

TEST REPORT

ACCORDING TO: FCC CFR 47 PART 90, section 90.219

FOR:

Axell Wireless Israel Ltd.

High power repeater, Class B

Model: D-MBR 3707-3708-PS-NFPA-48DC-B

FCC ID:NEODMBR37073708PS

This report is in conformity with ISO/IEC 17025. The "A2LA Accredited" symbol endorsement applies only to the tests and calibrations that are listed in the scope of Hermon Laboratories accreditation. The test results relate only to the items tested.
This test report shall not be reproduced in any form except in full with the written approval of Hermon Laboratories Ltd.

Table of contents

1	Applicant information	3
2	Equipment under test attributes	3
3	Manufacturer information	3
4	Test details	3
5	Tests summary	4
6	EUT description	5
6.1	General information	5
6.2	EUT modules and sub-assemblies	5
6.3	EUT options/configurations	5
6.4	Ports and lines	5
6.5	Support and test equipment	5
6.6	Changes made in EUT	5
6.7	Test configuration	6
6.8	Transmitter characteristics	7
7	Transmitter tests according to 47CFR part 90 requirements	8
7.1	Peak output power test	8
7.2	Occupied bandwidth test	56
7.3	Emission mask test	104
7.4	Radiated spurious emission measurements	173
7.5	Spurious emissions at RF antenna connector test	189
7.6	Intermodulation product test	280
7.7	Noise figure test	292
8	APPENDIX A Test equipment and ancillaries used for tests	296
8.1	Test equipment and ancillaries used for tests	297
9	APPENDIX B Measurement uncertainties	298
10	APPENDIX C Test facility description	299
11	APPENDIX D Specification references	299
12	APPENDIX E Test equipment correction factors	300
13	APPENDIX F Abbreviations and acronyms	314

1 Applicant information

Client name: Axell Wireless Israel Ltd.
Address: 6 Bareket street, Petach Tikva 49002, Israel
Telephone: +972 3918 0180
Fax: +972 3918 0190
E-mail: Tamir.BenShoshan@axellwireless.com
Contact name: Mr. Tamir Ben Shoshan

2 Equipment under test attributes

Product name: High power repeater
Product type: Class B signal booster
Model(s): D-MBR 3707-3708-PS-NFPA-48DC-B
Serial number: 15079001
Hardware version: DMBR024_Rev1A
Software release: File System: 24_03_15
CCD Application: 6.2.2
Receipt date 25-Jun-15

3 Manufacturer information

Manufacturer name: Axell Wireless Israel Ltd.
Address: 6 Bareket street, Petach Tikva 49002, Israel
Telephone: +972 3918 0180
Fax: +972 3918 0190
E-Mail: Tamir.BenShoshan@axellwireless.com
Contact name: Mr. Tamir Ben Shoshan

4 Test details

Project ID: 27215
Location: Hermon Laboratories Ltd. Harakevet Industrial Zone, Binyamina 30500, Israel
Test started: 15-Jul-15
Test completed: 04-Aug-15
Test specification(s): 47CFR part 90, section 90.219

5 Tests summary

Test	Status
Transmitter characteristics	
Section 90.219(e)(1), Radiated output power	Pass
Section 90.219(a), Occupied bandwidth	Pass
Sections 90.210(b), 90.210(h), Emission mask	Pass
Section 90.210(b), Intermodulation product	Pass
Section 90.219(e)(3), Radiated spurious emissions	Pass
Section 90.219(e)(3), Conducted spurious emissions	Pass
Section 2.1091, RF radiation exposure evaluation	Pass, exhibit provided in Application for certification
Section 2.219(e)(2) Noise figure	Pass

Testing was completed against all relevant requirements of the test standard. The results obtained indicate that the product under test complies in full with the requirements tested.
The test results relate only to the items tested. Pass/ fail decision was based on nominal values.

This test report supersedes the previously issued test report identified by Doc ID:AXERAD_FCC.27215.

	Name and Title	Date	Signature
Tested by:	Mr. S. Samokha, test engineer	August 4, 2015	
Reviewed by:	Mrs. M. Cherniavsky, certification engineer	August 26, 2015	
Approved by:	Mr. M. Nikishin, EMC and Radio group manager	October 27, 2015	

6 EUT description

6.1 General information

The EUT, D-MBR 3707-3708-PS-NFPA-48DC-B (Digital Multi Band Repeater for Public Safety) is a high-power digital multi-channel signal booster (DCSB) that features an array of up to 12 DSP based, softwarecontrolled, variable bandwidth filters, user-programmable across the 700 and 800 MHz bands.

The D-MBR 3707-3708-PS-NFPA-48DC-B supports all public safety technologies. In addition to specifying the centre frequency of each filter, the user can select a filter from a drop down list that has several choices for each pass band that vary in time delay and filter slope. This gives the engineer the unique ability to trade off the adjacent channel rejection and time delay interference for the coverage area permitting the use of the D-MBR 3007-3008 PS NFPA in applications where no other booster solution will work.

Every parameter of D-MBR 3707-3708-PS-NFPA-48DC-B including filter tuning and selection, is software controlled via Web management. The patented Axell Wireless' digital RF filter not only enables simple initial setup for any channel plan, but if necessary even permits a simple reconfiguration because of re-banding.

6.2 EUT modules and sub-assemblies

Description	Manufacturer	Model or P/N	Serial number
Booster	Axell Wireless	D-MBR 3707-3708-PS-NFPA-48DC-B	15079001
AC/DC adapter	MW	CLG-150-30A	825279200

6.3 EUT options/configurations

Number	Operating mode description	Configuration
1	Transmit 758-775 MHz, Downlink	1
2	Transmit 851-861 MHz, Downlink	2
3	Transmit 788-805 MHz, Uplink	3
4	Transmit 806-816 MHz, Uplink	4

6.4 Ports and lines

Port type	Port description	Connected from	Connected to	Qty.	Cable type	Cable length, m
Power	AC	AC mains	AC/DC adapter	1	Unshielded	1.5
Power	DC	AC/DC adapter	EUT	1	Unshielded	0.3
Signal	Ethernet	EUT	PC	1	UTP	5
Signal	Antenna	EUT	Antenna	2	Coax	NA
Signal	Alarm I/O	EUT	OC	1	Unshielded	3

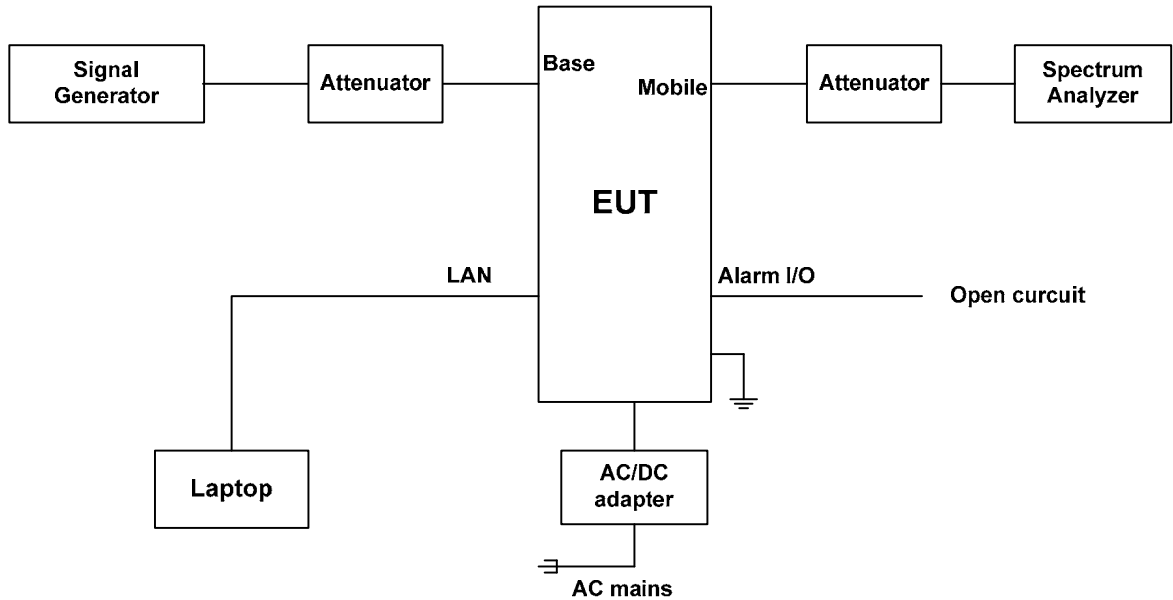
6.5 Support and test equipment

Description	Manufacturer	Model number	Serial number
Laptop	DELL	PP20L	5QXF83G
AC/DC adapter	DELL	LA65N80	0DF263-71615-7QF-E850
Mouse	Logitech	810-001317	NA

6.6 Changes made in EUT

No changes were implemented in the EUT during testing.

6.7 Test configuration



6.8 Transmitter characteristics

Type of equipment				
V	Stand-alone (Equipment with or without its own control provisions)			
	Combined equipment (Equipment where the radio part is fully integrated within another type of equipment)			
	Plug-in card (Equipment intended for a variety of host systems)			
Intended use		Condition of use		
	fixed	Always at a distance more than 2 m from all people		
V	mobile	Always at a distance more than 20 cm from all people		
	portable	May operate at a distance closer than 20 cm to human body		
Assigned frequency range		DL 758.0 – 775.0 MHz; UL 788.0 – 805.0 MHz- FCC part 90, subpart R DL 851.0 – 861.0 MHz; UL 806.0 – 816.0 MHz - FCC part 90, section 90.614		
Operating frequency range		DL 758.0 – 775.0 MHz; UL 788.0 – 805.0 MHz DL 851.0 – 861.0 MHz; UL 806.0 – 816.0 MHz		
Maximum rated output power		At maximum gain, Output port		37 dBm each band
		EIRP density dBm / MHz (aggregate power of both RF chains) with maximum declared antenna gain		NA
Is transmitter output power variable?		No		
		continuous variable		
		V	stepped variable with stepsize	1.0 dB
		minimum RF power		NA
		maximum RF power		37 dBm
Antenna connection				
unique coupling	V	standard connector	Integral	with temporary RF connector without temporary RF connector
Antenna/s technical characteristics				
Type	Manufacturer	Model number	Antenna gain, dBi	Cable loss, dB
External (Indoor)	NA	NA	NA	NA
External (Outdoor)	NA	NA	NA	NA
Transmitter aggregate data rate/s, Mbps				
Transmitter 99% power bandwidth		Type of modulation		
		C4FM 9.6 kbps	iDEN QAM 64 kbps	Analog FM 9.6 kbps
Type of multiplexing				
Modulating test signal (baseband)				
Maximum transmitter duty cycle in normal use				
Transmitter power source				
	DC	Nominal rated voltage		
V	AC	Nominal rated voltage	From 120 VAC via AC/DC adapter	
Common power source for transmitter and receiver			V	yes no

Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

7 Transmitter tests according to 47CFR part 90 requirements

7.1 Maximum output power test

7.1.1 General

This test was performed to measure the RF output power at antenna connector. Specification test limits are given in Table 7.1.1.

Table 7.1.1 Maximum output power limits

Assigned frequency range, MHz	Maximum output power (ERP)	
	W	dBm
Above 150.0	5.0	37.0

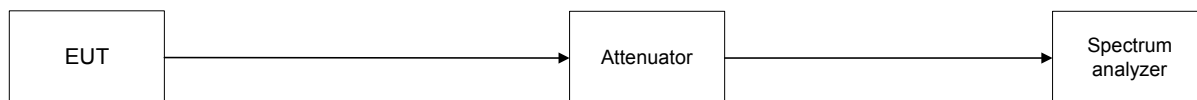
7.1.2 Test procedure

7.1.2.1 The EUT was set up as shown in Figure 7.1.1, energized and its proper operation was checked.

7.1.2.2 The EUT was adjusted to produce maximum available to the end user RF output power.

7.1.2.3 The peak output power was measured with spectrum analyzer as provided in the associated tables and plots.

Figure 7.1.1 Maximum output power test setup



Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.1.2 Output power test results

DETECTOR USED: Average
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz
MODULATING SIGNAL: C4FM
CONFIGURATION: Single Band Dual Channel

OPERATING FREQUENCY RANGE: 758 - 775 MHz (downlink)
788 - 805 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
758.0	Base	31.08	31.57	34.57	37.0	-2.43	Pass
766.0	Base	31.35	32.85	35.85	37.0	-1.15	Pass
775.0	Base	31.61	31.57	34.89	37.0	-2.11	Pass
Uplink transmit mode							
788.0	Mobile	24.08	25.40	28.40	37.0	-8.60	Pass
796.0	Mobile	25.09	26.11	29.11	37.0	-7.89	Pass
805.0	Mobile	26.18	26.34	29.34	37.0	-7.66	Pass

OPERATING FREQUENCY RANGE: 851 - 861 MHz (downlink)
806 - 816 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
851.0	Base	32.03	31.86	35.03	37.0	-1.97	Pass
856.0	Base	32.63	32.89	35.89	37.0	-1.11	Pass
861.0	Base	32.82	33.42	36.42	37.0	-0.58	Pass
Uplink transmit mode							
806.0	Mobile	25.22	26.42	29.42	37.0	-7.58	Pass
811.0	Mobile	25.17	26.28	29.28	37.0	-7.72	Pass
816.0	Mobile	24.80	26.41	29.41	37.0	-7.59	Pass

* - Margin = Maximum ERP – specification limit

** - There are no specific antennas supplied as a part of the unit that is why the maximum antenna assembly gain in dBd shall not exceed the power margin in dB.

Antenna Assembly Gain (dBd) = Antenna Gain (dBd) – Feeder Loss (dB) = Antenna Gain (dBi) – 2.15 – Feeder Loss (dB)

Note: Output power = Maximum value from SA reading (Without ALC or With ALC) + 10*log(N), where N = 2 (number of channels)

Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.1.3 Output power test results

DETECTOR USED: Average
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz
MODULATING SIGNAL: C4FM
CONFIGURATION: Single Band Single Channel

OPERATING FREQUENCY RANGE: 758 - 775 MHz (downlink)
788 - 805 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
758.0	Base	34.32	34.43	34.43	37.00	-2.57	Pass
766.0	Base	35.28	35.63	35.63	37.00	-1.37	Pass
775.0	Base	34.88	34.60	34.88	37.00	-2.12	Pass
Uplink transmit mode							
788.0	Mobile	25.23	25.32	25.32	37.0	-11.68	Pass
796.0	Mobile	25.77	25.86	25.86	37.0	-11.14	Pass
805.0	Mobile	26.13	26.29	26.29	37.0	-10.71	Pass

OPERATING FREQUENCY RANGE: 851 - 861 MHz (downlink)
806 - 816 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
851.0	Base	34.47	34.73	34.73	37.00	-2.27	Pass
856.0	Base	35.25	35.55	35.55	37.00	-1.45	Pass
861.0	Base	35.63	35.63	35.63	37.00	-1.37	Pass
Uplink transmit mode							
806.0	Mobile	26.14	26.27	26.27	37.0	-10.73	Pass
811.0	Mobile	25.97	26.11	26.11	37.0	-10.89	Pass
816.0	Mobile	26.08	26.17	26.17	37.0	-10.83	Pass

* - Margin = Maximum ERP – specification limit

** - There are no specific antennas supplied as a part of the unit that is why the maximum antenna assembly gain in dBd shall not exceed the power margin in dB.

Antenna Assembly Gain (dBd) = Antenna Gain (dBd) – Feeder Loss (dB) = Antenna Gain (dBi) – 2.15 – Feeder Loss (dB)

Note: Output power = Maximum value from SA reading (Without ALC or With ALC)

Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.1.4 Output power test results

DETECTOR USED: Average
RESOLUTION BANDWIDTH: 1 kHz
VIDEO BANDWIDTH: 10 kHz
MODULATING SIGNAL: iDEN QAM
CONFIGURATION: Single Band Dual Channel

OPERATING FREQUENCY RANGE: 758 - 775 MHz (downlink)
788 - 805 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
758.0	Base	27.78	29.88	32.88	37.0	-4.12	Pass
766.0	Base	28.74	31.00	34.00	37.0	-3.00	Pass
775.0	Base	28.39	31.07	34.07	37.0	-2.93	Pass
Uplink transmit mode							
788.0	Mobile	26.25	30.96	33.96	37.0	-3.04	Pass
796.0	Mobile	27.42	31.49	34.49	37.0	-2.51	Pass
805.0	Mobile	27.47	32.49	35.49	37.0	-1.51	Pass

OPERATING FREQUENCY RANGE: 851 - 861 MHz (downlink)
806 - 816 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
851.0	Base	28.28	30.83	33.83	37.0	-3.17	Pass
856.0	Base	29.09	31.93	34.93	37.0	-2.07	Pass
861.0	Base	29.64	30.94	33.94	37.0	-3.06	Pass
Uplink transmit mode							
806.0	Mobile	28.67	31.53	34.53	37.0	-2.47	Pass
811.0	Mobile	28.03	32.11	35.11	37.0	-1.89	Pass
816.0	Mobile	27.42	32.21	35.21	37.0	-1.79	Pass

* - Margin = Maximum ERP – specification limit

** - There are no specific antennas supplied as a part of the unit that is why the maximum antenna assembly gain in dBd shall not exceed the power margin in dB.

Antenna Assembly Gain (dBd) = Antenna Gain (dBd) – Feeder Loss (dB) = Antenna Gain (dBi) – 2.15 – Feeder Loss (dB)

Note: Output power = Maximum value from SA reading (Without ALC or With ALC) + 10*log(N), where N = 2 (number of channels)

Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.1.5 Output power test results

DETECTOR USED: Average
RESOLUTION BANDWIDTH: 1 kHz
VIDEO BANDWIDTH: 10 kHz
MODULATING SIGNAL: iDEN QAM
CONFIGURATION: Single Band Single Channel

OPERATING FREQUENCY RANGE: 758 - 775 MHz (downlink)
788 - 805 MHz (uplink)

755 - 805 MHz (uplink)							
Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
758.0	Base	31.22	33.11	33.11	37.0	-3.89	Pass
766.0	Base	32.07	33.88	33.88	37.0	-3.12	Pass
775.0	Base	31.51	33.40	33.40	37.0	-3.60	Pass
Uplink transmit mode							
788.0	Mobile	27.79	30.16	30.16	37.0	-6.84	Pass
796.0	Mobile	29.63	31.64	31.64	37.0	-5.36	Pass
805.0	Mobile	29.44	31.45	31.45	37.0	-5.55	Pass

OPERATING FREQUENCY RANGE: 851 - 861 MHz (downlink)
806 - 816 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
851.0	Base	31.75	33.33	33.33	37.0	-3.67	Pass
856.0	Base	31.73	33.69	33.69	37.0	-3.31	Pass
861.0	Base	32.57	33.40	33.40	37.0	-3.60	Pass
Uplink transmit mode							
806.0	Mobile	29.52	32.27	32.27	37.0	-4.73	Pass
811.0	Mobile	29.94	32.25	32.25	37.0	-4.75	Pass
816.0	Mobile	29.15	32.41	32.41	37.0	-4.59	Pass

* - Margin = Maximum ERP – specification limit

** - There are no specific antennas supplied as a part of the unit that is why the maximum antenna assembly gain in dBd shall not exceed the power margin in dB.

Antenna Assembly Gain (dBd) = Antenna Gain (dBd) – Feeder Loss (dB) = Antenna Gain (dBi) – 2.15 – Feeder Loss (dB)
Note: Output power = Maximum value from SA reading (Without ALC or With ALC)

Test specification:	Section 90.219(e)(1), Maximum output power		
Test procedure:	47 CFR, Section 2.1046; KDB 935210 D02 v03		
Test mode:	Compliance	Verdict: PASS	
Date(s):	16-Jul-15 - 22-Jul-15		
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.1.6 Output power test results

DETECTOR USED: Average
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz
MODULATING SIGNAL: Analog FM 10.0 kHz/1 kHz
CONFIGURATION: Single Band Dual Channel

OPERATING FREQUENCY RANGE: 758 - 775 MHz (downlink)
788 - 805 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
758.0	Base	31.05	31.72	34.72	37.0	-2.28	Pass
766.0	Base	32.47	33.18	36.18	37.0	-0.82	Pass
775.0	Base	31.45	32.39	32.39	37.0	-4.61	Pass
Uplink transmit mode							
788.0	Mobile	24.47	25.53	28.53	37.0	-8.47	Pass
796.0	Mobile	24.98	26.23	29.23	37.0	-7.77	Pass
805.0	Mobile	24.35	26.28	29.28	37.0	-7.72	Pass

OPERATING FREQUENCY RANGE: 851 - 861 MHz (downlink)
806 - 816 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
851.0	Base	32.09	31.96	35.09	37.0	-1.91	Pass
856.0	Base	32.67	32.88	35.88	37.0	-1.12	Pass
861.0	Base	32.80	33.74	36.74	37.0	-0.26	Pass
Uplink transmit mode							
806.0	Mobile	25.34	26.44	29.44	37.0	-7.56	Pass
811.0	Mobile	25.22	26.30	29.30	37.0	-7.70	Pass
816.0	Mobile	24.61	26.44	29.44	37.0	-7.56	Pass

* - Margin = Maximum ERP – specification limit

** - There are no specific antennas supplied as a part of the unit that is why the maximum antenna assembly gain in dBd shall not exceed the power margin in dB.

Antenna Assembly Gain (dBd) = Antenna Gain (dBd) – Feeder Loss (dB) = Antenna Gain (dBi) – 2.15 – Feeder Loss (dB)

Note: Output power = Maximum value from SA reading (Without ALC or With ALC) + 10*log(N), where N = 2 (number of channels)

Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.1.7 Output power test results

DETECTOR USED: Average
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz
MODULATING SIGNAL: Analog FM 10.0 kHz/1 kHz
CONFIGURATION: Single Band Single Channel

OPERATING FREQUENCY RANGE: 758 - 775 MHz (downlink)
788 - 805 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
758.0	Base	34.44	34.58	34.58	37.0	-2.42	Pass
766.0	Base	35.25	35.64	35.64	37.0	-1.36	Pass
775.0	Base	34.97	34.75	34.97	37.0	-2.03	Pass
Uplink transmit mode							
788.0	Mobile	25.23	25.32	25.32	37.0	-11.68	Pass
796.0	Mobile	25.97	26.04	26.04	37.0	-10.96	Pass
805.0	Mobile	26.25	26.28	26.28	37.0	-10.72	Pass

OPERATING FREQUENCY RANGE: 851 - 861 MHz (downlink)
806 - 816 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
851.0	Base	34.60	34.80	34.80	37.0	-2.20	Pass
856.0	Base	35.33	35.57	35.57	37.0	-1.43	Pass
861.0	Base	35.73	35.73	35.73	37.0	-1.27	Pass
Uplink transmit mode							
806.0	Mobile	26.56	26.77	26.77	37.0	-10.23	Pass
811.0	Mobile	26.22	26.33	26.33	37.0	-10.67	Pass
816.0	Mobile	26.43	26.58	26.58	37.0	-10.42	Pass

* - Margin = Maximum ERP – specification limit

** - There are no specific antennas supplied as a part of the unit that is why the maximum antenna assembly gain in dBd shall not exceed the power margin in dB.

Antenna Assembly Gain (dBd) = Antenna Gain (dBd) – Feeder Loss (dB) = Antenna Gain (dBi) – 2.15 – Feeder Loss (dB)

Note: Output power = Maximum value from SA reading (Without ALC or With ALC)

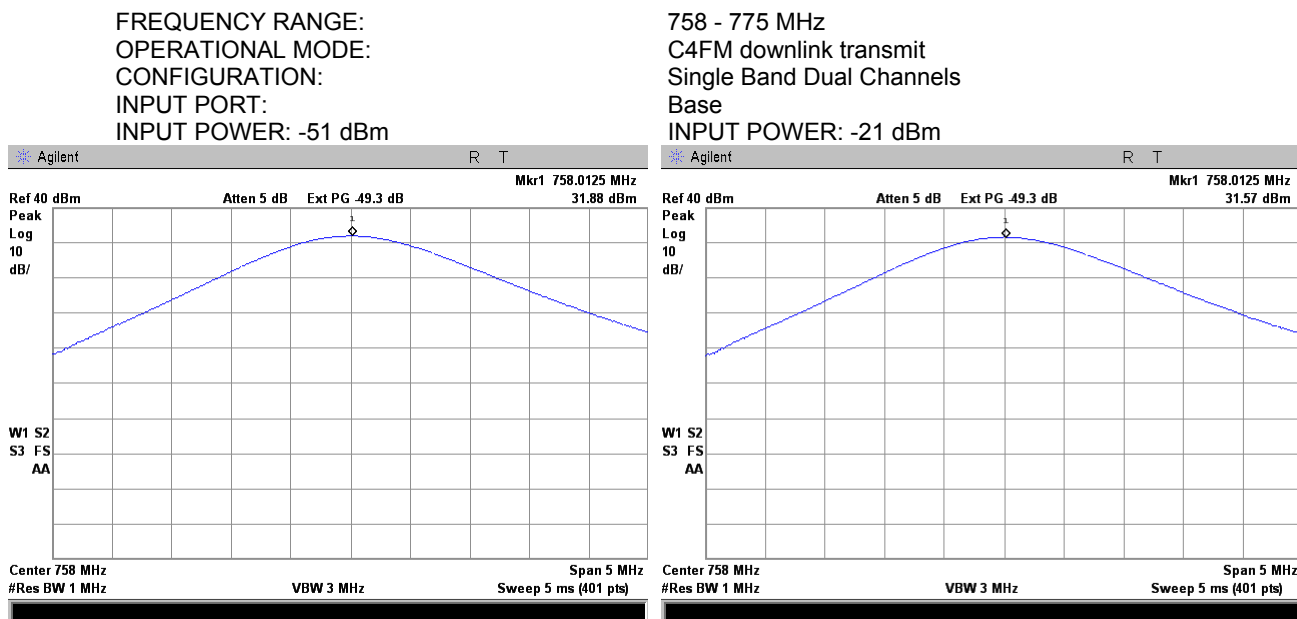
Reference numbers of test equipment used

HL 0539	HL 1908	HL 2357	HL 2909	HL 3434	HL 3768	HL 3779	HL 4068
HL 4224	HL 4273	HL 4274	HL 4354				

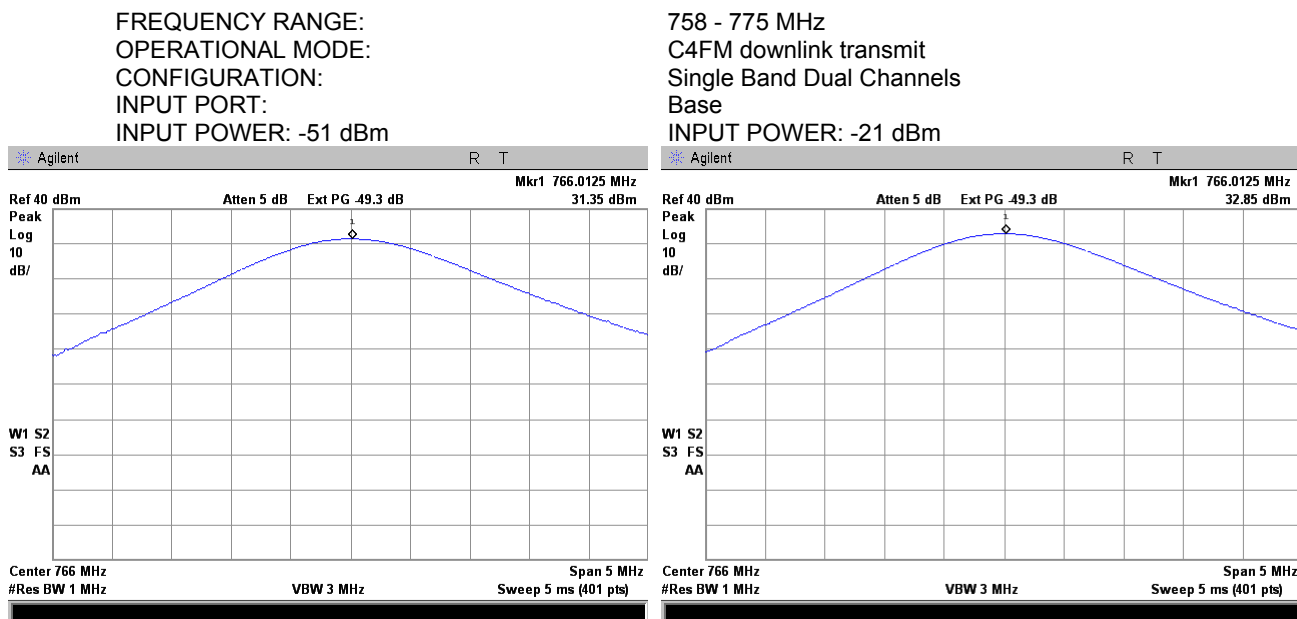
Full description is given in Appendix A.

Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.1 RF output power measurements at low frequency carrier, Port 1

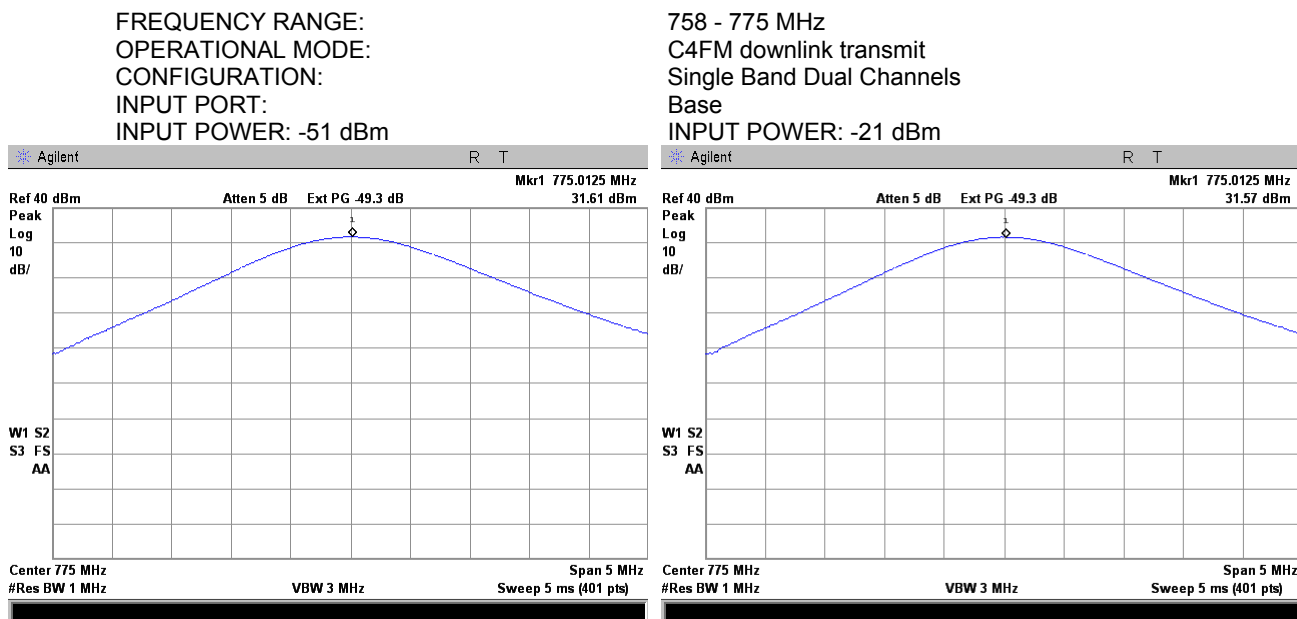


Plot 7.1.2 RF output power measurements at mid frequency carrier, Port 1

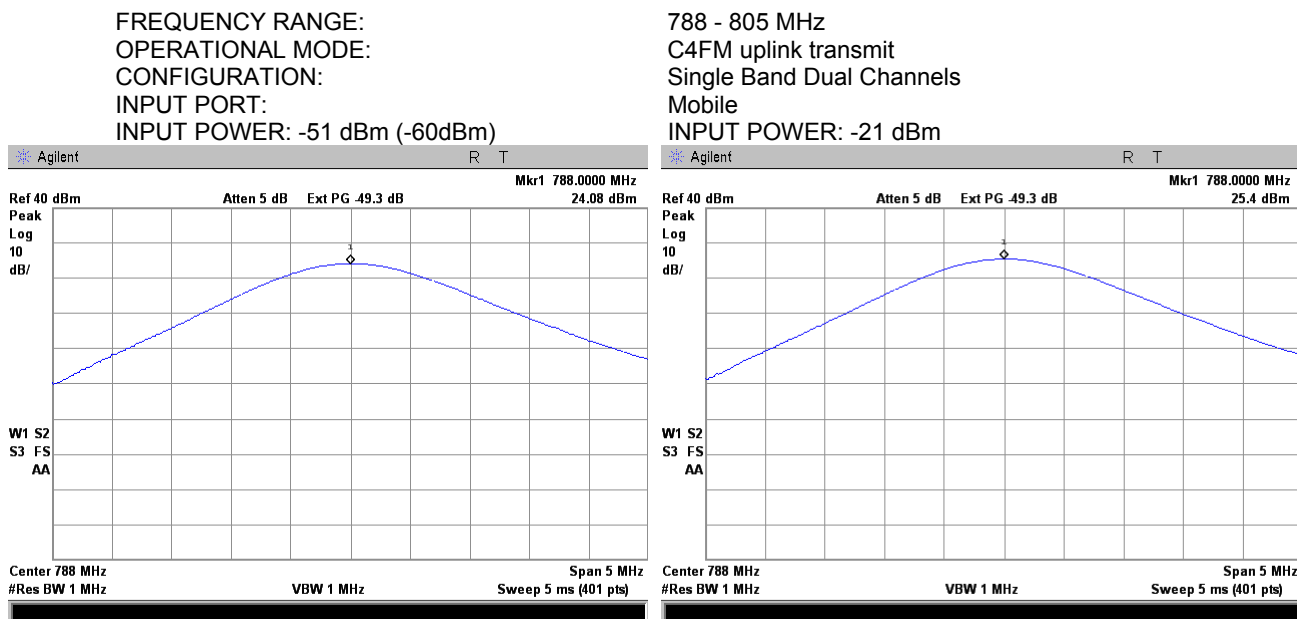


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.3 RF output power measurements at high frequency carrier, Port 1

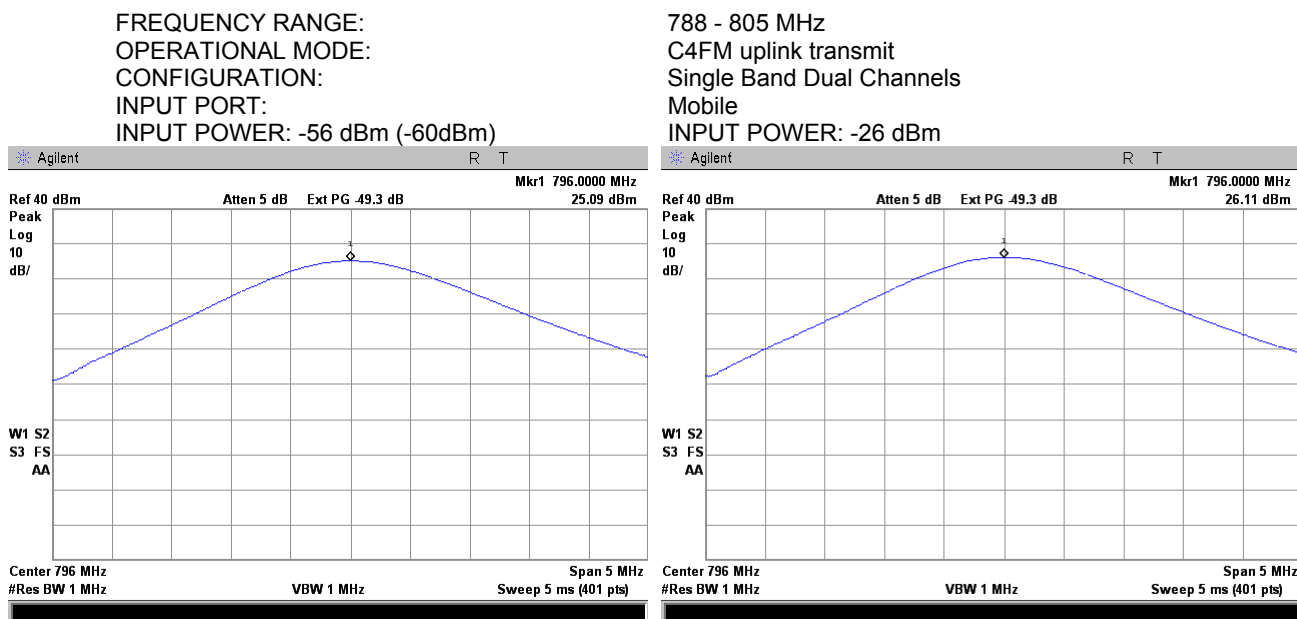


Plot 7.1.4 RF output power measurements at low frequency carrier, Port 2

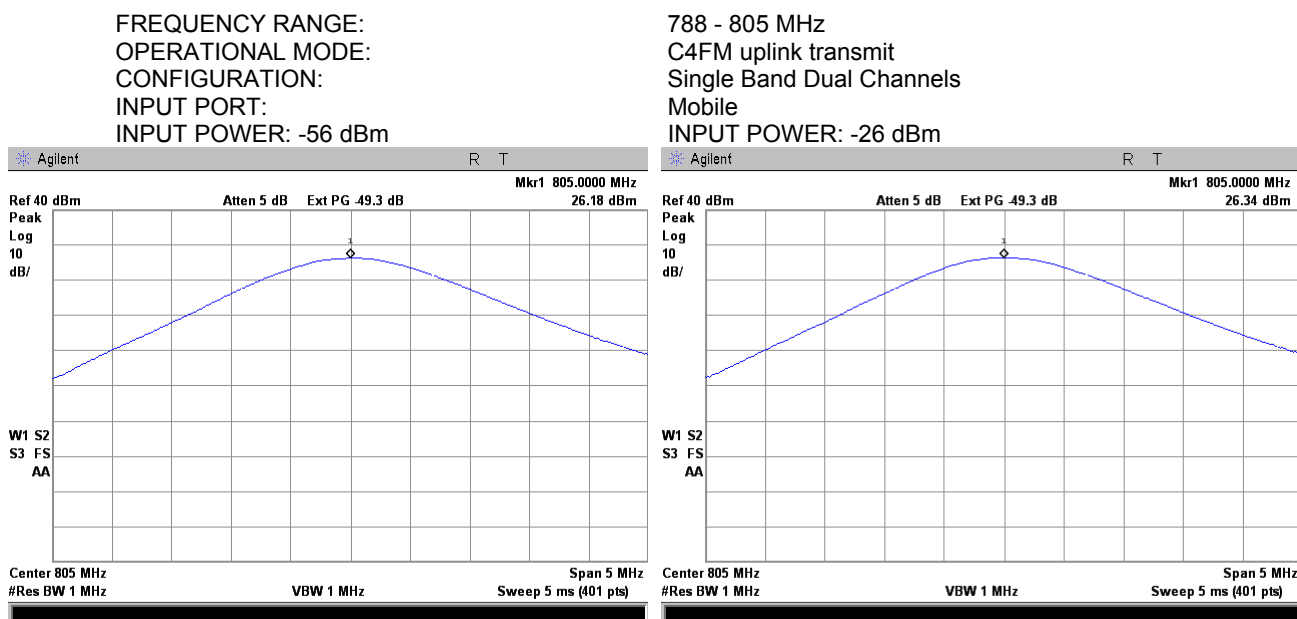


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.5 RF output power measurements at mid frequency carrier, Port 2

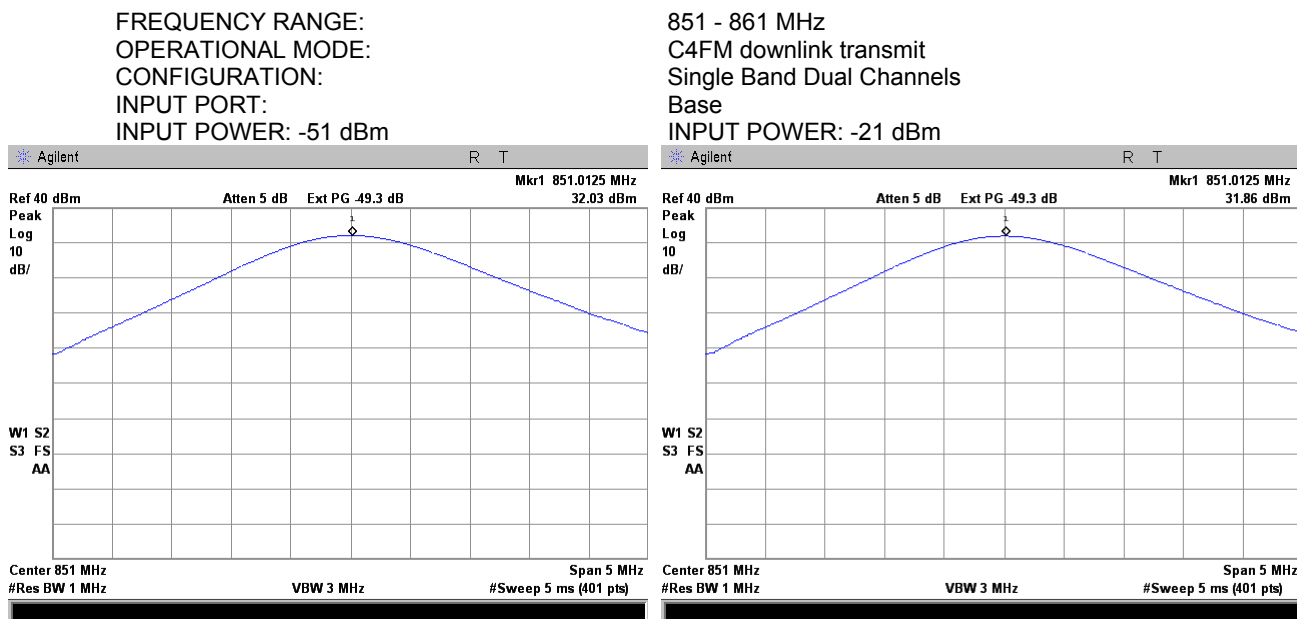


Plot 7.1.6 RF output power measurements at high frequency carrier, Port 2

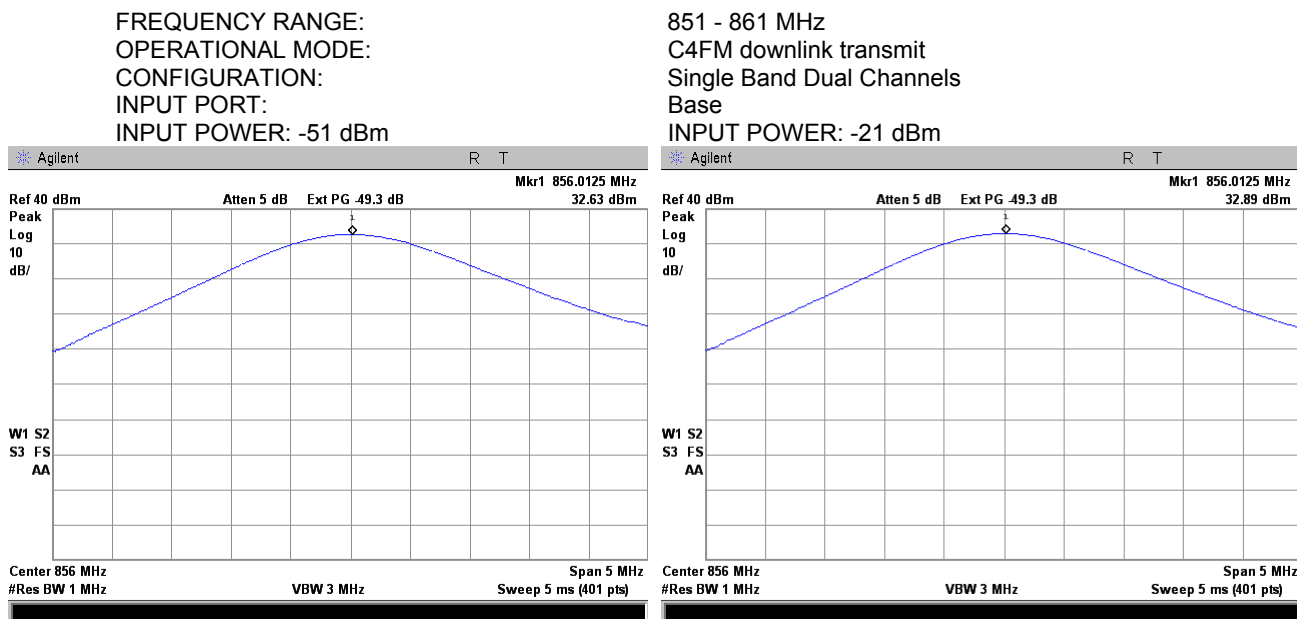


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.7 RF output power measurements at low frequency carrier, Port 1

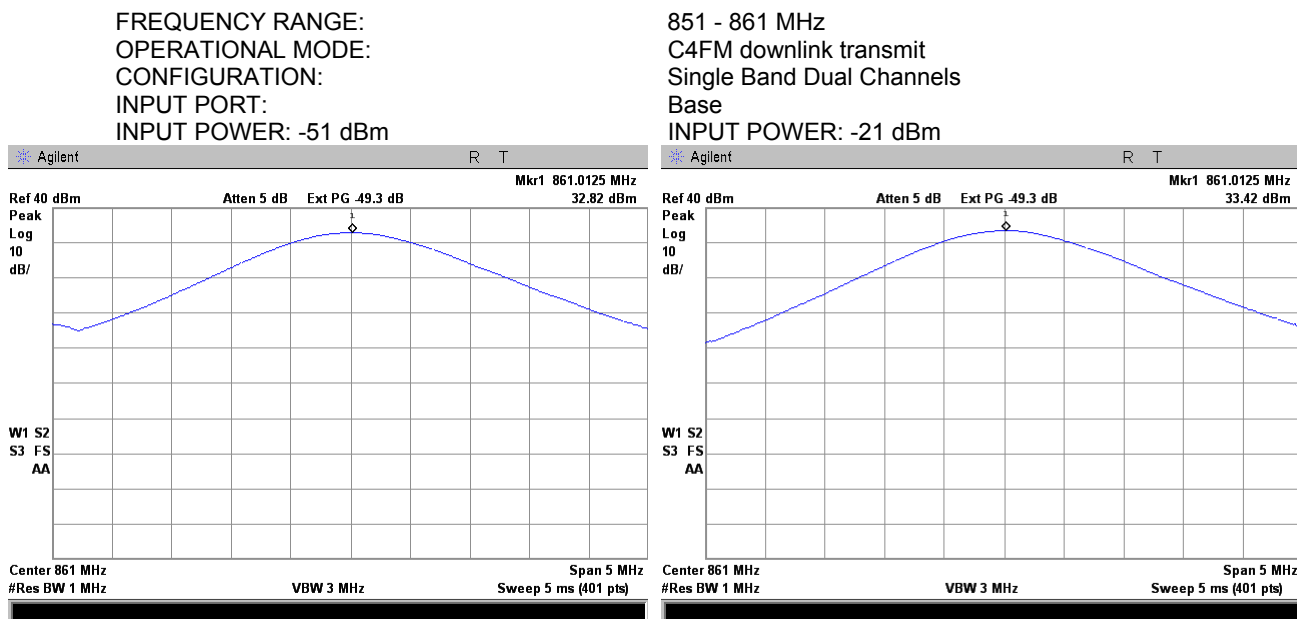


Plot 7.1.8 RF output power measurements at mid frequency carrier, Port 1

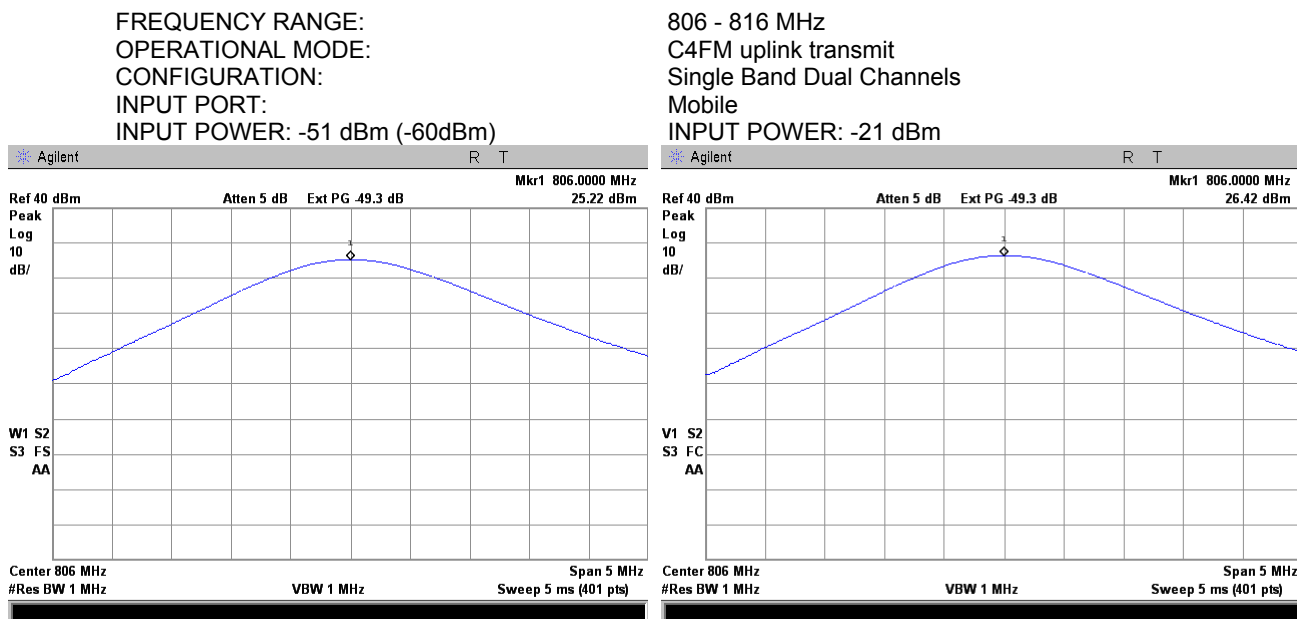


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.9 RF output power measurements at high frequency carrier, Port 1

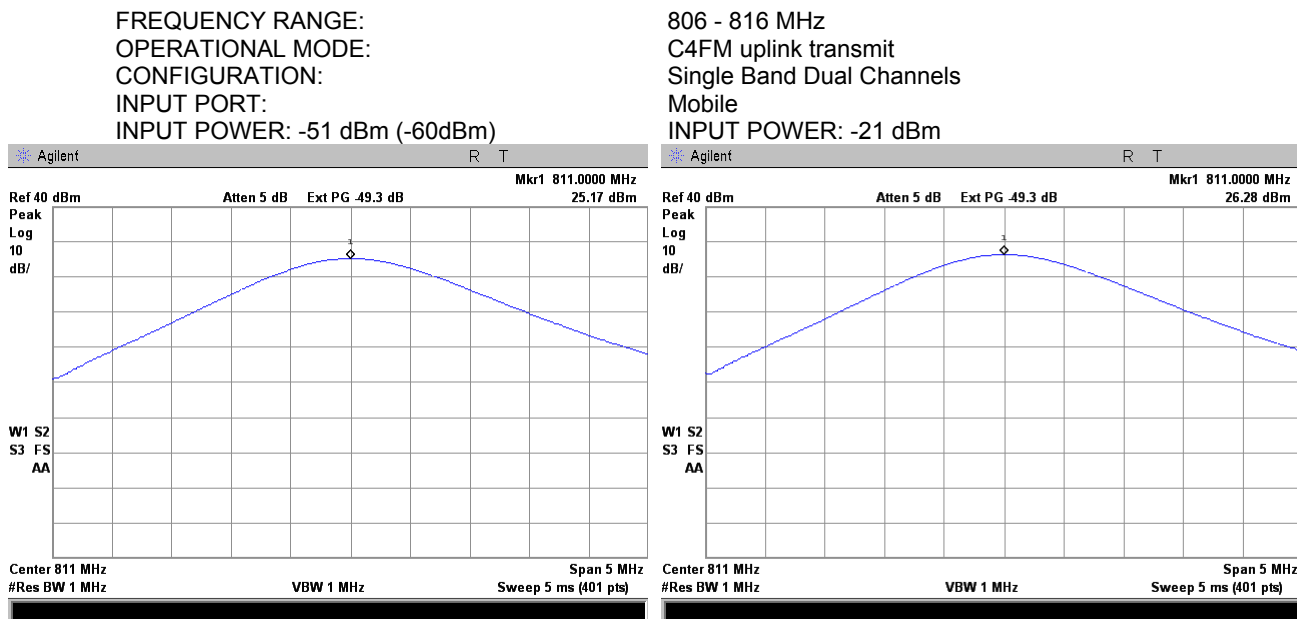


Plot 7.1.10 RF output power measurements at low frequency carrier, Port 2

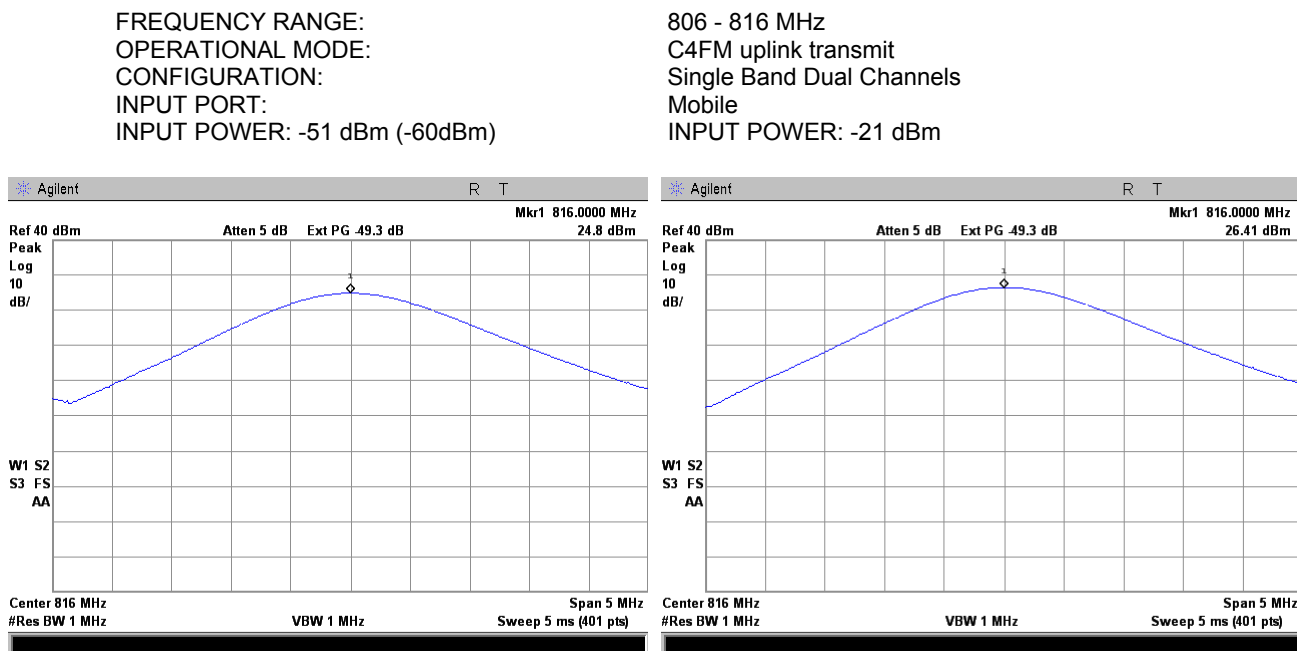


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.11 RF output power measurements at mid frequency carrier, Port 2

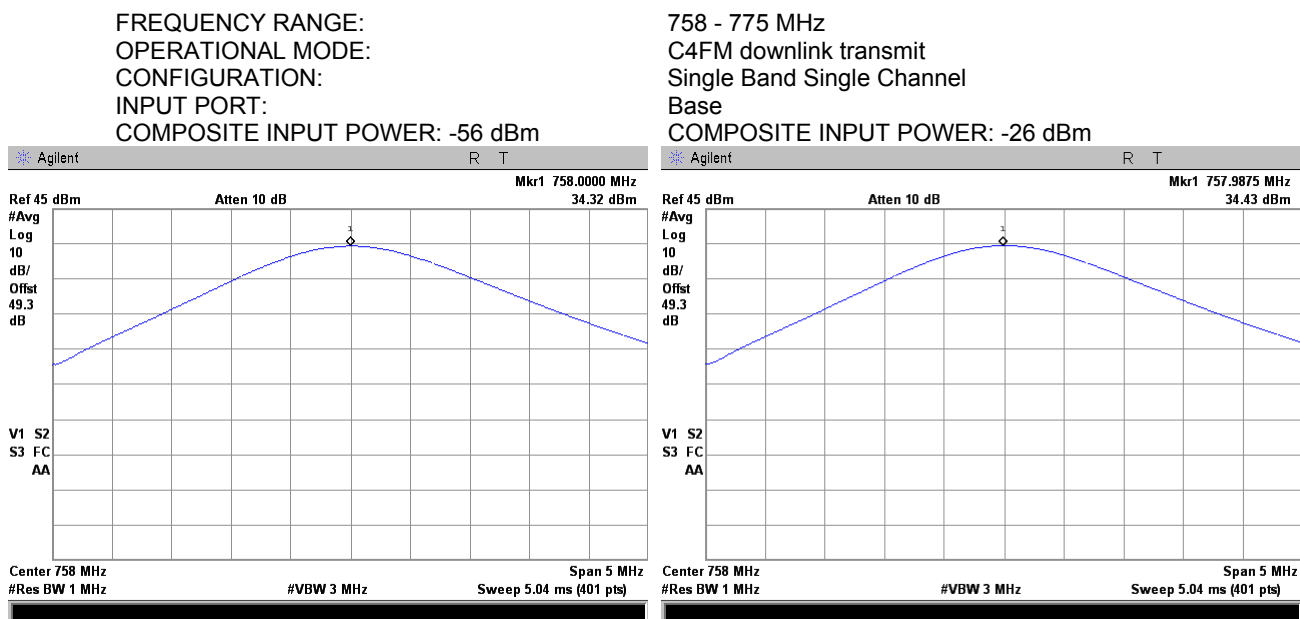


Plot 7.1.12 RF output power measurements at high frequency carrier, Port 2

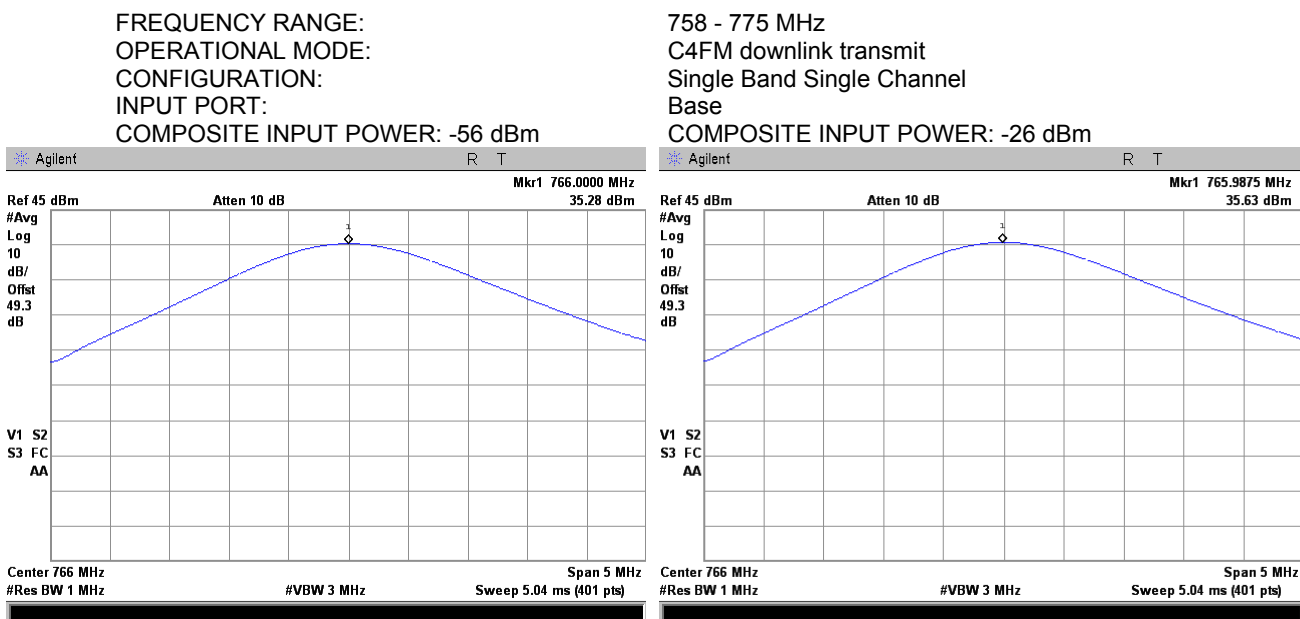


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.13 RF output power measurements at low frequency carrier, Port 1

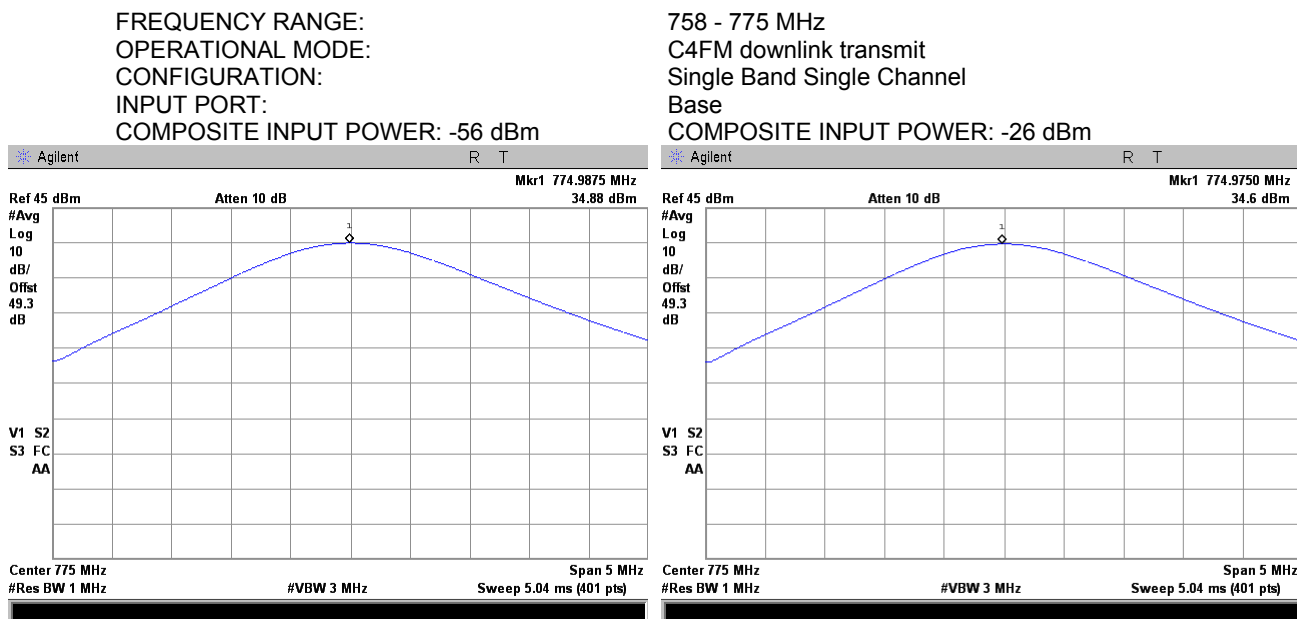


Plot 7.1.14 RF output power measurements at mid frequency carrier, Port 1

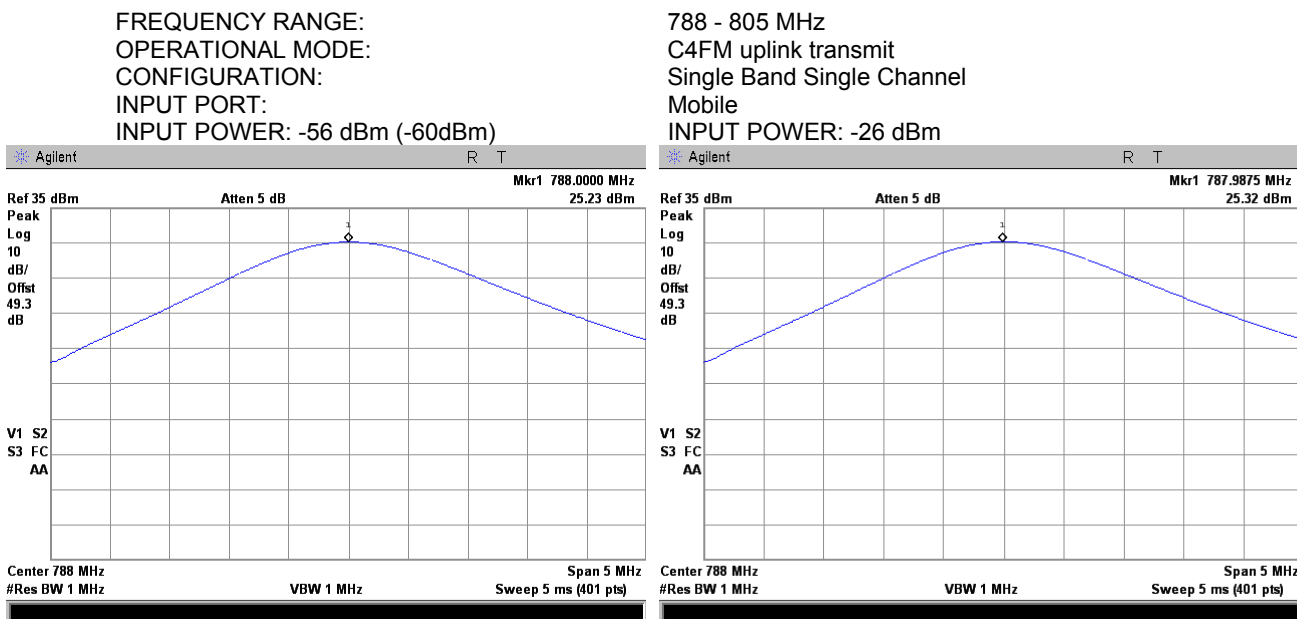


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.15 RF output power measurements at high frequency carrier, Port 1

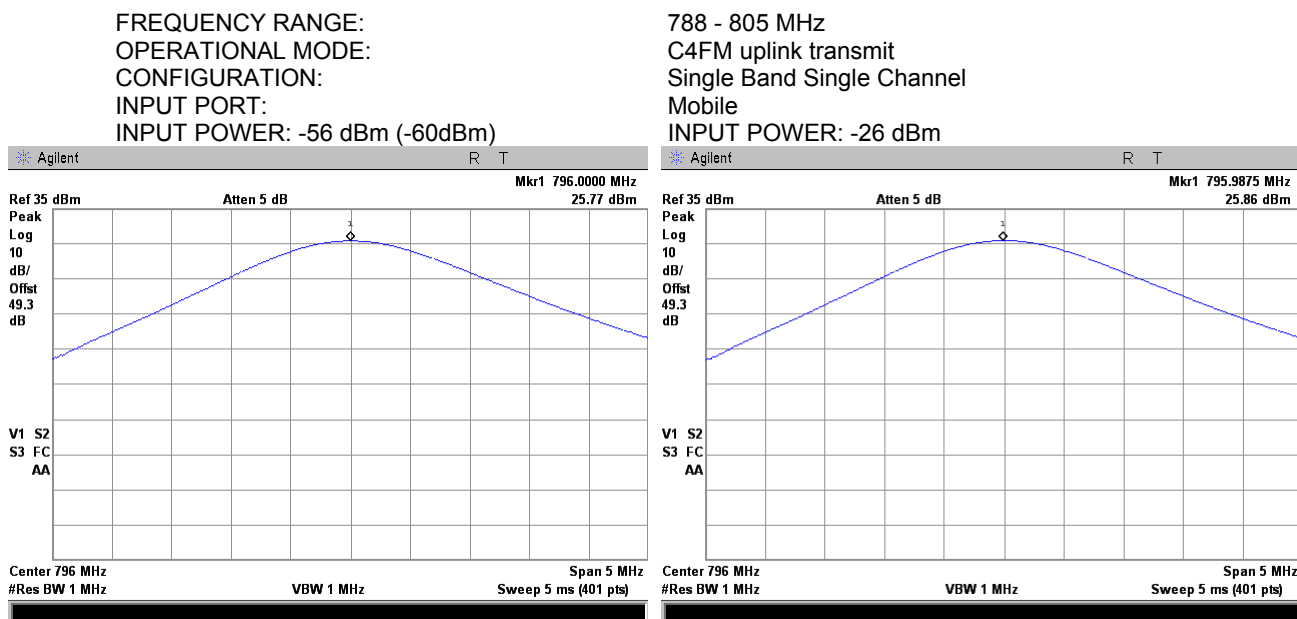


Plot 7.1.16 RF output power measurements at low frequency carrier, Port 2

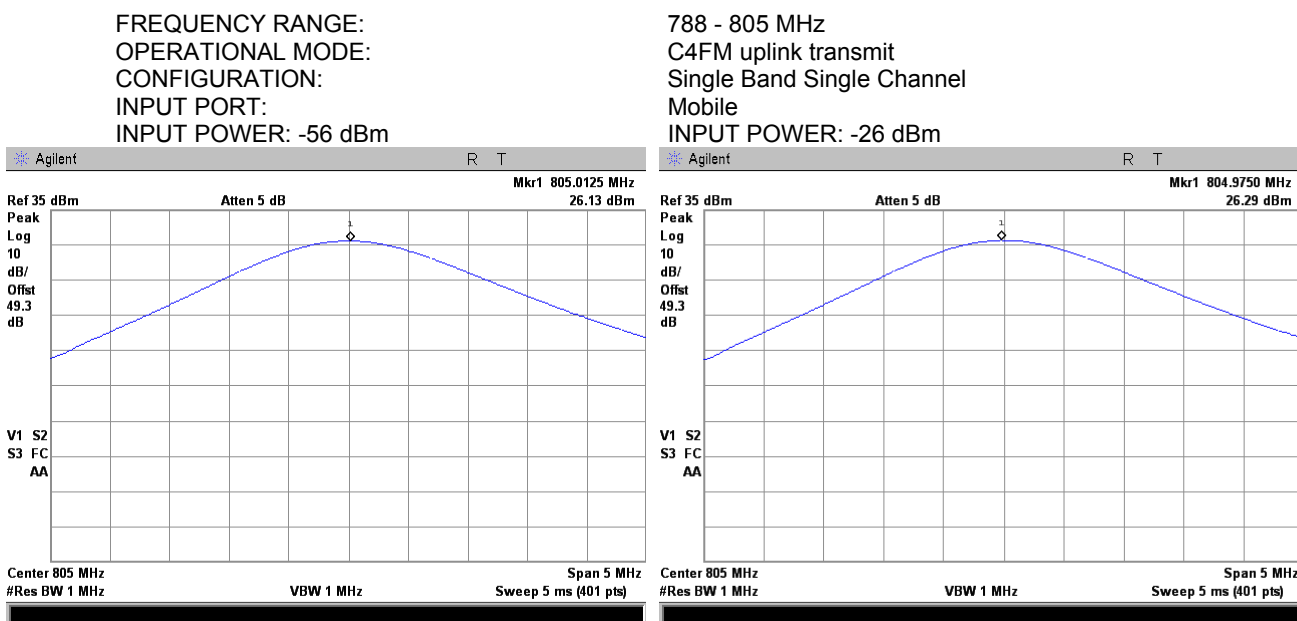


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.17 RF output power measurements at mid frequency carrier, Port 2

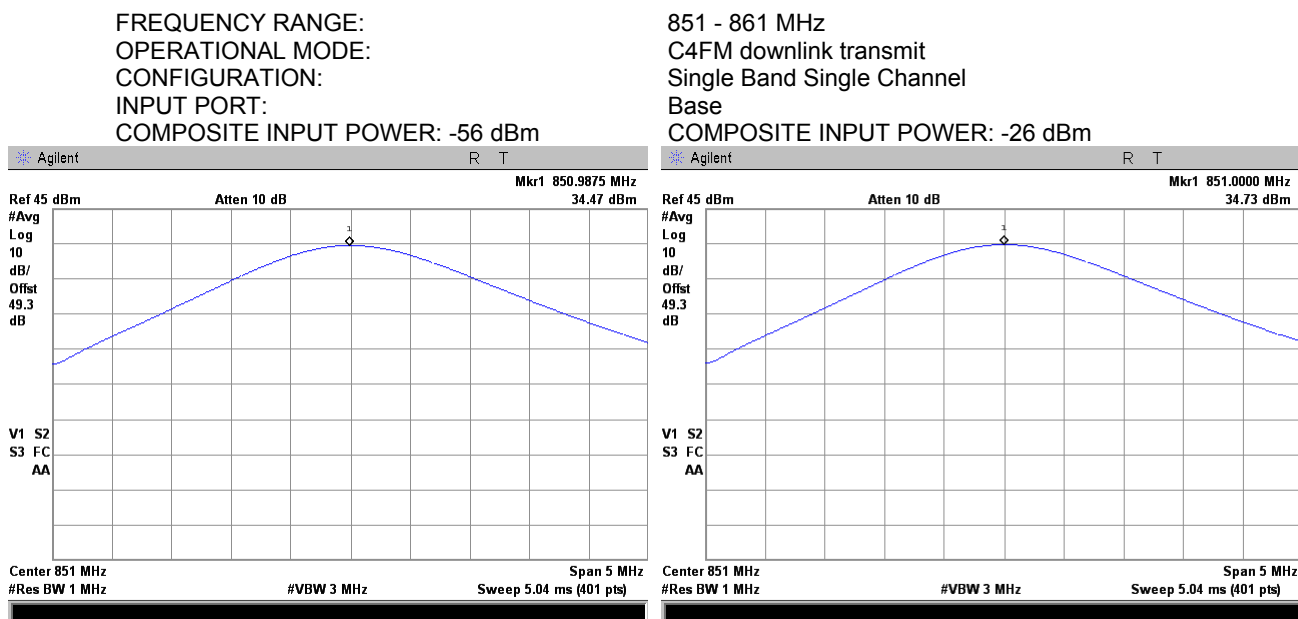


Plot 7.1.18 RF output power measurements at high frequency carrier, Port 2

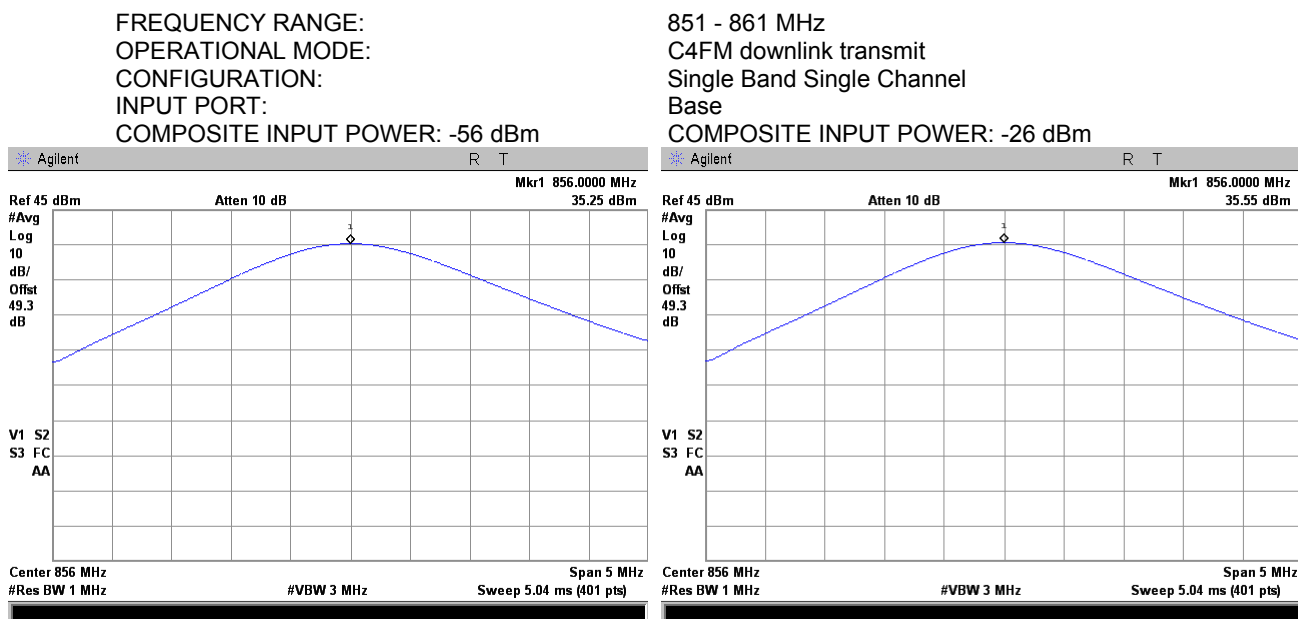


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.19 RF output power measurements at low frequency carrier, Port 1

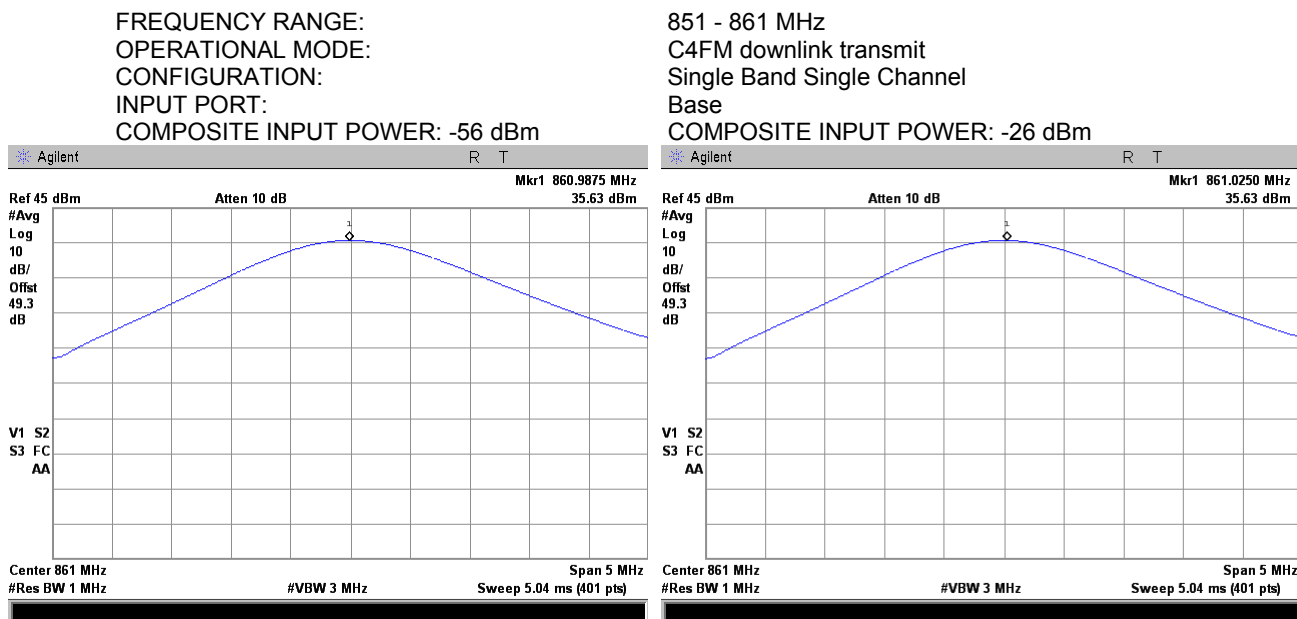


Plot 7.1.20 RF output power measurements at mid frequency carrier, Port 1

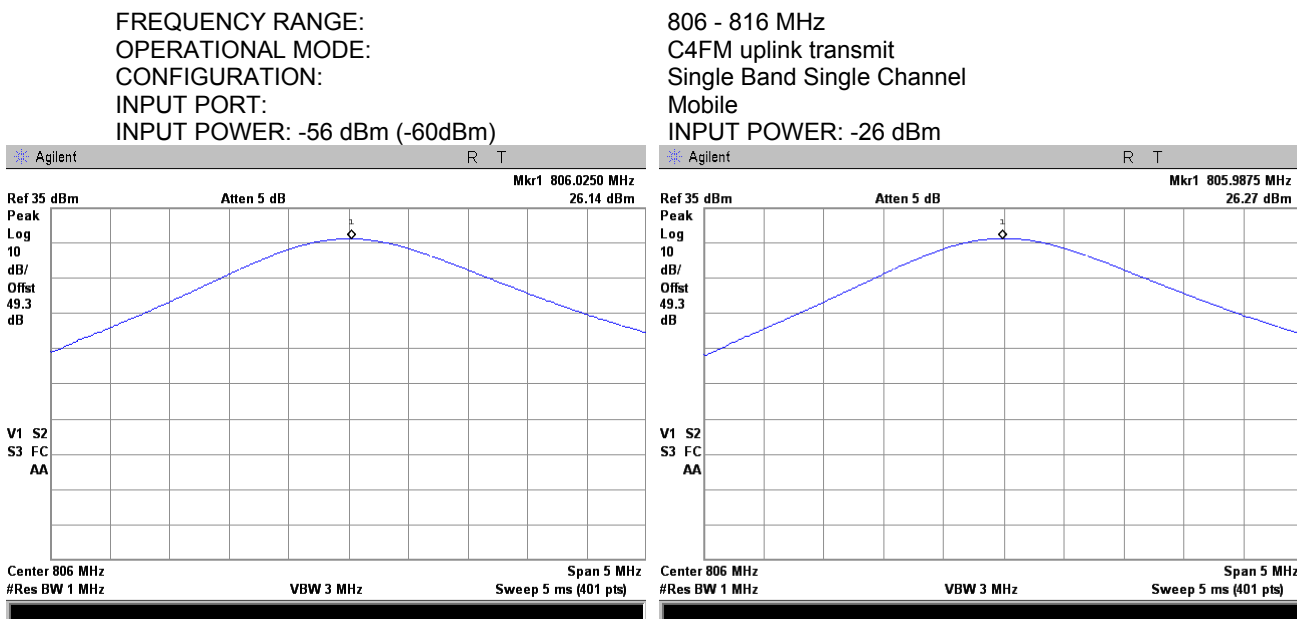


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.21 RF output power measurements at high frequency carrier, Port 1

