Band-edge Compliance

Temperature	11.5 °C
Relative Humidity	64.4 %
Barometric Pressure:	98.47 kPa
Test Date	Jan. 21, 2010
Sample Number	773533
Calibrated Test Equipment (ID)	228, 227-3, 272, 273
Reference Equipment (ID) (Calibration not required)	059, 233, 235, 227-5
Tested By	Jeremy Lee

Use the barometric pressure reported at: http://www.theweathernetwork.com/weather/cabc0284

Test Limits

15.247(d)

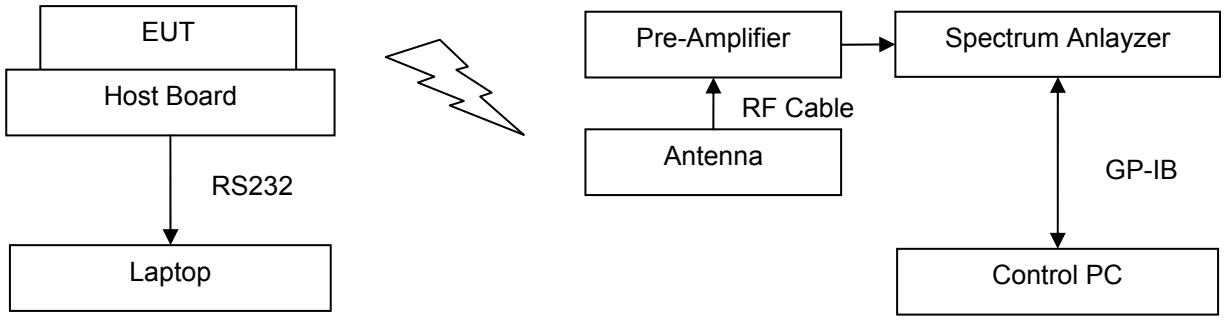
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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.

Test Setup

The test was performed in accordance with **FCC 15.247:2008, FCC 15.31:2008, and FCC Public notice DA 00-705 Released March 30, 2000.**

- The RF output of the EUT was connected to the RF input port of the Spectrum Analyzer.
- The EUT had its hopping function enabled for measuring the channel separation.
- The transmitter was transmitting at its maximum data rate, 250kbps.
- The following measurements were made with
  - Span = wide enough to capture the peak level of the emission operating on the channel closest to the band-edge, as well as any modulation products which fall outside of the authorized band of operation.
  - RBW = 100kHz
  - VBW ≥ RBW
  - Sweep = Auto
  - Detector Function = peak
  - Trace = Single trace up to capturing the whole range of signal
- Allowed the trace to stabilize.
- Set the marker on the emission at the bandedge, or on the highest modulation product outside of band, if this level is greater than that at the band edge.
- Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission.
- The marker-delta value was measured.

Setup Block Diagram



Test Results:

X Pass Fail N/A

- Band-edge compliance at low-end, the Carrier Frequency is: 2401.5MHz

LabTest Certification Inc.
BandEdge Emissions LowEnd
FCC15.247, 15.205 & 15.209, ClassB, 3meters, Horizontal

Operator: Jeremy Lee

Model #: OEM2400MR
Contact: Patrick Ho
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	AF dB/m	Cable dB	PreAmp dB	Emission dBuV/m	Limit dBuV/m	Margin dB	T/T degree	Tower cm
2.33750 GHz	20.93	28.10	1.37	-32.66	17.74	53.98	36.24	259.6	100.0
2.37047 GHz	22.34	28.12	1.37	-32.72	19.12	53.98	34.86	210.7	100.0
2.39997 GHz	24.61	28.14	1.38	-32.77	21.36	73.98	52.62	56.0	100.0

Project # : 9576, Sample #: 773533
Temp.: 11.5 C, Hum.: 64.4 %
Barometer Pres.:98.47 kPa

LabTest Certification Inc.
BandEdge Emissions LowEnd
FCC15.2447 15.205 & 15.209, ClassB, 3meters, Vertical

Operator: Jeremy Lee

11:15:28 AM, Friday, January 22, 2010

Model #: OEM2400MR
Contact: Patrick Ho
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	AF dB/m	Cable dB	PreAmp dB	Emission dBuV/m	Limit dBuV/m	Margin dB	T/T degree	Tower cm
2.33748 GHz	16.98	28.10	1.37	-32.66	13.79	53.98	40.19	174.3	100.0
2.37051 GHz	17.15	28.12	1.37	-32.72	13.93	53.98	40.05	347.4	100.0
2.39994 GHz	16.86	28.14	1.38	-32.77	13.61	73.98	60.37	121.5	100.0

Project # : 9576, Sample #: 773533
Temp.: 11.5 C, Hum.: 64.4 %
Barometer Pres.:98.47 kPa

- Band-edge compliance at High-end, the Carrier Frequency is: 2481.5MHz

LabTest Certification Inc.
BandEdge Emissions HighEnd
FCC15.247, 15.205 & 15.209, ClassB, 3meters, Horizontal

Operator: Jeremy Lee

Model #: OEM2400MR
Contact: Patrick Ho
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	AF dB/m	Cable dB	PreAmp dB	Emission dBuV/m	Limit dBuV/m	Margin dB	T/T degree	Tower cm
2.48350 GHz	26.04	28.19	1.40	-32.67	22.96	53.98	31.02	148.5	100.0
2.49466 GHz	25.15	28.20	1.40	-32.66	22.09	53.98	31.89	167.9	100.0
2.51898 GHz	17.45	28.25	1.40	-32.66	14.45	73.98	59.53	48.8	100.0

Project # : 9576, Sample #: 773533
Temp.: 11.5 C, Hum.: 64.4 %
Barometer Pres.:98.47 kPa

LabTest Certification Inc.
BandEdge Emissions HighEnd
FCC15.2447 15.205 & 15.209, ClassB, 3meters, Vertical

