HERMON LABORATORIES

839.01
Electrical

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TEST REPORT

ACCORDING TO: FCC part 15 subpart E and RSS-210 Issue 7, Annex 9

FOR:

RadWin Ltd.

Outdoor radio unit operating in the 5.4 GHz band

Model: F54/FCC/CMB/INT, F54/IC/CMB/INT, F54/FCC/CMB/EXT, F54/IC/CMB/EXT

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1 Applicant information

Client name:	RadWin Ltd.
Address:	32 Habarzel str., Tel Aviv, Israel, 69710
Telephone:	+972 3766 2988
Fax:	+972 3766 2922
E-mail:	shlomo_weiss@radwin.com
Contact name:	Mr. Shlomo Weiss

2 Equipment under test attributes

Product name:	Outdoor radio unit operating in 5.4 GHz band
Product type:	Point to point transceiver
Model(s):	F54/FCC/CMB/INT, F54/IC/CMB/INT, F54/FCC/CMB/EXT, F54/IC/CMB/EXT
Receipt date	4/07/2008

3 Manufacturer information

Manufacturer name:	RadWin Ltd.
Address:	32 Habarzel str., Tel Aviv, Israel, 69710
Telephone:	+972 3766 2988
Fax:	+972 3766 2922
E-Mail:	shlomo_weiss@radwin.com
Contact name:	Mr. Shlomo Weiss

4 Test details

Project ID:	18686
Location:	Hermon Laboratories Ltd. P.O.Box 23, Binyamina 30500, Israel
Test started:	4/07/2008
Test completed:	8/13/2008
Test specification(s):	FCC part 15 subpart E; RSS-210 Issue 7:2007, Annex 9 RSS-Gen Issue 2:2007

5 Tests summary

Test	Status
Transmitter characteristics	
FCC Section 15.407(a)(3) / RSS-Gen, Section 4.6, Occupied 26 dB bandwidth	Measured
FCC Section 15.407(a)(3) / RSS-210, Section A9.2, Maximum peak output power	Pass
FCC Section 15.407(a)(3) / RSS-210, Section A9.2, Peak power spectral density	Pass
FCC Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power	Pass
FCC Section 15.407(b) / RSS-210, Section A9.3, Unwanted radiated emission	Pass
FCC Section 15.407(b)(6), 15.207/ RSS-Gen, Section 7.2.2, Conducted emission	Not required
FCC Section 15.407(f), / RSS-Gen, Section 5.5, RF exposure	Provided in documentation for Application
FCC Section 15.407(g), / RSS-210, Section A9.5, Frequency stability	Pass

Testing was completed against all relevant requirements of the test standard. 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.

	Name and Title	Date	Signature
Tested by:	Mr. E. Plotnichenko, test engineer	August 13, 2008	
Reviewed by:	Mrs. M. Cherniavsky, certification engineer	August 14, 2008	
Approved by:	Mr. M. Nikishin, EMC and radio group manager	September 25, 2008	

6 EUT description

6.1 General information

The EUT is an outdoor unit radio unit. The EUT provides high capacity connectivity of up to 54 Mbps. The ODU may be used with integral or external antenna.

6.2 Ports and lines

Port type	Port description	Connected		Connector type	Q-ty	Cable type	Cable length, m	Indoor / outdoor
		From	To					
Power	-48 VDC	AC/DC adapter	IDU	Terminal block	1	unshielded	1.5	Indoor
Power	AC power	mains	AC/DC adapter	IEC 60320	1	unshielded	1.5	Indoor
RF	Antenna	EUT	antenna	N-type	1	shielded	1	Outdoor*
Signal	DC+ Ethernet	IDU	EUT	RJ45	1	shielded	20	Outdoor
Signal	Sync	EUT	Laptop	RJ45	1	unshielded	1.5	Indoor**
Signal	Ethernet	IDU	Laptop	RJ45	1	FTP	20	Indoor

* - for external antenna configuration only, 1 dB loss
** - for configuration prior the test

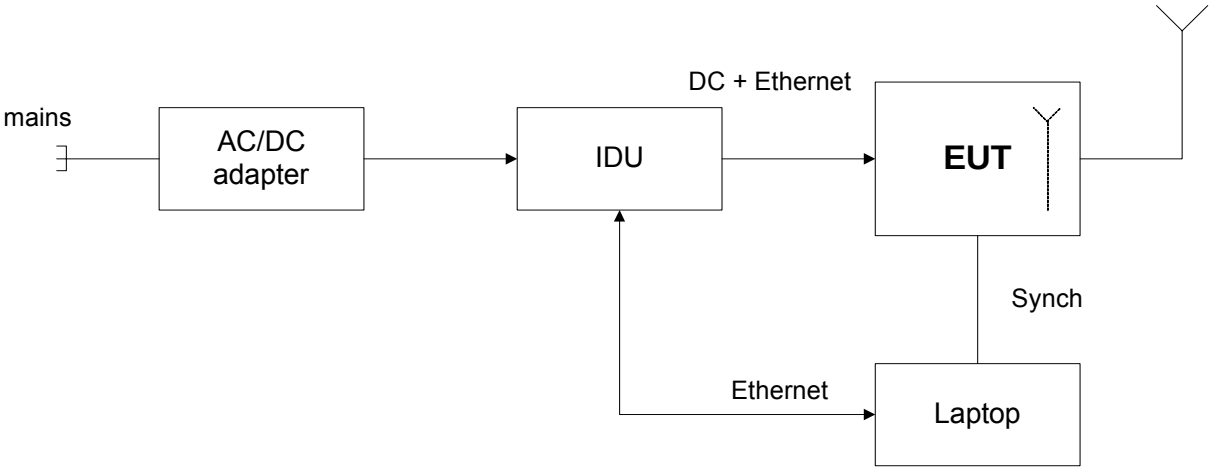
6.3 Support and test equipment

Description	Manufacturer	Model number	Serial number
Laptop	Dell	Latitude/D530	NA
IDU (for configuration with ODU)	RadWin Ltd.	IDU-E	DE2E2000123
AC/DC	YCL	WMB480042-5G	S0714002271

6.4 Changes made in the EUT

No changes were implemented.

6.5 Test configuration



6.6 Transmitter characteristics

Type of equipment					
X	Stand-alone (Equipment with or without its own control provisions)				
Intended use	**Condition of use**				
X	fixed	Always at a distance more than 2 m from all people			
Assigned frequency range	5470 - 5725 MHz				
Operating frequency range	5475 - 5720 MHz				
Maximum rated output power	**Average (conducted)**	3.14 dBm with internal antenna, 4 dBm with external antenna			
	Peak (conducted)	13.6 dBm with integral antenna 13.35 dBm with external antenna			
	Software power settings	8 dBm with integral antenna			
		9 dBm with external antenna			
Antenna connection					
unique coupling	X	standard connector, N-type	integral	X	with temporary RF connector
					without temporary RF connector

Antenna/s technical characteristics			
Type	Manufacturer	Model number	Gain
Flat Panel (integral)	SmartAnt Telecom Co. Ltd.	ALA06-200350	22 dBi
Planar Array (external)	MTI Ltd.	MT – 485045/N	22 dBi

Transmitter 99% power bandwidth	Transmitter aggregate data rate/s, MBps	Type of modulation
5 MHz	1.5; 2.25 3; 4.5 6; 9 12; 13.5	BPSK QPSK 16QAM 64QAM
10 MHz	3, 4.5 6; 9 12; 18 24; 27	BPSK QPSK 16QAM 64QAM
20 MHz	6; 9 12; 18 24; 36 48; 54	BPSK QPSK 16QAM 64QAM

Type of multiplexing	NA
Modulating test signal (baseband)	NA
Maximum transmitter duty cycle in normal use	40%
Transmitter duty cycle supplied for test	100%

Table 6.6.1 Measurement frequencies according to FCC part 15 subpart E requirements

Channel bandwidth, MHz	Channel frequency, MHz		
	Low	Mid	High
5	5475	5595	5720
10	5480	5590	5715
20	5485	5585	5710

Table 6.6.2 Measurement frequencies according to RSS-210 Annex 9 requirements

Channel bandwidth, MHz	Channel frequency, MHz			
	Low	Mid 1	Mid 2	High
5	5475	5595	5655	5720
10	5480	5590	5660	5715
20	5485	5585	5665	5710

Test specification:	Section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks:			

7 Transmitter tests according to 47CFR part 15 subpart E and RSS-210 Annex 9 requirements

7.1 Peak output power and peak spectral power density

7.1.1 General

This test was performed to measure the maximum peak output power and the peak spectral power density at the transmitter RF antenna connector. Specification test limits are given in Table 7.1.1.

Table 7.1.1 Peak output power and peak spectral power density limits

Assigned frequency range, MHz	Maximum peak transmit power*, dBm	Peak spectral power density*, dBm	Measurement bandwidth, MHz
5470 - 5725	The lesser of 250 mW or 11 dBm +10 log B**	11.0	1.0

*Note 1: due to 22 dBi antenna gain the limits of peak output power and peak power spectral density shall be reduced by 16 dB
**Note 2: “B” is the 26-dB emission bandwidth in MHz.

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 set to transmit modulated carrier at maximum data rate.

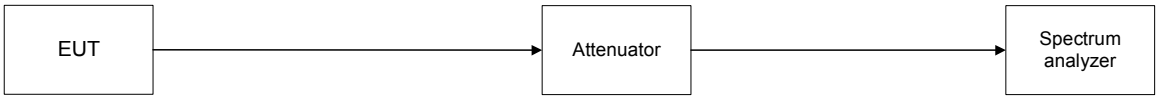
7.1.2.3 The measurements were performed in continuous transmission mode of operation for carrier (channel) frequencies at low and high edges and at the middle of the frequency range shown in Table 7.1.1. The transmitter 26 dB bandwidth was measured with spectrum analyzer as frequency delta between reference points on modulation envelope and provided in Table 7.1.2, Table 7.1.4 and associated plots.

7.1.2.4 The EUT was adjusted to produce maximum available for end user RF output power.

7.1.2.5 The peak output power measurements were performed in continuous transmission mode of operation for carrier (channel) frequency at low, mid and high edges with a sample detector. The power was computed by integrating the spectrum across the 26 dB bandwidth of the signal as provided in Table 7.1.2, Table 7.1.4 and associated plots.

7.1.2.6 The peak power spectral density was measured using a sample detector and power averaging mode to find the highest level across the emission in any 1-MHz band after 100 sweeps of averaging. The test results are provided in Table 7.1.2, Table 7.1.4 and associated plots.

Figure 7.1.1 Peak output power test setup



Test specification:	**Section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks:			

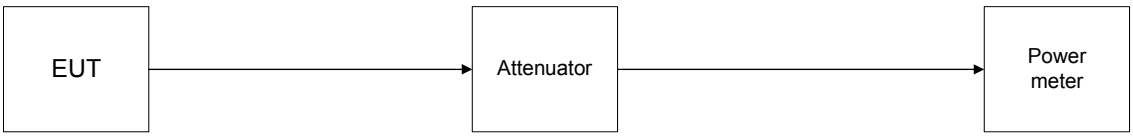
7.1.3 Test procedure for measurements with power meter

7.1.3.1 The EUT was set up as shown in Figure 7.1.2, energized and its proper operation was checked.

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

7.1.3.3 The peak output power was measured with thermocouple power meter as provided in Table 7.1.3, Table 7.1.5.

Figure 7.1.2 Peak output power test setup



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

Table 7.1.2 Average output power and peak power density test results

ASSIGNED FREQUENCY RANGE: 5470-5725 MHz
MODULATING SIGNAL: PRBS
TRANSMITTER OUTPUT POWER SETTINGS: "2 dBm" at 5 MHz channel bandwidth
"5 dBm" at 10 MHz channel bandwidth
"8 dBm" at 20 MHz channel bandwidth
DUTY CYCLE 100 %
DETECTOR USED: Sample
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz
METHOD OF POWER MEASUREMENTS: 1
METHOD OF POWER DENSITY MEASUREMENTS: 2

Frequency, MHz	26 dB bandwidth	Bit rate, MBps	Modulation	Output power			Peak power density			Verdict
				Measured, dBm	Limit, dBm	Margin, dB*	Measured, dBm/MHz	Limit, dBm/MHz	Margin, dB**	
Low channel, CBW 20 MHz										
5485	23.40	6	BPSK	0.67	8.00	-7.33	-13.02	-5	-8.02	Pass
5485	21.23	18	QPSK	1.21	8.00	-6.79	-12.07	-5	-7.07	Pass
5485	21.94	24	16QAM	1.58	8.00	-6.42	-11.83	-5	-6.83	Pass
5485	22.95	54	64QAM	1.54	8.00	-6.46	-12.07	-5	-7.07	Pass
Low channel, CBW 10 MHz										
5480	12.43	3	BPSK	-3.64	5.94	-9.58	-14.59	-5	-9.59	Pass
5480	9.90	9	QPSK	-1.20	4.96	-6.16	-11.16	-5	-6.16	Pass
5480	10.18	12	16QAM	-0.81	5.08	-5.89	-11.12	-5	-6.12	Pass
5480	9.96	27	64QAM	-1.70	4.98	-6.68	-11.68	-5	-6.68	Pass
Low channel, CBW 5 MHz										
5475	5.94	1.5	BPSK	-5.60	2.74	-8.34	-13.33	-5	-8.33	Pass
5475	4.80	4.5	QPSK	-5.34	1.81	-7.15	-12.15	-5	-7.15	Pass
5475	4.89	6	16QAM	-4.95	1.89	-6.84	-11.84	-5	-6.84	Pass
5475	4.89	13.5	64QAM	-4.88	1.89	-6.77	-11.77	-5	-6.77	Pass
Mid channel, CBW 20 MHz										
5585	22.73	6	BPSK	0.96	8.00	-7.04	-12.61	-5	-7.61	Pass
5585	22.05	18	QPSK	2.63	8.00	-5.37	-10.80	-5	-5.80	Pass
5585	21.49	24	16QAM	2.50	8.00	-5.50	-10.82	-5	-5.82	Pass
5585	23.51	54	64QAM	2.50	8.00	-5.50	-11.21	-5	-6.21	Pass
Mid channel, CBW 10 MHz										
5590	12.10	3	BPSK	-2.23	5.83	-8.06	-13.06	-5	-8.06	Pass
5590	9.55	9	QPSK	-0.47	4.80	-5.27	-10.27	-5	-5.27	Pass
5590	9.65	12	16QAM	0.34	4.85	-4.51	-9.51	-5	-4.51	Pass
5590	9.40	27	64QAM	-0.14	4.73	-4.87	-9.87	-5	-4.87	Pass
Mid channel, CBW 5 MHz										
5595	6.21	1.5	BPSK	-4.42	2.93	-7.35	-12.35	-5	-7.35	Pass
5595	4.86	4.5	QPSK	-3.40	1.87	-5.27	-10.26	-5	-5.26	Pass
5595	4.88	6	16QAM	-3.47	1.88	-5.35	-10.35	-5	-5.35	Pass
5595	4.89	13.5	64QAM	-4.44	1.89	-6.33	-11.34	-5	-6.34	Pass

Note 1: due to 22 dBi antenna gain the limits of peak output power and peak power spectral density shall be reduced by 16 dB
Note 2: Measurement plots are in dBm/Hz, in order to convert to dBm/MHz a 60dB factor was added
* - Margin = Measured output power – specification limit
** - Margin = Measured peak power density – specification limit.

Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

Table 7.1.2 Average output power and peak power density test results (continued)

Frequency, MHz	26 dB bandwidth	Bit rate, MBps	Modulation	Output power			Peak power density			Verdict
				Measured, dBm	Limit, dBm	Margin, dB*	Measured, dBm/MHz	Limit, dBm/MHz	Margin, dB**	
Mid2 channel, CBW 20 MHz (IC only)										
5665	22.95	6	BPSK	1.94	8.00	-6.06	-11.67	-5	-6.67	Pass
5665	21.90	18	QPSK	2.75	8.00	-5.25	-10.66	-5	-5.66	Pass
5665	21.68	24	16QAM	3.04	8.00	-4.96	-10.32	-5	-5.32	Pass
5665	23.10	54	64QAM	2.21	8.00	-5.79	-11.43	-5	-6.43	Pass
Mid2 channel, CBW 10 MHz (IC only)										
5660	12.00	3	BPSK	-1.73	5.79	-7.52	-12.52	-5	-7.52	Pass
5660	9.68	9	QPSK	0.48	4.86	-4.38	-9.38	-5	-4.38	Pass
5660	9.75	12	16QAM	0.27	4.89	-4.62	-9.62	-5	-4.62	Pass
5660	9.45	27	64QAM	-0.05	4.75	-4.80	-9.80	-5	-4.80	Pass
Mid2 channel, CBW 5 MHz (IC only)										
5655	6.30	1.5	BPSK	-3.88	2.99	-6.87	-11.88	-5	-6.88	Pass
5655	4.93	4.5	QPSK	-3.09	1.92	-5.01	-10.02	-5	-5.02	Pass
5655	5.04	6	16QAM	-2.76	2.02	-4.78	-9.78	-5	-4.78	Pass
5655	4.88	13.5	64QAM	-3.21	1.88	-5.09	-10.09	-5	-5.09	Pass
High channel, CBW 20 MHz										
5710	22.13	6	BPSK	2.06	8.00	-5.94	-11.39	-5	-6.39	Pass
5710	21.15	18	QPSK	3.14	8.00	-4.86	-10.11	-5	-5.11	Pass
5710	21.75	24	16QAM	3.14	8.00	-4.86	-10.24	-5	-5.24	Pass
5710	23.03	54	64QAM	3.09	8.00	-4.91	-10.53	-5	-5.53	Pass
High channel, CBW 10 MHz										
5715	11.90	3	BPSK	-1.60	5.76	-7.36	-12.36	-5	-7.36	Pass
5715	9.53	9	QPSK	0.11	4.79	-4.68	-9.68	-5	-4.68	Pass
5715	9.68	12	16QAM	0.13	4.86	-4.73	-9.73	-5	-4.73	Pass
5715	9.49	27	64QAM	0.11	4.77	-4.66	-9.66	-5	-4.66	Pass
High channel, CBW 5 MHz										
5720	6.14	1.5	BPSK	-3.71	2.88	-6.59	-11.59	-5	-6.59	Pass
5720	4.90	4.5	QPSK	-3.01	1.90	-4.91	-9.91	-5	-4.91	Pass
5720	4.96	6	16QAM	-2.73	1.95	-4.68	-9.69	-5	-4.69	Pass
5720	4.84	13.5	64QAM	-3.10	1.85	-4.95	-9.95	-5	-4.95	Pass

Note 1: due to 22 dBi antenna gain the limits of peak output power and peak power spectral density shall be reduced by 16 dB

Note 2: Measurement plots are in dBm/Hz, in order to convert to dBm/MHz a 60dB factor was added

* - Margin = Measured output power – specification limit

** - Margin = Measured peak power density – specification limit.

Reference numbers of test equipment used

HL 2909	HL 3208	HL 3439					

Full description is given in Appendix A.

Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

Table 7.1.3 Peak output power test results measured with peak power meter

ASSIGNED FREQUENCY: 5470-5725 MHz
MODULATING SIGNAL: OFDM
TRANSMITTER OUTPUT POWER SETTINGS: 2 dBm at 5 MHz channel bandwidth;
5 dBm at 10 MHz channel bandwidth;
8 dBm at 20 MHz channel bandwidth
DETECTOR USED: Peak
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz

Frequency, MHz	Bit rate, Mbps	Modulation	Power meter reading, dBm	Feeder loss, dB	Peak output power, dBm
Low channel					
5485	6	BPSK	11.95	0	11.95
5485	18	QPSK	11.48	0	11.48
5485	24	16QAM	12.70	0	12.70
5485	54	64QAM	11.20	0	11.20
5480	3	BPSK	10.08	0	10.08
5480	9	QPSK	9.22	0	9.22
5480	12	16QAM	9.70	0	9.70
5480	27	64QAM	9.58	0	9.58
5475	1.5	BPSK	7.02	0	7.02
5475	4.5	QPSK	5.75	0	5.75
5475	6	16QAM	7.02	0	7.02
5475	13.5	64QAM	6.07	0	6.07
Mid channel					
5585	6	BPSK	13.34	0	13.34
5585	18	QPSK	12.37	0	12.37
5585	24	16QAM	13.60	0	13.60
5585	54	64QAM	12.28	0	12.28
5590	3	BPSK	10.86	0	10.86
5590	9	QPSK	9.93	0	9.93
5590	12	16QAM	10.50	0	10.50
5590	27	64QAM	10.38	0	10.38
5595	1.5	BPSK	7.26	0	7.26
5595	4.5	QPSK	6.52	0	6.52
5595	6	16QAM	7.42	0	7.42
5595	13.5	64QAM	6.94	0	6.94

Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

Table 7.1.3 Peak output power test results measured with peak power meter (continued)

Mid channel (IC only)					
5665	6	BPSK	12.90	0	12.90
5665	18	QPSK	12.65	0	12.65
5665	24	16QAM	13.85	0	13.85
5665	54	64QAM	12.90	0	12.90
5660	3	BPSK	11.75	0	11.75
5660	9	QPSK	10.90	0	10.90
5660	12	16QAM	11.55	0	11.55
5660	27	64QAM	10.65	0	10.65
5655	1.5	BPSK	7.50	0	7.50
5655	4.5	QPSK	7.05	0	7.05
5655	6	16QAM	7.92	0	7.92
5655	13.5	64QAM	7.46	0	7.46
High channel					
5710	6	BPSK	13.30	0	13.30
5710	18	QPSK	12.65	0	12.65
5710	24	16QAM	13.20	0	13.20
5710	54	64QAM	13.00	0	13.00
5715	3	BPSK	10.97	0	10.97
5715	9	QPSK	10.40	0	10.40
5715	12	16QAM	11.23	0	11.23
5715	27	64QAM	10.90	0	10.90
5720	1.5	BPSK	8.22	0	8.22
5720	4.5	QPSK	7.50	0	7.50
5720	6	16QAM	8.21	0	8.21
5720	13.5	64QAM	7.72	0	7.72

* - Margin = Measured output power – specification limit.
** - Margin = Measured peak power density – specification limit.

Reference numbers of test equipment used

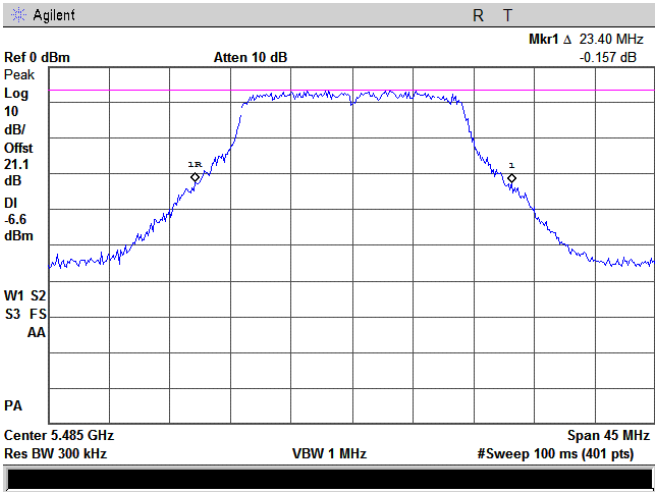
HL 2909	HL 3208	HL 3439					

Full description is given in Appendix A.

Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

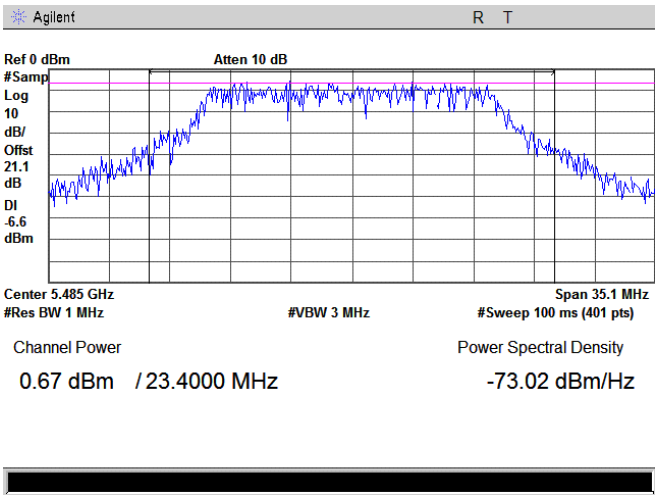
Plot 7.1.1 The 26 dB emission bandwidth

Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Plot 7.1.2 Peak output power and peak power spectral density

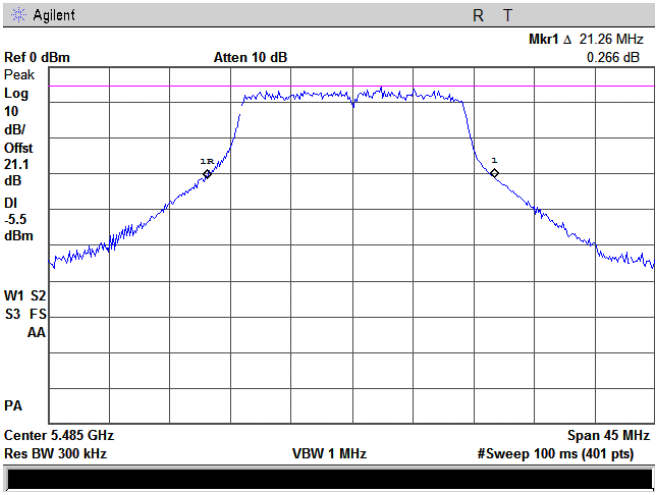
Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

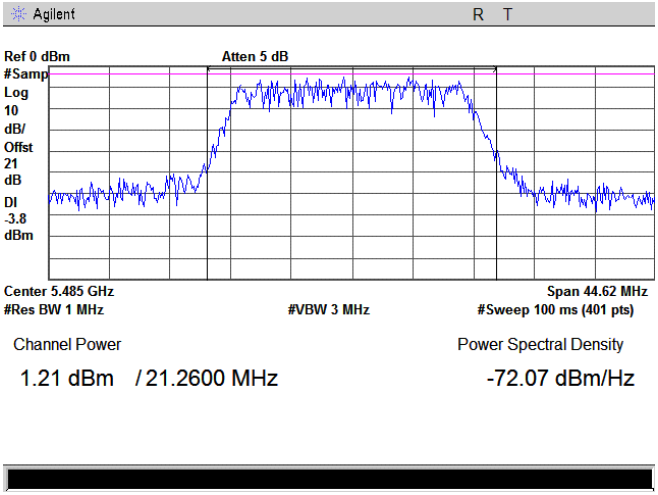
Plot 7.1.3 The 26 dB emission bandwidth

Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Plot 7.1.4 Peak output power and peak power spectral density

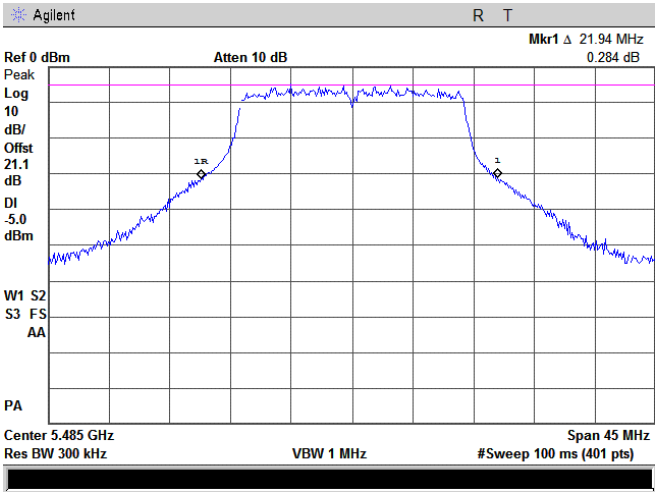
Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

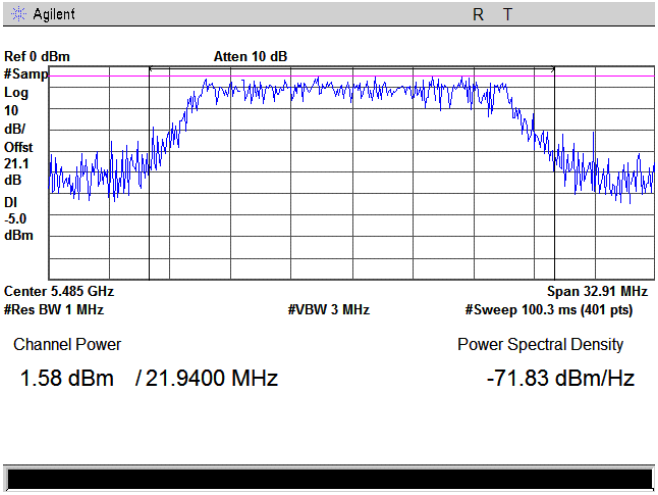
Plot 7.1.5 The 26 dB emission bandwidth

Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Plot 7.1.6 Peak output power and peak power spectral density

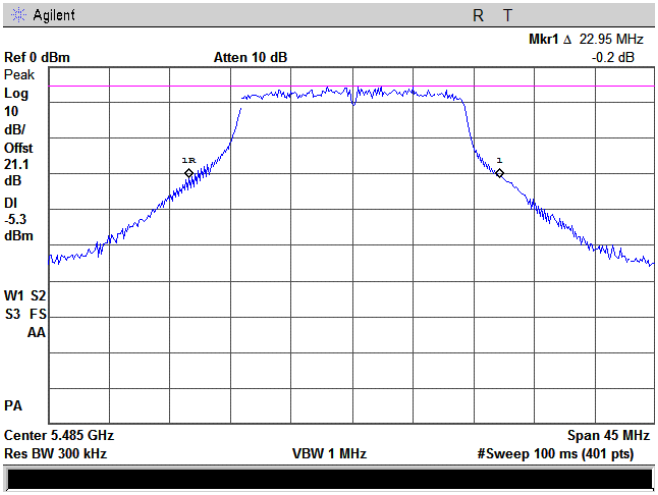
Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

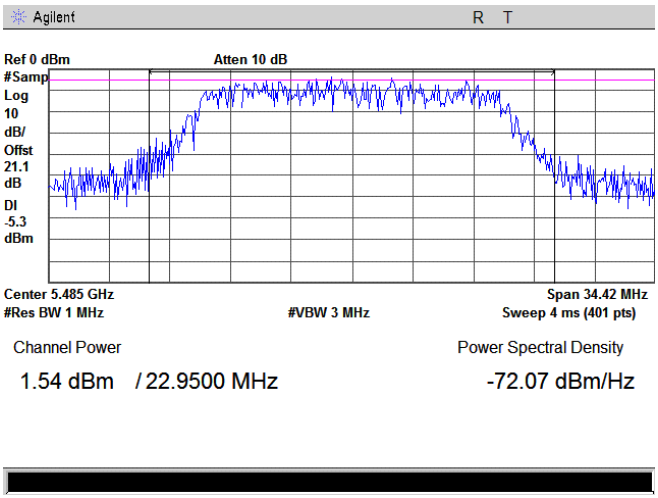
Plot 7.1.7 The 26 dB emission bandwidth

Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Plot 7.1.8 Peak output power and peak power spectral density

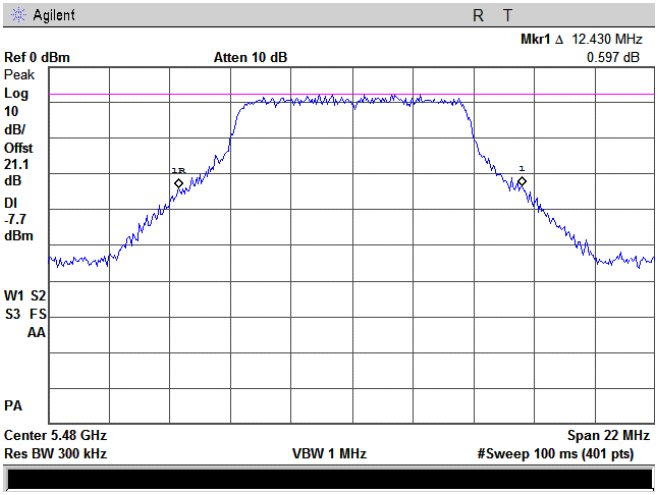
Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

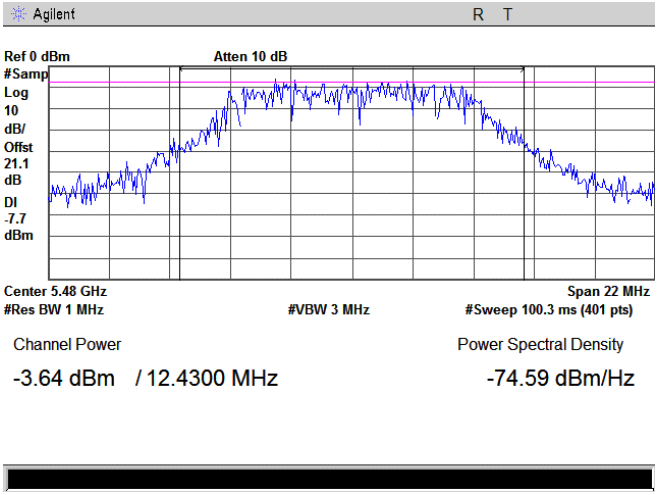
Plot 7.1.9 The 26 dB emission bandwidth

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Plot 7.1.10 Peak output power and peak power spectral density

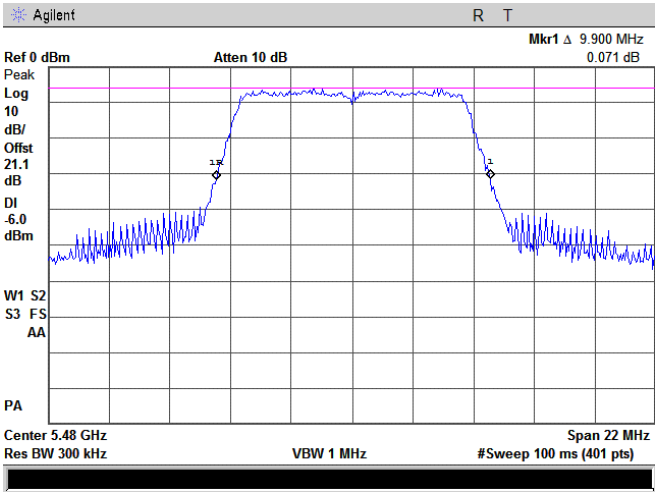
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

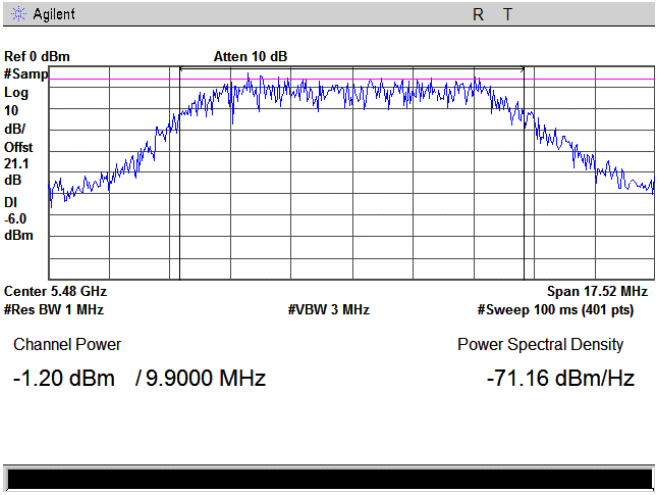
Plot 7.1.11 The 26 dB emission bandwidth

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Plot 7.1.12 Peak output power and peak power spectral density

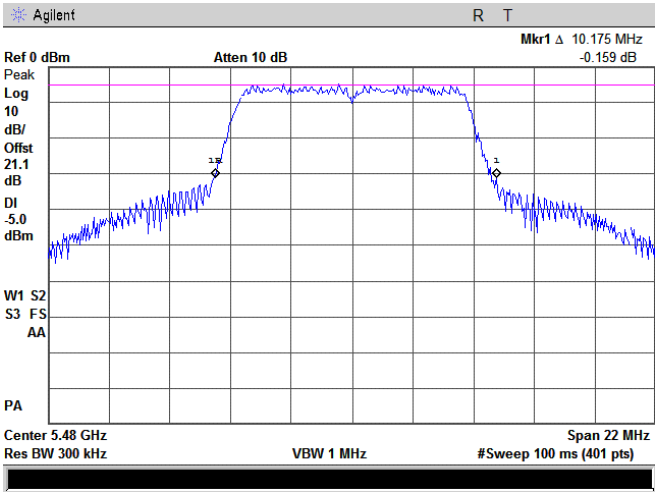
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

