Application for Certification
Remote Commander System

Interactive Technologies

XCVR1

FCC ID: ULPIQ70
IC ID: 8303A-IQ70

REPORT # RV980678D-002

This report was prepared in accordance with the requirements of the FCC Rules and Regulations Part 2, SubpartJ, 2.1033, Part 15.247 and other applicable sections of the rules as indicated herein.

Prepared By:

DNB Engineering, Inc.
5969 Robinson Avenue
Riverside, CA 92503

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Paragraph numbers in this report follow the application section numbers found in the FCC Rules and Regulations, Part 2, Subpart J for Certification of electronic equipment.

1.0 ADMINISTRATIVE DATA

1.1 Certifications and Qualifications

I certify that DNB Engineering, Inc conducted the tests performed in order to obtain the technical data presented in this application. Also, based on the results of the enclosed data, I have concluded that the equipment tested meets or exceeds the requirements of the Rules and Regulations governing this application.

1.2 Measurement Repeatability Information

The test data presented in this report has been acquired using the guidelines set forth in FCC Part 2.1031 through 2.1057, Part 15. The test results presented in this document are valid only for the equipment identified herein under the test conditions described. Repeatability of these test results will only be achieved with identical measurement conditions. These conditions include: The made test distance, EUT Height, Measurement Sit Characteristics, and the same EUT System Components. The system must have the same interconnecting Cables arranged in identical placement to that in the test setup, with the system and/or EUT functioning in the identical mode of operation (i.e. software and so on) as on the date of the test. Any deviation from the test conditions and the environment on the date of the test may result in measurement repeatability difficulties.

All changes made to the EUT during the course of testing as identified in this test report must be incorporated into the EUT or identical models to ensure compliance with the FCC regulations.

Thomas Elders

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1.3 Equipment Calibration List

Asset #	Equipment	Manufacturer	Model #	Serial #	Location	Cal date	Interval	Due date
364	Pre-Amp	Miteq	afd304008040	121391	Riv	28-Aug-08	365	28-Aug-09
1698	Pre-Amp	Miteq	AFS4-08001800-35-LN	378064	Riv	28-Aug-08	365	28-Aug-09
2264	Spectrum Analyzer	Agilent	E4407B	MY45103462	Riv	26-Aug-08	365	26-Aug-09
1943	Power Meter	Boonton	4231A	91501	Riv	21-Feb-08	730	21-Feb-10
1760	Pre-Amp	Mini-Circuits	ZFL-2000	8350	Riv	28-Aug-08	365	28-Aug-09
2295	Cable	Adams Russell	1996-0072	1W5	Riv	15-Oct-08	365	15-Oct-09
1874	Cable	DNB	Range	11874	Riv	28-Aug-08	365	28-Aug-09
11	Antenna (DRG)	EMCO	3115	2281	Riv	04-Oct-07	730	04-Oct-09
31	Antenna (Log Periodic)	Emco	3146	1284	Riv	03-Jan-08	730	03-Jan-10
1758	Antenna (Bicon)	AH Systems	SAS-200/540	524	Riv	02-Jan-08	730	02-Jan-10

2.1033 (b) (1) Application for Certification

Name of Applicant:	Interactive Technologies, Inc.
Applicant is:	Manufacturer
Name of Manufacturer:	Interactive Technologies, Inc.
Description:	Remote Commander System
Part Number:	XCVR1
Anticipated Production Quantity:	Multiple Units
15.247 Frequency Bands:	2.405 GHz – 2.480 GHz
15.247 Rated Power:	.1 mW
Type of Signal:	Digital Modulation
Test Procedure:	Measurement of Digital Transmission Systems Operating Under Section 15.247 (March 23, 2005)

2.1033 (b) (2) FCC Identifier

FCC ID: ULPIQ70

IC ID: 8303A-IQ70

2.1033 (b) (3) Installation and Operating Instructions

To be filed as a separate attachment

2.1033 (b) (4) Brief Description of Circuit Function

To be filed as a separate attachment.

2.1033 (b) (5) Block Diagram

To be filed as a separate attachment.

2.1033 (b) (6) Report of Measurements

15.207 Conducted Emissions (General Provisions)

Not Applicable. The equipment does not connect directly to the AC mains.

RSS-Gen 4.10 Receiver Spurious Emissions

Test Procedure:

The EUT was measured on an open area test site (OATS).

A measuring distance of 3m was used for measurements. The frequency range 30MHz to 25GHz was scanned for spurious emissions. The resolution bandwidth was 1MHz and the video bandwidth was 1MHz for peak measurements. The resolution bandwidth was 1MHz and the video bandwidth was 10Hz for average measurements.

Sufficient precautions shall be taken to ensure that reflections form extraneous objects adjacent to the site do not degrade the measurement results, in particular:

- no extraneous conduction objects having any dimension in excess of a quarter wavelength of the highest frequency tested shall be in the immediate vicinity of the site;

- all cables shall be as short as possible; as much of the cables as possible shall be on the ground plane or preferably below; and the low impedance cables shall be screened.

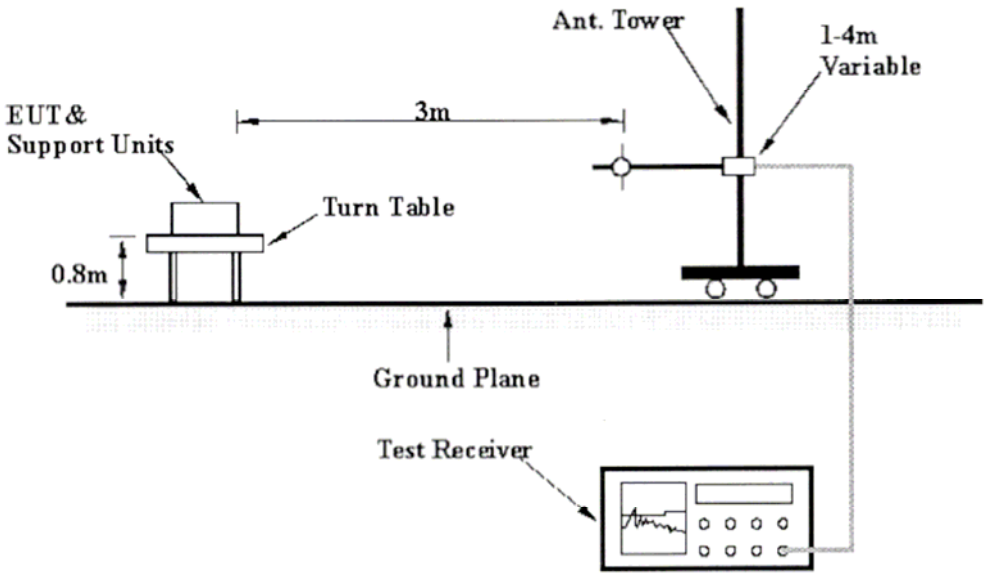
The EUT shall be placed upon a non-conductive table .8 meters above the ground plane and shall be placed in the "worst case" transmitting mode. The EUT shall be rotated 360 degrees to find the azimuth maxima. The receive antenna shall then be raised and lowered between 1 to 4 meters to find the maximum signal emanating from the EUT. This signal strength is then recorded on the data sheets.

Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measurement Distance (meters)
.009 – 0.490	2400/F(kHz)	20*(Log10(2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	20*(Log10(24000/F(kHz)	30
1.705 – 30.0	30	29.5	30
30 – 88	100	40	3
88 – 216	150	43.5	3
216 – 960	200	46.0	3
Above 960	500	54.0	3

Sample Calculation:

Corrected = Meter Reading + Cable1 Loss + Cable2 Loss + Antenna Factor – Amp Gain
Margin = Corrected – Limit

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions**	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies, Inc.		**RSS-Gen 4.10**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Test Setup			



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**RSS-Gen 4.10**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 8 Peak Measurements 30MHz – 1000MHz			

Freq. (MHz)	Meter (dBµV/m)	Antenna (dB)	Cable (dB)	Preamp. (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Delta (dB)	Polarity
32.02	21.8	13.1	0.9	21.96	13.84	40	-26.16	H
54.4	30.7	9.8	1.1	21.9	19.7	40	-20.3	H
72.49	42	9.5	1.3	21.9	30.9	40	-9.1	H
110.72	32.8	10.2	1.7	21.89	22.81	40	-17.19	H
112.74	34	10.3	1.7	21.89	24.11	40	-15.89	H
144.01	34.4	11.9	1.9	21.86	26.34	40	-13.66	H
171.14	28	13.3	2	21.83	21.47	40	-18.53	H
30.25	23.4	13.4	0.8	21.97	15.63	40	-24.37	V
48.33	29.5	10.4	1.1	21.91	19.09	40	-20.91	V
167.53	29.1	13.2	2	21.83	22.47	40	-17.53	V
206.58	23.1	10.7	2.2	21.78	14.22	40	-25.78	V
233.19	31.7	10.8	2.4	21.71	23.19	40	-16.81	V
256.37	25	12	2.5	21.65	17.85	40	-22.15	V
263.97	23	12.3	2.6	21.63	16.27	40	-23.73	V
501.51	28.2	17.3	4	21	28.5	40	-11.5	V
905.13	25.2	22	5.7	21.41	31.49	40	-8.51	V
206.56	21.7	10.7	2.2	21.78	12.82	40	-27.18	H
221.38	26.6	10.4	2.3	21.74	17.56	40	-22.44	H
221.38	26.6	10.4	2.3	21.74	17.56	40	-22.44	H
505.48	29.4	17.8	4	21.01	30.19	40	-9.81	H
989.97	23.6	23.5	6.1	21.49	31.71	40	-8.29	H

