

7.4.2 IEEE 802.11g

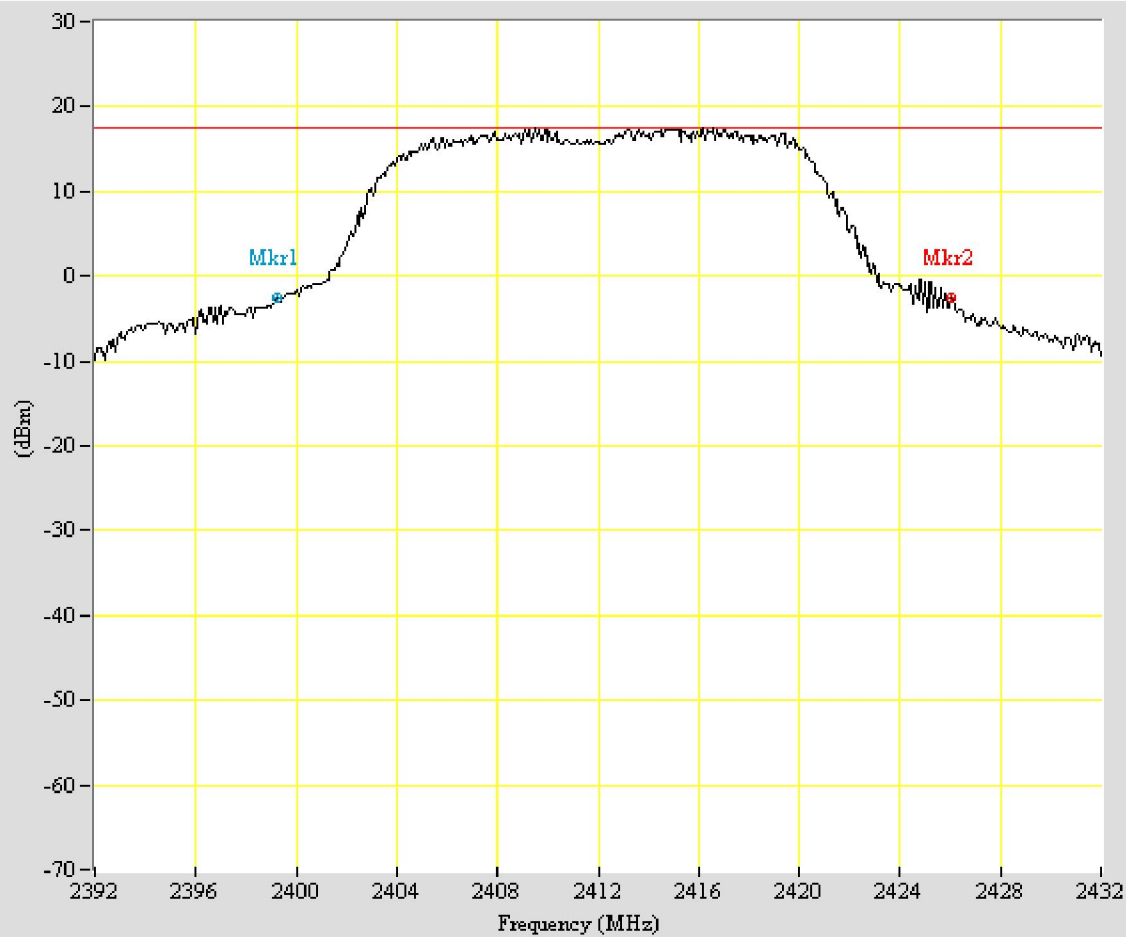
Test Date: Jun. 24, 2004Temperature: 23 °CHumidity: 59 %

Channel	Frequency (MHz)	Data Transfer Rate (Mbps)	Reading (dBm)	Cable Loss (dB)	Maximum Peak Output Power (dBm)	Maximum Peak Output Power (mW)	FCC Limit (mW)	Chart
1	2412	6	24.85	0.83	25.68	369.828	1000	-
		9	24.91	0.83	25.74	374.973	1000	Page 37
		12	23.55	0.83	24.38	274.157	1000	-
		18	23.55	0.83	24.38	274.157	1000	-
		24	22.85	0.83	23.68	233.346	1000	-
		36	22.83	0.83	23.66	232.274	1000	-
		48	20.50	0.83	21.33	135.831	1000	-
		54	21.03	0.83	21.86	153.462	1000	-
6	2437	6	24.70	0.66	25.36	343.558	1000	-
		9	24.74	0.66	25.40	346.737	1000	Page 38
		12	23.91	0.66	24.57	286.418	1000	-
		18	23.68	0.66	24.34	271.644	1000	-
		24	22.99	0.66	23.65	231.739	1000	-
		36	23.04	0.66	23.7	234.423	1000	-
		48	20.85	0.66	21.51	141.579	1000	-
		54	21.41	0.66	22.07	161.065	1000	-
11	2462	6	24.34	0.84	25.18	329.61	1000	Page 39
		9	24.27	0.84	25.11	324.34	1000	-
		12	23.23	0.84	24.07	255.27	1000	-
		18	23.14	0.84	23.98	250.035	1000	-
		24	22.64	0.84	23.48	222.844	1000	-
		36	22.45	0.84	23.29	213.304	1000	-
		48	20.12	0.84	20.96	124.738	1000	-
		54	20.57	0.84	21.41	138.357	1000	-

