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Test Report:	96743-1R1TRFWL
Applicant:	BelAir Networks Inc 603 March Road, Ottawa, ON K2K 2M5
Apparatus:	ERM1
FCC ID:	RAR20021001
In Accordance With:	FCC Part 15 Subpart C, 15.247 FHSS System and Digitally Modulated Radiators 902-928MHz, 2400 - 2483.5 MHz, 5725-5850MHz
Tested By:	Nemko Canada Inc. 303 River Road Ottawa, Ontario K1V 1H2
Authorized By:	 Jason Nixon, Wireless/Telecom Specialist
Date:	March 27, 2008
Total Number of Pages:	109

Report Summary

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15, Subpart C. Radiated tests were conducted in accordance with ANSI C63.4-2003. Radiated emissions are made on an open area test site. A description of the test facility is on file with the FCC.

The assessment summary is as follows:

Apparatus Assessed:	ERM1
Specification:	FCC Part 15 Subpart C, 15.247
Compliance Status:	Complies
Exclusions:	None
Non-compliances:	None
Report Release History:	R1: 10 dBi Omni Antenna part name was corrected

Author: Andrey Adelberg, EMC/Wireless Specialist

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025.

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Section 1: Equipment Under Test

1.1 Product Identification

The Equipment Under Test was identified as follows:

BelAir ERM1 Enhanced Radio Module

1.2 Samples Submitted for Assessment

The following samples of the apparatus have been submitted for type assessment:

Sample No.	Description	Serial No. / Part No.
1	ERM1 Enhanced Radio Module	K002100736
2	Host Unit: BelAir100	AABFQ7296
3	Ethernet Hub, Airlink ASW105/A4	S/N: 0526A4A20149
4	Laptop PC, Toshiba Satellite A10 (M/N:PSA10C-00REH)	S/N: 63042093J

The first samples were received on: February 4, 2008

1.3 Theory of Operation

The ERM1 is an 802.11a (OFDM) W-LAN Wireless Module designed for operation in the 5.725 – 5.85 GHz band.

1.4 Technical Specifications of the EUT

Frequency Band	5725 MHz – 5850 MHz
Operation Frequency	5730 MHz – 5845 MHz
Rated Output Power:	23 dBm ⁽¹⁾
Channel Bandwidths:	5MHz, 10MHz, 20MHz and 40MHz
Emission Designator	W7D
Modulation:	802.11a
Antenna Data:	23dBi, Huber&Suhner, SPA5600_9_23_0_V 19dBi, MTI, MT-485001 15dBi, MAXRAD, WISP4959018MBV 15dBi, BELAIR, BX2A00002 10dBi, MAXRAD, MHO5158010NM 10dBi, MTI, MT-462008
Antenna Connector:	Type-N

NOTES:

- (1) Manufacturer's rated power is average power measured using a wide-band power meter with a thermocouple detector.

Section 2: Test Conditions

2.1 Specifications

The apparatus was assessed against the following specifications:

FCC Part 15 Subpart C, 15.247 (FHSS System and Digitally Modulated Radiators 902-928MHz, 2400 - 2483.5 MHz, 5725-5850MHz)

2.2 Deviations From Laboratory Test Procedures

No deviations were made from laboratory test procedures.

2.3 Test Environment

All tests were performed under the following environmental conditions:

Temperature range	:	15 – 30 °C
Humidity range	:	20 - 75 %
Pressure range	:	86 - 106 kPa
Power supply range	:	+/- 5% of rated voltages

2.4 Test Equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next Cal.
Spectrum Analyzer	Rohde & Schwarz	FSU46	FA001877	Jan 23/09
Spectrum Analyzer	Rohde & Schwarz	FSP40	FA001920	June 19/08
Attenuator	Narda	768-10	9707	COU
Attenuator	Narda	768-10	9709	COU
Notch Filter	Microwave Circuits	5725-5850MHz	FA001921	COU
Multimeter	Fluke	16	FA001831	Jan 14/09
Electro-Magnetic Interference Test Chamber	TDK	SAC-3	FA002047	May 19/08
LISN	Rohde & Schwarz	ENV216	FA002023	Sept. 04/08
Receiver/Spectrum Analyzer	Rohde & Schwarz	ESU 26	FA002043	Dec. 07/08
50 Coax cable	HUBER + SUHNER	None	FA002022	Sept. 19/08
International Power Supply	California Inst.	3001i	FA001021	Jan. 16/09
Bilog	Sunol	JB3	FA002108	Jan. 21/09
Flush Mount Turntable	Sunol	FM2022	FA002082	NCR
Controller	Sunol	SC104V	FA002060	NCR
Mast	Sunol	TLT2	FA002061	NCR
18.0 – 40.0GHz Horn Antenna	EMCO	3116	FA001847	May 9/08
1 – 18 GHz Amplifier	JCA	JCA118-503	FA002091	Oct 2/08
18.0 – 26.0 GHz Amplifier	NARDA	BBS-1826N612	FA001550	COU
26 – 40.0 GHz Amplifier	NARDA	DBL-2640N610	FA001556	COU
Horn Antenna #2	EMCO	3115	FA000825	Jan. 15/09
Horn Antenna #4	EMCO	3115	FA001451	June 25/08
50 Coax cable	HUBER + SUHNER	None	FA002022	Sept. 19/08
50 Coax cable	HUBER + SUHNER	None	FA002015	Sept. 19/08

* COU (Calibrate on Use)

** NCR (No Calibration Required)

2.5 Measurement Uncertainty

Nemko Canada measurement uncertainty has been calculated using guidance of UKAS LAB 34:2003 and TIA-603-B Nov 7, 2002. All calculations have been performed to provide a confidence level of 95% and can be found in Nemko Canada document MU-003.

Section 3: Observations

3.1 Modifications Performed During Assessment

No modifications were performed during assessment.

3.2 Record Of Technical Judgements

No technical judgements were made during the assessment.

3.3 EUT Parameters Affecting Compliance

The user of the apparatus could not alter parameters that would affect compliance.

3.4 Test Deleted

No Tests were deleted from this assessment.

3.5 Additional Observations

There were no additional observations made during this assessment.

Section 4: Results Summary

This section contains the following:

FCC Part 15 Subpart C: Test Results

The column headed 'Required' indicates whether the associated clauses were invoked for the apparatus under test. The following abbreviations are used:

- N No: not applicable / not relevant.
- Y Yes: Mandatory i.e. the apparatus shall conform to these tests.
- N/T Not Tested, mandatory but not assessed. (See section 3.4 Test deleted)

The results contained in this section are representative of the operation of the apparatus as originally submitted.

4.1 FCC Part 15 Subpart C: Test Results

Part 15	Test Description	Required	Result
15.31(e)	Variation of power supply	YES	PASS
15.207(a)	Powerline Conducted Emissions	YES	PASS
15.209(a)	Radiated Emissions within Restricted Bands	YES	PASS
15.247(a)(1)	Frequency hopping systems	N	N/A
15.247(a)(1)(i)	Frequency hopping systems operating in the 902-928 MHz band	N	N/A
15.247(a)(1)(ii)	Frequency hopping systems operating in the 5725-5850 MHz band	N	N/A
15.247(a)(1)(iii)	Frequency hopping systems operating in the 2400-2483.5 MHz band	N	N/A
15.247(a)(2)	Minimum 6dB Bandwidth	YES	PASS
15.247(b)(1)	Maximum peak output power of Frequency hopping systems operating in the 2400-2483.5 MHz band and 5725-5850 MHz band	N	N/A
15.247(b)(2)	Maximum peak output power of Frequency hopping systems operating in the 902-928 MHz band	N	N/A
15.247(b)(3)	Maximum peak output power of systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands	YES	PASS
15.247(b)(4)	Maximum peak output power	YES	PASS
15.247(c)(1)	Fixed point-to-point Operation with directional antenna gains greater than 6 dBi	N	N/A
15.247(c)(2)	Transmitters operating in the 2400-2483.5 MHz band that emit multiple directional beams	N	N/A
15.247(d)	Conducted Spurious Emissions	YES	PASS
15.247(e)	Power Spectral Density for Digitally Modulated Devices	YES	PASS
15.247(f)	Time of Occupancy for Hybrid Systems	N	N/A
2.1055	Measurements required: Frequency stability	N	N/A

Appendix A: Test Results

Clause §15.207(a) AC Powerline Conducted Emissions

§15.207 Conducted limits.

a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50µH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of Emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

Test Conditions:

Sample Number:	1	Temperature (°C):	21
Date:	March 17, 2008	Humidity (%):	40
Modification State:	0	Tester:	Andrey Adelberg
		Laboratory:	Ottawa

Test Results: Pass (see attached plots).

Additional Observations:

Preview measurements:

0.15MHz to 30MHz

Receiver settings:

- Peak Detector, Max Hold and Average
- 10kHz RBW

Final measurement:

0.15MHz to 30MHz

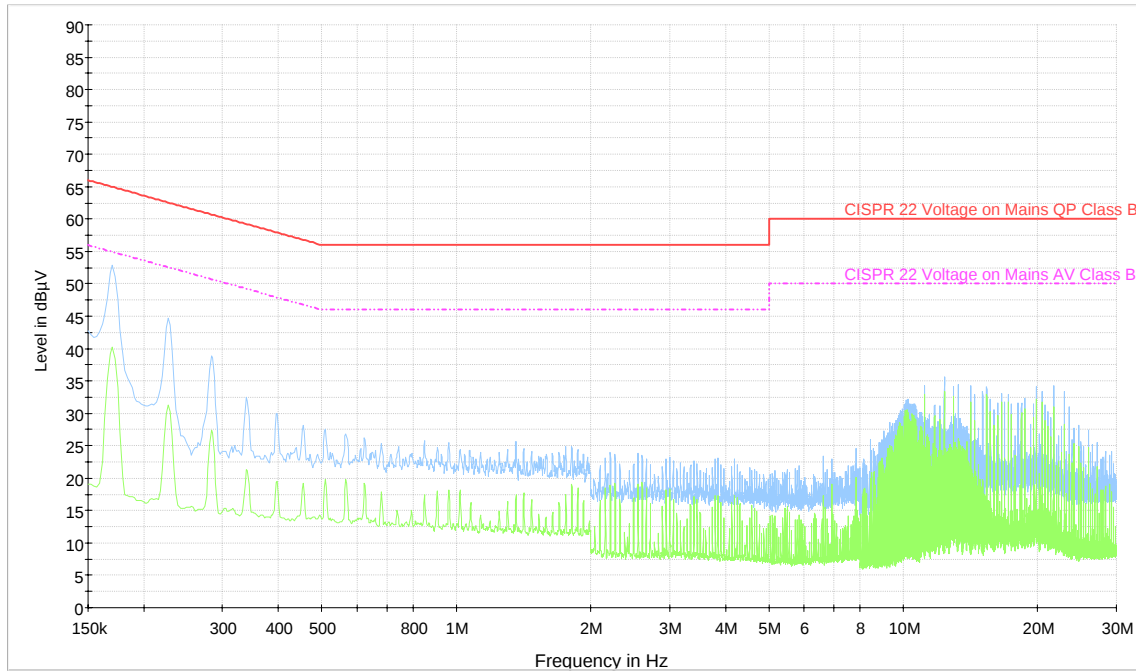
Receiver settings:

- Q-Peak Detector and Average
- 10kHz RBW

- Spectral plots have been corrected for transducer factors; cable loss, LISN, and attenuator.
- No emissions within 6dB of limit were detected.

AC Power-line Conducted Emissions, continued

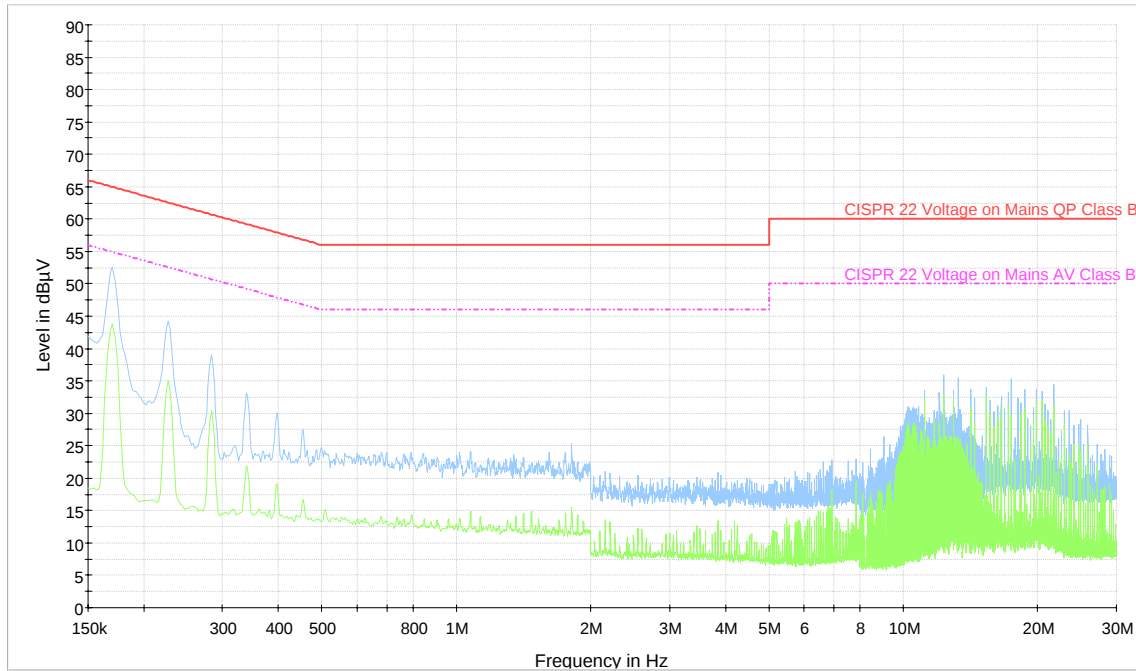
Phase Line



Conducted Emissions on AC mains' Phase Line
 — CISPR 22 Voltage on Mains QP Class B.LimitLine
 - - - CISPR 22 Voltage on Mains AV Class B.LimitLine
 — Preview Peak Result
 — Preview Average Result

AC Power-line Conducted Emissions, continued

Neutral Line



Conducted Emissions on AC mains' Neutral Line
 — CISPR 22 Voltage on Mains QP Class B.LimitLine
 - - - CISPR 22 Voltage on Mains AV Class B.LimitLine
 — Preview Peak Result
 — Preview Average Result

Clause 15.209(a) Radiated Emissions within Restricted Bands**§ 15.209 (a) Radiated emission limits; general requirements**

Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F (kHz)	300
0.490-1.705	24000/F (kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Conditions:

Sample Number:	1	Temperature (°C):	20°C
Date:	March 5 - 12, 2008	Humidity (%):	41 %
Modification State:	0	Tester:	Andrey Adelberg
		Laboratory:	Ottawa and Almonte

Test Results: Pass.
See attached tables and plots for results.

Additional Observations:

These results apply to emissions found in the restricted bands defined in FCC Part 15 Subpart C, 15.205.

The Spectrum was searched from 30MHz to 40GHz

All measurements were performed at a distance of 3 meters.

Test receiver with 120 kHz RBW was used below 1 GHz.

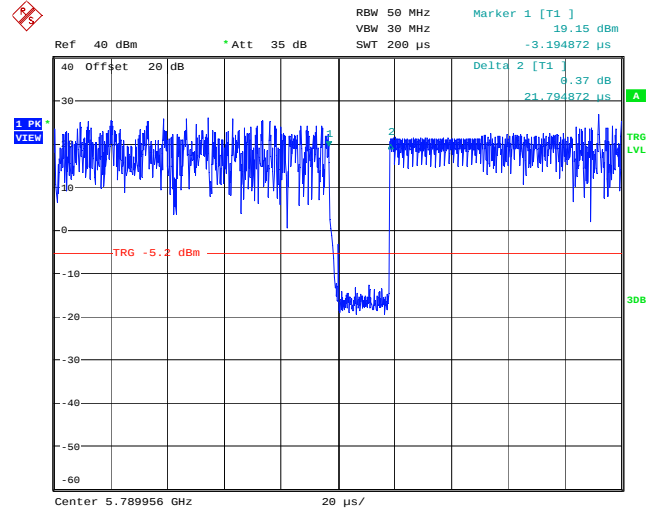
Spectrum Analyzer with 1 MHz RBW / 3 MHz VBW for peak measurements and 1 MHz RBW / 10 Hz VBW (video averaging / video filtering mode) for average measurements was used above 1GHz.

Radiated Emissions within Restricted Bands, continued

Duty Cycle:

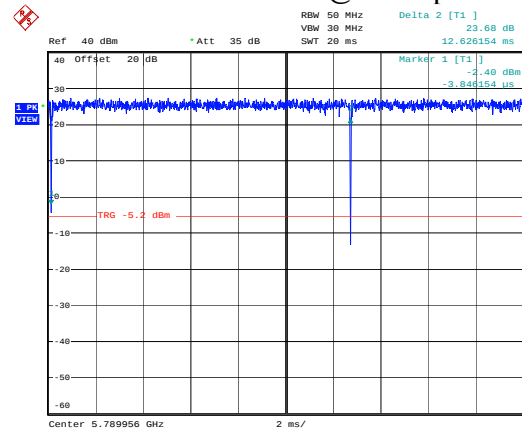
Channel Bandwidth: 5 MHz

Tx Off time



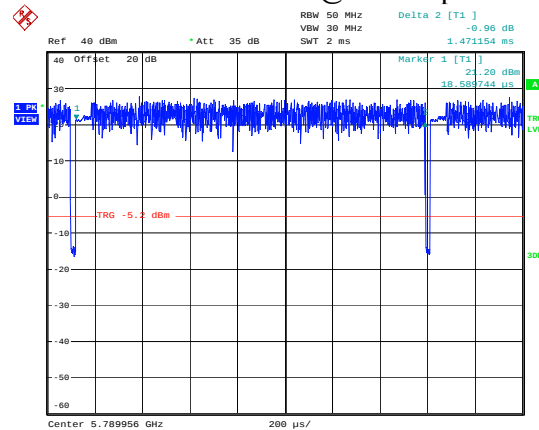
Date: 18.MAR.2008 14:24:20

Tx On time @ 6 Mbps



Date: 18.MAR.2008 14:25:10

Tx On time @ 54 Mbps



Date: 18.MAR.2008 14:26:04

$$\text{Duty Cycle Correction (6 Mbps)} = 20 \cdot \log_{10} (12.626\text{m} / 12.648\text{m}) = -0.015 \text{ dB}$$

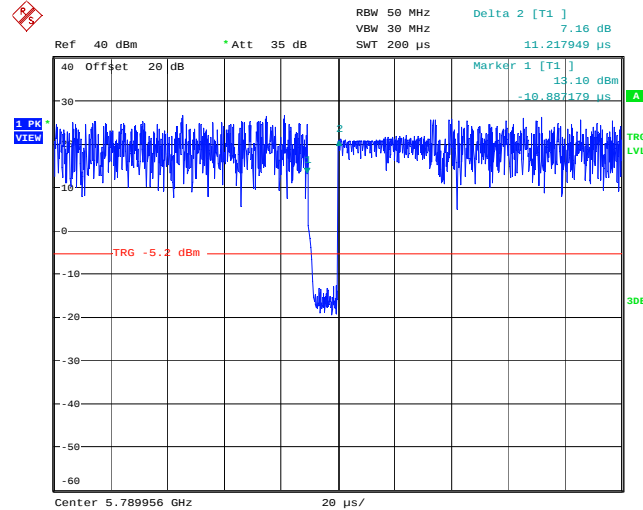
$$\text{Duty Cycle Correction (54 Mbps)} = 20 \cdot \log_{10} (1.471\text{m} / 1.493\text{m}) = -0.128 \text{ dB}$$

Radiated Emissions within Restricted Bands, continued

Duty Cycle:

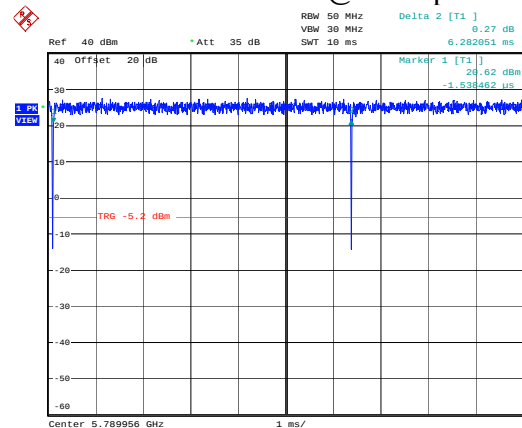
Channel Bandwidth: 10 MHz

Tx Off time



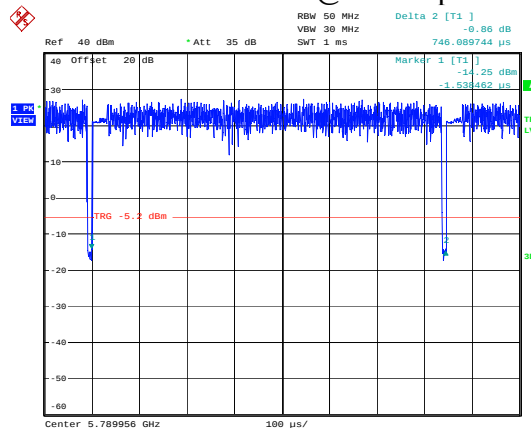
Date: 18.MAR.2008 14:23:13

Tx On time @ 6 Mbps



Date: 18.MAR.2008 14:20:18

Tx On time @ 54 Mbps



Date: 18.MAR.2008 14:21:36

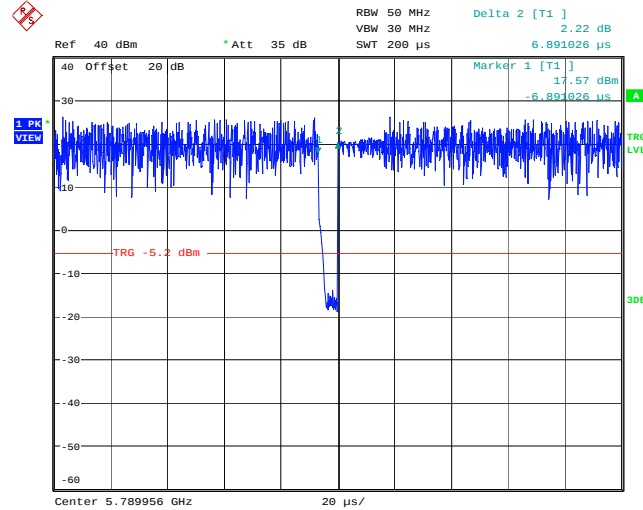
Duty Cycle Correction (6 Mbps) = $20 \cdot \log_{10} (6.282\text{m} / 6.293\text{m}) = -0.015 \text{ dB}$ Duty Cycle Correction (54 Mbps) = $20 \cdot \log_{10} (0.746\text{m} / 0.757\text{m}) = -0.130 \text{ dB}$

Radiated Emissions within Restricted Bands, continued

Duty Cycle:

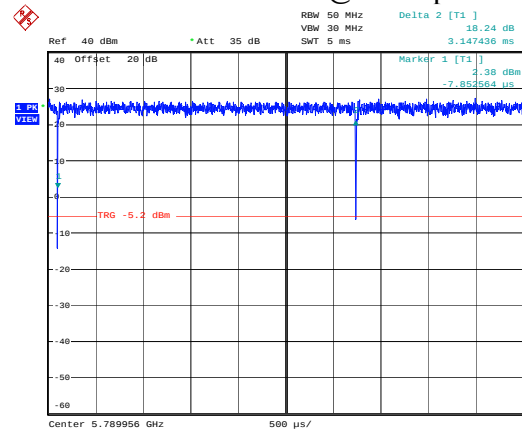
Channel Bandwidth: 20 MHz

Tx Off time



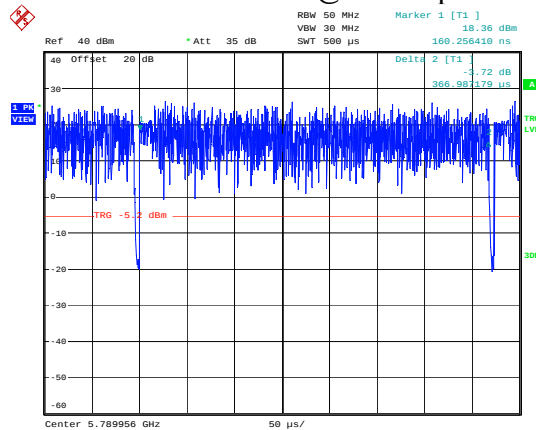
Date: 18.MAR.2008 14:28:46

Tx On time @ 6 Mbps



Date: 18.MAR.2008 14:28:13

Tx On time @ 54 Mbps



Date: 18.MAR.2008 14:26:59

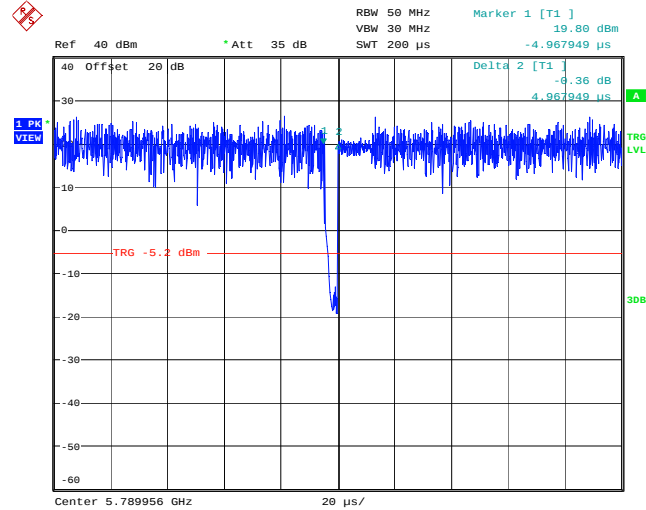
 $\text{Duty Cycle Correction (6 Mbps)} = 20 \cdot \log_{10} (3.147\text{m} / 3.154\text{m}) = -0.019 \text{ dB}$ $\text{Duty Cycle Correction (54 Mbps)} = 20 \cdot \log_{10} (0.367\text{m} / 0.374\text{m}) = -0.162 \text{ dB}$

Radiated Emissions within Restricted Bands, continued

Duty Cycle:

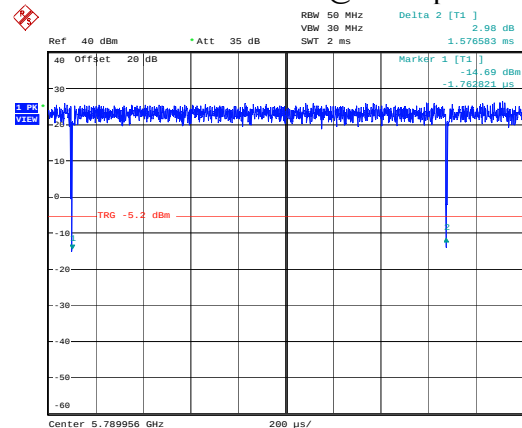
Channel Bandwidth: 40 MHz

Tx Off time



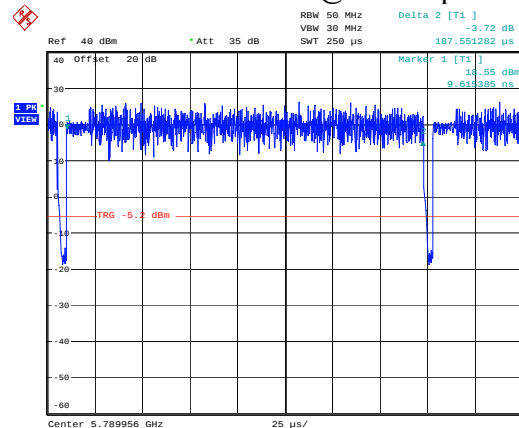
Date: 18.MAR.2008 14:29:27

Tx On time @ 6 Mbps



Date: 18.MAR.2008 14:30:09

Tx On time @ 54 Mbps



Date: 18.MAR.2008 14:31:43

$$\text{Duty Cycle Correction (6 Mbps)} = 20 \cdot \log_{10} (1.576\text{m} / 1.582\text{m}) = -0.027 \text{ dB}$$
$$\text{Duty Cycle Correction (54 Mbps)} = 20 \cdot \log_{10} (0.188\text{m} / 0.193\text{m}) = -0.227 \text{ dB}$$

Radiated Emissions within Restricted Bands, continued

Channel	Frequency (MHz)	Polarity	Detector	RCVD Signal (dBµV)	Total Loss (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
23 dBi point-to-point antenna								
5 MHz channel bandwidth								
Low	11460	Vertical	Peak	73.00	-1.26	71.74	74.00	2.26
Low	11460	Vertical	Avg	50.25	-1.26	48.99	54.00	5.01
Mid	11580	Vertical	Peak	74.09	-1.50	72.59	74.00	1.41
Mid	11580	Vertical	Avg	49.76	-1.50	48.26	54.00	5.74
High	11690	Vertical	Peak	69.09	-2.50	66.59	74.00	7.41
High	11690	Vertical	Avg	47.76	-2.50	45.26	54.00	8.74
Low	11460	Horizontal	Peak	54.51	-1.26	53.25	74.00	20.75
Low	11460	Horizontal	Avg	37.59	-1.26	36.33	54.00	17.67
Mid	11580	Horizontal	Peak	60.84	-1.50	59.34	74.00	14.66
Mid	11580	Horizontal	Avg	39.18	-1.50	37.68	54.00	16.32
High	11690	Horizontal	Peak	59.84	-2.50	57.34	74.00	16.66
High	11690	Horizontal	Avg	43.43	-2.50	40.93	54.00	13.07
10 MHz channel bandwidth								
Low	11470	Vertical	Peak	73.18	-1.26	71.92	74.00	2.08
Low	11470	Vertical	Avg	50.76	-1.26	49.50	54.00	4.50
Mid	11580	Vertical	Peak	72.76	-1.50	71.26	74.00	2.74
Mid	11580	Vertical	Avg	52.26	-1.50	50.76	54.00	3.24
High	11680	Vertical	Peak	66.76	-2.50	64.26	74.00	9.74
High	11680	Vertical	Avg	49.26	-2.50	46.76	54.00	7.24
Low	11470	Horizontal	Peak	56.34	-1.26	55.08	74.00	18.92
Low	11470	Horizontal	Avg	38.59	-1.26	37.33	54.00	16.67
Mid	11580	Horizontal	Peak	61.34	-1.50	59.84	74.00	14.16
Mid	11580	Horizontal	Avg	41.84	-1.50	40.34	54.00	13.66
High	11680	Horizontal	Peak	59.18	-2.50	56.68	74.00	17.32
High	11680	Horizontal	Avg	43.09	-2.50	40.59	54.00	13.41
NOTES:								
1) Tested using Horn antenna above 1 GHz and Log-Periodic antenna below 1 GHz								
2) Total Loss includes Antenna Factor, Cable Loss and Amplifier Gain								

Radiated Emissions within Restricted Bands, continued

Channel	Frequency (MHz)	Polarity	Detector	RCVD Signal (dBµV)	Total Loss (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
23 dBi point-to-point antenna								
20 MHz channel bandwidth								
Low	11480	Vertical	Peak	72.51	-1.26	71.25	74.00	2.75
Low	11480	Vertical	Avg	54.76	-1.26	53.50	54.00	0.50
Mid	11580	Vertical	Peak	66.93	-1.50	65.43	74.00	8.57
Mid	11580	Vertical	Avg	50.76	-1.50	49.26	54.00	4.74
High	11670	Vertical	Peak	64.76	-2.50	62.26	74.00	11.74
High	11670	Vertical	Avg	48.43	-2.50	45.93	54.00	8.07
Low	11480	Horizontal	Peak	60.26	-1.26	59.00	74.00	15.00
Low	11480	Horizontal	Avg	40.34	-1.26	39.08	54.00	14.92
Mid	11580	Horizontal	Peak	55.18	-1.50	53.68	74.00	20.32
Mid	11580	Horizontal	Avg	39.34	-1.50	37.84	54.00	16.16
High	11670	Horizontal	Peak	55.59	-2.50	53.09	74.00	20.91
High	11670	Horizontal	Avg	41.34	-2.50	38.84	54.00	15.16
40 MHz channel bandwidth								
Low	11500	Vertical	Peak	68.09	-1.26	66.83	74.00	7.17
Low	11500	Vertical	Avg	51.26	-1.26	50.00	54.00	4.00
Mid	11580	Vertical	Peak	62.18	-1.50	60.68	74.00	13.32
Mid	11580	Vertical	Avg	48.09	-1.50	46.59	54.00	7.41
High	11650	Vertical	Peak	60.68	-2.50	58.18	74.00	15.82
High	11650	Vertical	Avg	45.68	-2.50	43.18	54.00	10.82
Low	11500	Horizontal	Peak	52.84	-1.26	51.58	74.00	22.42
Low	11500	Horizontal	Avg	39.18	-1.26	37.92	54.00	16.08
Mid	11580	Horizontal	Peak	52.01	-1.50	50.51	74.00	23.49
Mid	11580	Horizontal	Avg	38.43	-1.50	36.93	54.00	17.07
High	11650	Horizontal	Peak	53.26	-2.50	50.76	74.00	23.24
High	11650	Horizontal	Avg	39.26	-2.50	36.76	54.00	17.24
NOTES: 1) Tested using Horn antenna above 1 GHz and Log-Periodic antenna below 1 GHz 2) Total Loss includes Antenna Factor, Cable Loss and Amplifier Gain								

Radiated Emissions within Restricted Bands, continued

Channel	Frequency (MHz)	Polarity	Detector	RCVD Signal (dBµV)	Total Loss (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
19 dBi point-to-point antenna								
5 MHz channel bandwidth								
Low	11460	Vertical	Peak	74.93	-1.26	73.67	74.00	0.33
Low	11460	Vertical	Avg	52.34	-1.26	51.08	54.00	2.92
Mid	11580	Vertical	Peak	75.26	-1.50	73.76	74.00	0.24
Mid	11580	Vertical	Avg	52.51	-1.50	51.01	54.00	2.99
High	11690	Vertical	Peak	67.26	-2.50	64.76	74.00	9.24
High	11690	Vertical	Avg	48.51	-2.50	46.01	54.00	7.99
Low	11460	Horizontal	Peak	58.34	-1.26	57.08	74.00	16.92
Low	11460	Horizontal	Avg	39.93	-1.26	38.67	54.00	15.33
Mid	11580	Horizontal	Peak	59.09	-1.50	57.59	74.00	16.41
Mid	11580	Horizontal	Avg	41.18	-1.50	39.68	54.00	14.32
High	11690	Horizontal	Peak	64.84	-2.50	62.34	74.00	11.66
High	11690	Horizontal	Avg	45.51	-2.50	43.01	54.00	10.99
10 MHz channel bandwidth								
Low	11470	Vertical	Peak	74.26	-1.26	73.00	74.00	1.00
Low	11470	Vertical	Avg	51.84	-1.26	50.58	54.00	3.42
Mid	11580	Vertical	Peak	75.18	-1.50	73.68	74.00	0.32
Mid	11580	Vertical	Avg	53.84	-1.50	52.34	54.00	1.66
High	11680	Vertical	Peak	62.26	-2.50	59.76	74.00	14.24
High	11680	Vertical	Avg	46.09	-2.50	43.59	54.00	10.41
Low	11470	Horizontal	Peak	56.09	-1.26	54.83	74.00	19.17
Low	11470	Horizontal	Avg	40.09	-1.26	38.83	54.00	15.17
Mid	11580	Horizontal	Peak	59.34	-1.50	57.84	74.00	16.16
Mid	11580	Horizontal	Avg	40.09	-1.50	38.59	54.00	15.41
High	11680	Horizontal	Peak	59.43	-2.50	56.93	74.00	17.07
High	11680	Horizontal	Avg	42.76	-2.50	40.26	54.00	13.74

NOTES:

- 1) Tested using Horn antenna above 1 GHz and Log-Periodic antenna below 1 GHz
- 2) Total Loss includes Antenna Factor, Cable Loss and Amplifier Gain