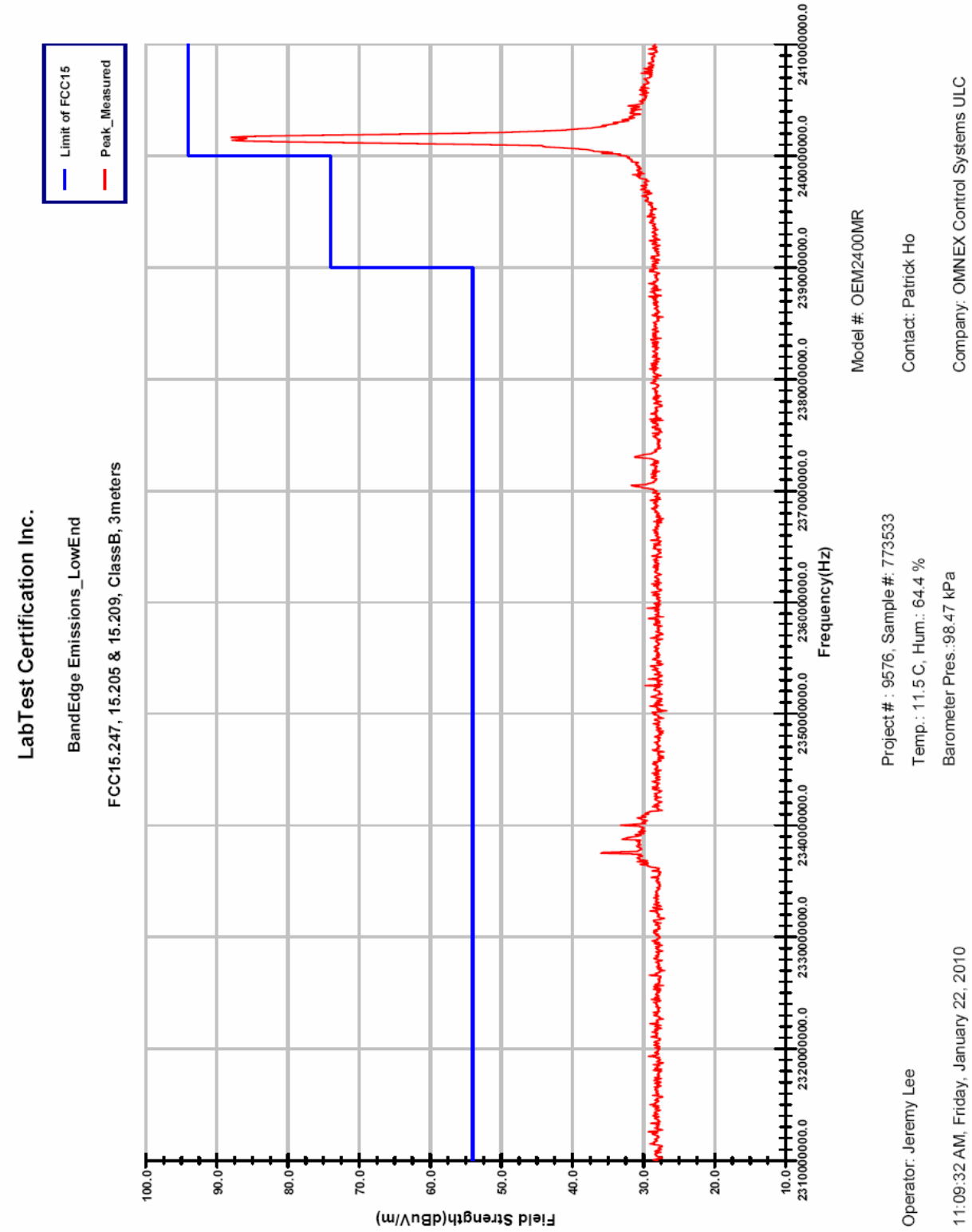
Operator: Jeremy Lee

Model #: OEM2400MR
Contact: Patrick Ho
Company: OMNEX Control Systems ULC

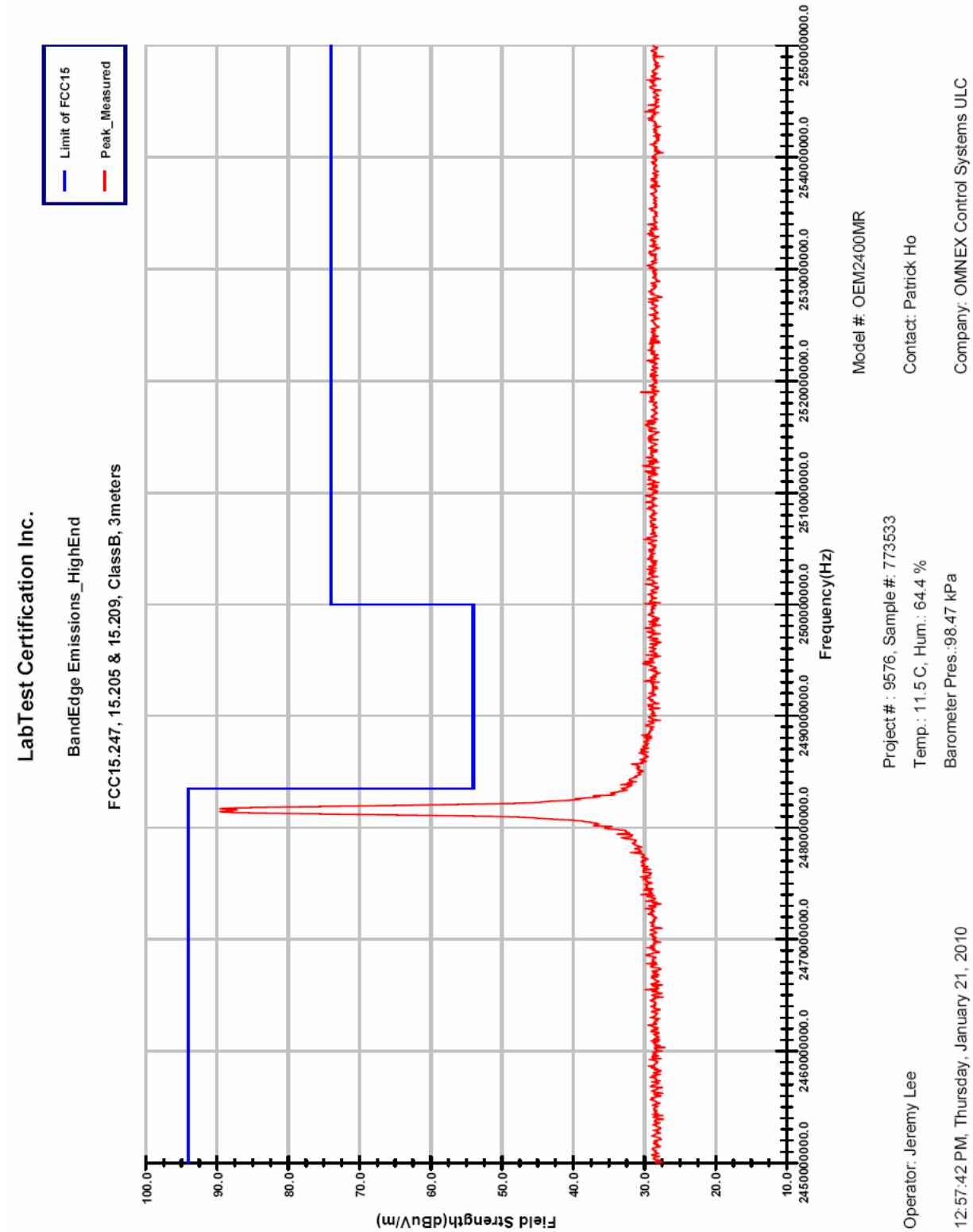
Frequency MHz	Measured dBuV	AF dB	Cable dB	PreAmp dB	Emission dBuV/m	Limit dBuV/m	Margin dB	T/T degree	Tower cm
2.48350 GHz	17.56	28.19	1.40	-32.67	14.48	53.98	39.50	260.3	100.0
2.49467 GHz	16.91	28.20	1.40	-32.66	13.85	53.98	40.13	291.9	100.0
2.51900 GHz	17.21	28.25	1.40	-32.66	14.21	73.98	59.77	210.6	100.0

Project # : 9576, Sample #: 773533
Temp.: 11.5 C, Hum.: 64.4 %
Barometer Pres.:98.47 kPa

- Band-edge compliance at low-end, the Carrier Frequency is: 2401.5MHz



- Band-edge compliance at High-end, the Carrier Frequency is: 2481.5MHz



Spurious RF Conducted Emissions

Temperature	20.5 to 22.8 °C
Relative Humidity	36.5 to 39.2 %
Barometric Pressure:	100.14 to 100.28 kPa
Test Date	Nov. 13, 2009
Sample Number	773533
Calibrated Test Equipment (ID)	152, 228
Reference Equipment (ID) (Calibration not required)	059, N1, N2
Tested By	Jeremy Lee

Use the barometric pressure reported at: http://www.theweathernetwork.com/weather/cabc0248

Test Limits

15.247(d)

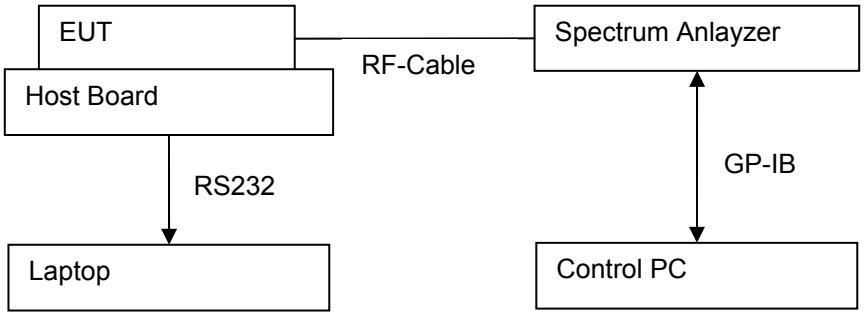
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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.

Test Setup

The test was performed in accordance with **FCC 15.247:2008, FCC 15.31:2008, and FCC Public notice DA 00-705 Released March 30, 2000.**

- The RF output of the EUT was connected to the RF input port of the Spectrum Analyzer.
- The EUT was set-up in three diferrent transmiting modes, low-end, middle, and high-end.
- The transmitter was set to output its maximum power.
- The following measurements were made with
  - Span = wide enough to capture the peak level of the in-band emission and all spurious emissions(e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic.
  - RBW = 100kHz up to 2.5GHz, 1MHz over 2.4GHz.
  - VBW ≥ RBW
  - Sweep = Auto
  - Detector Function = peak
  - Trace = Single trace up to capturing the whole range of signal
- Allowed the trace to stabilize.
- Set the marker on the peak of any spurious emission recorded.

