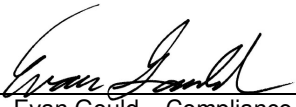
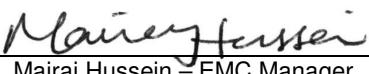




Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

Test Report

Report No	EJ1631-2
Client	Microwave Radio Communications LLC 101 Billerica Ave, Building 6 North Billerica, MA 01862
Phone	978-671-5778
FRN	0004267712
System Models	PTX270T1WG
FCC ID	FC3PTX270AD
Equipment Type Equipment Code	Licensed Non-Broadcast Station Transmitter TNB
Results	As detailed within this report
Prepared by	 Evan Gould – Compliance Engineer
Authorized by	 Mairaj Hussein – EMC Manager
Issue Date	<u>July 19, 2011</u>
Conditions of Issue	This Test Report is issued subject to the conditions stated in the 'Conditions of Testing' section on page 32 of this report.

Curtis-Straus LLC is accredited by the American Association for Laboratory Accreditation for the specific scope of accreditation under Certificate Number 1627-01. This report may contain data which is not covered by the A2LA accreditation.



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Summary

The purpose of this report is to support the application for Certification of licensed device operating pursuant to Parts 74, 78, and 101. The product is the Microwave Radio 2GHz & 7GHz PRX Radio. Under Part 74, the device operate as mobile TV Pickup Stations [74.601(a)] within the frequency bands: 2025-2110, 2450-2483.5, 6875-7125, and 6425-6525MHz. The applicability of Rule Parts to Frequency Bands is shown in the following table:

Frequency Band	Rule Parts
2025-2110MHz	74, 78
2450-2483.5	74
6425-6525	74, 78, 101
6875-7125	74, 78

Only one transmission band can be operated at a time.

The channel plans are shown below:

2GHz Band

Channel	Offset -	Center	Offset +
1	2028.5	2031.5	2034.5
2	2040.5	2043.5	2046.5
3	2052.5	2055.5	2058.5
4	2064.5	2067.5	2070.5
5	2076.5	2079.5	2082.5
6	2088.5	2091.5	2094.5
7	2100.5	2103.5	2106.5
8	2454.25	2458.5	2462.75
9	2471	2475.25	2479.5
10	2487.5	2491.75	2496

7GHz Band

Channel	Offset -	Center	Offset +
1	6881.25	6887.5	6893.75
2	6906.25	6912.5	6918.75
3	6931.25	6937.5	6943.75
4	6956.25	6962.5	6968.75
5	6981.25	6987.5	6993.75
6	7006.25	7012.5	7018.75
7	7031.25	7037.5	7043.75
8	7056.25	7062.5	7068.75
9	7081.25	7087.5	7093.75
10	7106.25	7112.5	7118.75
11	6431.25	6437.5	6443.75
12	6456.25	6462.5	6468.75
13	6481.25	6487.5	6493.75
14	6506.25	6512.5	6518.75

As can be seen in the Band Edges section of this report, the channels which are grayed out in the above tables are channel settings which are not allowed to be used as they produce fundamental emissions which lie outside the bands of operation.

Test Methodology

Testing was performed according to ANSI/TIA-603-C-2004.

Frequency range investigated: 30MHz – 75GHz

Testing was performed with the following modulations:

Digital: COFDM QPSK 8MHz FE1/2 GI 1/8

Analog: FM

Product Tested - Configuration Documentation

EUT Configuration											
Work Order: J1631 Company: Microwave Radio Communications LLC Company Address: 101 Billerica Ave., Building 6 North Billerica, MA 01862 Contact: Sal Blatti											
		MN		PN		SN					
EUT:		PRX-PRO		--		Sample 1					
EUT Description: 2GHz & 7GHz PRX-PRO EUT Max RX Frequency: 7118.75MHz											
Support Equipment:		MN		SN							
HD/SDI generator		Converter		CN11367 Used for CRFI and CEMI only							
Sony LCD		LMD-1410		3030296							
XBOX Video Game System		Not Listed		203641530205							
EUT Ports:											
Port Label	Port Type	No. of ports	No. Populated	Cable Type	Shielded	Ferrites	Length	Max Length	In/Out NEBS Type	Unpopulated Reason	
PWR	Power AC	1	All	3-wire AC	No	None	1m	2m	out	Used for AC Config	
PWR	Power DC	1	All	3-wire DC	No	None	1m	2m	out	Used for DC Config	
AUDIO 1	other	1	All	audio	No	None	1m	200	out		
AUDIO 2	other	1	All	audio	No	None	1m	200	out		
AUDIO 3&4	other	1	All	audio	No	None	1m	200	out		
Gen Lock	other	1	All	coaxial	No	None	1m	200	out		
SIGNAL OUTPUT	other	1	All	video	Yes	None	1m	200	out		
MONITOR	other	1	All	video	Yes	None	1m	200	out		
SDI OUTPUT	other	1	All	sdi	Yes	None	1m	200	out		
RS-232	RS-232	1	All	RS-232	No	None	1m	3	out		
Software / Operating Mode Description: Using front panel controls to set RX channel.											

Band Edges

REQUIREMENT

The lowest and highest available channels in a particular band of operation must reside generally within the prescribed band edges. The out-of-band limit from the emission mask was used for this purpose, which is an absolute limit of -13dBm. The applicable band edges are those described in the Summary section. The limit lines shown on the analyzer plots were calculated as follows:

$$\text{LimitOnAnalyzer} = -13\text{dBm} - \text{AttenuationFactor}$$

$$\text{LimitOnAnalyzer} = -13\text{dBm} - 30\text{dB} = -43\text{dBm}$$

EQUIPMENT

Rev: 31-Aug-2010

Spectrum Analyzers / Receivers / Preselectors		Range	MN	Mfr	SN	Asset	Cat	Calibration Due
Gold		100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	9-Apr-2011
Preamps / Couplers Attenuators / Filters		Range	MN	Mfr	SN	Asset	Cat	Calibration Due
HF 20dB 50W Attenuator		0.009-18 GHz	PE 7019-20	Pasternack	1	791	II	8-May-2011
Power/Noise Meters			MN	Mfr	SN	Asset	Cat	Calibration Due
Power Meter			437B	HP	2912A01367	1099	I	24-Jun-2011
Power Sensor			8481A	HP	2702A61351	774	I	24-Jun-2011
Meteorological Meters			MN	Mfr	SN	Asset	Cat	Calibration Due
Weather Clock (Pressure Only)			BA928	Oregon Scientific	C3166-1	831	I	17-Mar-2011
EMC3 Thermohygrometer			35519-044	Control Company	72457727	1353	II	18-Aug-2011

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

RESULTS

The analyzer plots shown below show that the lowest and highest channels that meet the band edge limit are:

Allowed Channel Settings

Channel	Frequency (MHz)
(2GHz Band) 1	2031.5
(2GHz Band) 7	2103.5
(2GHz Band) 8-	2454.25
(2GHz Band) 9+	2479.5

Since the emission masks of the above channels fit just within the band edge limits, the following channel settings are excluded from use:

Excluded Channel Settings

Channel	Frequency (MHz)
(2GHz Band) 1-	2028.5
(2GHz Band) 7+	2106.5
(2GHz Band) 10-	2487.5
(2GHz Band) 10	2491.75
(2GHz Band) 10+	2496



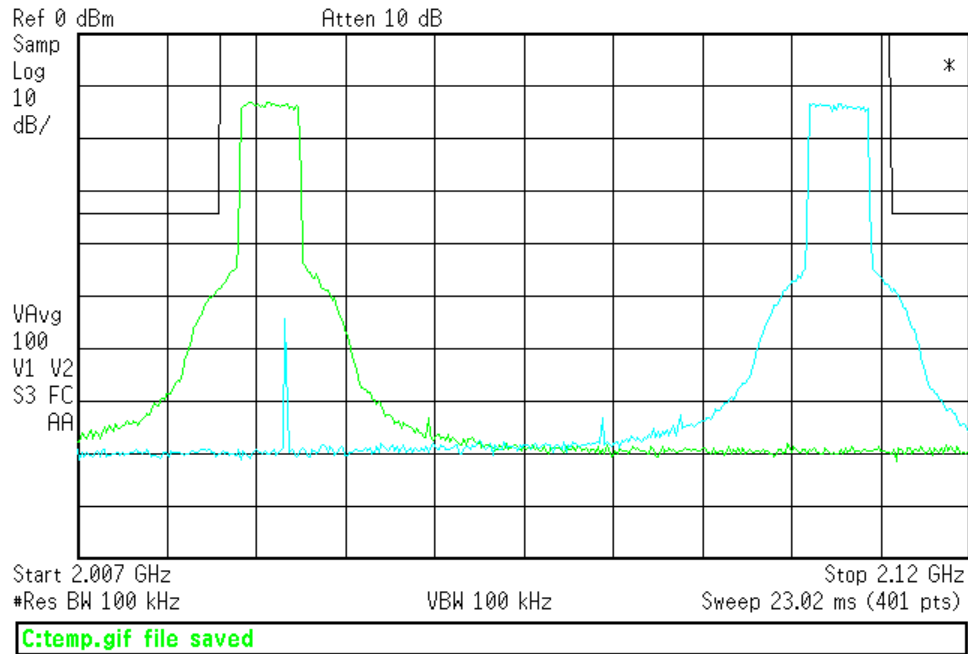
Note: All channels in the 7GHz Band are allowed.



PLOTS

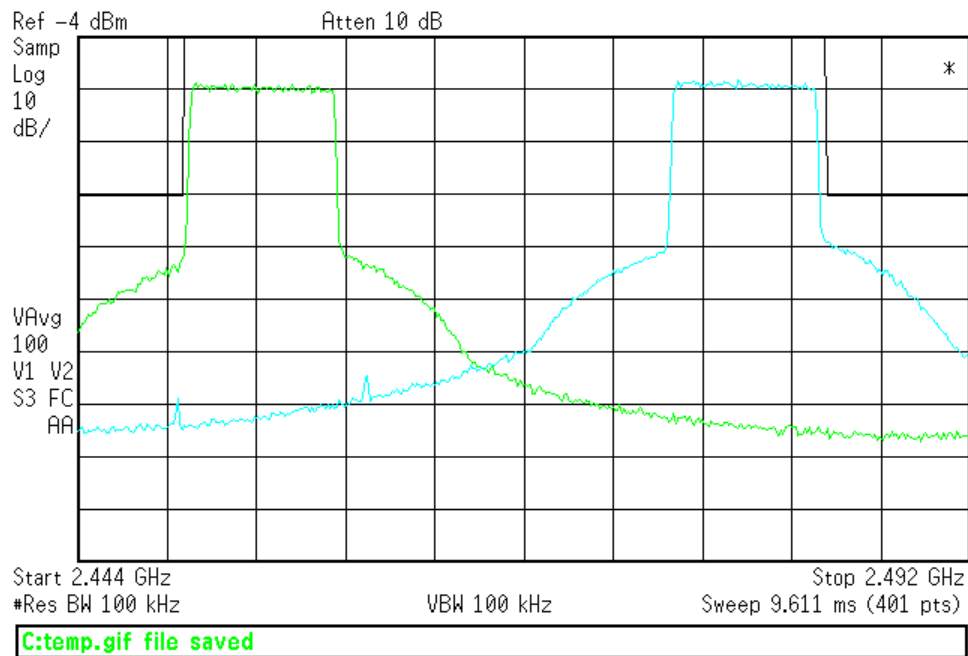
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R T

