



**Radiated Emissions Test Setup Photographs
Figure 9**



Retlif Testing Laboratories

Test Report No. R-2941P

Company: Lutron Electronics
 Model #: RAMC-MFE
 Fund. Freq: 418MHz.
 Mode: Rx (AM) Table Top

Test Personnel: J. Kavalusky
 Date: 10-25 to 31, 2006

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	Vert	1.00	0	22.7	12.9	0.0	1.0	0.0	36.6	41.93	-5.3
70	Vert	1.00	0	25.0	8.4	0.0	1.4	0.0	34.8	41.93	-7.1
120.0	Vert	1.00	0	13.0	11.1	0.0	1.9	0.0	26.00	41.53	-15.5
200.0	Vert	1.00	0	12.5	14.6	0.0	2.3	0.0	29.4	51.48	-22.1
500	Vert	1.00	0	-1.1	17.9	0.0	4.0	0.0	20.8	60.61	-39.8
700	Vert	1.00	0	19.1	17.2	0.0	3.6	0.0	39.9	60.84	-20.9
1000	Vert	1.0	0	-0.2	24.2	0.0	6.1	0.0	30.10	61.90	-31.8
1.254	Vert	1.0	207.4	45.0	24.9	-29.0	3.2	0.0	44.1	61.90	-17.8
1.7	Vert.	1.0	207.4	37.0	25.6	-33.0	4.2	0.0	33.8	61.9	-28.1
2.09	Vert.	1.0	207.4	41.0	27.6	-25.0	4.5	0.0	48.1	61.9	-13.8