Setup Block Diagram



Test Results:

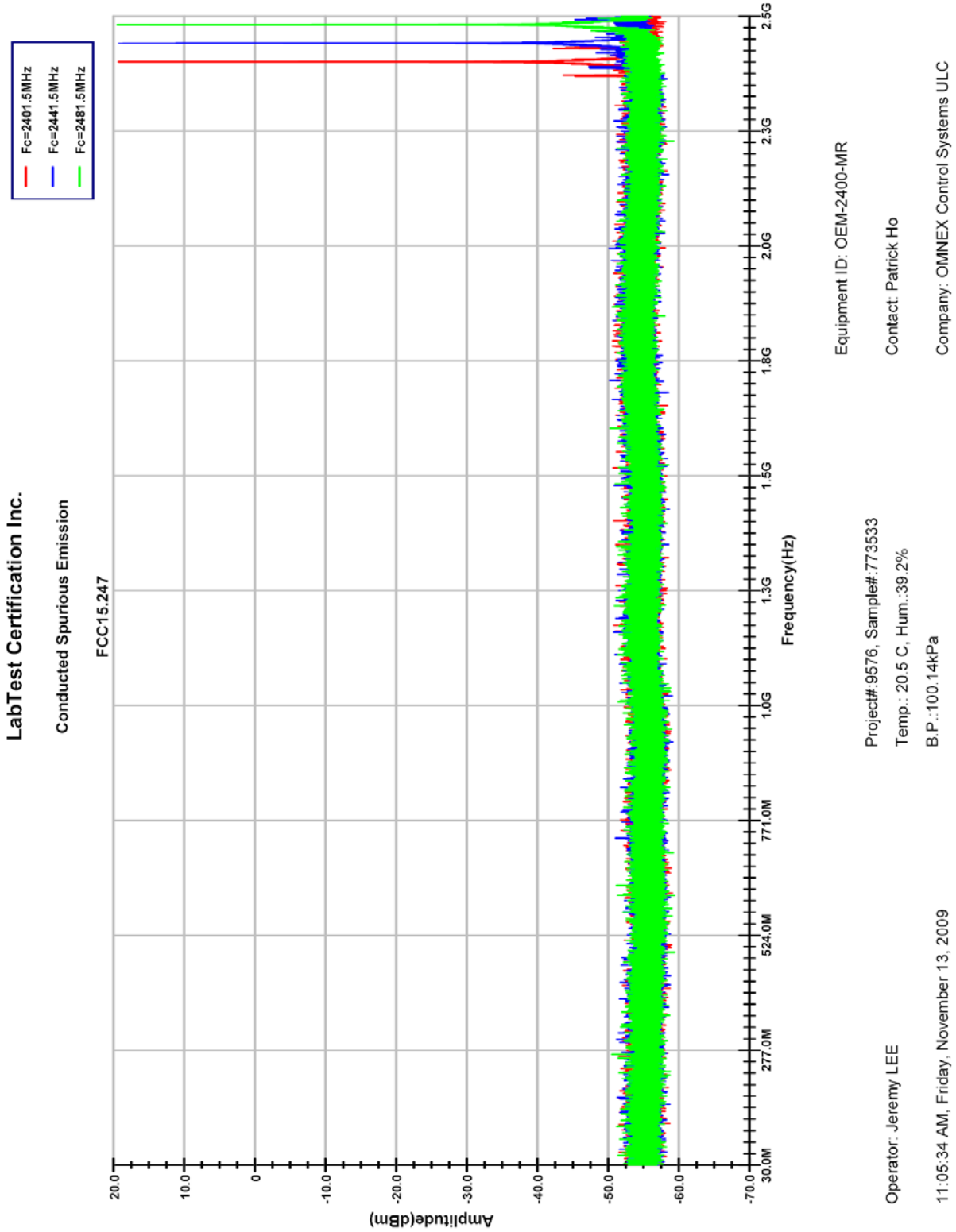
Difference(dB) = Measured Carrier Level(dBm) – Measured Spurious Level(dBm)

Description	Frequency (MHz)	Measured (dBm)	Difference (dB)	Limit (dB)	Pass/Fail
Carrier_Low End	2401.50	+19.186	-	-	-
Spurious	2370.62	-45.444	64.630	> 20	Pass
	2373.19	-43.727	62.913	> 20	Pass
	2430.35	-42.309	61.495	> 20	Pass
	2432.41	-44.090	63.276	> 20	Pass
2nd Harmonic	4803.00	-45.709	64.895	> 20	Pass
3rd Harmonic	7204.50	-43.709	62.895	> 20	Pass
4th Harmonic	9606.00	-34.584	53.770	> 20	Pass
5th Harmonic	12007.50	-36.678	55.864	> 20	Pass
6th Harmonic	14409.00	-38.115	57.301	> 20	Pass
7th Harmonic	16810.50	-31.053	50.239	> 20	Pass
8th Harmonic	19212.00	-29.740	48.926	> 20	Pass
9th Harmonic	21613.50	-30.615	49.801	> 20	Pass
10th Harmonic	24015.00	-24.865	44.051	> 20	Pass
Carrier_Middle	2441.50	+19.195	-	-	-
Spurious	2387.61	-47.458	66.653	> 20	Pass
	2390.97	-47.336	66.531	> 20	Pass
	2492.14	-45.382	64.577	> 20	Pass

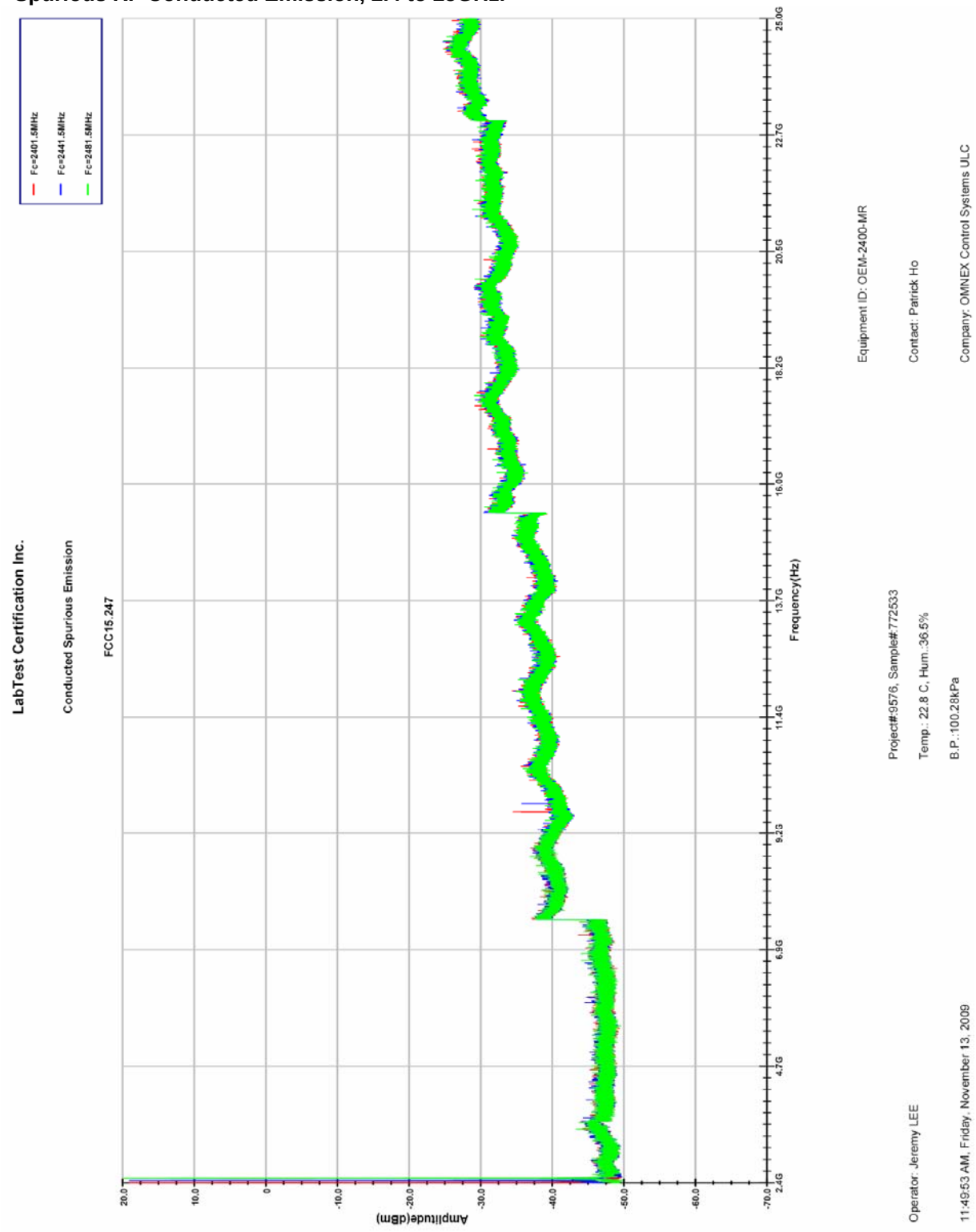
	2495.95	-47.006	66.201	> 20	Pass
2nd Harmonic	4883.00	-45.303	64.498	> 20	Pass
3rd Harmonic	7324.50	-44.803	63.998	> 20	Pass
4th Harmonic	9766.00	-35.771	54.966	> 20	Pass
5th Harmonic	12207.50	-34.678	53.873	> 20	Pass
6th Harmonic	14649.00	-35.646	54.841	> 20	Pass
7th Harmonic	17090.50	-31.709	50.904	> 20	Pass
8th Harmonic	19532.00	-29.709	48.904	> 20	Pass
9th Harmonic	21973.50	-29.930	49.125	> 20	Pass
10th Harmonic	24415.00	-24.771	43.966	> 20	Pass
Carrier_High End	2481.50	+19.395	-	-	-
Spurious	2468.71	-47.671	67.096	> 20	Pass
	2487.52	-43.634	63.029	> 20	Pass
	2494.76	-48.788	68.183	> 20	Pass
2nd Harmonic	4963.00	-45.771	65.166	> 20	Pass
3rd Harmonic	7444.50	-43.959	63.354	> 20	Pass
4th Harmonic	9926.00	-38.990	58.385	> 20	Pass
5th Harmonic	12407.50	-37.052	56.447	> 20	Pass
6th Harmonic	14889.00	-35.084	54.479	> 20	Pass
7th Harmonic	17370.50	-30.646	50.041	> 20	Pass
8th Harmonic	19852.00	-29.271	48.666	> 20	Pass
9th Harmonic	22333.50	-29.459	48.854	> 20	Pass
10th Harmonic	24815.00	-27.428	46.823	> 20	Pass

X Pass **Fail** **N/A**

- Spurious RF Conducted Emission, 0.03 to 2.5GHz.