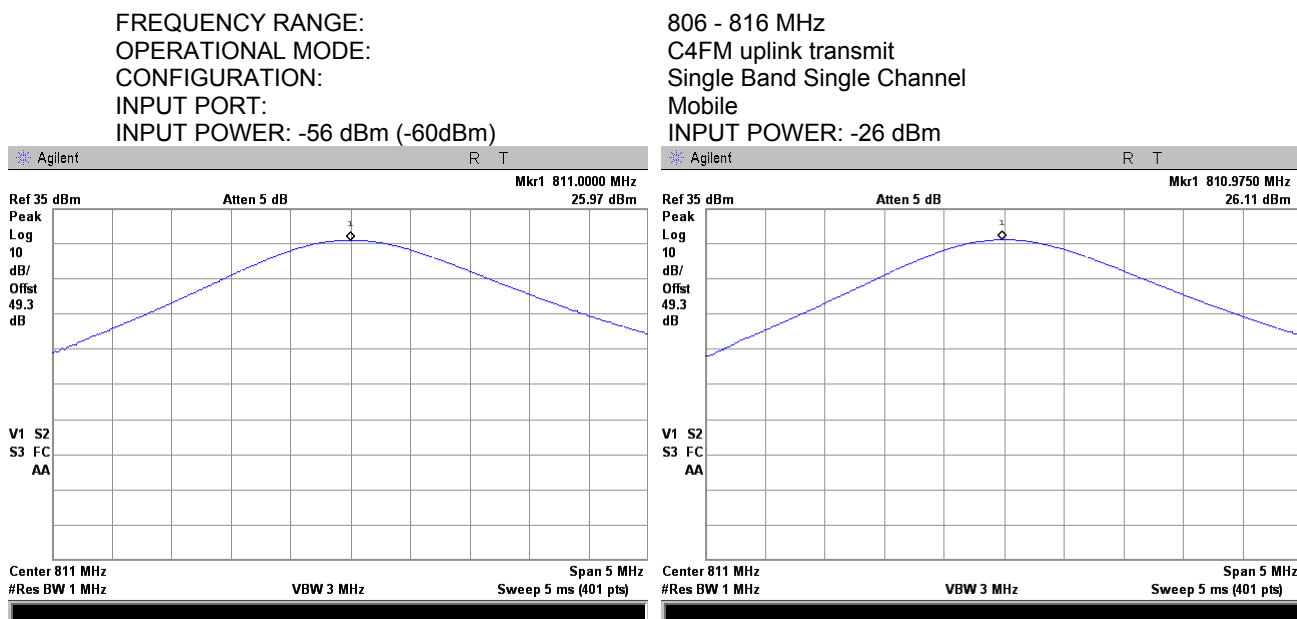


Plot 7.1.22 RF output power measurements at low frequency carrier, Port 2

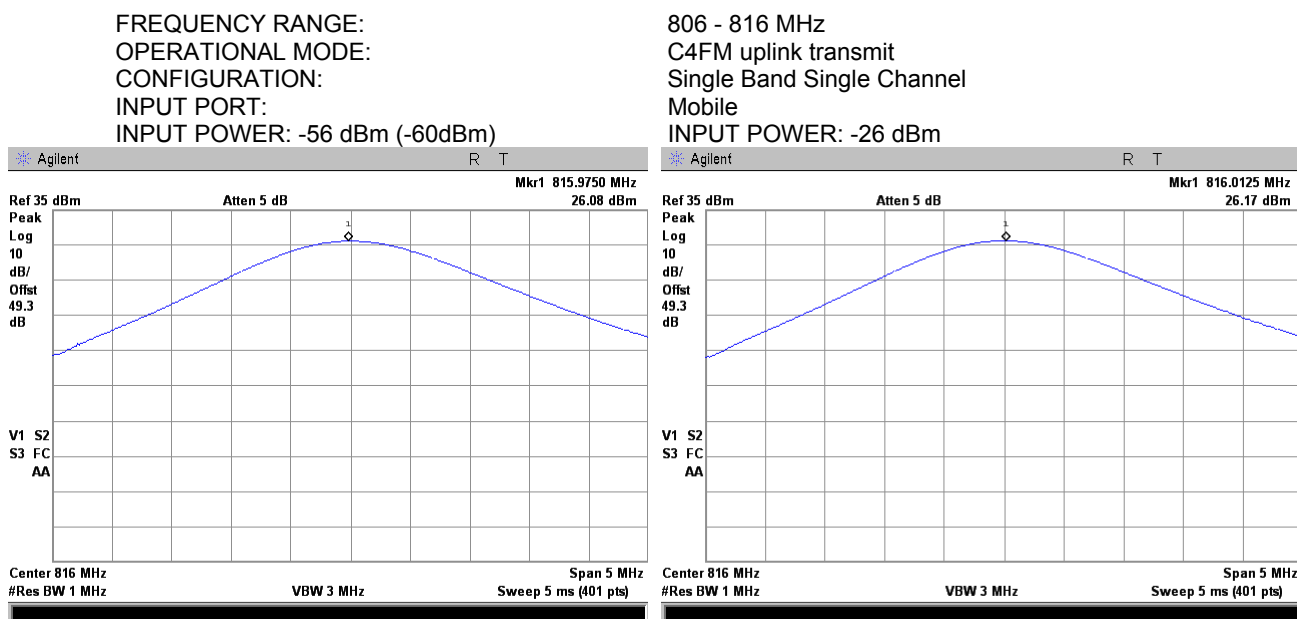


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.23 RF output power measurements at mid frequency carrier, Port 2



Plot 7.1.24 RF output power measurements at high frequency carrier, Port 2

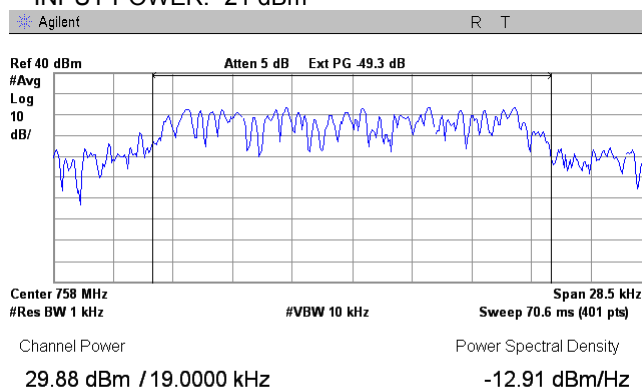
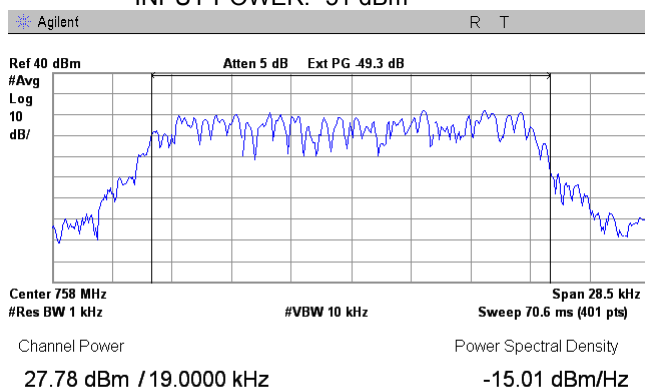


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.25 RF output power measurements at low frequency carrier, Port 1

FREQUENCY RANGE:
OPERATIONAL MODE:
CONFIGURATION:
INPUT PORT:
INPUT POWER: -51 dBm

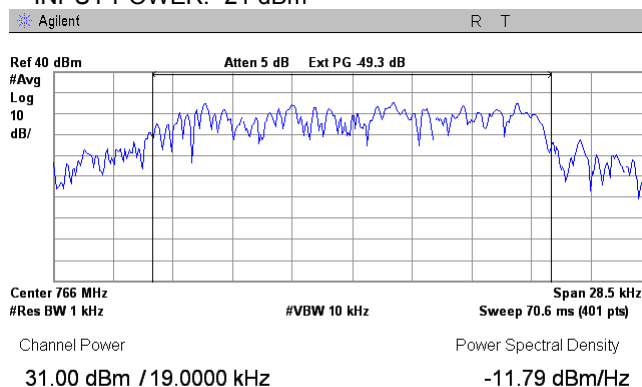
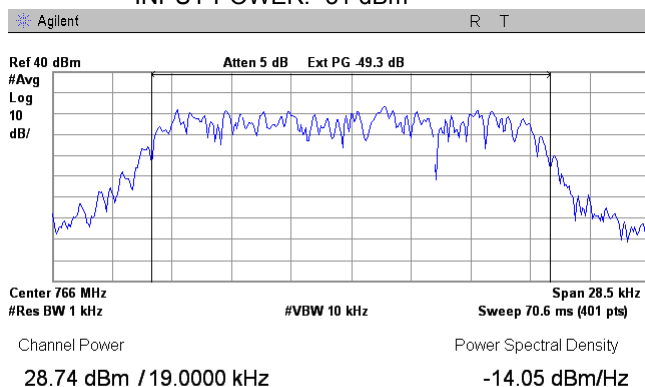
758 - 775 MHz
iDEN QAM downlink transmit
Single Band Dual Channels
Base
INPUT POWER: -21 dBm



Plot 7.1.26 RF output power measurements at mid frequency carrier, Port 1

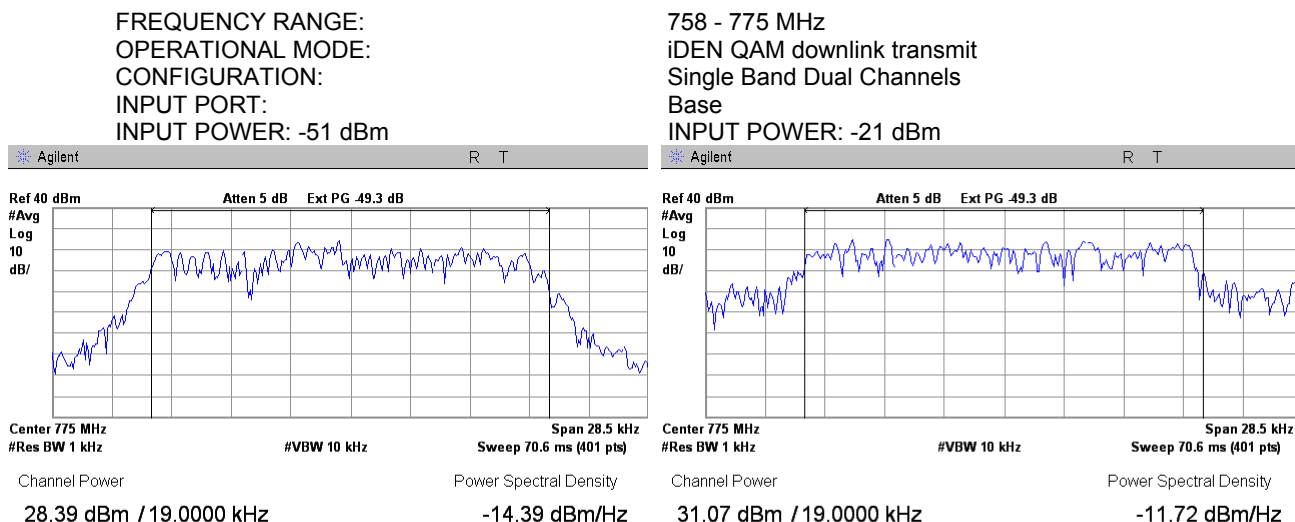
FREQUENCY RANGE:
OPERATIONAL MODE:
CONFIGURATION:
INPUT PORT:
INPUT POWER: -51 dBm

758 - 775 MHz
iDEN QAM downlink transmit
Single Band Dual Channels
Base
INPUT POWER: -21 dBm

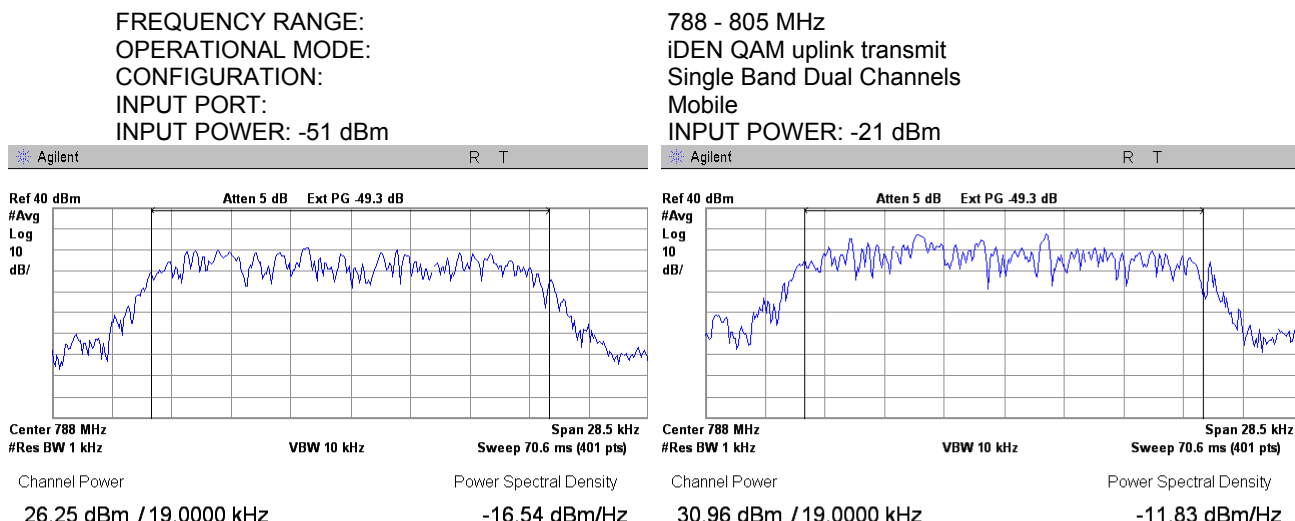


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.27 RF output power measurements at high frequency carrier, Port 1

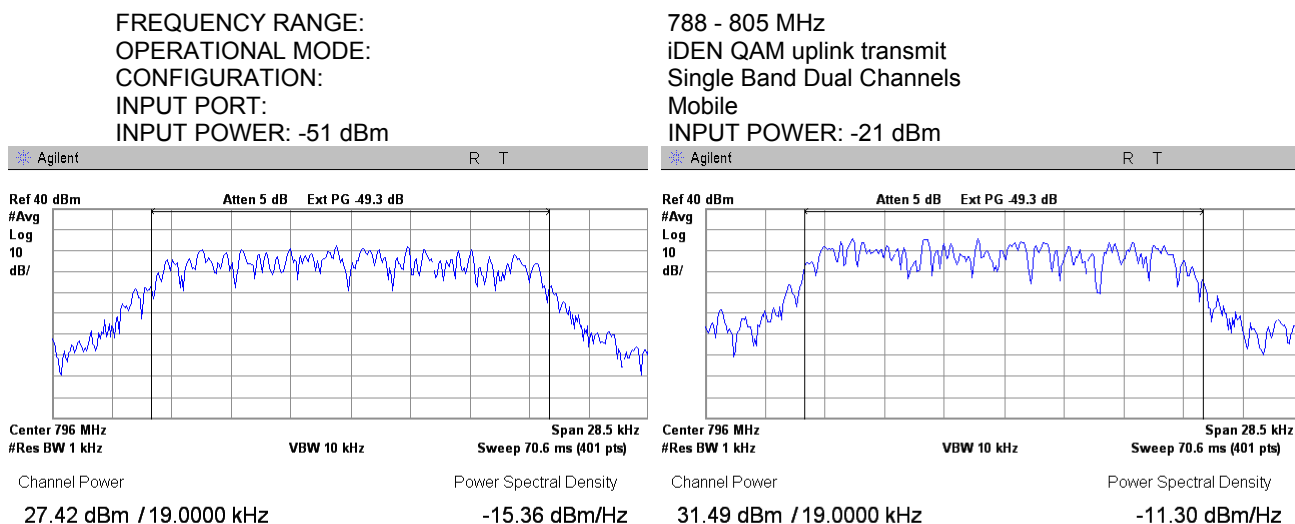


Plot 7.1.28 RF output power measurements at low frequency carrier, Port 2

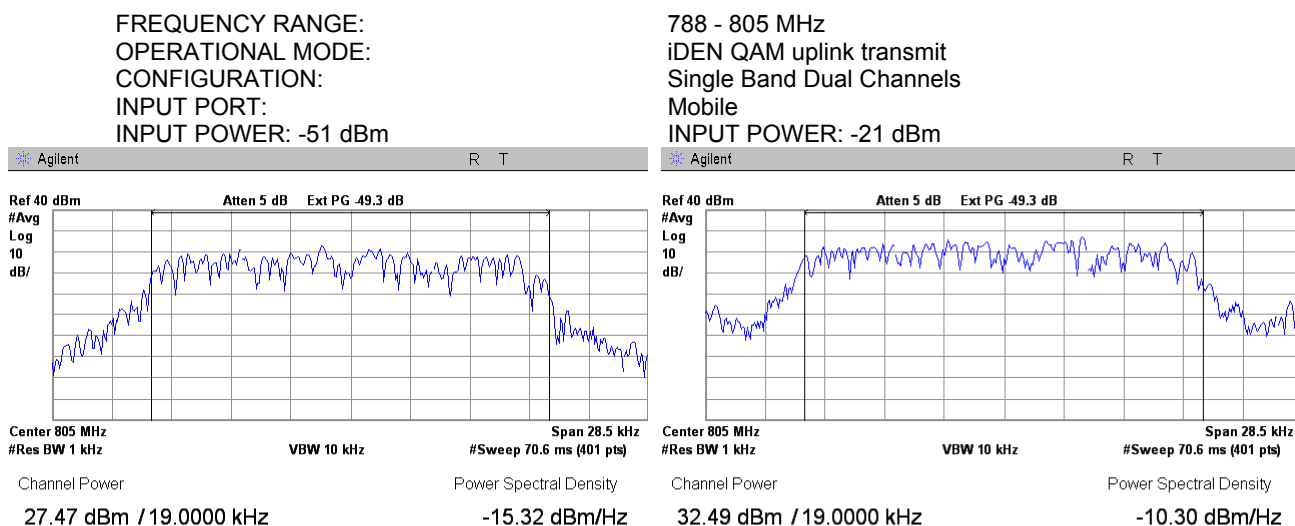


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.29 RF output power measurements at mid frequency carrier, Port 2

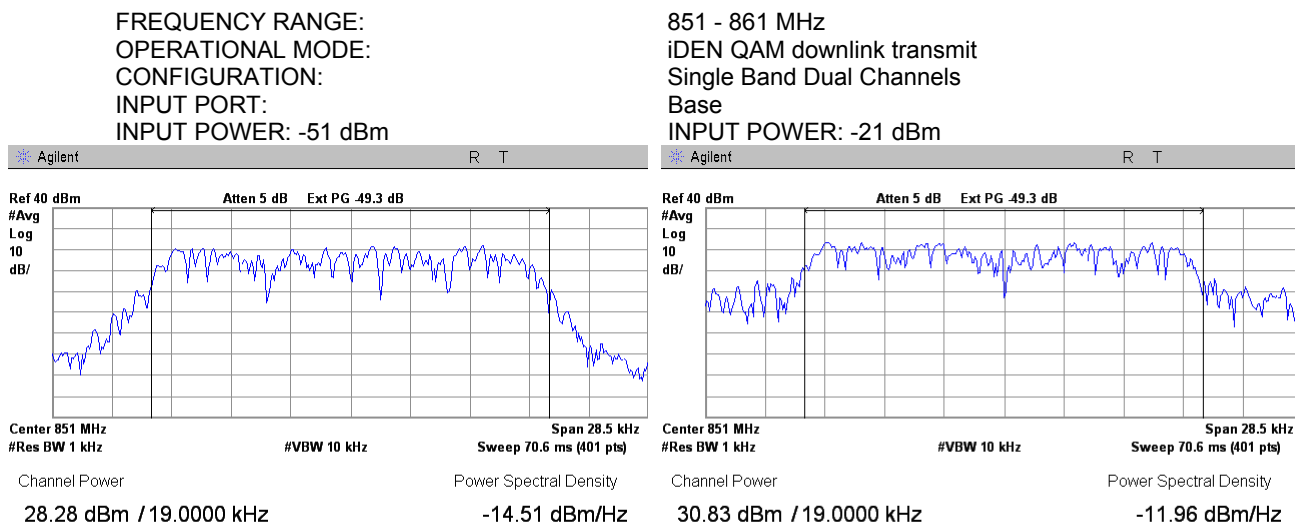


Plot 7.1.30 RF output power measurements at high frequency carrier, Port 2

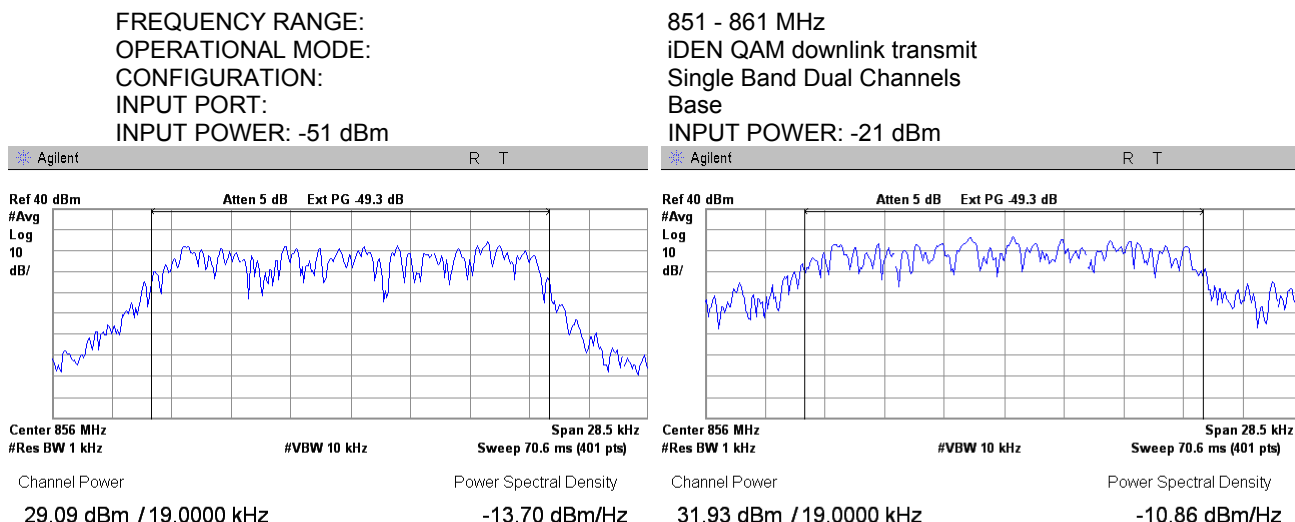


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.31 RF output power measurements at low frequency carrier, Port 1

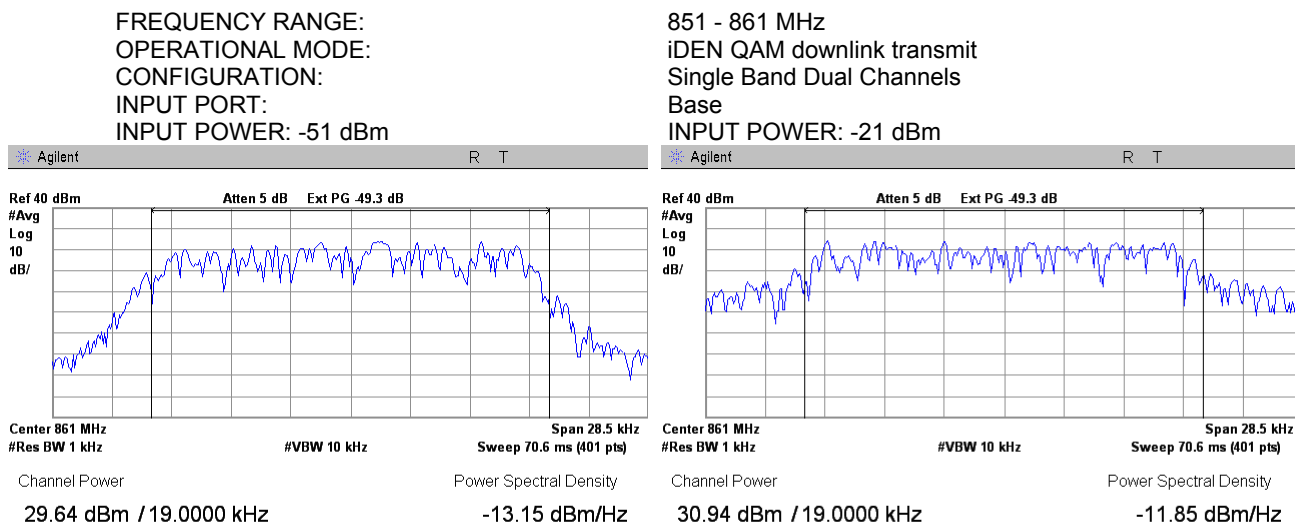


Plot 7.1.32 RF output power measurements at mid frequency carrier, Port 1

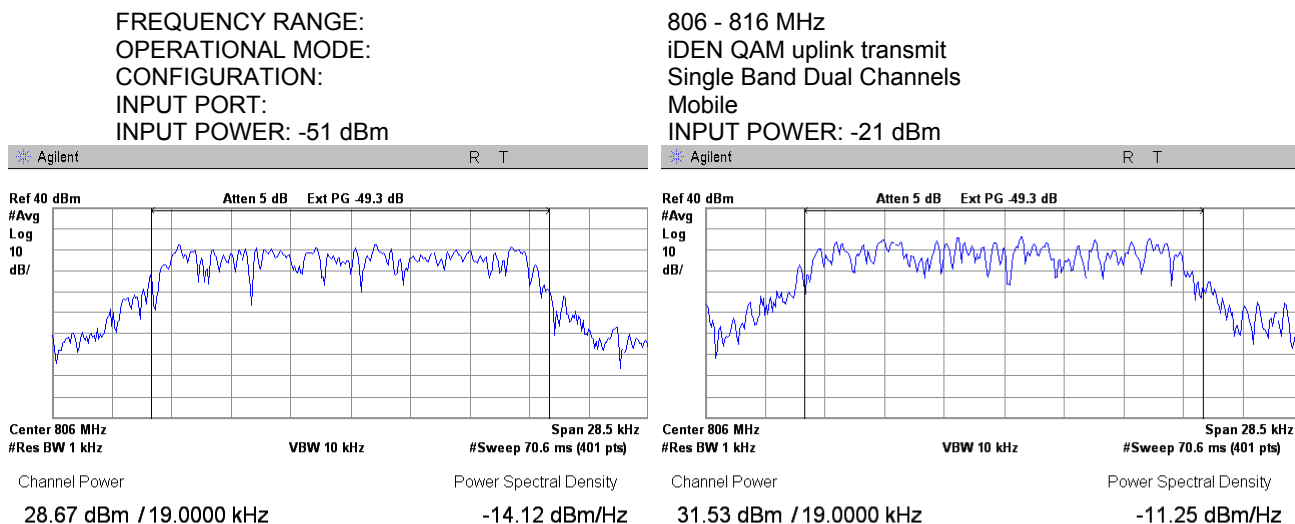


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.33 RF output power measurements at high frequency carrier, Port 1

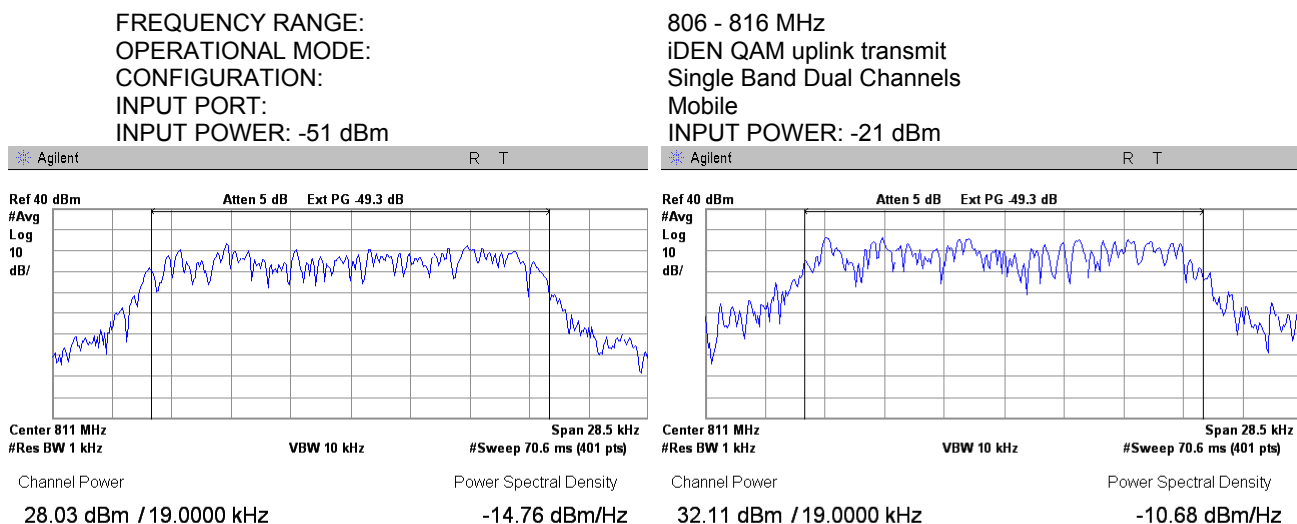


Plot 7.1.34 RF output power measurements at low frequency carrier, Port 2

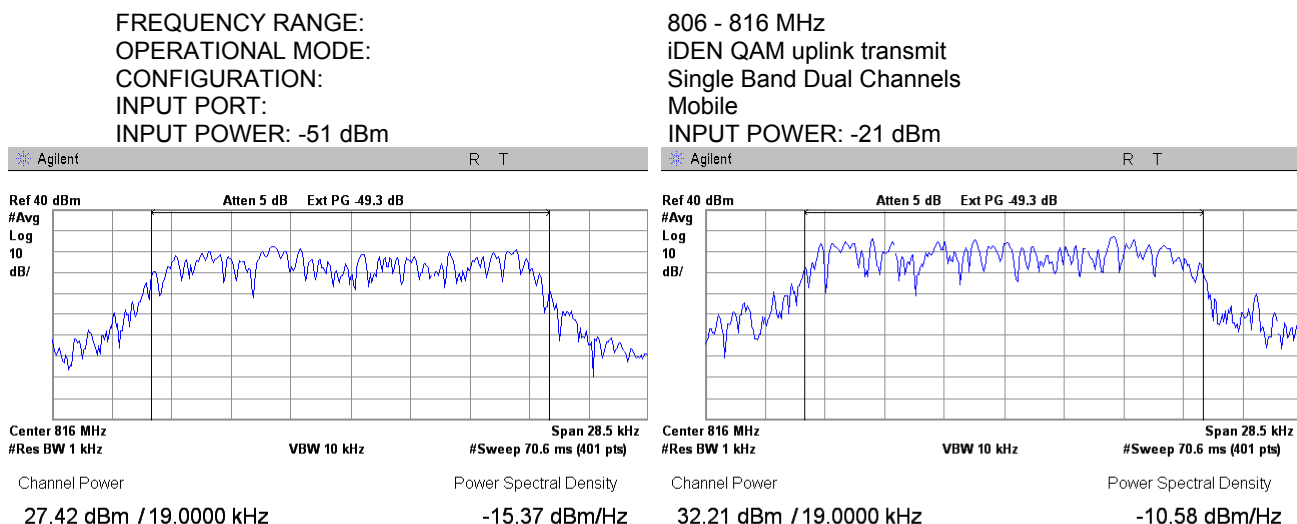


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.35 RF output power measurements at mid frequency carrier, Port 2

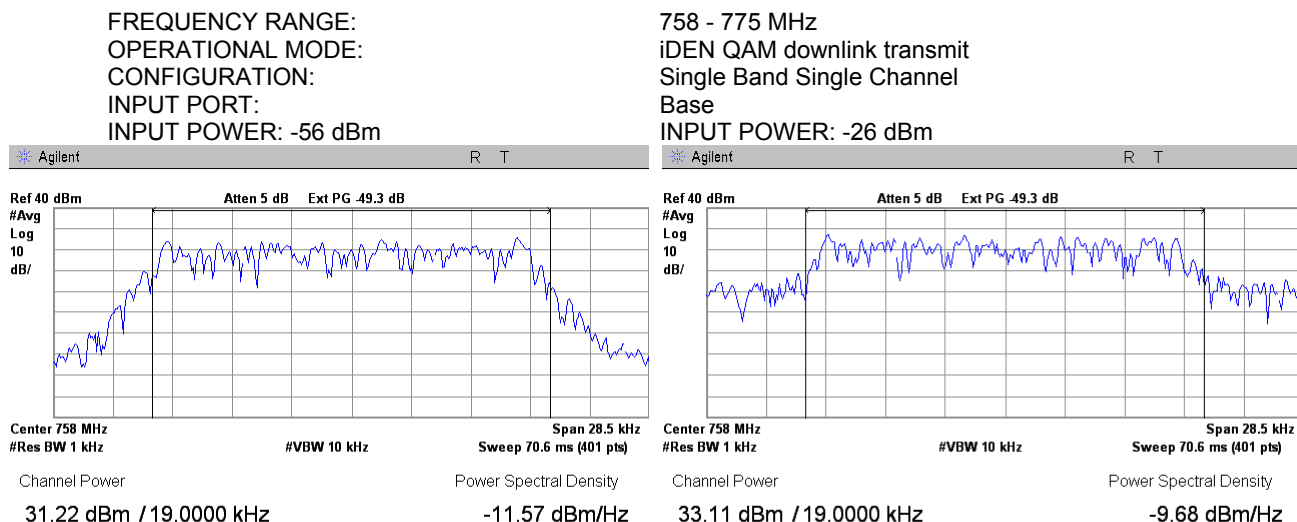


Plot 7.1.36 RF output power measurements at high frequency carrier, Port 2

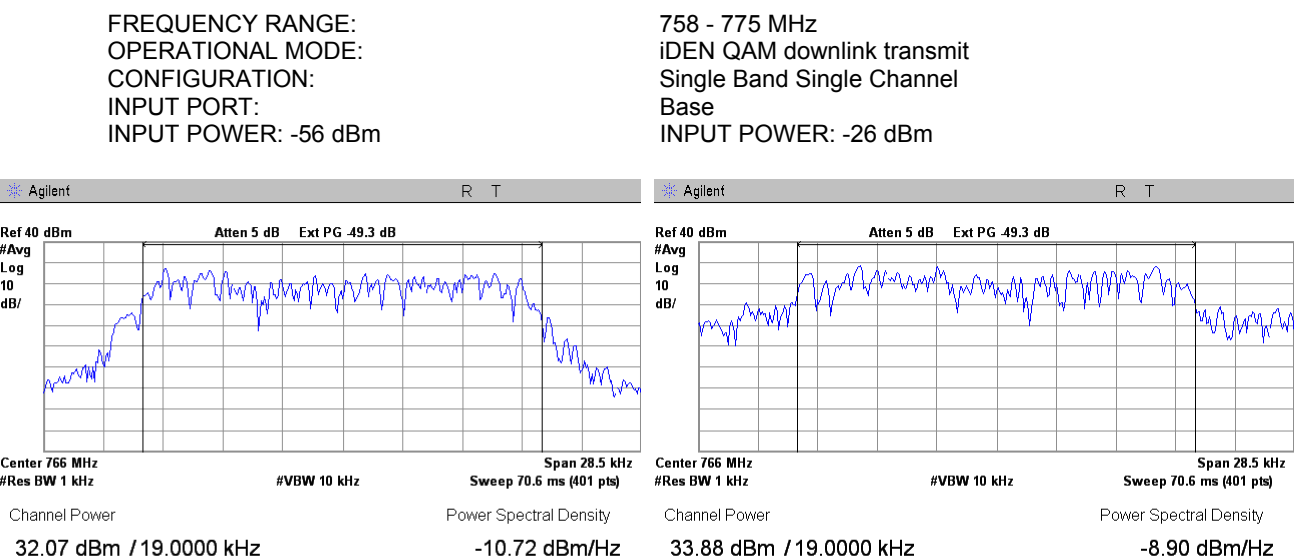


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.37 RF output power measurements at low frequency carrier, Port 1

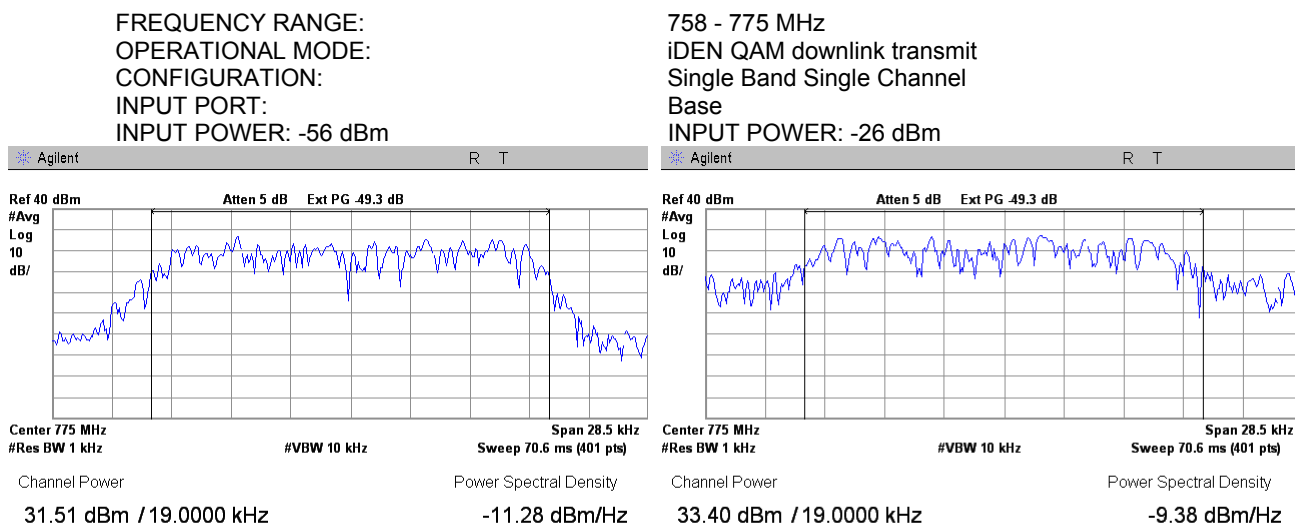


Plot 7.1.38 RF output power measurements at mid frequency carrier, Port 1

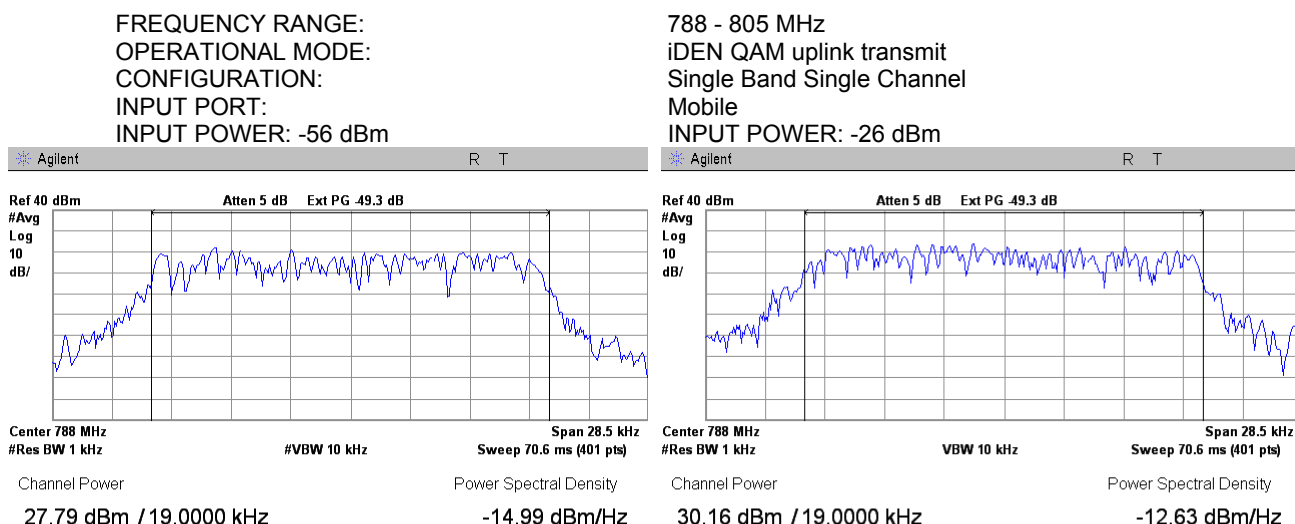


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.39 RF output power measurements at high frequency carrier, Port 1

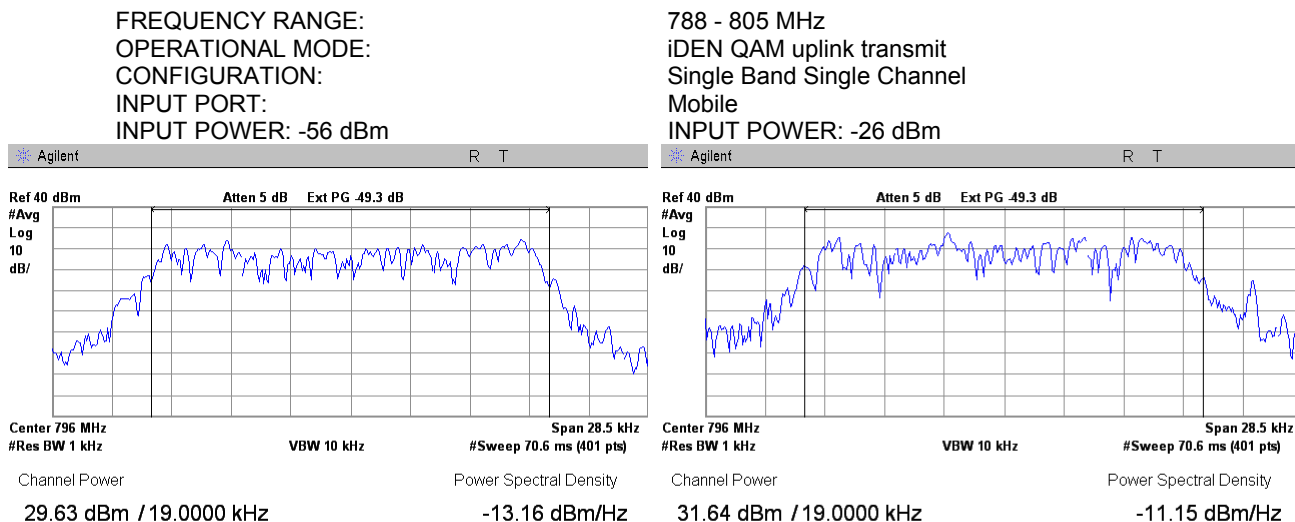


Plot 7.1.40 RF output power measurements at low frequency carrier, Port 2

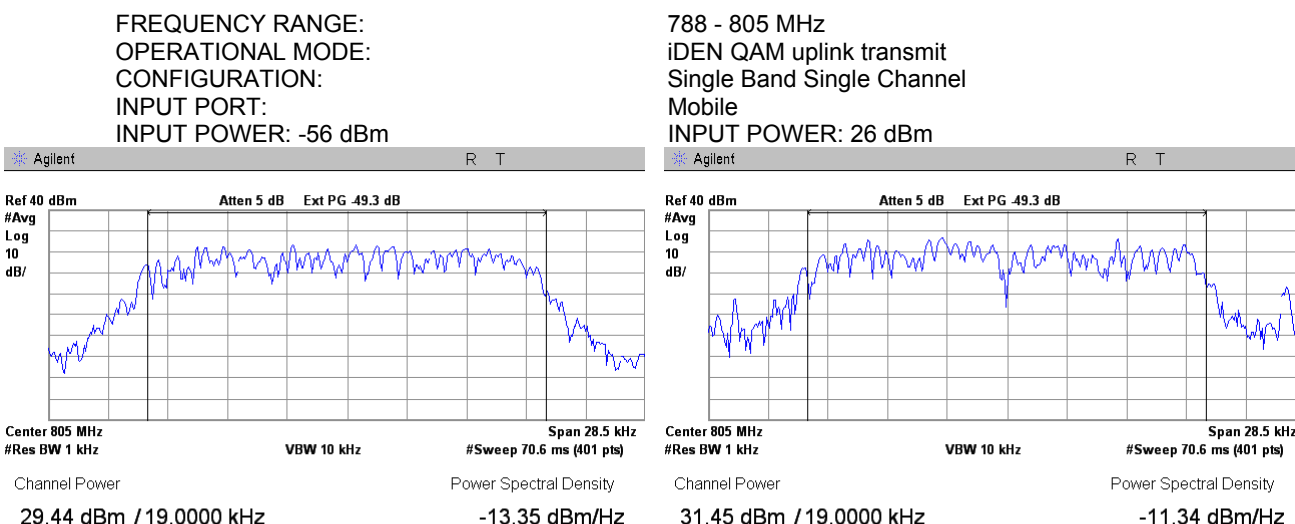


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.41 RF output power measurements at mid frequency carrier, Port 2

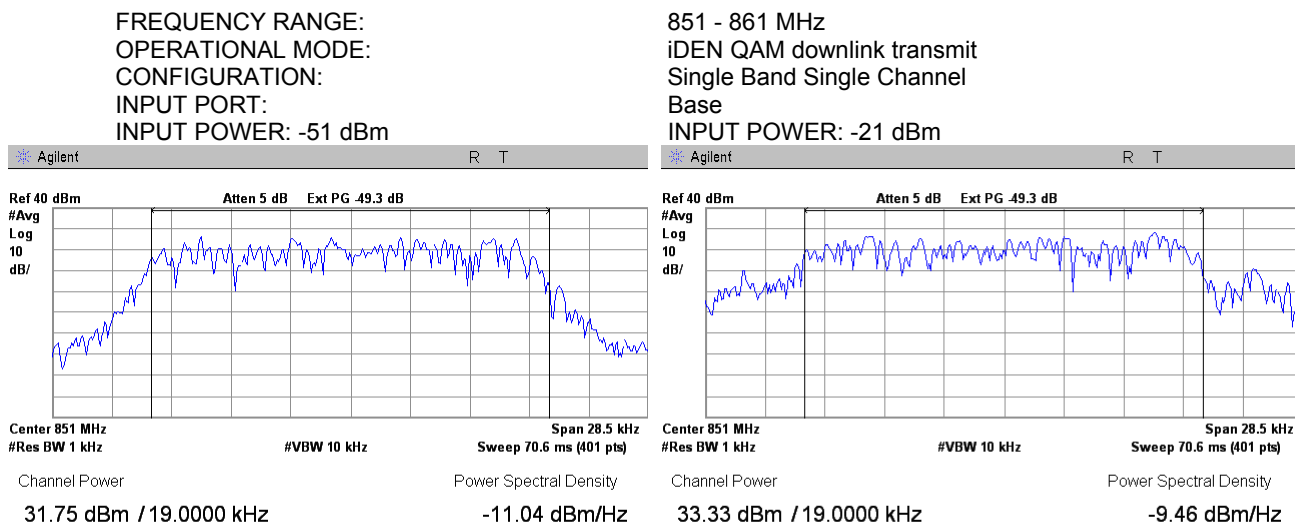


Plot 7.1.42 RF output power measurements at high frequency carrier, Port 2

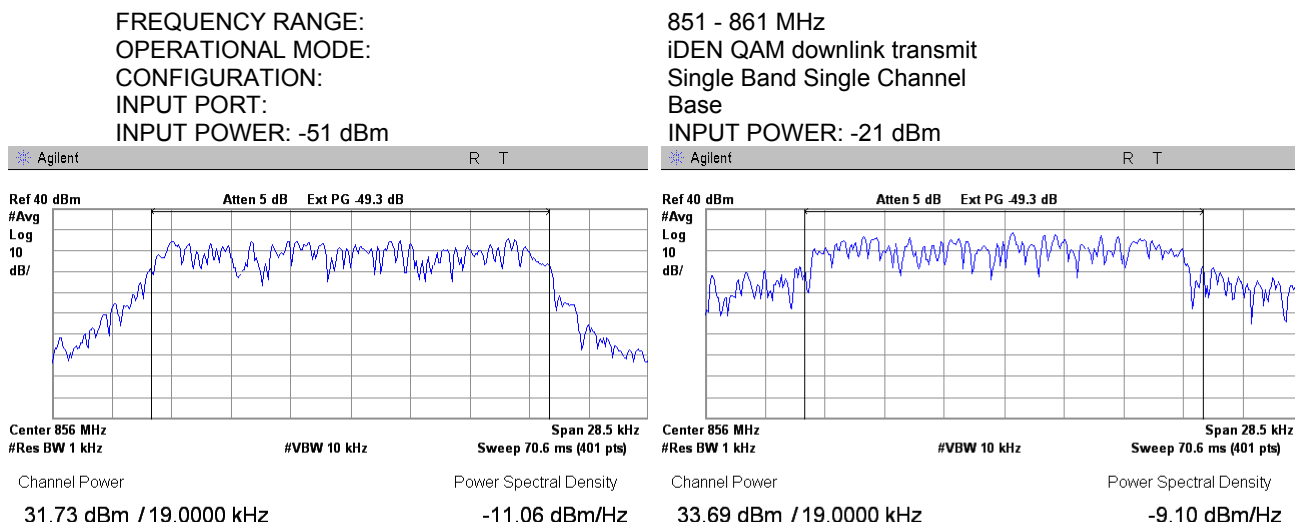


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.43 RF output power measurements at low frequency carrier, Port 1

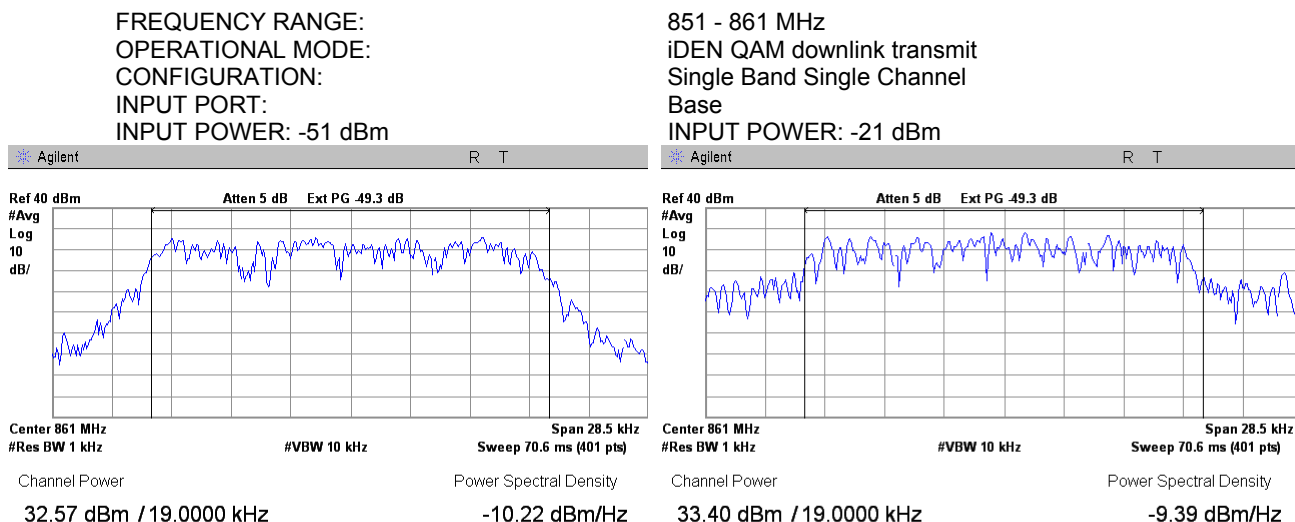


Plot 7.1.44 RF output power measurements at mid frequency carrier, Port 1

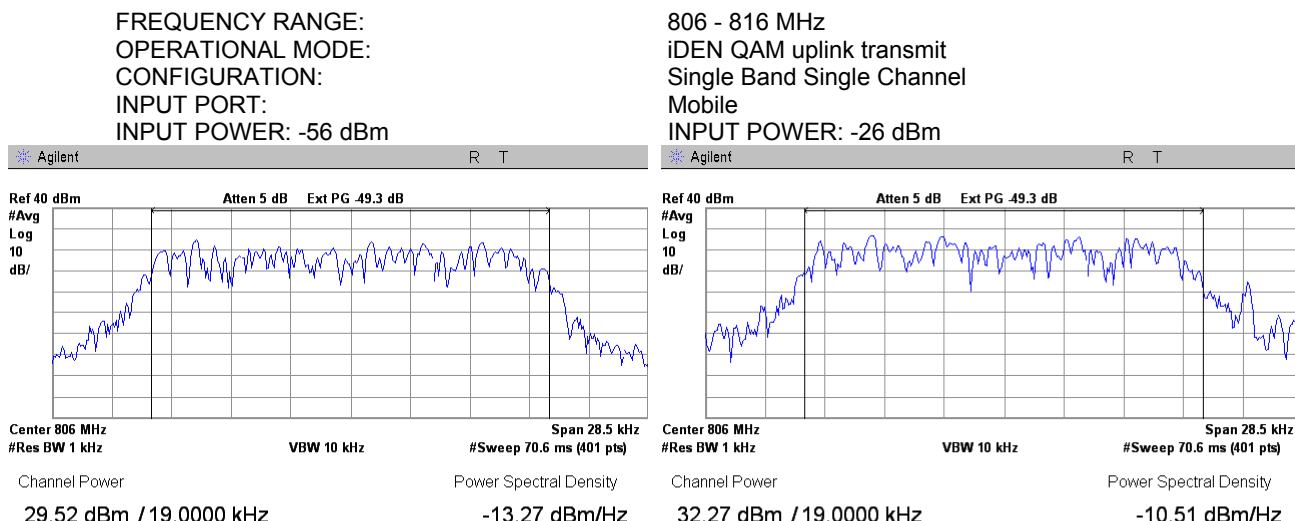


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.45 RF output power measurements at high frequency carrier, Port 1

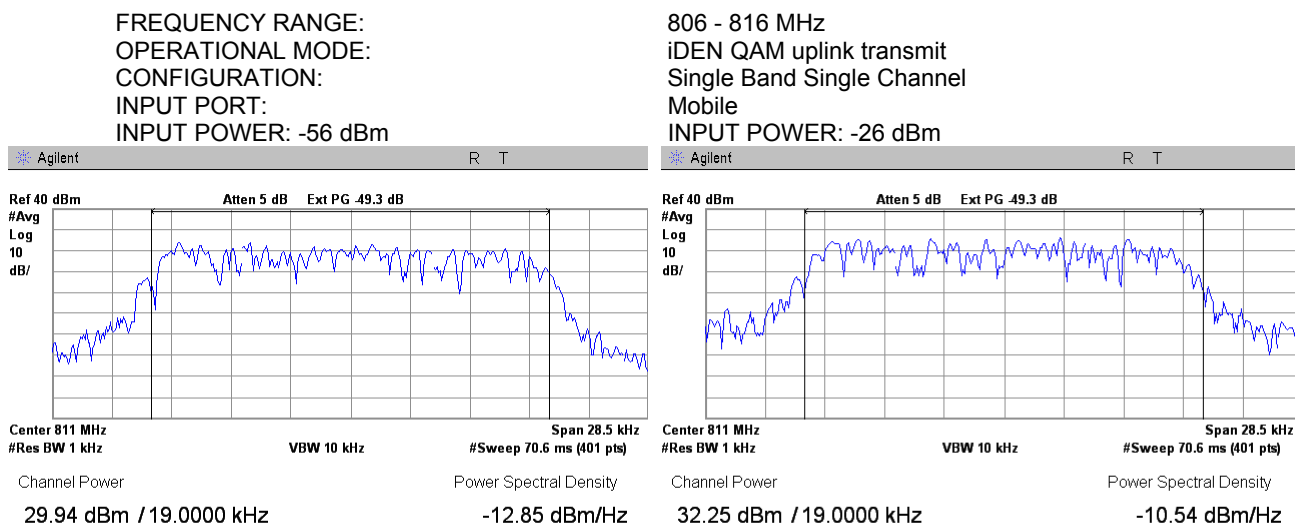


Plot 7.1.46 RF output power measurements at low frequency carrier, Port 2

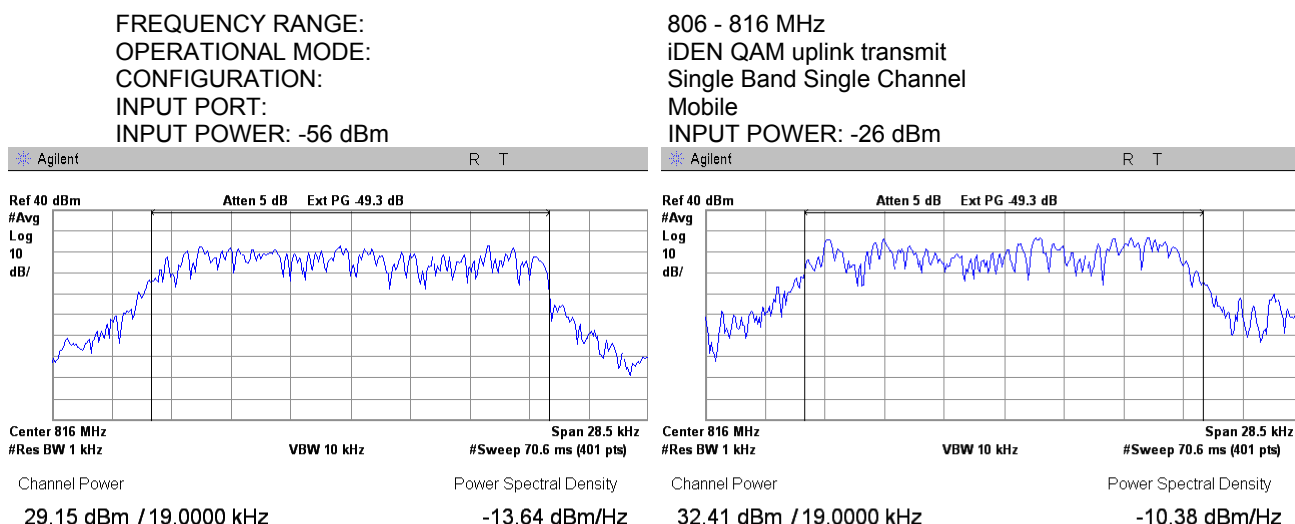


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.47 RF output power measurements at mid frequency carrier, Port 2

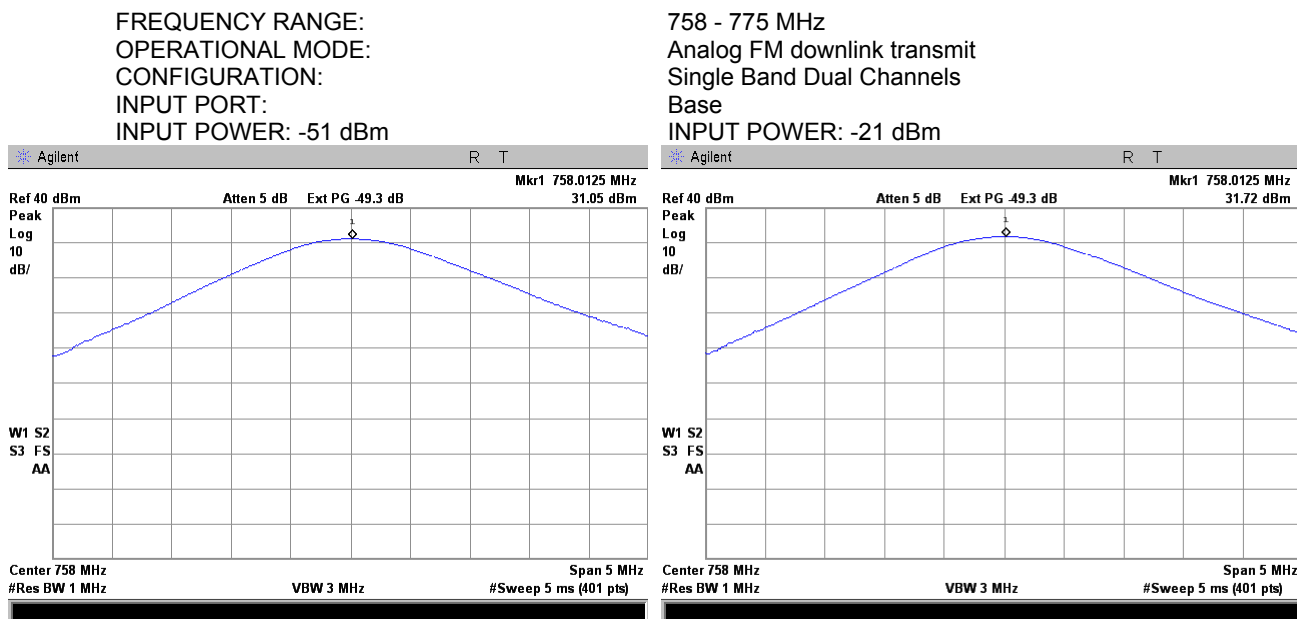


Plot 7.1.48 RF output power measurements at high frequency carrier, Port 2

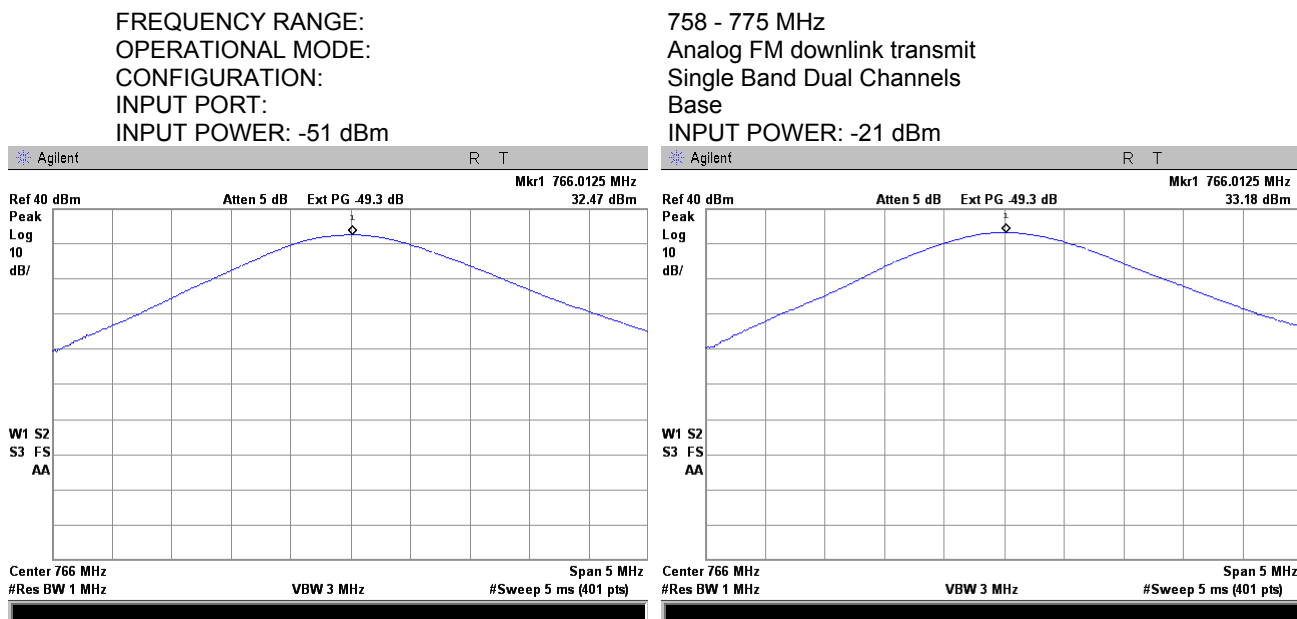


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.49 RF output power measurements at low frequency carrier, Port 1

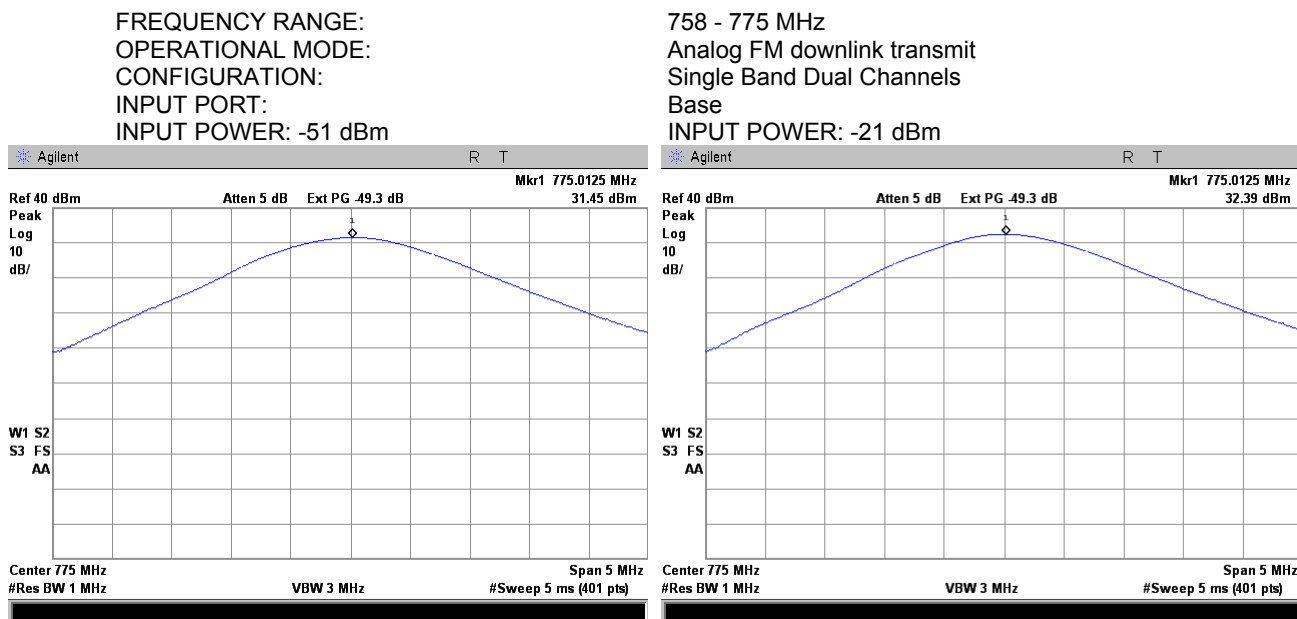


Plot 7.1.50 RF output power measurements at mid frequency carrier, Port 1

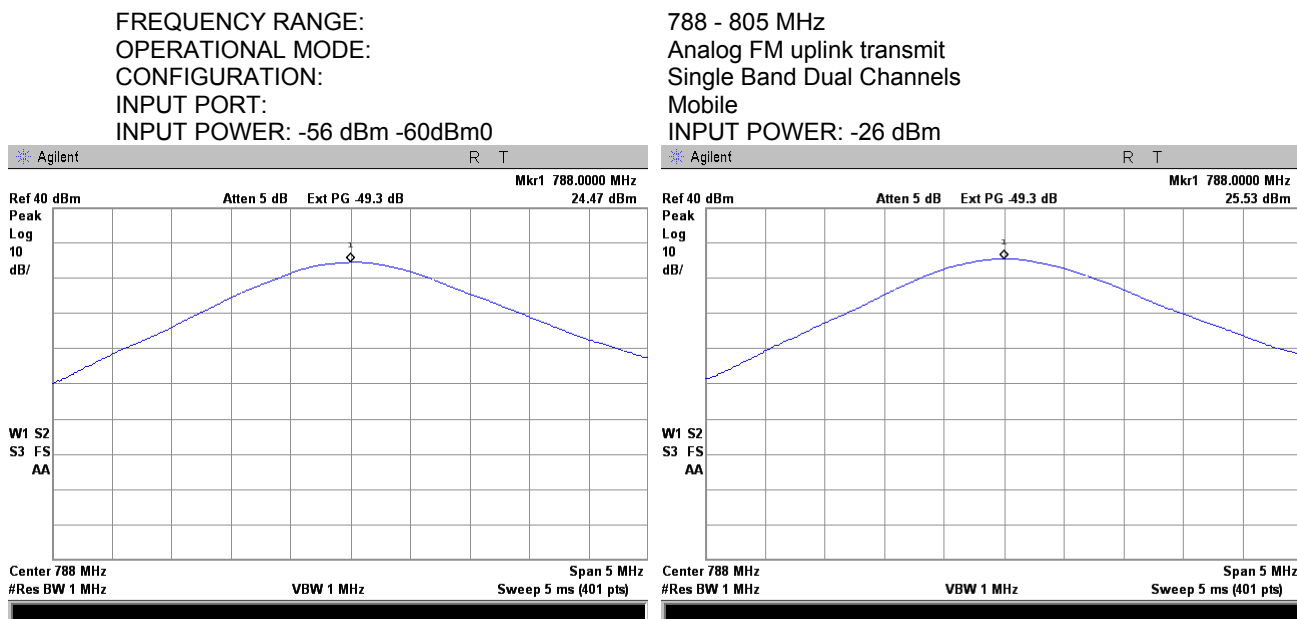


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.51 RF output power measurements at high frequency carrier, Port 1

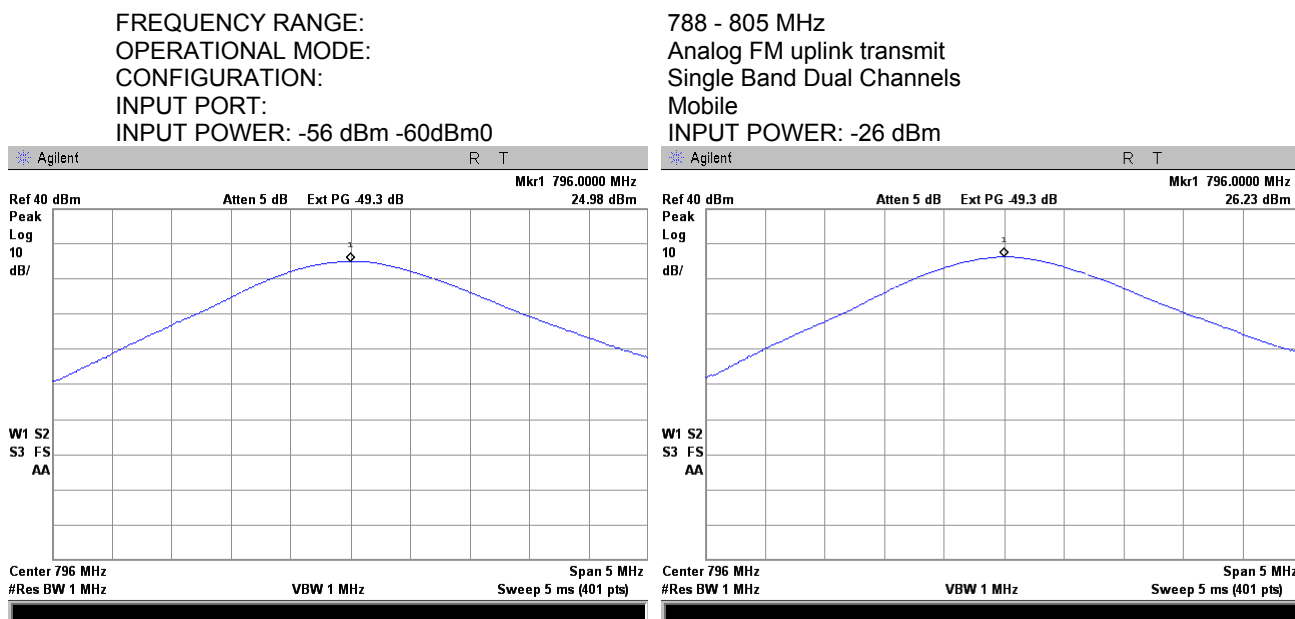


Plot 7.1.52 RF output power measurements at low frequency carrier, Port 2

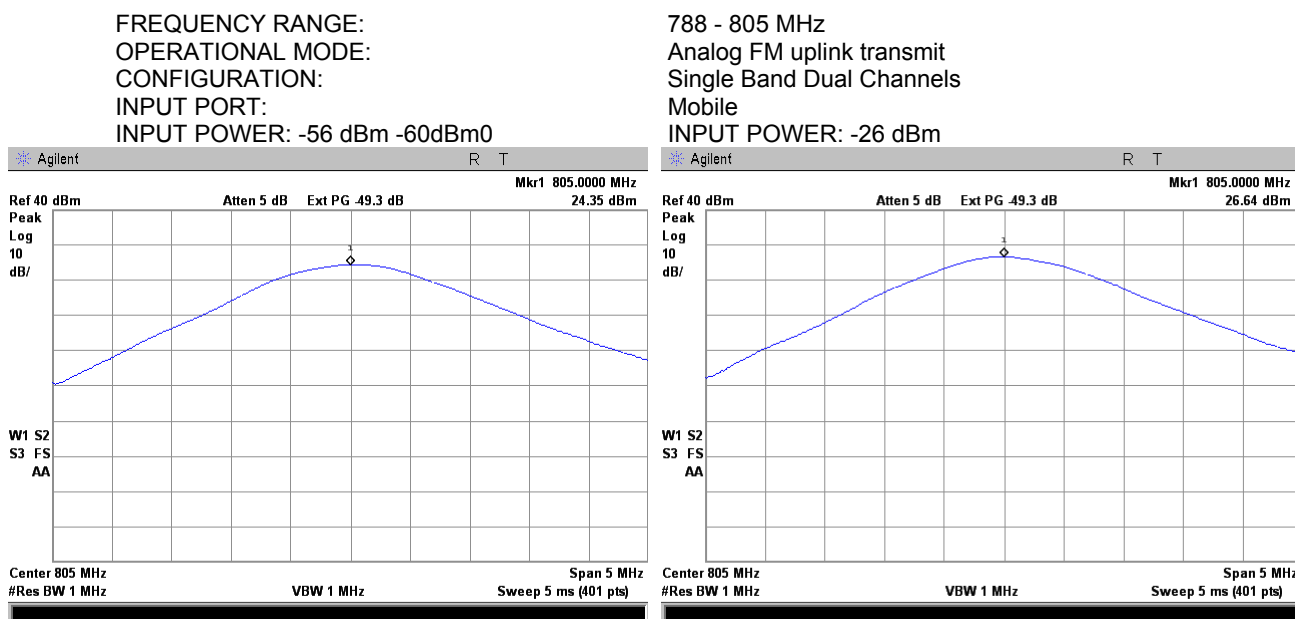


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.53 RF output power measurements at mid frequency carrier, Port 2

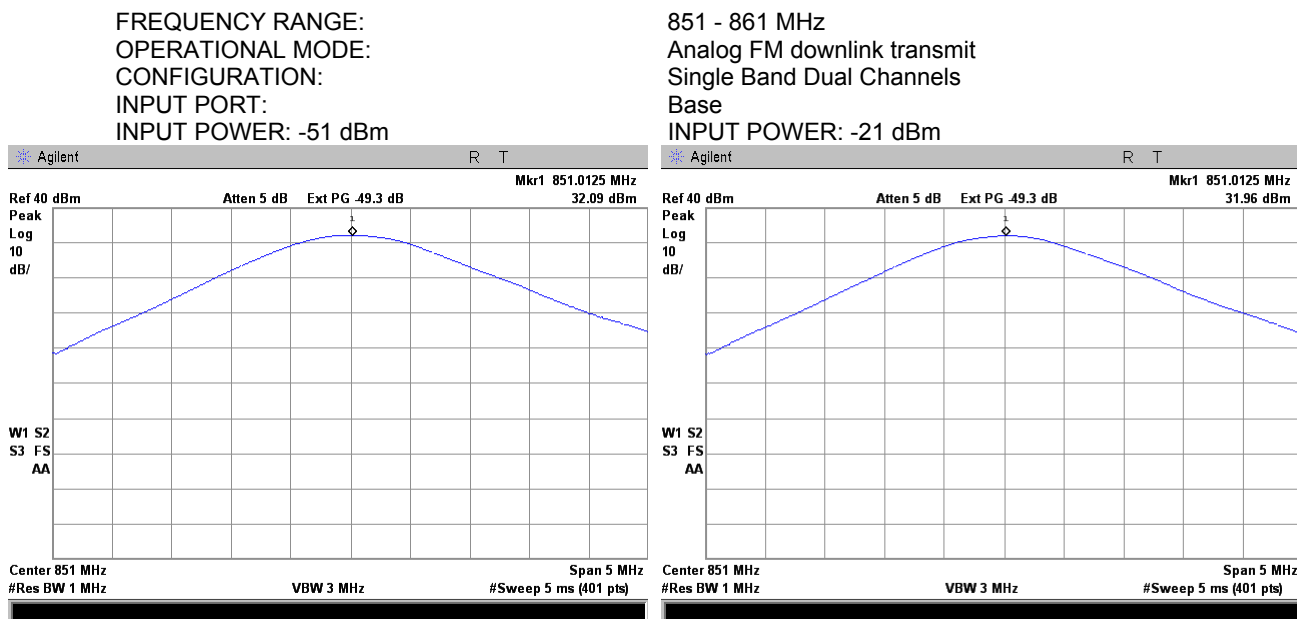


Plot 7.1.54 RF output power measurements at high frequency carrier, Port 2

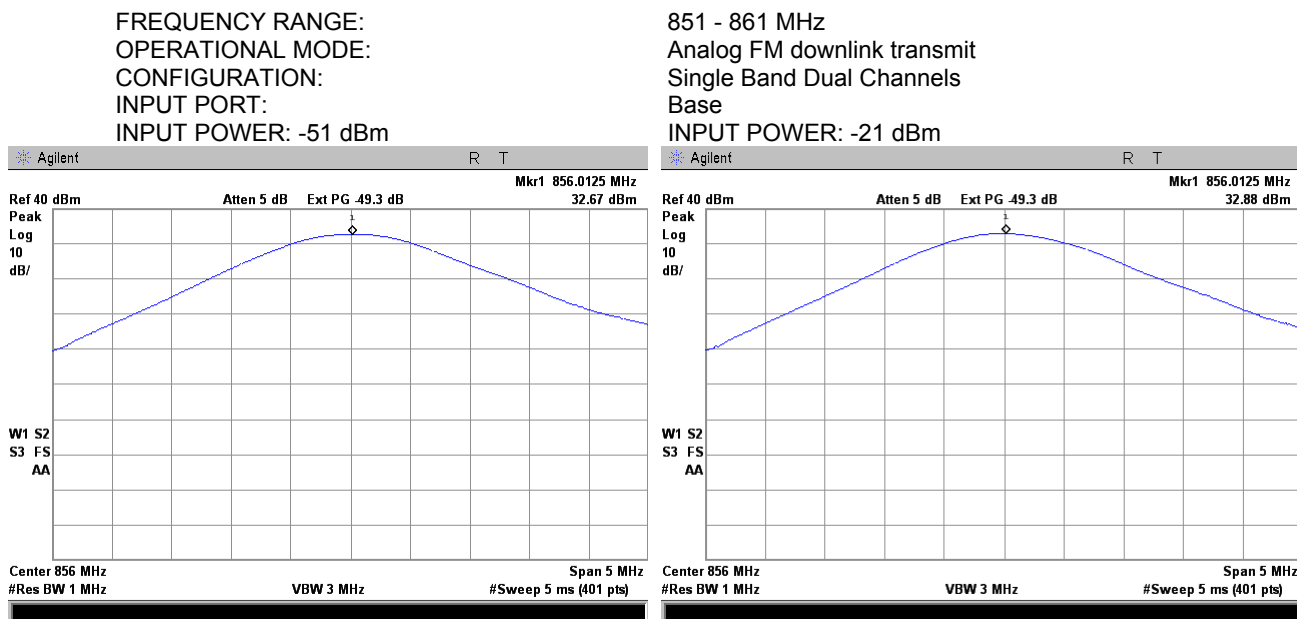


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.55 RF output power measurements at low frequency carrier, Port 1