**2GHz Band Channels 1 and 7**

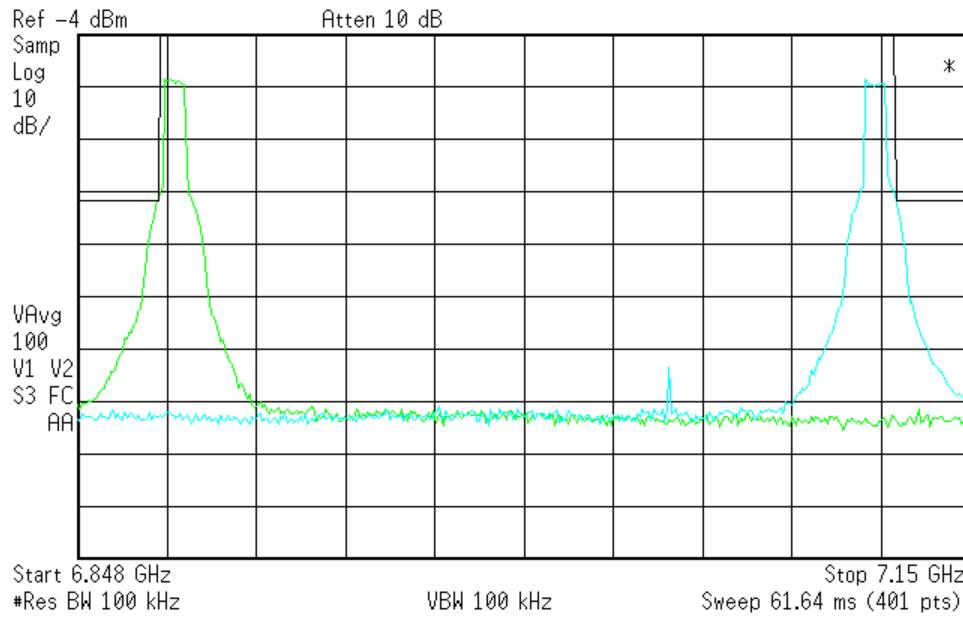
Agilent 14:24:44 Sep 2, 2010

R T

**2GHz Band Channels 8- and 9+**

Agilent 14:36:49 Sep 2, 2010

R T



C:\temp.gif file saved

7GHz Band Channels 1- and 14+

Output Power**LIMIT**

"On any authorized frequency...the average power delivered to an antenna in this service...shall not exceed the values listed in the following table." [74.636(a)]

The limit listed in the table referenced above in 74.636(a) for the applicable frequency ranges (2025-2110, 2450-2483.5, 6425-6526, 6875-7125 MHz) is 12 Watts.

$$P[\text{dBm}] = 10 \cdot \log(P[\text{mW}]) = 10 \cdot \log(12000) = 40.7 \text{ dBm}$$

Tested by EG on 9/2/10

Environmental Conditions

24.8°C 48%rh 1005mB

MEASUREMENTS**2GHz Band**

Modulation	Channel	Frequency (MHz)	Power Meter Reading (dBm)	Cable Factor (dB)	Attenuator (dB)	Adjusted Output Power (dBm)
QPSK	1-	2028.5	6.8	1.4	19.7	27.9
QPSK	1	2031.5	6.9	1.4	19.7	28
QPSK	4	2067.5	8	1.3	19.7	29
QPSK	7	2103.5	6.7	1.3	19.7	27.7
QPSK	7+	2106.5	6.7	1.3	19.7	27.7
QPSK	8 -	2454.25	6.9	1.6	19.7	28.2
QPSK	9+	2479.5	7.7	1.6	19.7	29
QPSK	10+	2496	6.7	1.6	19.7	28
FM	1-	2028.5	13.5	1.4	19.7	34.6
FM	1	2031.5	13.6	1.4	19.7	34.7
FM	4	2067.5	13.3	1.3	19.7	34.3
FM	7	2103.5	13.1	1.3	19.7	34.1
FM	7+	2106.5	13.2	1.3	19.7	34.2
FM	8 -	2454.25	13.3	1.6	19.7	34.6
FM	9+	2479.5	13.1	1.6	19.7	34.4
FM	10+	2496	11.9	1.6	19.7	33.2

7GHz Band

Modulation	Channel	Frequency (MHz)	Power Meter Reading (dBm)	Cable Factor (dB)	Attenuator (dB)	Adjusted Output Power (dBm)
QPSK	1 -	6881.25	9.3	2.8	19.9	32
QPSK	5	6987.5	8.7	2.8	19.9	31.4
QPSK	10+	7118.75	9	2.8	19.9	31.7
QPSK	11 -	6431.25	9.9	2.7	19.8	32.4
QPSK	14+	6518.75	9.8	2.6	19.8	32.2
FM	1 -	6881.25	13.3	2.8	19.9	36
FM	5	6987.5	12.9	2.8	19.9	35.6
FM	10+	7118.75	12.3	2.8	19.9	35
FM	11 -	6431.25	13.2	2.7	19.8	35.7
FM	14+	6518.75	13.3	2.6	19.8	35.7

Rev: 31-Aug-2010

Spectrum Analyzers / Receivers /Preselectors

Range	MN	Mfr	SN	Asset	Cat	Calibration Due	
Gold	100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	9-Apr-2011

Preamps /Couplers Attenuators / Filters

HF 20dB 50W Attenuator

Range	MN	Mfr	SN	Asset	Cat	Calibration Due
0.009-18 GHz	PE 7019-20	Pasternack	1	791	II	8-May-2011

Power/Noise Meters

Power Meter

Power Sensor

MN

437B

8481A

Mfr

HP

HP

SN

2912A01367

2702A61351

Asset

1099

774

Cat

I

I

Calibration Due

24-Jun-2011

24-Jun-2011

Meteorological Meters

Weather Clock (Pressure Only)

EMC3 Thermohygrometer

MN

BA928

35519-044

Mfr

Oregon Scientific

Control Company

SN

C3166-1

72457727

Asset

831

1353

Cat

I

II

Calibration Due

17-Mar-2011

18-Aug-2011

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Emission Masks – Digital Modulation**LIMIT**

Mask specified in 74.637(a)(2)

The emission mask is drawn in reference to the mean transmitter power. Since the output power reported above was measured with the same external attenuator and cable, the values used for the amplitude reference levels in the plots below come from the unadjusted power meter readings above.

The emission masks in the plots below are corrected (as per 74.637(c)(3)) for the difference between the Resolution Bandwidth used to capture the trace, and the Reference Bandwidth specified in the mask description. See the following calculation:

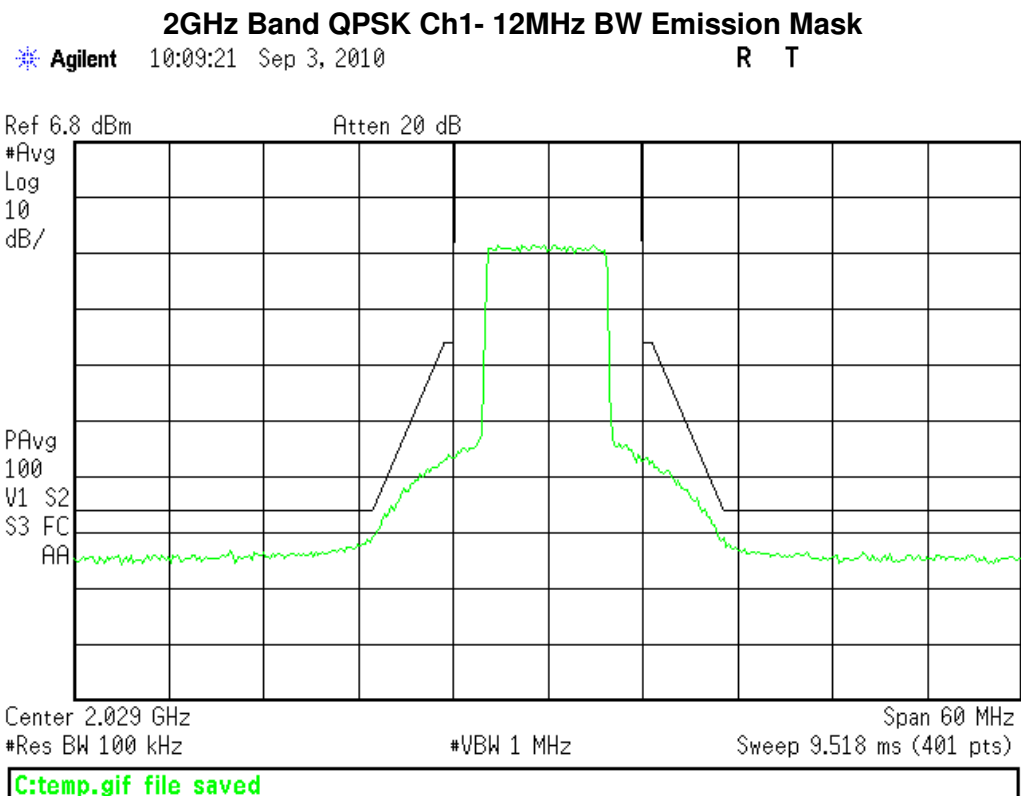
$$\text{CorrectionFactor} = 10 \log \frac{B_{\text{ref}}(\text{MHz})}{B_{\text{res}}(\text{MHz})} = 10 \log \frac{0.004}{0.100} = -14.0 \text{ dB}$$

The negative value indicates that the *attenuation* required below the reference level must be *decreased*. Therefore the limit *increases* by 14dB.