Radiated Emissions within Restricted Bands, continued

Channel	Frequency (MHz)	Polarity	Detector	RCVD Signal (dBµV)	Total Loss (dB)	Emission Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
19 dBi point-to-point antenna								
20 MHz channel bandwidth								
Low	11480	Vertical	Peak	74.84	-1.26	73.58	74.00	0.42
Low	11480	Vertical	Avg	51.26	-1.26	50.00	54.00	4.00
Mid	11580	Vertical	Peak	66.34	-1.50	64.84	74.00	9.16
Mid	11580	Vertical	Avg	50.93	-1.50	49.43	54.00	4.57
High	11670	Vertical	Peak	59.09	-2.50	56.59	74.00	17.41
High	11670	Vertical	Avg	44.34	-2.50	41.84	54.00	12.16
Low	11480	Horizontal	Peak	60.18	-1.26	58.92	74.00	15.08
Low	11480	Horizontal	Avg	41.09	-1.26	39.83	54.00	14.17
Mid	11580	Horizontal	Peak	55.84	-1.50	54.34	74.00	19.66
Mid	11580	Horizontal	Avg	39.76	-1.50	38.26	54.00	15.74
High	11670	Horizontal	Peak	53.51	-2.50	51.01	74.00	22.99
High	11670	Horizontal	Avg	40.18	-2.50	37.68	54.00	16.32
15 dBi Sector antenna								
5 MHz channel bandwidth								
Low	11460	Vertical	Peak	73.59	-1.26	72.33	74.00	1.67
Low	11460	Vertical	Avg	51.43	-1.26	50.17	54.00	3.83
Mid	11580	Vertical	Peak	69.18	-1.50	67.68	74.00	6.32
Mid	11580	Vertical	Avg	47.84	-1.50	46.34	54.00	7.66
High	11690	Vertical	Peak	63.43	-2.50	60.93	74.00	13.07
High	11690	Vertical	Avg	43.01	-2.50	40.51	54.00	13.49
Low	11460	Horizontal	Peak	60.84	-1.26	59.58	74.00	14.42
Low	11460	Horizontal	Avg	42.43	-1.26	41.17	54.00	12.83
Mid	11580	Horizontal	Peak	65.18	-1.50	63.68	74.00	10.32
Mid	11580	Horizontal	Avg	44.76	-1.50	43.26	54.00	10.74
High	11690	Horizontal	Peak	61.09	-2.50	58.59	74.00	15.41
High	11690	Horizontal	Avg	42.59	-2.50	40.09	54.00	13.91
NOTES: 1) Tested using Horn antenna above 1 GHz and Log-Periodic antenna below 1 GHz 2) Same power settings as in 20 MHz were used for 40 MHz channel with 19 dBi antenna. Only worst case results were recorded 3) Same power settings as in 5 MHz were used for 10 MHz, 20 MHz and 40 MHz channel with 15 dBi Sector antenna. Only worst case results were recorded 4) Total Loss includes Antenna Factor, Cable Loss and Amplifier Gain								

Radiated Emissions within Restricted Bands, continued

Channel	Frequency (MHz)	Polarity	Detector	RCVD Signal (dBμV)	Total Loss (dB)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
15 dBi point-to-point antenna								
5 MHz channel bandwidth								
Low	11460	Vertical	Peak	68.68	-1.26	67.42	74.00	6.58
Low	11460	Vertical	Avg	46.34	-1.26	45.08	54.00	8.92
Mid	11580	Vertical	Peak	67.18	-1.50	65.68	74.00	8.32
Mid	11580	Vertical	Avg	48.59	-1.50	47.09	54.00	6.91
High	11690	Vertical	Peak	65.93	-2.50	63.43	74.00	10.57
High	11690	Vertical	Avg	48.26	-2.50	45.76	54.00	8.24
Low	11460	Horizontal	Peak	75.26	-1.26	74.00	74.00	0.00
Low	11460	Horizontal	Avg	49.93	-1.26	48.67	54.00	5.33
Mid	11580	Horizontal	Peak	72.93	-1.50	71.43	74.00	2.57
Mid	11580	Horizontal	Avg	50.26	-1.50	48.76	54.00	5.24
High	11690	Horizontal	Peak	67.09	-2.50	64.59	74.00	9.41
High	11690	Horizontal	Avg	47.51	-2.50	45.01	54.00	8.99
10 dBi point-to-multipoint antenna (Maxrad)								
5 MHz channel bandwidth								
Low	11460	Vertical	Peak	75.26	-1.26	74.00	74.00	0.00
Low	11460	Vertical	Avg	47.01	-1.26	45.75	54.00	8.25
Mid	11580	Vertical	Peak	64.68	-1.50	63.18	74.00	10.82
Mid	11580	Vertical	Avg	40.59	-1.50	39.09	54.00	14.91
High	11690	Vertical	Peak	54.51	-2.50	52.01	74.00	21.99
High	11690	Vertical	Avg	37.26	-2.50	34.76	54.00	19.24
Low	11460	Horizontal	Peak	70.26	-1.26	69.00	74.00	5.00
Low	11460	Horizontal	Avg	47.84	-1.26	46.58	54.00	7.42
Mid	11580	Horizontal	Peak	58.76	-1.50	57.26	74.00	16.74
Mid	11580	Horizontal	Avg	40.34	-1.50	38.84	54.00	15.16
High	11690	Horizontal	Peak	56.01	-2.50	53.51	74.00	20.49
High	11690	Horizontal	Avg	40.51	-2.50	38.01	54.00	15.99

NOTES:

- 1) Tested using Horn antenna above 1 GHz and Log-Periodic antenna below 1 GHz
- 2) Same power settings as in 5 MHz were used for 10 MHz, 20 MHz and 40 MHz channel with 15 dBi point-to-point antenna. Only worst case results were recorded
- 3) Same power settings as in 5 MHz were used for 10 MHz, 20 MHz and 40 MHz channel with 10 dBi Maxrad antenna. Only worst case results were recorded
- 4) Total Loss includes Antenna Factor, Cable Loss and Amplifier Gain

Radiated Emissions within Restricted Bands, continued

Channel	Frequency (MHz)	Polarity	Detector	RCVD Signal (dBμV)	Total Loss (dB)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
10 dBi point-to-multipoint antenna (MTI)								
5 MHz channel bandwidth								
Low	11460	Vertical	Peak	72.34	-1.26	71.08	74.00	2.92
Low	11460	Vertical	Avg	49.09	-1.26	47.83	54.00	6.17
Mid	11580	Vertical	Peak	66.26	-1.50	64.76	74.00	9.24
Mid	11580	Vertical	Avg	45.09	-1.50	43.59	54.00	10.41
High	11690	Vertical	Peak	69.59	-2.50	67.09	74.00	6.91
High	11690	Vertical	Avg	49.18	-2.50	46.68	54.00	7.32
Low	11460	Horizontal	Peak	66.68	-1.26	65.42	74.00	8.58
Low	11460	Horizontal	Avg	43.93	-1.26	42.67	54.00	11.33
Mid	11580	Horizontal	Peak	60.43	-1.50	58.93	74.00	15.07
Mid	11580	Horizontal	Avg	42.18	-1.50	40.68	54.00	13.32
High	11690	Horizontal	Peak	61.34	-2.50	58.84	74.00	15.16
High	11690	Horizontal	Avg	43.01	-2.50	40.51	54.00	13.49
NOTES: 1) Tested using Horn antenna above 1 GHz and Log-Periodic antenna below 1 GHz 2) Same power settings as in 5 MHz were used for 10 MHz, 20 MHz and 40 MHz channel with 10 dBi MTI antenna. Only worst case results were recorded 3) Total Loss includes Antenna Factor, Cable Loss and Amplifier Gain								

Clause 15.247(a)(2) Minimum 6 dB Bandwidth

Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6dB bandwidth shall be at least 500 kHz.

Test Conditions:

Sample Number:	1	Temperature (°C):	25
Date:	February 12, 2008	Humidity (%):	48
Modification State:	0	Tester:	Andrey Adelberg
		Laboratory:	Ottawa

Test Results: Pass
See attached table and plots.

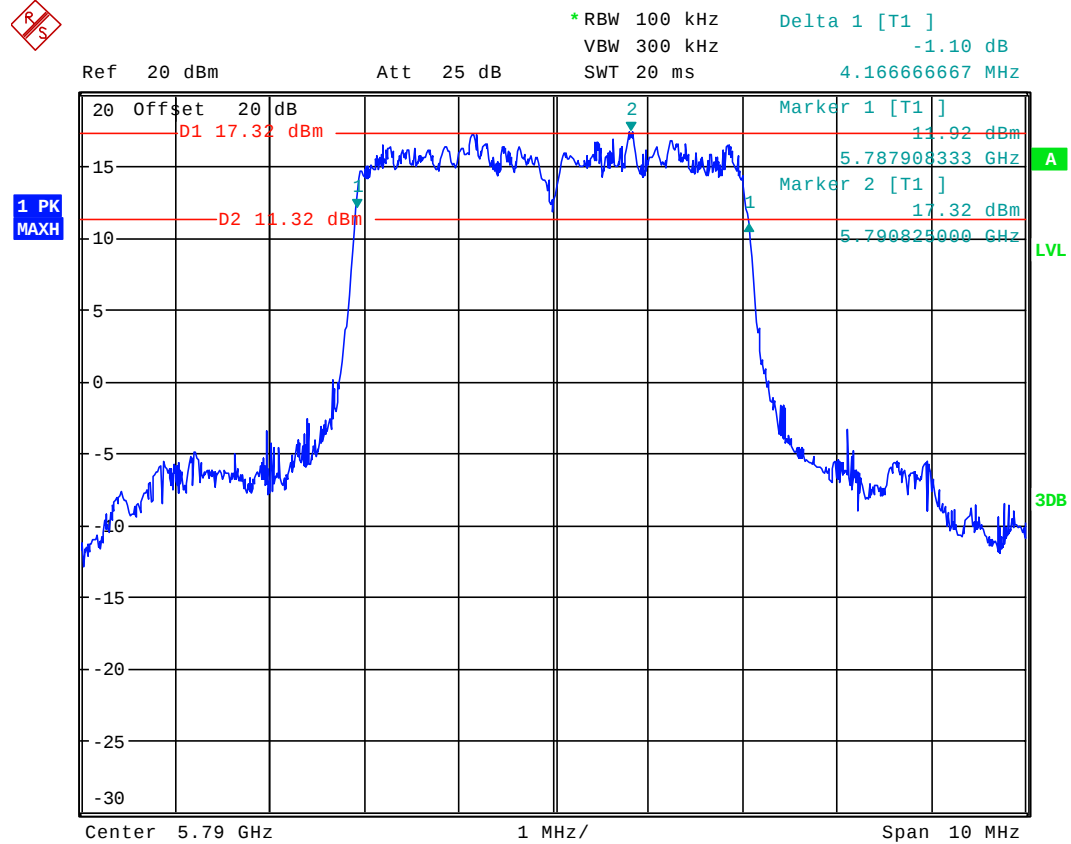
Minimum 6 dB Bandwidth test results:

Channel Bandwidth, MHz	Measured 6 dB BW, MHz	Limit, kHz	Margin, MHz
5	4.167	500	3.667
10	8.293	500	7.793
20	16.490	500	15.990
40	32.772	500	32.272

6 dB Bandwidth, continued

Nominal TX Channel Bandwidth: 5 MHz

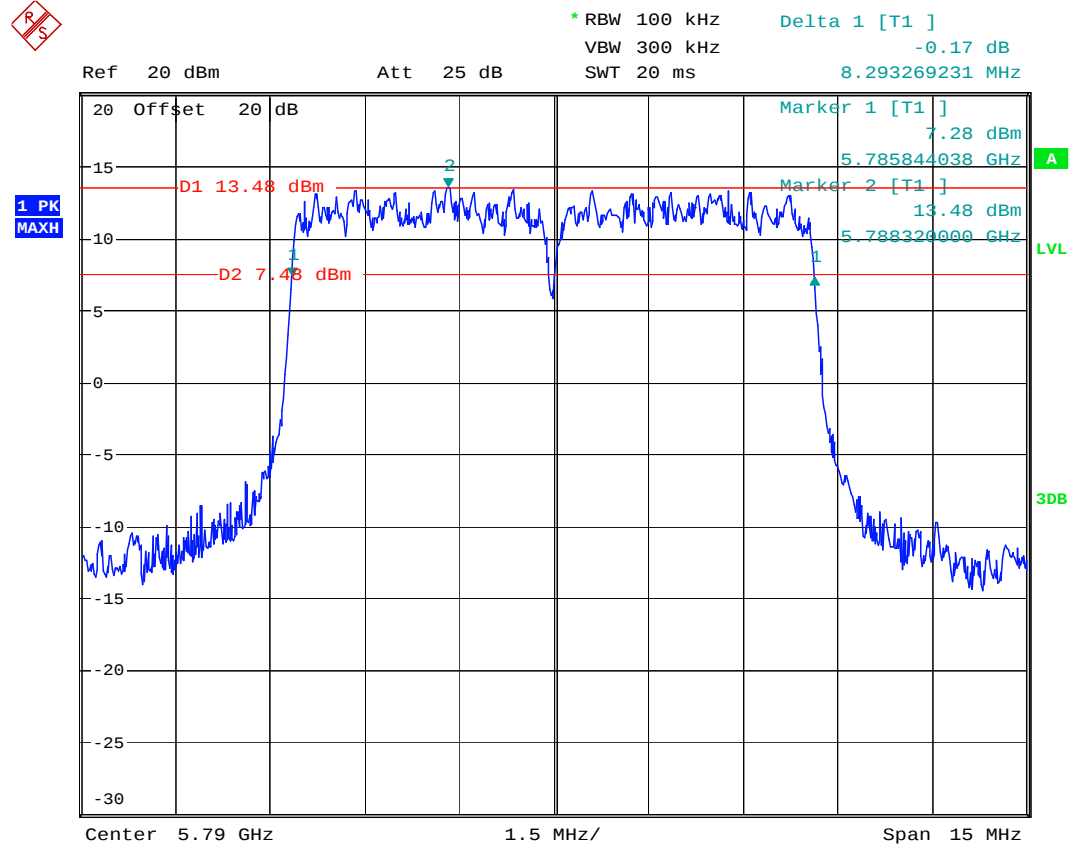
6dB Bandwidth



6 dB Bandwidth, continued

Nominal TX Channel Bandwidth: 10 MHz

6dB Bandwidth

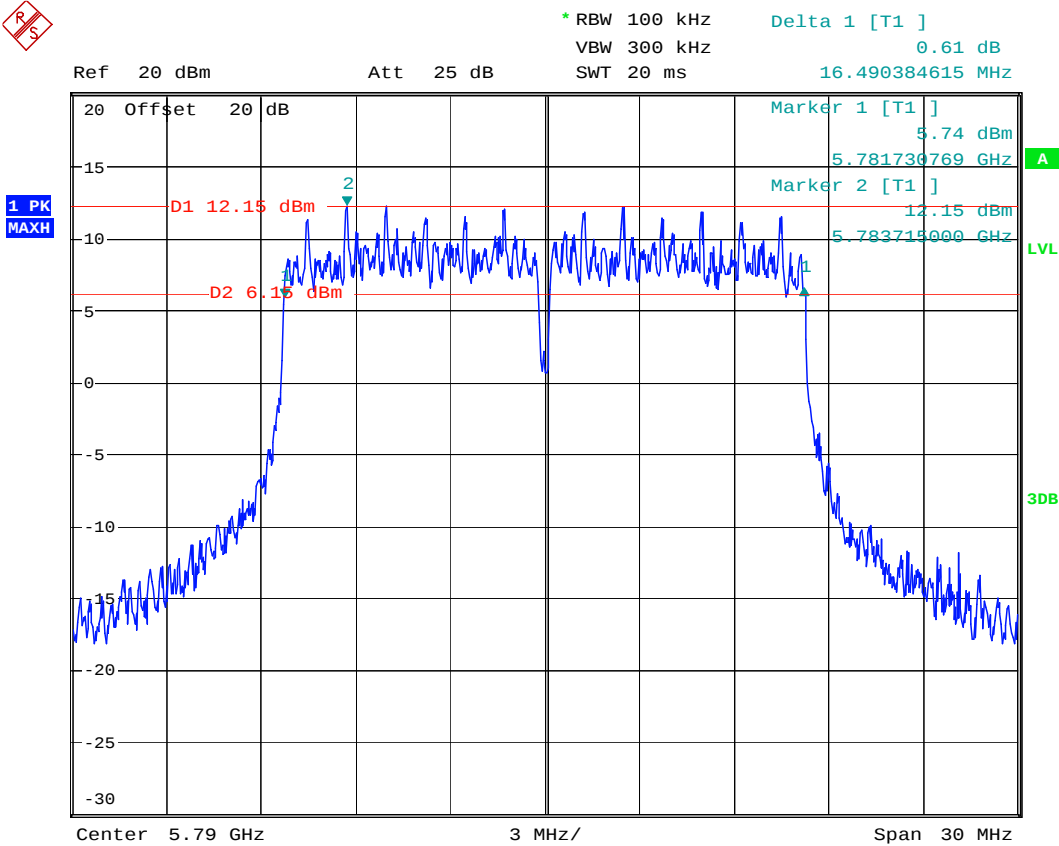


Date: 12.FEB.2008 21:57:22

6 dB Bandwidth, continued

Nominal TX Channel Bandwidth: 20 MHz

6dB Bandwidth

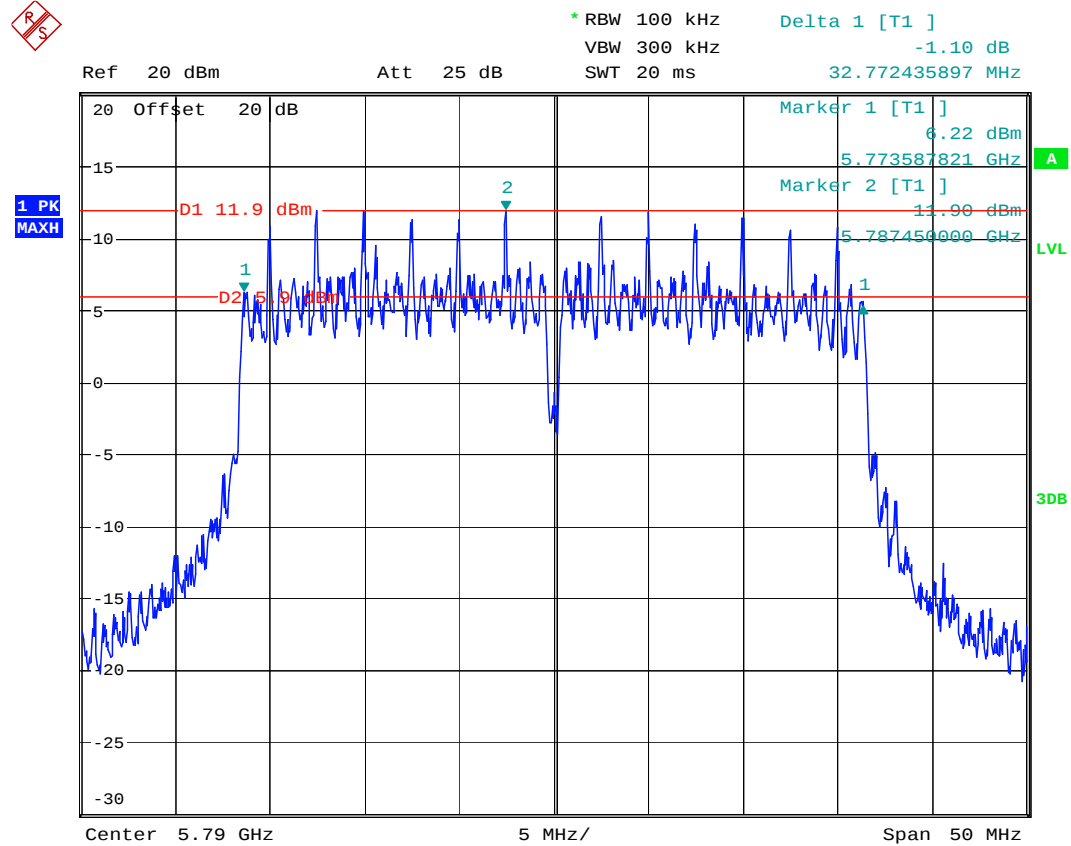


Date: 12.FEB.2008 21:55:08

6 dB Bandwidth, continued

Nominal TX Channel Bandwidth: 40 MHz

6dB Bandwidth



Date: 12.FEB.2008 21:52:21

Clause 15.247(b)(3) Maximum peak output power of systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signalling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Clause 15.247(b)(4) Maximum peak output power

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Clause 15.247(c)(1) Fixed point-to-point operation

§15.247(c)(1)(ii) Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted output power.

Test Conditions:

Sample Number:	1	Temperature (°C):	23
Date:	Mach 12, 2008	Humidity (%):	41
Modification State:	0	Tester:	Andrey Adelberg
		Laboratory:	Ottawa

Test Results: Pass
See attached plots and tables.

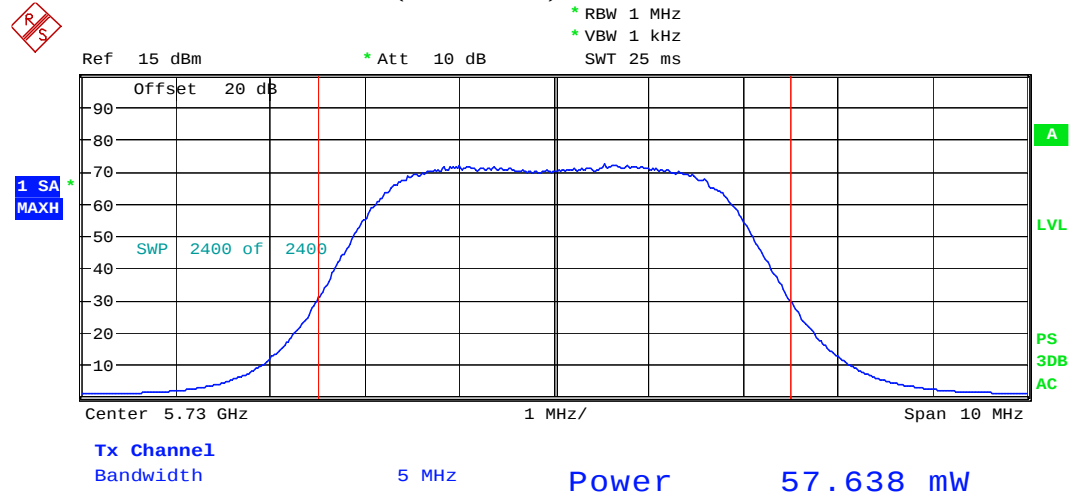
Additional Observations:

The output RF power was measured on the antenna port by means of a spectrum analyzer and following the 'Power Output Option 2, Method 3' procedure from the FCC guidelines for Measurement of Digital Transmission Systems operating under Section 15.247.

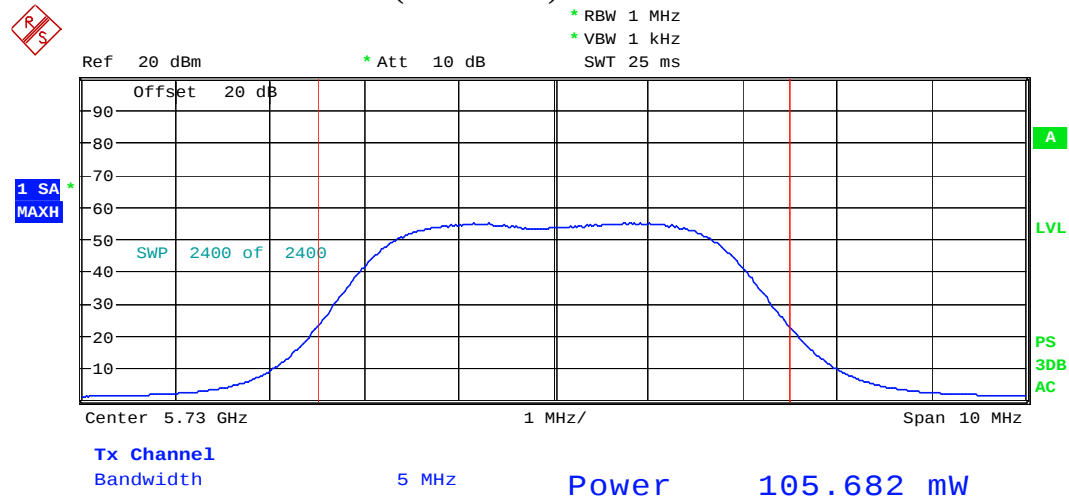
T on is 1.4 msec, therefore VBW was set to 1kHz
Transmit output power was measured while supply voltage was varied from 102 VAC to 138 VAC (85% to 115% of the nominal rated supply voltage). No change in transmit output power was observed.

Maximum peak output power of systems using digital modulation, continued

Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 33
Antenna Gain: 23 dBi (Directional)

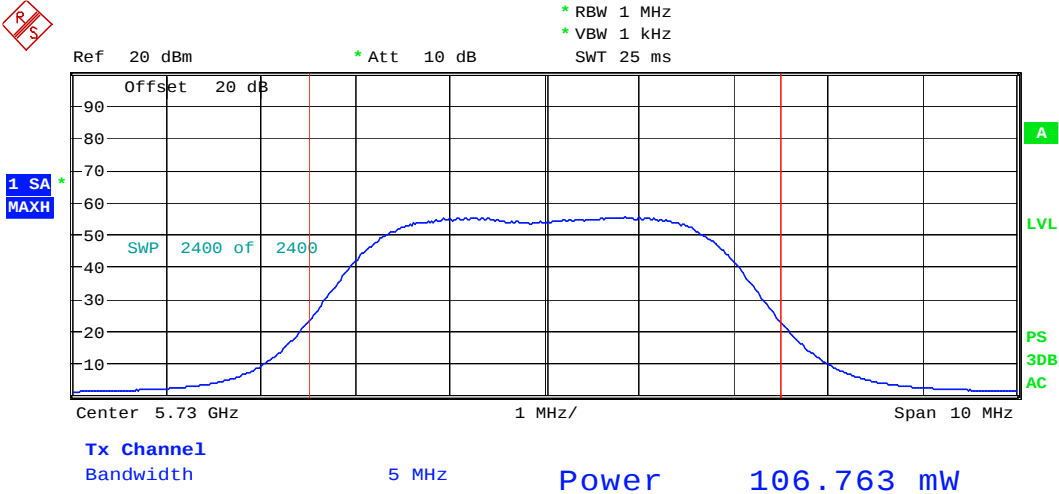


Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 37
Antenna Gain: 15 dBi (Directional)

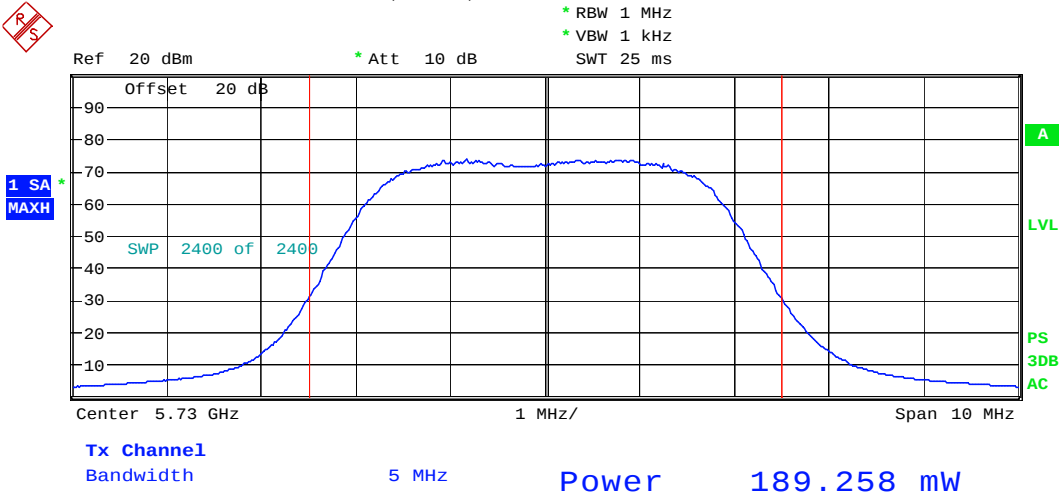


Maximum peak output power of systems using digital modulation, continued

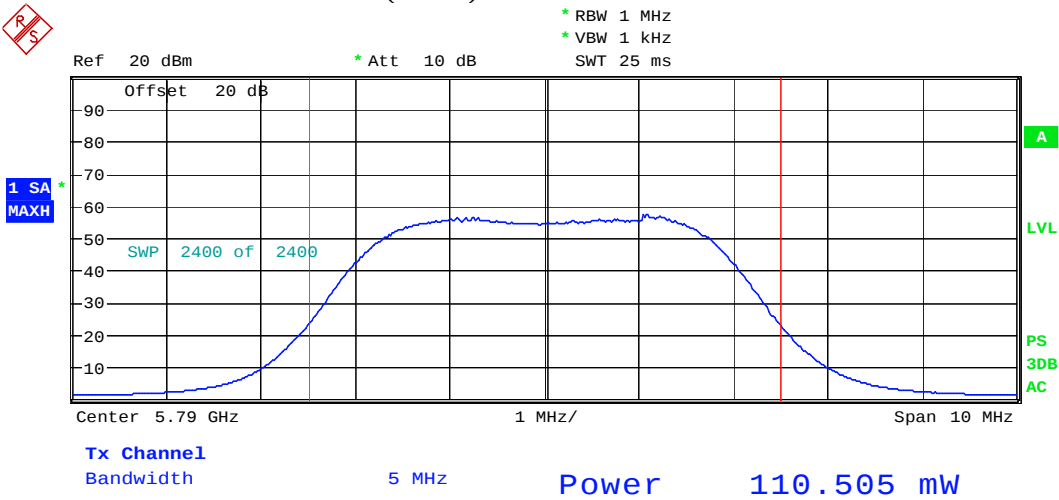
Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 38
Antenna Gain: 19 dBi (Directional), 15 dBi (Omni)



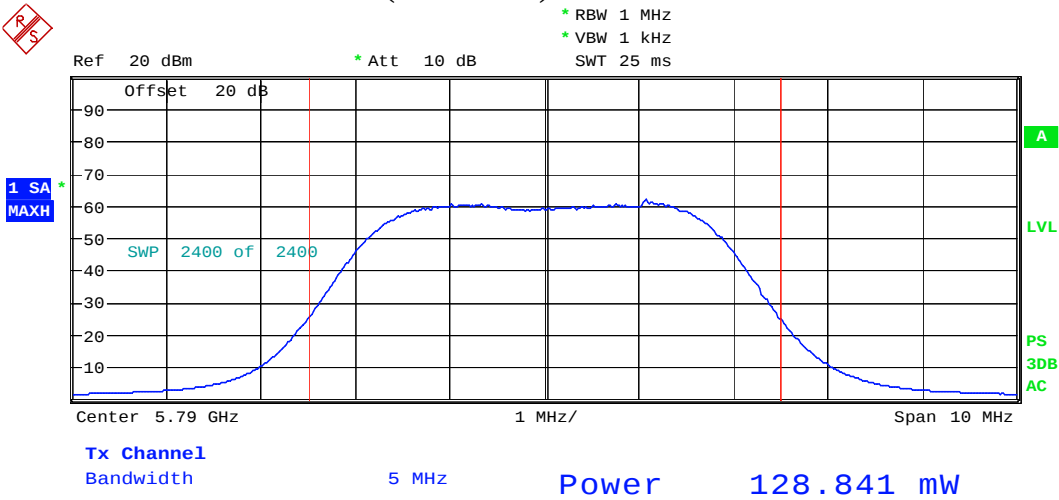
Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni)



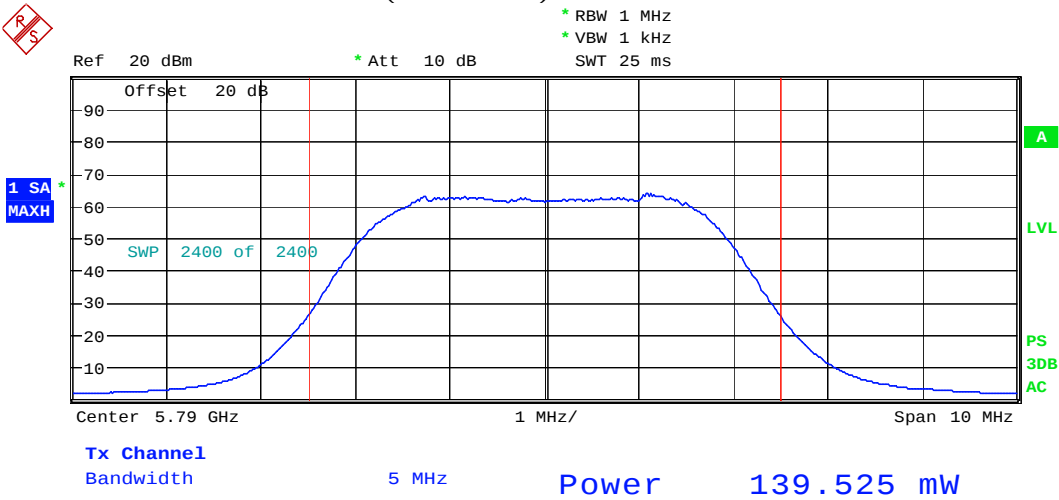
Channel BW: 5 MHz
TX-channel: 5790 MHz
Power settings: 36
Antenna Gain: 15 dBi (Omni)



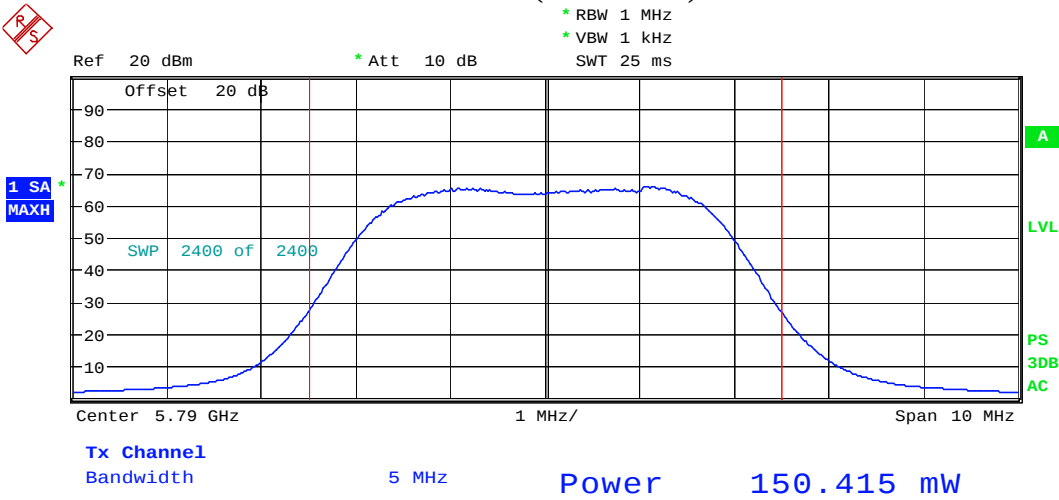
Channel BW: 5 MHz
TX-channel: 5790 MHz
Power settings: 37
Antenna Gain: 23 dBi (Directional)



Channel BW: 5 MHz
TX-channel: 5790 MHz
Power settings: 39
Antenna Gain: 19 dBi (Directional)