- Spurious RF Conducted Emission, 2.4 to 25GHz.



Spurious Radiated Emissions

Temperature	6.7 to 7.2 °C
Relative Humidity	40.2 to 47.2 %
Barometric Pressure:	102.53 to 102.65 kPa
Test Date	Dec. 01 and 02 , 2009
Sample Number	773533
Calibrated Test Equipment (ID)	112, 152, 227-1, 227-2, 227-3, 227-4, 228
Reference Equipment (ID) (Calibration not required)	059, 124, 141, 227-5, 233, 235
Tested By	Jeremy Lee

Use the barometric pressure reported at: http://www.theweathernetwork.com/weather/cabc0284

Test Limits

15.247(d)

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)).

15.205(a)

Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090–0.110	16.42–16.423	399.9–410	4.5–5.15
[1] 0.495–0.505	16.69475–16.69525	608–614	5.35–5.46
2.1735–2.1905	16.80425–16.80475	960–1240	7.25–7.75
4.125–4.128	25.5–25.67	1300–1427	8.025–8.5
4.17725–4.17775	37.5–38.25	1435–1626.5	9.0–9.2
4.20725–4.20775	73–74.6	1645.5–1646.5	9.3–9.5
6.215–6.218	74.8–75.2	1660–1710	10.6–12.7
6.26775–6.26825	108–121.94	1718.8–1722.2	13.25–13.4
6.31175–6.31225	123–138	2200–2300	14.47–14.5
8.291–8.294	149.9–150.05	2310–2390	15.35–16.2
8.362–8.366	156.52475–156.52525	2483.5–2500	17.7–21.4
8.37625–8.38675	156.7–156.9	2690–2900	22.01–23.12
8.41425–8.41475	162.0125–167.17	3260–3267	23.6–24.0
12.29–12.293	167.72–173.2	3332–3339	31.2–31.8
12.51975–12.52025	240–285	3345.8–3358	36.43–36.5
12.57675–12.57725	322–335.4	3600–4400	[2]
13.36–13.41.			

[1] Until February 1, 1999, this restricted band shall be 0.490–0.510 MHz.
[2] Above 38.6

15.209(a)

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

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

Test Setup

The test was performed in accordance with **FCC 15.247:2008, FCC 15.31:2008, FCC 15.33:2008, FCC 15.35:2008, and ANSI C63.4, 2003, and FCC Public notice DA 00-705 Released March 30, 2000.**

Test procedure is based on the FCC15.31(a)(3) – Other intentional and unintentional radiators are to be measured for compliance using the following procedure excluding sections 4.1.5.2, 5.7, 9 and 14: ANSI C63.4–2003: "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz" (incorporated by reference, see § 15.38). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51.
NOTE to Paragraph (a)(3): Digital devices tested to show compliance with the provisions of §§ 15.107(e) and 15.109(g) must be tested following the ANSI C63.4 procedure described in paragraph (a)(3) of this section.[As stated in the adopting R&O, ANSI C63.4 is not used for measurements below 30 MHz.]

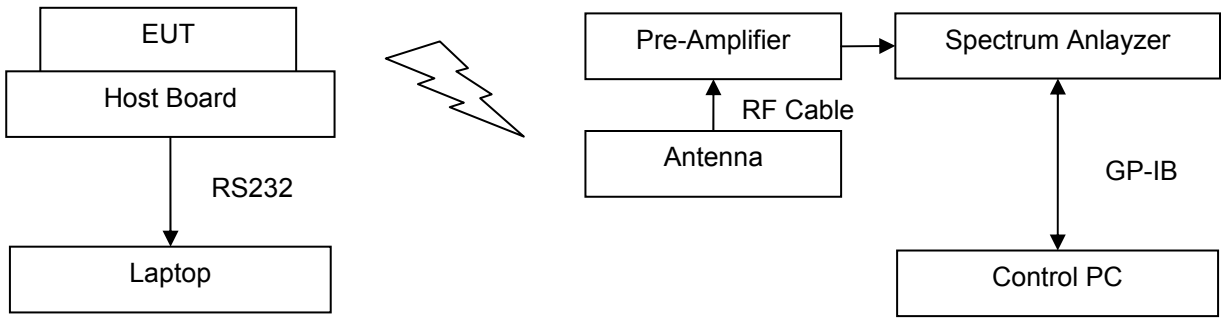
The EUT was placed on a 1 meter by 1.5 meters wide and 0.8-meter high nonconductive table that was placed directly onto a flush mounted turntable. The EUT was connected to its support equipment with any excess I/O cabling bundled to approximately 1 meter. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna supporter. It is measured with a receiver – spectrum analyzer, was software controlled. The antennas were balanced dipoles. For frequencies of 80 MHz or above, the antennas were resonant in length, and for frequencies below 80 MHz it had a length equal to the 80 MHz resonant length.

Prescan tests were performed to determine the "worst-case" orientation of the EUT (By Manipulating the EUT's position through all three orthogonal axes). With the EUT positioned in the "worst case" orientation, emissions from the unit were maximized by manipulating the cables, and by adjusting the polarization and height of the receive antenna and rotating the EUT on the turntable.

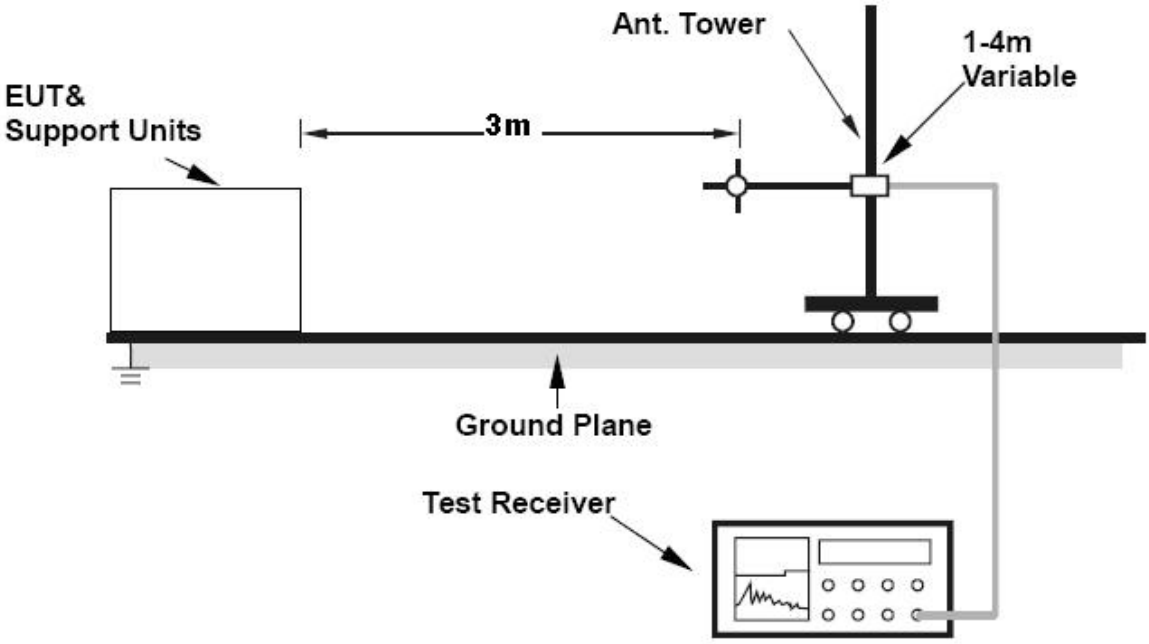
- The EUT was measured in three diferrent transmiting frequencies, low-end, middle, and high-end.
- The transmitter was set-up as its maximum power.
- The following measurements were made with
  - Span = wide enough to fully capture the emission being measured.
  - RBW = 100kHz for f < 1GHz, and 1MHz for f ≥ 1GHz
  - VBW ≥ RBW
  - Sweep = Auto
  - Detector Function = peak

- Trace = Single trace up to capturing the whole range of signal
- Detecting Method = Quasi peak for f < 1GHz, and Averaging detector for f ≥ 1GHz

