

**Conducted Emissions Test Setup Photographs
Figure 2**



Retlif Testing Laboratories

Test Report No. R-2965P

RETLIF TESTING LABORATORIES
 EMISSION LEVEL [dBuV] 7 Feb 2007 02:51:33

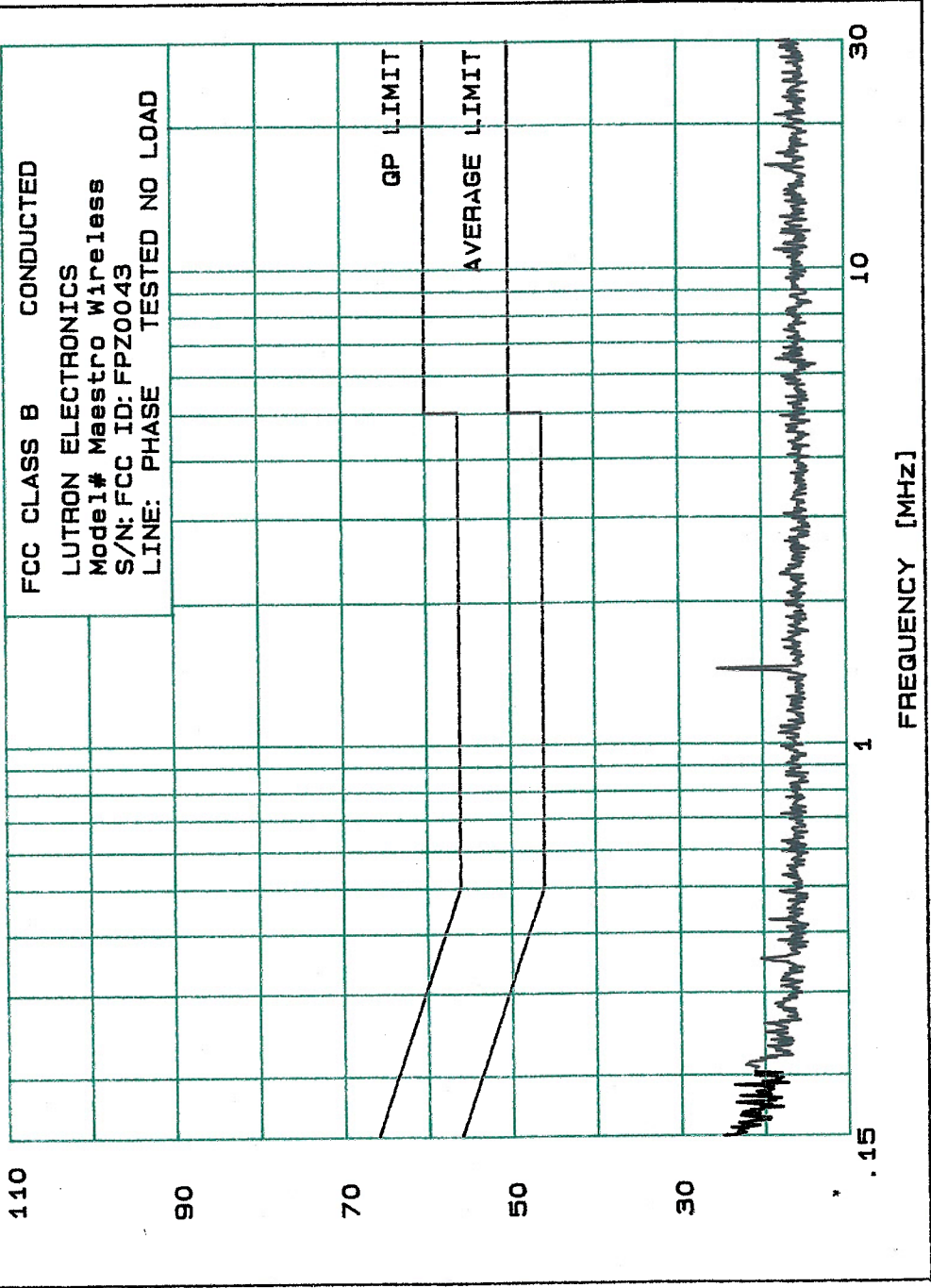


Figure 3



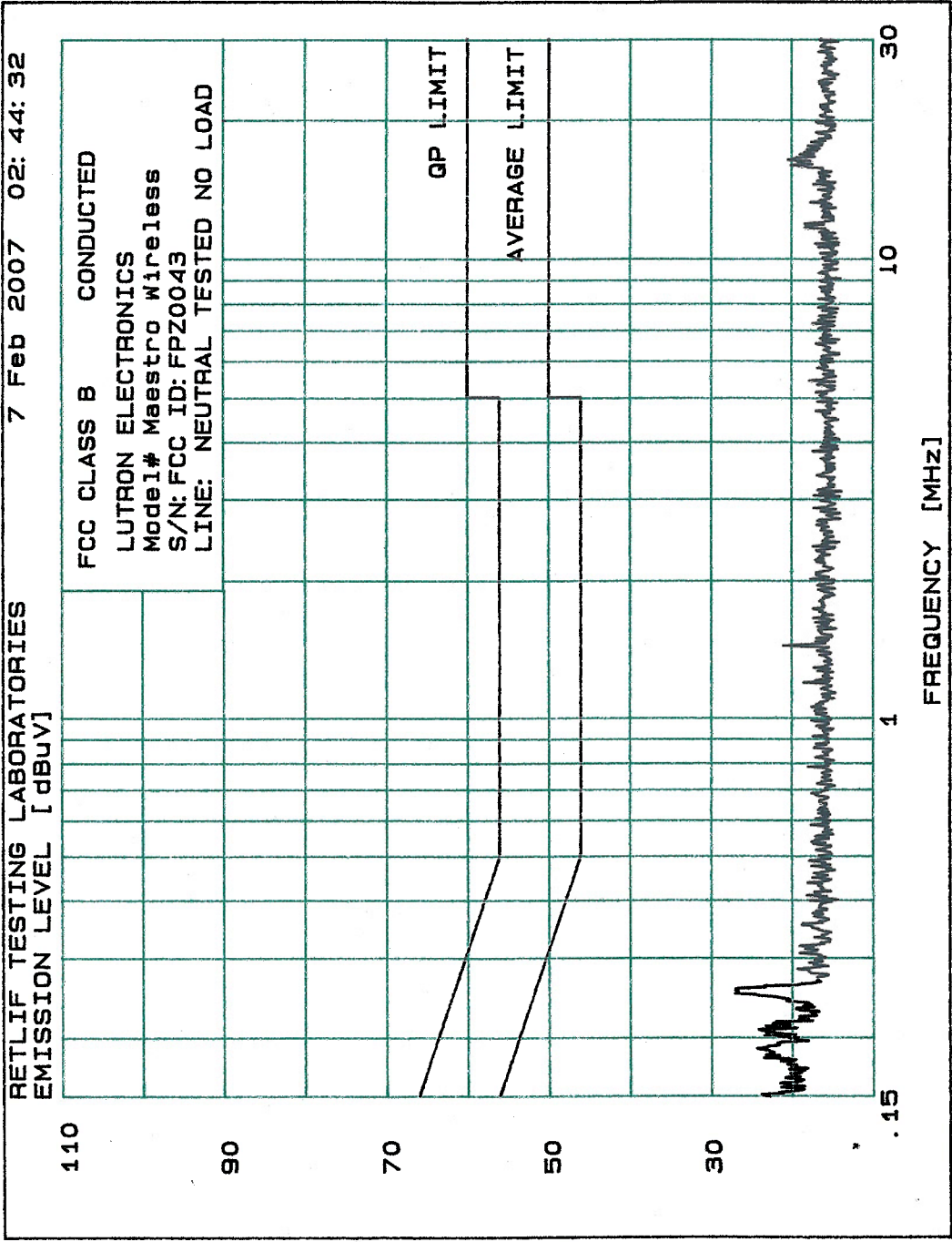


Figure 4

4.2 Radiated Emissions Measurements, §15.33, §15.35, §15.109, §15.205, §15.209, §15.231

Radiated Emissions measurements were recorded for the test sample at a distance of 3 meters. Radiated Emissions were measured with the antenna in both the horizontal and vertical polarizations. The antenna was raised 1 to 4 meters in height and the EUT (Equipment Under Test) was rotated 360° to maximize the emission. No significant emission level changes occurred while positioning the EUT power cable.

For intentional radiators the field strength of emissions of the EUT was measured out to the tenth harmonic of the carrier frequency. The carrier frequency was set to 390MHz.

An average factor -23.5dB was applied to the level of the fundamental emission when compared to the FCC limit. The EUT duty cycle information supporting the -23.5dB factor is shown in Figure 5.

