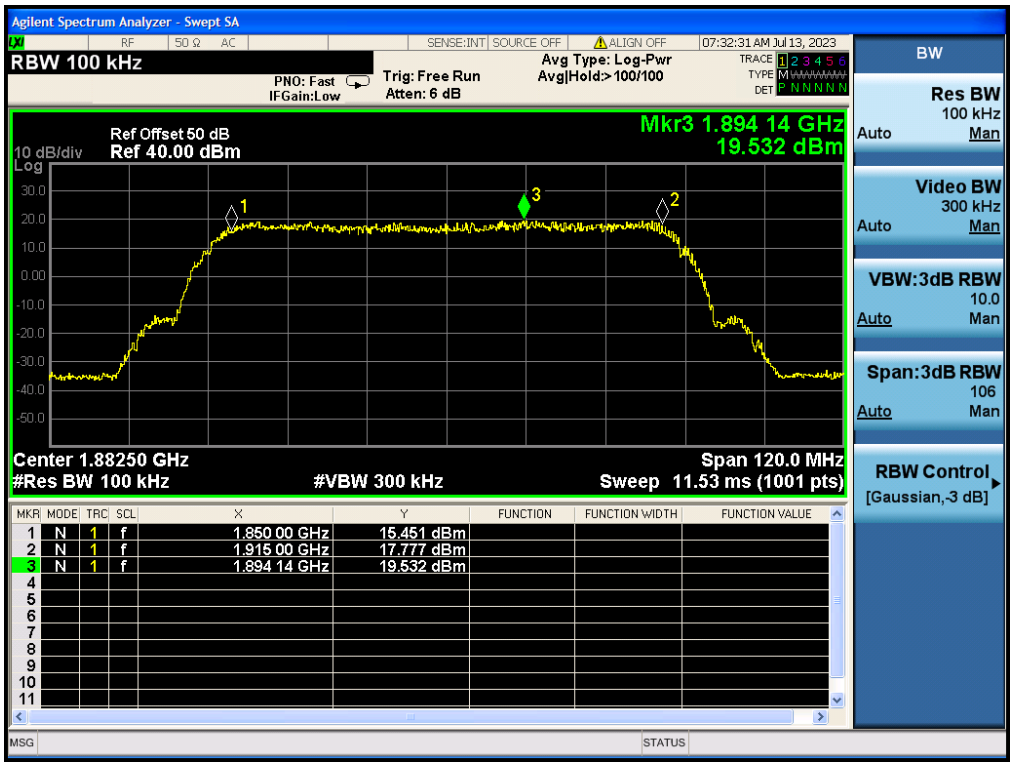
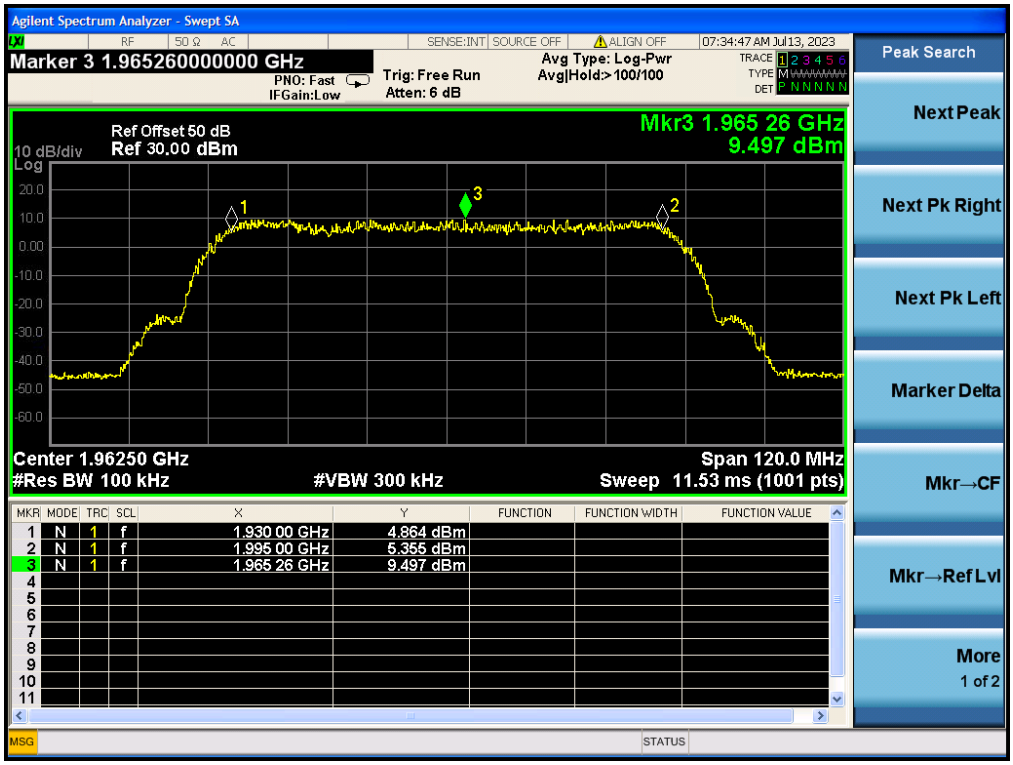
UL1850-1915MHz



DL1930-1995MHz



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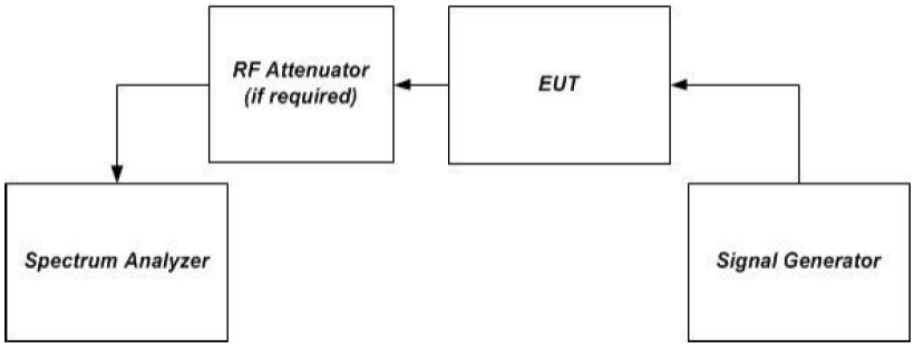
5.2 Maximum Power

Test Requirement:	The following procedures shall be used to demonstrate compliance to the signal booster power limits and requirements as specified in §20.21(e)(8)(i)(D) and §20.21(e)(8)(i)(B) for Wideband Consumer Signal Boosters (i.e., a maximum uplink composite power level of 1 watt (30 dBm) conducted power and EIRP, a maximum downlink power level of 0.05 watt (17 dBm) conducted power and EIRP, and a conducted uplink power output that is at least 0.05 watt (17 dBm) for each band of operation). 1) Compliance to authorized EIRP limits must be shown using the highest gains from the list of antennas, cabling and coupling devices authorized by the manufacturer for use with the consumer booster. 2) In addition, the maximum power levels measured in this procedure will be utilized in calculating the maximum gain as described in the next section. 3) The frequency with the highest power level in each operational band as determined in section 7.1 is to be measured discretely by applying the following procedure utilizing the stated emission and power detector types independently. 4) Use a signal generator to create a pulsed CW signal with a pulse width of 570 µsec and a duty cycle of 12.5% and measure utilizing the burst power function of the measuring instrument. 5) Use a signal generator to create an AWGN signal with a 99% Occupied Bandwidth of 4.1 MHz and measure utilizing the channel or band power function of the measurring instrumentation. 6) All modes of operation must be verified to maintain operation at the maximum uplink and downlink test levels per device type as defined in section 5.4.
Limit:	Gain: Fixed Booster maximum gain shall not exceed 6.5 dB + 20Log10(Frequency) *Where, Frequency is the uplink mid-band frequency of the supported spectrum bands in MHz.* Conducted Output Power: 17dBm<P_{uplink} $P_{donwlink}$<17dBm. EIRP: Uplink<30dBm, Donwlink<17dBm.
Test Setup:	
Procedure:	a) Connect the EUT to the test equipment as shown in Figure 1. Begin with the uplink output (donor) port connected to the spectrum analyzer. b) Configure the signal generator and spectrum analyzer for operation on the frequency determined in 7.1 with the highest power level, but with the center frequency of the signal no closer than 2.5 MHz from the band edge. The spectrum analyzer span shall be set to at least 10 MHz. c) Set the initial signal generator power to a level well below that which causes AGC activation. d) Slowly increase the signal generator power level until the output signal reaches the AGC operational limit (from observation of signal behavior on the spectrum analyzer; i.e., no further increase in output power as input power is increased). e) Reduce power sufficiently on the signal generator to ensure that the AGC is not controlling the power output. f) Slowly increase the signal generator power to a level just below (and within 0.5 dB of) the AGC limit without triggering the AGC. Note the signal generator power level as Pin. g) Measure the output power, Pout, with the spectrum analyzer as follows. 1) Set RBW=100kHz for AWGN signal type, or 300kHz for CW or GSM signal type. 2) Set VBW ⩾ 3*RBW. 3) Select either the BURST POWER or CHANNEL POWER measurement mode,

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	as required for each signal type. For AWGN, the channel power integration bandwidth shall be the 99% OBW of the 4.1 MHz signal. 4) Select the power averaging (rms) detector. 5) Affirm that the number of measurement points per sweep ⩾ (2*span)/RBW. NOTE–This requirement does not apply for BURST power measurement mode. 6) Set sweep time = auto couple, or as necessary (but no less than auto couple value). 7) Trace average at least 100 traces in power averaging (i.e., rms) mode. 8) Record the measured power level Pout, with one set of results for the GSM or CW input stimulus, and another set of results for the AWGN input stimulus. h) Repeat step g) while increasing the signal generator amplitude in 2 dB steps until the maximum input level indicated in 5.5 is reached. If the booster has shut down at any point during the input power steps, it should be noted and step g) shall be repeated at an input level 1 dB less than that found to cause the shutdown. The test report shall include either a statement describing that the device complies at 10 dB above AGC or at the 5.5 power levels, or a table showing compliance at the additional input power(s) required. i) Repeat the entire procedure for each operational uplink and downlink frequency band supported by the booster. j) Provide tabulated results in the test report.