Setup Block Diagram



Test Setup at OATS



Test Result

Radiated Emission (dBuV/m) = Measured Emission (dBuV) + Antenna Factor(1/m) + Cable Loss(dB)– Pre-Amplifier Gain(dB)

X Pass Fail N/A

Frequency (MHz)	Measured (dBuV)	AF (dB/m)	CL (dB)	Pre-Amp (dB)	Radiated Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Results
Spurious of Low End								
384.259	47.76	15.79	5.76	32.59	36.72	46.02	9.30	Pass
480.275	40.72	18.06	6.56	32.33	32.81		13.21	Pass
576.356	36.24	19.70	7.24	32.08	31.10		14.92	Pass
Spurious of Middle								
326.174	31.02	14.90	5.23	32.50	18.65	46.02	27.37	Pass
384.259	47.36	15.79	5.76	32.59	36.32		9.70	Pass
480.275	41.05	18.06	6.56	32.33	33.34		12.68	Pass
986.123	27.30	23.74	9.54	31.50	29.08	53.98	24.90	Pass
Spurious of High End								
366.153	39.31	15.11	5.63	32.38	27.67	46.02	18.35	Pass
384.259	50.29	15.79	5.76	32.59	39.25		6.77	Pass
480.341	34.03	18.06	6.56	32.33	26.32		19.70	Pass
Harmonics of Low End								
4803.06	24.26	33.50	1.86	24.03	35.59	53.98	18.39	Pass
Harmonics of middle								
4881.06	22.16	33.90	1.88	23.79	34.15	53.98	19.83	Pass
7321.59	20.49	36.28	2.36	14.52	44.61		9.37	Pass
Harmonics of Highend								
4959.06	23.25	34.30	1.90	23.55	35.90	53.98	18.08	Pass
7438.59	22.63	36.34	2.38	14.12	47.23		6.75	Pass

- Table of Radiated Spurious Emissions of Lowend: 300 to1000MHz, Quasi-peak Detecting, Antenna was used SAS-510-2.

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.209, 3 meters, Lowend, Horizontal

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
06:05:37 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
384.259 MHz	47.76	-11.04	36.72	46.02	9.30	195.3	310.8	H
480.275 MHz	40.52	-7.71	32.81	46.02	13.21	142.2	320.6	H
576.356 MHz	36.24	-5.14	31.10	46.02	14.92	100.1	11.6	H

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 47.2 %, B. P.:102.65 kPa

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.209, 3 meters, Lowend, Vertical

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
06:05:37 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
384.259 MHz	37.38	-11.04	26.34	46.02	19.68	100.1	141.2	V
480.275 MHz	30.69	-7.71	22.98	46.02	23.04	101.2	91.6	V
576.356 MHz	29.83	-5.14	24.69	46.02	21.33	101.1	88.9	V

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 47.2 %, B. P.:102.65 kPa

- Table of Radiated Spurious Emissions of Middle: 300 to1000MHz, Quasi-peak Detecting, Antenna was used SAS-510-2.

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.209, 3 meters, Middle, Horizontal

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
05:28:04 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
326.174 MHz	29.80	-12.37	17.43	46.02	28.59	246.8	36.9	H
384.259 MHz	47.36	-11.04	36.32	46.02	9.70	144.2	302.4	H
480.275 MHz	41.05	-7.71	33.34	46.02	12.68	138.3	330.0	H
986.123 MHz	27.28	1.78	29.06	53.98	24.92	100.1	349.1	H

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 47.2 %, B. P.:102.65 kPa

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.209, 3 meters, Middle, Vertical

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
05:28:04 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
326.174 MHz	31.02	-12.37	18.65	46.02	27.37	100.1	217.8	V
384.259 MHz	35.65	-11.04	24.61	46.02	21.41	100.1	10.9	V
480.275 MHz	36.83	-7.71	29.12	46.02	16.90	100.2	227.4	V
986.123 MHz	27.30	1.78	29.08	53.98	24.90	100.2	299.6	V

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 47.2 %, B. P.:102.65 kPa

- Table of Radiated Spurious Emissions of Highend: 300 to1000MHz, Quasi-peak Detecting, Antenna was used SAS-510-2.

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.209, 3 meters, Highend, Horizontal

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
04:22:10 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
366.153 MHz	39.31	-11.64	27.67	46.02	18.35	195.9	136.2	H
384.259 MHz	50.29	-11.04	39.25	46.02	6.77	197.1	322.1	H
480.341 MHz	34.03	-7.71	26.32	46.02	19.70	139.8	242.2	H

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 47.2 %, B. P.:102.65 kPa

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.209, 3 meters, Highend, Vertical

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
04:22:10 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
366.153 MHz	38.64	-11.64	27.00	46.02	19.02	101.2	117.9	V
384.259 MHz	38.16	-11.04	27.12	46.02	18.90	100.1	151.8	V
480.341 MHz	33.61	-7.71	25.90	46.02	20.12	101.2	253.8	V

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 47.2 %, B. P.:102.65 kPa

- Table of Radiated Spurious Emissions of LowEnd: 1 to18GHz, Averaging Detecting, Antenna was used SAS-571.

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.205 and 209, 3 meters, Lowend, Horizontal
Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
02:20:22 PM, Wednesday, December 02, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
4.803 GHz	24.26	11.33	35.59	53.98	18.39	110.0	345.0	H

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 43.5 %, B. P.:102.53 kPa

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.205 and 209, 3 meters, Lowend, Vertical
Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
02:20:22 PM, Wednesday, December 02, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
4.803 GHz	21.64	11.33	32.97	53.98	21.01	110.0	300.0	V

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 43.5 %, B. P.:102.53 kPa

- Table of Radiated Spurious Emissions of Middle: 1 to18GHz, Averaging Detecting, Antenna was used SAS-571.

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.205 and 209, 3 meters, Middle, Horizontal
Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
01:37:22 PM, Wednesday, December 02, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
4.881 GHz	22.05	11.99	34.04	53.98	19.94	110.0	343.0	H
7.322 GHz	20.19	24.12	44.31	53.98	9.67	110.0	10.8	H

Project # : 9576, Sample #:773533
Temp.: 7.6 C, Hum.: 40.2 %, B. P.:102.53 kPa

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.205 and 209, 3 meters, Middle, Vertical

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
01:37:22 PM, Wednesday, December 02, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
4.881 GHz	22.16	11.99	34.15	53.98	19.83	110.0	300.0	V
7.322 GHz	20.49	24.12	44.61	53.98	9.37	110.0	76.6	V

Project # : 9576, Sample #:773533
Temp.: 7.6 C, Hum.: 40.2 %, B. P.:102.53 kPa

- Table of Radiated Spurious Emissions of HighEnd: 1 to18GHz, Averaging Detecting, Antenna was used SAS-571.

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.205 and 209, 3 meters, Highend, Horizontal

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
01:09:56 PM, Wednesday, December 02, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
4.959 GHz	22.06	12.65	34.71	53.98	19.27	110.0	344.8	H
7.439 GHz	22.63	24.60	47.23	53.98	6.75	110.0	56.3	H

Project # : 9576, Sample #:773533
Temp.: 6.7 C, Hum.: 55.2 %, B. P.:102.53 kPa

LabTest Certification Inc.
Intentional Radiated Spurious
FCC15.205 and 209, 3 meters, Highend, Vertical

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
01:09:56 PM, Wednesday, December 02, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
4.959 GHz	23.25	12.65	35.90	53.98	18.08	110.0	87.0	V
7.439 GHz	22.36	24.60	46.96	53.98	7.02	110.0	116.0	V

Project # : 9576, Sample #:773533
Temp.: 6.7 C, Hum.: 55.2 %, B. P.:102.53 kPa

Continuous Data and Short Transmission

Test Date	Dec. 03, 2009
Sample Number	773533
Tested By	Jeremy Lee

Use the barometric pressure reported at: http://www.theweathernetwork.com/weather/cabc0248

Test Limits

FCC15.247(g)

Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

Test Results

Followed by the theory of operation, The OEM2400MR transceiver is a frequency hopping spread spectrum 2.4-2.4835 MHz radio platform specifically designed for industrial applications. The radio is capable of accepting a wide range of input voltages and is able to operate across a broad temperature range. The radio has been designed to withstand ISM band interference while ensuring the integrity of each data packet. This is accomplished via the OMNEX IRIS data protocol that uses ARQ and Auto-Routing to move data accurately in hostile RF conditions. Each unit is capable of acting as a master, a slave or repeater.

X Pass **Fail** **N/A**

Coordination of Frequency Hopping

Test Date	Dec. 03, 2009
Sample Number	773533
Tested By	Jeremy Lee

Use the barometric pressure reported at: http://www.theweathernetwork.com/weather/cabc0248

Test Limits

FCC15.247(h)

The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

Test Results

Followed by the theory of operation, the OEM2400MR transceiver is a frequency hopping spread spectrum 2.4-2.4835 MHz Radio platforms specifically designed for industrial applications.