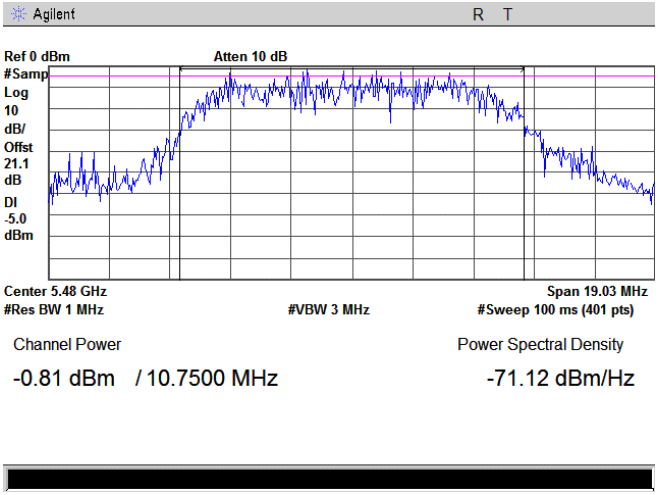
Plot 7.1.13 The 26 dB emission bandwidth

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Plot 7.1.14 Peak output power and peak power spectral density

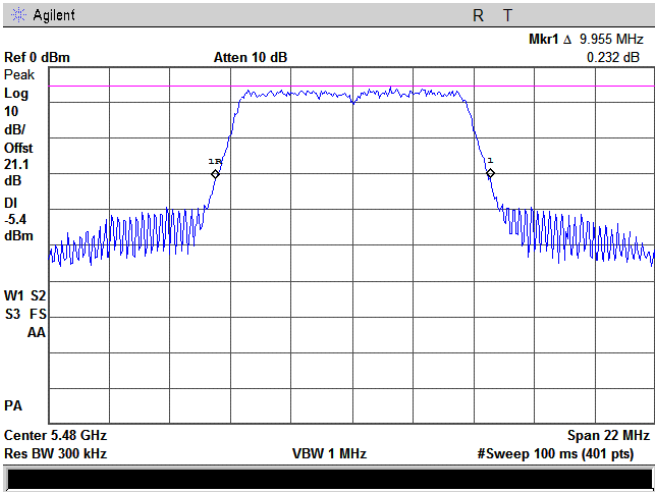
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

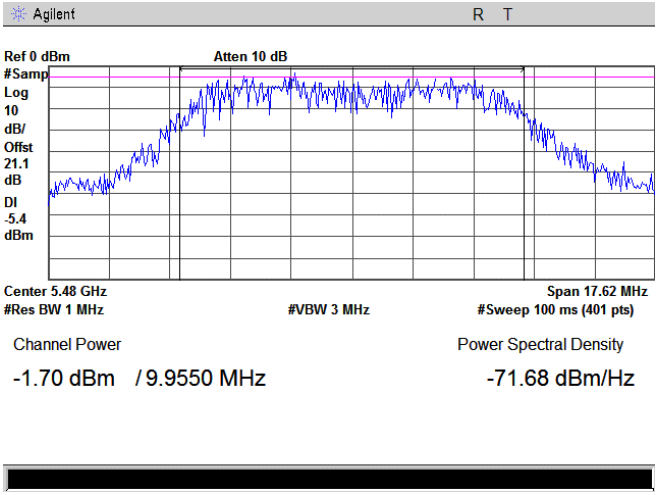
Plot 7.1.15 The 26 dB emission bandwidth

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Plot 7.1.16 Peak output power and peak power spectral density

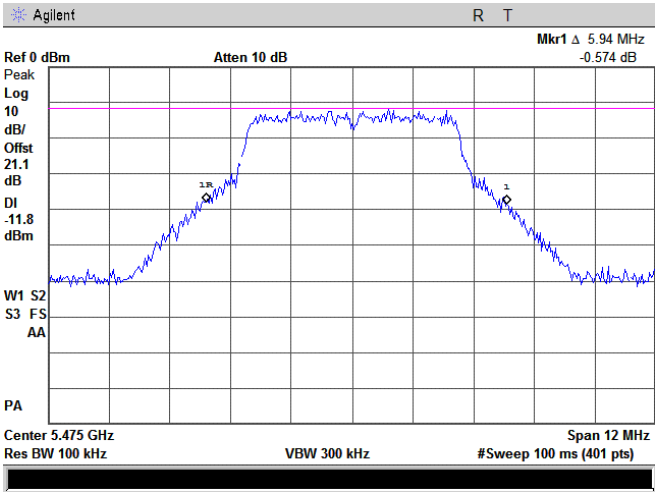
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

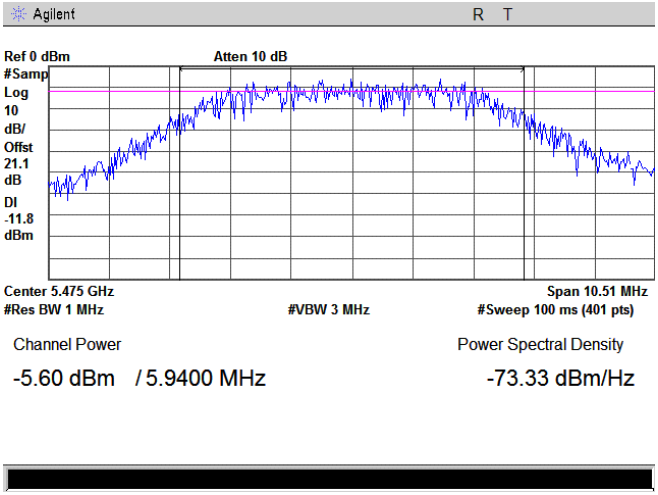
Plot 7.1.17 The 26 dB emission bandwidth

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Plot 7.1.18 Peak output power and peak power spectral density

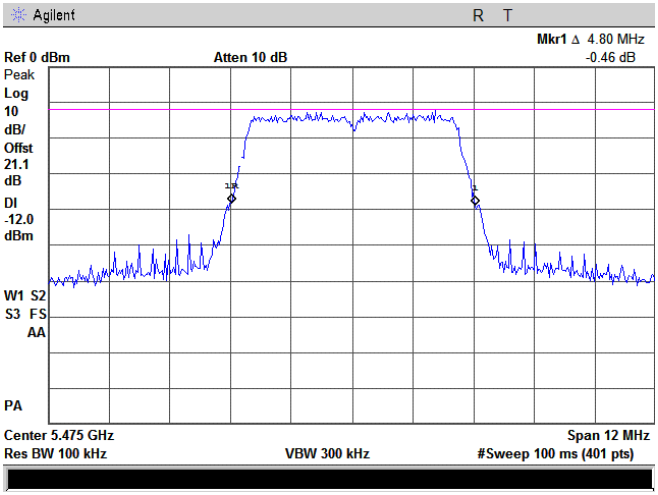
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

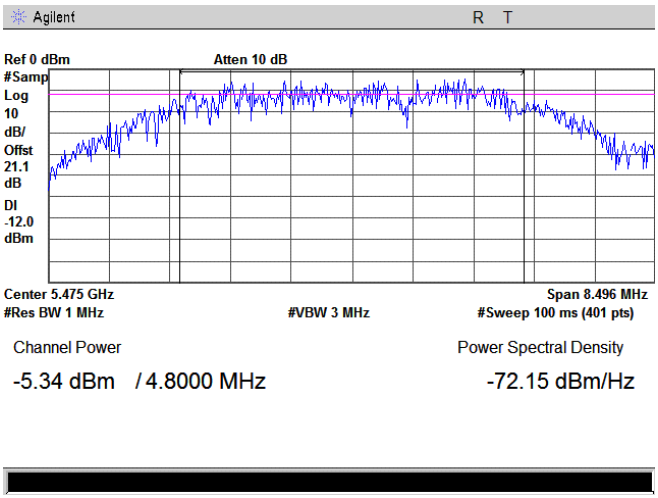
Plot 7.1.19 The 26 dB emission bandwidth

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Plot 7.1.20 Peak output power and peak power spectral density

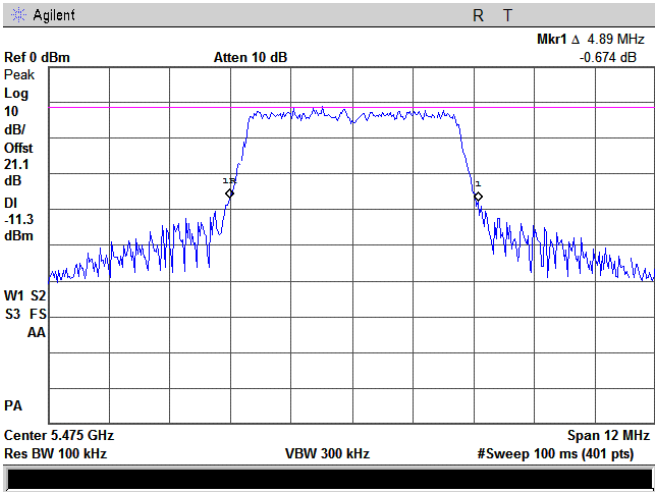
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

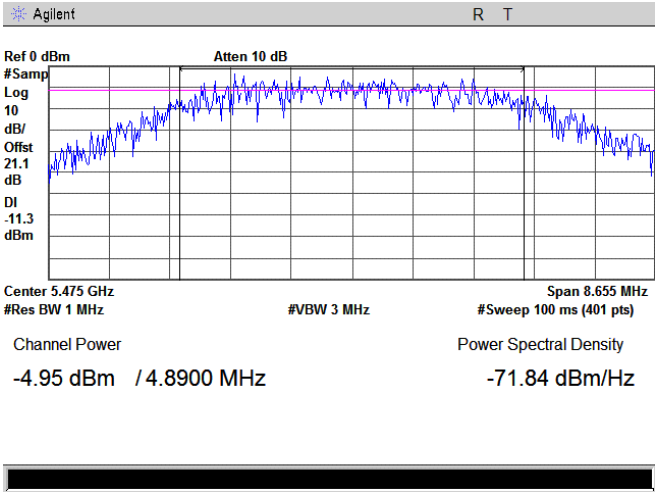
Plot 7.1.21 The 26 dB emission bandwidth

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Plot 7.1.22 Peak output power and peak power spectral density

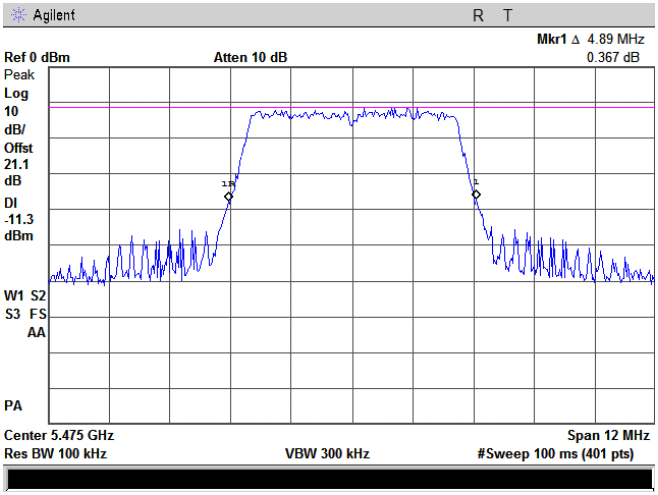
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

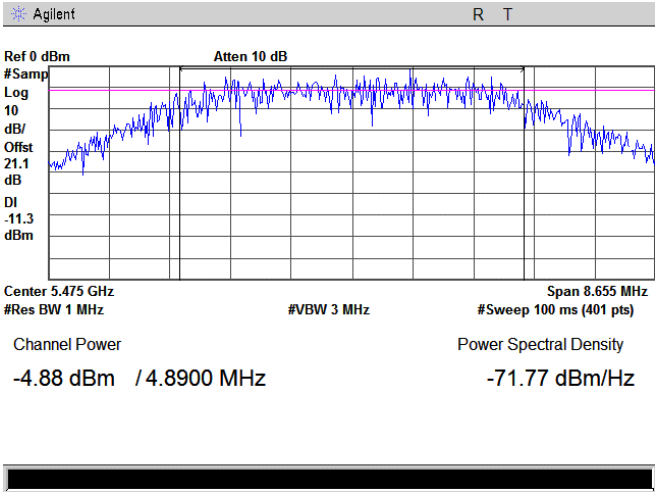
Plot 7.1.23 The 26 dB emission bandwidth

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Plot 7.1.24 Peak output power and peak power spectral density

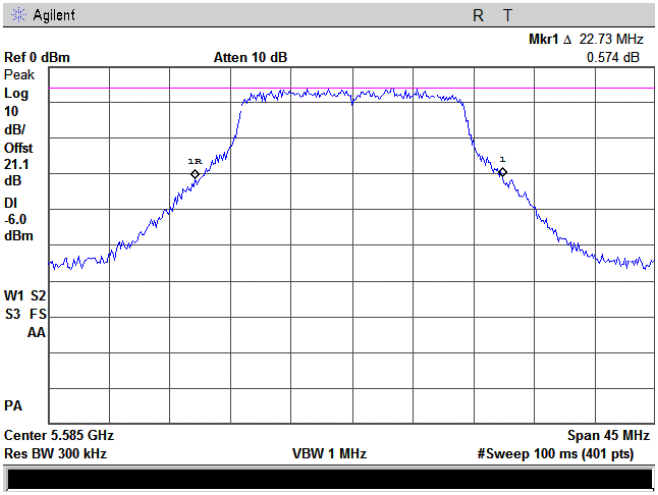
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

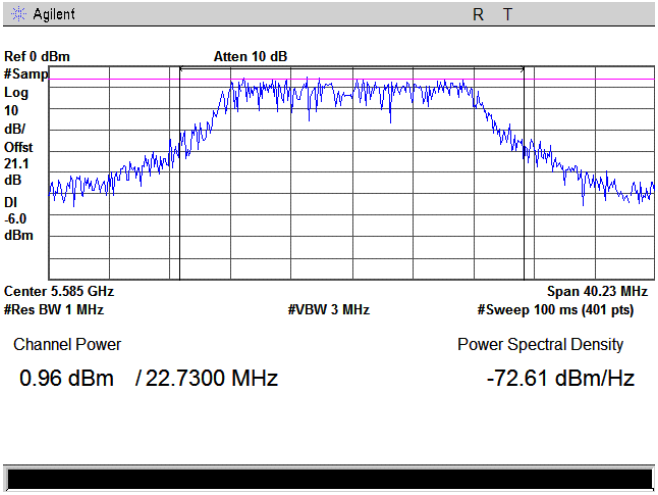
Plot 7.1.25 The 26 dB emission bandwidth

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Plot 7.1.26 Peak output power and peak power spectral density

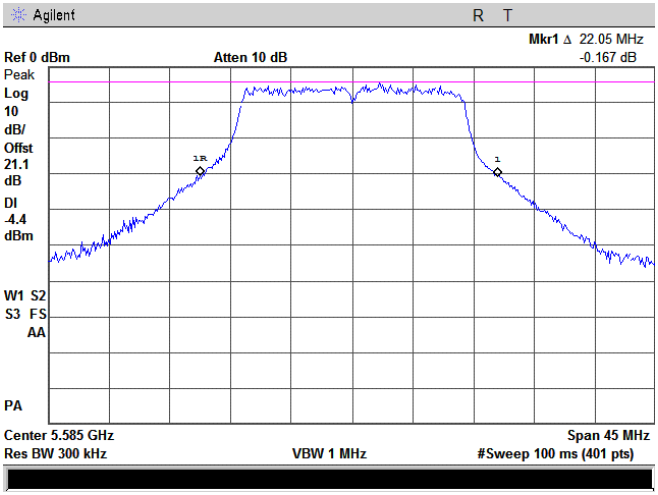
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

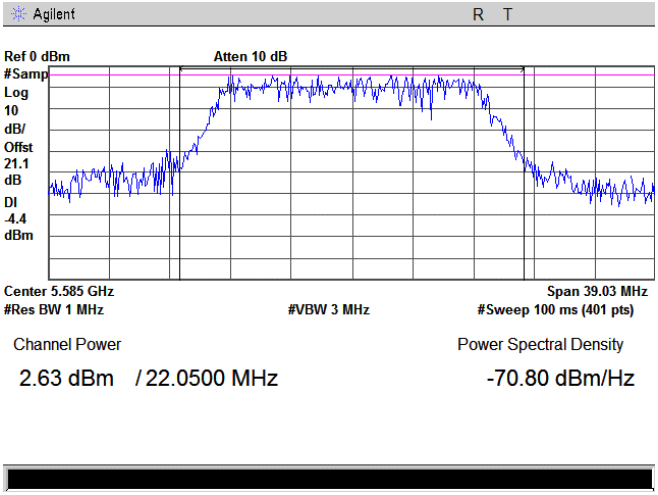
Plot 7.1.27 The 26 dB emission bandwidth

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Plot 7.1.28 Peak output power and peak power spectral density

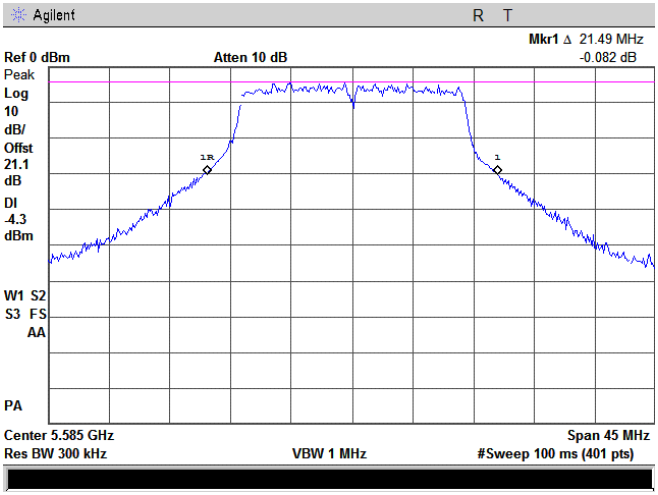
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

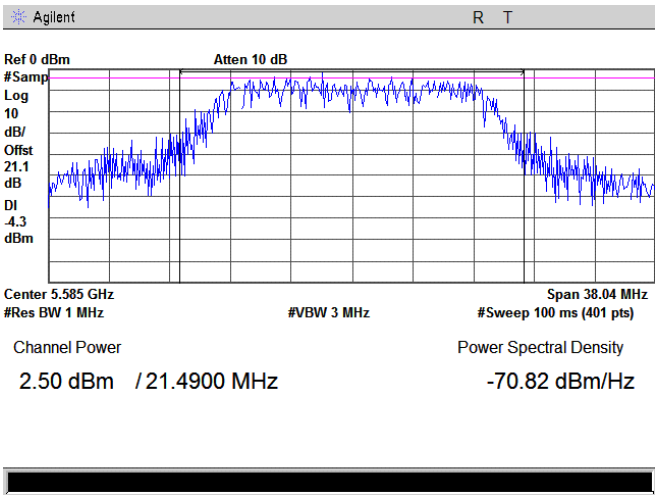
Plot 7.1.29 The 26 dB emission bandwidth

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Plot 7.1.30 Peak output power and peak power spectral density

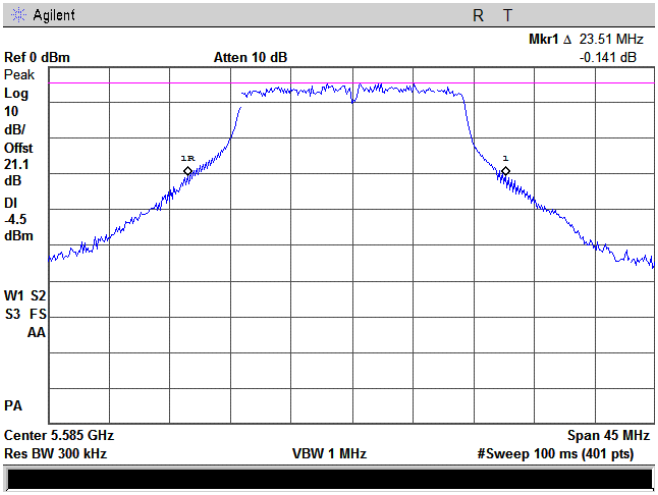
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

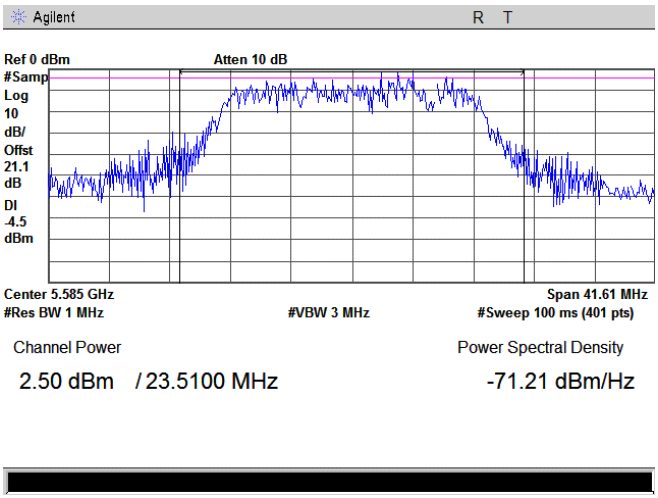
Plot 7.1.31 The 26 dB emission bandwidth

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Plot 7.1.32 Peak output power and peak power spectral density

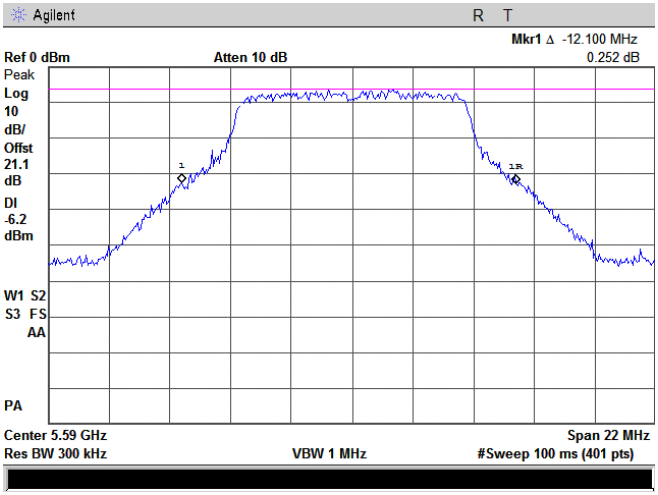
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

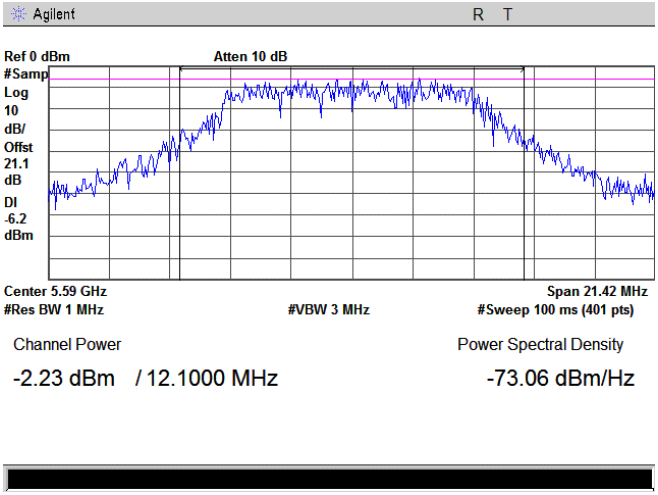
Plot 7.1.33 The 26 dB emission bandwidth

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Plot 7.1.34 Peak output power and peak power spectral density

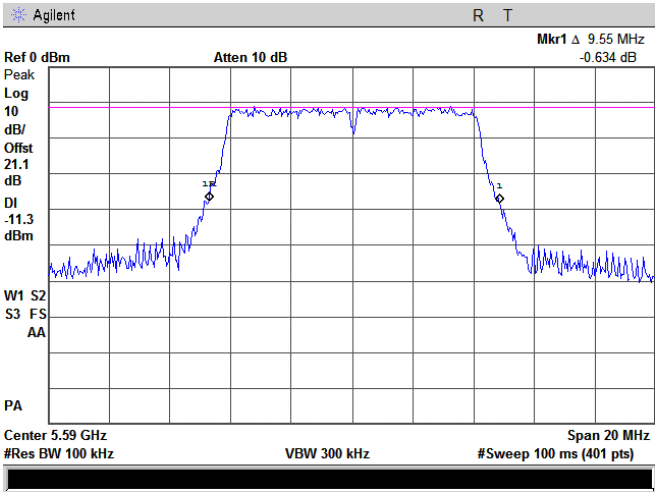
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

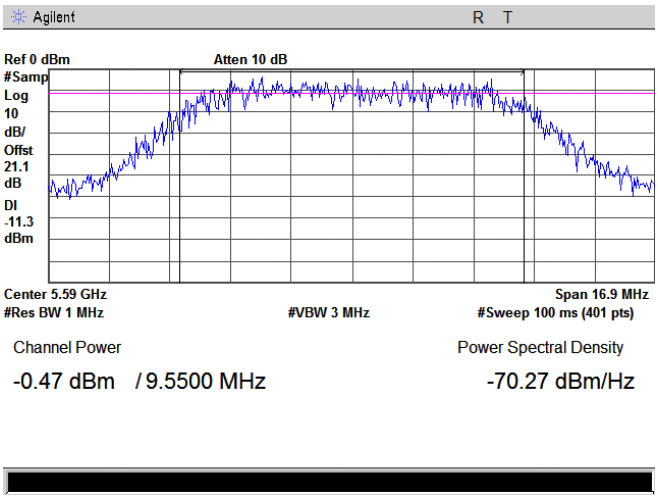
Plot 7.1.35 The 26 dB emission bandwidth

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Plot 7.1.36 Peak output power and peak power spectral density

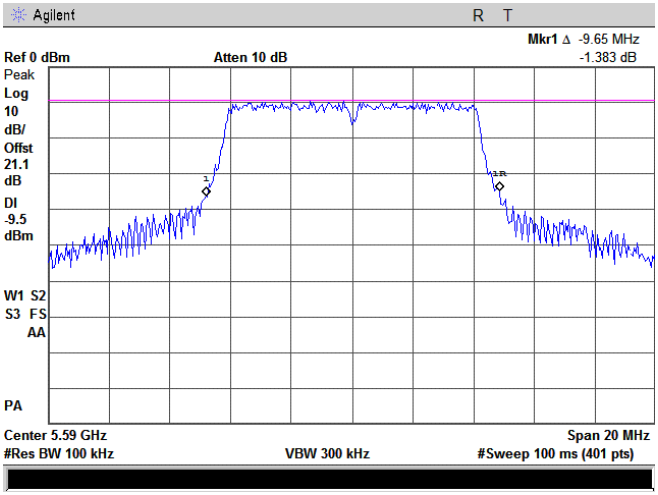
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

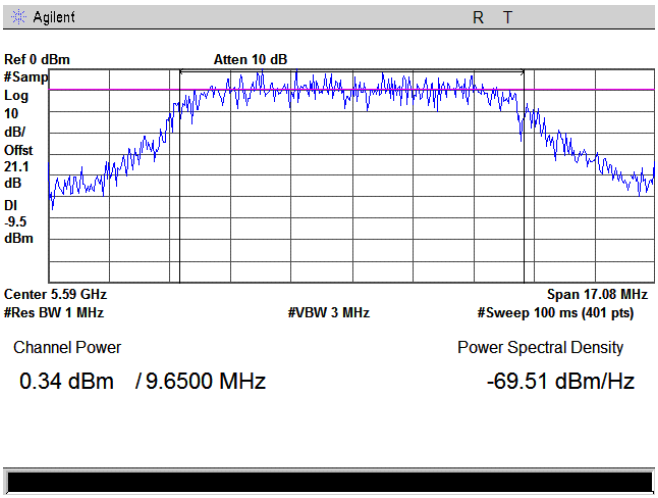
Plot 7.1.37 The 26 dB emission bandwidth

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Plot 7.1.38 Peak output power and peak power spectral density

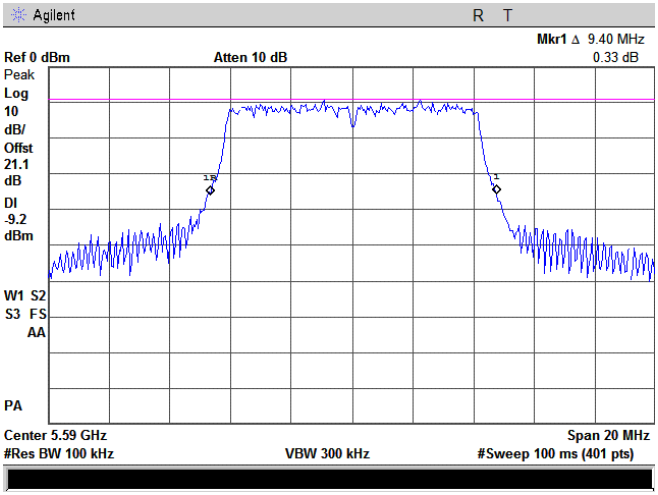
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

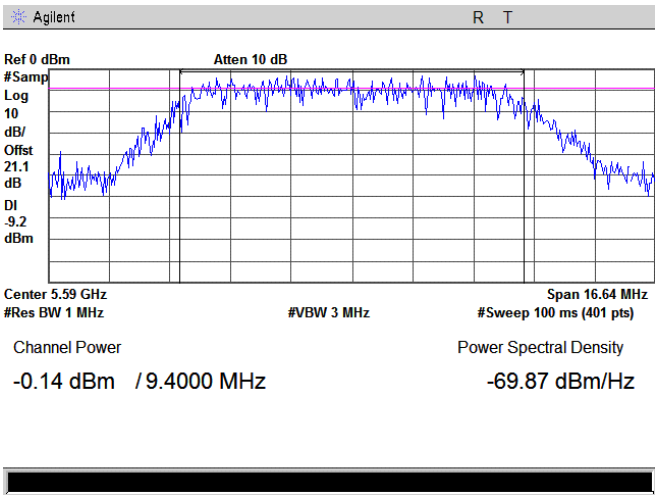
Plot 7.1.39 The 26 dB emission bandwidth

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Plot 7.1.40 Peak output power and peak power spectral density

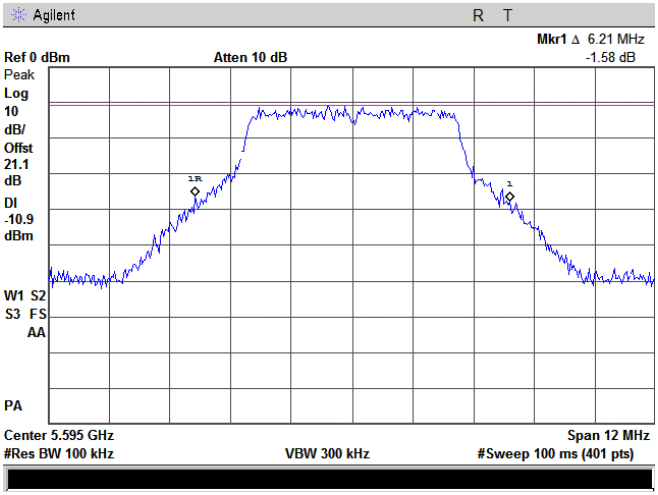
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

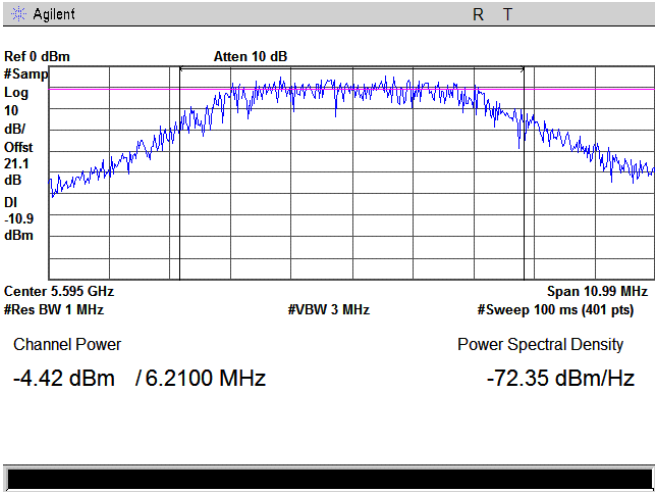
Plot 7.1.41 The 26 dB emission bandwidth

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Plot 7.1.42 Peak output power and peak power spectral density

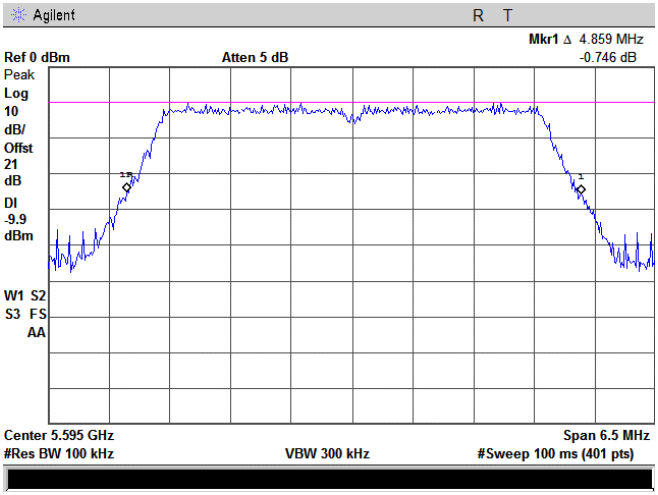
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

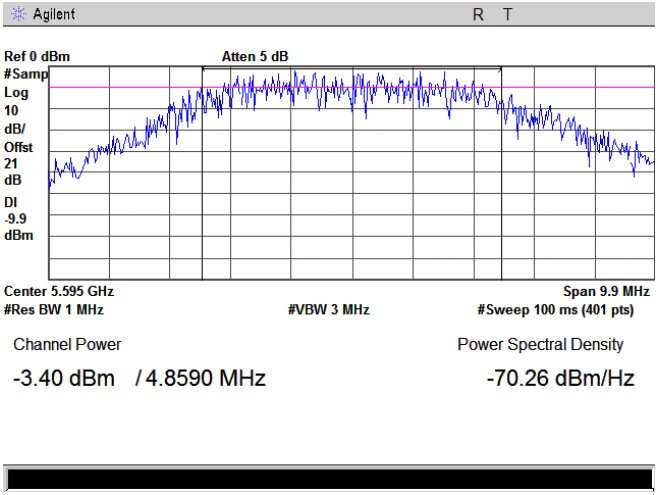
Plot 7.1.43 The 26 dB emission bandwidth

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Plot 7.1.44 Peak output power and peak power spectral density

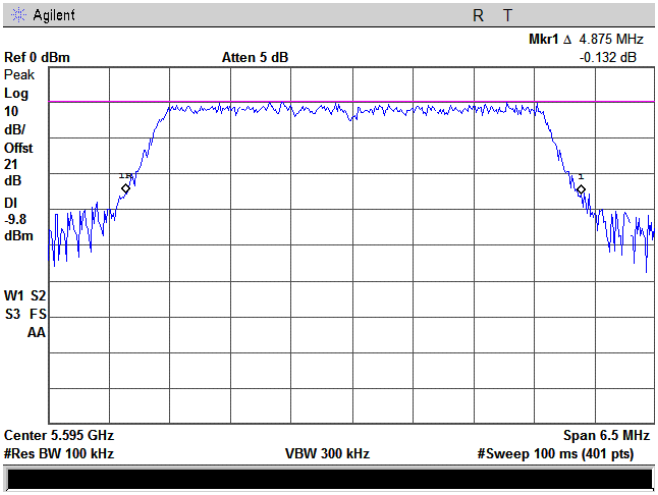
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

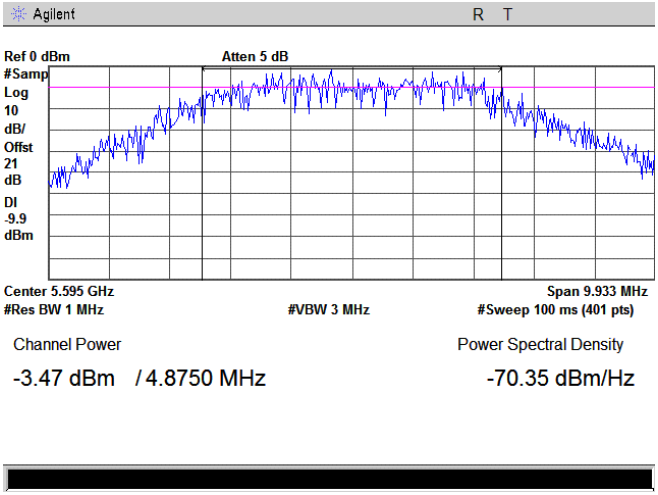
Plot 7.1.45 The 26 dB emission bandwidth