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**RSS-Gen 4.10**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 1 Peak Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	35.19	1.64	0.6	23.7	21.57	39.56	74	-34.44	Vertical
1025	36.51	1.64	0.62	23.7	21.57	40.9	74	-33.1	Vertical
1042	39.94	1.64	0.62	23.7	21.57	44.33	74	-29.67	Vertical
1060	45.83	1.64	0.62	23.7	21.57	50.22	74	-23.78	Vertical
1267	48.67	1.72	0.66	23.7	22.04	52.71	74	-21.29	Vertical
1650	39.64	1.06	0.76	25.3	22.03	44.73	74	-29.27	Vertical
2022	46.75	1.14	0.83	27.5	21.03	55.19	74	-18.81	Vertical
2405	57.4	1.26	0.92	29.2	18.31	70.47	Fund		Vertical
2485	45.79	1.21	0.86	30.2	21.8	56.26	74	-17.74	Vertical
4810	34.82	1.65	1.04	30.3	11.68	56.13	74	-17.87	Vertical
7215	30.21	2.89	1.84	35.9	29.18	41.66	74	-32.34	Vertical
9620	32.45	3.07	2.17	38.2	23.72	52.17	74	-21.83	Vertical
12025	29.64	5.92	2.14	39.1	24.3	52.5	74	-21.5	Vertical
1005	36.91	1.64	0.6	23.7	21.57	41.28	74	-32.72	Horizontal
1025	35.13	1.64	0.62	23.7	21.57	39.52	74	-34.48	Horizontal
1042	39.93	1.64	0.62	23.7	21.57	44.32	74	-29.68	Horizontal
1060	42.57	1.64	0.62	23.7	21.57	46.96	74	-27.04	Horizontal
1267	46.78	1.72	0.66	23.7	22.04	50.82	74	-23.18	Horizontal
1650	34.31	1.06	0.76	25.3	22.03	39.4	74	-34.6	Horizontal
2022	48.64	1.14	0.83	27.5	21.03	57.08	74	-16.92	Horizontal
2405	53.33	1.26	0.92	29.2	18.31	66.4	Fund		Horizontal
2485	44.12	1.21	0.86	30.2	21.8	54.59	74	-19.41	Vertical
4810	33.8	1.65	1.04	30.3	11.68	55.11	74	-18.89	Horizontal
7215	30.49	2.89	1.84	35.9	29.18	41.94	74	-32.06	Horizontal
9620	31.22	3.07	2.17	38.2	23.72	50.94	74	-23.06	Horizontal
12025	27.44	5.92	2.14	39.1	24.3	50.3	74	-23.7	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**RSS-Gen 4.10**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 1 Average Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	25.8	1.64	0.6	23.7	21.57	30.17	54	-23.83	Vertical
1025	30.4	1.64	0.62	23.7	21.57	34.79	54	-19.21	Vertical
1042	34.93	1.64	0.62	23.7	21.57	39.32	54	-14.68	Vertical
1060	38.46	1.64	0.62	23.7	21.57	42.85	54	-11.15	Vertical
1267	42.13	1.72	0.66	23.7	22.04	46.17	54	-7.83	Vertical
1650	31.23	1.06	0.76	25.3	22.03	36.32	54	-17.68	Vertical
2022	42.35	1.14	0.83	27.5	21.03	50.79	54	-3.21	Vertical
2405	56.41	1.26	0.92	29.2	18.31	69.48	Fund		Vertical
4810	26.99	1.65	1.04	30.3	11.68	48.3	54	-5.7	Vertical
7215	25.21	2.89	1.84	35.9	29.18	36.66	54	-17.34	Vertical
9620	27.65	3.07	2.17	38.2	23.72	47.37	54	-6.63	Vertical
12025	25.42	5.92	2.14	39.1	24.3	48.28	54	-5.72	Vertical
1005	27.4	1.64	0.6	23.7	21.57	31.77	54	-22.23	Horizontal
1025	31.32	1.64	0.62	23.7	21.57	35.71	54	-18.29	Horizontal
1042	35.61	1.64	0.62	23.7	21.57	40	54	-14	Horizontal
1060	38.46	1.64	0.62	23.7	21.57	42.85	54	-11.15	Horizontal
1267	40.51	1.72	0.66	23.7	22.04	44.55	54	-9.45	Horizontal
1650	29.56	1.06	0.76	25.3	22.03	34.65	54	-19.35	Horizontal
2022	42.38	1.14	0.83	27.5	21.03	50.82	54	-3.18	Horizontal
2405	54.27	1.26	0.92	29.2	18.31	67.34	Fund		Horizontal
4810	27.44	1.65	1.04	30.3	11.68	48.75	54	-5.25	Horizontal
7215	25.36	2.89	1.84	35.9	29.18	36.81	54	-17.19	Horizontal
9620	28.81	3.07	2.17	38.2	23.72	48.53	54	-5.47	Horizontal
12025	25.32	5.92	2.14	39.1	24.3	48.18	54	-5.82	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**RSS-Gen 4.10**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 8 Peak Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	33.87	1.64	0.6	23.7	21.57	38.24	74	-35.76	Vertical
1025	37.45	1.64	0.62	23.7	21.57	41.84	74	-32.16	Vertical
1042	41.43	1.64	0.62	23.7	21.57	45.82	74	-28.18	Vertical
1060	44.51	1.64	0.62	23.7	21.57	48.9	74	-25.1	Vertical
1267	47.39	1.72	0.66	23.7	22.04	51.43	74	-22.57	Vertical
1650	46.83	1.06	0.76	25.3	22.03	51.92	74	-22.08	Vertical
2022	47.56	1.14	0.83	27.5	21.03	56	74	-18	Vertical
2440	57.21	1.26	0.92	29.2	18.31	70.28	Fund		Vertical
2488	44.34	1.21	0.86	30.2	21.8	54.81	74	-19.19	Vertical
4880	35.42	1.65	1.04	30.3	11.68	56.73	74	-17.27	Vertical
7320	32.88	2.89	1.84	35.9	29.18	44.33	74	-29.67	Vertical
9760	36.75	3.07	2.17	38.2	23.72	56.47	74	-17.53	Vertical
12200	29.18	5.92	2.14	39.1	24.3	52.04	74	-21.96	Vertical
1005	36.63	1.64	0.6	23.7	21.57	41	74	-33	Horizontal
1025	38.67	1.64	0.62	23.7	21.57	43.06	74	-30.94	Horizontal
1042	41.22	1.64	0.62	23.7	21.57	45.61	74	-28.39	Horizontal
1060	46.74	1.64	0.62	23.7	21.57	51.13	74	-22.87	Horizontal
1267	48.53	1.72	0.66	23.7	22.04	52.57	74	-21.43	Horizontal
1650	40.94	1.06	0.76	25.3	22.03	46.03	74	-27.97	Horizontal
2022	49.21	1.14	0.83	27.5	21.03	57.65	74	-16.35	Horizontal
2440	56.9	1.26	0.92	29.2	18.31	69.97	Fund		Horizontal
2488	43.11	1.21	0.86	30.2	21.8	53.58	74	-20.42	Horizontal
4880	37.59	1.65	1.04	30.3	11.68	58.9	74	-15.1	Horizontal
7320	31.66	2.89	1.84	35.9	29.18	43.11	74	-30.89	Horizontal
9760	35.42	3.07	2.17	38.2	23.72	55.14	74	-18.86	Horizontal
12200	34.38	5.92	2.14	39.1	24.3	57.24	74	-16.76	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**RSS-Gen 4.10**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 8 Average Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	24.62	1.64	0.6	23.7	21.57	28.99	54	-25.01	Vertical
1025	29.67	1.64	0.62	23.7	21.57	34.06	54	-19.94	Vertical
1042	33.89	1.64	0.62	23.7	21.57	38.28	54	-15.72	Vertical
1060	38.12	1.64	0.62	23.7	21.57	42.51	54	-11.49	Vertical
1267	40.76	1.72	0.66	23.7	22.04	44.8	54	-9.2	Vertical
1650	28.65	1.06	0.76	25.3	22.03	33.74	54	-20.26	Vertical
2022	41.32	1.14	0.83	27.5	21.03	49.76	54	-4.24	Vertical
2440	56.39	1.26	0.92	29.2	18.31	69.46	Fund		Vertical
4880	28.4	1.65	1.04	30.3	11.68	49.71	54	-4.29	Vertical
7320	26.44	2.89	1.84	35.9	29.18	37.89	54	-16.11	Vertical
9760	28.23	3.07	2.17	38.2	23.72	47.95	54	-6.05	Vertical
12200	24.38	5.92	2.14	39.1	24.3	47.24	54	-6.76	Vertical
1005	27.4	1.64	0.6	23.7	21.57	31.77	54	-22.23	Horizontal
1025	30.22	1.64	0.62	23.7	21.57	34.61	54	-19.39	Horizontal
1042	33.51	1.64	0.62	23.7	21.57	37.9	54	-16.1	Horizontal
1060	37.67	1.64	0.62	23.7	21.57	42.06	54	-11.94	Horizontal
1267	39.98	1.72	0.66	23.7	22.04	44.02	54	-9.98	Horizontal
1650	30.64	1.06	0.76	25.3	22.03	35.73	54	-18.27	Horizontal
2022	41.34	1.14	0.83	27.5	21.03	49.78	54	-4.22	Horizontal
2440	55.86	1.26	0.92	29.2	18.31	68.93	Fund		Horizontal
4880	27.23	1.65	1.04	30.3	11.68	48.54	54	-5.46	Horizontal
7320	23.67	2.89	1.84	35.9	29.18	35.12	54	-18.88	Horizontal
9760	28.91	3.07	2.17	38.2	23.72	48.63	54	-5.37	Horizontal
12200	26.9	5.92	2.14	39.1	24.3	49.76	54	-4.24	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**RSS-Gen 4.10**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 16 Peak Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	34.1	1.64	0.6	23.7	21.57	38.47	74	-35.53	Vertical
1025	35.68	1.64	0.62	23.7	21.57	40.07	74	-33.93	Vertical
1042	38.53	1.64	0.62	23.7	21.57	42.92	74	-31.08	Vertical
1060	38.24	1.64	0.62	23.7	21.57	42.63	74	-31.37	Vertical
1267	47.32	1.72	0.66	23.7	22.04	51.36	74	-22.64	Vertical
1650	34.89	1.06	0.76	25.3	22.03	39.98	74	-34.02	Vertical
2022	39.92	1.14	0.83	27.5	21.03	48.36	74	-25.64	Vertical
2480	57.51	1.26	0.92	29.2	18.31	70.58	Fund		Vertical
2483	45.64	1.21	0.86	30.2	21.8	56.11	74	-17.89	Vertical
4960	36.45	1.65	1.04	30.3	11.68	57.76	74	-16.24	Vertical
7440	34.14	2.89	1.84	35.9	29.18	45.59	74	-28.41	Vertical
9920	37.72	3.07	2.17	38.2	23.72	57.44	74	-16.56	Vertical
12400	27.43	5.92	2.14	39.1	24.3	50.29	74	-23.71	Vertical
1005	34.99	1.64	0.6	23.7	21.57	39.36	74	-34.64	Horizontal
1025	37.81	1.64	0.62	23.7	21.57	42.2	74	-31.8	Horizontal
1042	39.44	1.64	0.62	23.7	21.57	43.83	74	-30.17	Horizontal
1060	40.53	1.64	0.62	23.7	21.57	44.92	74	-29.08	Horizontal
1267	46.35	1.72	0.66	23.7	22.04	50.39	74	-23.61	Horizontal
1650	38.57	1.06	0.76	25.3	22.03	43.66	74	-30.34	Horizontal
2022	44.33	1.14	0.83	27.5	21.03	52.77	74	-21.23	Horizontal
2480	57.5	1.26	0.92	29.2	18.31	70.57	Fund		Horizontal
2483	46.71	1.21	0.86	30.2	21.8	57.18	74	-16.82	Horizontal
4960	37.59	1.65	1.04	30.3	11.68	58.9	74	-15.1	Horizontal
7440	32.11	2.89	1.84	35.9	29.18	43.56	74	-30.44	Horizontal
9920	36.34	3.07	2.17	38.2	23.72	56.06	74	-17.94	Horizontal
12400	35.42	5.92	2.14	39.1	24.3	58.28	74	-15.72	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**RSS-Gen 4.10**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 16 Average Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	25.67	1.64	0.6	23.7	21.57	30.04	54	-23.96	Vertical
1025	28.42	1.64	0.62	23.7	21.57	32.81	54	-21.19	Vertical
1042	32.99	1.64	0.62	23.7	21.57	37.38	54	-16.62	Vertical
1060	38.24	1.64	0.62	23.7	21.57	42.63	54	-11.37	Vertical
1267	41.76	1.72	0.66	23.7	22.04	45.8	54	-8.2	Vertical
1650	25.66	1.06	0.76	25.3	22.03	30.75	54	-23.25	Vertical
2022	31.72	1.14	0.83	27.5	21.03	40.16	54	-13.84	Vertical
2480	56.49	1.26	0.92	29.2	18.31	69.56	Fund		Vertical
4960	28.46	1.65	1.04	30.3	11.68	49.77	54	-4.23	Vertical
7440	28.51	2.89	1.84	35.9	29.18	39.96	54	-14.04	Vertical
9920	31.64	3.07	2.17	38.2	23.72	51.36	54	-2.64	Vertical
12400	23.31	5.92	2.14	39.1	24.3	46.17	54	-7.83	Vertical
1005	25.42	1.64	0.6	23.7	21.57	29.79	54	-24.21	Horizontal
1025	29.66	1.64	0.62	23.7	21.57	34.05	54	-19.95	Horizontal
1042	32.48	1.64	0.62	23.7	21.57	36.87	54	-17.13	Horizontal
1060	33.5	1.64	0.62	23.7	21.57	37.89	54	-16.11	Horizontal
1267	38.12	1.72	0.66	23.7	22.04	42.16	54	-11.84	Horizontal
1650	29.19	1.06	0.76	25.3	22.03	34.28	54	-19.72	Horizontal
2022	37.56	1.14	0.83	27.5	21.03	46	54	-8	Horizontal
2480	56.77	1.26	0.92	29.2	18.31	69.84	Fund		Horizontal
4960	28.54	1.65	1.04	30.3	11.68	49.85	54	-4.15	Horizontal
7440	24.31	2.89	1.84	35.9	29.18	35.76	54	-18.24	Horizontal
9920	27.45	3.07	2.17	38.2	23.72	47.17	54	-6.83	Horizontal
12400	27	5.92	2.14	39.1	24.3	49.86	54	-4.14	Horizontal

15.209 Radiated Emissions (General Provisions)

Test Procedure:

The EUT was measured on an open area test site (OATS).

A measuring distance of 3m was used for measurements. The frequency range 30MHz to 25GHz was scanned for spurious emissions. The resolution bandwidth was 1MHz and the video bandwidth was 1MHz for peak measurements. The resolution bandwidth was 1MHz and the video bandwidth was 10Hz for average measurements.