Figure 10



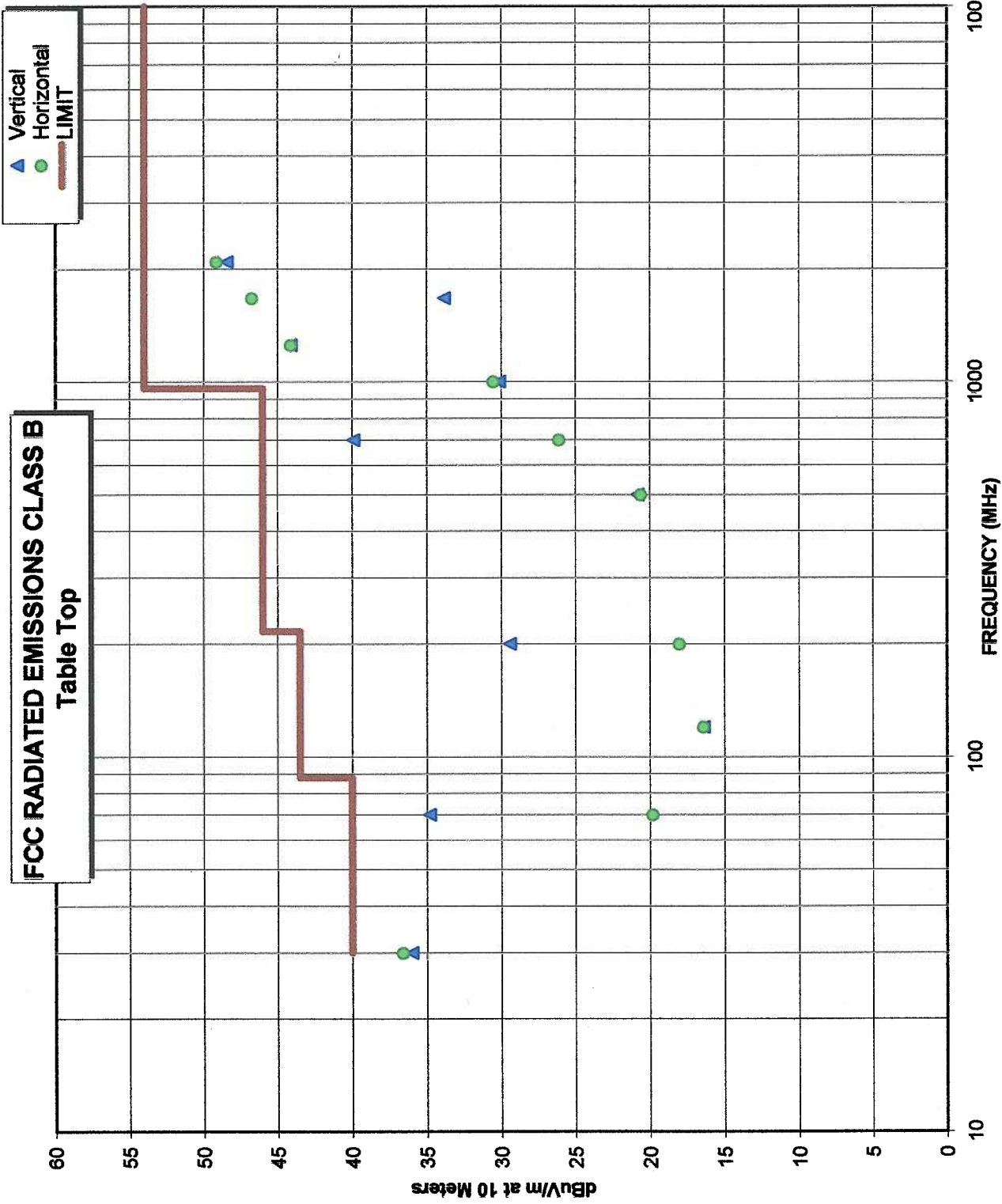


Figure 12



Retlif Testing Laboratories

Test Report No. R-2941P

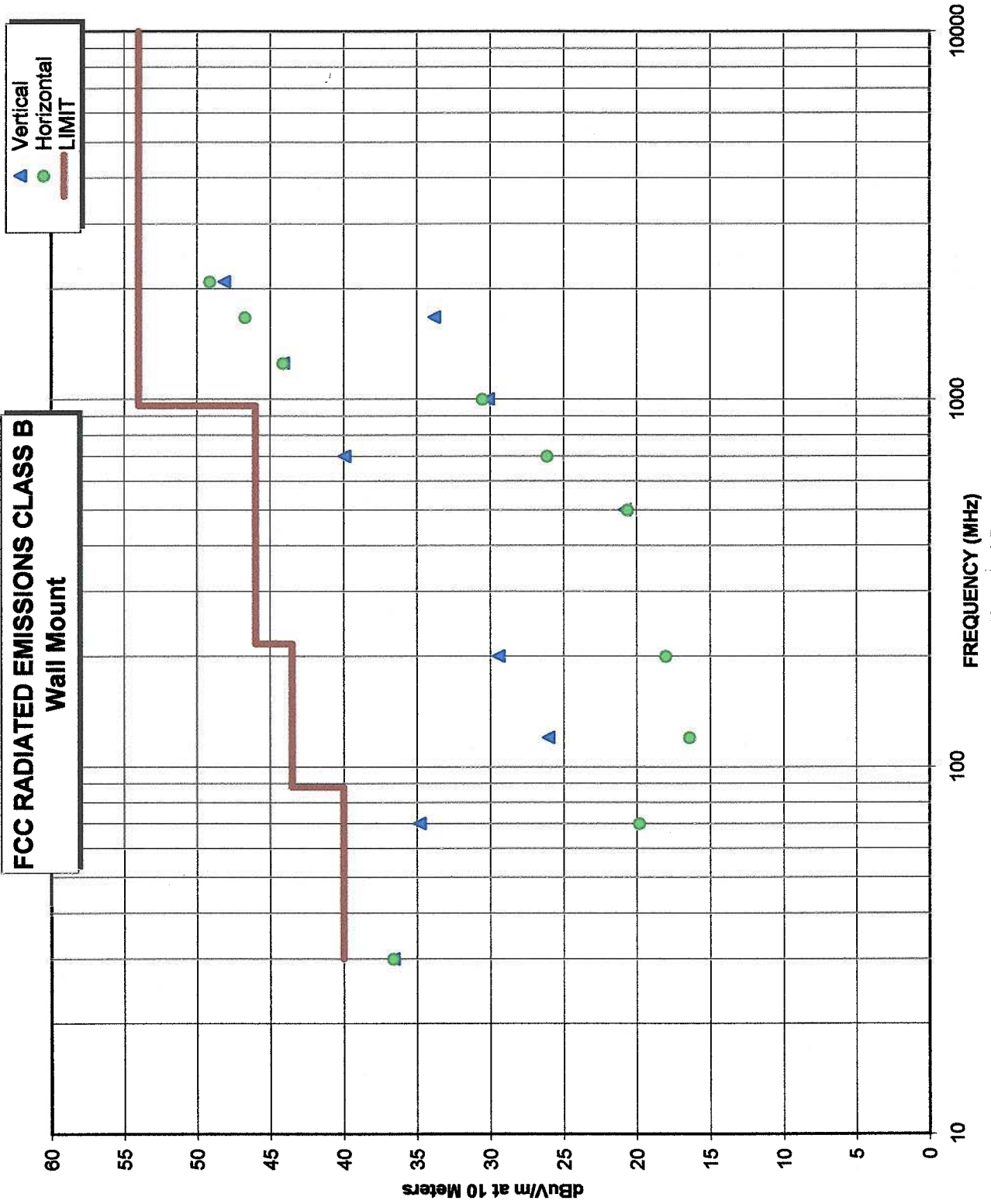


Figure 15



Company: Lutron Electronics
 Model #: RAMC-MFE
 Fund. Freq: 418MHz.
 Mode: Tx (AM) Table Top

Test Personnel: J. Kavalusky
 Date: 10-25 to 31,2006

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	Vert	1.00	0	22.7	12.9	0.0	1.0	0.0	36.6	41.93	-5.3