Note:

1. Please refer to page 37 to page 39 for chart

2. The estimated measurement uncertainty of the result measurement is $\pm 1.5\text{dB}(1\text{GHz} \leq f \leq 18\text{GHz})$



*Center 2412.0000MHz

*SPAN 40.0000MHz

*RBW 2000.00kHz

*VBW 3000.00kHz

*SWP 50.00msec

*ATTEN 40.00dB

*RL 30.00dBm

Display Line 17.500dBm

Channel Power Across 26.867MHz BW Total 24.910dBm

Δ Marker -26.8667MHz 0.000dB

Mkr1 2399.200MHz -2.500dBm

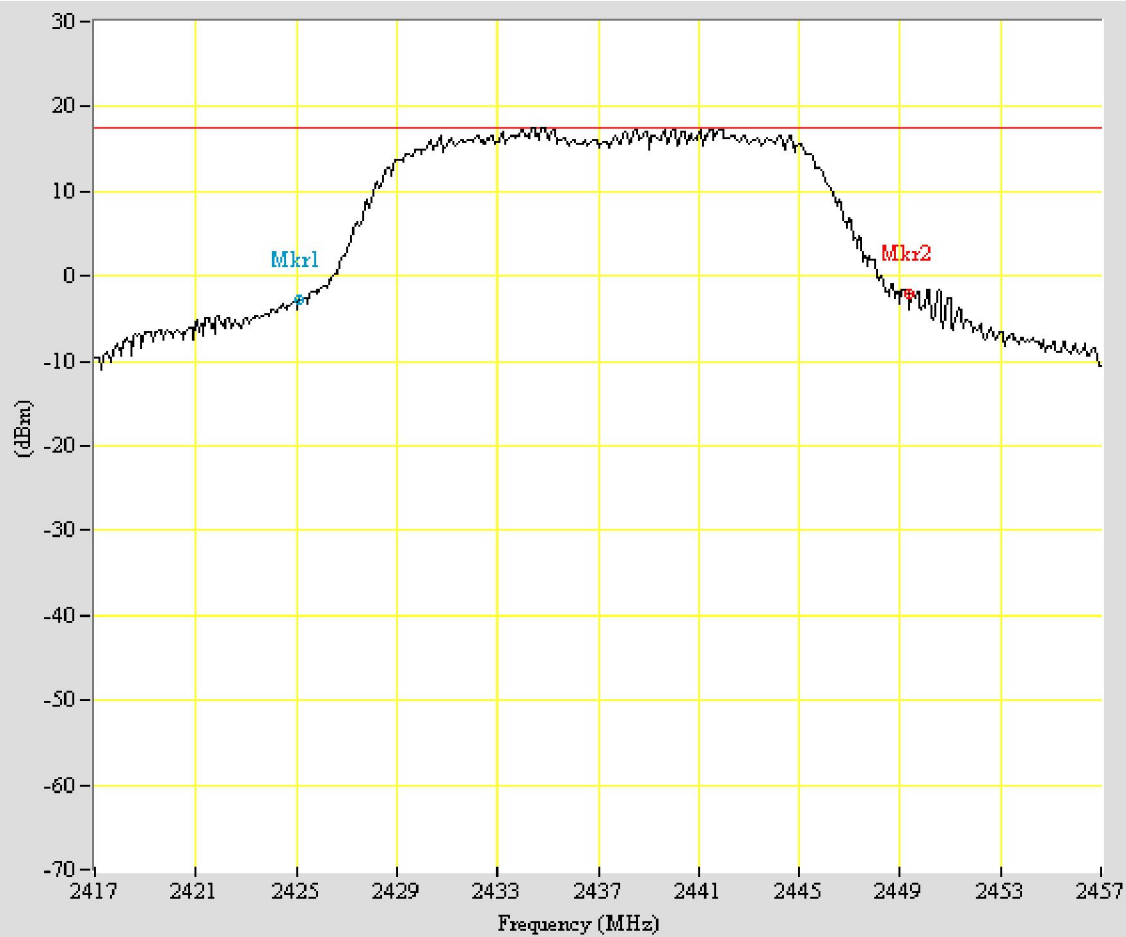
Mkr2 2426.067MHz -2.500dBm

EUT: WLG100

Purpose: Output_Pwr

Condition: 802.11g_CH01_9Mbps

Note:



*Center 2437.0000MHz

*SPAN 40.0000MHz

*RBW 2000.00kHz

*VBW 3000.00kHz

*SWP 50.00msec

*ATTEN 40.00dB

*RL 30.00dBm

Display Line 17.500dBm

Channel Power Across 24.200MHz BW Total 24.740dBm

Δ Marker -24.2000MHz 0.830dB

Mkr1 2425.133MHz -2.830dBm

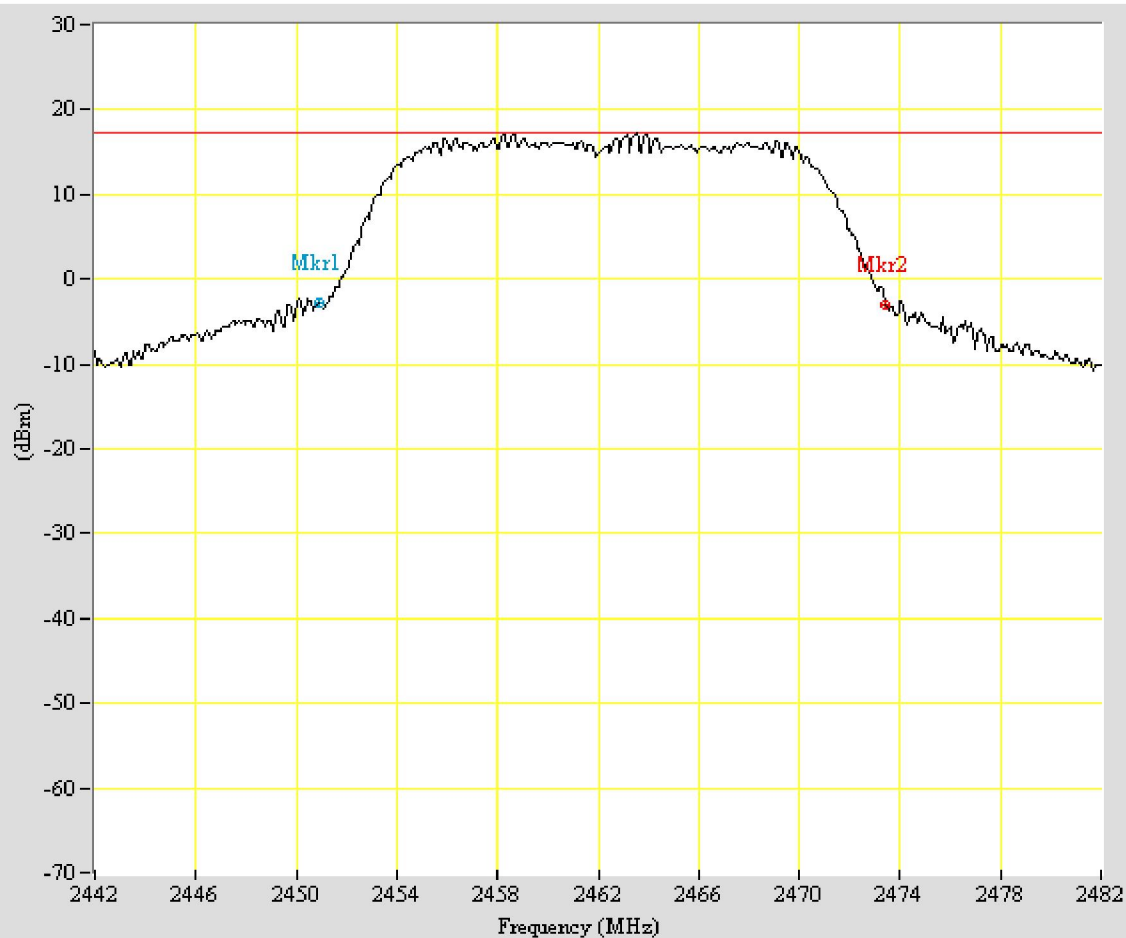
Mkr2 2449.333MHz -2.000dBm

EUT: WLG100

Purpose: Output_Pwr

Condition: 802.11g_CH06_9Mbps

Note:



*Center 2462.0000MHz

*SPAN 40.0000MHz

*RBW 2000.00kHz

*VBW 3000.00kHz

*SWP 50.00msec

*ATTEN 40.00dB

*RL 30.00dBm

Display Line 17.170dBm

Channel Power Across 22.467MHz BW Total 24.340dBm

Δ Marker -22.4667MHz -0.170dB

Mkr1 2450.933MHz -2.830dBm

Mkr2 2473.400MHz -3.000dBm

EUT: WLG100

Purpose: Output_Pwr

Condition: 802.11g_CH11_6Mbps

Note:

8 POWER DENSITY MEASUREMENT

8.1 Standard Applicable

According to 15.247(d), for direct sequence systems, the transmitted power density averaged over any 1 second interval shall not be greater than 8 dBm in any 3 kHz bandwidth within these bands.

8.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in figure 2. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set EUT to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. Adjust the center frequency of spectrum analyzer on highest level appearing on spectral display within a 300 kHz frequency span.
4. Set the spectrum analyzer on a 3 kHz resolution bandwidth and 10 kHz video bandwidth as well as max. hold function, then record the measurement result.
5. Repeat above procedures until all measured frequencies were complete.