5.2.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.8 °C
Humidity:	49.9 %
Atmospheric Pressure:	1010 mbar

5.2.2 Test Data:

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Max. Gain

Frequency(MHz)	Signal Type	Pre AGC Input Level (dBm)	Conducted Output Level (dBm)	Gain(dB)	Gain Limit (dB)
UL824-849	CW	-40	19.62	59.62	64.94
	AWGN	-40	19.56	59.56	
UL1710-1755	CW	-49	19.82	68.82	71.27
	AWGN	-49	19.50	68.50	
UL699-716	CW	-42	18.72	60.72	63.49
	AWGN	-42	18.73	60.73	
UL777-787	CW	-42	18.63	60.63	64.36
	AWGN	-42	18.16	60.16	
UL1850-1915	CW	-49	21.25	70.25	71.99
	AWGN	-49	20.43	69.43	
DL869-894	CW	-53	9.74	62.74	64.94
	AWGN	-53	9.41	62.41	
DL2110-2155	CW	-60	9.62	69.62	71.27
	AWGN	-60	9.03	69.03	
DL746-756	CW	-52	9.81	61.81	64.36
	AWGN	-52	9.58	61.58	
DL729-746	CW	-52	9.73	61.73	63.52
	AWGN	-52	9.27	61.27	
DL1930-1995	CW	-59	9.42	68.42	71.99
	AWGN	-59	9.27	68.27	

Remark: *Fixed Booster maximum gain shall not exceed 6.5 dB + 20 Log10 (Frequency), where Frequency is the uplink mid-band frequency of the supported spectrum bands in MHz.*

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Max. Input level

Frequency(MHz)	Signal Type	Max. Input Level (dBm)	Conducted Output Level (dBm)	Conducted Output Power Limit (dBm)	Conducted& EIRP Power Limit (dBm)
UL 824-849	CW	-39	19.86	>17dBm	<30dBm
	AWGN	-39	19.75		
UL1710-1755	CW	-48	20.01		
	AWGN	-48	19.68		
UL699-716	CW	-41	19.01		
	AWGN	-41	18.85		
UL777-787	CW	-41	19.02		
	AWGN	-41	18.31		
UL1850-1915	CW	-48	21.27		
	AWGN	-48	20.56		
DL 869-894	CW	-51	9.96	N/A	<17dBm
	AWGN	-51	9.48		
DL2110-2155	CW	-59	9.89		
	AWGN	-59	9.23		
DL729-746	CW	-51	9.95		
	AWGN	-51	9.61		
DL746-756	CW	-51	9.86		
	AWGN	-51	9.31		
DL1930-1995	CW	-58	9.51		
	AWGN	-58	9.32		

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Max. Output level

Frequency(MHz)	Signal Type	Conducted Output Level (dBm)	Max Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Conducted Output Power Limit (dBm)	Conducted& EIRP Power Limit (dBm)
UL 824-849	CW	19.62	10	3	26.62	>17dBm	<30dBm
	AWGN	19.56	10	3	26.56		
UL1710-1755	CW	19.82	10	3	26.82		
	AWGN	19.50	10	3	26.50		
UL699-716	CW	18.72	10	3	25.72		
	AWGN	18.73	10	3	25.73		
UL777-787	CW	18.63	10	3	25.63		
	AWGN	18.16	10	3	25.16		
UL1850-1915	CW	21.25	10	3	28.25		
	AWGN	20.43	10	3	27.43		
DL 869-894	CW	9.74	9	3	15.74	N/A	<17dBm
	AWGN	9.41	9	3	15.41		
DL2110-2155	CW	9.62	9	3	15.62		
	AWGN	9.03	9	3	15.03		
DL729-746	CW	9.81	9	3	15.81		
	AWGN	9.58	9	3	15.58		
DL746-756	CW	9.73	9	3	15.73		
	AWGN	9.27	9	3	15.27		
DL1930-1995	CW	9.42	9	3	15.42		
	AWGN	9.27	9	3	15.27		

Remark: *EIRP= Conducted Output Level+ Max Antenna Gain- Cable Loss*

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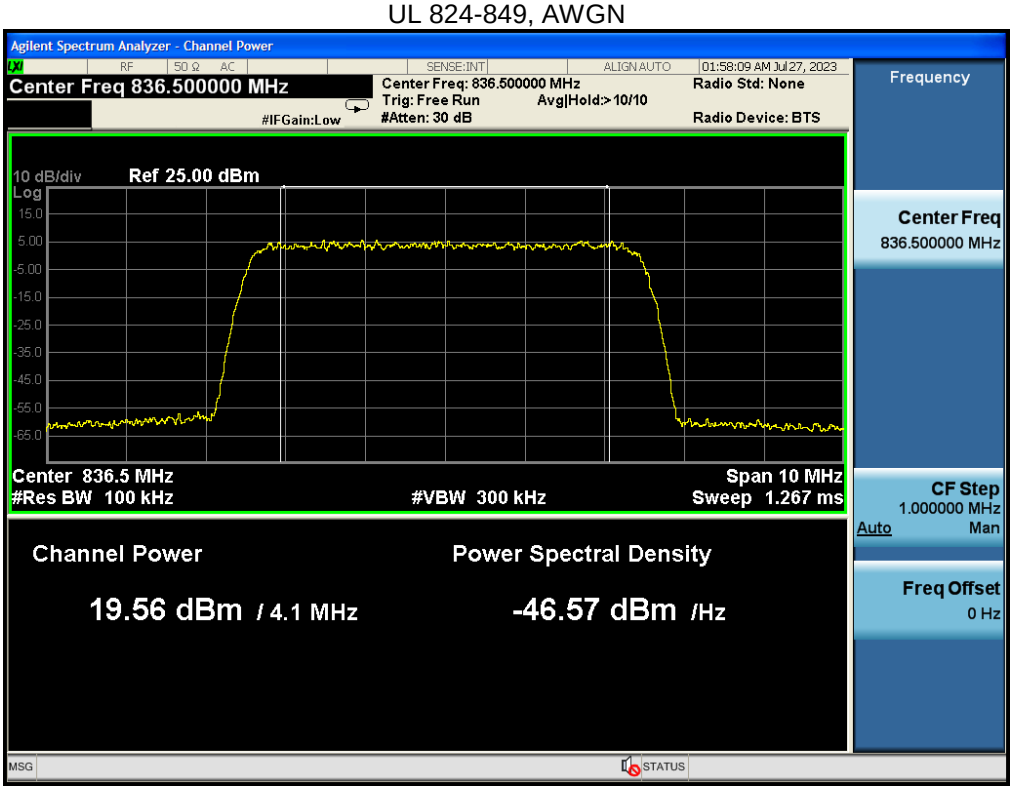
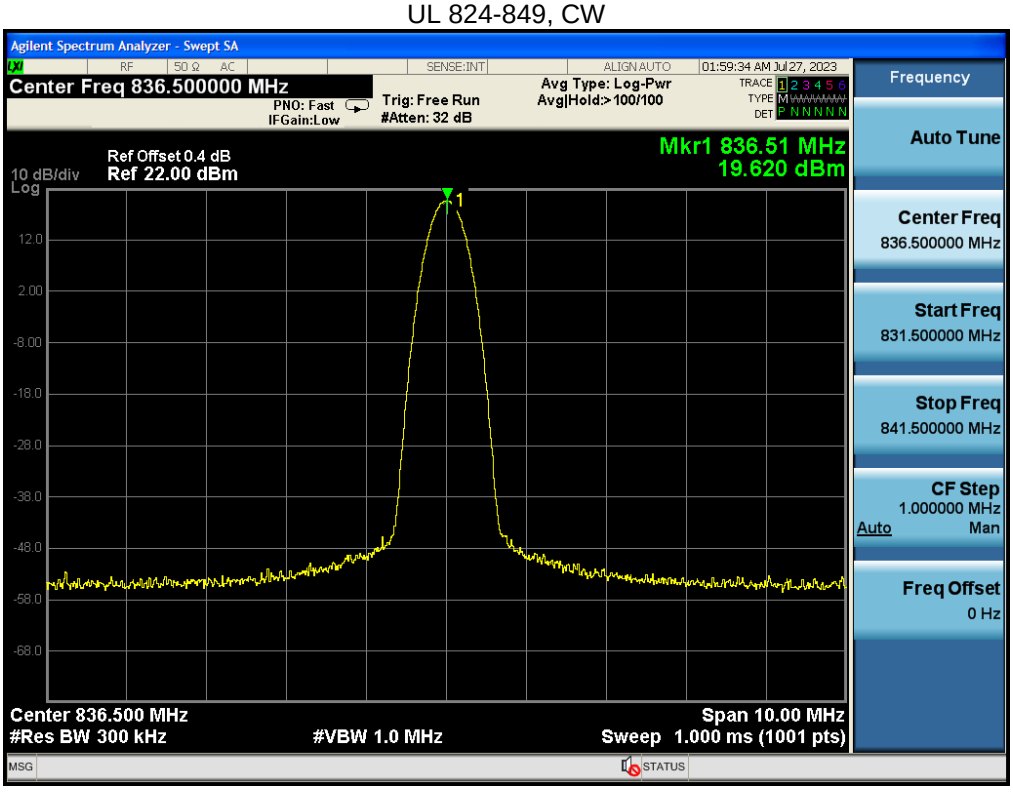
UL 824-849, AWGN