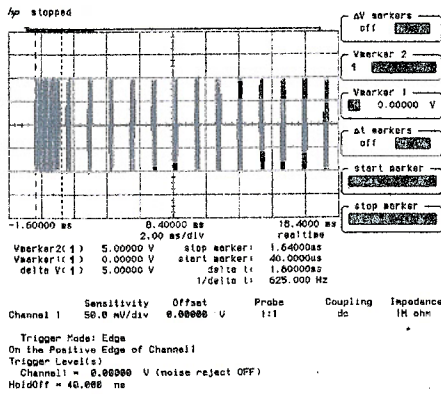
Figure 6 is a test setup diagram for Radiated Emissions and Figure 7 (Receiver) and Figure 8 (Transmitter) are the photographs of the test setup.

The test results for Radiated Emissions testing are shown in the following figures:

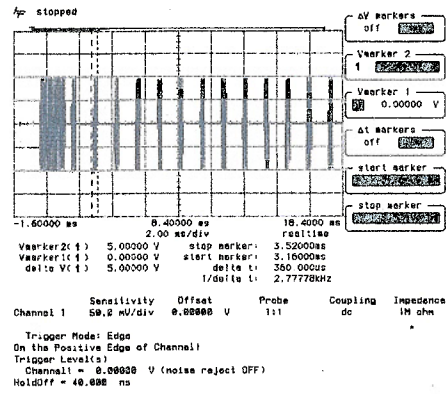
- FIGURE 9/10 Unintentional Radiated Emissions Data Sheets, (AM) Rx Mode, 390MHz
- FIGURE 11 Unintentional Radiated Emissions Graph, (AM) Rx Mode, 390MHz
- FIGURE 12/13 Unintentional Radiated Emissions Data Sheets, (AM) Tx Mode, 390MHz
- FIGURE 14 Unintentional Radiated Emissions Graph, (AM) Tx Mode, 390MHz
- FIGURE 15 Intentional Radiated Emissions Data Sheet, (AM) Tx Mode, 390MHz, EUT Position 1
- FIGURE 16 Intentional Radiated Emissions Data Sheet, (AM) Tx Mode, 390MHz, EUT Position 2
- FIGURE 17 Intentional Radiated Emissions Data Sheet, (AM) Tx Mode, 390MHz, EUT Position 3

ALL LEVELS COMPLY WITH THE APPLICABLE FCC LIMITS PART 15 CLASS B AND C FOR RADIATED EMISSIONS PER THE APPLICABLE PARAGRAPHS.

