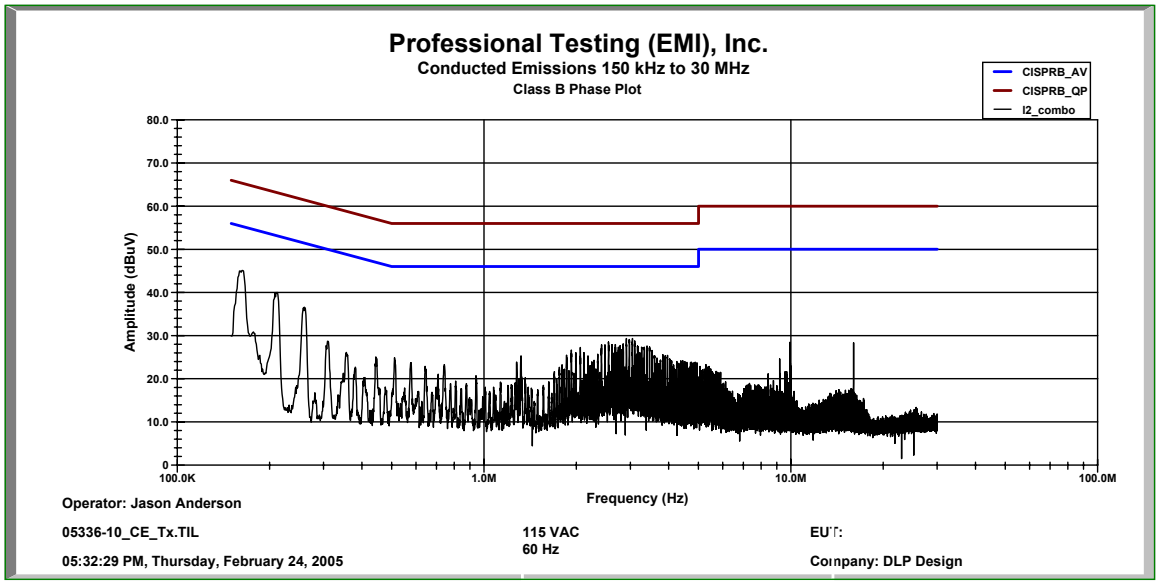
Power line Conducted Emissions
DLP Design RF2
Quasi-Peak Detection, RBW = 9 kHz

Test Date: February 24, 2005

Line Selection: Phase

Frequency Reading (MHz)	Quasi-peak Reading (dBuV)	Average Reading (dBuV)	Quasi-peak Limit (dBuV)	Quasi-peak Margin (dB)	Average Limit (dBuV)	Average Margin (dB)	Test Results
0.16137	45	44.1	65.4	-20.4	55.4	-11.3	Within Limits
0.20814	40.3	39.8	63.3	-23.0	53.3	-13.5	Within Limits
0.25541	36.4	35.4	61.6	-25.2	51.6	-16.2	Within Limits
2.89774	26.8	20	56.0	-29.2	46.0	-26.0	Within Limits
3.03001	27.8	20.4	56.0	-28.2	46.0	-25.6	Within Limits
5.30124	7.2	-0.1	60.0	-52.8	50.0	-50.1	Within Limits
9.19949	9.2	4.2	60.0	-50.8	50.0	-45.8	Within Limits
9.92443	4.5	-13.7	60.0	-55.5	50.0	-63.7	Within Limits
9.95283	6.3	-3.8	60.0	-53.7	50.0	-53.8	Within Limits
15.9805	13.1	8.5	60.0	-46.9	50.0	-41.5	Within Limits