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Plot 7.1.46 Peak output power and peak power spectral density

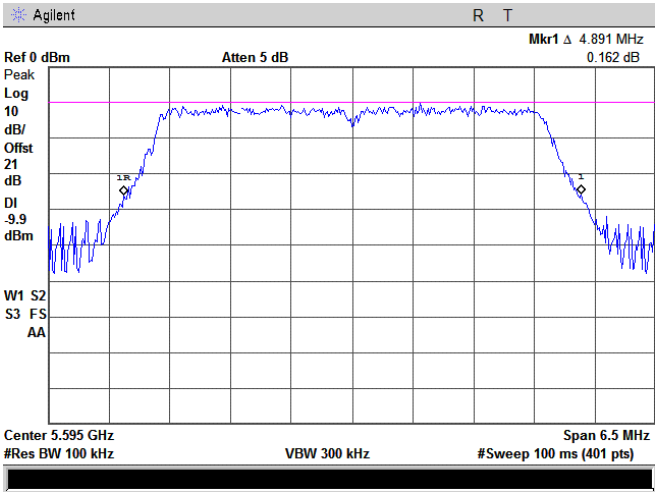
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

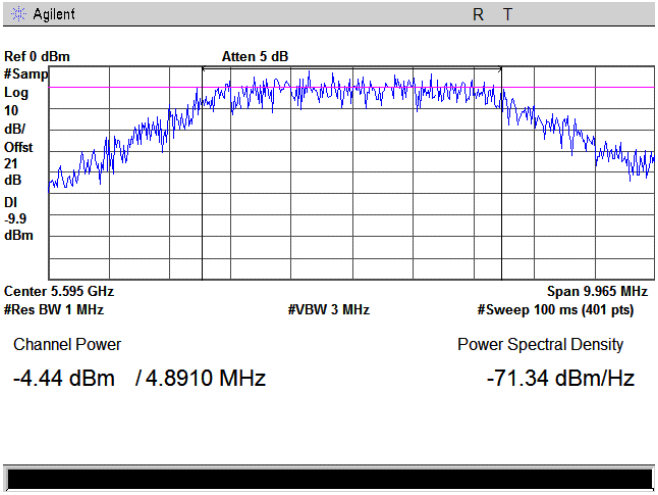
Plot 7.1.47 The 26 dB emission bandwidth

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Plot 7.1.48 Peak output power and peak power spectral density

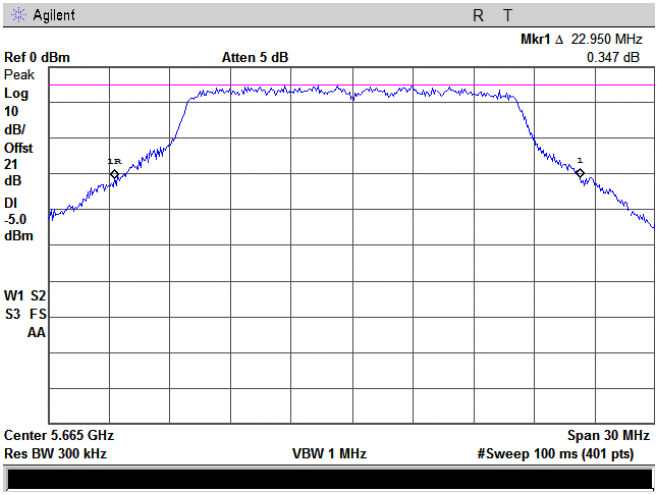
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

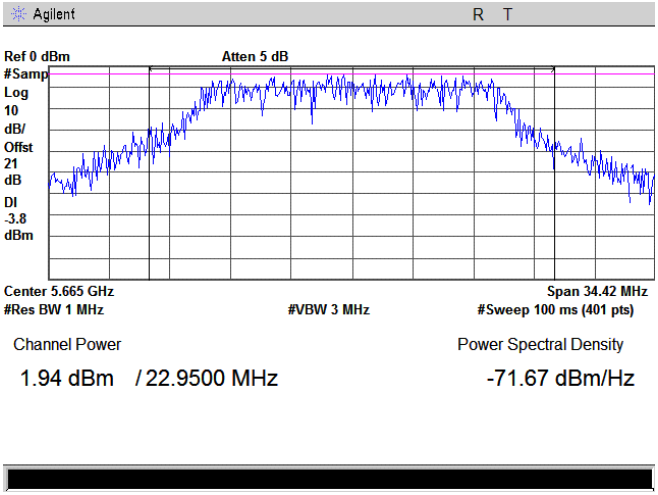
Plot 7.1.49 The 26 dB emission bandwidth

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Plot 7.1.50 Peak output power and peak power spectral density

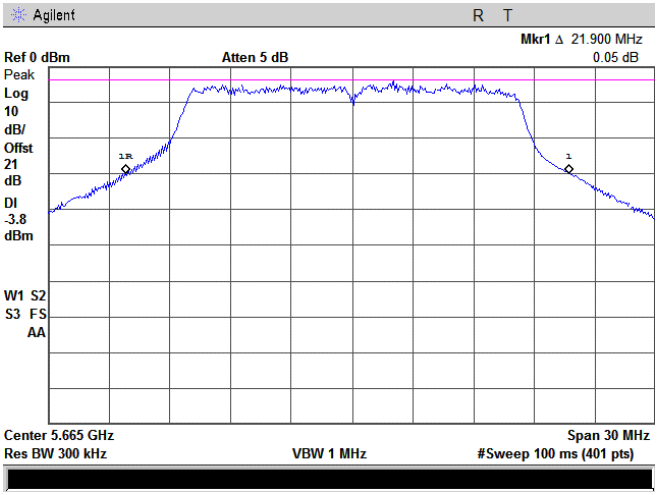
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

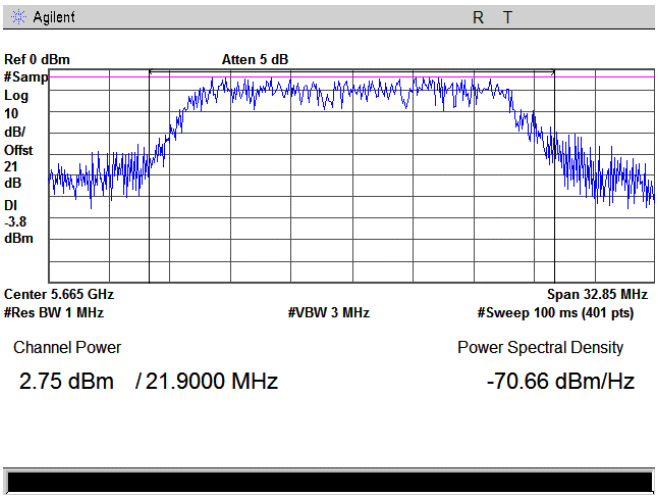
Plot 7.1.51 The 26 dB emission bandwidth

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Plot 7.1.52 Peak output power and peak power spectral density

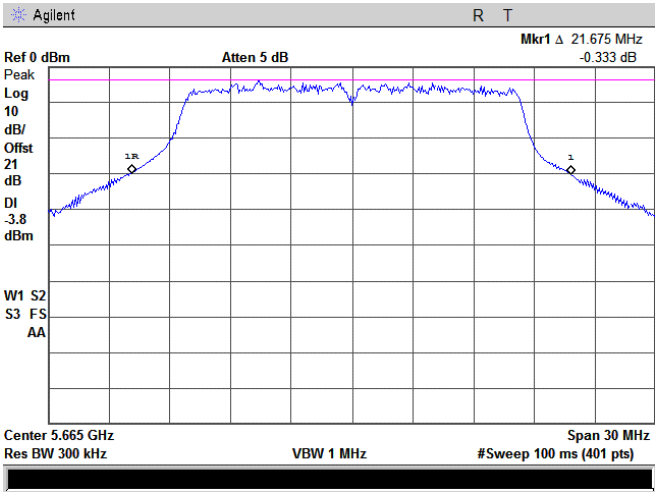
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

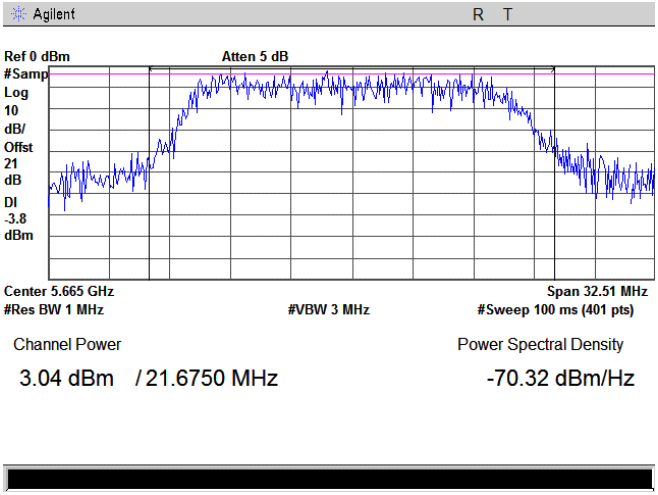
Plot 7.1.53 The 26 dB emission bandwidth

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Plot 7.1.54 Peak output power and peak power spectral density

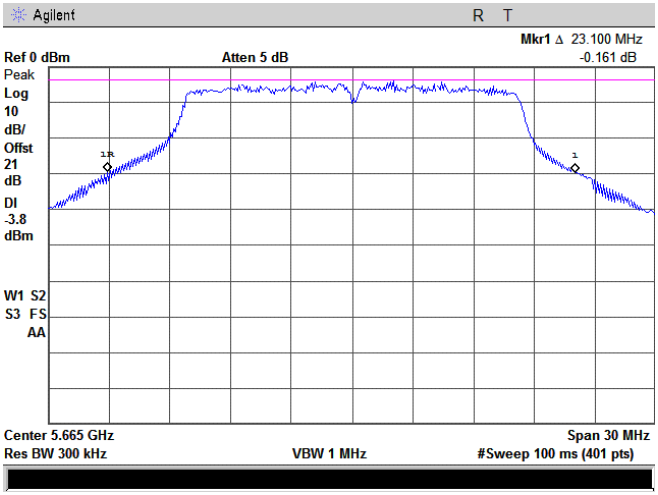
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

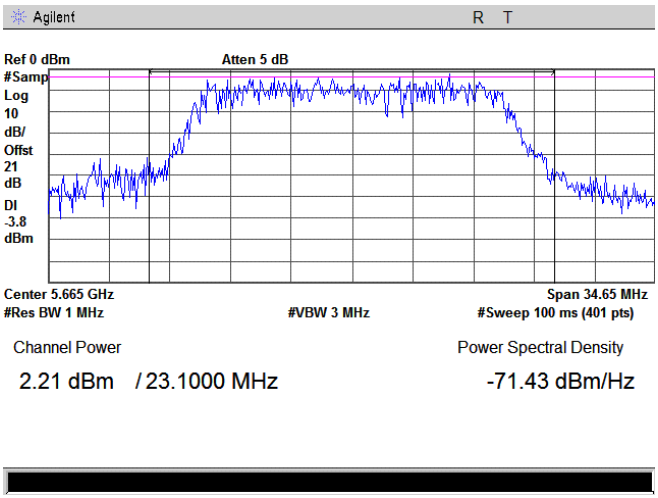
Plot 7.1.55 The 26 dB emission bandwidth

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Plot 7.1.56 Peak output power and peak power spectral density

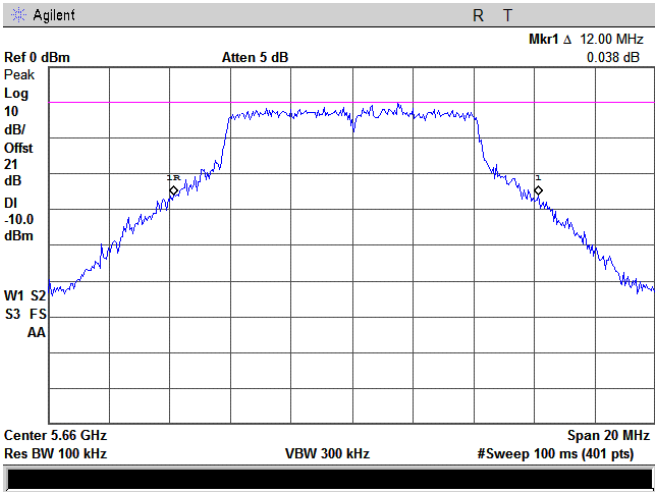
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

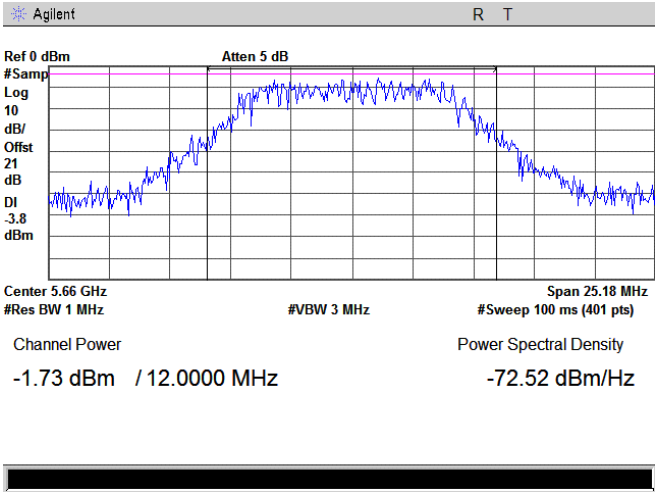
Plot 7.1.57 The 26 dB emission bandwidth

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Plot 7.1.58 Peak output power and peak power spectral density

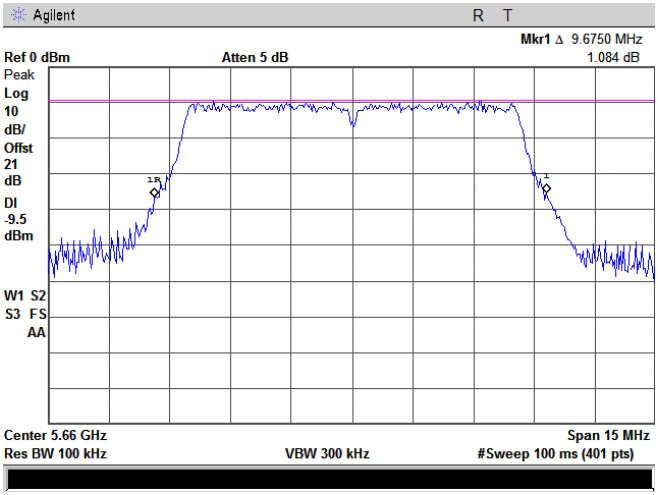
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

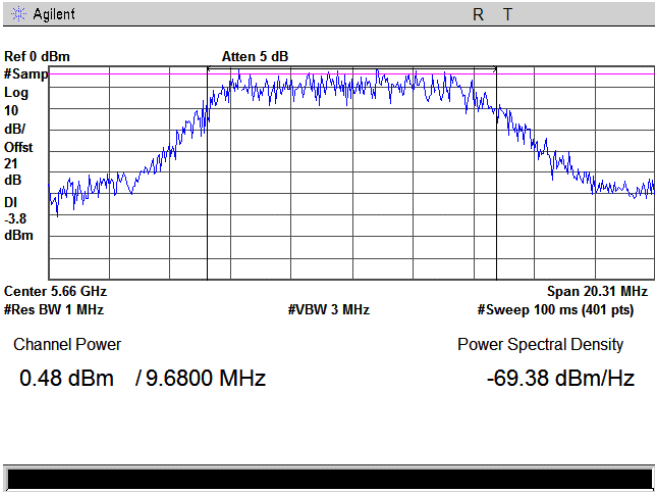
Plot 7.1.59 The 26 dB emission bandwidth

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Plot 7.1.60 Peak output power and peak power spectral density

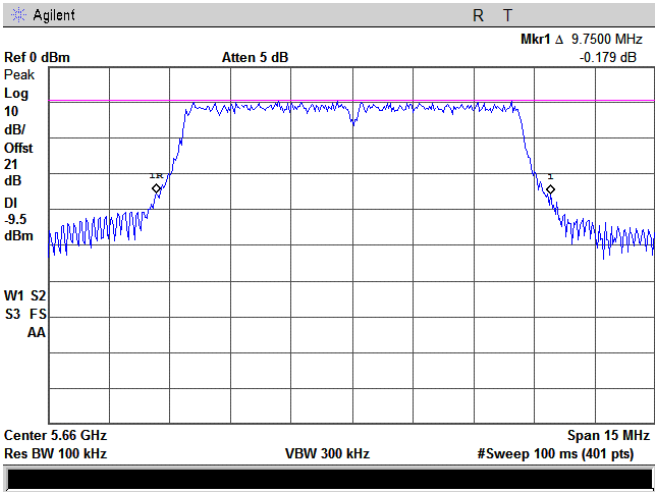
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

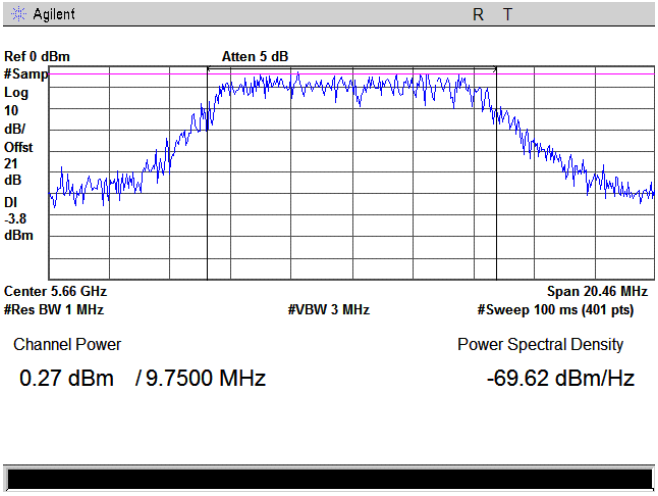
Plot 7.1.61 The 26 dB emission bandwidth

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Plot 7.1.62 Peak output power and peak power spectral density

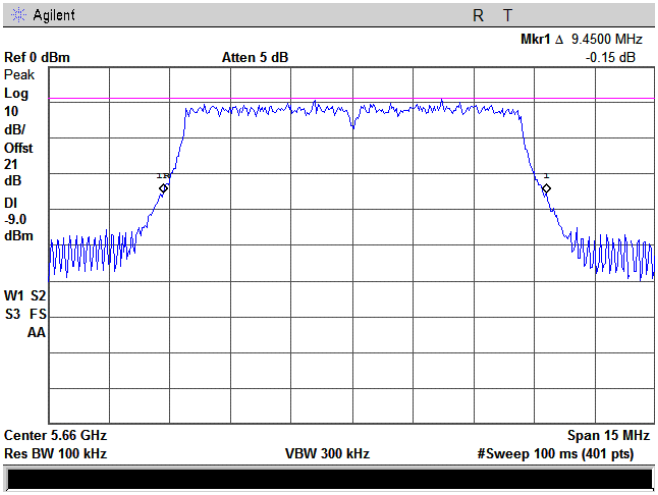
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

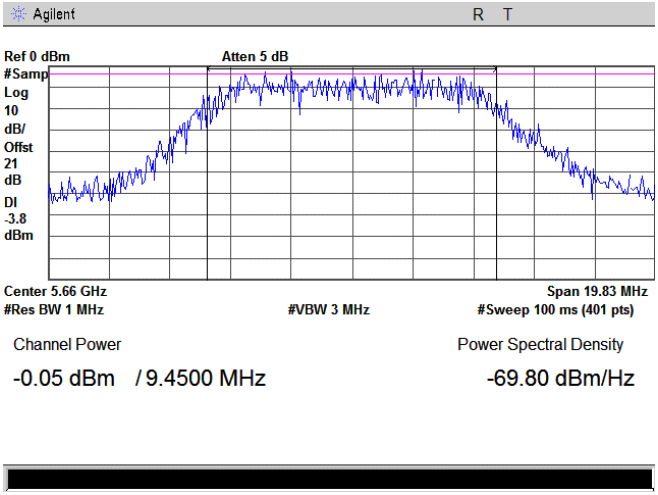
Plot 7.1.63 The 26 dB emission bandwidth

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Plot 7.1.64 Peak output power and peak power spectral density

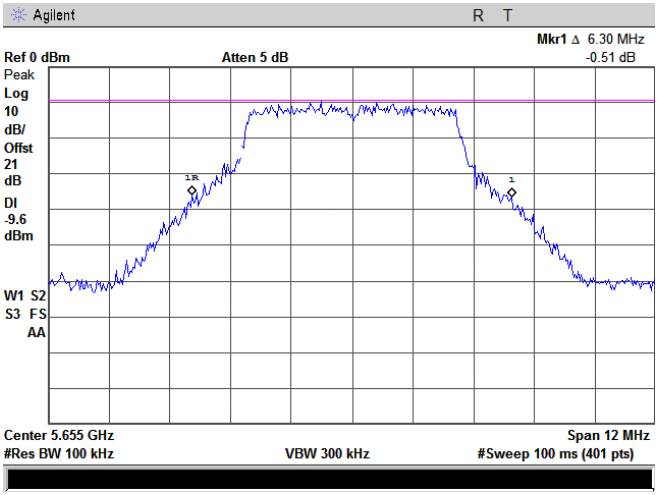
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

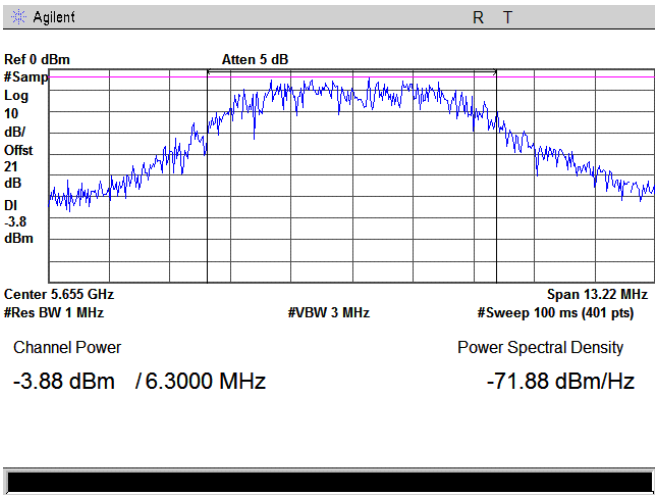
Plot 7.1.65 The 26 dB emission bandwidth

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Plot 7.1.66 Peak output power and peak power spectral density

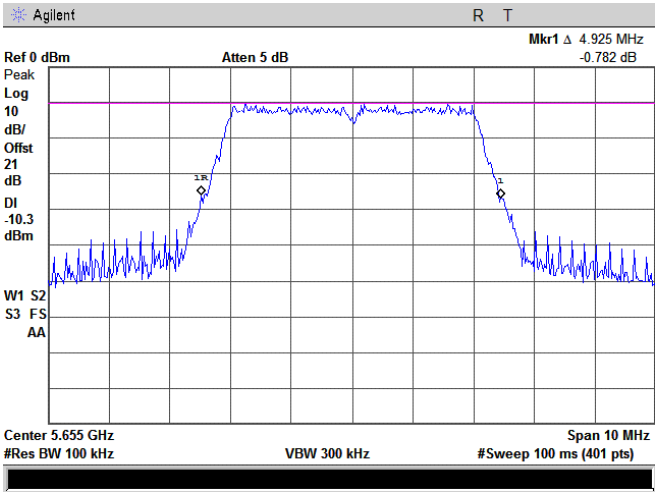
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

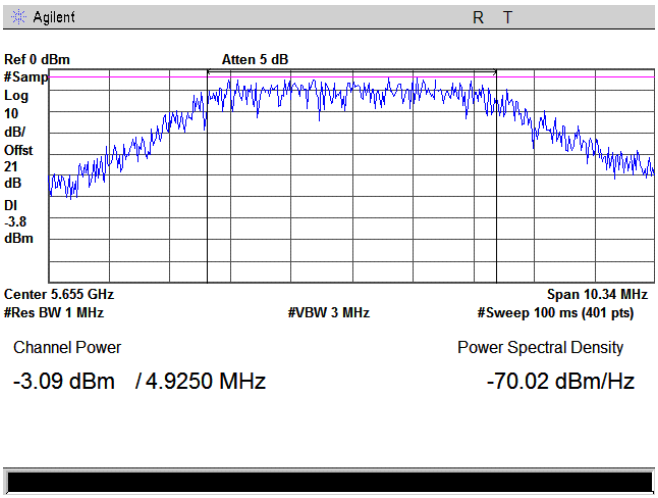
Plot 7.1.67 The 26 dB emission bandwidth

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Plot 7.1.68 Peak output power and peak power spectral density

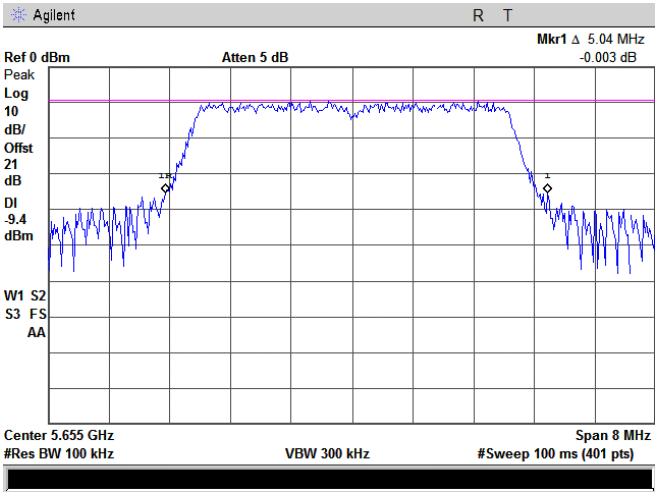
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

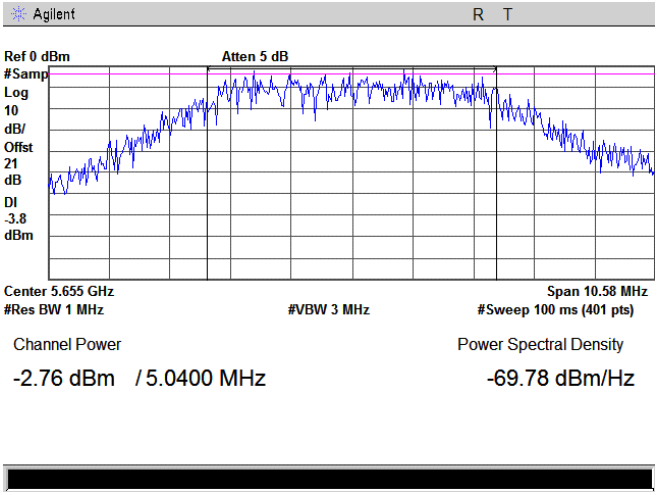
Plot 7.1.69 The 26 dB emission bandwidth

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Plot 7.1.70 Peak output power and peak power spectral density

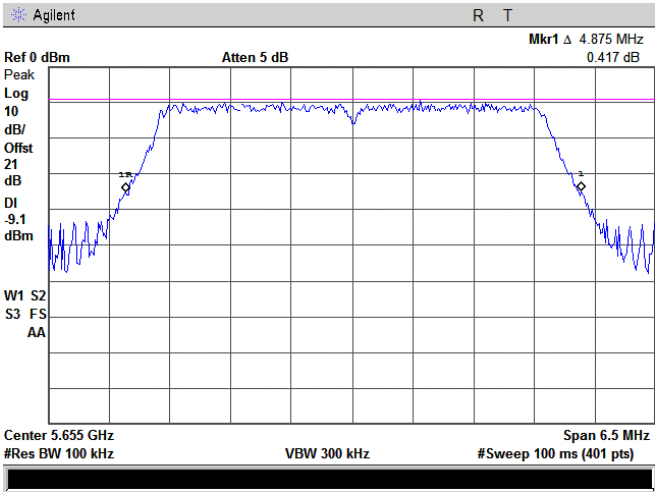
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

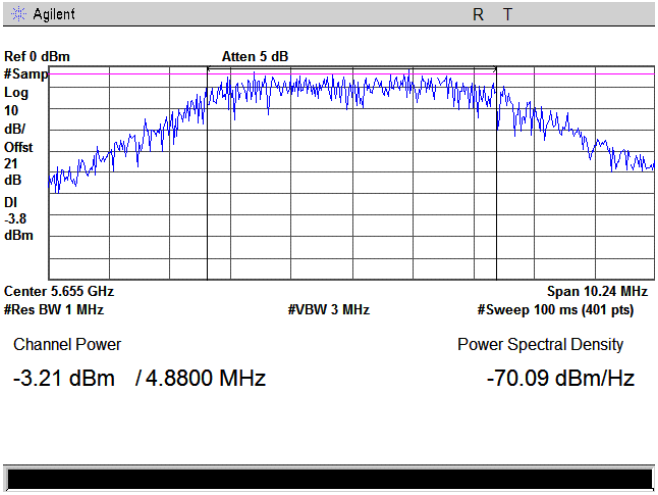
Plot 7.1.71 The 26 dB emission bandwidth

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Plot 7.1.72 Peak output power and peak power spectral density

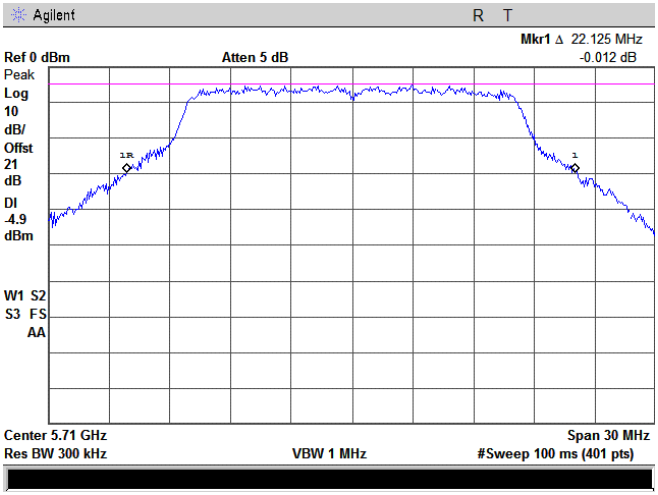
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

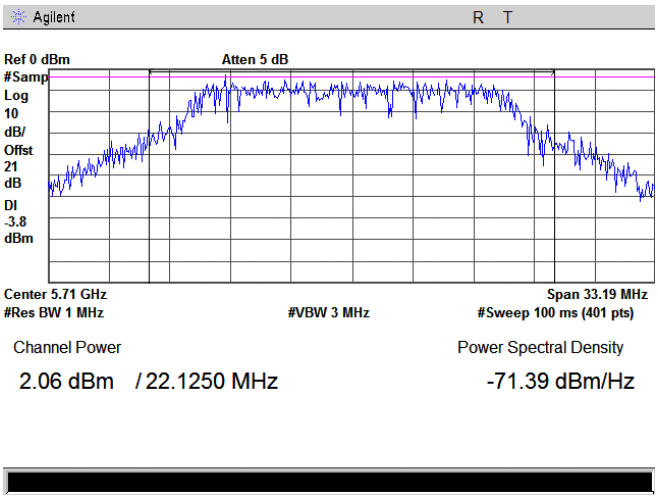
Plot 7.1.73 The 26 dB emission bandwidth

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Plot 7.1.74 Peak output power and peak power spectral density

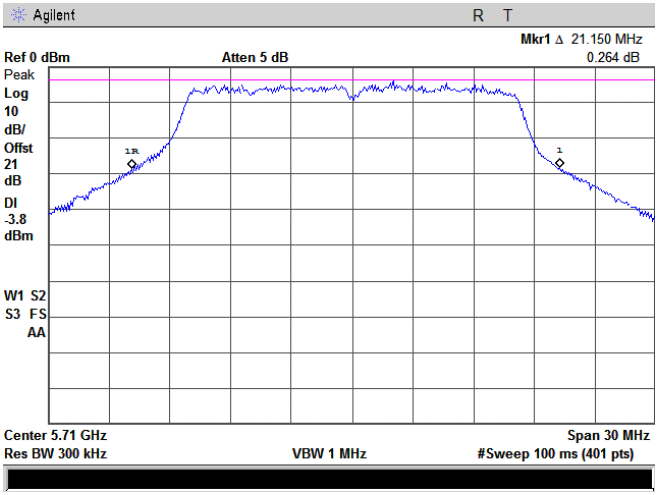
Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

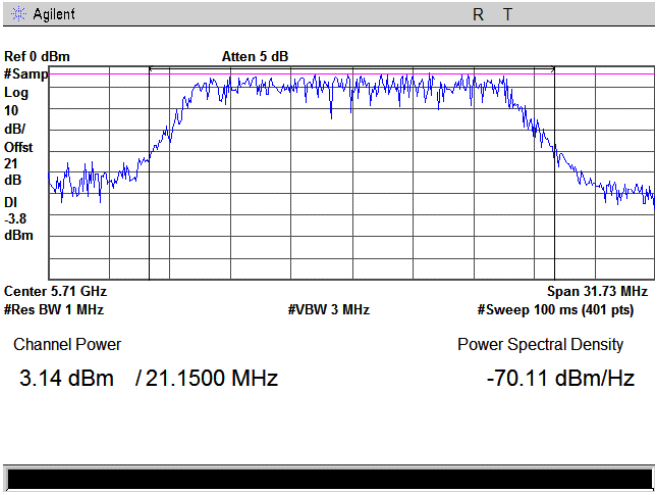
Plot 7.1.75 The 26 dB emission bandwidth

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Plot 7.1.76 Peak output power and peak power spectral density

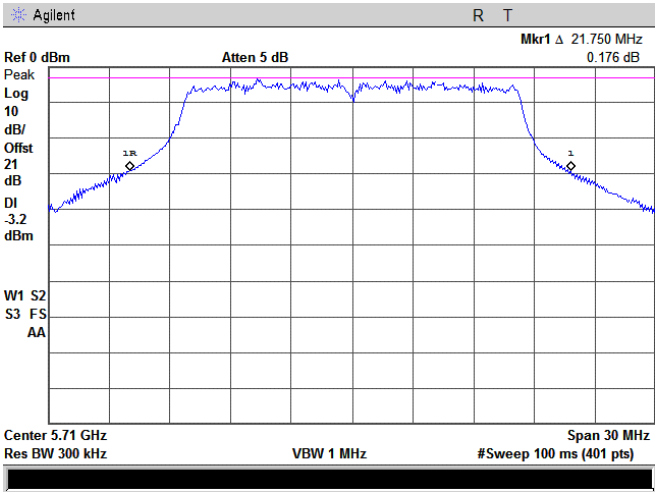
Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

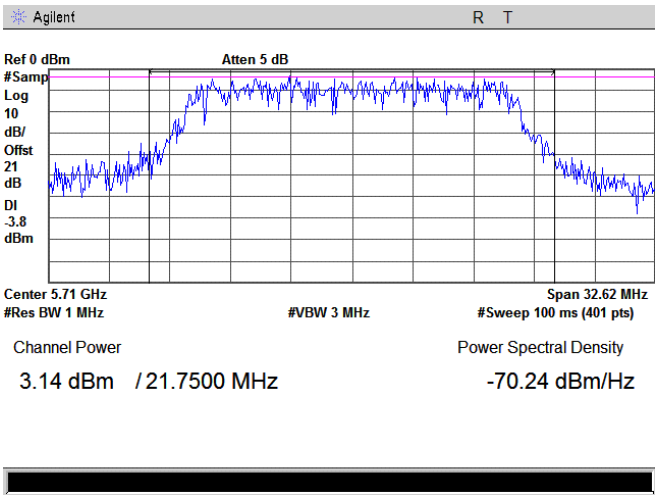
Plot 7.1.77 The 26 dB emission bandwidth

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Plot 7.1.78 Peak output power and peak power spectral density

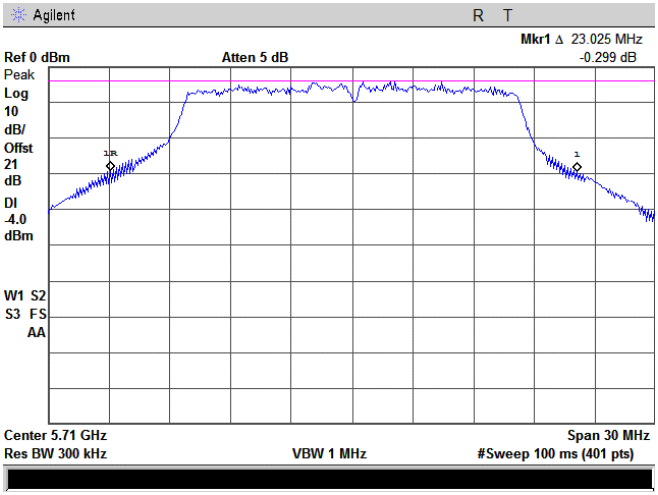
Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