UL 824-849, CW



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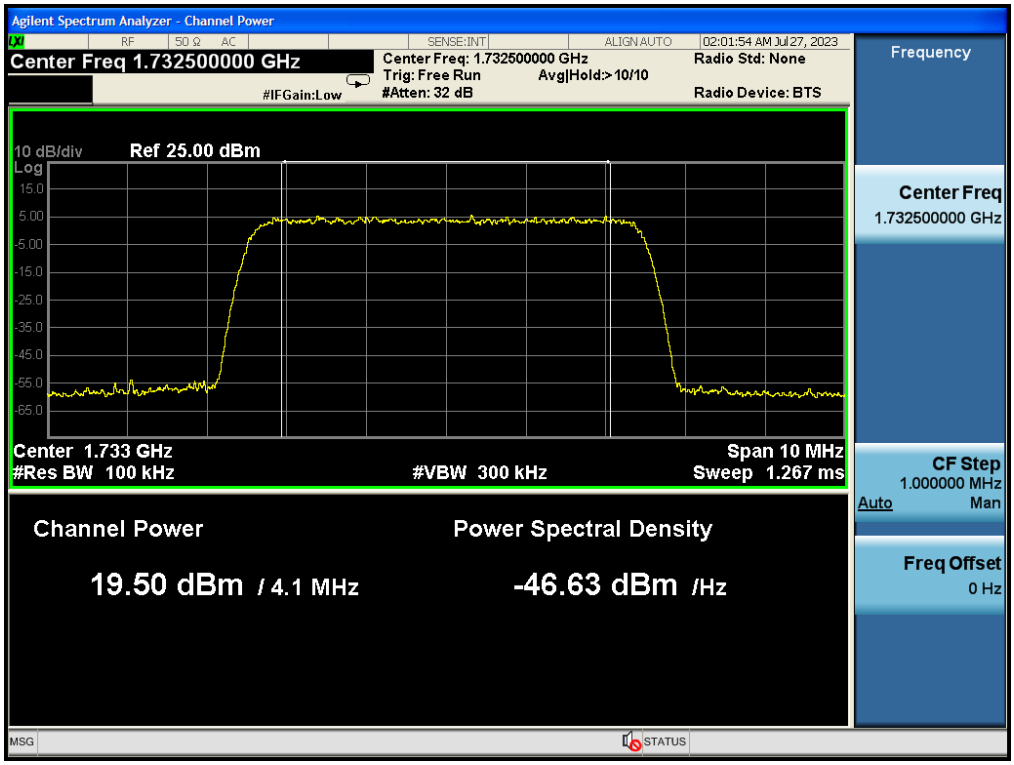
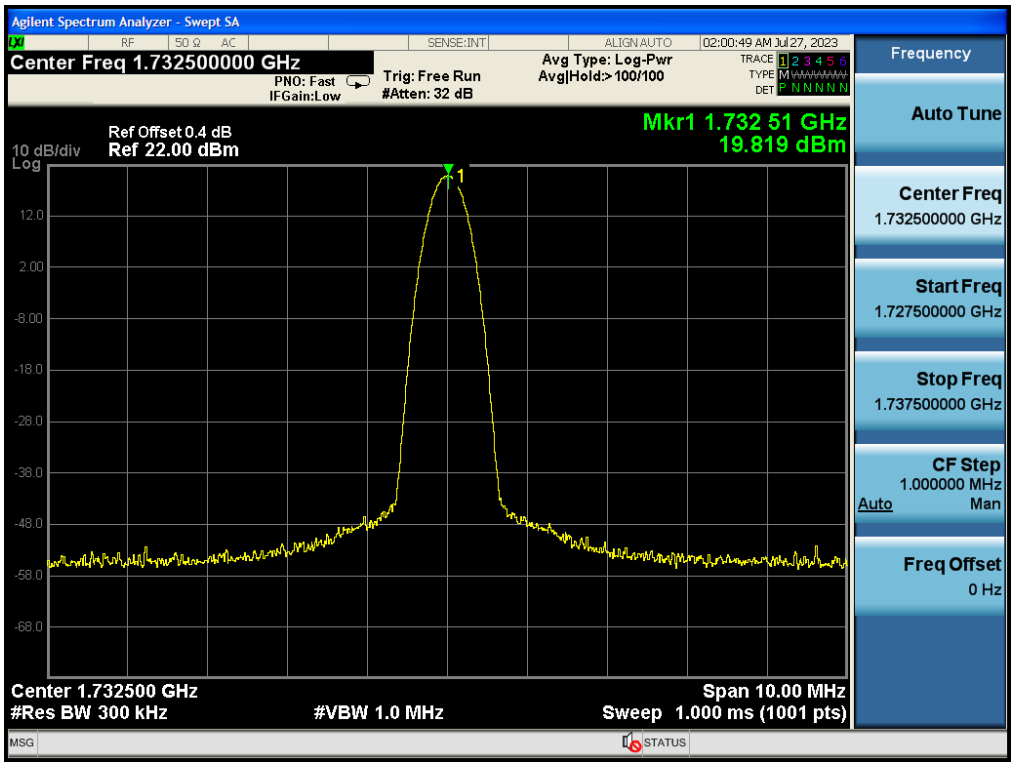
UL1710-1755, AWGN



UL1710-1755, CW



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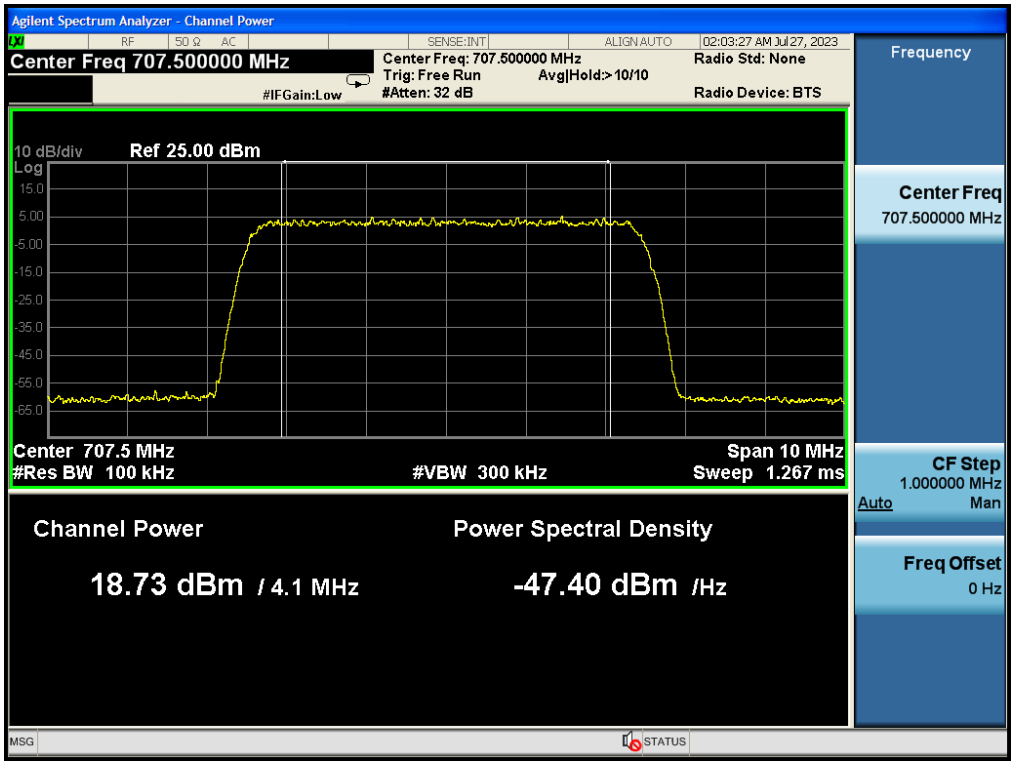
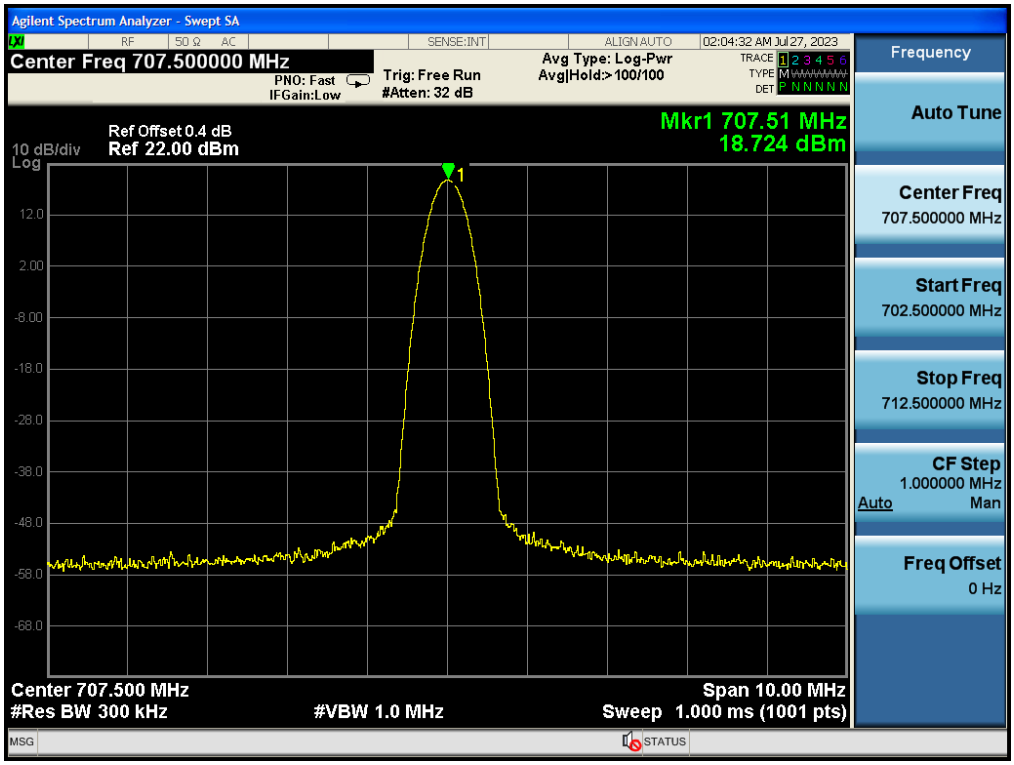
UL699-716, AWGN



UL699-716, CW



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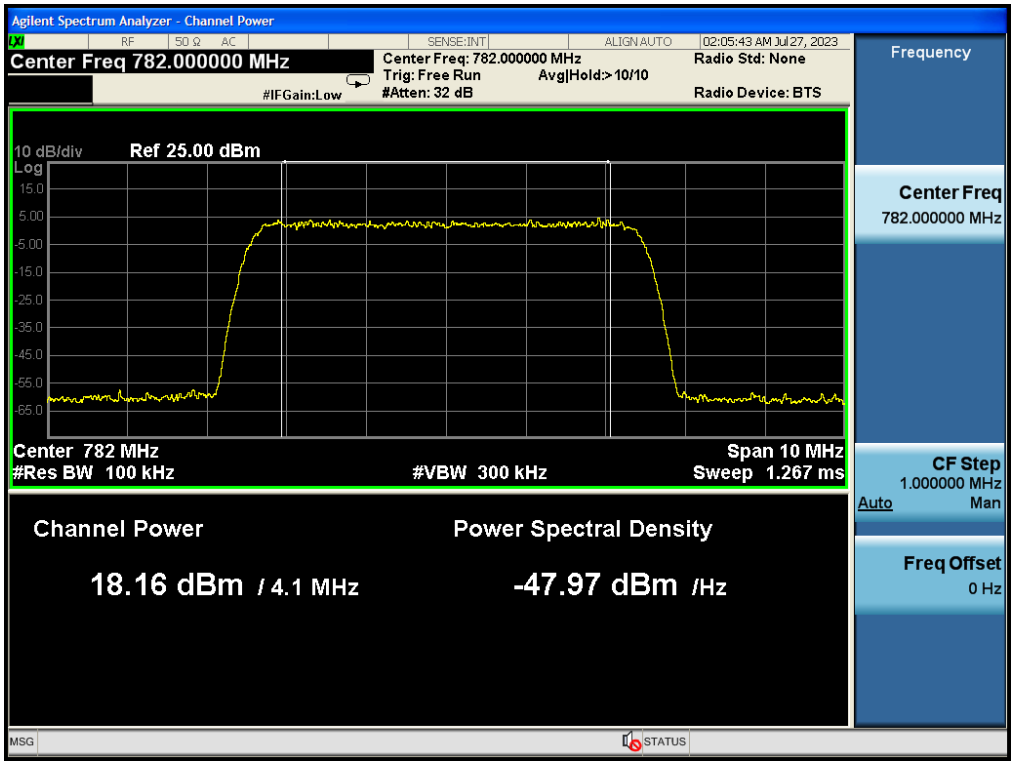
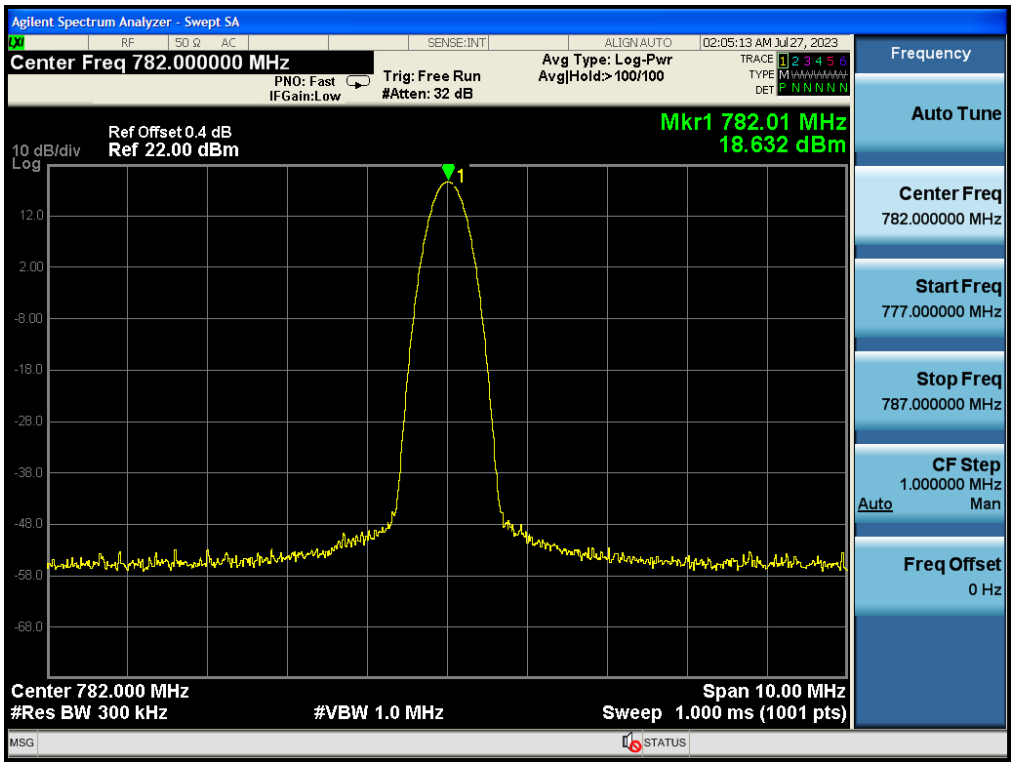
UL777-787, AWGN