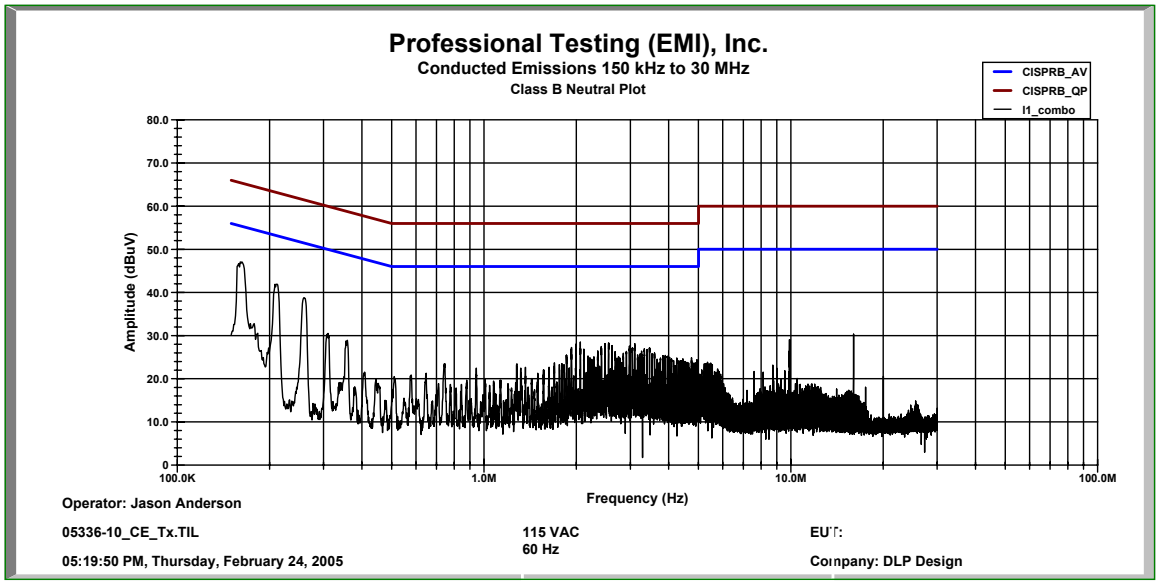
The data presented here in graphical form is for overview only. Detailed and precise data is in the table above.

Power line Conducted Emissions
DLP Design RF2
Quasi-Peak Detection, RBW = 9 kHz

Test Date: February 24, 2005

Line Selection: Neutral

Frequency Reading (MHz)	Quasi-peak Reading (dBuV)	Average Reading (dBuV)	Quasi-peak Limit (dBuV)	Quasi-peak Margin (dB)	Average Limit (dBuV)	Average Margin (dB)	Test Results
0.15977	44.1	43.2	65.5	-21.4	55.5	-12.3	Within Limits
0.21232	39.1	38.5	63.1	-24.0	53.1	-14.6	Within Limits
0.258	36.1	35.2	61.5	-25.4	51.5	-16.3	Within Limits
0.30635	27.5	26.4	60.1	-32.6	50.1	-23.7	Within Limits
0.34803	14.6	11.3	59.0	-44.4	49.0	-37.7	Within Limits
5.35892	22.4	16.4	60.0	-37.6	50.0	-33.6	Within Limits
5.4918	21	14.8	60.0	-39.0	50.0	-35.2	Within Limits
9.87457	10	5.4	60.0	-50.0	50.0	-44.6	Within Limits
9.91481	12.2	6.8	60.0	-47.8	50.0	-43.2	Within Limits
16.0164	30.5	29.9	60.0	-29.5	50.0	-20.1	Within Limits



The data presented here in graphical form is for overview only. Detailed and precise data is in the table above.

Peak Power
DLP Design RF2
Peak Detection, RBW = 1 MHz
Test Distance 1 meters

Test Date: February 23, 2005

All Orientations

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBuV/m)
2405	max	1	76.5	0.0	28.2	0.6	105.3
2440	max	1	77.3	0.0	28.2	0.6	106.1
2480	max	1	77.2	0.0	28.3	0.6	106.1

Calculations

$$P = \frac{(E * d)^2}{30 * G}$$

P=Power in watts, E=measured maximum field strength in V/m, d=distance in meters, G=numeric gain of transmitting antenna