70	Vert	1.00	0	25.0	8.4	0.0	1.4	0.0	34.8	41.93	-7.1
120.0	Vert	1.00	0	13.0	11.1	0.0	1.9	0.0	26.00	41.53	-15.5
200.0	Vert	1.00	0	12.5	14.6	0.0	2.3	0.0	29.4	51.48	-22.1
420.0	Vert	1.00	0	31.2	15.7	0.0	3.6	0.0	50.5	54.67	-4.2
500	Vert	1.00	0	-1.1	17.9	0.0	4.0	0.0	20.8	60.61	-39.8
700	Vert	1.00	0	19.1	17.2	0.0	3.6	0.0	39.9	60.84	-20.9
1000	Vert	1.0	0	-0.2	24.2	0.0	6.1	0.0	30.10	61.90	-31.8
1.254	Vert	1.0	207.4	45.0	24.9	-29.0	3.2	0.0	44.1	61.90	-17.8
1.7	Vert.	1.0	207.4	37.0	25.6	-33.0	4.2	0.0	33.8	61.9	-28.1
2.09	Vert.	1.0	207.4	41.0	27.6	-25.0	4.5	0.0	48.1	61.9	-13.8

Figure 16



Retlif Testing Laboratories

Test Report No. R-2941P

Company: Lutron Electronics
 Model # RAMC-MFE
 Fund Freq. 418Hz
 Mode Tx (AM) Table Top