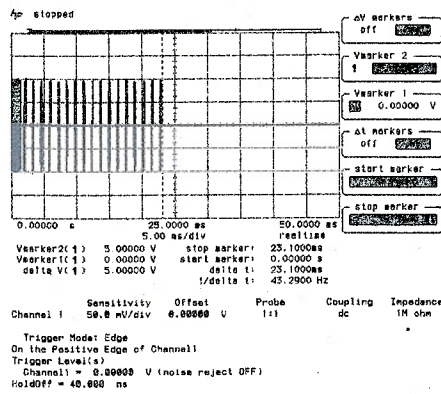




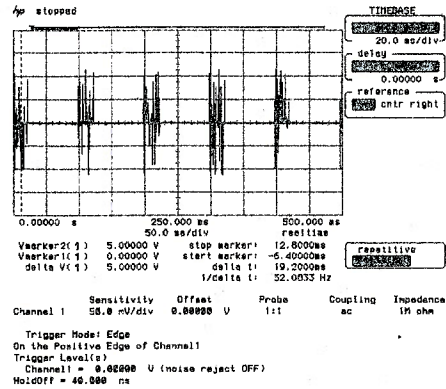
Marker On Wide Pulse Width



Marker On Narrow Pulse Width



Complete "ON" Pulse Train



EUT Transmitter Signal Multiple Periods

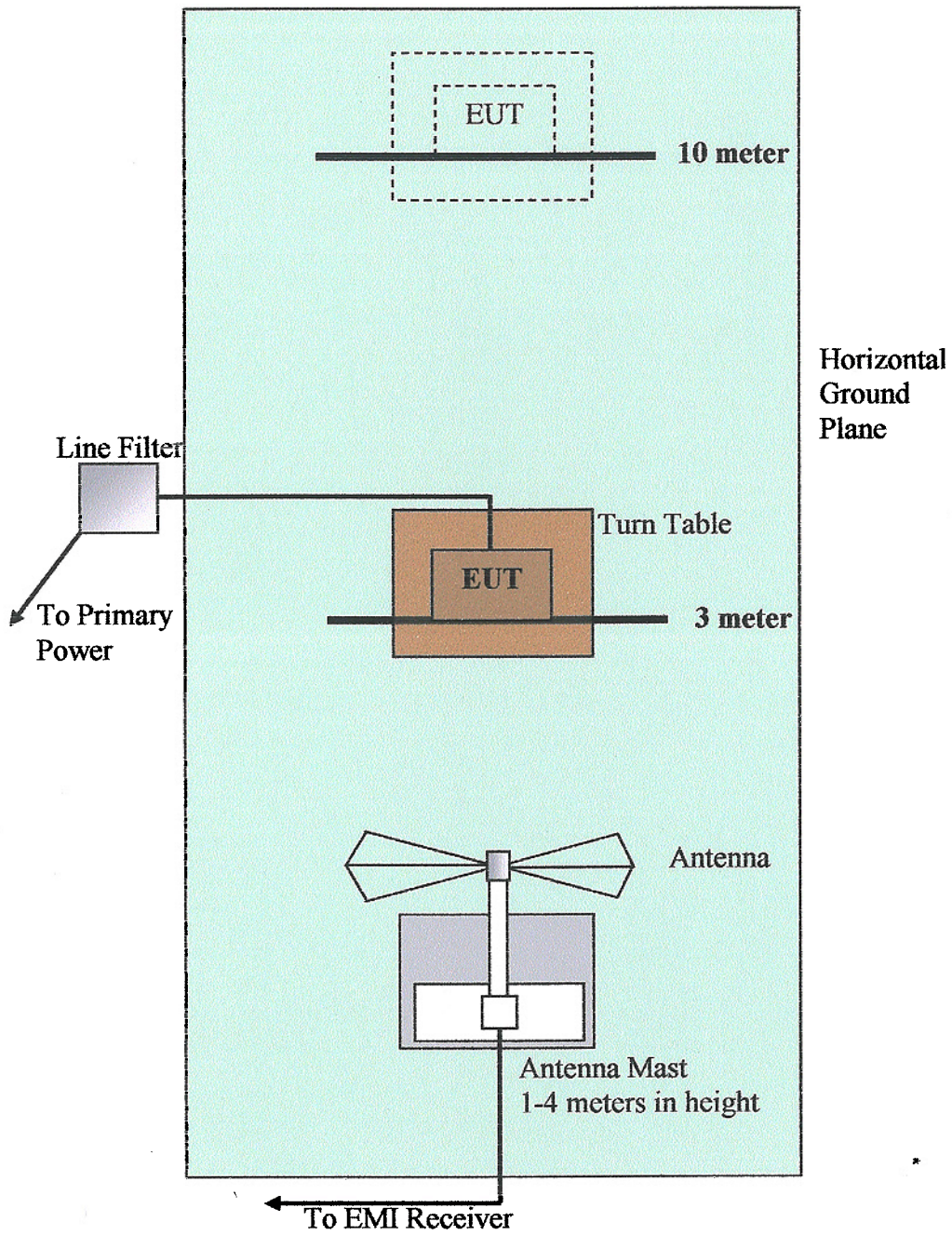
Duty Cycle Correction Factor Calculation:

Total Number of Pulses counted in 100ms

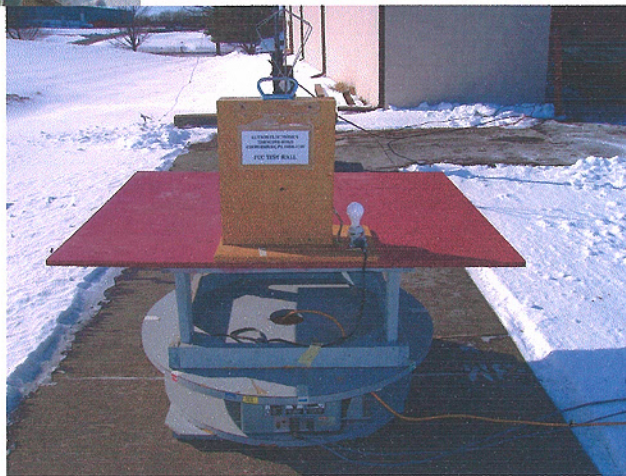
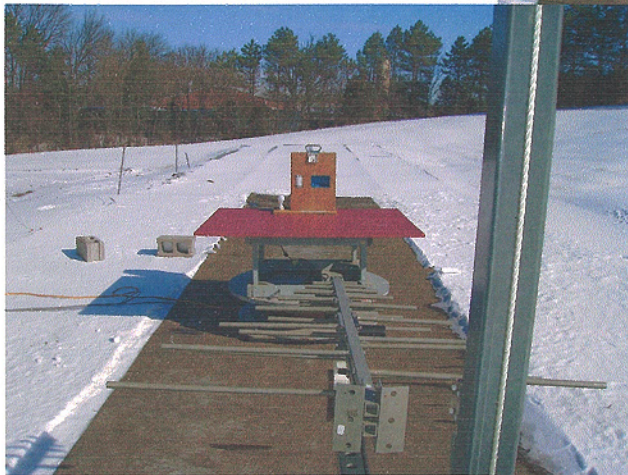
Total Time On = 6.66ms