Distance=1 meters
Gain=0 dBi

Calculated Result

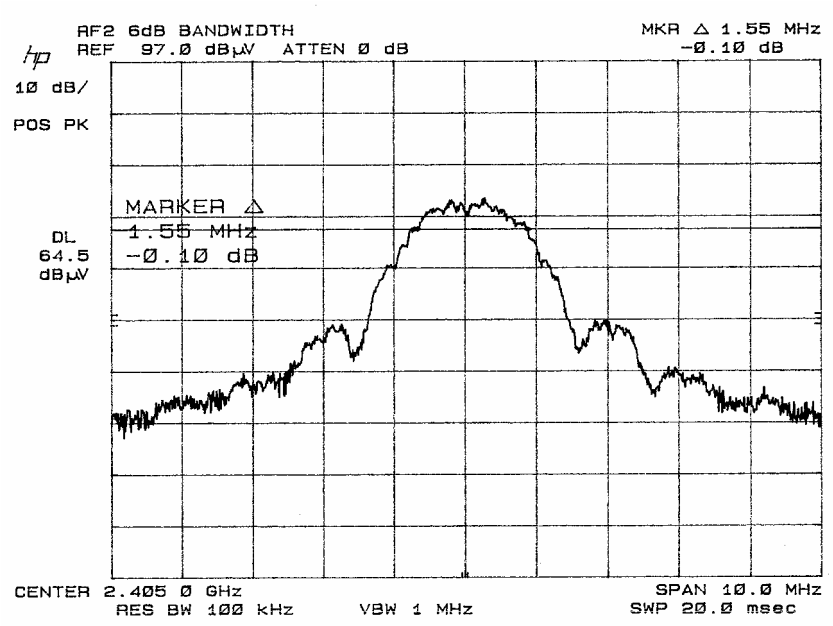
Frequency (MHz)	Field Strength (dB/uV)	E.I.R.P (dBm)	Limit (dBm)
2405	105.3	0.50	30
2440	106.1	1.34	30
2480	106.1	1.30	30

Result: PASS

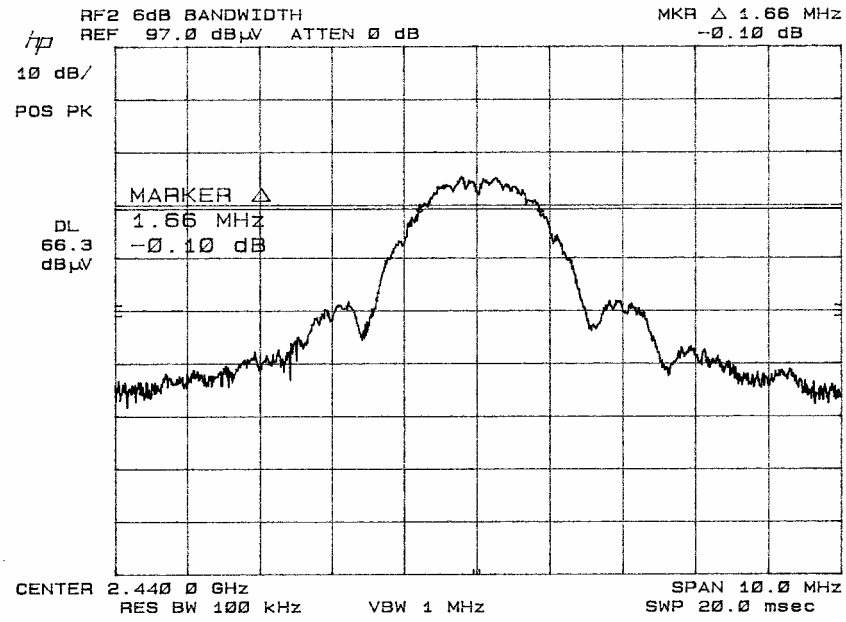
Occupied Bandwidth
DLP Design RF2
Peak Detection, RBW = 100 kHz