Environmental Conditions

24.8°C 46%rh 998mB

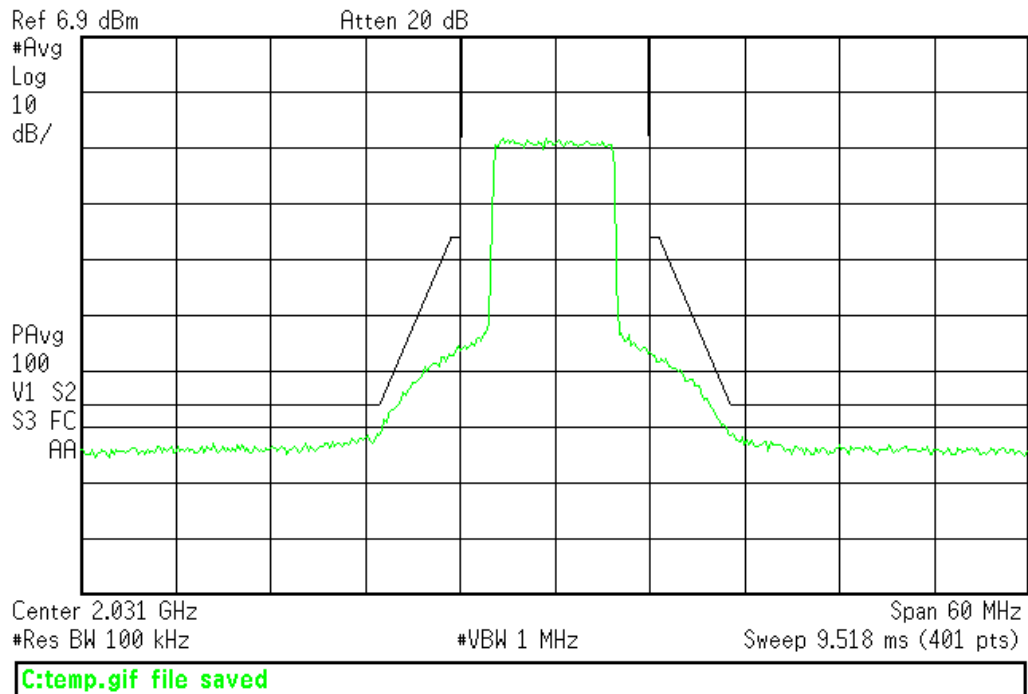
Tested by EG on 9/3/10

PLOTS

2GHz Band QPSK Ch1 12MHz BW Emission Mask

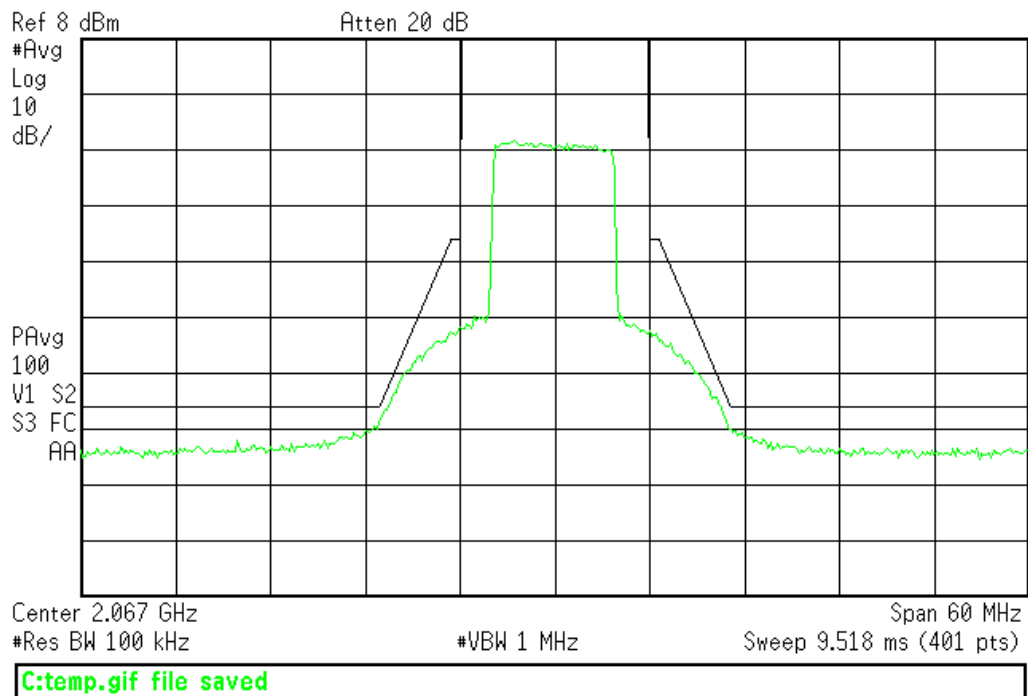
Agilent 10:10:39 Sep 3, 2010

R T

**2GHz Band QPSK Ch4 12MHz BW Emission Mask**

Agilent 10:12:13 Sep 3, 2010

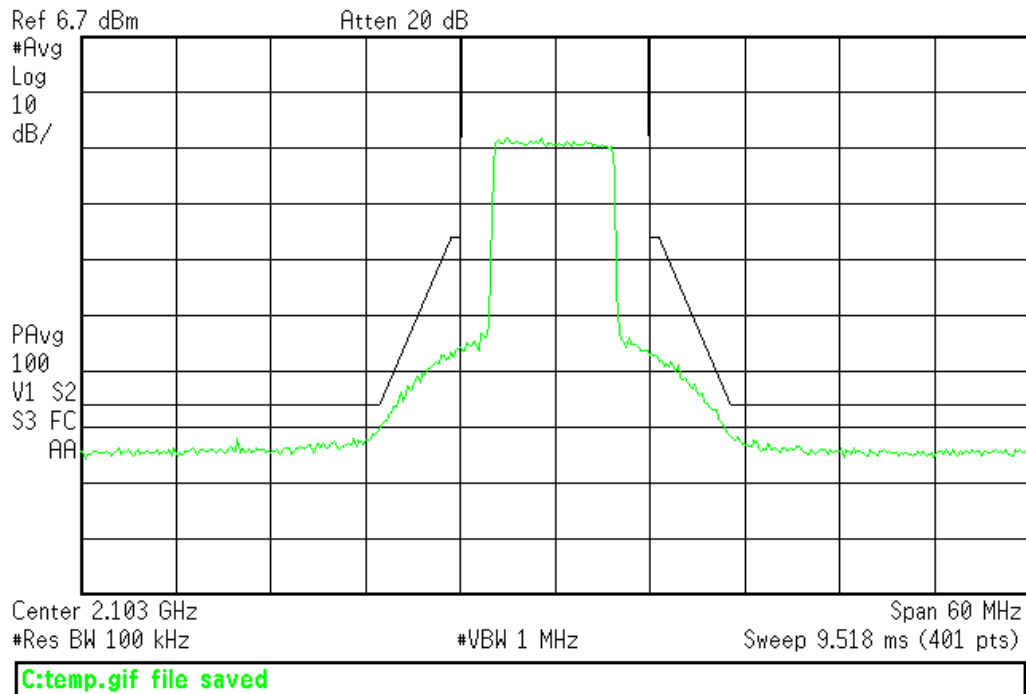
R T



2GHz Band QPSK Ch7 12MHz BW Emission Mask

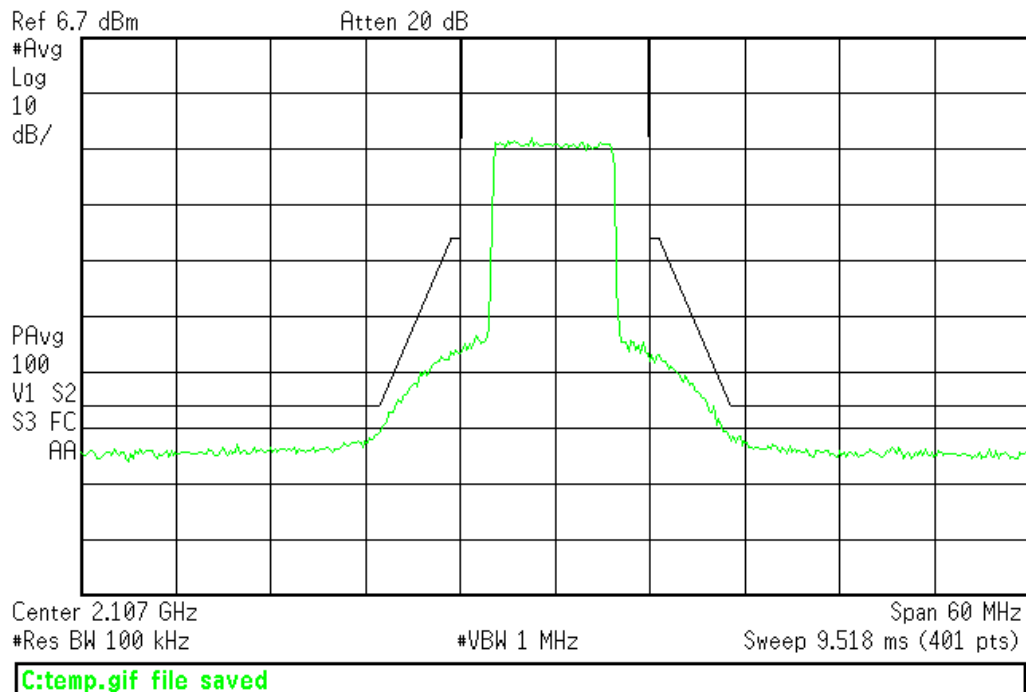
Agilent 10:13:43 Sep 3, 2010

R T

**2GHz Band QPSK Ch7+ 12MHz BW Emission Mask**

Agilent 10:15:28 Sep 3, 2010

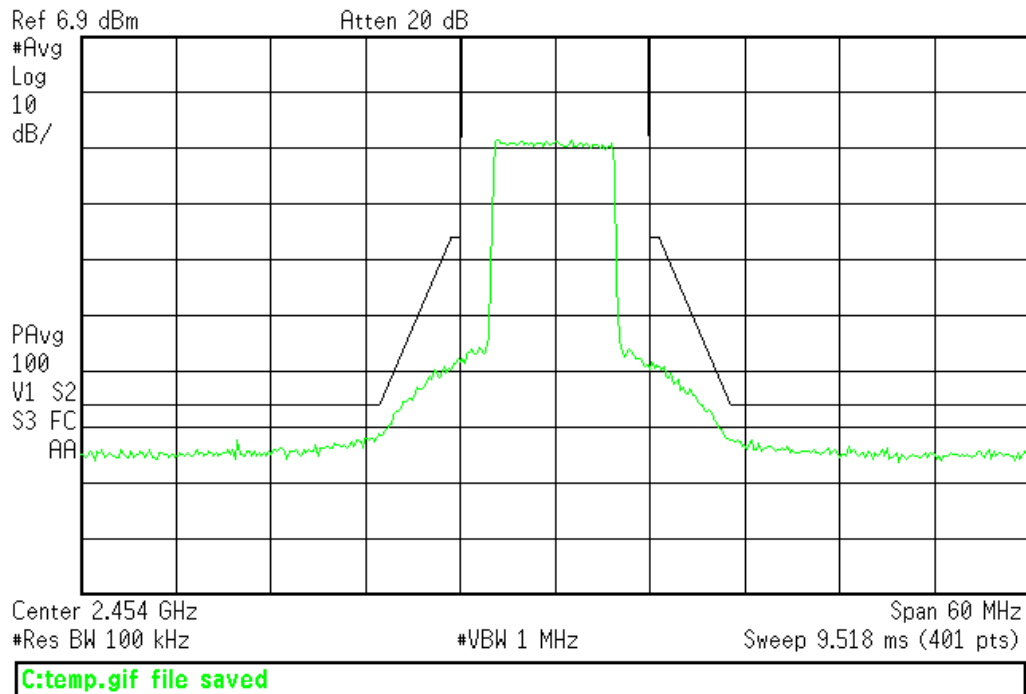
R T



2GHz Band QPSK Ch8- 12MHz BW Emission Mask

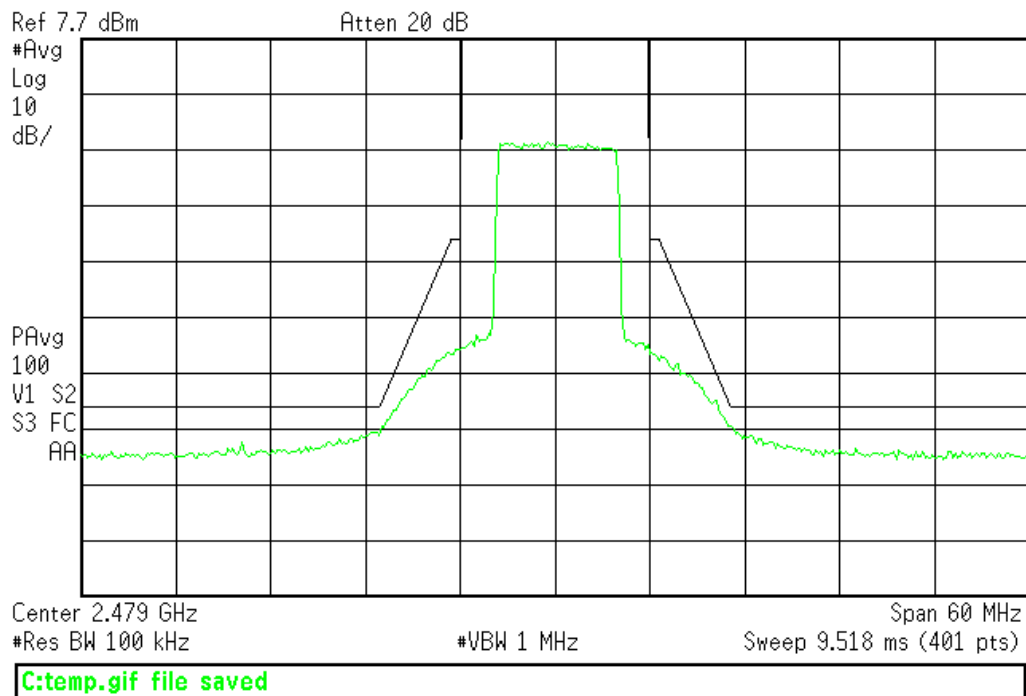
Agilent 10:17:17 Sep 3, 2010

R T

**2GHz Band QPSK Ch9+ 12MHz BW Emission Mask**

Agilent 10:19:21 Sep 3, 2010

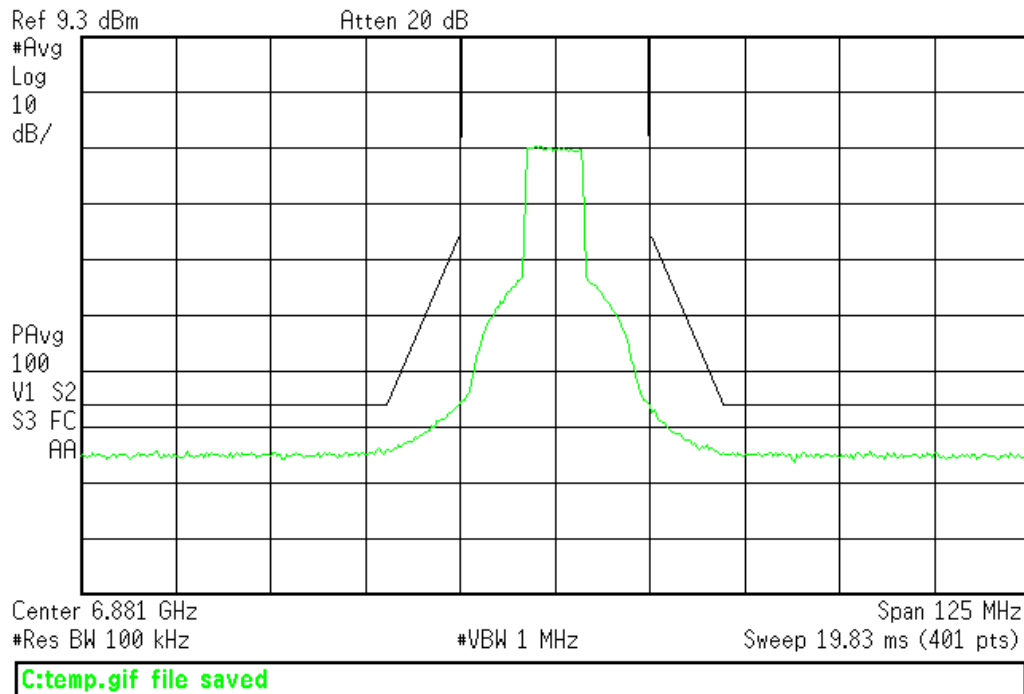
R T



7GHz Band QPSK Ch1- 25MHz BW Emission Mask

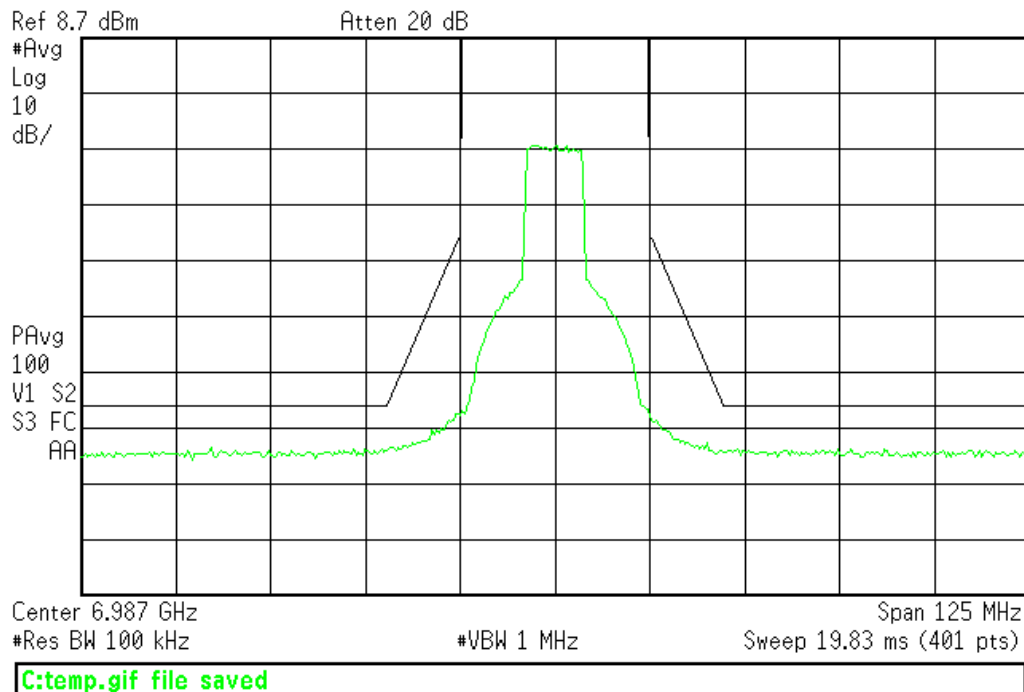
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R T

**7GHz Band QPSK Ch5 25MHz BW Emission Mask**

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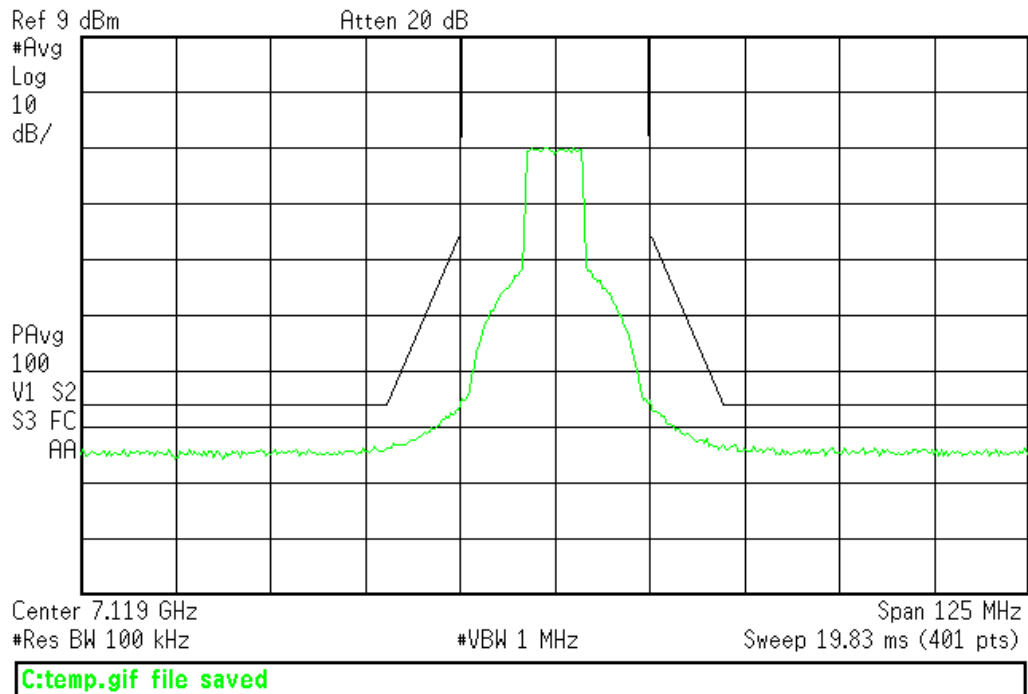