8.3 Measurement Equipment

Equipment	Manufacturer	Model No.	Next Cal. Due
Spectrum Analyzer	Hewlett-Packard	8564EC	09/16/2005

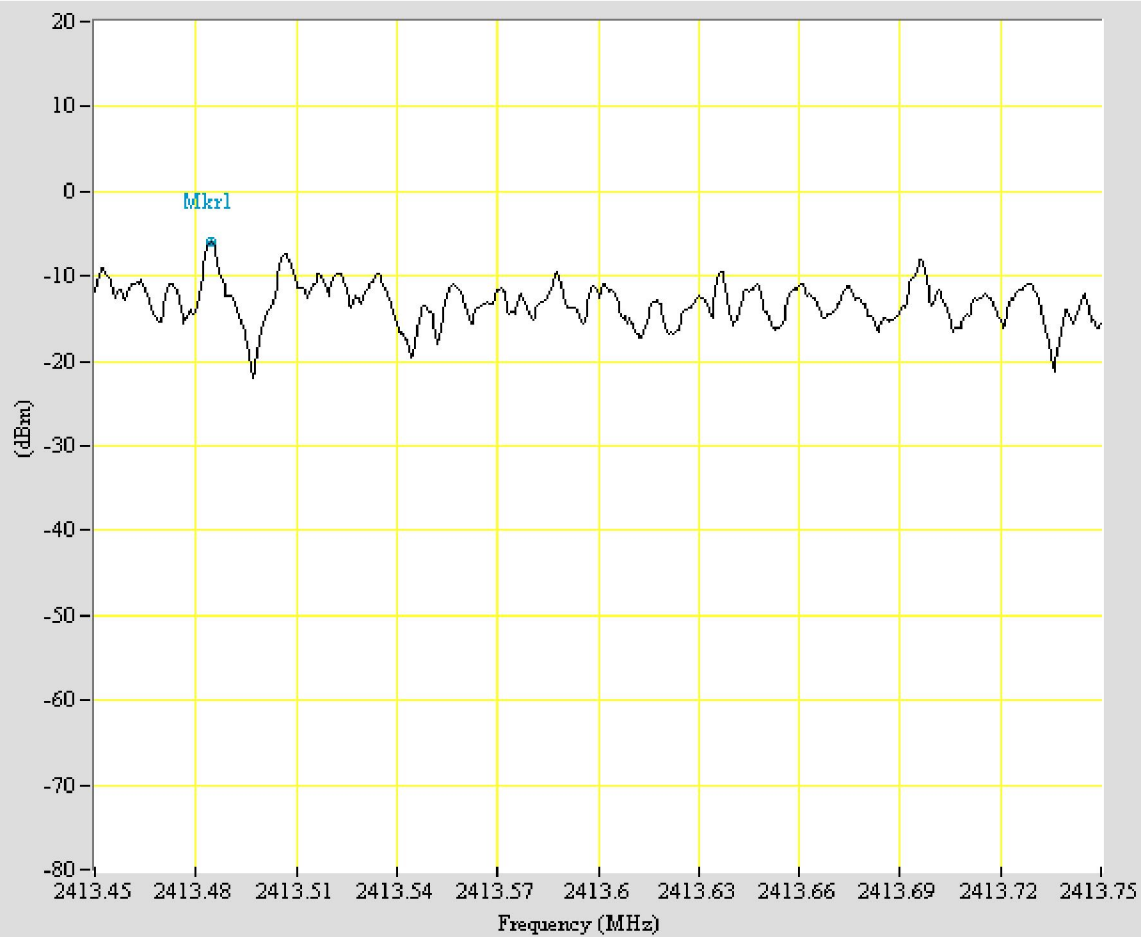
8.4 Measurement Data

8.4.1 802.11b

Test Date: Jun. 24, 2004Temperature: 23 °CHumidity: 59 %

Channel	Frequency (MHz)	Data Transfer Rate (Mbps)	Reading (dBm)	Cable Loss (dB)	Peak Power Spectral Density (dBm)	FCC Limit (dBm)	Chart
1	2412	1	-8.83	0.83	-8.00	8	-
		2	-7.00	0.83	-6.17	8	-
		5.5	-8.33	0.83	-7.50	8	-
		11	-5.83	0.83	-5.00	8	Page 42
6	2437	1	-10.83	0.66	-10.17	8	-
		2	-8.00	0.66	-7.34	8	-
		5.5	-7.66	0.66	-7.00	8	-
		11	-5.50	0.66	-4.84	8	Page 43
11	2462	1	-9.66	0.84	-8.82	8	-
		2	-7.16	0.84	-6.32	8	-
		5.5	-6.50	0.84	-5.66	8	-
		11	-5.83	0.84	-4.99	8	Page 44

Note:**1. Please refer to page 42 to page 44 for chart****2. The estimated measurement uncertainty of the result measurement is $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)**