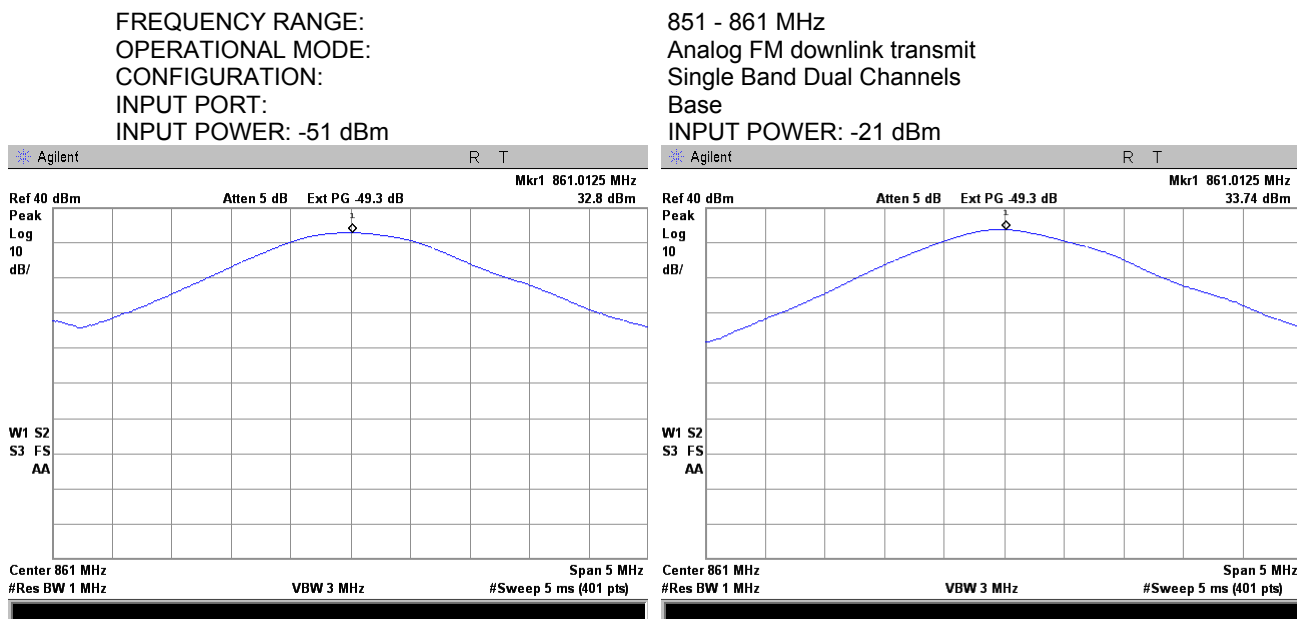


Plot 7.1.56 RF output power measurements at mid frequency carrier, Port 1

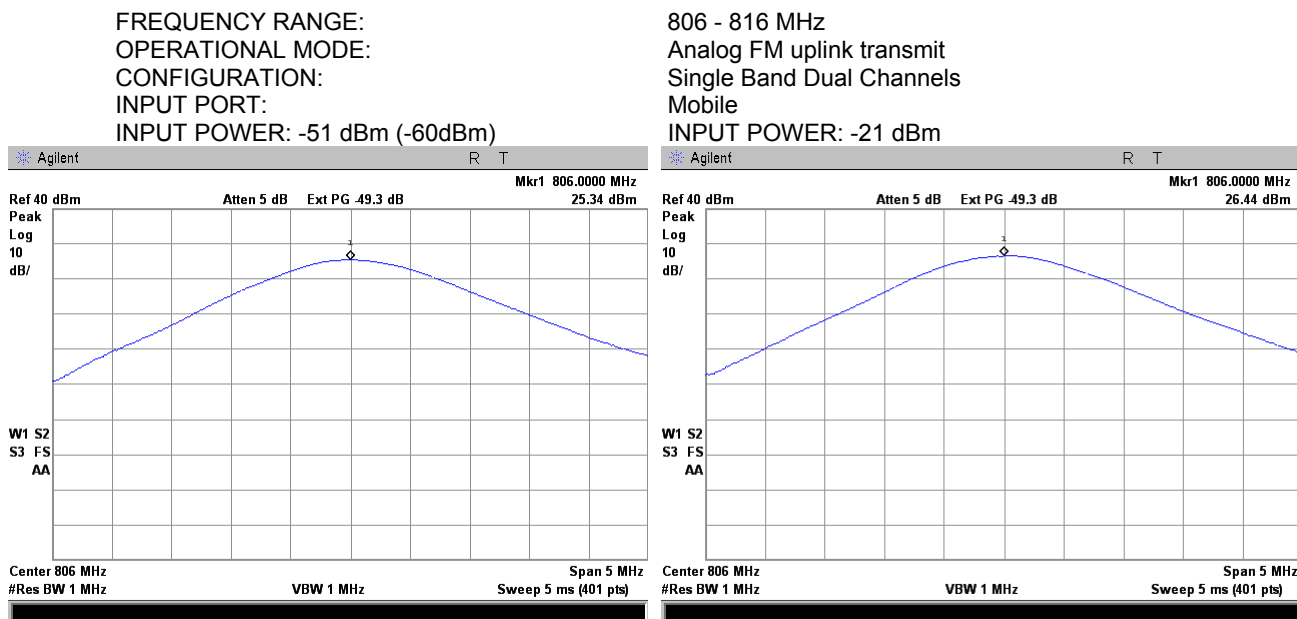


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.57 RF output power measurements at high frequency carrier, Port 1

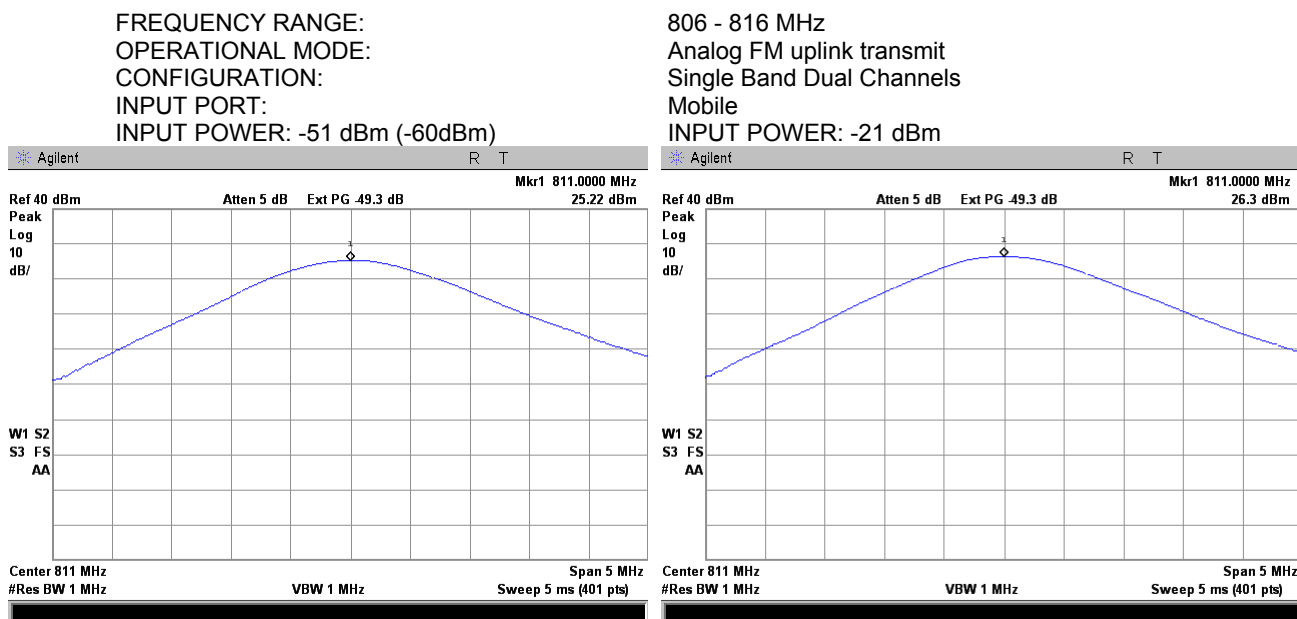


Plot 7.1.58 RF output power measurements at low frequency carrier, Port 2

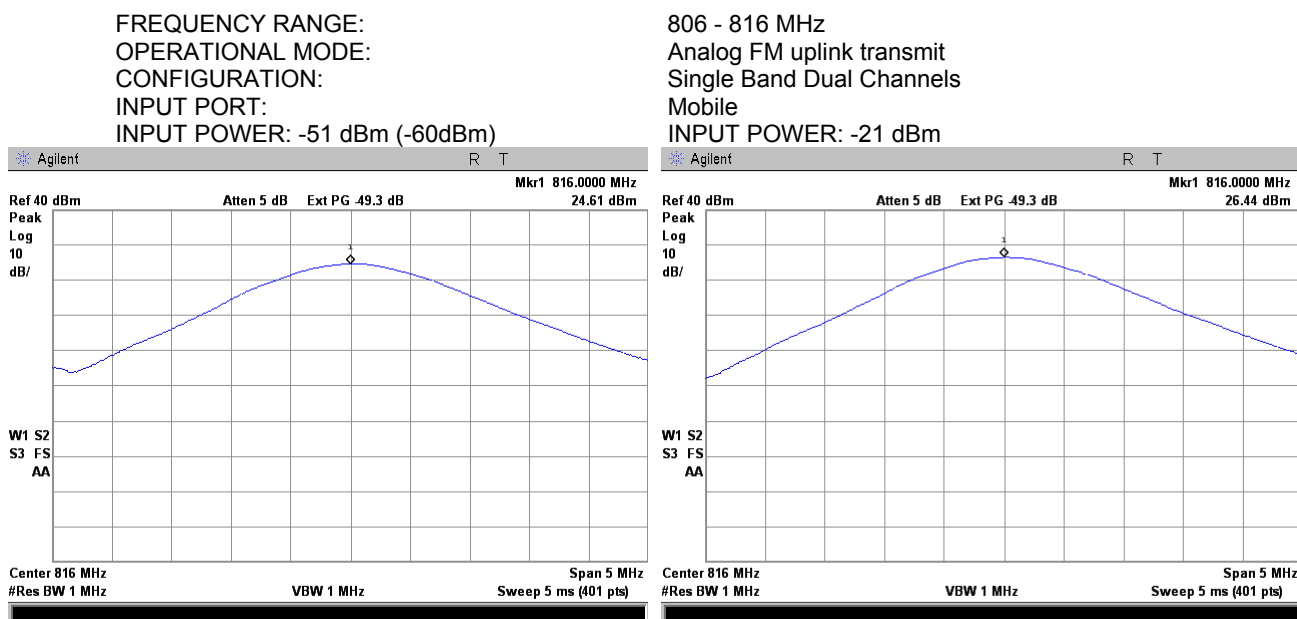


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.59 RF output power measurements at mid frequency carrier, Port 2



Plot 7.1.60 RF output power measurements at high frequency carrier, Port 2

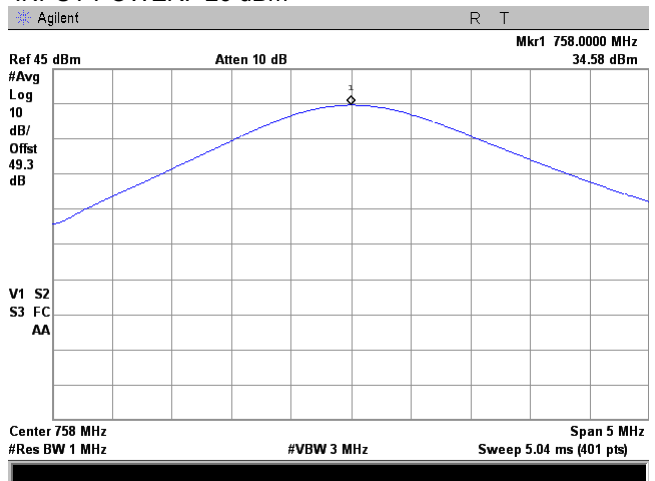
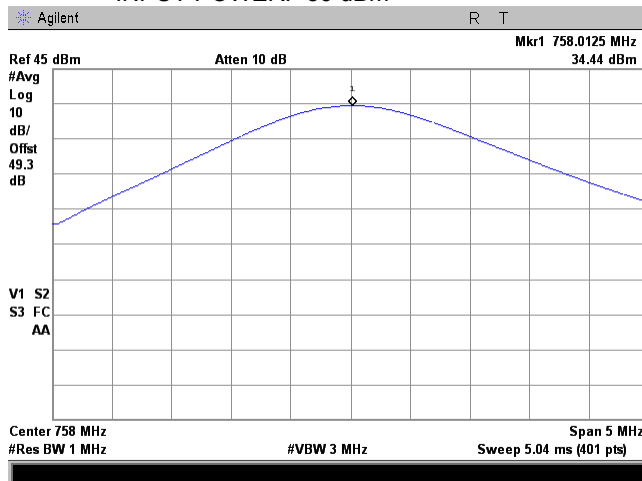


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.61 RF output power measurements at low frequency carrier, Port 1

FREQUENCY RANGE:
OPERATIONAL MODE:
CONFIGURATION:
INPUT PORT:
INPUT POWER: -56 dBm

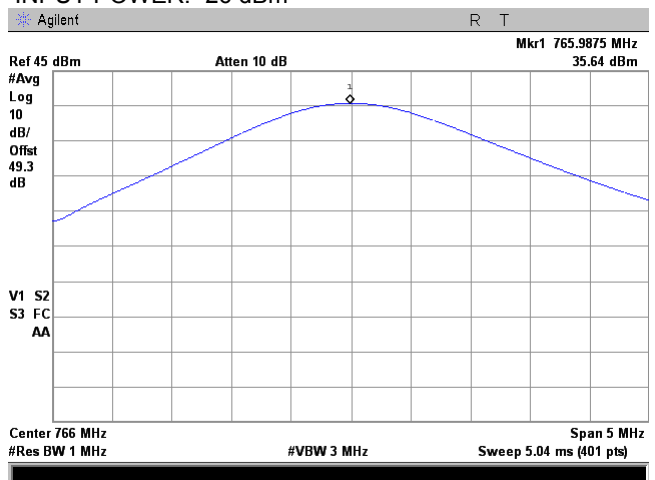
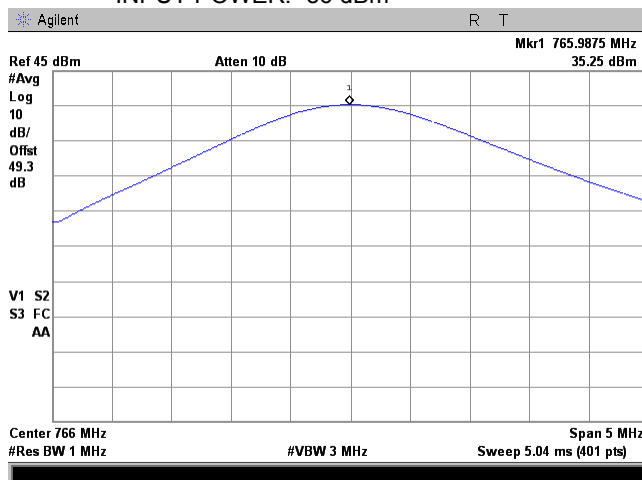
758 - 775 MHz
Analog FM downlink transmit
Single Band Single Channel
Base
INPUT POWER: -26 dBm



Plot 7.1.62 RF output power measurements at mid frequency carrier, Port 1

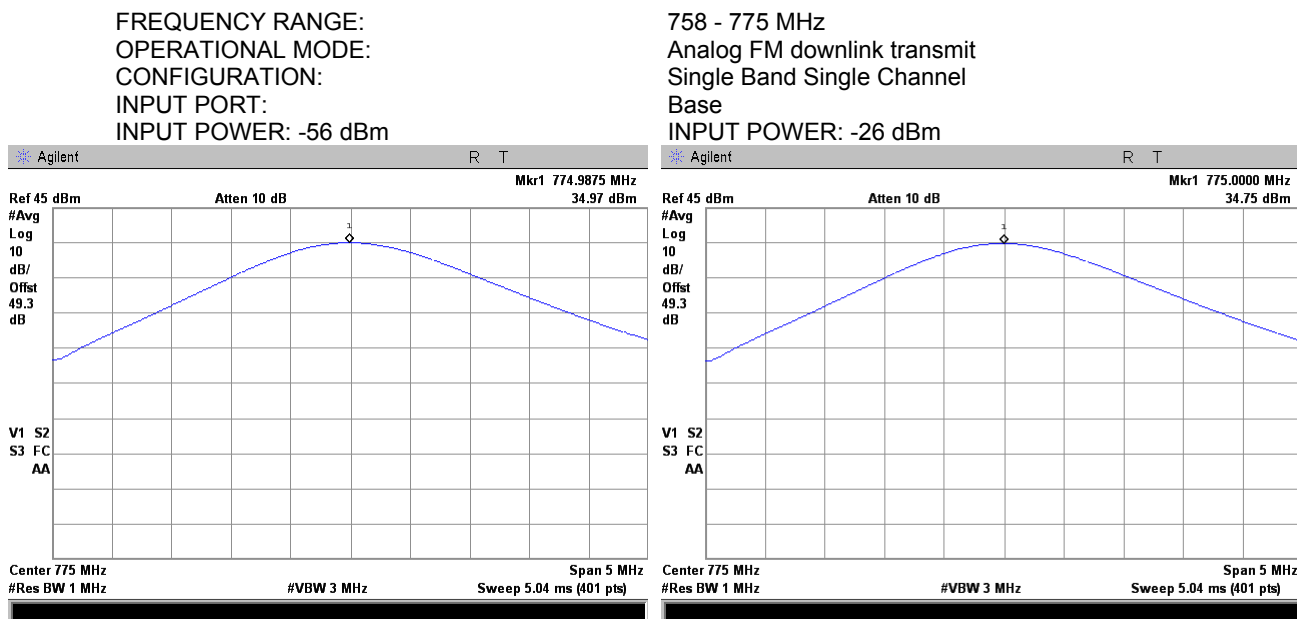
FREQUENCY RANGE:
OPERATIONAL MODE:
CONFIGURATION:
INPUT PORT:
INPUT POWER: -56 dBm

758 - 775 MHz
Analog FM downlink transmit
Single Band Single Channel
Base
INPUT POWER: -26 dBm

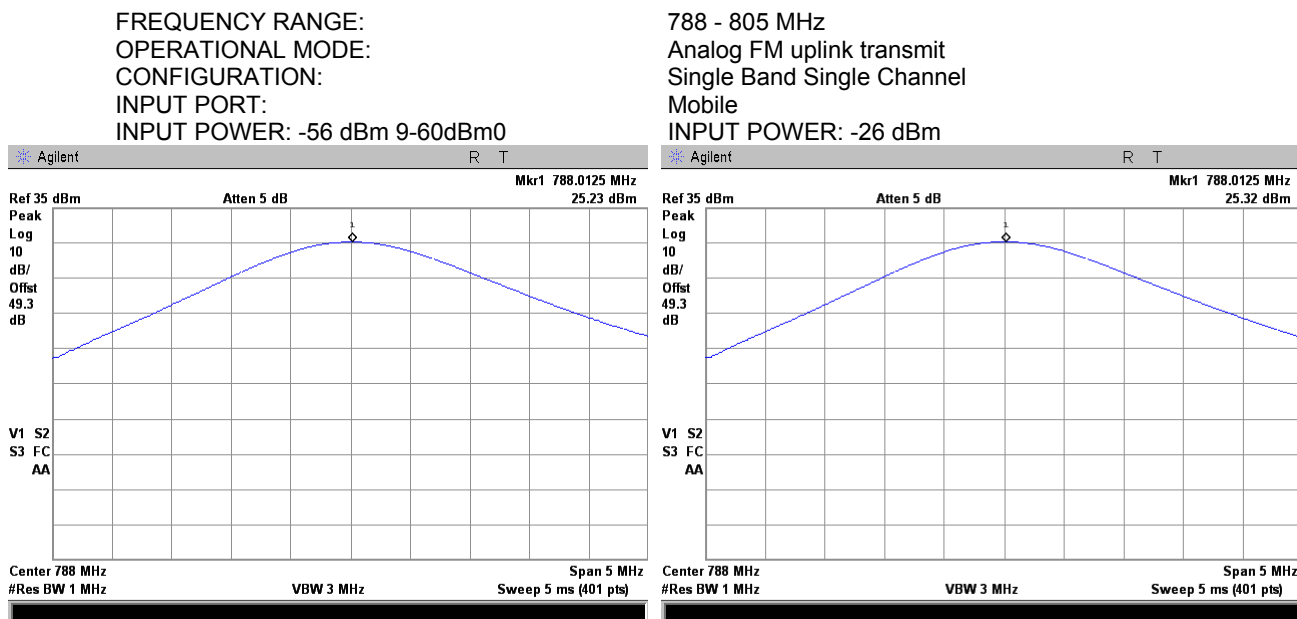


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.63 RF output power measurements at high frequency carrier, Port 1

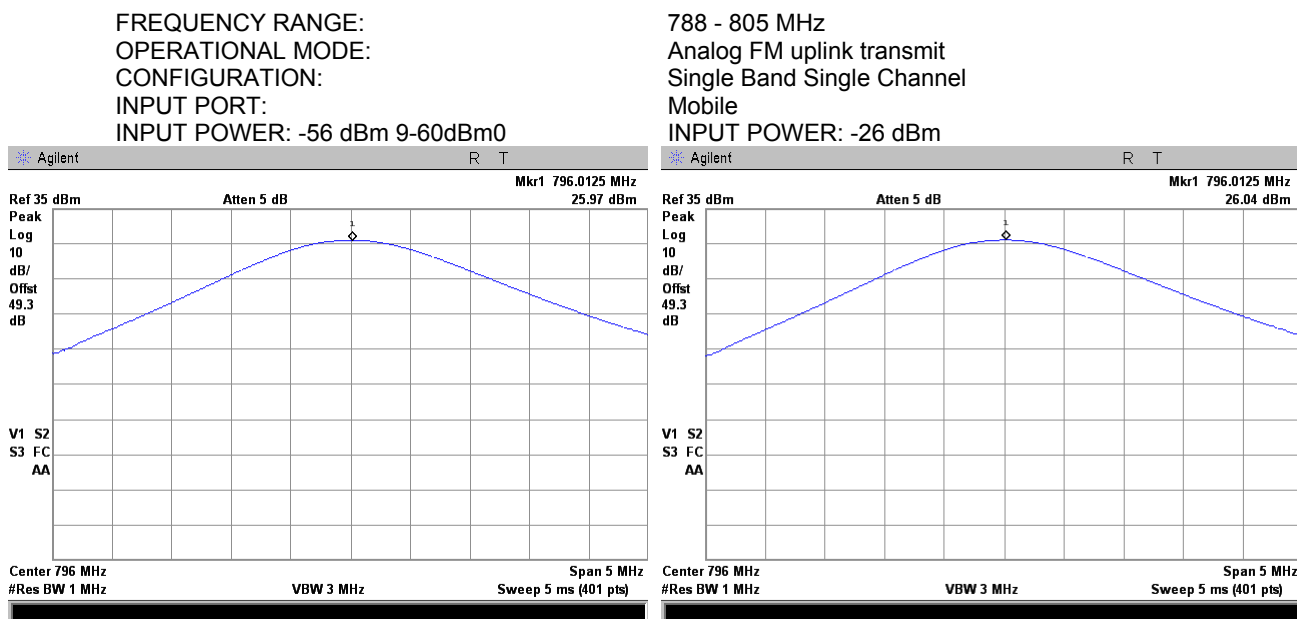


Plot 7.1.64 RF output power measurements at low frequency carrier, Port 2

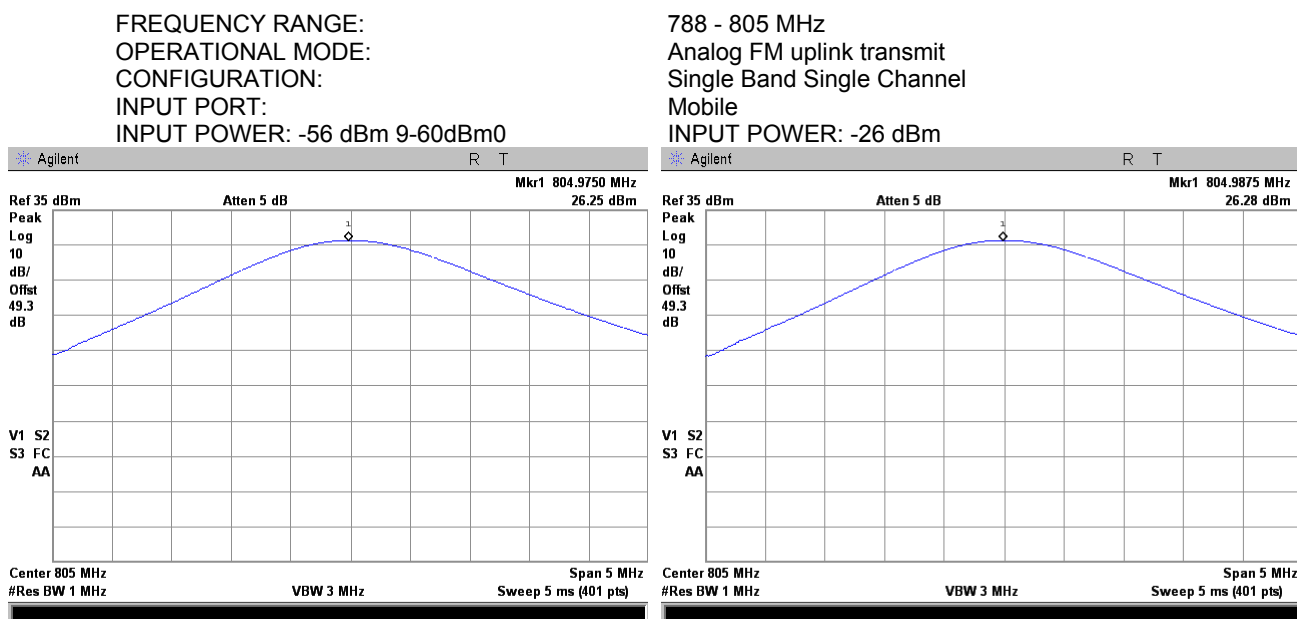


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.65 RF output power measurements at mid frequency carrier, Port 2

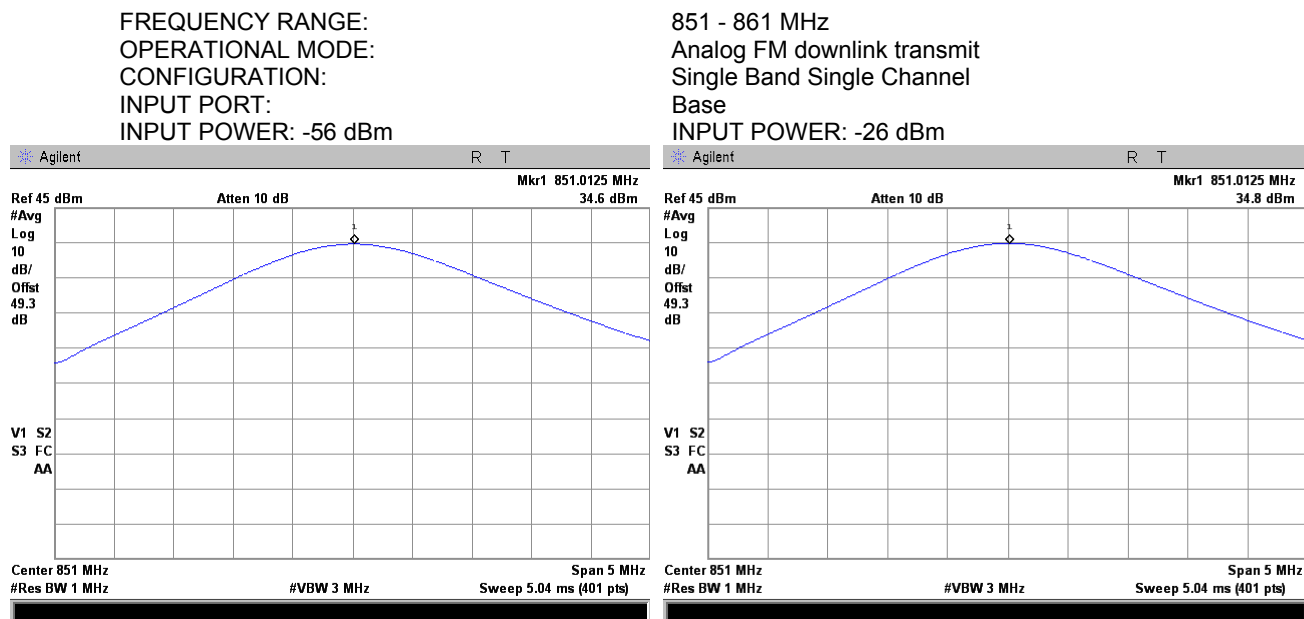


Plot 7.1.66 RF output power measurements at high frequency carrier, Port 2

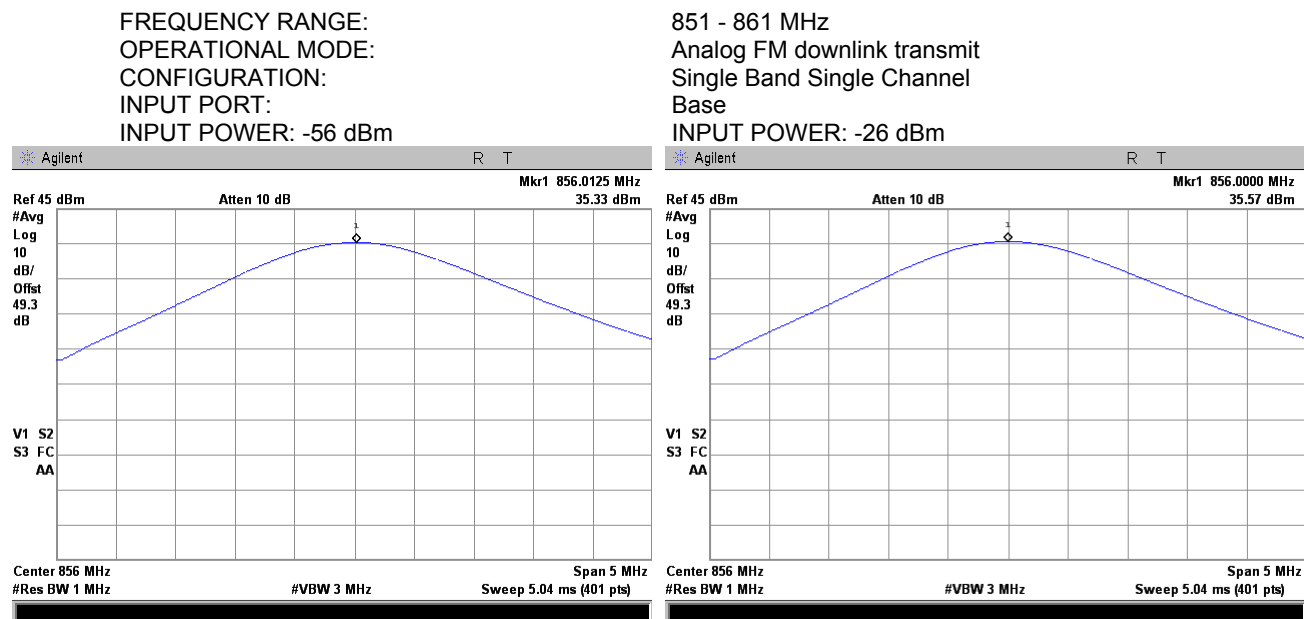


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.67 RF output power measurements at low frequency carrier, Port 1



Plot 7.1.68 RF output power measurements at mid frequency carrier, Port 1

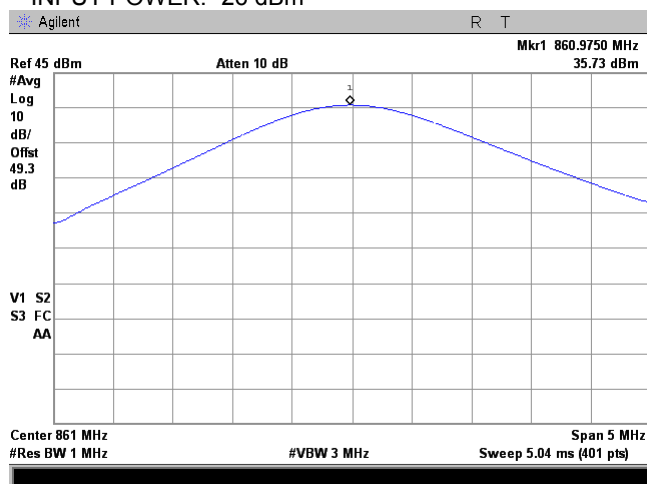
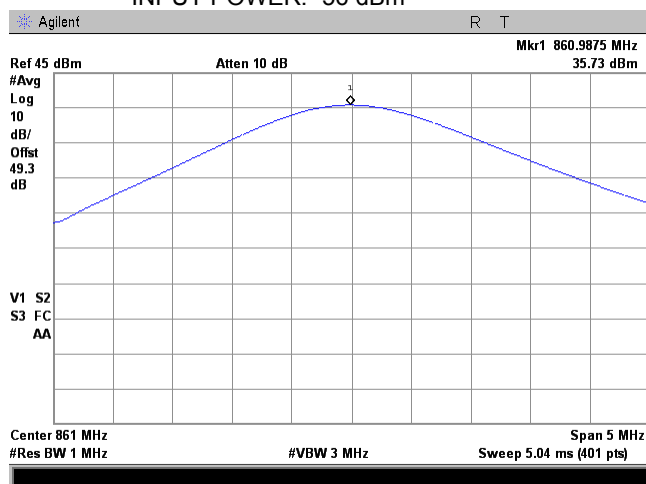


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.69 RF output power measurements at high frequency carrier, Port 1

FREQUENCY RANGE:
OPERATIONAL MODE:
CONFIGURATION:
INPUT PORT:
INPUT POWER: -56 dBm

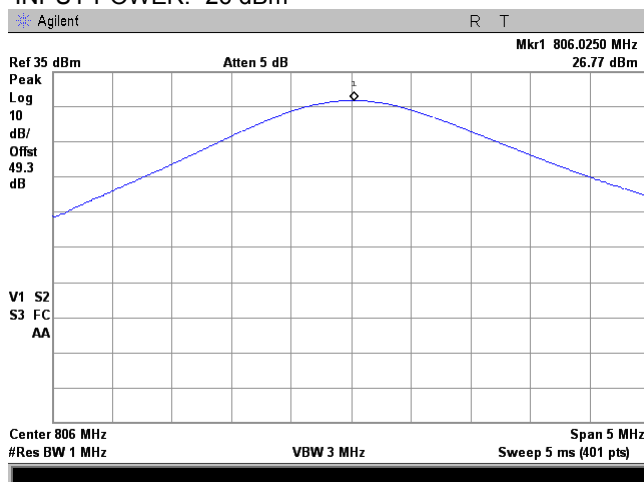
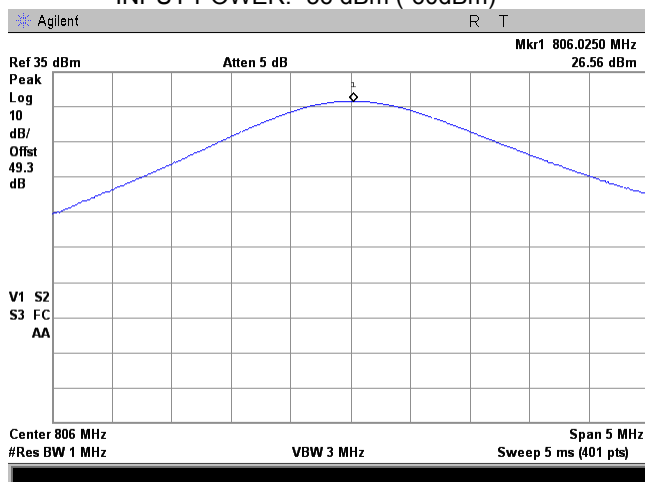
851 - 861 MHz
Analog FM downlink transmit
Single Band Single Channel
Base
INPUT POWER: -26 dBm



Plot 7.1.70 RF output power measurements at low frequency carrier, Port 2

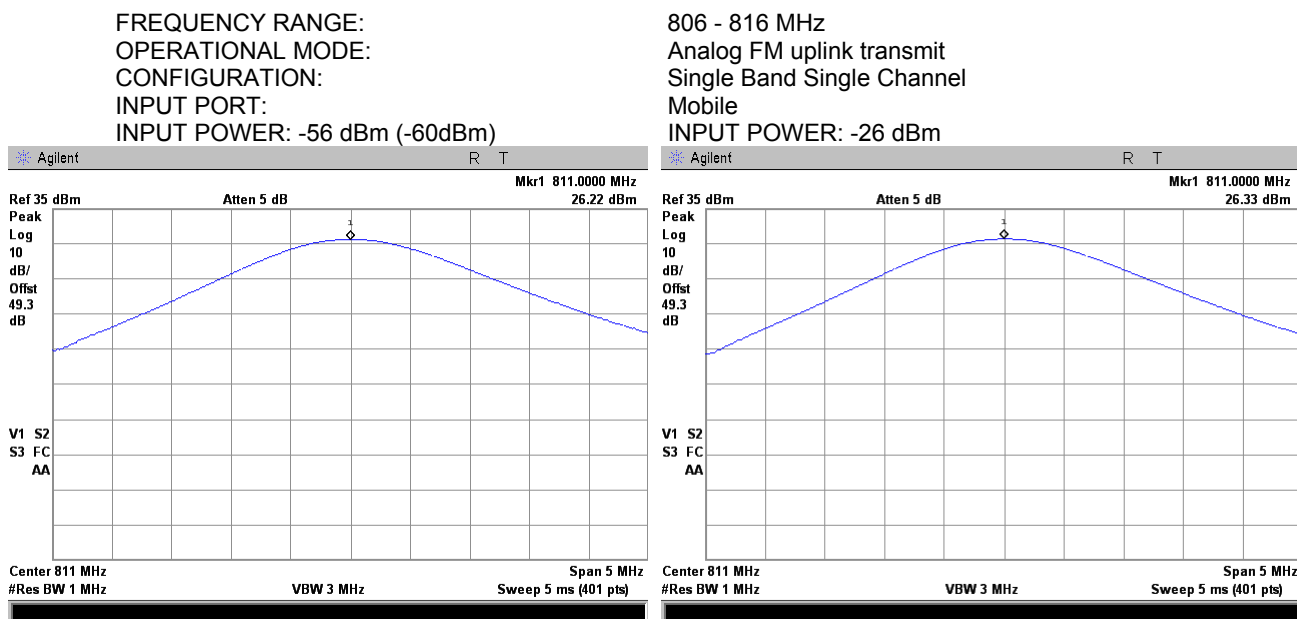
FREQUENCY RANGE:
OPERATIONAL MODE:
CONFIGURATION:
INPUT PORT:
INPUT POWER: -56 dBm (-60dBm)

806 - 816 MHz
Analog FM uplink transmit
Single Band Single Channel
Mobile
INPUT POWER: -26 dBm

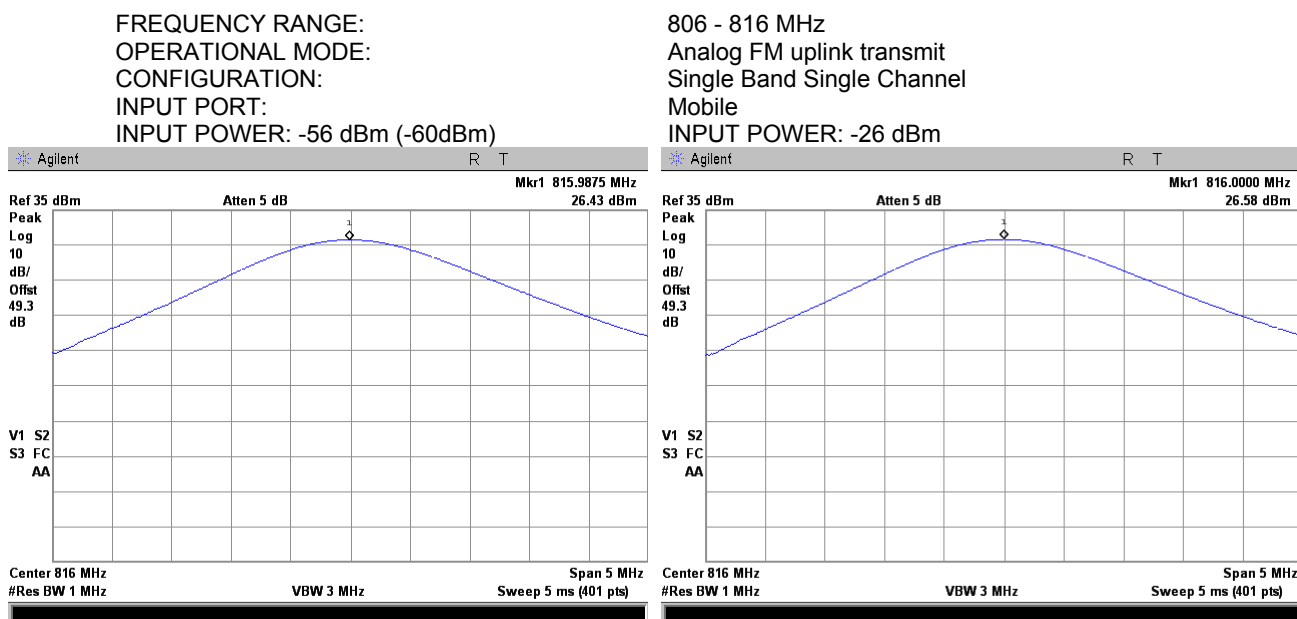


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.71 RF output power measurements at mid frequency carrier, Port 2



Plot 7.1.72 RF output power measurements at high frequency carrier, Port 2



Test specification:	Section 90.219(e)(1), Maximum output power		
Test procedure:	47 CFR, Section 2.1046; KDB 935210 D02 v03		
Test mode:	Compliance	Verdict: PASS	
Date(s):	16-Jul-15 - 22-Jul-15		
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.1.8 Peak output power test results

DETECTOR USED: Average
RESOLUTION BANDWIDTH: 100 kHz
VIDEO BANDWIDTH: 300 kHz
MODULATING SIGNAL: OFDMA/CS-FDMA
CONFIGURATION: Dual Channel
OPERATING FREQUENCY RANGE: 758 - 768 MHz (downlink)
788 - 798 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
760.5	Base	31.49	31.70	34.70	37.0	-2.30	Pass
765.5	Base	31.63	32.26	35.26	37.0	-1.74	Pass
Uplink transmit mode							
790.5	Mobile	24.51	25.89	28.89	37.0	-8.11	Pass
795.5	Mobile	25.22	26.02	29.02	37.0	-7.98	Pass

- There are no specific antennas supplied as a part of the unit that is why the maximum antenna assembly gain in dBd shall not exceed the power margin in dB.

Antenna Assembly Gain (dBd) = Antenna Gain (dBd) – Feeder Loss (dB) = Antenna Gain (dBi) – 2.15 – Feeder Loss (dB)

Note: Output power = Maximum value from SA reading (Without ALC or With ALC) + 10*log(N), where N = 2 (number of channels)

DETECTOR USED: Average
RESOLUTION BANDWIDTH: 100 kHz
VIDEO BANDWIDTH: 300 kHz
MODULATING SIGNAL: OFDMA/CS-FDMA
CONFIGURATION: Single Channel
OPERATING FREQUENCY RANGE: 758 - 768 MHz (downlink)
788 - 798 MHz (uplink)

Carrier frequency, MHz	Input port	SA reading, dBm		Output power**, dBm	Limit, dBm	Margin*, dB	Verdict
		Without ALC	With ALC				
Downlink transmit mode							
760.5	Base	34.43	34.43	34.43	37.0	-2.57	Pass
765.5	Base	35.52	35.30	35.52	37.0	-1.48	Pass
Uplink transmit mode							
790.5	Mobile	25.72	25.81	25.81	37.0	-11.19	Pass
795.5	Mobile	26.30	26.12	26.30	37.0	-10.70	Pass

* - Margin = Maximum ERP – specification limit

** - There are no specific antennas supplied as a part of the unit that is why the maximum antenna assembly gain in dBd shall not exceed the power margin in dB.

Antenna Assembly Gain (dBd) = Antenna Gain (dBd) – Feeder Loss (dB) = Antenna Gain (dBi) – 2.15 – Feeder Loss (dB)

Note: Output power = Maximum value from SA reading (Without ALC or With ALC)

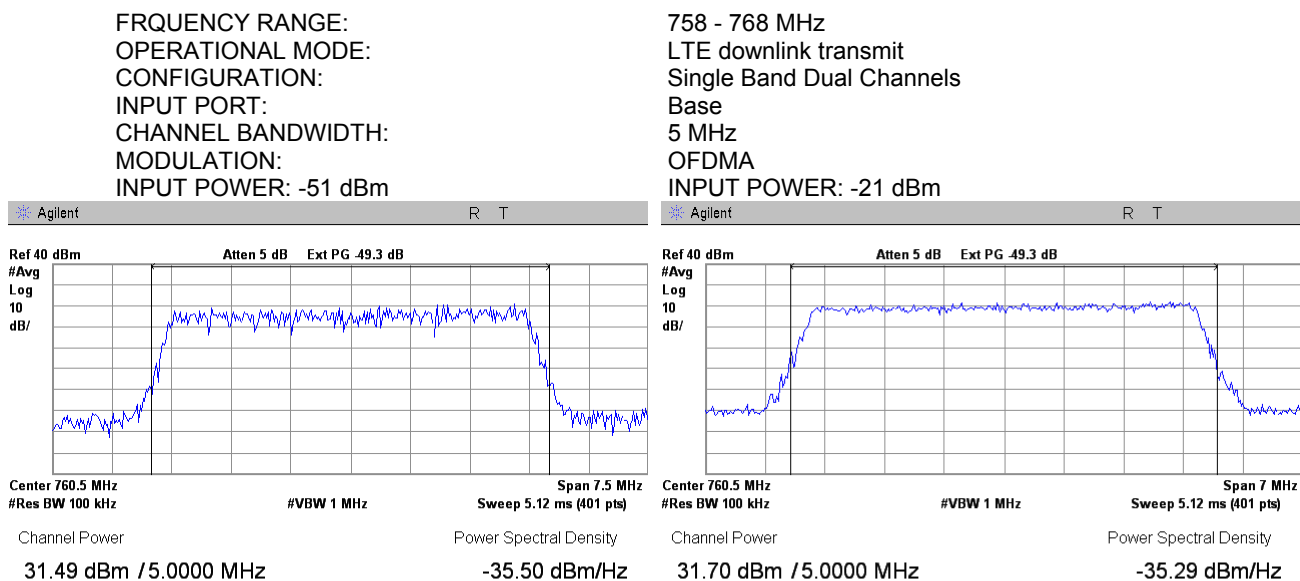
Reference numbers of test equipment used

HL 0539	HL 1908	HL 2357	HL 2909	HL 3434	HL 3768	HL 3779	HL 4068
HL 4224	HL 4273	HL 4274	HL 4354				

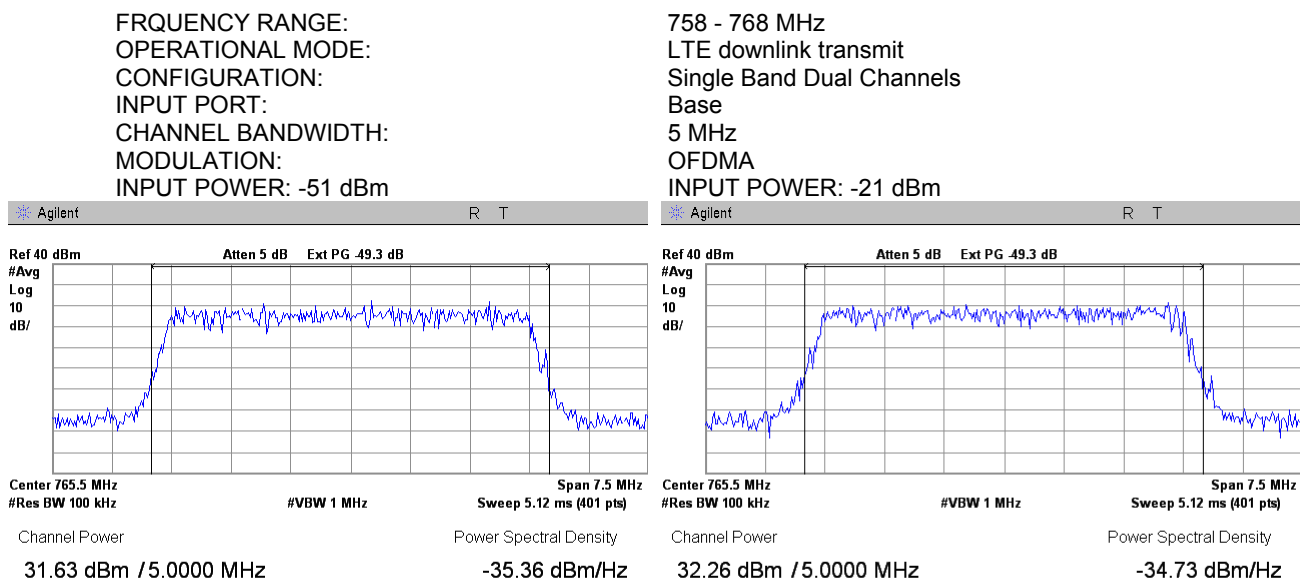
Full description is given in Appendix A.

Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.73 RF output power measurements at low frequency carrier, Port 1

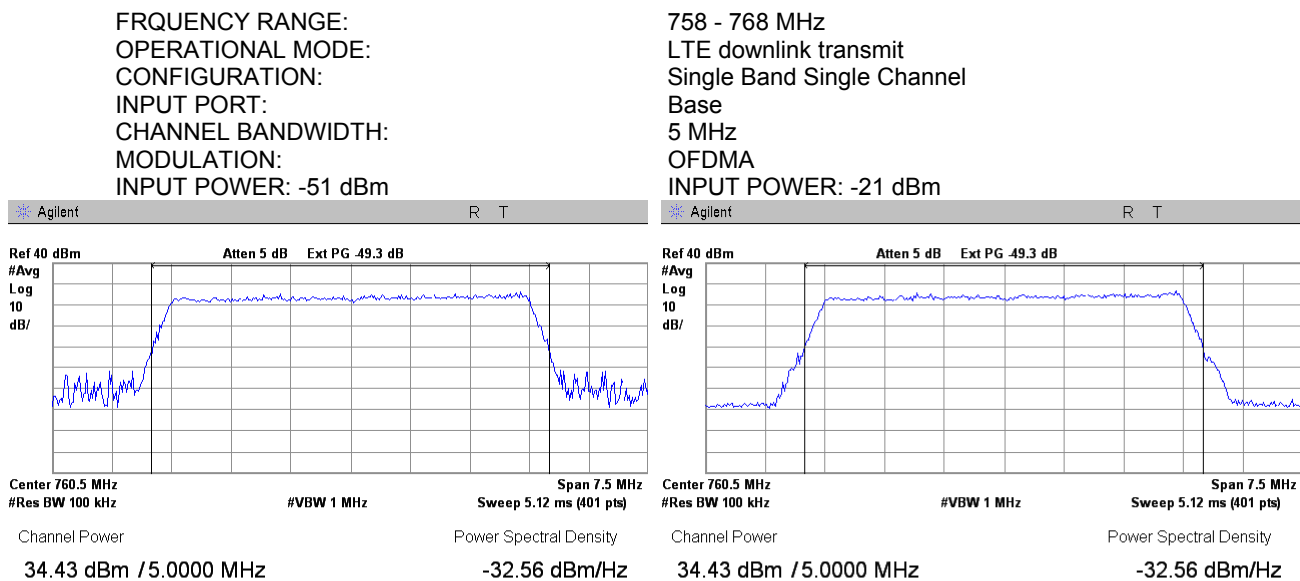


Plot 7.1.74 RF output power measurements at high frequency carrier, Port 1

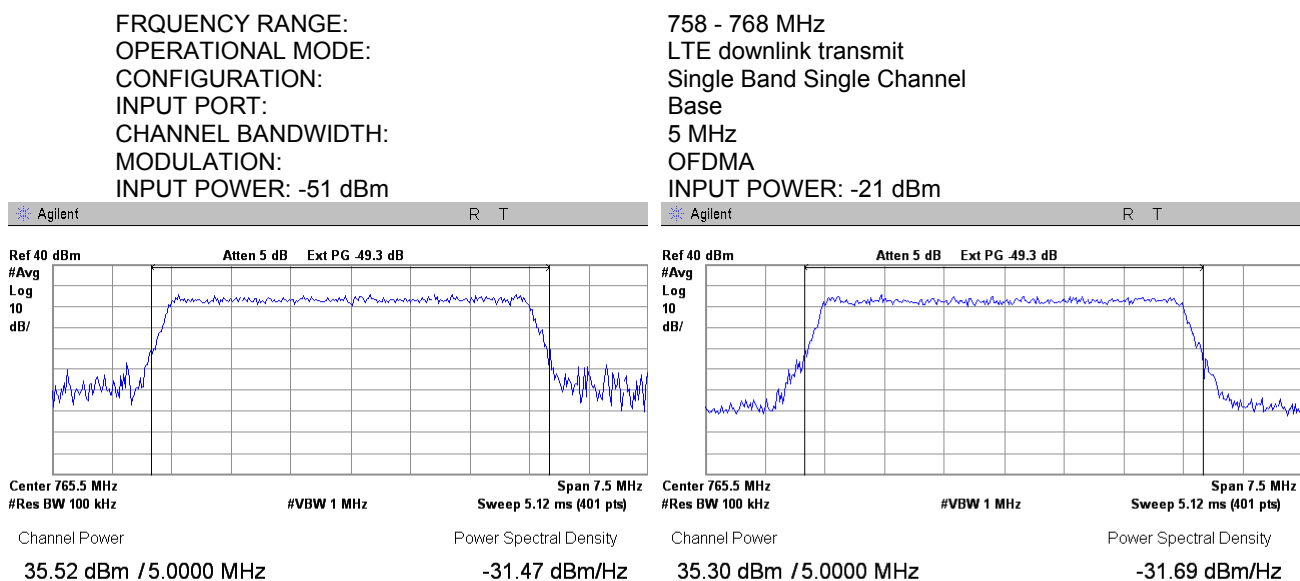


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.75 RF output power measurements at low frequency carrier, Port 1

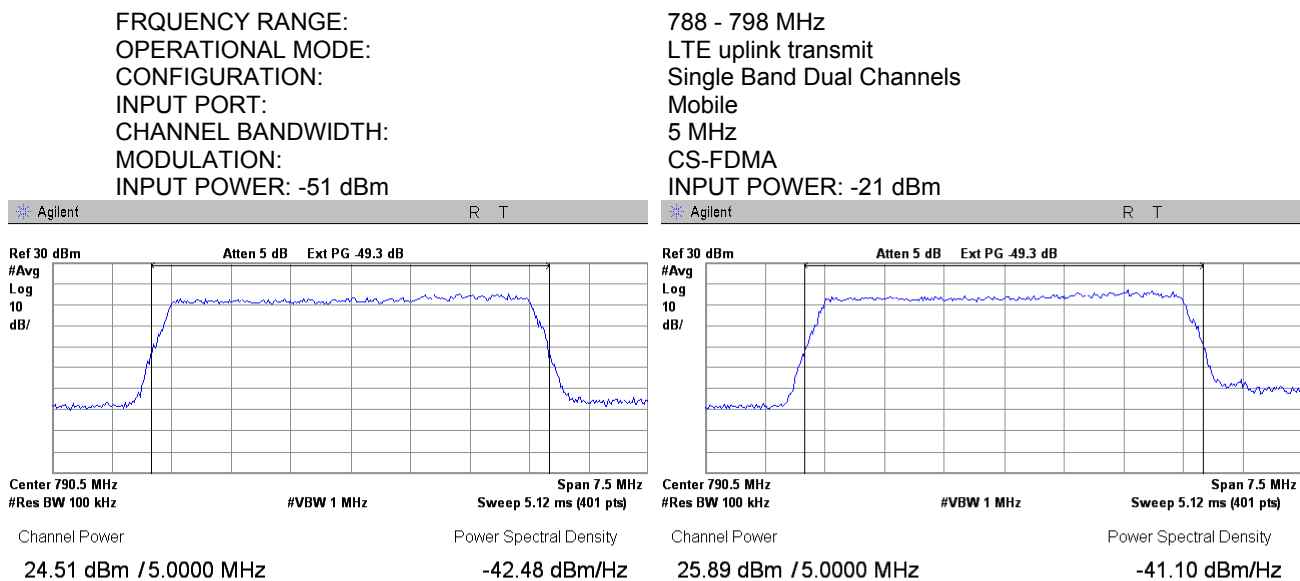


Plot 7.1.76 RF output power measurements at high frequency carrier, Port 1

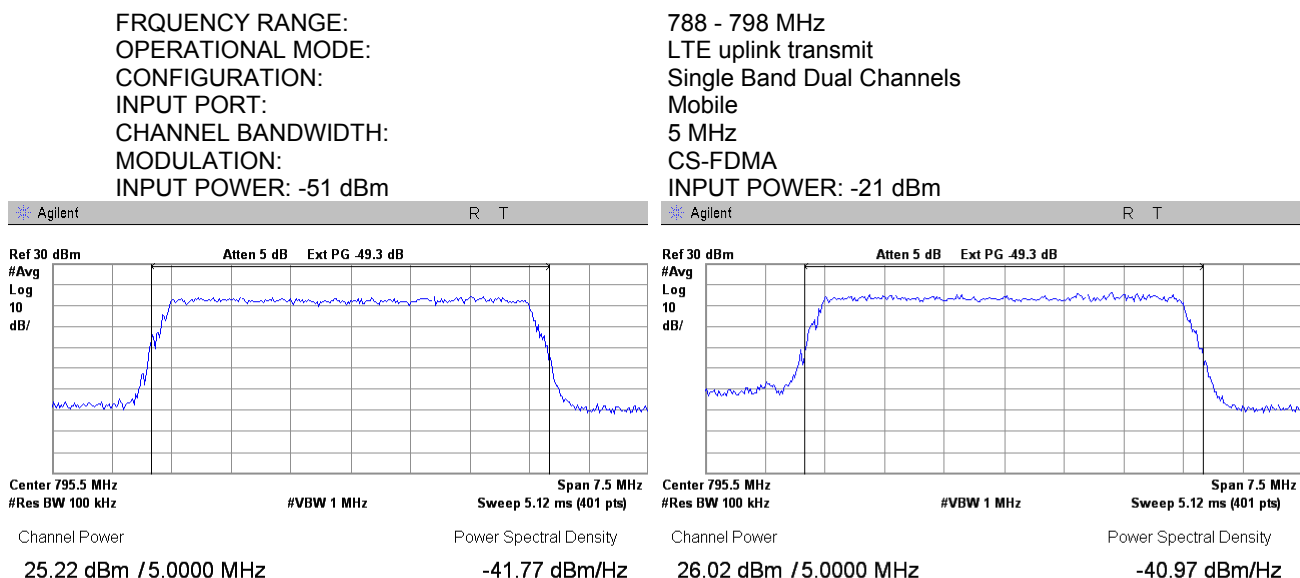


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.77 RF output power measurements at low frequency carrier, Port 2

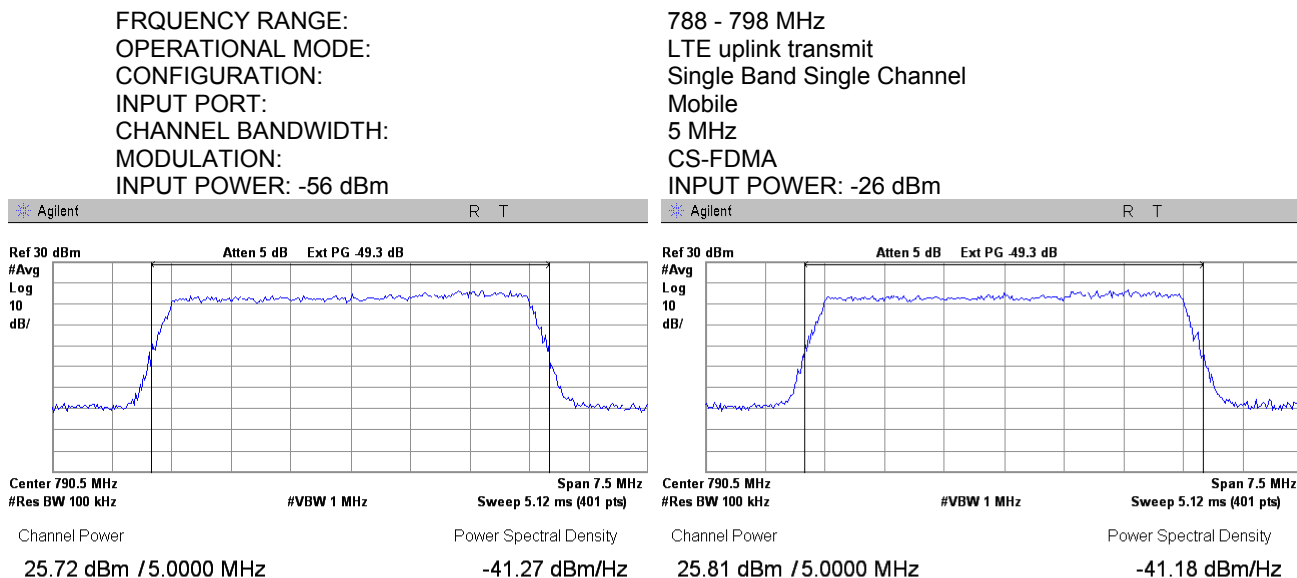


Plot 7.1.78 RF output power measurements at high frequency carrier, Port 2

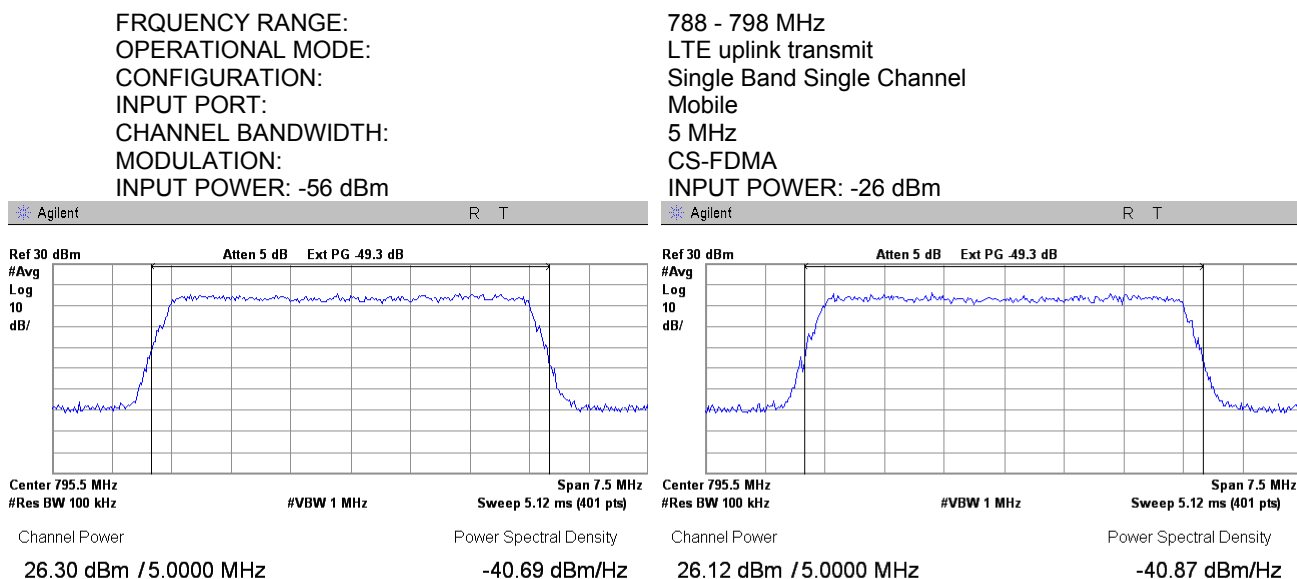


Test specification:		Section 90.219(e)(1), Maximum output power	
Test procedure:		47 CFR, Section 2.1046; KDB 935210 D02 v03	
Test mode:		Compliance	Verdict: PASS
Date(s):		16-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.1.79 RF output power measurements at low frequency carrier, Port 2



Plot 7.1.80 RF output power measurements at high frequency carrier, Port 2



Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

7.2 Occupied bandwidth test

7.2.1 General

This test was performed to measure transmitter occupied bandwidth. Specification test limits are given in Table 7.2.1.

Table 7.2.1 Occupied bandwidth limits

Assigned frequency, MHz	Modulation envelope reference points*, dBc	Maximum allowed bandwidth, kHz
758 – 775/778 - 805	26	75.0
806 – 816/851 - 861		75.0
758 – 768/788 - 798	99%	5000.0

* - Modulation envelope reference points are provided in terms of attenuation below the unmodulated carrier.

7.2.2 Test procedure

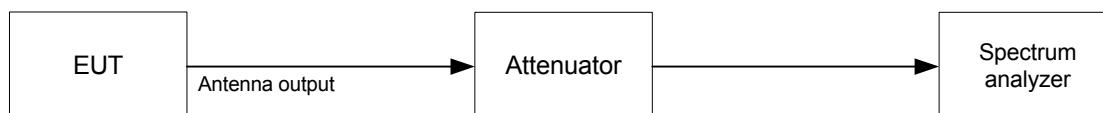
7.2.2.1 The EUT was set up as shown in Figure 7.2.1, energized and its proper operation was checked.

7.2.2.2 The EUT was set to transmit the unmodulated carrier and the reference peak power level was measured.

7.2.2.3 The EUT was set to transmit the normally modulated carrier.

7.2.2.4 The transmitter occupied bandwidth was measured with spectrum analyzer as a frequency delta between the reference points on modulation envelope and provided in Table 7.2.2 and the associated plots.

Figure 7.2.1 Occupied bandwidth test setup





HERMON LABORATORIES

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.2.2 Occupied bandwidth test results

DETECTOR USED: Peak hold
 RESOLUTION BANDWIDTH: 300 Hz
 VIDEO BANDWIDTH: 1 kHz
 MODULATION ENVELOPE REFERENCE POINTS: 26 dBc
 MODULATING SIGNAL: C4FM
 BIT RATE: 4 kbps
 OPERATING FREQUENCY RANGE: 758 - 775 MHz (downlink)
 788 - 805 MHz (uplink)

CONFIGURATION:

Single Band Dual Channels

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
758.0	Base	8.170	7.847	75.0	-66.83	Pass
766.0	Base	8.476	7.539	75.0	-66.52	Pass
775.0	Base	8.027	7.886	75.0	-66.97	Pass
788.0	Mobile	7.660	7.376	75.0	-67.34	Pass
796.0	Mobile	8.138	7.884	75.0	-66.86	Pass
805.0	Mobile	8.451	7.581	75.0	-66.55	Pass

CONFIGURATION:

Single Channel

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
758.0	Base	7.870	7.449	75.0	-67.13	Pass
766.0	Base	7.649	7.611	75.0	-67.35	Pass
775.0	Base	7.725	7.886	75.0	-67.11	Pass
788.0	Mobile	7.749	7.960	75.0	-67.04	Pass
796.0	Mobile	7.928	7.573	75.0	-67.07	Pass
805.0	Mobile	7.537	7.662	75.0	-67.34	Pass



HERMON LABORATORIES

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.2.2 Occupied bandwidth test results (continued)

DETECTOR USED: Peak hold
 RESOLUTION BANDWIDTH: 300 Hz
 VIDEO BANDWIDTH: 1 kHz
 MODULATION ENVELOPE REFERENCE POINTS: 26 dBc
 MODULATING SIGNAL: C4FM
 BIT RATE: 4 kbps
 OPERATING FREQUENCY RANGE: 851 - 861 MHz (downlink)
 806 - 816 MHz (uplink)

CONFIGURATION:

Single Band Dual Channels

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
851.0	Base	7.970	7.626	75.0	-67.03	Pass
856.0	Base	8.257	8.270	75.0	-66.73	Pass
861.0	Base	7.699	7.999	75.0	-67.00	Pass
806.0	Mobile	6.896	8.161	75.0	-66.84	Pass
811.0	Mobile	7.912	7.376	75.0	-67.09	Pass
816.0	Mobile	7.916	7.864	75.0	-67.08	Pass

CONFIGURATION:

Single Channel

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
851.0	Base	7.828	7.482	75.0	-67.17	Pass
856.0	Base	8.097	8.097	75.0	-66.90	Pass
861.0	Base	7.774	7.864	75.0	-67.14	Pass
806.0	Mobile	8.087	7.652	75.0	-66.91	Pass
811.0	Mobile	8.515	8.156	75.0	-66.49	Pass
816.0	Mobile	8.412	7.928	75.0	-66.59	Pass



HERMON LABORATORIES

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.2.2 Occupied bandwidth test results (continued)

DETECTOR USED: Peak hold
 RESOLUTION BANDWIDTH: 300 Hz
 VIDEO BANDWIDTH: 1 kHz
 MODULATION ENVELOPE REFERENCE POINTS: 26 dBc
 MODULATING SIGNAL: iDEN QAM
 BIT RATE: 4 kbps
 OPERATING FREQUENCY RANGE: 758 - 775 MHz (downlink)
 788 - 805 MHz (uplink)

CONFIGURATION: Single Band Dual Channels

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
758.0	Base	17.434	17.358	75.0	-57.57	Pass
766.0	Base	17.326	17.779	75.0	-57.22	Pass
775.0	Base	17.301	18.644	75.0	-56.36	Pass
788.0	Mobile	17.323	16.980	75.0	-57.68	Pass
796.0	Mobile	17.217	17.535	75.0	-57.47	Pass
805.0	Mobile	17.495	17.026	75.0	-57.51	Pass

CONFIGURATION: Single Channel

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
758.0	Base	17.314	17.437	75.0	-57.56	Pass
766.0	Base	17.398	18.246	75.0	-56.75	Pass
775.0	Base	17.140	18.196	75.0	-56.80	Pass
788.0	Mobile	17.387	17.004	75.0	-57.61	Pass
796.0	Mobile	16.953	17.180	75.0	-57.82	Pass
805.0	Mobile	17.353	17.076	75.0	-57.65	Pass



HERMON LABORATORIES

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.2.2 Occupied bandwidth test results (continued)

DETECTOR USED: Peak hold
 RESOLUTION BANDWIDTH: 300 Hz
 VIDEO BANDWIDTH: 1 kHz
 MODULATION ENVELOPE REFERENCE POINTS: 26 dBc
 MODULATING SIGNAL: iDEN QAM
 BIT RATE: 4 kbps
 OPERATING FREQUENCY RANGE: 851 - 861 MHz (downlink)
 806 - 816 MHz (uplink)

CONFIGURATION: Single Band Dual Channels

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
851.0	Base	17.441	17.879	75.0	-57.12	Pass
856.0	Base	16.423	17.717	75.0	-57.28	Pass
861.0	Base	17.306	18.082	75.0	-56.92	Pass
806.0	Mobile	17.407	16.771	75.0	-57.59	Pass
811.0	Mobile	17.348	17.084	75.0	-57.65	Pass
816.0	Mobile	17.413	17.285	75.0	-57.59	Pass

CONFIGURATION: Single Channel

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
851.0	Base	16.974	17.989	75.0	-57.01	Pass
856.0	Base	16.423	17.717	75.0	-57.28	Pass
861.0	Base	16.651	17.723	75.0	-57.28	Pass
806.0	Mobile	17.122	17.240	75.0	-57.76	Pass
811.0	Mobile	17.585	17.763	75.0	-57.24	Pass
816.0	Mobile	17.091	17.336	75.0	-57.66	Pass



HERMON LABORATORIES

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.2.2 Occupied bandwidth test results (continued)

DETECTOR USED: Peak hold
 RESOLUTION BANDWIDTH: 300 Hz
 VIDEO BANDWIDTH: 1 kHz
 MODULATION ENVELOPE REFERENCE POINTS: 26 dBc
 MODULATING SIGNAL: Analog FM 10.0 kHz/1 kHz
 BIT RATE: 4 kbps
 OPERATING FREQUENCY RANGE: 758 - 775 MHz (downlink)
 788 - 805 MHz (uplink)

CONFIGURATION: Single Band Dual Channels

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
758.0	Base	23.495	23.477	75.0	-51.51	Pass
796.0	Base	23.479	23.434	75.0	-51.52	Pass
775.0	Base	23.417	23.423	75.0	-51.58	Pass
788.0	Mobile	23.378	23.322	75.0	-51.62	Pass
796.0	Mobile	23.278	23.332	75.0	-51.67	Pass
805.0	Mobile	23.933	23.912	75.0	-51.07	Pass

CONFIGURATION: Single Channel

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
758.0	Base	23.425	23.497	75.0	-51.50	Pass
796.0	Base	23.478	23.457	75.0	-51.52	Pass
775.0	Base	23.428	23.366	75.0	-51.57	Pass
788.0	Mobile	23.340	22.946	75.0	-51.66	Pass
796.0	Mobile	23.351	22.976	75.0	-51.65	Pass
805.0	Mobile	23.652	23.683	75.0	-51.32	Pass



HERMON LABORATORIES

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.2.2 Occupied bandwidth test results (continued)

DETECTOR USED: Peak hold
 RESOLUTION BANDWIDTH: 300 Hz
 VIDEO BANDWIDTH: 1 kHz
 MODULATION ENVELOPE REFERENCE POINTS: 26 dBc
 MODULATING SIGNAL: Analog FM 10.0 kHz/1 kHz
 BIT RATE: 4 kbps

OPERATING FREQUENCY RANGE: 851 - 861 MHz (downlink)
 806 - 816 MHz (uplink)
 CONFIGURATION: Single Band Dual Channels

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
851.0	Base	24.056	24.056	75.0	-50.94	Pass
856.0	Base	24.087	24.084	75.0	-50.91	Pass
861.0	Base	23.837	24.047	75.0	-50.95	Pass
806.0	Mobile	23.932	23.646	75.0	-51.07	Pass
811.0	Mobile	23.982	23.967	75.0	-51.02	Pass
816.0	Mobile	23.976	23.996	75.0	-51.00	Pass

CONFIGURATION: Single Channel

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
851.0	Base	23.843	24.066	75.0	-50.93	Pass
856.0	Base	24.065	24.062	75.0	-50.94	Pass
861.0	Base	24.083	23.935	75.0	-50.92	Pass
806.0	Mobile	23.682	23.682	75.0	-51.32	Pass
811.0	Mobile	23.942	23.945	75.0	-51.06	Pass
816.0	Mobile	23.721	23.961	75.0	-51.04	Pass



HERMON LABORATORIES

Test specification:	Section 90.219(a), Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	20-Jul-15 - 22-Jul-15		
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.2.3 Occupied bandwidth test results

OPERATING FREQUENCY RANGE: 758 - 768 MHz (downlink)
788 - 798 MHz (uplink)

DETECTOR USED: Peak hold

RESOLUTION BANDWIDTH: 100 kHz

VIDEO BANDWIDTH: 300 kHz

MODULATION ENVELOPE REFERENCE POINTS: 99%

CHANNEL BANDWIDTH: 5 MHz

CONFIGURATION: Single Band Dual Channels

CONFIRMATION:

Single Band Dual Channels

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
Downlink						
Modulation OFDMA						
760.5	Base	4.500	4.567	5000.0	-0.43	Pass
765.5	Base	4.509	4.513	5000.0	-0.49	Pass
Uplink						
Modulation SC-FDMA						
790.5	Mobile	4.500	4.490	5000.0	-0.50	Pass
795.5	Mobile	4.534	4.483	5000.0	-0.47	Pass

CONFIGURATION: Single Channel

CONFIRMATION:

Carrier frequency, MHz	Output port	Occupied bandwidth, kHz		Limit, kHz	Margin, kHz	Verdict
		Without ALC	With ALC			
Downlink						
Modulation OFDMA						
760.5	Base	4.502	4.503	5000.0	-0.50	Pass
765.5	Base	4.483	4.515	5000.0	-0.49	Pass
Uplink						
Modulation SC-FDMA						
790.5	Mobile	4.501	4.492	5000.0	-0.50	Pass
795.5	Mobile	4.514	4.510	5000.0	-0.49	Pass

Reference numbers of test equipment used

HL 2909	HL 3390	HL 3768	HL 3770	HL 3776	HL 3780	HL 3787	HL 4274
HL 4354							

Full description is given in Appendix A.