Test Date: February 23, 2005

Low Channel



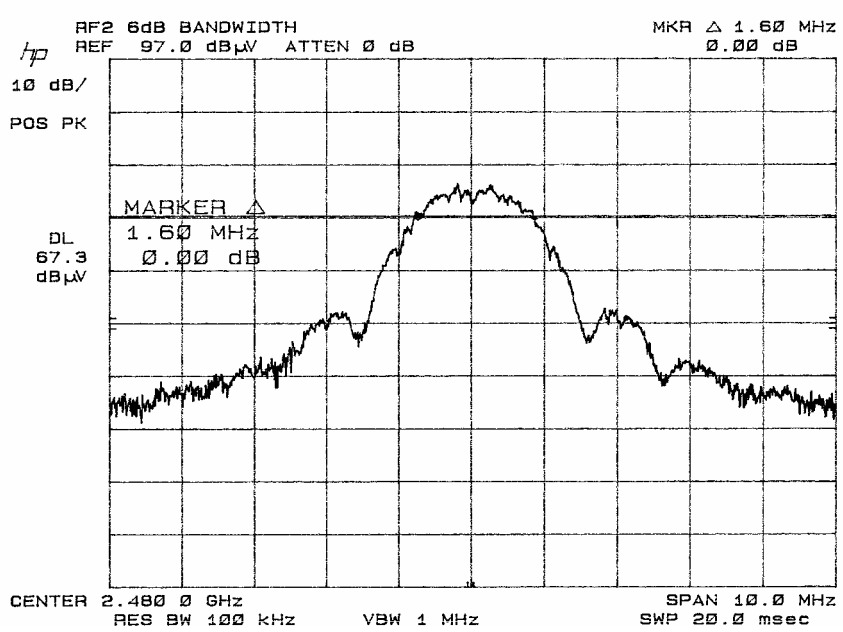
Middle Channel



Occupied Bandwidth
DLP Design RF2
Peak Detection, RBW = 100 kHz

Test Date: February 23, 2005

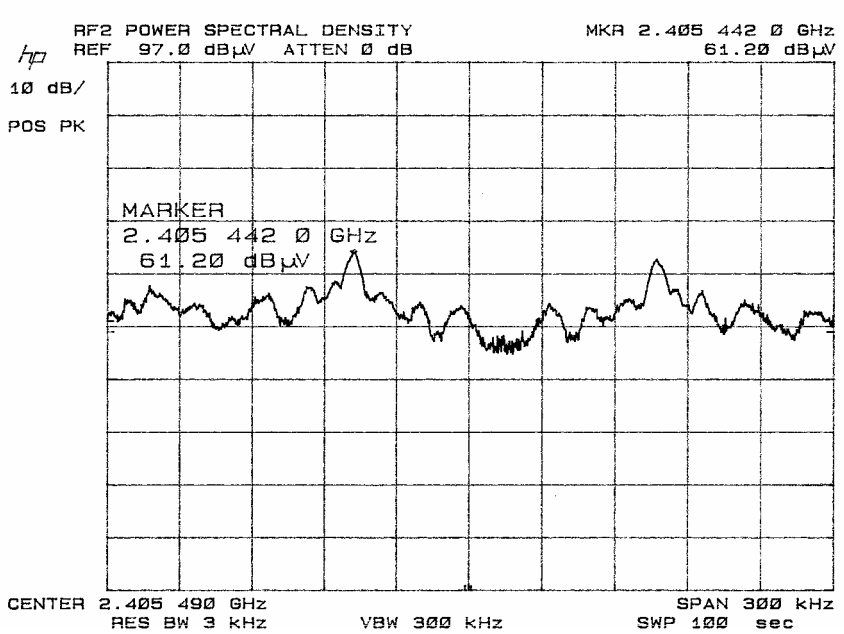
High Channel



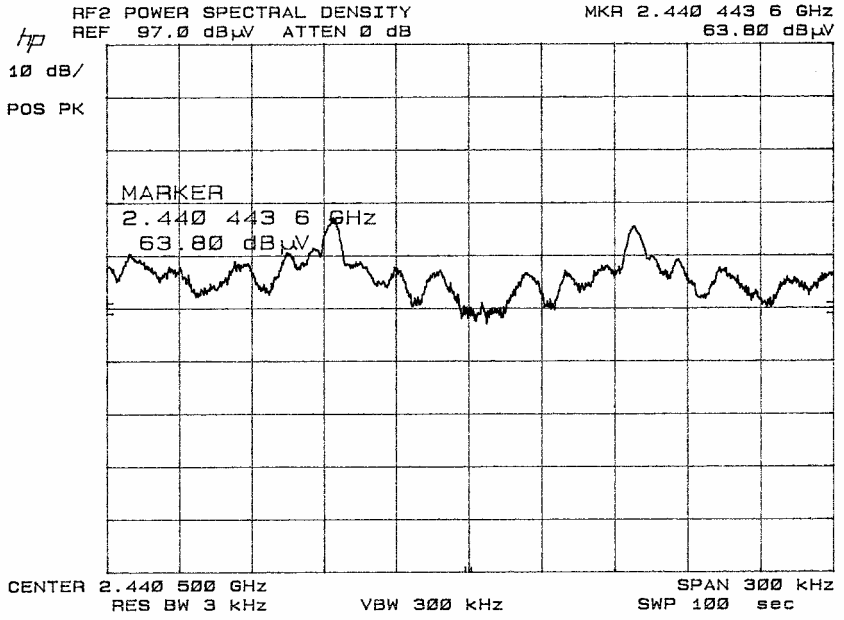
Power Spectral Density
DLP Design RF2
Peak Detection, RBW = 3 kHz
Test Distance 1 meters