UL777-787, CW



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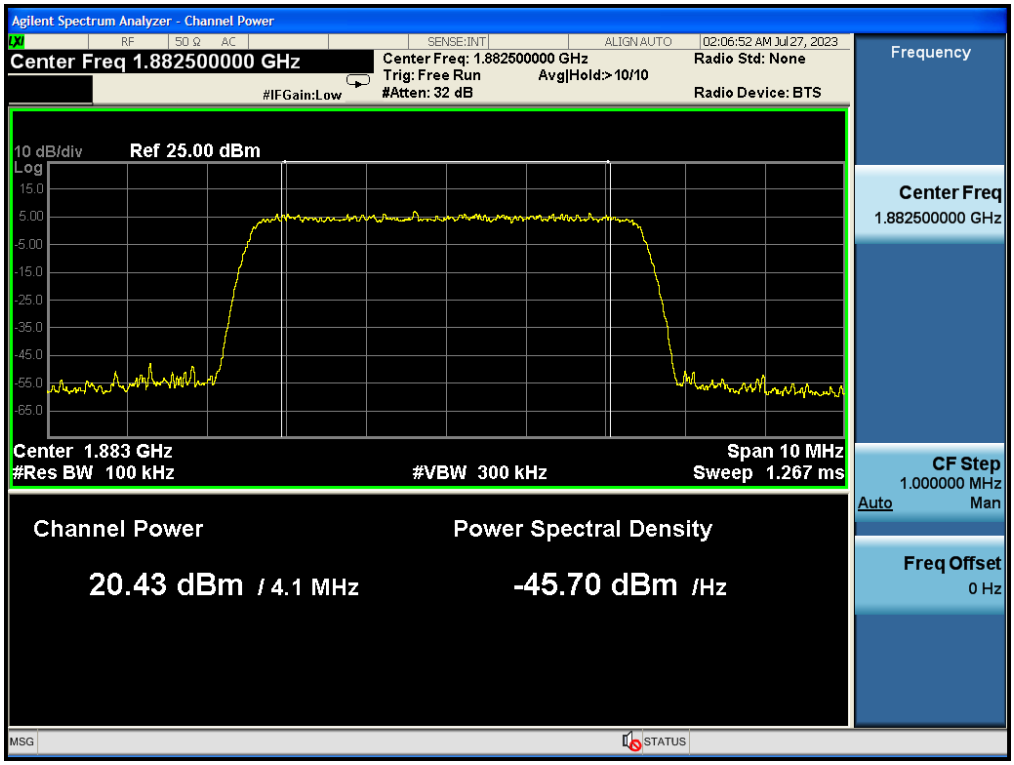
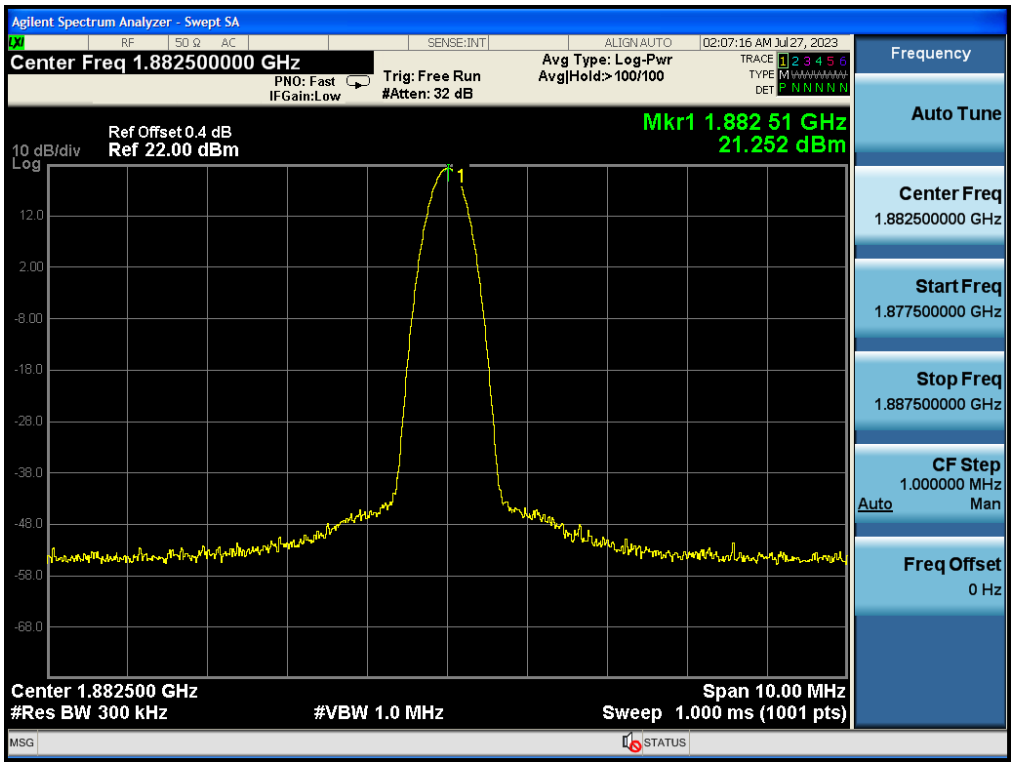
UL1850-1915, AWGN



UL1850-1915, CW



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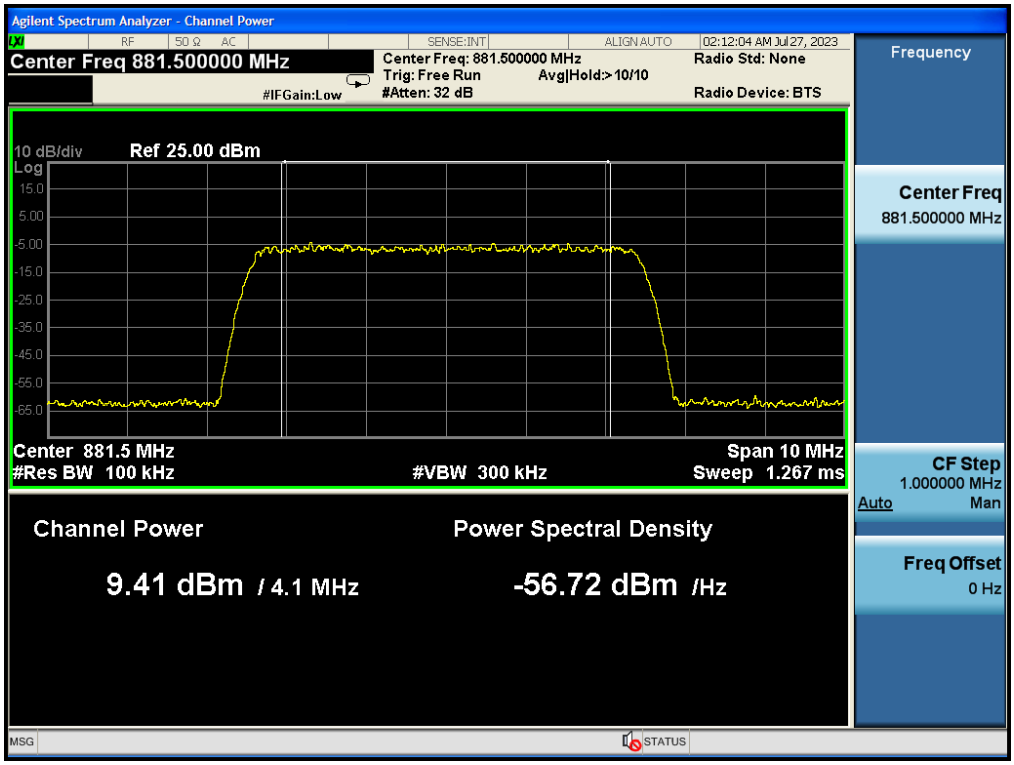
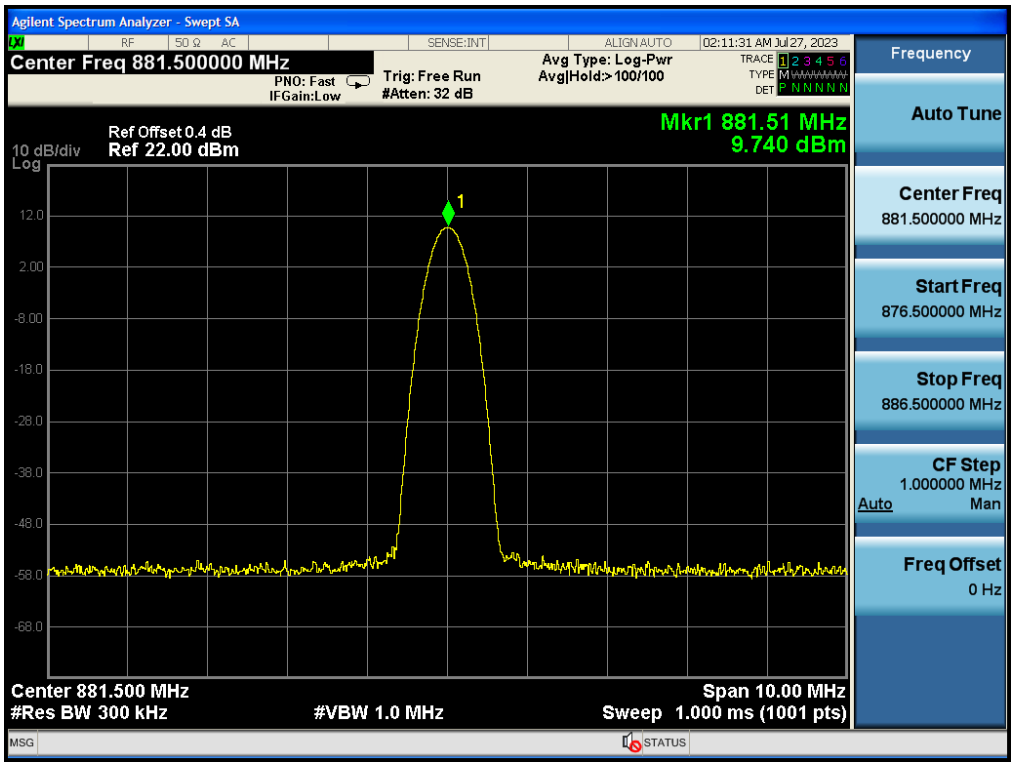
DL869-894, AWGN