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

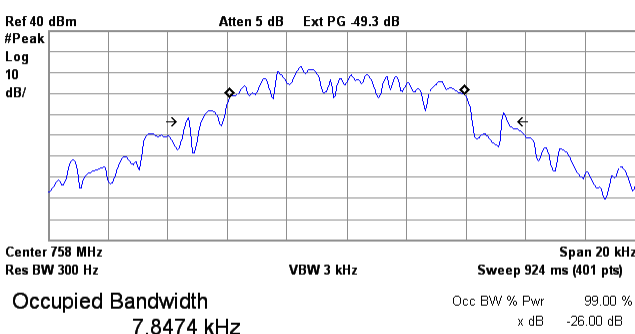
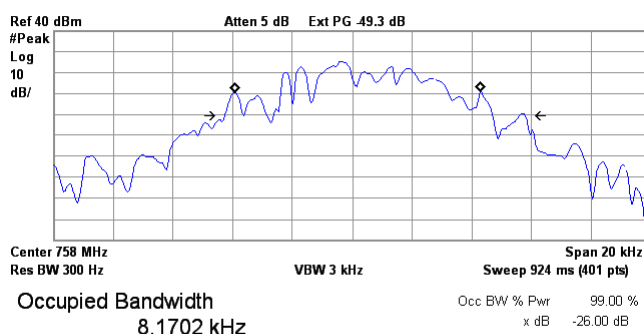
Plot 7.2.1 Occupied bandwidth test result at low frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

758 - 775 MHz
C4FM downlink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error 208.133 Hz
Occupied Bandwidth 10.060 kHz*

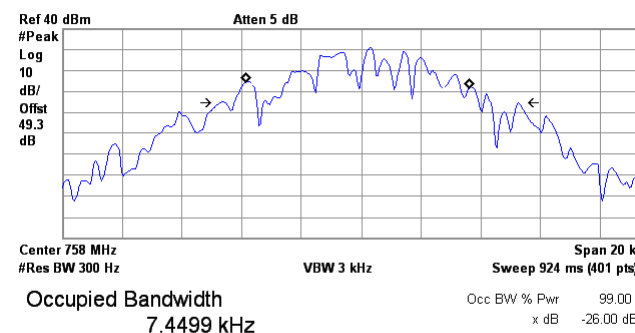
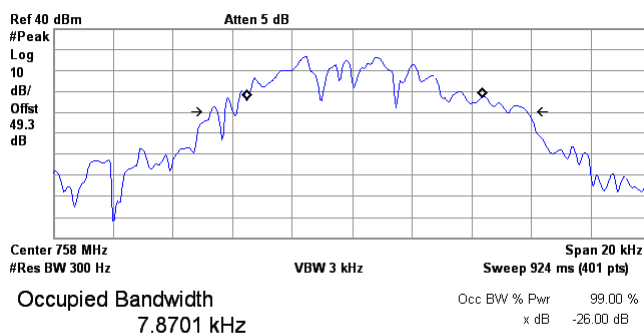
Transmit Freq Error 29.055 Hz
Occupied Bandwidth 10.757 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error 412.440 Hz
Occupied Bandwidth 10.554 kHz*

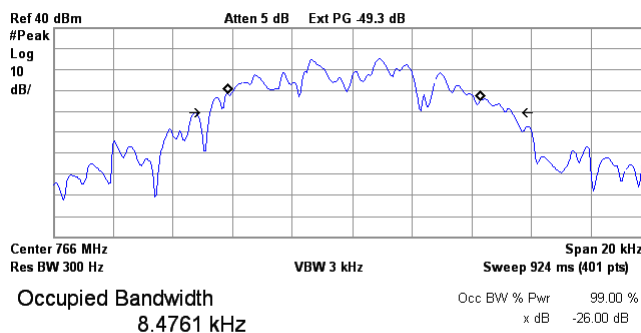
Transmit Freq Error -135.551 Hz
Occupied Bandwidth 9.935 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.2 Occupied bandwidth test result at mid frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

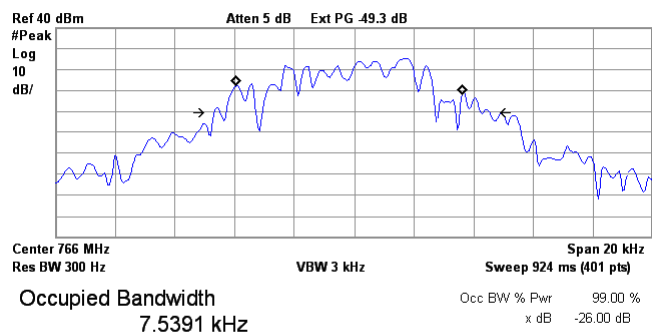
Agilent R T



Transmit Freq Error 78.480 Hz
Occupied Bandwidth 10.112 kHz*

758 - 775 MHz
C4FM downlink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

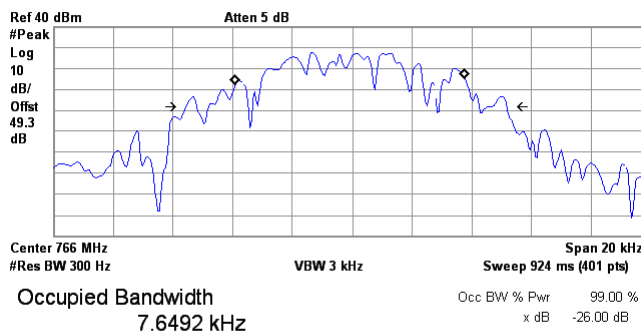
Agilent R T



Transmit Freq Error -171.123 Hz
Occupied Bandwidth 9.239 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

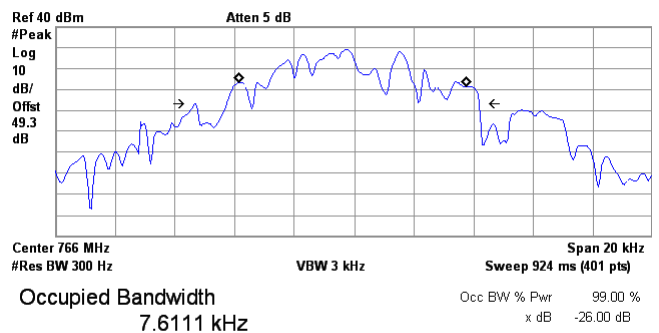
Agilent R T



Transmit Freq Error -59.981 Hz
Occupied Bandwidth 10.731 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



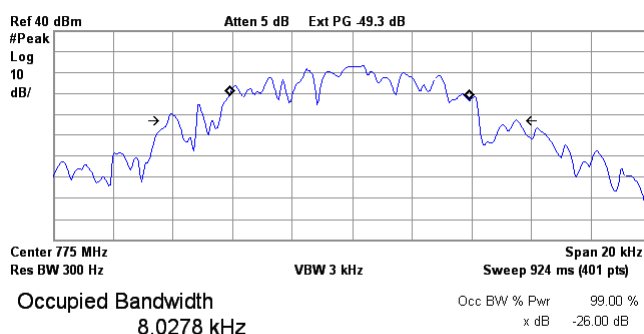
Transmit Freq Error -34.666 Hz
Occupied Bandwidth 9.528 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.3 Occupied bandwidth test result at high frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

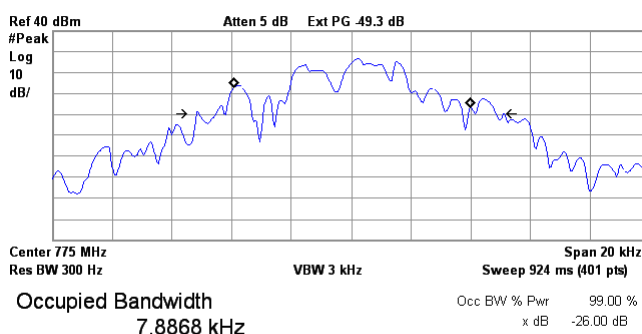
Agilent R T



Transmit Freq Error -107.190 Hz
Occupied Bandwidth 11.671 kHz*

758 - 775 MHz
C4FM downlink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

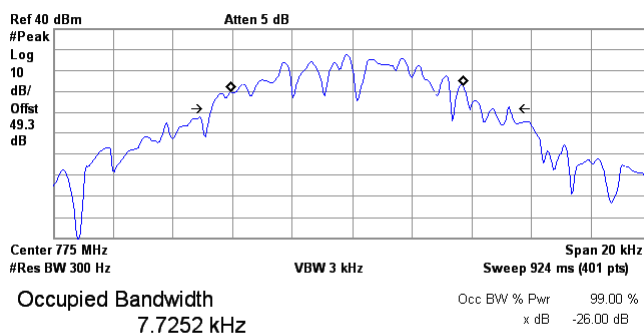
Agilent R T



Transmit Freq Error 31.794 Hz
Occupied Bandwidth 10.010 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

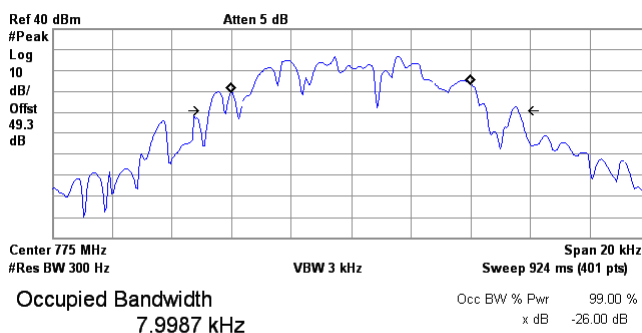
Agilent R T



Transmit Freq Error -187.489 Hz
Occupied Bandwidth 9.979 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



Transmit Freq Error 22.595 Hz
Occupied Bandwidth 10.344 kHz*

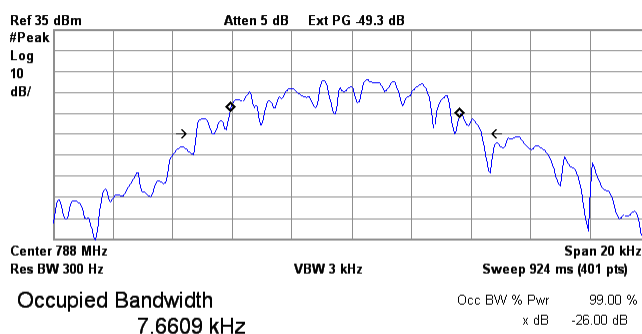
Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.4 Occupied bandwidth test result at low frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

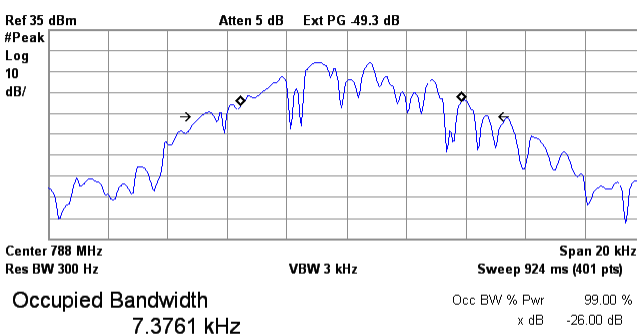
788 - 805 MHz
C4FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T



Transmit Freq Error -233.485 Hz
Occupied Bandwidth 9.560 kHz*

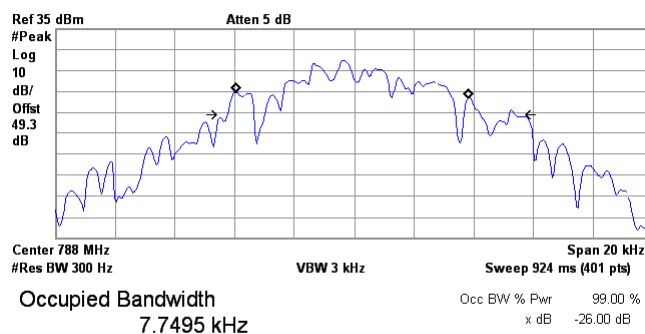
Agilent R T



Transmit Freq Error 147.522 Hz
Occupied Bandwidth 9.635 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

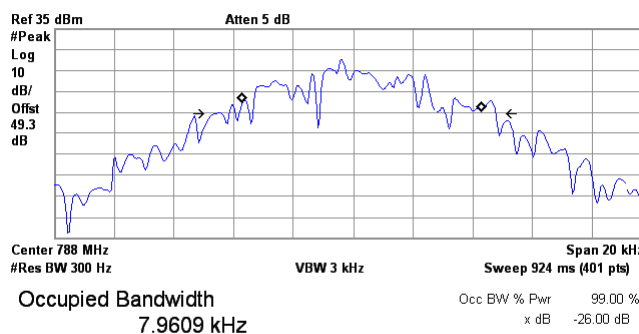
Agilent R T



Transmit Freq Error -55.875 Hz
Occupied Bandwidth 9.627 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



Transmit Freq Error 300.201 Hz
Occupied Bandwidth 9.423 kHz*

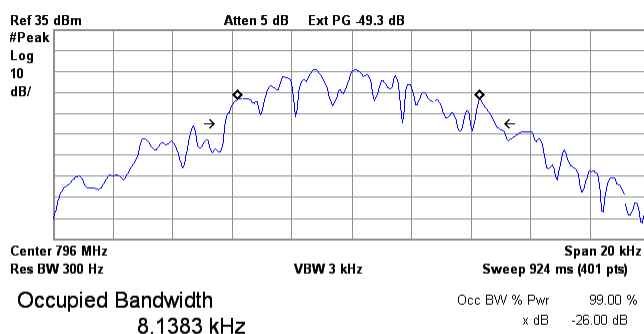
Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.5 Occupied bandwidth test result at mid frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

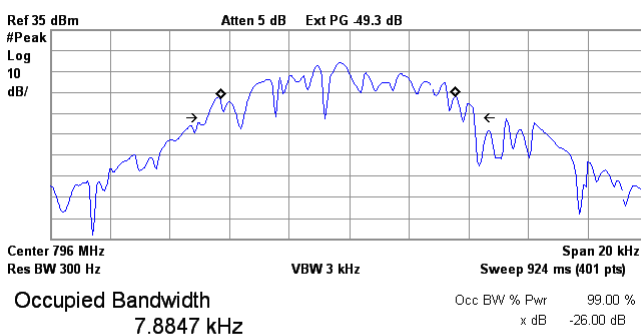
788 - 805 MHz
C4FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T



Transmit Freq Error 252.881 Hz
Occupied Bandwidth 9.055 kHz*

Agilent R T

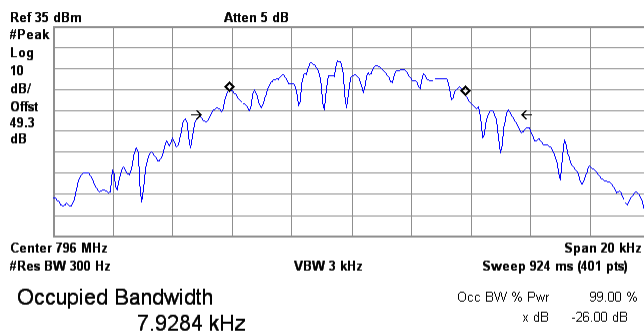


Transmit Freq Error -377.815 Hz
Occupied Bandwidth 8.926 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

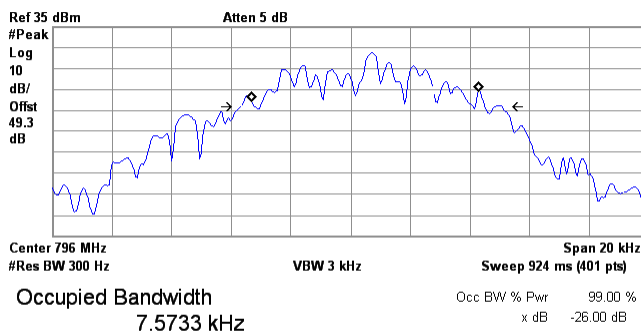
Single Channel
INPUT POWER: -26 dBm

Agilent R T



Transmit Freq Error -142.867 Hz
Occupied Bandwidth 10.066 kHz*

Agilent R T



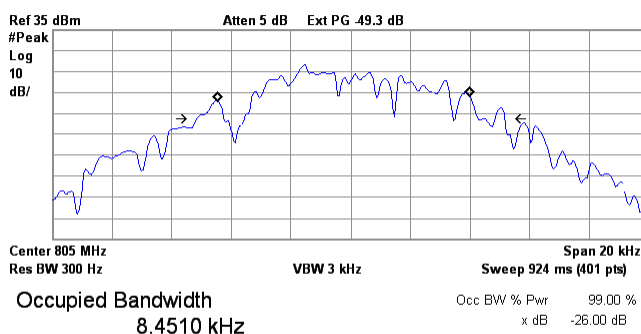
Transmit Freq Error 491.730 Hz
Occupied Bandwidth 8.753 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.6 Occupied bandwidth test result at high frequency carrier, Port 2

FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

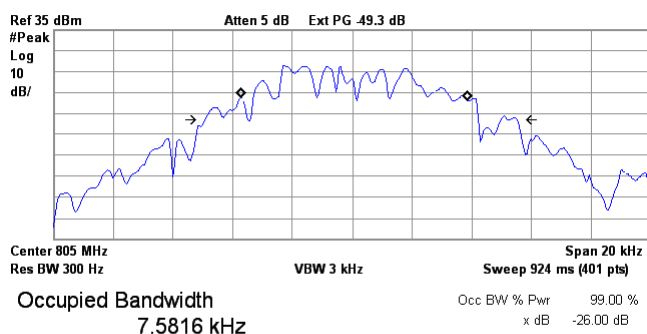
Agilent R T



Transmit Freq Error -210.875 Hz
Occupied Bandwidth 10.327 kHz*

788 - 805 MHz
C4FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

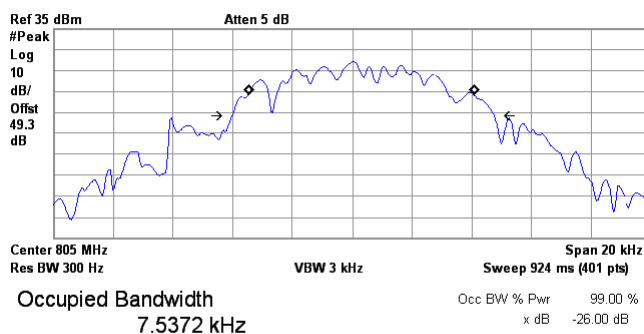
Agilent R T



Transmit Freq Error 79.768 Hz
Occupied Bandwidth 10.436 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

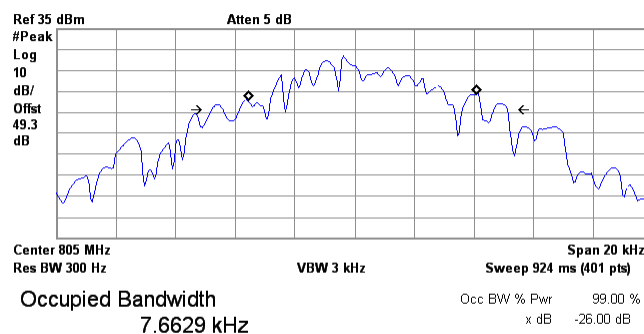
Agilent R T



Transmit Freq Error 308.768 Hz
Occupied Bandwidth 8.765 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



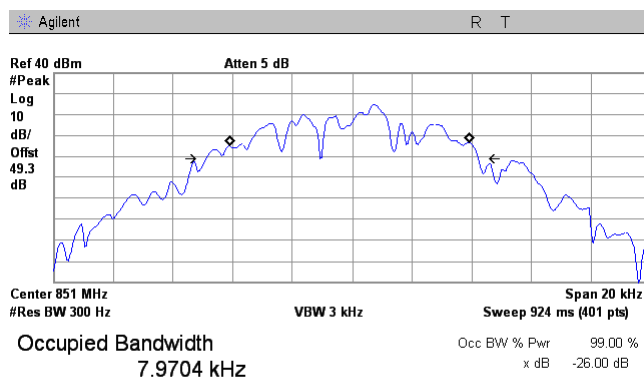
Transmit Freq Error 261.960 Hz
Occupied Bandwidth 9.922 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

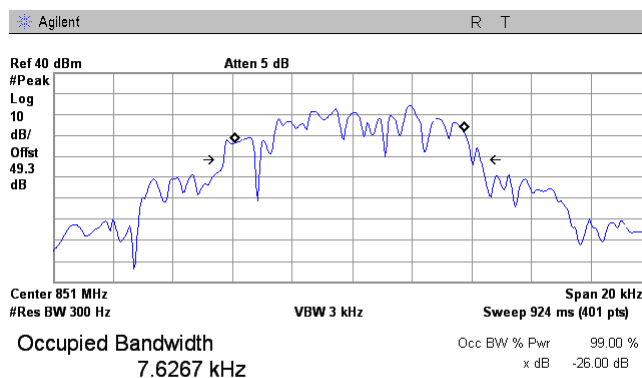
Plot 7.2.7 Occupied bandwidth test result at low frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
COMPOSITE INPUT POWER:
INPUT POWER: -51 dBm
CONFIGURATION:

851 - 861 MHz
C4FM downlink transmit
Mobile
-56 dBm
INPUT POWER: -21 dBm
Single Band Dual Channels

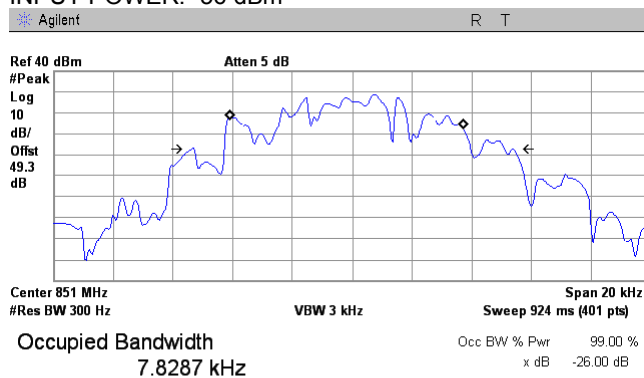


Transmit Freq Error -107.611 Hz
Occupied Bandwidth 9.115 kHz*



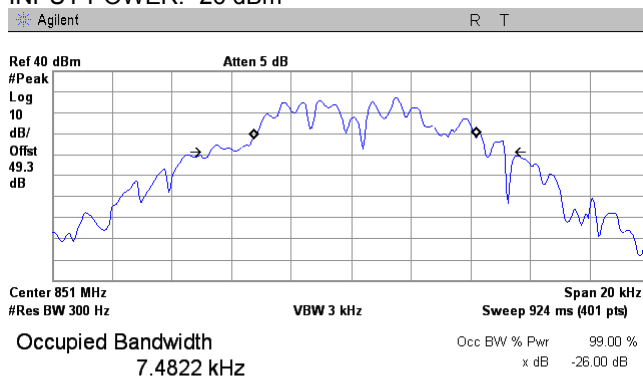
Transmit Freq Error -71.907 Hz
Occupied Bandwidth 8.597 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm



Transmit Freq Error -195.798 Hz
Occupied Bandwidth 10.742 kHz*

Single Channel
INPUT POWER: -26 dBm



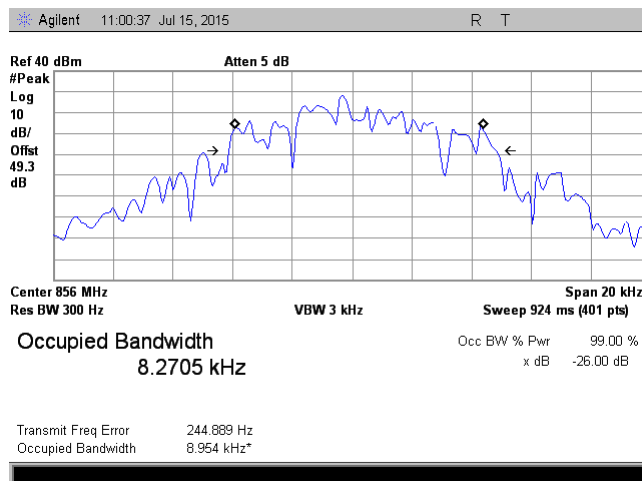
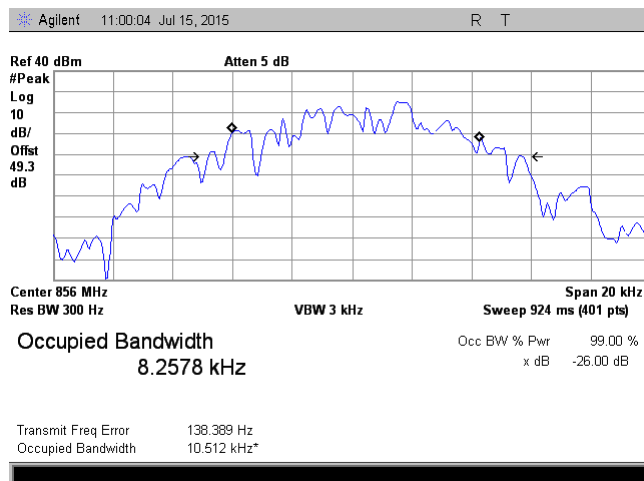
Transmit Freq Error 475.428 Hz
Occupied Bandwidth 9.656 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

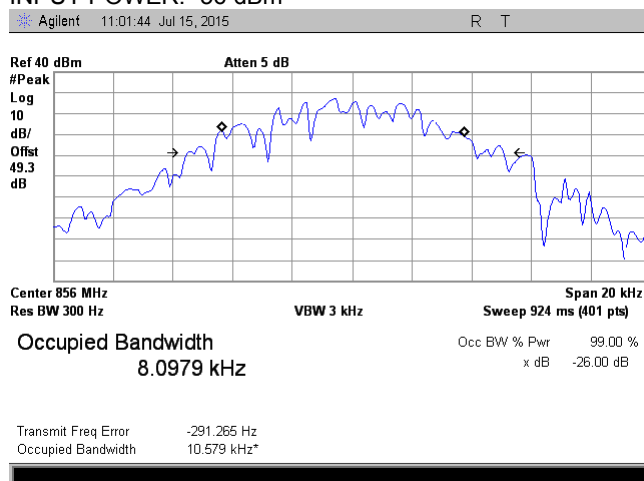
Plot 7.2.8 Occupied bandwidth test result at mid frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
COMPOSITE INPUT POWER:
INPUT POWER: -51 dBm
CONFIGURATION:

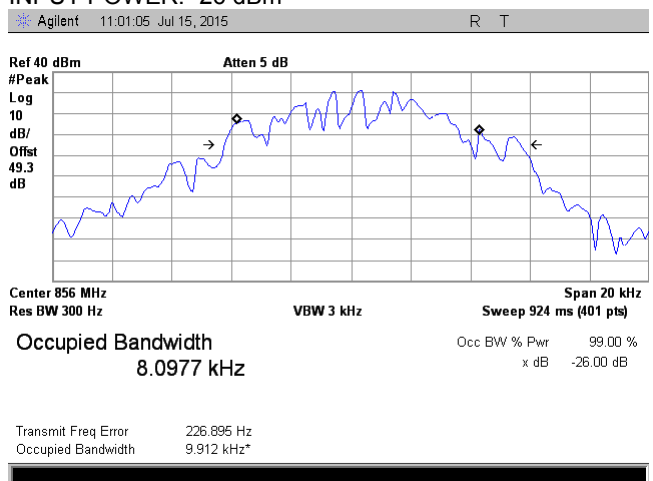
851 - 861 MHz
C4FM downlink transmit
Mobile
-56 dBm
INPUT POWER: -21 dBm
Single Band Dual Channels



CONFIGURATION:
INPUT POWER: -56 dBm



Single Channel
INPUT POWER: -26 dBm

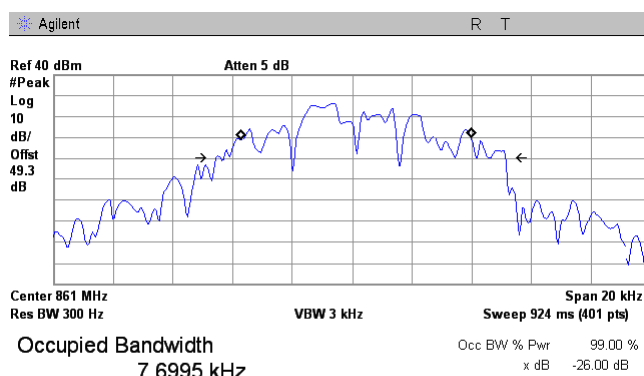


Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

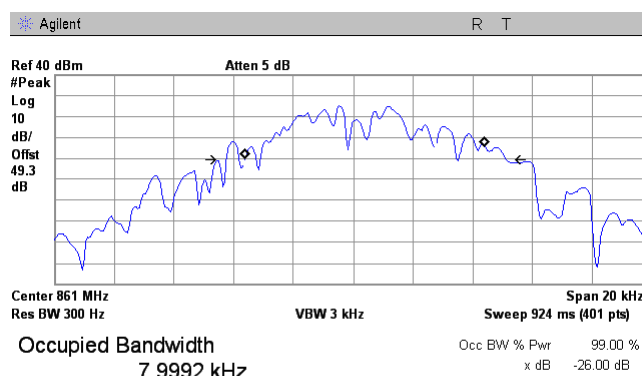
Plot 7.2.9 Occupied bandwidth test result at high frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

851 - 861 MHz
C4FM downlink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

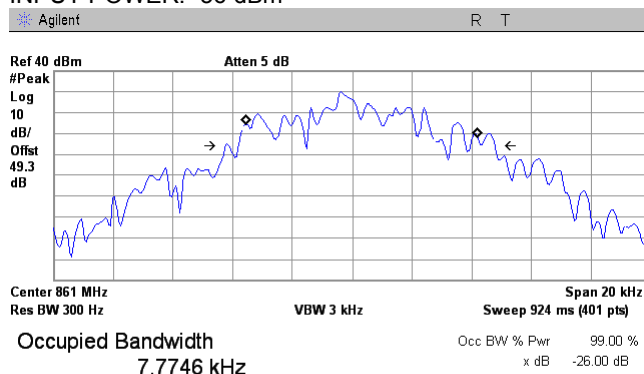


Transmit Freq Error 145.829 Hz
Occupied Bandwidth 9.693 kHz*



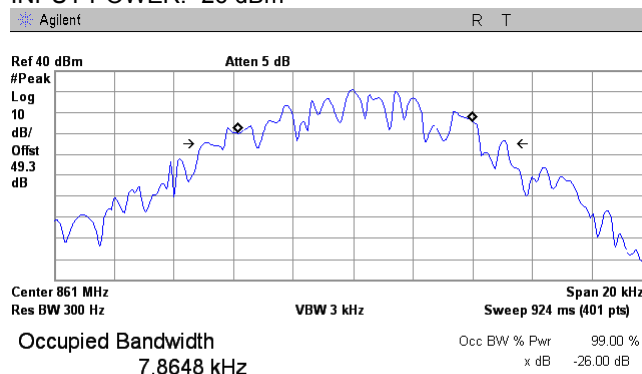
Transmit Freq Error 407.285 Hz
Occupied Bandwidth 9.365 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm



Transmit Freq Error 327.182 Hz
Occupied Bandwidth 9.025 kHz*

Single Channel
INPUT POWER: -26 dBm



Transmit Freq Error 63.307 Hz
Occupied Bandwidth 10.126 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

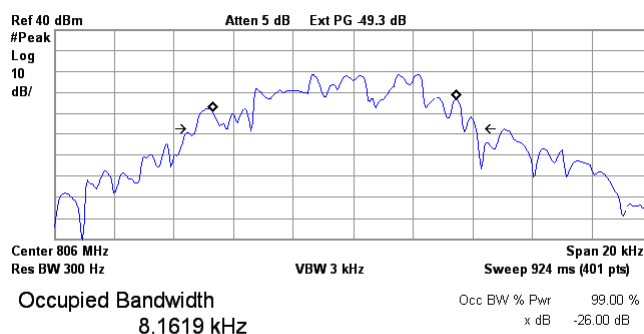
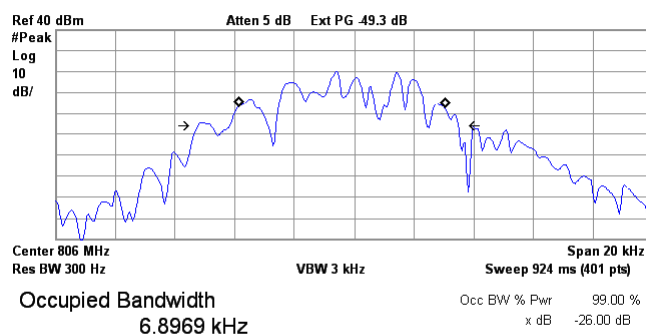
Plot 7.2.10 Occupied bandwidth test result at low frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

806 - 816 MHz
C4FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error -421.476 Hz
Occupied Bandwidth 8.710 kHz*

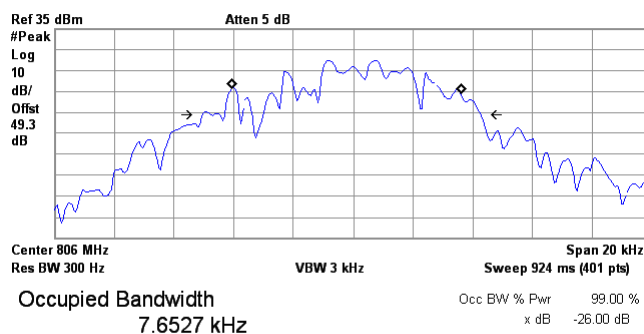
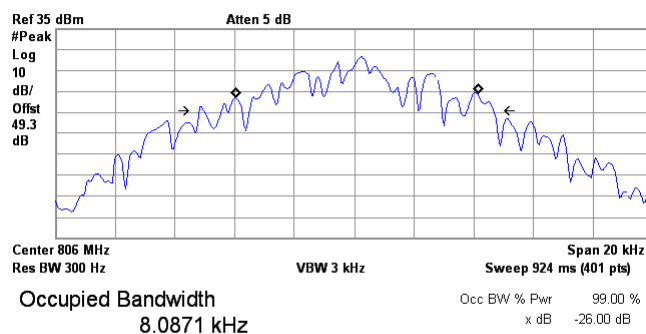
Transmit Freq Error -607.895 Hz
Occupied Bandwidth 9.364 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error 91.215 Hz
Occupied Bandwidth 9.863 kHz*

Transmit Freq Error -231.878 Hz
Occupied Bandwidth 9.309 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

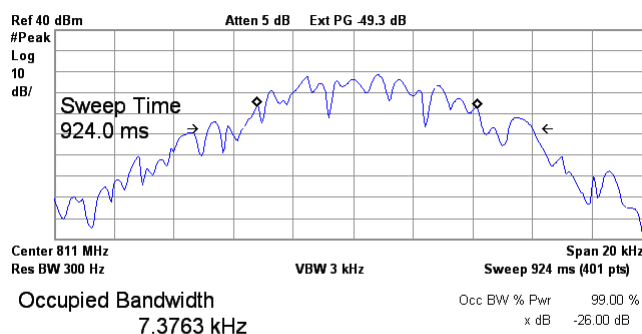
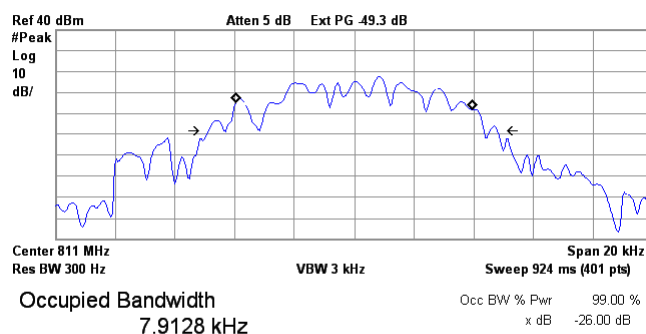
Plot 7.2.11 Occupied bandwidth test result at mid frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

806 - 816 MHz
C4FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error 8.352 Hz
Occupied Bandwidth 9.677 kHz*

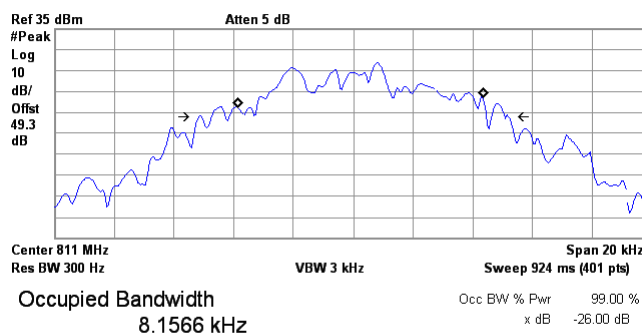
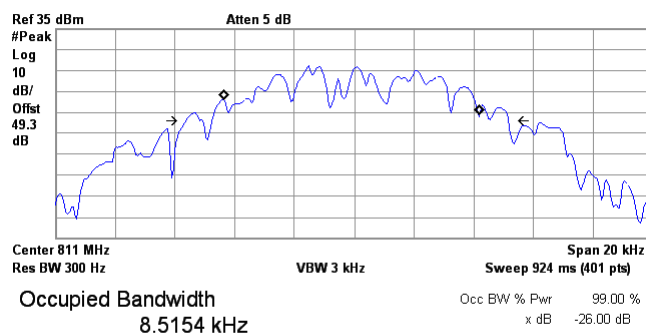
Transmit Freq Error 472.487 Hz
Occupied Bandwidth 10.853 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -80.265 Hz
Occupied Bandwidth 10.772 kHz*

Transmit Freq Error 252.782 Hz
Occupied Bandwidth 10.366 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

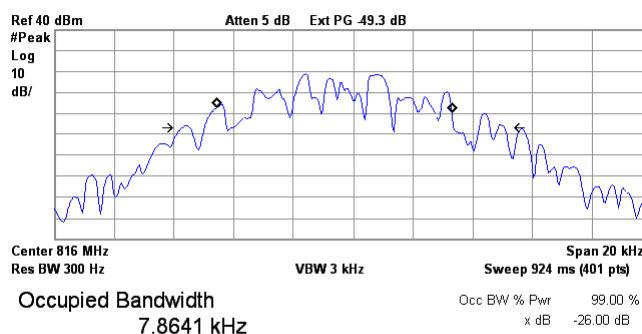
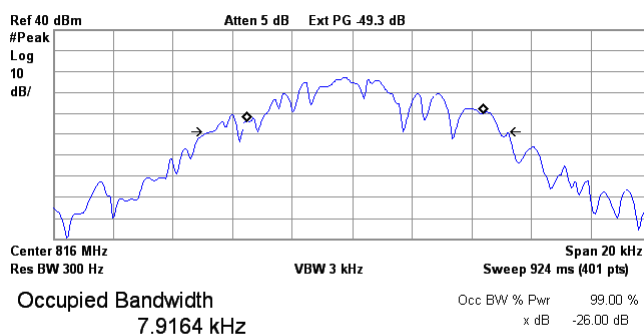
Plot 7.2.12 Occupied bandwidth test result at high frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

806 - 816 MHz
C4FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error 434.297 Hz
Occupied Bandwidth 9.641 kHz*

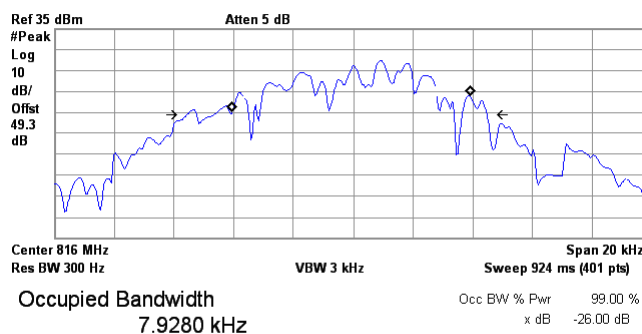
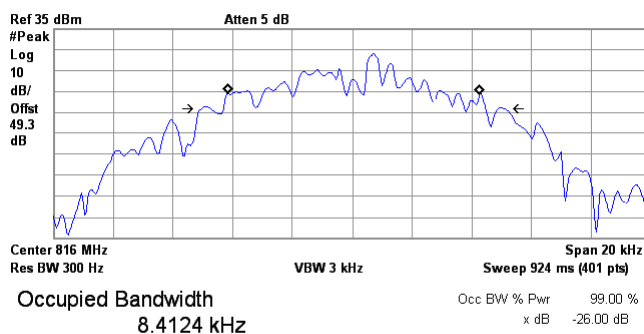
Transmit Freq Error -637.730 Hz
Occupied Bandwidth 10.793 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error 62.425 Hz
Occupied Bandwidth 10.091 kHz*

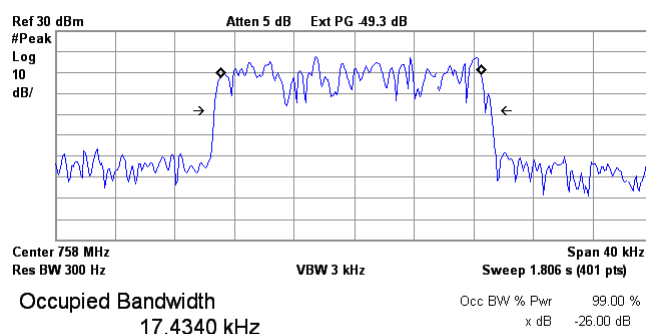
Transmit Freq Error -62.143 Hz
Occupied Bandwidth 10.036 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:	Compliance	Verdict: PASS	
Date(s):	20-Jul-15 - 22-Jul-15		
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.13 Occupied bandwidth test result at low frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

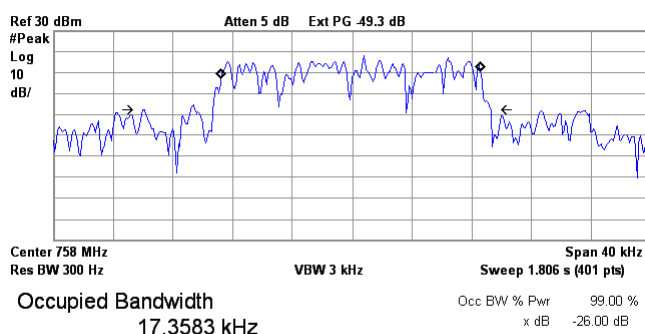
Agilent R T



Transmit Freq Error -215.643 Hz
Occupied Bandwidth 18.572 kHz*

758 - 775 MHz
iDEN QAM downlink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

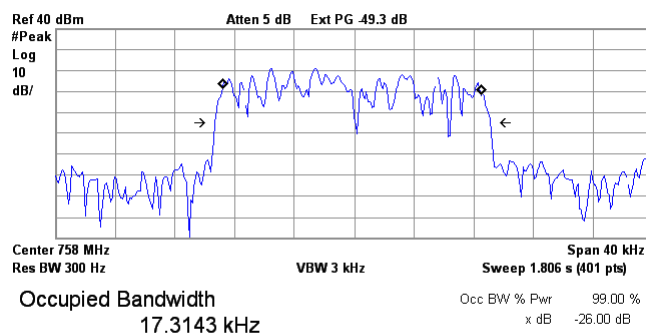
Agilent R T



Transmit Freq Error -74.403 Hz
Occupied Bandwidth 23.302 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

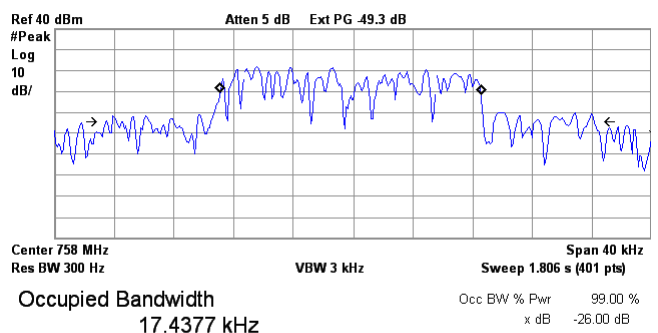
Agilent R T



Transmit Freq Error -137.376 Hz
Occupied Bandwidth 18.451 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



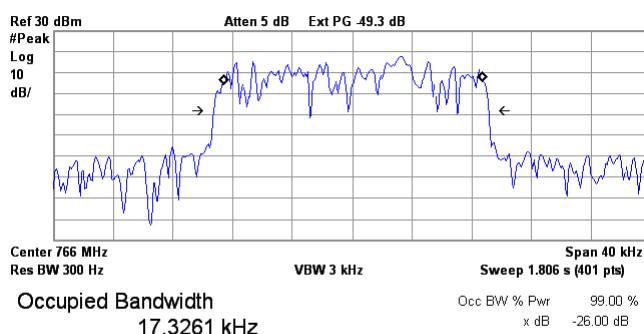
Transmit Freq Error -156.617 Hz
Occupied Bandwidth 32.712 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.14 Occupied bandwidth test result at mid frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

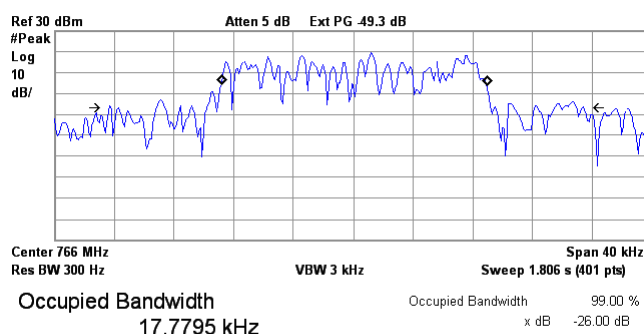
Agilent R T



Transmit Freq Error 71.902 Hz
Occupied Bandwidth 18.445 kHz*

758 - 775 MHz
iDEN QAM downlink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

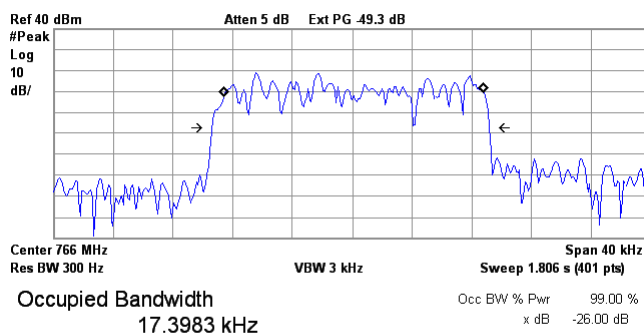
Agilent R T



Transmit Freq Error 65.015 Hz
Occupied Bandwidth 31.750 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

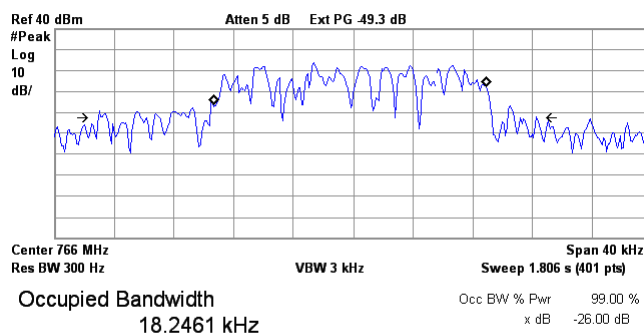
Agilent R T



Transmit Freq Error 117.089 Hz
Occupied Bandwidth 18.581 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



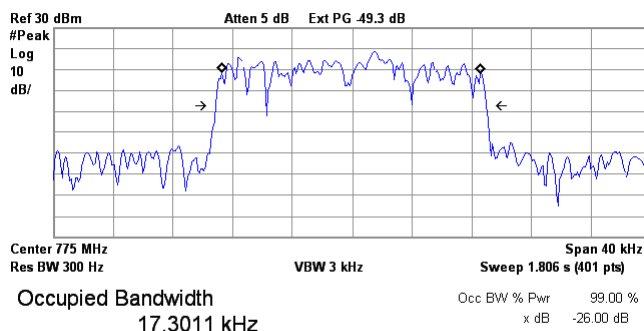
Transmit Freq Error -225.273 Hz
Occupied Bandwidth 29.376 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.15 Occupied bandwidth test result at high frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

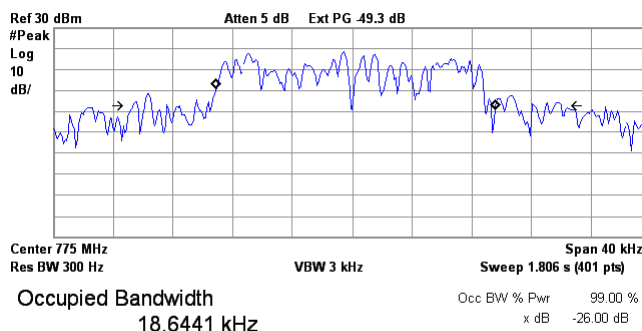
Agilent R T



Transmit Freq Error -55.574 Hz
Occupied Bandwidth 18.126 kHz*

758 - 775 MHz
iDEN QAM downlink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

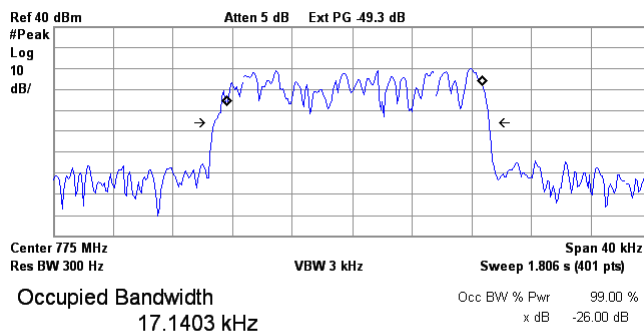
Agilent R T



Transmit Freq Error 261.637 Hz
Occupied Bandwidth 28.679 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

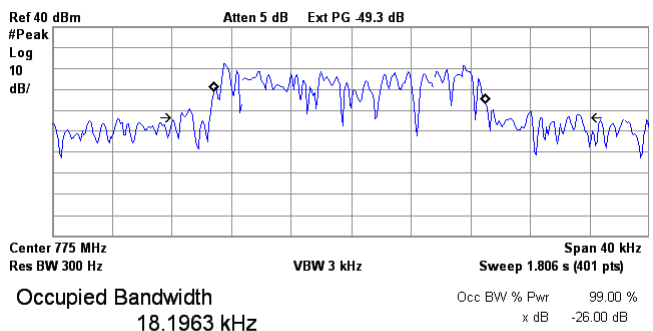
Agilent R T



Transmit Freq Error 177.465 Hz
Occupied Bandwidth 18.401 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



Transmit Freq Error -75.716 Hz
Occupied Bandwidth 26.822 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

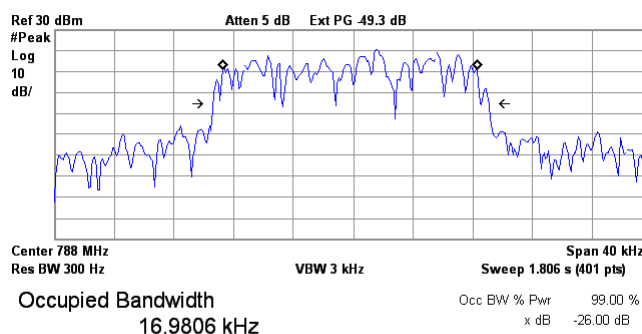
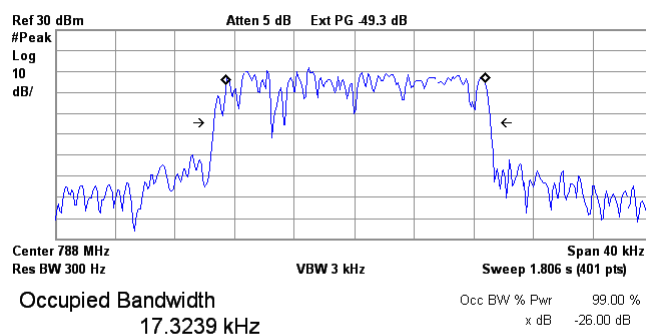
Plot 7.2.16 Occupied bandwidth test result at low frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

788 - 805 MHz
iDEN QAM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error 109.514 Hz
Occupied Bandwidth 18.544 kHz*

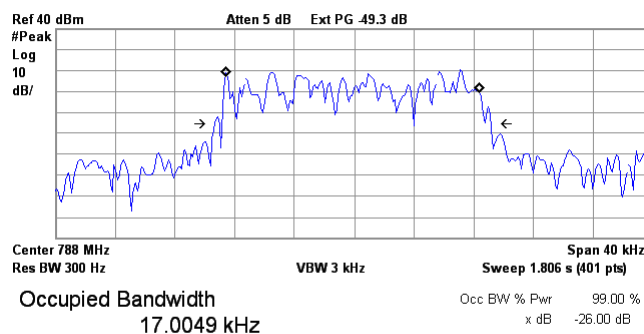
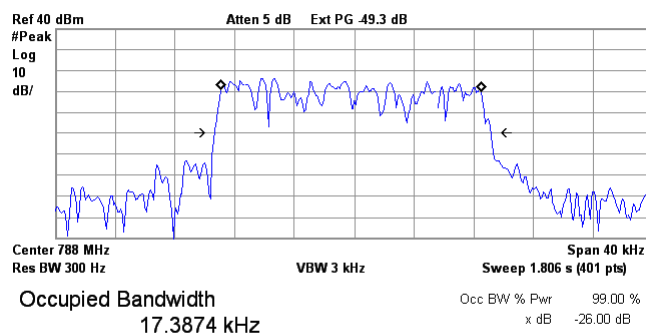
Transmit Freq Error -227.068 Hz
Occupied Bandwidth 18.478 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -199.271 Hz
Occupied Bandwidth 18.516 kHz*

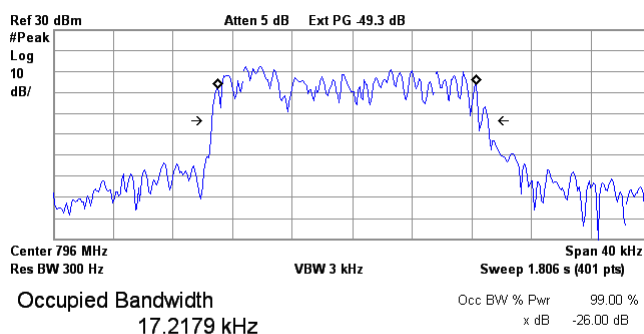
Transmit Freq Error -122.630 Hz
Occupied Bandwidth 18.516 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.17 Occupied bandwidth test result at mid frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

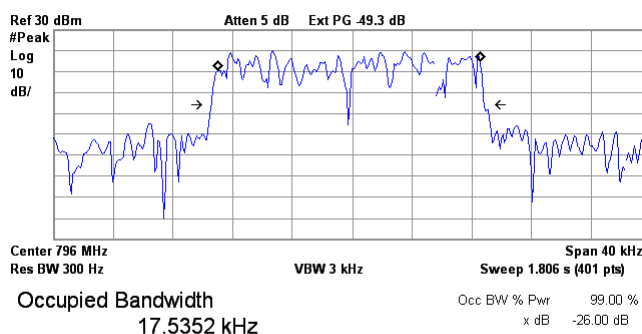
Agilent R T



Transmit Freq Error -360.157 Hz
Occupied Bandwidth 18.495 kHz*

788 - 805 MHz
iDEN QAM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

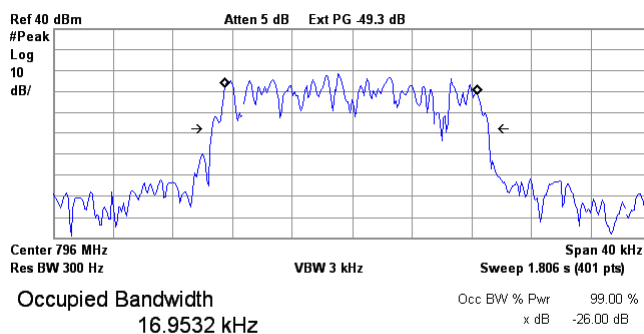
Agilent R T



Transmit Freq Error -198.045 Hz
Occupied Bandwidth 18.303 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

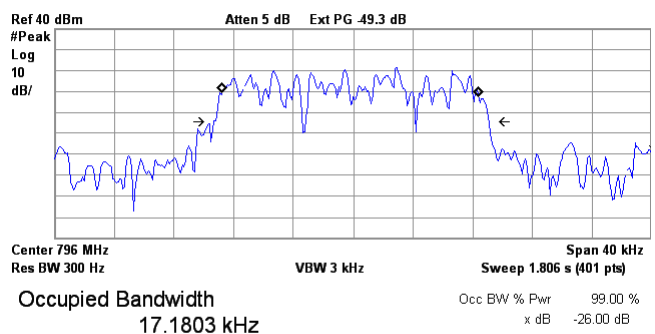
Agilent R T



Transmit Freq Error -50.680 Hz
Occupied Bandwidth 18.513 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



Transmit Freq Error -174.501 Hz
Occupied Bandwidth 18.423 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

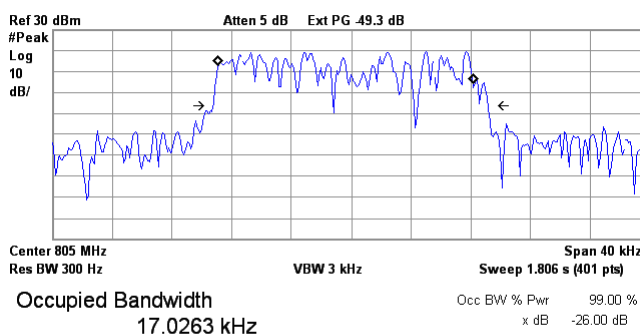
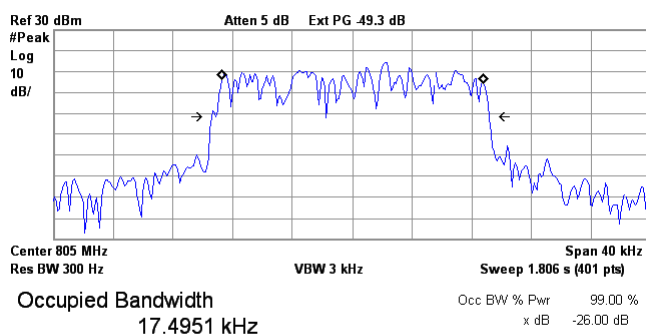
Plot 7.2.18 Occupied bandwidth test result at high frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

788 - 805 MHz
iDEN QAM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error 45.400 Hz
Occupied Bandwidth 18.583 kHz*

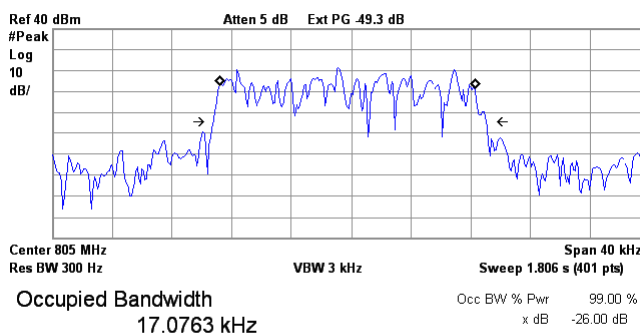
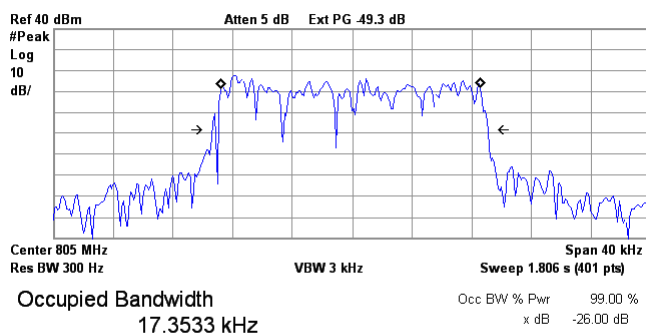
Transmit Freq Error -350.973 Hz
Occupied Bandwidth 18.422 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -81.754 Hz
Occupied Bandwidth 18.473 kHz*

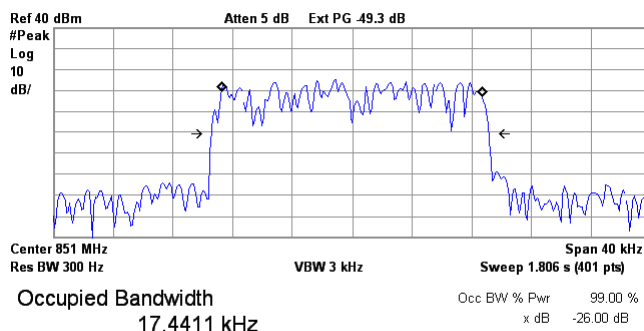
Transmit Freq Error -278.148 Hz
Occupied Bandwidth 18.298 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.19 Occupied bandwidth test result at low frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

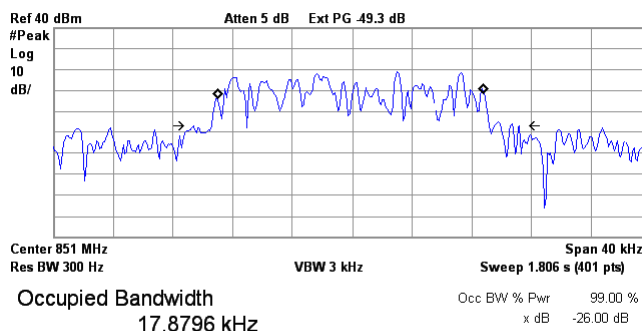
Agilent R T



Transmit Freq Error -22.076 Hz
Occupied Bandwidth 18.610 kHz*

851 - 861 MHz
iDEN QAM downlink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

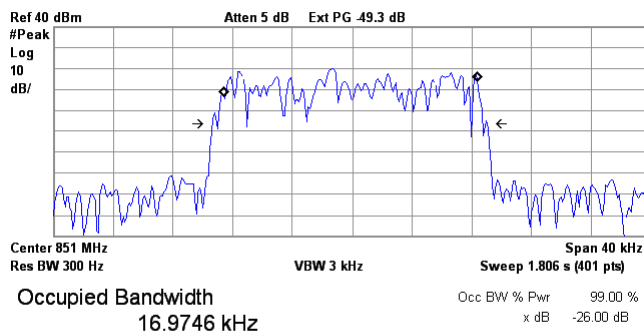
Agilent R T



Transmit Freq Error -90.779 Hz
Occupied Bandwidth 21.822 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

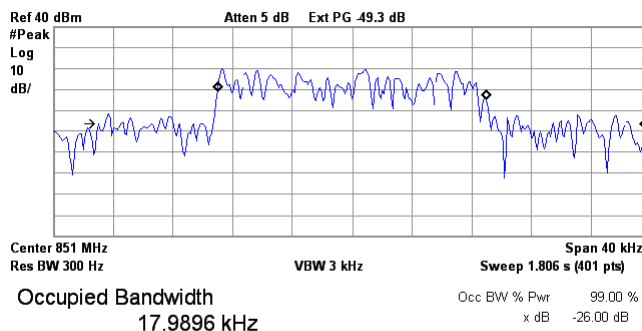
Agilent R T



Transmit Freq Error -79.615 Hz
Occupied Bandwidth 18.397 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



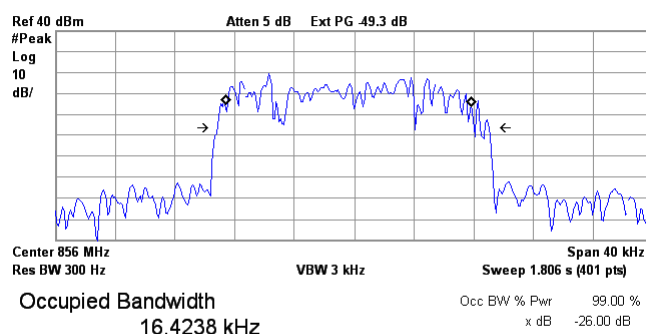
Transmit Freq Error -19.279 Hz
Occupied Bandwidth 35.135 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.20 Occupied bandwidth test result at mid frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

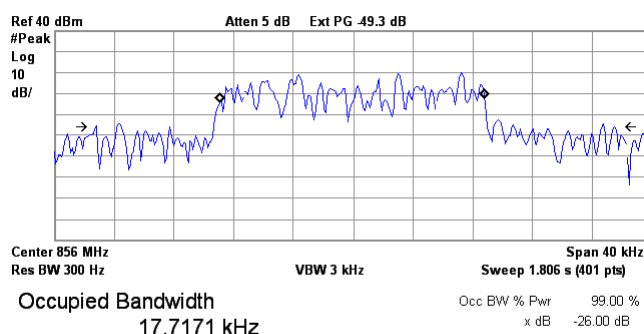
Agilent R T



Transmit Freq Error -432.636 Hz
Occupied Bandwidth 18.193 kHz*

851 - 861 MHz
iDEN QAM downlink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

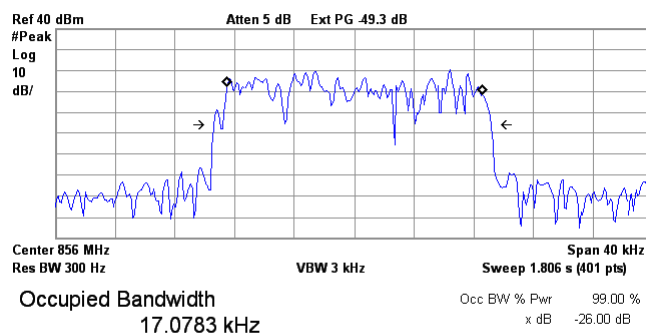
Agilent R T



Transmit Freq Error -43.810 Hz
Occupied Bandwidth 34.801 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

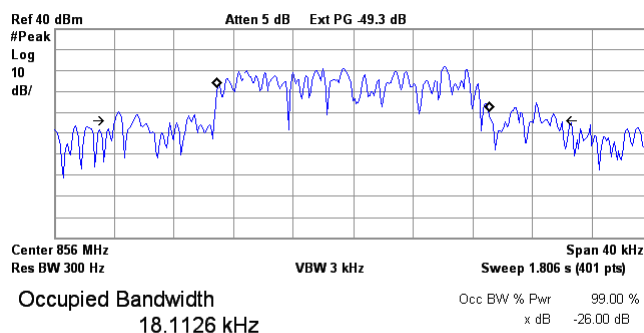
Agilent R T



Transmit Freq Error 56.048 Hz
Occupied Bandwidth 18.574 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



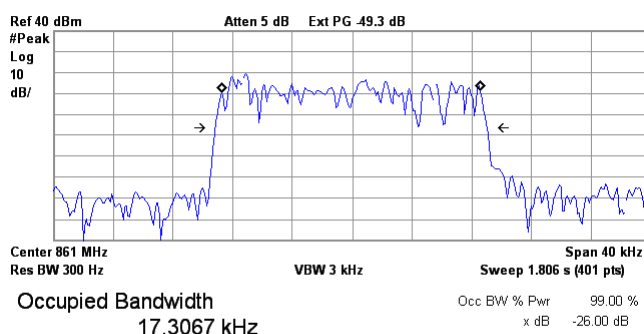
Transmit Freq Error -1.274 Hz
Occupied Bandwidth 29.577 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.21 Occupied bandwidth test result at high frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

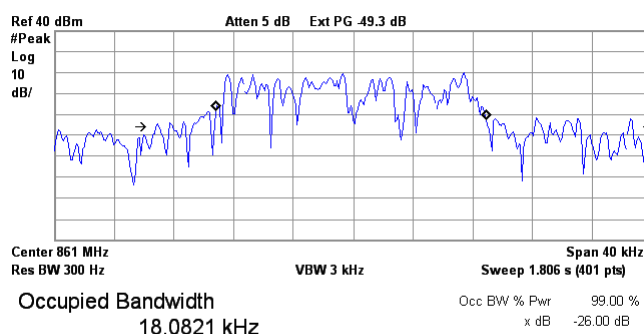
Agilent R T



Transmit Freq Error -60.138 Hz
Occupied Bandwidth 18.220 kHz*

851 - 861 MHz
iDEN QAM downlink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

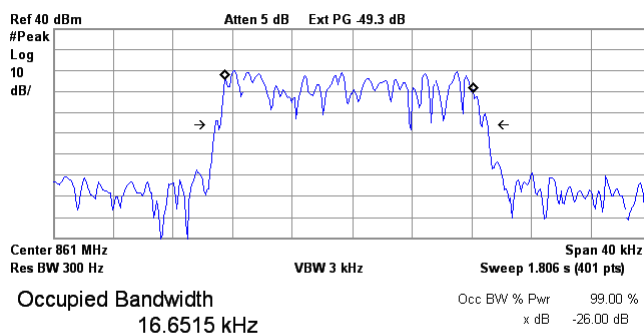
Agilent R T



Transmit Freq Error -127.926 Hz
Occupied Bandwidth 31.955 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

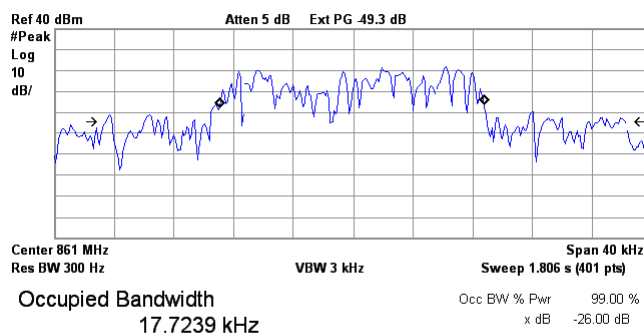
Agilent R T



Transmit Freq Error -189.421 Hz
Occupied Bandwidth 18.240 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



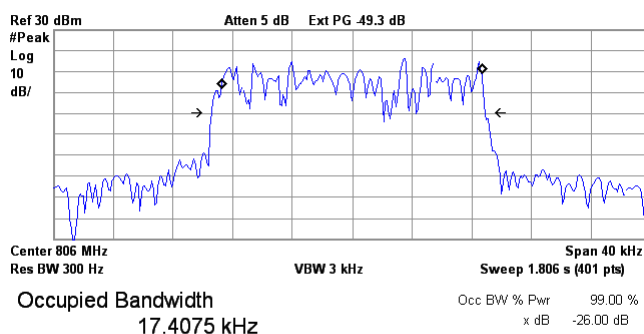
Transmit Freq Error -81.737 Hz
Occupied Bandwidth 34.766 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.22 Occupied bandwidth test result at low frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

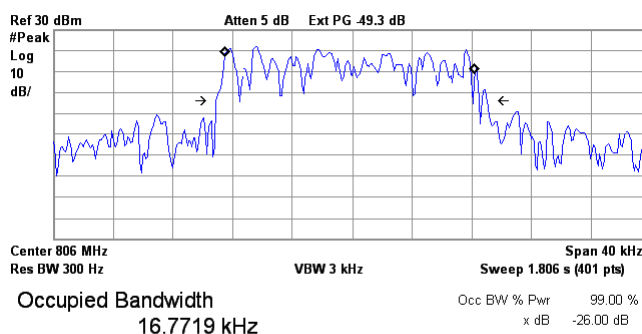
Agilent R T



Transmit Freq Error -42.276 Hz
Occupied Bandwidth 18.308 kHz*

806 - 816 MHz
iDEN QAM uplink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

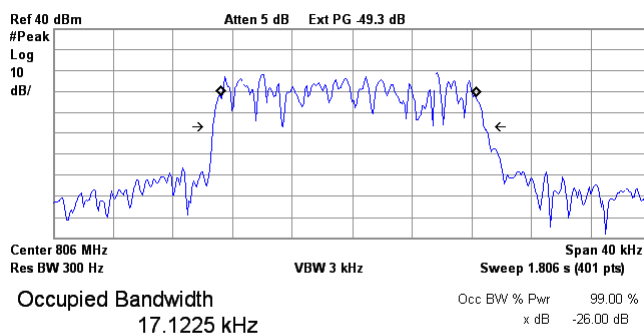
Agilent R T



Transmit Freq Error -140.772 Hz
Occupied Bandwidth 18.161 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

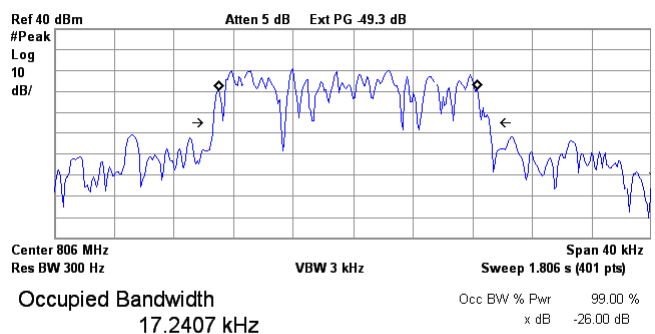
Agilent R T



Transmit Freq Error -279.249 Hz
Occupied Bandwidth 18.163 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



Transmit Freq Error -357.182 Hz
Occupied Bandwidth 18.527 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

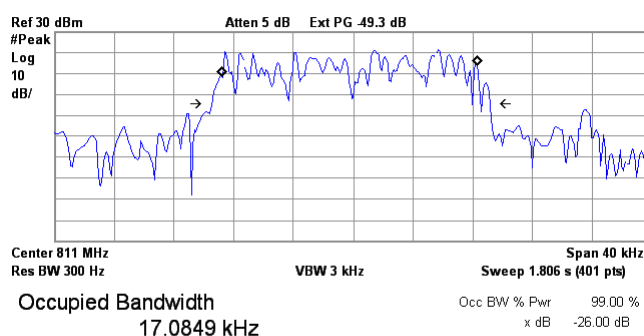
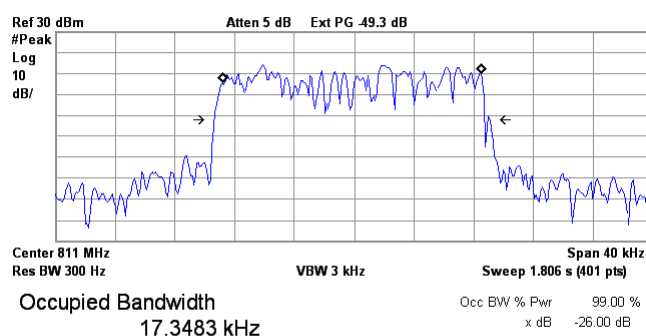
Plot 7.2.23 Occupied bandwidth test result at mid frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

806 - 816 MHz
iDEN QAM uplink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error -146.411 Hz
Occupied Bandwidth 18.461 kHz*

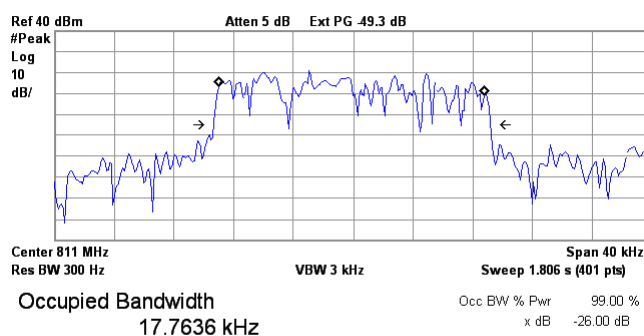
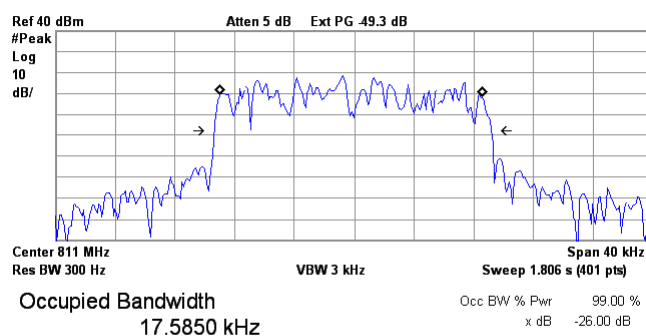
Transmit Freq Error -218.194 Hz
Occupied Bandwidth 18.650 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -188.615 Hz
Occupied Bandwidth 18.582 kHz*

Transmit Freq Error -96.801 Hz
Occupied Bandwidth 18.550 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

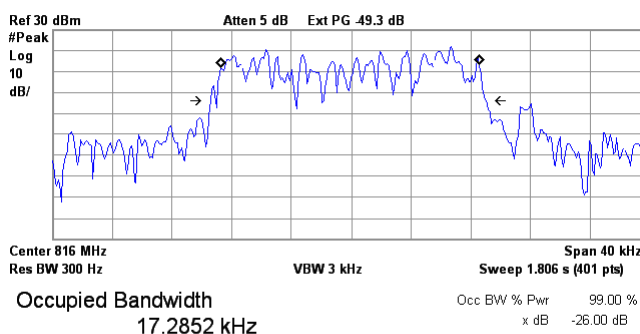
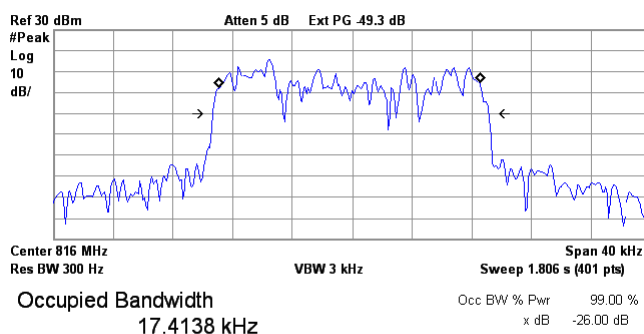
Plot 7.2.24 Occupied bandwidth test result at high frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

806 - 816 MHz
iDEN QAM uplink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error -152.577 Hz
Occupied Bandwidth 18.501 kHz*

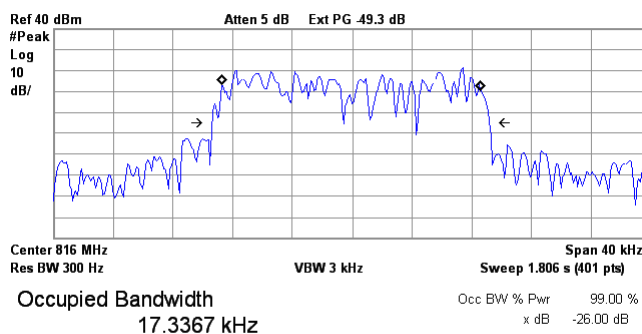
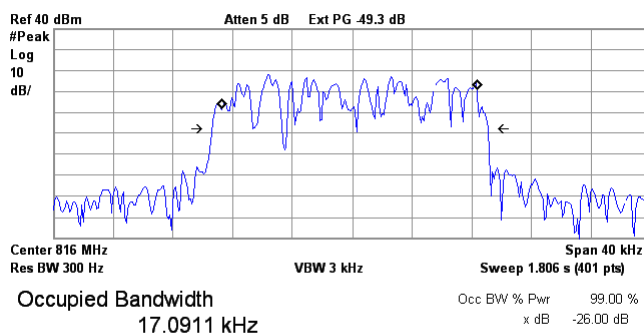
Transmit Freq Error -54.208 Hz
Occupied Bandwidth 18.444 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -187.908 Hz
Occupied Bandwidth 18.487 kHz*

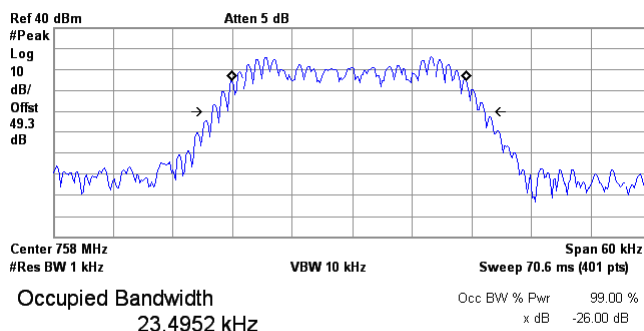
Transmit Freq Error -18.775 Hz
Occupied Bandwidth 18.592 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.25 Occupied bandwidth test result at low frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

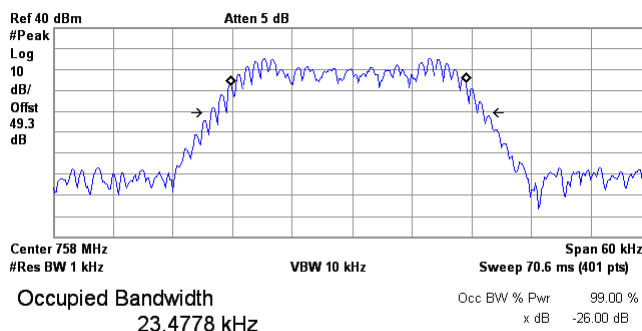
Agilent R T



Transmit Freq Error -323.065 Hz
Occupied Bandwidth 27.350 kHz*

758 - 775 MHz
Analog FM downlink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

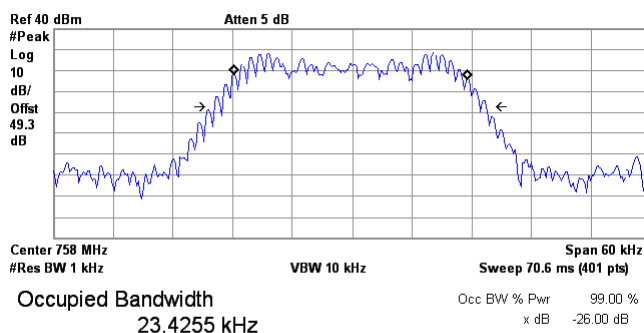
Agilent R T



Transmit Freq Error -362.846 Hz
Occupied Bandwidth 27.361 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

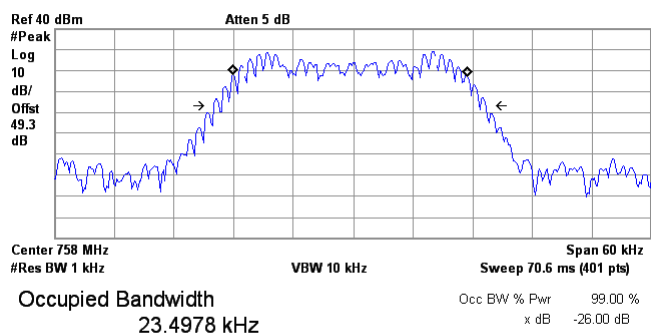
Agilent R T



Transmit Freq Error -210.992 Hz
Occupied Bandwidth 27.334 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



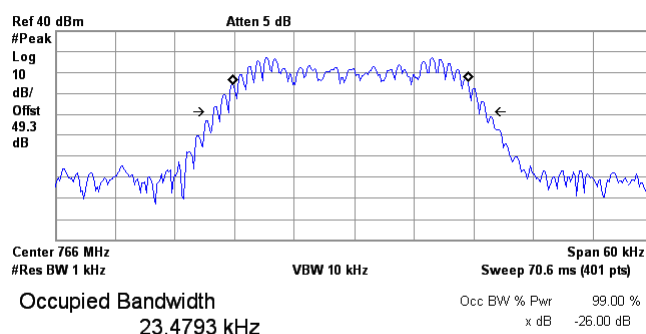
Transmit Freq Error -278.595 Hz
Occupied Bandwidth 27.333 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.26 Occupied bandwidth test result at mid frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

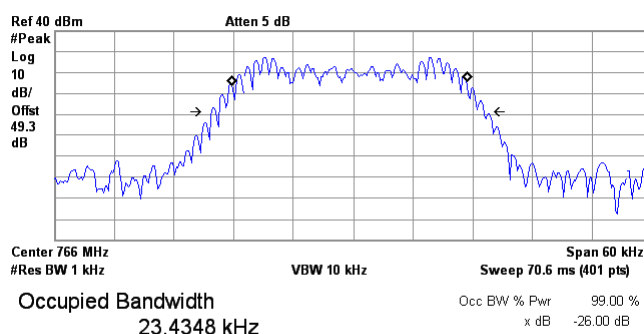
Agilent R T



Transmit Freq Error -343.184 Hz
Occupied Bandwidth 27.390 kHz*

758 - 775 MHz
Analog FM downlink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

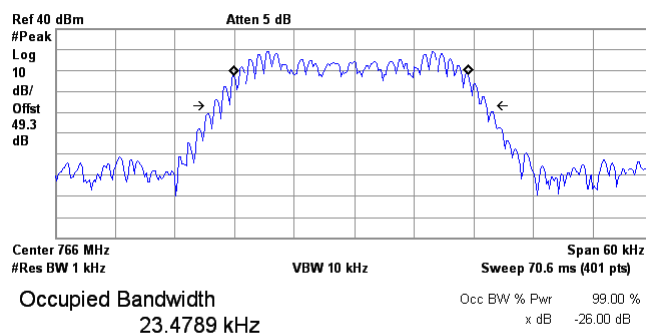
Agilent R T



Transmit Freq Error -388.218 Hz
Occupied Bandwidth 27.367 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

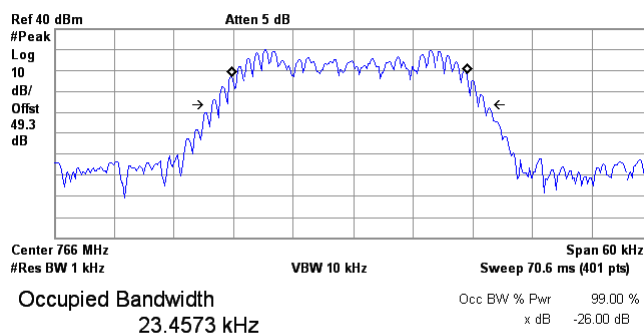
Agilent R T



Transmit Freq Error -321.561 Hz
Occupied Bandwidth 27.347 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



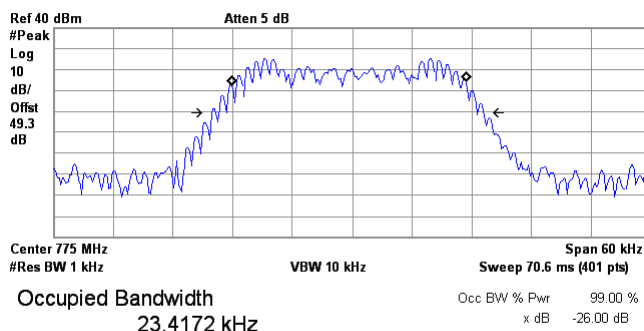
Transmit Freq Error -373.820 Hz
Occupied Bandwidth 27.361 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.27 Occupied bandwidth test result at high frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

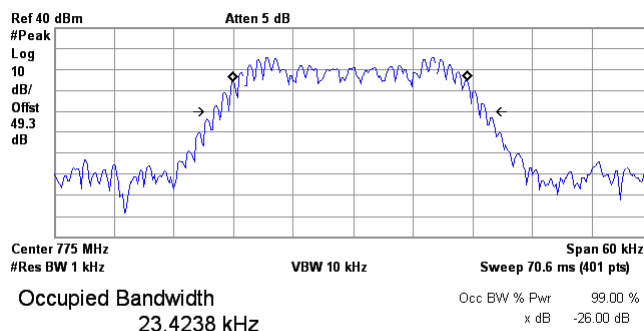
Agilent R T



Transmit Freq Error -325.620 Hz
Occupied Bandwidth 27.337 kHz*

758 - 775 MHz
Analog FM downlink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

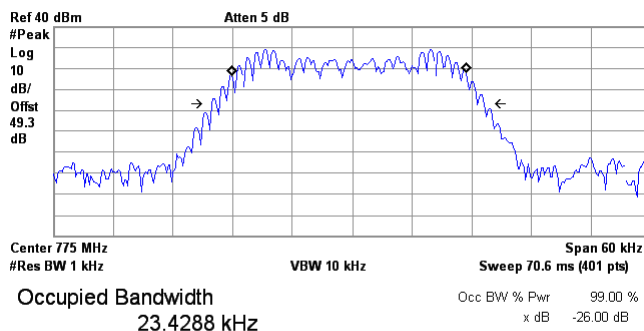
Agilent R T



Transmit Freq Error -294.686 Hz
Occupied Bandwidth 27.327 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

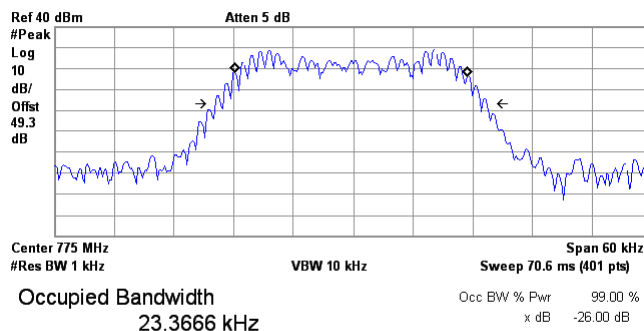
Agilent R T



Transmit Freq Error -314.610 Hz
Occupied Bandwidth 27.360 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



Transmit Freq Error -218.186 Hz
Occupied Bandwidth 27.321 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

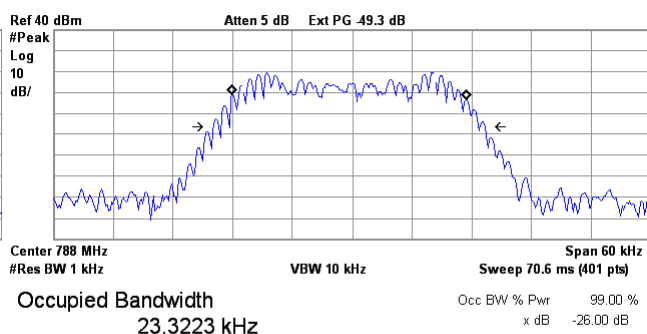
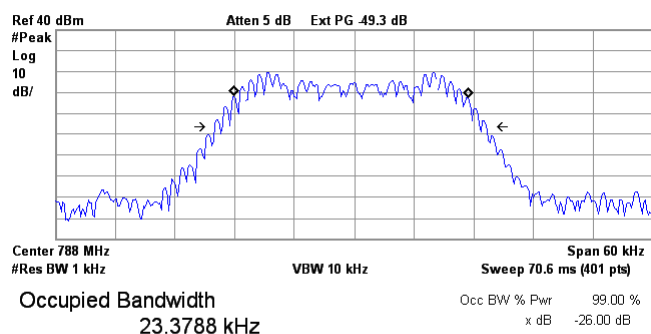
Plot 7.2.28 Occupied bandwidth test result at low frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