R T



7GHz Band QPSK Ch10+ 25MHz BW Emission Mask

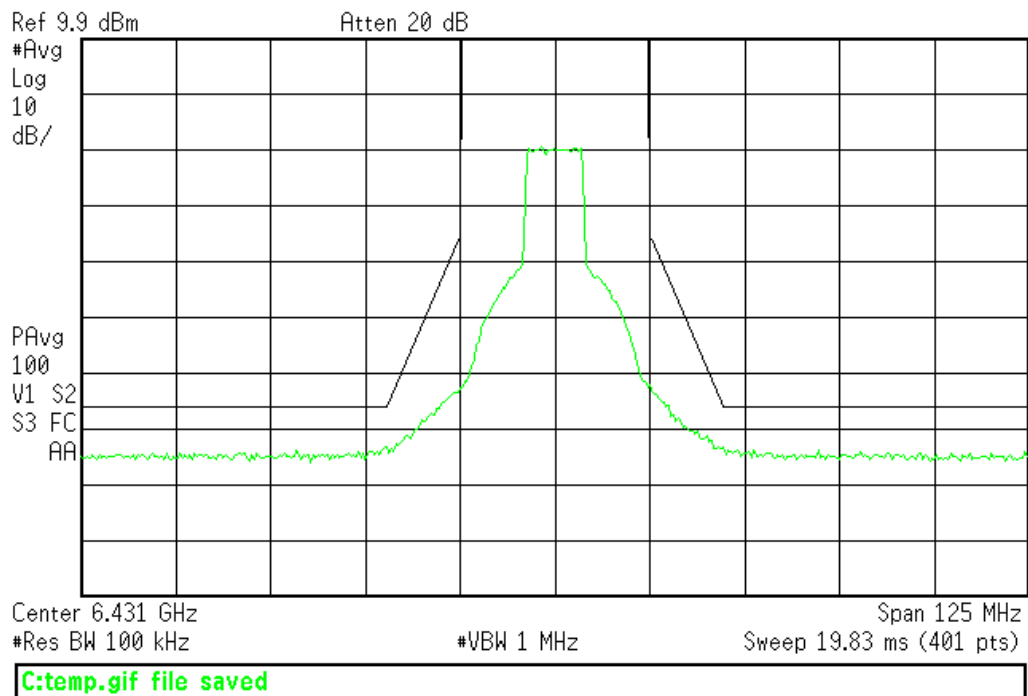
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R T

**7GHz Band QPSK Ch11- 25MHz BW Emission Mask**

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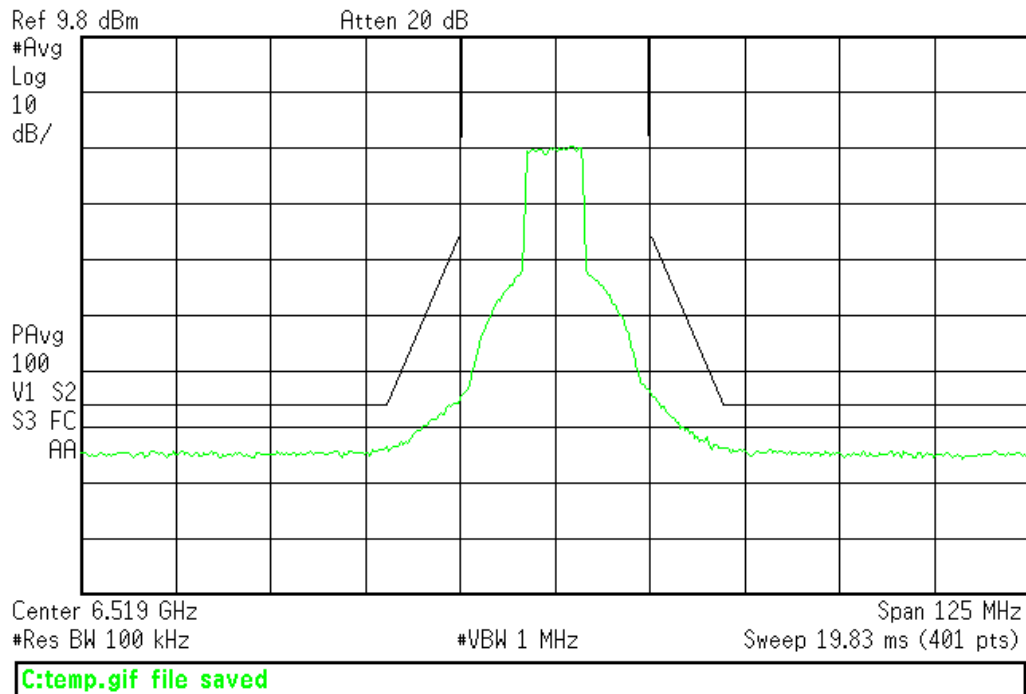
R T



7GHz Band QPSK Ch14+ 25MHz BW Emission Mask

Agilent 10:02:43 Sep 3, 2010

R T



Rev: 31-Aug-2010

Spectrum Analyzers / Receivers / Preselectors

Preamps / Couplers Attenuators / Filters

Power/Noise Meters

Meteorological Meters

Weather Clock (Pressure Only)
EMC3 Thermohygrometer

Range	MN	Mfr	SN	Asset	Cat	Calibration Due
100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	9-Apr-2011
Range	MN	Mfr	SN	Asset	Cat	Calibration Due
0.009-18 GHz	PE 7019-20	Pasternack	1	791	II	8-May-2011
	MN	Mfr	SN	Asset	Cat	Calibration Due
	437B	HP	2912A01367	1099	I	24-Jun-2011
	8481A	HP	2702A61351	774	I	24-Jun-2011
	MN	Mfr	SN	Asset	Cat	Calibration Due
	BA928	Oregon Scientific	C3166-1	831	I	17-Mar-2011
	35519-044	Control Company	72457727	1353	II	18-Aug-2011