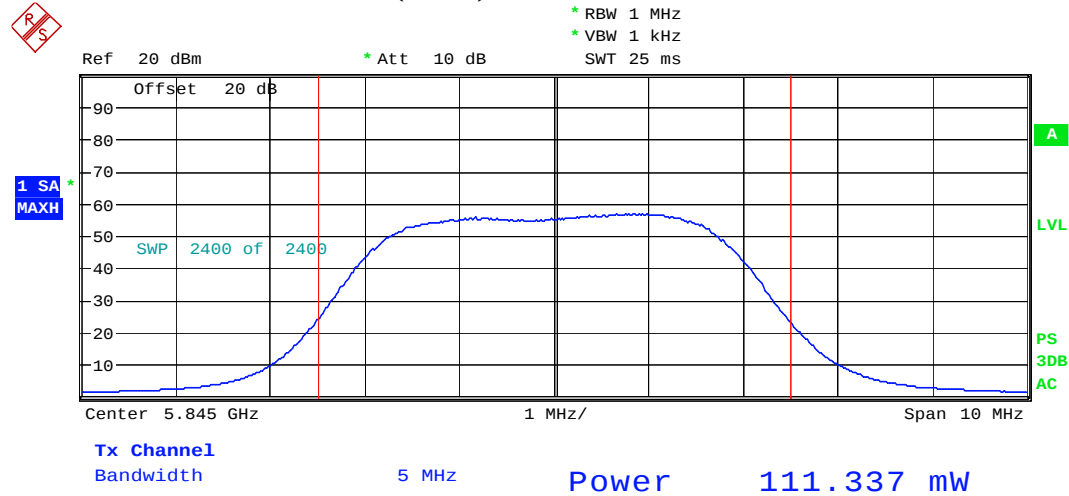


Channel BW: 5 MHz
TX-channel: 5790 MHz
Power settings: 40
Antenna Gain: 10 dBi and 15 dBi (Directional)

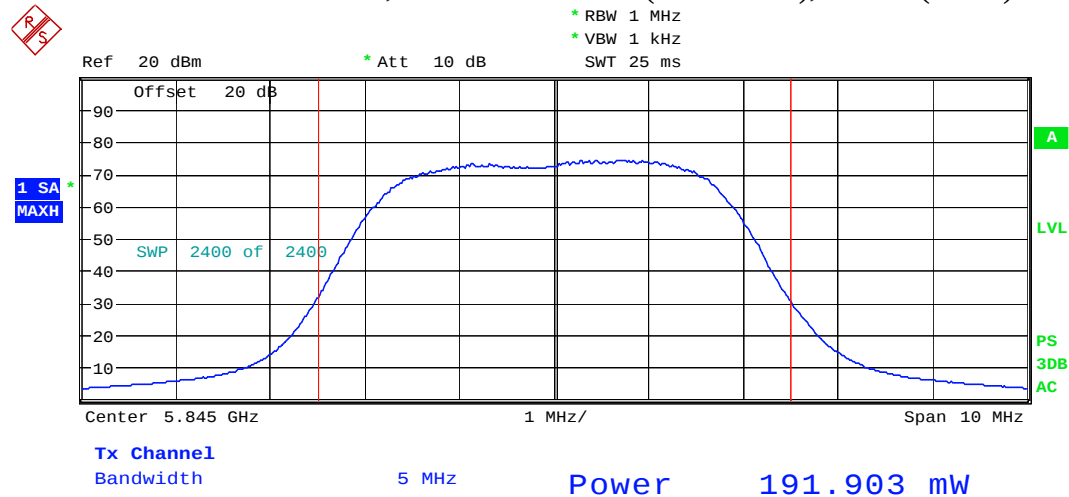


Maximum peak output power of systems using digital modulation, continued

Channel BW: 5 MHz
TX-channel: 5845 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)

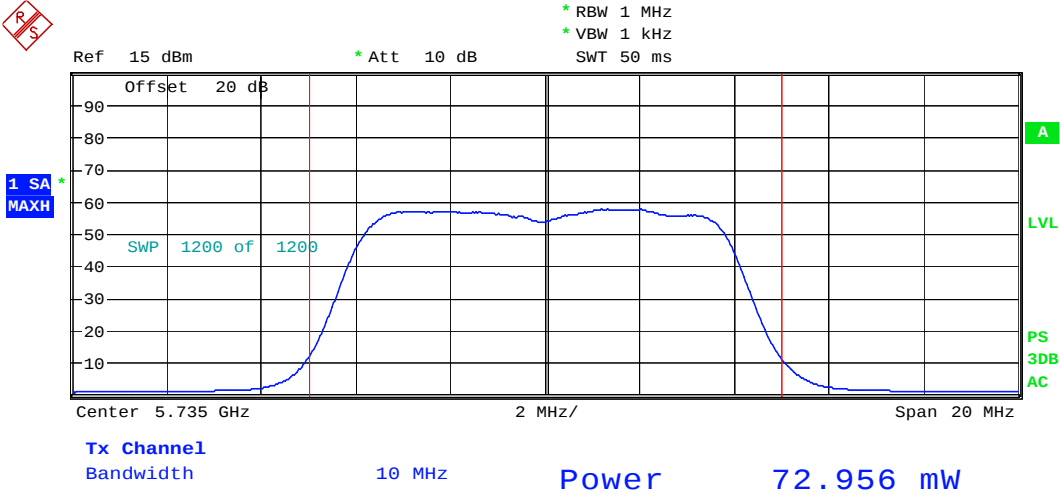


Channel BW: 5 MHz
TX-channel: 5845 MHz
Power settings: 40
Antenna Gain: 23 dBi, 15 dBi and 19 dBi (Directional), 10 dBi (Omni)

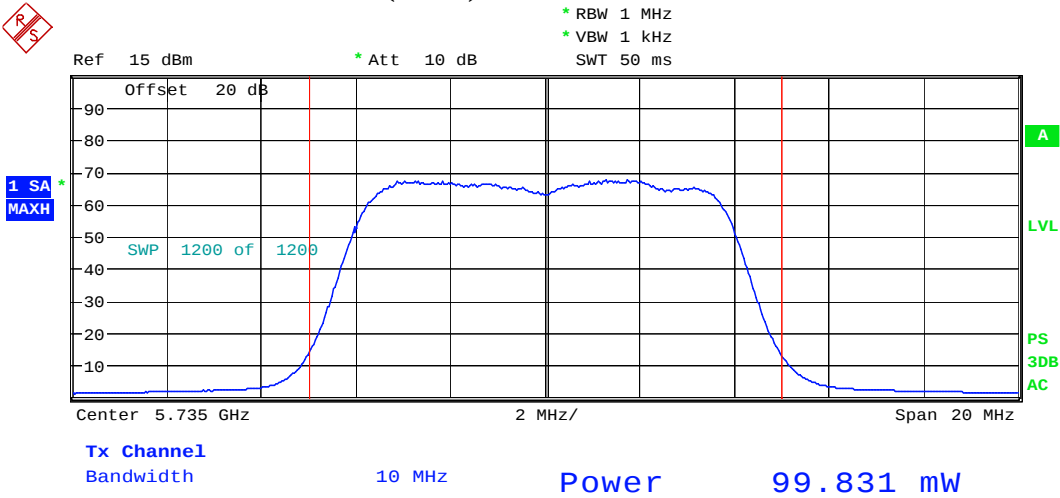


Maximum peak output power of systems using digital modulation, continued

Channel BW: 10 MHz
TX-channel: 5735 MHz
Power settings: 35
Antenna Gain: 23 dBi (Directional)

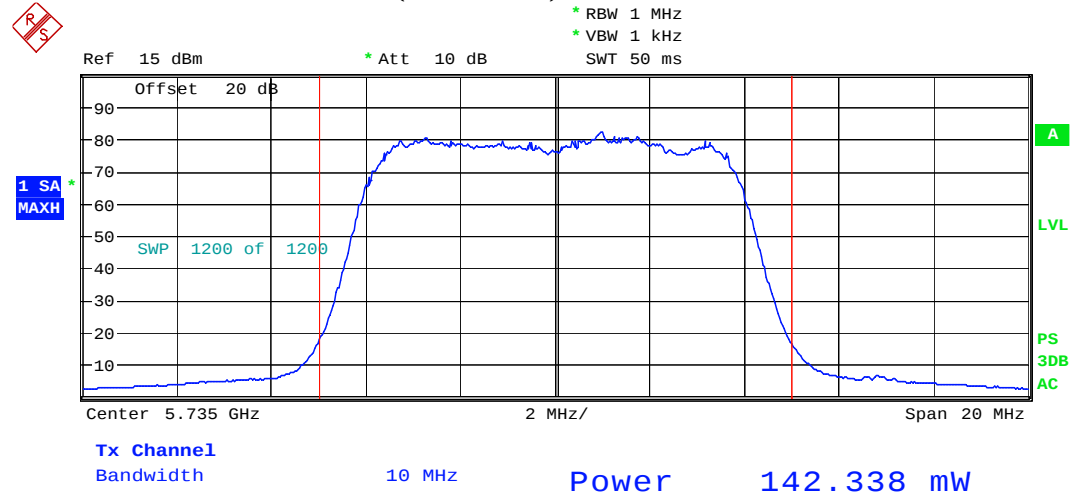


Channel BW: 10 MHz
TX-channel: 5735 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)

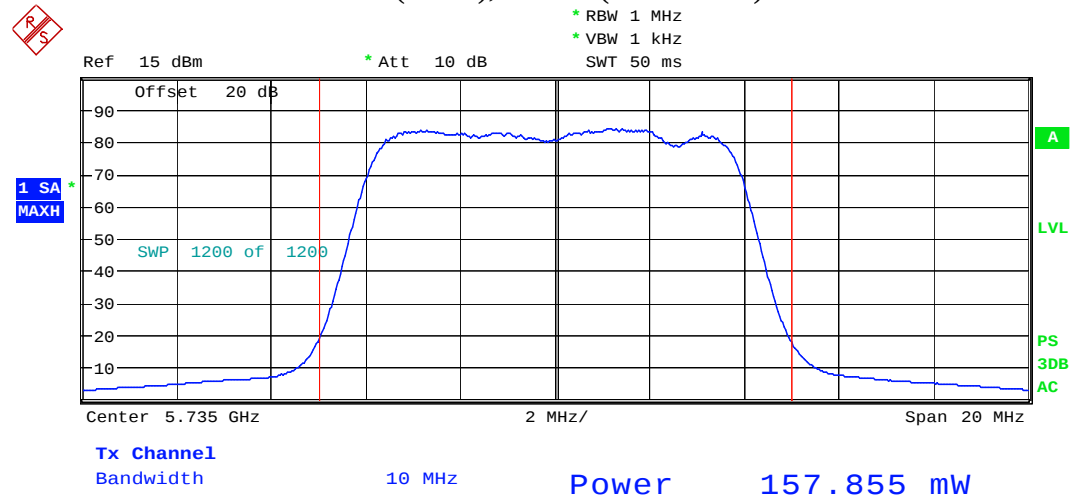


Maximum peak output power of systems using digital modulation, continued

Channel BW:	10 MHz
TX-channel:	5735 MHz
Power settings:	38
Antenna Gain:	19 dBi (Directional)

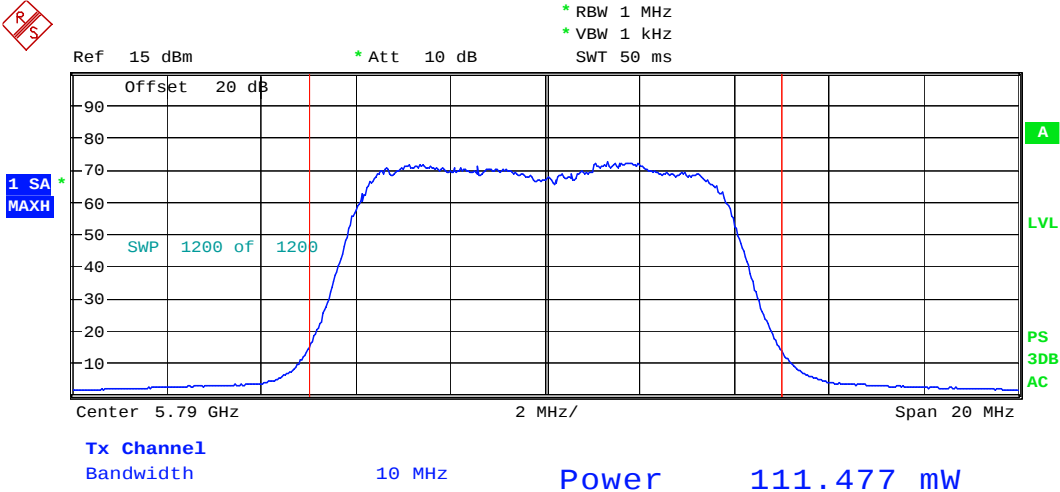


Channel BW:	10 MHz
TX-channel:	5735 MHz
Power settings:	40
Antenna Gain:	10 dBi (Omni), 15 dBi (Directional)

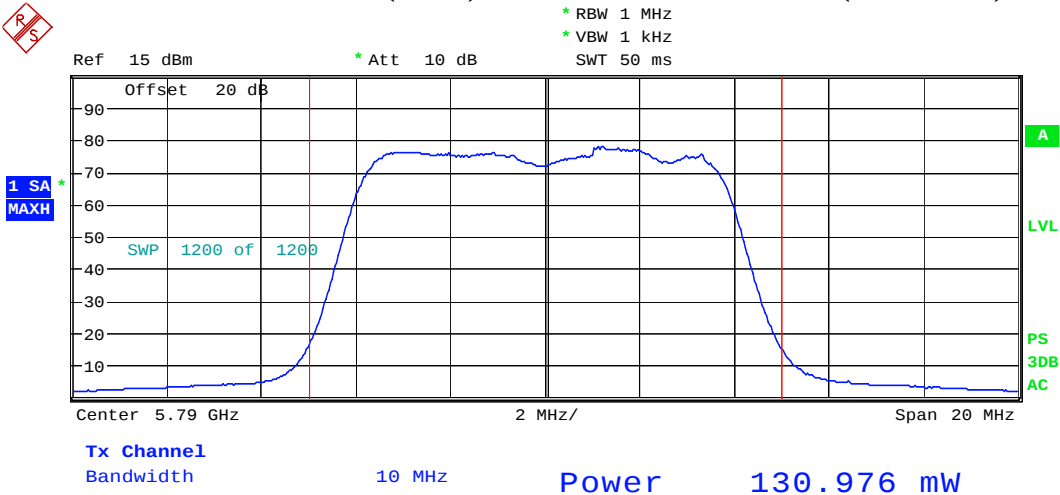


Maximum peak output power of systems using digital modulation, continued

Channel BW: 10 MHz
TX-channel: 5790 MHz
Power settings: 36
Antenna Gain: 15 dBi (Omni)

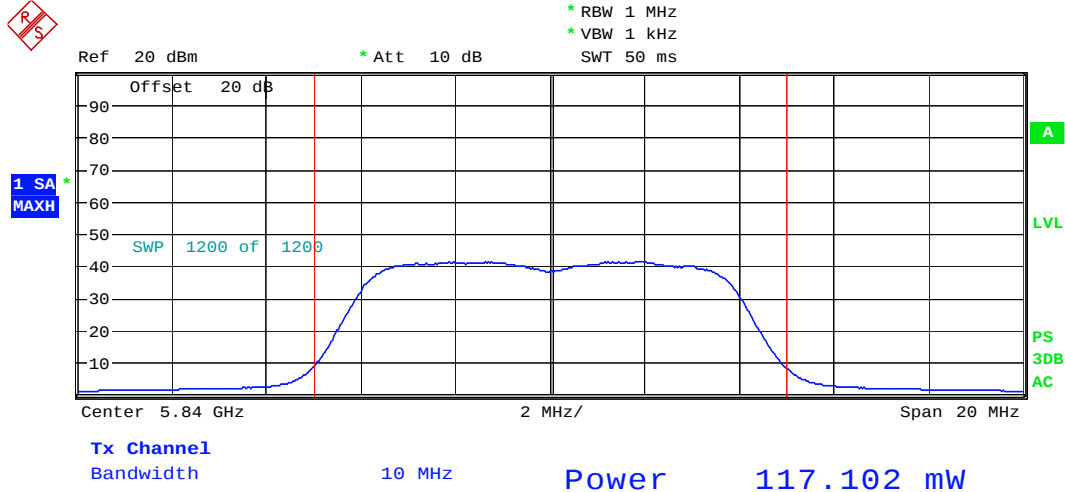


Channel BW: 10 MHz
TX-channel: 5790 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)

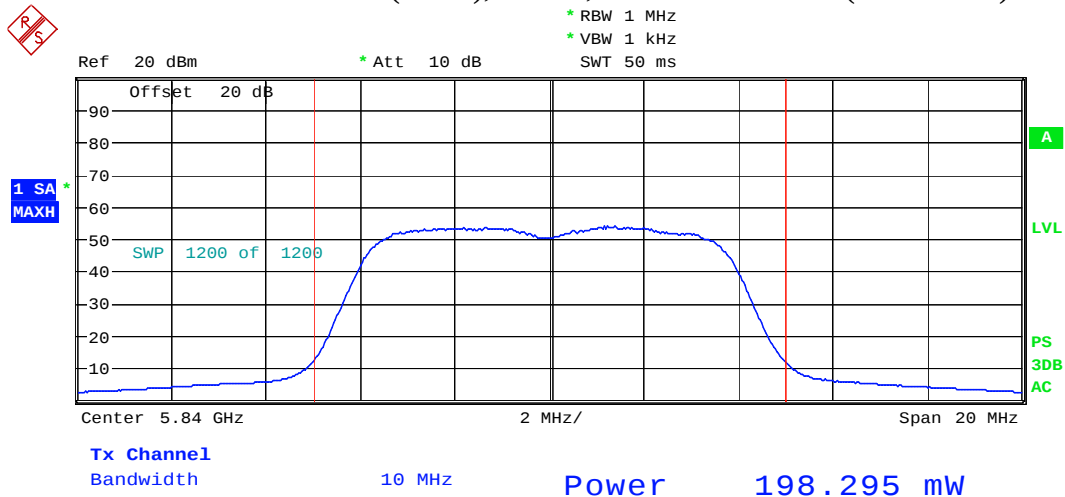


Maximum peak output power of systems using digital modulation, continued

Channel BW: 10 MHz
TX-channel: 5840 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)

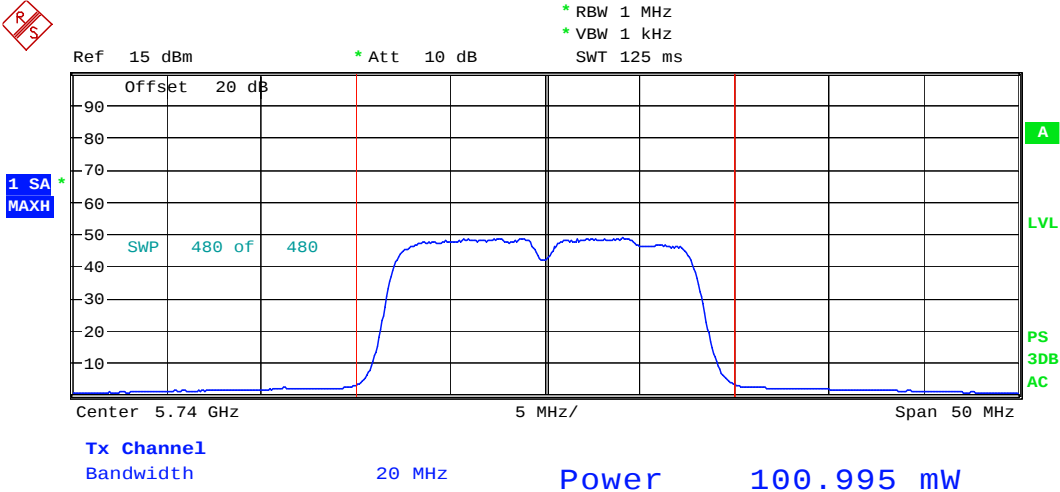


Channel BW: 10 MHz
TX-channel: 5840 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)

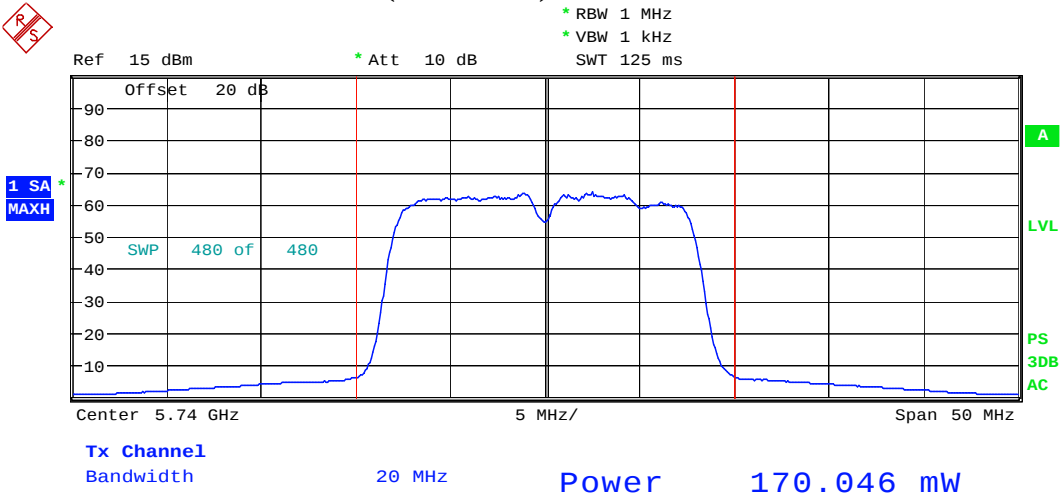


Maximum peak output power of systems using digital modulation, continued

Channel BW: 20 MHz
TX-channel: 5740 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)

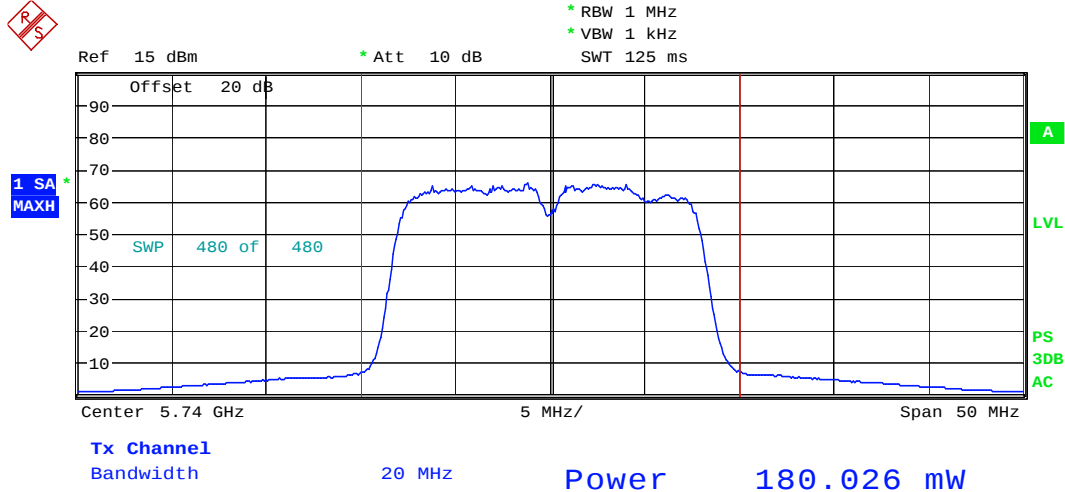


Channel BW: 20 MHz
TX-channel: 5740 MHz
Power settings: 39
Antenna Gain: 23 dBi (Directional)

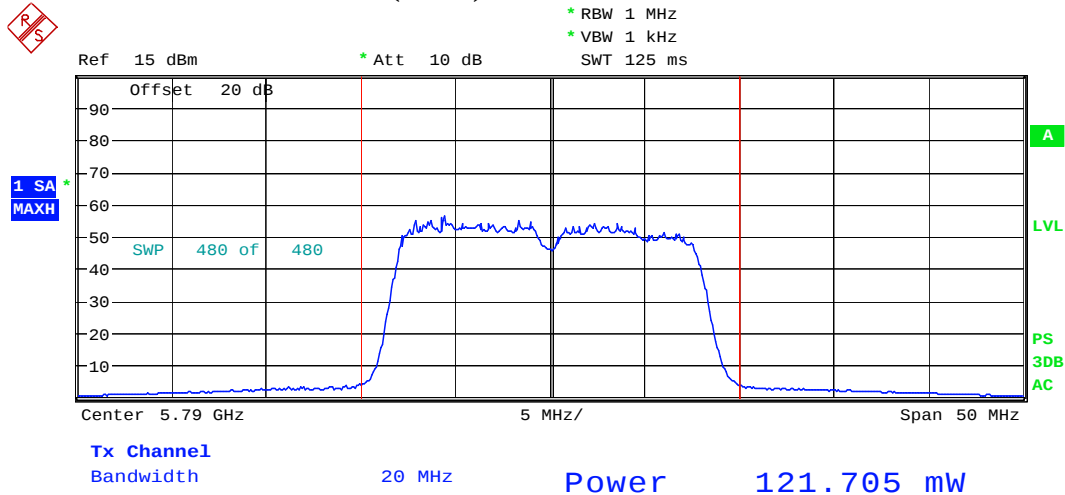


Maximum peak output power of systems using digital modulation, continued

Channel BW: 20 MHz
TX-channel: 5740 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 19 dBi and 15 dBi (Directional)

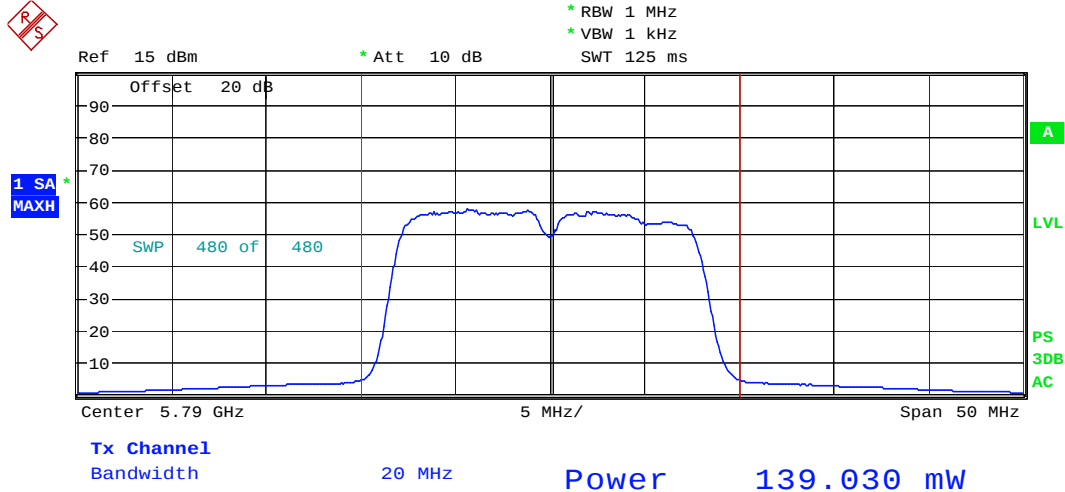


Channel BW: 20 MHz
TX-channel: 5790 MHz
Power settings: 38
Antenna Gain: 15 dBi (Omni)

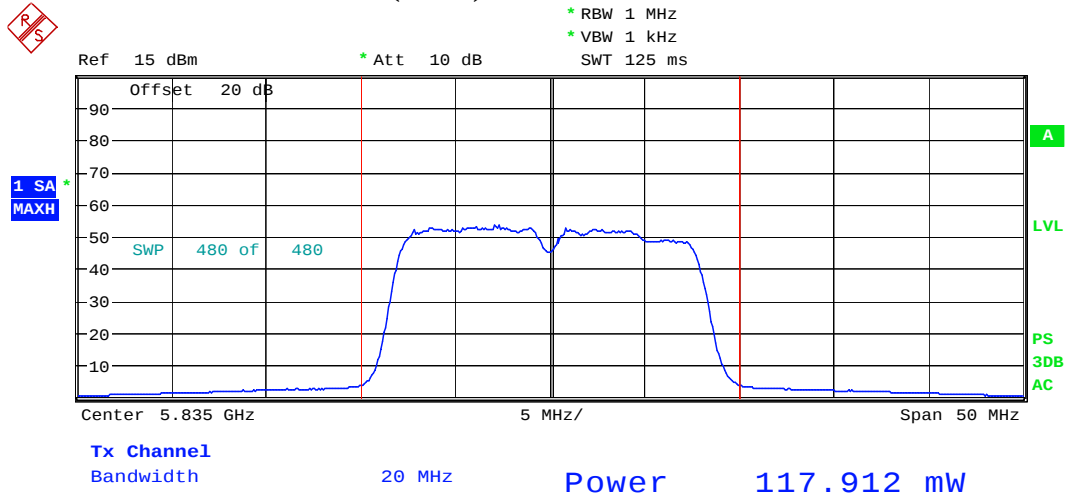


Maximum peak output power of systems using digital modulation, continued

Channel BW: 20 MHz
TX-channel: 5790 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)

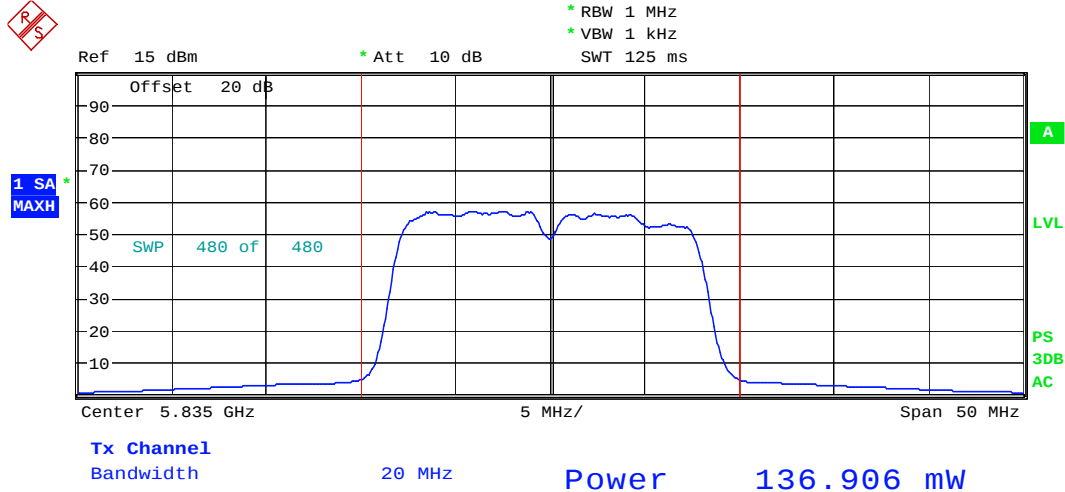


Channel BW: 20 MHz
TX-channel: 5835 MHz
Power settings: 38
Antenna Gain: 15 dBi (Omni)

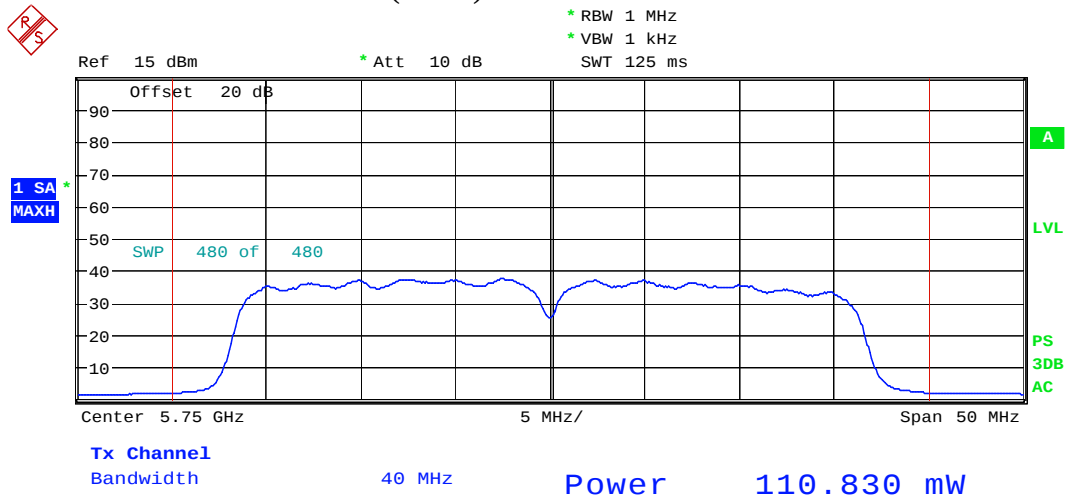


Maximum peak output power of systems using digital modulation, continued

Channel BW: 20 MHz
TX-channel: 5835 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)

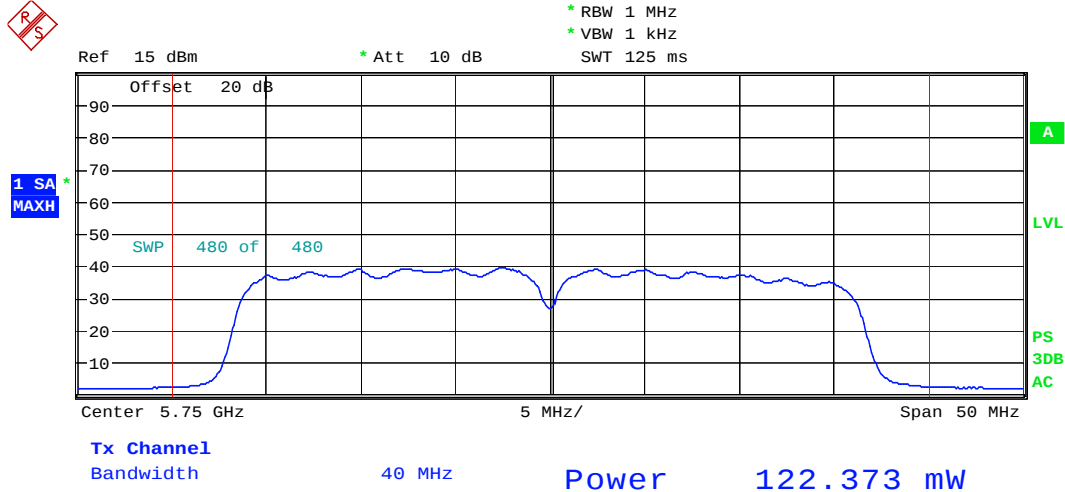


Channel BW: 40 MHz
TX-channel: 5750 MHz
Power settings: 39
Antenna Gain: 15 dBi (Omni)

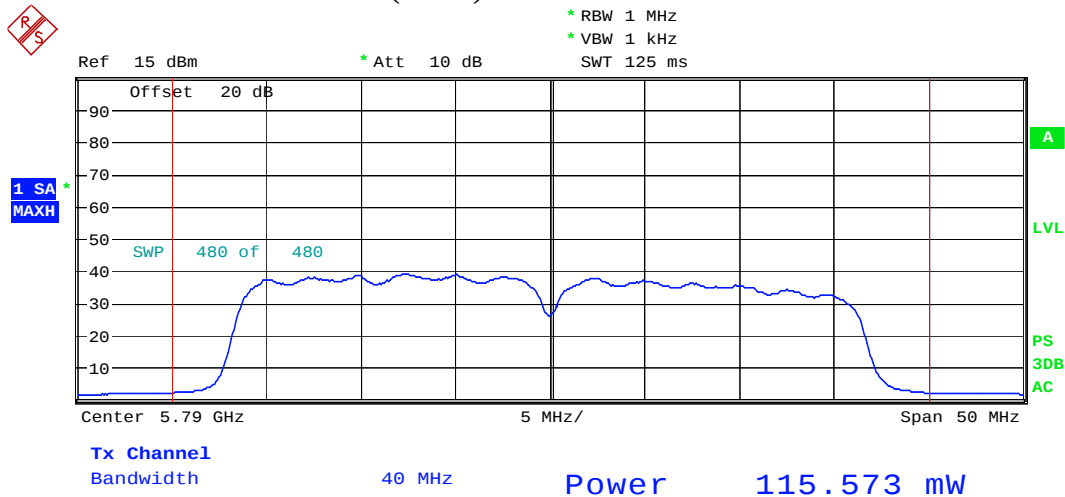


Maximum peak output power of systems using digital modulation, continued

Channel BW: 40 MHz
TX-channel: 5750 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)