Sufficient precautions shall be taken to ensure that reflections form extraneous objects adjacent to the site do not degrade the measurement results, in particular:

- no extraneous conduction objects having any dimension in excess of a quarter wavelength of the highest frequency tested shall be in the immediate vicinity of the site;

- all cables shall be as short as possible; as much of the cables as possible shall be on the ground plane or preferably below; and the low impedance cables shall be screened.

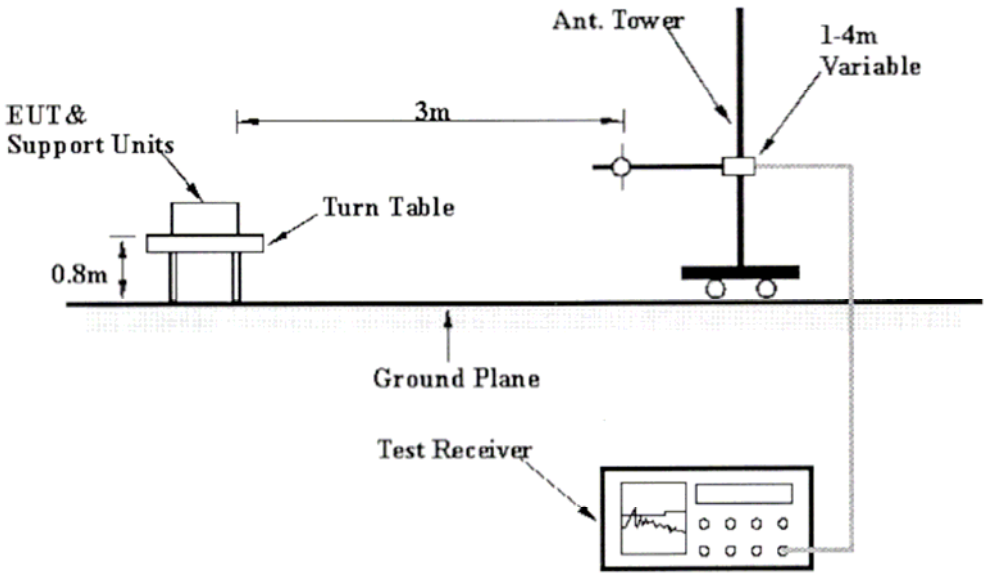
The EUT shall be placed upon a non-conductive table .8 meters above the ground plane and shall be placed in the "worst case" transmitting mode. The EUT shall be rotated 360 degrees to find the azimuth maxima. The receive antenna shall then be raised and lowered between 1 to 4 meters to find the maximum signal emanating from the EUT. This signal strength is then recorded on the data sheets.

Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measurement Distance (meters)
.009 – 0.490	2400/F(kHz)	20*(Log10(2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	20*(Log10(24000/F(kHz)	30
1.705 – 30.0	30	29.5	30
30 – 88	100	40	3
88 – 216	150	43.5	3
216 – 960	200	46.0	3
Above 960	500	54.0	3

Sample Calculation:

Corrected = Meter Reading + Cable1 Loss + Cable2 Loss + Antenna Factor – Amp Gain
Margin = Corrected – Limit

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions**	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.209**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Test Setup			



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**15.209**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 8 Peak Measurements 30MHz – 1000MHz			

Freq. (MHz)	Meter (dBµV/m)	Antenna (dB)	Cable (dB)	Preamp. (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Delta (dB)	Polarity
32.02	21.8	13.1	0.9	21.96	13.84	40	-26.16	H
54.4	30.7	9.8	1.1	21.9	19.7	40	-20.3	H
72.49	42	9.5	1.3	21.9	30.9	40	-9.1	H
110.72	32.8	10.2	1.7	21.89	22.81	40	-17.19	H
112.74	34	10.3	1.7	21.89	24.11	40	-15.89	H
144.01	34.4	11.9	1.9	21.86	26.34	40	-13.66	H
171.14	28	13.3	2	21.83	21.47	40	-18.53	H
30.25	23.4	13.4	0.8	21.97	15.63	40	-24.37	V
48.33	29.5	10.4	1.1	21.91	19.09	40	-20.91	V
167.53	29.1	13.2	2	21.83	22.47	40	-17.53	V
206.58	23.1	10.7	2.2	21.78	14.22	40	-25.78	V
233.19	31.7	10.8	2.4	21.71	23.19	40	-16.81	V
256.37	25	12	2.5	21.65	17.85	40	-22.15	V
263.97	23	12.3	2.6	21.63	16.27	40	-23.73	V
501.51	28.2	17.3	4	21	28.5	40	-11.5	V
905.13	25.2	22	5.7	21.41	31.49	40	-8.51	V
206.56	21.7	10.7	2.2	21.78	12.82	40	-27.18	H
221.38	26.6	10.4	2.3	21.74	17.56	40	-22.44	H
221.38	26.6	10.4	2.3	21.74	17.56	40	-22.44	H
505.48	29.4	17.8	4	21.01	30.19	40	-9.81	H
989.97	23.6	23.5	6.1	21.49	31.71	40	-8.29	H

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**15.209**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 1 Peak Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	35.19	1.64	0.6	23.7	21.57	39.56	74	-34.44	Vertical
1025	36.51	1.64	0.62	23.7	21.57	40.9	74	-33.1	Vertical
1042	39.94	1.64	0.62	23.7	21.57	44.33	74	-29.67	Vertical
1060	45.83	1.64	0.62	23.7	21.57	50.22	74	-23.78	Vertical
1267	48.67	1.72	0.66	23.7	22.04	52.71	74	-21.29	Vertical
1650	39.64	1.06	0.76	25.3	22.03	44.73	74	-29.27	Vertical
2022	46.75	1.14	0.83	27.5	21.03	55.19	74	-18.81	Vertical
2405	57.4	1.26	0.92	29.2	18.31	70.47	Fund		Vertical
2485	45.79	1.21	0.86	30.2	21.8	56.26	74	-17.74	Vertical
4810	34.82	1.65	1.04	30.3	11.68	56.13	74	-17.87	Vertical
7215	30.21	2.89	1.84	35.9	29.18	41.66	74	-32.34	Vertical
9620	32.45	3.07	2.17	38.2	23.72	52.17	74	-21.83	Vertical
12025	29.64	5.92	2.14	39.1	24.3	52.5	74	-21.5	Vertical
1005	36.91	1.64	0.6	23.7	21.57	41.28	74	-32.72	Horizontal
1025	35.13	1.64	0.62	23.7	21.57	39.52	74	-34.48	Horizontal
1042	39.93	1.64	0.62	23.7	21.57	44.32	74	-29.68	Horizontal
1060	42.57	1.64	0.62	23.7	21.57	46.96	74	-27.04	Horizontal
1267	46.78	1.72	0.66	23.7	22.04	50.82	74	-23.18	Horizontal
1650	34.31	1.06	0.76	25.3	22.03	39.4	74	-34.6	Horizontal
2022	48.64	1.14	0.83	27.5	21.03	57.08	74	-16.92	Horizontal
2405	53.33	1.26	0.92	29.2	18.31	66.4	Fund		Horizontal
2485	44.12	1.21	0.86	30.2	21.8	54.59	74	-19.41	Vertical
4810	33.8	1.65	1.04	30.3	11.68	55.11	74	-18.89	Horizontal
7215	30.49	2.89	1.84	35.9	29.18	41.94	74	-32.06	Horizontal
9620	31.22	3.07	2.17	38.2	23.72	50.94	74	-23.06	Horizontal
12025	27.44	5.92	2.14	39.1	24.3	50.3	74	-23.7	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**15.209**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 1 Average Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	25.8	1.64	0.6	23.7	21.57	30.17	54	-23.83	Vertical
1025	30.4	1.64	0.62	23.7	21.57	34.79	54	-19.21	Vertical
1042	34.93	1.64	0.62	23.7	21.57	39.32	54	-14.68	Vertical
1060	38.46	1.64	0.62	23.7	21.57	42.85	54	-11.15	Vertical
1267	42.13	1.72	0.66	23.7	22.04	46.17	54	-7.83	Vertical
1650	31.23	1.06	0.76	25.3	22.03	36.32	54	-17.68	Vertical
2022	42.35	1.14	0.83	27.5	21.03	50.79	54	-3.21	Vertical
2405	56.41	1.26	0.92	29.2	18.31	69.48	Fund		Vertical
4810	26.99	1.65	1.04	30.3	11.68	48.3	54	-5.7	Vertical
7215	25.21	2.89	1.84	35.9	29.18	36.66	54	-17.34	Vertical
9620	27.65	3.07	2.17	38.2	23.72	47.37	54	-6.63	Vertical
12025	25.42	5.92	2.14	39.1	24.3	48.28	54	-5.72	Vertical
1005	27.4	1.64	0.6	23.7	21.57	31.77	54	-22.23	Horizontal
1025	31.32	1.64	0.62	23.7	21.57	35.71	54	-18.29	Horizontal
1042	35.61	1.64	0.62	23.7	21.57	40	54	-14	Horizontal
1060	38.46	1.64	0.62	23.7	21.57	42.85	54	-11.15	Horizontal
1267	40.51	1.72	0.66	23.7	22.04	44.55	54	-9.45	Horizontal
1650	29.56	1.06	0.76	25.3	22.03	34.65	54	-19.35	Horizontal
2022	42.38	1.14	0.83	27.5	21.03	50.82	54	-3.18	Horizontal
2405	54.27	1.26	0.92	29.2	18.31	67.34	Fund		Horizontal
4810	27.44	1.65	1.04	30.3	11.68	48.75	54	-5.25	Horizontal
7215	25.36	2.89	1.84	35.9	29.18	36.81	54	-17.19	Horizontal
9620	28.81	3.07	2.17	38.2	23.72	48.53	54	-5.47	Horizontal
12025	25.32	5.92	2.14	39.1	24.3	48.18	54	-5.82	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**15.209**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 8 Peak Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	33.87	1.64	0.6	23.7	21.57	38.24	74	-35.76	Vertical
1025	37.45	1.64	0.62	23.7	21.57	41.84	74	-32.16	Vertical
1042	41.43	1.64	0.62	23.7	21.57	45.82	74	-28.18	Vertical
1060	44.51	1.64	0.62	23.7	21.57	48.9	74	-25.1	Vertical
1267	47.39	1.72	0.66	23.7	22.04	51.43	74	-22.57	Vertical
1650	46.83	1.06	0.76	25.3	22.03	51.92	74	-22.08	Vertical
2022	47.56	1.14	0.83	27.5	21.03	56	74	-18	Vertical
2440	57.21	1.26	0.92	29.2	18.31	70.28	Fund		Vertical
2488	44.34	1.21	0.86	30.2	21.8	54.81	74	-19.19	Vertical
4880	35.42	1.65	1.04	30.3	11.68	56.73	74	-17.27	Vertical
7320	32.88	2.89	1.84	35.9	29.18	44.33	74	-29.67	Vertical
9760	36.75	3.07	2.17	38.2	23.72	56.47	74	-17.53	Vertical
12200	29.18	5.92	2.14	39.1	24.3	52.04	74	-21.96	Vertical
1005	36.63	1.64	0.6	23.7	21.57	41	74	-33	Horizontal
1025	38.67	1.64	0.62	23.7	21.57	43.06	74	-30.94	Horizontal
1042	41.22	1.64	0.62	23.7	21.57	45.61	74	-28.39	Horizontal
1060	46.74	1.64	0.62	23.7	21.57	51.13	74	-22.87	Horizontal
1267	48.53	1.72	0.66	23.7	22.04	52.57	74	-21.43	Horizontal
1650	40.94	1.06	0.76	25.3	22.03	46.03	74	-27.97	Horizontal
2022	49.21	1.14	0.83	27.5	21.03	57.65	74	-16.35	Horizontal
2440	56.9	1.26	0.92	29.2	18.31	69.97	Fund		Horizontal
2488	43.11	1.21	0.86	30.2	21.8	53.58	74	-20.42	Horizontal
4880	37.59	1.65	1.04	30.3	11.68	58.9	74	-15.1	Horizontal
7320	31.66	2.89	1.84	35.9	29.18	43.11	74	-30.89	Horizontal
9760	35.42	3.07	2.17	38.2	23.72	55.14	74	-18.86	Horizontal
12200	34.38	5.92	2.14	39.1	24.3	57.24	74	-16.76	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**15.209**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 8 Average Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	24.62	1.64	0.6	23.7	21.57	28.99	54	-25.01	Vertical
1025	29.67	1.64	0.62	23.7	21.57	34.06	54	-19.94	Vertical
1042	33.89	1.64	0.62	23.7	21.57	38.28	54	-15.72	Vertical
1060	38.12	1.64	0.62	23.7	21.57	42.51	54	-11.49	Vertical
1267	40.76	1.72	0.66	23.7	22.04	44.8	54	-9.2	Vertical
1650	28.65	1.06	0.76	25.3	22.03	33.74	54	-20.26	Vertical
2022	41.32	1.14	0.83	27.5	21.03	49.76	54	-4.24	Vertical
2440	56.39	1.26	0.92	29.2	18.31	69.46	Fund		Vertical
4880	28.4	1.65	1.04	30.3	11.68	49.71	54	-4.29	Vertical
7320	26.44	2.89	1.84	35.9	29.18	37.89	54	-16.11	Vertical
9760	28.23	3.07	2.17	38.2	23.72	47.95	54	-6.05	Vertical
12200	24.38	5.92	2.14	39.1	24.3	47.24	54	-6.76	Vertical
1005	27.4	1.64	0.6	23.7	21.57	31.77	54	-22.23	Horizontal
1025	30.22	1.64	0.62	23.7	21.57	34.61	54	-19.39	Horizontal
1042	33.51	1.64	0.62	23.7	21.57	37.9	54	-16.1	Horizontal
1060	37.67	1.64	0.62	23.7	21.57	42.06	54	-11.94	Horizontal
1267	39.98	1.72	0.66	23.7	22.04	44.02	54	-9.98	Horizontal
1650	30.64	1.06	0.76	25.3	22.03	35.73	54	-18.27	Horizontal
2022	41.34	1.14	0.83	27.5	21.03	49.78	54	-4.22	Horizontal
2440	55.86	1.26	0.92	29.2	18.31	68.93	Fund		Horizontal
4880	27.23	1.65	1.04	30.3	11.68	48.54	54	-5.46	Horizontal
7320	23.67	2.89	1.84	35.9	29.18	35.12	54	-18.88	Horizontal
9760	28.91	3.07	2.17	38.2	23.72	48.63	54	-5.37	Horizontal
12200	26.9	5.92	2.14	39.1	24.3	49.76	54	-4.24	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**15.209**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 16 Peak Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	34.1	1.64	0.6	23.7	21.57	38.47	74	-35.53	Vertical
1025	35.68	1.64	0.62	23.7	21.57	40.07	74	-33.93	Vertical
1042	38.53	1.64	0.62	23.7	21.57	42.92	74	-31.08	Vertical
1060	38.24	1.64	0.62	23.7	21.57	42.63	74	-31.37	Vertical
1267	47.32	1.72	0.66	23.7	22.04	51.36	74	-22.64	Vertical
1650	34.89	1.06	0.76	25.3	22.03	39.98	74	-34.02	Vertical
2022	39.92	1.14	0.83	27.5	21.03	48.36	74	-25.64	Vertical
2480	57.51	1.26	0.92	29.2	18.31	70.58	Fund		Vertical
2483	45.64	1.21	0.86	30.2	21.8	56.11	74	-17.89	Vertical
4960	36.45	1.65	1.04	30.3	11.68	57.76	74	-16.24	Vertical
7440	34.14	2.89	1.84	35.9	29.18	45.59	74	-28.41	Vertical
9920	37.72	3.07	2.17	38.2	23.72	57.44	74	-16.56	Vertical
12400	27.43	5.92	2.14	39.1	24.3	50.29	74	-23.71	Vertical
1005	34.99	1.64	0.6	23.7	21.57	39.36	74	-34.64	Horizontal
1025	37.81	1.64	0.62	23.7	21.57	42.2	74	-31.8	Horizontal
1042	39.44	1.64	0.62	23.7	21.57	43.83	74	-30.17	Horizontal
1060	40.53	1.64	0.62	23.7	21.57	44.92	74	-29.08	Horizontal
1267	46.35	1.72	0.66	23.7	22.04	50.39	74	-23.61	Horizontal
1650	38.57	1.06	0.76	25.3	22.03	43.66	74	-30.34	Horizontal
2022	44.33	1.14	0.83	27.5	21.03	52.77	74	-21.23	Horizontal
2480	57.5	1.26	0.92	29.2	18.31	70.57	Fund		Horizontal
2483	46.71	1.21	0.86	30.2	21.8	57.18	74	-16.82	Horizontal
4960	37.59	1.65	1.04	30.3	11.68	58.9	74	-15.1	Horizontal
7440	32.11	2.89	1.84	35.9	29.18	43.56	74	-30.44	Horizontal
9920	36.34	3.07	2.17	38.2	23.72	56.06	74	-17.94	Horizontal
12400	35.42	5.92	2.14	39.1	24.3	58.28	74	-15.72	Horizontal