Frequency hopping spread spectrum technology was originally developed by the U.S. military to prevent interference or interception of radio transmissions on the battlefield. Frequency hopping devices concentrate their full power into a very narrow signal and randomly hop from one frequency to another within a designated frequency band. If they encounter interference on a particular frequency, the devices error checks the affected data, hops to another point on the spectrum, and resumes communications on subsequent hops.

X Pass **Fail** **N/A**

RF Exposure (SAR)

Test Date	Dec. 03, 2009
Sample Number	773533
Tested By	Jeremy Lee

Use the barometric pressure reported at: http://www.theweathernetwork.com/weather/cabc0248

Test Limits

FCC15.247

02- Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. *See* § 1.1307(b)(1) of this chapter.

FCC1.1310

The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter. Further information on evaluating compliance with these limits can be found in the FCC's OST/OET Bulletin Number 65, ''Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation.''

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f^2)	6
30–300	61.4	0.163	1.0	6
300–1500	.....	.....	f/300	6
1500–100,000	.....	.....	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f^2)	30
30–300	27.5	0.073	0.2	30
300–1500	.....	.....	f/1500	30
1500–100,000	.....	.....	1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density

NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

Included are calculations that determine the minimum distance from the transmitter antenna that will ensure an exposure limit at or below the guidelines given in Table 1 of Section 1.1310 for the general population. The formula for these calculations are taken from OET Bulletin 65, edition 97-01, August 1997; "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields".

Calculations

Per Table 1 of Section 1.1310, the limit for General Population/Uncontrolled Exposure at 2400 to 2483.5MHz is 1 mW/cm^2.
Per OET Bulletin 65, Edition 97-01, the formula for calculating power density is: $S=P*G/4\pi d^2$ with:

Given

E=√(30*P*G)/d

and

S=E^2/3770

where

E=Field Strength in Volts/meter
P=Power in Watts
G=Numeric antenna gain
D=Distance in meters
S=Power Density in milliwatts/square centimeter

Combining equations and rearranging the terms to express the distance as a function of the remaining variables yields:

d=√ ((30*P*G)/(3770*S)

Changing to units of Power to mW and Distance to cm, using:

P(mW)=P(W)/1000 and
D(cm)=100*d(m)

yields

d=100*√30*(P/1000)*G)/(3770*S))
d=0.282*√(P*G/S)

where

d=distance in cm
P=Power in mW
G=Numeric antenna gain
S=Power Density in mW/cm^2

Substituting the logarithmic form of power and gain using:

P(mW)=10^(P(dBm)/10) and
G(numeric)=10^(G(dBi)/10)

yields

d=0.282*10^((P+G)/20)/ √S Equation(1)

where

d=MPE distance in cm
P=Power in dBm
G=Antenna Gain in dBi
S=Power Density Limit in mW/cm^2

Equation (1) and the measured peak power is used to calculate the MPE distance.

Limits

From §1.1310 Table 1 (B), S=1.0mW/cm^2

Results

No non-compliance noted:

Channel Frequency(MHz)	Power Density Limit (mW/cm^2)	Output Power (dBm)	Gain of Antenna (dBi)	MPE distance (cm)
2401.5	1.0	+19.97	1.76	3.44
2440.5	1.0	+19.86	1.76	3.40
2479.5	1.0	+20.13	1.76	3.51

Conclusion

For mobile or fixed location transmitters, the minimum separation distance is 20cm, even if calculations indicate that the MPE distance would be less. Therefore, the minimum safe distance has to be inserted in the EUT's User Manual.

Radiated Emission: Unintentional Radiators

Temperature	6.3 to 7.3 °C
Relative Humidity	46.2 to 49.4 %
Barometric Pressure:	102.65 kPa
Test Date	Dec. 01, 2009
Sample Number	773533
Calibrated Test Equipment (ID)	112, 152, 227-1, 227-2, 228
Reference Equipment (ID) (Calibration not required)	059, 124, 233, 235
Tested By	Jeremy Lee

Use the barometric pressure reported at: http://www.theweathernetwork.com/weather/cabc0284

Test Limits

FCC 15.109 (a):
Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field strength (microvolts/ meter)
30–88	100
88–216	150
216–960	200
Above 960	500

Test Setup

The test was performed in accordance with **FCC 15.247:2008, FCC 15.31:2008, FCC 15.33:2008, FCC 15.35:2008, and ANSI C63.4, 2003, and FCC Public notice DA 00-705 Released March 30, 2000.**

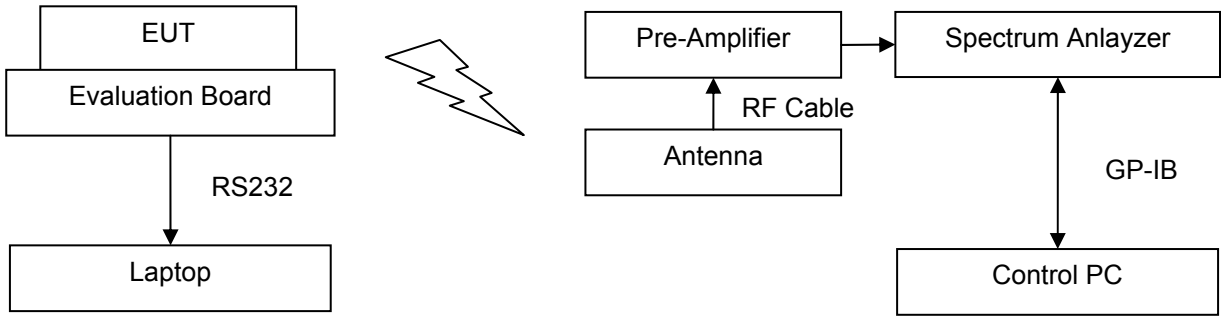
Test procedure is based on the FCC15.31(a)(3) – Other intentional and unintentional radiators are to be measured for compliance using the following procedure excluding sections 4.1.5.2, 5.7, 9 and 14: ANSI C63.4–2003: "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz" (incorporated by reference, see § 15.38). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51.
NOTE to Paragraph (a)(3): Digital devices tested to show compliance with the provisions of §§ 15.107(e) and 15.109(g) must be tested following the ANSI C63.4 procedure described in paragraph (a)(3) of this section.[As stated in the adopting R&O, ANSI C63.4 is not used for measurements below 30 MHz.]

The EUT was placed on a 1 meter by 1.5 meters wide and 0.8-meter high nonconductive table that was placed directly onto a flush mounted turntable. The EUT was connected to its support equipment with any excess I/O cabling bundled to approximately 1 meter. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna supporter. It is measured with a receiver – the spectrum analyzer, was software controlled. The antennas were balanced dipoles. For frequencies of 80 MHz or above, the antennas were resonant in length, and for frequencies below 80 MHz it had a length equal to the 80 MHz resonant length.

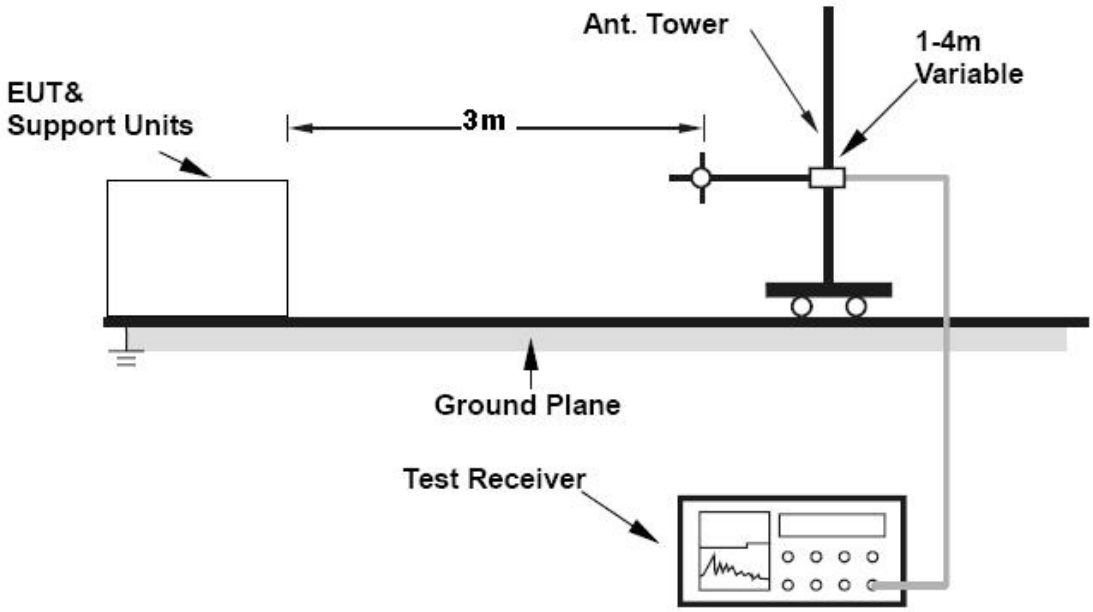
Tests were performed to determine the Idle orientation of the EUT. The EUT was positioned Idle and the emissions from the unit were maximized by manipulating the cables, and by adjusting the polarization and height of the receive antenna and rotating the EUT on the turntable.