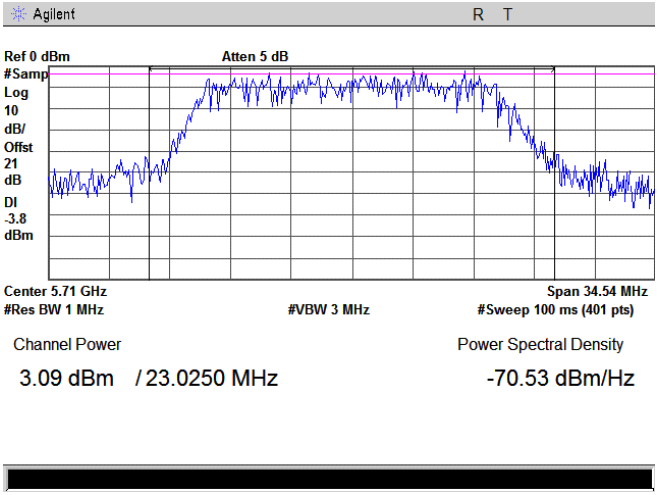
Plot 7.1.79 The 26 dB emission bandwidth

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Plot 7.1.80 Peak output power and peak power spectral density

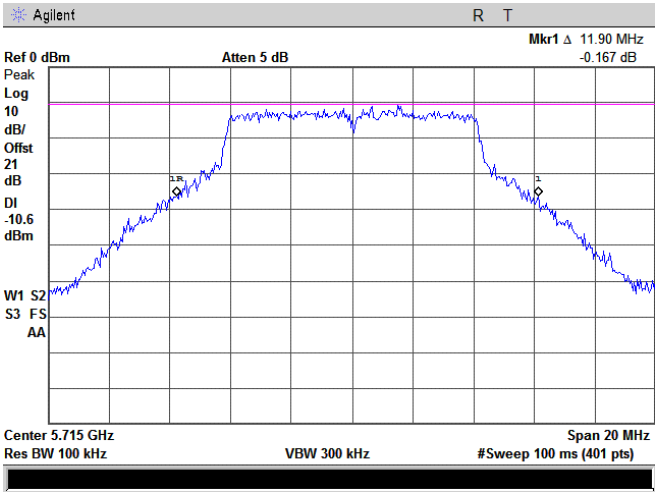
Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

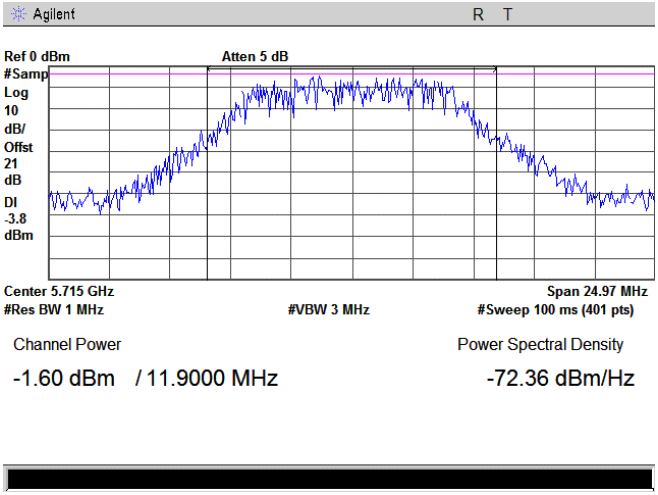
Plot 7.1.81 The 26 dB emission bandwidth

Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Plot 7.1.82 Peak output power and peak power spectral density

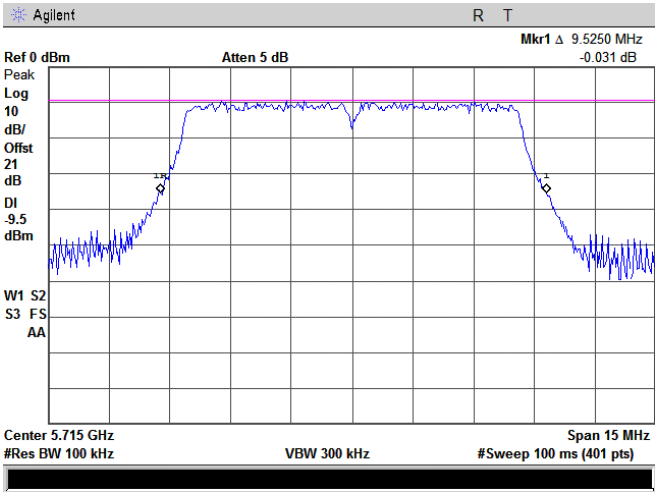
Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

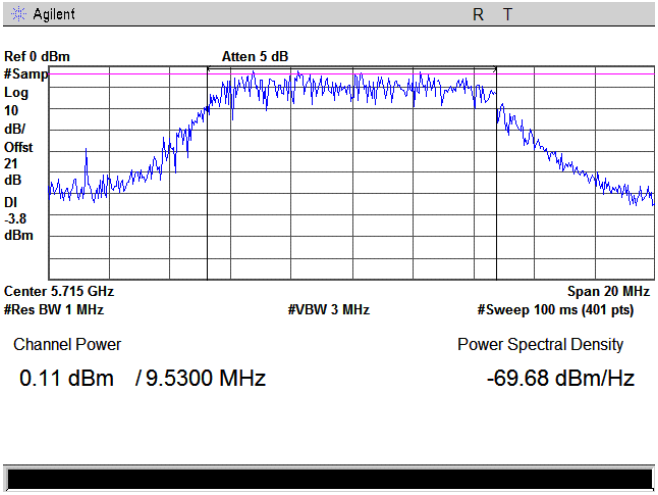
Plot 7.1.83 The 26 dB emission bandwidth

Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Plot 7.1.84 Peak output power and peak power spectral density

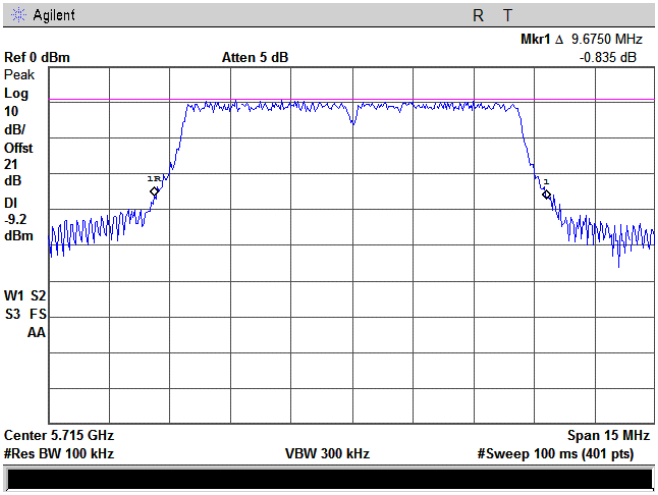
Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

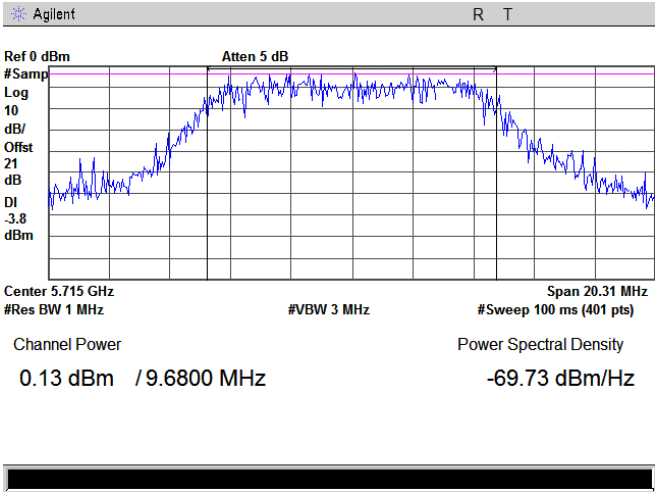
Plot 7.1.85 The 26 dB emission bandwidth

Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Plot 7.1.86 Peak output power and peak power spectral density

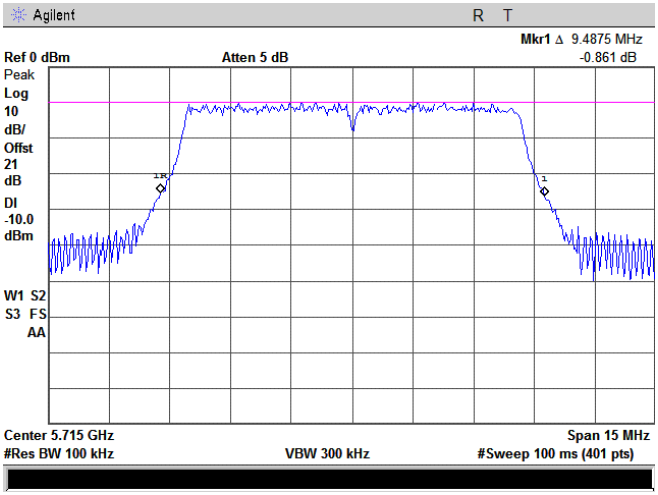
Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

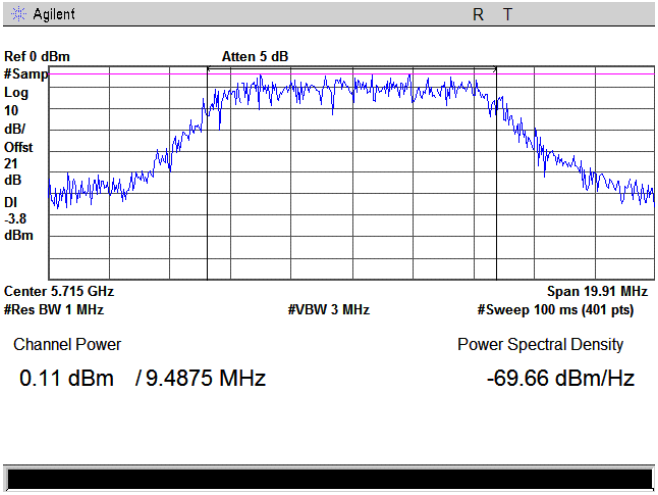
Plot 7.1.87 The 26 dB emission bandwidth

Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Plot 7.1.88 Peak output power and peak power spectral density

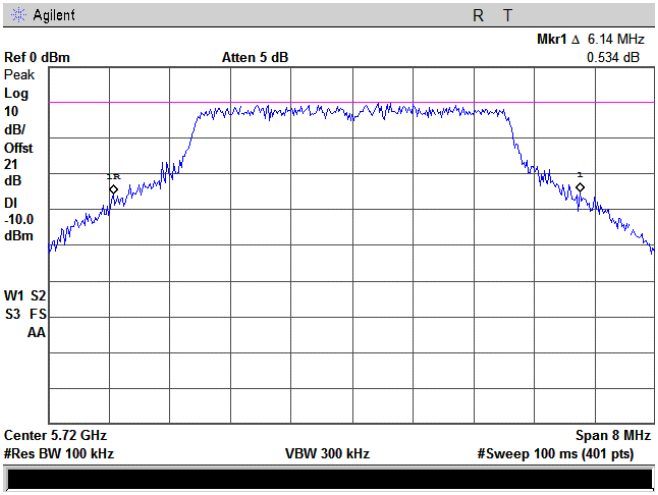
Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

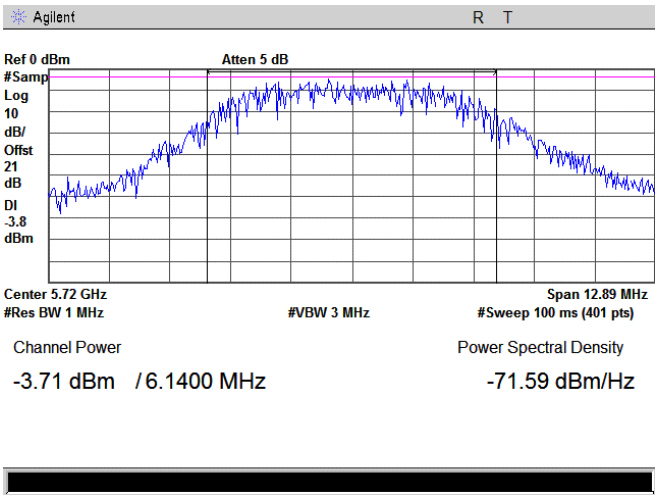
Plot 7.1.89 The 26 dB emission bandwidth

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Plot 7.1.90 Peak output power and peak power spectral density

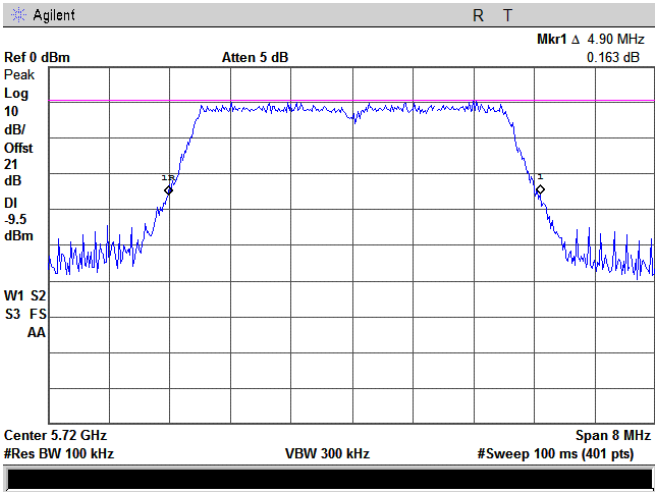
Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

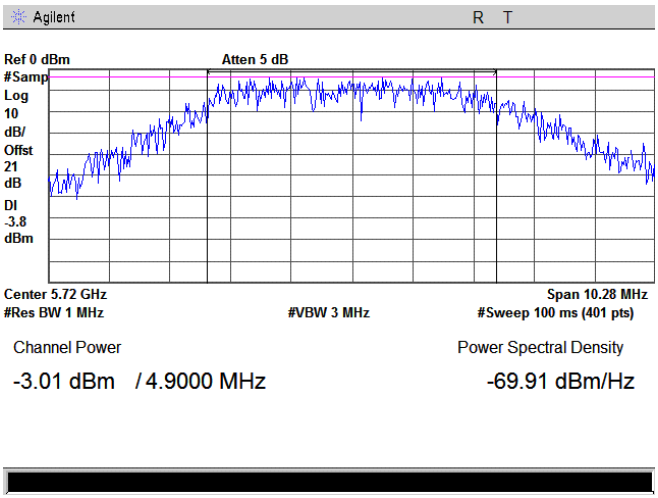
Plot 7.1.91 The 26 dB emission bandwidth

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Plot 7.1.92 Peak output power and peak power spectral density

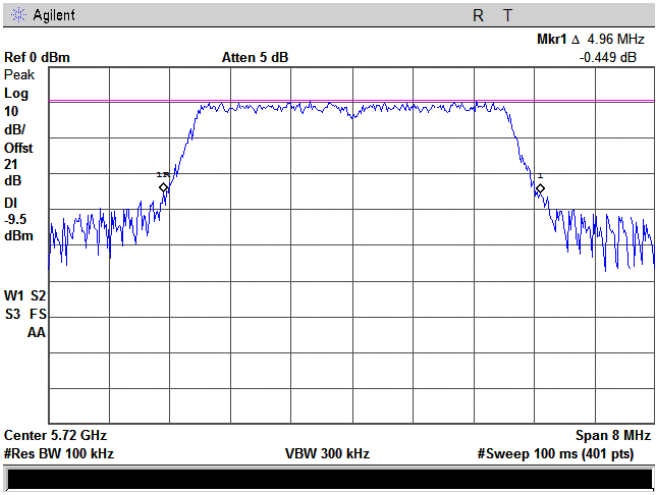
Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

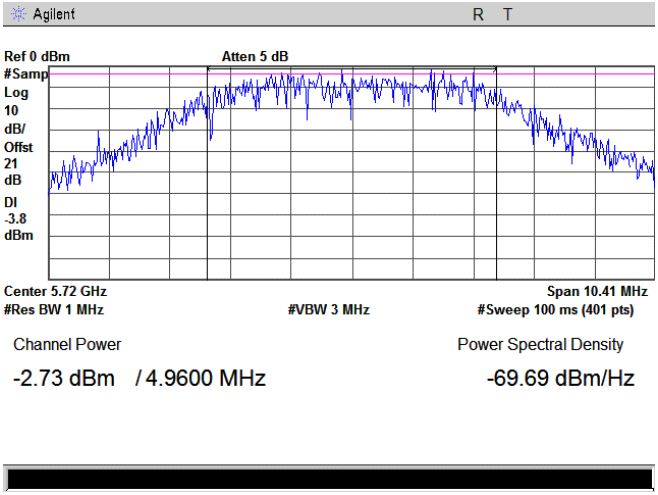
Plot 7.1.93 The 26 dB emission bandwidth

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Plot 7.1.94 Peak output power and peak power spectral density

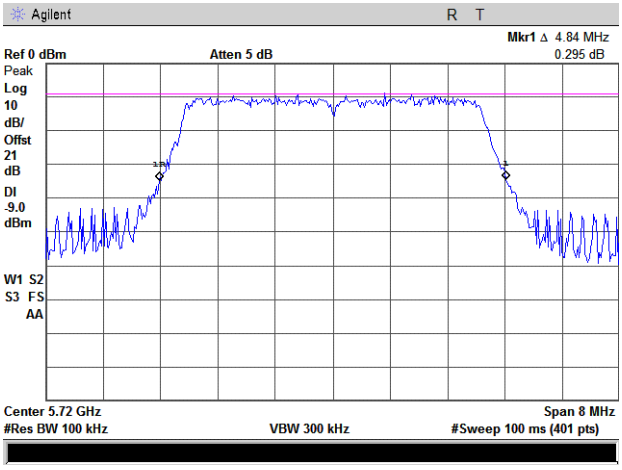
Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

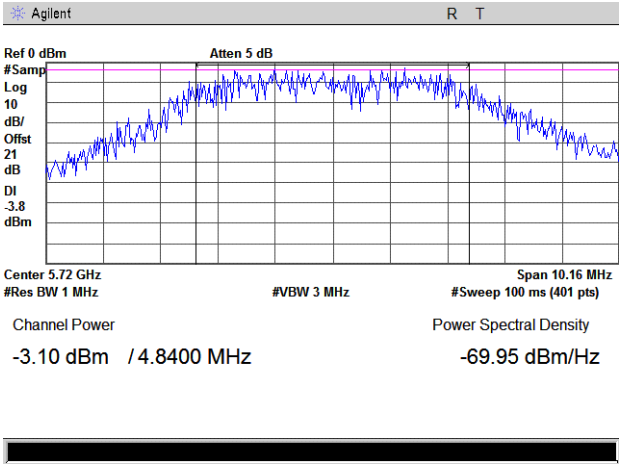
Plot 7.1.95 The 26 dB emission bandwidth

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Plot 7.1.96 Peak output power and peak power spectral density

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

Table 7.1.4 Average output power and peak power spectral density test results

ASSIGNED FREQUENCY RANGE: 5470-5725 MHz
MODULATING SIGNAL: PRBS
TRANSMITTER OUTPUT POWER SETTINGS: "3 dBm" at 5 MHz channel bandwidth
"6 dBm" at 10 MHz channel bandwidth
"9 dBm" at 20 MHz channel bandwidth
DETECTOR USED: Sample
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz
METHOD OF POWER MEASUREMENTS: 1
METHOD OF POWER DENSITY MEASUREMENTS: 2

Frequency, MHz	26 dB bandwidth	Bit rate, MBps	Modulation	Output power			Peak power density			Verdict
				Measured, dBm	Limit, dBm	Margin, dB*	Measured, dBm/MHz	Limit, dBm/MHz	Margin, dB**	
Low frequency, CBW 20 MHz										
5485	22.84	6	BPSK	1.26	8.00	-6.74	-12.28	-5.0	-7.28	Pass
5485	22.05	18	QPSK	2.14	8.00	-5.86	-11.30	-5.0	-6.3	Pass
5485	21.94	24	16QAM	2.33	8.00	-5.67	-11.08	-5.0	-6.08	Pass
5485	23.51	54	64QAM	2.10	8.00	-5.90	-11.61	-5.0	-6.61	Pass
Low frequency, CBW 10 MHz										
5480	12.05	3	BPSK	-1.67	5.81	-7.48	-12.48	-5.0	-7.48	Pass
5480	10.12	9	QPSK	-0.84	5.05	-5.89	-10.82	-5.0	-5.82	Pass
5480	10.23	12	16QAM	-0.95	5.10	-6.05	-11.01	-5.0	-6.01	Pass
5480	9.96	27	64QAM	-0.93	4.98	-5.91	-10.92	-5.0	-5.92	Pass
Low frequency, CBW 5 MHz										
5475	5.97	1.5	BPSK	-4.63	2.76	-7.39	-12.39	-5.0	-7.03	Pass
5475	4.86	4.5	QPSK	-3.96	1.87	-5.83	-10.83	-5.0	-6.12	Pass
5475	4.92	6.0	16QAM	-3.49	1.92	-5.41	-10.41	-5.0	-5.77	Pass
5475	4.92	13.5	64QAM	-3.92	1.92	-5.84	-10.84	-5.0	-6.18	Pass
Mid channel, CBW 20 MHz										
5585	22.61	6	BPSK	2.19	8.00	-5.81	-11.36	-5.0	-6.36	Pass
5585	22.16	18	QPSK	3.07	8.00	-4.93	-10.37	-5.0	-5.37	Pass
5585	22.16	24	16QAM	3.75	8.00	-4.25	-9.70	-5.0	-4.7	Pass
5585	23.18	54	64QAM	2.54	8.00	-5.46	-11.11	-5.0	-6.11	Pass
Mid channel, CBW 10 MHz										
5590	11.83	3	BPSK	-1.07	5.73	-6.80	-11.85	-5.0	-6.85	Pass
5590	10.01	9	QPSK	-0.30	5.00	-5.30	-10.30	-5.0	-5.3	Pass
5590	10.07	12	16QAM	0.00	5.03	-5.03	-10.02	-5.0	-5.02	Pass
5590	9.90	27	64QAM	-0.31	4.96	-5.27	-10.26	-5.0	-5.26	Pass
Mid channel, CBW 5 MHz										
5595	5.97	1.5	BPSK	-3.54	2.76	-6.30	-11.28	-5.0	-6.28	Pass
5595	4.89	4.5	QPSK	-2.79	1.89	-4.68	-9.69	-5.0	-4.69	Pass
5595	4.95	6.0	16QAM	-2.49	1.95	-4.44	-9.42	-5.0	-4.42	Pass
5595	4.83	13.5	64QAM	-2.82	1.84	-4.66	-9.66	-5.0	-4.66	Pass

Note 1: due to 22 dBi antenna gain the limits of peak output power and peak power spectral density shall be reduced by 16 dB
Note 2: Measurement plots are in dBm/Hz, in order to convert to dBm/MHz a 60dB factor was added
* - Margin = Measured output power – specification limit
** - Margin = Measured peak power density – specification limit.

Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

Table 7.1.4 Average output power and peak power spectral density test results (continued)

Frequency, MHz	26 dB bandwidth	Bit rate, MBps	Modulation	Output power			Peak power density			Verdict
				Measured, dBm	Limit, dBm	Margin, dB*	Measured, dBm/MHz	Limit, dBm/MHz	Margin, dB**	
Mid2 channel, CBW 20 MHz (IC only)										
5665	22.61	6	BPSK	2.19	8.00	-5.81	-11.35	-5.0	-6.35	Pass
5665	21.60	18	QPSK	3.79	8.00	-4.21	-9.56	-5.0	-4.56	Pass
5665	21.60	24	16QAM	3.66	8.00	-4.34	-9.69	-5.0	-4.69	Pass
5665	23.29	54	64QAM	3.23	8.00	-4.77	-10.45	-5.0	-5.45	Pass
Mid2 channel, CBW 10 MHz (IC only)										
5660	11.66	3	BPSK	-0.26	5.67	-5.93	-10.93	-5.0	-5.93	Pass
5660	9.96	9	QPSK	0.21	4.98	-4.77	-9.77	-5.0	-4.77	Pass
5660	10.01	12	16QAM	0.44	5.00	-4.56	-9.56	-5.0	-4.56	Pass
5660	9.85	27	64QAM	0.07	4.93	-4.86	-9.87	-5.0	-4.87	Pass
Mid2 channel, CBW 5 MHz (IC only)										
5655	6.03	1.5	BPSK	-2.44	2.80	-5.24	-10.24	-5.0	-5.24	Pass
5655	4.83	4.5	QPSK	-2.37	1.84	-4.21	-9.21	-5.0	-4.21	Pass
5655	4.95	6.0	16QAM	-2.42	1.95	-4.37	-9.37	-5.0	-4.37	Pass
5655	4.86	13.5	64QAM	-1.96	1.87	-3.83	-8.83	-5.0	-3.83	Pass
High channel, CBW 20 MHz										
5710	23.29	6	BPSK	2.82	8.00	-5.18	-10.85	-5.0	-5.85	Pass
5710	22.16	18	QPSK	4.00	8.00	-4.00	-9.45	-5.0	-4.45	Pass
5710	21.04	24	16QAM	3.85	8.00	-4.15	-9.38	-5.0	-4.38	Pass
5710	23.51	54	64QAM	3.52	8.00	-4.48	-10.19	-5.0	-5.19	Pass
High channel, CBW 10 MHz										
5715	11.83	3	BPSK	-0.21	5.73	-5.94	-10.93	-5.0	-5.93	Pass
5715	10.01	9	QPSK	0.18	5.00	-4.82	-9.83	-5.0	-4.83	Pass
5715	10.23	12	16QAM	0.48	5.10	-4.62	-9.62	-5.0	-4.62	Pass
5715	9.90	27	64QAM	1.33	4.96	-3.63	-8.63	-5.0	-3.63	Pass
High channel, CBW 5 MHz										
5720	6.12	1.5	BPSK	-2.96	2.87	-5.83	-10.83	-5.0	-5.83	Pass
5720	4.86	4.5	QPSK	-2.31	1.87	-4.18	-9.18	-5.0	-4.18	Pass
5720	4.86	6.0	16QAM	-2.42	1.87	-4.29	-9.28	-5.0	-4.28	Pass
5720	4.83	13.5	64QAM	-2.45	1.84	-4.29	-9.29	-5.0	-4.29	Pass

Note 1: due to 22 dBi antenna gain the limits of peak output power and peak power spectral density shall be reduced by 16 dB

Note 2: Measurement plots are in dBm/Hz, in order to convert to dBm/MHz a 60dB factor was added

* - Margin = Measured output power – specification limit

** - Margin = Measured peak power density – specification limit.

Reference numbers of test equipment used

HL 2909	HL 3208	HL 3439					

Full description is given in Appendix A.

Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

Table 7.1.5 Peak output power test results measured with power meter

ASSIGNED FREQUENCY: 5470-5725 MHz
MODULATING SIGNAL: OFDM
TRANSMITTER OUTPUT POWER SETTINGS: 3 dBm at 5 MHz channel bandwidth;
6 dBm at 10 MHz channel bandwidth;
9 dBm at 20 MHz channel bandwidth
DETECTOR USED: Peak / Average
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz

Frequency, MHz	Bit rate, Mbps	Modulation	Power meter reading, dBm	Feeder loss, dB	Peak output power, dBm
Low channel					
5485	6	BPSK	12.85	1	11.85
5485	18	QPSK	11.92	1	10.92
5485	24	16QAM	13.53	1	12.53
5485	54	64QAM	12.50	1	11.50
5480	3	BPSK	10.20	1	9.20
5480	9	QPSK	9.75	1	8.75
5480	12	16QAM	10.61	1	9.61
5480	27	64QAM	9.61	1	8.61
5475	1.5	BPSK	8.00	1	7.00
5475	4.5	QPSK	7.13	1	6.13
5475	6	16QAM	7.56	1	6.56
5475	13.5	64QAM	7.50	1	6.50
Mid channel					
5585	6	BPSK	13.80	1	12.80
5585	18	QPSK	13.10	1	12.10
5585	24	16QAM	14.06	1	13.06
5585	54	64QAM	13.15	1	12.15
5590	3	BPSK	10.33	1	9.33
5590	9	QPSK	10.03	1	9.03
5590	12	16QAM	10.45	1	9.45
5590	27	64QAM	10.53	1	9.53
5595	1.5	BPSK	8.71	1	7.71
5595	4.5	QPSK	7.40	1	6.40
5595	6	16QAM	8.30	1	7.30
5595	13.5	64QAM	7.80	1	6.80

Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

Table 7.1.5 Peak output power test results measured with power meter (continued)

Mid channel (IC only)					
5665	6	BPSK	14.76	1	13.76
5665	18	QPSK	13.70	1	12.70
5665	24	16QAM	14.55	1	13.55
5665	54	64QAM	13.15	1	12.15
5660	3	BPSK	10.95	1	9.95
5660	9	QPSK	10.40	1	9.40
5660	12	16QAM	11.15	1	10.15
5660	27	64QAM	10.73	1	9.73
5655	1.5	BPSK	8.77	1	7.77
5655	4.5	QPSK	8.04	1	7.04
5655	6	16QAM	8.85	1	7.85
5655	13.5	64QAM	8.45	1	7.45
High channel					
5710	6	BPSK	14.35	1	13.35
5710	18	QPSK	13.38	1	12.38
5710	24	16QAM	14.00	1	13.00
5710	54	64QAM	14.10	1	13.10
5715	3	BPSK	11.41	1	10.41
5715	9	QPSK	10.70	1	9.70
5715	12	16QAM	11.20	1	10.20
5715	27	64QAM	10.90	1	9.90
5720	1.5	BPSK	9.15	1	8.15
5720	4.5	QPSK	7.95	1	6.95
5720	6	16QAM	8.65	1	7.65
5720	13.5	64QAM	8.72	1	7.72

* - Margin = Measured output power – specification limit.
** - Margin = Measured peak power density – specification limit.

Reference numbers of test equipment used

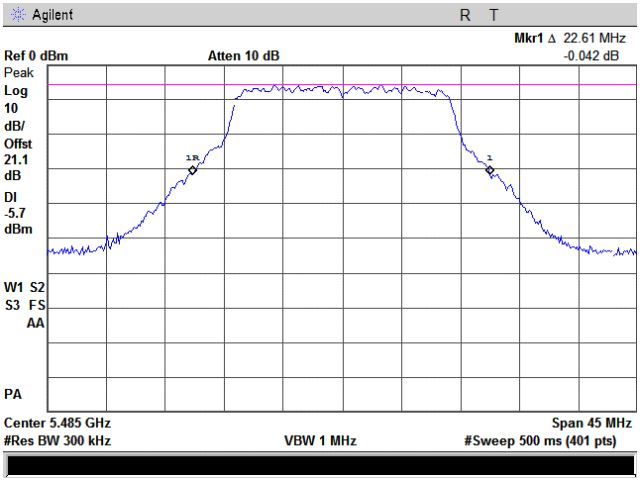
HL 2909	HL 3208	HL 3439					

Full description is given in Appendix A.

Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

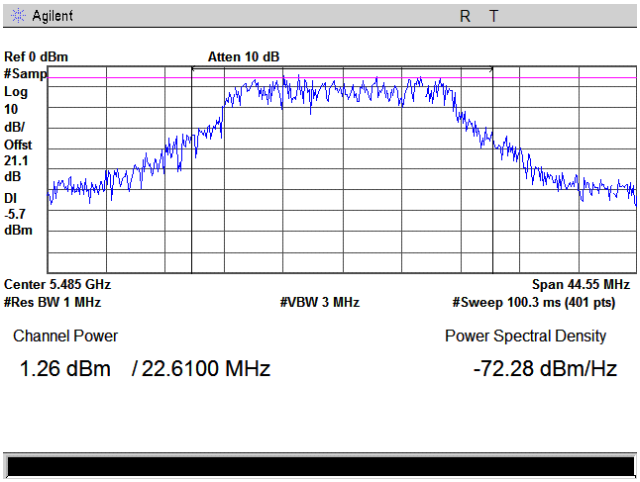
Plot 7.1.97 The 26 dB emission bandwidth

Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Plot 7.1.98 Peak output power and peak power spectral density

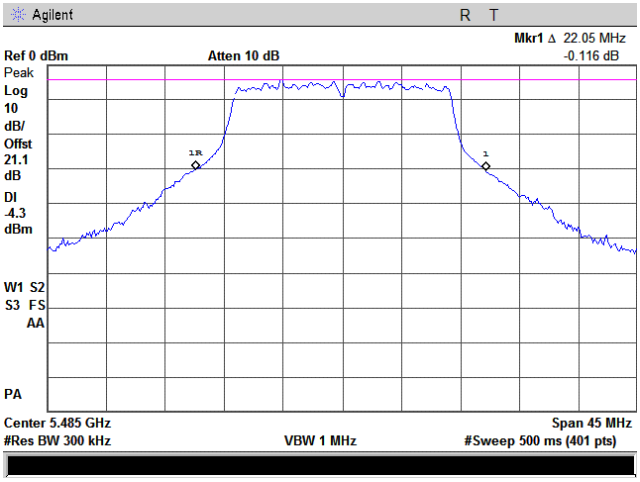
Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

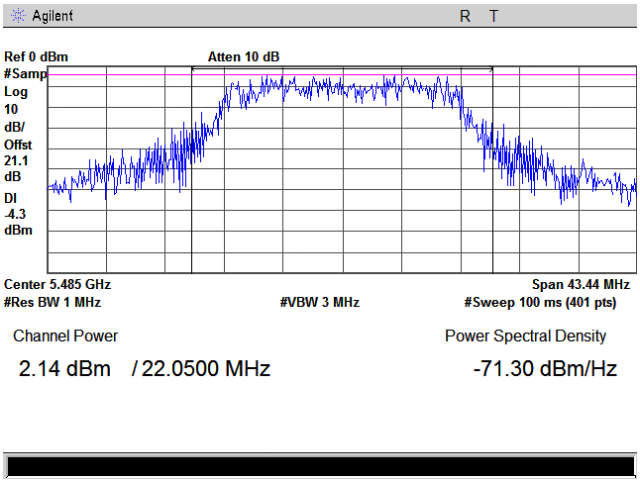
Plot 7.1.99 The 26 dB emission bandwidth

Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Plot 7.1.100 Peak output power and peak power spectral density

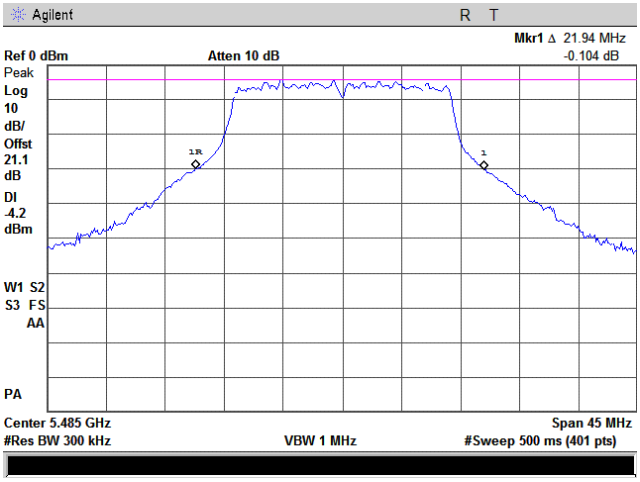
Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

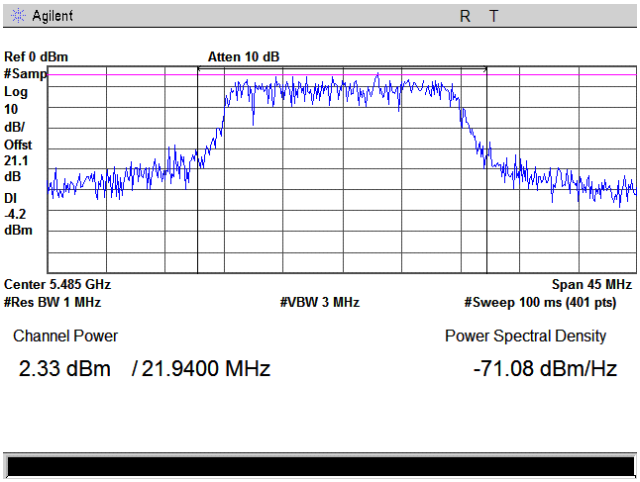
Plot 7.1.101 The 26 dB emission bandwidth

Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Plot 7.1.102 Peak output power and peak power spectral density

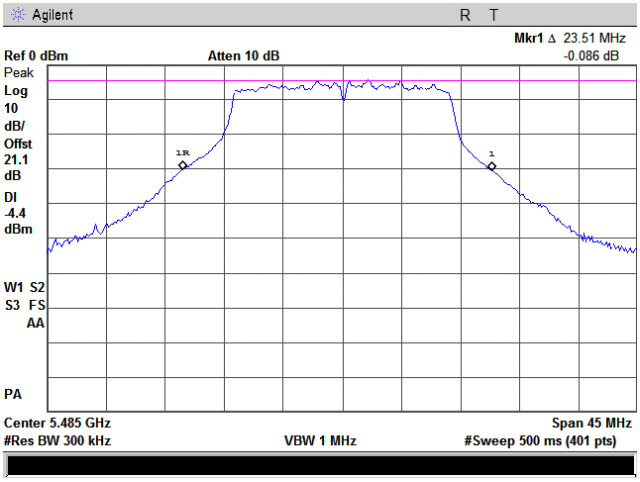
Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

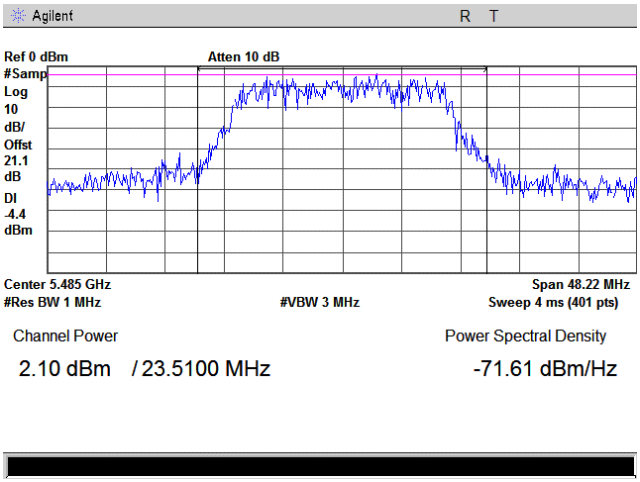
Plot 7.1.103 The 26 dB emission bandwidth

Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Plot 7.1.104 Peak output power and peak power spectral density

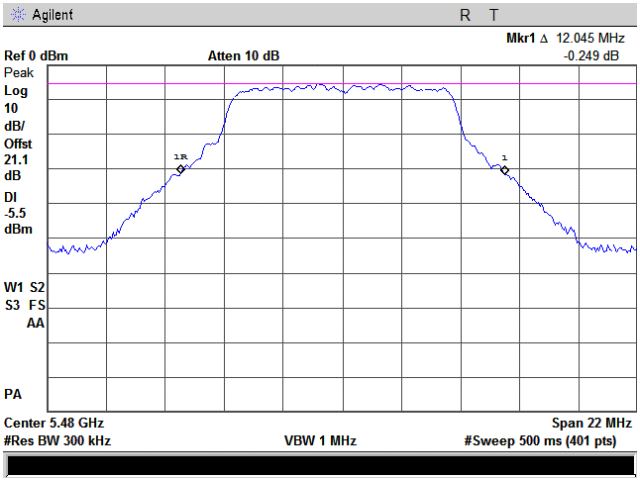
Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

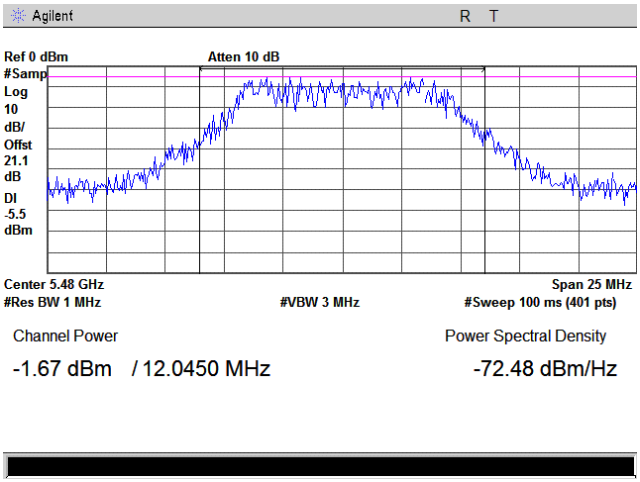
Plot 7.1.105 The 26 dB emission bandwidth

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Plot 7.1.106 Peak output power and peak power spectral density

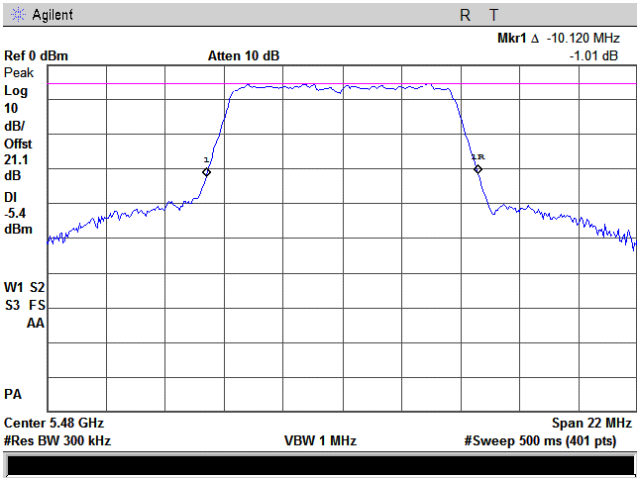
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

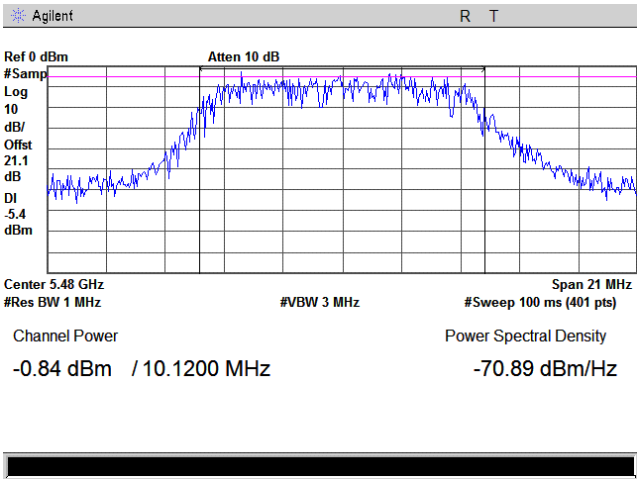
Plot 7.1.107 The 26 dB emission bandwidth

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Plot 7.1.108 Peak output power and peak power spectral density

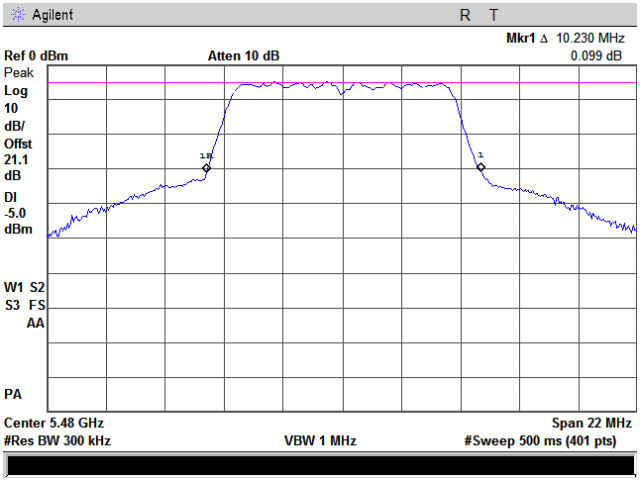
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

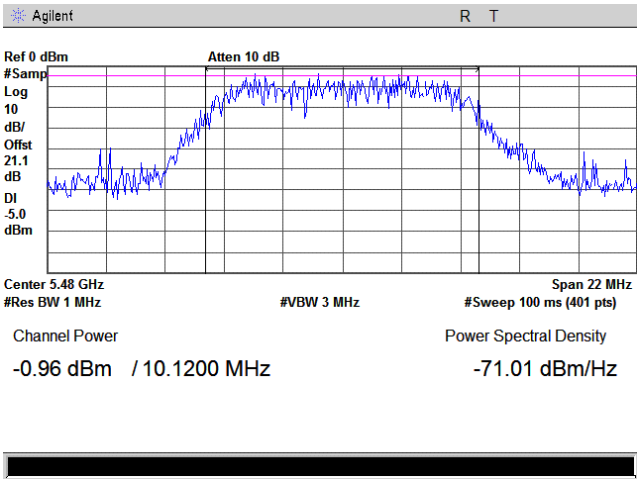
Plot 7.1.109 The 26 dB emission bandwidth

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Plot 7.1.110 Peak output power and peak power spectral density

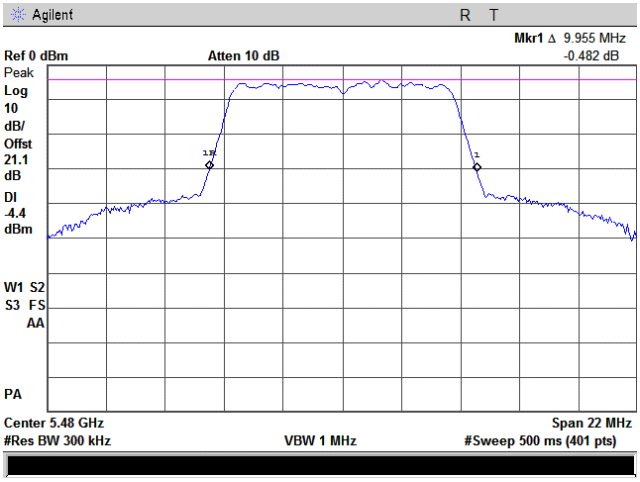
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

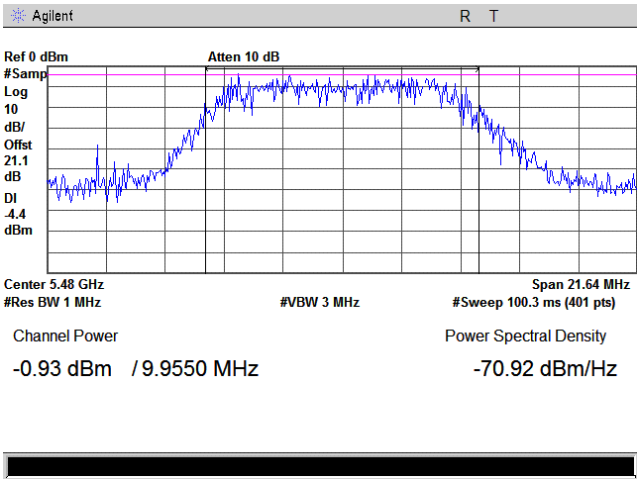
Plot 7.1.111 The 26 dB emission bandwidth

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Plot 7.1.112 Peak output power and peak power spectral density

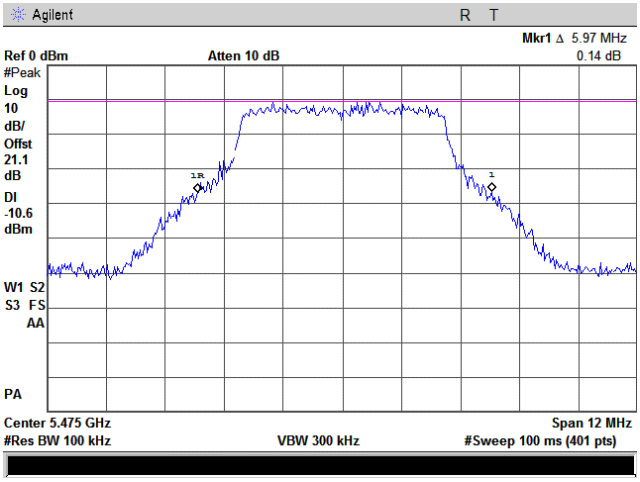
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

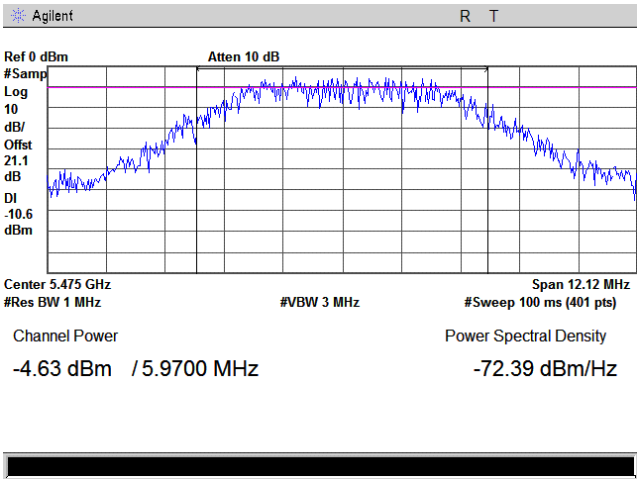
Plot 7.1.113 The 26 dB emission bandwidth

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Plot 7.1.114 Peak output power and peak power spectral density

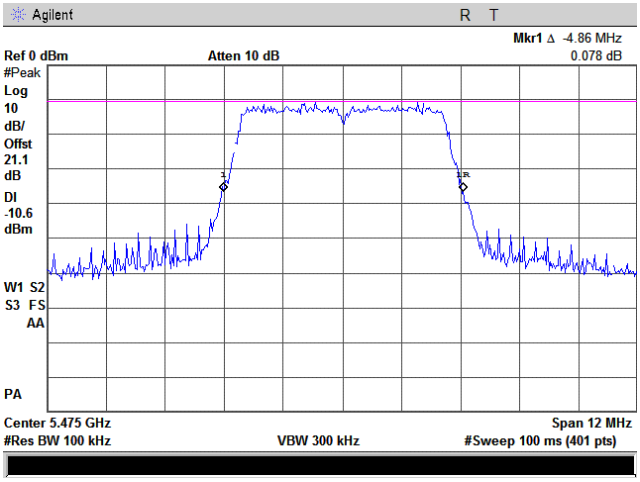
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

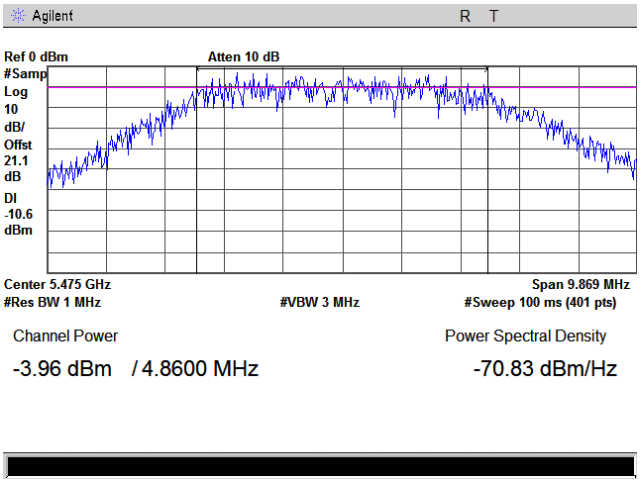
Plot 7.1.115 The 26 dB emission bandwidth

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Plot 7.1.116 Peak output power and peak power spectral density

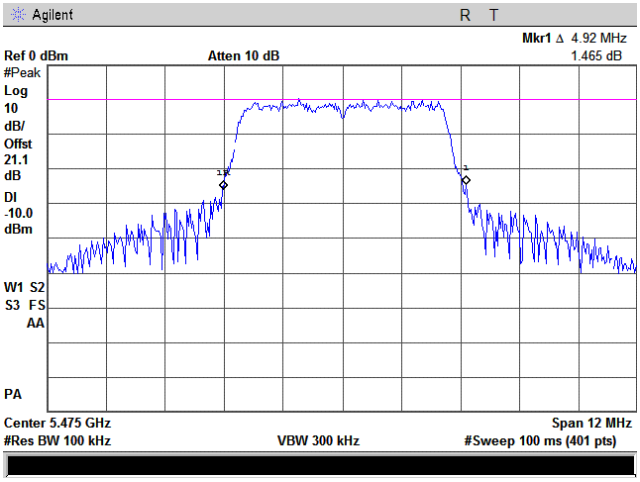
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

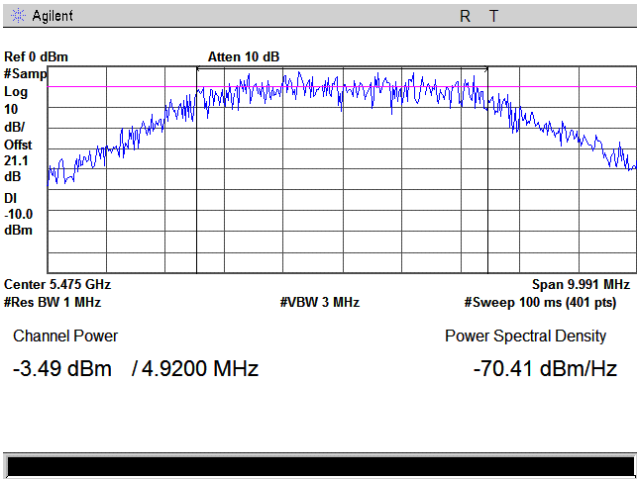
Plot 7.1.117 The 26 dB emission bandwidth

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Plot 7.1.118 Peak output power and peak power spectral density

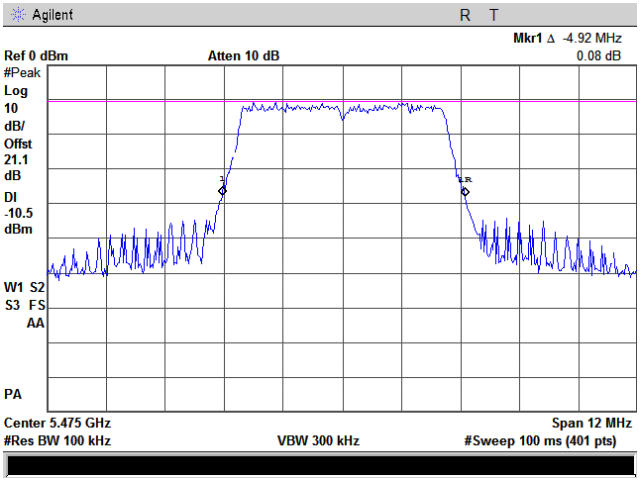
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

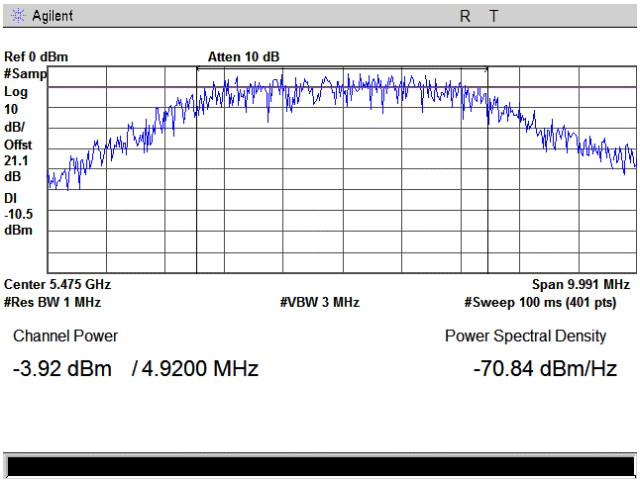
Plot 7.1.119 The 26 dB emission bandwidth

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Plot 7.1.120 Peak output power and peak power spectral density

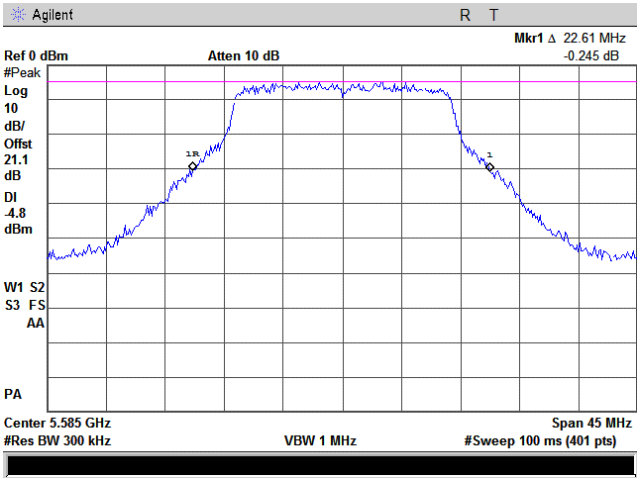
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

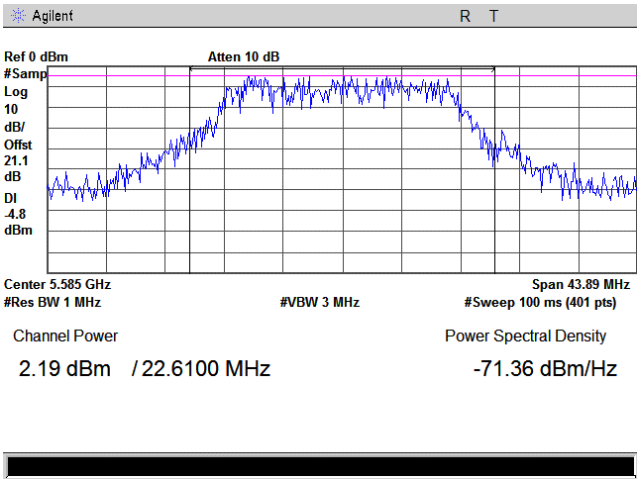
Plot 7.1.121 The 26 dB emission bandwidth

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Plot 7.1.122 Peak output power and peak power spectral density

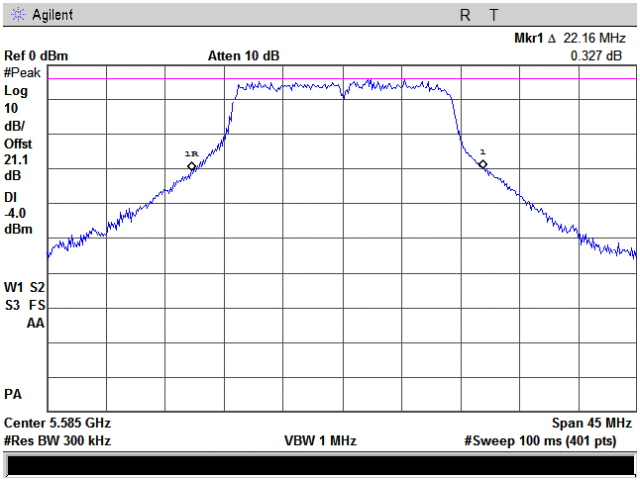
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

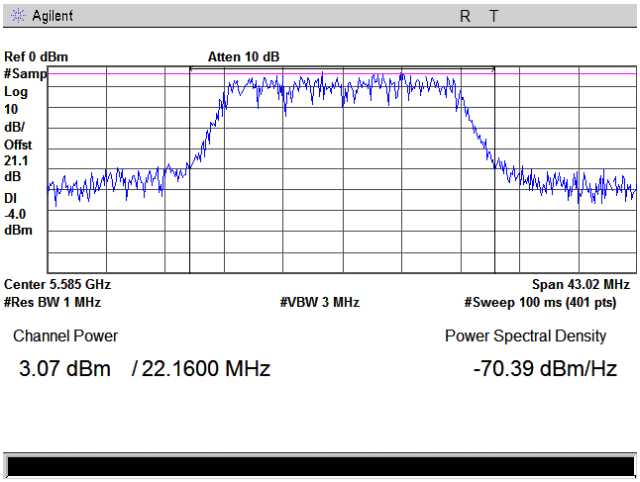
Plot 7.1.123 The 26 dB emission bandwidth

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Plot 7.1.124 Peak output power and peak power spectral density

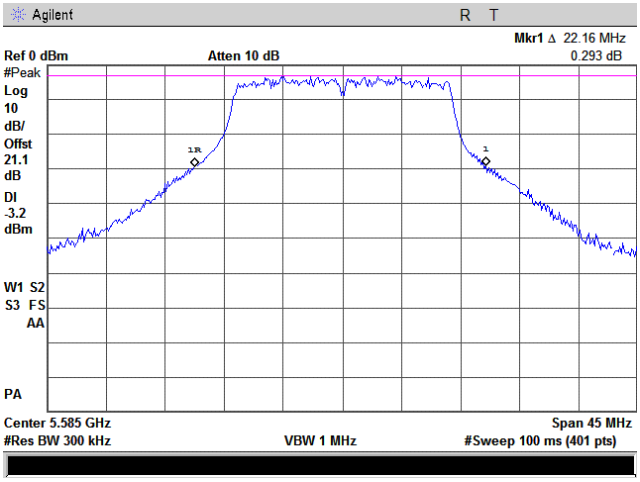
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

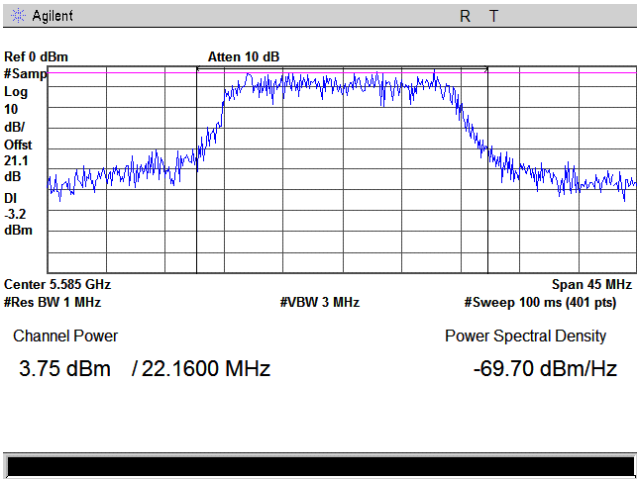
Plot 7.1.125 The 26 dB emission bandwidth

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Plot 7.1.126 Peak output power and peak power spectral density

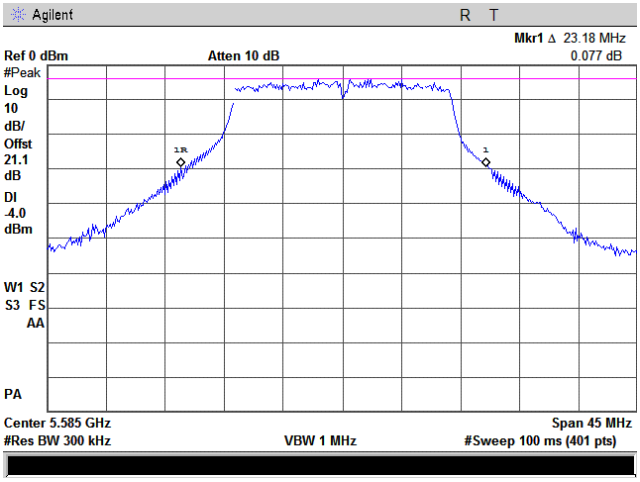
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

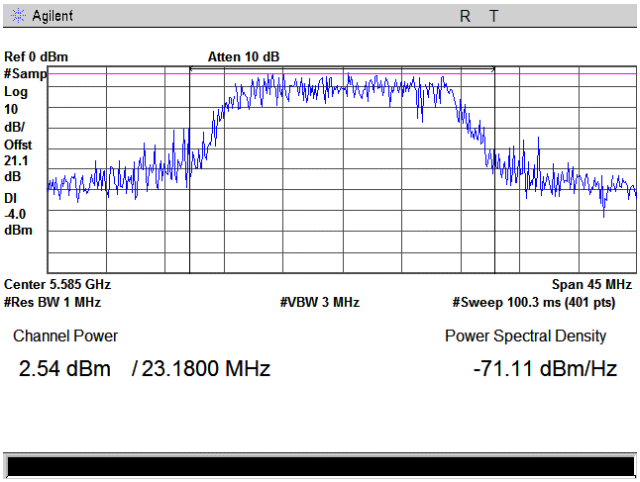
Plot 7.1.127 The 26 dB emission bandwidth

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Plot 7.1.128 Peak output power and peak power spectral density

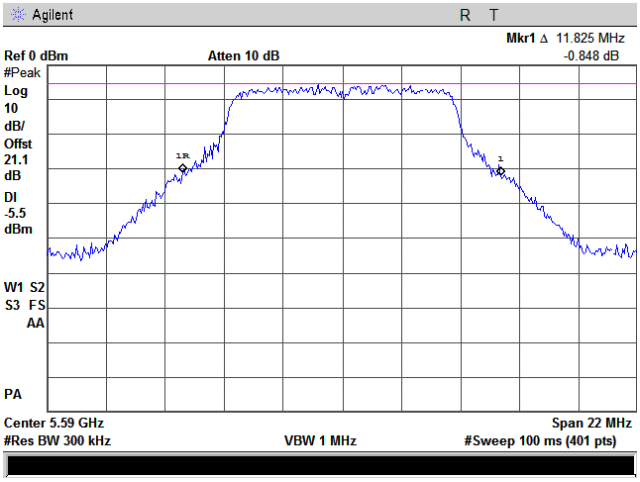
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

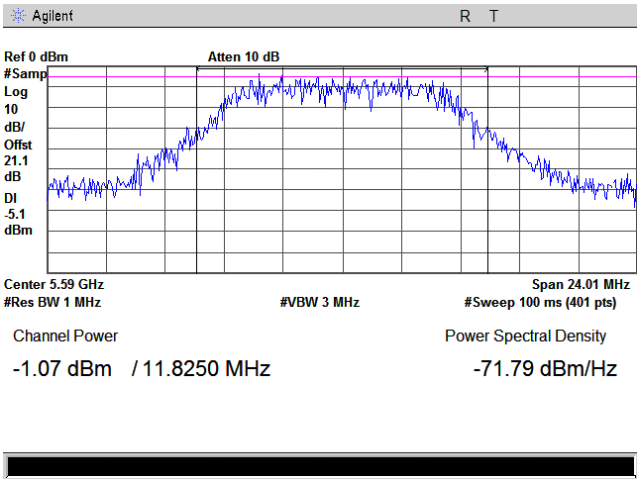
Plot 7.1.129 The 26 dB emission bandwidth

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Plot 7.1.130 Peak output power and peak power spectral density

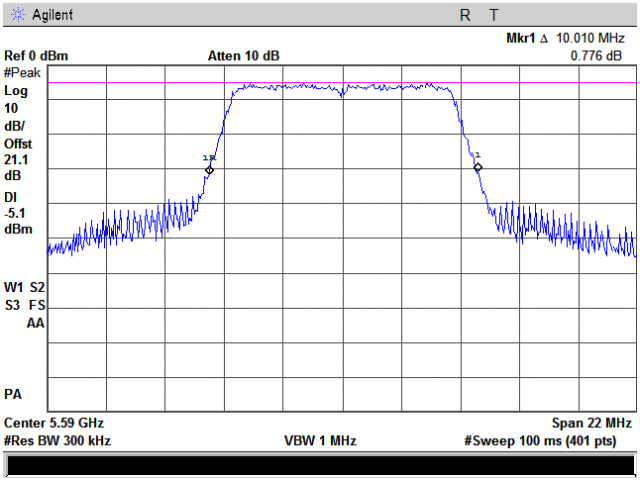
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

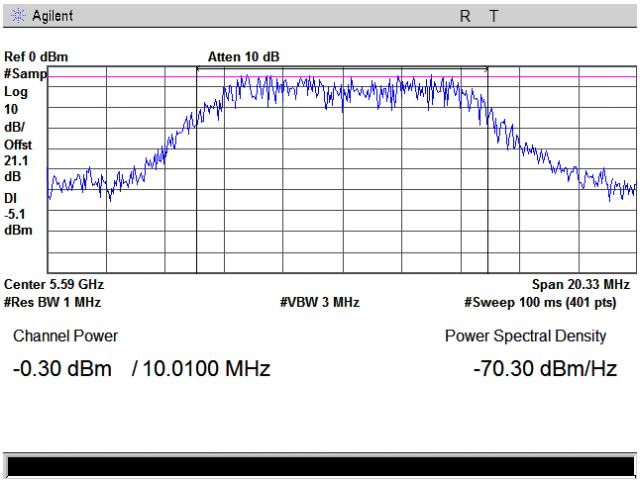
Plot 7.1.131 The 26 dB emission bandwidth

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Plot 7.1.132 Peak output power and peak power spectral density

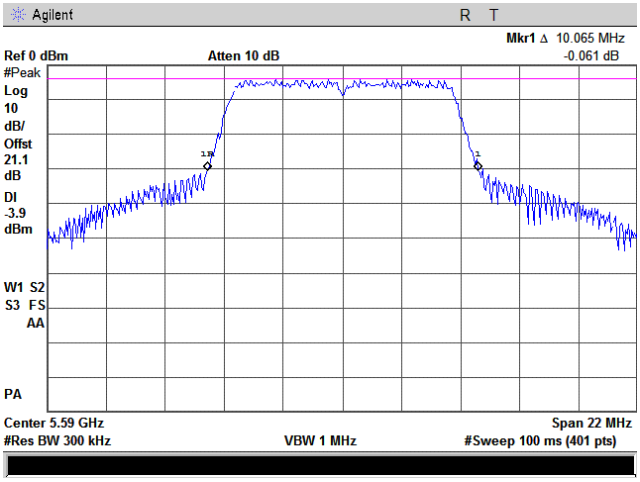
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

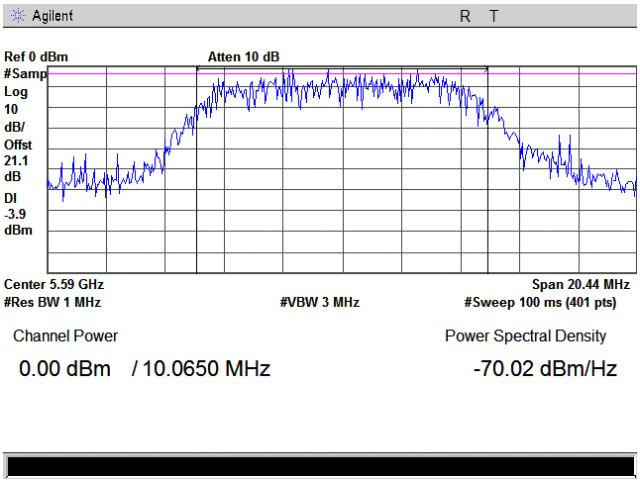
Plot 7.1.133 The 26 dB emission bandwidth

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Plot 7.1.134 Peak output power and peak power spectral density

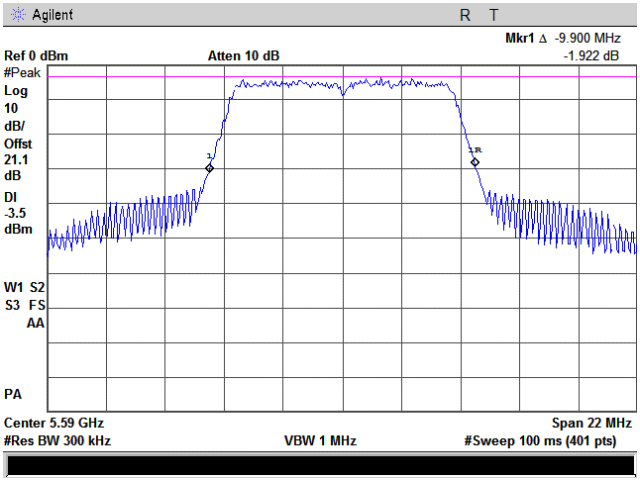
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

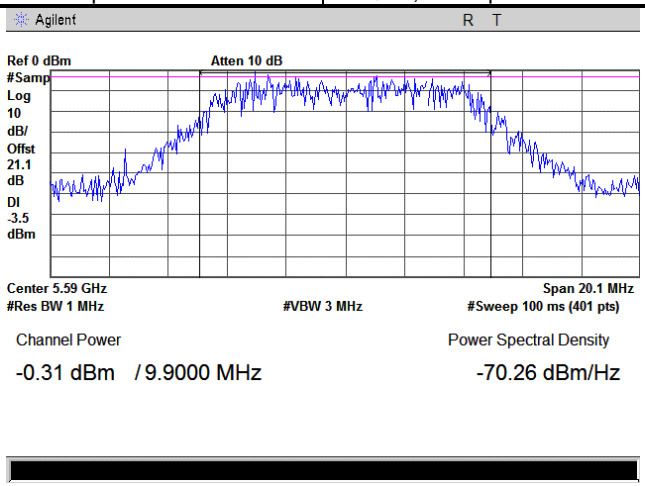
Plot 7.1.135 The 26 dB emission bandwidth

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Plot 7.1.136 Peak output power and peak power spectral density