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Radiated Emissions** (spurious)	
DNB Job Number:	98078C	Date:	3-31-2009
Customer:	Interactive Technologies		**15.209**
Model Number:	XCVR1	Specification:	
Description:	Remote Commander System		
Channel 16 Average Measurements 1GHz – 25GHz			

Freq. (MHz)	Meter (dBµV)/m	Cable1 (dB)	Cable2 (dB)	Antenna (dB)	Preamp (dB)	Corrected (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarity
1005	25.67	1.64	0.6	23.7	21.57	30.04	54	-23.96	Vertical
1025	28.42	1.64	0.62	23.7	21.57	32.81	54	-21.19	Vertical
1042	32.99	1.64	0.62	23.7	21.57	37.38	54	-16.62	Vertical
1060	38.24	1.64	0.62	23.7	21.57	42.63	54	-11.37	Vertical
1267	41.76	1.72	0.66	23.7	22.04	45.8	54	-8.2	Vertical
1650	25.66	1.06	0.76	25.3	22.03	30.75	54	-23.25	Vertical
2022	31.72	1.14	0.83	27.5	21.03	40.16	54	-13.84	Vertical
2480	56.49	1.26	0.92	29.2	18.31	69.56	Fund		Vertical
4960	28.46	1.65	1.04	30.3	11.68	49.77	54	-4.23	Vertical
7440	28.51	2.89	1.84	35.9	29.18	39.96	54	-14.04	Vertical
9920	31.64	3.07	2.17	38.2	23.72	51.36	54	-2.64	Vertical
12400	23.31	5.92	2.14	39.1	24.3	46.17	54	-7.83	Vertical
1005	25.42	1.64	0.6	23.7	21.57	29.79	54	-24.21	Horizontal
1025	29.66	1.64	0.62	23.7	21.57	34.05	54	-19.95	Horizontal
1042	32.48	1.64	0.62	23.7	21.57	36.87	54	-17.13	Horizontal
1060	33.5	1.64	0.62	23.7	21.57	37.89	54	-16.11	Horizontal
1267	38.12	1.72	0.66	23.7	22.04	42.16	54	-11.84	Horizontal
1650	29.19	1.06	0.76	25.3	22.03	34.28	54	-19.72	Horizontal
2022	37.56	1.14	0.83	27.5	21.03	46	54	-8	Horizontal
2480	56.77	1.26	0.92	29.2	18.31	69.84	Fund		Horizontal
4960	28.54	1.65	1.04	30.3	11.68	49.85	54	-4.15	Horizontal
7440	24.31	2.89	1.84	35.9	29.18	35.76	54	-18.24	Horizontal
9920	27.45	3.07	2.17	38.2	23.72	47.17	54	-6.83	Horizontal
12400	27	5.92	2.14	39.1	24.3	49.86	54	-4.14	Horizontal

15.247(a) (2) 6dB Emission Bandwidth

Test Procedure:

Use the following spectrum analyzer settings:

RBW	=	100kHz
VBW	=	300kHz
Span	=	Greater than RBW
Sweep	=	auto
Detector	=	peak
Trace	=	max hold

The EUT should be transmitting at its maximum data rate. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 6dB down one side of the emission. Reset the marker-delta functions, and more the marker to the other side of the emission, until it is even with the reference marker level. The marker-delta reading at this point is the 6dB bandwidth of the emission. If this value varies with different modes of operation (e.g., data rate, modulation format, etc.), repeat this test for each variation.

Requirement: The minimum 6dB bandwidth shall be at least 500kHz.

EUT Operating Conditions:

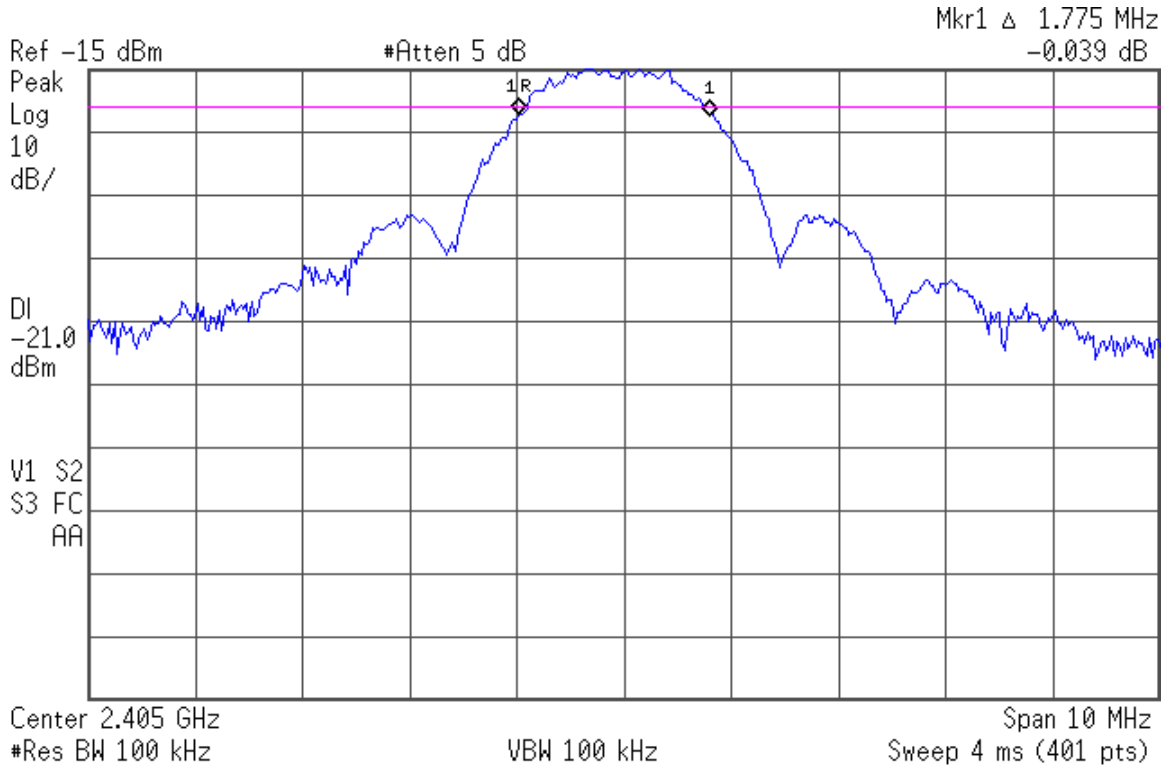
The test fixture provided by the client allowed the EUT to transmit continuously at the low, mid, and upper channels respectively.