- The EUT was set-up in three different receiving modes, lowend, middle and highend.
- The following measurements were made with
  - Span = wide enough to fully capture the emission being measured.
  - RBW = 120kHz.
  - VBW ≥ RBW
  - Sweep = Auto
  - Detector Function = peak
  - Trace = Single trace up to capturing the whole range of signal
  - Detecting Method = Quasi peak.

Setup Block Diagram



Test Setup at OATS



Test Result

Radiated Emission (dBuV/m) = Measured Emission (dBuV) + Antenna Factor(1/m) + Cable Loss(dB)– Pre-Amplifier Gain(dB)

Frequency (MHz)	Measured (dBuV)	AF (dB/m)	CL (dB)	Pre-Amp (dB)	Radiated Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	POL	Results
Lowend of receiving mode									
384.26	45.44	15.79	5.76	32.59	34.40	46.02	11.62	V	PASS
480.34	34.93	18.06	6.56	32.33	27.22		18.80	H	PASS
895.53	33.22	22.90	8.97	31.59	33.50		12.52	V	PASS
Middle of receiving mode									
384.33	52.75	15.79	5.76	32.59	41.72	46.02	4.30	H	PASS
480.34	46.36	18.06	6.56	32.33	38.65		7.37	H	PASS
975.35	27.85	24.00	9.39	31.40	29.84	53.98	24.14	V	PASS
Highend of receiving mode									
384.26	49.55	15.79	5.76	32.59	38.51	46.02	7.51	H	PASS
480.34	47.50	18.06	6.56	32.33	39.79		6.23	H	PASS
895.53	33.57	22.90	8.97	31.59	33.85		12.17	V	PASS

X Pass Fail N/A

- Table of Unintentional Radiated Emissions of Lowend of receiving mode: 300 to1000MHz, Quasi-peak Detecting, Antenna was used SAS-510-2.

LabTest Certification Inc.
Unintentional Radiated Emission
FCC15.109, Class B, 3 meters, Lowend, Horizontal

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
03:32:45 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
384.259 MHz	41.60	-11.04	30.56	46.02	15.46	100.1	225.5	H
480.341 MHz	34.93	-7.71	27.22	46.02	18.80	100.1	35.0	H
895.526 MHz	33.04	0.28	33.32	46.02	12.70	249.4	173.6	H

Project # : 9576, Sample #:773533
Temp.: 6.3 C, Hum.: 49.4 %, B. P.:102.65 kPa

LabTest Certification Inc.
Unintentional Radiated Emission
FCC15.109, Class B, 3 meters, Lowend, Vertical

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
03:32:45 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
384.259 MHz	45.44	-11.04	34.40	46.02	11.62	246.6	270.3	V
480.341 MHz	31.16	-7.71	23.45	46.02	22.57	101.9	49.4	V
895.526 MHz	33.22	0.28	33.50	46.02	12.52	100.9	86.1	V

Project # : 9576, Sample #:773533
Temp.: 6.3 C, Hum.: 49.4 %, B. P.:102.65 kPa

- Table of Unintentional Radiated Emissions of Middle of receiving mode: 300 to1000MHz, Quasi-peak Detecting, Antenna was used SAS-510-2.

LabTest Certification Inc.
Unintentional Radiated Emission
FCC15.109, Class B, 3 meters, Middle, Horizontal

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
01:41:16 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
384.325 MHz	52.75	-11.03	41.72	46.02	4.30	100.3	123.1	H
480.341 MHz	46.36	-7.71	38.65	46.02	7.37	100.1	188.8	H
975.352 MHz	27.61	1.99	29.60	53.98	24.38	355.5	134.1	H

Project # : 9576, Sample #:773533
Temp.: 7.3 C, Hum.: 46.2 %, B. P.:102.65 kPa

LabTest Certification Inc.
Unintentional Radiated Emission
FCC15.109, Class B, 3 meters, Middle, Vertical

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
01:41:16 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
384.325 MHz	48.31	-11.03	37.28	46.02	8.74	100.3	121.8	V
480.341 MHz	43.06	-7.71	35.35	46.02	10.67	100.3	220.1	V
975.352 MHz	27.85	1.99	29.84	53.98	24.14	301.3	275.7	V

Project # : 9576, Sample #:773533
Temp.: 7.3 C, Hum.: 46.2 %, B. P.:102.65 kPa

- Table of Unintentional Radiated Emissions of Highend of receiving mode: 300 to1000MHz, Quasi-peak Detecting, Antenna was used SAS-510-2.

LabTest Certification Inc.
Unintentional Radiated Emission
FCC15.109, Class B, 3 meters, Highend, Horizontal

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
02:38:12 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
384.259 MHz	49.55	-11.04	38.51	46.02	7.51	100.3	206.6	H
480.341 MHz	47.50	-7.71	39.79	46.02	6.23	100.1	263.1	H
895.526 MHz	33.25	0.28	33.53	46.02	12.49	100.1	202.1	H

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 47.2 %, B. P.:102.65 kPa

LabTest Certification Inc.
Unintentional Radiated Emission
FCC15.109, Class B, 3 meters, Highend, Vertical

Operator: Jeremy Lee
Model #: OEM-2400-MR
Contact: Patrick Ho
02:38:12 PM, Tuesday, December 01, 2009
Company: OMNEX Control Systems ULC

Frequency MHz	Measured dBuV	Cal Factor dB/m	Emission dBuV/m	Limit dBuV/m	Margin dB	Tower cm	T/T Degree	POL
384.259 MHz	38.51	-11.04	27.47	46.02	18.55	100.2	68.0	V
480.341 MHz	36.05	-7.71	28.34	46.02	17.68	141.1	338.4	V
895.526 MHz	33.57	0.28	33.85	46.02	12.17	143.1	264.8	V

Project # : 9576, Sample #:773533
Temp.: 7.2 C, Hum.: 47.2 %, B. P.:102.65 kPa

Conducted Emission

Test Date	Dec. 03, 2009
Sample Number	773533
Tested By	Jeremy Lee

Use the barometric pressure reported at: http://www.theweathernetwork.com/weather/cabc0248

Test Limits

FCC 15.207:

02- 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 30MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN).

Test Results

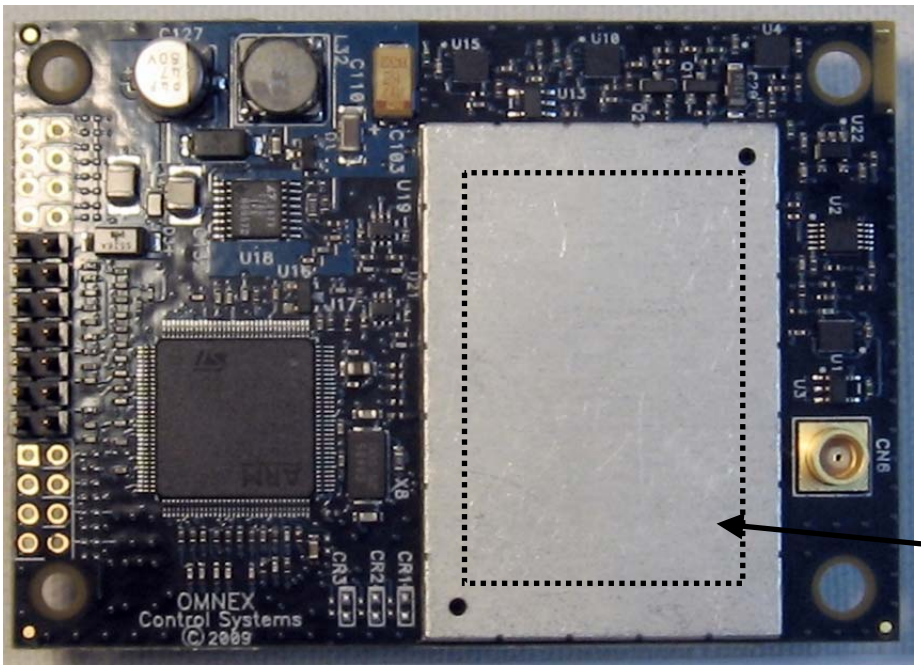
The test was exempted because there is no public utility (AC) power line connection.