$$\begin{aligned}
 \text{Duty Cycle Correction Factor} &= 20 \log [\text{Time On} / (\text{Time On} + \text{Time Off})] \\
 &= 20 \log [6.66\text{ms} / 100\text{ms}] \\
 &= 20 \log [0.0666] \\
 &= -23.5\text{dB}
 \end{aligned}$$

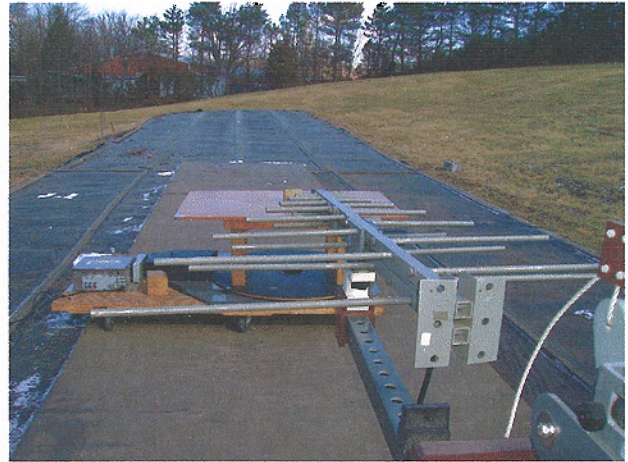
Figure 5



**Radiated Emissions Test Setup Diagram
Figure 6**



**Radiated Emissions Test Setup (Receiver) Photographs
Figure 7**



**Radiated Emissions Test Setup in 3 Orthogonal Axis (Transmitter)
Photographs
Figure 8**

Test Personnel: J. Kavalusky JK
Date: 2/17/07

Company: Lutron Electronics
Model #: Maestro Receiver UNIT#1
Fund. Freq.: 390MHz
Mode: Rx (AM)

Radiated Emissions for Unintentional Radiators

Frequency (MHz)	Polarity	Antenna Height (Meters)	Azimuth (Degrees)	*Indicated Level (dBuV)	Antenna Factor (dB)	Pre-Amp Gain Factor (dB)	Cable Loss (dB)	Averaging Factor (dB)	Field Strength @ 3m (dBuV/m)	Limits @ 3m (dBuV/m)	Margin (dB)
30	Vert	1.00	0	6.4	12.9	0.0	0.5	0.0	19.8	40.00	-20.2
60	Vert	1.00	0	7.0	9.4	0.0	0.7	0.0	17.1	40.00	-22.9
120.0	Vert	1.00	0	4.4	11.1	0.0	1.0	0.0	16.50	43.50	-27.0
200.0	Vert	1.00	0	1.4	14.6	0.0	1.2	0.0	17.2	43.50	-26.3
700	Vert	1.00	0	3.7	21.5	0.0	2.9	0.0	28.1	46.00	-17.9
1000	Vert	1.00	0	4.4	24.2	0.0	3.8	0.0	32.4	54.00	-21.6

* Indicated Level are noise floor.

Figure 9

Company: Lutron Electronics
 Model # Maestro Receiver UNIT#1
 Fund. FREQ. 390MHz.
 Mode:Rx (AM)

Test Personnel: J. Kavalusky JK
 Date:2/17/07

Radiated Emissions for Unintentional Radiators

Frequency (MHz)	Polarity	Antenna Height (Meters)	Antenna Azimuth (Degrees)	*Indicated Level (dBuV)	Antenna Factor (dB)	Pre-Amp Gain Factor (dB)	Cable Loss (dB)	Averaging Factor (dB)	Field Strength @ 3m (dBuV/m)	Limits @ 3m (dBuV/m)	Margin (dB)
30	Horiz	1.0	0.0	1.4	13.9	0.0	0.5	0.0	15.8	40.00	-26.1
60	Horiz	1.0	0.0	6.8	9.4	0.0	0.7	0.0	16.9	40.00	-25.0
120.0	Horiz	1.0	0.0	7.0	11.0	0.0	1.0	0.0	19.0	43.50	-22.6
200.0	Horiz	1.0	180	7.5	14.0	0.0	1.2	0.0	22.7	43.50	-20.8
700	Horiz	1.0	0.0	3.9	21.6	0.0	2.9	0.0	28.4	46.00	-32.4
1000	Horiz	1.0	0.0	4.4	24.6	0.0	3.8	0.0	32.8	54.00	-29.1

* Indicated Level are noise floor.