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



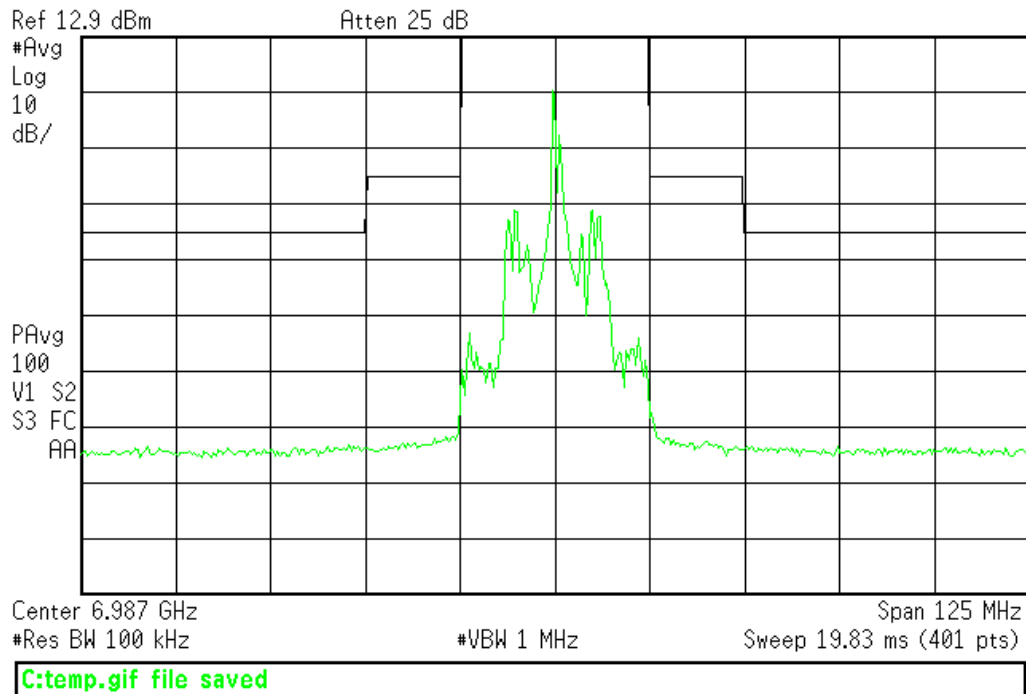
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7GHz Band FM Ch5 25MHz BW Emission Mask

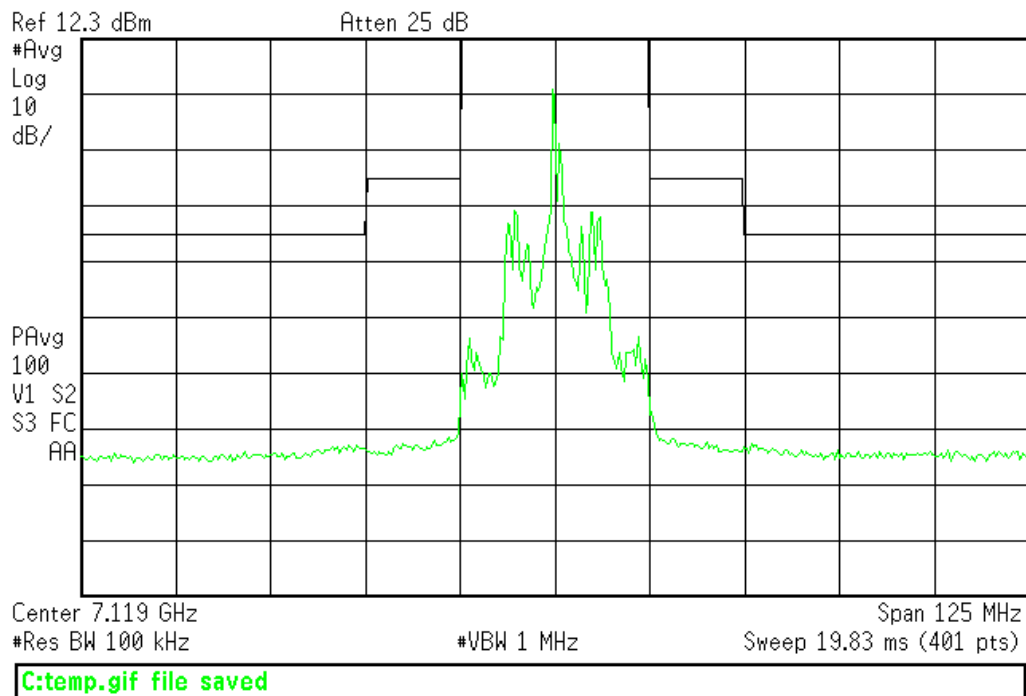
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R T

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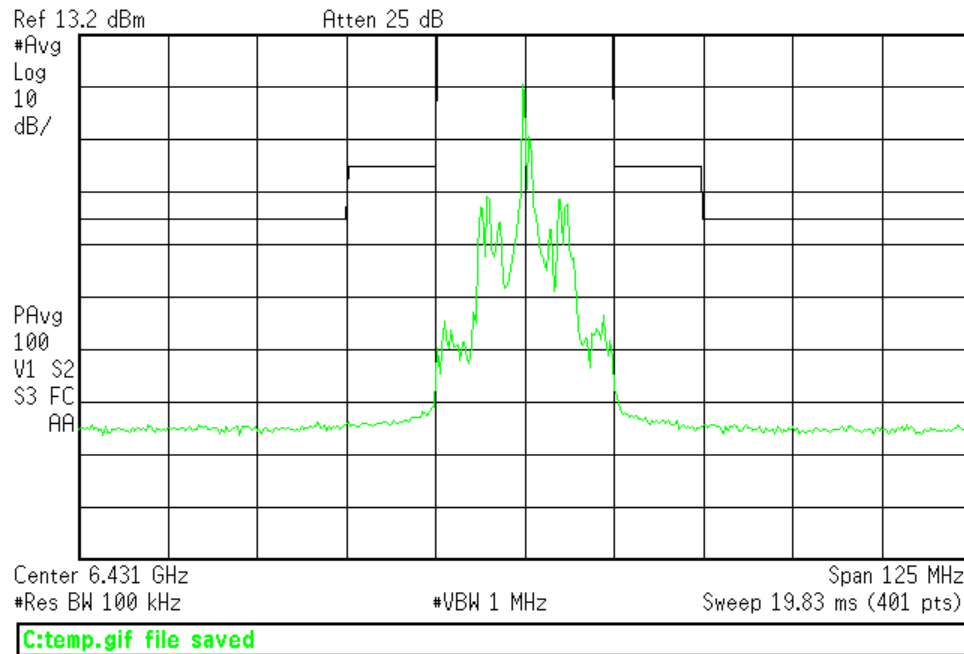
R T



7GHz Band FM Ch11- 25MHz BW Emission Mask

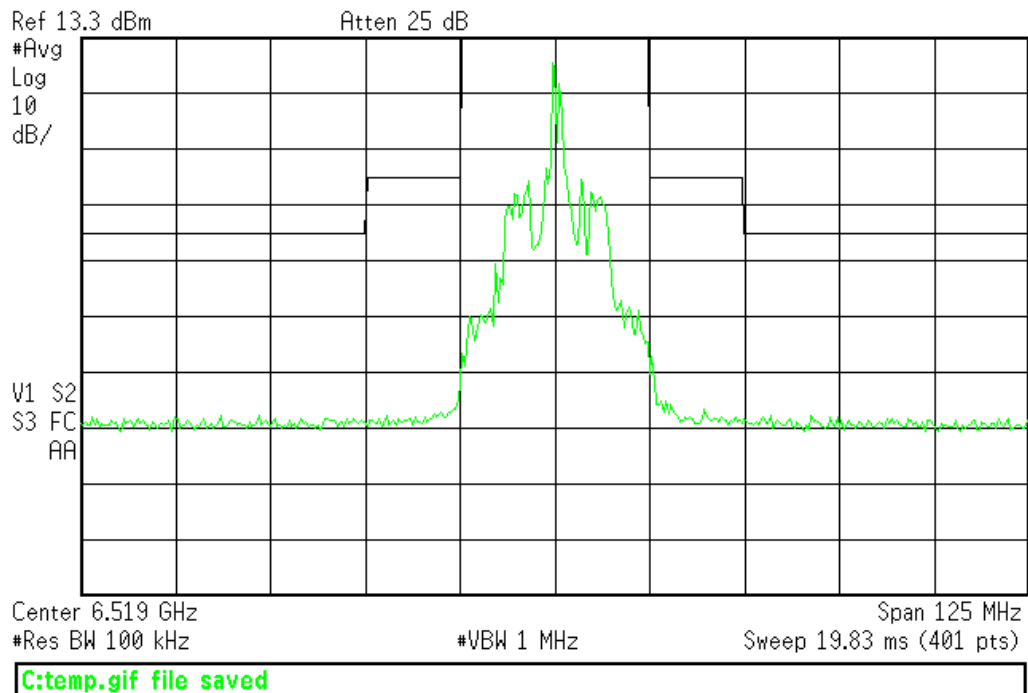
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R T

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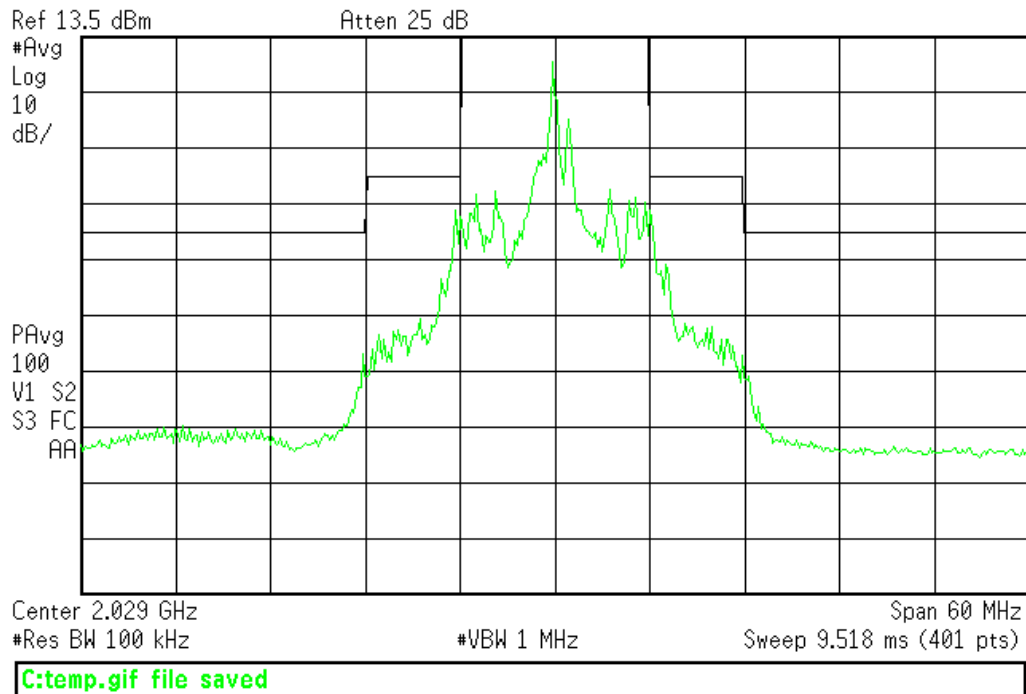
R T