Test Personnel: J. Kavalusky
 Date: 10-25 to 31, 2006

Radiated Emission for Intentional 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)
418	Vert	1.00	253.8	76.0	17.0	0.0	3.6	-19.2	77.4	80.28	-2.9
836	Vert	1.00	253.8	12.1	22.5	0.0	5.2	-19.2	20.6	60.28	-39.7
1254	Vert	1.00	288.7	50.00	24.9	-29.0	3.2	-19.2	29.90	60.28	-30.4
1672	Vert	1.00	288.7	47.00	25.6	-33.0	4.2	-19.2	24.60	60.28	-35.7
2090	Vert	1.00	288.7	53.0	27.6	-25.0	4.5	-19.2	40.9	60.28	-19.4
2508	Vert	1.00	288.7	56.75	28.3	-25.0	5.3	-19.2	46.15	61.93	-15.8
2926	Vert	1.00	288.7	54.20	29.7	-25.0	5.9	-19.2	45.60	61.93	-16.3
3344	Vert	1.00	288.7	48.3	30.4	-25.0	6.6	-19.2	41.1	54.00	-12.9
3762	Vert	1.00	288.7	45.6	31.8	-24.8	7.3	-19.2	40.70	54.0	-13.3
4180	Vert	1.00	288.7	42.9	32.7	-24.7	8.1	-19.2	39.8	54.0	-14.2
418	Horiz	1.00	253.8	69.0	16.5	0.0	3.5	-19.2	69.8	80.28	-10.5
836	Horiz	1.00	253.8	13.9	22.8	0.0	5.2	-19.2	22.7	60.28	-37.6
1254	Horiz	1.00	288.7	47.0	25.0	-31.0	1.0	-19.2	22.8	60.28	-37.5
1672	Horiz	1.00	288.7	48.7	26.6	-33.0	1.0	-19.2	24.1	61.93	-37.8
2090	Horiz	1.00	288.7	54.00	28.0	-29.0	1.0	-19.2	34.80	61.93	-27.1
2508	Horiz	1.00	288.7	47.00	29.9	-32.0	1.0	-19.2	26.7	61.93	-35.2
2926	Horiz	1.00	288.7	50.00	30.4	-27.0	1.0	-19.2	35.20	61.93	-26.7
3344	Horiz	1.00	288.7	41.30	31.4	-25.0	1.0	-19.2	29.50	54.00	-24.5
3762	Horiz	1.00	288.7	43.40	32.5	-23.3	1.0	-19.2	34.40	54.0	-19.6
4180	Horiz	1.00	288.7	42.00	32.5	-22.0	1.0	-19.2	34.30	54.0	-19.7

Figure 20



Retlif Testing Laboratories

Test Report No. R-2941P

Company: Lutron Electronics
 Model # RAMC-MFE
 Fund. Freq 418 MHz
 Mode Tx (AM) Wall Mount

Test Personnel: J. Kavalusky
 Date: 10-25 to 31, 2006

Radiated Emission for Intentional 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)
418	Vert	1.00	253.8	77.8	17.0	0.0	3.5	-19.2	79.1	80.28	-1.2
836	Vert	1.00	253.8	12.0	22.5	0.0	5.2	-19.2	20.5	60.28	-39.8
1254	Vert	1.00	288.7	50.10	24.9	-33.0	3.2	-19.2	26.00	60.28	-34.3
1672	Vert	1.00	288.7	50.00	25.6	-33.0	4.2	-19.2	27.60	60.28	-32.7
2090	Vert	1.00	288.7	54.3	27.6	-25.0	4.5	-19.2	42.2	60.28	-18.1
2508	Vert	1.00	288.7	48.60	28.3	-25.0	5.3	-19.2	38.00	60.28	-22.3
2926	Vert	1.00	288.7	44.40	29.7	-25.0	5.9	-19.2	35.80	60.28	-24.5
3344	Vert	1.00	288.7	44.5	30.4	-24.9	6.6	-19.2	37.4	54.00	-16.6
3762	Vert	1.00	288.7	44.4	31.8	-24.8	7.3	-19.2	39.50	54.0	-14.5
4180	Vert	1.00	288.7	41.4	32.7	-24.7	8.1	-19.2	38.3	54.0	-15.7
418	Horiz	1.00	253.8	69.9	16.5	0.0	3.5	-19.2	70.7	80.28	-9.6
836	Horiz	1.00	253.8	18.0	22.8	0.0	5.2	-19.2	26.8	60.28	-33.5
1254	Horiz	1.00	288.7	52.0	24.9	-29.0	3.2	-19.2	31.9	60.28	-28.4
1672	Horiz	1.00	288.7	49.0	26.5	-33.0	4.2	-19.2	27.5	60.28	-32.8
2090	Horiz	1.00	288.7	53.20	28.0	-25.0	4.5	-19.2	41.50	60.28	-18.8
2508	Horiz	1.00	288.7	55.00	28.3	-25.0	5.3	-19.2	44.4	60.28	-15.9
2926	Horiz	1.00	288.7	46.20	29.7	-25.0	5.9	-19.2	37.60	60.28	-22.7
3344	Horiz	1.00	288.7	45.00	30.4	-24.9	6.6	-19.2	37.90	54.00	-16.1
3762	Horiz	1.00	288.7	46.10	31.8	-24.8	7.3	-19.2	41.20	54.0	-12.8
4180	Horiz	1.00	288.7	43.60	32.5	-24.7	8.1	-19.2	40.30	54.0	-13.7