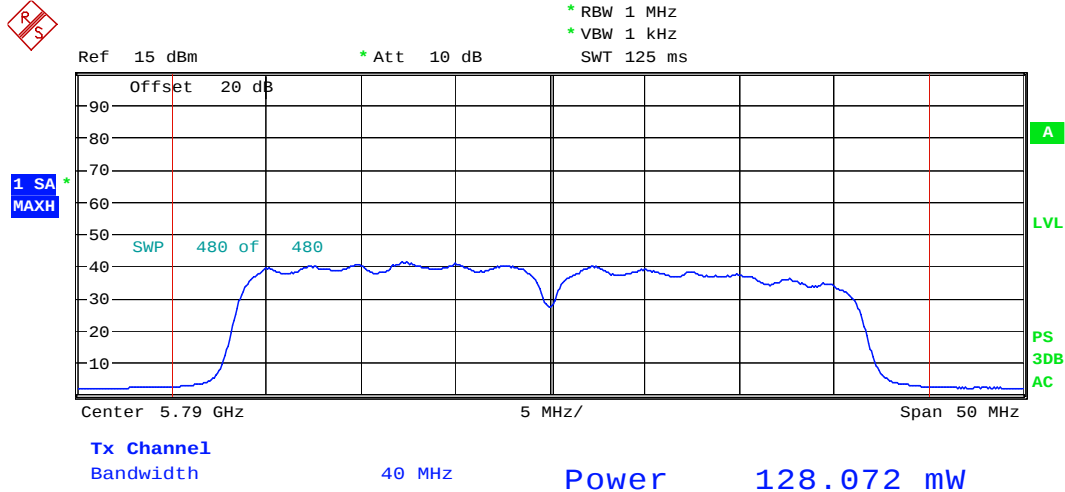


Channel BW: 40 MHz
TX-channel: 5790 MHz
Power settings: 39
Antenna Gain: 15 dBi (Omni)

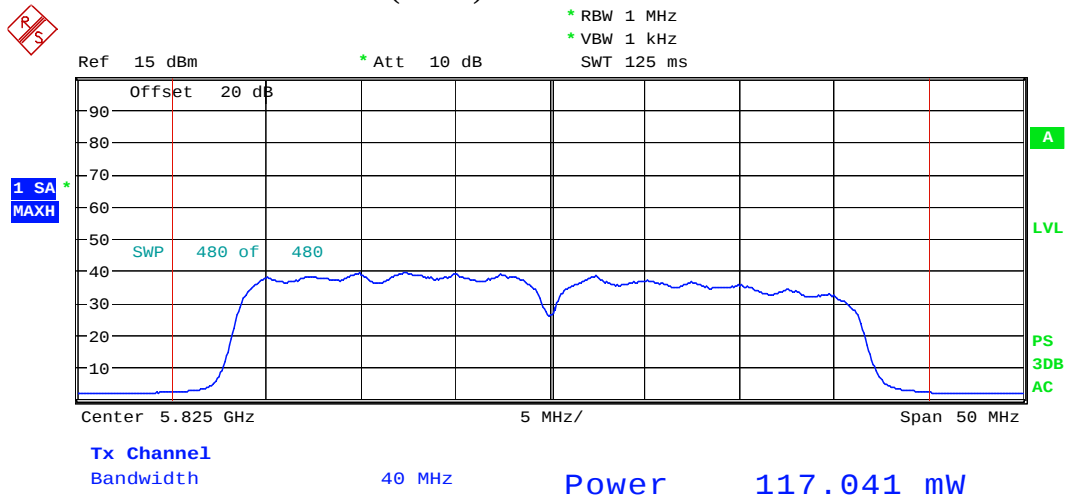


Maximum peak output power of systems using digital modulation, continued

Channel BW: 40 MHz
TX-channel: 5790 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)

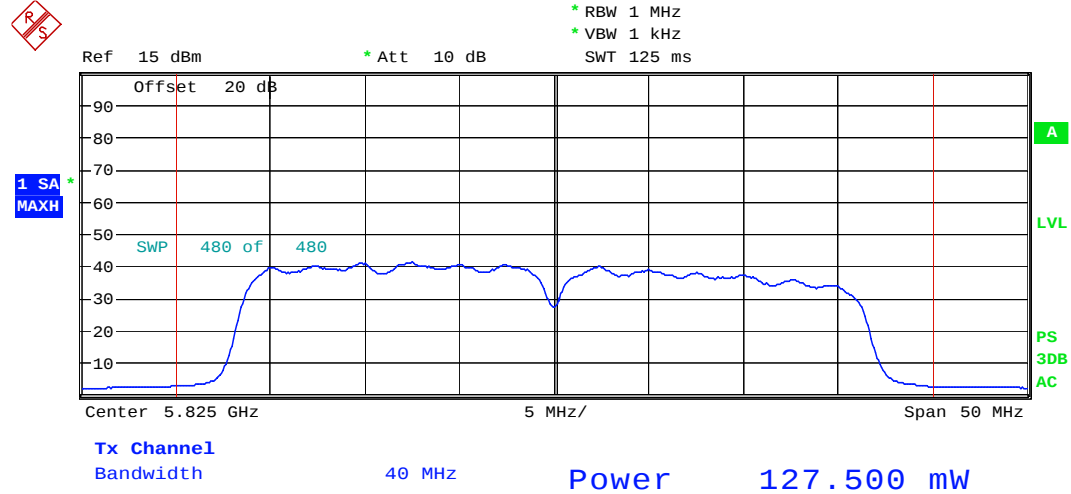


Channel BW: 40 MHz
TX-channel: 5825 MHz
Power settings: 39
Antenna Gain: 15 dBi (Omni)



Maximum peak output power of systems using digital modulation, continued

Channel BW: 40 MHz
 TX-channel: 5825 MHz
 Power settings: 40
 Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Maximum peak output power of systems using digital modulation, continued

Channel BW: 5MHz

Ch #	Freq. (MHz)	G _{ANT} (dBi)	Cable loss (dB)	G _{ANT+CABLE} (dBi)	Target P _{wr} (dBm)	P _{TX} Cond. (mW)	P _{TX} Cond. (dBm)	Limit (dBm)	Margin (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
146	5730	10	1	9	40	189.258	22.77	26.00	3.23	31.77	36.00	4.23
158	5790	10	1	9	40	150.415	21.77	26.00	4.23	30.77	36.00	5.23
169	5845	10	1	9	40	191.903	22.83	26.00	3.17	31.83	36.00	4.17
146	5730	15	1	14	38	106.763	20.28	21.00	0.72	34.28	36.00	1.72
158	5790	15	1	14	36	110.505	20.43	21.00	0.57	34.43	36.00	1.57
169	5845	15	1	14	37	111.337	20.47	21.00	0.53	34.47	36.00	1.53
146	5730	19	1	18	38	106.763	20.28	30.00	9.72	38.28	p-t-p	N/A
158	5790	19	1	18	39	139.525	21.45	30.00	8.55	39.45	p-t-p	N/A
169	5845	19	1	18	40	191.903	22.83	30.00	7.17	40.83	p-t-p	N/A
146	5730	23	1	22	33	57.638	17.61	30.00	12.39	39.61	p-t-p	N/A
158	5790	23	1	22	37	128.841	21.10	30.00	8.90	43.10	p-t-p	N/A
169	5845	23	1	22	40	191.903	22.83	30.00	7.17	44.83	p-t-p	N/A
146	5730	15	1	14	37	105.682	20.24	30.00	9.76	34.24	p-t-p	N/A
158	5790	15	1	14	40	150.415	21.77	30.00	8.23	35.77	p-t-p	N/A
169	5845	15	1	14	40	191.903	22.83	30.00	7.17	36.83	p-t-p	N/A

Maximum Conducted P_{TX}: 22.83dBm

Maximum EIRP: 34.47dBm (G_{ANT} = 15 dBi, point-to-multipoint operation)
44.83dBm (G_{ANT} = 23 dBi, point-to-point operation)

Maximum peak output power of systems using digital modulation, continued

Channel BW: 10MHz

Ch #	Freq. (MHz)	G _{ANT} (dBi)	Cable loss (dB)	G _{ANT+CABLE} (dBi)	Target P _{wr} (dBm)	P _{TX} Cond. (mW)	P _{TX} Cond. (dBm)	Limit (dBm)	Margin (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
147	5735	10	1	9	40	157.855	21.98	26.00	4.02	30.98	36.00	5.02
158	5790	10	1	9	40	137.957	21.40	26.00	4.60	30.40	36.00	5.60
168	5840	10	1	9	40	198.295	22.97	26.00	3.03	31.97	36.00	4.03
147	5735	15	1	14	37	99.831	19.99	21.00	1.01	33.99	36.00	2.01
158	5790	15	1	14	36	111.477	20.47	21.00	0.53	34.47	36.00	1.53
168	5840	15	1	14	37	117.102	20.69	21.00	0.31	34.69	36.00	1.31
147	5735	19	1	18	38	142.338	21.53	30.00	8.47	39.53	p-t-p	N/A
158	5790	19	1	18	40	137.957	21.40	30.00	8.60	39.40	p-t-p	N/A
168	5840	19	1	18	40	198.295	22.97	30.00	7.03	40.97	p-t-p	N/A
147	5735	23	1	22	35	72.956	18.63	30.00	11.37	40.63	p-t-p	N/A
158	5790	23	1	22	40	137.957	21.40	30.00	8.60	43.40	p-t-p	N/A
168	5840	23	1	22	40	198.295	22.97	30.00	7.03	44.97	p-t-p	N/A
147	5735	15	1	14	40	157.855	21.98	30.00	8.02	35.98	p-t-p	N/A
158	5790	15	1	14	40	137.957	21.40	30.00	8.60	35.40	p-t-p	N/A
168	5840	15	1	14	40	198.295	22.97	30.00	7.03	36.97	p-t-p	N/A

Maximum Conducted P_{TX}: 22.97dBm

Maximum EIRP: 34.69dBm (G_{ANT} = 15 dBi, point-to-multipoint operation)
 44.97dBm (G_{ANT} = 23 dBi, point-to-point operation)

Maximum peak output power of systems using digital modulation, continued

Channel BW: 20MHz

Ch #	Freq. (MHz)	G _{ANT} (dBi)	Cable loss (dB)	G _{ANT+CABLE} (dBi)	Target P _{wr} (dBm)	P _{TX} Cond. (mW)	P _{TX} Cond. (dBm)	Limit (dBm)	Margin (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
148	5740	10	1	9	40	180.026	22.55	26.00	3.45	31.55	36.00	4.45
158	5790	10	1	9	40	139.030	21.43	26.00	4.57	30.43	36.00	5.57
167	5835	10	1	9	40	136.906	21.36	26.00	4.64	30.36	36.00	5.64
147	5735	15	1	14	37	100.995	20.04	21.00	0.96	34.04	36.00	1.96
158	5790	15	1	14	38	121.705	20.85	21.00	0.15	34.85	36.00	1.15
168	5840	15	1	14	38	117.912	20.72	21.00	0.28	34.72	36.00	1.28
148	5740	19	1	18	40	180.026	22.55	30.00	7.45	40.55	p-t-p	N/A
158	5790	19	1	18	40	139.030	21.43	30.00	8.57	39.43	p-t-p	N/A
167	5835	19	1	18	40	136.906	21.36	30.00	8.64	39.36	p-t-p	N/A
148	5740	23	1	22	39	170.046	22.31	30.00	7.69	44.31	p-t-p	N/A
158	5790	23	1	22	40	139.030	21.43	30.00	8.57	43.43	p-t-p	N/A
167	5835	23	1	22	40	136.906	21.36	30.00	8.64	43.36	p-t-p	N/A
148	5740	15	1	14	40	180.026	22.55	30.00	7.45	36.55	p-t-p	N/A
158	5790	15	1	14	40	139.030	21.43	30.00	8.57	35.43	p-t-p	N/A
167	5835	15	1	14	40	136.906	21.36	30.00	8.64	35.36	p-t-p	N/A

Maximum Conducted P_{TX}: 22.55dBm

Maximum EIRP: 34.85dBm (G_{ANT} = 15 dBi, point-to-multipoint operation)
 44.31dBm (G_{ANT} = 23 dBi, point-to-point operation)

Maximum peak output power of systems using digital modulation, continued

Channel BW: 40MHz

Ch #	Freq. (MHz)	G _{ANT} (dBi)	Cable loss (dB)	G _{ANT+CABLE} (dBi)	Target P _{wr} (dBm)	P _{TX} Cond. (mW)	P _{TX} Cond. (dBm)	Limit (dBm)	Margin (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
150	5750	10	1	9	40	122.373	20.88	26.00	5.12	29.88	36.00	6.12
158	5790	10	1	9	40	128.072	21.07	26.00	4.93	30.07	36.00	5.93
165	5825	10	1	9	40	127.500	21.06	26.00	4.94	30.06	36.00	5.94
150	5750	15	1	14	39	110.830	20.45	21.00	0.55	34.45	36.00	1.55
158	5790	15	1	14	39	115.537	20.63	21.00	0.37	34.63	36.00	1.37
165	5825	15	1	14	39	117.041	20.68	21.00	0.32	34.68	36.00	1.32
150	5750	19	1	18	40	122.373	20.88	30.00	9.12	38.88	p-t-p	N/A
158	5790	19	1	18	40	128.072	21.07	30.00	8.93	39.07	p-t-p	N/A
165	5825	19	1	18	40	127.500	21.06	30.00	8.94	39.06	p-t-p	N/A
150	5750	23	1	22	40	122.373	20.88	30.00	9.12	42.88	p-t-p	N/A
158	5790	23	1	22	40	128.072	21.07	30.00	8.93	43.07	p-t-p	N/A
165	5825	23	1	22	40	127.500	21.06	30.00	8.94	43.06	p-t-p	N/A
150	5750	15	1	14	40	122.373	20.88	30.00	9.12	34.88	p-t-p	N/A
158	5790	15	1	14	40	128.072	21.07	30.00	8.93	35.07	p-t-p	N/A
165	5825	15	1	14	40	127.500	21.06	30.00	8.94	35.06	p-t-p	N/A

Maximum Conducted P_{TX}: 21.07dBm

Maximum EIRP: 34.68dBm (G_{ANT} = 15 dBi, point-to-multipoint operation)
 43.07dBm (G_{ANT} = 23 dBi, point-to-point operation)

Clause 15.247(d) Conducted Spurious Emissions

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Conditions:

Sample Number:	1	Temperature (°C):	20
Date:	March 5 – 12, 2008	Humidity (%):	39
Modification State:	0	Tester:	Andrey Adelberg
		Laboratory:	Ottawa

Test Results: Pass.

See attached plots for results.

Additional Observations:

The Spectrum was searched from 30MHz to 40 GHz.

All measurements for spurious emissions were performed conducted using a Spectrum analyzer with Peak Detector with 100kHz RBW

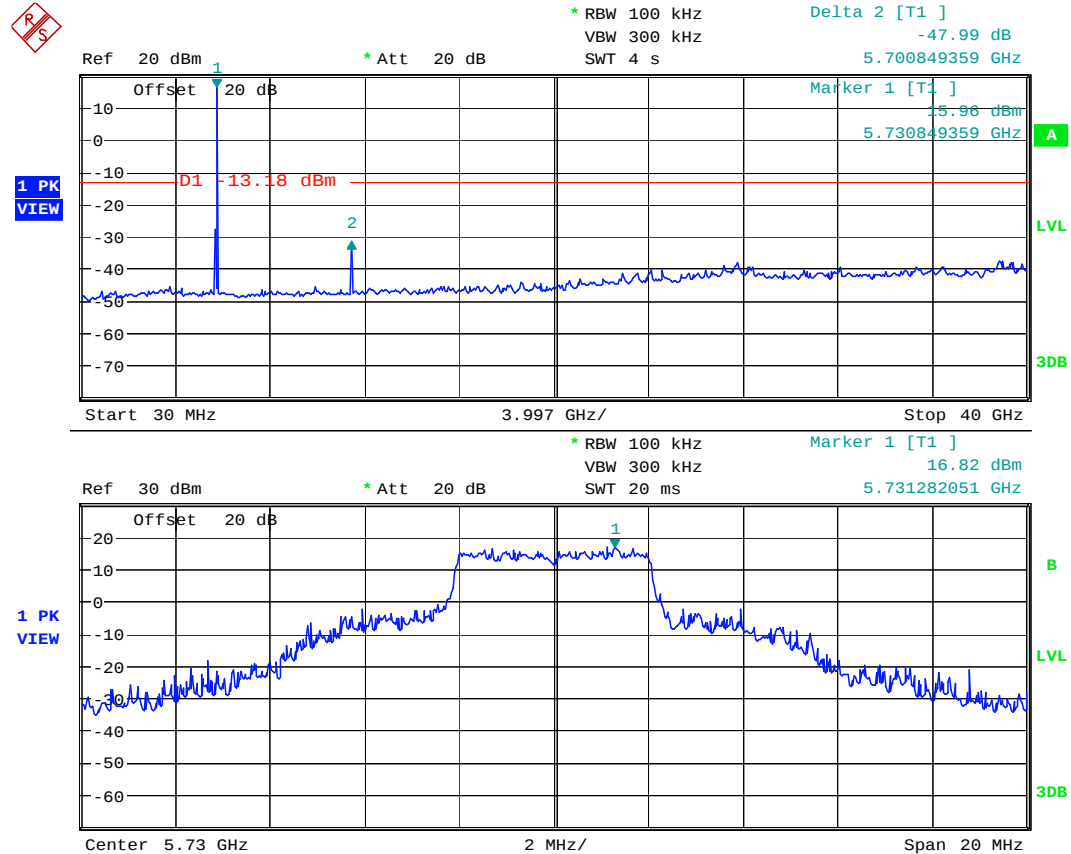
‘Power Output Option 2, Method 3’ procedure from the FCC guidelines for Measurement of Digital Transmission Systems operating under Section 15.247 was used for power measurements, therefore the attenuation of 30 dB down from the highest emission level within the authorized band was used instead of 20 dB.