2GHz Band FM Ch1- 12MHz BW Emission Mask

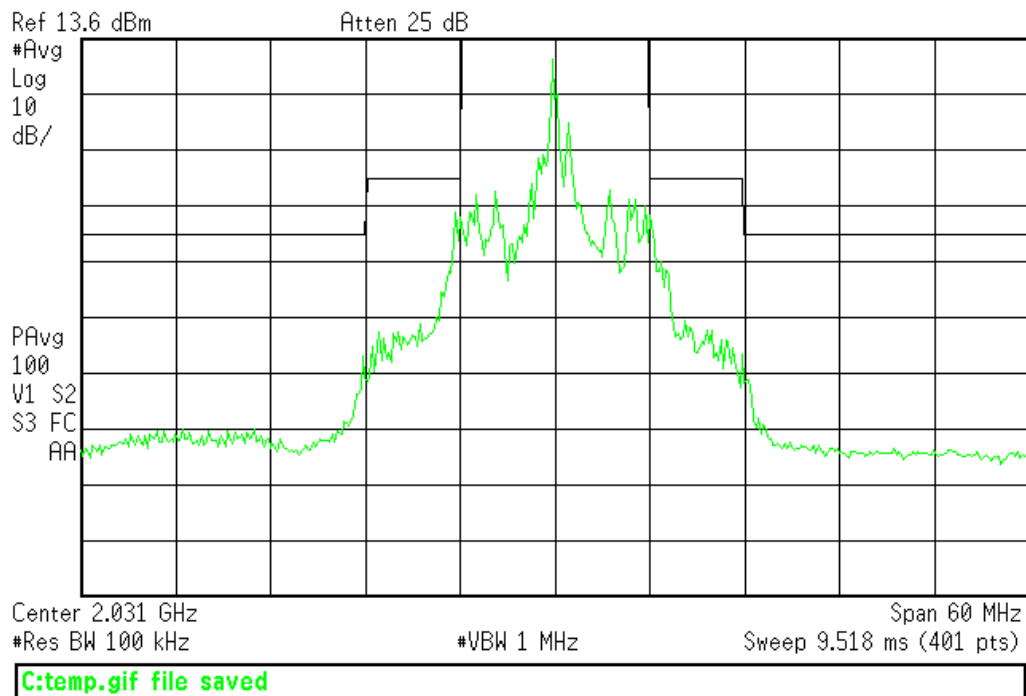
* Agilent 11:11:38 Sep 3, 2010

R T

**2GHz Band FM Ch1 12MHz BW Emission Mask**

* Agilent 11:14:01 Sep 3, 2010

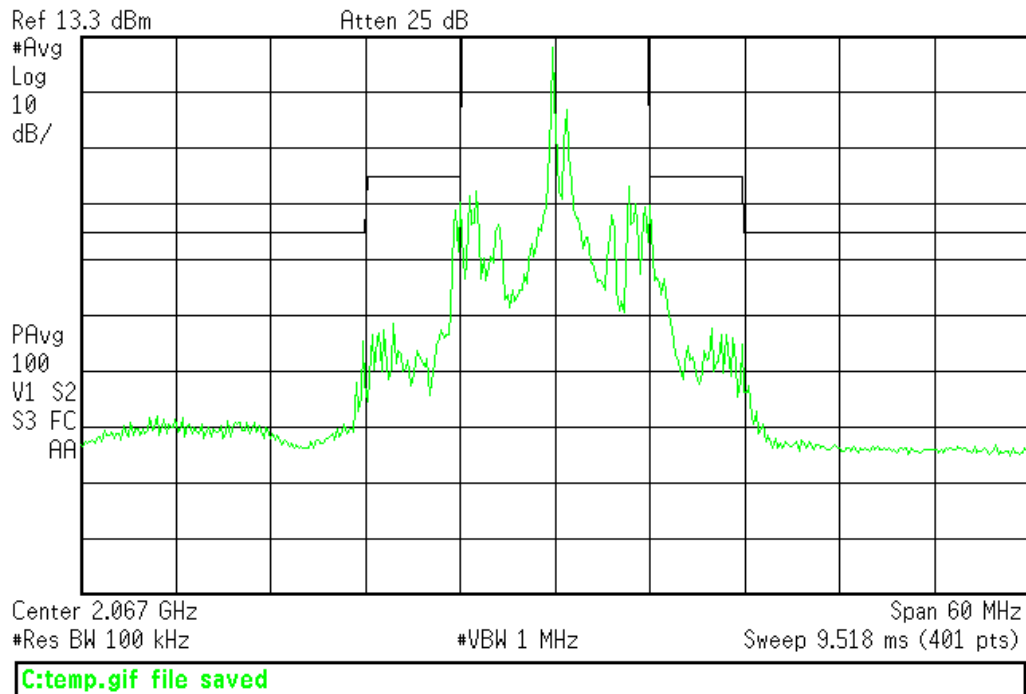
R T



2GHz Band FM Ch4 12MHz BW Emission Mask

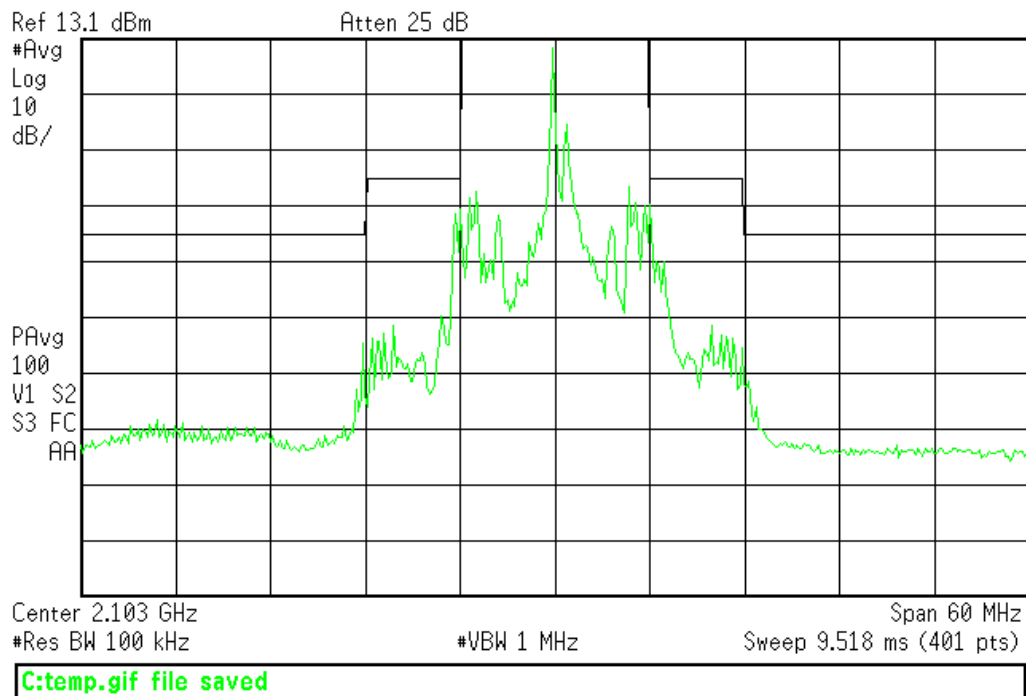
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R T

**2GHz Band FM C7 12MHz BW Emission Mask**

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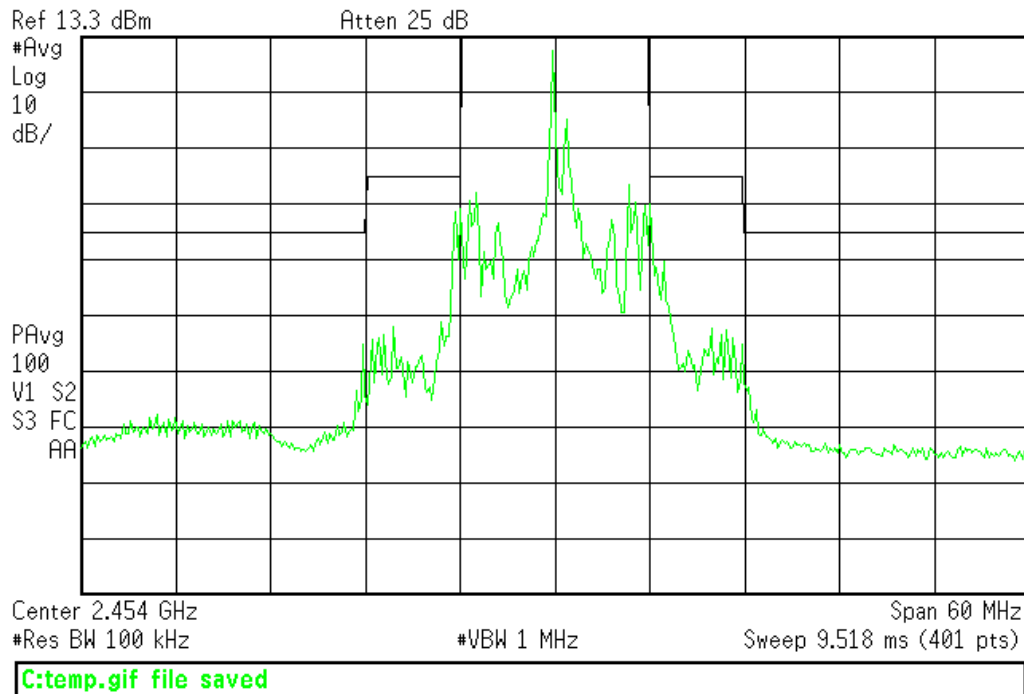
R T



2GHz Band FM Ch8- 12MHz BW Emission Mask

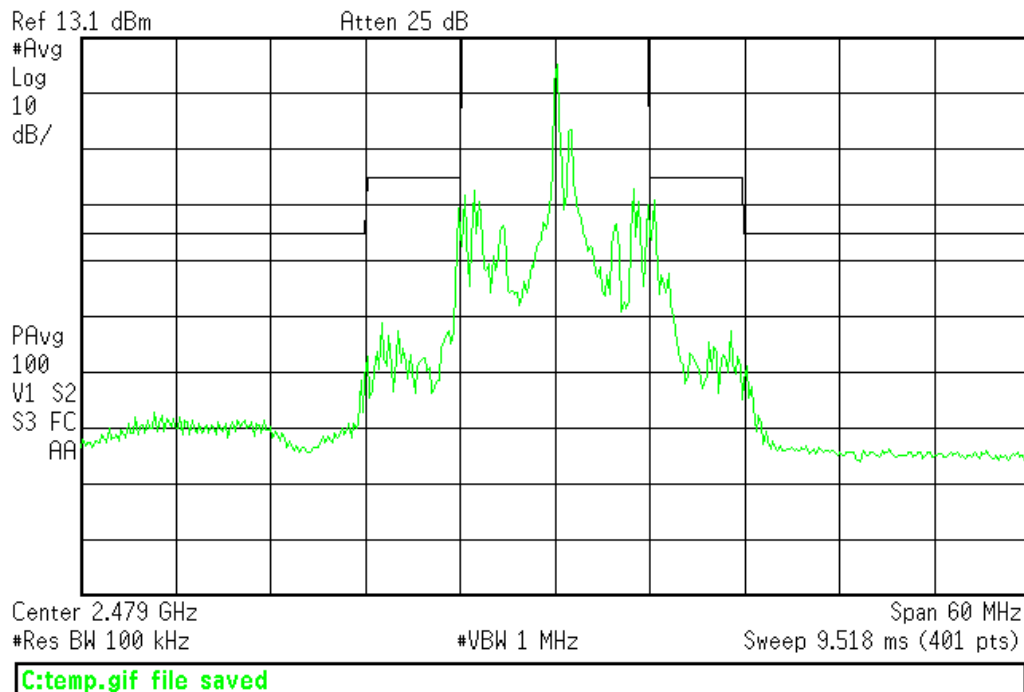
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R T