Test Setup:

	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**6 dB Emission Bandwidth**	
DNB Job Number:	98078B	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(a,2)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
25°C	40%	99.2kpa

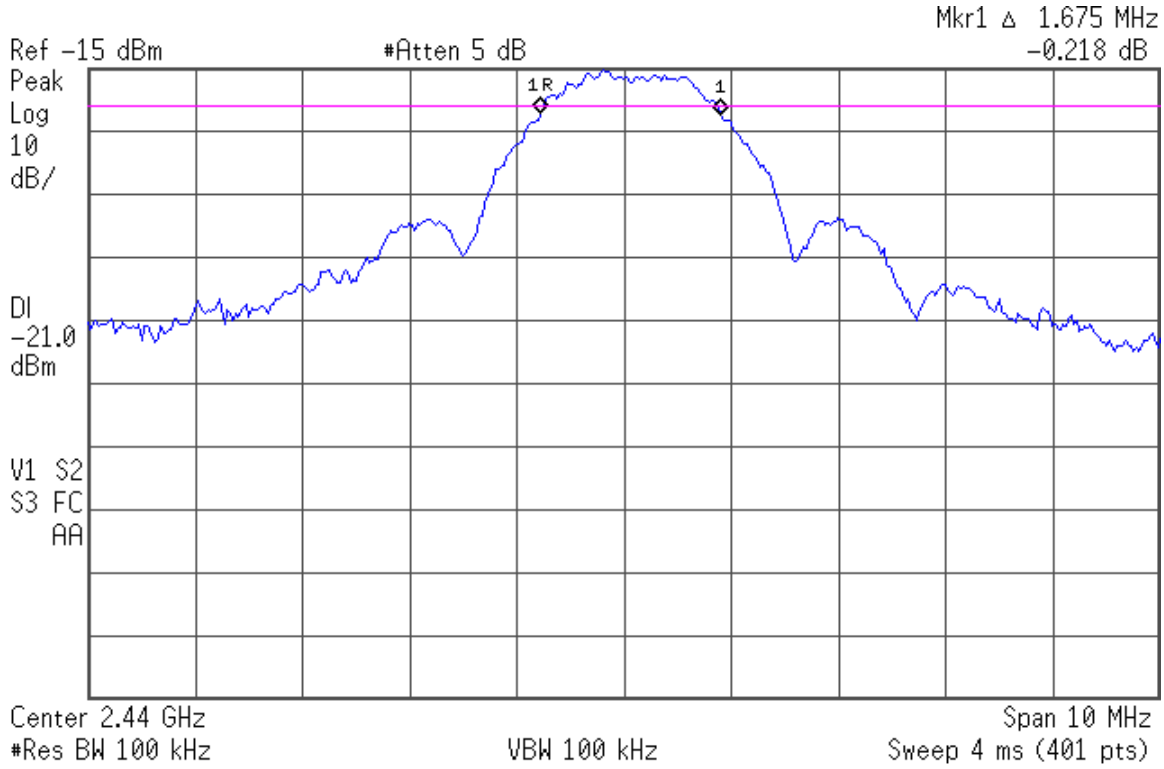
Channel	**Freq. (MHz)**	**6dB BW(kHz)**	**min. lim.(kHz)**	**Pass/fail**
1	2405	1775	500	Pass



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**6 dB Emission Bandwidth**	
DNB Job Number:	98078B	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(a,2)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
25°C	40%	99.2kpa

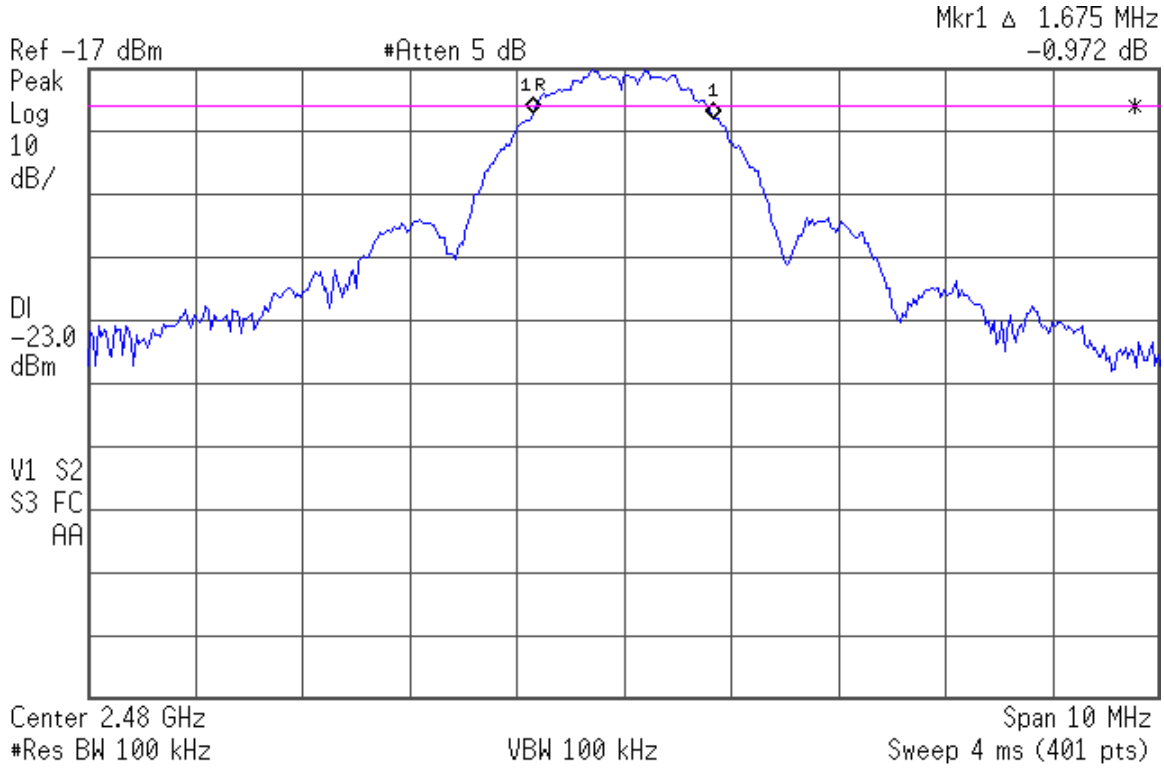
Channel	**Freq. (MHz)**	**6dB BW(kHz)**	**min. lim.(kHz)**	**Pass/fail**
8	2440	1675	500	Pass



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**6 dB Emission Bandwidth**	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(a,2)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
25°C	40%	99.2kpa

Channel	**Freq. (MHz)**	**6dB BW(kHz)**	**min. lim.(kHz)**	**Pass/fail**
16	2480	1675	500	Pass



15.247(b) (3) Maximum Peak Output Power (Conducted)

Test Procedure:

Connect RF power meter directly to antenna terminals. Record RF output of low, mid and upper channels.

De Facto EIRP Limit

Describe how the EUT complies with the *de facto* EIRP limit for every antenna proposed for use with the EUT. This includes those devices that will be used in point-to-point applications. If the peak output power, as measured above, must be reduced so that the *de facto* EIRP limit may be met for a particular antenna, describe exactly how much it will be reduced for that antenna. If the peak output power level is raised above the limit in order to compensate for cable loss between the EUT and the antenna, specify the minimum length of cable that will always be used, the type of cable and its loss in dB per unit length for the frequency of the emission. Also, specify who will be responsible for ensuring that compliant operation is maintained for every antenna that will be used with the EUT.

Point-to-Point Operation

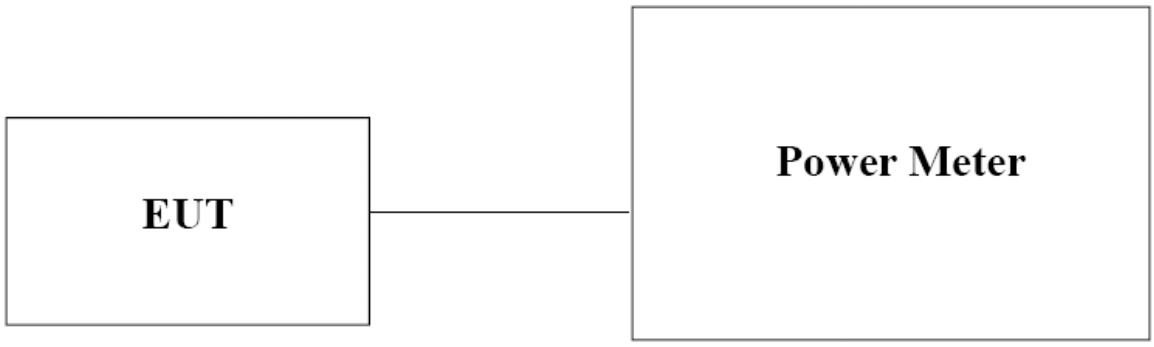
If the EIRP relaxation for point-to-point operation is proposed for any particular antenna, describe who will be responsible for ensuring that the EUT is only used in such an application.

Requirement: The maximum peak output power shall not exceed 1W (30dBm)

EUT Operating Conditions:

The test fixture provided by the client enabled the EUT to transmit continuously at the low, mid and upper channels respectively.

Test Setup:



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Peak Output Power** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(b, 3)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Commander System		

Environmental conditions								
Ambient Temperature			**Relative Humidity**			**Barometric Pressure**		
25°C			40%			99.2kPa		
CH	**Freq (MHz)**	**Conducted Power(dBm)**	**Limit (dBm)**	**De Facto Limit**	**Delta (dBm)**	**Pass/ Fail**	**Antenna**	
							Type	**Gain**
1	2405	-9.98	30	N/A	-39.98	Pass	Omni	0 dbi

Environmental conditions								
Ambient Temperature			**Relative Humidity**			**Barometric Pressure**		
25°C			40%			99.2kPa		
CH	**Freq (MHz)**	**Conducted Power(dBm)**	**Limit (dBm)**	**De Facto Limit**	**Delta (dBm)**	**Pass/ Fail**	**Antenna**	
							Type	**Gain**
8	2440	-12.6	30	N/A	-42.6	Pass	Omni	0 dbi

Environmental conditions								
Ambient Temperature			**Relative Humidity**			**Barometric Pressure**		
25°C			34%			99.2kPa		
CH	**Freq (MHz)**	**Conducted Power(dBm)**	**Limit (dBm)**	**De Facto Limit**	**Delta (dBm)**	**Pass/ Fail**	**Antenna**	
							Type	**Gain**
39	2480	-13.2	30	N/A	-43.2	Pass	Omni	0 dbi

15.247(c) Spurious RF Conducted Emissions

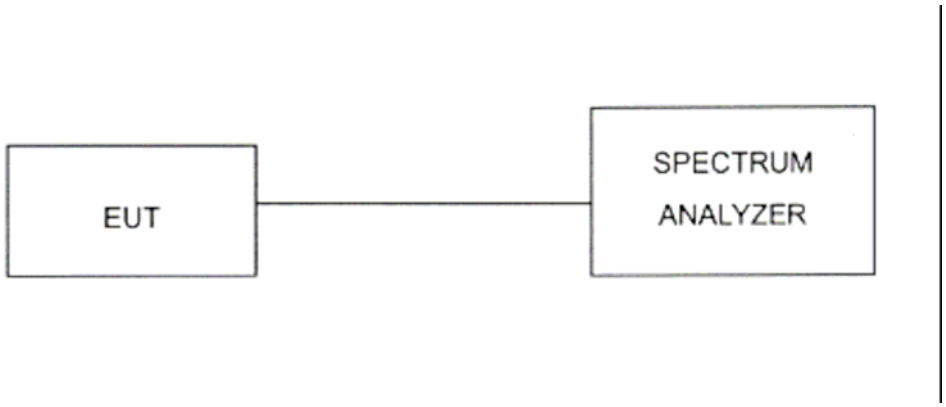
Use the following spectrum analyzer settings:

Span	=	Wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g. harmonics) form the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
RBW	=	100kHz
VBW	=	300kHz
Sweep	=	auto
Detector	=	peak
Trace	=	max. hold

Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded.