DL869-894, CW



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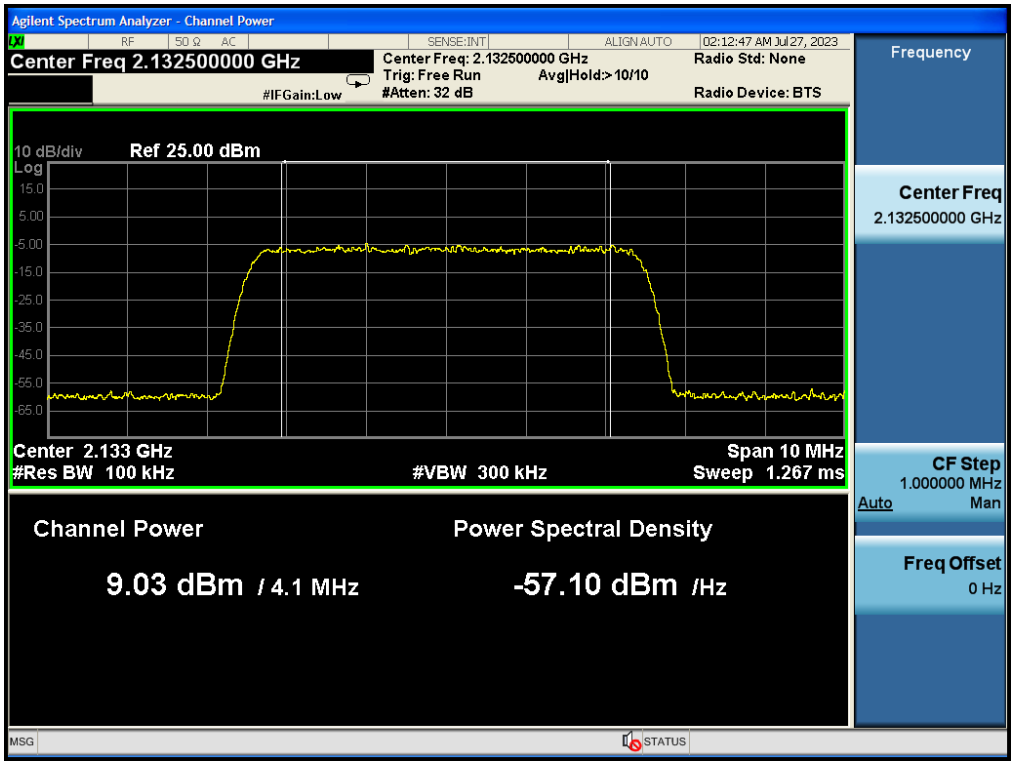
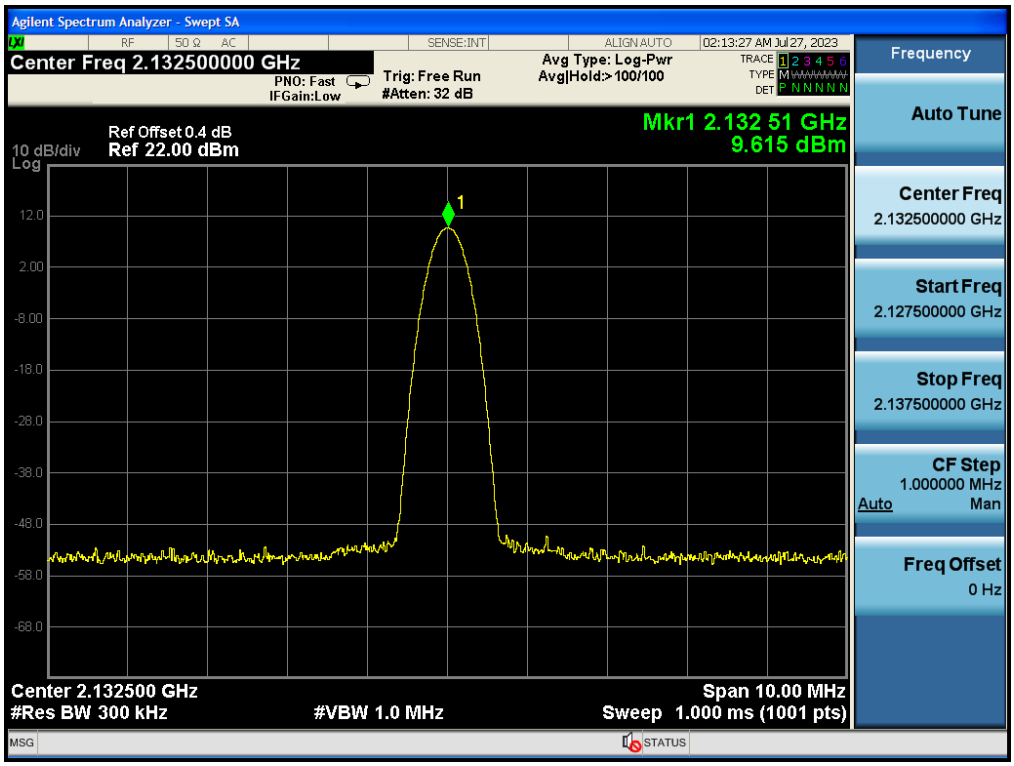
DL2110-2155, AWGN



DL2110-2155, CW



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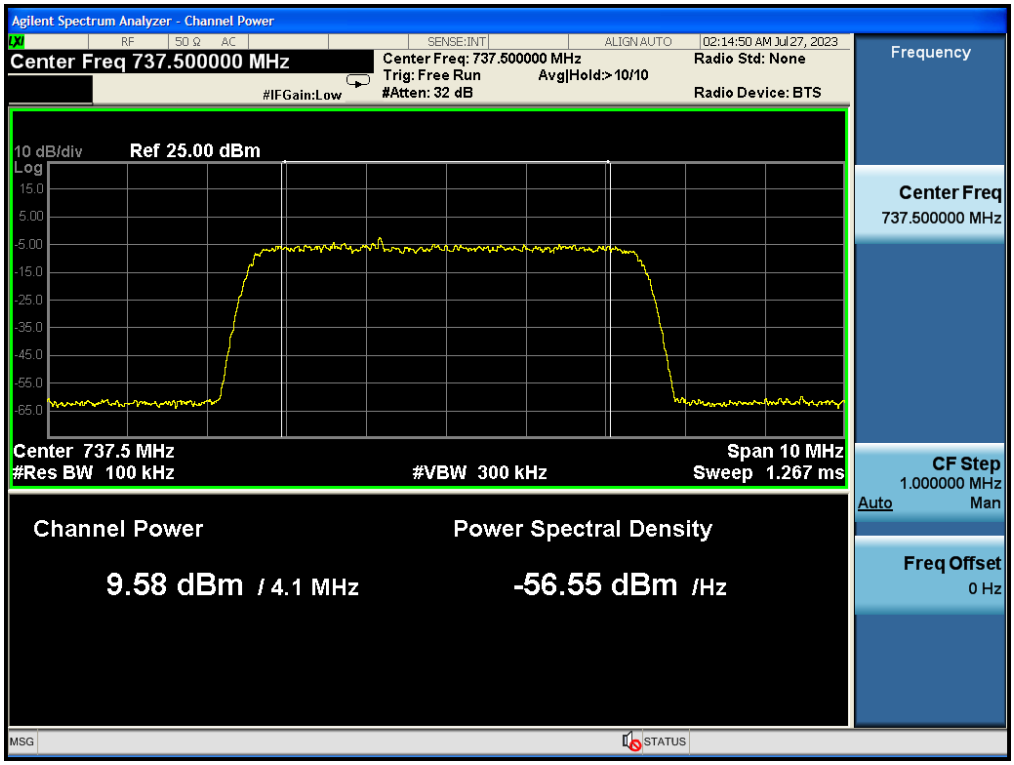
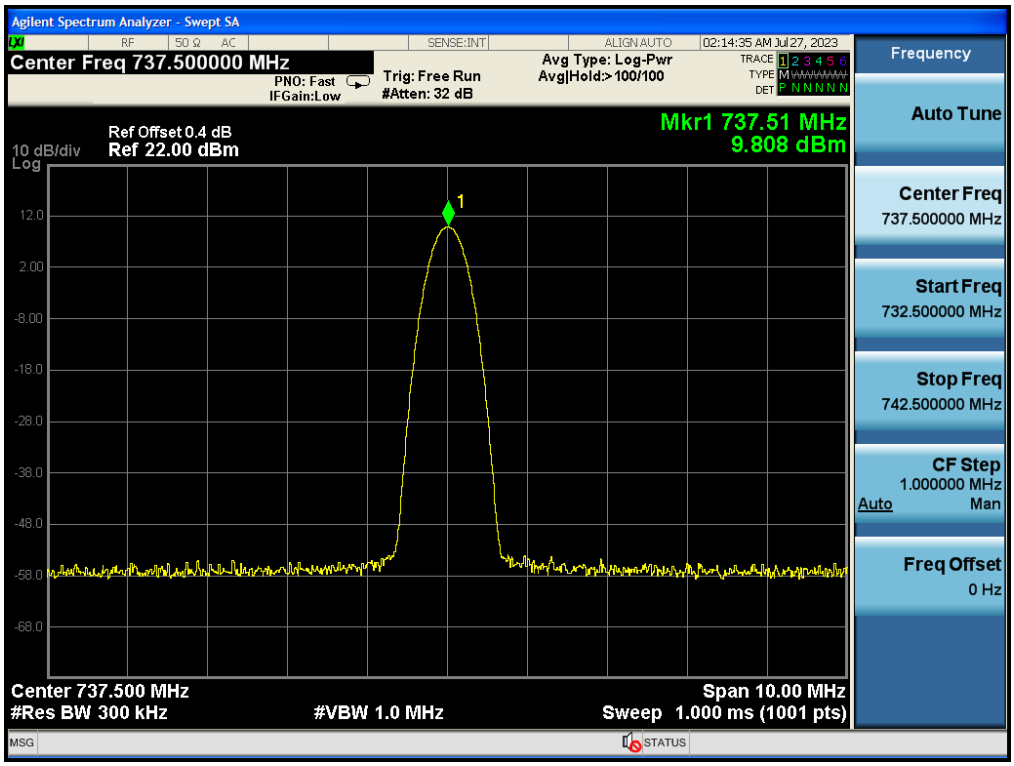
DL729-746, AWGN