Figure 21



4.3 Bandwidth Measurements, §15.231

Bandwidth measurements were made at the three transmit frequencies of 418MHz.

Retlif Testing Laboratories used an HP-8568B Spectrum Analyzer to perform bandwidth measurements. Bandwidth plots are shown on data sheets.

The requirement states that the bandwidth shall be no wider than .25% of the center frequency at the 20dB down points. Results of testing are shown in Figures 22 through 25.

THE BANDWIDTH MEASUREMENTS COMPLIED WITH THE FCC REQUIREMENTS SET FORTH IN §15.231.



Company: Lutron Electronics
Model # RAMC-MFE
Fund. Freq.: 418MHz

Test Personnel: John Kavalusky
Date: 10/27/06

Bandwidth of Fundamental Frequency

	Frequency (MHz)	Measurement (dBuV/m)
Center Frequency	418.046	70.80
20 dB down	418.0079	50.85
20 dB down	418.0781	50.80

The bandwidth is 70kHz.

Allowable Bandwidth: 0.25% of Fundamental Frequency
For 418MHz: ± 0.5225 MHz

Figure 22



MKR 418.0079 MHz
50.85 dB μ V

ATTEN 10 dB

REF 81.0 dB μ V

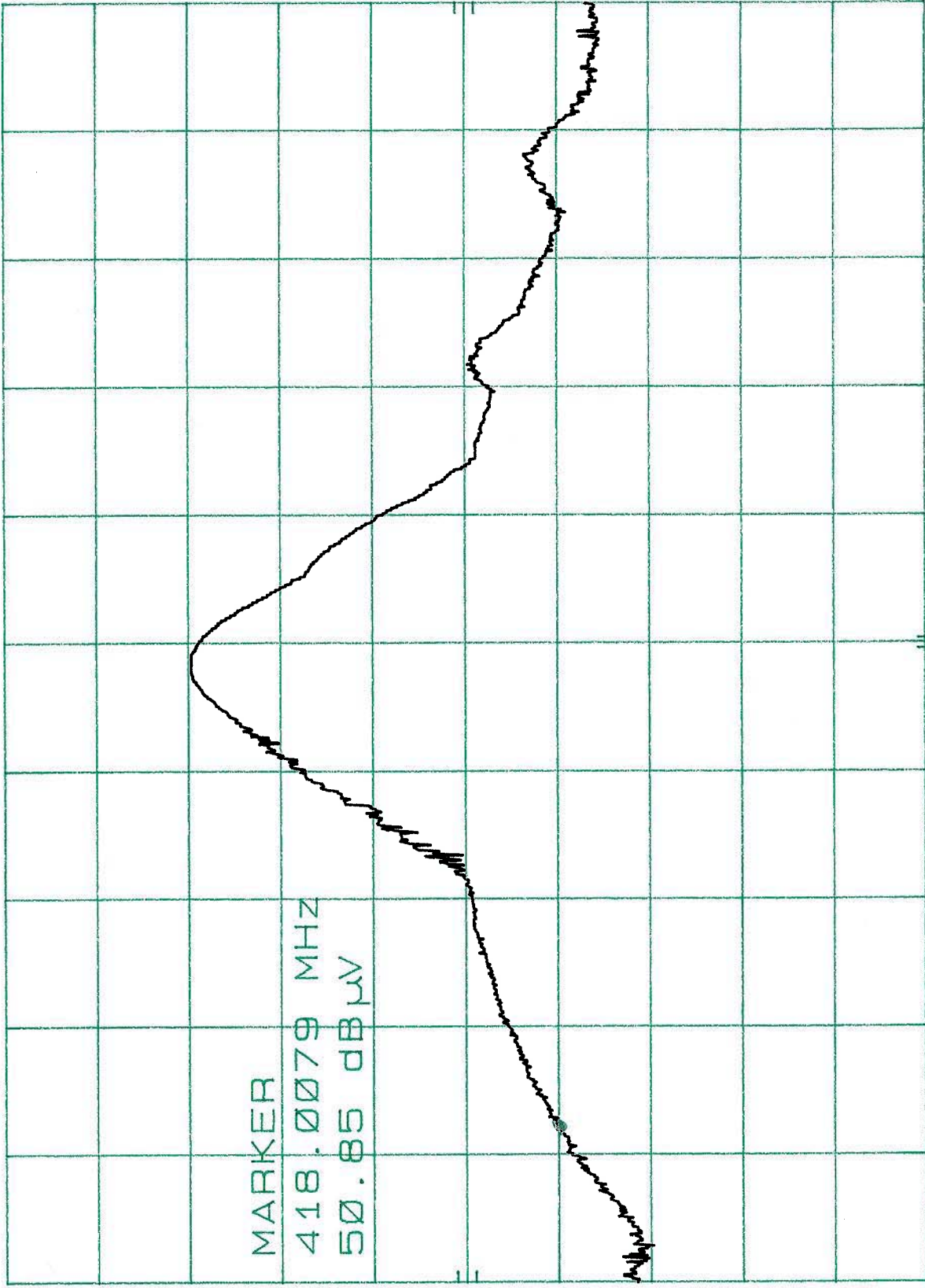
hp

5 dB/

MARKER

418.0079 MHz

50.85 dB μ V



SPAN 100.0 KHZ

SWP 1.0 sec

VBW 30 KHZ

CENTER 418.0460 MHz

RES BW 10 KHZ (i)