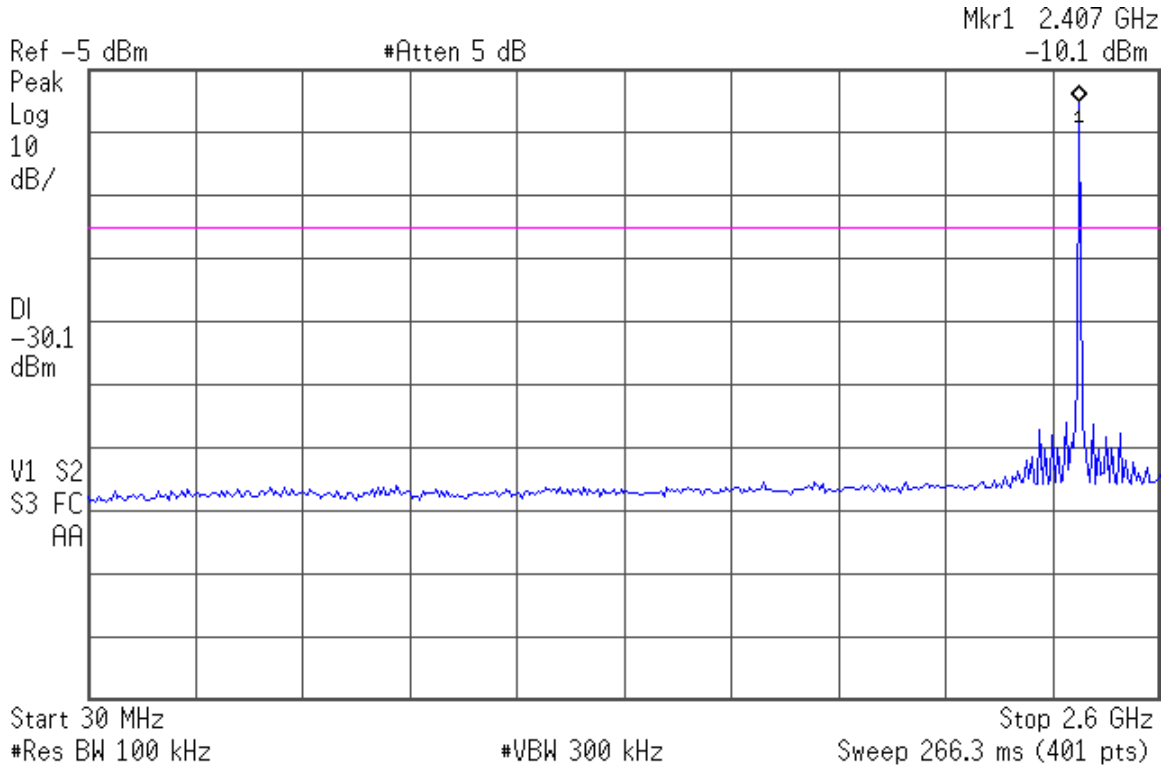
Requirement: The maximum out-of-band emissions shall not exceed 20dBc

Test Setup:



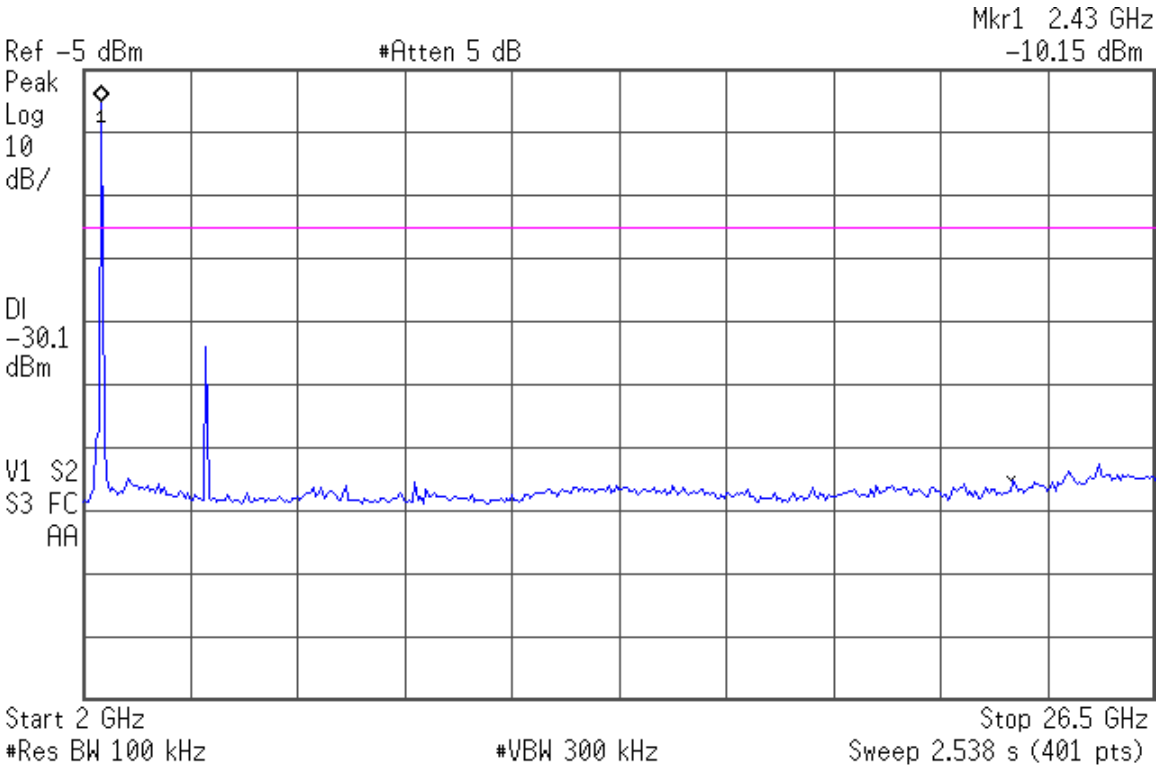
	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Spurious Emissions** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(c)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
25°C	39%	98.9kPa
Channel	**Freq. (MHz)**	**Pass/Fail**
1	2405	Pass



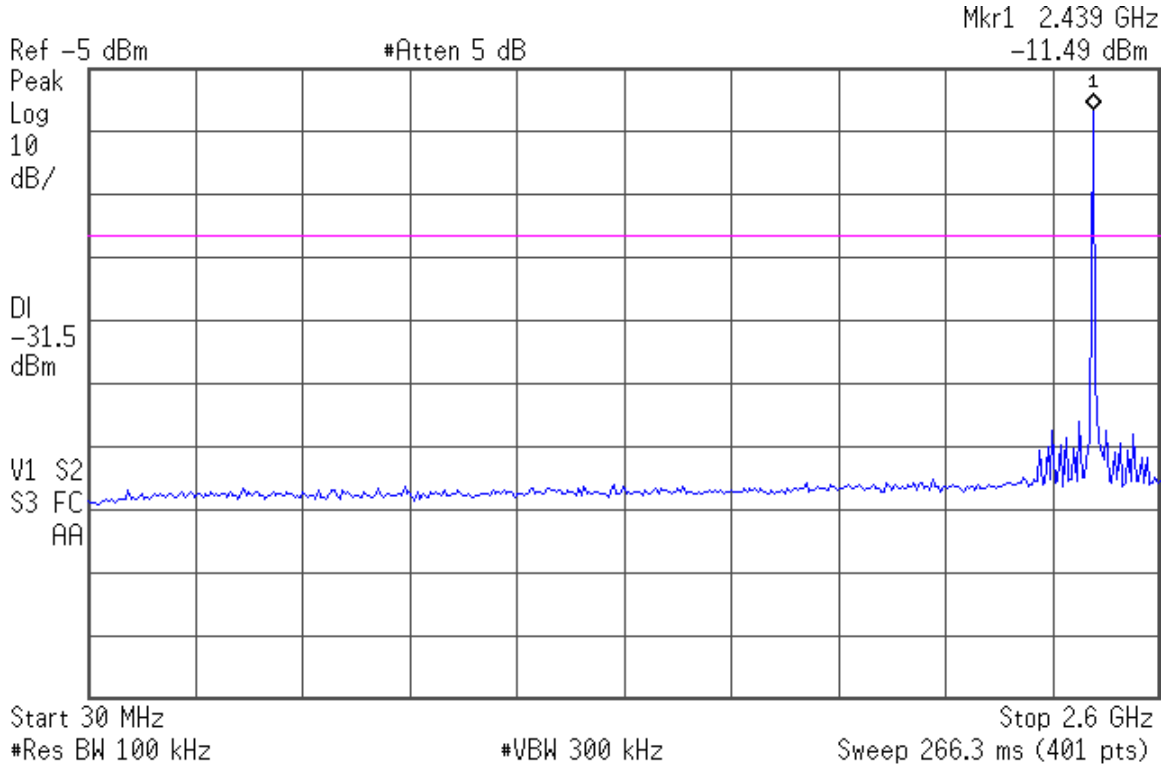
	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Spurious Emissions** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(c)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
25°C	39%	98.9kPa
Channel	**Freq. (MHz)**	**Pass/Fail**
1	2405	Pass



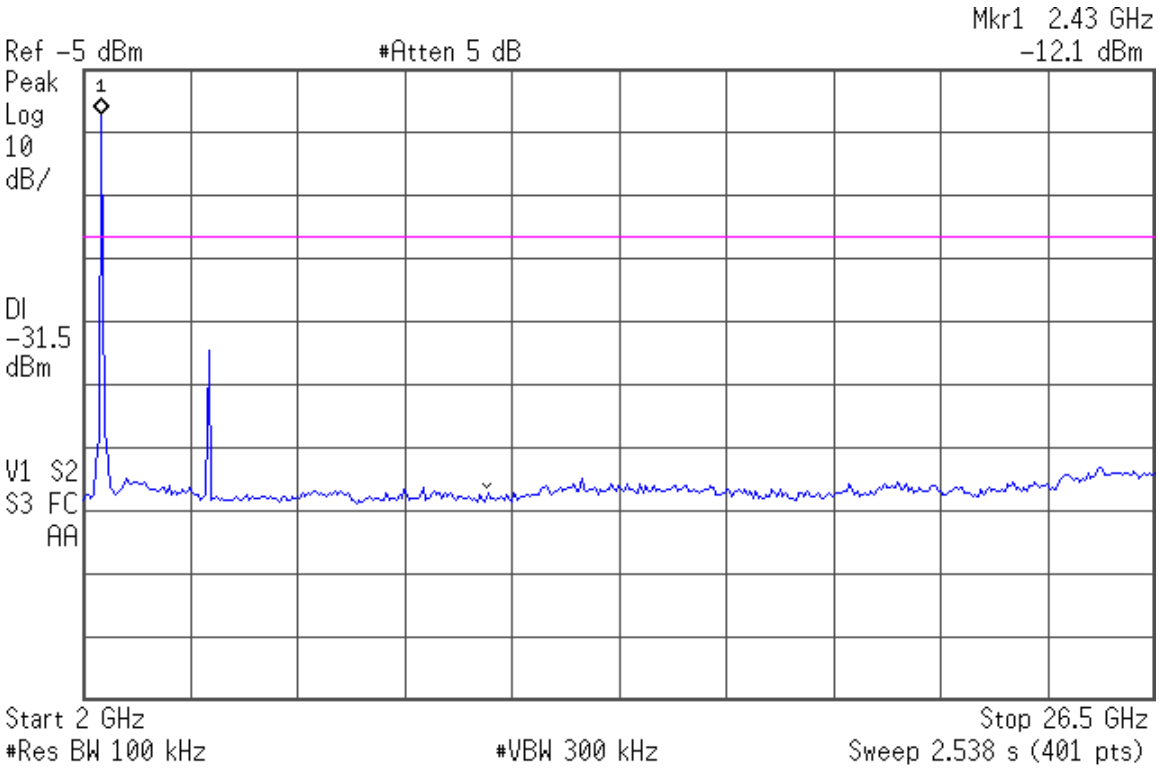
	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Spurious Emissions** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(c)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
25°C	36%	99.2kPa
Channel	**Freq. (MHz)**	**Pass/Fail**
8	2440	Pass