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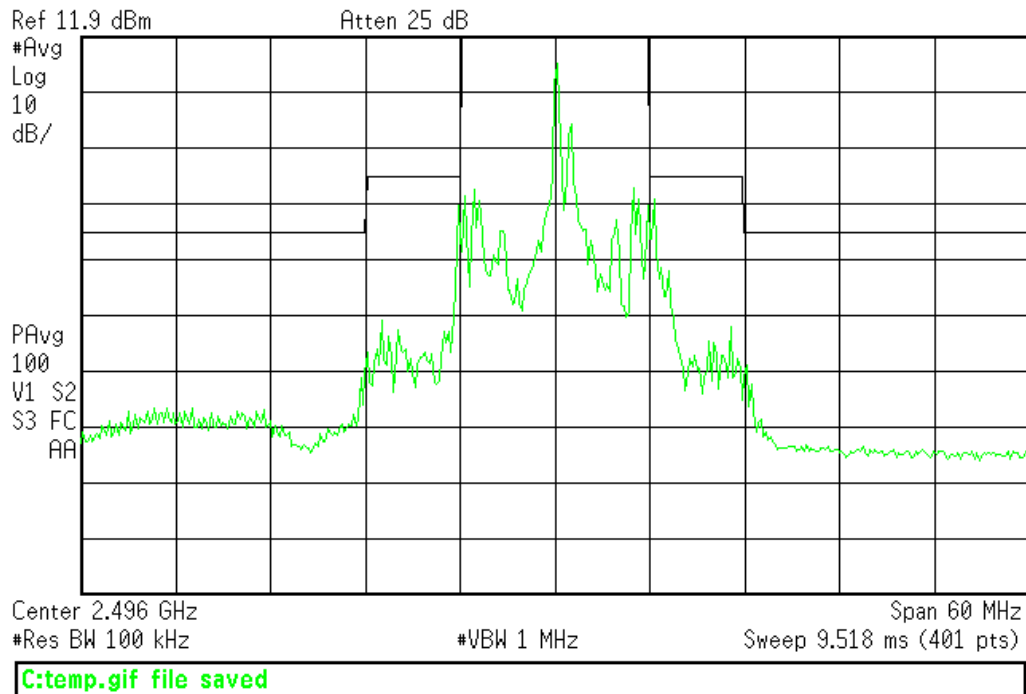
R T



2GHz Band FM Ch10+ 12MHz BW Emission Mask

* Agilent 11:29:47 Sep 3, 2010

R T



Rev: 31-Aug-2010

Spectrum Analyzers / Receivers / Preselectors
Gold

Range	MN	Mfr	SN	Asset	Cat	Calibration Due
100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	9-Apr-2011

Preamps / Couplers Attenuators / Filters
HF 20dB 50W Attenuator

Range	MN	Mfr	SN	Asset	Cat	Calibration Due
0.009-18 GHz	PE 7019-20	Pasternack	1	791	II	8-May-2011

Power/Noise Meters

	MN	Mfr	SN	Asset	Cat	Calibration Due
Power Meter	437B	HP	2912A01367	1099	I	24-Jun-2011
Power Sensor	8481A	HP	2702A61351	774	I	24-Jun-2011

Meteorological Meters

	MN	Mfr	SN	Asset	Cat	Calibration Due
Weather Clock (Pressure Only)	BA928	Oregon Scientific	C3166-1	831	I	17-Mar-2011
EMC3 Thermohygrometer	35519-044	Control Company	72457727	1353	II	18-Aug-2011

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Out-of-Band Emissions – Conducted

LIMIT

“...the peak power of emissions shall be attenuated below the peak envelope transmitter power (P_{peak})...On any frequency removed from the channel edge by more than 2500 Hz: At least $43 + 10 \log_{10} (P_{peak} \text{ in watts dB})$ [74.637(b) & (b)(2)]

The equation above yields an absolute limit of -13dBm.

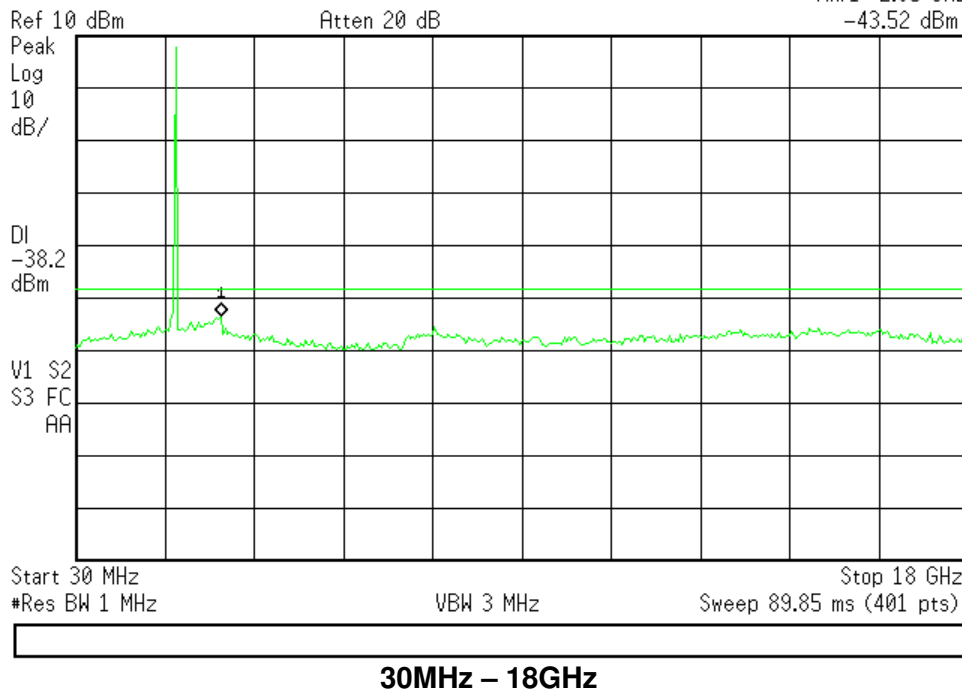
Tested by EG on 9/2/10

PLOTS

Agilent 11:16:14 Sep 1, 2010

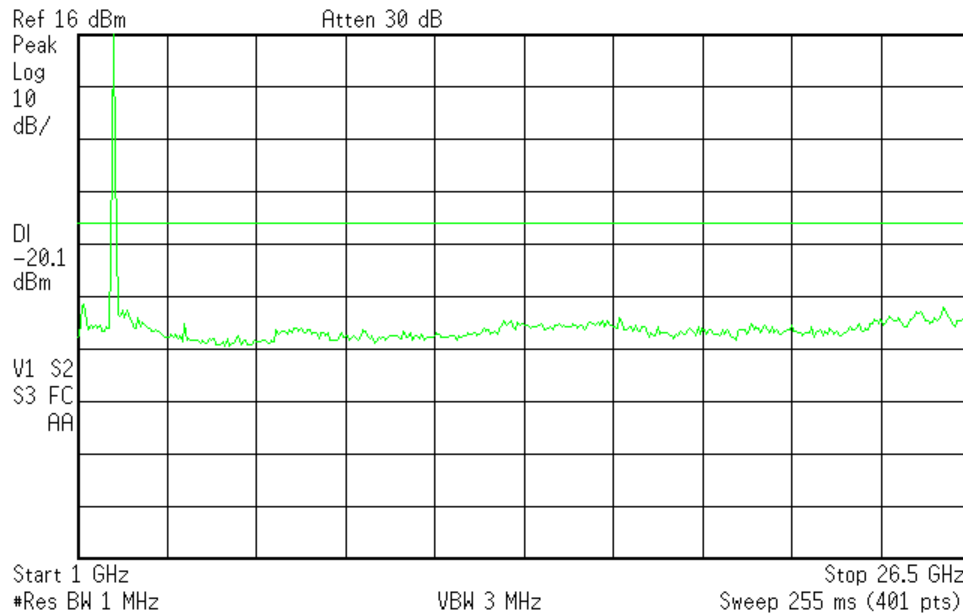
R T

Mkr1 2.95 GHz
-43.52 dBm



Agilent 11:23:32 Sep 1, 2010

R T

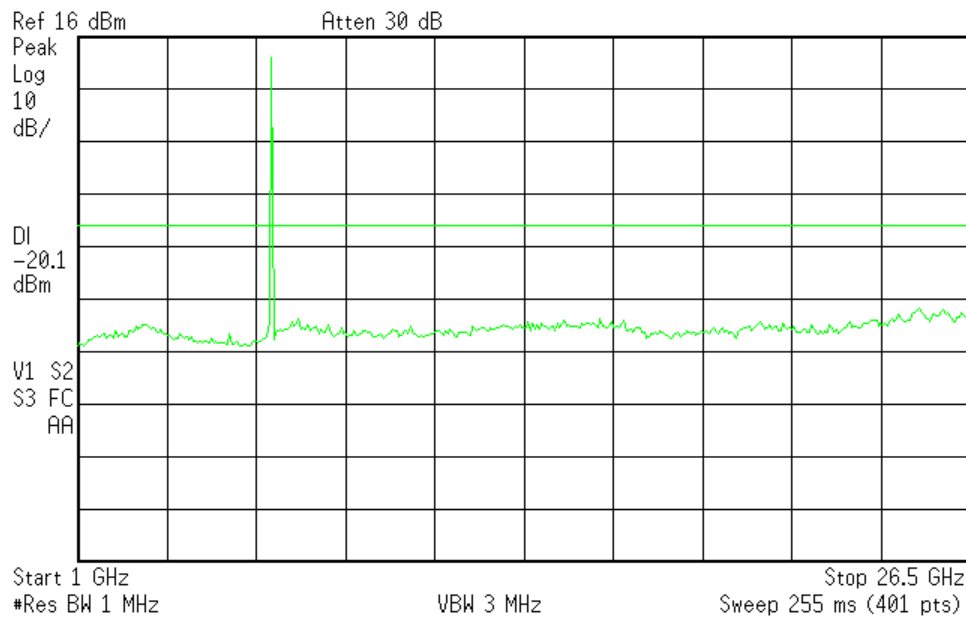


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1-26.5GHz (2GHz Tx)

Agilent 13:56:34 Sep 3, 2010

R T



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1-26.5GHz (7GHz Tx)

Out-of-Band Emissions – Radiated

LIMIT

“...the peak power of emissions shall be attenuated below the peak envelope transmitter power (P_{peak})...On any frequency removed from the channel edge by more than 2500 Hz: At least $43 + 10 \log_{10} (P_{peak} \text{ in watts}) \text{ dB}$ ” [74.637(b) & (b)(2)]

The equation above yields an absolute limit of -13dBm.

MEASUREMENTS

No other transmitter related spurious emissions were detected in the frequency range.

Frequency Tolerance**LIMIT**

The frequency tolerance limit is 0.005%. [74.661]

EQUIPMENT

Equip: Gold SA, Bryant ENV Chamber

Engineer: Evan Gould

Date: 9/7/2010

WO: J1631

Company: Microwave Radio Corporation

EUT: PTX-PRO 2 and 7 GHz radios

MEASUREMENTS

The value used for the nominal frequency was the measurement taken at 30°C and 120VAC. The limit used for the 2GHz band is the tighter of two limits covering the 2GHz range.