DL729-746, CW



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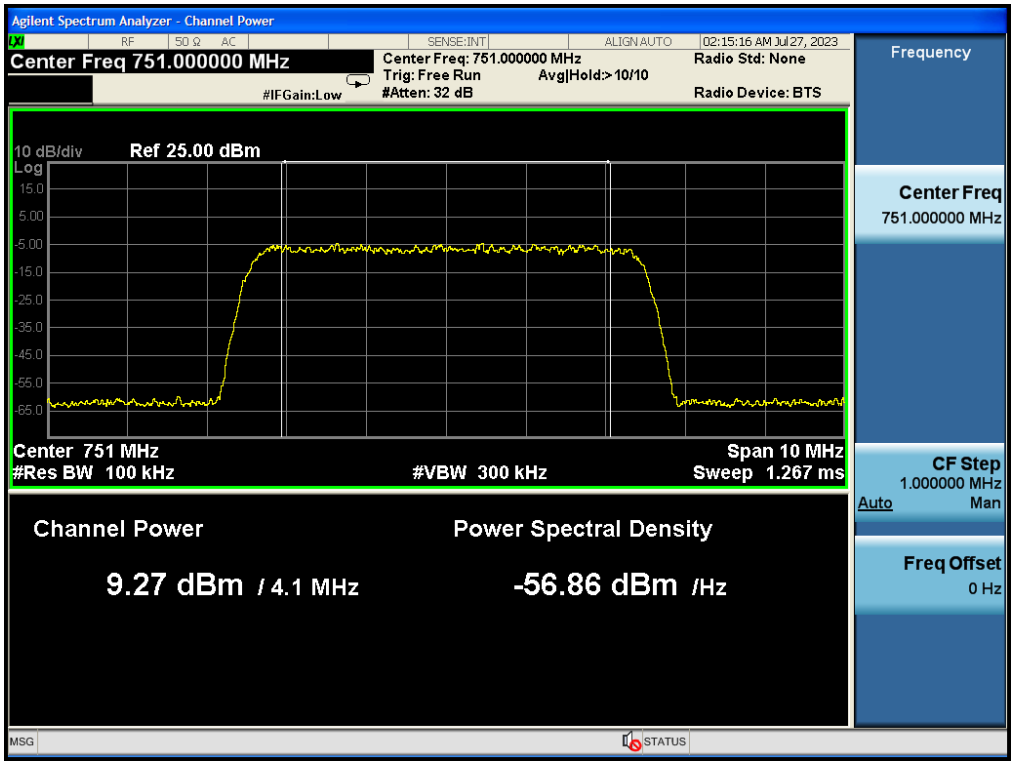
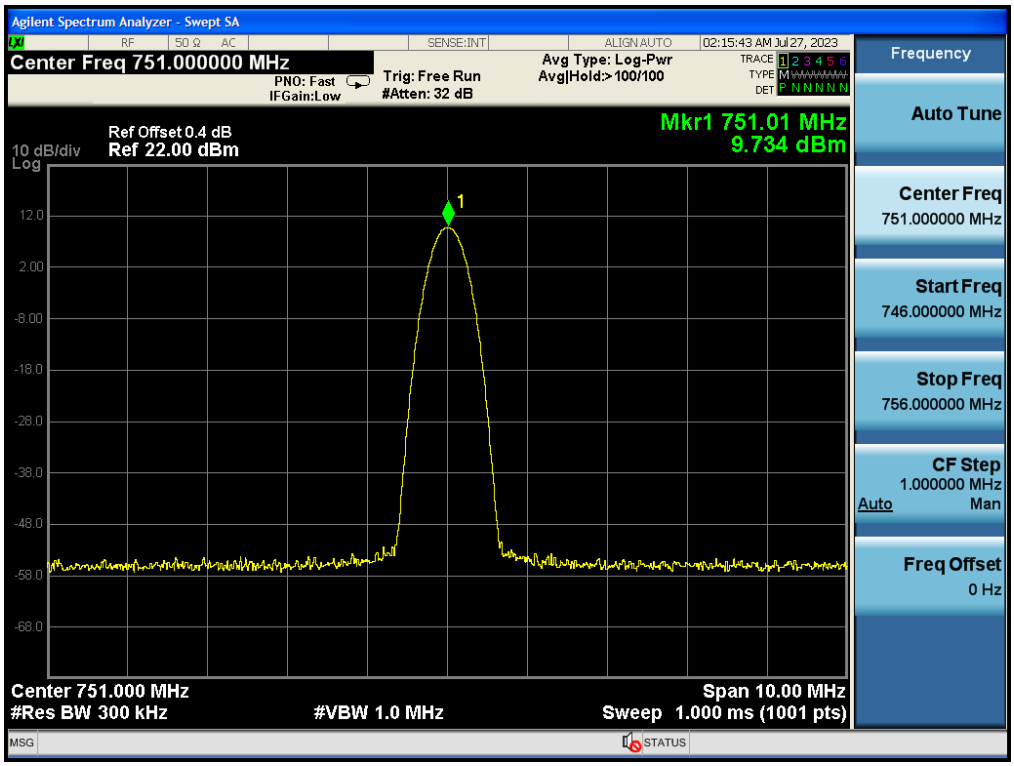
DL746-756, AWGN



DL746-756, CW



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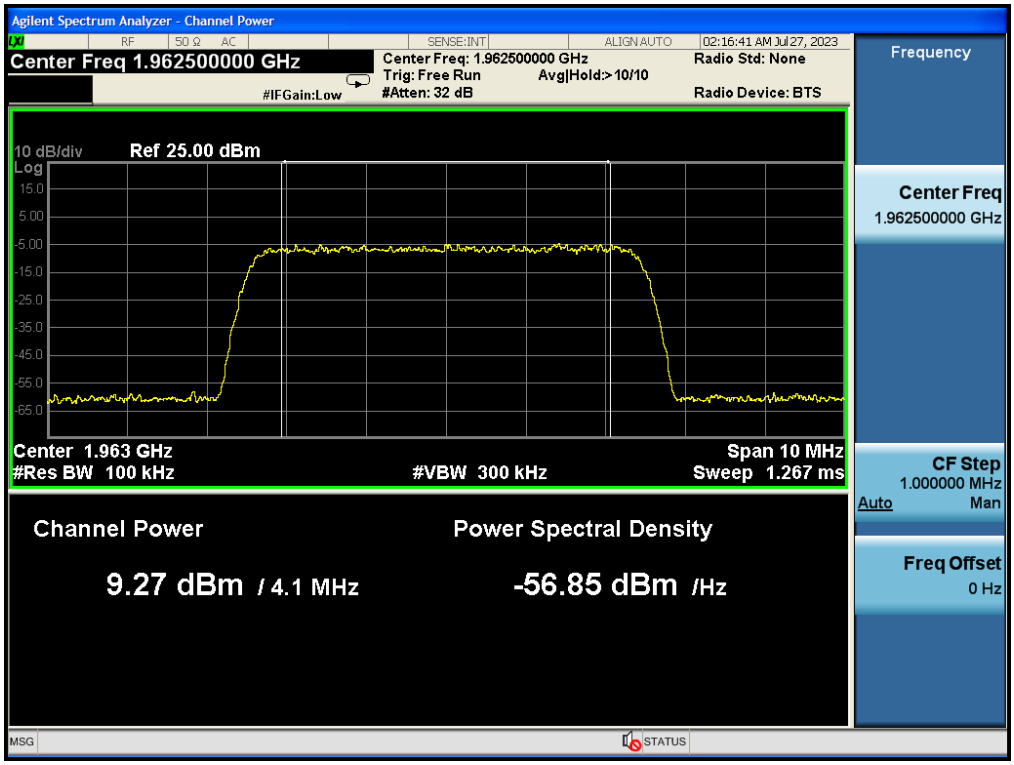
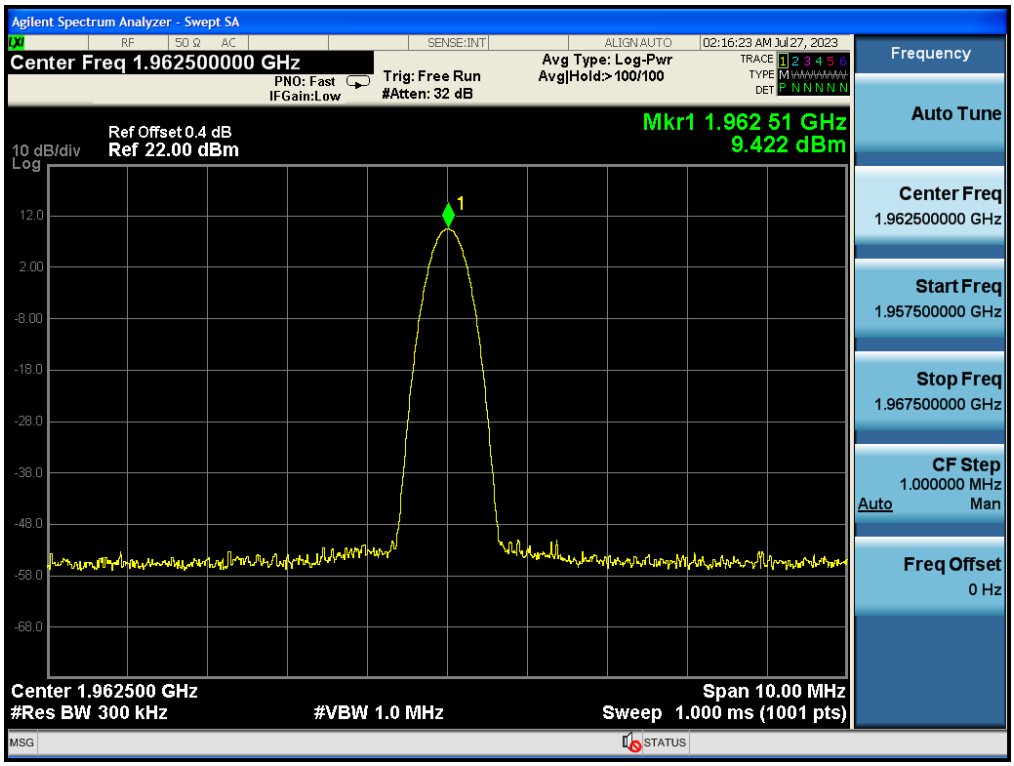
DL1930-1995, AWGN