APPENDIX A: Test Equipment Used

ID No.	Description	Manufacturer	Model	Serial No.	Calibration Date	Calibration Due Date	Calibration Certificate No:	Calibration Laboratory
059	Power Supply	California Instruments	5000i	HK51870	N/A	N/A	N/A	N/A
112	GTEM EMC Chamber	Emco	5317	N/A	04-Oct-2005	04-Oct-2010	1000082343	Wescan
124	Pre-Amplifier	Com-Power	PA-103	161118	N/A	N/A	N/A	N/A
141	Pre-Amplifier	RF Bay	LPA-10-10	04521173	N/A	N/A	N/A	N/A
152	Spectrum Analyzer	Adventest	R3271	15050455	05-Nov-2009	05-Nov-2010	295548	Wescan
227-1	Biconical Antenna	A.H. Systems	SAS-542	716	29-Apr-2009	29-Apr-2010	10399EE	A.H. Systems
227-2	LP Antenna	A.H. Systems	SAS-510-2	1262	29-Apr-2009	29-Apr-2010	10399EE	A.H. Systems
227-3	Horn Antenna	A.H. Systems	SAS-571	936	29-Apr-2009	29-Apr-2010	10399EE	A.H. Systems
227-4	Horn Antenna	A.H. Systems	SAS-572	233	29-Apr-2009	29-Apr-2010	10399EE	A.H. Systems
227-5	Coaxial RF Cable	A.H. Systems	SAC-26G-3	205	N/A	N/A	N/A	N/A
228	Humidity/ Temperature Logger	Veriteq	SP-2000-20R	07072157	02-Oct-2009	02-Oct-2010	0144511	Veriteq
233	Coaxial RF Cable	N/A	LCI-001	N/A	N/A	N/A	N/A	N/A
235	Turn table /Tower System	Sunol Sciences Co.	SC104V	031407-1	N/A	N/A	N/A	N/A
272	EMC Analyzer	Agilent	E7405A	US41110263	14-Dec-2009	14-Dec-2010	138311901104 084091214	TRS-RenTelco
273	RF Preamplifier	Agilent	8449B	3008A02264	06-Jan-2010	06-Jan-2012	138311901068 042101 6	TRS-RenTelco
N1	Coaxial RF Cable	Belden	OC-LMR100A-4	N/A	N/A	N/A	N/A	N/A
N2	Attenuator	Mini-circuits	UNAT-15+	15542	N/A	N/A	N/A	N/A

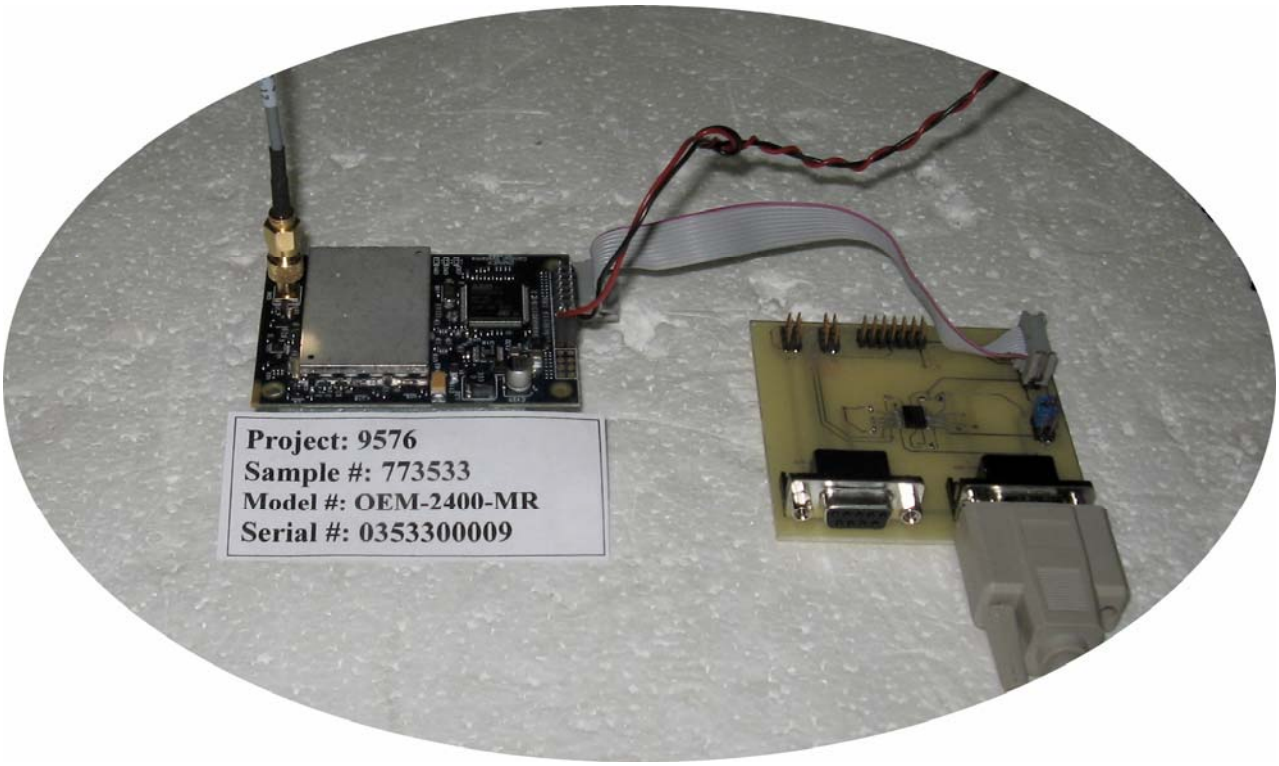
APPENDIX B: EUT photos

- EUT: Top View



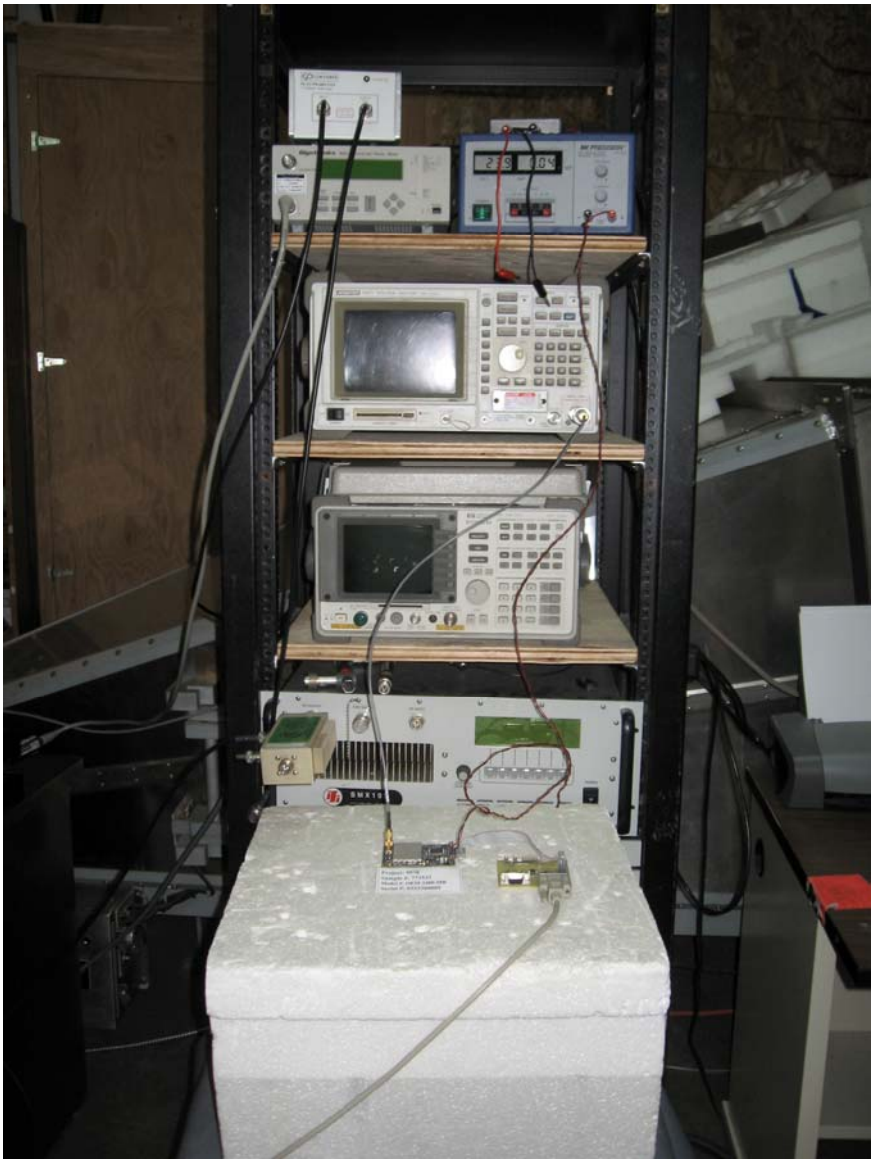
- EUT: Bottom View

- EUT with Host Board



APPENDIX C: Test setup photos

- Test configuration for Conducted measurement



- Test configuration for Radiated Emission at OATS #1

- Test configuration for Radiated Emission at OATS #2

- Test configuration for Radiated Emission at OATS #3

END OF REPORT