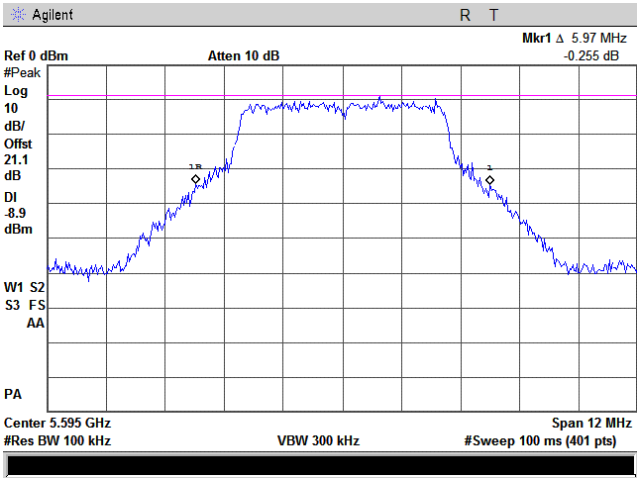
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

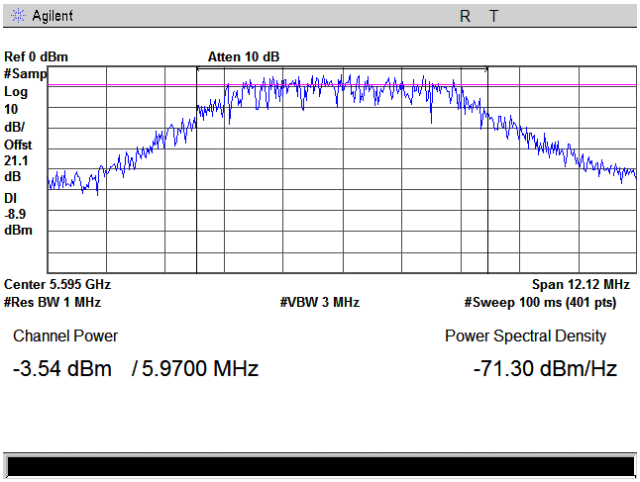
Plot 7.1.137 The 26 dB emission bandwidth

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Plot 7.1.138 Peak output power and peak power spectral density

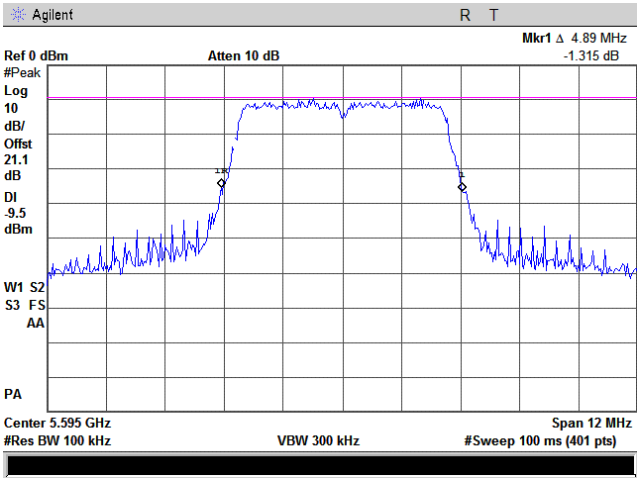
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

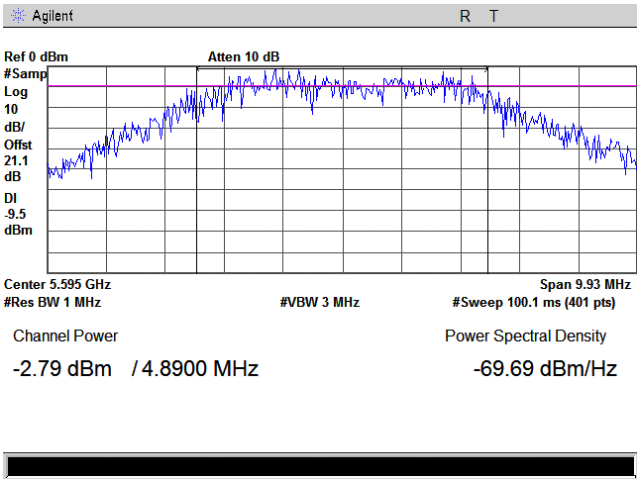
Plot 7.1.139 The 26 dB emission bandwidth

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Plot 7.1.140 Peak output power and peak power spectral density

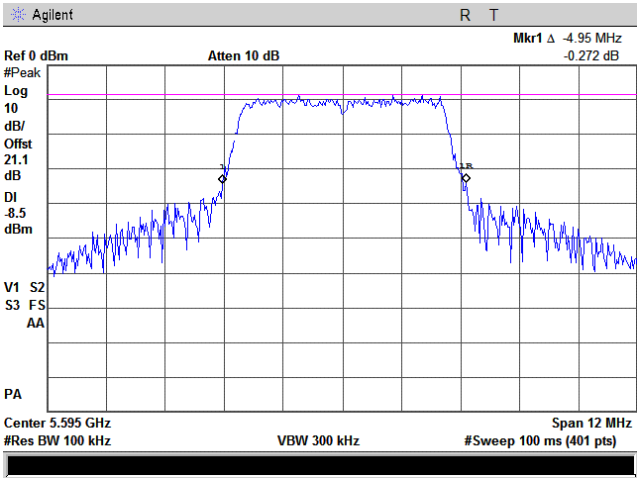
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

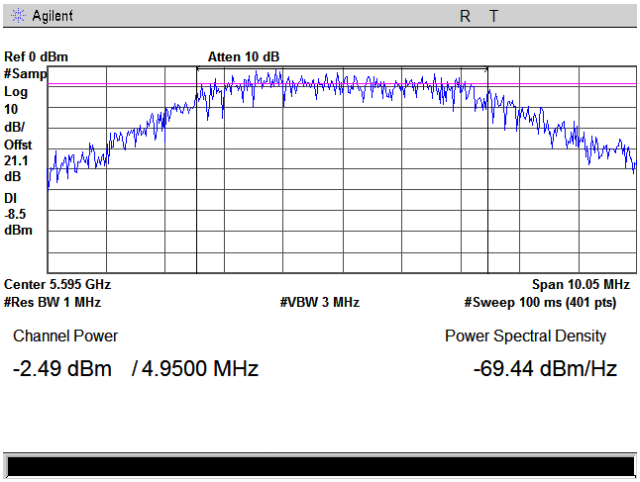
Plot 7.1.141 The 26 dB emission bandwidth

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Plot 7.1.142 Peak output power and peak power spectral density

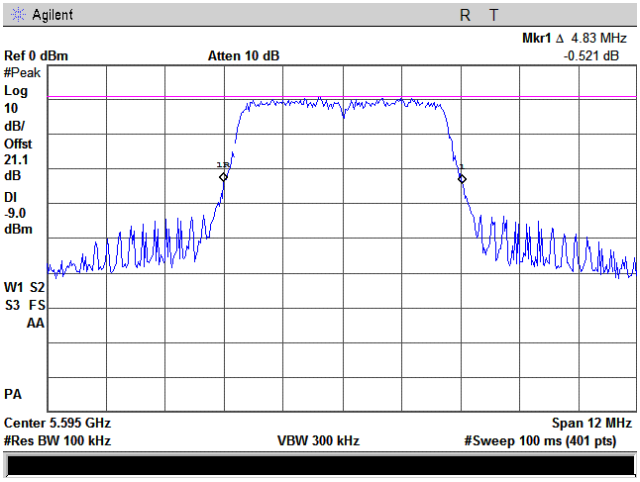
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

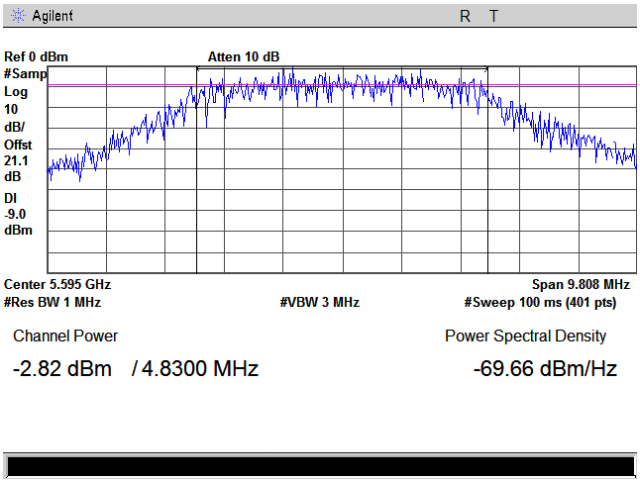
Plot 7.1.143 The 26 dB emission bandwidth

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Plot 7.1.144 Peak output power and peak power spectral density

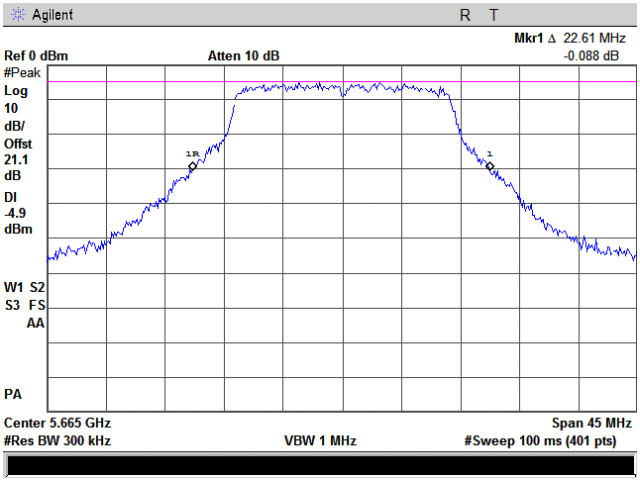
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

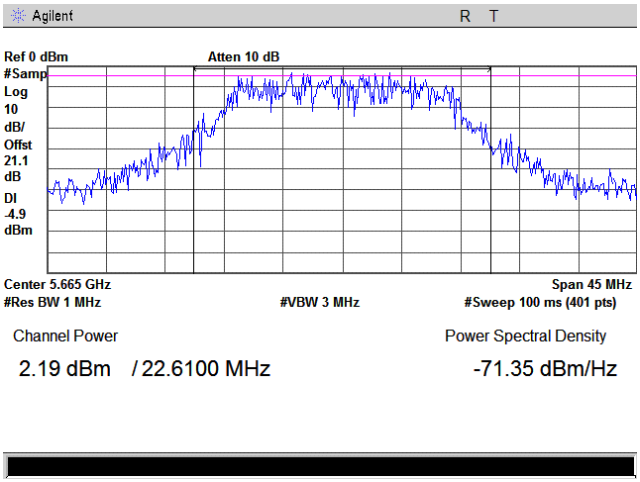
Plot 7.1.145 The 26 dB emission bandwidth

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Plot 7.1.146 Peak output power and peak power spectral density

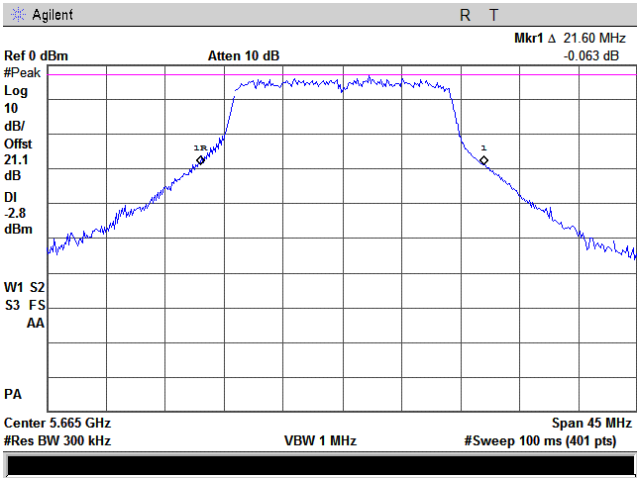
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

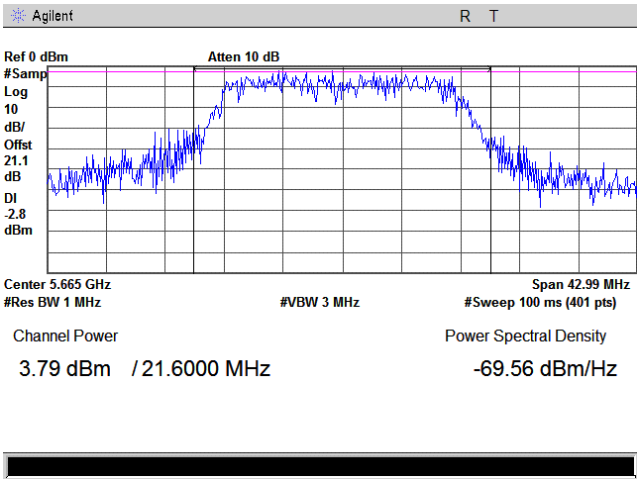
Plot 7.1.147 The 26 dB emission bandwidth

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Plot 7.1.148 Peak output power and peak power spectral density

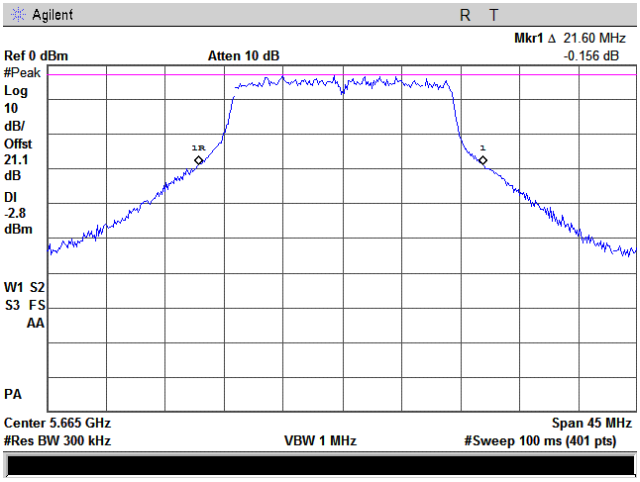
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

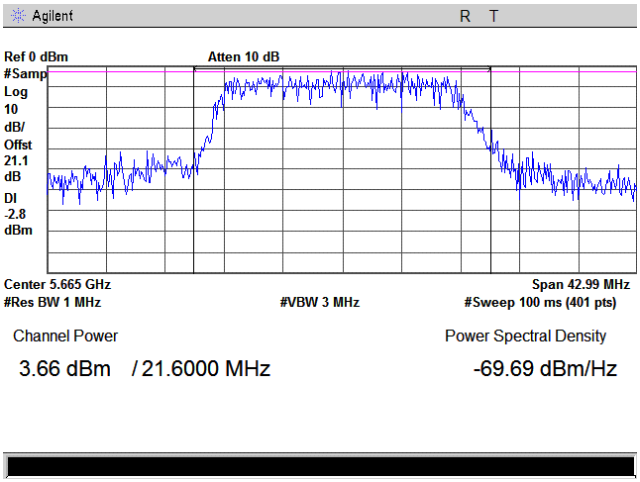
Plot 7.1.149 The 26 dB emission bandwidth

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Plot 7.1.150 Peak output power and peak power spectral density

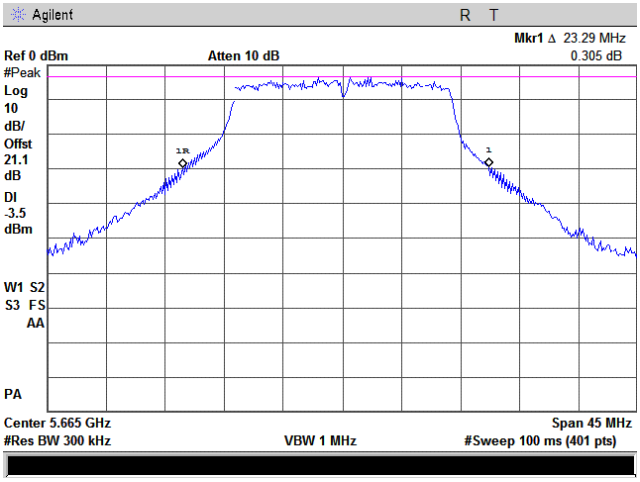
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

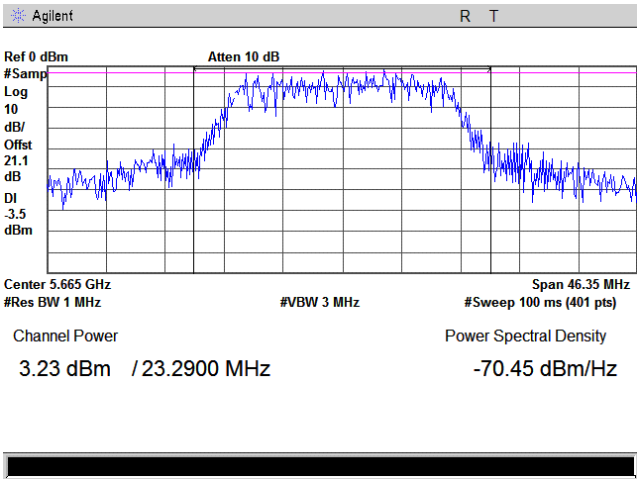
Plot 7.1.151 The 26 dB emission bandwidth

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Plot 7.1.152 Peak output power and peak power spectral density

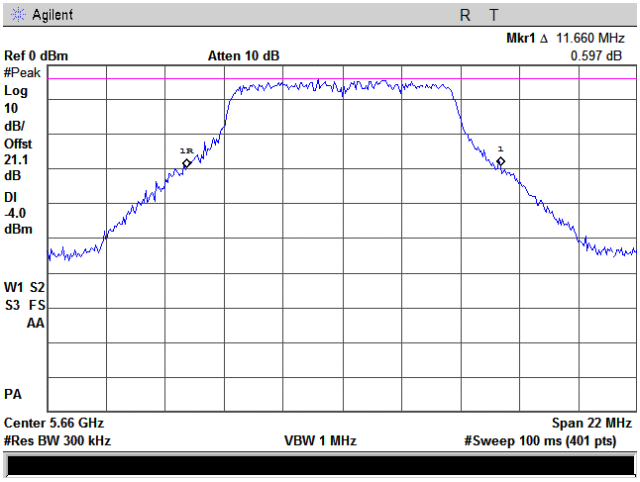
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

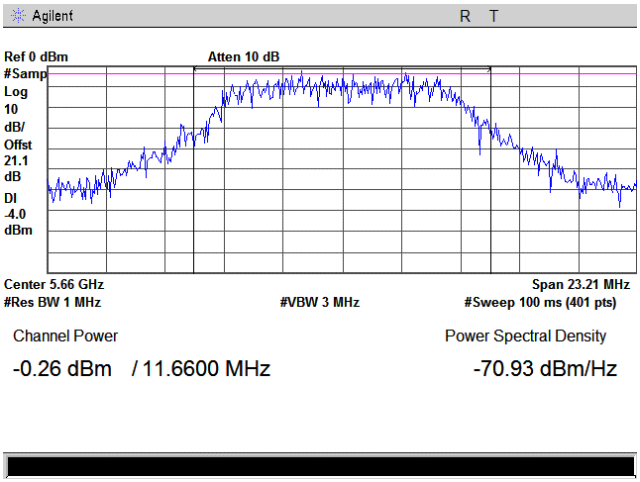
Plot 7.1.153 The 26 dB emission bandwidth

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Plot 7.1.154 Peak output power and peak power spectral density

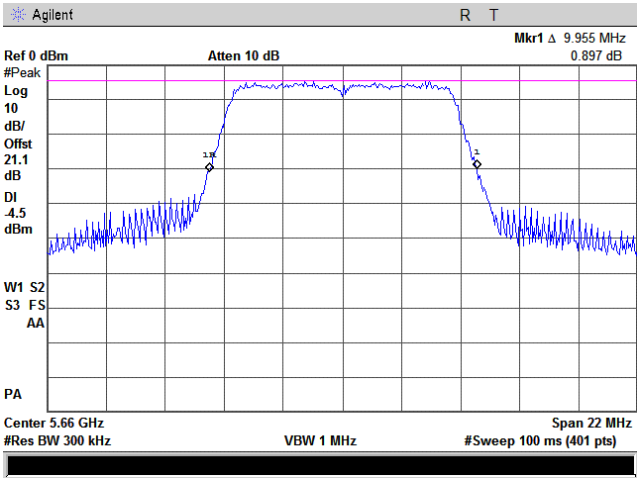
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

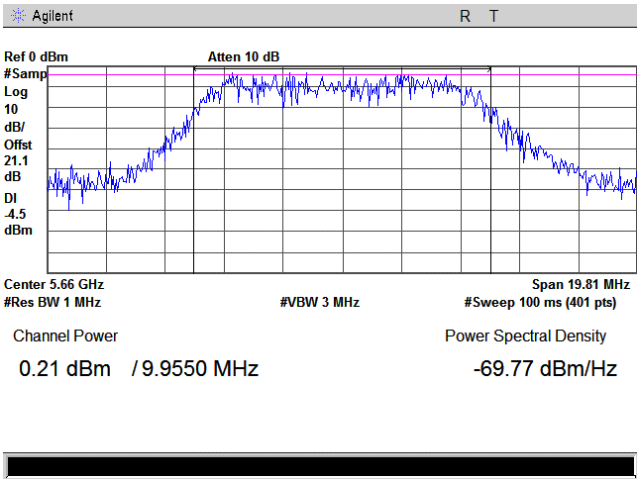
Plot 7.1.155 The 26 dB emission bandwidth

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Plot 7.1.156 Peak output power and peak power spectral density

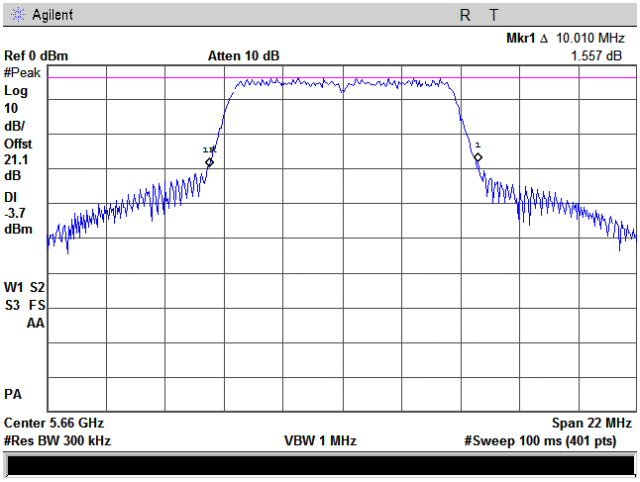
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

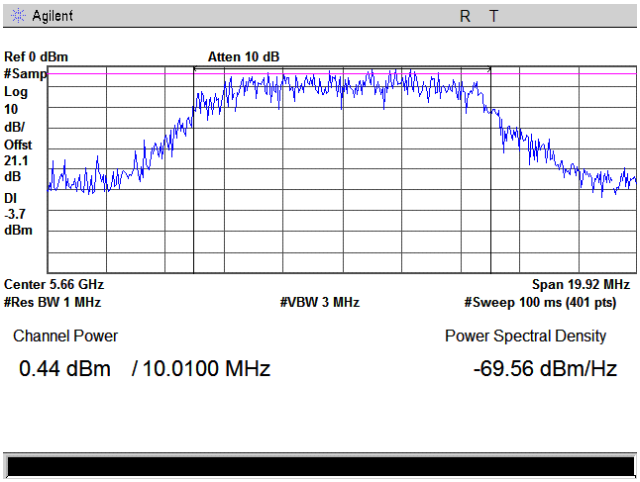
Plot 7.1.157 The 26 dB emission bandwidth

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Plot 7.1.158 Peak output power and peak power spectral density

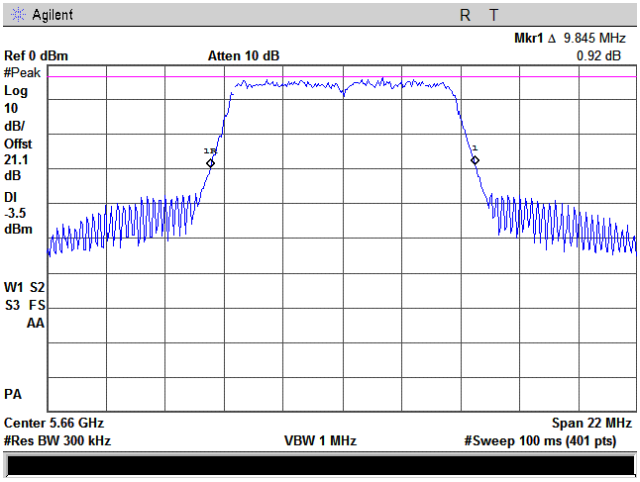
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

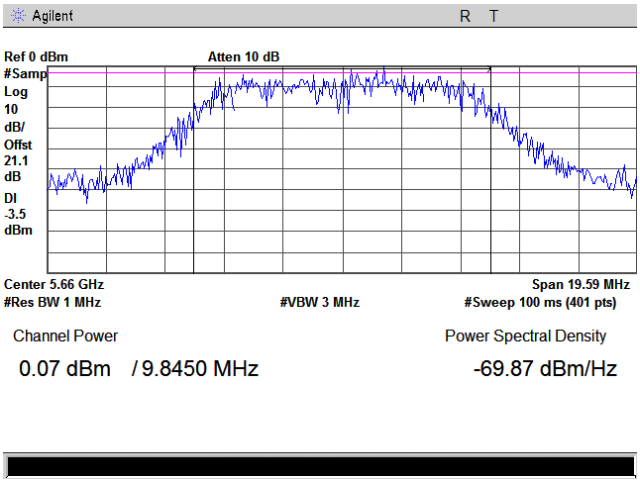
Plot 7.1.159 The 26 dB emission bandwidth

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Plot 7.1.160 Peak output power and peak power spectral density

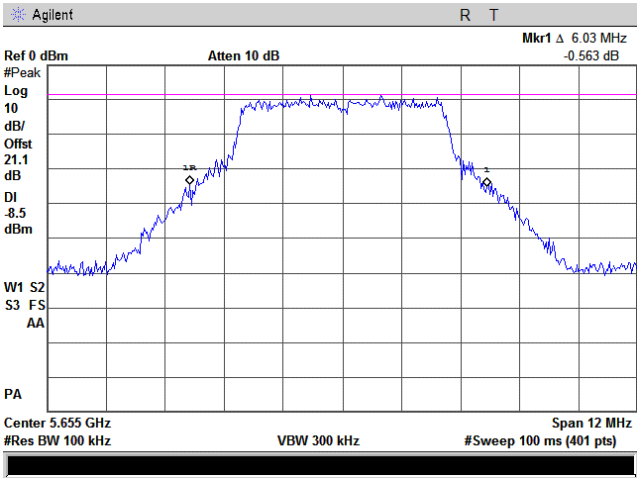
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

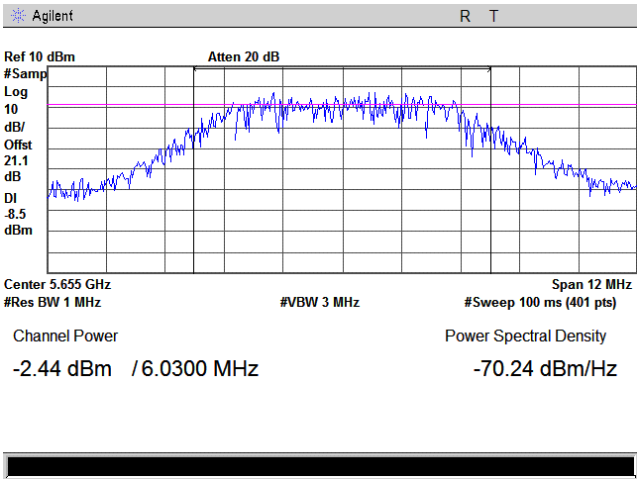
Plot 7.1.161 The 26 dB emission bandwidth

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Plot 7.1.162 Peak output power and peak power spectral density

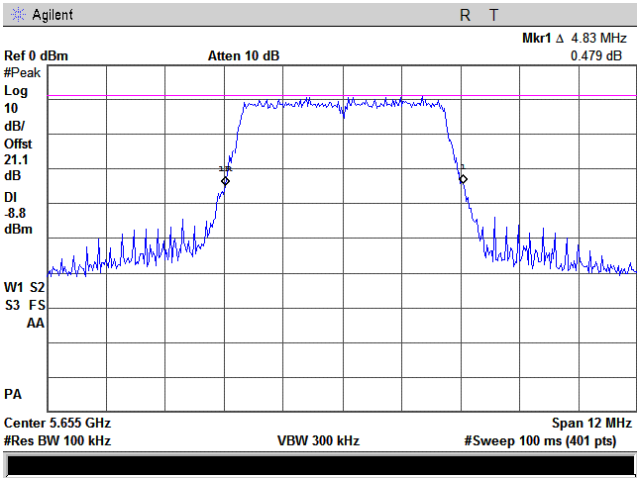
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

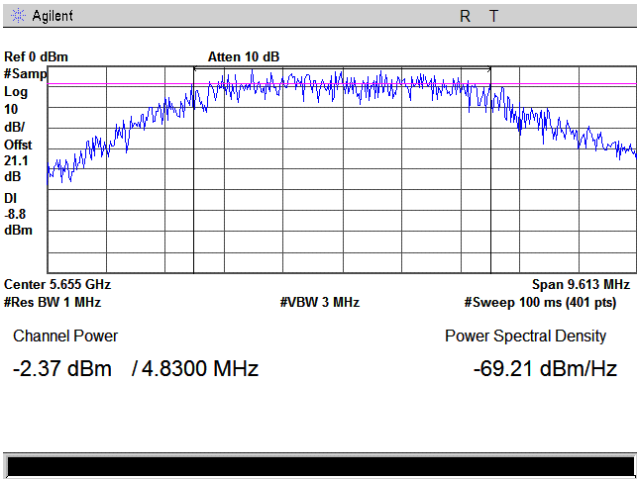
Plot 7.1.163 The 26 dB emission bandwidth

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Plot 7.1.164 Peak output power and peak power spectral density

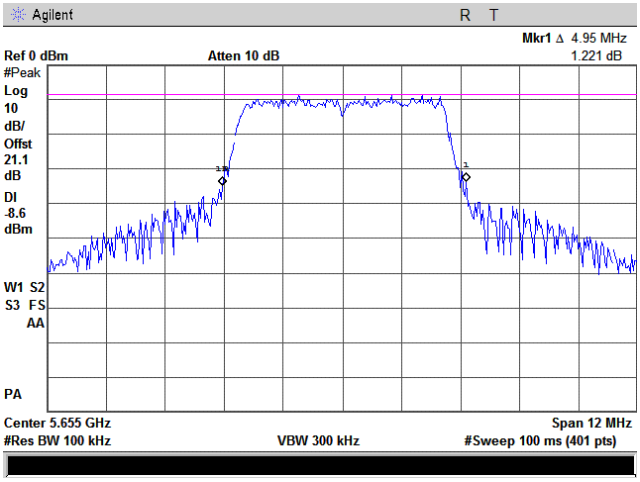
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

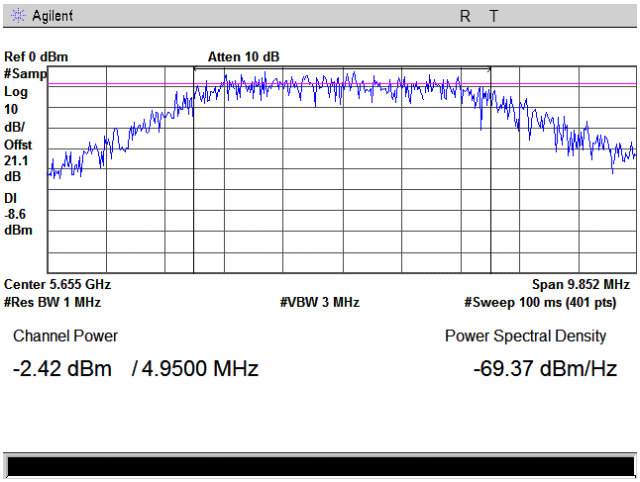
Plot 7.1.165 The 26 dB emission bandwidth

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Plot 7.1.166 Peak output power and peak power spectral density

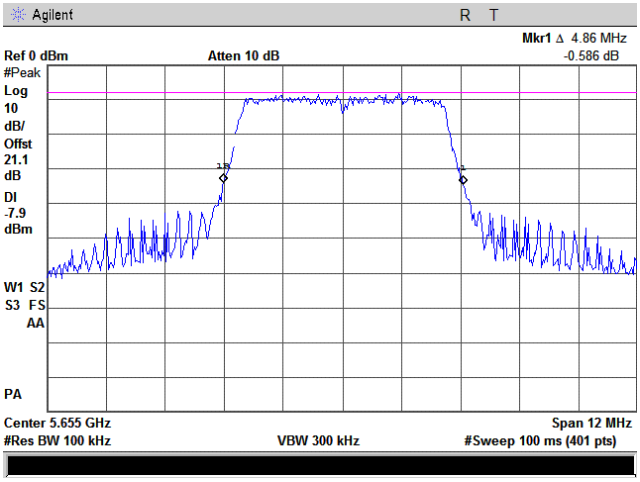
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Test specification:	**FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2** **Peak output power and peak power spectral density**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

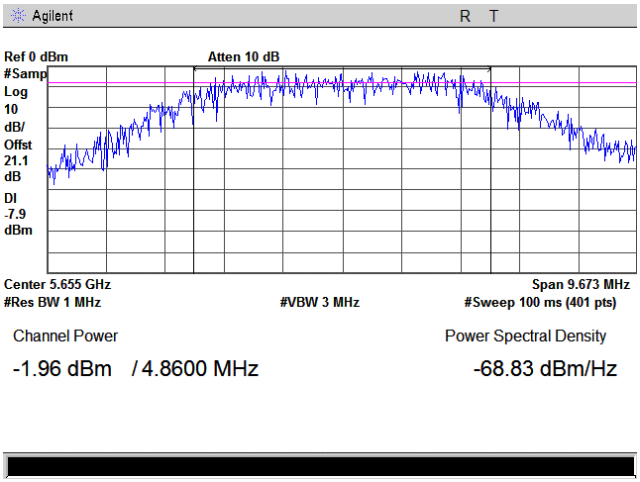
Plot 7.1.167 The 26 dB emission bandwidth

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Plot 7.1.168 Peak output power and peak power spectral density

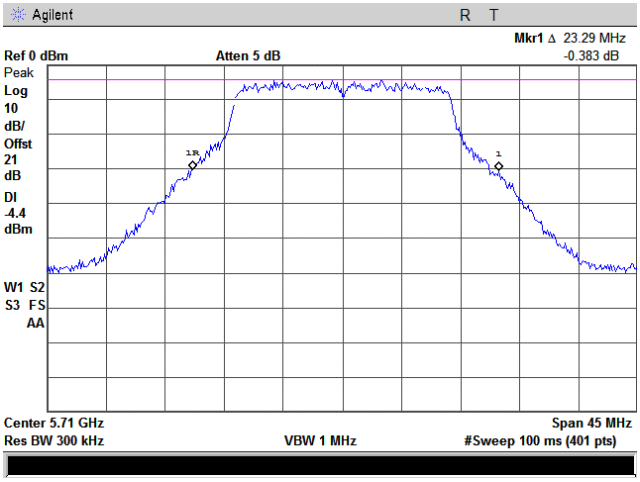
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

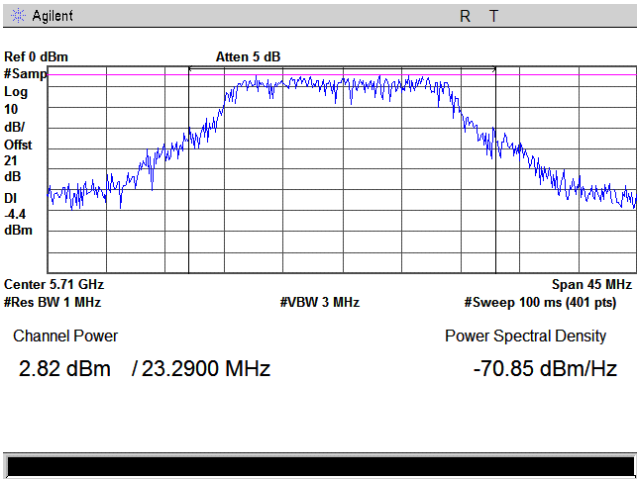
Plot 7.1.169 The 26 dB emission bandwidth

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Plot 7.1.170 Peak output power and peak power spectral density