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 5 MHz

Channel: 5730 MHz



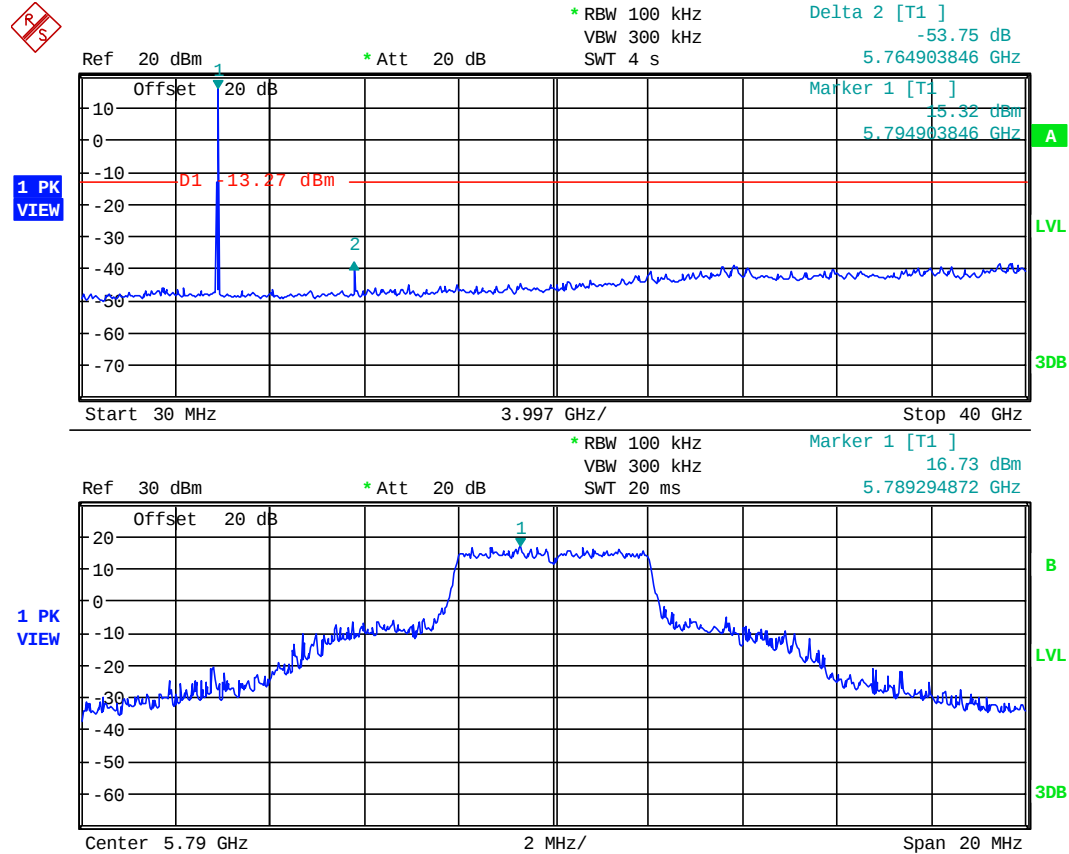
Date: 17.MAR.2008 16:57:02

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 5 MHz

Channel: 5790 MHz

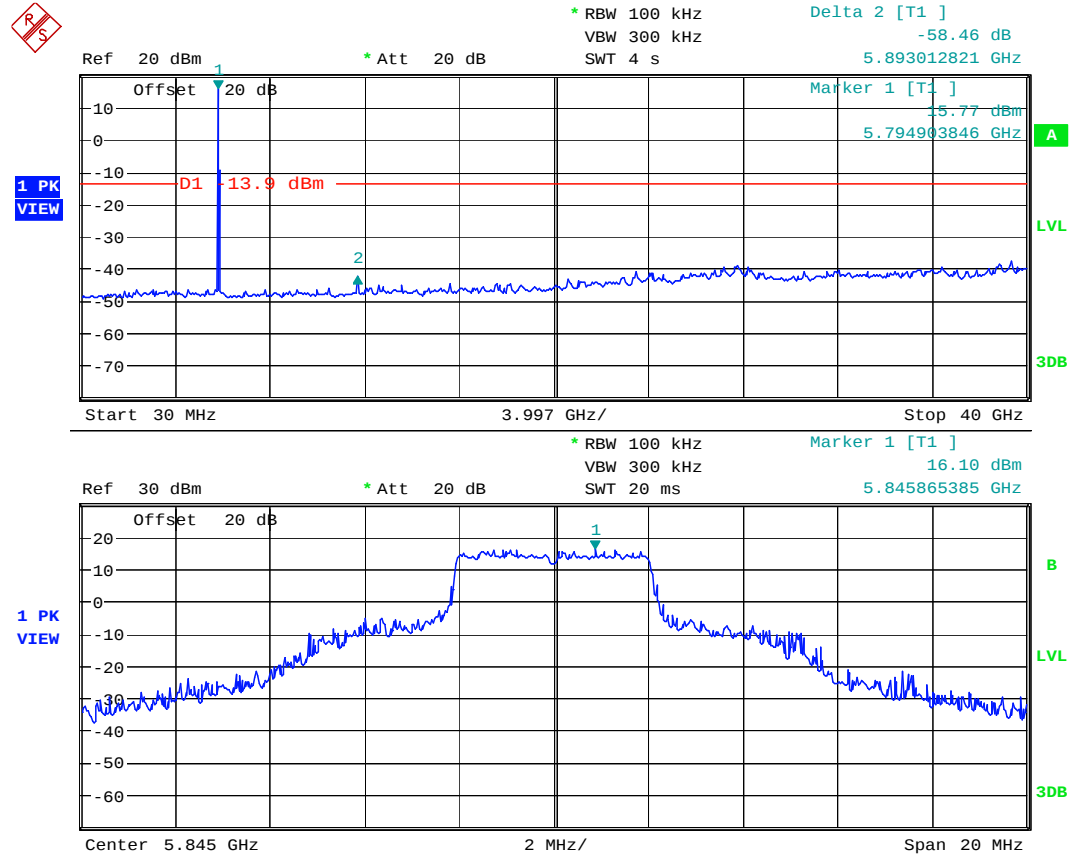


Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 5 MHz

Channel: 5845 MHz



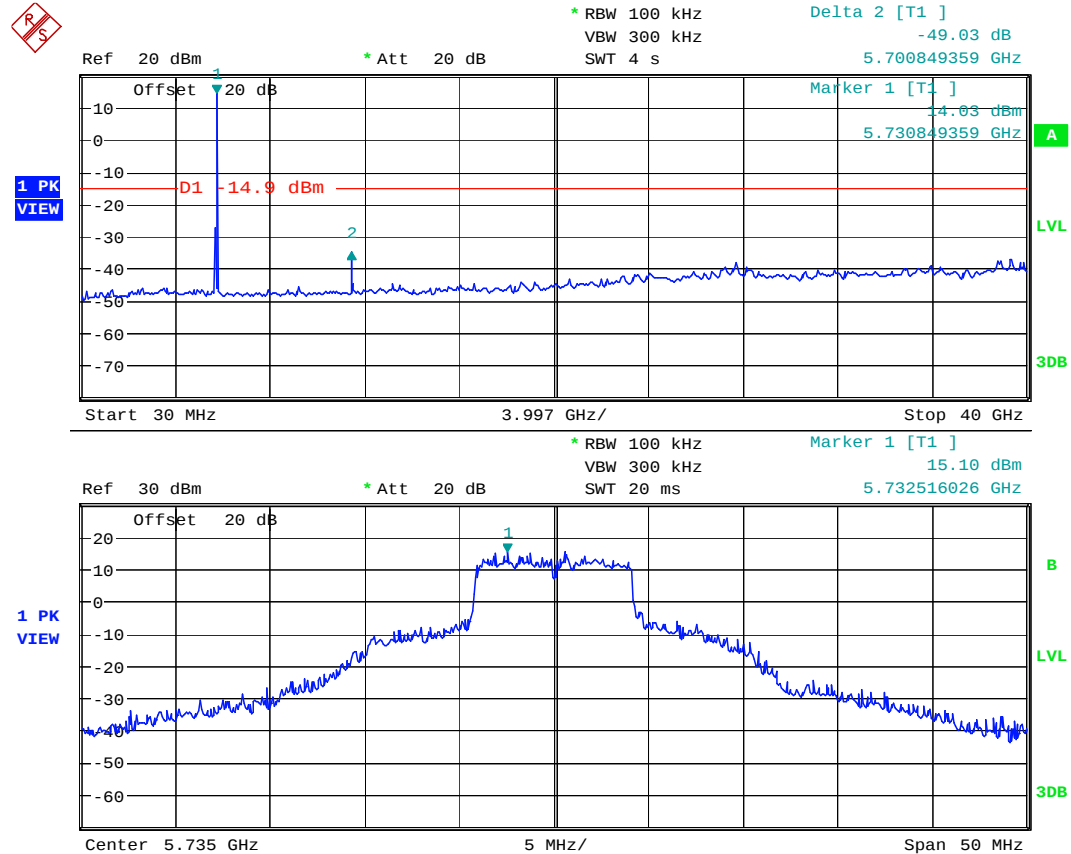
Date: 17.MAR.2008 16:53:47

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 10 MHz

Channel: 5735 MHz



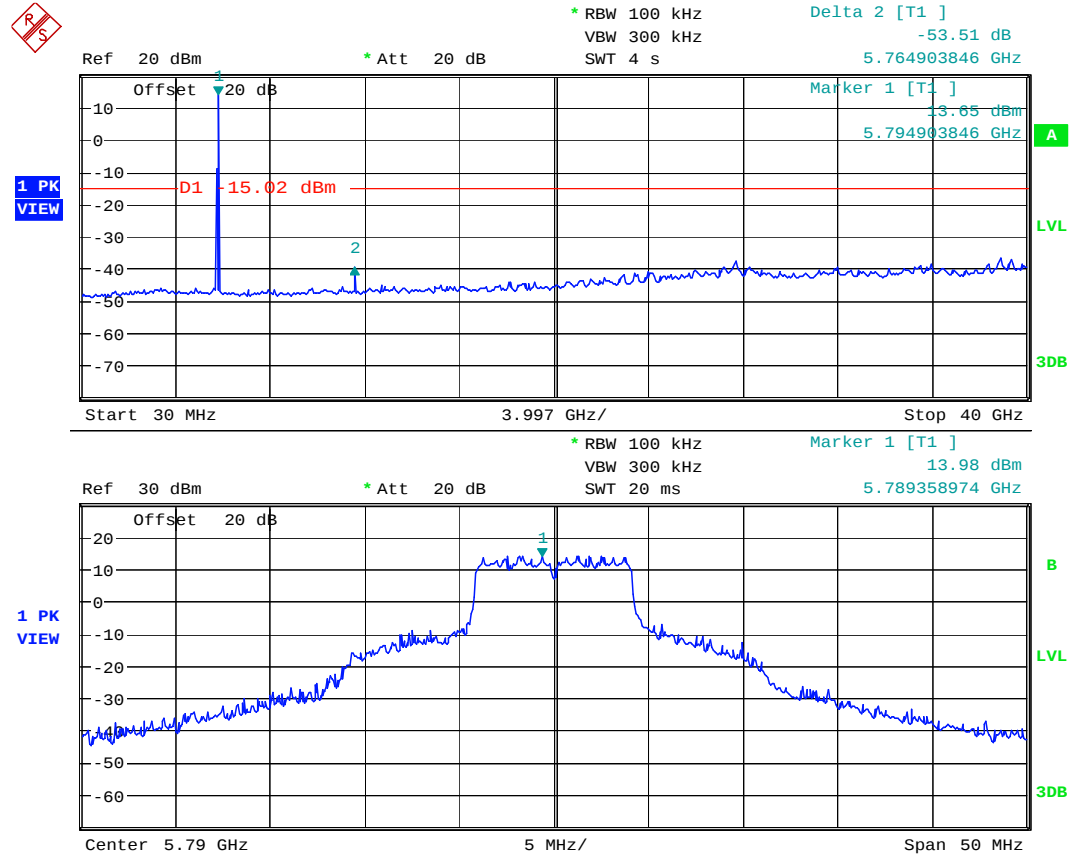
Date: 17.MAR.2008 16:47:19

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 10 MHz

Channel: 5790 MHz



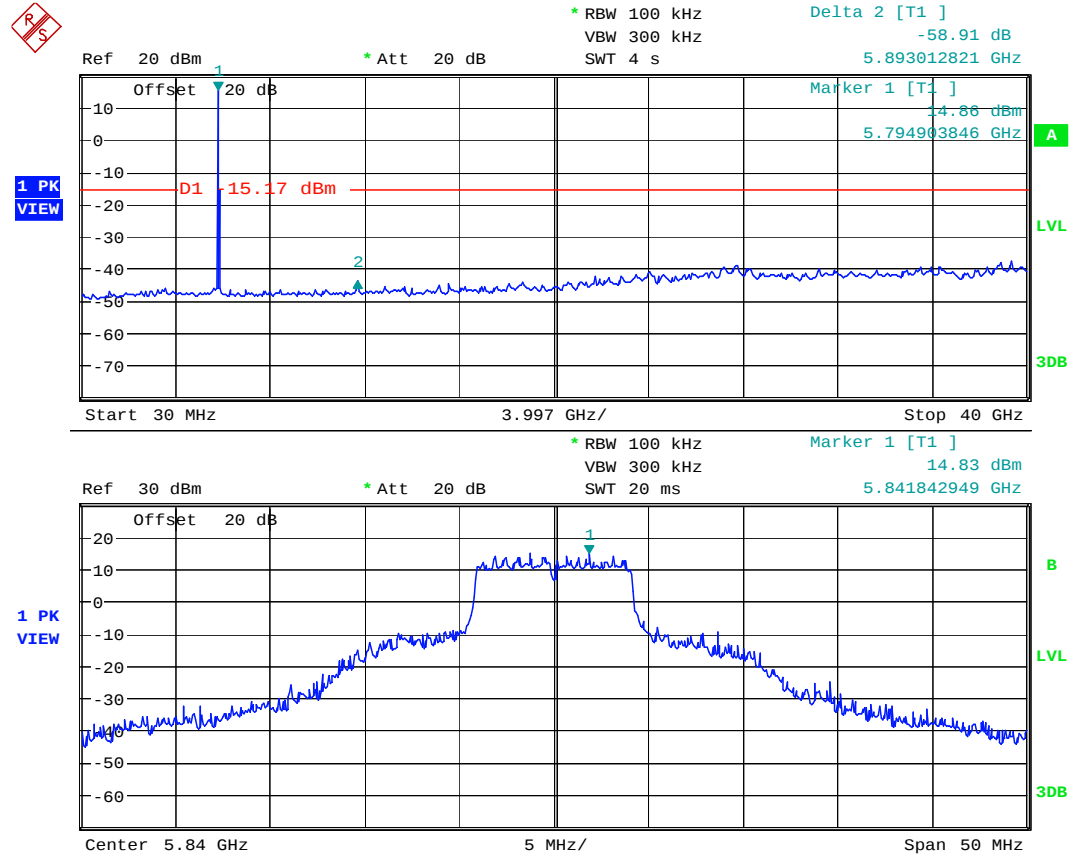
Date: 17.MAR.2008 16:50:21

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 10 MHz

Channel: 5840 MHz



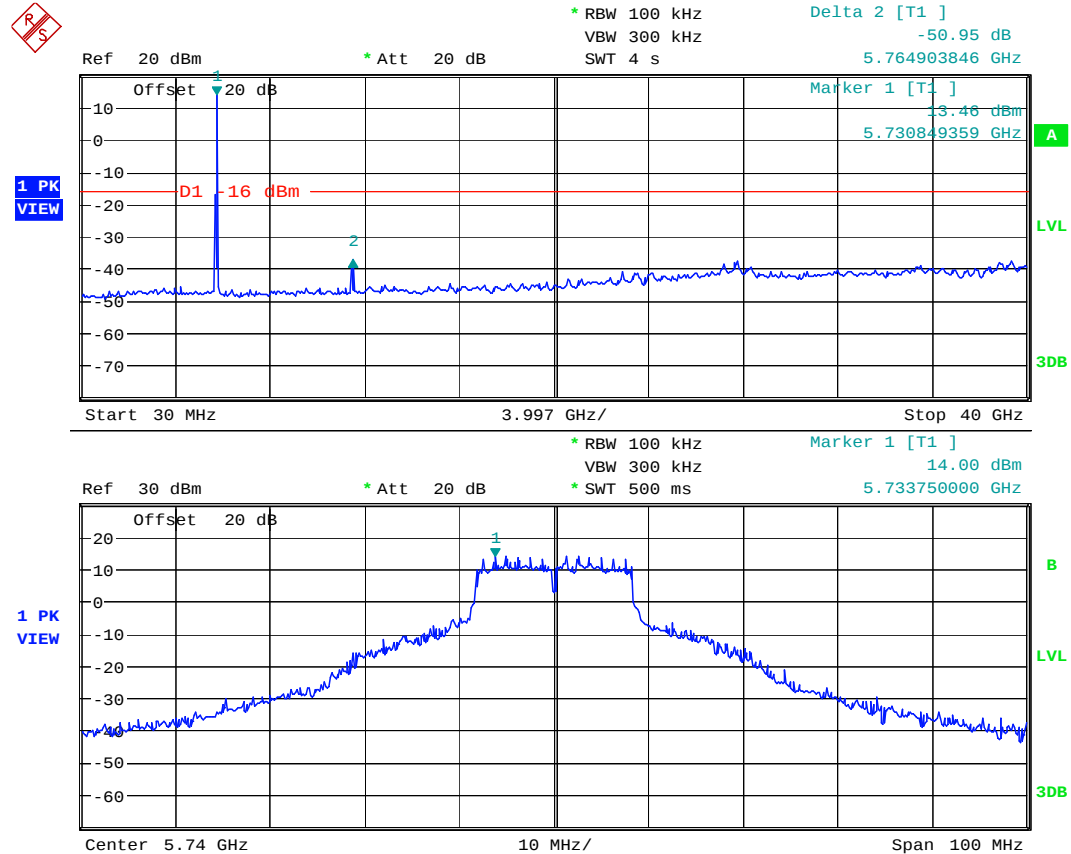
Date: 17.MAR.2008 16:52:13

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 20 MHz

Channel: 5740 MHz



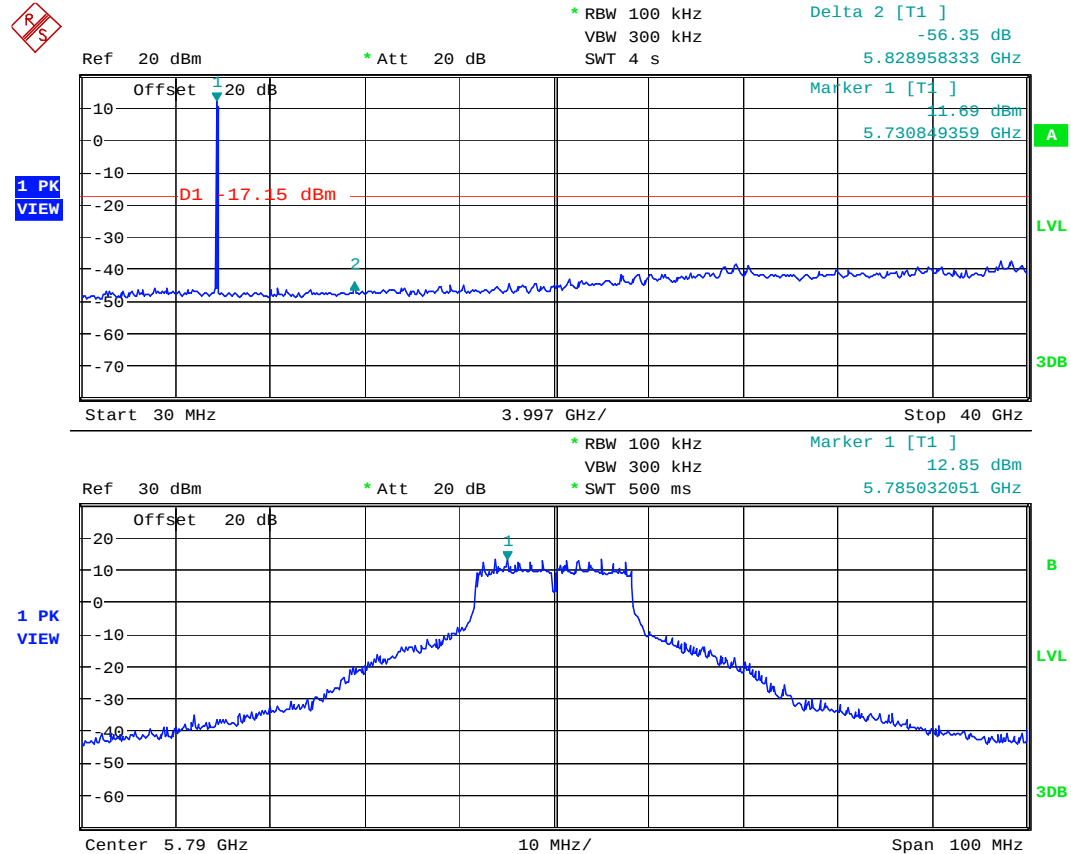
Date: 17.MAR.2008 17:00:32

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 20 MHz

Channel: 5790 MHz



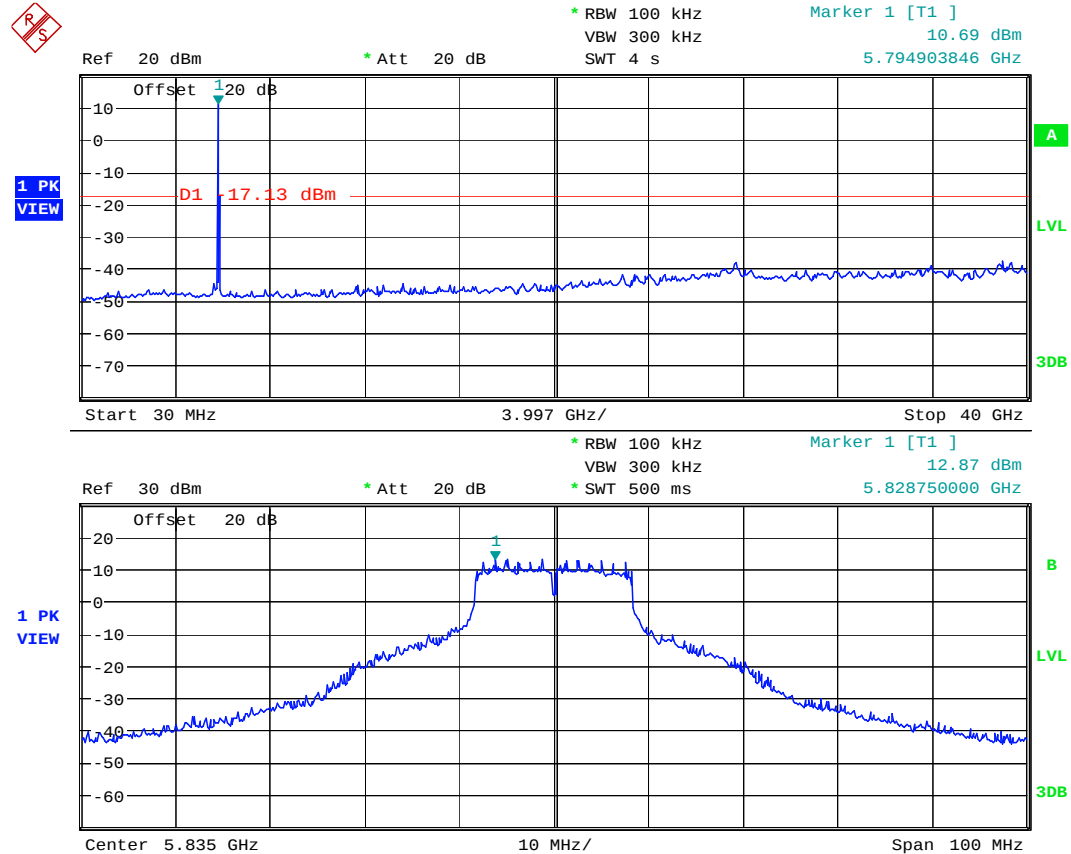
Date: 17.MAR.2008 17:02:08

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 20 MHz

Channel: 5835 MHz



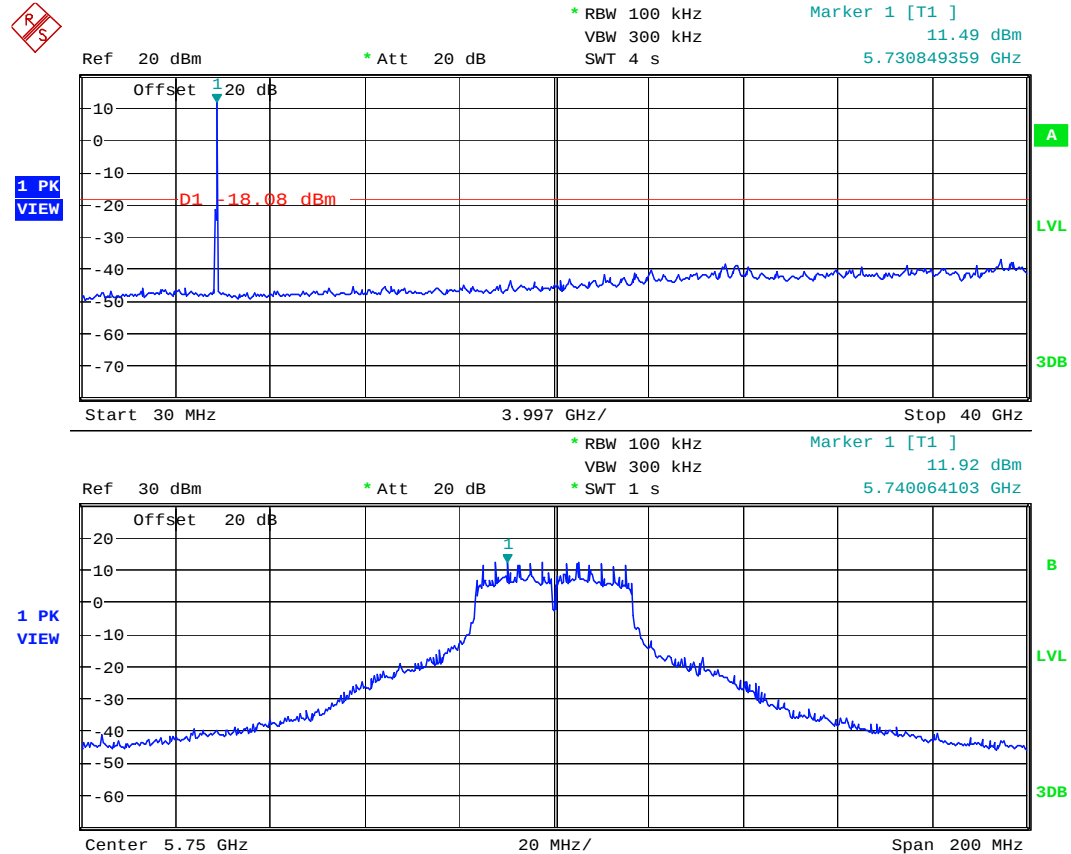
Date: 17.MAR.2008 17:03:31

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 40 MHz

Channel: 5750 MHz



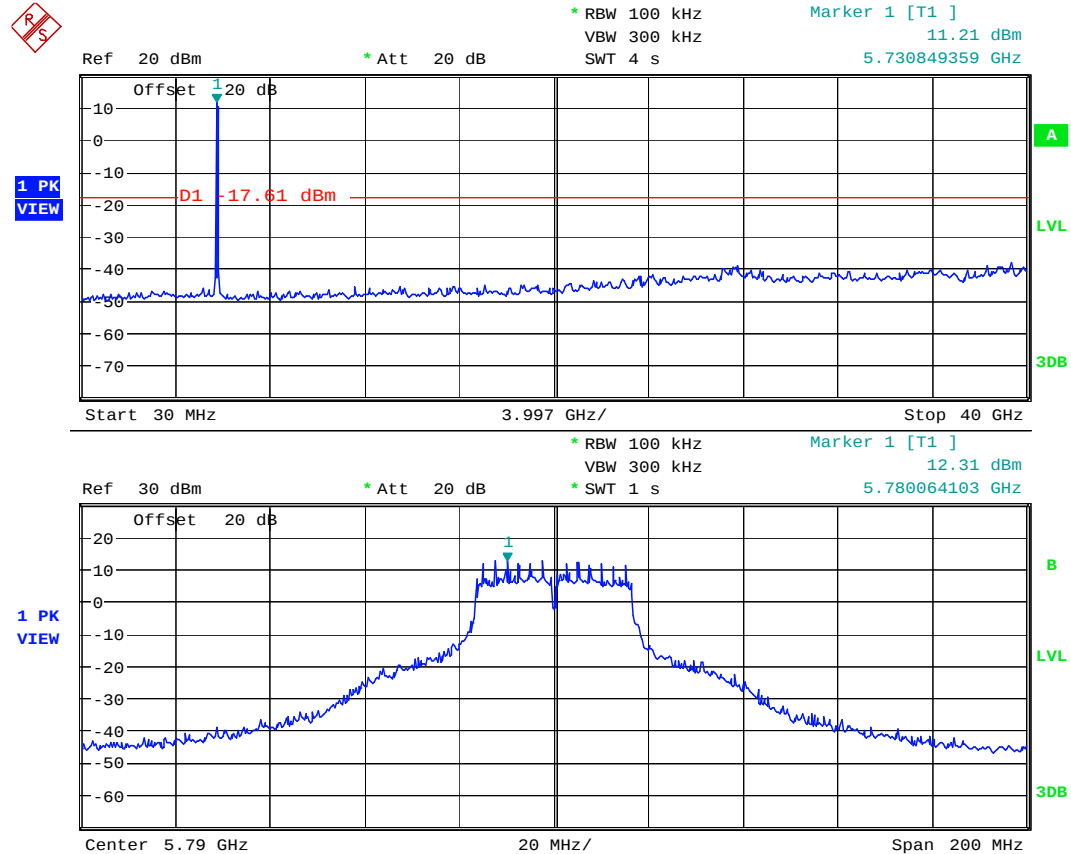
Date: 17.MAR.2008 17:08:13

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 40 MHz

Channel: 5790 MHz



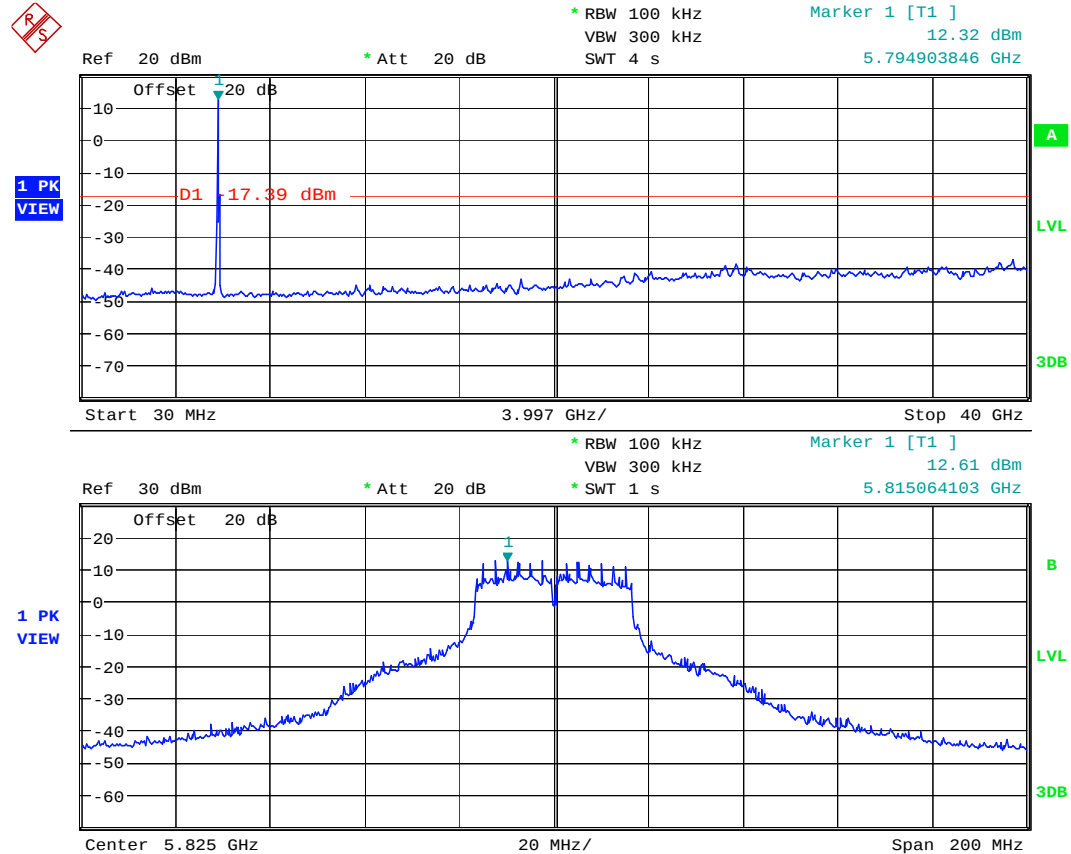
Date: 17.MAR.2008 17:06:52

Conducted Spurious Emissions, continued

30 dBc Limit Check

Channel BW: 40 MHz

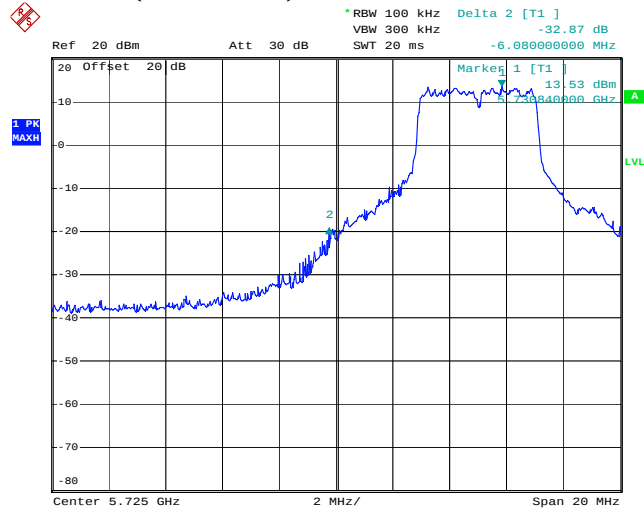
Channel: 5825 MHz



Date: 17.MAR.2008 17:05:40

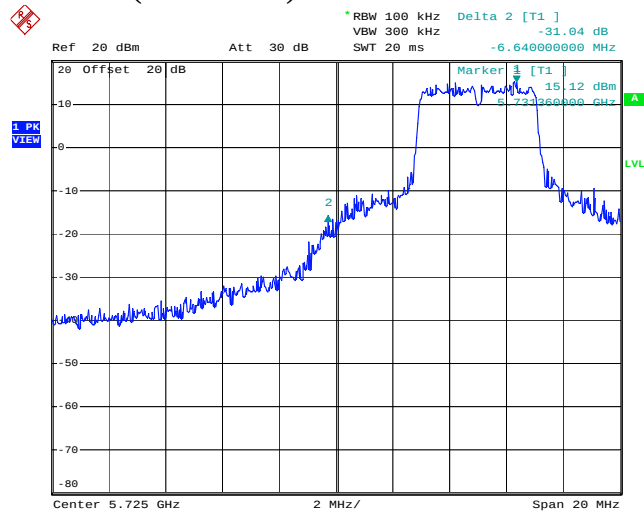
Conducted Spurious Emissions, continued

Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 33
Antenna Gain: 23 dBi (Directional)



Date: 14.MAR.2008 13:23:51

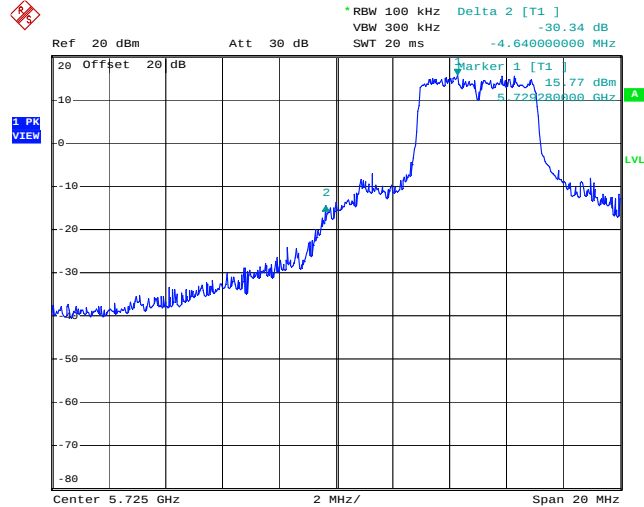
Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 37
Antenna Gain: 15 dBi (Directional)



Date: 14.MAR.2008 13:25:54

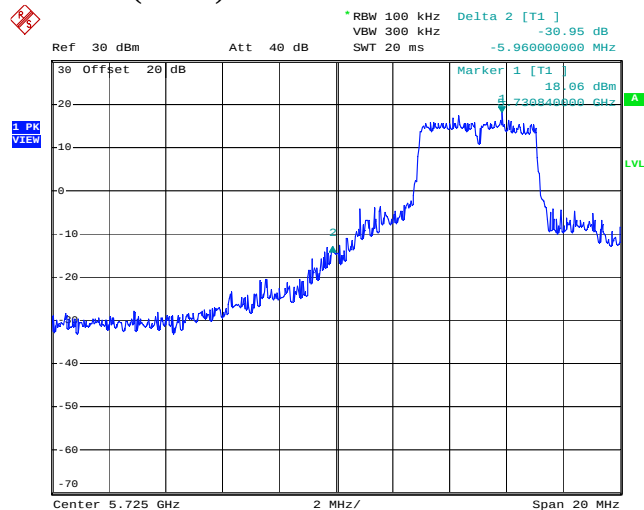
Conducted Spurious Emissions, continued

Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 38
Antenna Gain: 19 dBi (Directional), 15 dBi (Omni)



Date: 14.MAR.2008 13:28:20

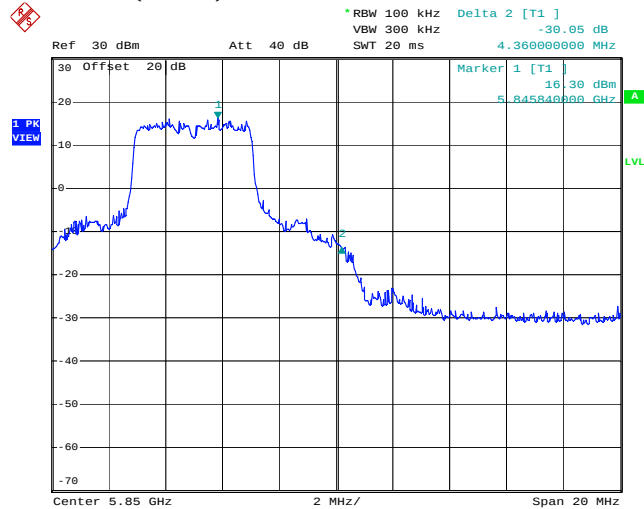
Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni)



Date: 14.MAR.2008 13:36:28

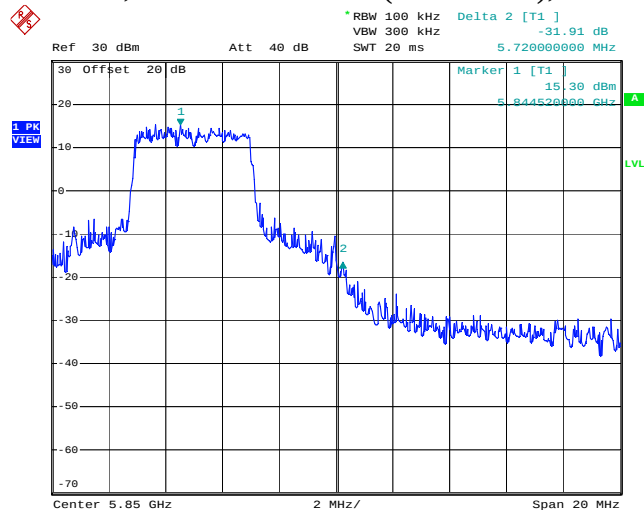
Conducted Spurious Emissions, continued

Channel BW: 5 MHz
TX-channel: 5845 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)



Date: 14.MAR.2008 14:48:17

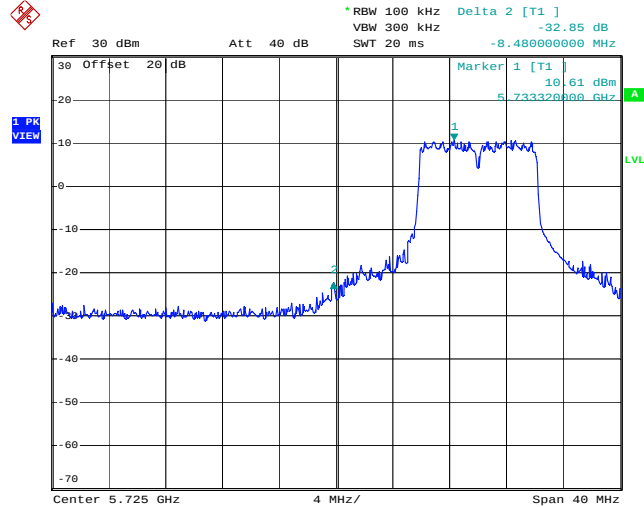
Channel BW: 5 MHz
TX-channel: 5845 MHz
Power settings: 40
Antenna Gain: 23 dBi, 15 dBi and 19 dBi (Directional), 10 dBi (Omni)



Date: 14.MAR.2008 14:58:04

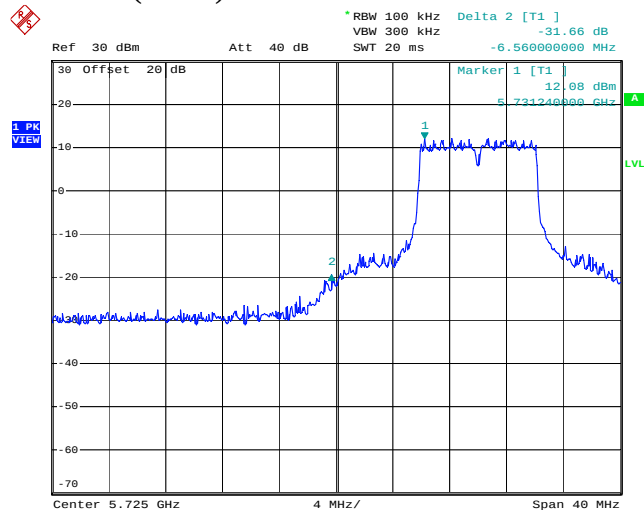
Conducted Spurious Emissions, continued

Channel BW: 10 MHz
TX-channel: 5735 MHz
Power settings: 35
Antenna Gain: 23 dBi (Directional)



Date: 14.MAR.2008 13:38:32

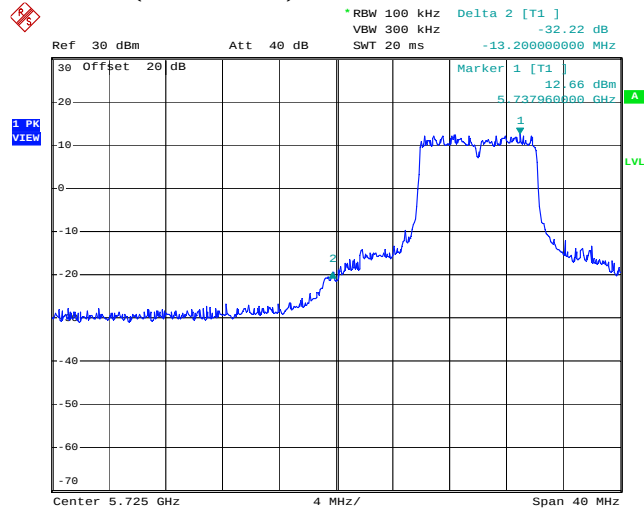
Channel BW: 10 MHz
TX-channel: 5735 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)



Date: 14.MAR.2008 13:39:25

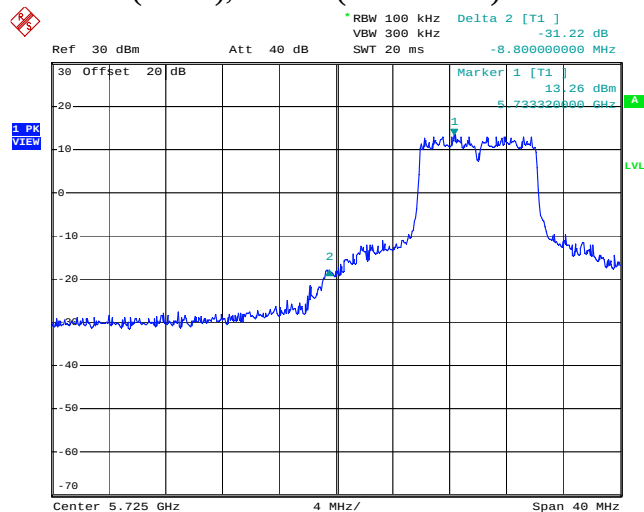
Conducted Spurious Emissions, continued

Channel BW: 10 MHz
TX-channel: 5735 MHz
Power settings: 38
Antenna Gain: 19 dBi (Directional)



Date: 14.MAR.2008 13:40:22

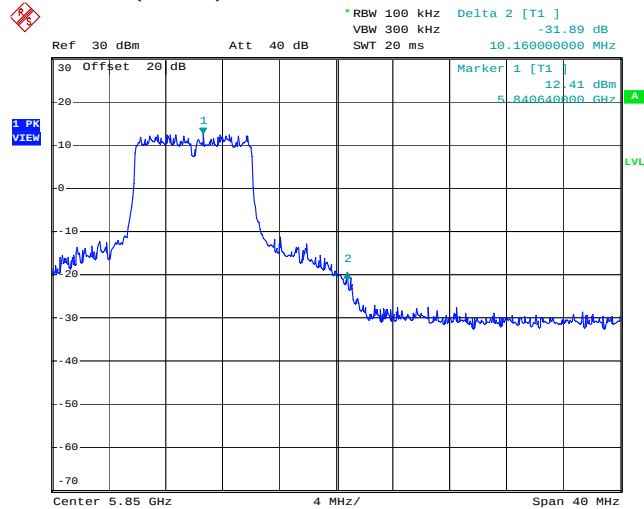
Channel BW: 10 MHz
TX-channel: 5735 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 15 dBi (Directional)



Date: 14.MAR.2008 13:41:16

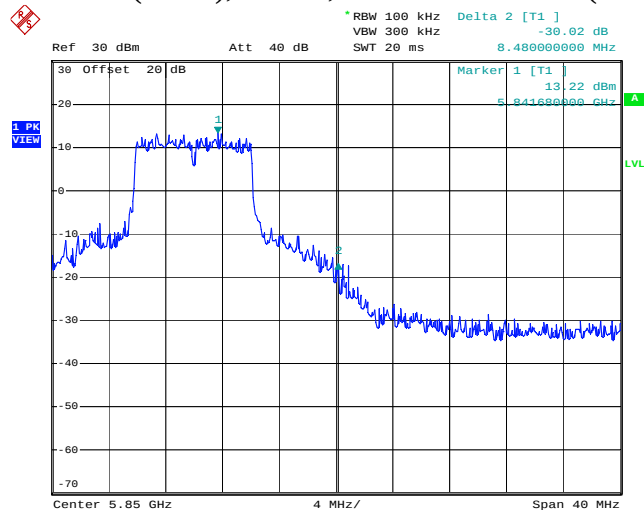
Conducted Spurious Emissions, continued

Channel BW: 10 MHz
TX-channel: 5840 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)



Date: 14.MAR.2008 14:59:10

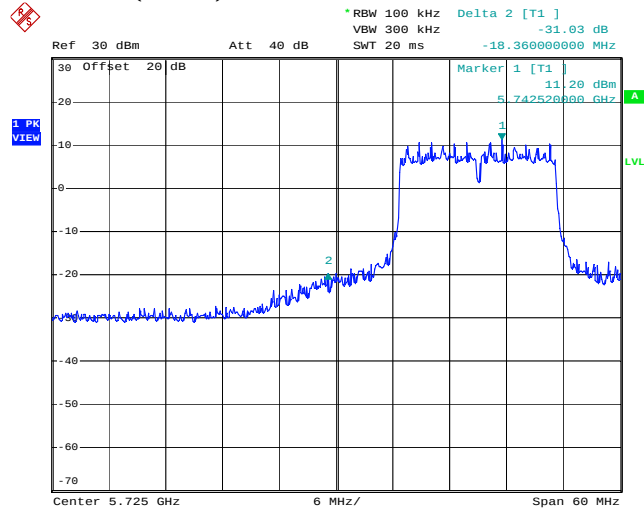
Channel BW: 10 MHz
TX-channel: 5840 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 14.MAR.2008 15:00:14

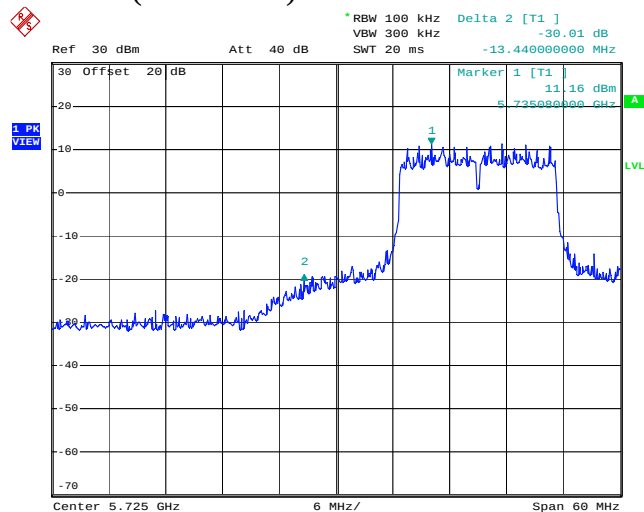
Conducted Spurious Emissions, continued

Channel BW: 20 MHz
TX-channel: 5740 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)



Date: 14.MAR.2008 13:44:16

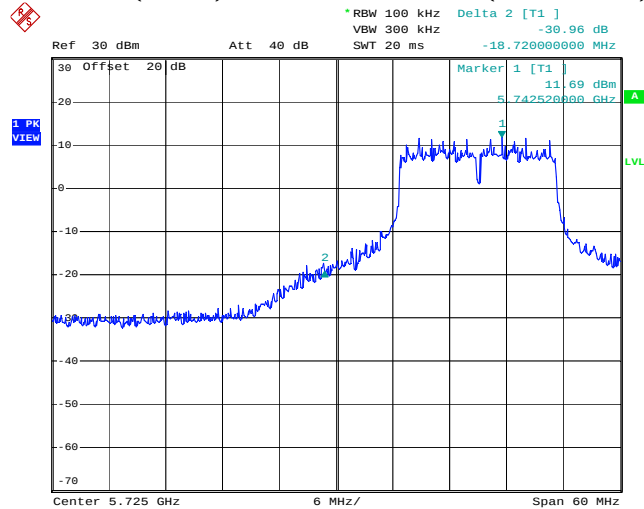
Channel BW: 20 MHz
TX-channel: 5740 MHz
Power settings: 39
Antenna Gain: 23 dBi (Directional)



Date: 14.MAR.2008 13:50:48

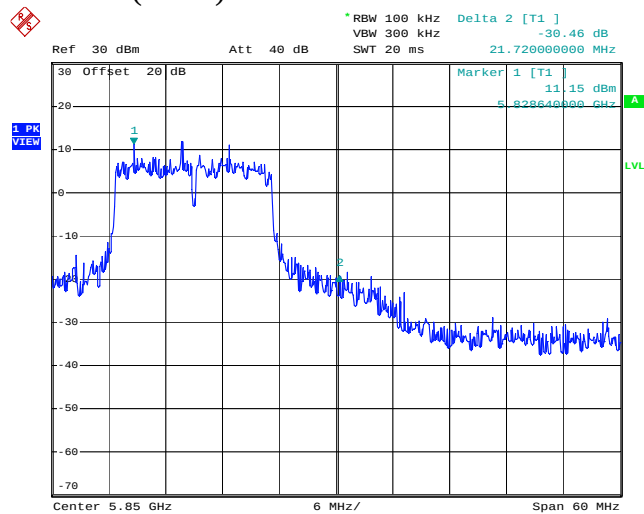
Conducted Spurious Emissions, continued

Channel BW: 20 MHz
TX-channel: 5740 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 19 dBi and 15 dBi (Directional)



Date: 14.MAR.2008 13:57:27

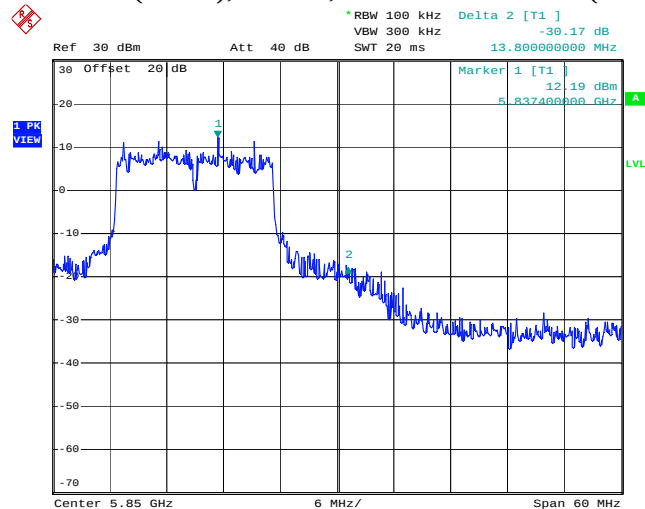
Channel BW: 20 MHz
TX-channel: 5835 MHz
Power settings: 38
Antenna Gain: 15 dBi (Omni)