DL1930-1995, CW



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5.3 Maximum Booster Gian Computation

Test Requirement:	This section provides guidance on the computation of the maximum gain based on the results obtained from previous measurements. The NPS limits on maximum gain for fixed and mobile Wideband Consumer Signal Boosters are provided in §20.21(e)(8)(i)(C)(2). Additionally, §20.21(e)(8)(i)(B) requires that Wideband Consumer Signal Boosters be able to provide equivalent uplink and downlink gain (within 9 dB).
Procedure:	a) Compute the maximum gain of the booster as follows to demonstrate compliance to the applicable gain limits as specified. b) For both the uplink and downlink in each supported frequency band, use each of the POUT and PIN value pairs determined in 7.2 in the following equation to determine the maximum gain (G) of the booster: G (dB) = P_{OUT}(dBm) - P_{IN}(dBm). c) Record the maximum gain of the uplink and downlink paths for each supported frequency band and verify that the each gain value complies with the applicable limit.

5.3.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.8 °C
Humidity:	49.9 %
Atmospheric Pressure:	1010 mbar

5.3.2 Test Data:

Uplink Gain VS Downlink Gain

Band	Signal Type	Uplink Gain (dB)	Downlink Gain(dB)	D-value	Limit (dBm)
Cellular	CW	59.62	62.74	3.12	9
	AWGN	59.56	62.41	2.85	
AWS-1	CW	68.82	69.62	0.8	
	AWGN	68.50	69.03	0.53	
Low A-E Blocks	CW	60.72	61.73	1.01	
	AWGN	60.73	61.27	0.54	
700 MHz Upper C Block	CW	60.63	61.81	1.18	
	AWGN	60.16	61.58	1.42	
Broadband PCS	CW	70.25	68.42	-1.83	
	AWGN	69.43	68.27	-1.16	

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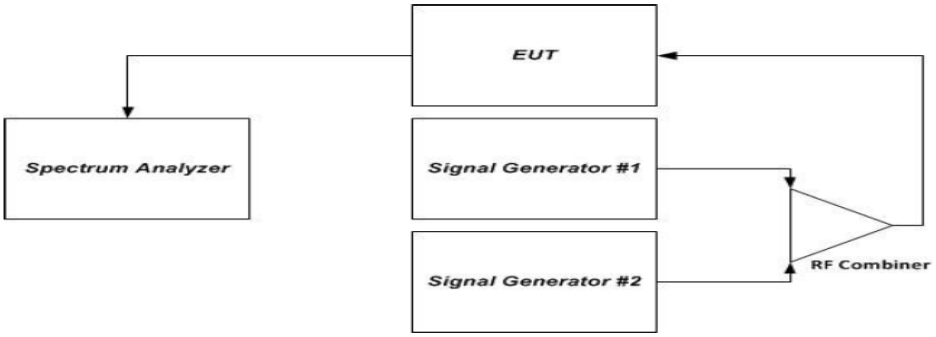
5.4 Intermodulation Product

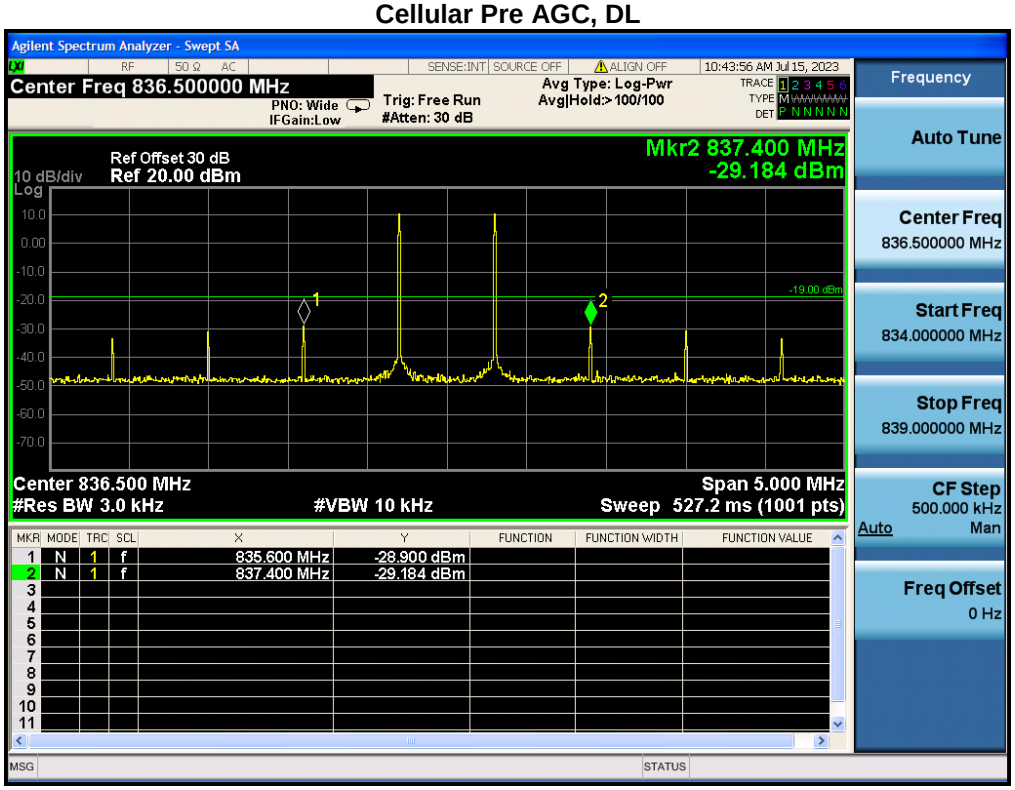
Test Requirement:	The following procedures shall be used to demonstrate compliance to the intermodulation limit specified in §20.21(e)(8)(i)(F) for Wideband Consumer Signal Boosters (i.e., -19 dBm).
Limit:	-19dBm
Test Setup:	 Figure 2 – Intermodulation product instrumentation test setup
Procedure:	a) Connect the signal booster to the test equipment as shown in Figure 2. Begin with the uplink output connected to the spectrum analyzer. b) Set the spectrum analyzer RBW = 3 kHz. c) Set the VBW ⩾ 3 X the RBW. d) Select the RMS detector. e) Set the spectrum analyzer center frequency to the center of the supported operational band under test. f) Set the span to 5 MHz. g) Configure the two signal generators for CW operation with generator 1 tuned 300 kHz below the operational band center frequency and generator 2 tuned 300 kHz above the operational band center frequency. h) Set the signal generator amplitudes so that the power from each into the RF combiner is equivalent and turn on the RF output. i) Increase the signal generators' amplitudes equally until just before the EUT begins AGC and ensure that all intermodulation products (if any exist), are below the specified limit of -19 dBm. j) Utilize the MAX HOLD function of the spectrum analyzer and wait for the trace to stabilize. Place a marker at the highest amplitude intermodulation product. k) Record the maximum intermodulation product amplitude level that is observed. l) Capture the spectrum analyzer trace for inclusion in the test report. m) Repeat steps 7.4.5 to 7.4.12 for all uplink and downlink operational bands. Note: If using a single signal generator with dual outputs, ensure that intermodulation products are not the result of the generator.

5.4.1 E.U.T. Operation:

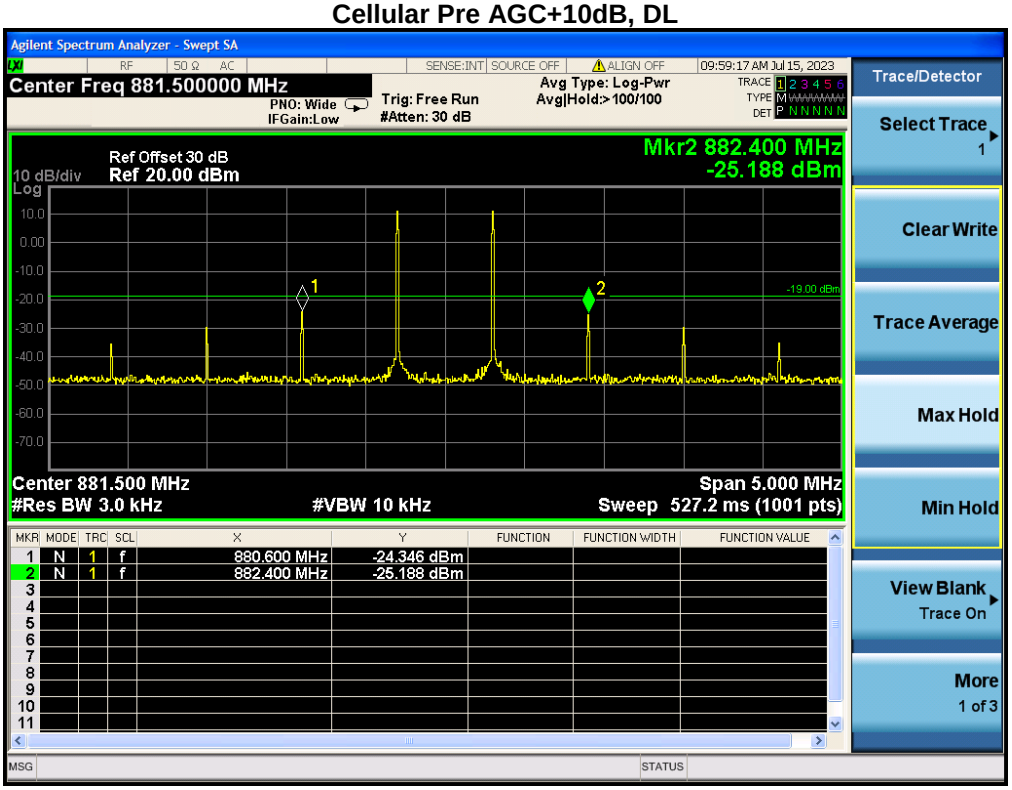
Operating Environment:	
Temperature:	25.8 °C
Humidity:	49.9 %
Atmospheric Pressure:	1010 mbar

5.4.2 Test Data:

Cellular Pre AGC, DL



Cellular Pre AGC+10dB, DL



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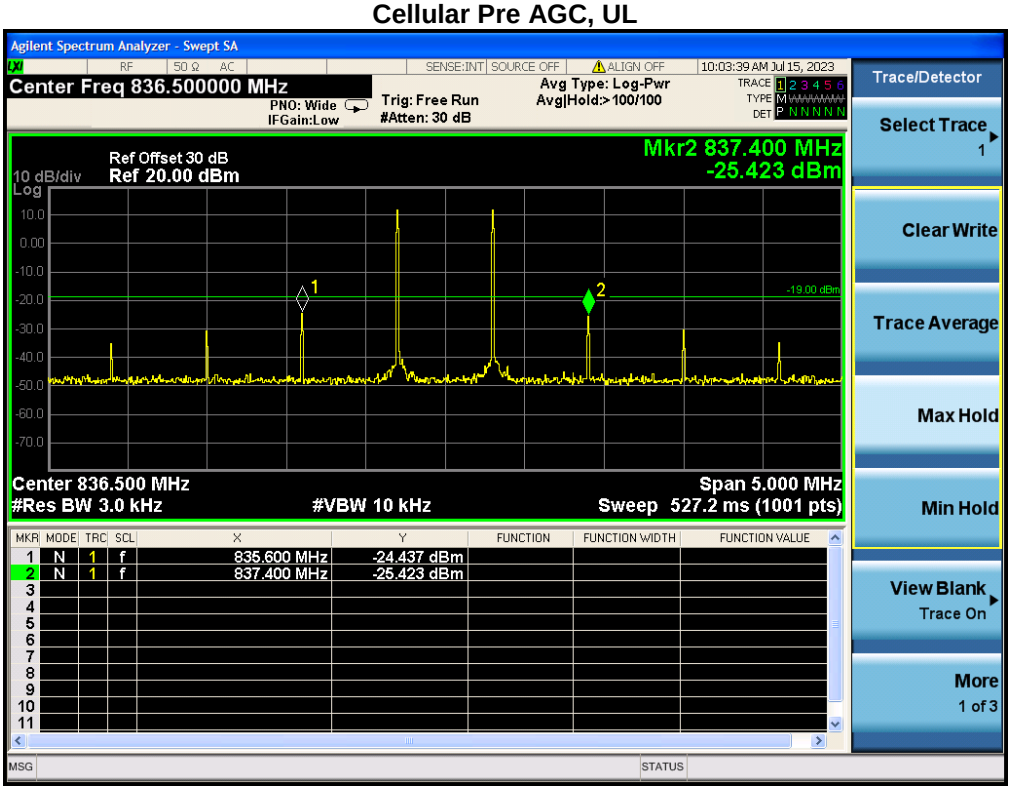
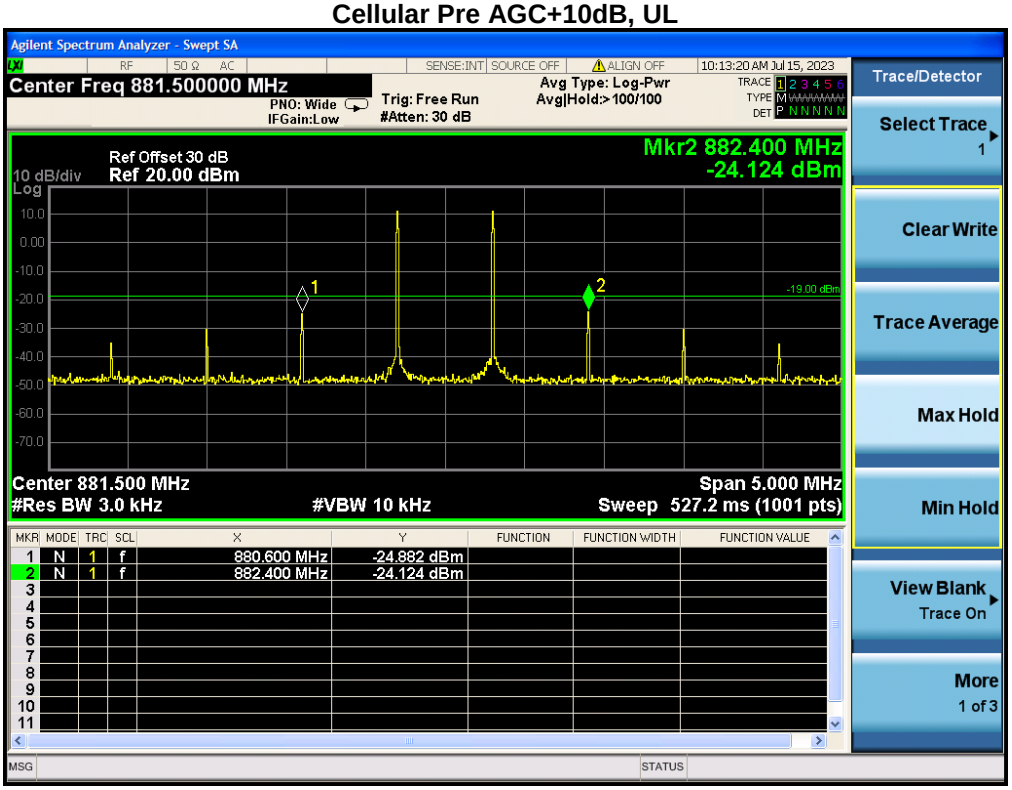
Cellular Pre AGC, UL



Cellular Pre AGC+10dB, UL



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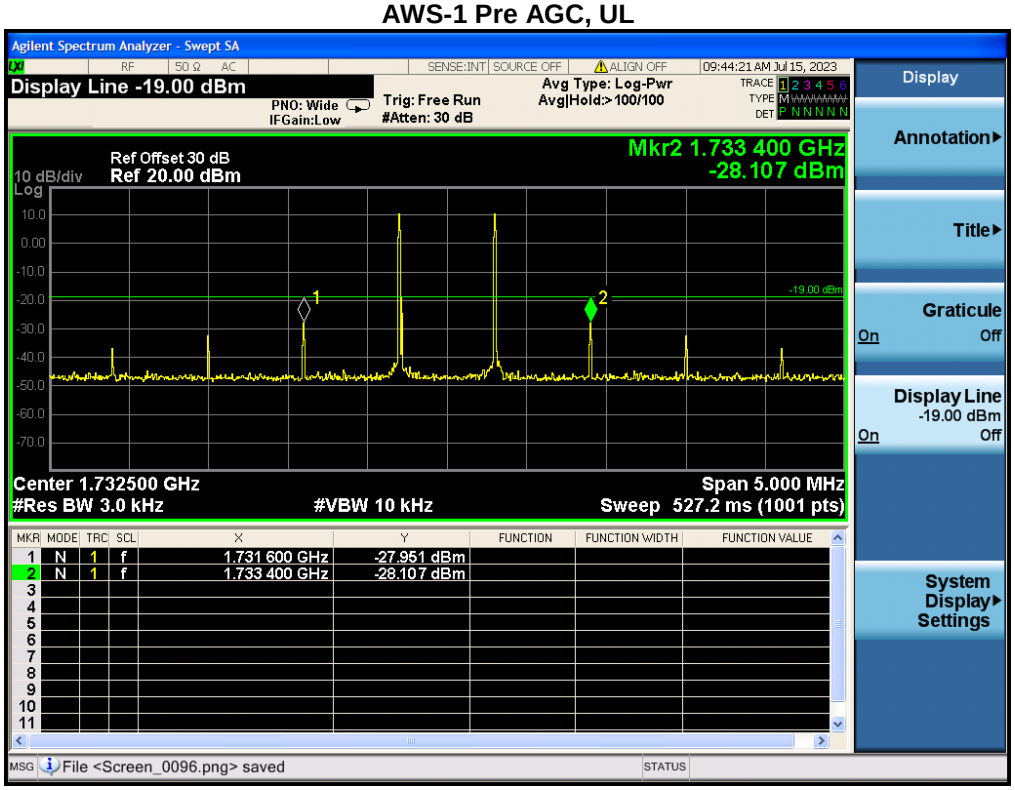
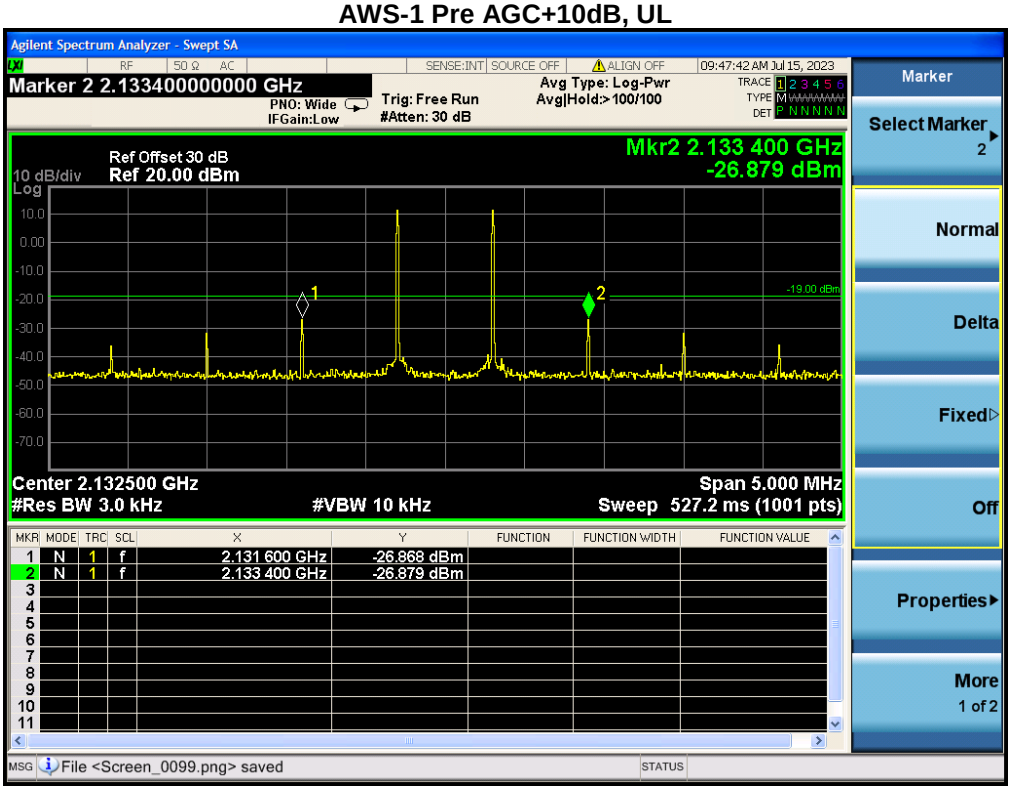
AWS-1 Pre AGC, UL



AWS-1 Pre AGC+10dB, UL



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