Test Date: February 23, 2005

Low Channel



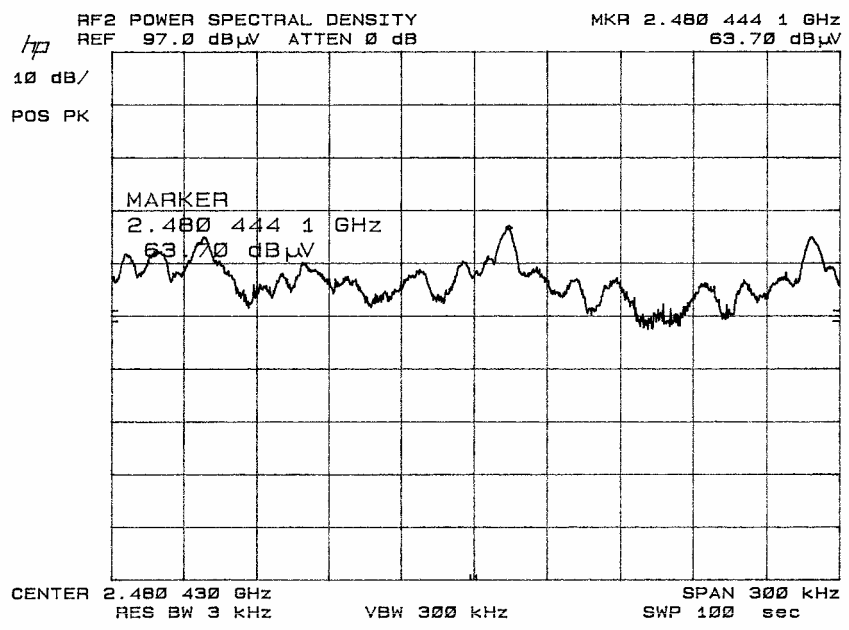
Middle Channel



Power Spectral Density
DLP Design RF2
Peak Detection, RBW = 3 kHz
Test Distance 1 meters

Test Date: February 23, 2005

High Channel



Power Spectral Density
DLP Design RF2
Peak Detection, RBW = 3 kHz
Test Distance 1 meters

Test Date: February 23, 2005

All Orientations

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBuV/m)
2405	max	1	61.2	0.0	28.2	0.6	90.0
2440	max	1	63.8	0.0	28.2	0.6	92.6
2480	max	1	63.7	0.0	28.3	0.6	92.6

Calculations

$$P = \frac{(E * d)^2}{30 * G}$$

P=Power in watts, E=measured maximum field strength in V/m, d=distance in meters, G=numeric gain of transmitting antenna