Date: 14.MAR.2008 15:02:38

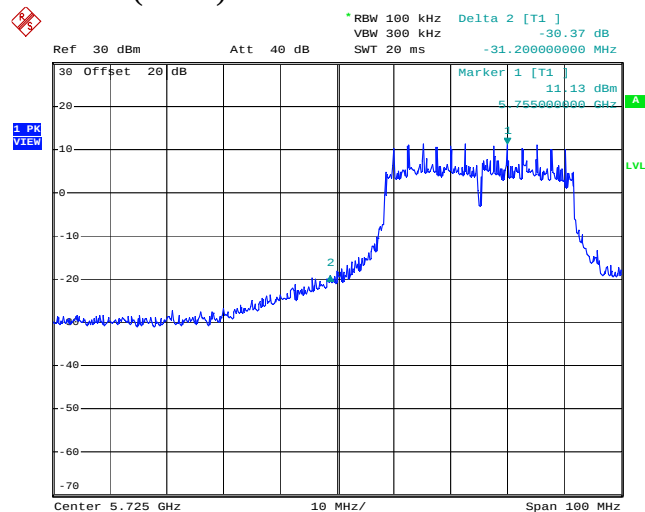
Conducted Spurious Emissions, continued

Channel BW: 20 MHz
TX-channel: 5835 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 14.MAR.2008 15:08:15

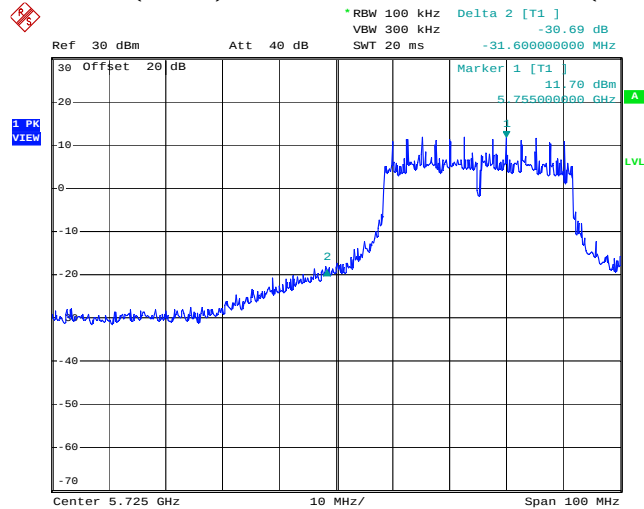
Channel BW: 40 MHz
TX-channel: 5750 MHz
Power settings: 39
Antenna Gain: 15 dBi (Omni)



Date: 14.MAR.2008 13:59:30

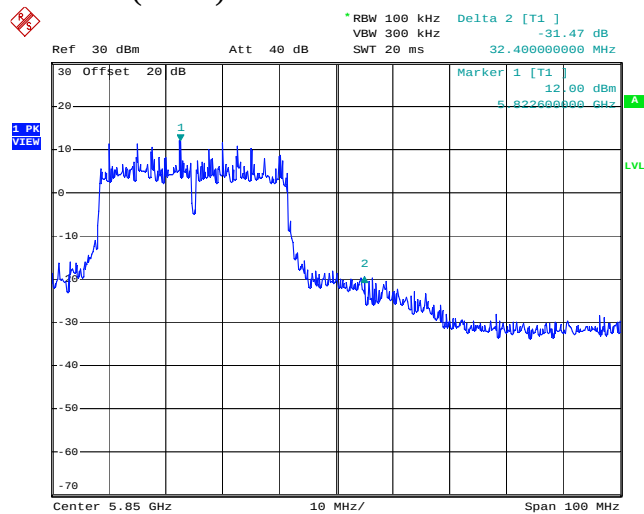
Conducted Spurious Emissions, continued

Channel BW: 40 MHz
TX-channel: 5750 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 14.MAR.2008 14:01:23

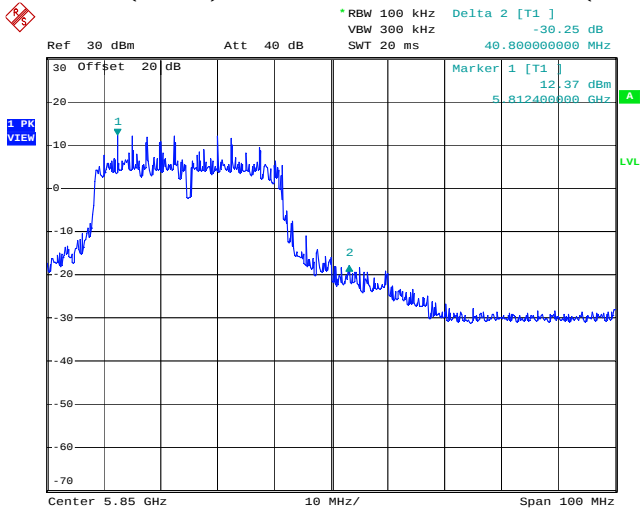
Channel BW: 40 MHz
TX-channel: 5825 MHz
Power settings: 39
Antenna Gain: 15 dBi (Omni)



Date: 14.MAR.2008 15:09:55

Conducted Spurious Emissions, continued

Channel BW: 40 MHz
TX-channel: 5825 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 14.MAR.2008 15:10:30

Clause 15.247(e) Power Spectral Density for Digitally Modulated Devices

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Conditions:

Sample Number:	1	Temperature (°C):	24
Date:	March 17-18, 2008	Humidity (%):	35
Modification State:	0	Tester:	Andrey Adelberg
		Laboratory:	Ottawa

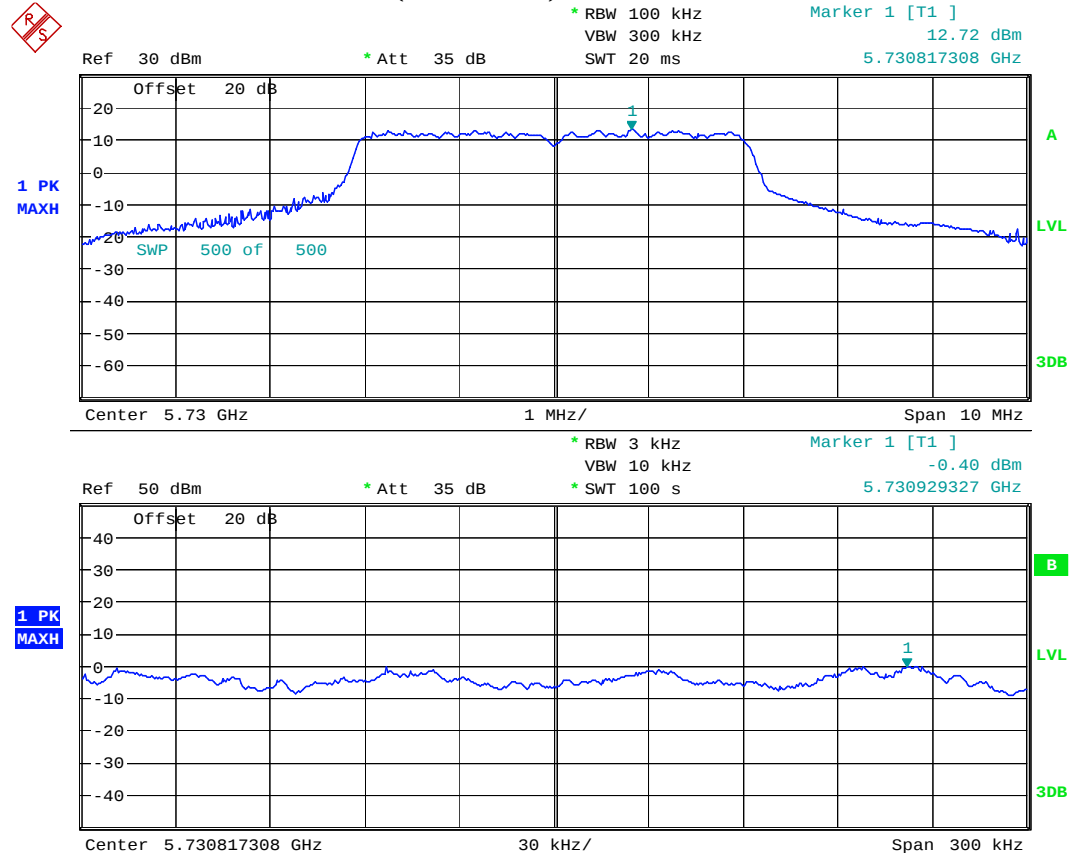
Test Results: Pass
 See attached plots and tables.

Additional Observations:

The Power Spectral Density was measured on the antenna port by means of a spectrum analyzer and following procedure described in '*PSD Option 1*' in FCC guidelines for Measurement of Digital Transmission Systems operating under Section 15.247 (because condition 2 in '*PSD Option 2*' could not be achieved, the test procedure was reverted to '*PSD Option 1*').

Power Spectral Density for Digitally Modulated Devices, continued

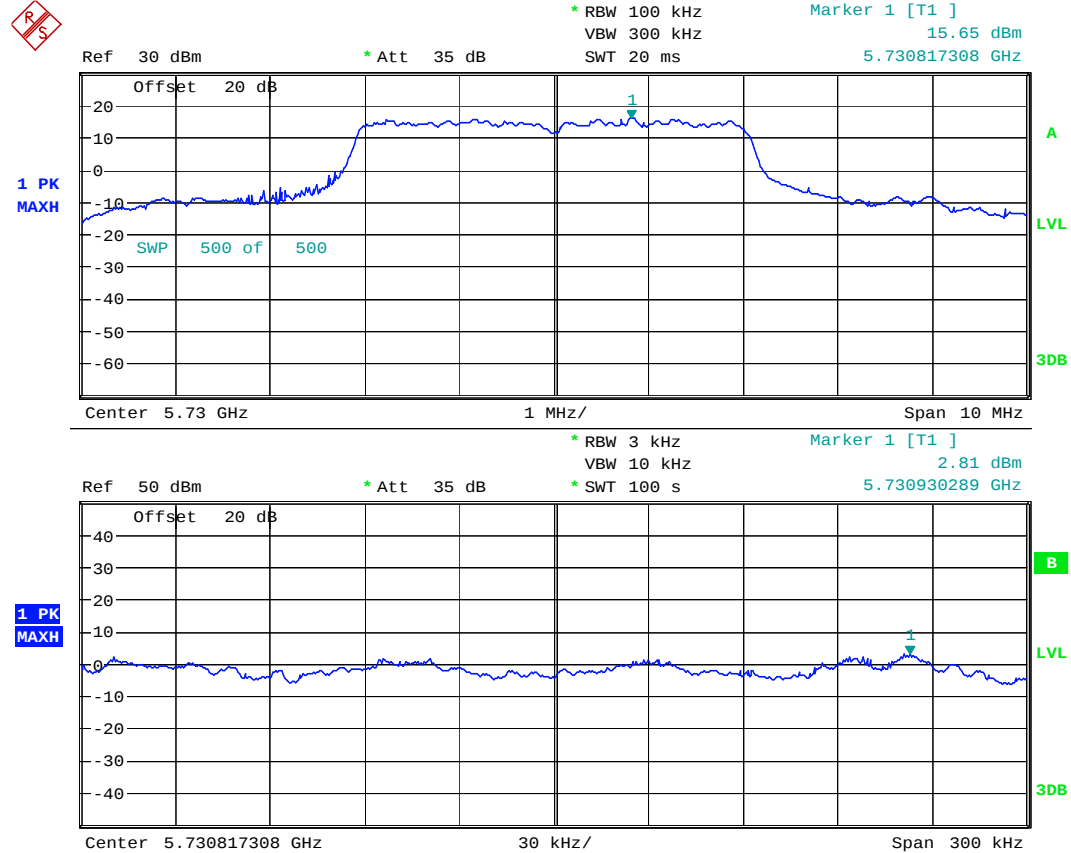
Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 33
Antenna Gain: 23 dBi (Directional)



Date: 17.MAR.2008 18:31:57

Power Spectral Density for Digitally Modulated Devices, continued

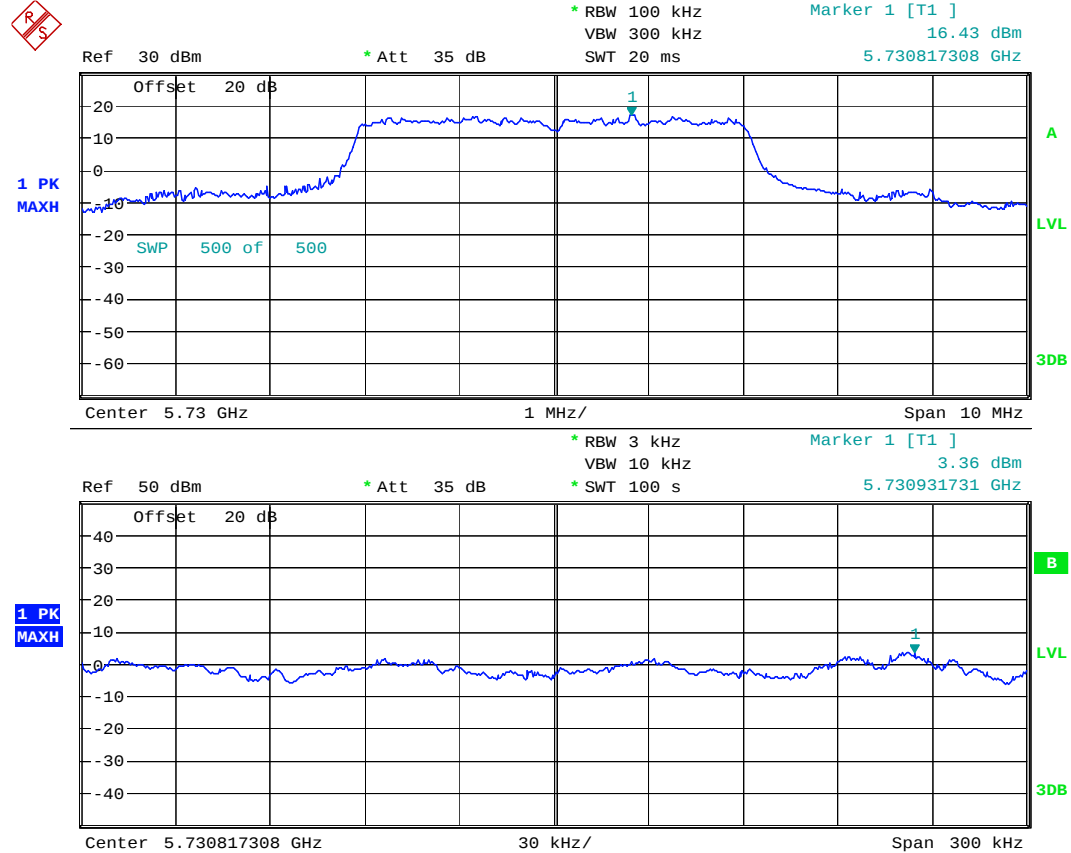
Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 37
Antenna Gain: 15 dBi (Directional)



Date: 17.MAR.2008 18:37:23

Power Spectral Density for Digitally Modulated Devices, continued

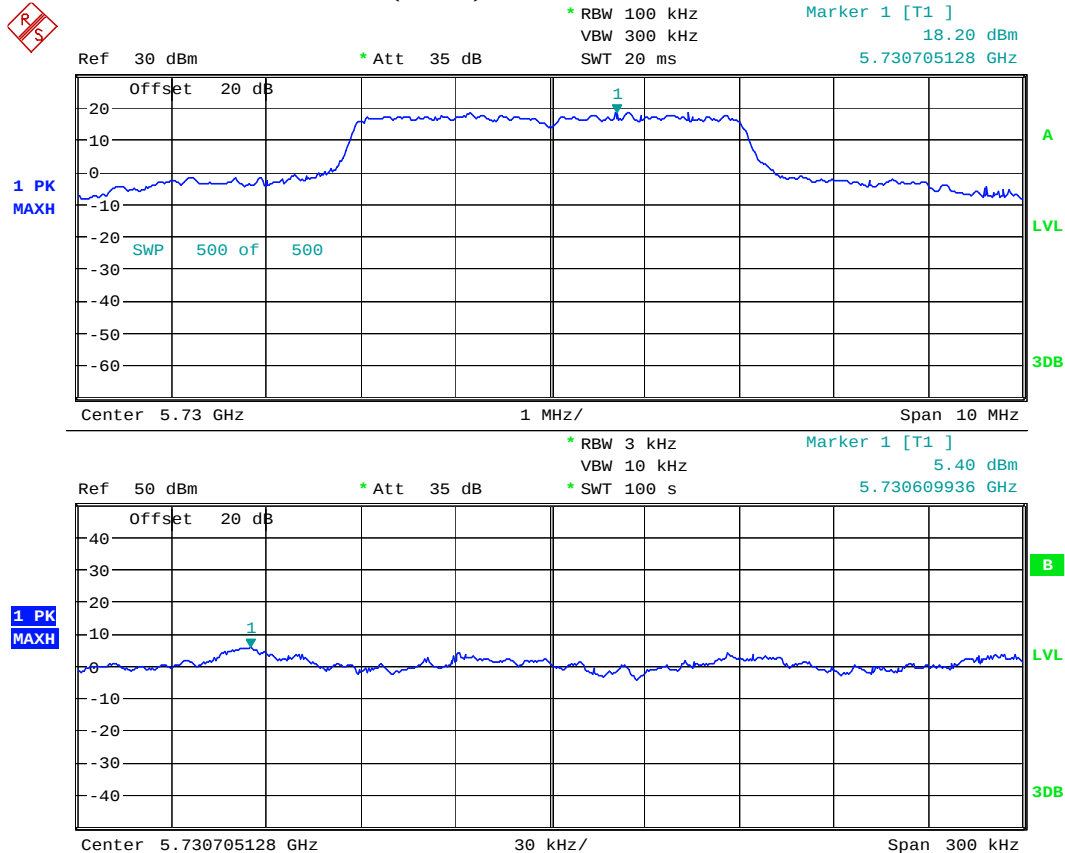
Channel BW: 5 MHz
 TX-channel: 5730 MHz
 Power settings: 38
 Antenna Gain: 19 dBi (Directional), 15 dBi (Omni)



Date: 17.MAR.2008 18:41:32

Power Spectral Density for Digitally Modulated Devices, continued

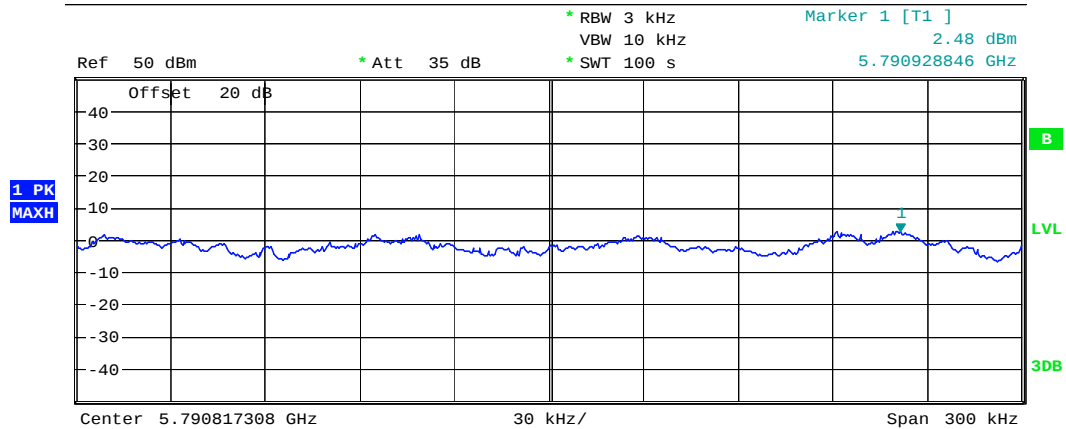
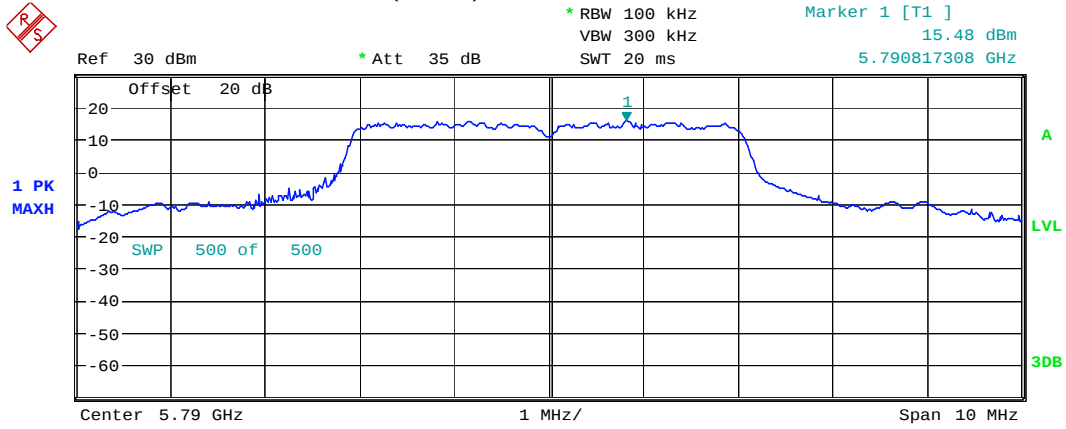
Channel BW: 5 MHz
TX-channel: 5730 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni)



Date: 17.MAR.2008 18:47:45

Power Spectral Density for Digitally Modulated Devices, continued

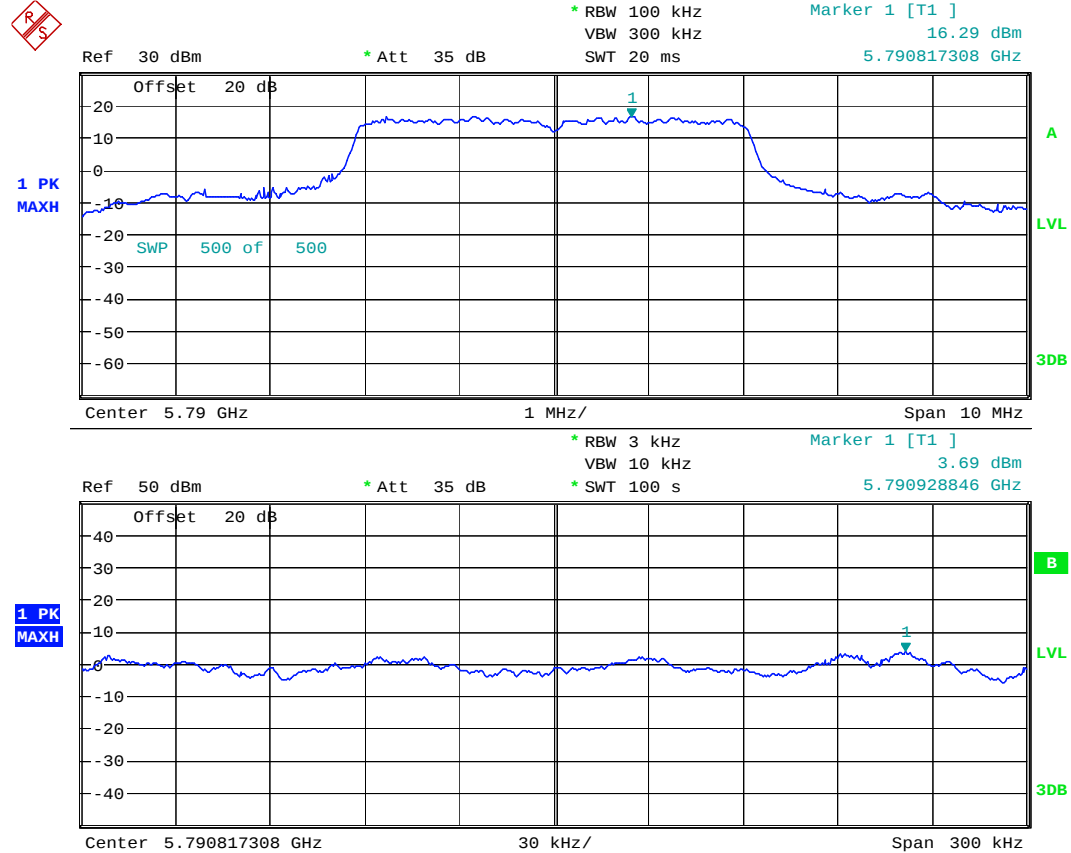
Channel BW: 5 MHz
TX-channel: 5790 MHz
Power settings: 36
Antenna Gain: 15 dBi (Omni)



Date: 17.MAR.2008 18:56:31

Power Spectral Density for Digitally Modulated Devices, continued

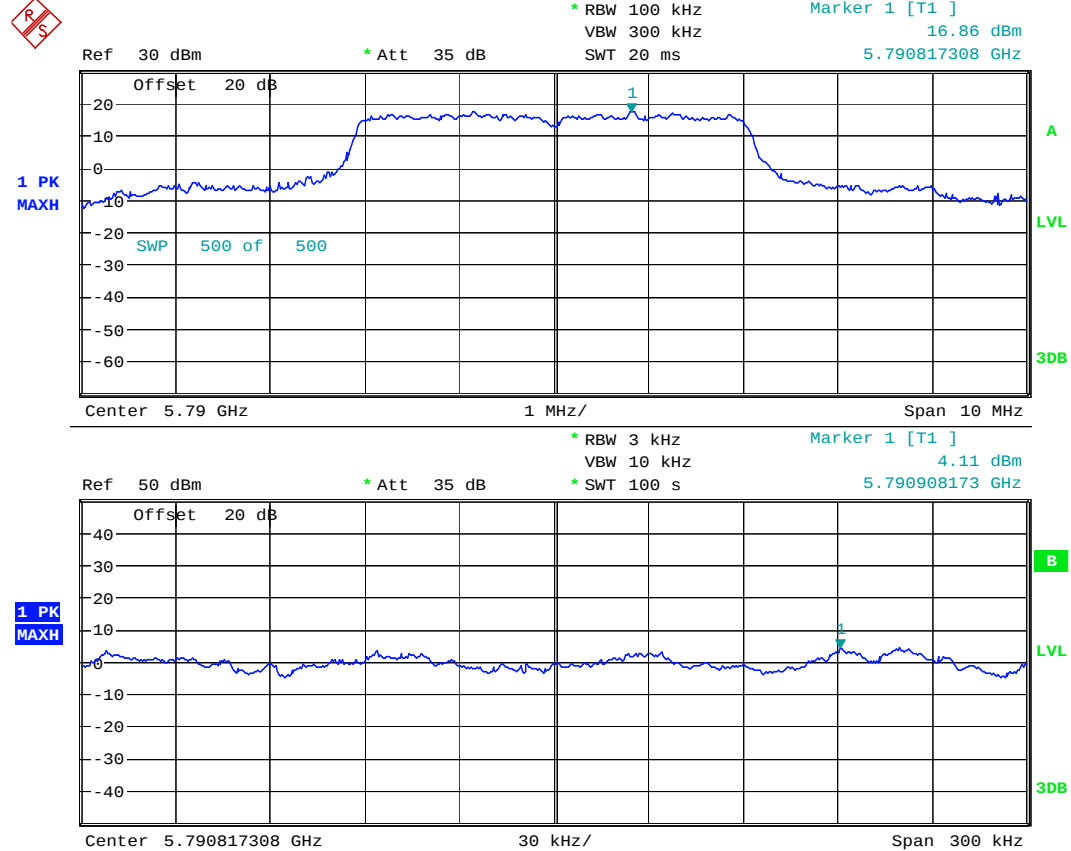
Channel BW: 5 MHz
TX-channel: 5790 MHz
Power settings: 37
Antenna Gain: 23 dBi (Directional)



Date: 17.MAR.2008 19:05:34

Power Spectral Density for Digitally Modulated Devices, continued

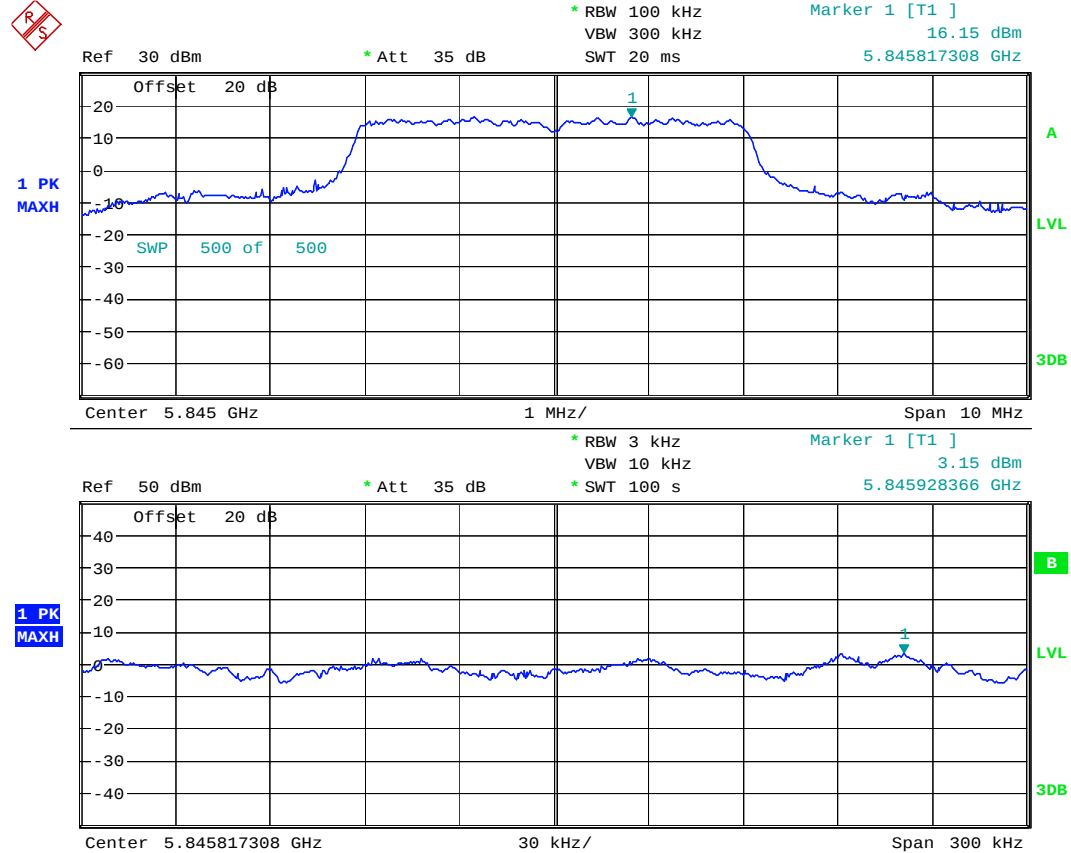
Channel BW: 5 MHz
TX-channel: 5790 MHz
Power settings: 39
Antenna Gain: 19 dBi (Directional)



Date: 17.MAR.2008 19:10:31

Power Spectral Density for Digitally Modulated Devices, continued

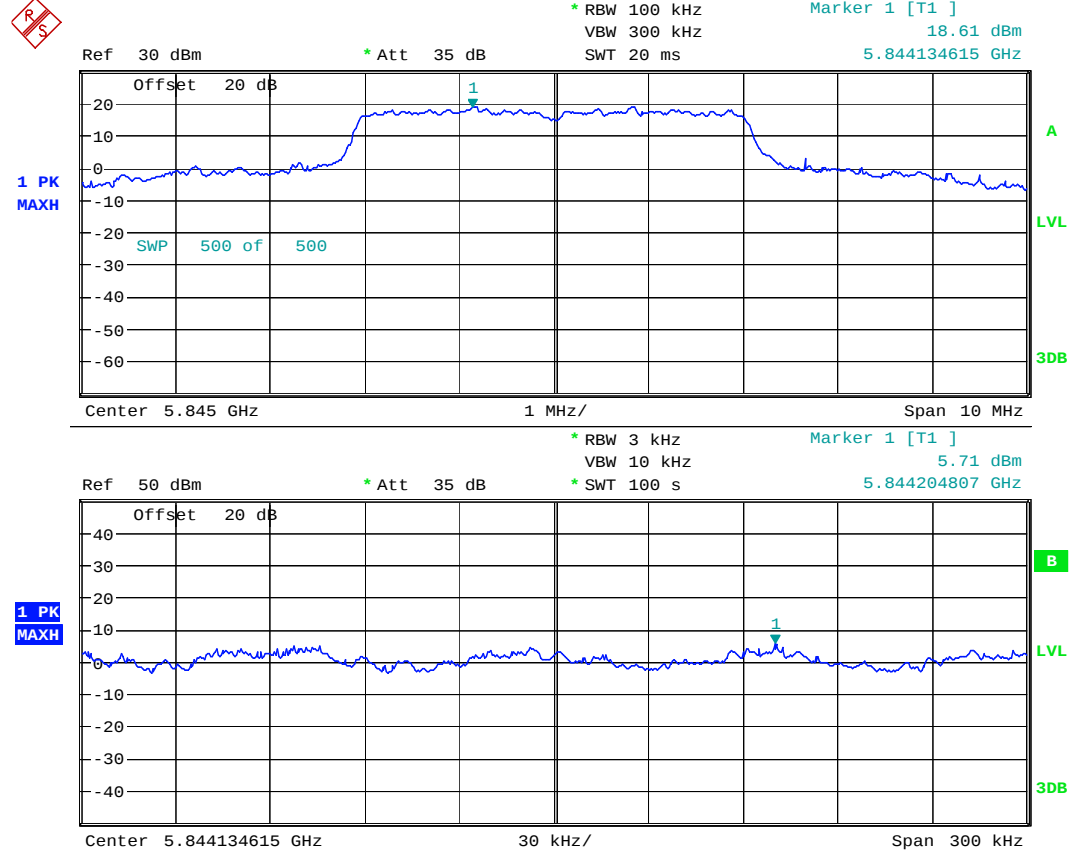
Channel BW: 5 MHz
TX-channel: 5845 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)



Date: 17.MAR.2008 19:14:03

Power Spectral Density for Digitally Modulated Devices, continued

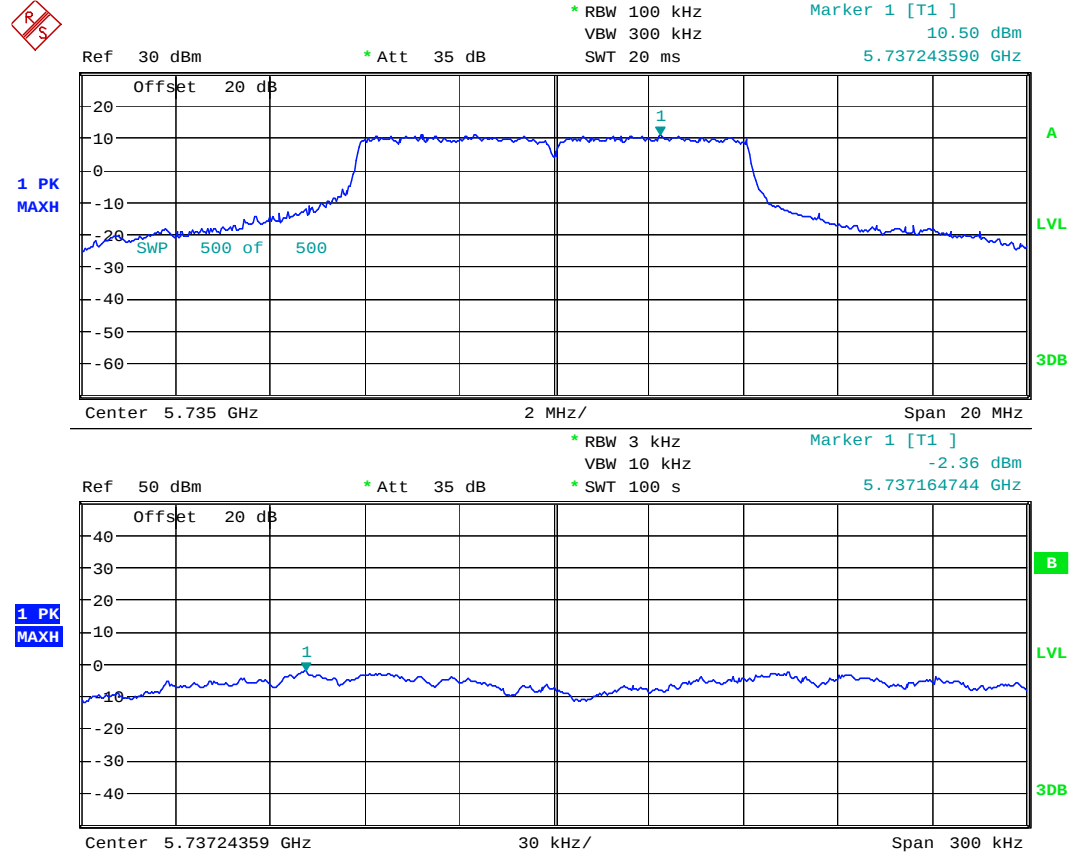
Channel BW: 5 MHz
 TX-channel: 5845 MHz
 Power settings: 40
 Antenna Gain: 23 dBi, 15 dBi and 19 dBi (Directional), 10 dBi (Omni)