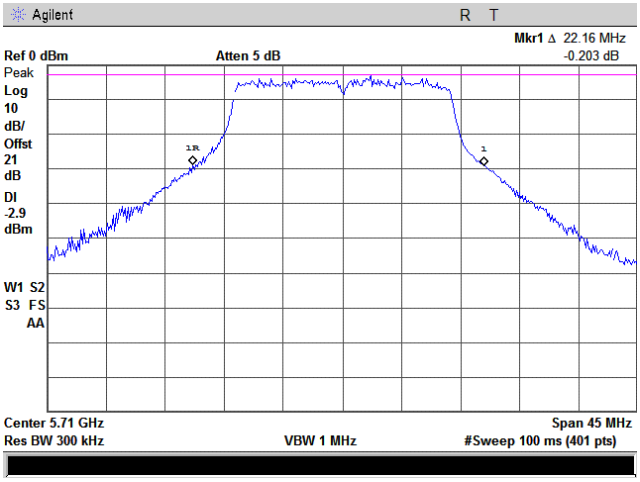
Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

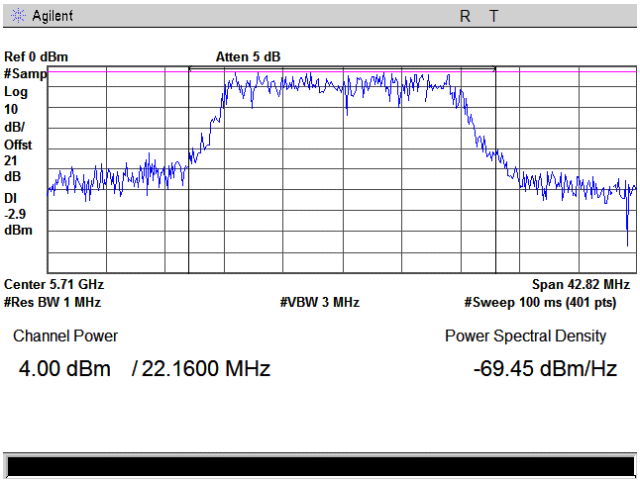
Plot 7.1.171 The 26 dB emission bandwidth

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Plot 7.1.172 Peak output power and peak power spectral density

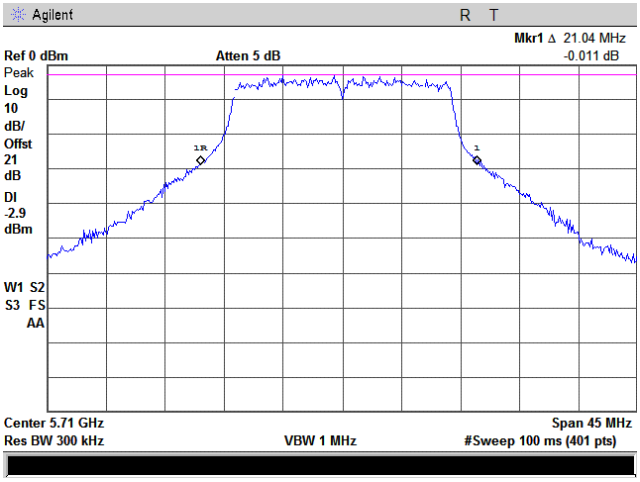
Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK, 18 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

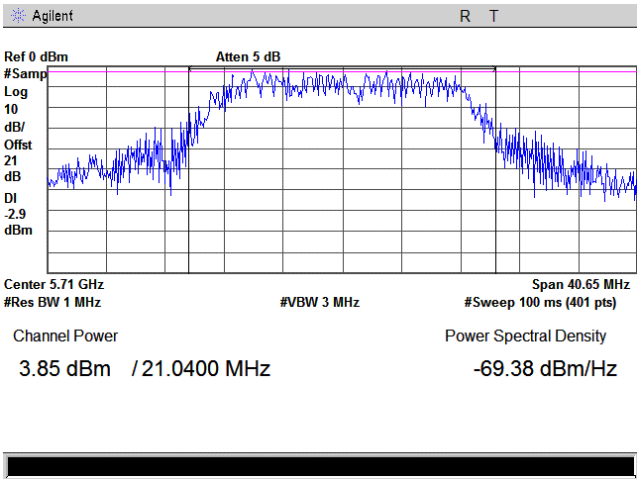
Plot 7.1.173 The 26 dB emission bandwidth

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Plot 7.1.174 Peak output power and peak power spectral density

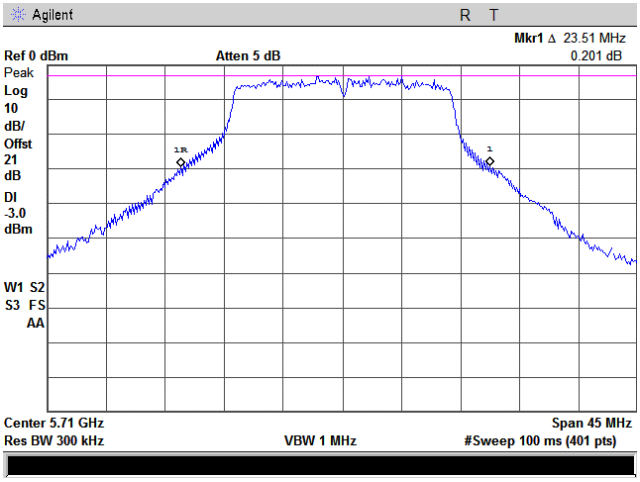
Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM, 24 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

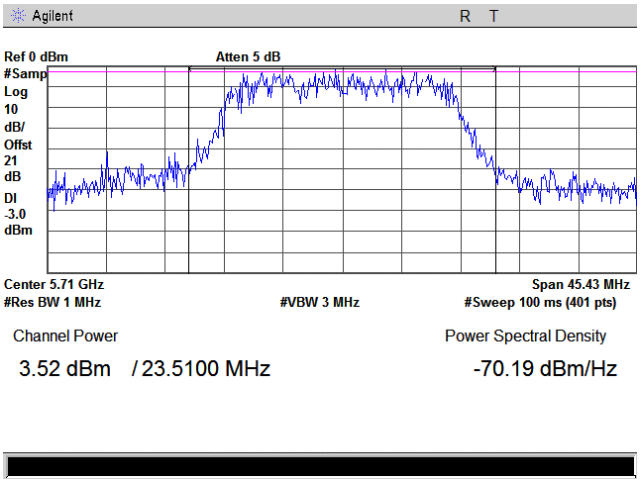
Plot 7.1.175 The 26 dB emission bandwidth

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Plot 7.1.176 Peak output power and peak power spectral density

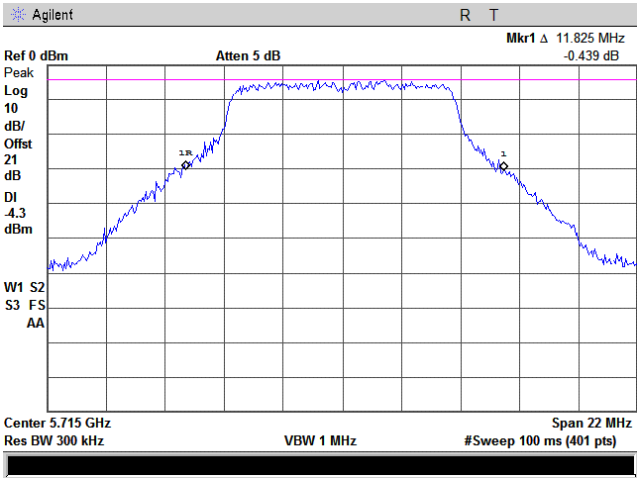
Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM, 54 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

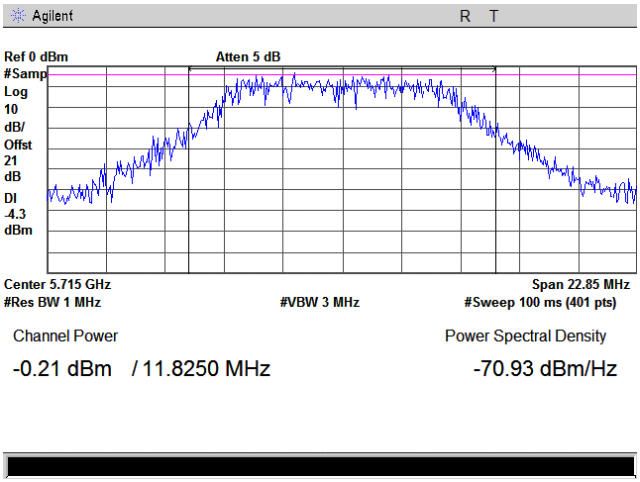
Plot 7.1.177 The 26 dB emission bandwidth

Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Plot 7.1.178 Peak output power and peak power spectral density

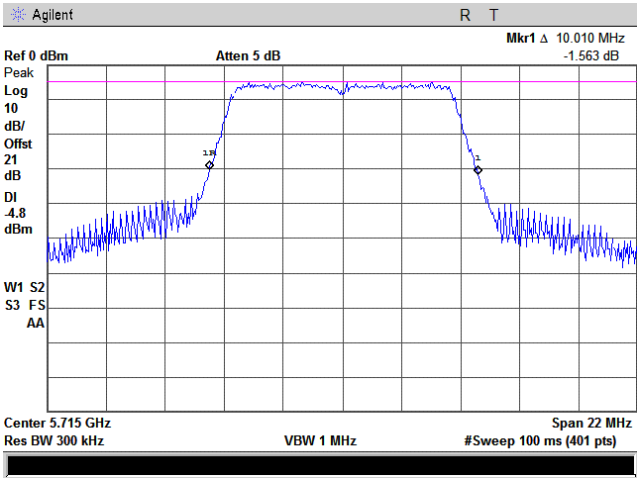
Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK, 3 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

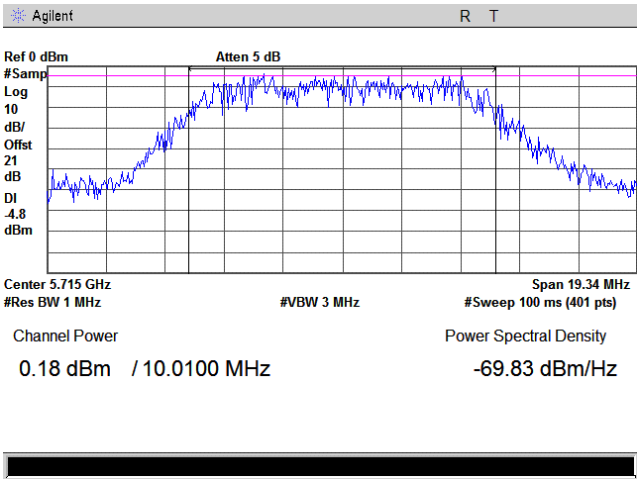
Plot 7.1.179 The 26 dB emission bandwidth

Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Plot 7.1.180 Peak output power and peak power spectral density

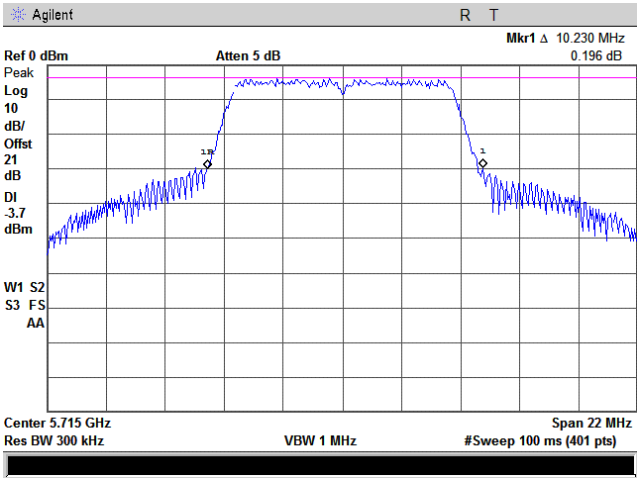
Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK, 9 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

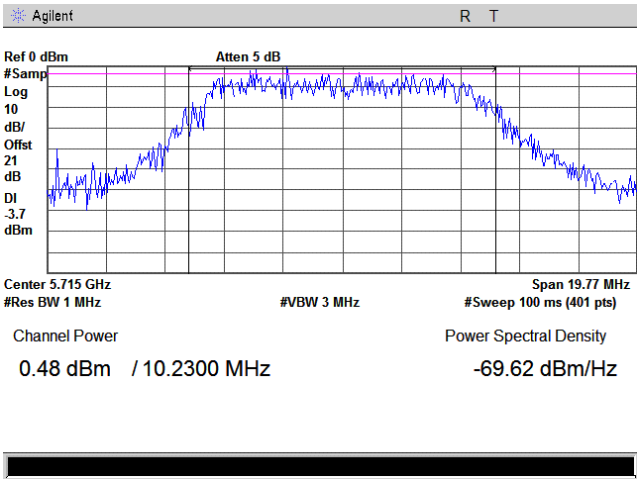
Plot 7.1.181 The 26 dB emission bandwidth

Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Plot 7.1.182 Peak output power and peak power spectral density

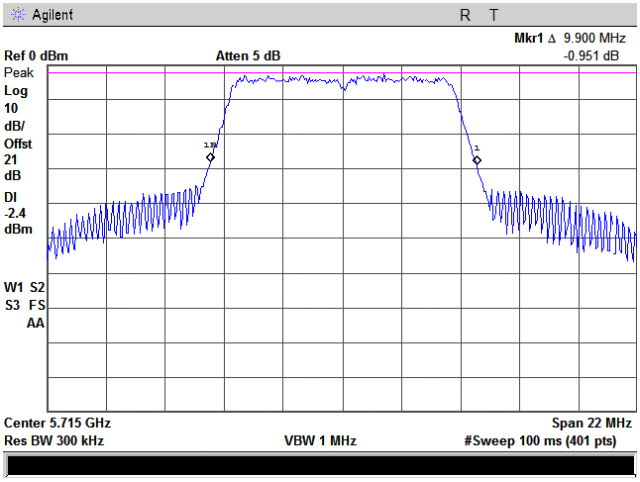
Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM, 12 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

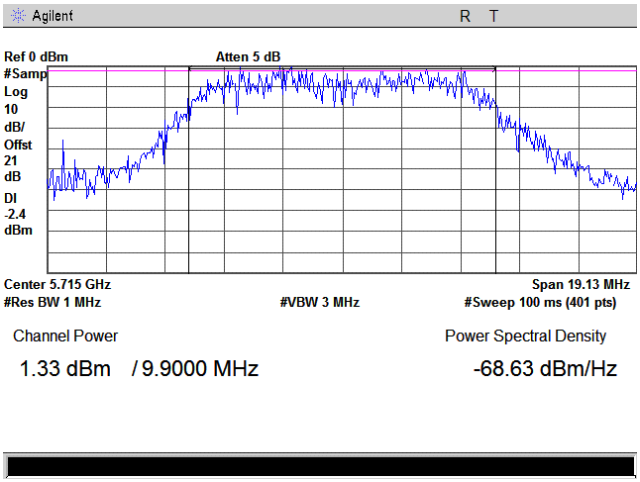
Plot 7.1.183 The 26 dB emission bandwidth

Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Plot 7.1.184 Peak output power and peak power spectral density

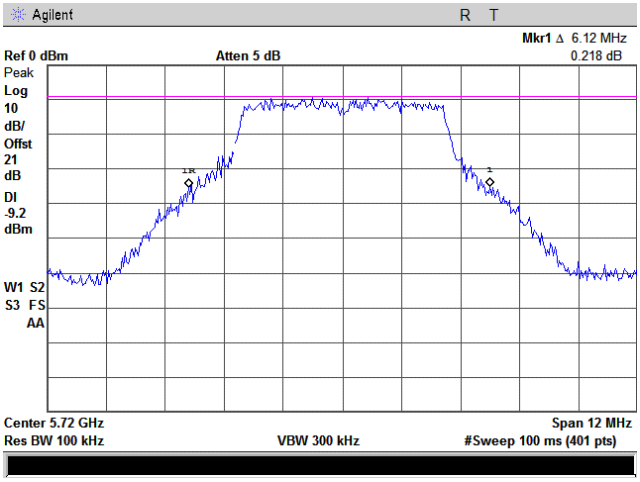
Frequency:	5715 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM, 27 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

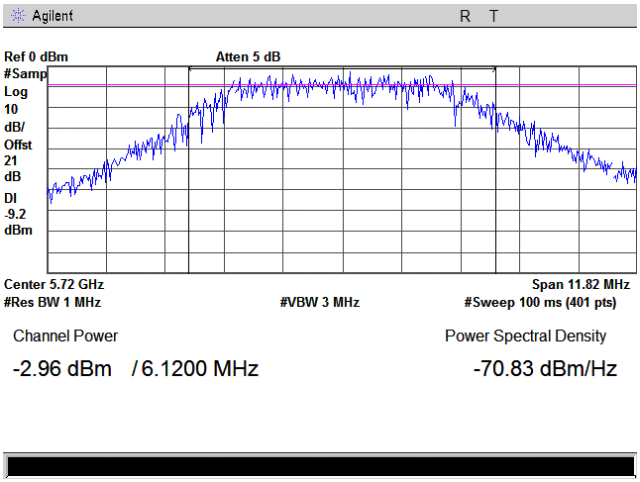
Plot 7.1.185 The 26 dB emission bandwidth

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Plot 7.1.186 Peak output power and peak power spectral density

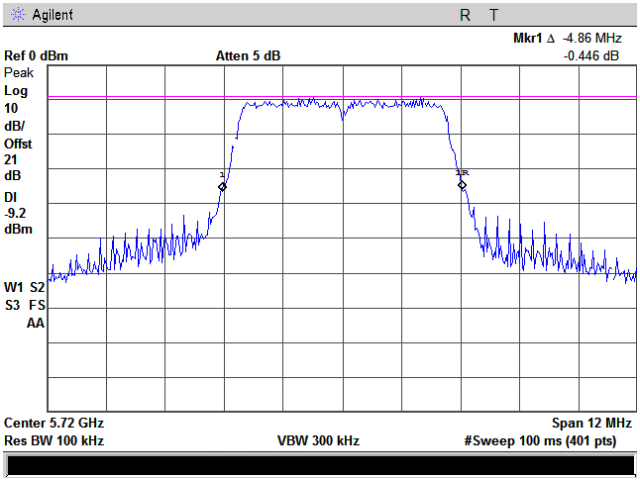
Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK, 1.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

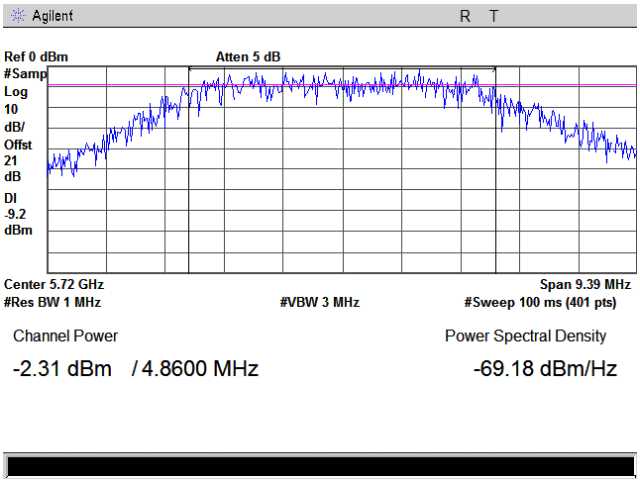
Plot 7.1.187 The 26 dB emission bandwidth

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Plot 7.1.188 Peak output power and peak power spectral density

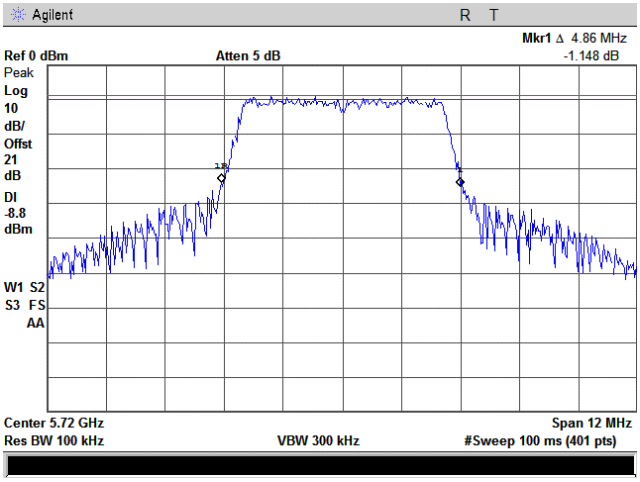
Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK, 4.5 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

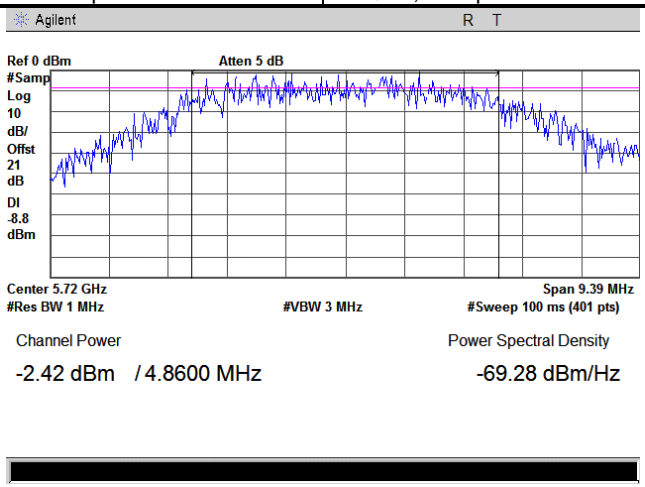
Plot 7.1.189 The 26 dB emission bandwidth

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Plot 7.1.190 Peak output power and peak power spectral density

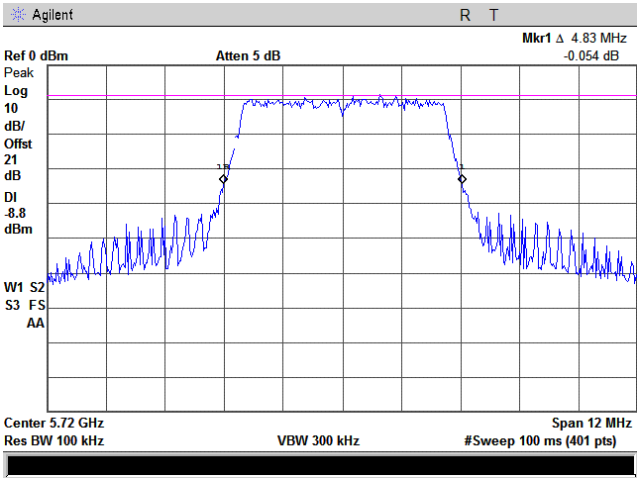
Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM, 6 Mbps



Test specification:	FCC section 15. 407(a)(1-3), RSS-210 Annex 9, section A9.2 Peak output power and peak power spectral density		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/03/2008		
Temperature: 24ºC	**Air Pressure:** 1010 hPa	**Relative Humidity:** 54 %	**Power Supply:** 120 VAC
Remarks: EUT with external antenna			

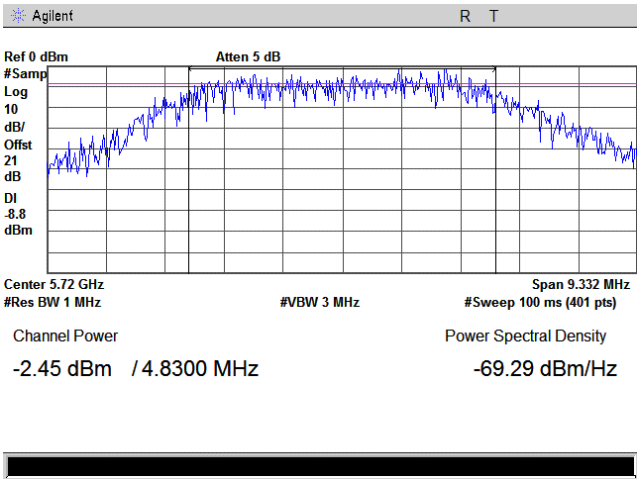
Plot 7.1.191 The 26 dB emission bandwidth

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Plot 7.1.192 Peak output power and peak power spectral density

Frequency:	5720 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM, 13.5 Mbps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks:			

7.2 Ratio of the peak excursion of the modulation envelope to the peak transmit power

7.2.1 General

This test was performed to measure the ratio of the peak excursion of the modulation envelope to the peak transmit power at RF antenna connector. Specification test limits are given in Table 7.2.1.

Table 7.2.1 Peak excursion limits

Assigned frequency, MHz	Maximum peak excursion, dB/MHz
5470 - 5750	13.0

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.

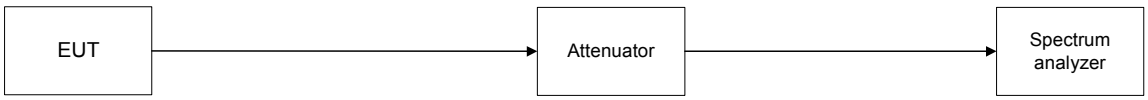
7.2.2.2 The EUT was adjusted to produce maximum available to end user RF output power.

7.2.2.3 The measurements were performed in continuous transmission mode of operation for carrier (channel) frequency at low and high edges and at the middle of the frequency range.

The maximum peak excursion of modulation envelope was measured as a difference between 2 traces.

7.2.2.4 The test results were recorded in Table 7.2.2, Table 7.2.3 and shown in the associated plots.

Figure 7.2.1 Band edge emission test setup



Test specification:	**Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

Table 7.2.2 Peak excursion test results

ASSIGNED FREQUENCY RANGE: 5470-5725 MHz
DETECTOR USED: 1-st trace : Peak, Max Hold
2-nd trace : Sample, 100 Power Averaging
TRANSMITTER OUTPUT POWER SETTINGS: "2 dBm" at 5 MHz channel bandwidth
"5 dBm" at 10 MHz channel bandwidth
"8 dBm" at 20 MHz channel bandwidth
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: 3 MHz

Frequency, MHz	Bit Rate, MBps	1-st trace, dBm	2-nd trace, dBm	Peak excursion, dB	Limit, dB	Margin, dB	Verdict
Low channel, CBW 20 MHz							
5485	6	-1.391	-11.200	9.809	13	-3.191	Pass
5485	18	-0.363	-10.600	10.237	13	-2.763	Pass
5485	24	-0.619	-10.770	10.151	13	-2.849	Pass
5485	54	0.168	-11.320	11.488	13	-1.512	Pass
Low channel, CBW 10 MHz							
5480	3	-2.454	-12.320	9.866	13	-3.134	Pass
5480	9	-0.18	-9.892	9.712	13	-3.288	Pass
5480	12	1.383	-10.090	11.473	13	-1.527	Pass
5480	27	0.871	-9.704	10.575	13	-2.425	Pass
Low channel, CBW 5 MHz							
5475	1.5	-2.733	-12.330	9.597	13	-3.403	Pass
5475	4.5	-0.686	-11.030	10.344	13	-2.656	Pass
5475	6	0.532	-11.440	11.972	13	-1.028	Pass
5475	13.5	0.105	-10.640	10.745	13	-2.255	Pass
Mid channel, CBW 20 MHz							
5585	6	-0.359	-10.700	10.341	13	-2.659	Pass
5585	18	-0.326	-9.497	9.171	13	-3.829	Pass
5585	24	1.293	-9.009	10.302	13	-2.698	Pass
5585	54	2.126	-8.919	11.045	13	-1.955	Pass
Mid channel, CBW 10 MHz							
5590	3	-1.225	-11.360	10.135	13	-2.865	Pass
5590	9	1.016	-8.868	9.884	13	-3.116	Pass
5590	12	2.105	-9.157	11.262	13	-1.738	Pass
5590	27	1.984	-9.392	11.376	13	-1.624	Pass
Mid channel, CBW 5 MHz							
5595	1.5	0.105	-10.94	11.045	13	-1.955	Pass
5595	4.5	0.451	-9.836	10.287	13	-2.713	Pass
5595	6	2.099	-9.052	11.151	13	-1.849	Pass
5595	13.5	1.698	-9.242	10.940	13	-2.06	Pass

*****- Margin = Peak excursion – specification limit.

Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

Table 7.2.2 Peak excursion test results (continued)

Frequency, MHz	Bit Rate, MBps	1-st trace, dBm	2-nd trace, dBm	Peak excursion, dB	Limit, dB	Margin, dB	Verdict
Mid2 channel, CBW 20 MHz (IC only)							
5665	6	-0.058	-10.190	10.132	13	-2.868	Pass
5665	18	0.778	-8.913	9.691	13	-3.309	Pass
5665	24	1.560	-8.984	10.544	13	-2.456	Pass
5665	54	1.813	-9.466	11.279	13	-1.721	Pass
Mid2 channel, CBW 10 MHz (IC only)							
5660	3	0.432	-9.813	10.245	13	-2.755	Pass
5660	9	2.38	-7.259	9.639	13	-3.361	Pass
5660	12	3.331	-8.052	11.383	13	-1.617	Pass
5660	27	2.872	-8.016	10.888	13	-2.112	Pass
Mid2 channel, CBW 5 MHz (IC only)							
5655	1.5	-0.121	-9.374	9.253	13	-3.747	Pass
5655	4.5	1.161	-9.434	10.595	13	-2.405	Pass
5655	6	2.379	-9.054	11.433	13	-1.567	Pass
5655	13.5	2.372	-9.478	11.850	13	-1.150	Pass
High channel, CBW 20 MHz							
5710	6	0.51	-9.659	10.169	13	-2.831	Pass
5710	18	0.393	-9.283	9.676	13	-3.324	Pass
5710	24	1.86	-7.801	9.661	13	-3.339	Pass
5710	54	2.692	-8.367	11.059	13	-1.941	Pass
High channel, CBW 10 MHz							
5715	3	0.787	-9.077	9.864	13	-3.136	Pass
5715	9	2.185	-8.333	10.518	13	-2.482	Pass
5715	12	3.397	-6.926	10.323	13	-2.677	Pass
5715	27	3.096	-7.993	11.089	13	-1.911	Pass
High channel, CBW 5 MHz							
5720	1.5	-0.516	-9.625	9.109	13	-3.891	Pass
5720	4.5	1.505	-8.818	10.323	13	-2.677	Pass
5720	6	2.358	-9.146	11.504	13	-1.496	Pass
5720	13.5	2.362	-8.559	10.921	13	-2.079	Pass

*- Margin = Peak excursion – specification limit.

Reference numbers of test equipment used

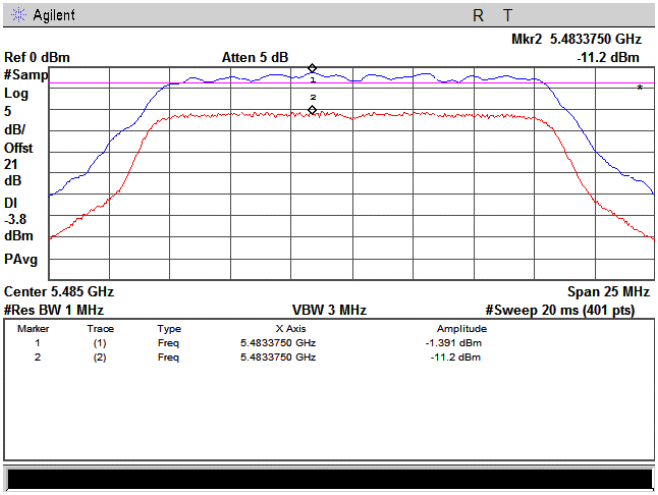
HL 2909	HL 3208	HL 3439					

Full description is given in Appendix A.

Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

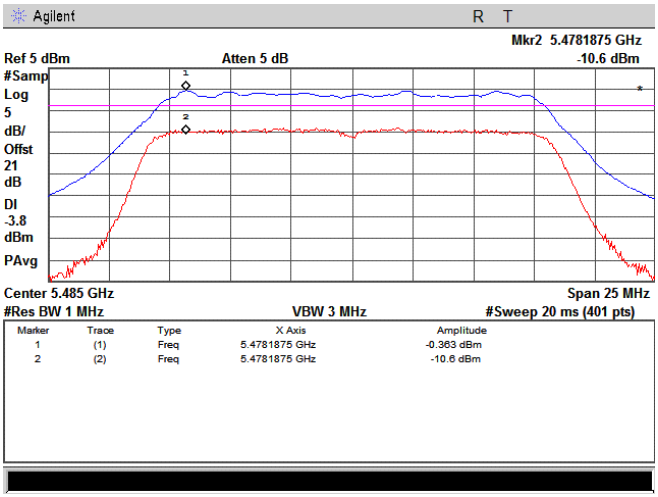
Plot 7.2.1 Peak excursion measurements

Frequency: 5485 MHz
Channel BW: 20 MHz
Modulation parameters: BPSK; 6 MBps



Plot.7.2.2 Peak excursion measurement

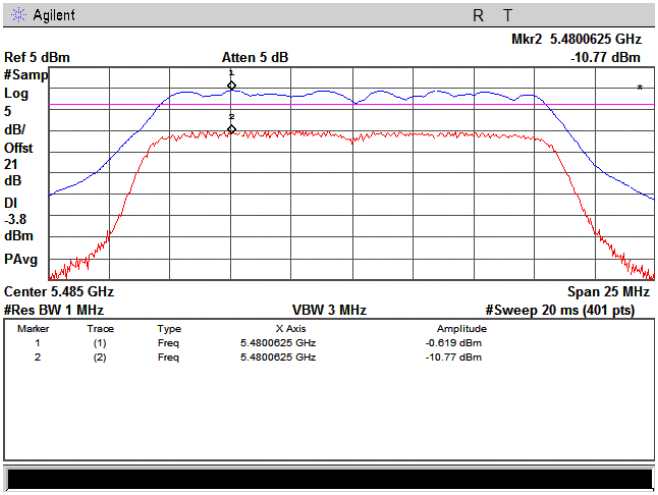
Frequency: 5485 MHz
Channel BW: 20 MHz
Modulation parameters: QPSK; 18 MBps



Test specification:	**Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

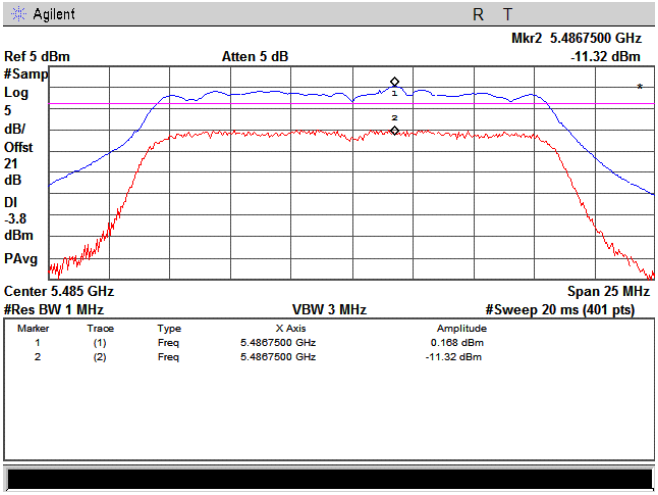
Plot.7.2.3 Peak excursion measurement

Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM; 24 MBps



Plot.7.2.4 Peak excursion measurement

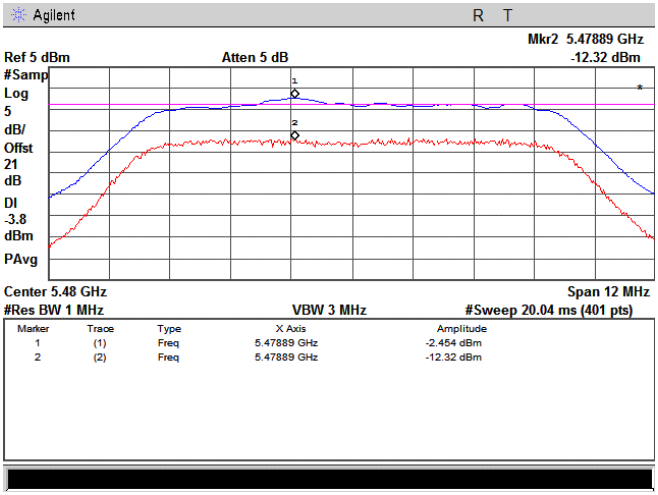
Frequency:	5485 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM; 54 MBps