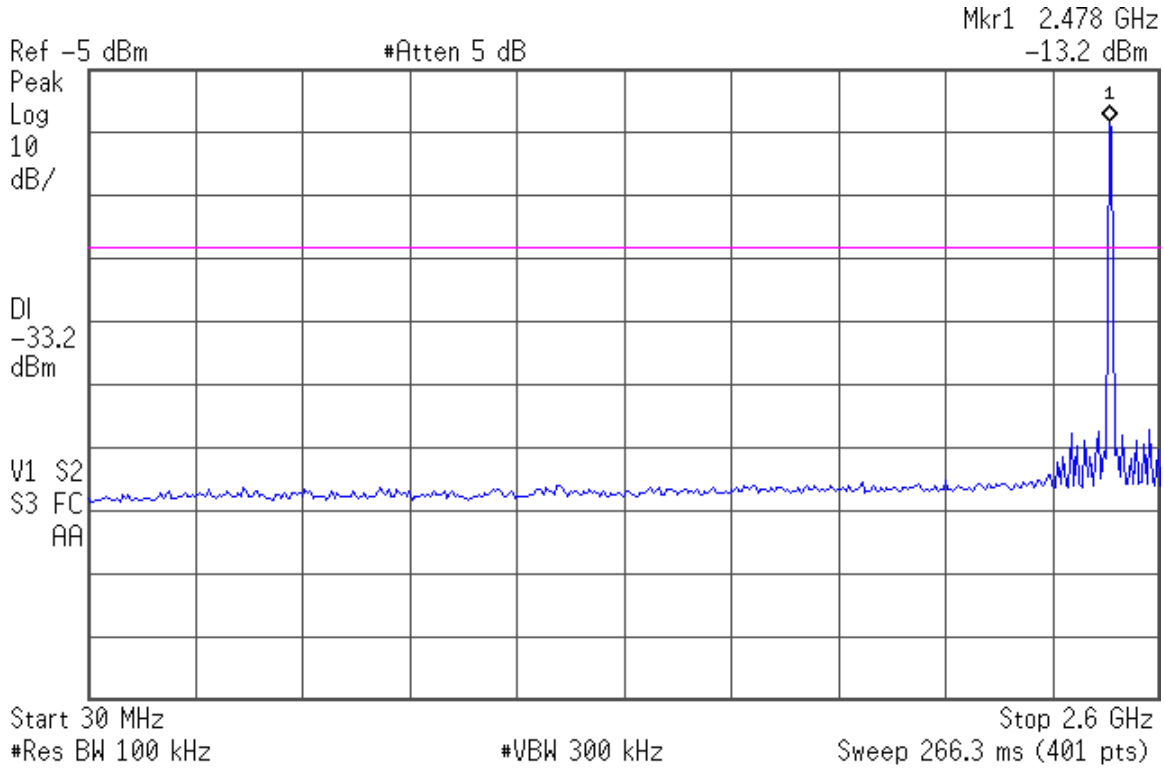
	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Spurious Emissions** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(c)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
25°C	36%	99.2kPa
Channel	**Freq. (MHz)**	**Pass/Fail**
8	2440	Pass



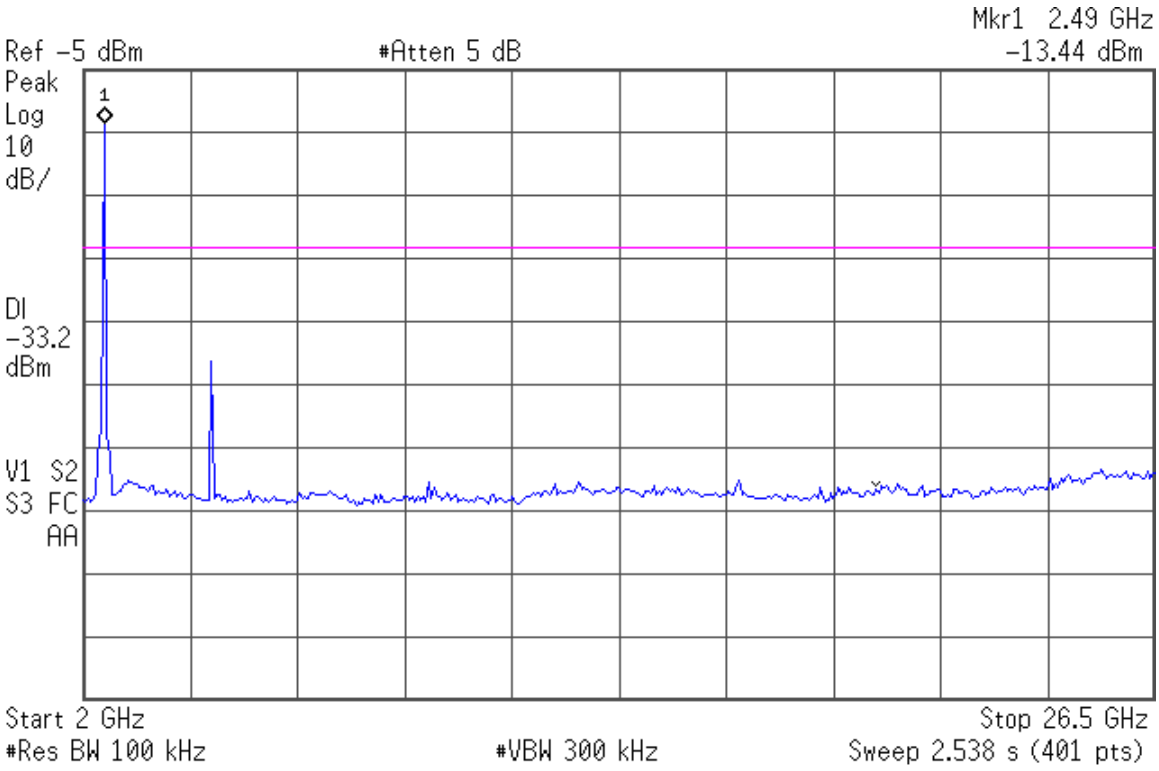
	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Spurious Emissions** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(c)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
24°C	36%	99.2kPa
Channel	**Freq. (MHz)**	**Pass/Fail**
16	2480	Pass



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Spurious Emissions** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(c)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
24°C	36%	99.2kPa
Channel	**Freq. (MHz)**	**Pass/Fail**
16	2480	Pass



15.247 (c) Band Edge Measurements

Procedure:
Use the following spectrum analyzer settings:

Span = Capture peak of low and high channel, as well as emissions outside band.

RBW > 1% of the span

VBW > RBW

Sweep = auto

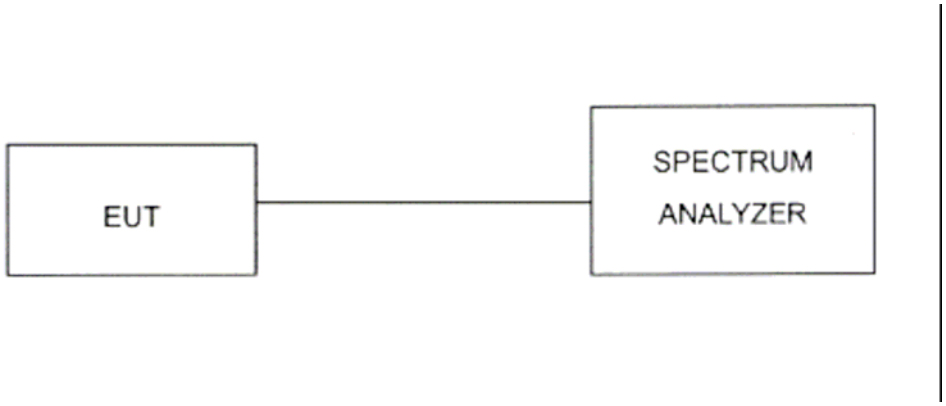
Detector = peak

Trace = max hold

Allow trace to stabilize. Set the marker on the emission at the bandedge, or on the highest modulation product outside of the band. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission.

Requirement: The maximum out-of-band emissions shall not exceed 20dBc

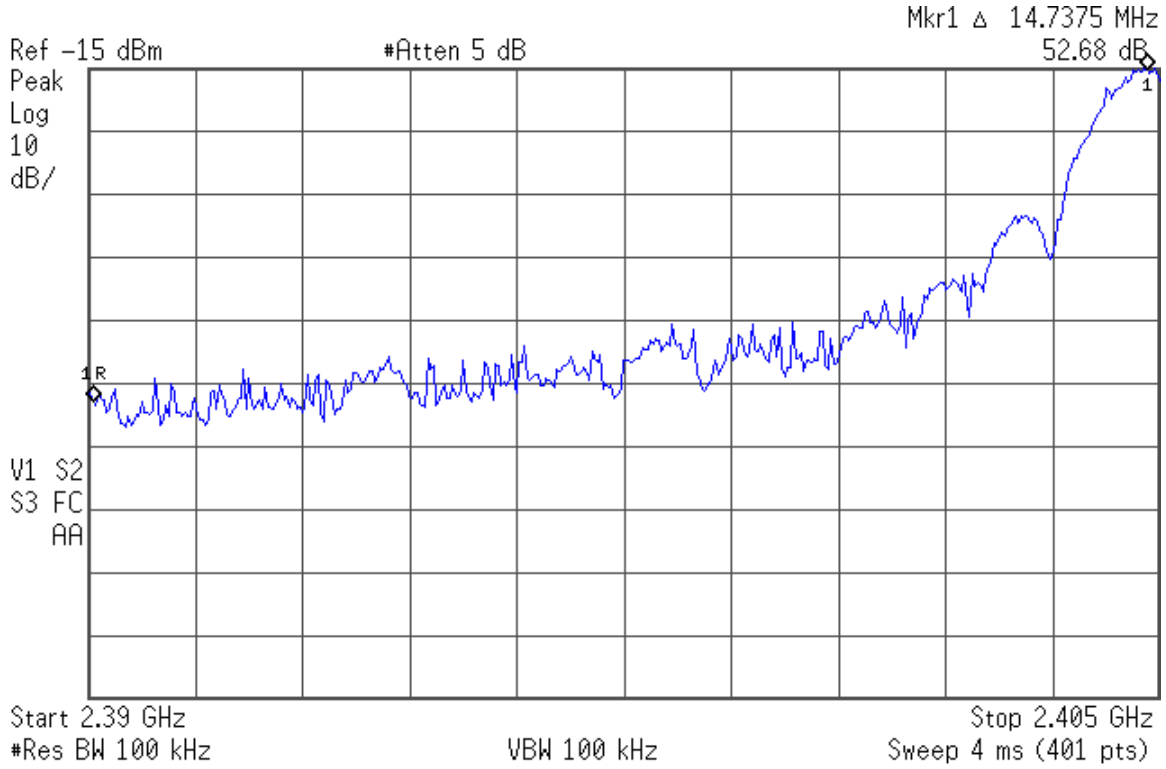
Test Setup:



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Band Edge Measurements** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc		**15.247(c)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Commander System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
23°C	27%	99.2kPa

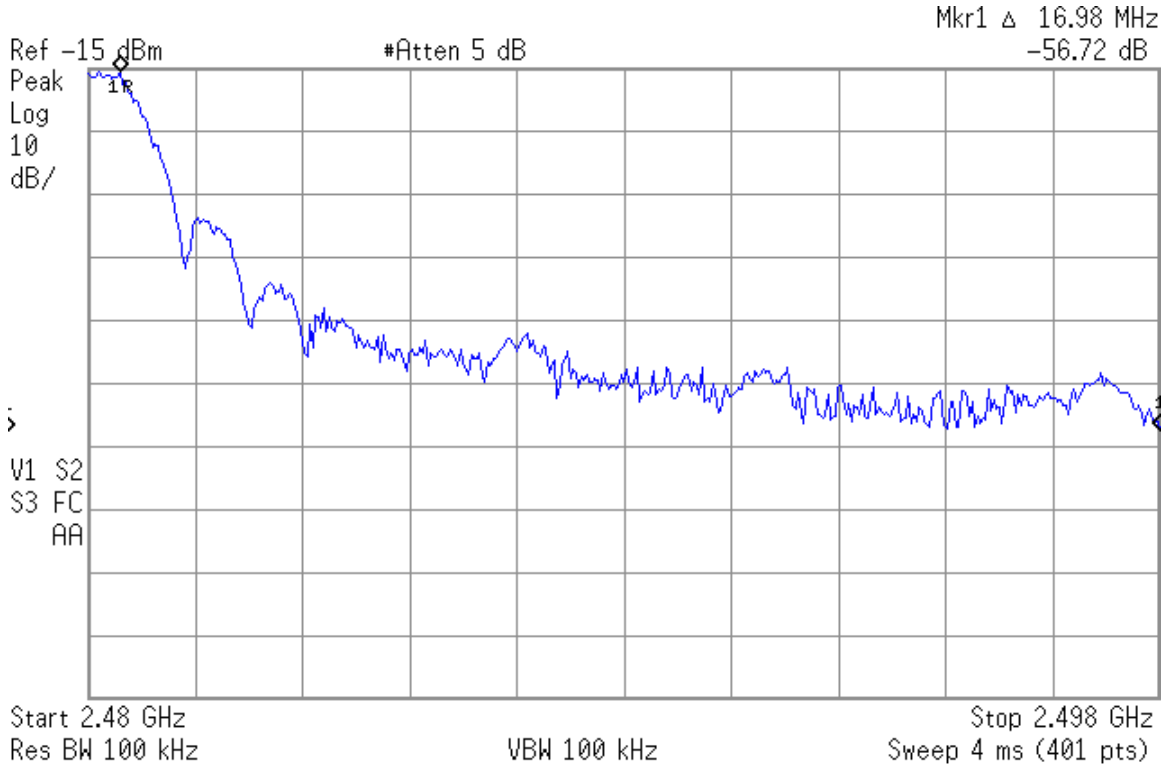
Channel	**Freq. (MHz)**	**Measured dBc**	**Minimum dBc**	**Pass/Fail**
1	2405	-52.68	-20	Pass