Date: 17.MAR.2008 19:18:23

Power Spectral Density for Digitally Modulated Devices, continued

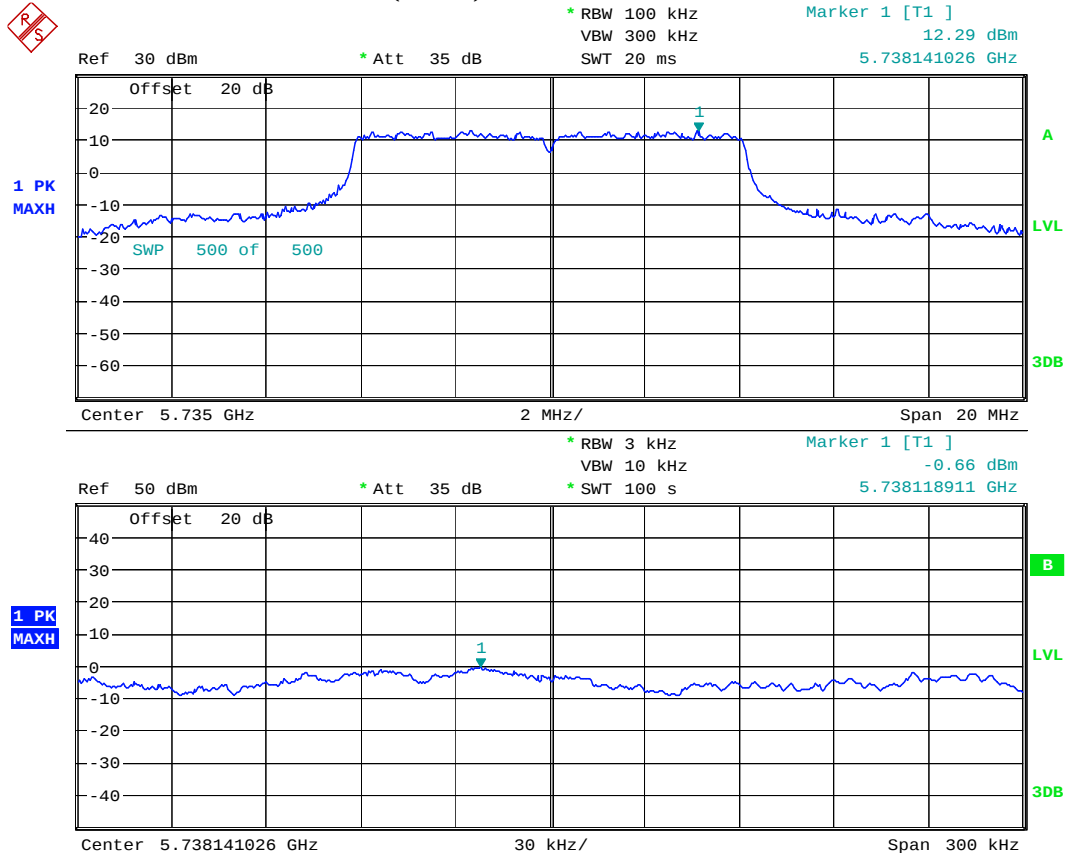
Channel BW: 10 MHz
TX-channel: 5735 MHz
Power settings: 35
Antenna Gain: 23 dBi (Directional)



Date: 17.MAR.2008 19:26:07

Power Spectral Density for Digitally Modulated Devices, continued

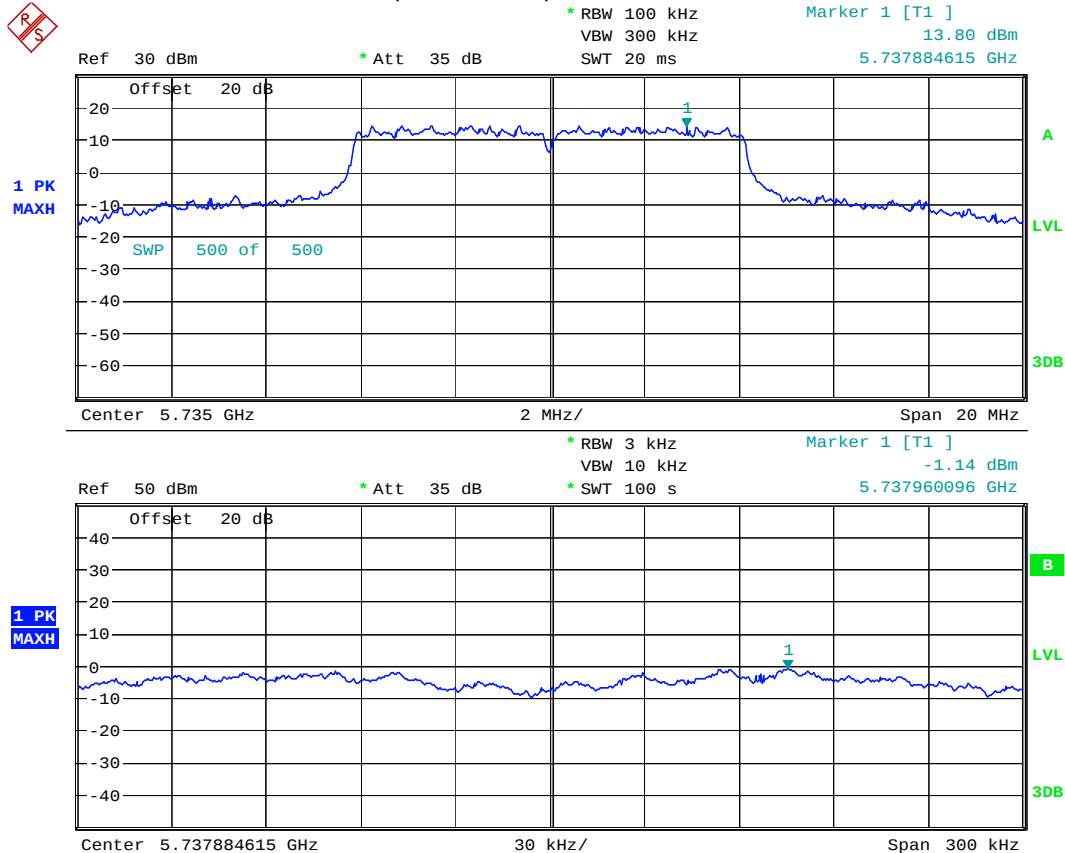
Channel BW: 10 MHz
TX-channel: 5735 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)



Date: 17.MAR.2008 19:31:42

Power Spectral Density for Digitally Modulated Devices, continued

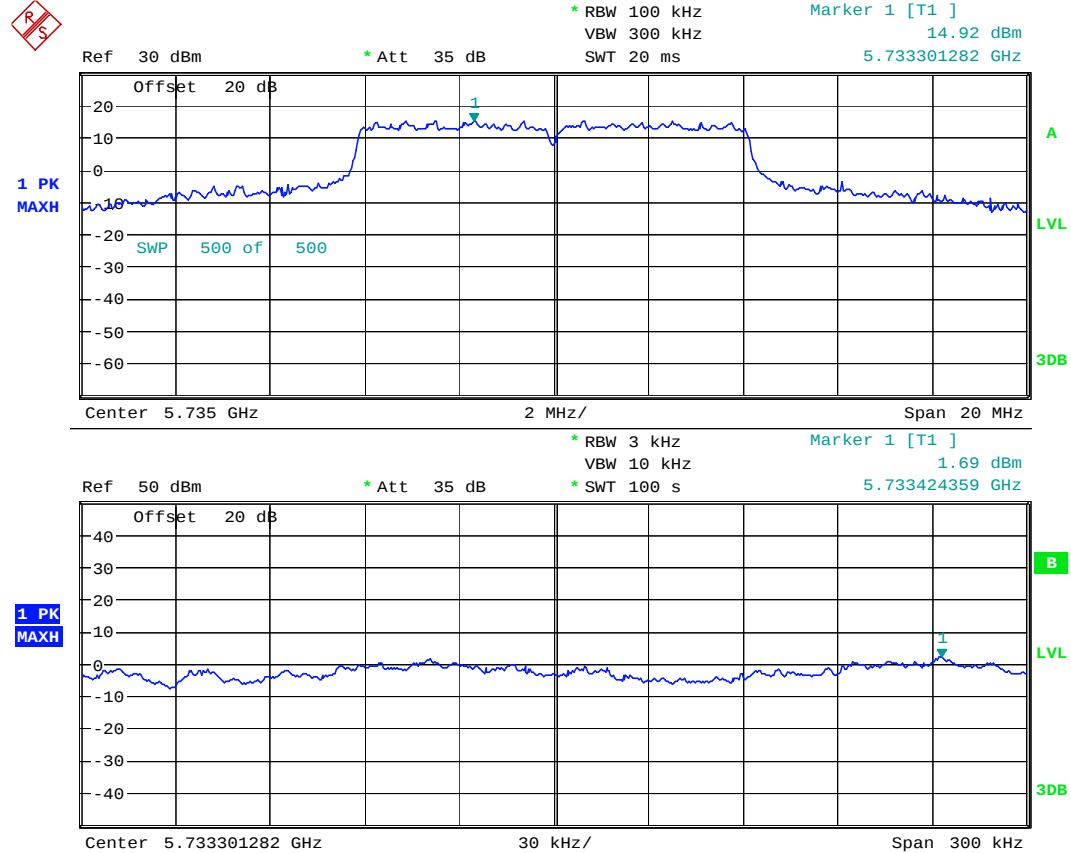
Channel BW: 10 MHz
TX-channel: 5735 MHz
Power settings: 38
Antenna Gain: 19 dBi (Directional)



Date: 17.MAR.2008 19:36:40

Power Spectral Density for Digitally Modulated Devices, continued

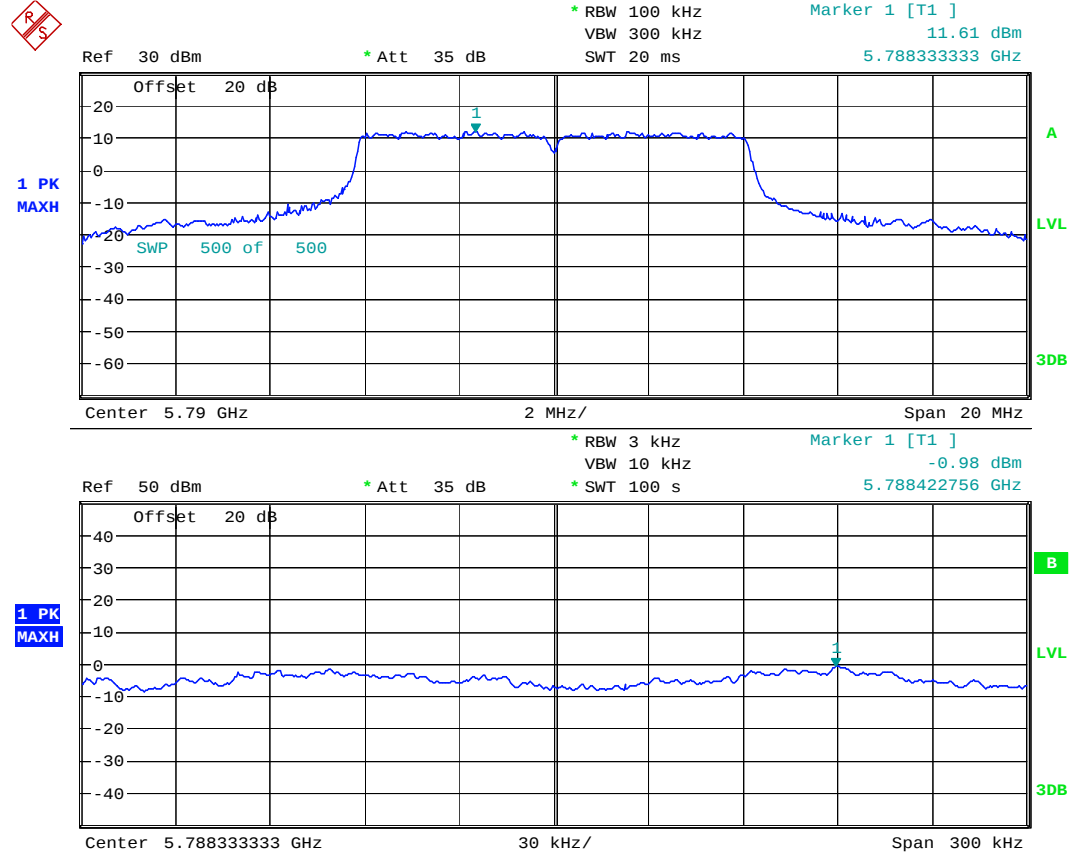
Channel BW: 10 MHz
 TX-channel: 5735 MHz
 Power settings: 40
 Antenna Gain: 10 dBi (Omni), 15 dBi (Directional)



Date: 17.MAR.2008 19:44:53

Power Spectral Density for Digitally Modulated Devices, continued

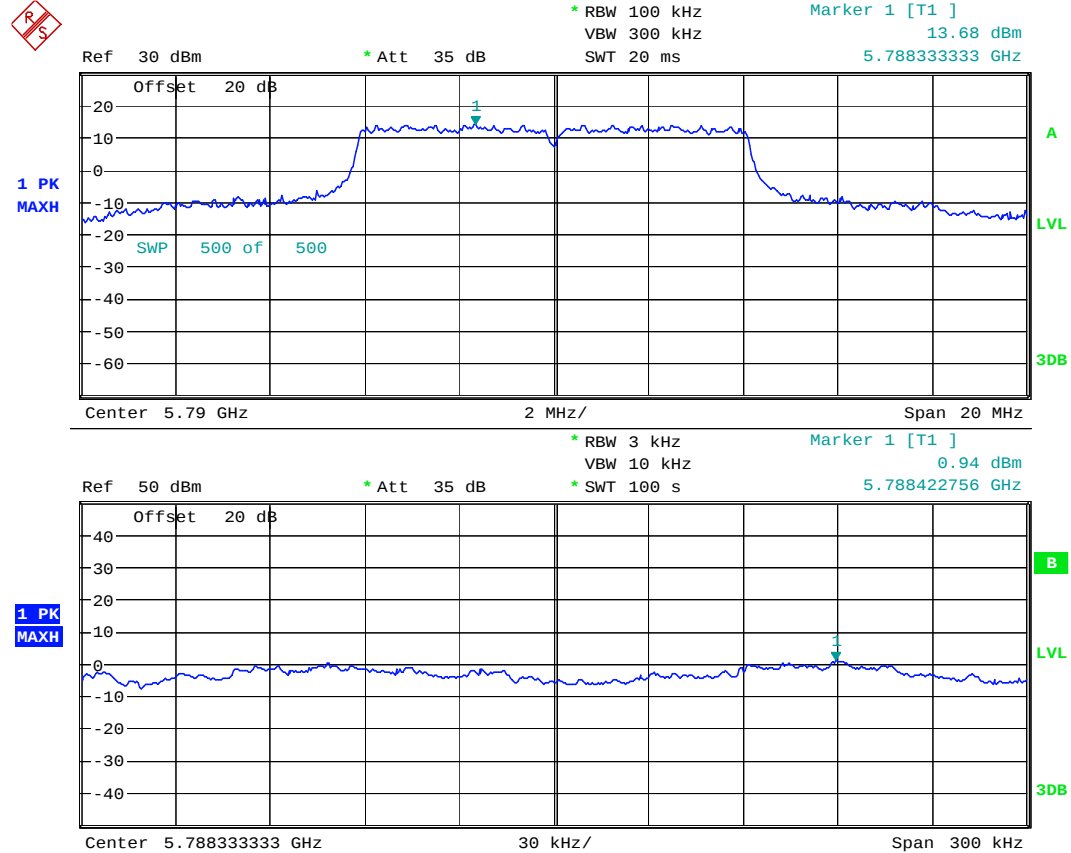
Channel BW: 10 MHz
TX-channel: 5790 MHz
Power settings: 36
Antenna Gain: 15 dBi (Omni)



Date: 17.MAR.2008 19:54:24

Power Spectral Density for Digitally Modulated Devices, continued

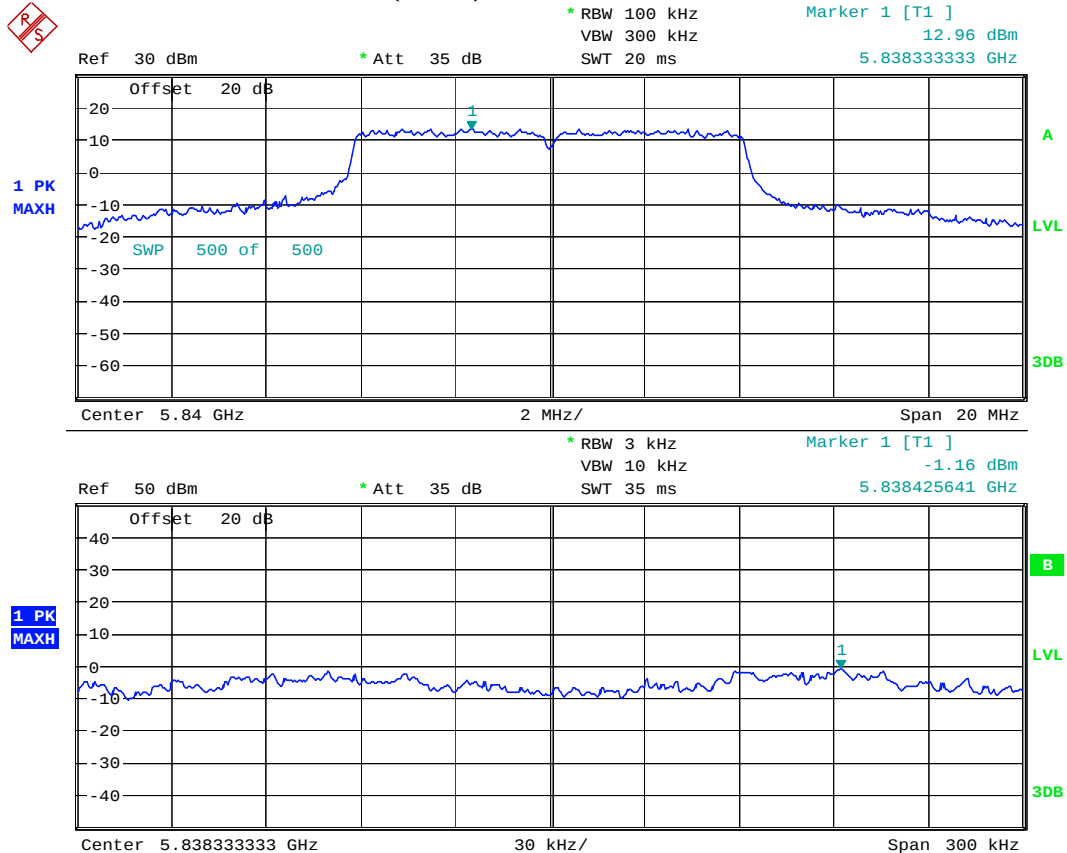
Channel BW: 10 MHz
 TX-channel: 5790 MHz
 Power settings: 40
 Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 17.MAR.2008 20:08:28

Power Spectral Density for Digitally Modulated Devices, continued

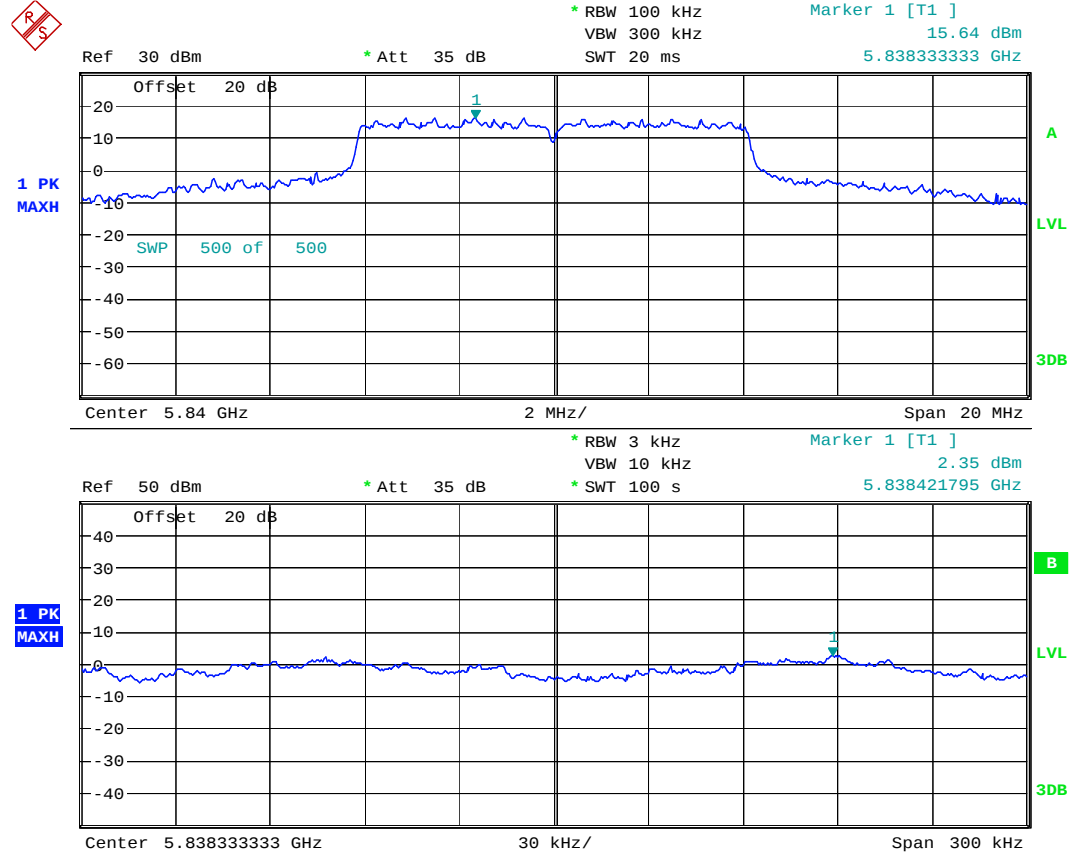
Channel BW: 10 MHz
TX-channel: 5840 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)



Date: 17.MAR.2008 20:43:59

Power Spectral Density for Digitally Modulated Devices, continued

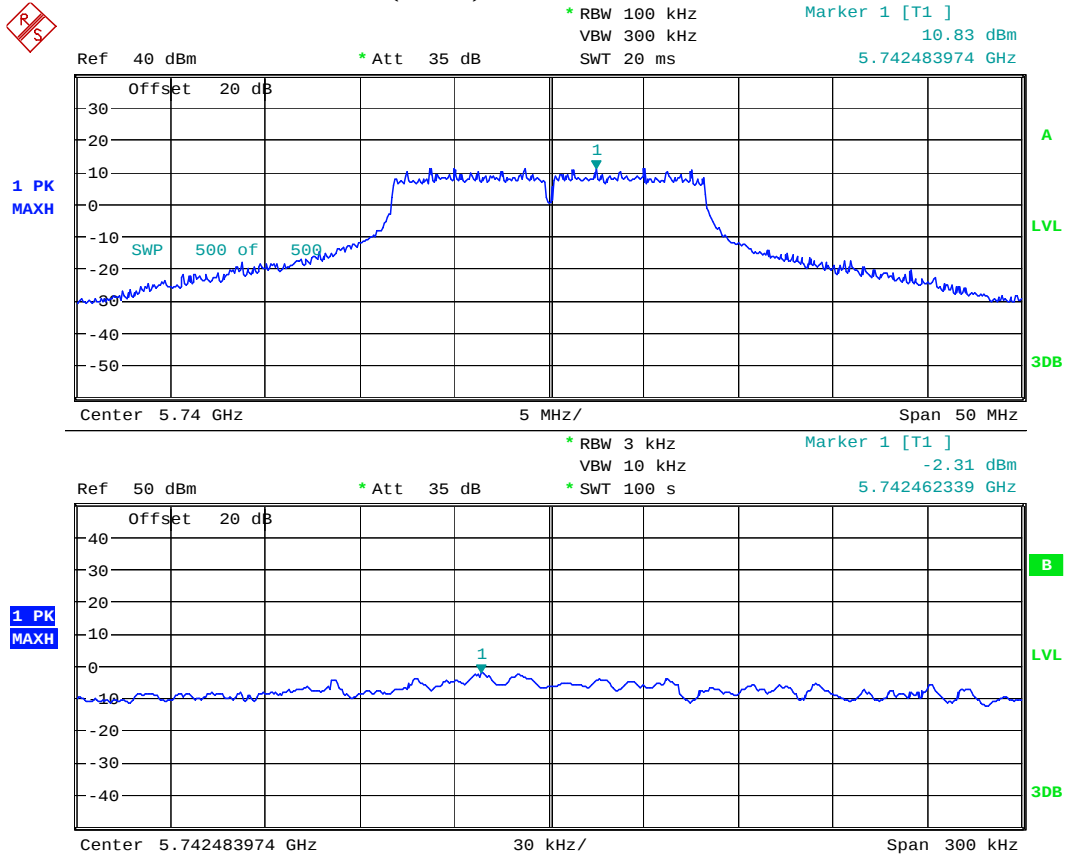
Channel BW: 10 MHz
 TX-channel: 5840 MHz
 Power settings: 40
 Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 17.MAR.2008 20:55:51

Power Spectral Density for Digitally Modulated Devices, continued

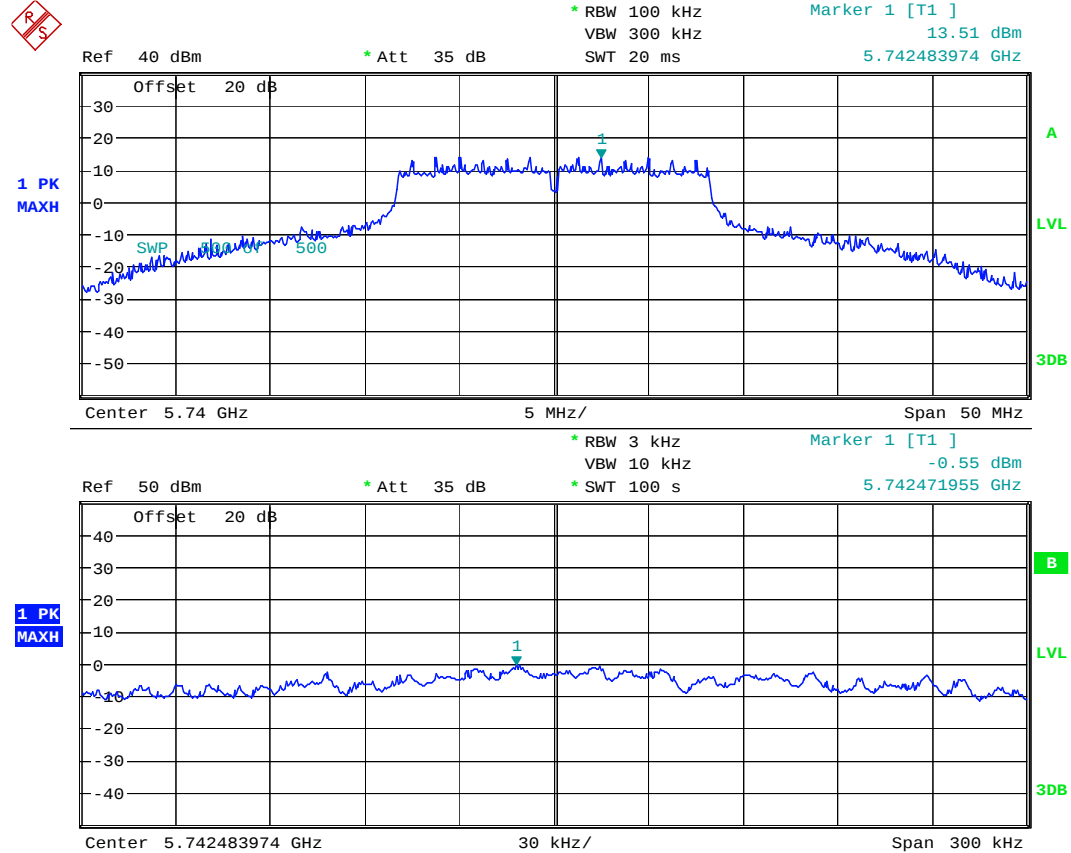
Channel BW: 20 MHz
TX-channel: 5740 MHz
Power settings: 37
Antenna Gain: 15 dBi (Omni)



Date: 18.MAR.2008 13:18:49

Power Spectral Density for Digitally Modulated Devices, continued

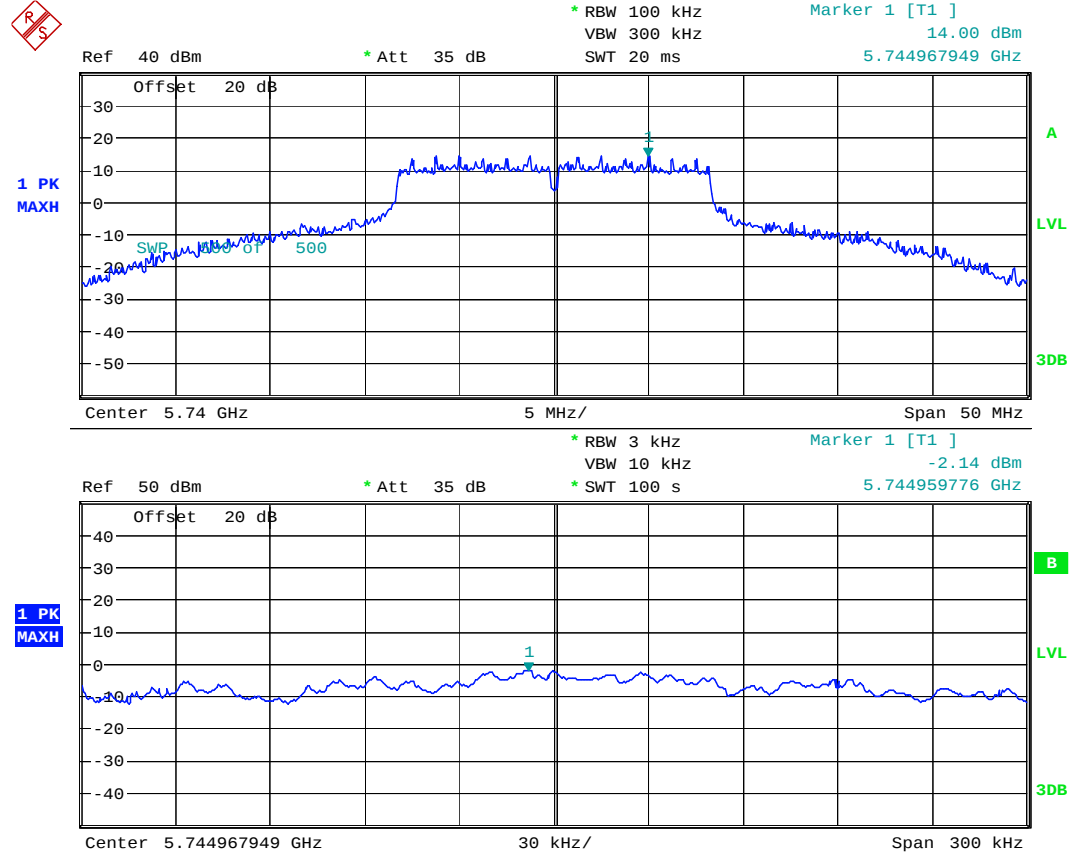
Channel BW: 20 MHz
TX-channel: 5740 MHz
Power settings: 39
Antenna Gain: 23 dBi (Directional)



Date: 18.MAR.2008 13:23:09

Power Spectral Density for Digitally Modulated Devices, continued

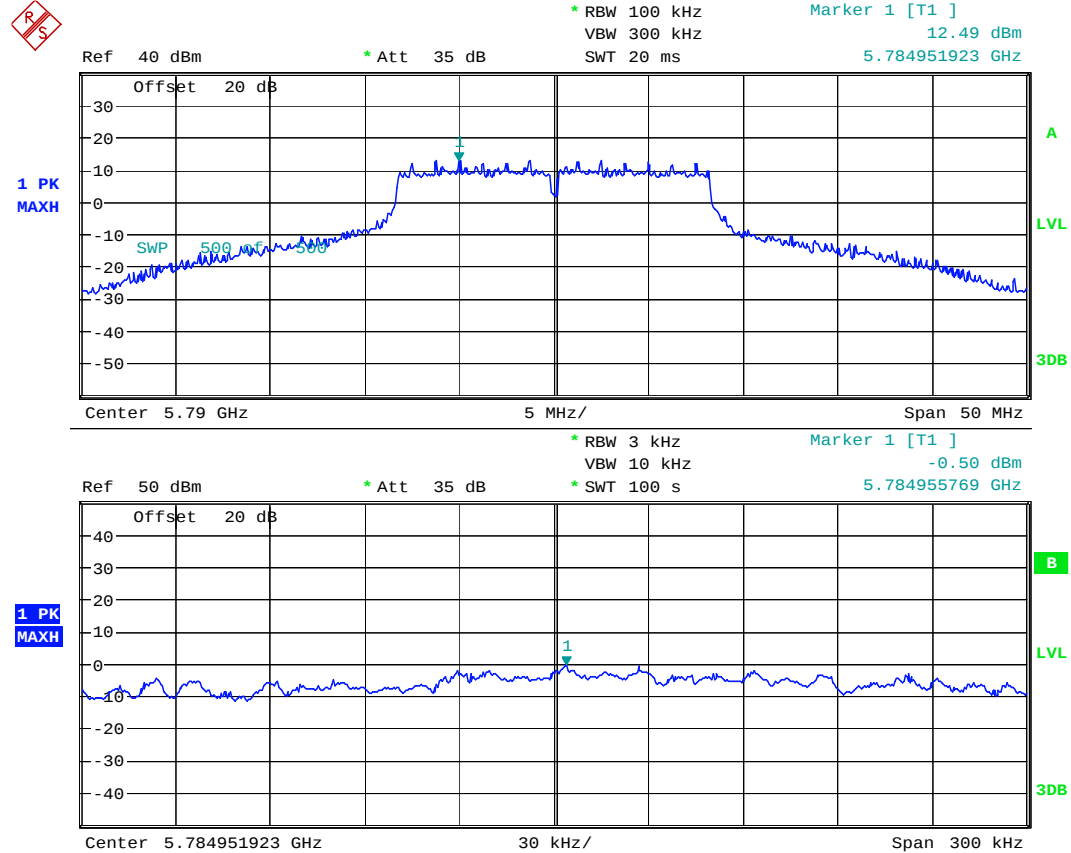
Channel BW: 20 MHz
 TX-channel: 5740 MHz
 Power settings: 40
 Antenna Gain: 10 dBi (Omni), 19 dBi and 15 dBi (Directional)