Figure 10

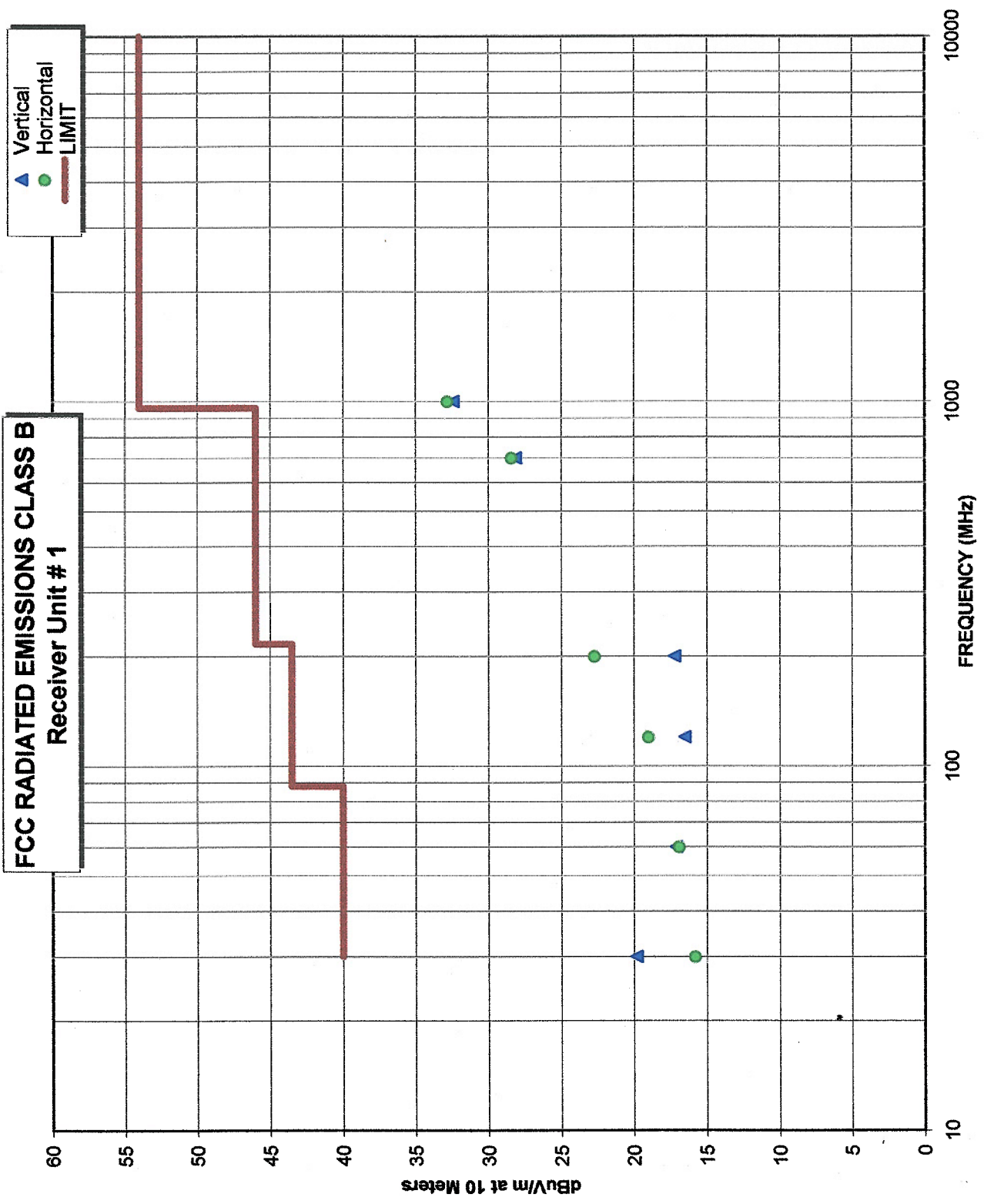


Figure 11