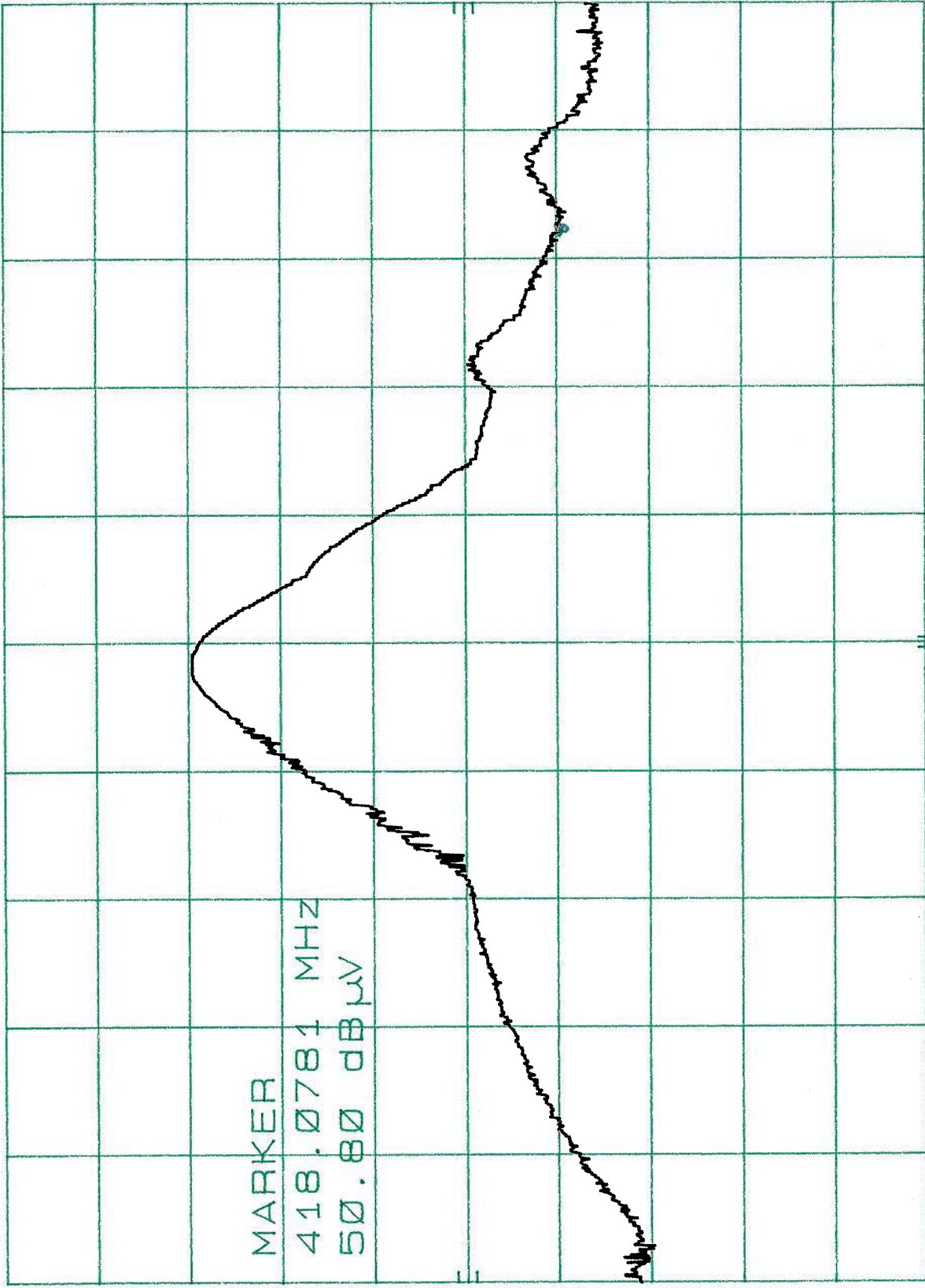
Figure 24

MKR 418.0781 MHz
50.80 dB μ V

ATTEN 10 dB

REF 81.0 dB μ V

hp
5 dB/



MARKER
418.0781 MHz
50.80 dB μ V

SPAN 100.0 KHZ
SWP 1.0 sec

VBW 30 KHZ

CENTER 418.0460 MHz
RES BW 10 KHZ (1)

Figure 25

5.0 CONCLUSIONS

The evaluation of the **Lutron Electronics Model #: RAMC-MFE**, configured as described herein, indicated that the unit complies with the requirements set forth in Subpart B and C of Part 15 of the **FCC Rules** for unintentional and intentional radiators.

1. The **EUT** meets the Conducted Emissions limits set forth in §15.107.
2. The **EUT** meets the Radiated Emissions limits for unintentional radiators Set forth in §15.109.
3. The **EUT** meets the Radiated Emissions limits for intentional radiators set Forth in §15.205, §15.209, and §15.231 (c).