Test specification:	**Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

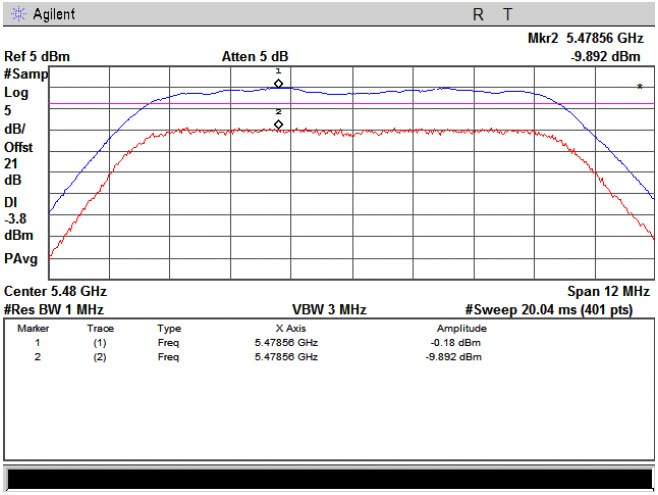
Plot 7.2.5 Peak excursion measurement

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK; 3 MBps



Plot 7.2.6 Peak excursion measurement

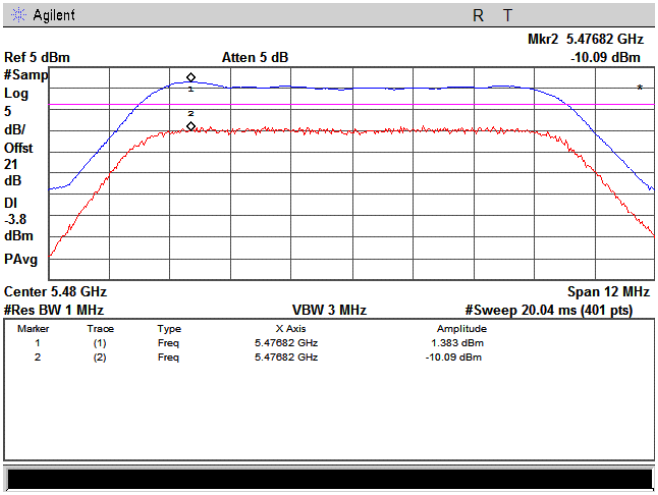
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK; 9 MBps



Test specification:	**Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

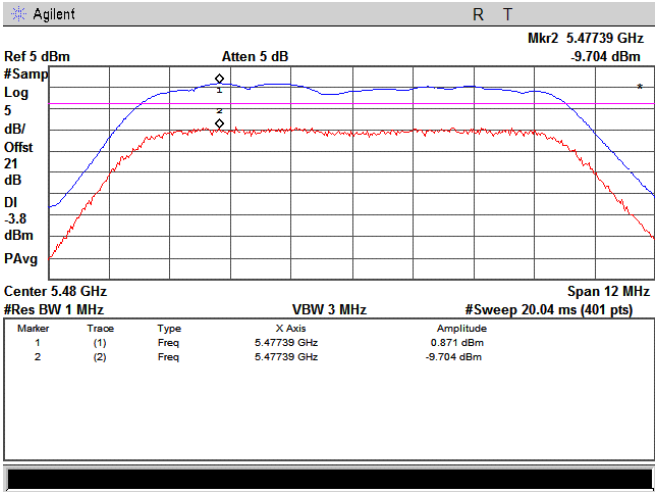
Plot 7.2.7 Peak excursion measurement

Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM; 12 MBps



Plot 7.2.8 Peak excursion measurement

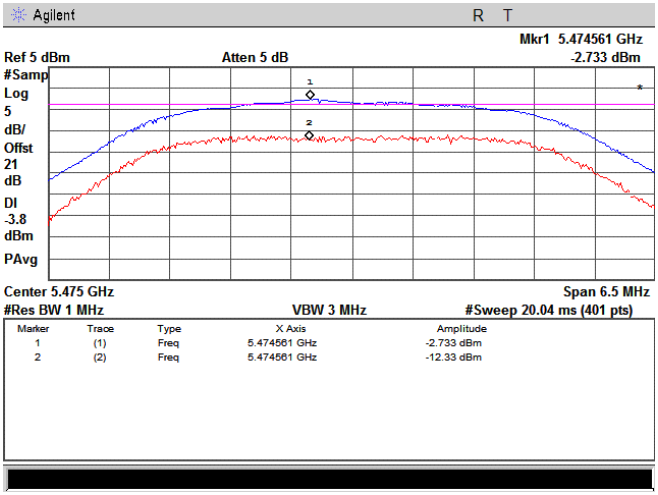
Frequency:	5480 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM; 27 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

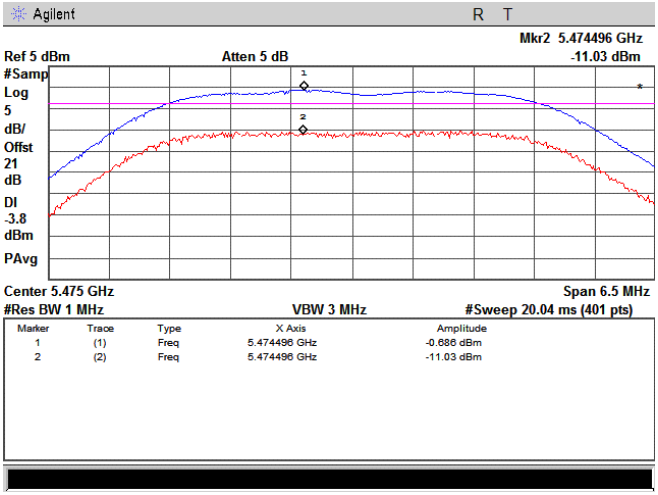
Plot 7.2.9 Peak excursion measurement

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK; 1.5 MBps



Plot 7.2.10 Peak excursion measurement

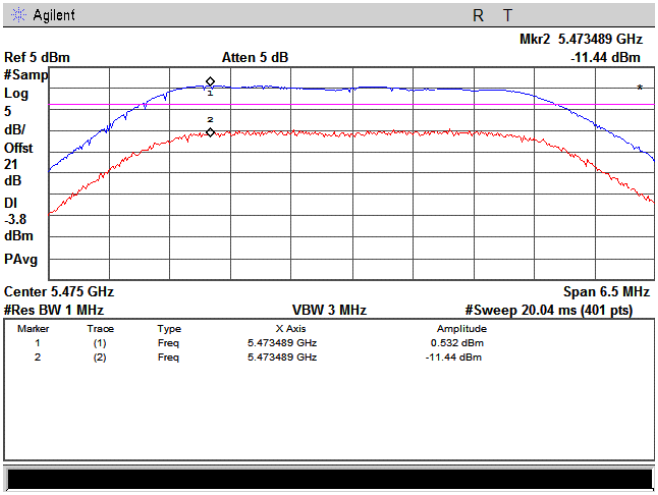
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK; 4.5 MBps



Test specification:	**Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

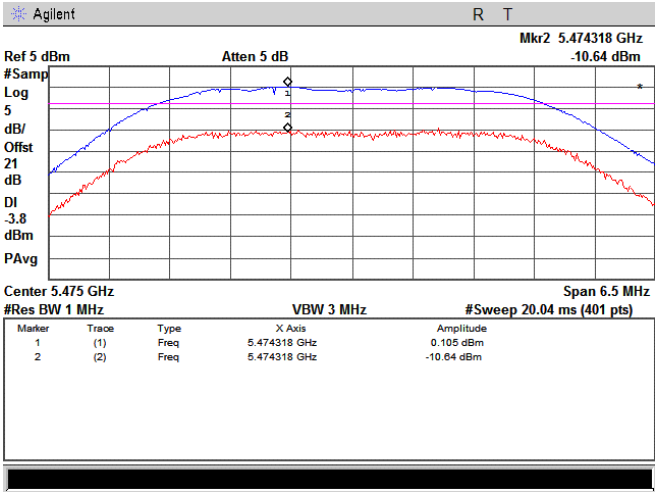
Plot 7.2.11 Peak excursion measurement

Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM; 6 MBps



Plot 7.2.12 Peak excursion measurement

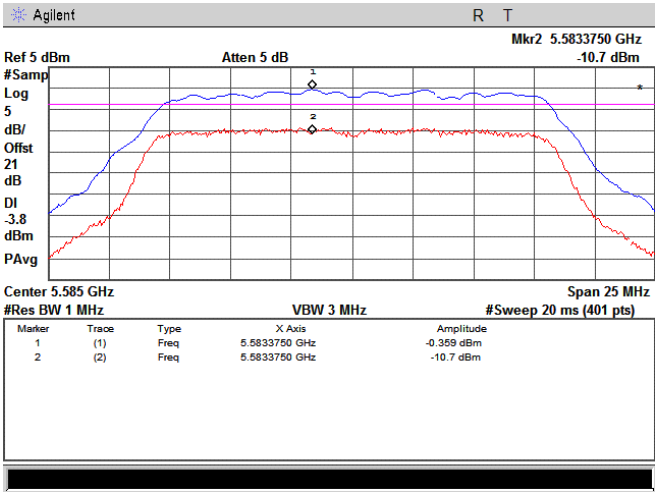
Frequency:	5475 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM; 13.5 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

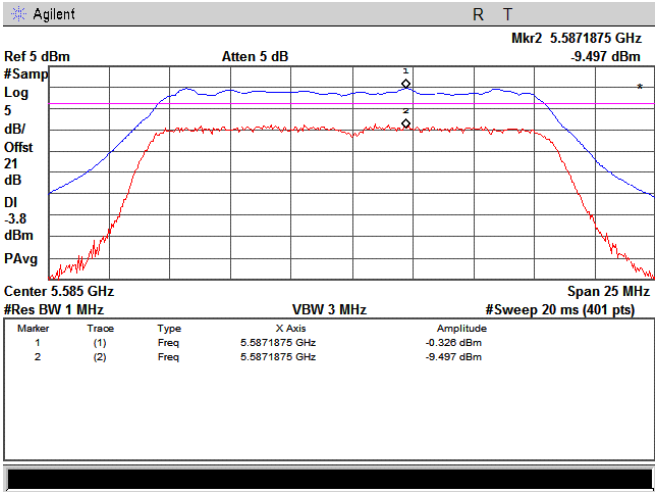
Plot 7.2.13 Peak excursion measurement

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK; 6 MBps



Plot 7.2.14 Peak excursion measurement

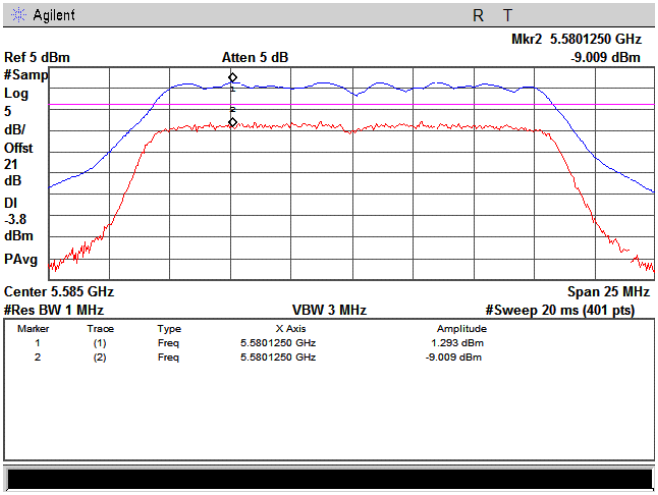
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK; 18 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

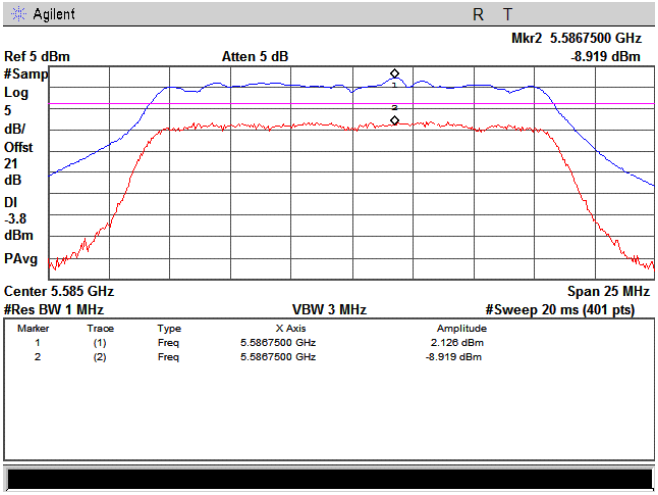
Plot 7.2.15 Peak excursion measurement

Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM; 24 MBps



Plot 7.2.16 Peak excursion measurement

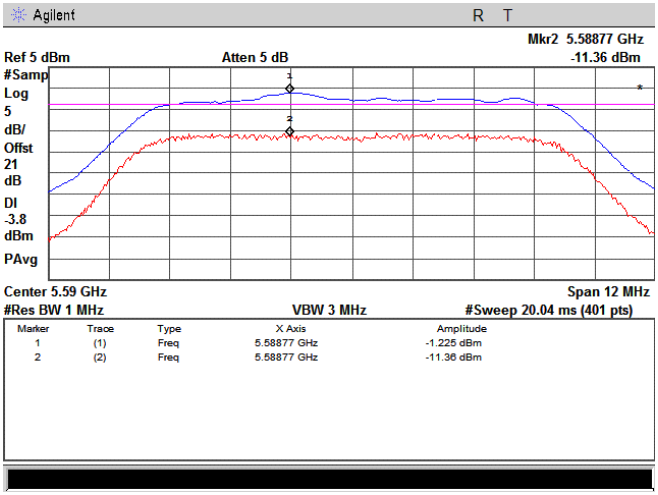
Frequency:	5585 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM; 54 MBps



Test specification:	**Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

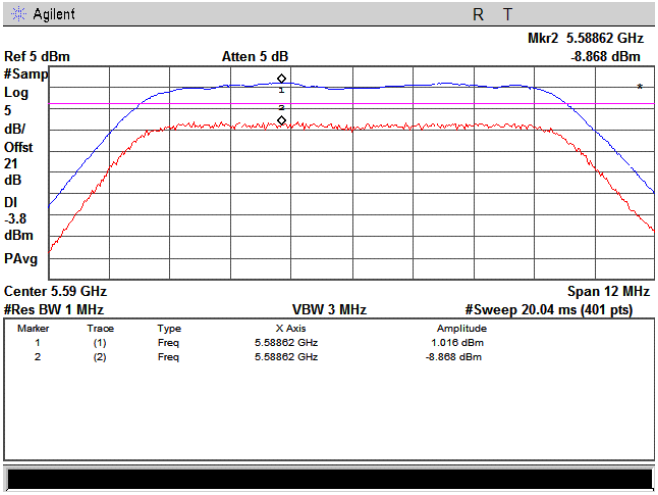
Plot 7.2.17 Peak excursion measurement

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK; 3 MBps



Plot 7.2.18 Peak excursion measurement

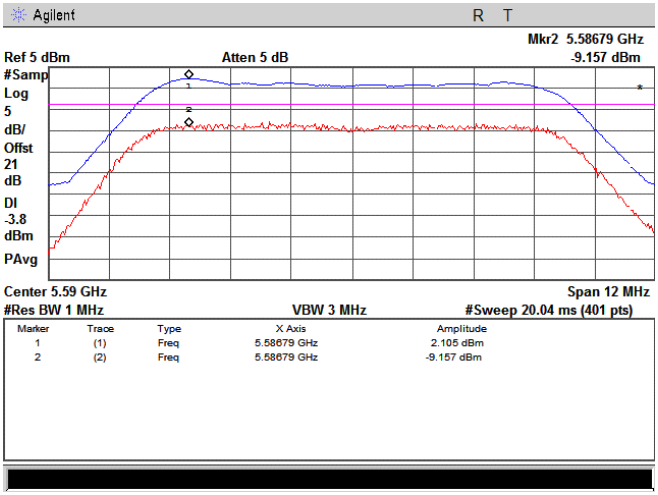
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK; 9 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

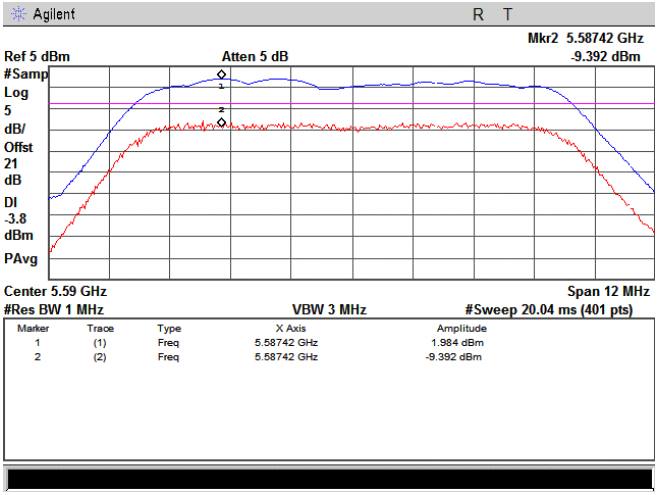
Plot 7.2.19 Peak excursion measurement

Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM; 12 MBps



Plot 7.2.20 Peak excursion measurement

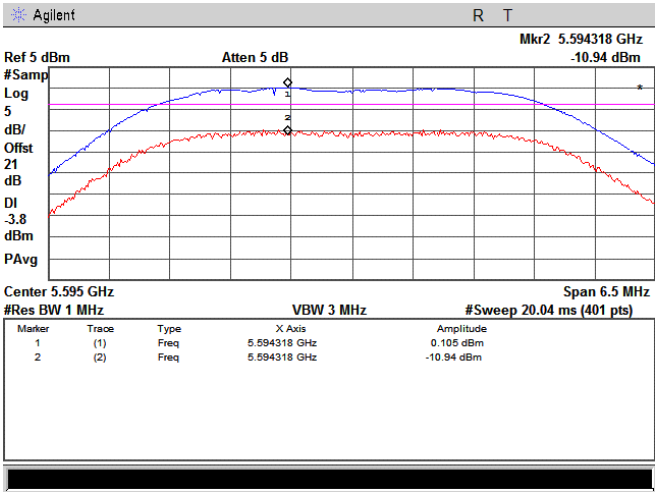
Frequency:	5590 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM; 27 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

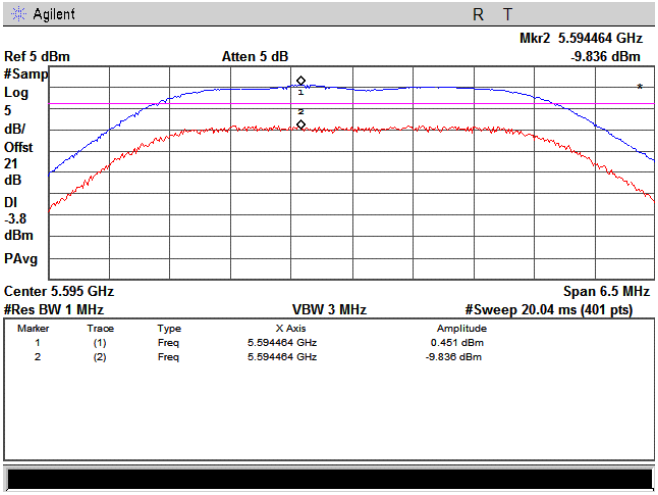
Plot 7.2.21 Peak excursion measurement

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK; 1.5 MBps



Plot 7.2.22 Peak excursion measurement

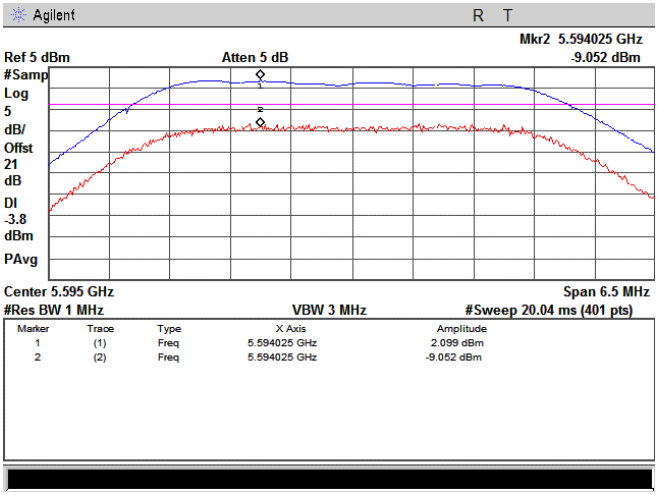
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK; 4.5 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

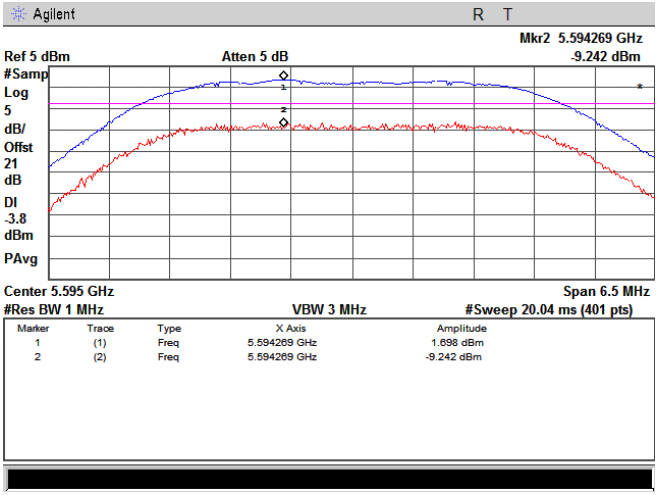
Plot 7.2.23 Peak excursion measurement

Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM; 6 MBps



Plot 7.2.24 Peak excursion measurement

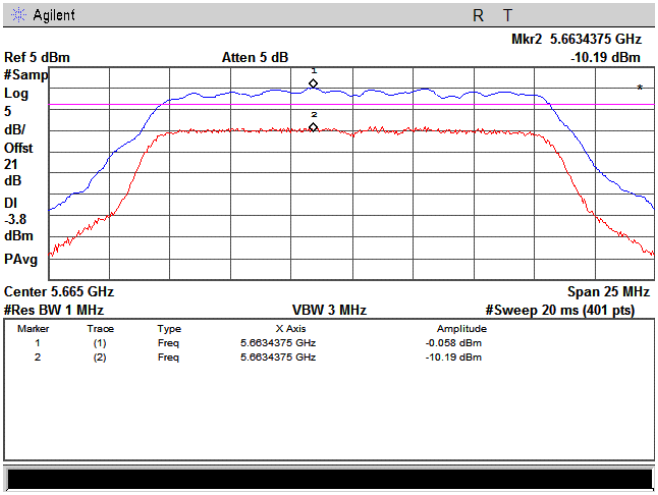
Frequency:	5595 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM; 13.5 MBps



Test specification:	**Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power**		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	**Verdict:**	PASS
Date:	6/15/2008		
Temperature: 23 ºC	**Air Pressure:** 1012 hPa	**Relative Humidity:** 52 %	**Power Supply:** 120 VAC
Remarks: EUT with internal antenna			

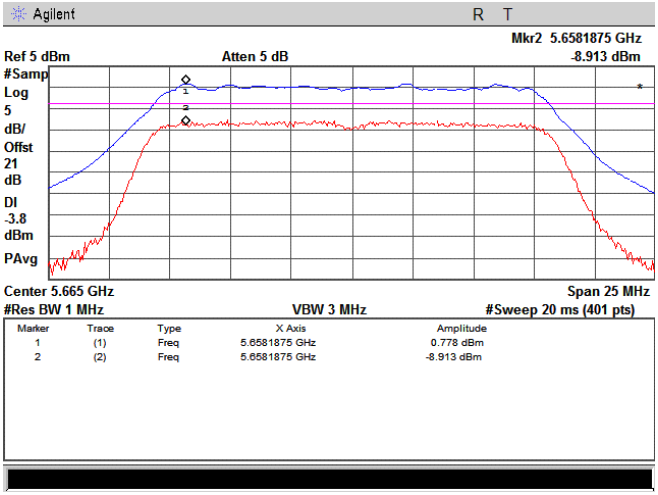
Plot 7.2.25 Peak excursion measurement

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK; 6 MBps



Plot 7.2.26 Peak excursion measurement

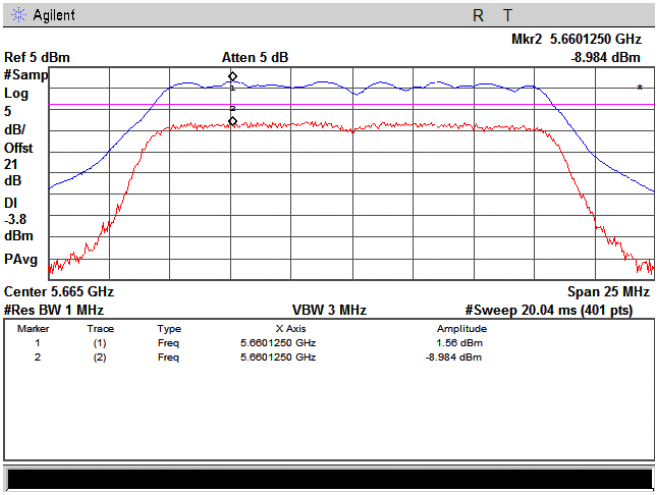
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK; 18 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

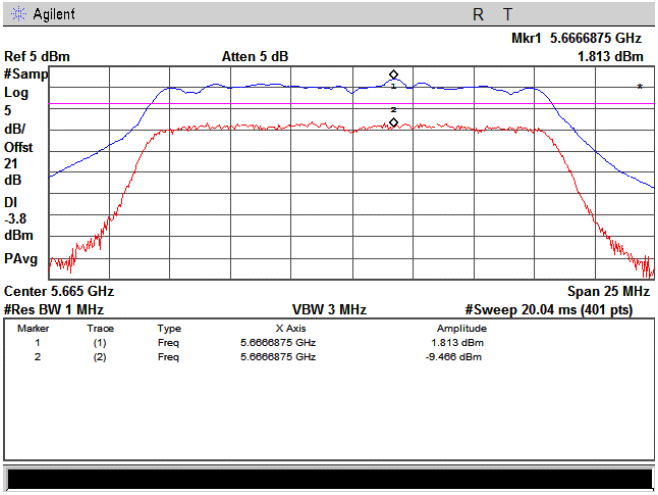
Plot 7.2.27 Peak excursion measurement

Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	16QAM; 24 MBps



Plot 7.2.28 Peak excursion measurement

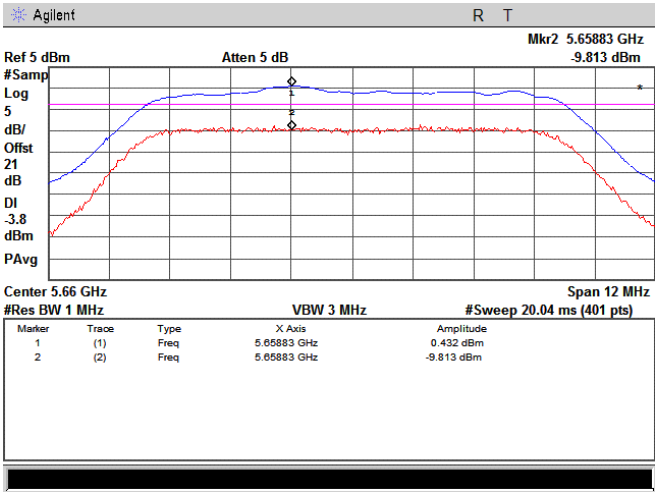
Frequency:	5665 MHz
Channel BW:	20 MHz
Modulation parameters:	64QAM; 54 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

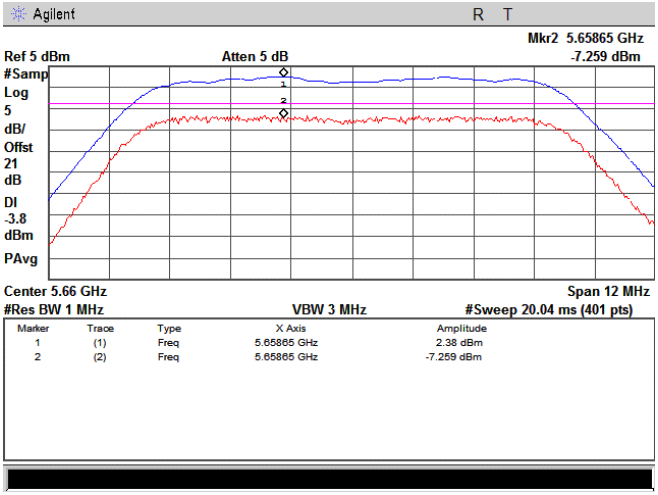
Plot 7.2.29 Peak excursion measurement

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	BPSK; 3 MBps



Plot 7.2.30 Peak excursion measurement

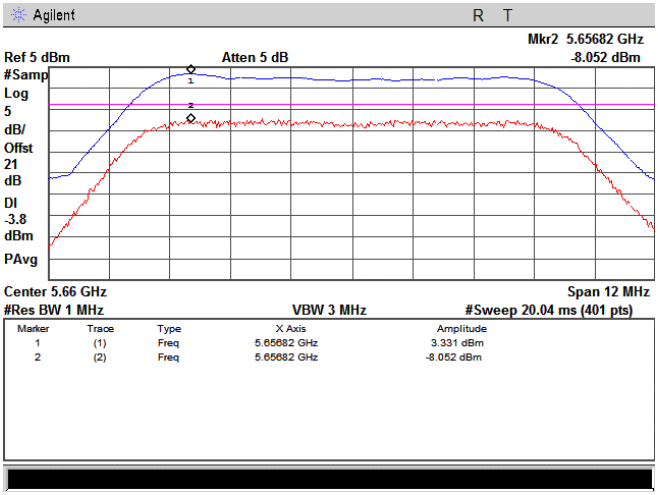
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	QPSK; 9 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

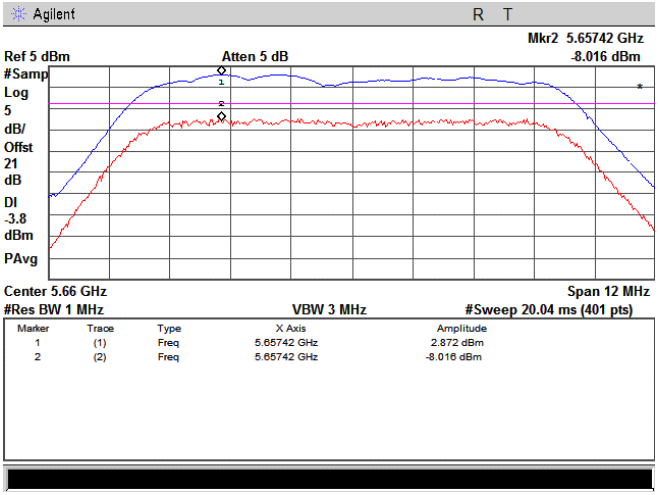
Plot 7.2.31 Peak excursion measurement

Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	16QAM; 12 MBps



Plot 7.2.32 Peak excursion measurement

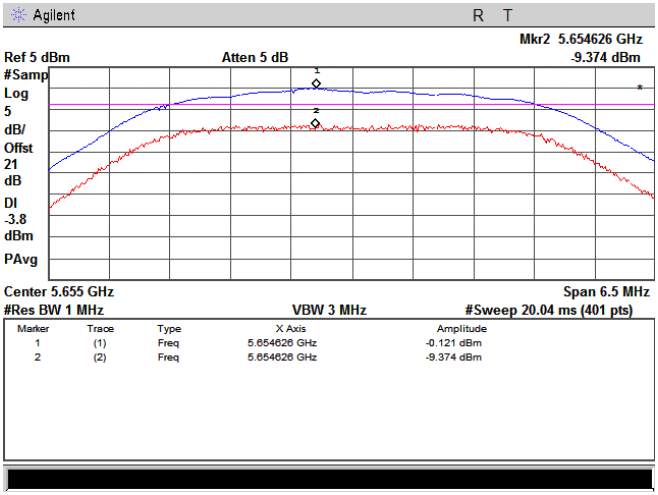
Frequency:	5660 MHz
Channel BW:	10 MHz
Modulation parameters:	64QAM; 27 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

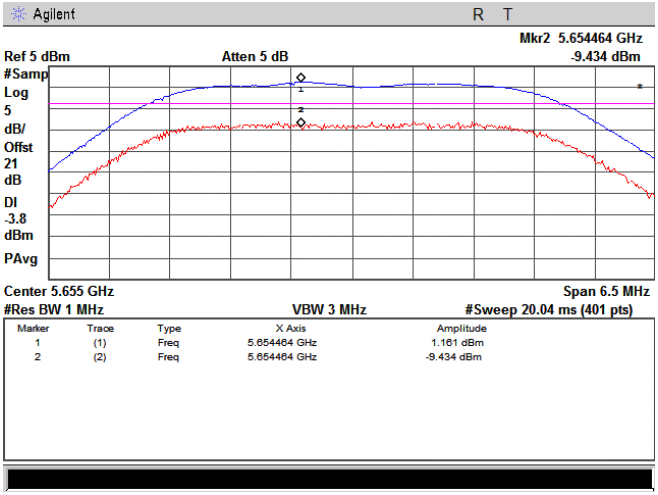
Plot 7.2.33 Peak excursion measurement

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	BPSK; 1.5 MBps



Plot 7.2.34 Peak excursion measurement

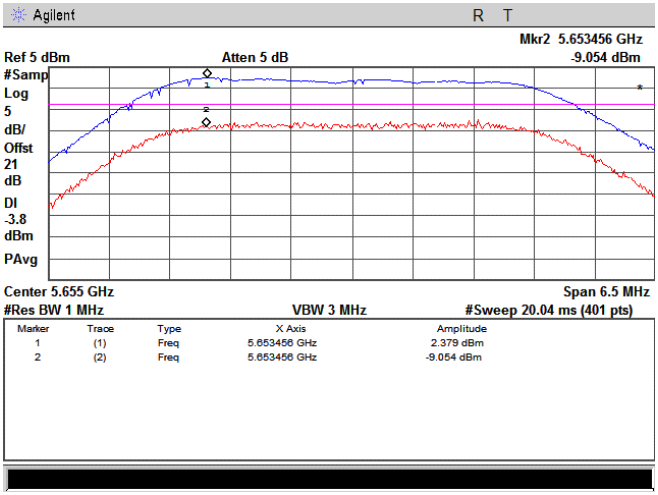
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	QPSK; 4.5 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

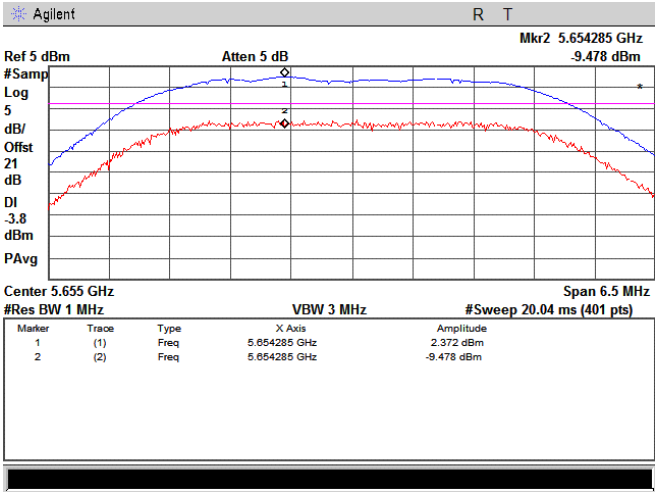
Plot 7.2.35 Peak excursion measurement

Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	16QAM; 6 MBps



Plot 7.2.36 Peak excursion measurement

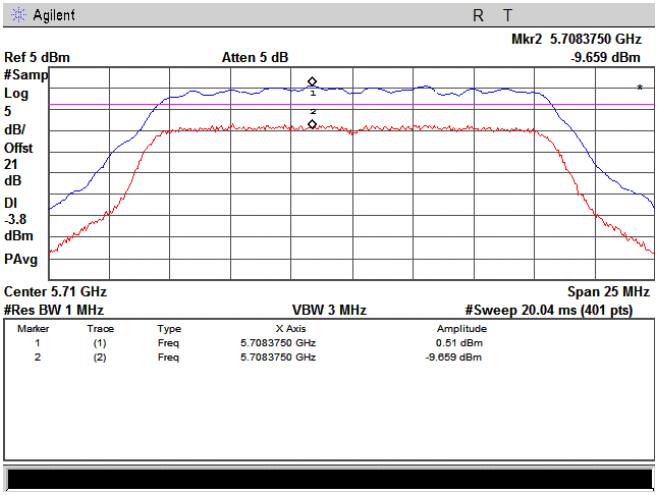
Frequency:	5655 MHz
Channel BW:	5 MHz
Modulation parameters:	64QAM; 13.5 MBps



Test specification:	Section 15.407(a)(6), Ratio of the peak excursion of the modulation envelope to the peak transmit power		
Test procedure:	FCC Public Notice DA 02-2138, Appendix A		
Test mode:	Compliance	Verdict:	PASS
Date:	6/15/2008		
Temperature: 23 ºC	Air Pressure: 1012 hPa	Relative Humidity: 52 %	Power Supply: 120 VAC
Remarks: EUT with internal antenna			

Plot 7.2.37 Peak excursion measurement

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	BPSK; 6 MBps



Plot 7.2.38 Peak excursion measurement

Frequency:	5710 MHz
Channel BW:	20 MHz
Modulation parameters:	QPSK; 18 MBps