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Band Edge Measurements** (Conducted)	
DNB Job Number:	98078C	**Date:**	5-21-2009
Customer:	Interactive Technologies, Inc.		**15.247(c)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Command System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
23°C	27%	99.2kPa

Channel	**Freq. (MHz)**	**Measured dBc**	**Minimum dBc**	**Pass/Fail**
16	2480	-34.15	-20	Pass

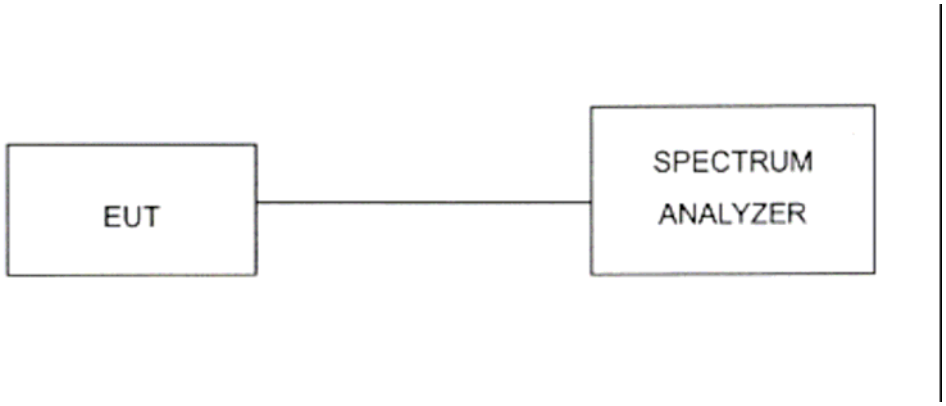


15.247 (d) Peak Power Spectral Density

Procedure:
Locate and zoom in on emission peak(s) within the passband. Set RBW = 3kHz, VBW > RBW, Sweep = (Span/3kHz). The peak level measured must be no greater than +8dBm.

Requirement: The PPSD shall not exceed 8dBm

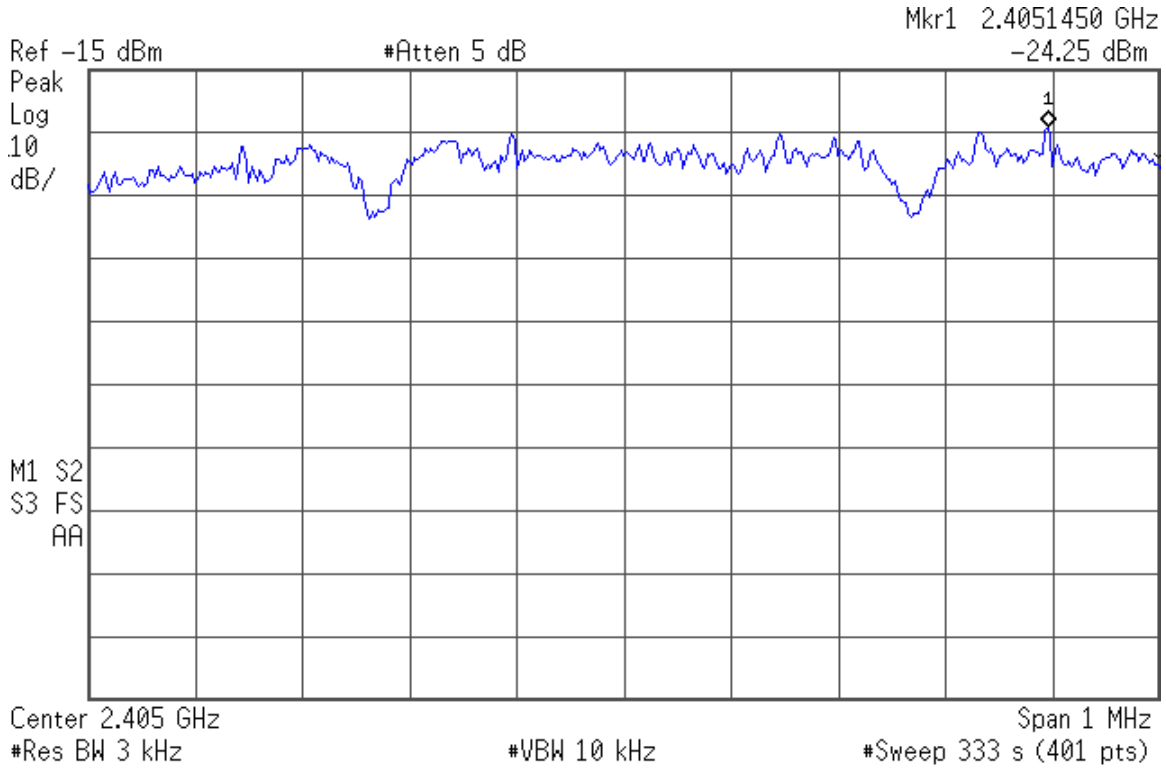
Test Setup:



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Spectral Density** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(d)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Commander System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
24°C	32%	99.5kPa

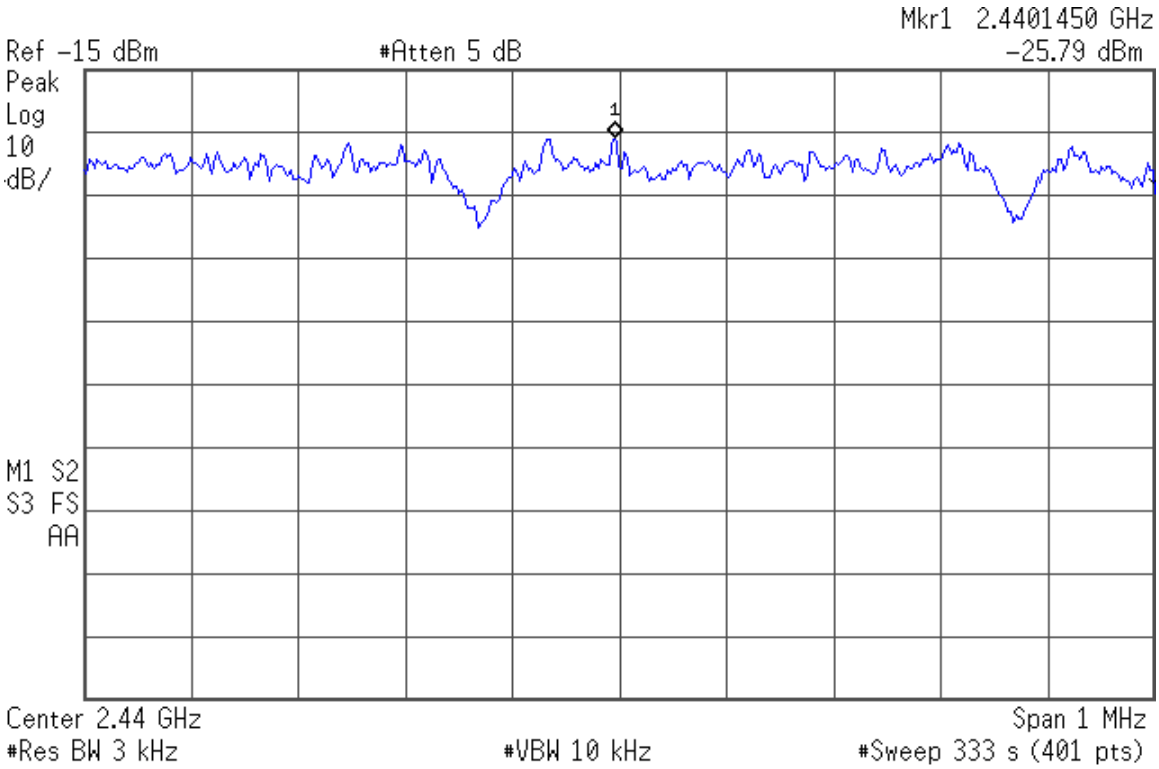
Channel	**Freq. (MHz)**	**Peak Reading (dBm)**	**Limit (dBm)**	**Pass/Fail**
1	2405	-24.25	8.0	Pass



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Spectral Density** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc		**15.247(d)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Commander System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
24°C	32%	99.5kPa

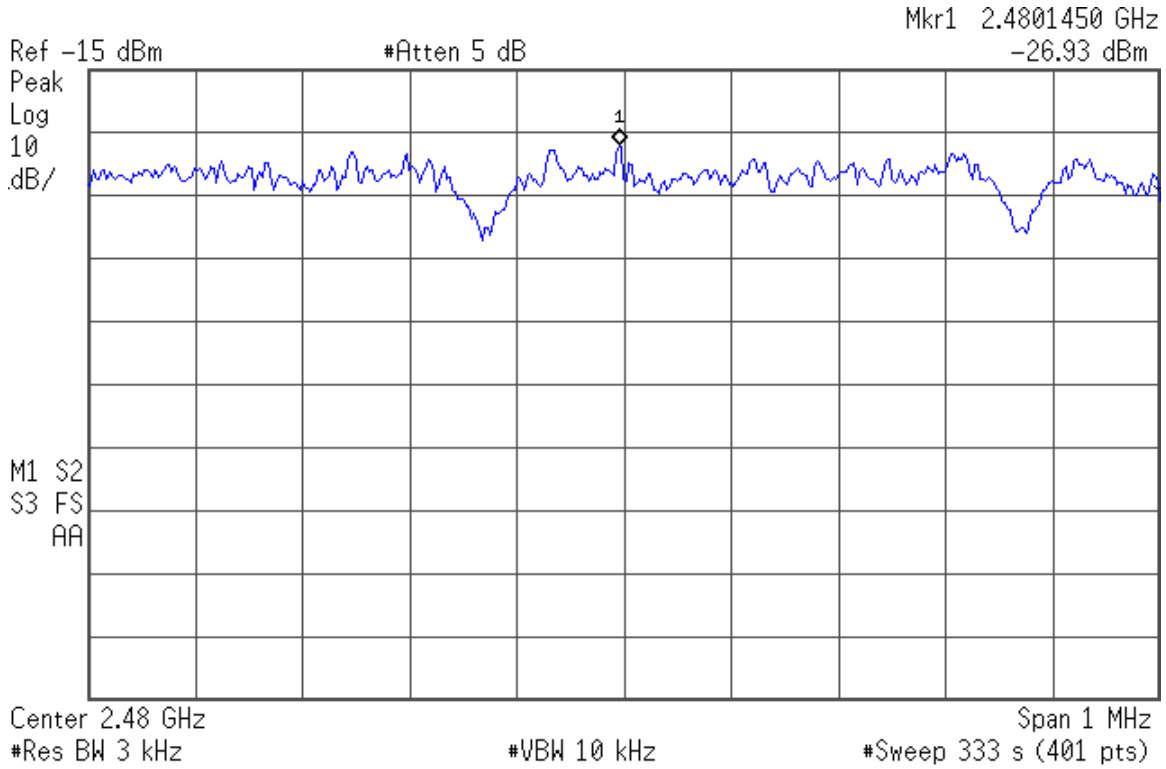
Channel	**Freq. (MHz)**	**Peak Reading (dBm)**	**Limit (dBm)**	**Pass/Fail**
8	2440	-25.79	8.0	Pass



	5969 Robinson Ave. Riverside, CA 92503 (951)637-2630	**Spectral Density** (Conducted)	
DNB Job Number:	98078C	**Date:**	3-31-2009
Customer:	Interactive Technologies, Inc.		**15.247(d)**
Model Number:	XCVR1	**Specification:**	
Description:	Remote Commander System		

Environmental conditions		
Ambient Temperature	**Relative Humidity**	**Barometric Pressure**
24°C	32%	99.5kPa

Channel	**Freq. (MHz)**	**Peak Reading (dBm)**	**Limit (dBm)**	**Pass/Fail**
16	2480	-26.93	8.0	Pass



2.1033 (b) (7) Equipment Photographs

To be filed as a separate attachment.

End Of Report