*Center 2413.6000MHz

*SPAN 0.3000MHz

*RBW 3.00kHz

*VBW 10.00kHz

*SWP 100000.00msec

*ATTEN 30.00dB

*RL 20.00dBm

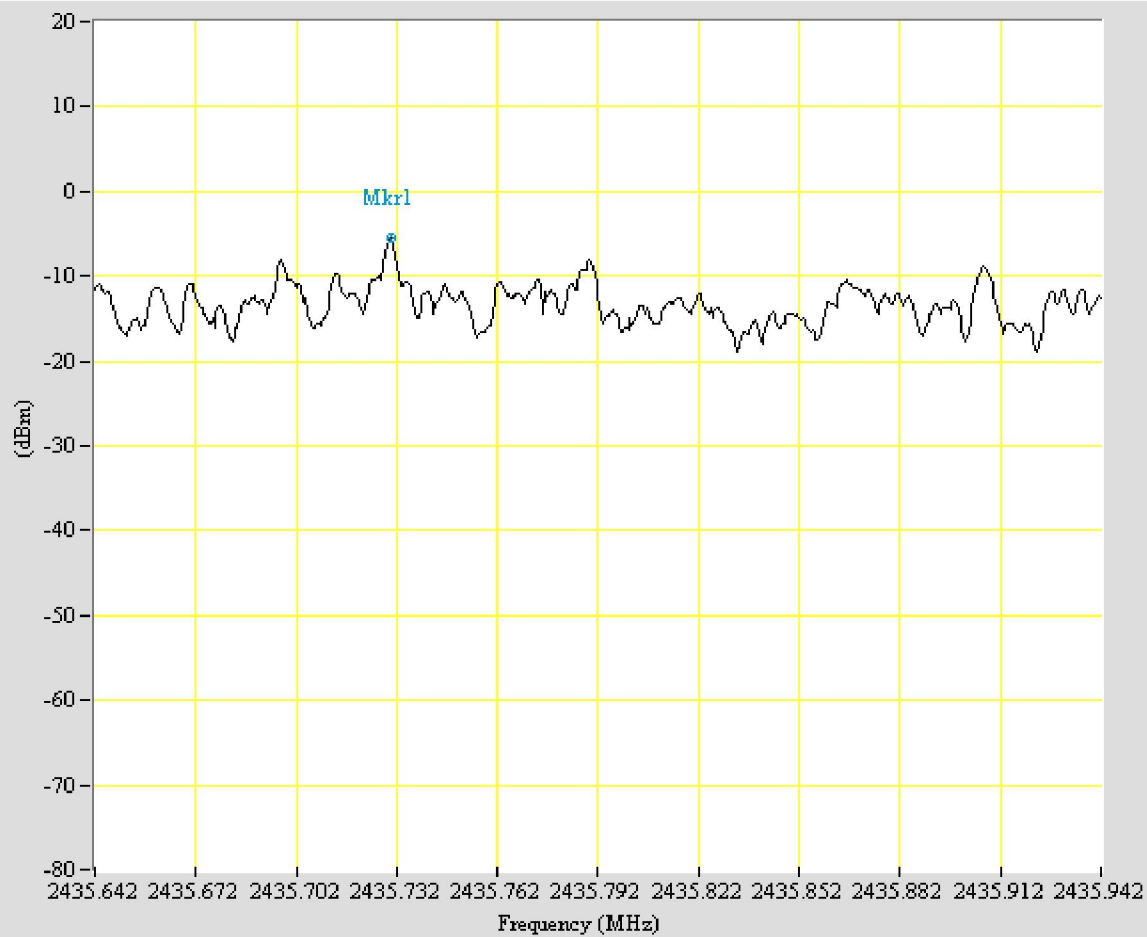
Marker 2413.484MHz -5.830dBm

EUT: WLG100

Purpose: PwrDensity

Condition: 802.11b_CH01_11Mbps

Note:



*Center 2435.7917MHz

*SPAN 0.3000MHz

*RBW 3.00kHz

*VBW 10.00kHz

*SWP 100000.00msec

*ATTEN 30.00dB

*RL 20.00dBm

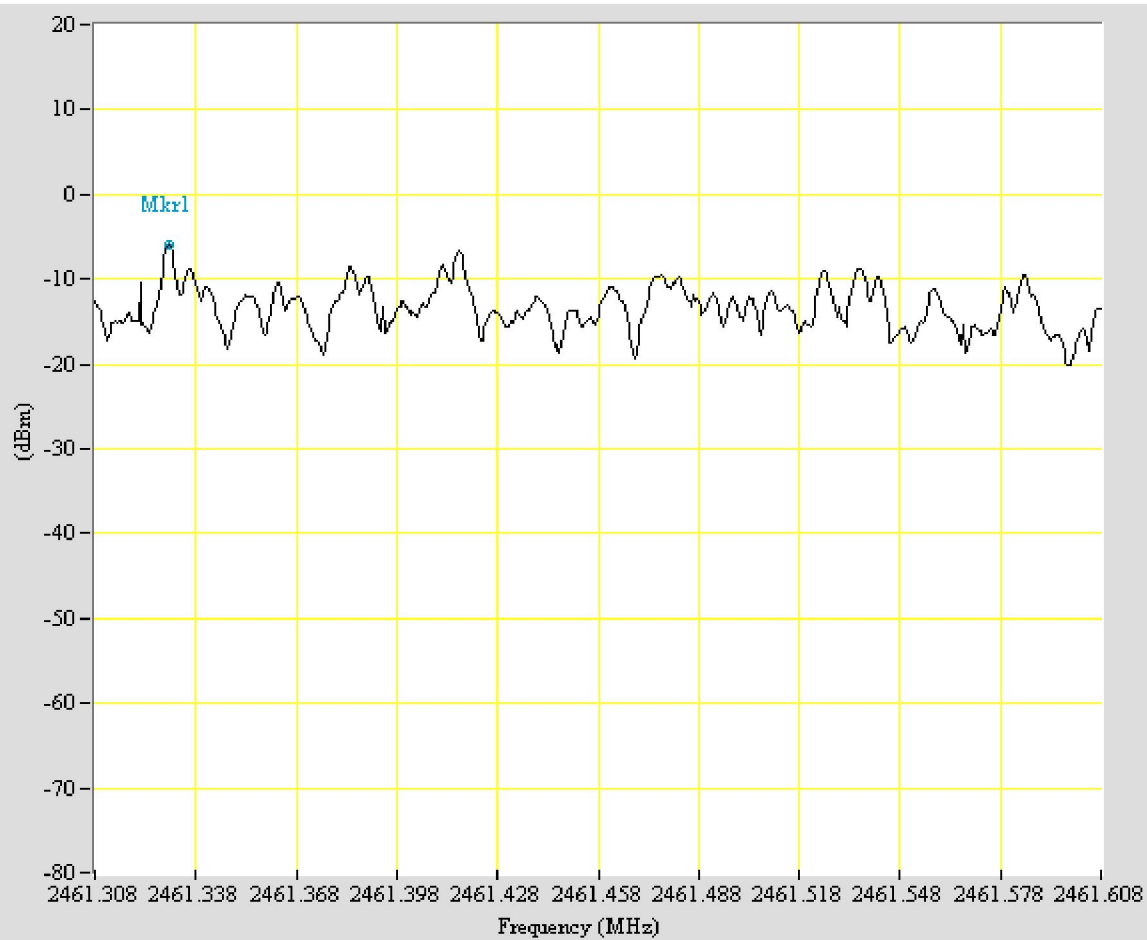
Marker 2435.730MHz -5.500dBm

EUT: WLG100

Purpose: PwrDensity

Condition: 802.11b_CH06_11Mbps

Note:



*Center 2461.4583MHz

*SPAN 0.3000MHz

*RBW 3.00kHz

*VBW 10.00kHz

*SWP 100000.00msec

*ATTEN 30.00dB

*RL 20.00dBm

Marker 2461.330MHz -5.830dBm

EUT: WLG100

Purpose: PwrDensity

Condition: 802.11b_CH11_11Mbps

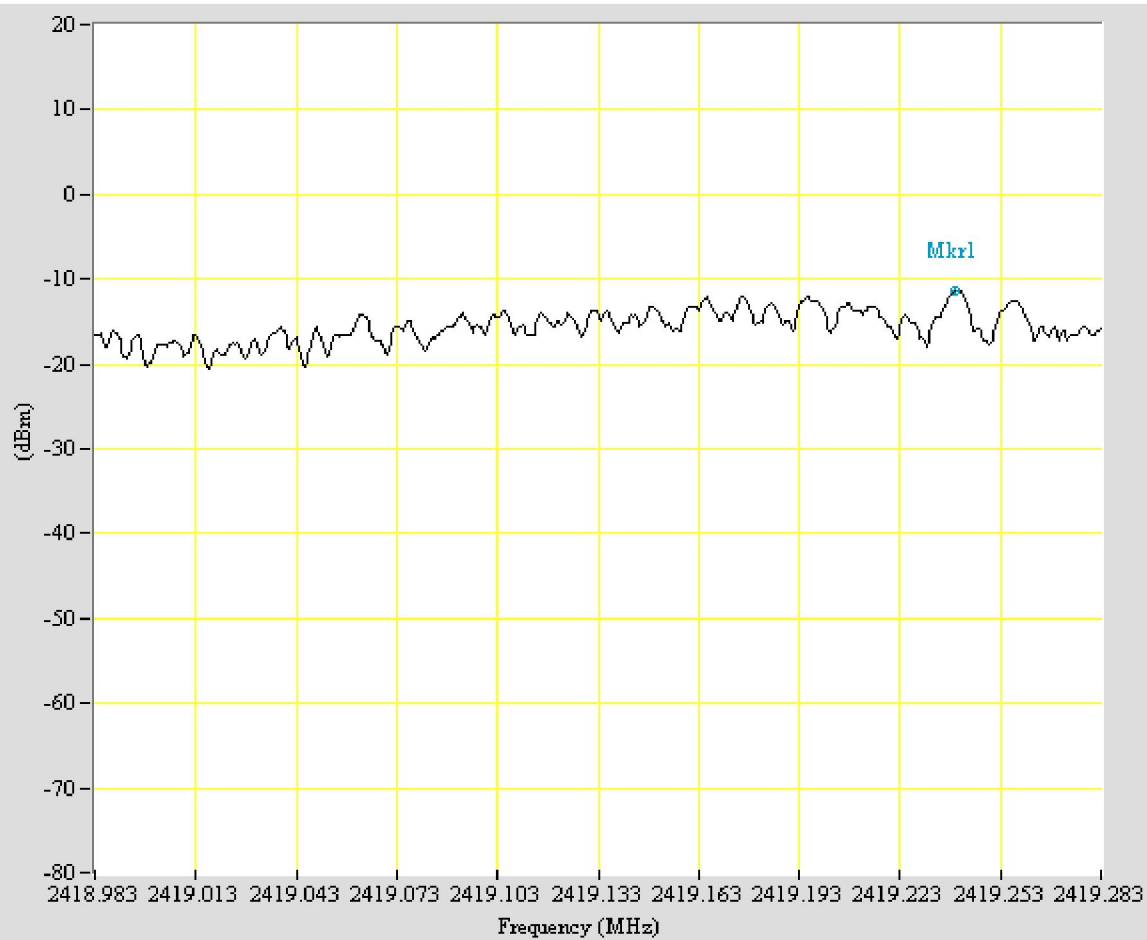
Note:

8.4.2 IEEE 802.11g

Test Date: Jun. 24, 2004Temperature: 23 °CHumidity: 59 %

Channel	Frequency (MHz)	Data Transfer Rate (Mbps)	Reading (dBm)	Cable Loss (dB)	Peak Power Spectral Density (dBm)	FCC Limit (dBm)	Chart
1	2412	6	-11.33	0.83	-10.50	8	-
		9	-11.33	0.83	-10.50	8	Page 46
		12	-11.66	0.83	-10.83	8	-
		18	-11.66	0.83	-10.83	8	-
		24	-11.66	0.83	-10.83	8	-
		36	-13.66	0.83	-12.83	8	-
		48	-4.33	0.83	-13.50	8	-
		54	-14.83	0.83	-14.00	8	-
6	2437	6	-10.16	0.66	-9.50	8	Page 47
		9	-12.00	0.66	-11.34	8	-
		12	-12.83	0.66	-12.17	8	-
		18	-12.66	0.66	-12.00	8	-
		24	-12.33	0.66	-11.67	8	-
		36	-13.83	0.66	-13.17	8	-
		48	-15.16	0.66	-14.50	8	-
		54	-15.66	0.66	-15.00	8	-
11	2462	6	-12.00	0.84	-11.16	8	-
		9	-11.50	0.84	-10.66	8	Page 48
		12	-13.16	0.84	-12.32	8	-
		18	-13.00	0.84	-12.16	8	-
		24	-13.16	0.84	-12.32	8	-
		36	-13.83	0.84	-12.99	8	-
		48	-16.83	0.84	-15.99	8	-
		54	-16.66	0.84	-15.82	8	-

Note:**1. Please refer to page 46 to page 48 for chart****2. The estimated measurement uncertainty of the result measurement is $\pm 1.5\text{dB}$ ($1\text{GHz} \leq f \leq 18\text{GHz}$)**