788 - 805 MHz
Analog FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error -367.101 Hz
Occupied Bandwidth 27.322 kHz*

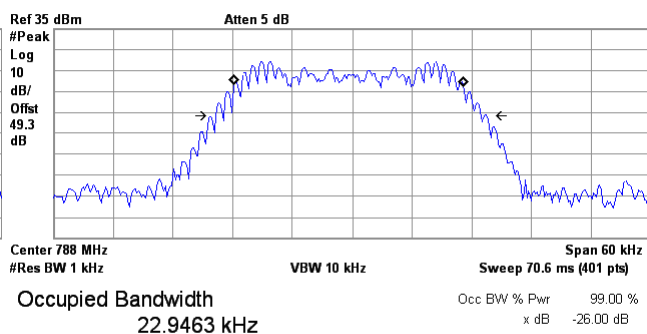
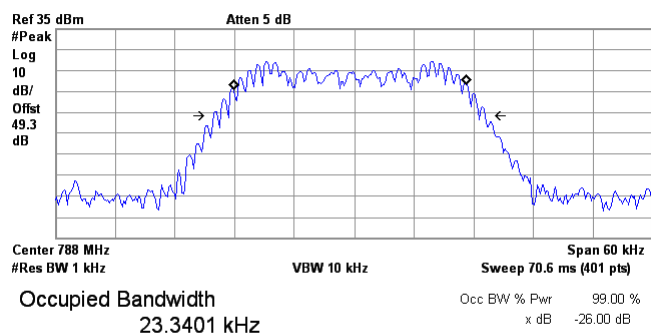
Transmit Freq Error -320.174 Hz
Occupied Bandwidth 27.288 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -373.495 Hz
Occupied Bandwidth 27.323 kHz*

Transmit Freq Error -318.630 Hz
Occupied Bandwidth 27.212 kHz*



Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Verdict: PASS	
Date(s):			
20-Jul-15 - 22-Jul-15			
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

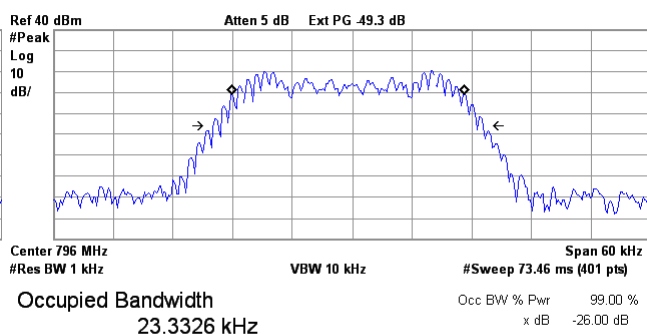
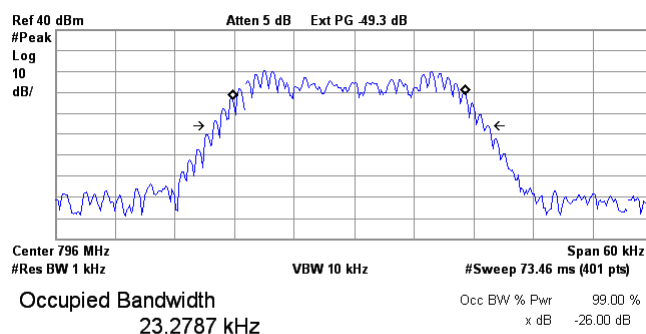
Plot 7.2.29 Occupied bandwidth test result at mid frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

788 - 805 MHz
Analog FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error -464.850 Hz
Occupied Bandwidth 27.125 kHz*

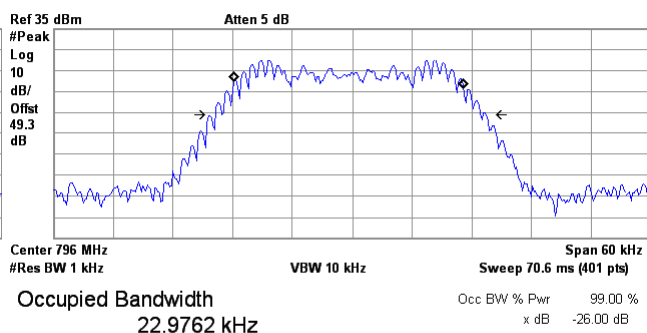
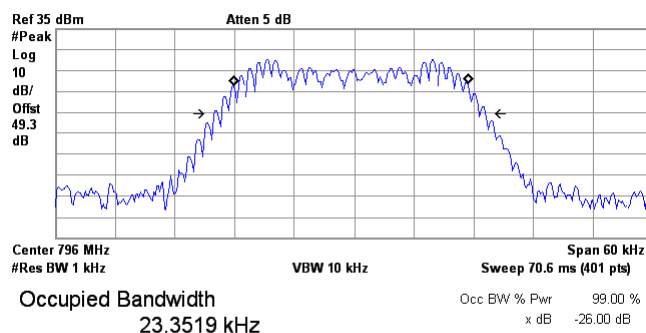
Transmit Freq Error -347.529 Hz
Occupied Bandwidth 27.108 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -347.994 Hz
Occupied Bandwidth 27.276 kHz*

Transmit Freq Error -331.157 Hz
Occupied Bandwidth 27.226 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

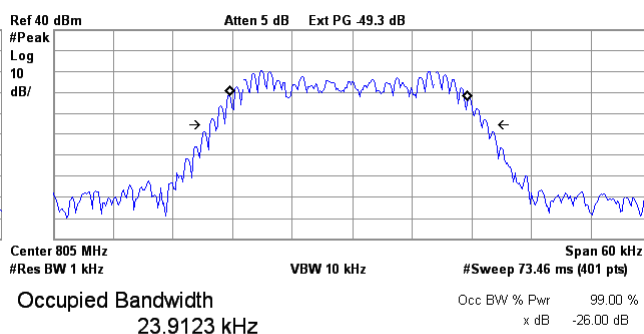
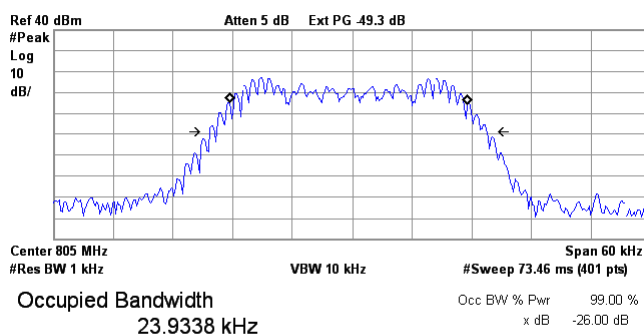
Plot 7.2.30 Occupied bandwidth test result at high frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

788 - 805 MHz
Analog FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error -365.293 Hz
Occupied Bandwidth 27.881 kHz*

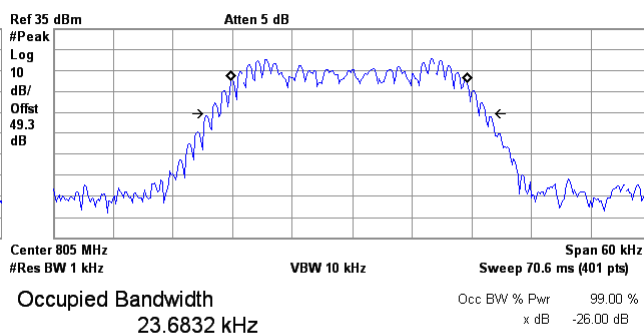
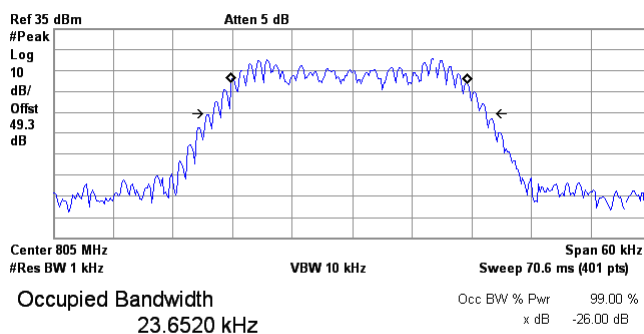
Transmit Freq Error -341.149 Hz
Occupied Bandwidth 27.856 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -251.267 Hz
Occupied Bandwidth 27.396 kHz*

Transmit Freq Error -291.869 Hz
Occupied Bandwidth 27.424 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

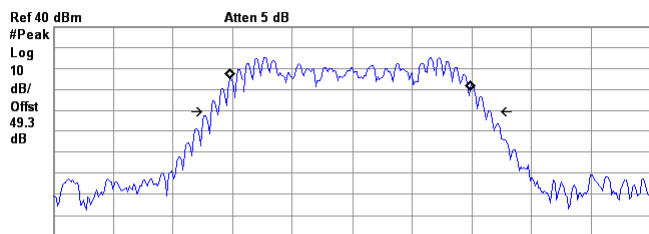
Plot 7.2.31 Occupied bandwidth test result at low frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -51 dBm
CONFIGURATION:

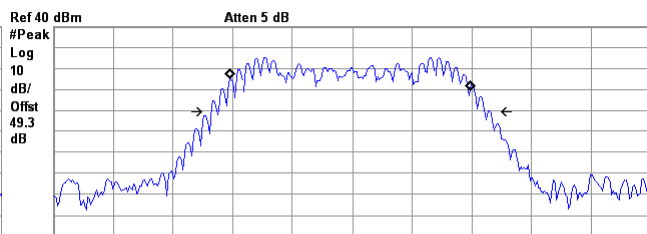
851 - 861 MHz
Analog FM downlink transmit
Base
Dual Band
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Center 851 MHz
#Res BW 1 kHz
Occupied Bandwidth
24.0565 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB



Center 851 MHz
#Res BW 1 kHz
Occupied Bandwidth
24.0565 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -229.984 Hz
Occupied Bandwidth 28.053 kHz*

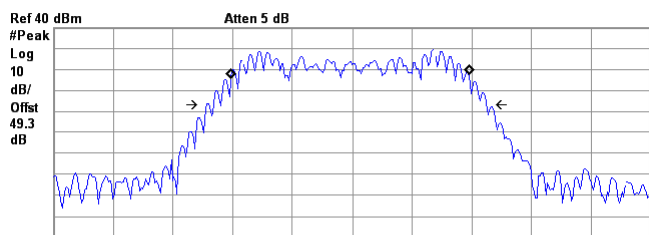
Transmit Freq Error -229.984 Hz
Occupied Bandwidth 28.053 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

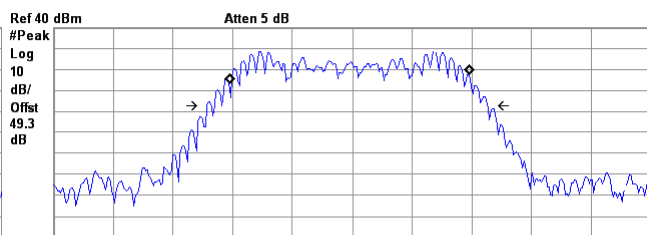
Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Center 851 MHz
#Res BW 1 kHz
Occupied Bandwidth
23.8437 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB



Center 851 MHz
#Res BW 1 kHz
Occupied Bandwidth
24.0661 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -226.209 Hz
Occupied Bandwidth 28.107 kHz*

Transmit Freq Error -333.889 Hz
Occupied Bandwidth 28.167 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

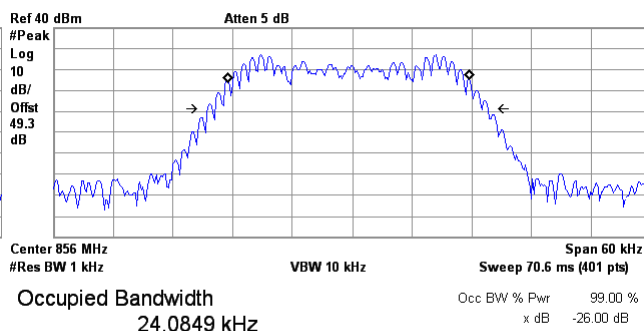
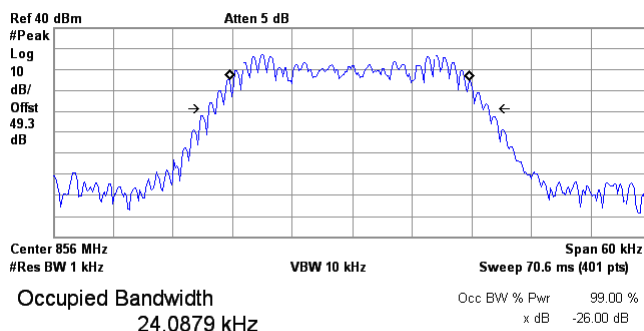
Plot 7.2.32 Occupied bandwidth test result at mid frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

851 - 861 MHz
Analog FM downlink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error -325.272 Hz
Occupied Bandwidth 28.139 kHz*

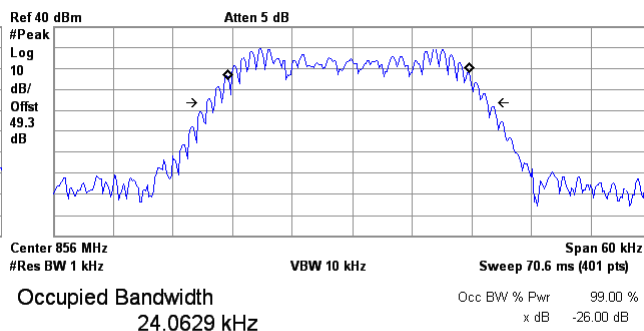
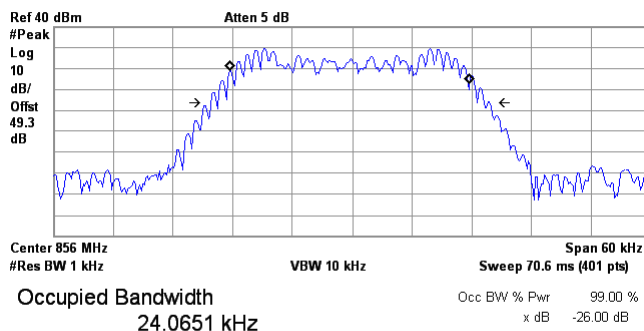
Transmit Freq Error -344.862 Hz
Occupied Bandwidth 28.178 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -257.761 Hz
Occupied Bandwidth 28.045 kHz*

Transmit Freq Error -347.590 Hz
Occupied Bandwidth 28.158 kHz*

Test specification:	Section 90.219(a), Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict: PASS	
Date(s):	20-Jul-15 - 22-Jul-15		
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

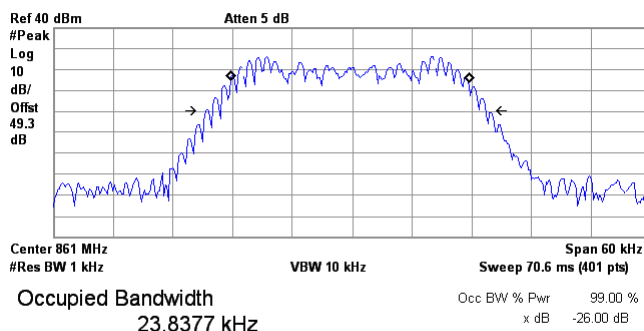
Plot 7.2.33 Occupied bandwidth test result at high frequency carrier, Port 1

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

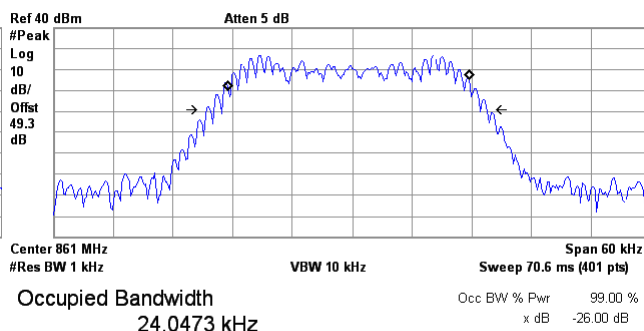
851 - 861 MHz
Analog FM downlink transmit
Base
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error -267.400 Hz
Occupied Bandwidth 28.163 kHz*



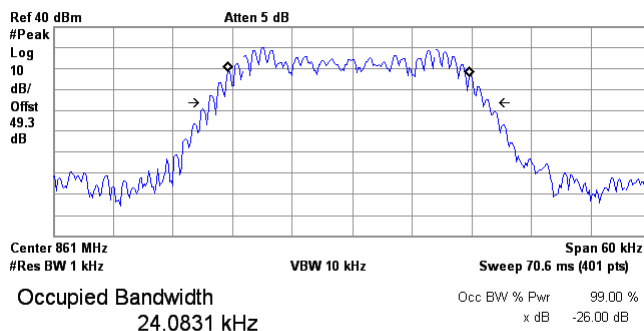
Transmit Freq Error -367.071 Hz
Occupied Bandwidth 28.169 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

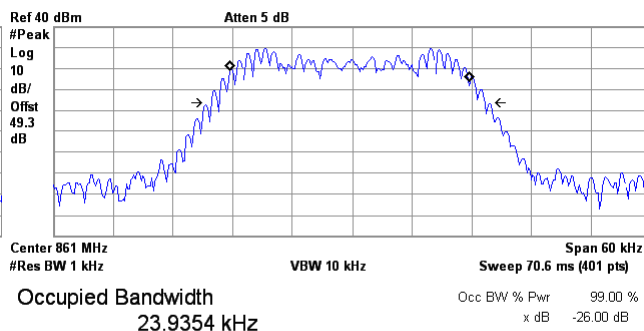
Agilent R T

Single Channel
INPUT POWER: -26 dBm

Agilent R T



Transmit Freq Error -334.276 Hz
Occupied Bandwidth 28.087 kHz*



Transmit Freq Error -314.306 Hz
Occupied Bandwidth 27.481 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

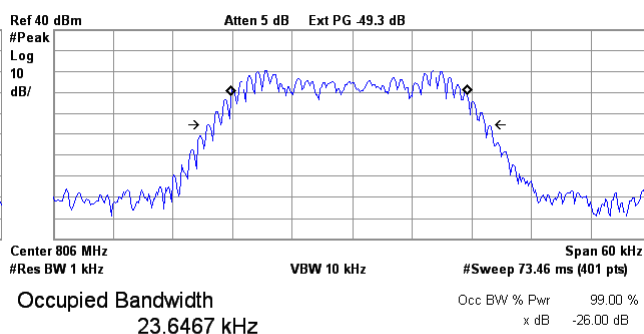
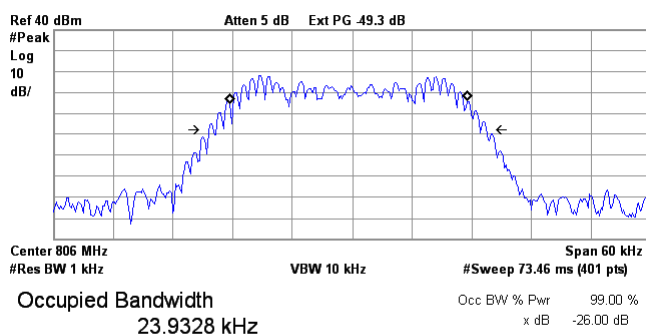
Plot 7.2.34 Occupied bandwidth test result at low frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

806 - 816 MHz
Analog FM downlink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T

Agilent R T



Transmit Freq Error -377.314 Hz
Occupied Bandwidth 27.893 kHz*

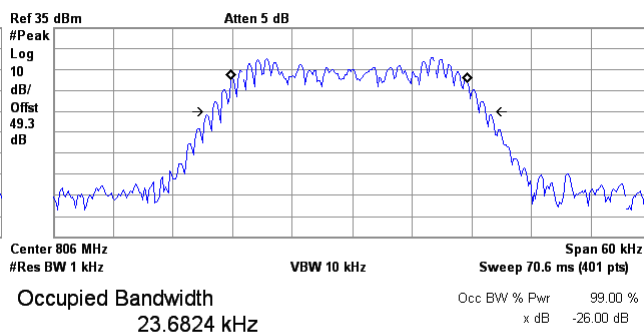
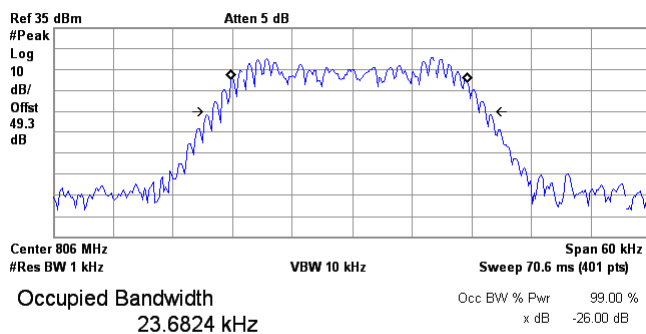
Transmit Freq Error -283.358 Hz
Occupied Bandwidth 27.816 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm

Agilent R T

Agilent R T



Transmit Freq Error -263.470 Hz
Occupied Bandwidth 27.418 kHz*

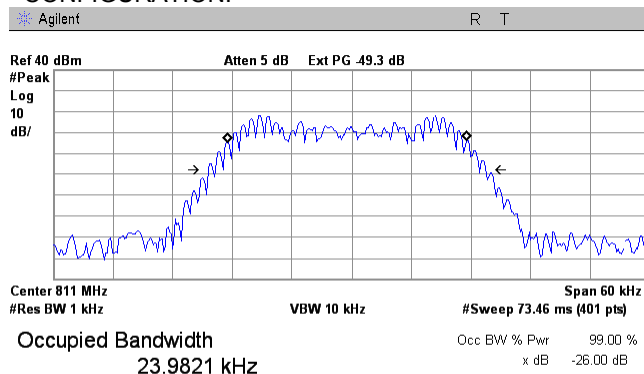
Transmit Freq Error -263.470 Hz
Occupied Bandwidth 27.418 kHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

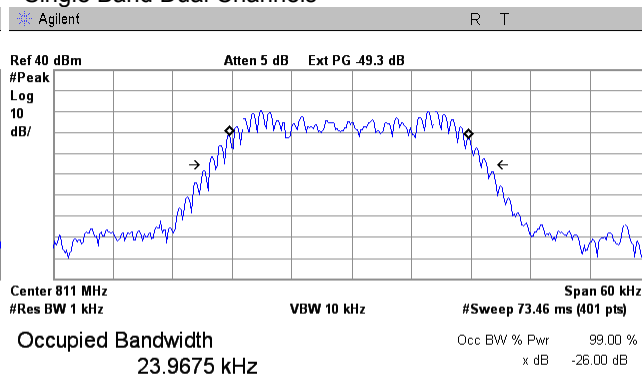
Plot 7.2.35 Occupied bandwidth test result at mid frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

806 - 816 MHz
Analog FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels



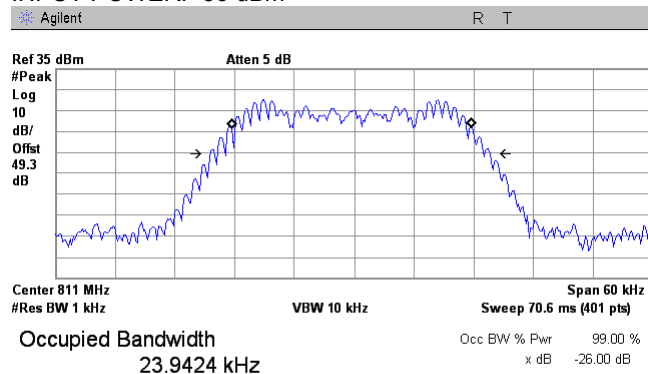
Transmit Freq Error -384.688 Hz
Occupied Bandwidth 27.929 kHz*



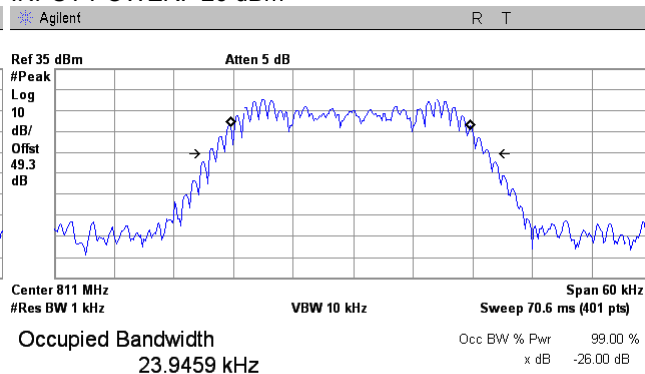
Transmit Freq Error -341.466 Hz
Occupied Bandwidth 27.881 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm



Transmit Freq Error -334.871 Hz
Occupied Bandwidth 28.125 kHz*



Transmit Freq Error -331.932 Hz
Occupied Bandwidth 28.086 kHz*

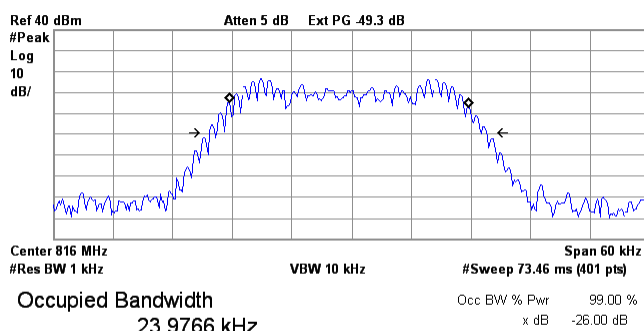
Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.36 Occupied bandwidth test result at high frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
INPUT POWER: -51 dBm
CONFIGURATION:

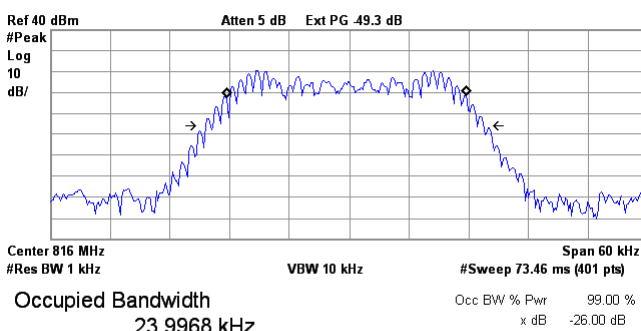
806 - 816 MHz
Analog FM uplink transmit
Mobile
INPUT POWER: -21 dBm
Single Band Dual Channels

Agilent R T



Transmit Freq Error -361.965 Hz
Occupied Bandwidth 27.883 kHz*

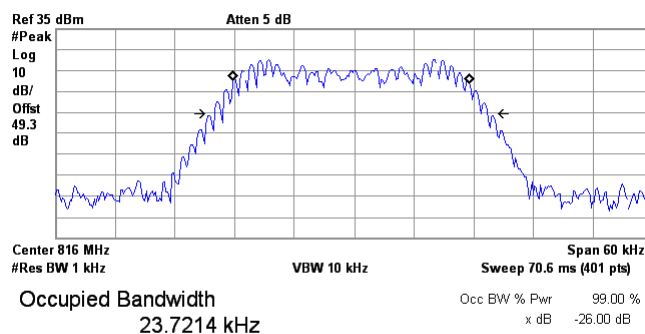
Agilent R T



Transmit Freq Error -372.487 Hz
Occupied Bandwidth 27.915 kHz*

CONFIGURATION:
INPUT POWER: -56 dBm

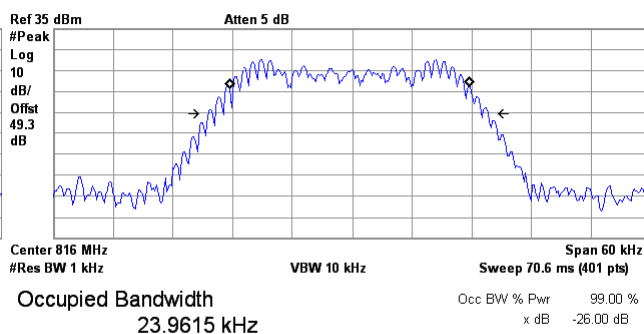
Agilent R T



Transmit Freq Error -280.885 Hz
Occupied Bandwidth 27.444 kHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T

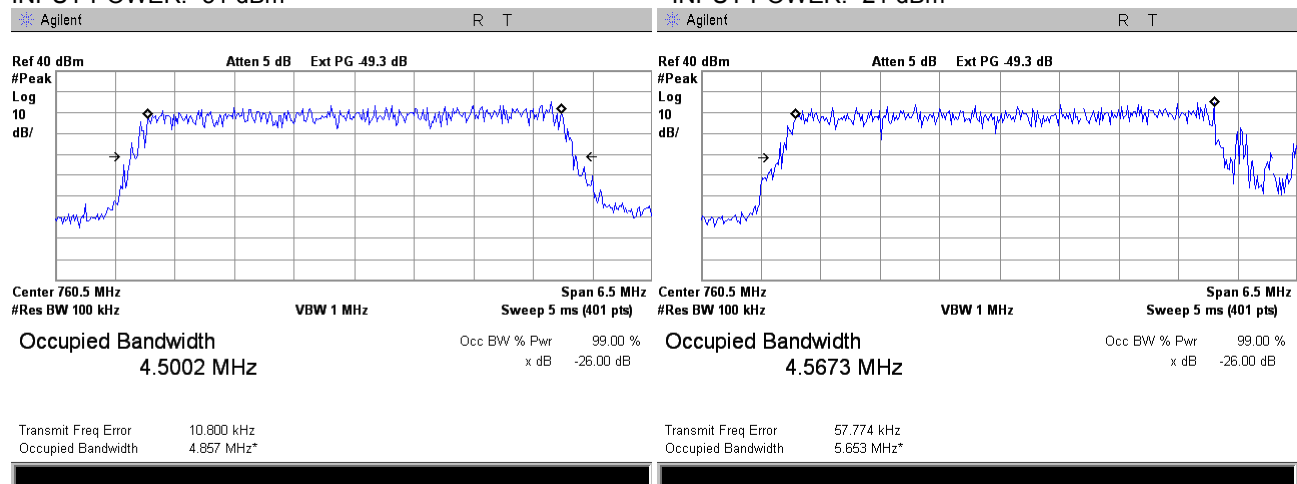


Transmit Freq Error -340.322 Hz
Occupied Bandwidth 28.125 kHz*

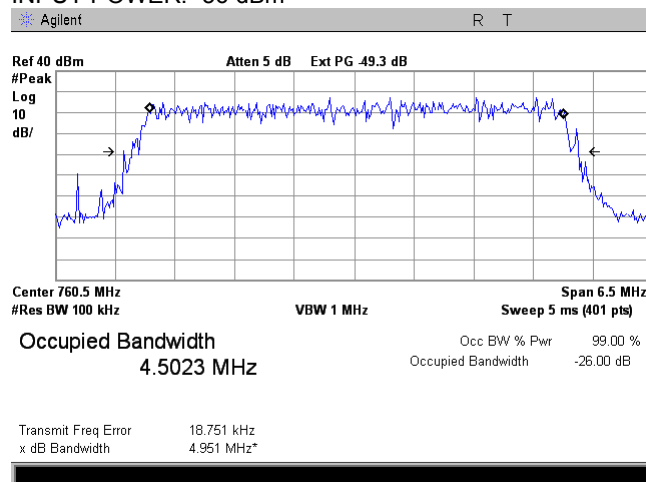
Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.37 Occupied bandwidth test result at low frequency carrier, Port 1

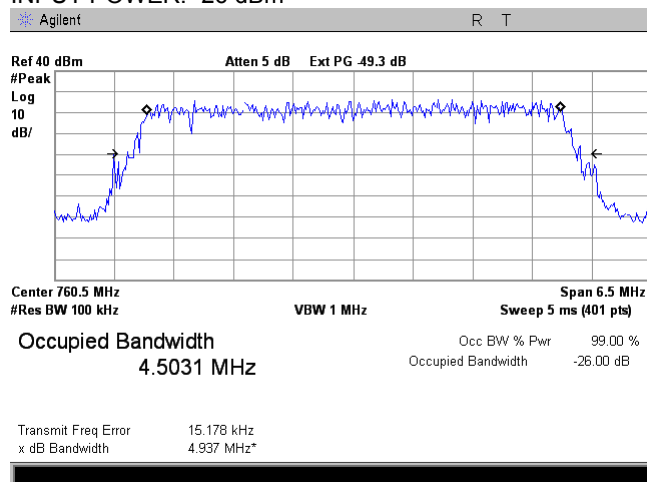
FREQUENCY RANGE: 758 - 768 MHz
 OPERATIONAL MODE: LTE downlink transmit
 CONFIGURATION: Single Band Dual Channels
 INPUT PORT: Base
 CHANNEL BANDWIDTH: 5 MHz
 MODULATION: OFDMA
 INPUT POWER: -51 dBm



CONFIGURATION:
 INPUT POWER: -56 dBm



Single Channel
 INPUT POWER: -26 dBm



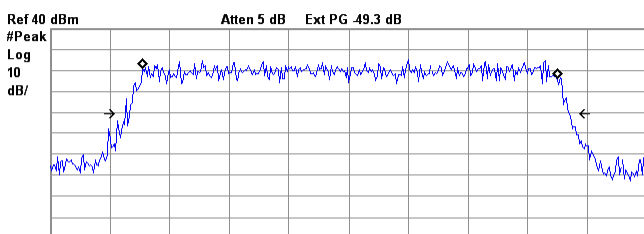
Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.2.38 Occupied bandwidth test result at high frequency carrier, Port 1

FREQUENCY RANGE:
OPERATIONAL MODE:
CONFIGURATION:
INPUT PORT:
CHANNEL BANDWIDTH:
MODULATION:
INPUT POWER: -51 dBm

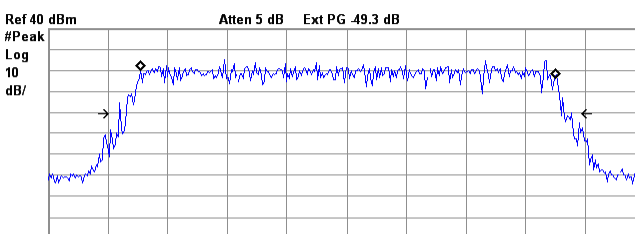
758 - 768 MHz
LTE downlink transmit
Single Band Dual Channels
Base
5 MHz
OFDMA
INPUT POWER: -21 dBm

Agilent R T



Transmit Freq Error 12.574 kHz
Occupied Bandwidth 4.838 MHz*

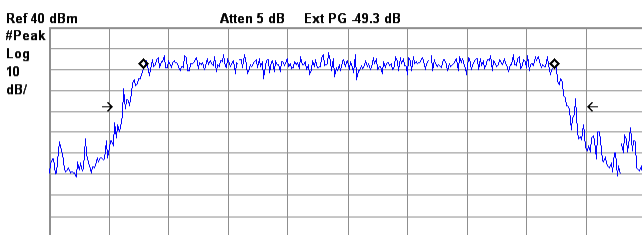
Agilent R T



Transmit Freq Error 11.970 kHz
Occupied Bandwidth 4.937 MHz*

CONFIGURATION:
INPUT POWER: -56 dBm

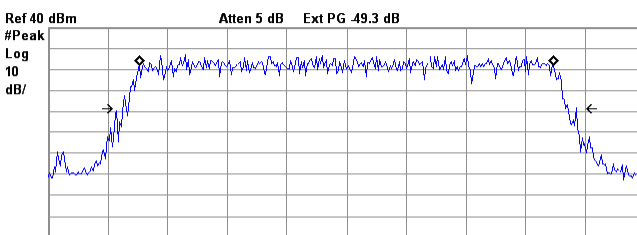
Agilent R T



Transmit Freq Error 17.738 kHz
Occupied Bandwidth 4.949 MHz*

Single Channel
INPUT POWER: -26 dBm

Agilent R T



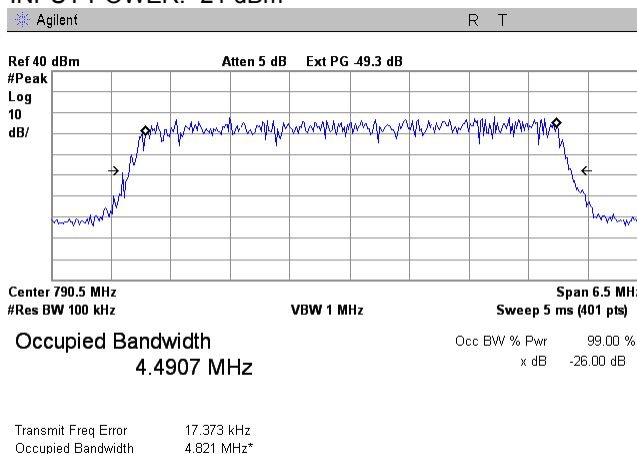
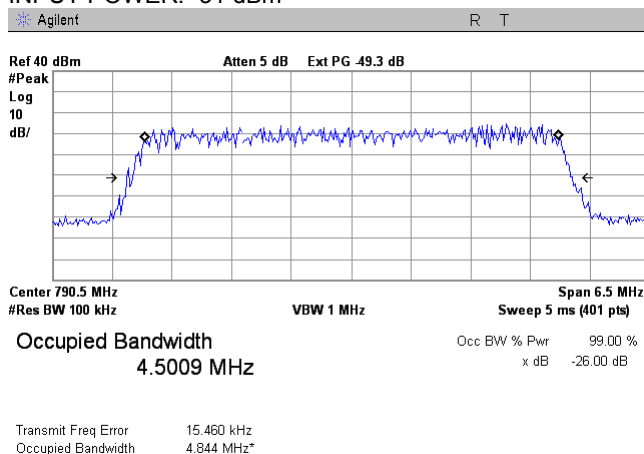
Transmit Freq Error 1.714 kHz
Occupied Bandwidth 4.940 MHz*

Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:		Compliance	Verdict: PASS
Date(s):		20-Jul-15 - 22-Jul-15	
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

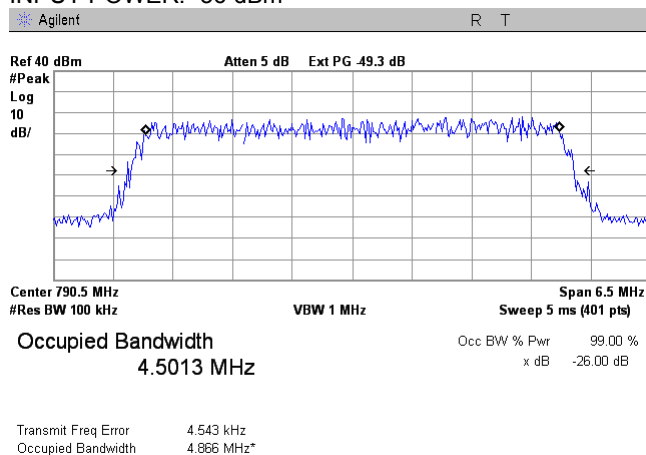
Plot 7.2.39 Occupied bandwidth test result at low frequency carrier, Port 2

FREQUENCY RANGE:
OPERATIONAL MODE:
CONFIGURATION:
INPUT PORT:
CHANNEL BANDWIDTH:
MODULATION:
INPUT POWER: -51 dBm

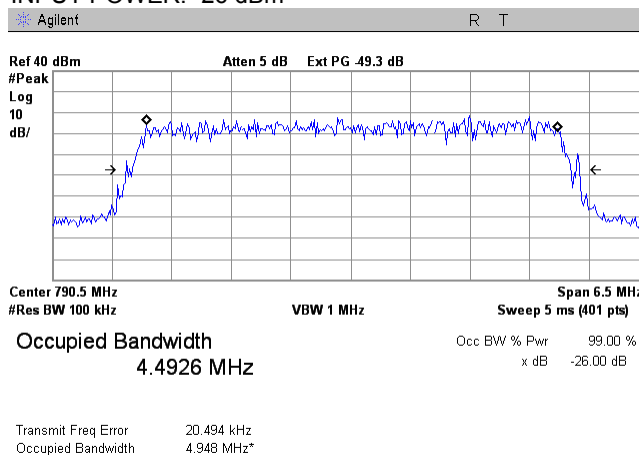
788 - 798 MHz
LTE uplink transmit
Single Band Dual Channels
Mobile
5 MHz
CS-FDMA
INPUT POWER: -21 dBm



CONFIGURATION:
INPUT POWER: -56 dBm



Single Channel
INPUT POWER: -26 dBm

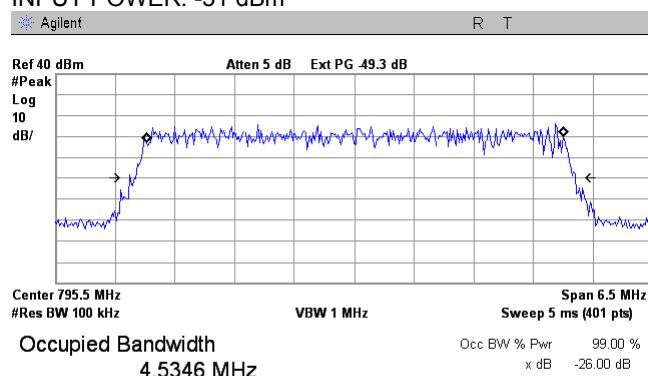


Test specification:		Section 90.219(a), Occupied bandwidth	
Test procedure:		47 CFR, Section 2.1049	
Test mode:	Compliance	Verdict: PASS	
Date(s):	20-Jul-15 - 22-Jul-15		
Temperature: 24.1 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

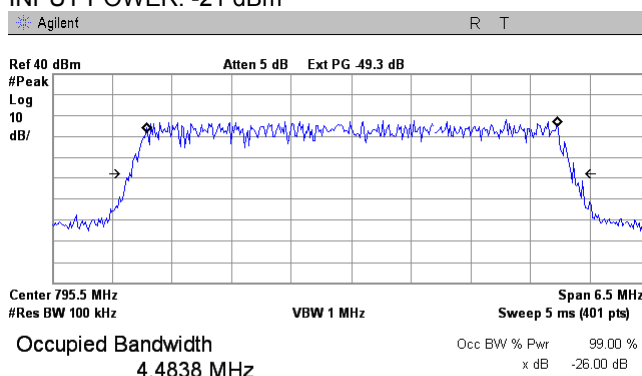
Plot 7.2.40 Occupied bandwidth test result at high frequency carrier, Port 2

FRQUENCY RANGE:
OPERATIONAL MODE:
CONFIGURATION:
INPUT PORT:
CHANNEL BANDWIDTH:
MODULATION:
INPUT POWER: -51 dBm

788 - 798 MHz
LTE uplink transmit
Single Band Dual Channels
Mobile
5 MHz
CS-FDMA
INPUT POWER: -21 dBm



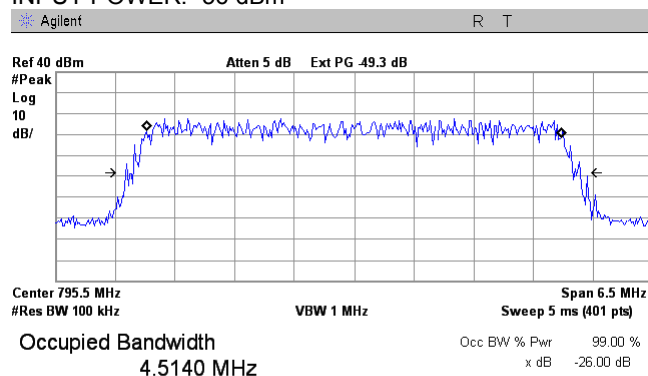
Transmit Freq Error 7.293 kHz
Occupied Bandwidth 4.855 MHz*



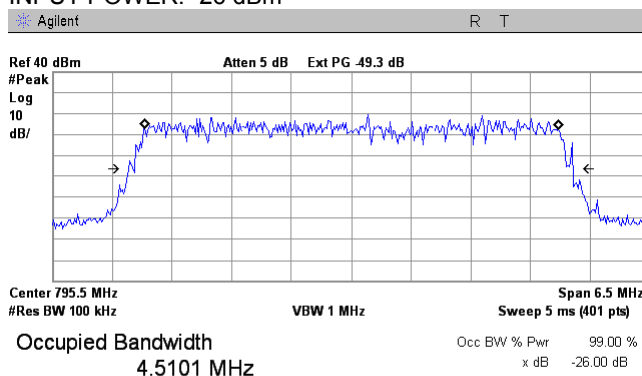
Transmit Freq Error 7.913 kHz
Occupied Bandwidth 4.842 MHz*

CONFIGURATION:
INPUT POWER: -56 dBm

Single Channel
INPUT POWER: -26 dBm



Transmit Freq Error -1.248 kHz
Occupied Bandwidth 4.951 MHz*



Transmit Freq Error 7.629 kHz
Occupied Bandwidth 4.841 MHz*

Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

7.3 Emission mask test

7.3.1 General

This test was performed to measure emission mask at RF antenna connector. Specification test limits are given in Table 7.3.1.

Table 7.3.1 Emission mask limits

Frequency displacement from carrier	Attenuation below carrier, dBc
Emission mask B (Channel bandwidth 10 kHz, authorized bandwidth 8 kHz) with audio low pass filter	
0 – 4.0 kHz	0
4.0 – 8.0 kHz	25.0
8.0 – 20.0 kHz	35.0
More than 20.0 kHz	43+10logP(W)
Emission mask B (Channel bandwidth 20.0 kHz, authorized bandwidth 18.0 kHz)	
0 – 9.0 kHz	0
9.0 – 18.0 kHz	25.0
18.0 – 45.0 kHz	35.0
More than 45.0 kHz	43+10logP(W)
Emission mask B (Channel bandwidth 25.0 kHz, authorized bandwidth 23.0 kHz)	
0 – 11.5 kHz	0
11.5 – 23.0 kHz	25.0
23.0 – 11.5 kHz	35.0
More than 23.0 kHz	43+10logP(W)
Emission mask B (Channel bandwidth 5 MHz) with audio low pass filter	
0 – 2.5 MHz	0
2.5 – 5.0 MHz	25.0
5.0 – 12.5 MHz	35.0
More than 12.5 MHz	43+10logP(W)
Emission mask H (Channel bandwidth 8 kHz, authorized bandwidth 8 kHz)	
0 – 4.0 kHz	0
4.0 – 8.5 kHz	107 log (fd/4)
8.5 – 15.0 kHz	40.5 log(fd/1.16)
15.0 – 25.0 kHz	116 log(fd/6.1)
More than 25.0 kHz	43+10logP(W)

* - linearly increase with frequency

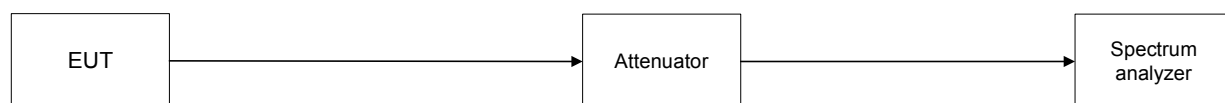
** - emission mask includes carrier modulation envelope within ± 250 % of the authorized bandwidth; the frequency range removed beyond ± 250 % of the authorized bandwidth from carrier was investigated as spurious emission

7.3.2 Test procedure

7.3.2.1 The EUT was set up as shown in Figure 7.3.1, energized and its proper operation was checked.

7.3.2.2 The emission mask was measured with spectrum analyzer as provided in the associated plots.

Figure 7.3.1 Emission mask test setup



Test specification:	Section 90.210(b), 90.210(h), Emission mask		
Test procedure:	47 CFR, Sections 2.1051, 2.1047 and 90.210(b)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	15-Jul-15 - 22-Jul-15		
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.3.2 Emission mask test results

Carrier frequency, MHz	Limit	Verdict
Modulation C4F/iDEN/Analog FM		
Downlink 758 – 775 MHz		
758.0	Emission mask B	Pass
766.0		
775.0		
Uplink 788 – 805 MHz		
788.0	Emission mask B	Pass
796.0		
805.0		
Downlink 851 – 861 MHz		
851.0	Emission mask B, H	Pass
856.0		
861.0		
Uplink 806 – 816 MHz		
806.0	Emission mask B, H	Pass
811.0		
816.0		

Table 7.3.3 Emission mask test results

OPERATING FREQUENCY RANGE: 758 - 768 MHz (downlink)
788 - 798 MHz (uplink)

DETECTOR USED: Peak hold

RESOLUTION BANDWIDTH: 100 kHz

VIDEO BANDWIDTH: 300 kHz

MODULATING SIGNAL: OFDMA/CS-FDMA

Carrier frequency, MHz	Limit	Verdict
Dual Band		
Downlink		
760.5	Emission mask B	Pass
765.5		
Uplink		
790.5	Emission mask B	Pass
795.5		
Single Band Single Channel		
Downlink		
760.5	Emission mask B	Pass
765.5		

Reference numbers of test equipment used

HL 2909	HL 3768	HL 3770	HL 3776	HL 4224	HL 4273	HL 4274	HL 4413
---------	---------	---------	---------	---------	---------	---------	---------

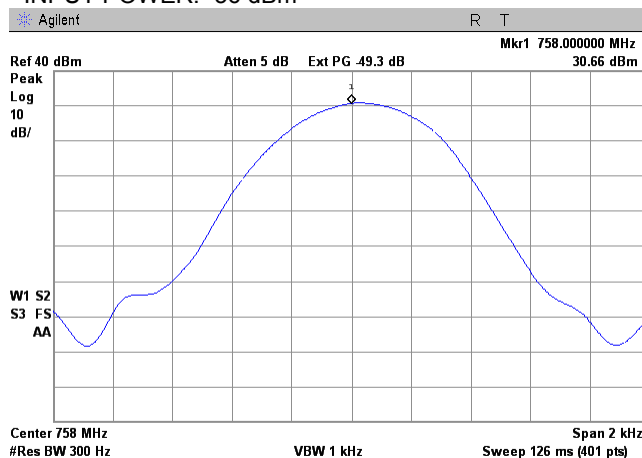
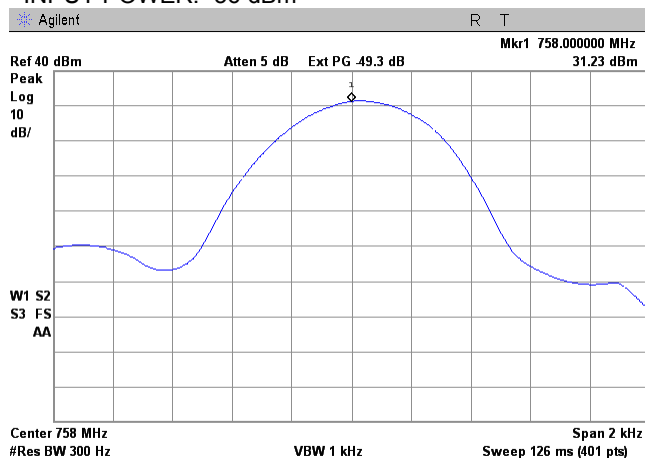
Full description is given in Appendix A.

Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.1 Reference level test results at low carrier frequency, Port 1

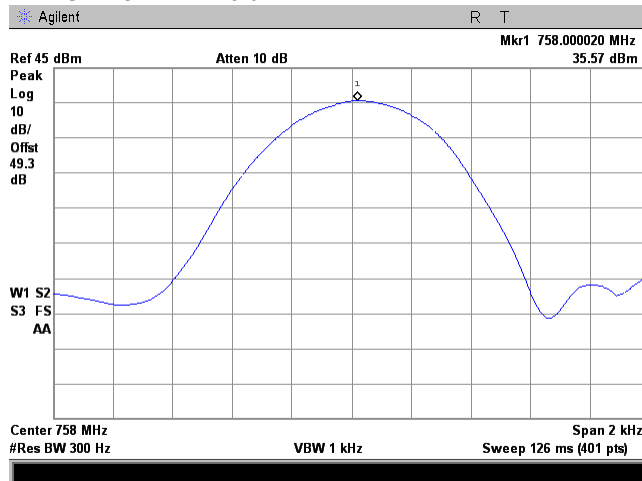
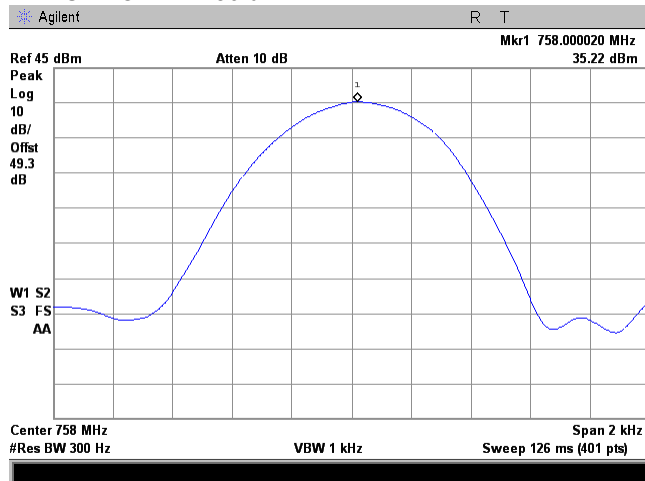
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -56 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

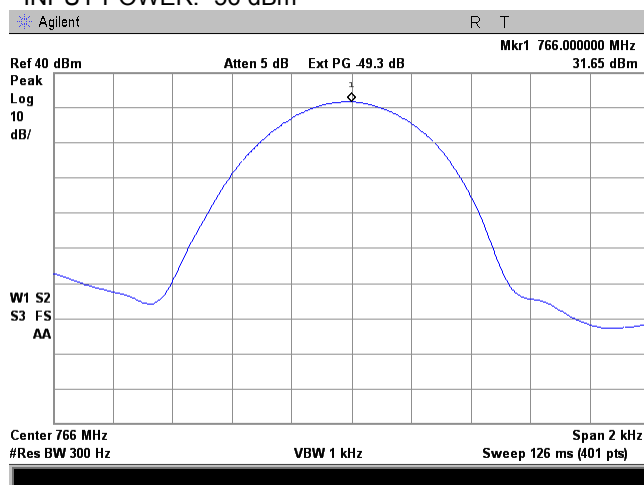
Single Band Single Channel
INPUT POWER: -26 dBm



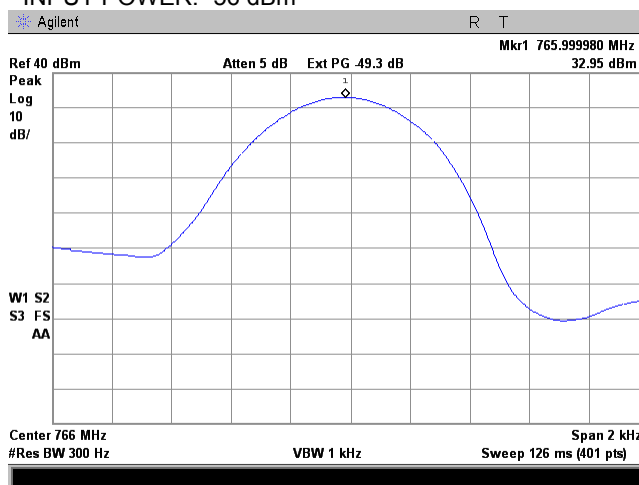
Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.2 Reference level test results at mid carrier frequency, Port 1

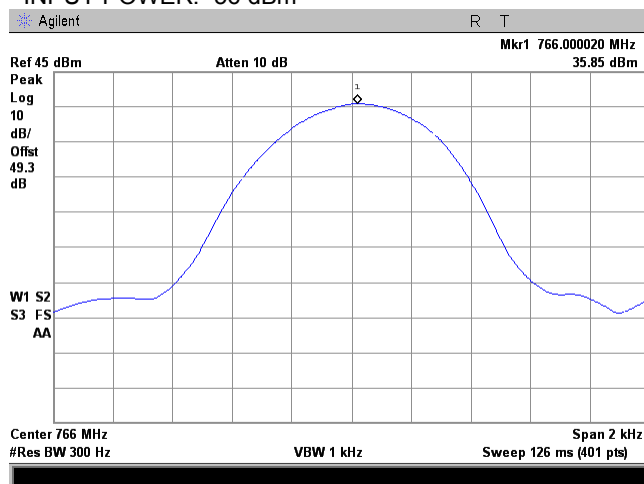
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm



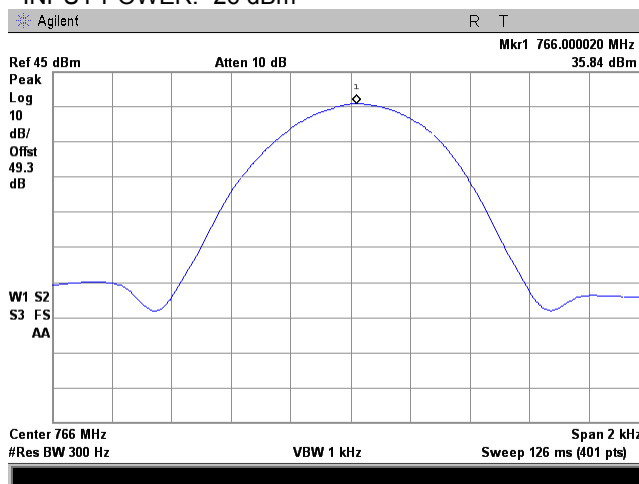
758 - 775 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -56 dBm



CONFIGURATION:
INPUT POWER: -56 dBm



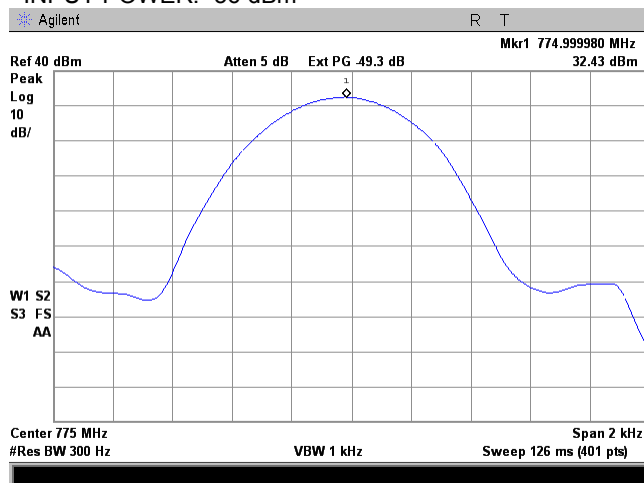
Single Band Single Channel
INPUT POWER: -26 dBm



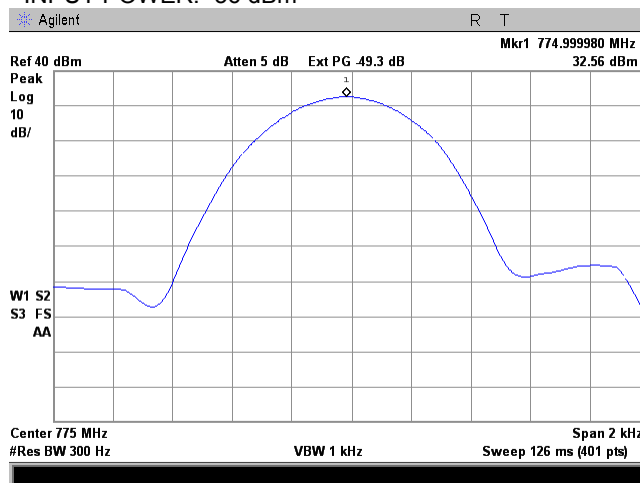
Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.3 Reference level test results at high carrier frequency, Port 1

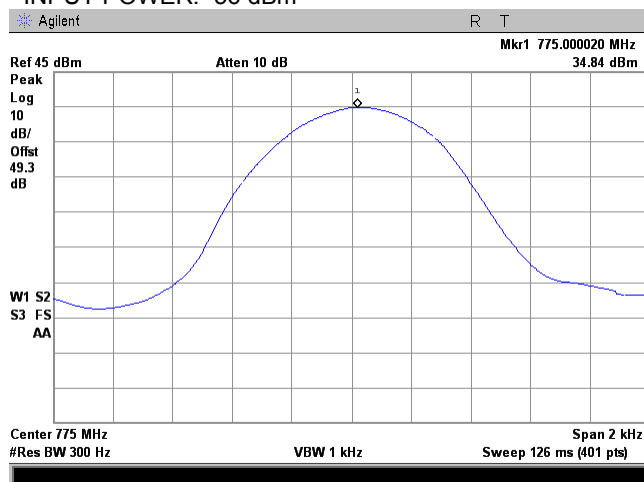
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm



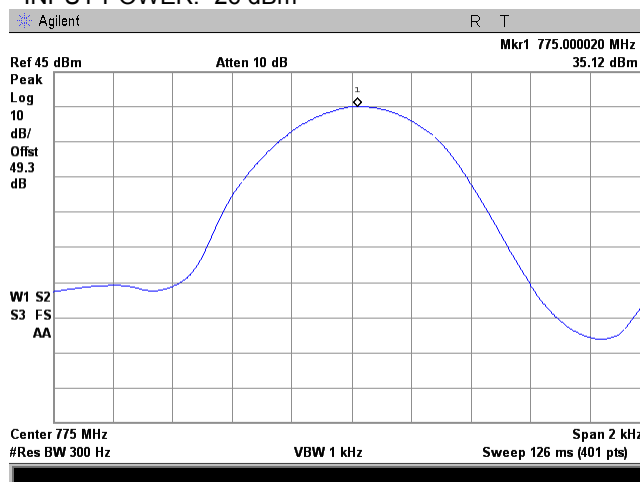
758 - 775 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -56 dBm



CONFIGURATION:
INPUT POWER: -56 dBm



Single Band Single Channel
INPUT POWER: -26 dBm

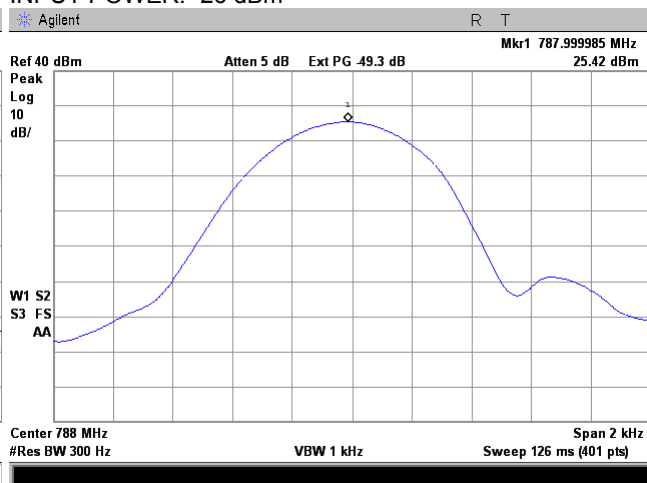
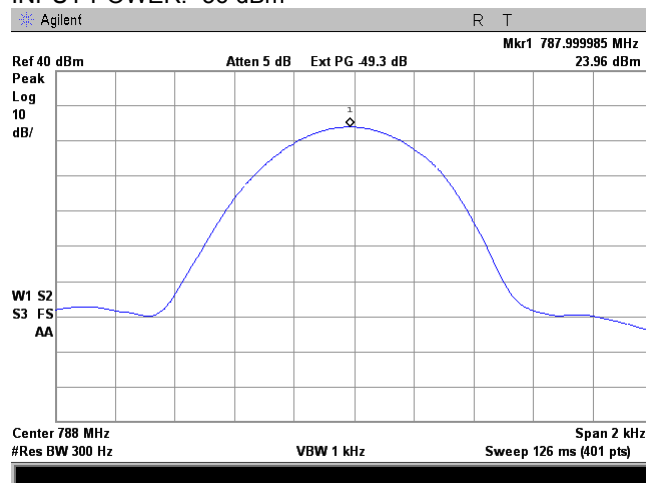


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.4 Reference level test results at low carrier frequency, Port 1

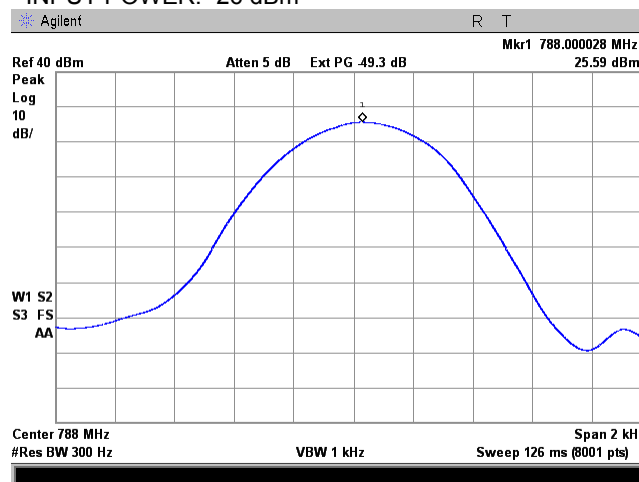
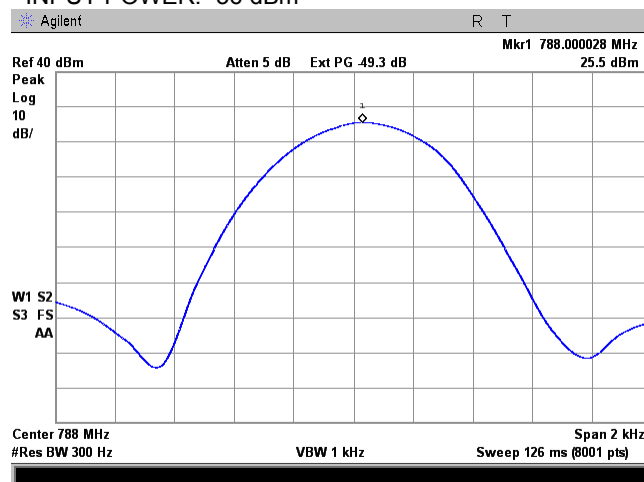
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

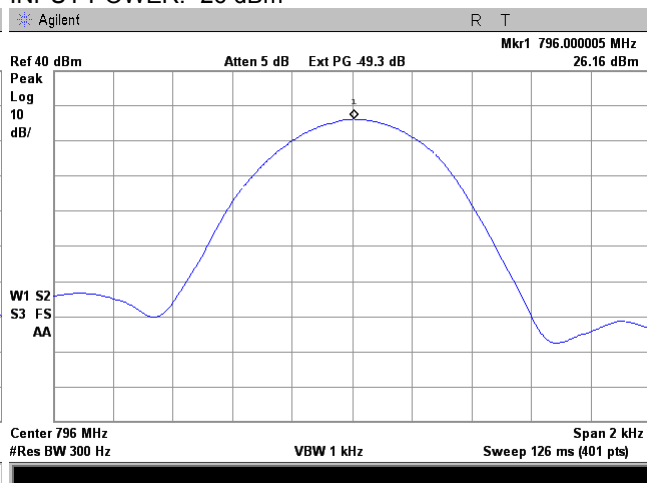
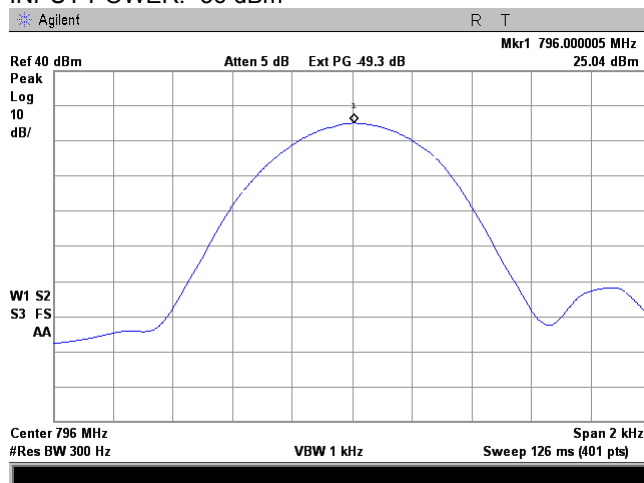


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.5 Reference level test results at mid carrier frequency, Port 1

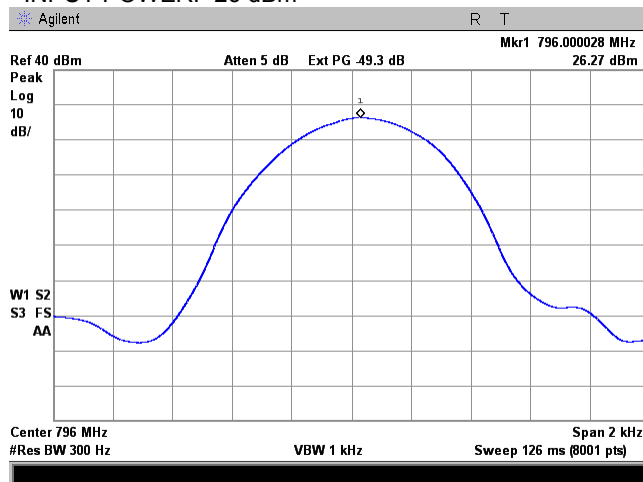
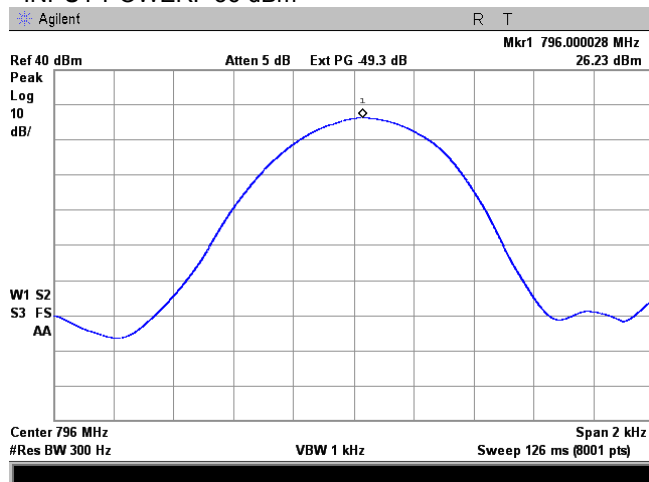
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

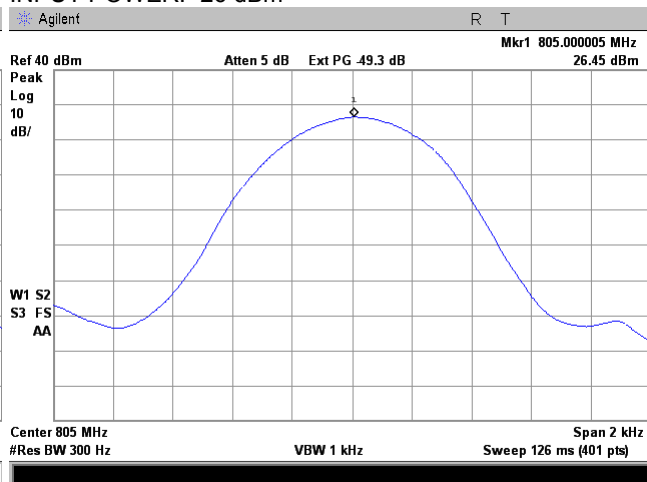
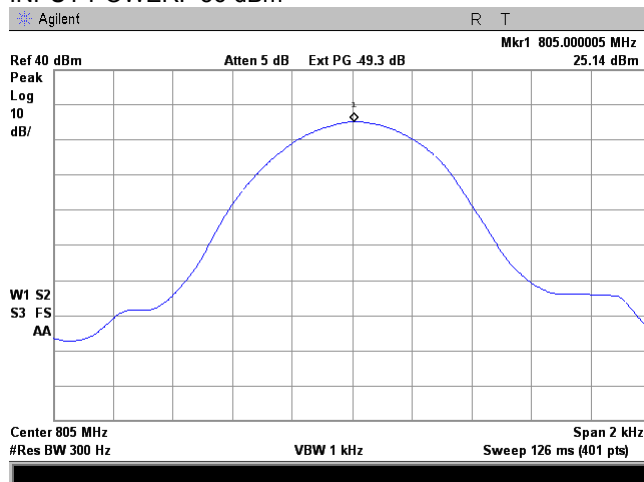


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.6 Reference level test results at high carrier frequency, Port 1

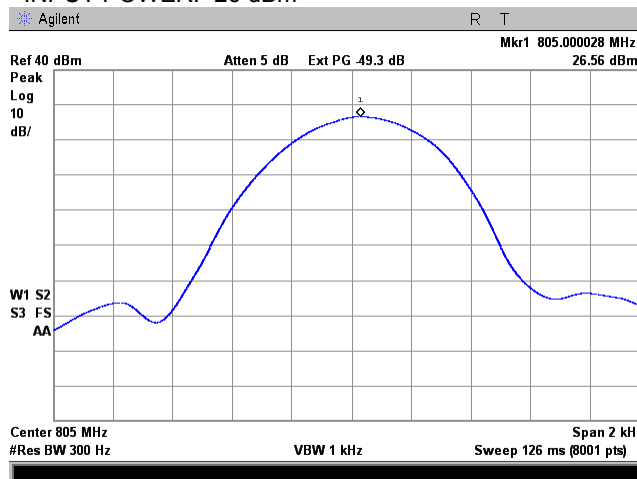
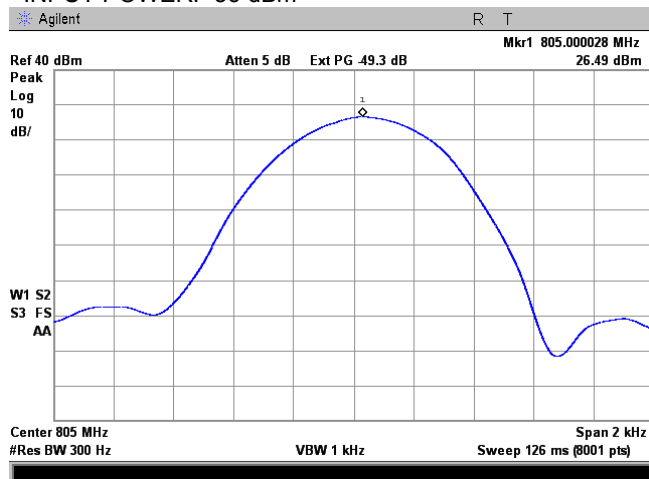
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

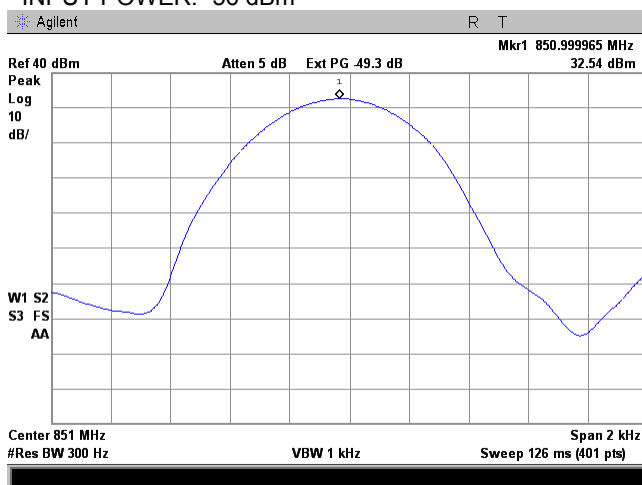
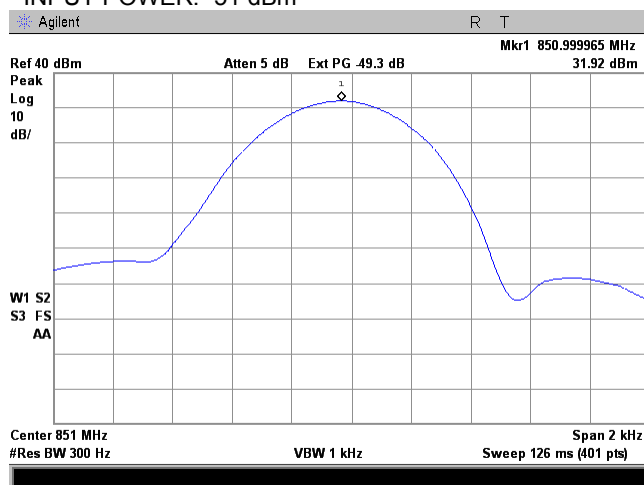


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.7 Reference level test results at low carrier frequency, Port 1

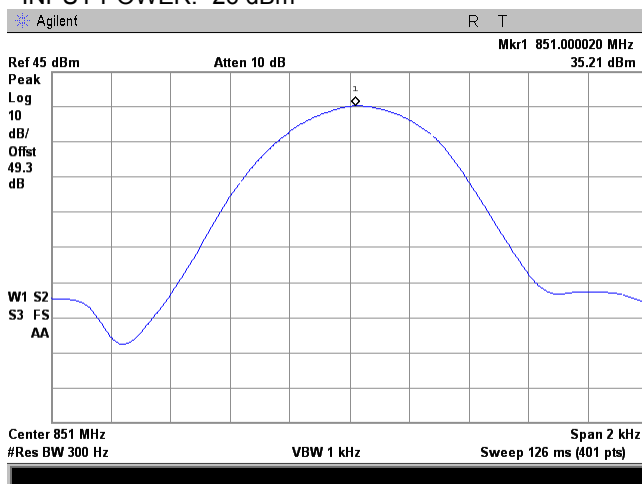
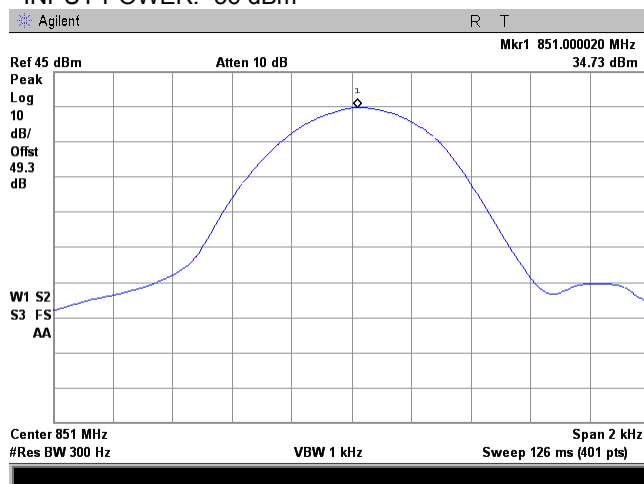
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -51 dBm

851 - 861 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -56 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

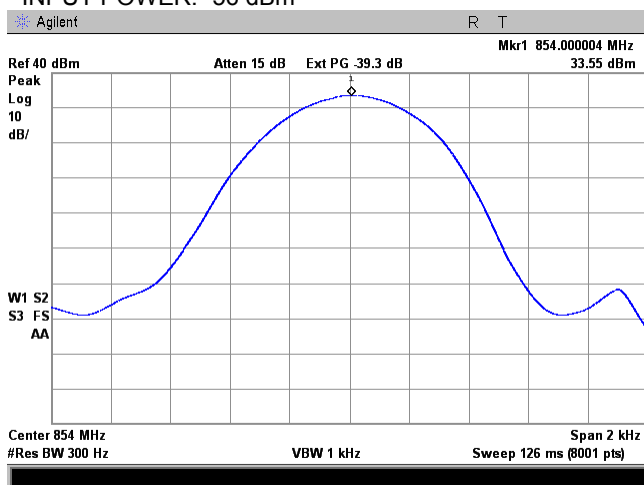
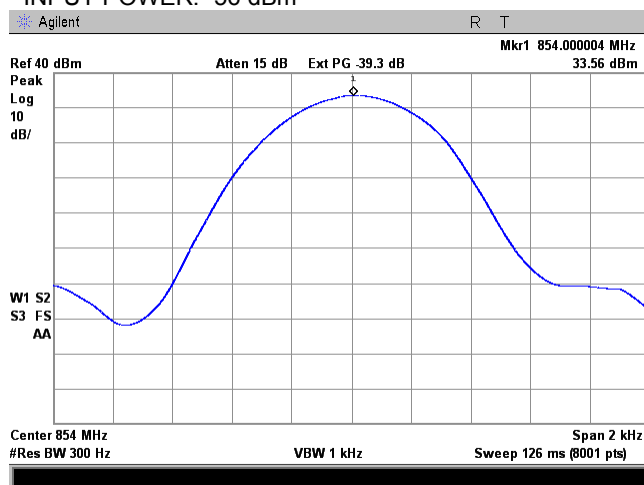


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.8 Reference level test results at 854 MHz carrier frequency, Port 1

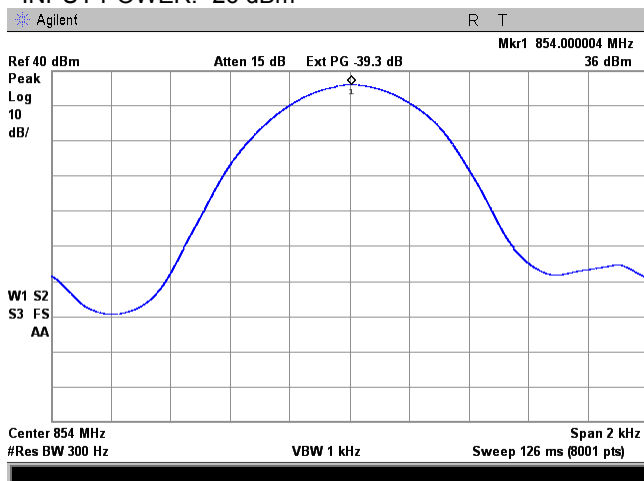
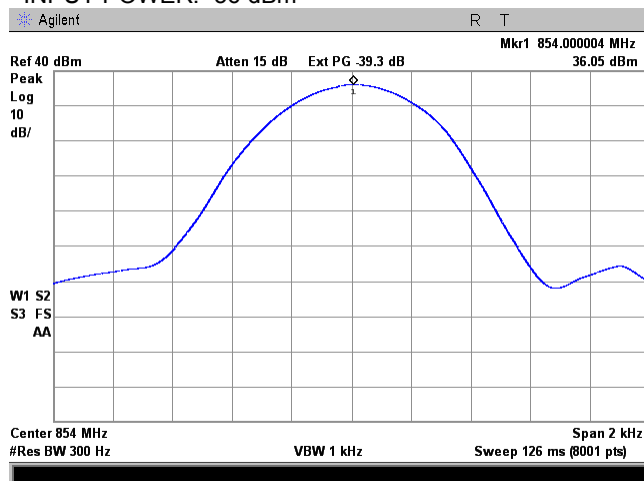
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 854MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -56 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

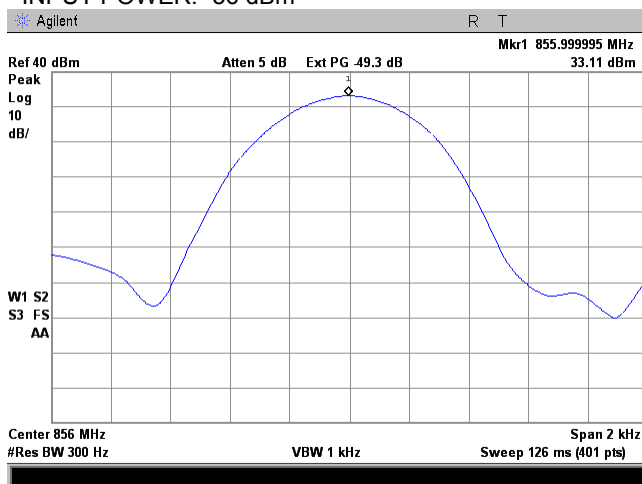
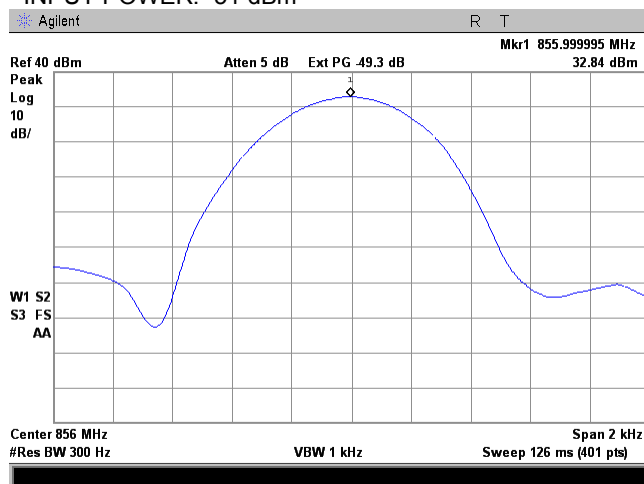


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.9 Reference level test results at mid carrier frequency, Port 1

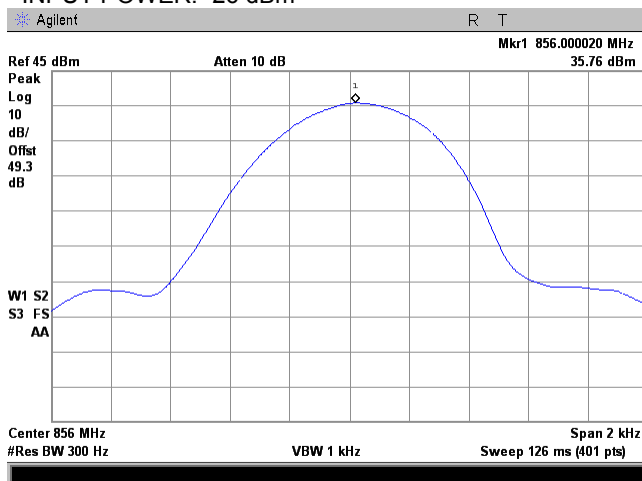
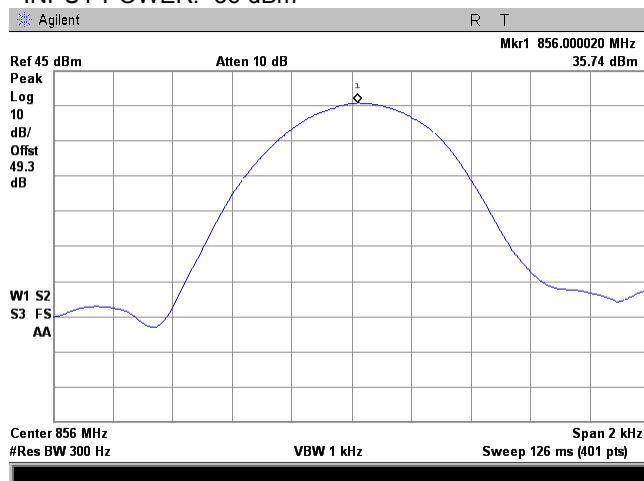
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -51 dBm

851 - 861 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -56 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

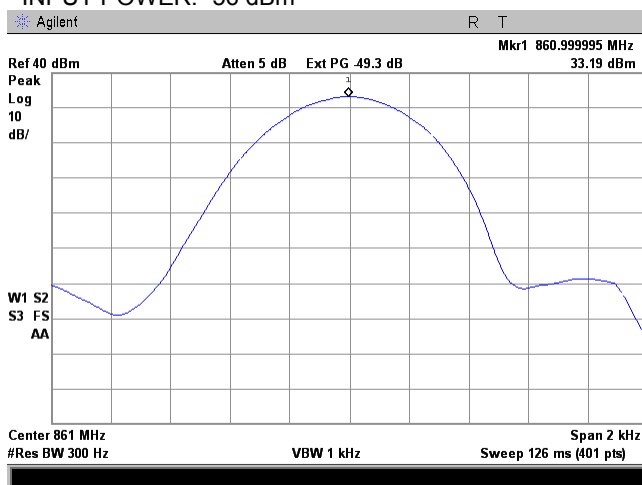
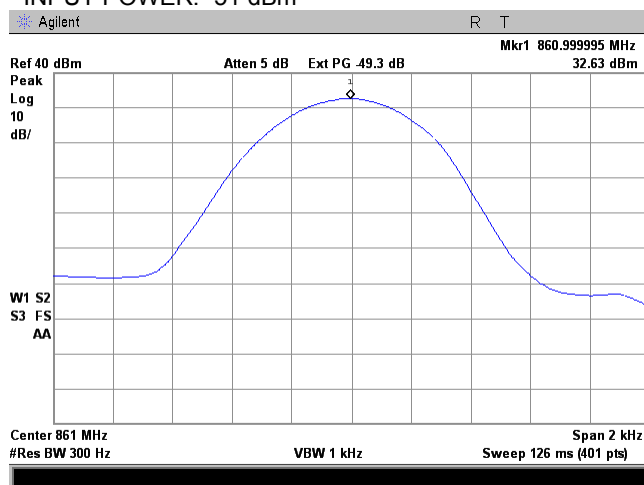


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.10 Reference level test results at high carrier frequency, Port 1

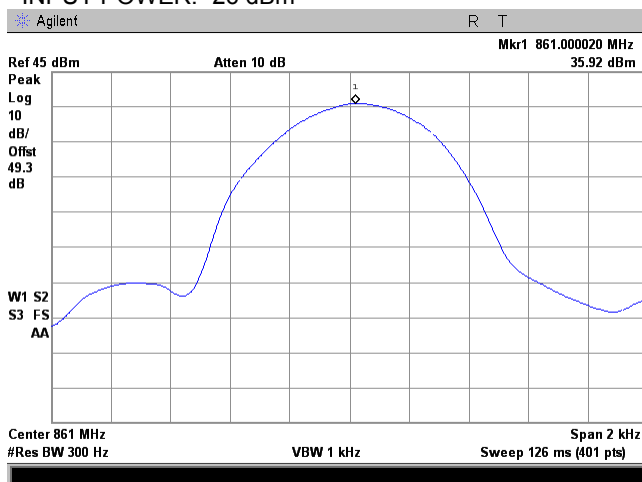
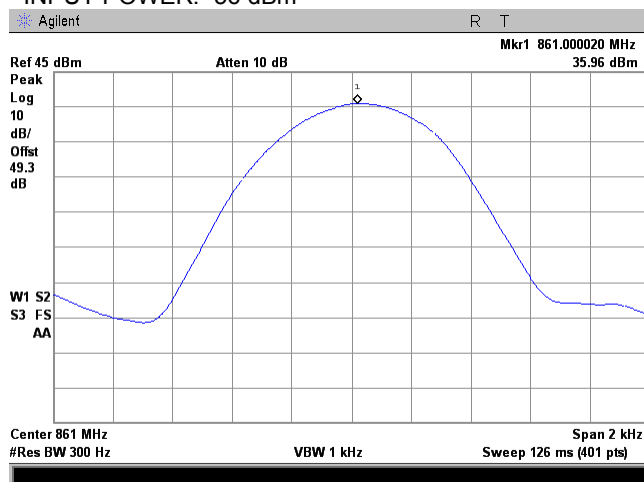
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -51 dBm

851 - 861 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -56 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

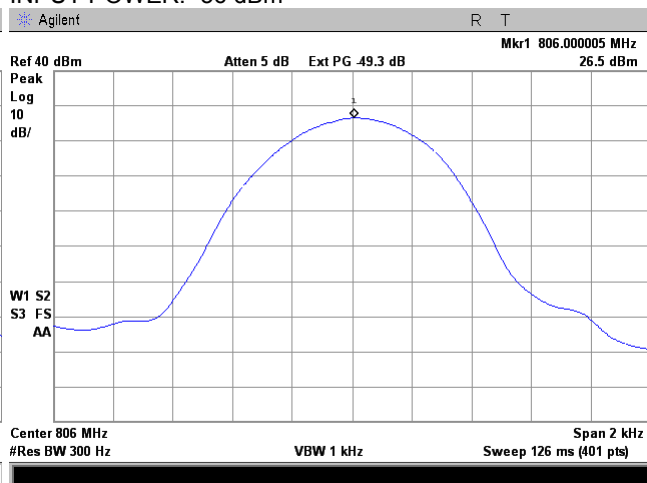
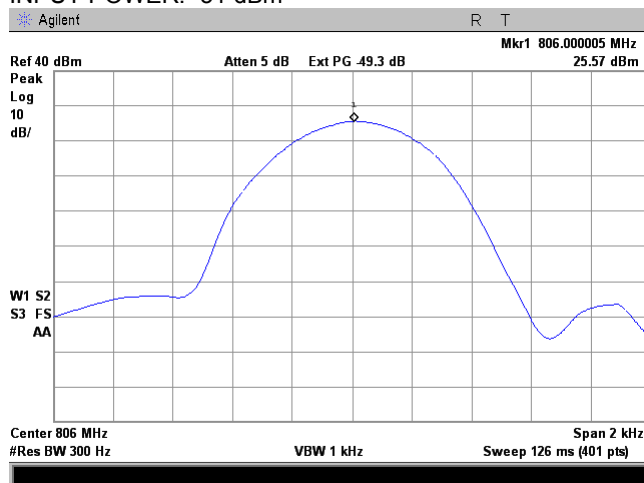


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.11 Reference level test results at low carrier frequency, Port 1

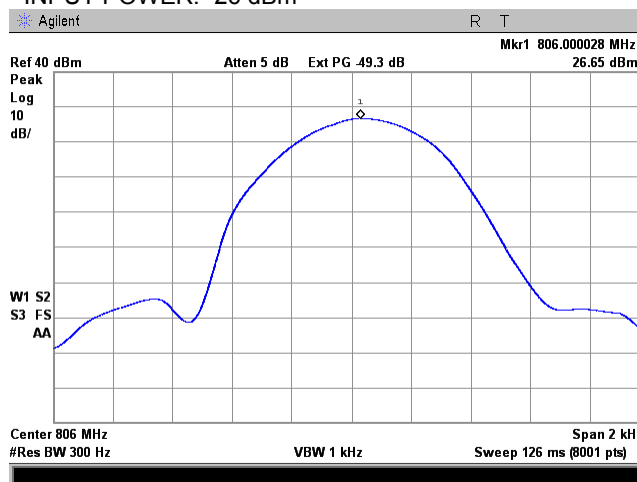
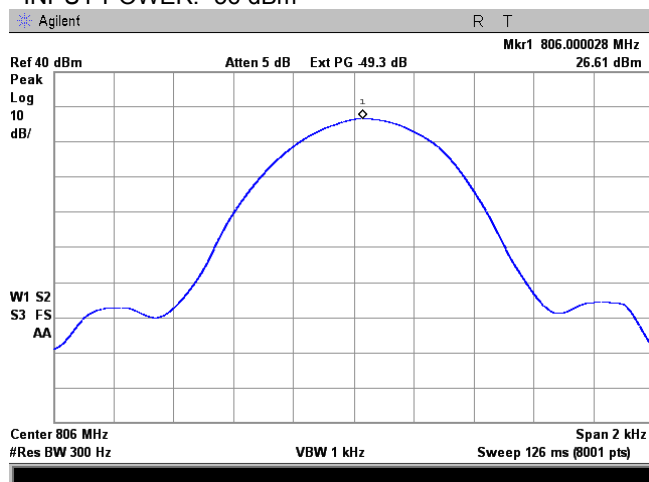
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -51 dBm

806 - 816 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -56 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

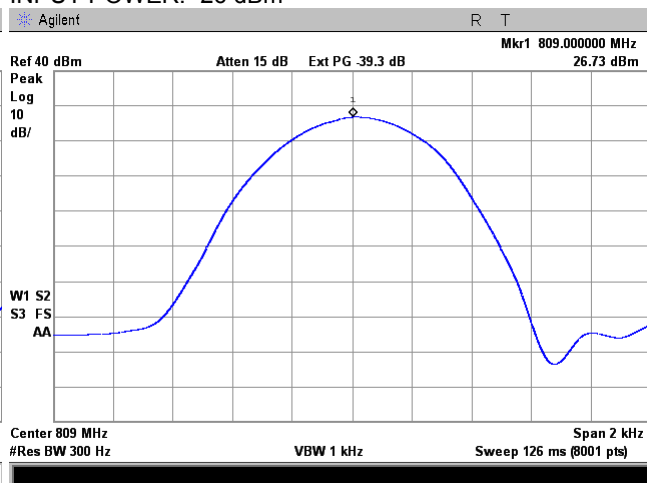
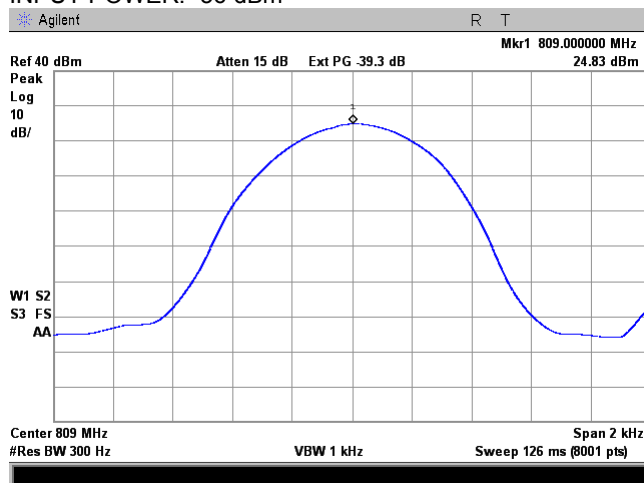


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.12 Reference level test results at 809 MHz carrier frequency, Port 2

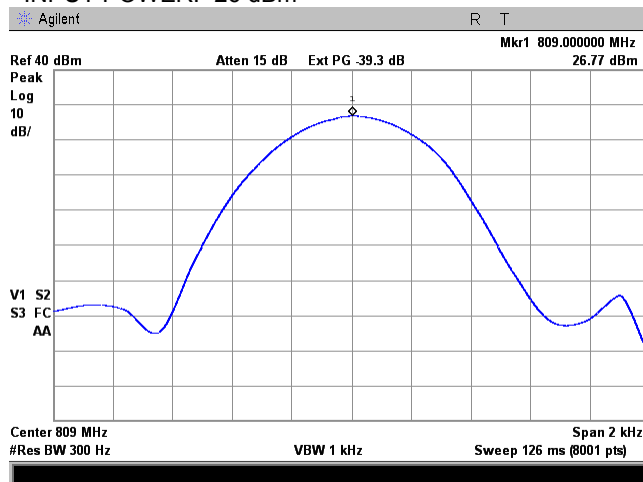
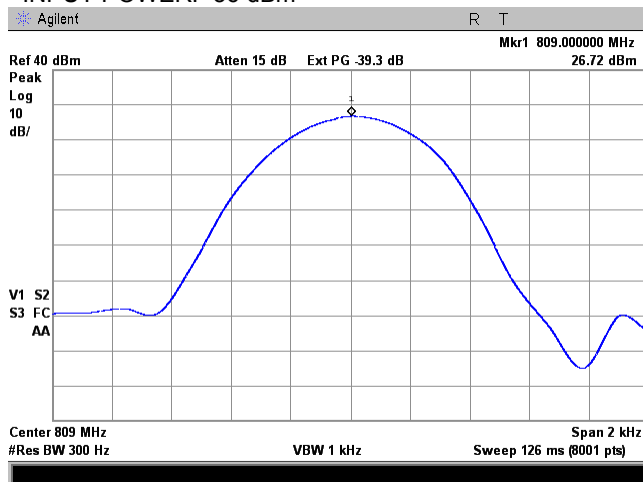
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 816 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

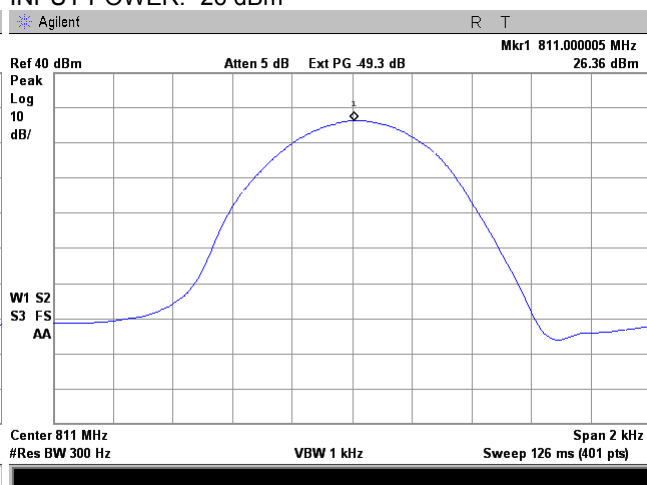
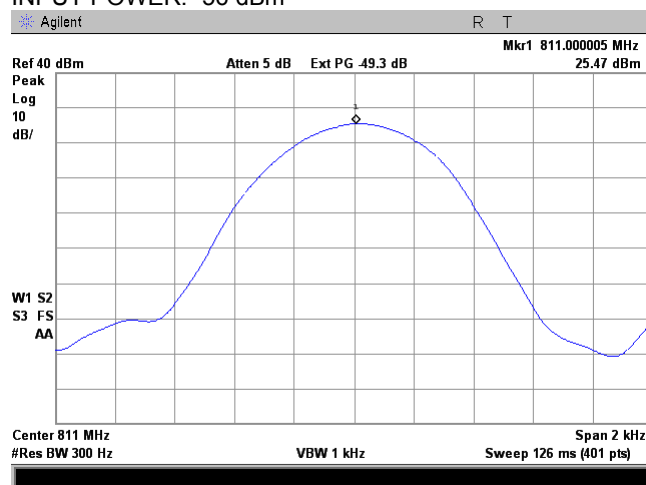


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.13 Reference level test results at mid carrier frequency, Port 1

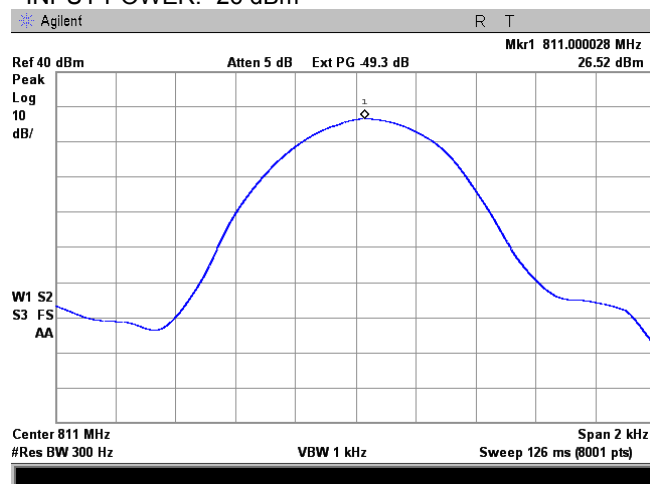
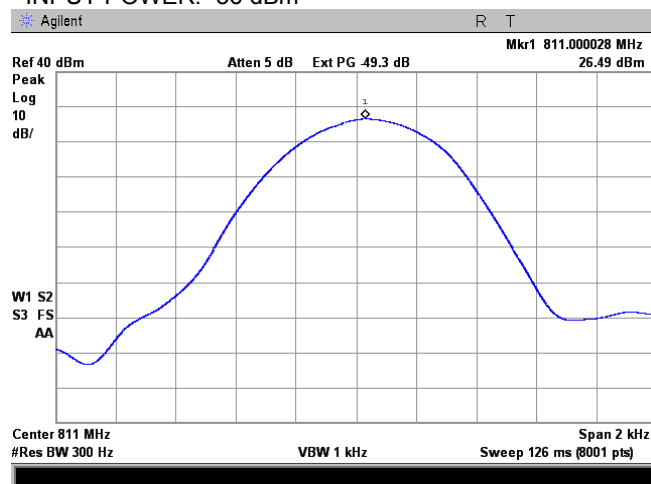
FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 816 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

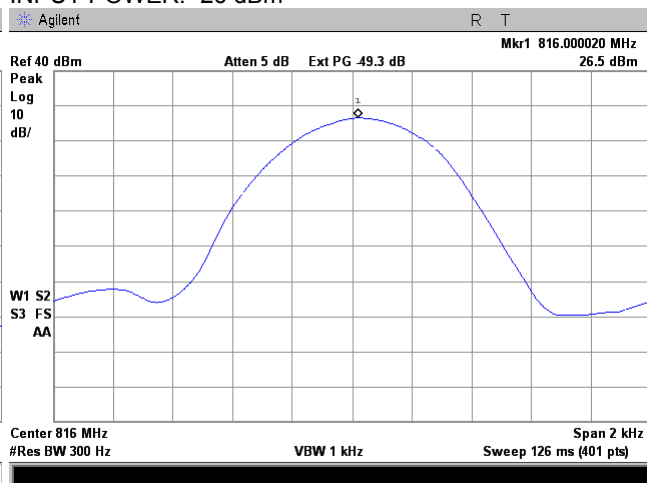
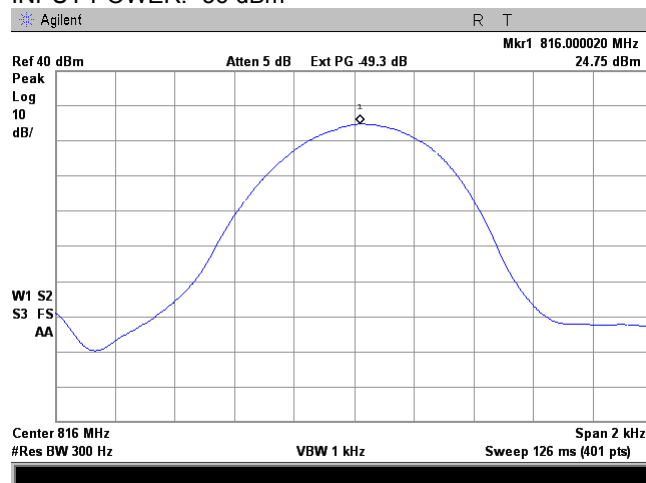


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

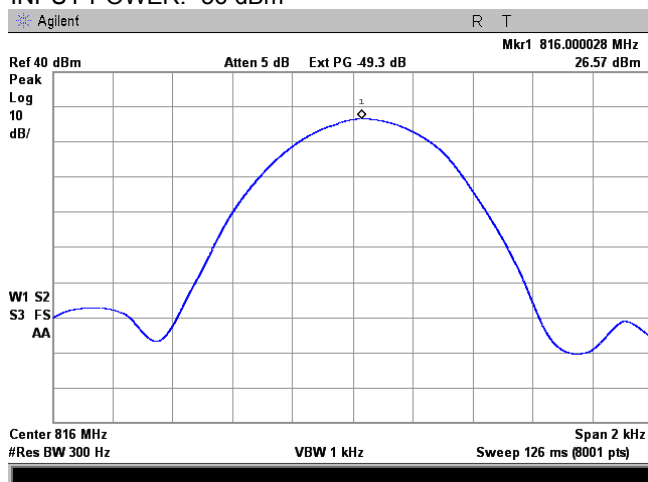
Plot 7.3.14 Reference level test results at high carrier frequency, Port 1

FREQUENCY RANGE:
REFERENCE LEVEL:
CONFIGURATION:
INPUT POWER: -56 dBm

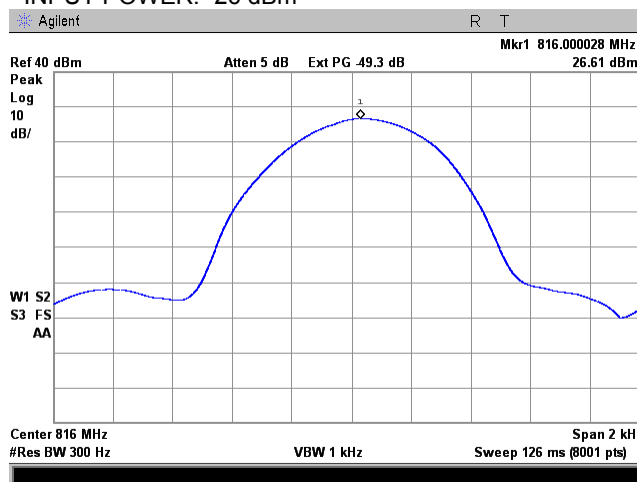
806 - 816 MHz
Unmodulated power
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm



Single Band Single Channel
INPUT POWER: -26 dBm

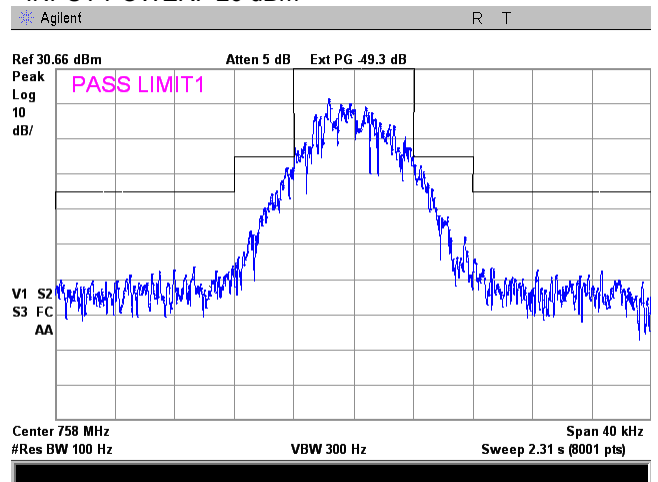
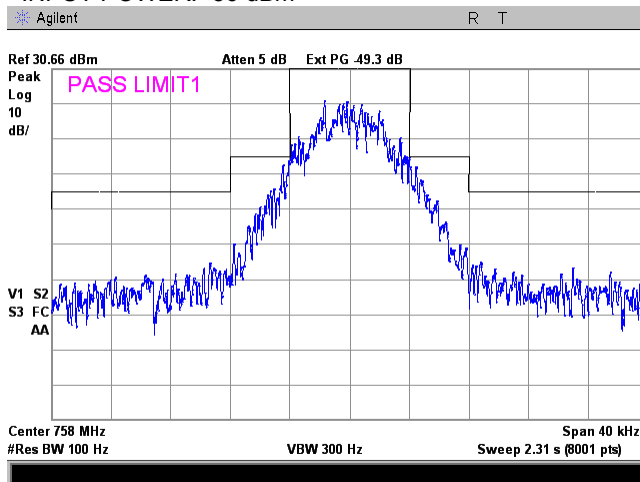


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.15 Emission mask test results at low carrier frequency, Port 1

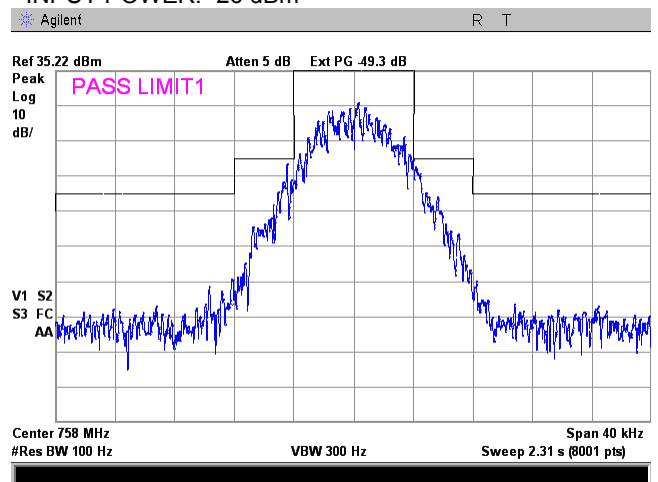
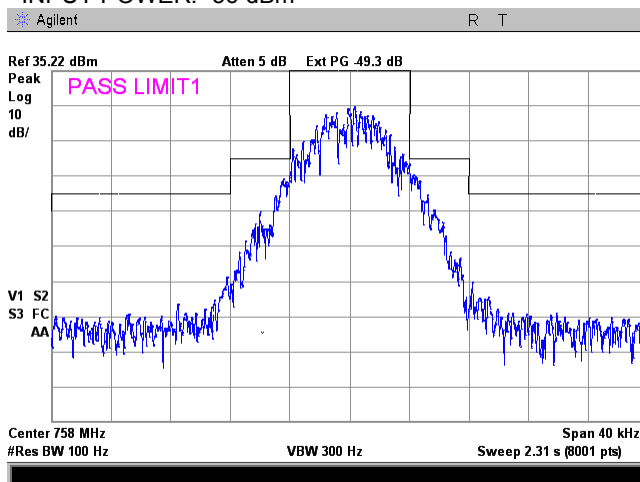
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
C4FM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

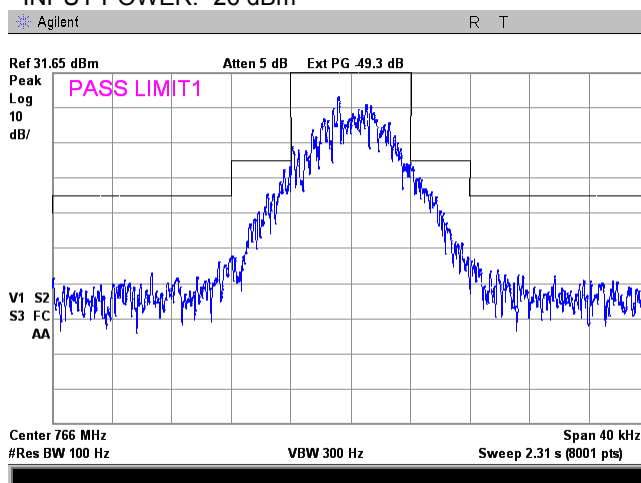
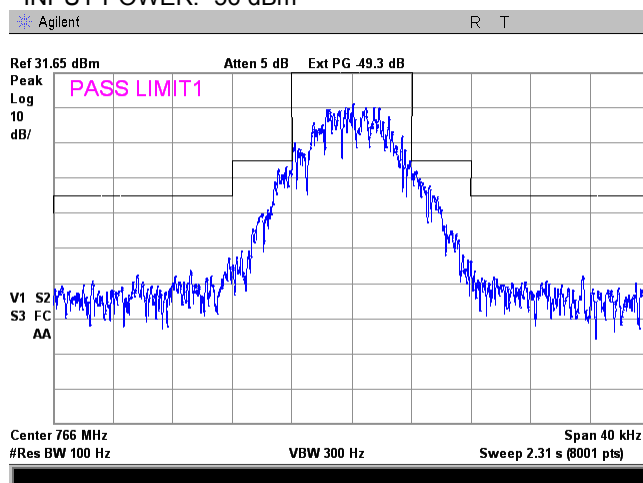


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.16 Emission mask test result at mid frequency carrier, Port 1

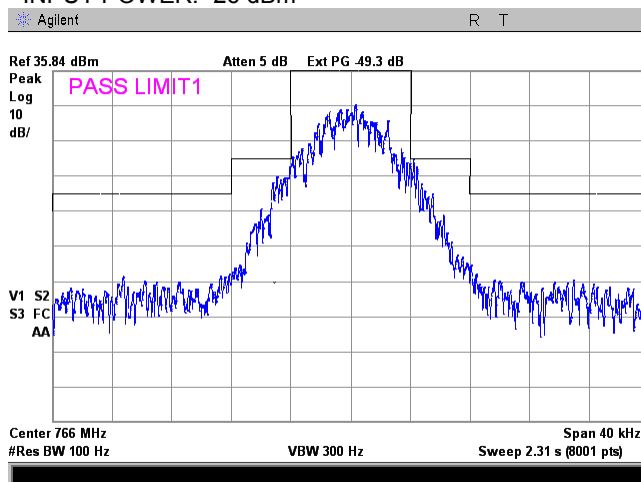
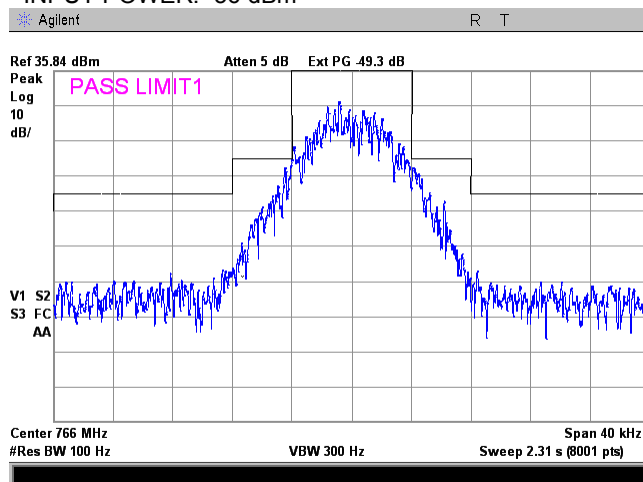
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
C4FM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

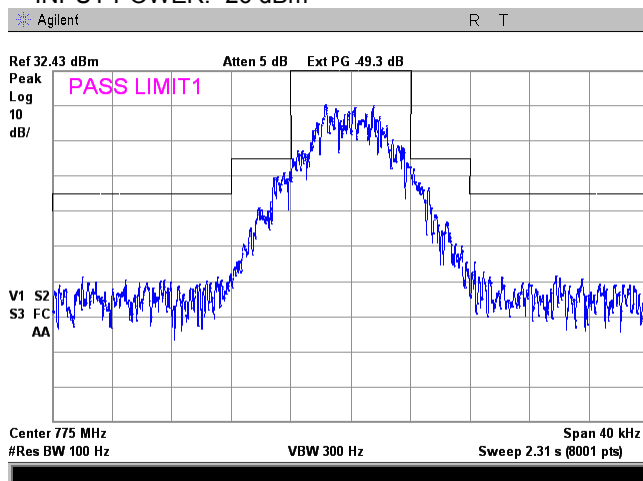
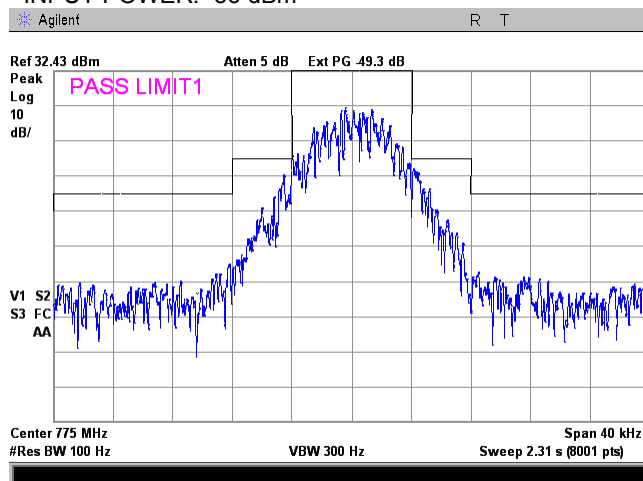


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.17 Emission mask test result at high frequency carrier, Port 1

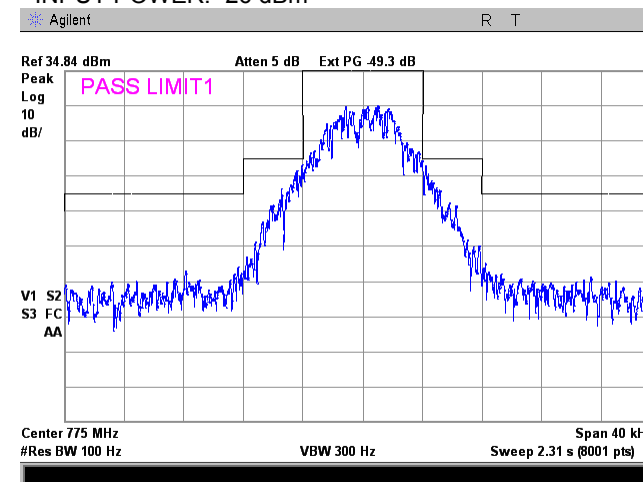
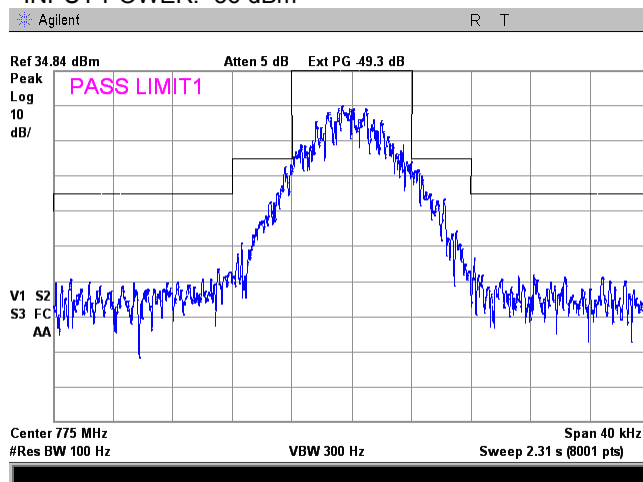
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
C4FM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

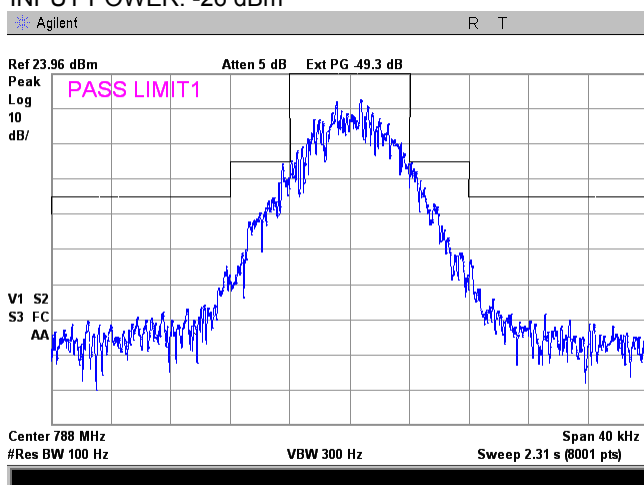
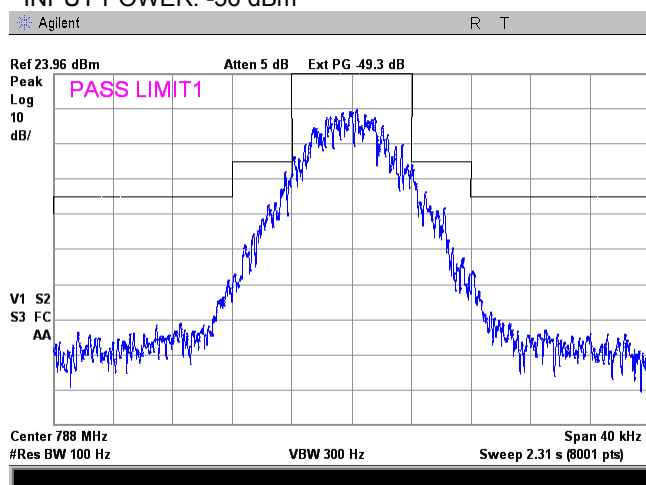


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.18 Emission mask test result at low frequency carrier, Port 2

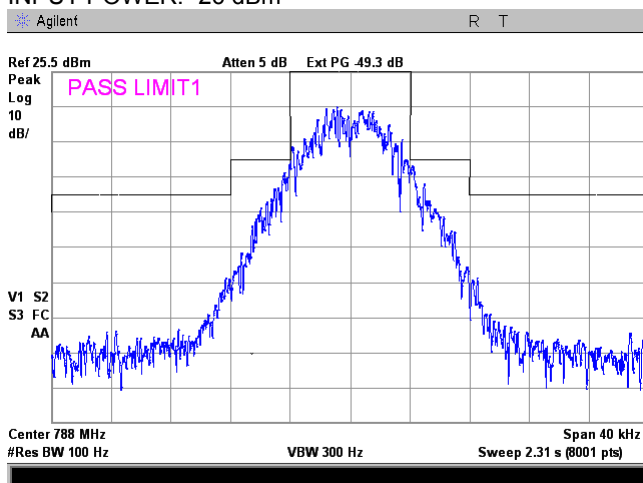
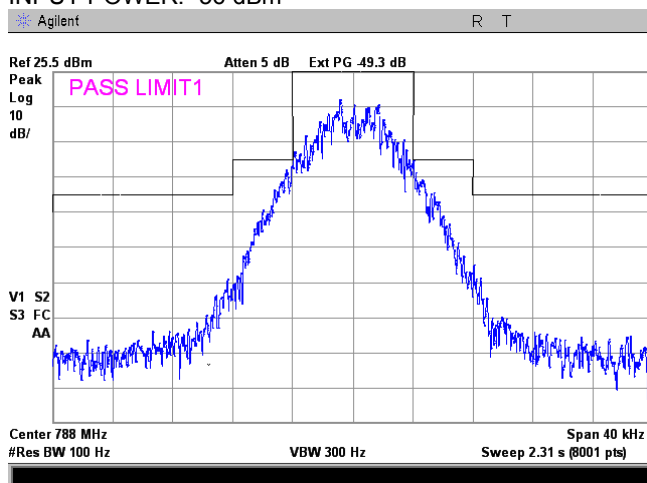
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
C4FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

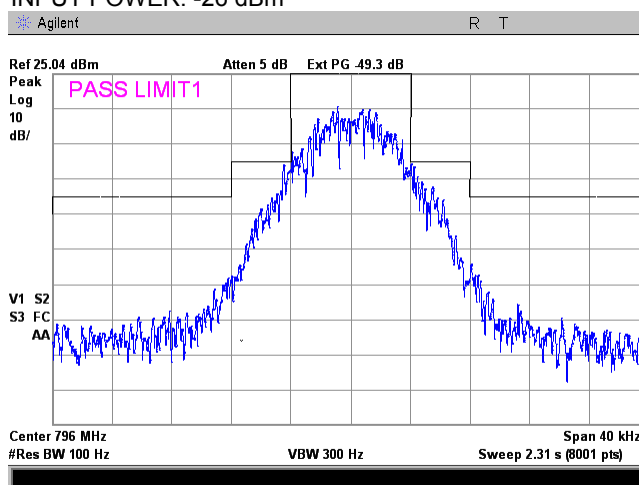
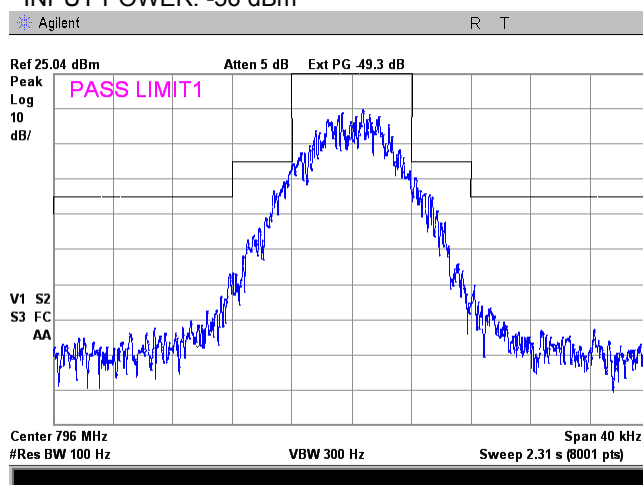


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.19 Emission mask test result at mid frequency carrier, Port 2

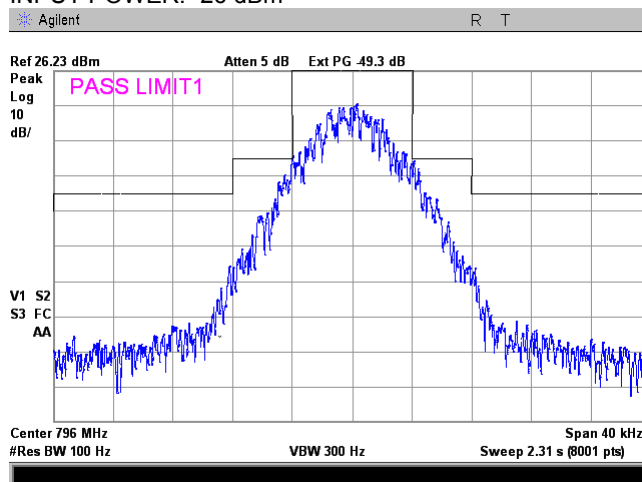
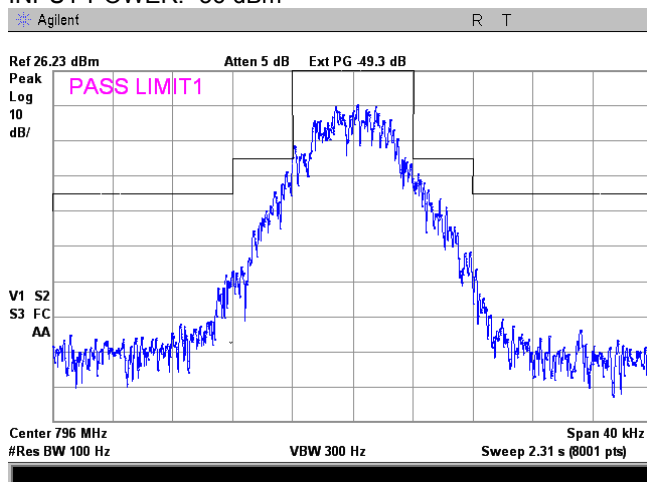
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
C4FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

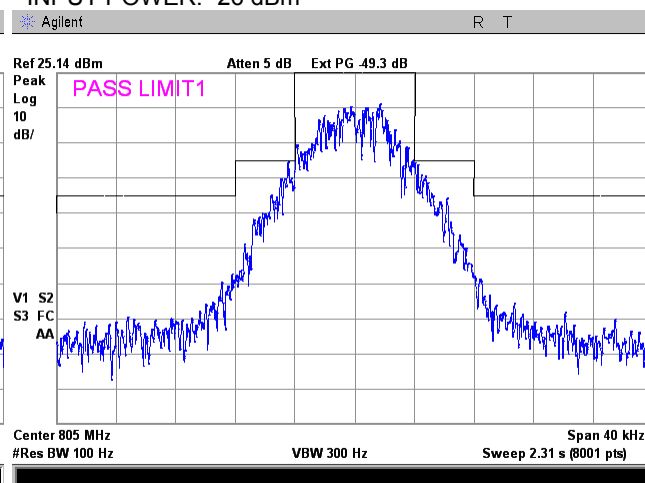
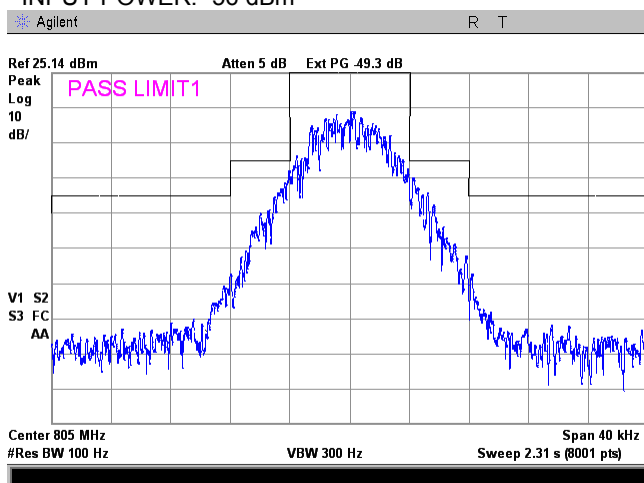


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.20 Emission mask test result at high frequency carrier, Port 2

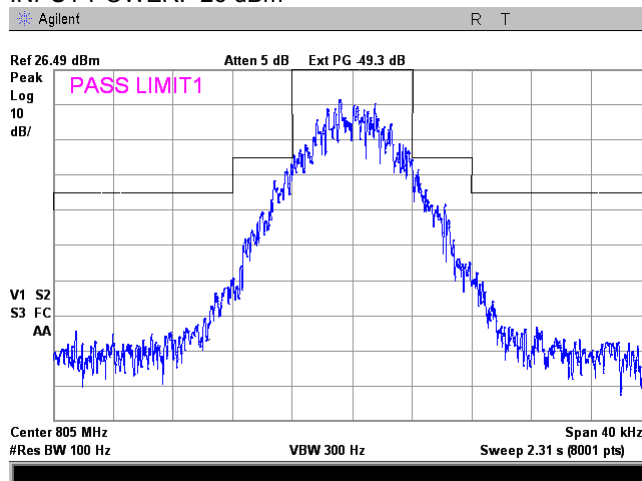
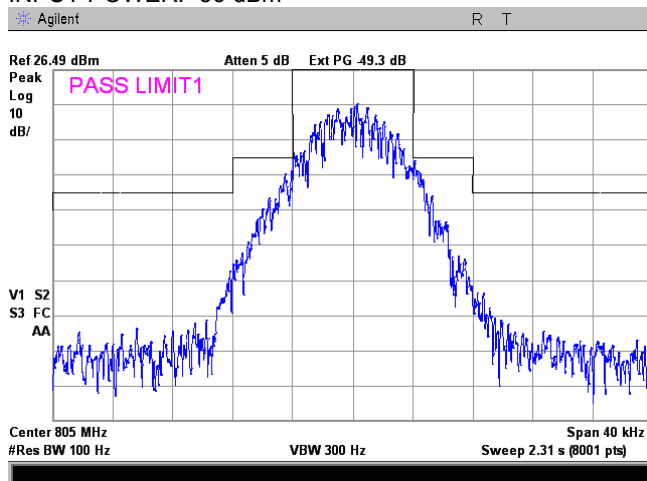
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
C4FM uplink transmit
Mobile
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

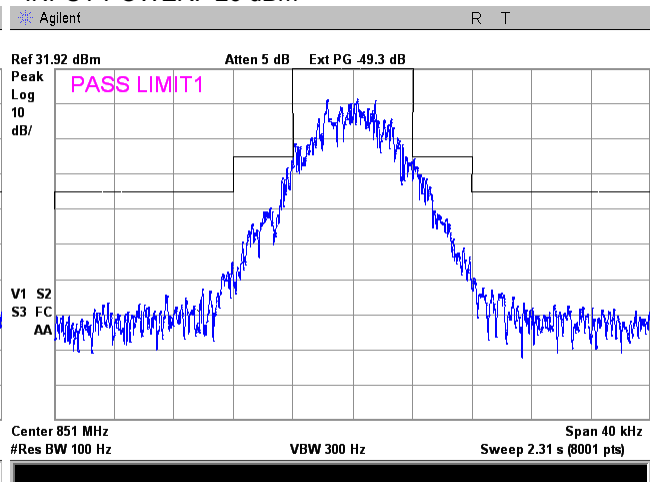
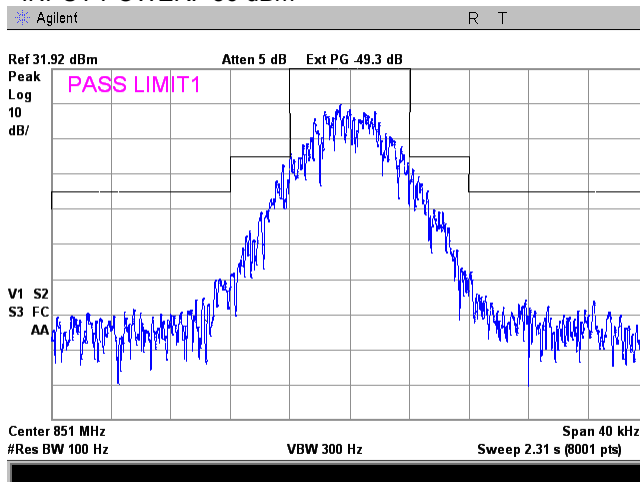


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.21 Emission mask test result at low frequency carrier, Port 1

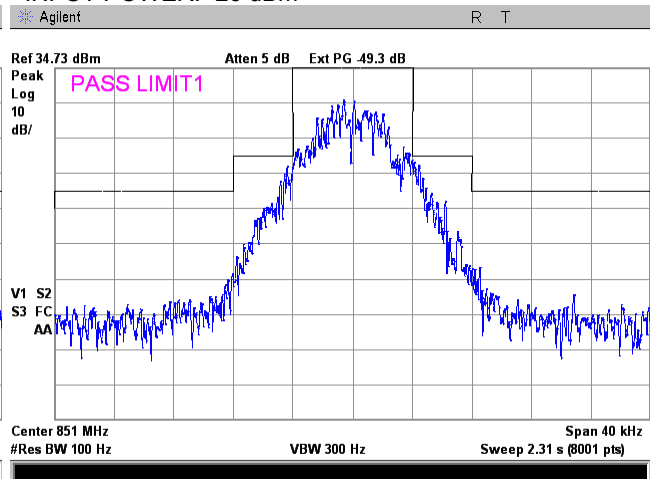
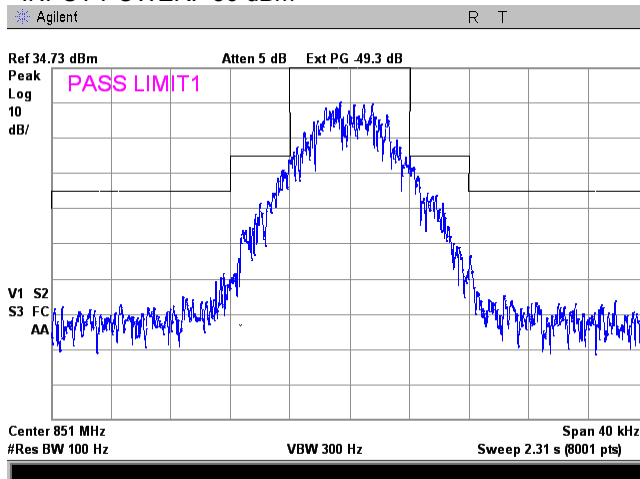
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
C4FM downlink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

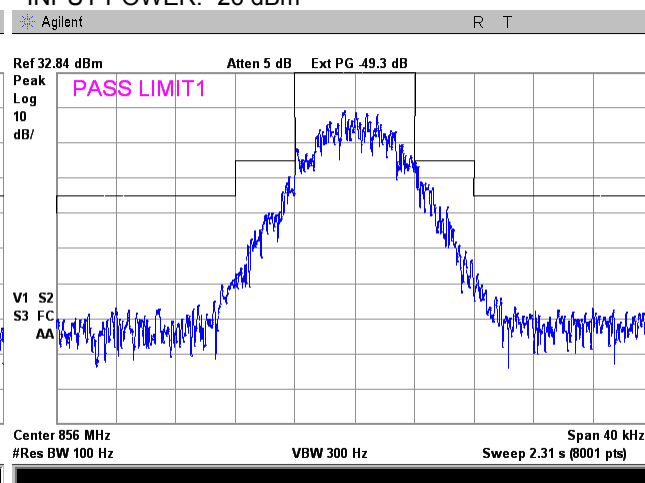
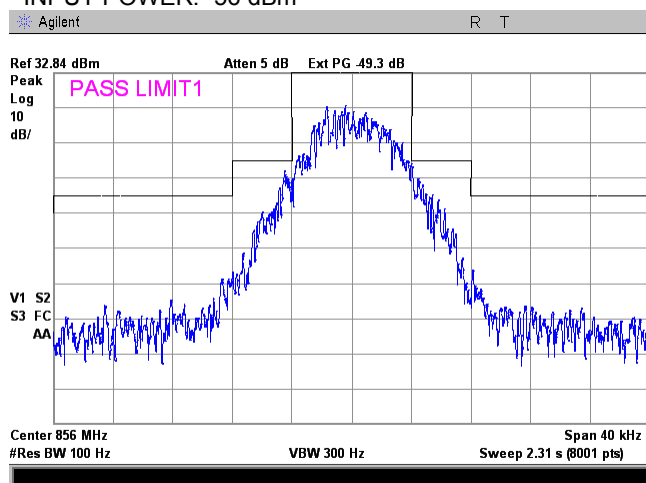


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.22 Emission mask test result at mid frequency carrier, Port 1

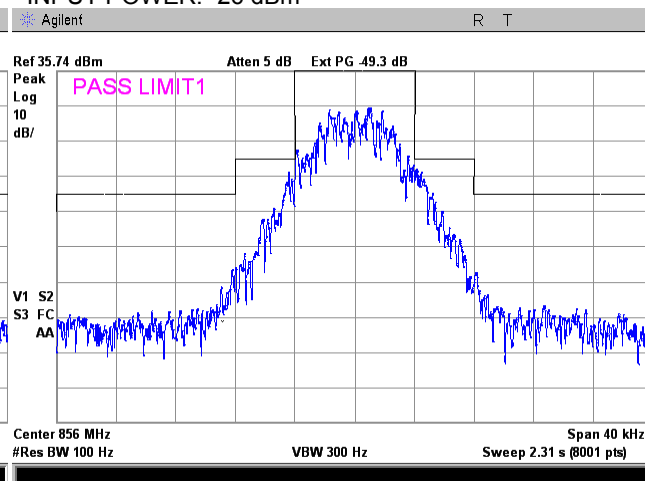
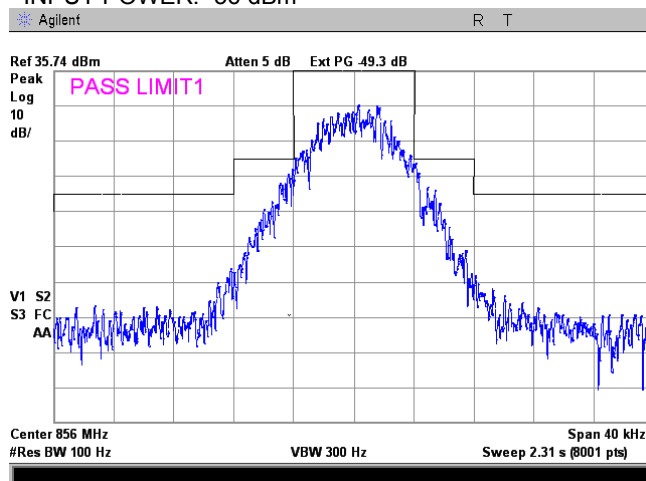
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
C4FM downlink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

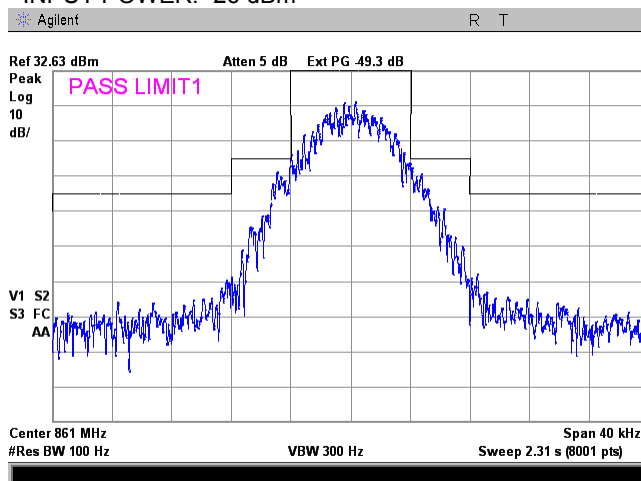
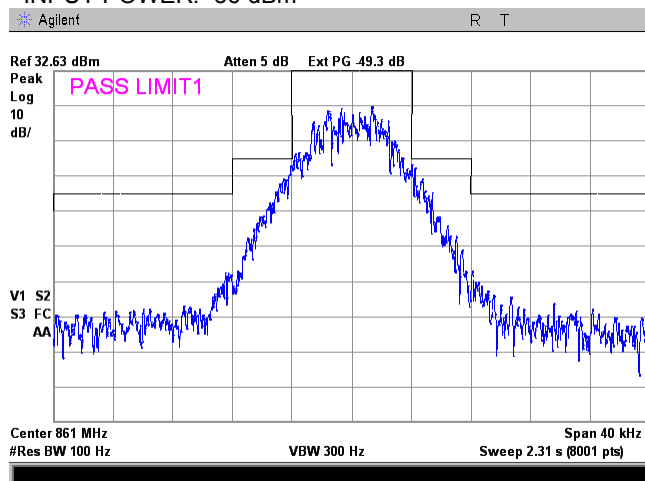


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.23 Emission mask test result at high frequency carrier, Port 1

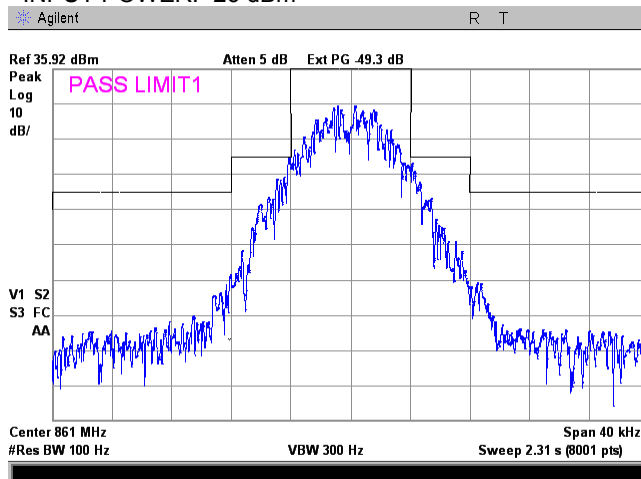
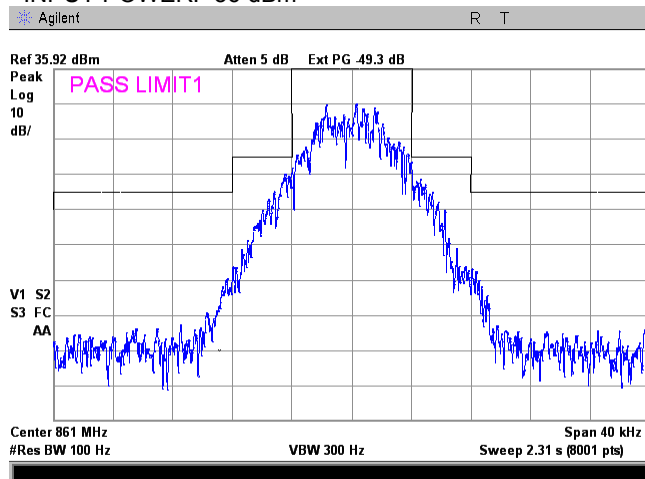
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
C4FM downlink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

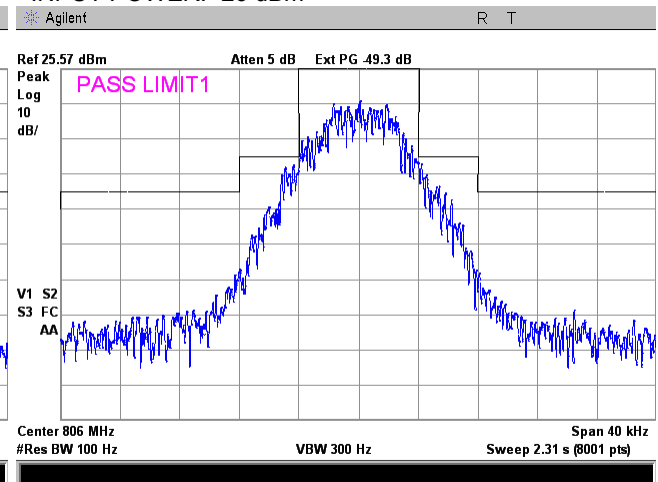
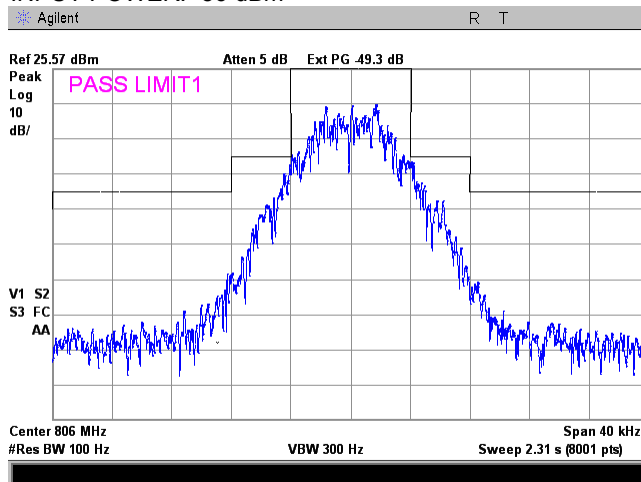


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.24 Emission mask test result at low frequency carrier, Port 2

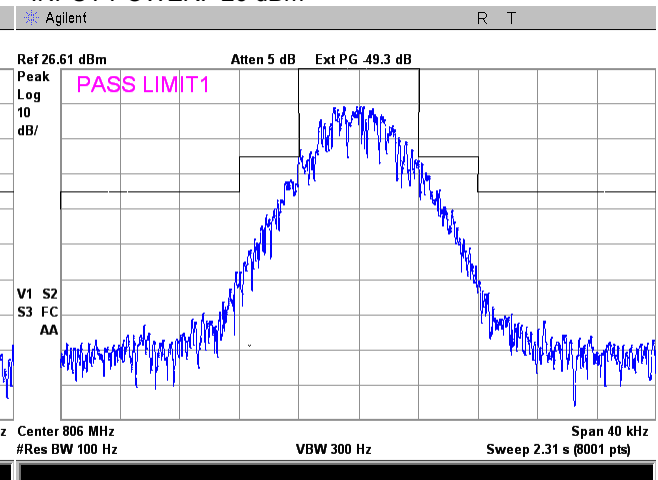
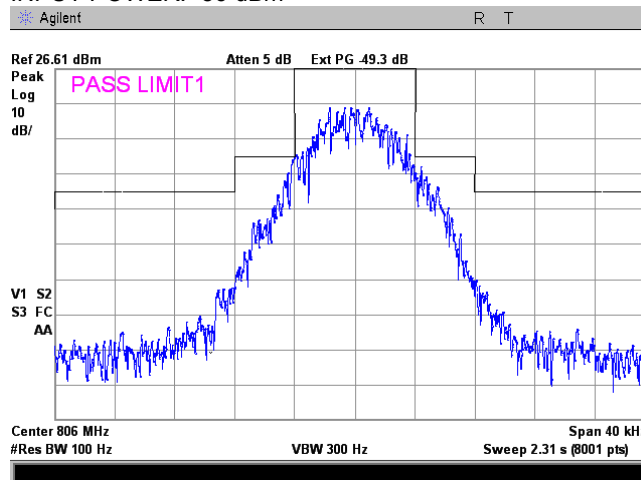
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 816 MHz
C4FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

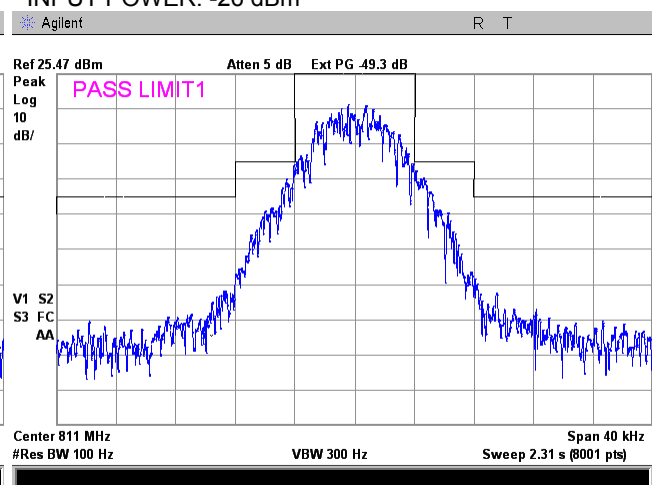
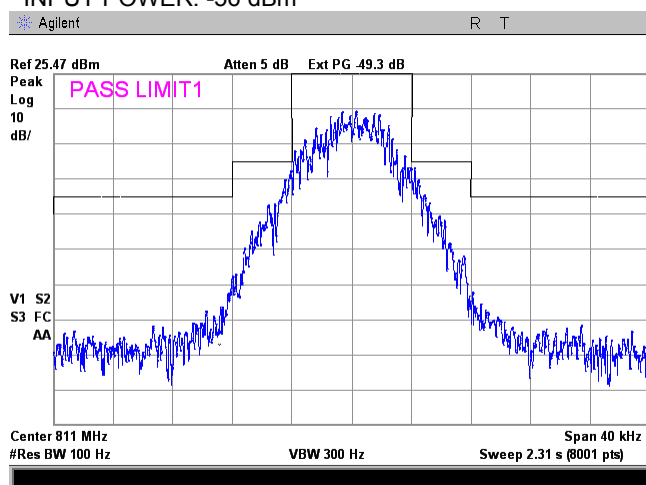


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.25 Emission mask test result at mid frequency carrier, Port 2

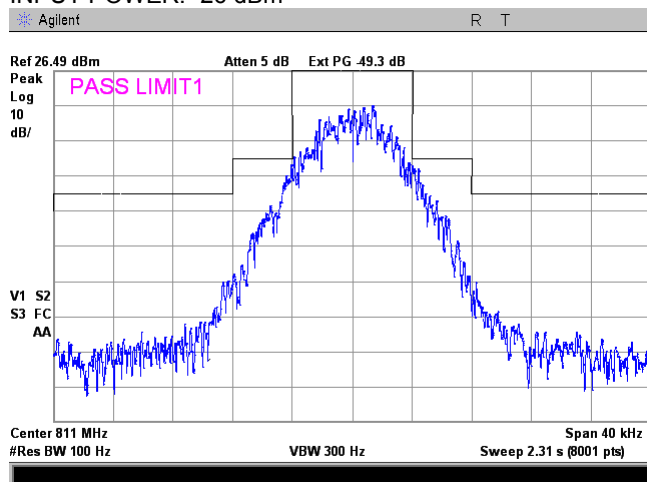
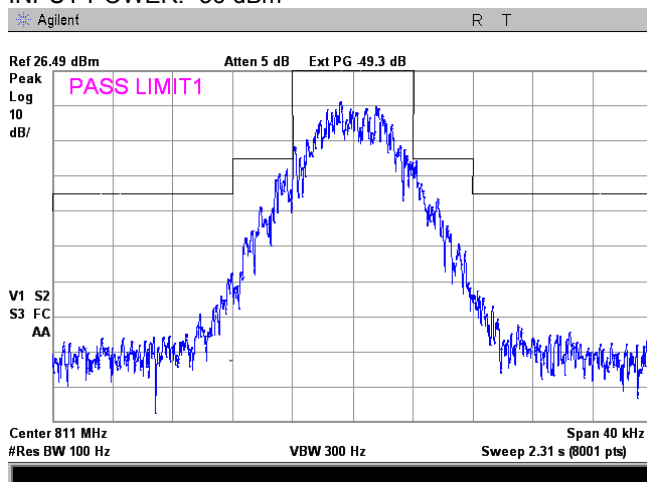
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 816 MHz
C4FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

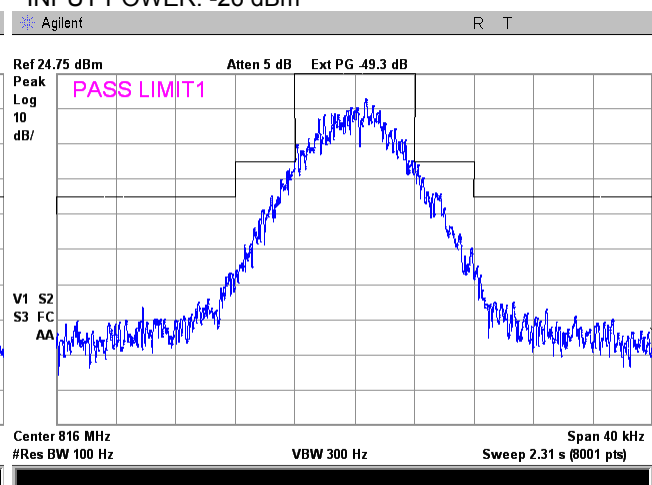
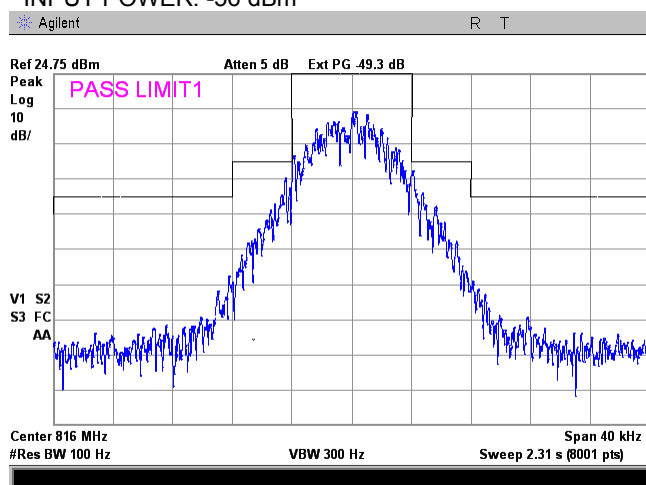


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.26 Emission mask test result at high frequency carrier, Port 2

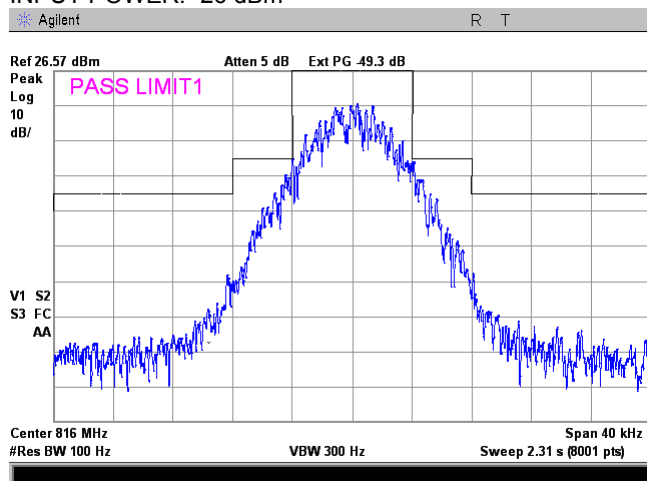
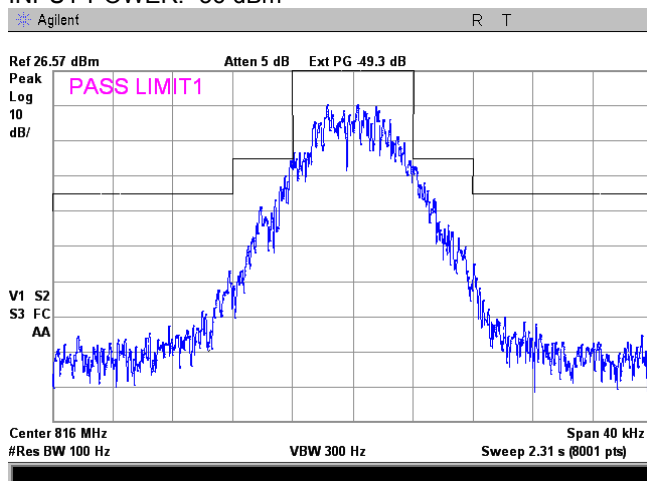
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 816 MHz
C4FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

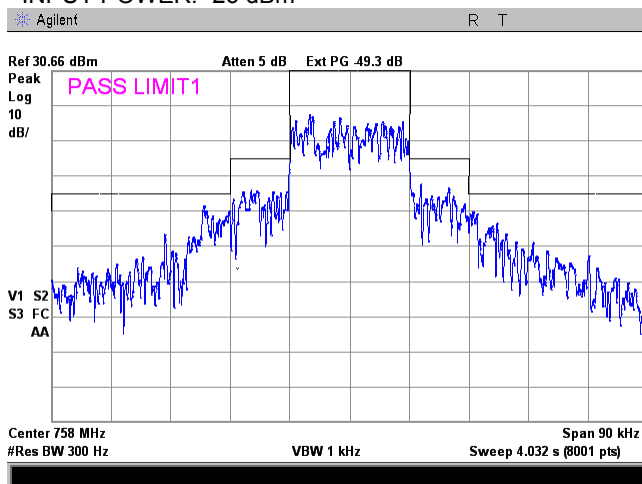
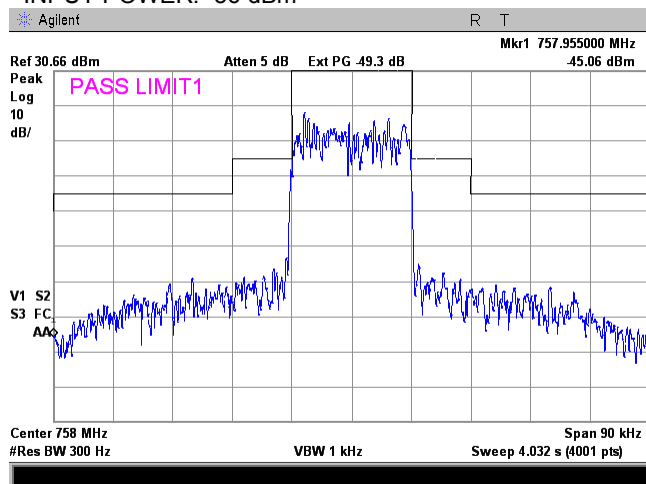


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.27 Emission mask test result at low frequency carrier, Port 1

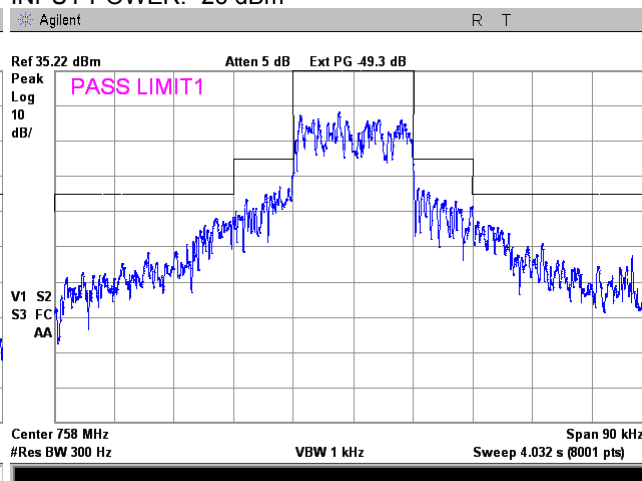
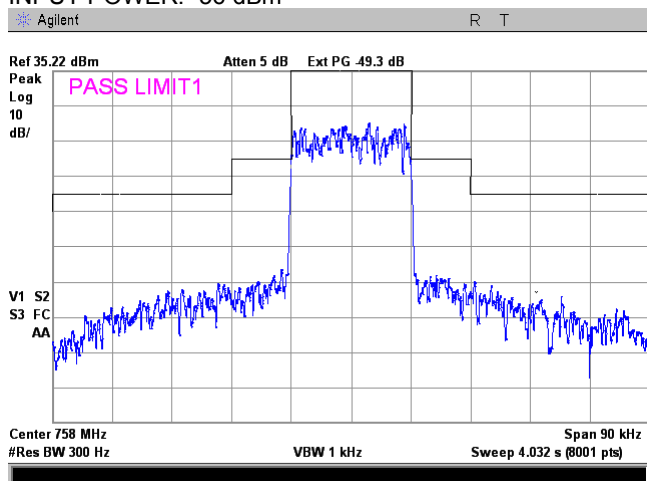
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
iDEN QAM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

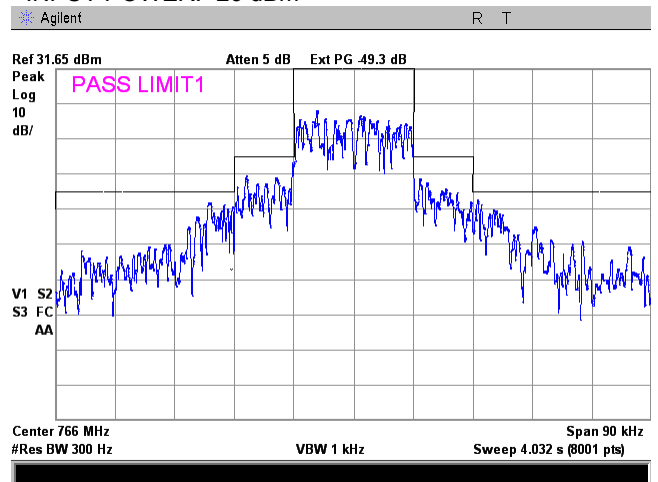
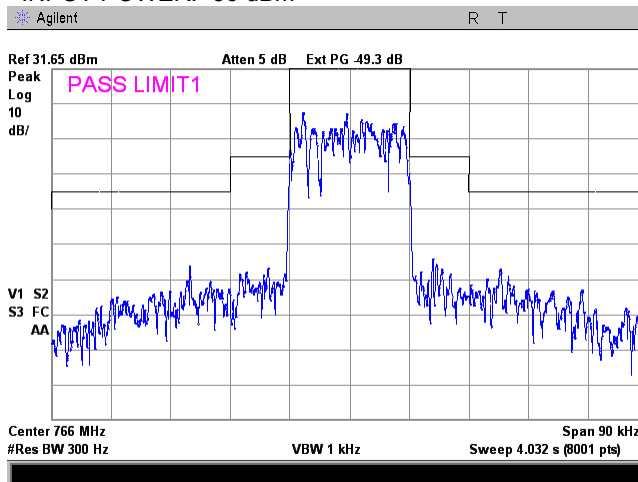


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.28 Emission mask test result at mid frequency carrier, Port 1

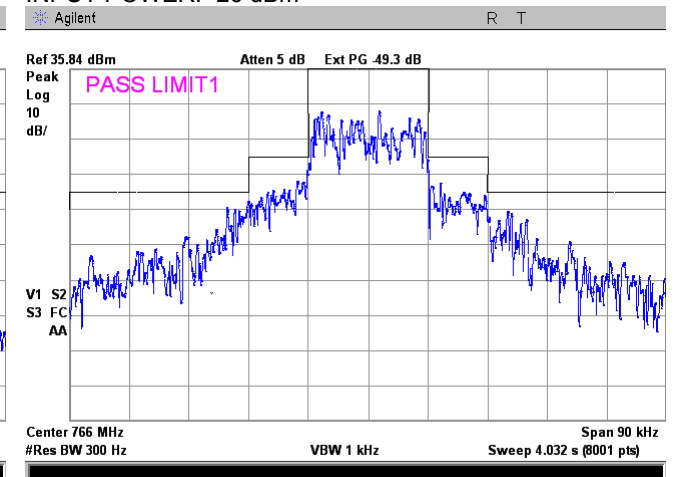
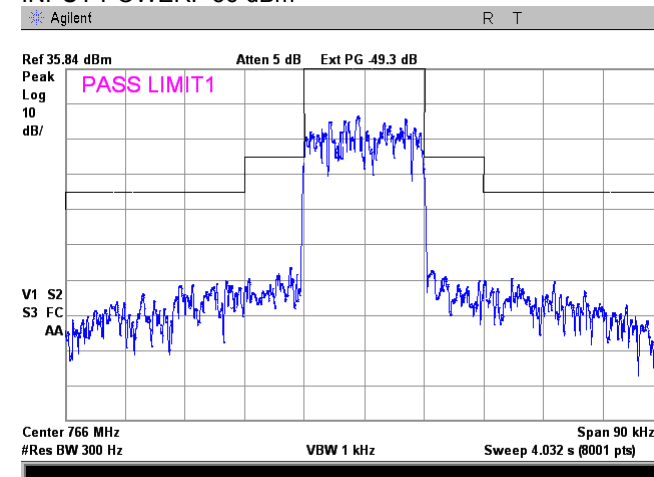
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
iDEN QAM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

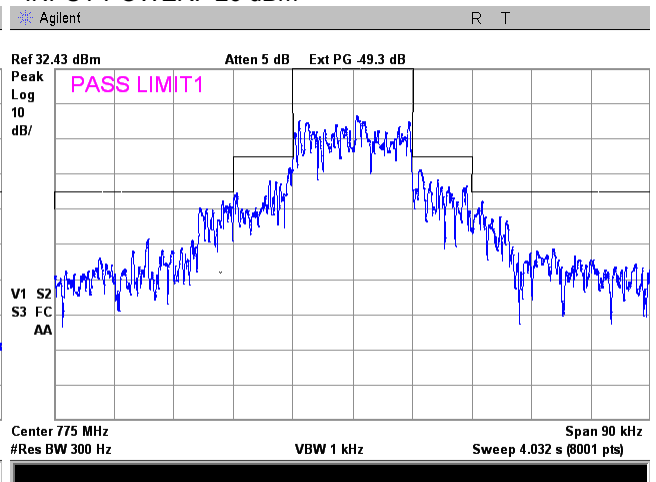
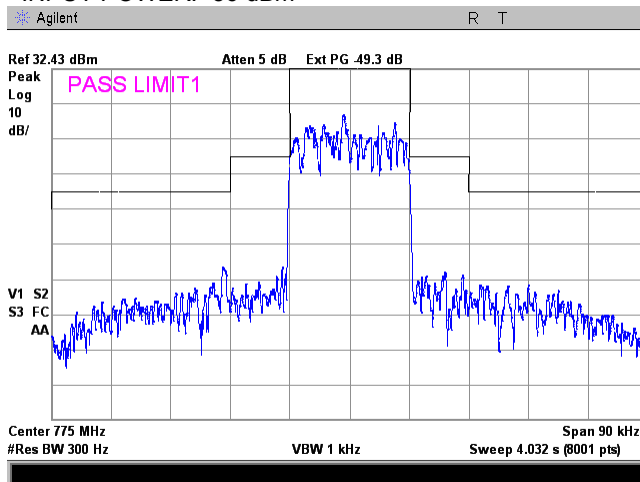


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.29 Emission mask test result at high frequency carrier, Port 1

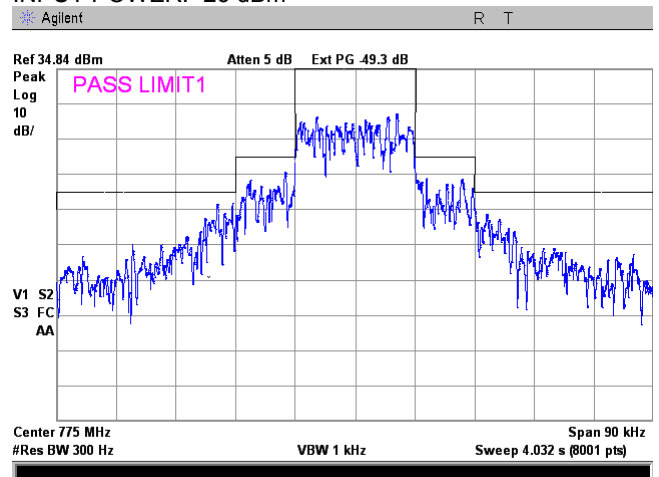
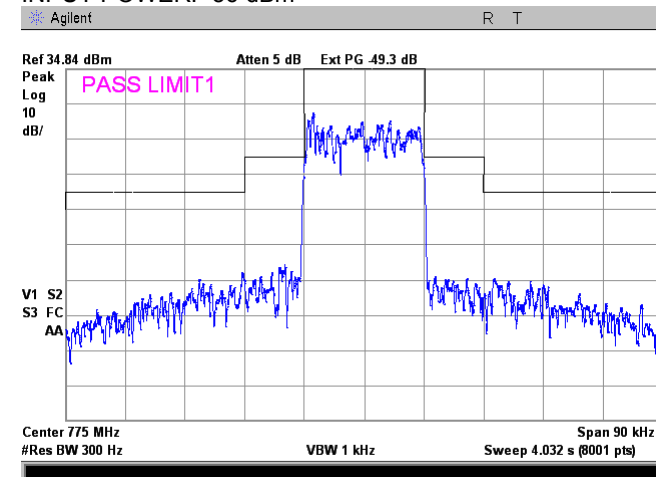
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
iDEN QAM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

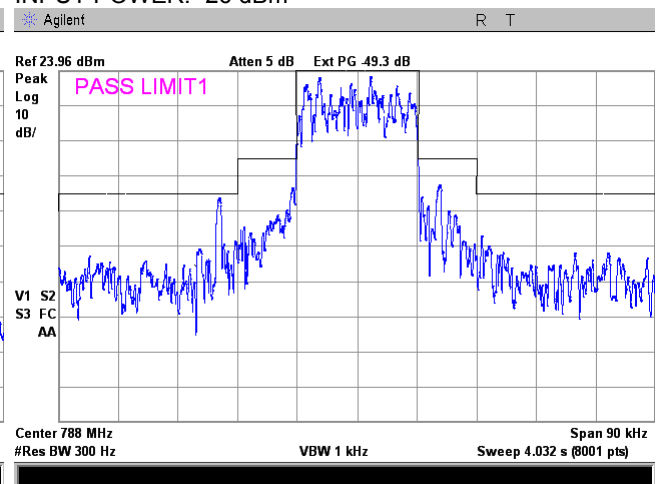
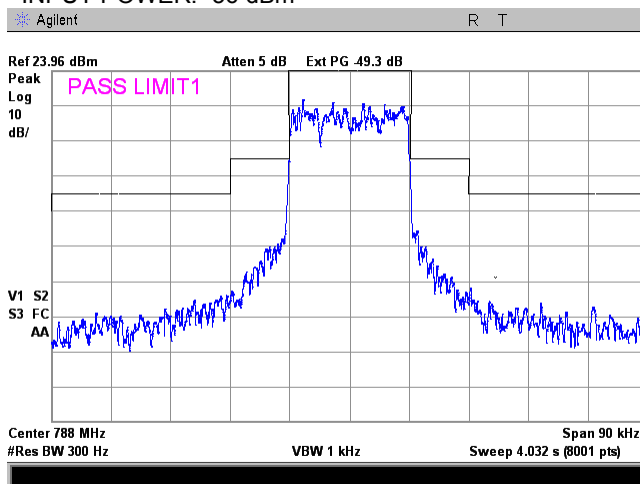


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.30 Emission mask test result at low frequency carrier, Port 2

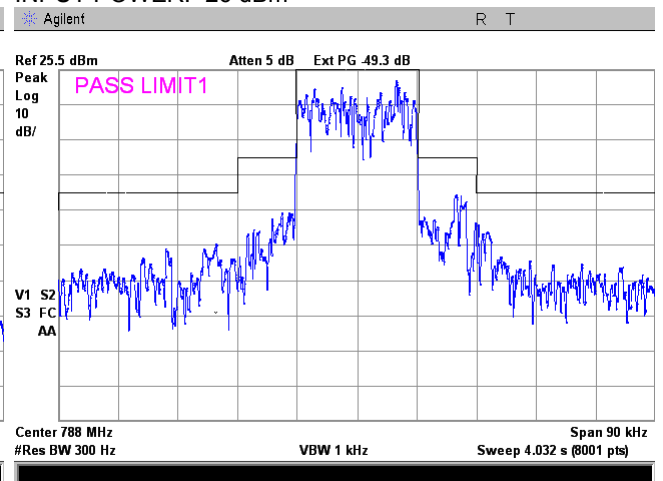
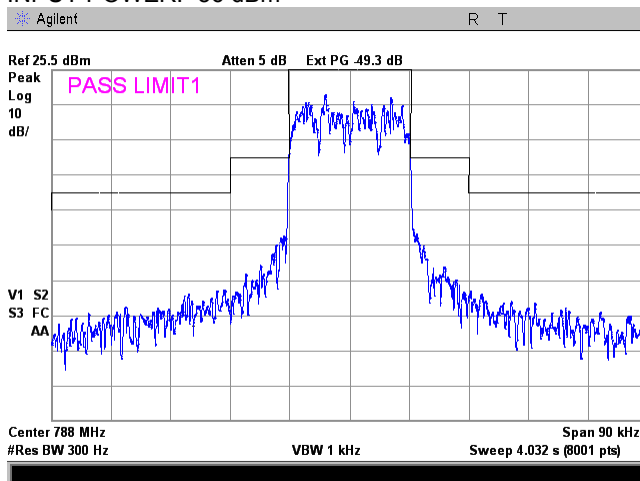
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
iDEN QAM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

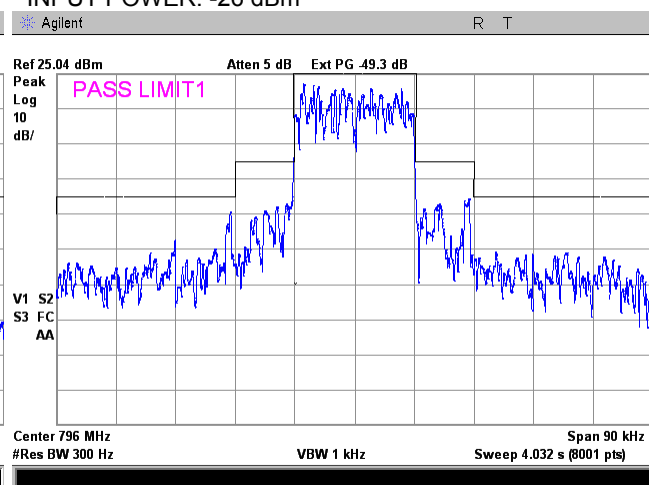
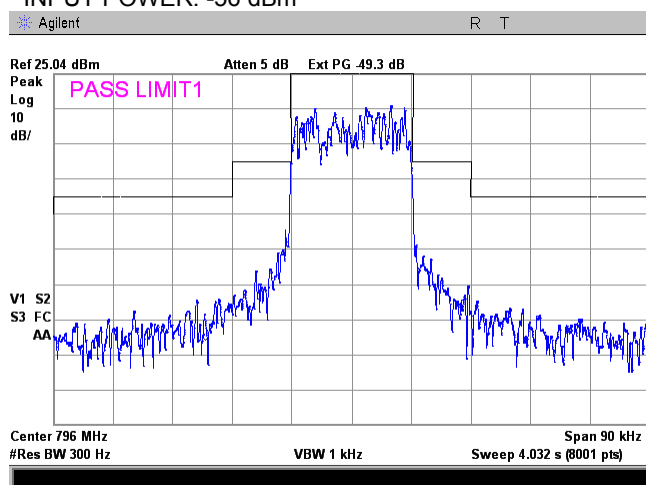


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.31 Emission mask test result at mid frequency carrier, Port 2

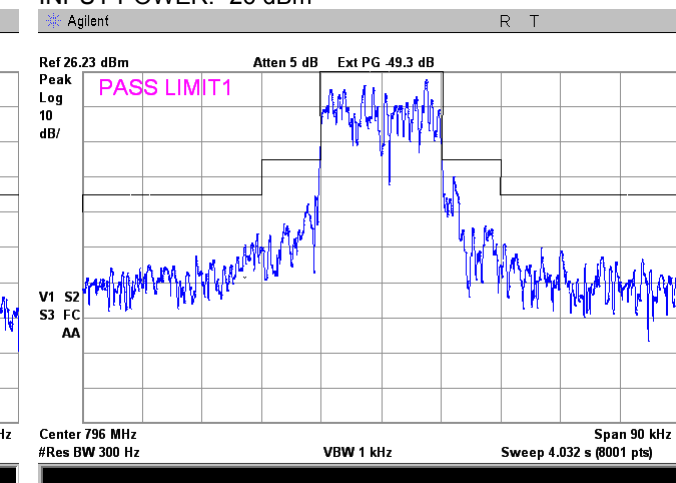
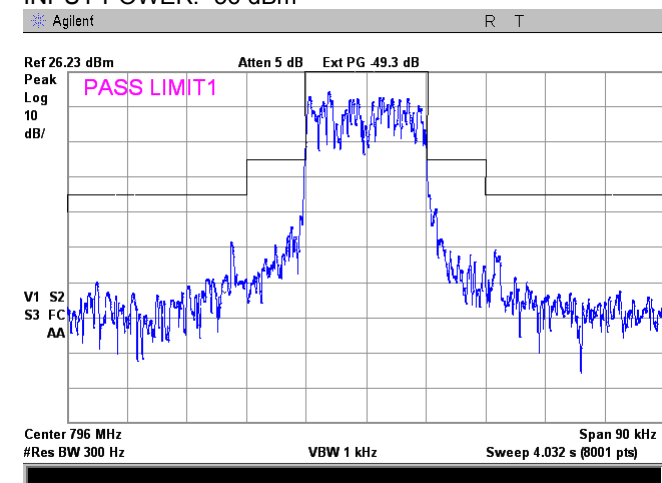
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
iDEN QAM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

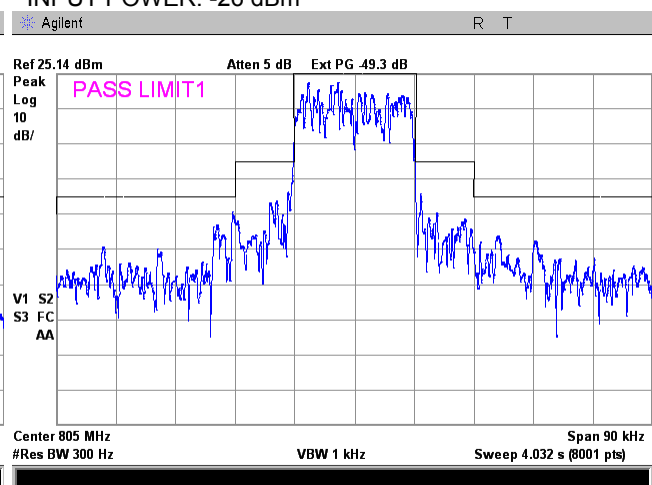
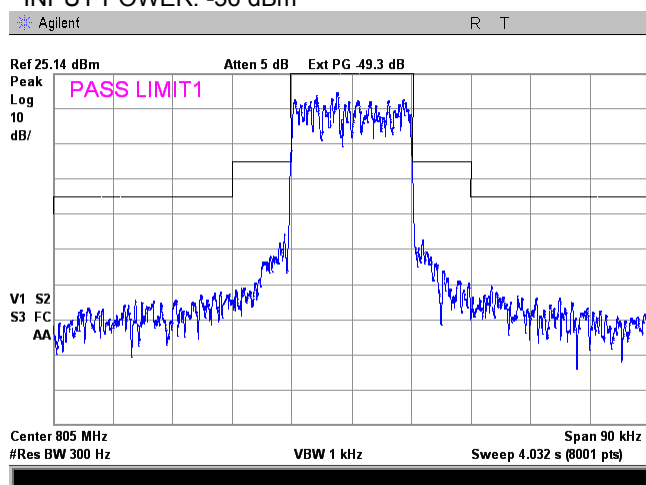


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.32 Emission mask test result at high frequency carrier, Port 2

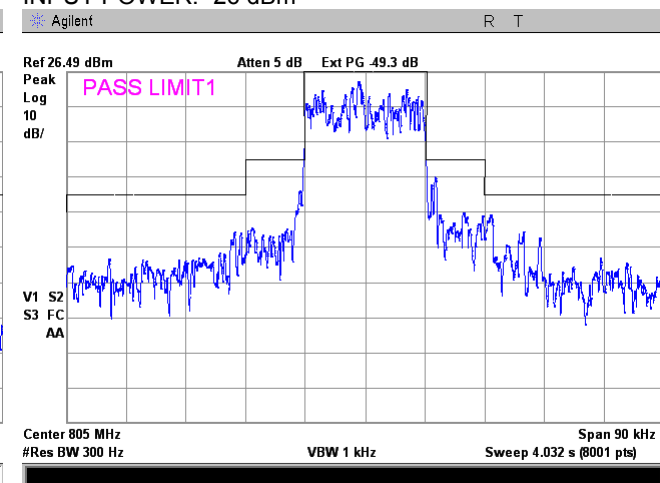
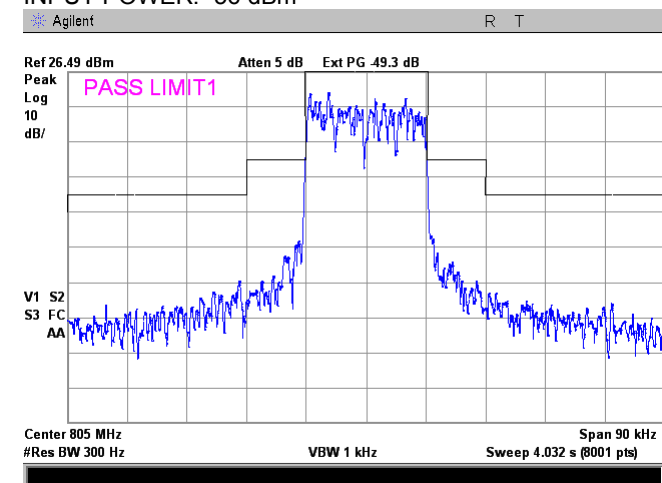
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
iDEN QAM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

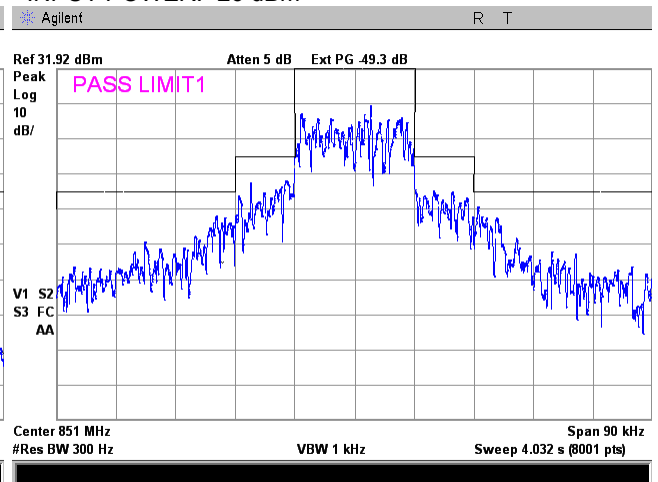
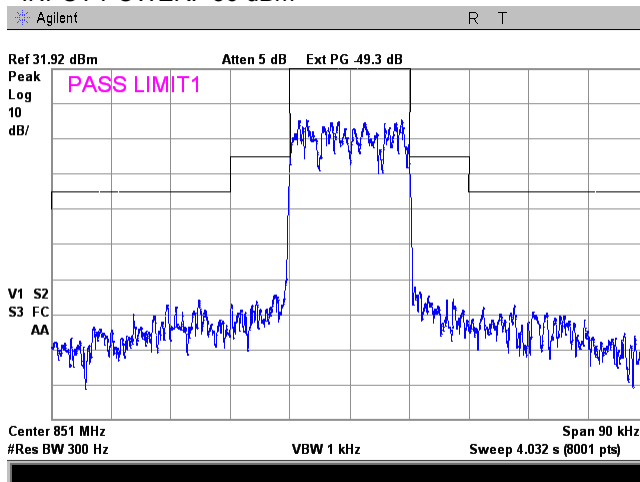


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.33 Emission mask test result at low frequency carrier, Port 1

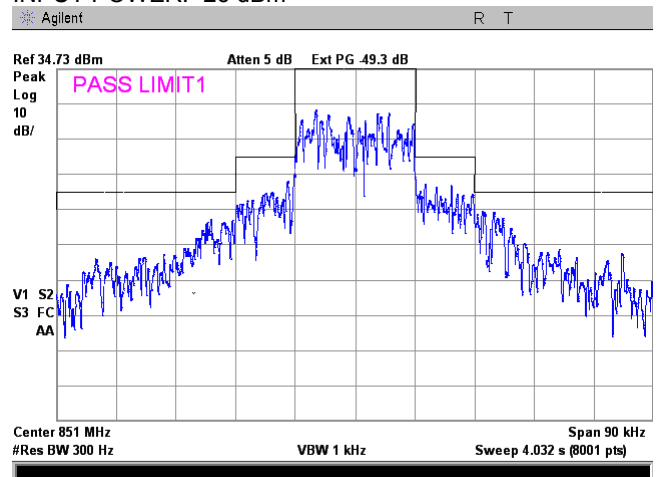
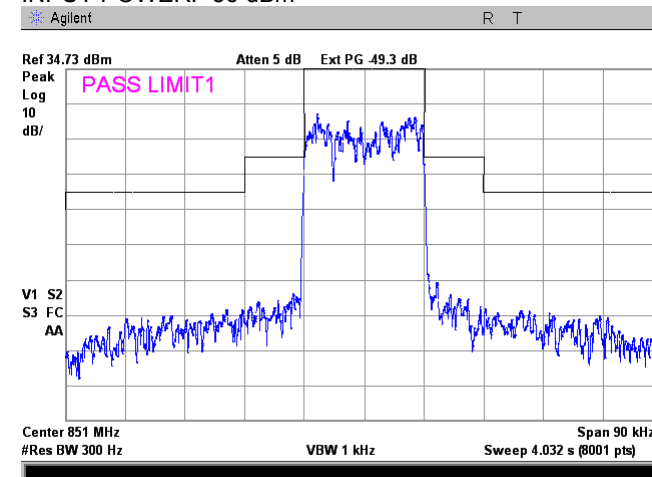
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
iDEN QAM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

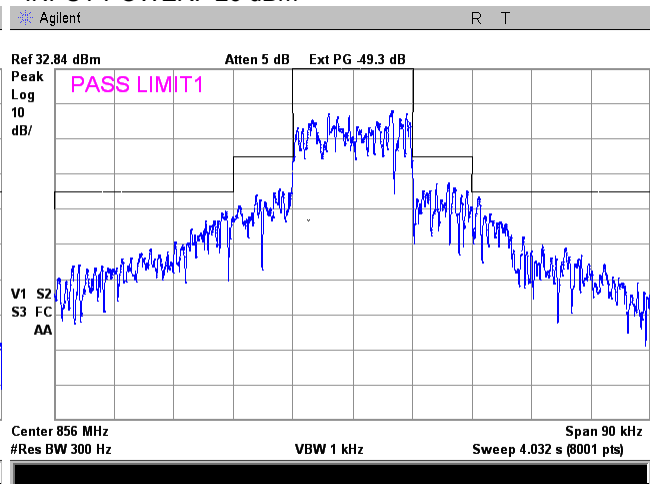
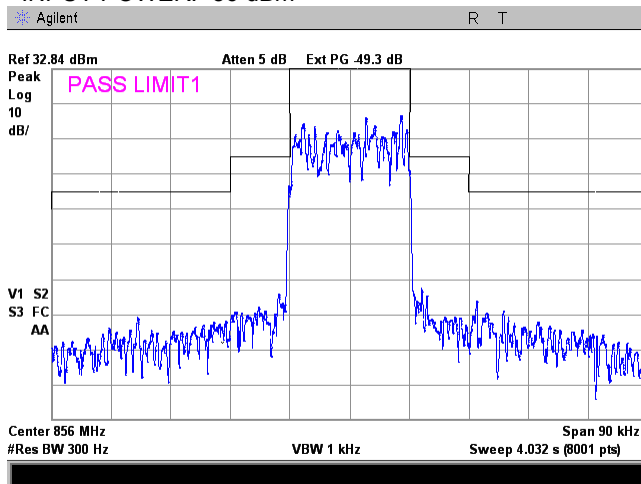


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.34 Emission mask test result at mid frequency carrier, Port 1

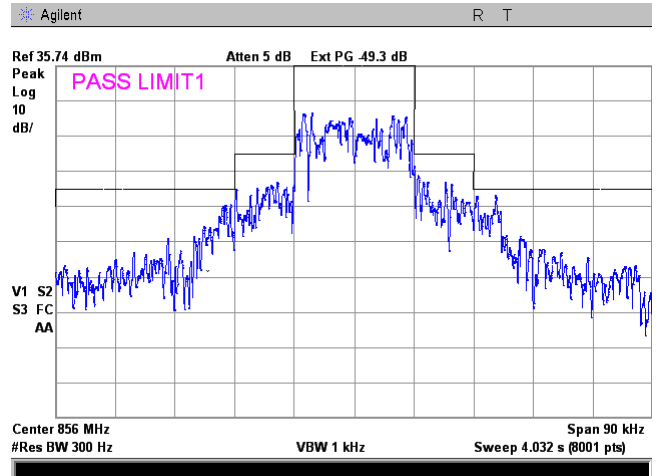
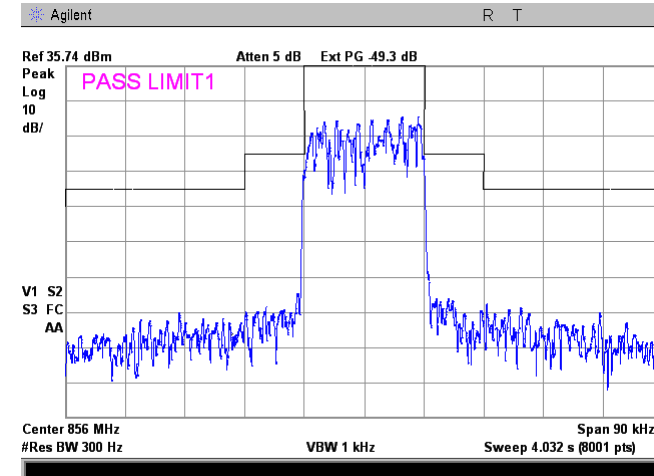
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
iDEN QAM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

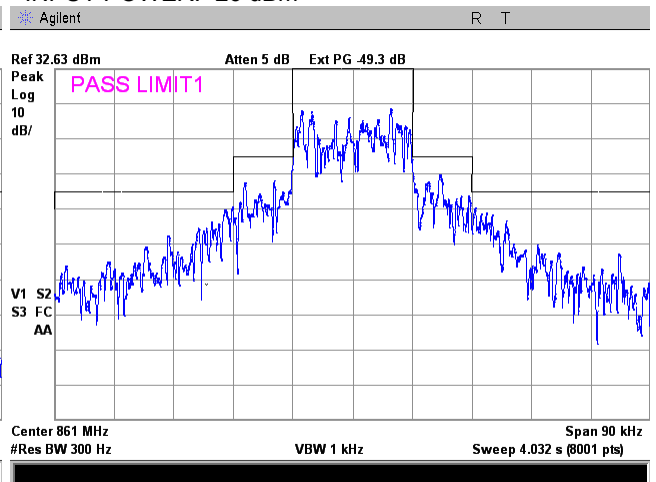
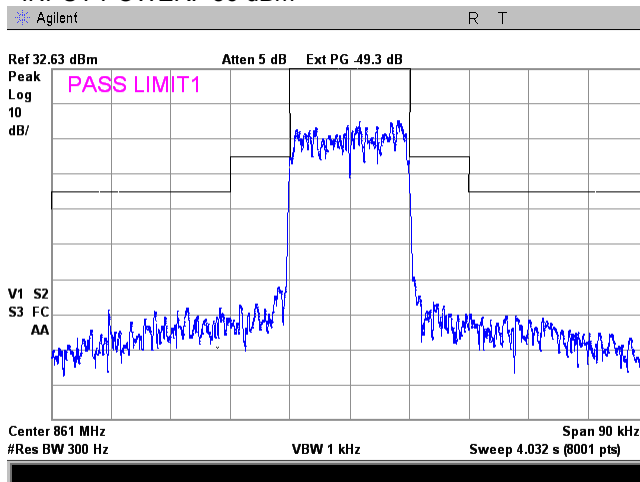


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.35 Emission mask test result at high frequency carrier, Port 1

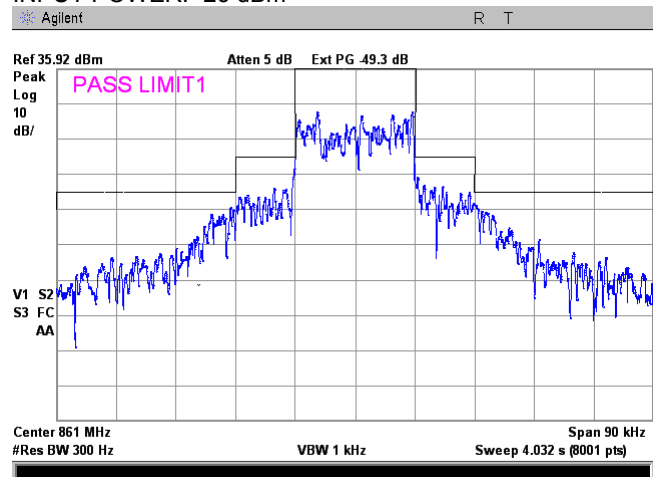
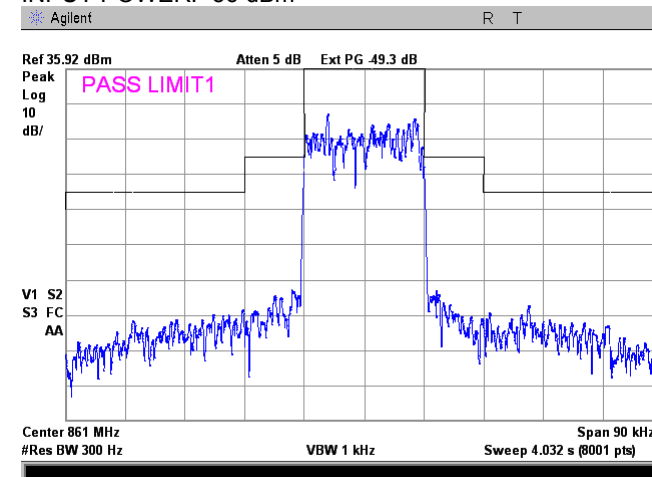
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
iDEN QAM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

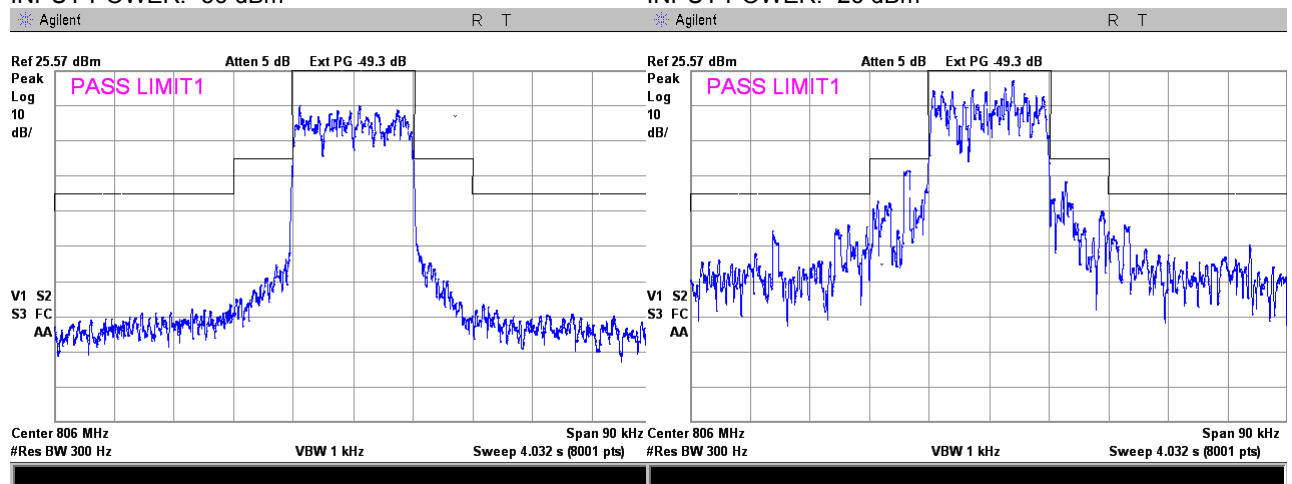
Single Band Single Channel
INPUT POWER: -26 dBm



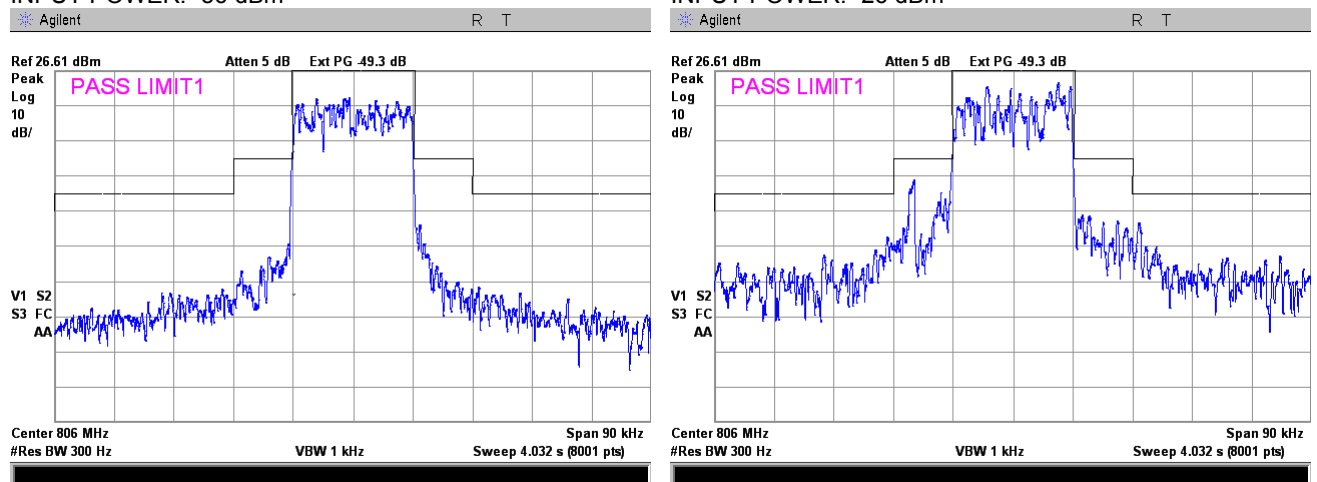
Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.36 Emission mask test result at low frequency carrier, Port 2

FREQUENCY RANGE: 806 - 816 MHz
 OPERATIONAL MODE: iDEN QAM uplink transmit
 INPUT PORT: Mobile
 EMISSION MASK: 90.210(b)
 CONFIGURATION: Single Band Dual Channels
 INPUT POWER: -56 dBm



CONFIGURATION: Single Band Single Channel
 INPUT POWER: -56 dBm

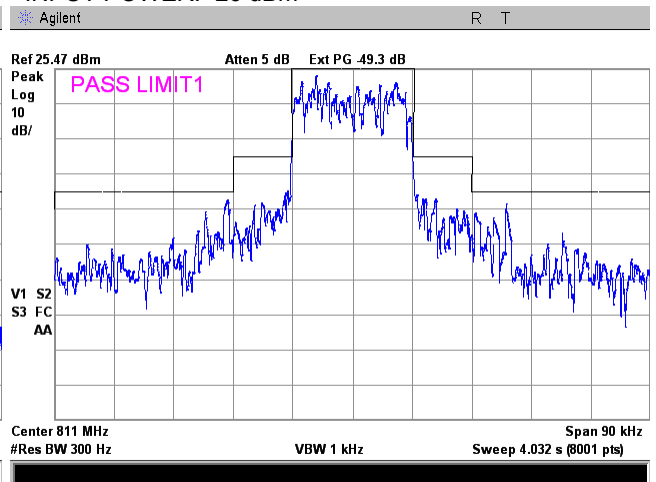
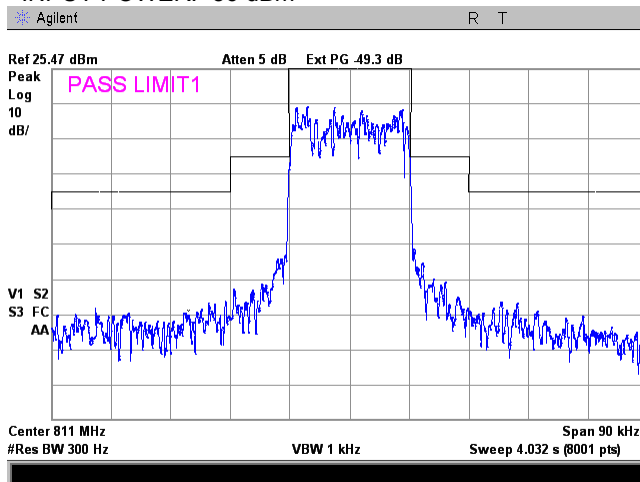


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.37 Emission mask test result at mid frequency carrier, Port 2

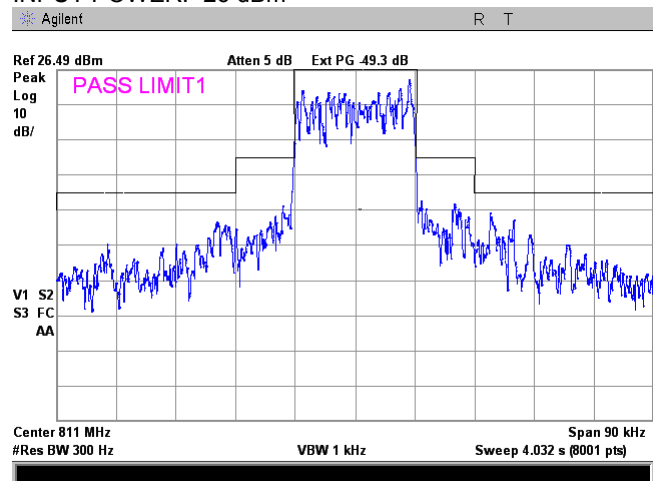
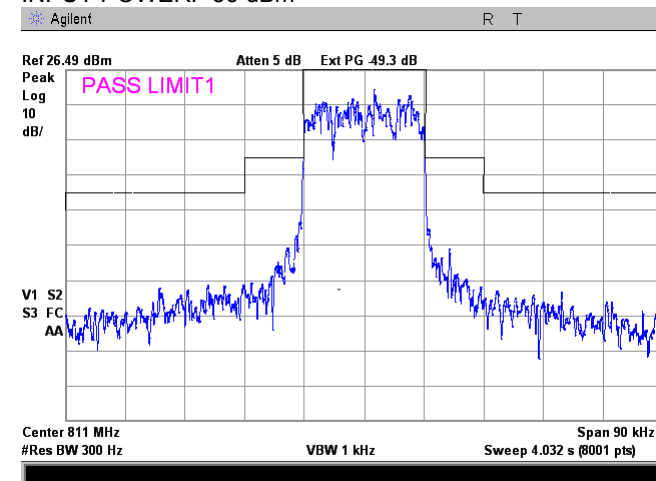
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 816 MHz
iDEN QAM uplink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

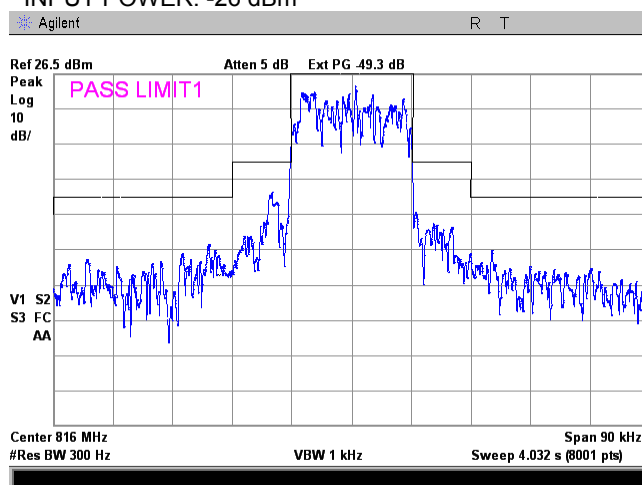
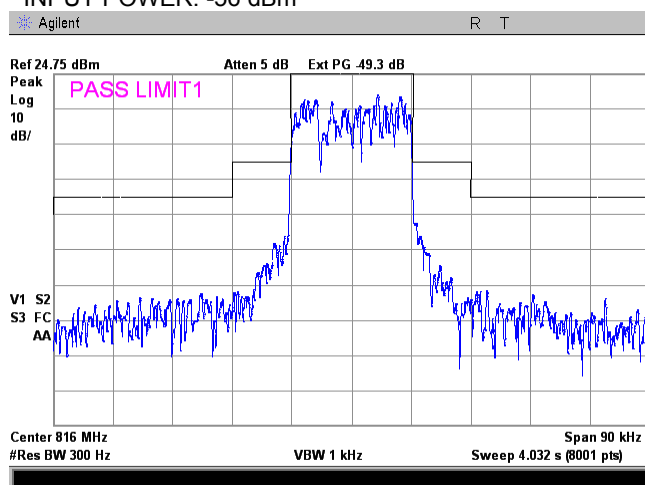


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

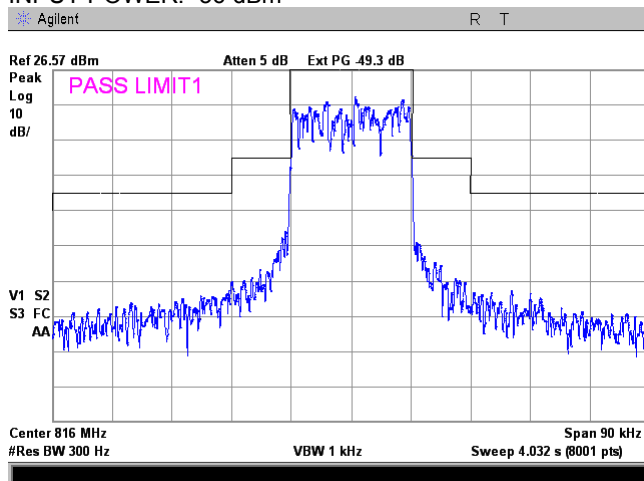
Plot 7.3.38 Emission mask test result at high frequency carrier, Port 2

FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
COMPOSITE INPUT POWER:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

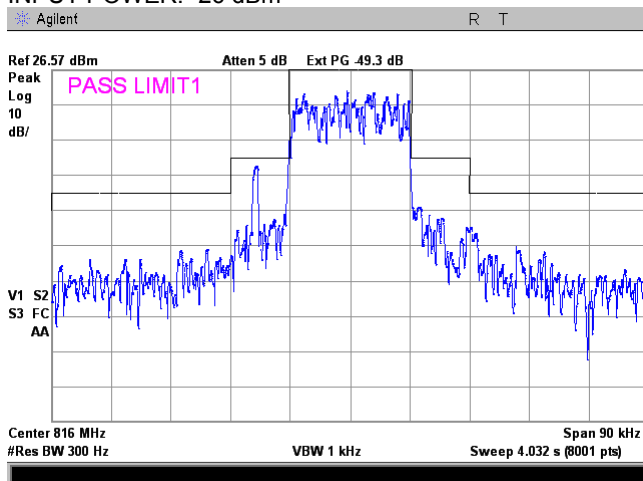
806 - 816 MHz
iDEN QAM uplink transmit
Base
-56 dBm
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm



Single Band Single Channel
INPUT POWER: -26 dBm

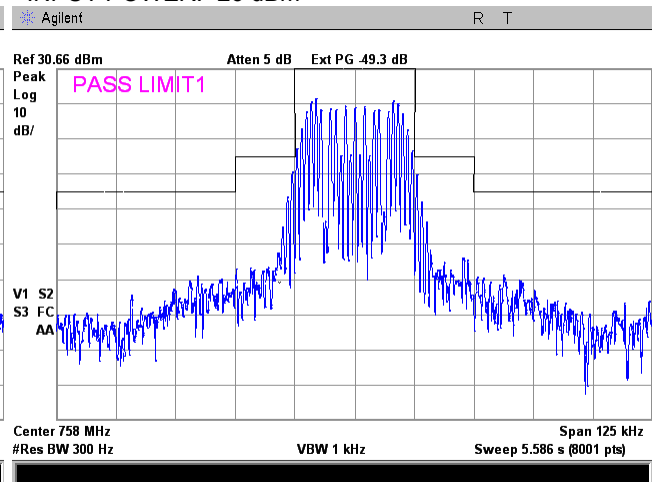
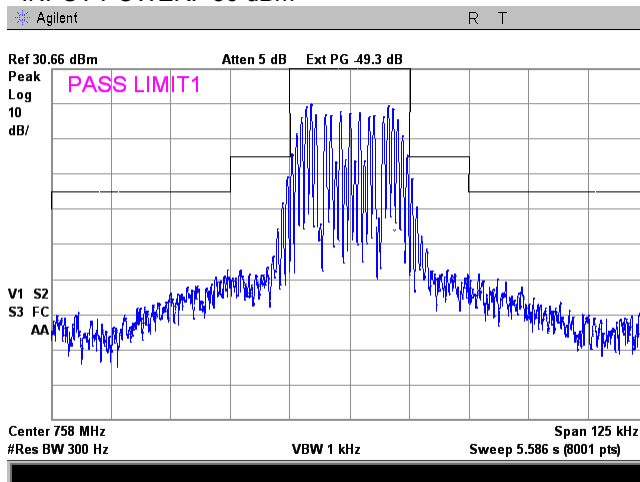


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.39 Emission mask test result at low frequency carrier, Port 1

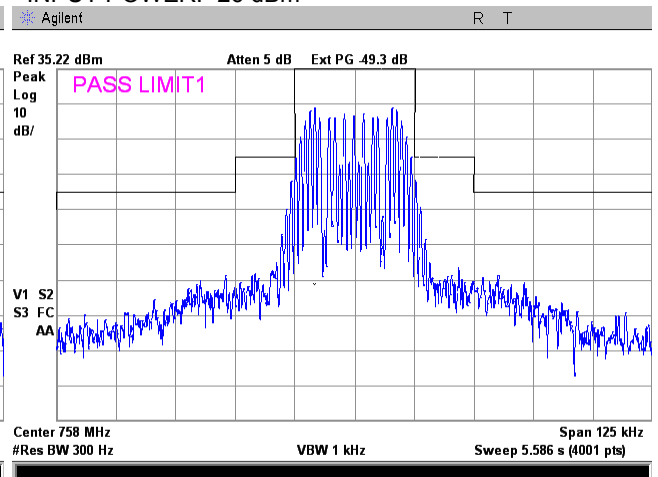
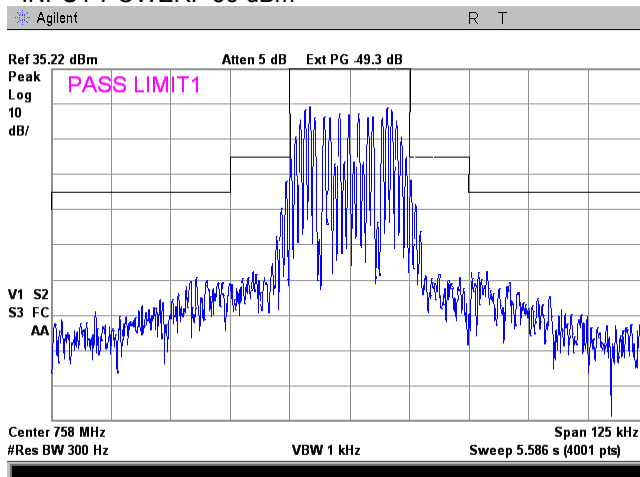
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
Analog FM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

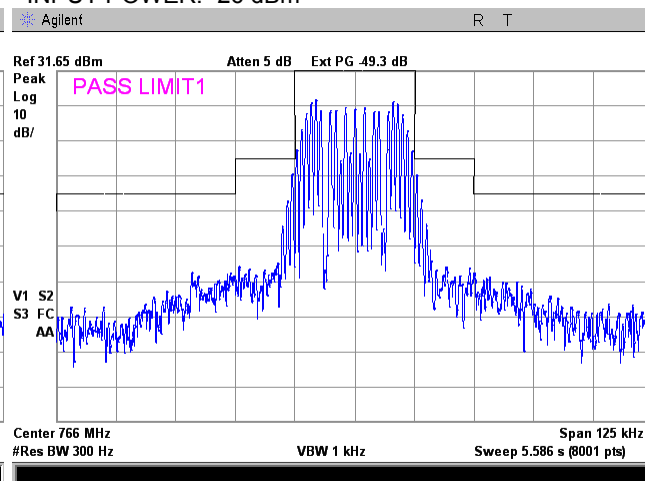
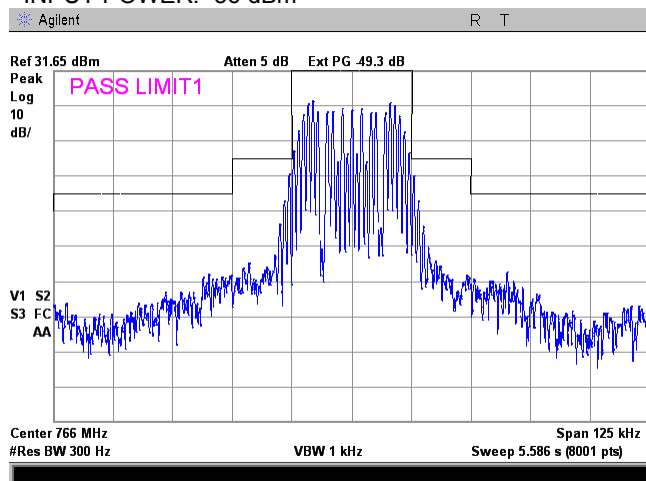


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.40 Emission mask test result at mid frequency carrier, Port 1

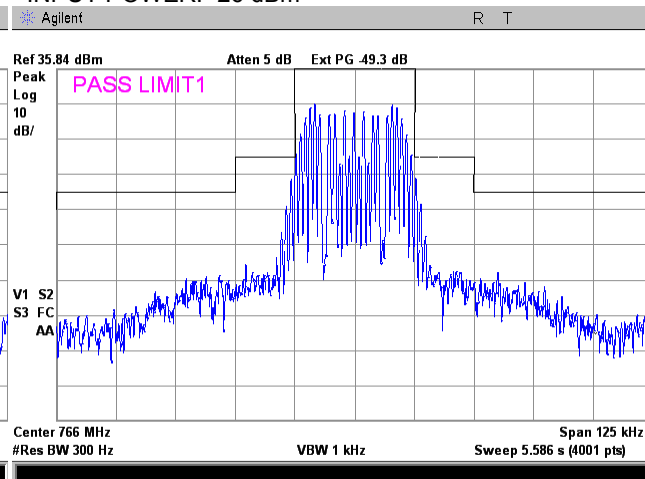
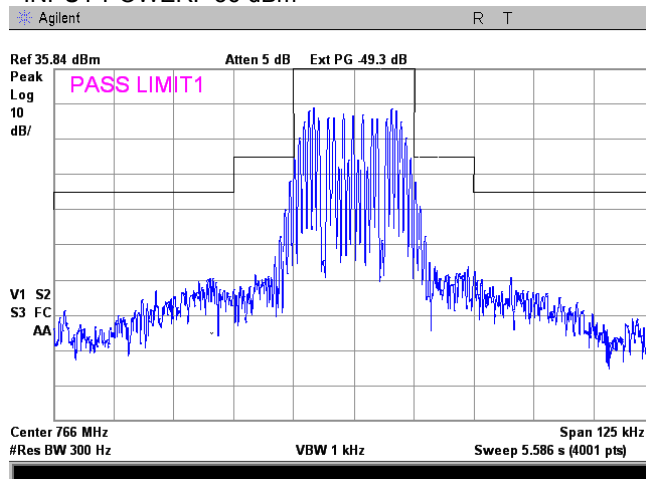
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
Analog FM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

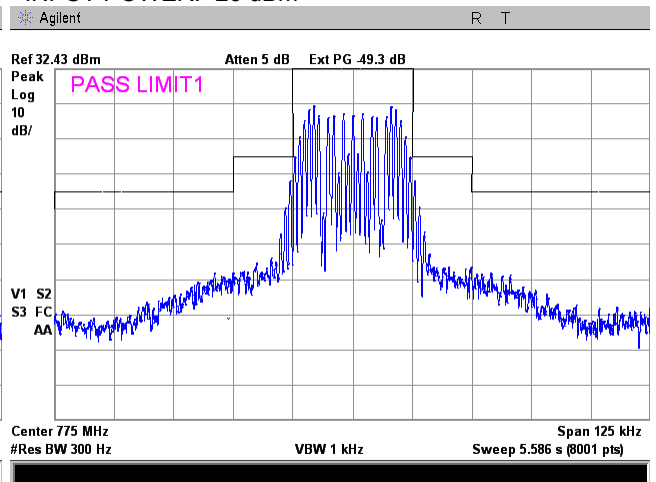
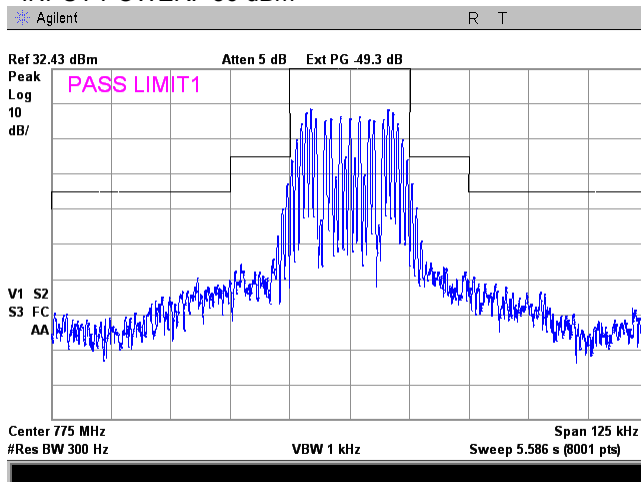


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.41 Emission mask test result at high frequency carrier, Port 1

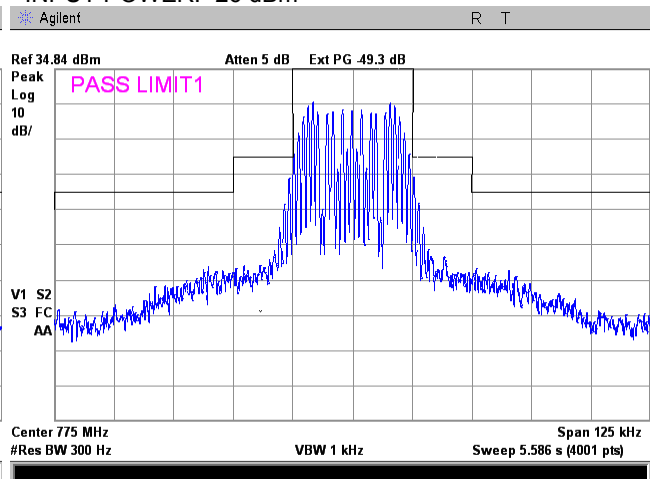
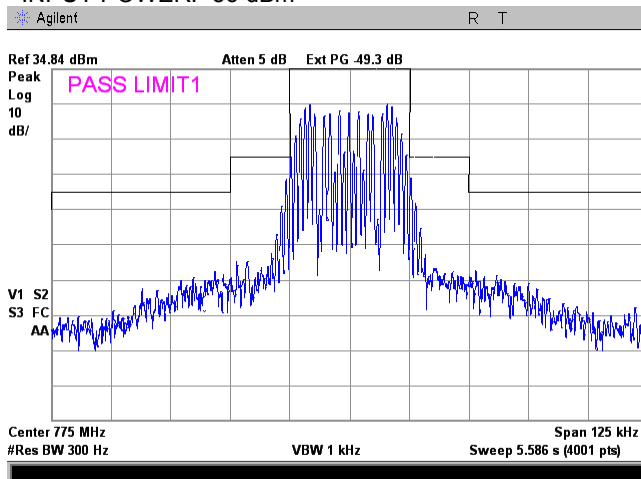
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 775 MHz
Analog FM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

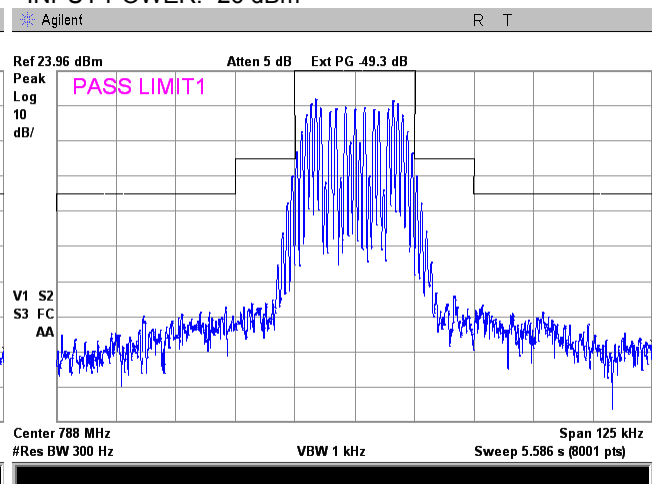
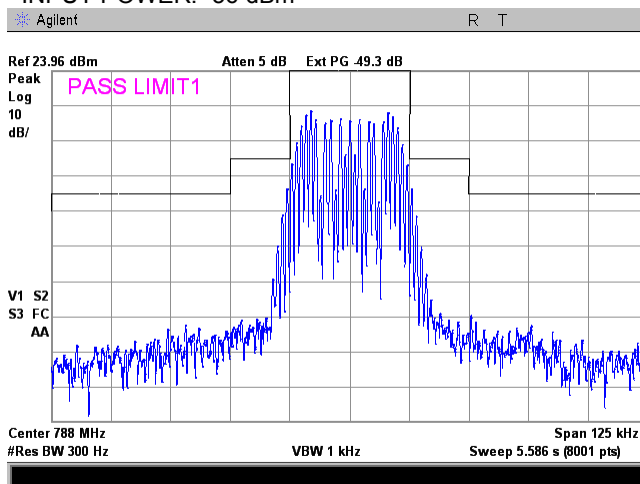


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.42 Emission mask test result at low frequency carrier, Port 2

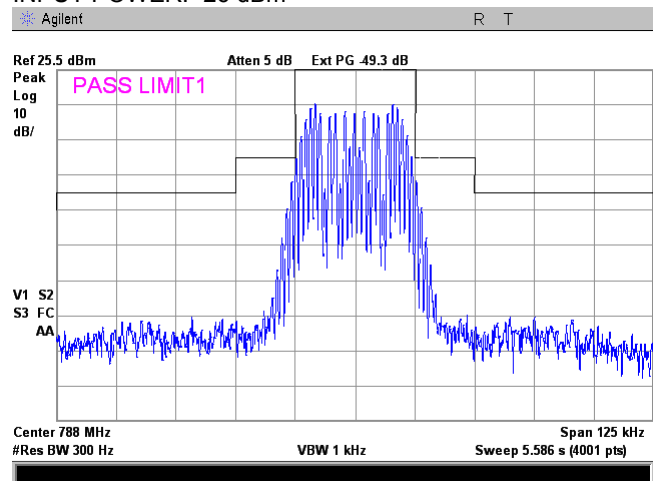
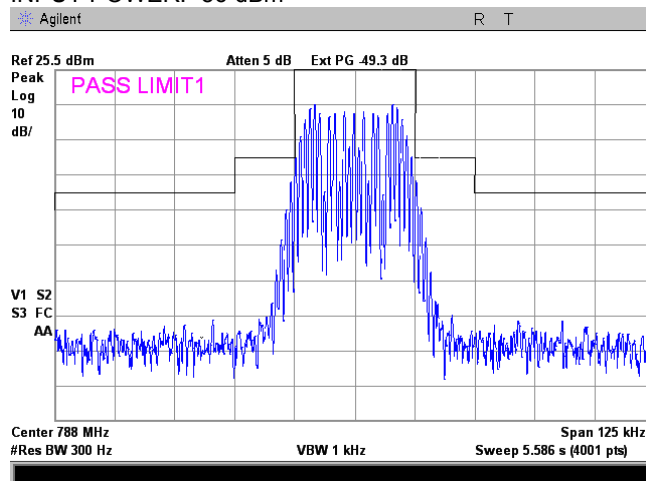
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
Analog FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

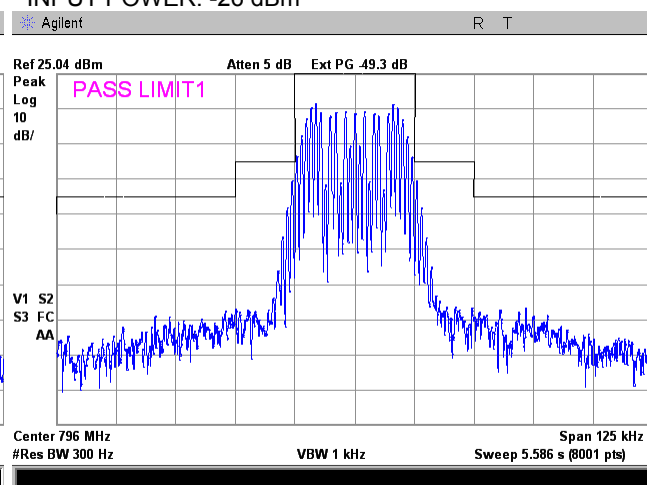
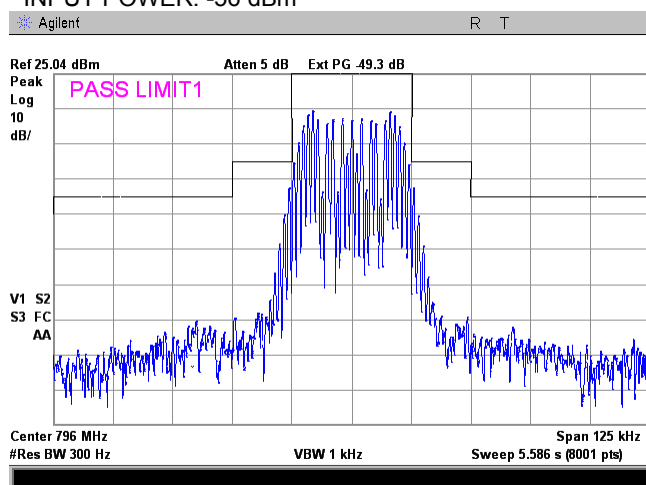


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.43 Emission mask test result at mid frequency carrier, Port 2

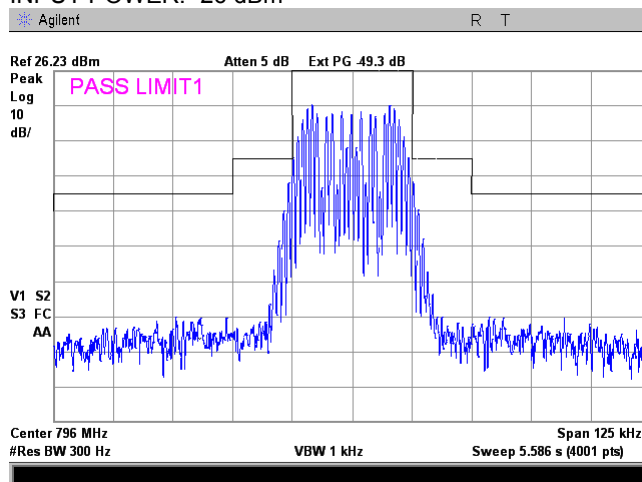
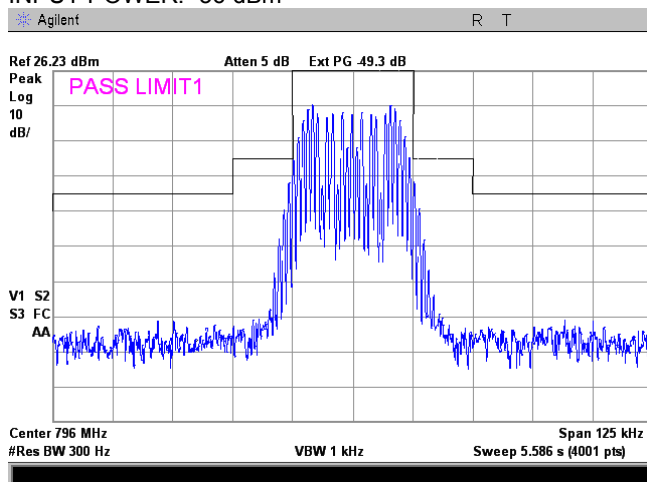
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
Analog FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

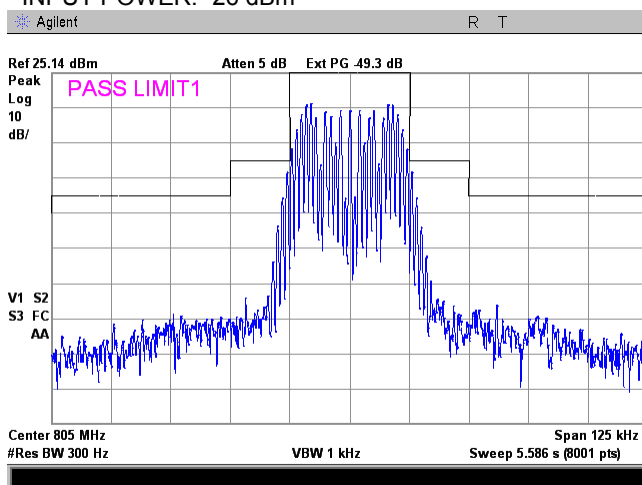
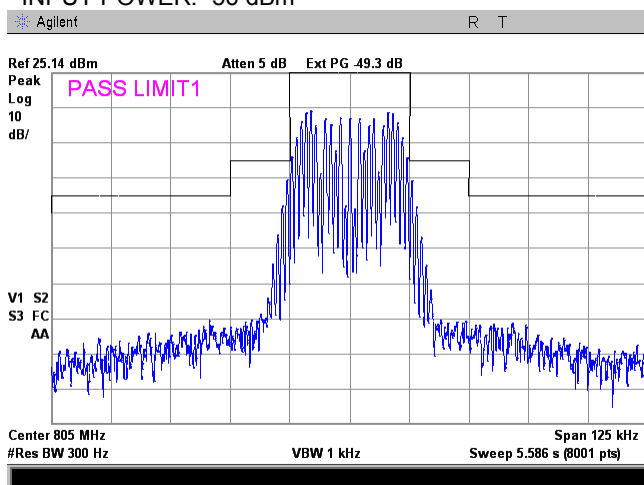


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.44 Emission mask test result at high frequency carrier, Port 2

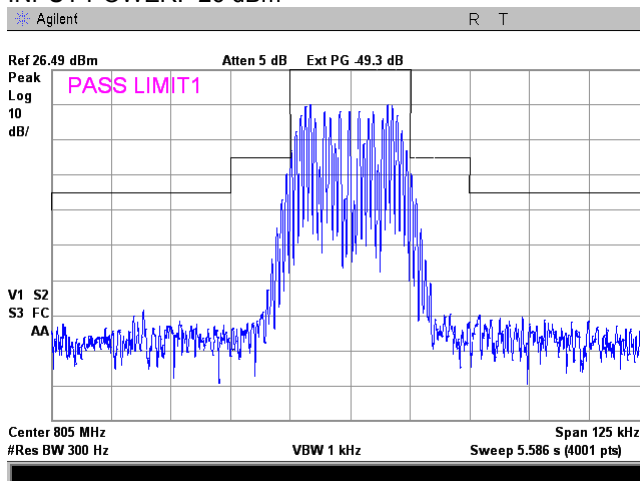
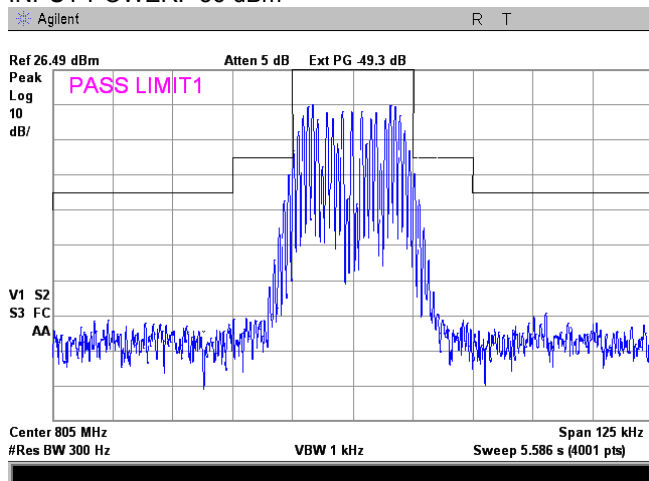
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 805 MHz
Analog FM uplink transmit
Mobile
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

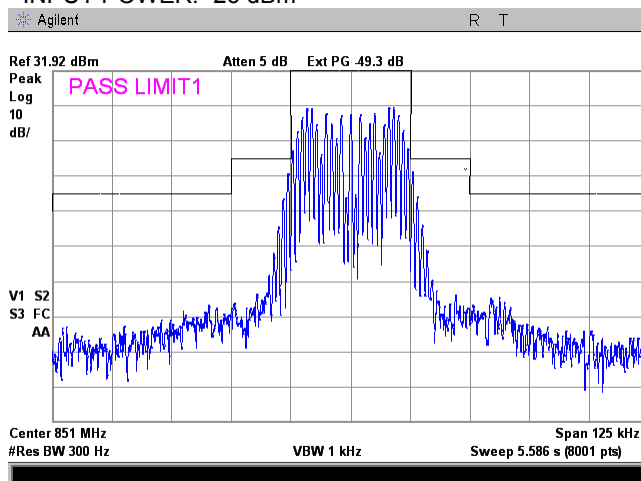
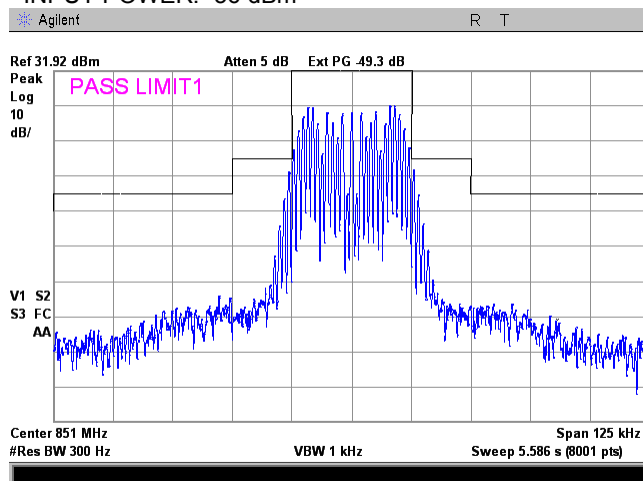


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.45 Emission mask test result at low frequency carrier, Port 1

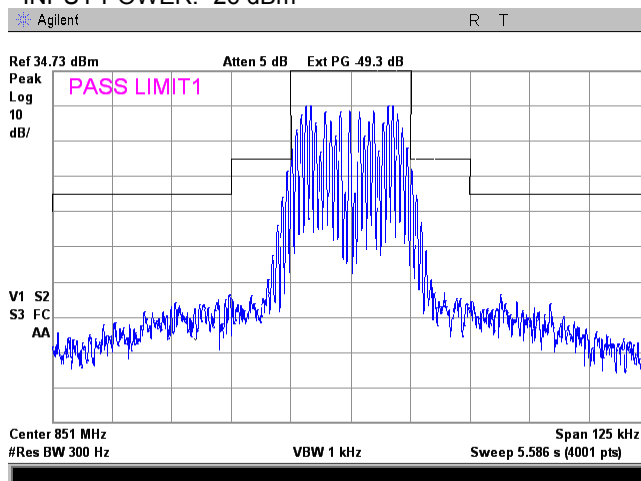
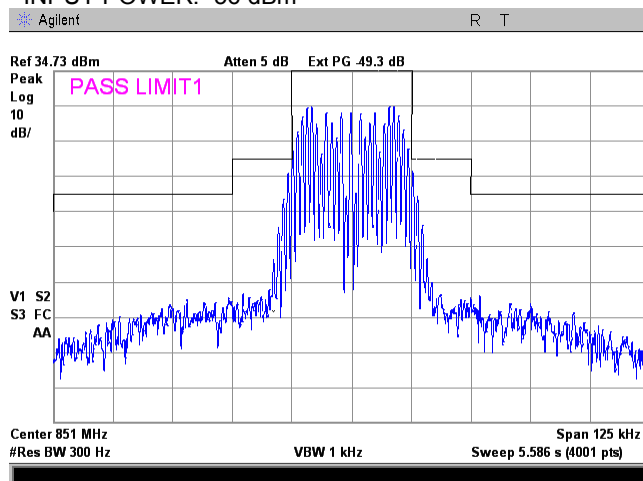
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
Analog FM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

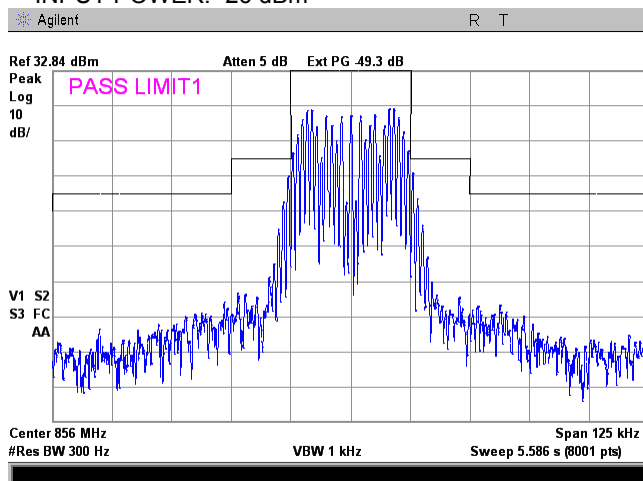
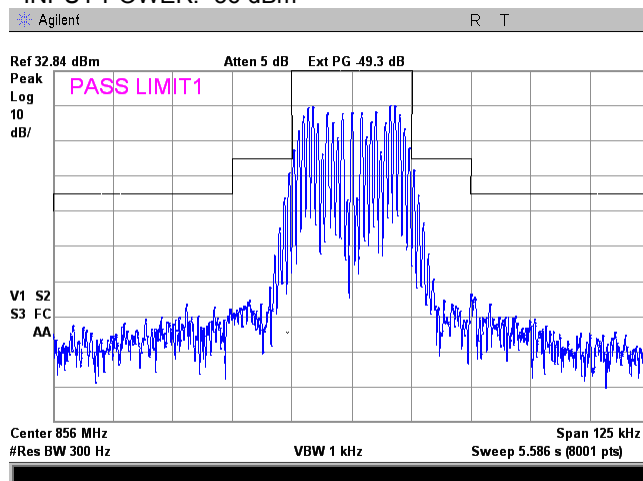


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.46 Emission mask test result at mid frequency carrier, Port 1

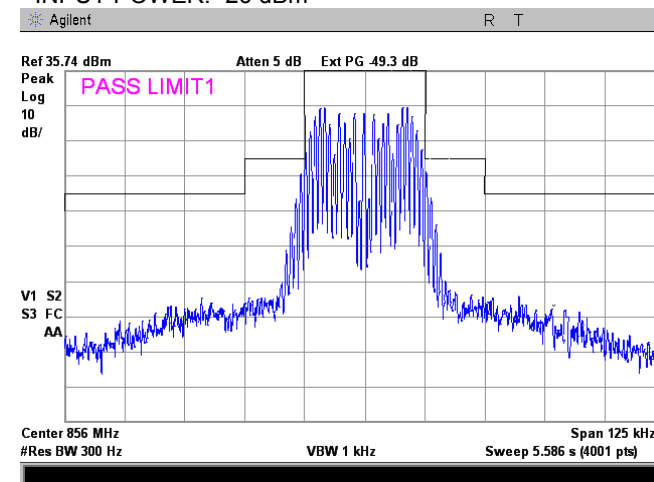
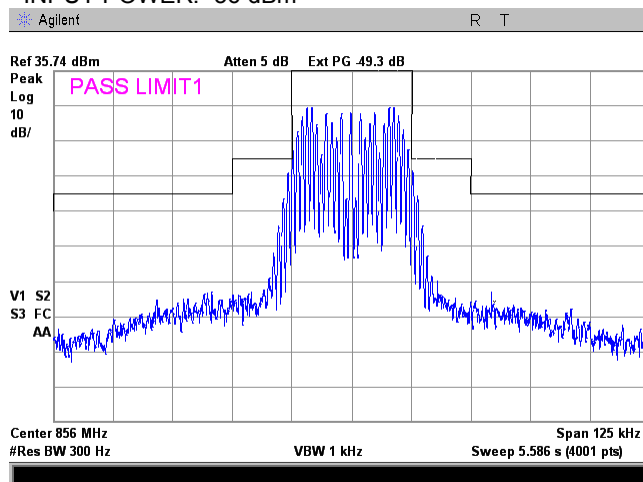
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
Analog FM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

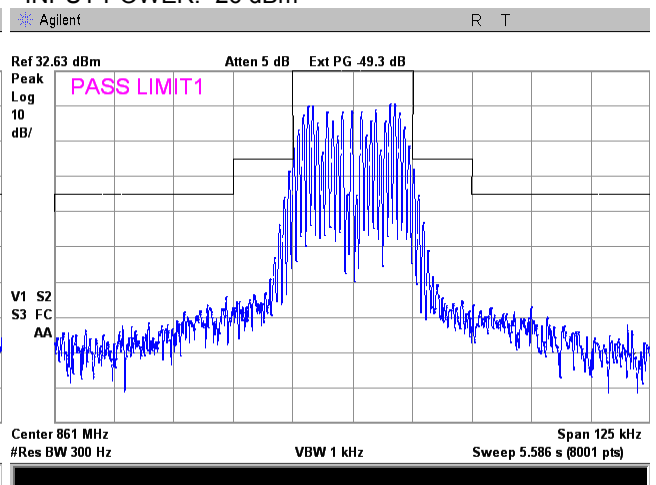
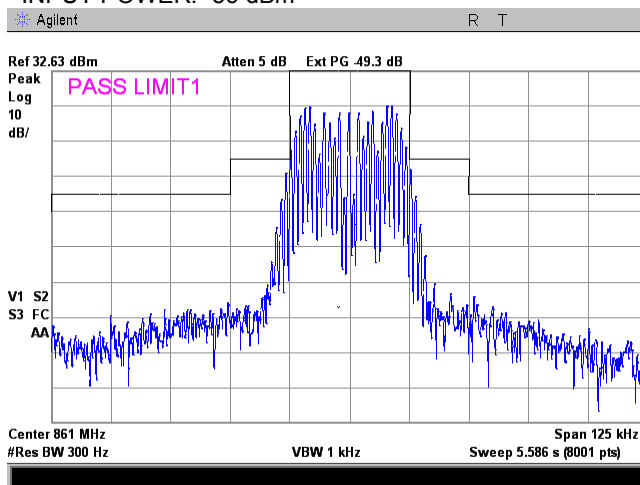


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.47 Emission mask test result at high frequency carrier, Port 1

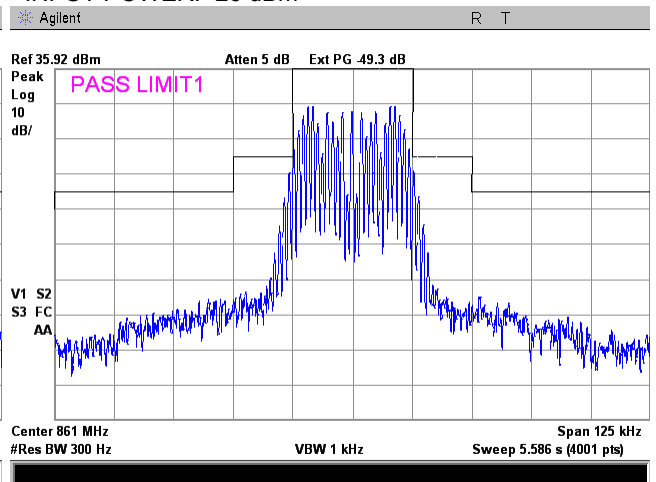
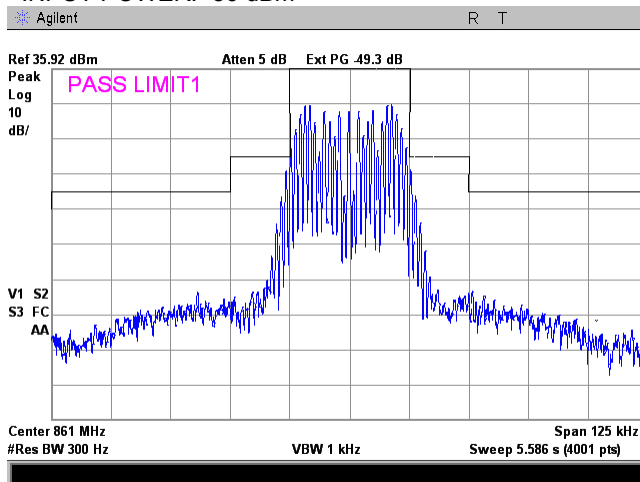
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
Analog FM downlink transmit
Base
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

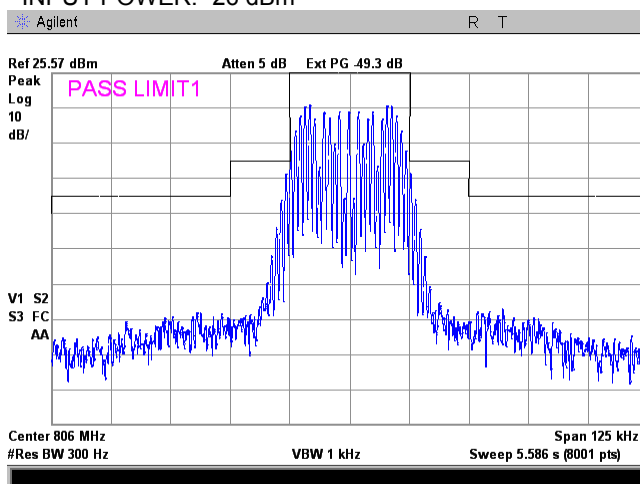
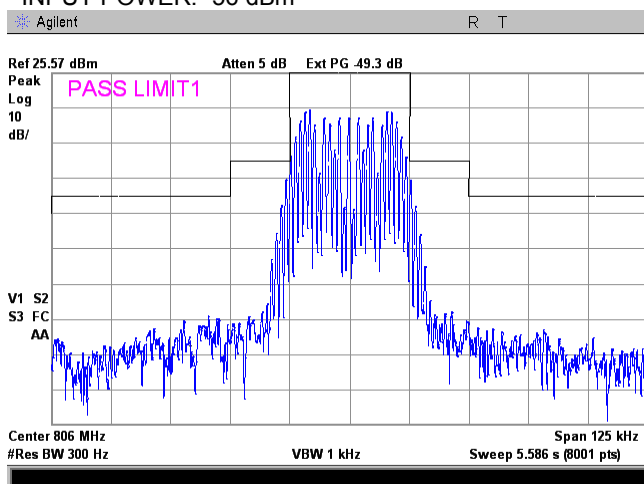


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.48 Emission mask test result at low frequency carrier, Port 2

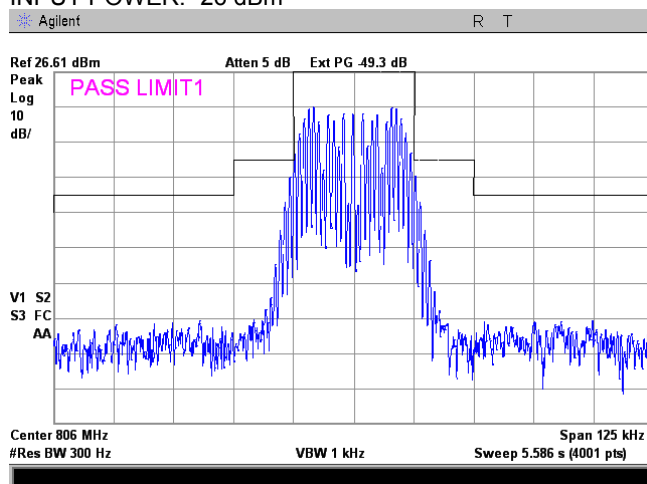
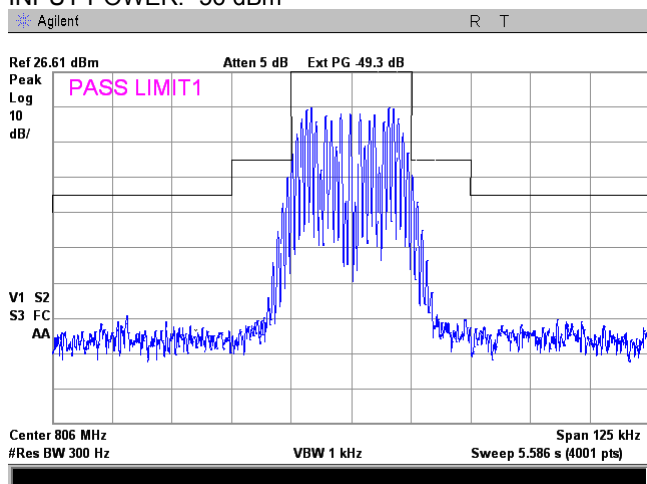
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 816 MHz
Analog FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

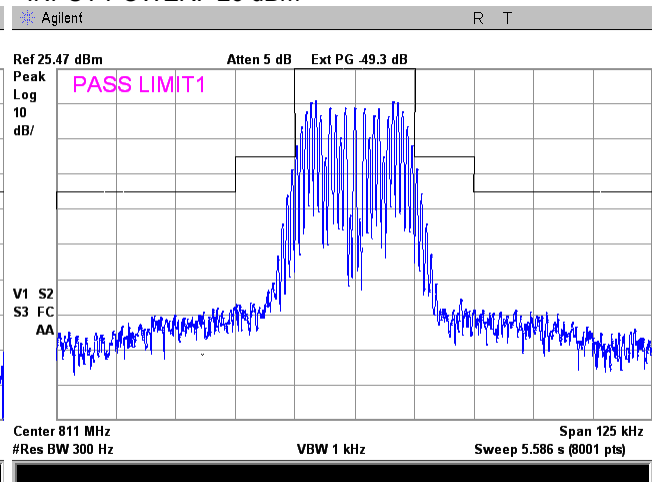
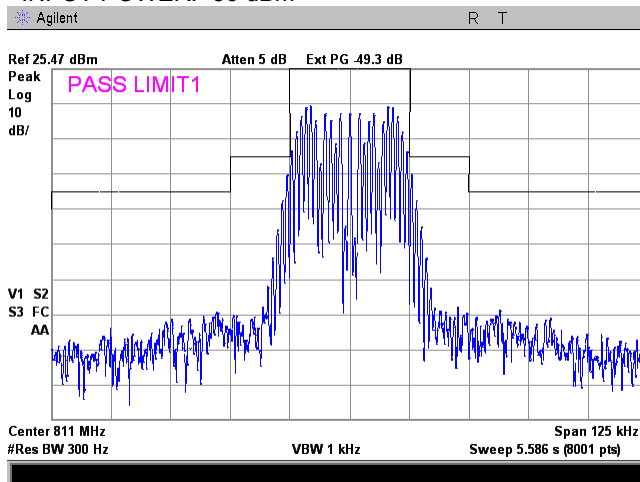


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.49 Emission mask test result at mid frequency carrier, Port 2

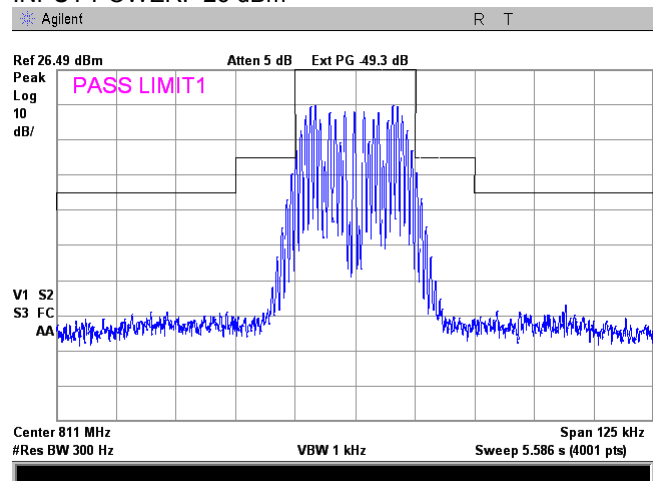
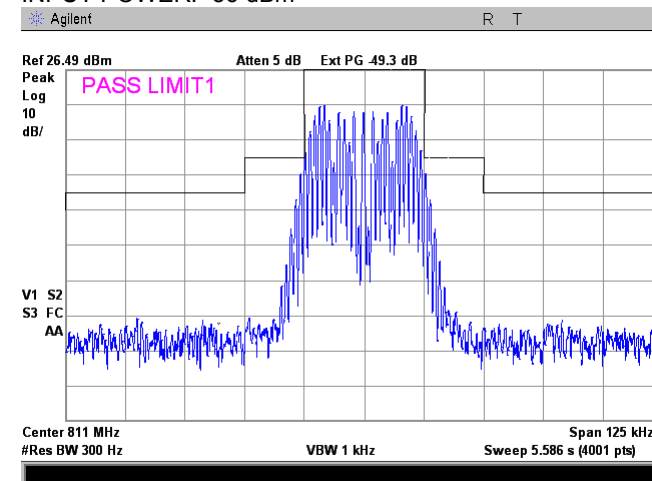
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 816 MHz
Analog FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

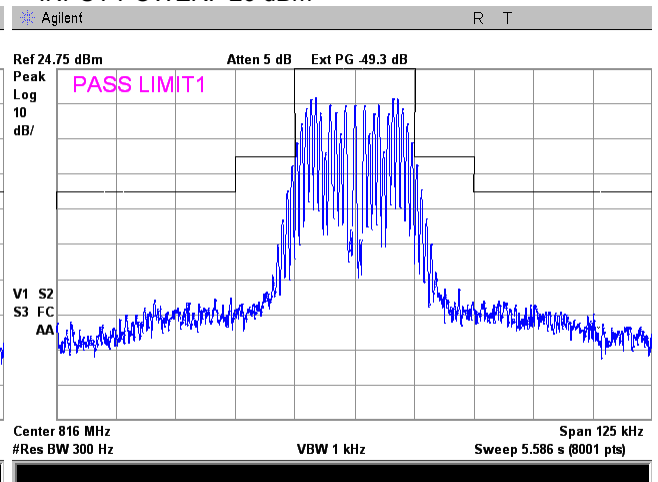
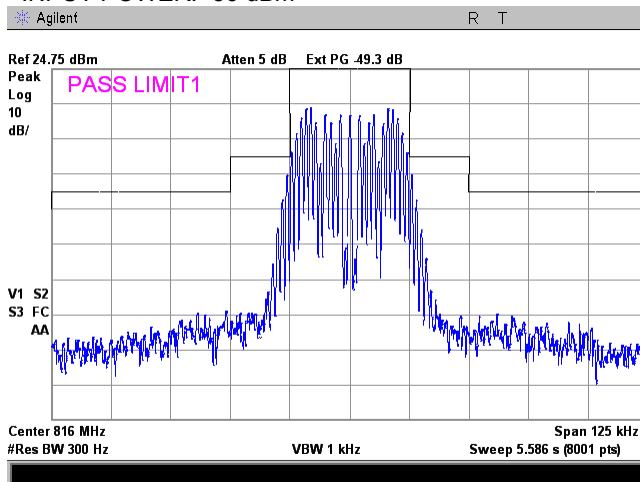


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.50 Emission mask test result at high frequency carrier, Port 2

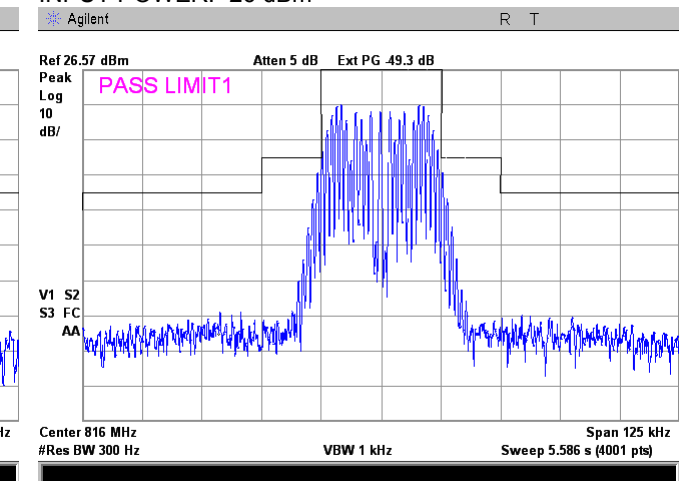
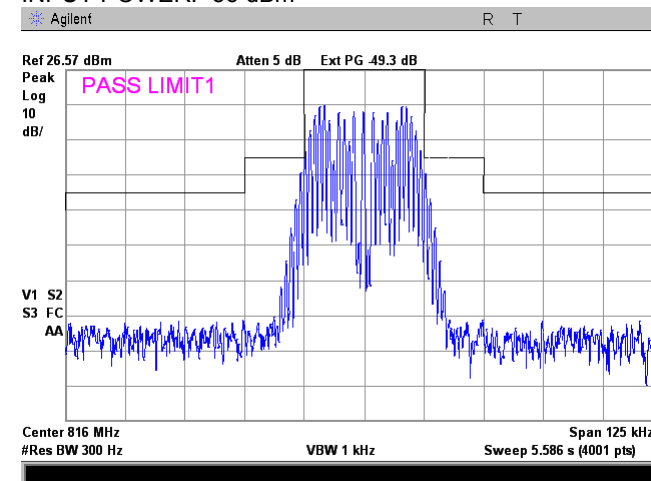
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 816 MHz
Analog FM uplink transmit
Mobile
90.210(b)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm



Test specification:	Section 90.210(b), 90.210(h), Emission mask		
Test procedure:	47 CFR, Sections 2.1051, 2.1047 and 90.210(b)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	15-Jul-15 - 22-Jul-15		
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Table 7.3.4 Emission mask test results

OPERATING FREQUENCY RANGE: 758 - 768 MHz (downlink)
788 - 798 MHz (uplink)

DETECTOR USED: Peak hold

RESOLUTION BANDWIDTH: 100 kHz

VIDEO BANDWIDTH: 300 kHz

MODULATING SIGNAL: OFDMA/CS-FDMA

Carrier frequency, MHz	Limit	Verdict
Dual Band		
Downlink		
760.5	Emission mask B	Pass
765.5		
Uplink		
790.5	Emission mask B	Pass
795.5		
Single Band Single Channel		
Downlink		
760.5	Emission mask B	Pass
765.5		

Reference numbers of test equipment used

HL 2909	HL 3390	HL 3768	HL 3770	HL 3776	HL 3780	HL 3787	HL 4274
HL 4354							

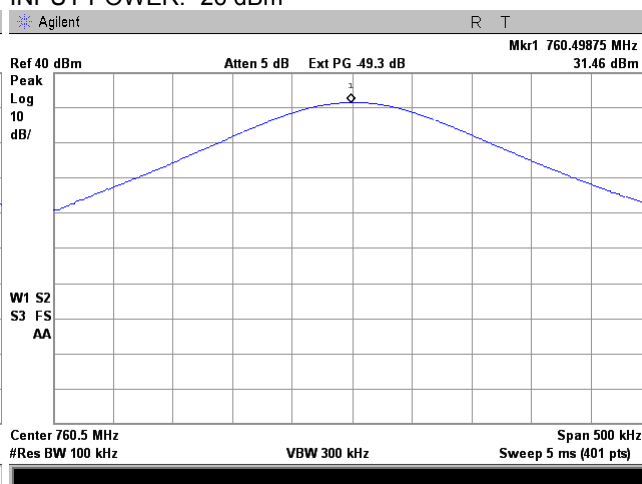
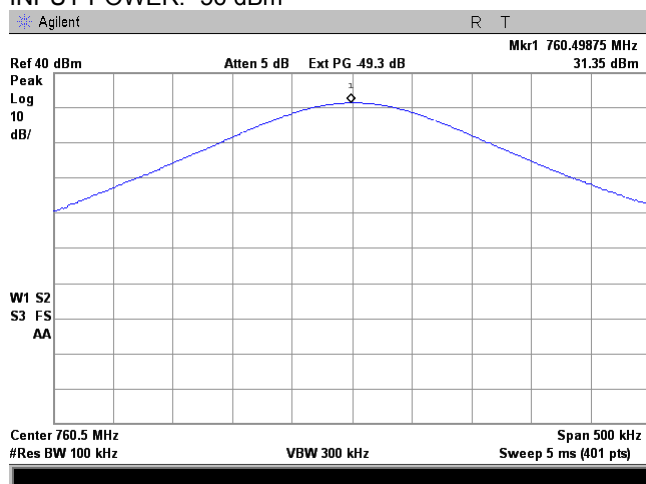
Full description is given in Appendix A.

Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.51 Reference level test results at low carrier frequency, Port 1

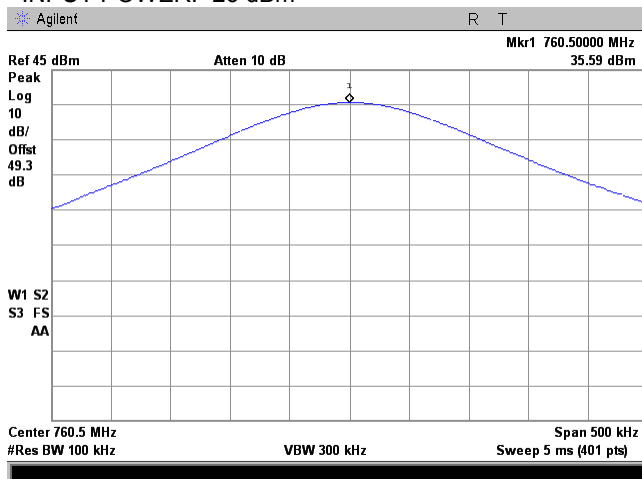
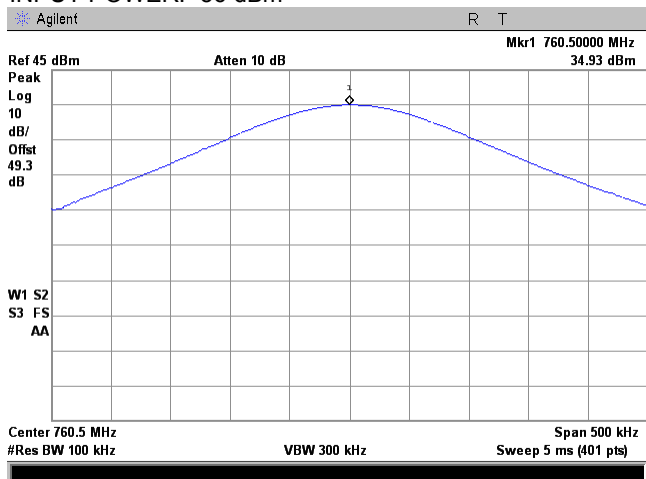
FREQUENCY RANGE:
REFERENCE LEVEL:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 768 MHz
Unmodulated power
Base
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

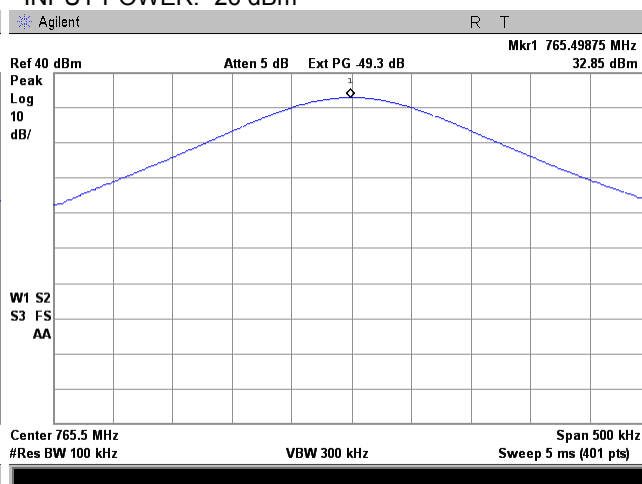
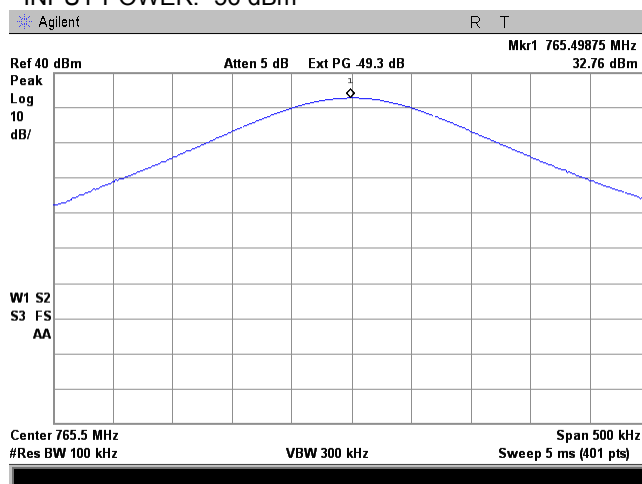


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.52 Reference level test results at high carrier frequency, Port 1

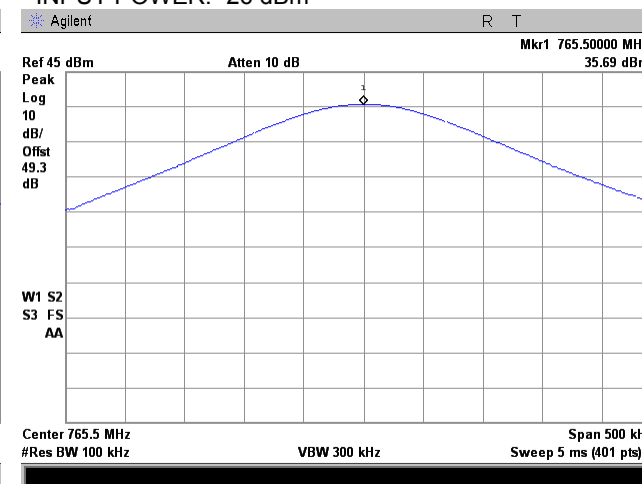
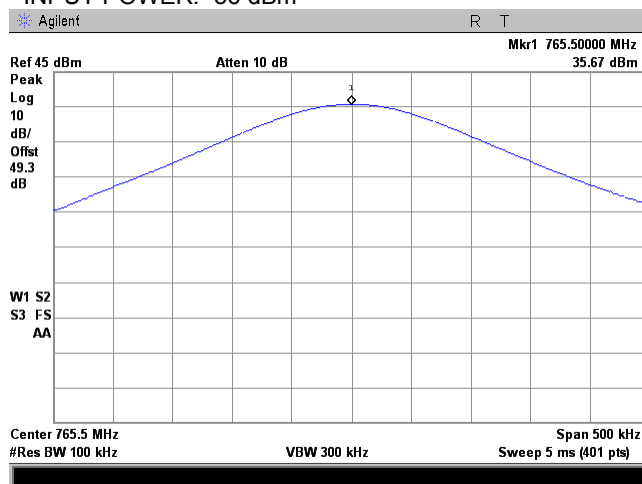
FREQUENCY RANGE:
REFERENCE LEVEL:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 768 MHz
Unmodulated power
Base
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

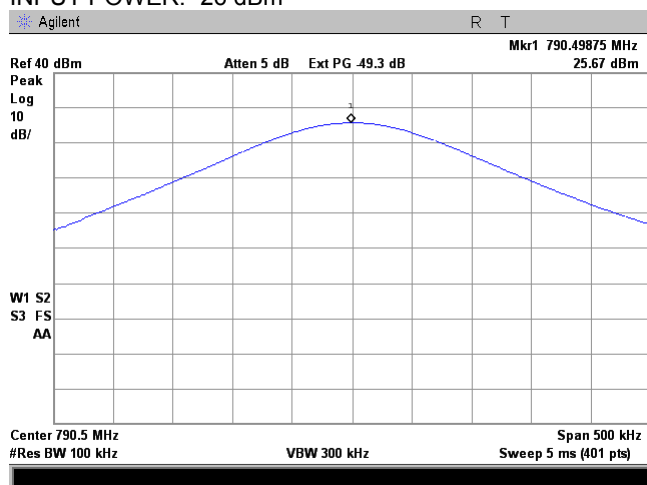
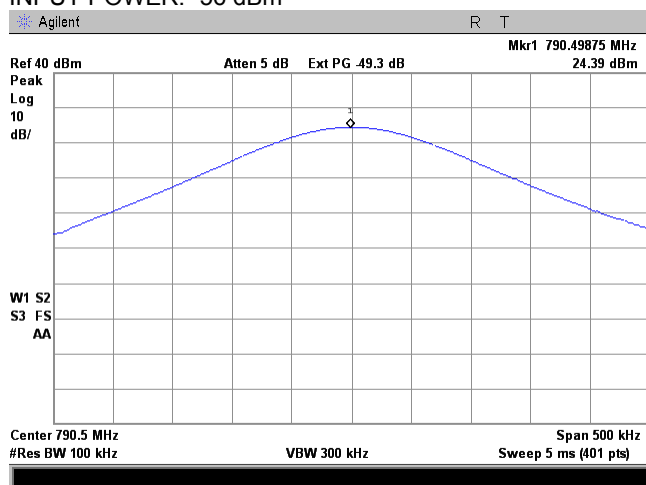


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.53 Reference level test results at low carrier frequency, Port 1

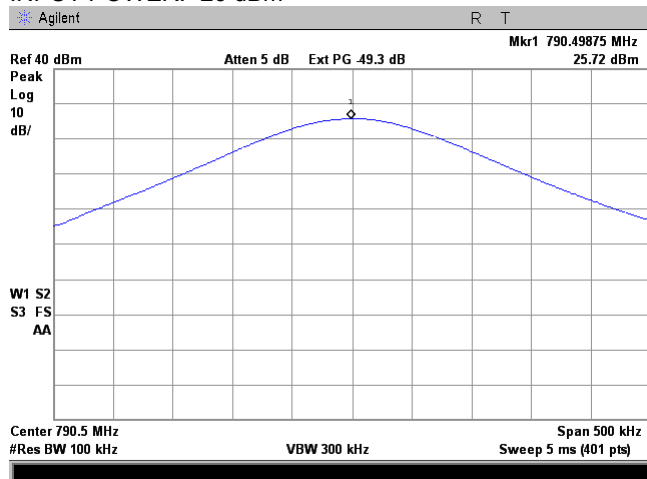
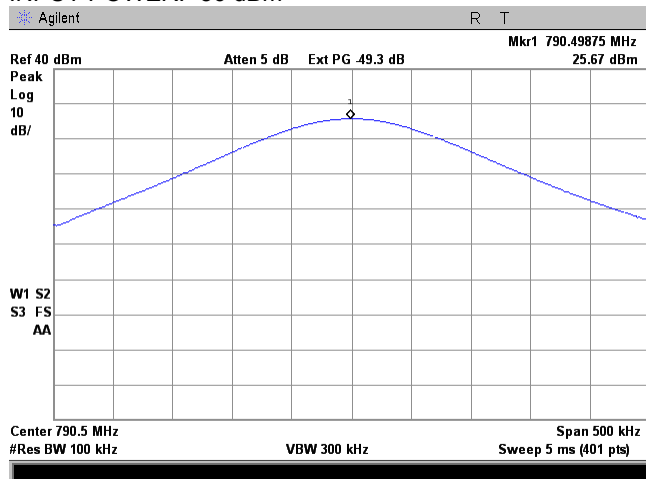
FREQUENCY RANGE:
REFERENCE LEVEL:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 798 MHz
Unmodulated power
Mobile
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

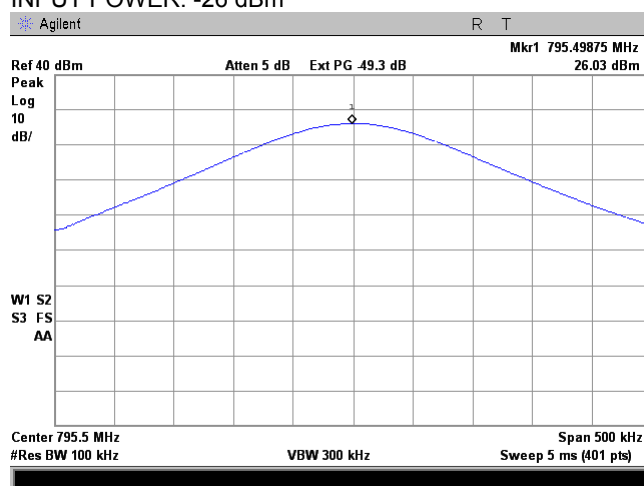
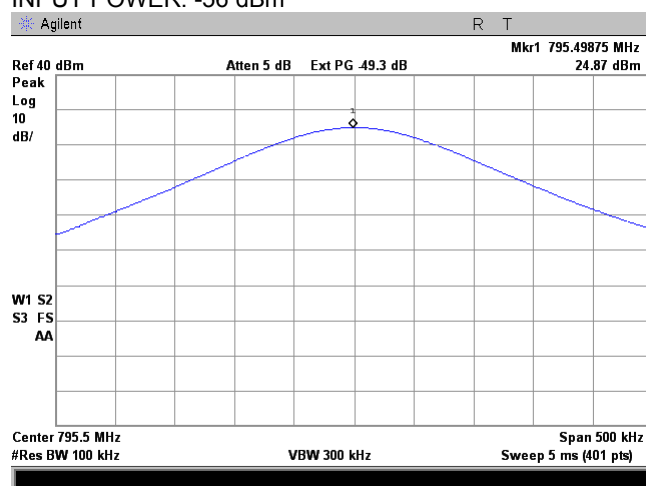


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.54 Reference level test results at high carrier frequency, Port 1

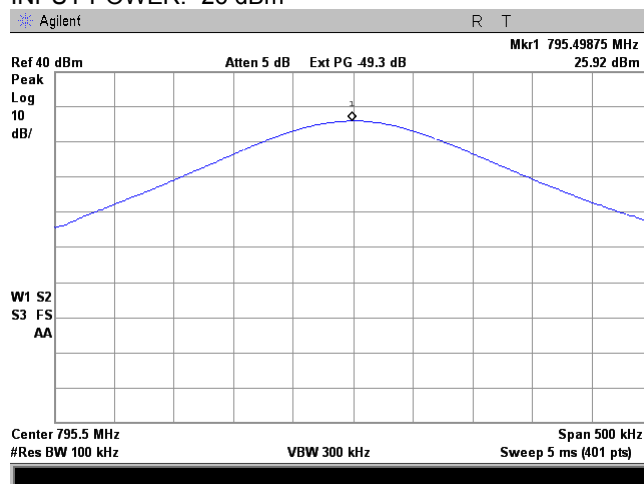
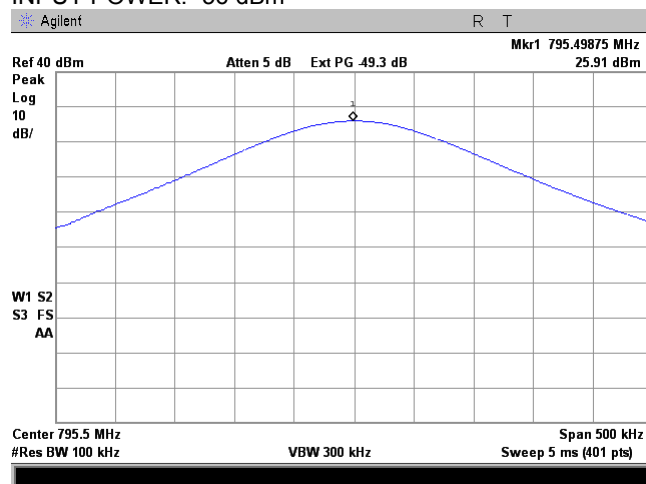
FREQUENCY RANGE:
REFERENCE LEVEL:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 798 MHz
Unmodulated power
Mobile
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

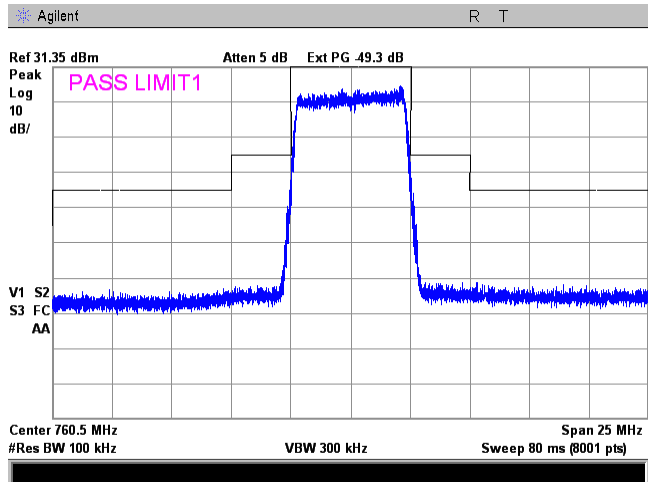
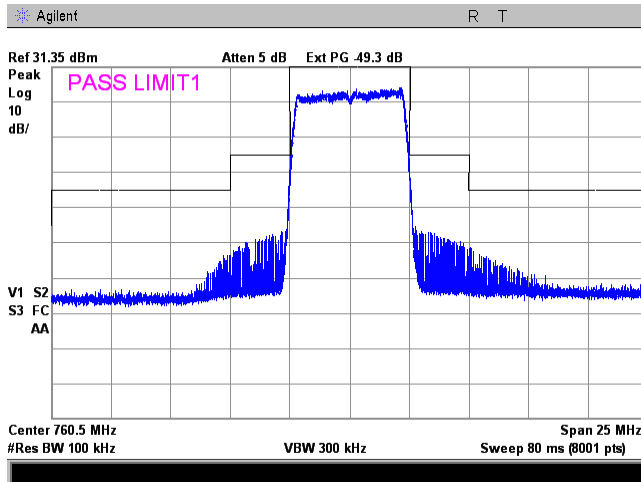


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.55 Emission mask test results at low carrier frequency, Port 1

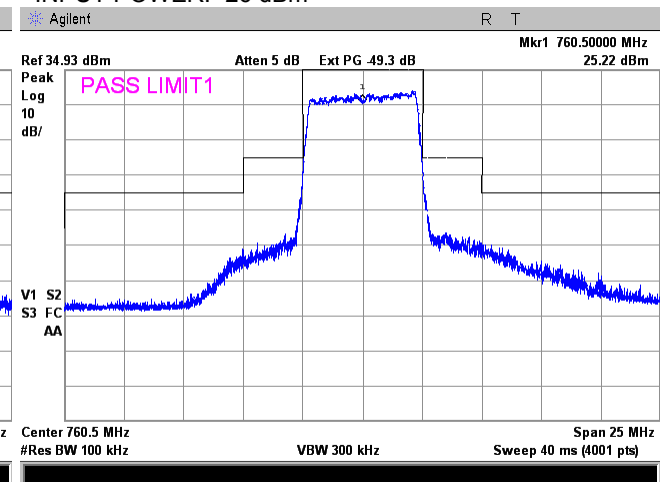
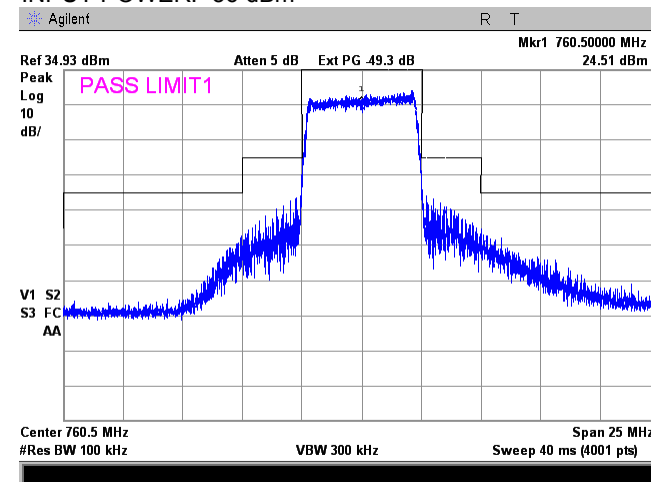
FRQUENCY RANGE:
OPERATIONAL MODE:
CHANNEL BANDWIDTH:
MODULATION:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 768 MHz
LTE downlink transmit
5 MHz
OFDMA
Base
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

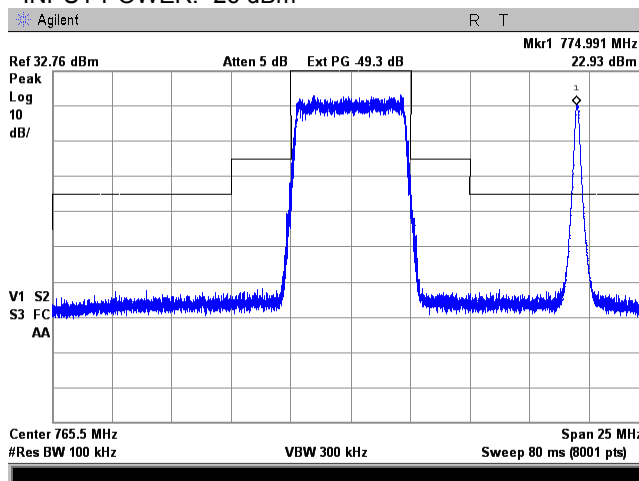
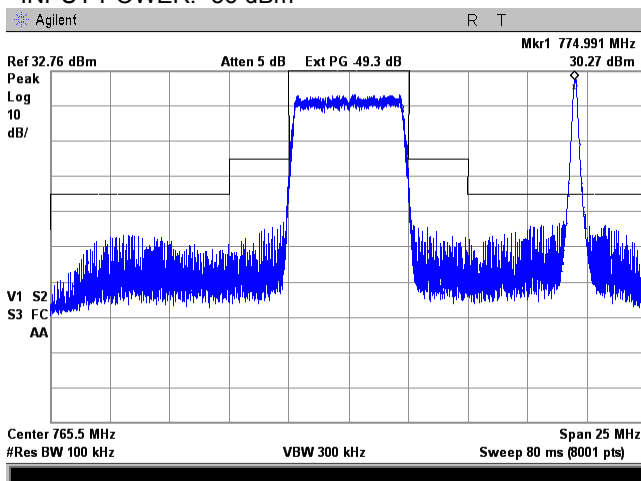


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.56 Emission mask test results at high carrier frequency, Port 1

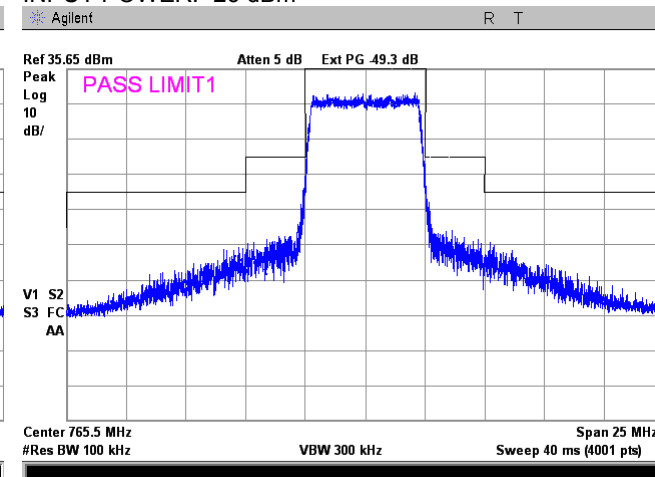
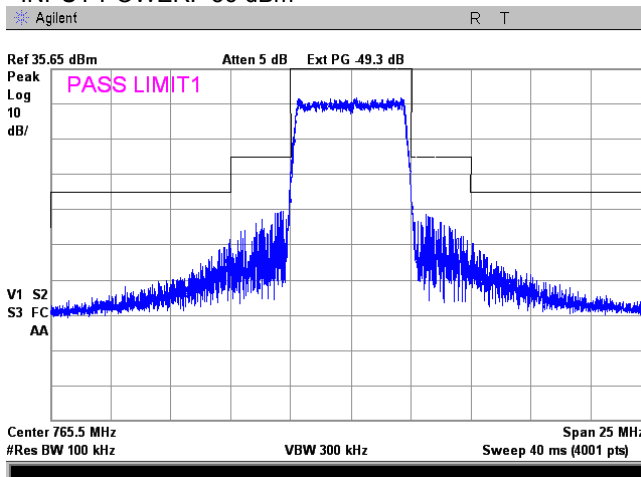
FRQUENCY RANGE:
OPERATIONAL MODE:
CHANNEL BANDWIDTH:
MODULATION:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

758 - 768 MHz
LTE downlink transmit
5 MHz
OFDMA
Base
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

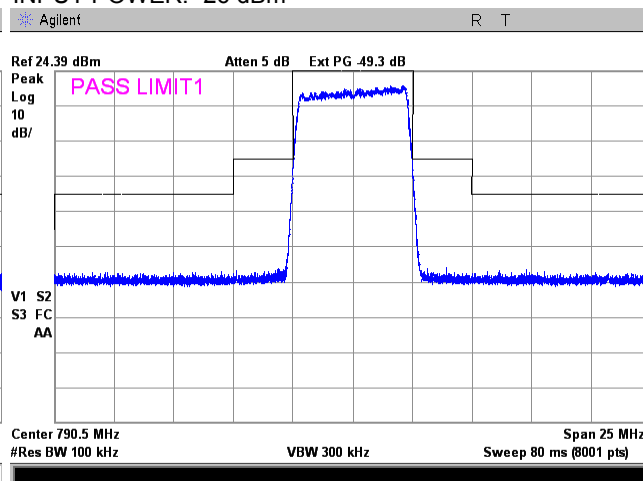
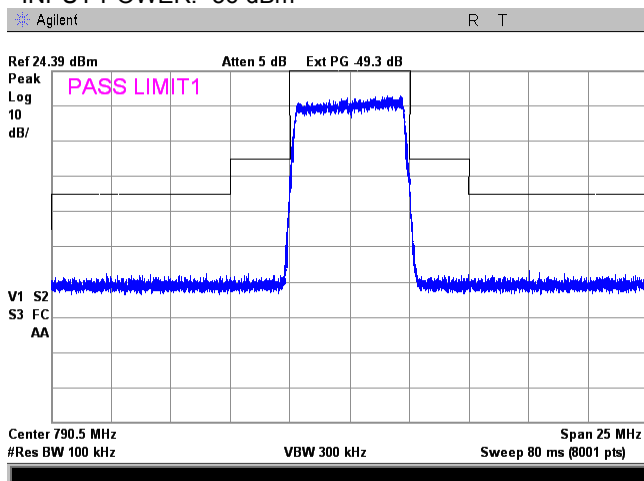


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.57 Emission mask test results at low carrier frequency, Port 1

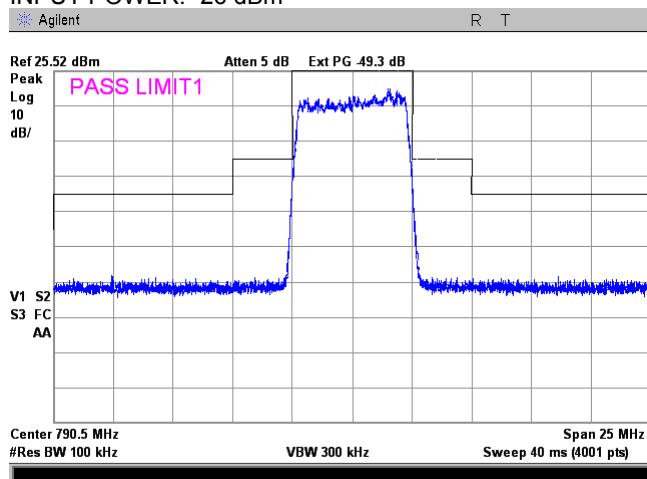
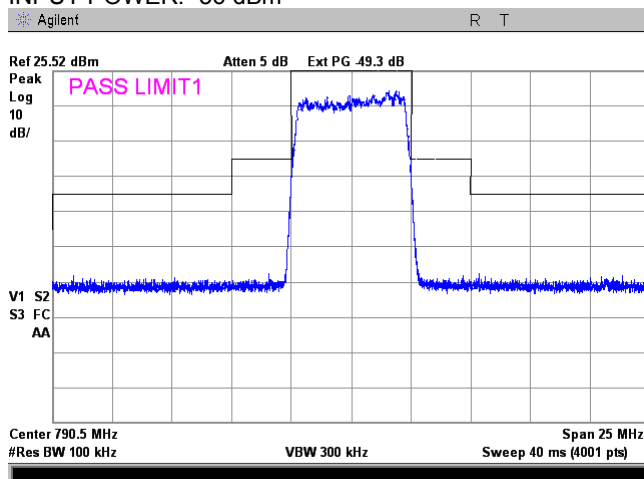
FRQUENCY RANGE:
OPERATIONAL MODE:
CHANNEL BANDWIDTH:
MODULATION:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 798 MHz
LTE uplink transmit
5 MHz
CS-FDMA
Base
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

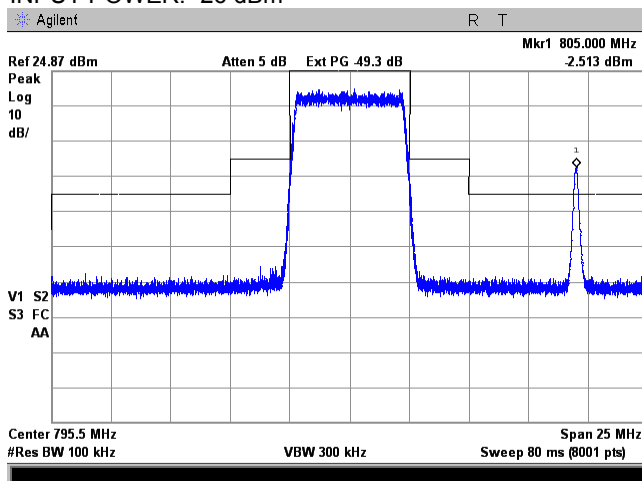
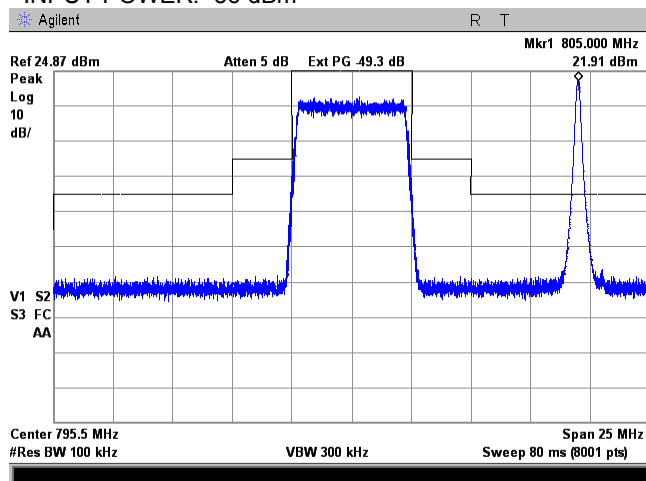


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.58 Emission mask test results at high carrier frequency, Port 1

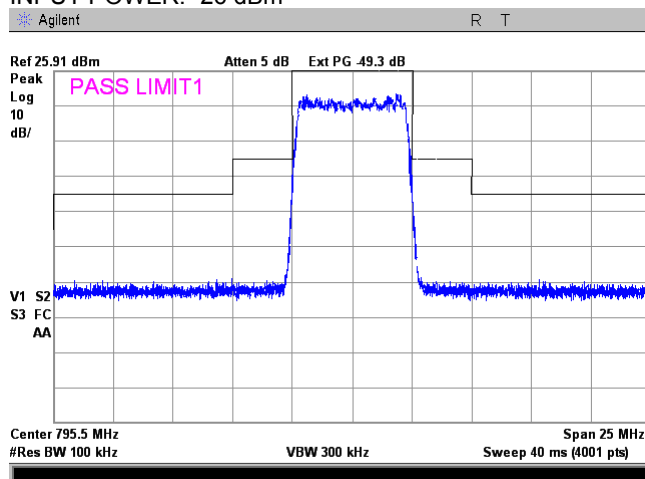
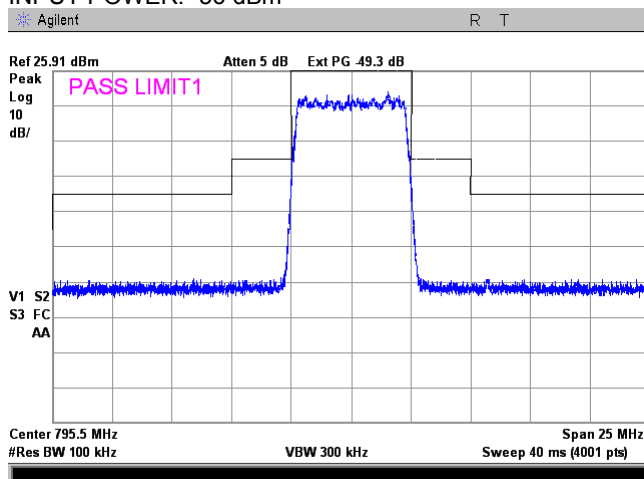
FRQUENCY RANGE:
OPERATIONAL MODE:
CHANNEL BANDWIDTH:
MODULATION:
INPUT PORT:
CONFIGURATION:
INPUT POWER: -56 dBm

788 - 798 MHz
LTE uplink transmit
5 MHz
CS-FDMA
Base
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

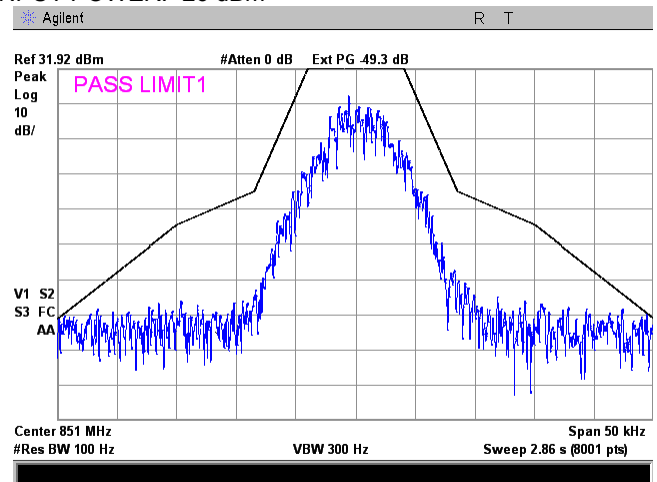
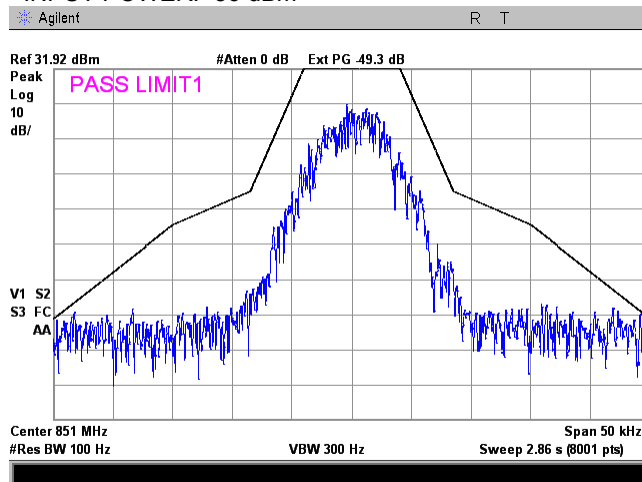


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.59 Emission mask test result at low frequency carrier, Port 1

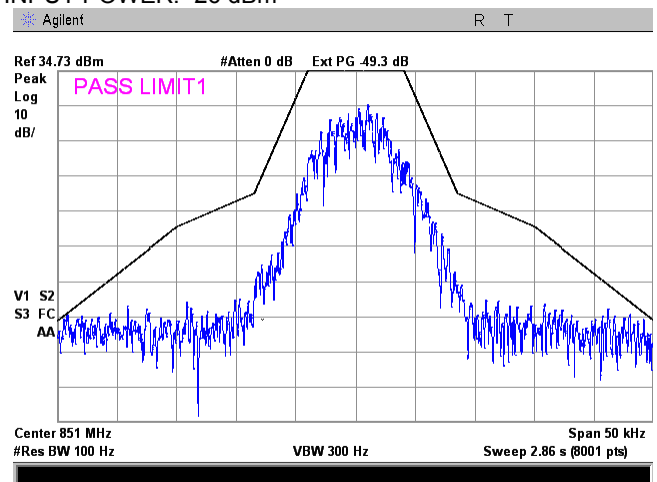
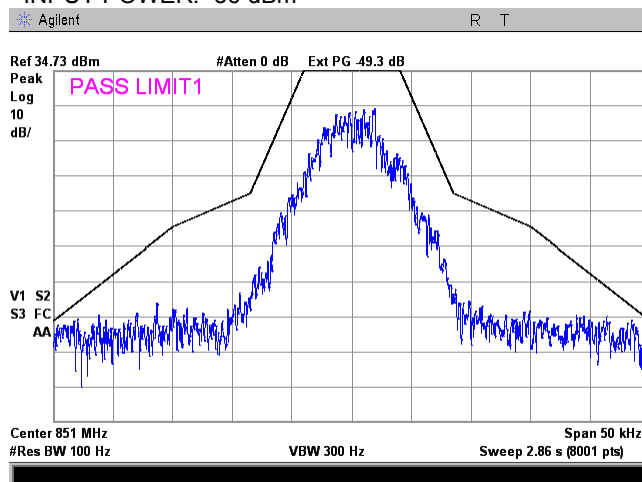
FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 854 MHz
C4FM downlink transmit
Mobile
90.210(h)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

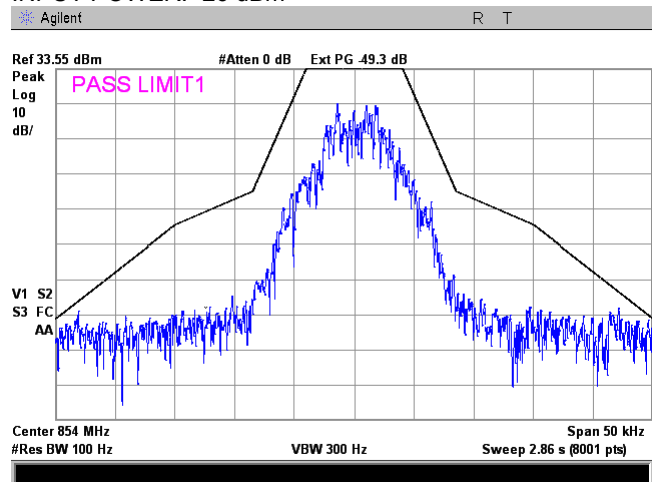
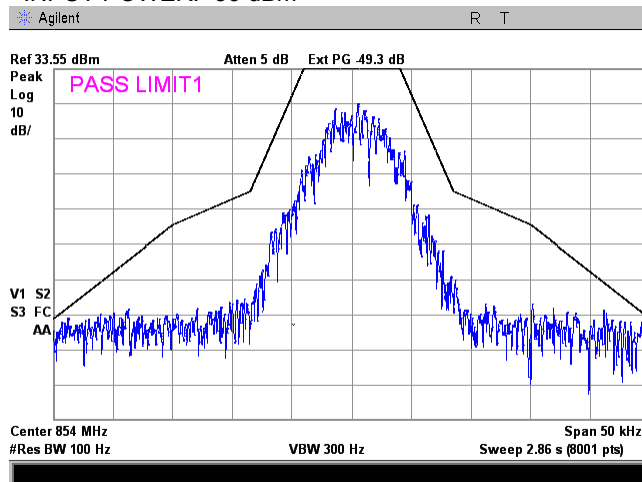


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.60 Emission mask test result at high frequency carrier, Port 1

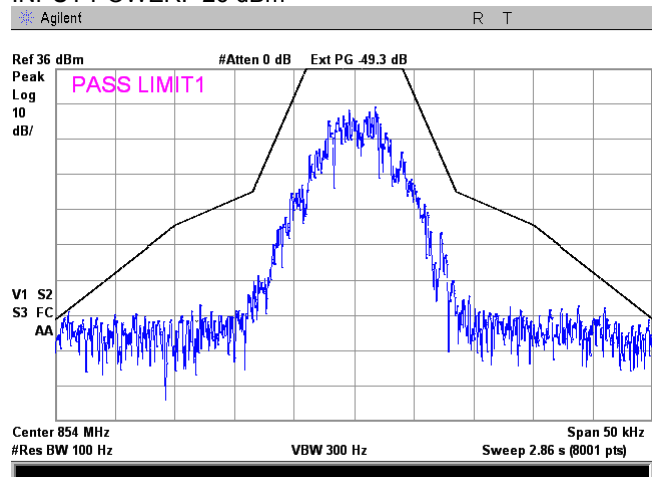
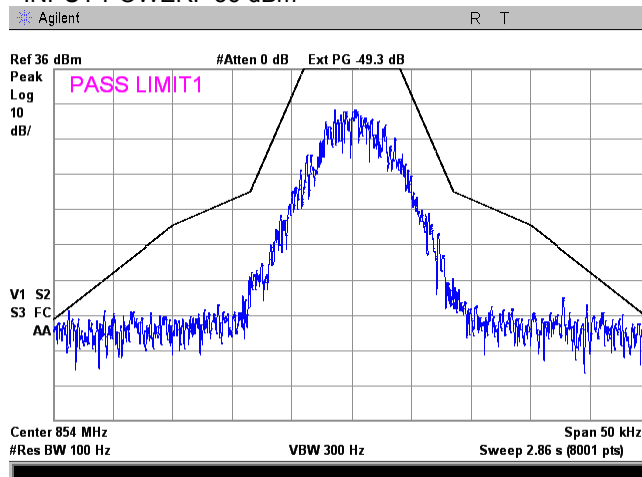
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 854 MHz
C4FM downlink transmit
Mobile
90.210(h)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

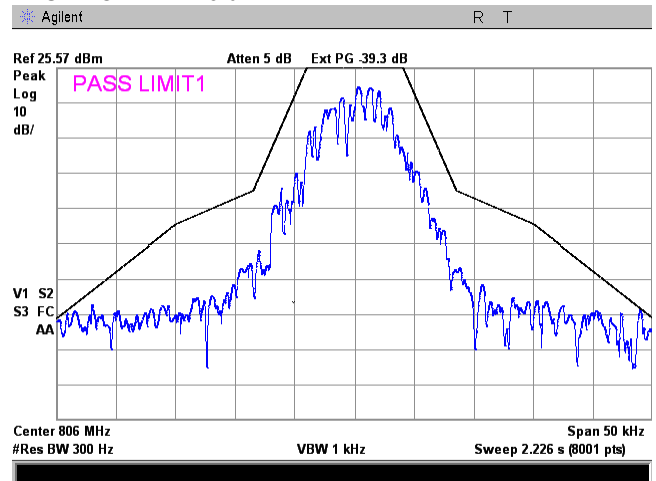
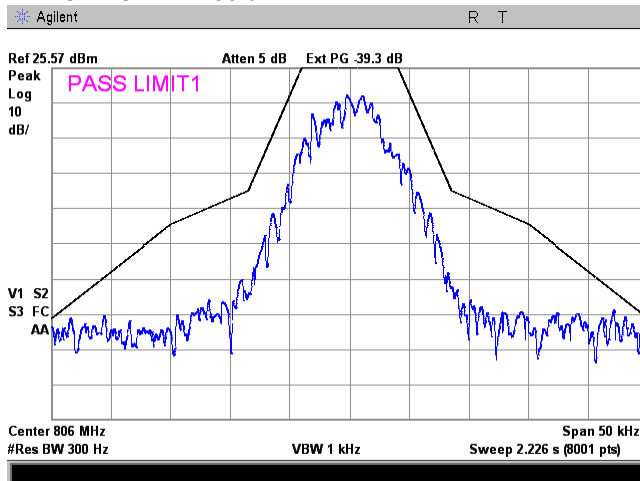


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.61 Emission mask test result at low frequency carrier, Port 2

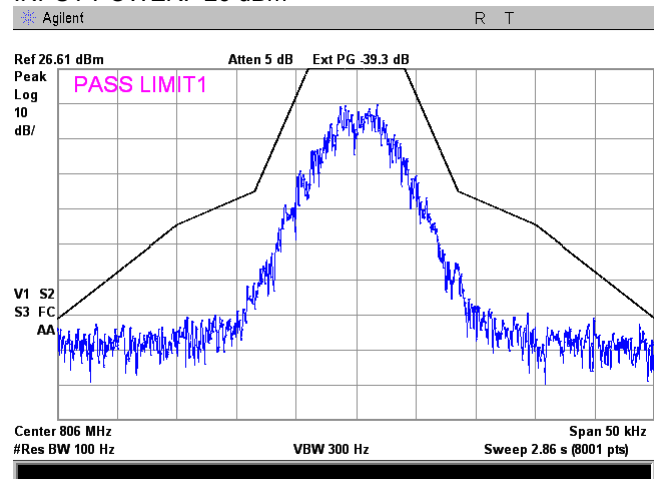
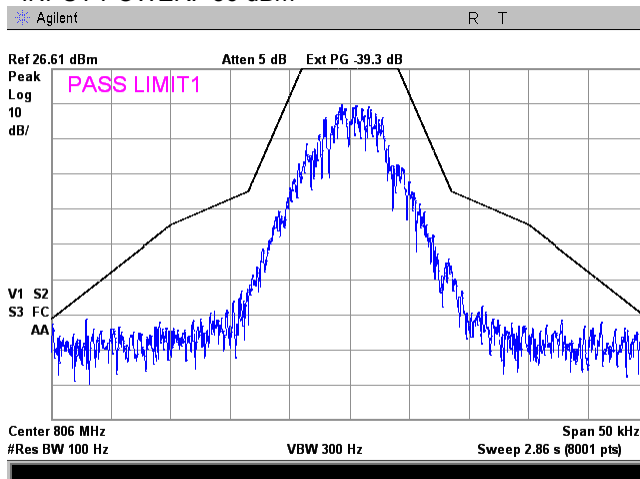
FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
COMPOSITE INPUT POWER:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 809 MHz
C4FM uplink transmit
Base
-54 dBm
90.210(h)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

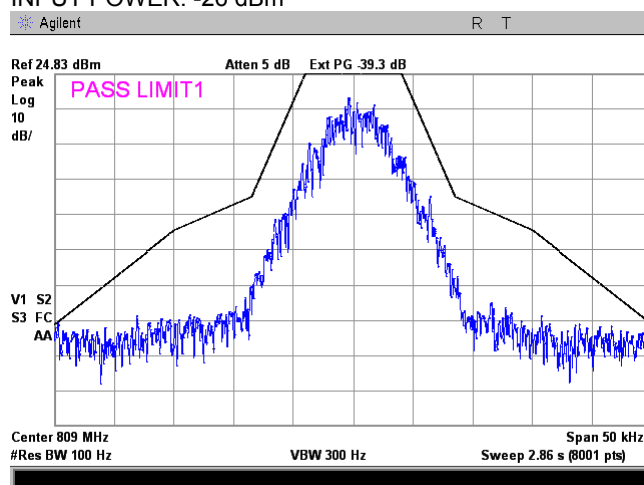
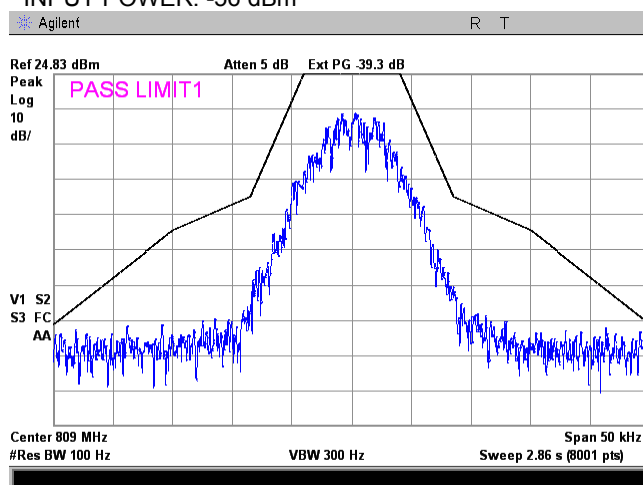


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.62 Emission mask test result at high frequency carrier, Port 2

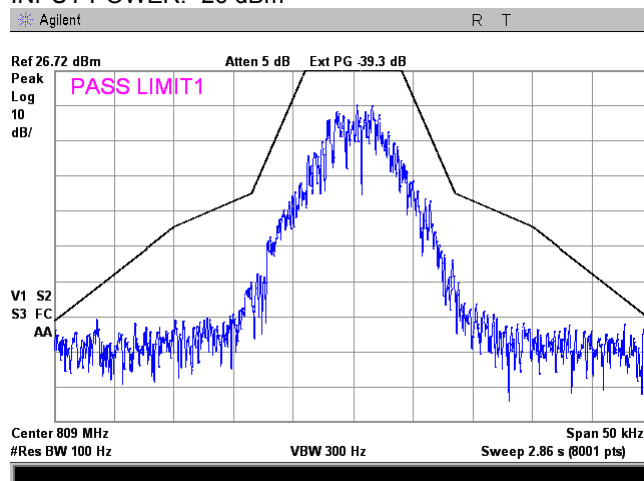
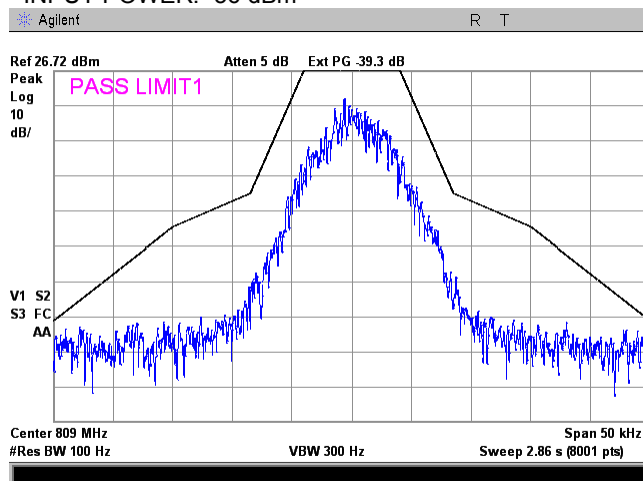
FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
COMPOSITE INPUT POWER:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 809 MHz
C4FM uplink transmit
Base
-54 dBm
90.210(h)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

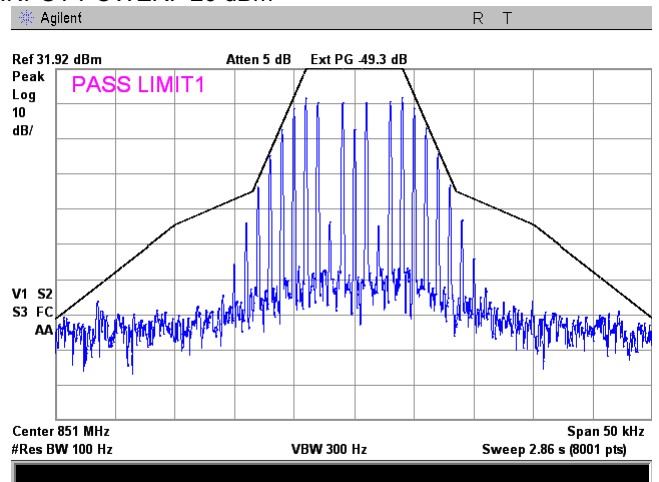
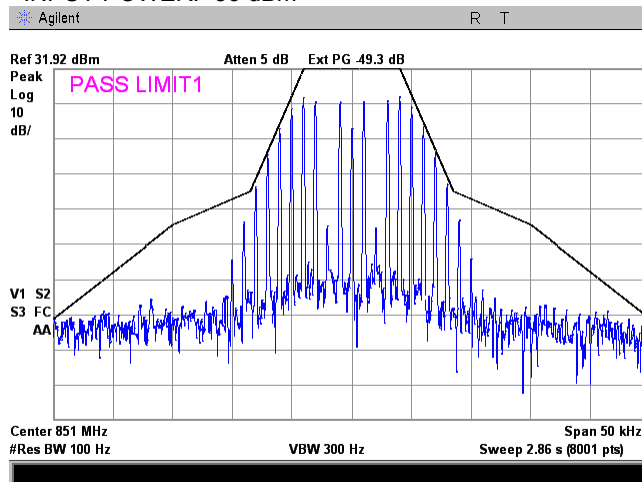


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.63 Emission mask test result at low frequency carrier, Port 1

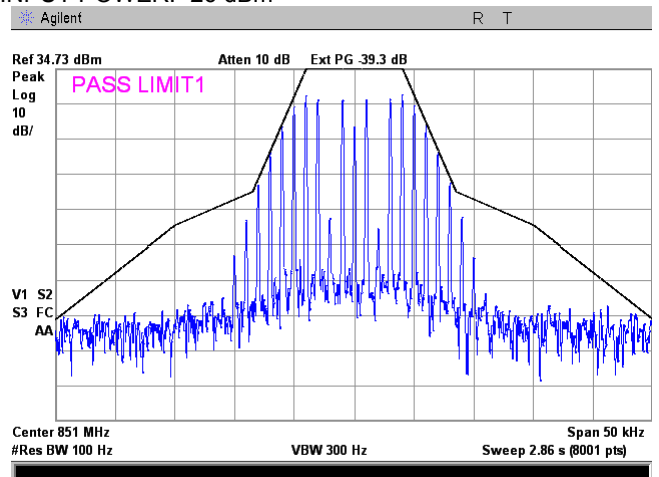
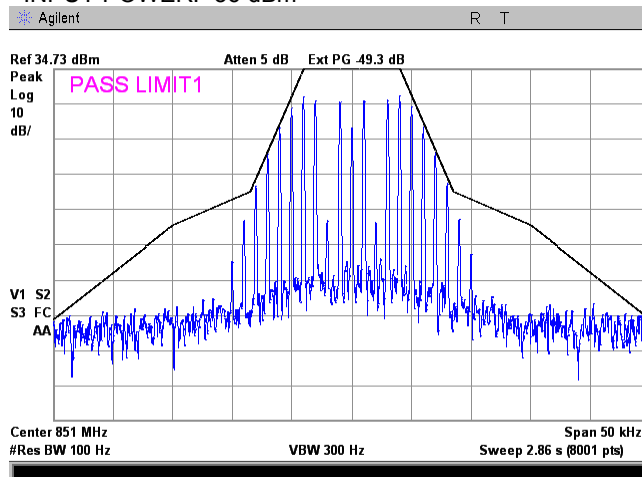
FRQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 861 MHz
Analog FM downlink transmit
Base
90.210(h)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

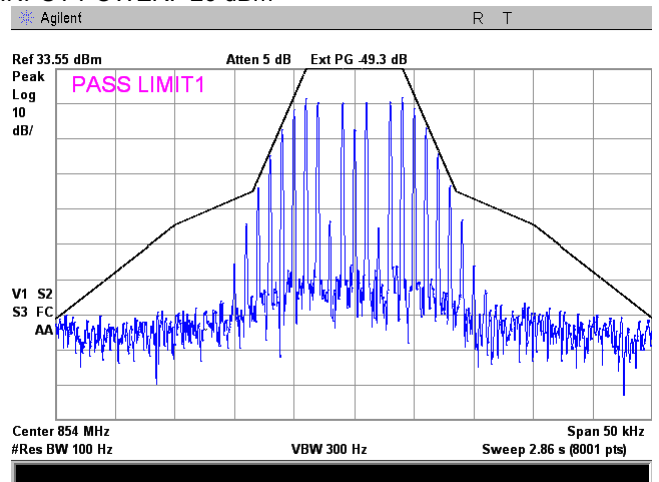
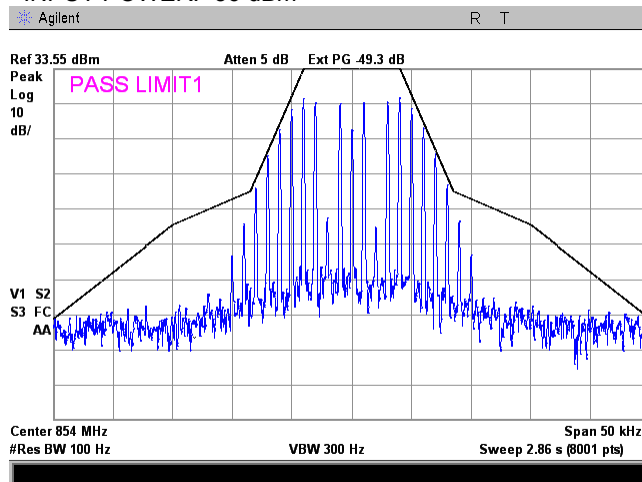


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.64 Emission mask test result at high frequency carrier, Port 1

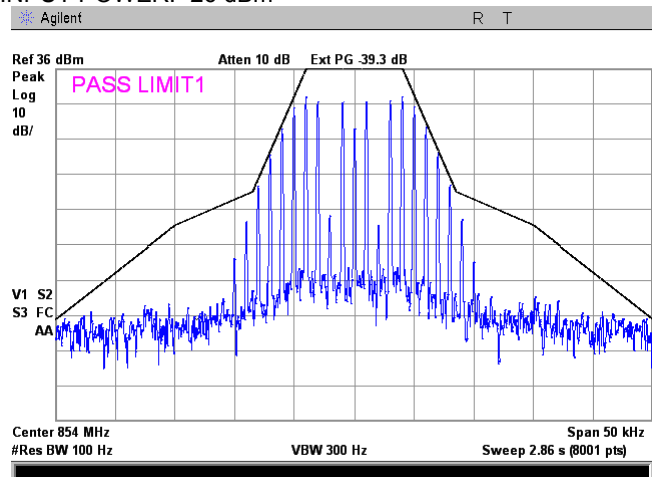
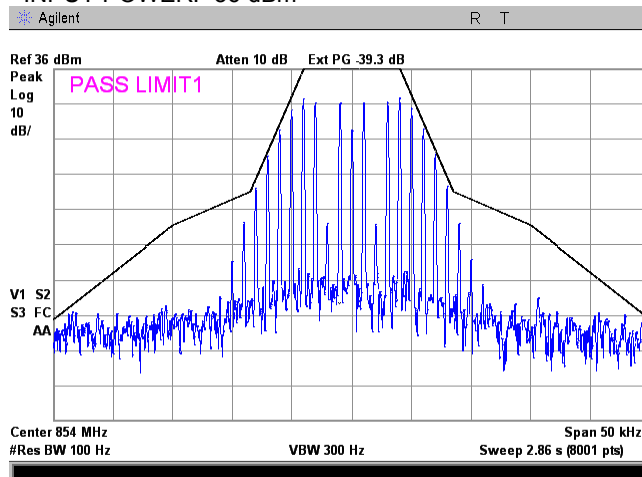
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

851 - 854 MHz
Analog FM downlink transmit
Base
90.210(h)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

Single Band Single Channel
INPUT POWER: -26 dBm

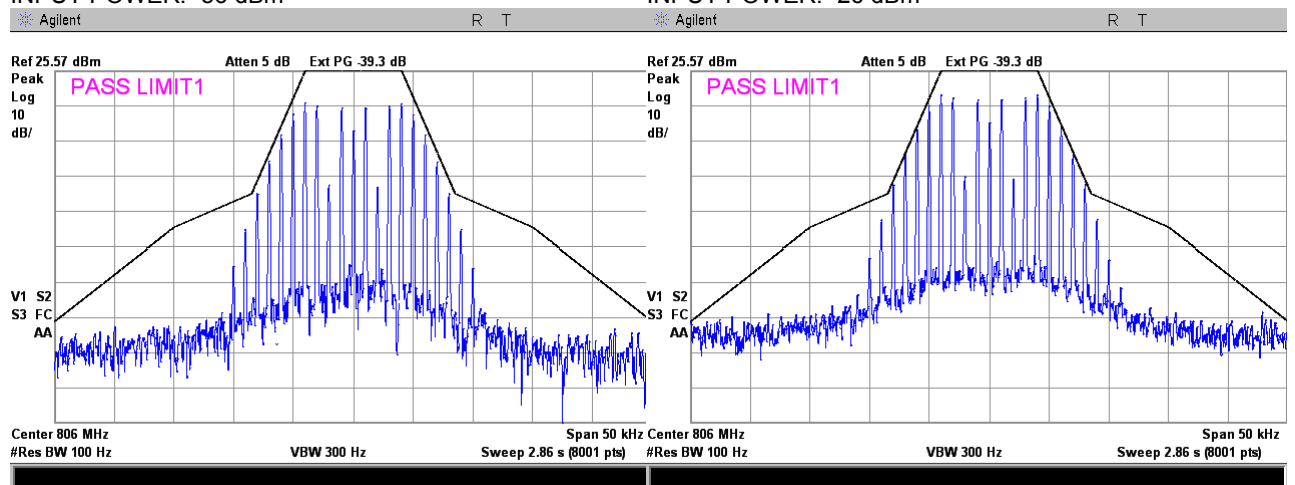


Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.65 Emission mask test result at low frequency carrier, Port 2

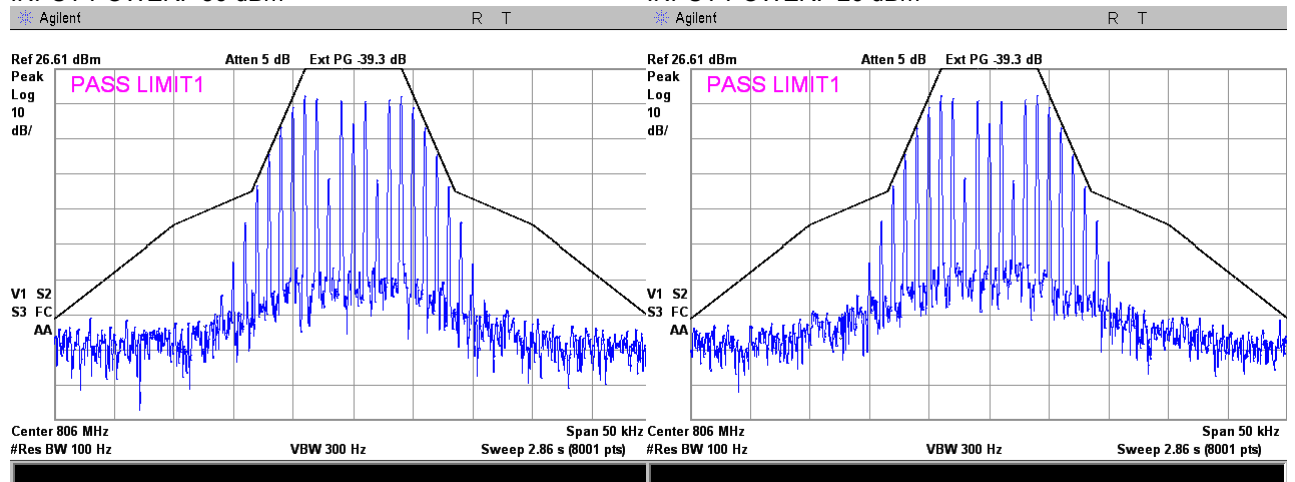
FREQUENCY RANGE:
OPERATIONAL MODE:
INPUT PORT:
EMISSION MASK:
CONFIGURATION:
INPUT POWER: -56 dBm

806 - 809 MHz
Analog FM uplink transmit
Mobile
90.210(h)
Single Band Dual Channels
INPUT POWER: -26 dBm



CONFIGURATION:
INPUT POWER: -56 dBm

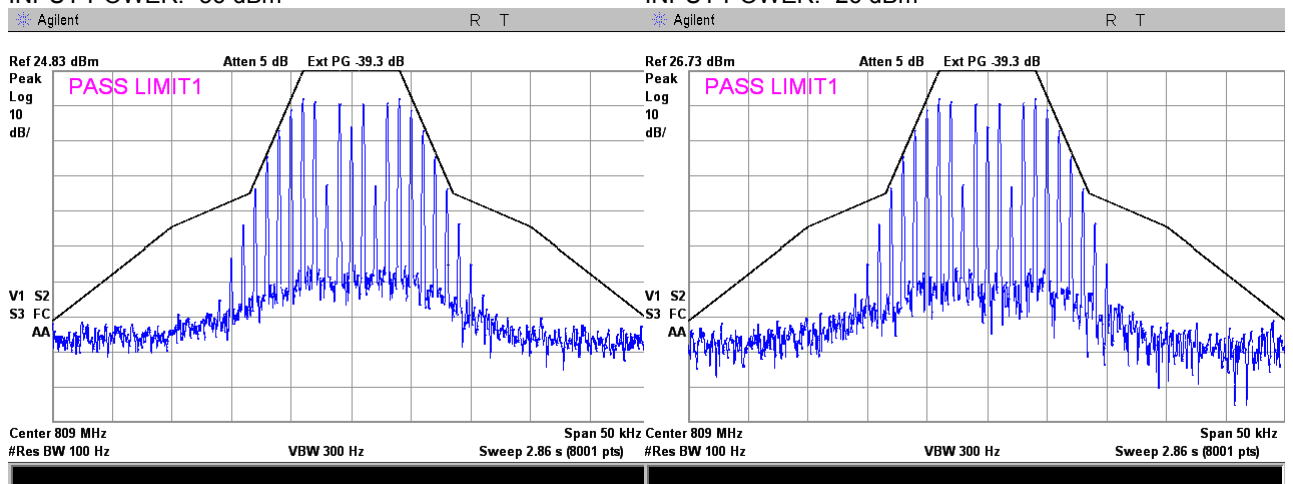
Single Band Single Channel
INPUT POWER: -26 dBm



Test specification:		Section 90.210(b), 90.210(h), Emission mask	
Test procedure:		47 CFR, Sections 2.1051, 2.1047 and 90.210(b)	
Test mode:		Compliance	Verdict: PASS
Date(s):		15-Jul-15 - 22-Jul-15	
Temperature: 23.4 °C	Air Pressure: 1005 hPa	Relative Humidity: 47 %	Power Supply: 120 VAC
Remarks:			

Plot 7.3.66 Emission mask test result at high frequency carrier, Port 2

FREQUENCY RANGE: 806 - 809 MHz
 OPERATIONAL MODE: Analog FM uplink transmit
 INPUT PORT: Mobile
 EMISSION MASK: 90.210(h)
 CONFIGURATION: Single Band Dual Channels
 INPUT POWER: -56 dBm



CONFIGURATION: Single Band Single Channel
 INPUT POWER: -56 dBm