Distance=1 meters
Gain=0 dBi

Calculated Result

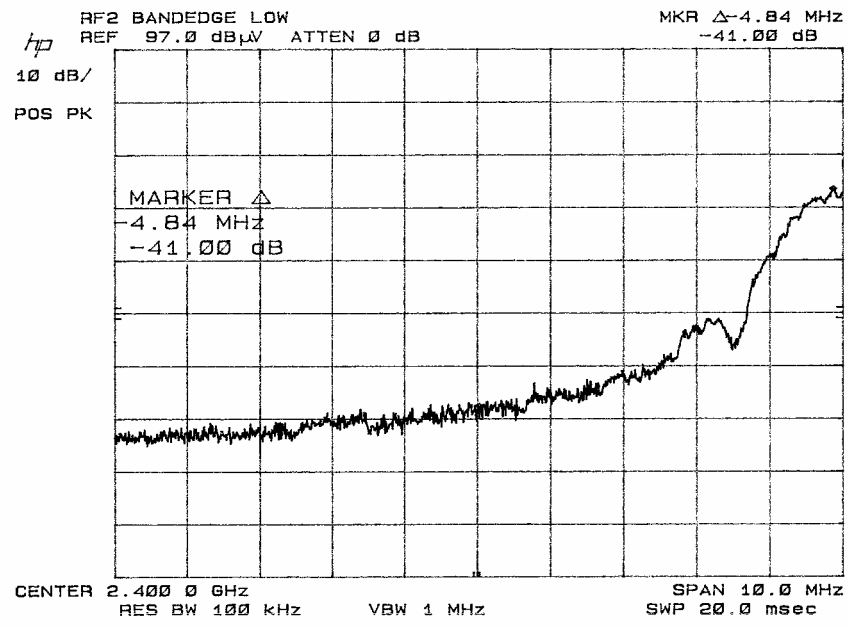
Frequency (MHz)	Field Strength (dB/uV)	E.I.R.P (dBm/3kHz)	Limit (dBm/3kHz)
2405	90.0	-14.77	8
2440	92.6	-12.17	8
2480	92.6	-12.17	8

Result: PASS

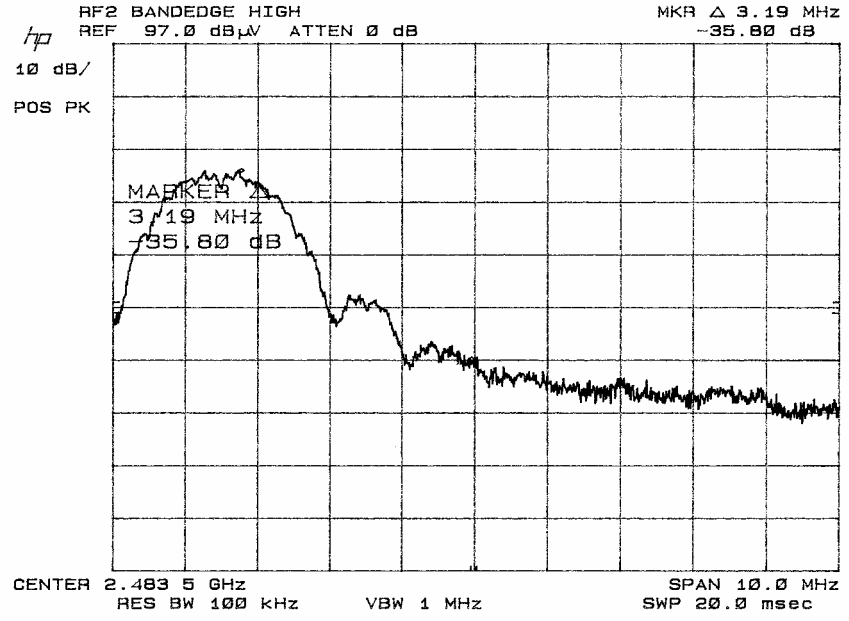
Band Edge Spurious Emissions
DLP Design RF2
Peak Detection, RBW = 100 kHz
Test Distance 1 meters

Test Date: February 23, 2005

Band Edge Plot (Low Channel)



Band Edge Plot (High Channel)



Band Edge Spurious Emissions
DLP Design RF2
Peak Detection, RBW = 100 kHz
Test Distance 1 meters

Test Date: February 23, 2005

Band Edge Data

Freq. (MHz)	Detector Function	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/M)	Cable Loss (dB)	Distance Correction (dB)	Corrected Level (dBuV/M)	Limit 3 Meters (dBuV)	Margin (dB)
2400	peak	1	35.5	34.7	28.2	3.6	9.5	23.1	54	-30.9
2483.5	peak	1	41.4	34.9	28.3	3.6	9.5	28.9	54	-25.1

Note: To measure the band edge at 2400 MHz the device was tuned to the lowest channel. To measure the band edge at 2483.5 MHz the device was tuned to the highest channel. The marker delta method was used to determine the level at the band edge. The EUT meets the general emission limits from 15.209

Out of Band Spurious/Harmonic Emissions
DLP Design RF2
Quasi-Peak Detection, RBW = 120 kHz
Test Distance 3 meters

Test Date: February 25, 2005

30-1000 MHz Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
66	noise	floor	32.9	26.7	7.3	2.2	15.7	40	-24.3
250	noise	floor	34.7	27.1	12.2	4.4	24.2	46	-21.8
350	noise	floor	36.5	27.3	15.0	5.5	29.7	46	-16.3
570	noise	floor	34.3	27.1	18.6	7.3	33.1	46	-12.9
725	noise	floor	34.6	26.2	21.6	8.5	38.5	46	-7.5
910	noise	floor	35.1	26.2	22.6	10.7	42.2	46	-3.8

30-1000 MHz Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
66	noise	floor	32.9	26.7	7.3	2.2	15.7	40	-24.3
250	noise	floor	34.7	27.1	12.2	4.4	24.2	46	-21.8
350	noise	floor	36.5	27.3	15.0	5.5	29.7	46	-16.3
570	noise	floor	34.3	27.1	18.6	7.3	33.1	46	-12.9
725	noise	floor	34.6	26.2	21.6	8.5	38.5	46	-7.5
910	noise	floor	35.1	26.2	22.6	10.7	42.2	46	-3.8

Out of Band Spurious/Harmonic Emissions
DLP Design RF2
Peak/Average Detection, RBW = 1 MHz
Test Distance 1 meter

Test Date: February 24, 2005

1-25 GHz Vertical (Low Channel)

Freq. (MHz)	Detector Function	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/M)	Cable Loss (dB)	Distance Correction (dB)	Corrected Level (dBuV/M)	Limit 3 Meters (dBuV)	Margin (dB)
4880	peak	1	51	31.1	34.2	3.8	9.5	48.4	74	-25.6
7320	peak	1	49.6	30.9	36.9	4.4	9.5	50.5	74	-23.5
9760	peak	1	47.8	30.8	37.9	4.5	9.5	49.9	74	-24.1
12200	noise	floor	28.9	30.4	39.4	5.0	9.5	33.3	54	-20.7
14640	noise	floor	30	29.3	40.5	4.8	9.5	36.5	54	-17.5
17080	noise	floor	29.3	31.3	42.7	5.2	9.5	36.4	54	-17.6
19520	noise	floor	41.6	0.0	37.0	0.0	29.5	49.1	54	-4.9
21960	noise	floor	41.4	0.0	37.0	0.0	29.5	48.9	54	-5.1
24400	noise	floor	41.3	0.0	37.0	0.0	29.5	48.8	54	-5.2
4880	avg	1	49.5	31.1	34.2	3.8	9.5	46.9	54	-7.1
7320	avg	1	48.1	30.9	36.9	4.4	9.5	49.0	54	-5.0
9760	avg	1	46.3	30.8	37.9	4.5	9.5	48.4	54	-5.6

1-25 GHz Horizontal (Low Channel)

Freq. (MHz)	Detector Function	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/M)	Cable Loss (dB)	Distance Correction (dB)	Corrected Level (dBuV/M)	Limit 3 Meters (dBuV)	Margin (dB)
4880	peak	1	53.7	31.1	34.2	3.8	9.5	51.1	74	-22.9
7320	peak	1	50.7	30.9	36.9	4.4	9.5	51.6	74	-22.4
9760	peak	1	45.3	30.8	37.9	4.5	9.5	47.4	74	-26.6
12200	noise	floor	28.9	30.4	39.4	5.0	9.5	33.3	54	-20.7
14640	noise	floor	30	29.3	40.5	4.8	9.5	36.5	54	-17.5
17080	noise	floor	29.3	31.3	42.7	5.2	9.5	36.4	54	-17.6
19520	noise	floor	41.6	0.0	37.0	0.0	29.5	49.1	54	-4.9
21960	noise	floor	41.4	0.0	37.0	0.0	29.5	48.9	54	-5.1
24400	noise	floor	41.3	0.0	37.0	0.0	29.5	48.8	54	-5.2
4880	avg	1	52.2	31.1	34.2	3.8	9.5	49.6	54	-4.4
7320	avg	1	49.2	30.9	36.9	4.4	9.5	50.1	54	-3.9
9760	avg	1	43.8	30.8	37.9	4.5	9.5	45.9	54	-8.1

Note: Average was calculated using a peak to average correction factor. This is calculated for the timing assessment.