Date: 18.MAR.2008 13:26:26

Power Spectral Density for Digitally Modulated Devices, continued

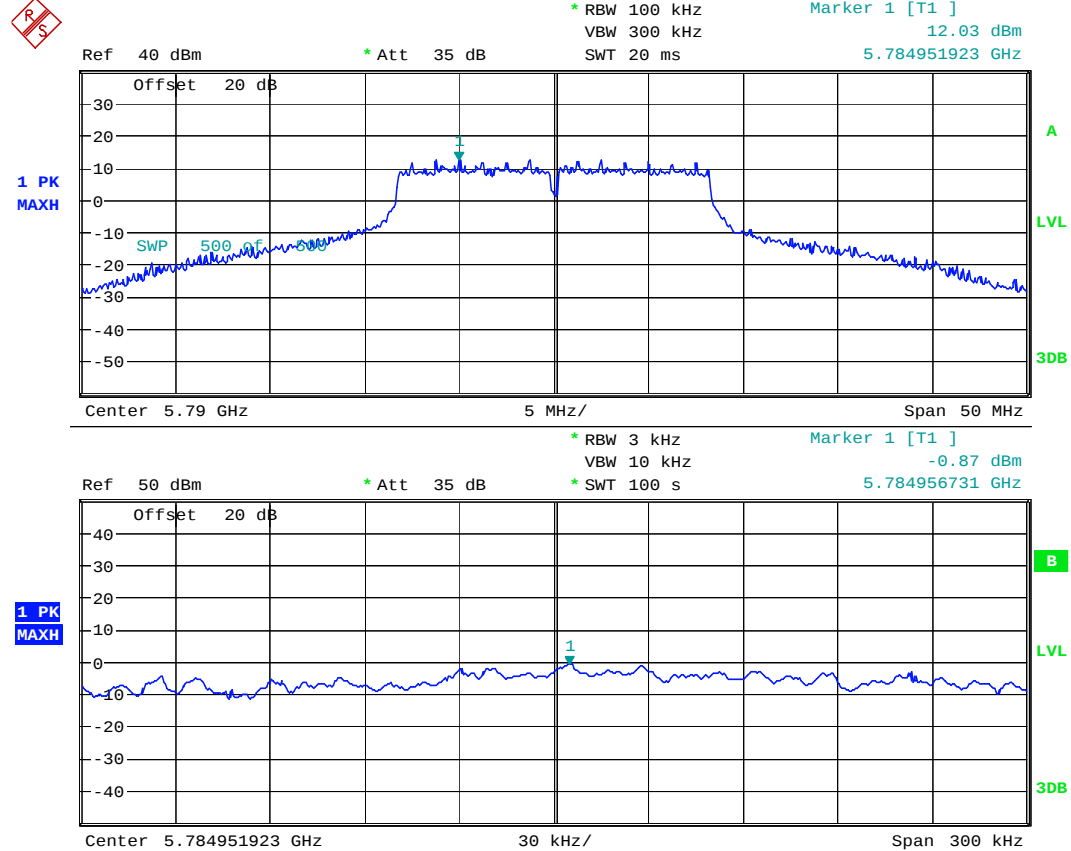
Channel BW: 20 MHz
TX-channel: 5790 MHz
Power settings: 38
Antenna Gain: 15 dBi (Omni)



Date: 18.MAR.2008 13:39:19

Power Spectral Density for Digitally Modulated Devices, continued

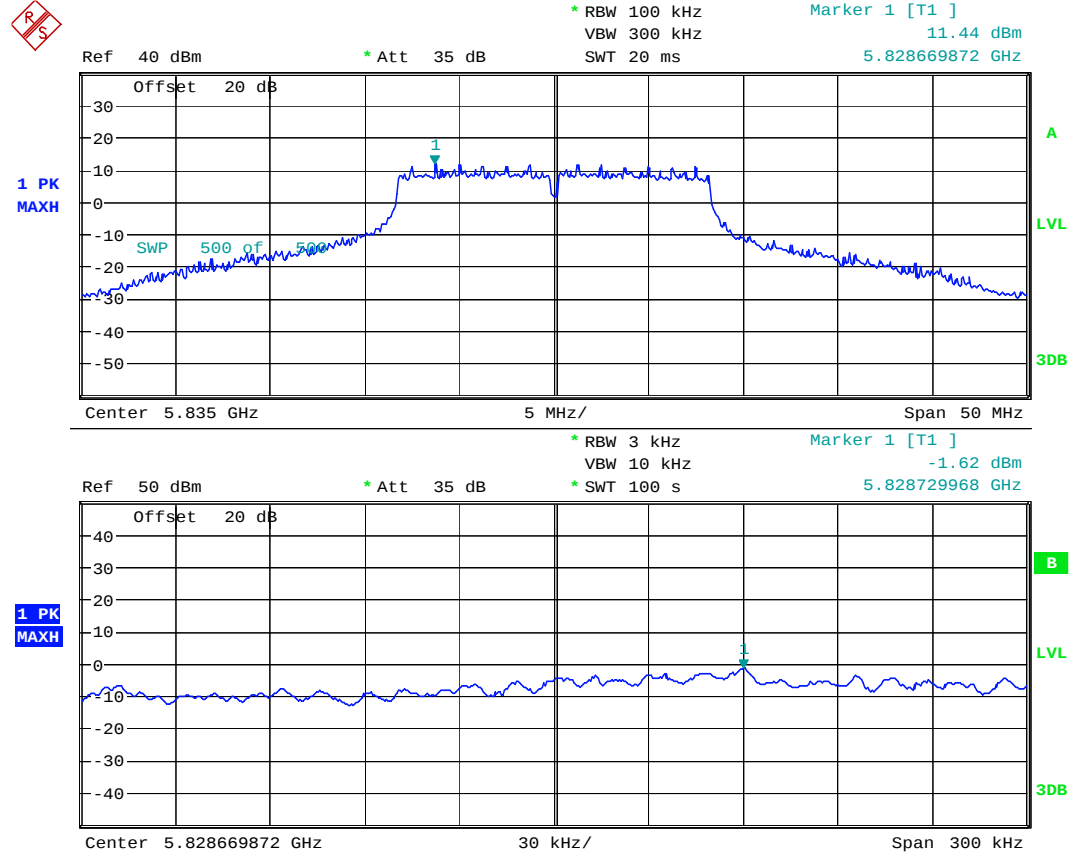
Channel BW: 20 MHz
 TX-channel: 5790 MHz
 Power settings: 40
 Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 18.MAR.2008 13:34:39

Power Spectral Density for Digitally Modulated Devices, continued

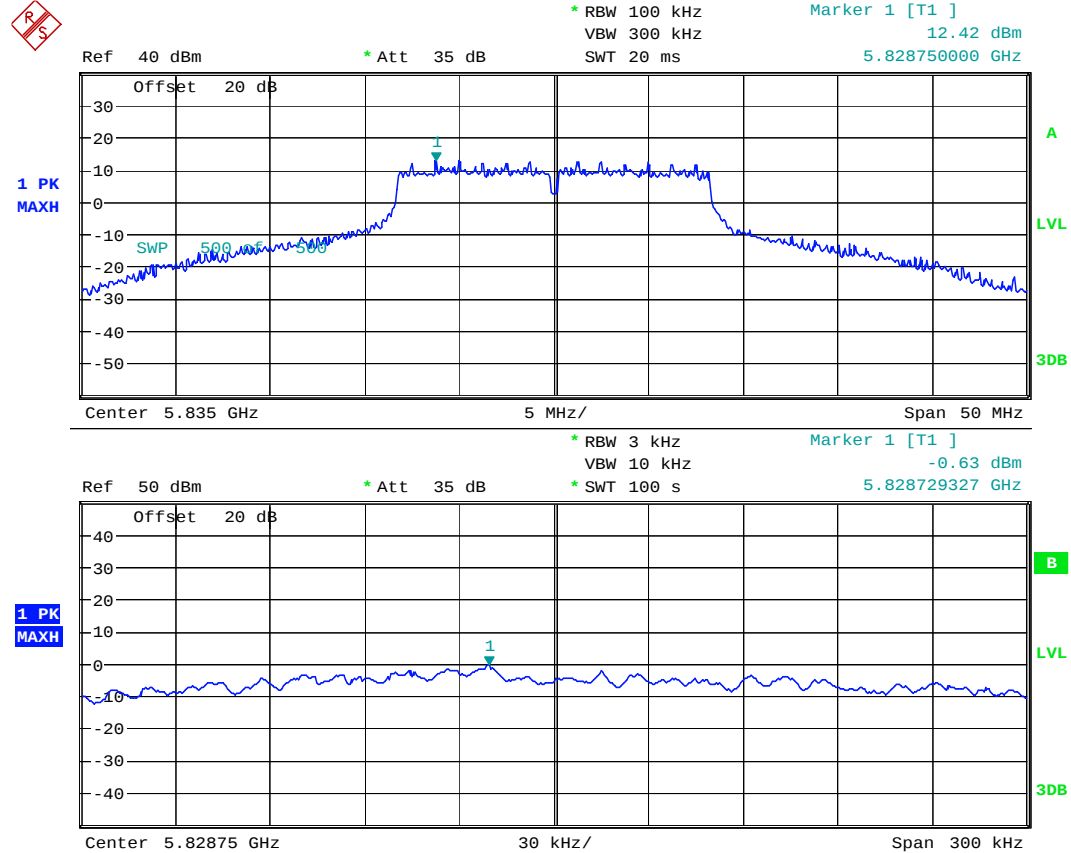
Channel BW: 20 MHz
TX-channel: 5835 MHz
Power settings: 38
Antenna Gain: 15 dBi (Omni)



Date: 18.MAR.2008 13:42:35

Power Spectral Density for Digitally Modulated Devices, continued

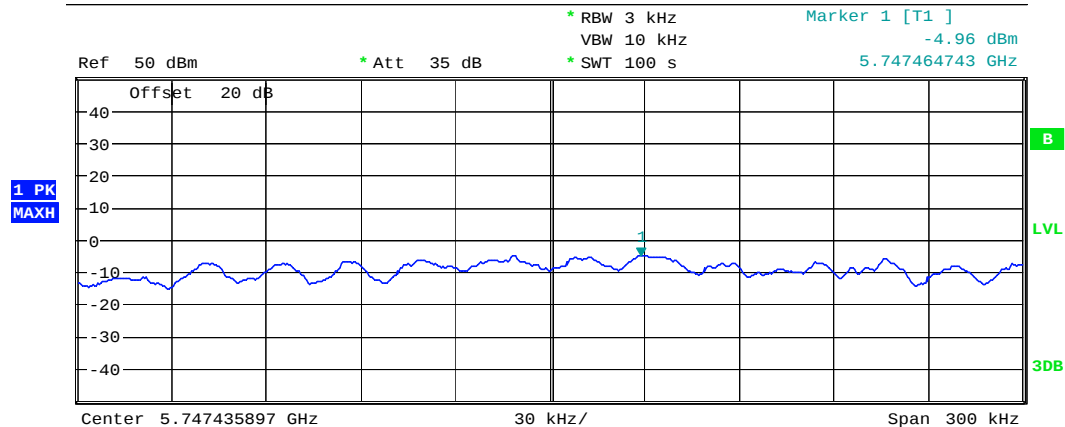
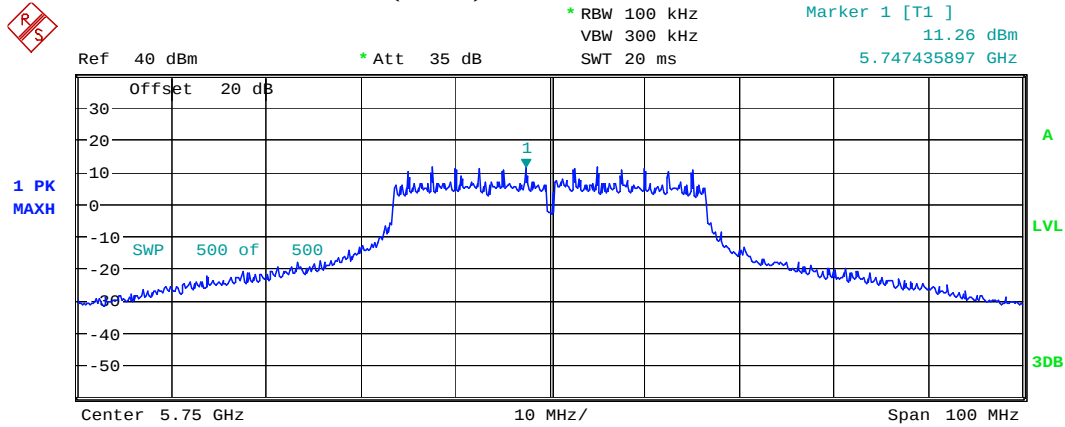
Channel BW: 20 MHz
 TX-channel: 5835 MHz
 Power settings: 40
 Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 18.MAR.2008 13:45:53

Power Spectral Density for Digitally Modulated Devices, continued

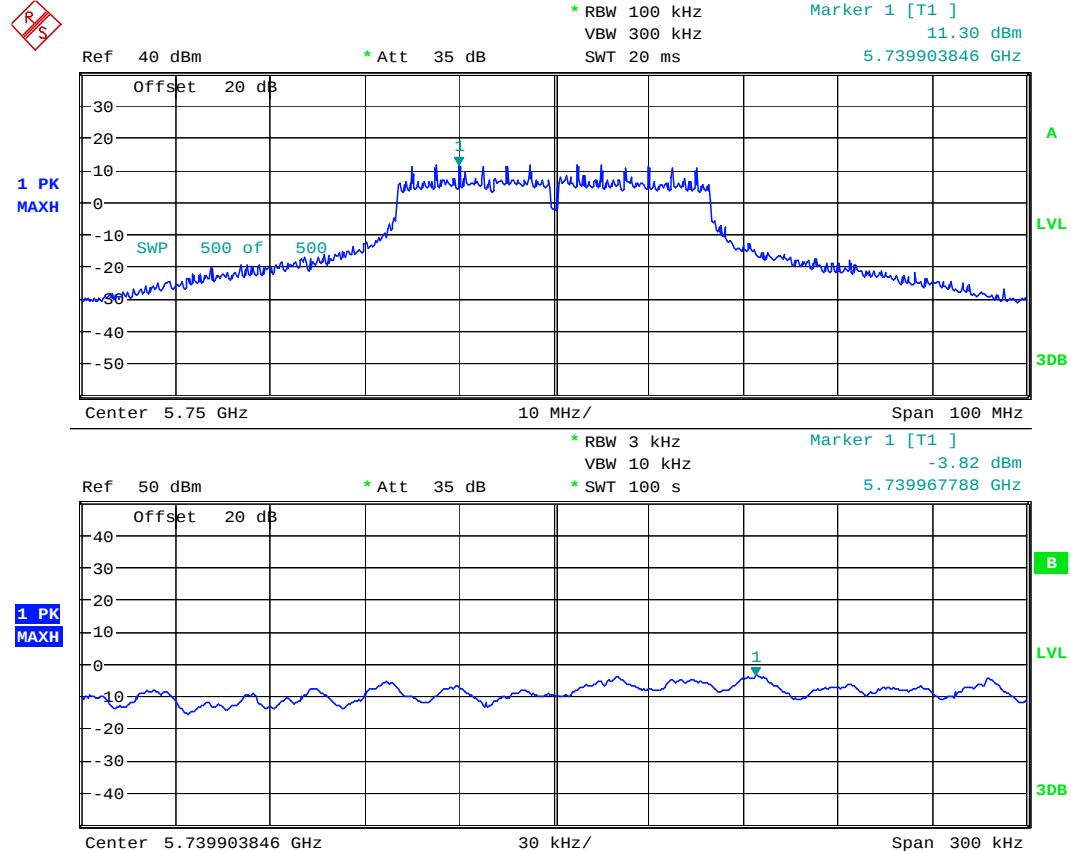
Channel BW: 40 MHz
TX-channel: 5750 MHz
Power settings: 39
Antenna Gain: 15 dBi (Omni)



Date: 18.MAR.2008 13:51:23

Power Spectral Density for Digitally Modulated Devices, continued

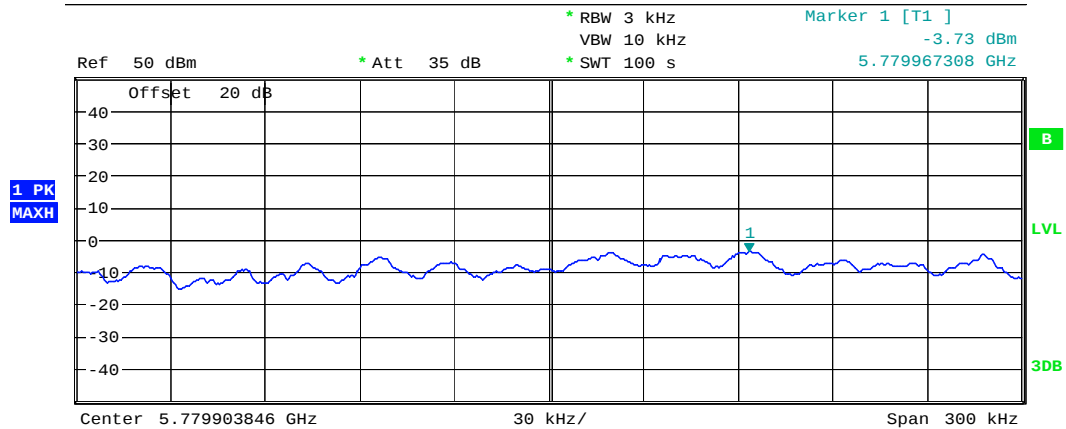
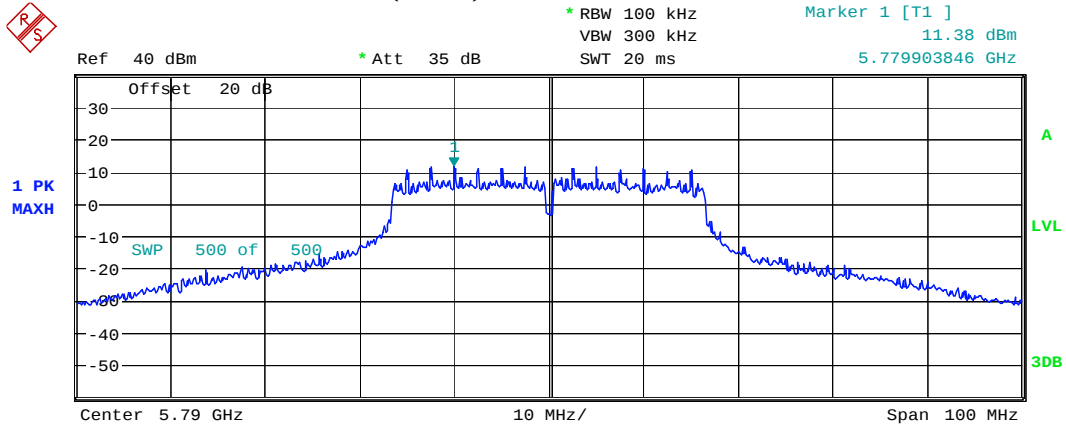
Channel BW: 40 MHz
TX-channel: 5750 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 18.MAR.2008 13:54:29

Power Spectral Density for Digitally Modulated Devices, continued

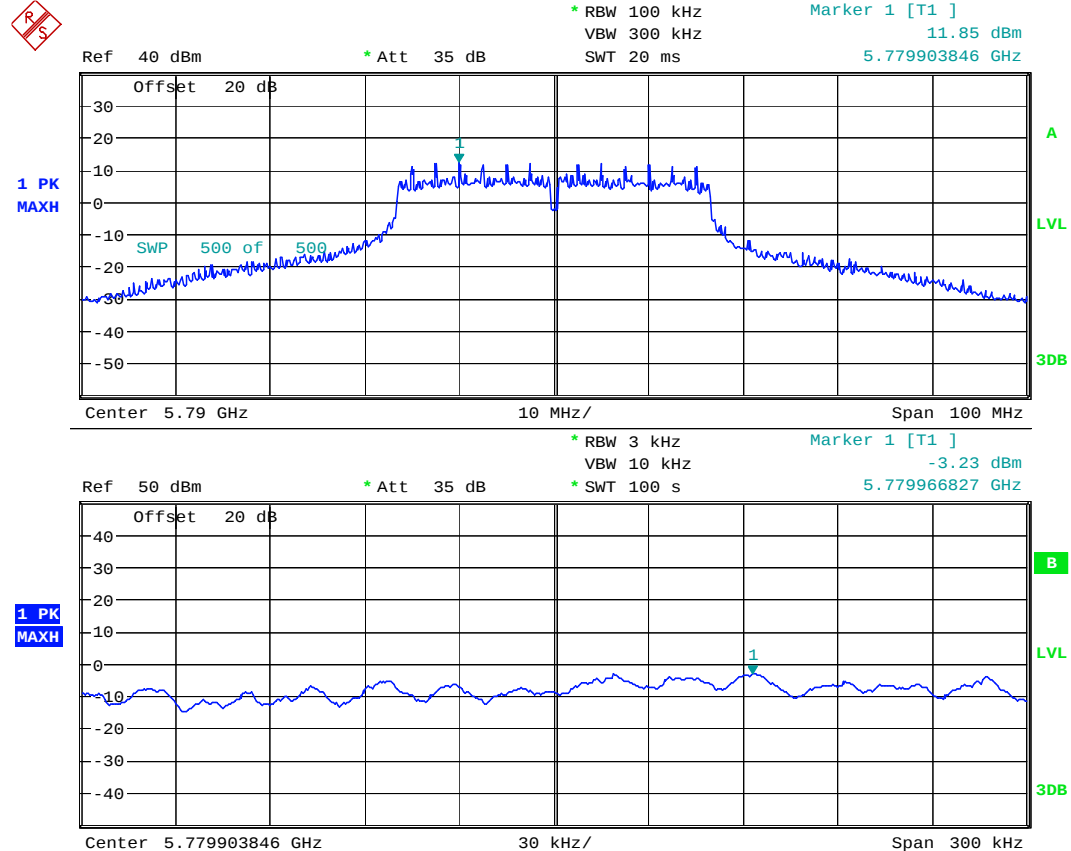
Channel BW: 40 MHz
TX-channel: 5790 MHz
Power settings: 39
Antenna Gain: 15 dBi (Omni)



Date: 18.MAR.2008 13:58:54

Power Spectral Density for Digitally Modulated Devices, continued

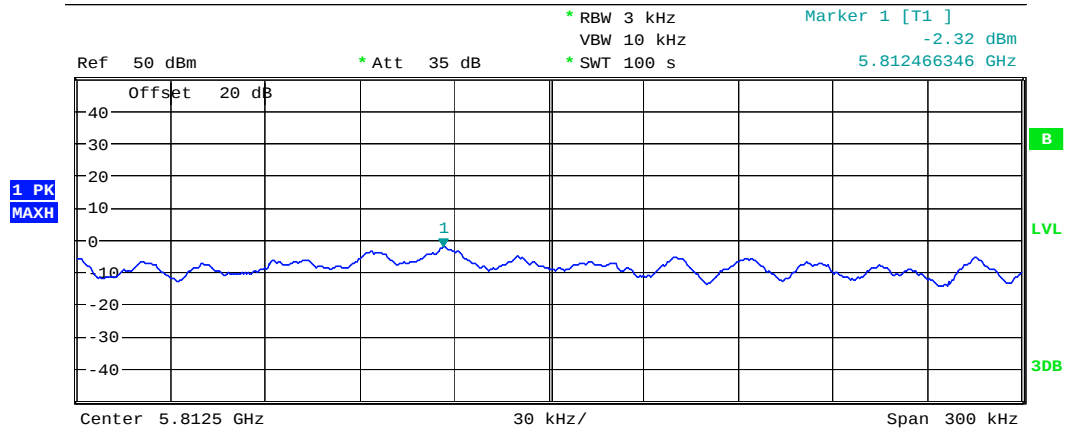
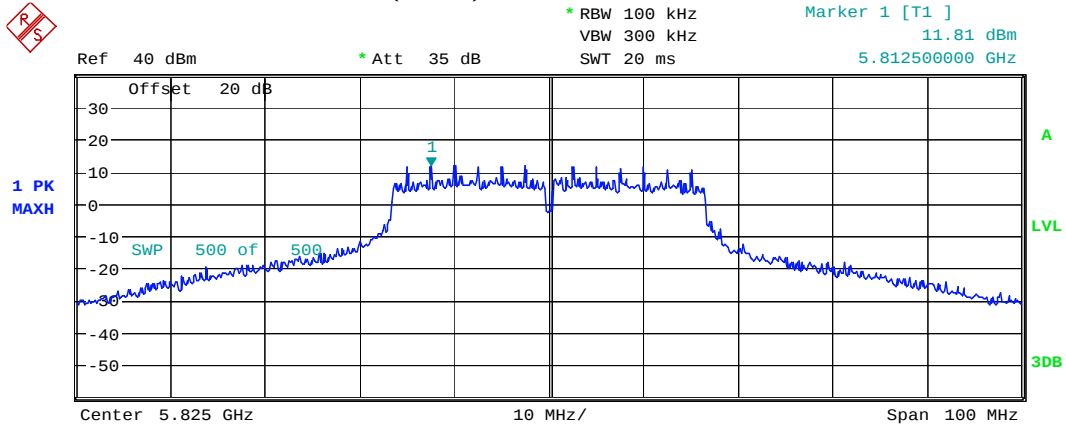
Channel BW: 40 MHz
 TX-channel: 5790 MHz
 Power settings: 40
 Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 18.MAR.2008 14:02:07

Power Spectral Density for Digitally Modulated Devices, continued

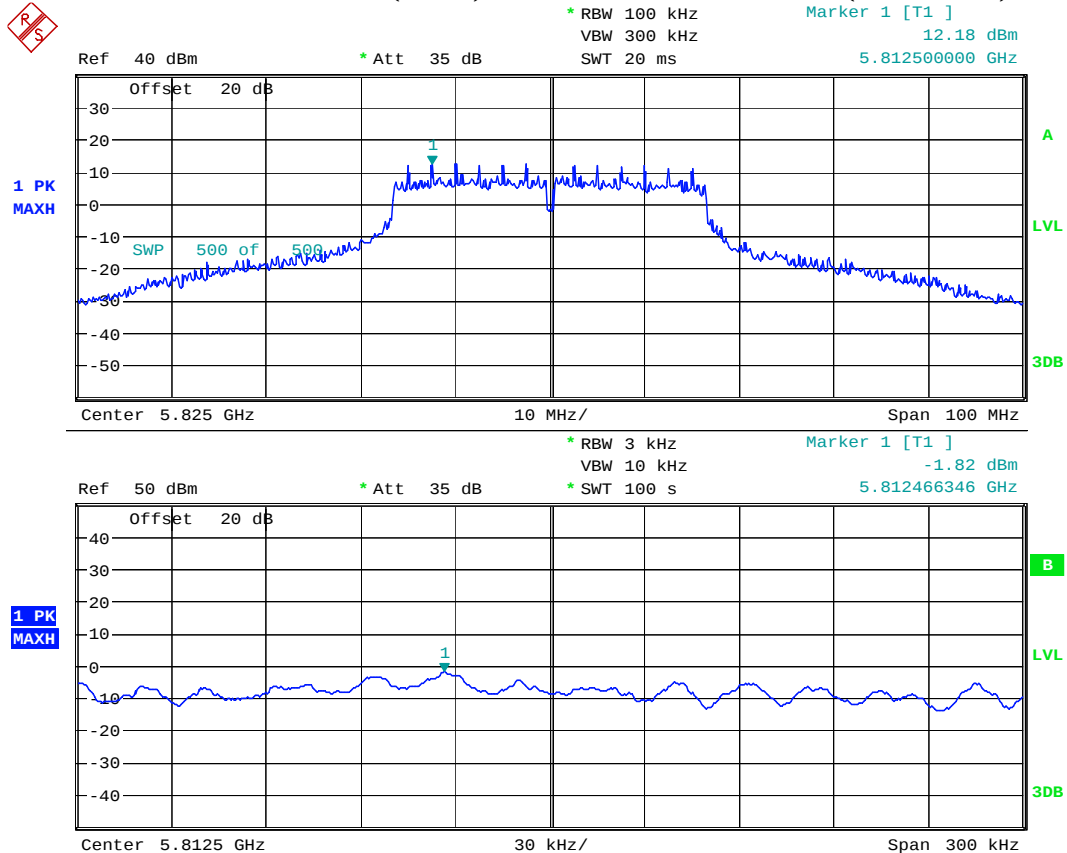
Channel BW: 40 MHz
TX-channel: 5825 MHz
Power settings: 39
Antenna Gain: 15 dBi (Omni)



Date: 18.MAR.2008 14:06:07

Power Spectral Density for Digitally Modulated Devices, continued

Channel BW: 40 MHz
TX-channel: 5825 MHz
Power settings: 40
Antenna Gain: 10 dBi (Omni), 23 dBi, 19 dBi and 15 dBi (Directional)



Date: 18.MAR.2008 14:08:59

Power Spectral Density for Digitally Modulated Devices, continued

Channel BW: 5 MHz

Ch #	Freq. (MHz)	G _{ANT} (dBi)	Cable Loss (dB)	G _{ANT+CABLE} (dBi)	Target Pwr (dBm)	PSD Cond. (dBm/3kHz)	PSD Limit (dBm/3kHz)	Margin (dB)	PSD EIRP (dBm/3kHz)
146	5730	10	1	9	40	5.40	8.00	2.60	14.40
158	5790	10	1	9	40	4.53	8.00	3.47	13.53
169	5845	10	1	9	40	5.71	8.00	2.29	14.71
146	5730	15	1	14	38	3.36	8.00	4.64	17.36
158	5790	15	1	14	36	2.48	8.00	5.52	16.48
169	5845	15	1	14	37	3.15	8.00	4.85	17.15
146	5730	19	1	18	38	3.36	8.00	4.64	21.36
158	5790	19	1	18	39	4.11	8.00	3.89	22.11
169	5845	19	1	18	40	5.71	8.00	2.29	23.71
146	5730	23	1	22	33	-0.40	8.00	8.40	21.60
158	5790	23	1	22	37	3.69	8.00	4.31	25.69
169	5845	23	1	22	40	5.71	8.00	2.29	27.71
146	5730	15	1	14	37	2.81	8.00	5.19	16.81
158	5790	15	1	14	40	4.53	8.00	3.47	18.53
169	5845	15	1	14	40	5.71	8.00	2.29	19.71

Channel BW: 10 MHz

Ch #	Freq. (MHz)	G _{ANT} (dBi)	Cable Loss (dB)	G _{ANT+CABLE} (dBi)	Target Pwr (dBm)	PSD Cond. (dBm/3kHz)	PSD Limit (dBm/3kHz)	Margin (dB)	PSD EIRP (dBm/3kHz)
147	5735	10	1	9	40	1.69	8.00	6.31	10.69
158	5790	10	1	9	40	0.94	8.00	7.06	9.94
168	5840	10	1	9	40	2.35	8.00	5.65	11.35
147	5735	15	1	14	37	-0.66	8.00	8.66	13.34
158	5790	15	1	14	36	-0.98	8.00	8.98	13.02
168	5840	15	1	14	37	-1.16	8.00	9.16	12.84
147	5735	19	1	18	38	-1.14	8.00	9.14	16.86
158	5790	19	1	18	40	0.94	8.00	7.06	18.94
168	5840	19	1	18	40	2.35	8.00	5.65	20.35
147	5735	23	1	22	35	-2.36	8.00	10.36	19.64
158	5790	23	1	22	40	0.94	8.00	7.06	22.94
168	5840	23	1	22	40	2.35	8.00	5.65	24.35
147	5735	15	1	14	40	1.69	8.00	6.31	15.69
158	5790	15	1	14	40	0.94	8.00	7.06	14.94
168	5840	15	1	14	40	2.35	8.00	5.65	16.35

Power Spectral Density for Digitally Modulated Devices, continued

Channel BW: 20 MHz

Ch #	Freq. (MHz)	G _{ANT} (dBi)	Cable Loss (dB)	G _{ANT+CABLE} (dBi)	Target Pwr (dBm)	PSD Cond. (dBm/3kHz)	PSD Limit (dBm/3kHz)	Margin (dB)	PSD EIRP (dBm/3kHz)
148	5740	10	1	9	40	-2.14	8.00	10.14	6.86
158	5790	10	1	9	40	-0.87	8.00	8.87	8.13
167	5835	10	1	9	40	-0.63	8.00	8.63	8.37
148	5740	15	1	14	37	-2.31	8.00	10.31	11.69
158	5790	15	1	14	38	-0.50	8.00	8.50	13.50
167	5835	15	1	14	38	-1.62	8.00	9.62	12.38
148	5740	19	1	18	40	-2.14	8.00	10.14	15.86
158	5790	19	1	18	40	-0.87	8.00	8.87	17.13
167	5835	19	1	18	40	-0.63	8.00	8.63	17.37
147	5735	23	1	22	39	-0.55	8.00	8.55	21.45
158	5790	23	1	22	40	-0.87	8.00	8.87	21.13
168	5840	23	1	22	40	-0.63	8.00	8.63	21.37
148	5740	15	1	14	40	-2.14	8.00	10.14	11.86
158	5790	15	1	14	40	-0.87	8.00	8.87	13.13
167	5835	15	1	14	40	-0.63	8.00	8.63	13.37

Channel BW: 40 MHz

Ch #	Freq. (MHz)	G _{ANT} (dBi)	Cable Loss (dB)	G _{ANT+CABLE} (dBi)	Target Pwr (dBm)	PSD Cond. (dBm/3kHz)	PSD Limit (dBm/3kHz)	Margin (dB)	PSD EIRP (dBm/3kHz)
150	5750	10	1	9	40	-3.82	8.00	11.82	5.18
158	5790	10	1	9	40	-3.23	8.00	11.23	5.77
165	5825	10	1	9	40	-1.82	8.00	9.82	7.18
150	5750	15	1	14	39	-4.96	8.00	12.96	9.04
158	5790	15	1	14	39	-3.79	8.00	11.79	10.21
165	5825	15	1	14	39	-2.32	8.00	10.32	11.68
150	5750	19	1	18	40	-3.82	8.00	11.82	14.18
158	5790	19	1	18	40	-3.23	8.00	11.23	14.77
165	5825	19	1	18	40	-1.82	8.00	9.82	16.18
150	5750	23	1	22	40	-3.82	8.00	11.82	18.18
158	5790	23	1	22	40	-3.23	8.00	11.23	18.77
165	5825	23	1	22	40	-1.82	8.00	9.82	20.18
150	5750	15	1	14	40	-3.82	8.00	11.82	10.18
158	5790	15	1	14	40	-3.23	8.00	11.23	10.77
165	5825	15	1	14	40	-1.82	8.00	9.82	12.18

Appendix B: Setup Photographs

Conducted Emissions Setup:

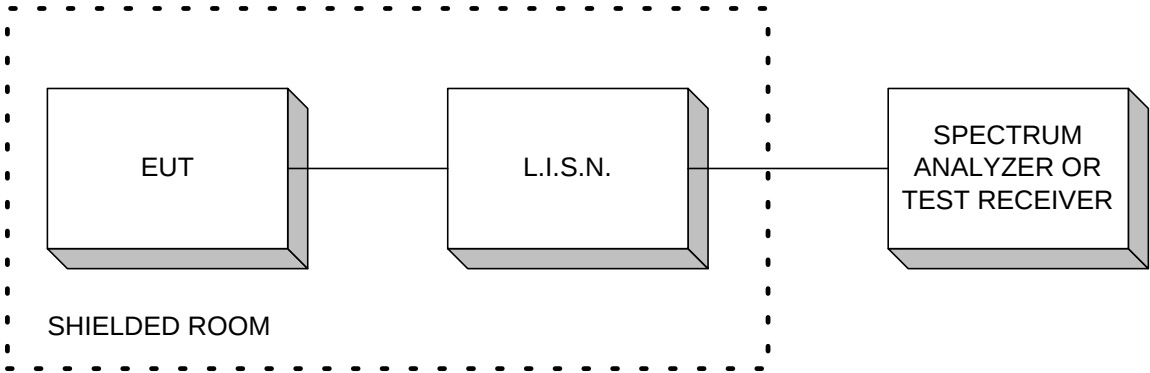


Radiated Spurious Emissions Setup:



Appendix C: Block Diagram of Test Setups

Conducted Emissions



Test Site For Radiated Emissions