2GHz radio Frequency Tolerance Measurements						
Temperture (°C)	Voltage (VAC)	Frequency (GHz)	Delta (Hz)	Delta (%)	Limit (%)	Result (Pass/Fail)
-30	120	2.458502428	1784	0.000073	0.001	Pass
-20	120	2.458502185	1541	0.000063	0.001	Pass
-10	120	2.458501564	920	0.000037	0.001	Pass
0	120	2.458501042	398	0.000016	0.001	Pass
10	120	2.458500790	146	0.000006	0.001	Pass
20	102	2.458500641	3	0.000000	0.001	Pass
20	120	2.458500644	0	0.000000	0.001	Pass
20	138	2.458500646	2	0.000000	0.001	Pass
30	120	2.458501266	622	0.000025	0.001	Pass
40	120	2.458500501	143	0.000006	0.001	Pass
50	120	2.458500360	284	0.000012	0.001	Pass

7GHz radio Frequency Tolerance Measurements						
Temperture (°C)	Voltage (VAC)	Frequency (GHz)	Delta (Hz)	Delta (%)	Limit (%)	Result (Pass/Fail)
-30	120	7.062504755	8367	0.000118	0.005	Pass
-20	120	7.062502942	6554	0.000093	0.005	Pass
-10	120	7.062500857	4469	0.000063	0.005	Pass
0	120	7.062498192	1804	0.000026	0.005	Pass
10	120	7.062497192	804	0.000011	0.005	Pass
20	102	7.062496422	34	0.000000	0.005	Pass
20	120	7.062496388	0	0.000000	0.005	Pass
20	138	7.062496440	52	0.000001	0.005	Pass
30	120	7.062497462	1074	0.000015	0.005	Pass
40	120	7.062495853	535	0.000008	0.005	Pass
50	120	7.062494888	1500	0.000021	0.005	Pass

Measurement Uncertainty

Measurement	Expanded Uncertainty k=2	Maximum allowable uncertainty (ETSI)
Radiated Emissions (30-1000MHz)	5.6dB	N/A
Radiated Emissions (1-26.5GHz)	4.6dB	N/A
Radiated Emissions (above 26.5GHz)	4.9dB	N/A
Magnetic Radiated Emissions	5.6dB	N/A
Conducted Emissions	3.9dB	N/A
Telco Conducted Emissions (Current)	2.9dB	N/A
Telco Conducted Emissions (Voltage)	4.4dB	N/A
Electrostatic Discharge	11.5%	N/A
Radiated RF Immunity (Uniform Field)	1.6dB	N/A
Electrical Fast Transients	23.1%	N/A
Surge	23.1%	N/A
Conducted RF Immunity	3dB	N/A
Magnetic Immunity	12.8%	N/A
Dips and Interrupts	2.3V	N/A
Harmonics	3.5%	N/A
Flicker	3.5%	N/A
Radio frequency	8.2×10^{-8}	1×10^{-7}
RF power, conducted	0.7dB	0.75dB
Maximum frequency deviation:		
• Within 300Hz and 6kHz of audio frequency	• 1.2%	• 5%
• Within 6kHz and 25kHz of audio frequency	• 0.1dB	• 3dB
Adjacent channel power	1.9dB	3dB
Conducted spurious emission of transmitter, valid up to 12.75GHz	0.7dB	3dB
Conducted emission of receivers	0.7dB	1dB
Radiated emission of transmitter, valid up to 26.5GHz	5.6dB	6dB
Radiated emission of transmitter, valid up to 80GHz	5.6dB	6dB
Radiated emission of receiver, valid up to 26.5GHz	5.6dB	6dB
Radiated emission of receiver, valid up to 80GHz	5.6dB	6dB
RF level uncertainty for a given BER	0.7dB	1dB
Humidity	2.31%	5%
Temperature	0.6°C	1.0°C
Time	0.8%	10%
RF Power Density, Conducted	2.2dB	3dB
DC and low frequency voltages	1.29%	3%
Voltage (AC, <10kHz)	1.29%	2%
Voltage (DC)	0.23%	1%
The above reflects a 95% confidence level		

Conditions Of Testing

[Bureau Veritas Consumer Products Services, Inc., a Massachusetts corporation], and/or its affiliates (collectively, the "Company") will conduct, at the request of the Submitter ("Client"), the tests specified on the submitted Test Request Form or equivalent in accordance with, and subject to, the following terms and conditions (collectively, "**Conditions**"):

1. All orders for tests are subject to acceptance by the Company, and no order will constitute a binding commitment of the Company unless and until such order is accepted by it, as evidenced by the issuance of a written report ("**Test Report**") by the Company. The Test Report is issued solely by the Company, is intended for the exclusive use of Client and shall not be published, used for advertising purposes, copied or replicated for distribution to any other person or entity or otherwise publicly disclosed without the prior written consent of the Company. By submitting a request for services to the Company, Client consents to the disclosure to accreditation bodies of those records of Client relevant to the accreditation body's assessment of the Company's competence and compliance with relevant accreditation criteria. The Company shall not be liable for any loss or damage whatsoever resulting from the failure of the Company to provide its services within any time period for completion estimated by the Company. If Client anticipates using the Test Report in any legal proceeding, arbitration, dispute resolution forum or other proceeding, it shall so notify the Company prior to submitting the Test Report in such proceeding. The Company has no obligation to provide a fact or expert witness at such proceeding unless the Company agrees in advance to do so for a separate and additional fee.
2. The Test Report will set forth the findings of the Company solely with respect to the test samples identified therein. Unless specifically and expressly indicated in the Test Report, the results set forth in such Test Report are not intended to be indicative or representative of the quality or characteristics of the lot from which a test sample is taken, and Client shall not rely upon the Test Report as being so indicative or representative of the lot or of the tested product in general. The Test Report will reflect the findings of the Company at the time of testing only, and the Company shall have no obligation to update the Test Report after its issuance. The Test Report will set forth the results of the tests performed by the Company based upon the written information provided to the Company. The Test Report will be based solely on the samples and written information submitted to the Company by Client, and the Company shall not be obligated to conduct any independent investigation or inquiry with respect thereto.
3. The Company may, in its sole discretion, destroy samples which have been furnished to the Company for testing and which have not been destroyed in the course of testing. The Company may delegate the performance of all or a portion of the services contemplated hereunder to an affiliate, agent or subcontractor of the Company, and Client consents to such delegation.
4. These Conditions and the Test Report represent the entire understanding of the parties hereto with respect to the subject matter hereof and of the Test Report, and no modification, variance or extrapolation with respect thereto shall be permitted without the prior written consent of the Company.
5. The names, service marks, trademarks and copyrights of the Company and its affiliates, including the names "**BUREAU VERITAS**," "**BUREAU VERITAS CONSUMER PRODUCTS SERVICES**," "**BVCPS**," "**MTL**," "**ACTS**," "**MTL-ACTS**" and "**CURTIS-STRAUS**" (collectively, the "**Marks**") are and shall remain the sole property of the Company or its affiliates and shall not be used by Client except solely to the extent that Client obtains the prior written approval of the Company and then only in the manner prescribed by the Company. Client shall not contest the validity of the Marks or take any action that might impair the value or goodwill associated with the Marks or the image or reputation of the Company or its affiliates.
6. Payment in full shall be due 30 days after the date of invoice. Interest shall be due on overdue amounts from the due date until paid at an interest rate of 1.5% per month or, if less, the maximum rate permitted by law. The Company reserves the right, at any time and from time to time, to revoke any credit extended to Client. Client shall reimburse the Company for any costs it incurs in collecting past due amounts, including court costs and fees and expenses of attorneys and collection agencies. The Test Report may not be used or relied upon by Client if and for so long as Client fails to pay when due any invoice issued by the Company or any affiliate of it to Client or any affiliate or subsidiary of Client together with interest and penalties, if any, accrued thereon.
7. The Company disclaims any and all responsibility or liability arising out of or in connection with e-mail transmissions of such information.
8. Client understands and agrees that the Company is neither an insurer nor a guarantor, that the Company does not take the place of Client or any designer, manufacturer, agent, buyer, distributor or transportation or shipping company, and that the Company disclaims all liability in such capacities. Client further understands that if it seeks assurance against loss or damage, it should obtain appropriate insurance.
9. Client agrees that the Company, by providing the services, does not take the place of Client nor any third party, nor does the Company release them from any of their obligations, nor does the Company otherwise assume, abridge, abrogate or undertake to discharge any duty of any third party to Client or any duty of Client or any third party to any other third party, and Client will not release any third party from its obligations and duties with respect to the tested goods.
10. Client shall, on a timely basis, (a) provide adequate instructions to the Company in order to enable the Company to perform properly its services, (b) provide, or cause Client's suppliers and contractors to provide, the Company with all documents necessary to enable the Company to perform its services, (c) furnish the Company with all relevant information regarding Client's intended use and purposes of the tested goods, (d) advise the Company of essential dates and deadlines relevant to the tested goods and (e) fully exercise all rights and remedies available to Client against third parties in respect of the tested goods.
11. The Company shall undertake due care and ordinary skill in the performance of its services to Client, and the Company shall accept responsibility only where such skill has not been exercised and, even in such event, only to the extent of the limitation of liability set forth herein.
12. If Client desires to assert a claim arising from or relating to (i) the performance, purported performance or non-performance of any services by the Company or (ii) the sale, resale, manufacture, distribution or use of any tested goods, it must submit that claim to the Company in a writing that sets forth with particularity the basis for such claim within 60 days from discovery of the potential claim and not more than six months after the date of issuance of the Test Report to Client. Client waives any and all such claims including, without limitation, claims that the Test Report is inaccurate, incomplete or misleading or that additional or different testing is required, unless and then only to the extent that Client submits a written claim to the Company within both such time periods.



13. CLIENT SHALL, EXCEPT TO THE EXTENT OF COMPANY'S LIABILITY TO CLIENT HEREUNDER (WHICH IN NO EVENT SHALL EXCEED THE LIMITATION OF LIABILITY HEREIN), HOLD HARMLESS AND INDEMNIFY THE COMPANY, ITS AFFILIATES AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL ACTUAL OR ALLEGED THIRD PARTY CLAIMS FOR LOSS, DAMAGE OR EXPENSE OF WHATSOEVER NATURE AND HOWSOEVER ARISING FROM OR RELATING TO (i) THE PERFORMANCE, PURPORTED PERFORMANCE OR NON-PERFORMANCE OF ANY SERVICES BY THE COMPANY OR (ii) THE SALE, RESALE, MANUFACTURE, DISTRIBUTION OR USE OF ANY TESTED GOODS.

14. EXCEPT AS MAY OTHERWISE BE EXPRESSLY AGREED TO IN WRITING BY THE COMPANY AND NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN OR IN ANY TEST REPORT, NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, IS MADE.

15. (A) IN NO EVENT WHATSOEVER SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, EXEMPLARY OR PUNITIVE DAMAGES IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE TEST REPORT OR THE SERVICES PROVIDED BY THE COMPANY HEREUNDER, INCLUDING WITHOUT LIMITATION LOSS OF OR DAMAGE TO PROPERTY; LOSS OF INCOME, PROFIT OR USE; OR ANY CLAIMS OR DEMANDS MADE AGAINST CLIENT OR ANY OTHER PERSON BY ANY THIRD PARTY IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE SERVICES PROVIDED BY THE COMPANY HEREUNDER.

(B) NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN, AND IN RECOGNITION OF THE RELATIVE RISKS AND BENEFITS TO CLIENT AND THE COMPANY ASSOCIATED WITH THE TESTING SERVICES CONTEMPLATED HEREBY, THE RISKS HAVE BEEN ALLOCATED SUCH THAT UNDER NO CIRCUMSTANCES WHATSOEVER SHALL THE LIABILITY OF THE COMPANY TO CLIENT OR ANY THIRD PARTY IN RESPECT OF ANY CLAIM FOR LOSS, DAMAGE OR EXPENSE, OF WHATSOEVER NATURE OR MAGNITUDE, AND HOWSOEVER ARISING, EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF THE FEES PAID TO THE COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM OR U.S.\$10,000, WHICHEVER IS THE LESSER AMOUNT.

16. The Company shall not be liable for any loss or damage resulting from any delay or failure in performance of its obligations hereunder resulting directly or indirectly from any event of force majeure or any event outside the control of the Company. If any such event occurs, the Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.

17. Company's services, including these Conditions, shall be governed by, and construed in accordance with, the local laws of the country where the Company performs the tests or, in the case of tests performed in the United States of America, the laws of Massachusetts without regard to conflicts of laws principles. If any aspect(s) of these Conditions is found to be illegal or unenforceable, the validity, legality and enforceability of all remaining aspects of these Conditions shall not in any way be affected or impaired thereby. Any proceeding related to the subject matter hereof shall be brought, if at all, in the courts of the country where the Company performs the tests or, in the case of tests performed in the United States of America, in the courts of Massachusetts. Client waives the right to interpose any counterclaim or setoffs of any nature in any litigation arising hereunder.

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