*Center 2419.1333MHz

*SPAN 0.3000MHz

*RBW 3.00kHz

*VBW 10.00kHz

*SWP 100000.00msec

*ATTEN 30.00dB

*RL 20.00dBm

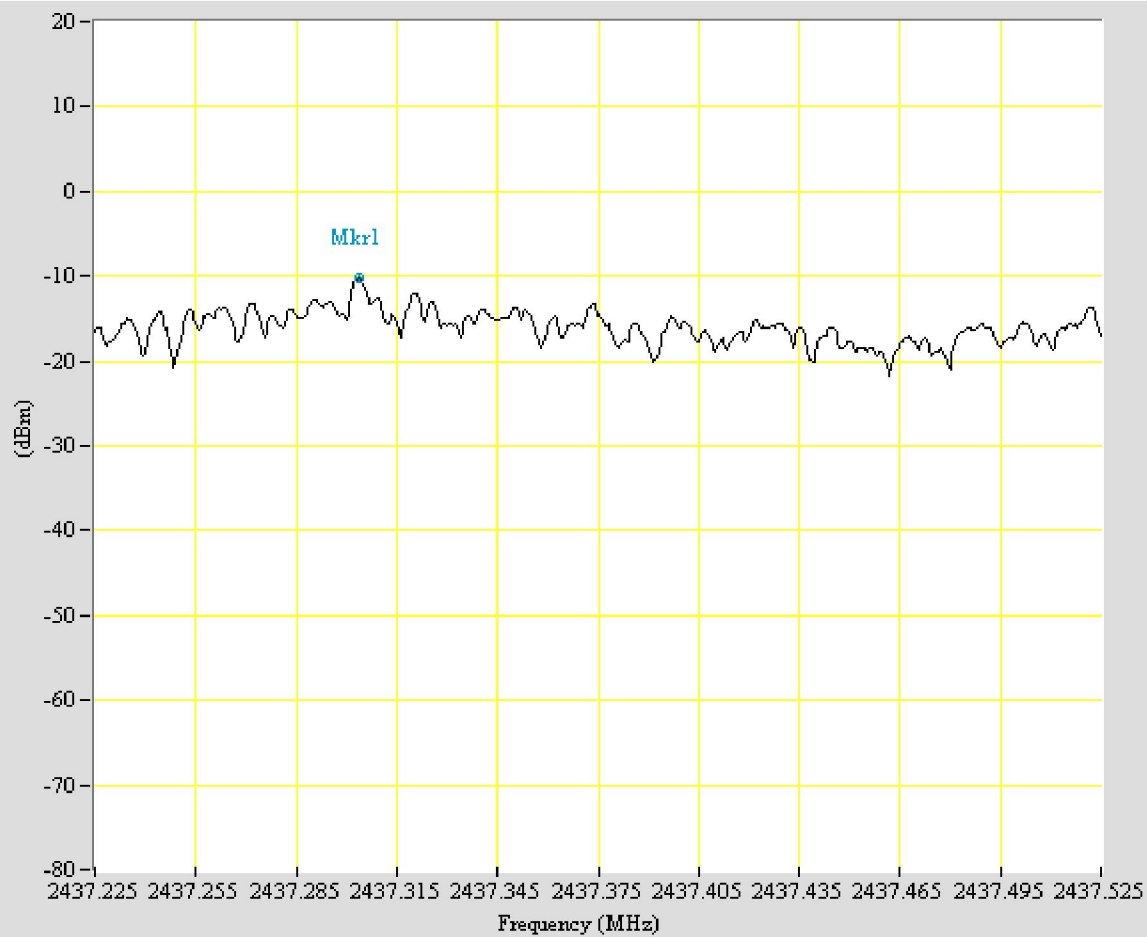
Marker 2419.240MHz -11.330dBm

EUT: WLG100

Purpose: PwrDensity

Condition: 802,11g_CH01_9MHz

Note:



*Center 2437.3750MHz

*SPAN 0.3000MHz

*RBW 3.00kHz

*VBW 10.00kHz

*SWP 100000.00msec

*ATTEN 30.00dB

*RL 20.00dBm

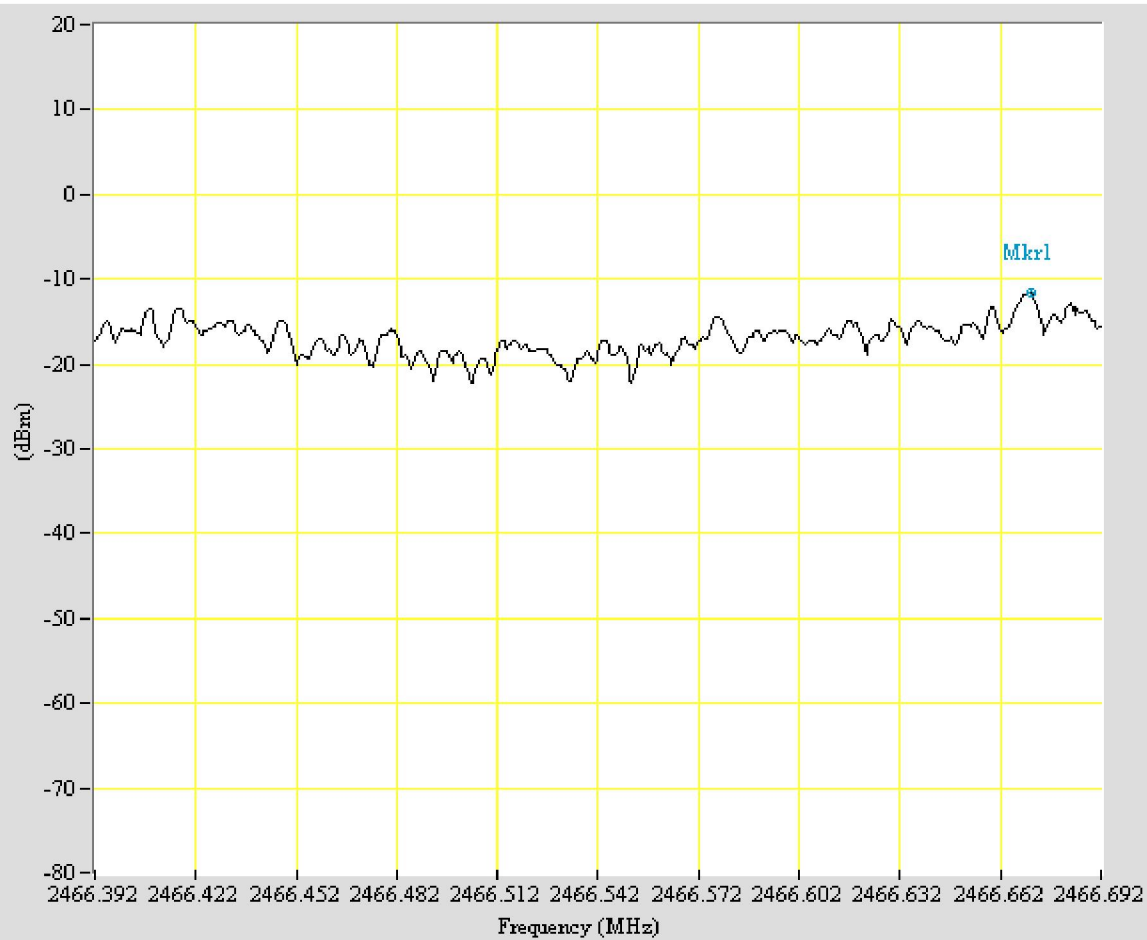
Marker 2437.304MHz -10.160dBm

EUT: WLG100

Purpose: PwrDensity

Condition: 802.11g_CH06_6Mbps

Note:



*Center 2466.5417MHz

*SPAN 0.3000MHz

*RBW 3.00kHz

*VBW 10.00kHz

*SWP 100000.00msec

*ATTEN 30.00dB

*RL 20.00dBm

Marker 2466.671MHz -11.500dBm

EUT: WLG100

Purpose: PwrDensity

Condition: 802.11g_CH11_9Mbps

Note: