802.11b
Spurious Radiated Emissions Data Sheet
Transmit Mode
Adjacent Restricted Band 2310-2390 MHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	8 Sep 2006	FCC	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Low Channel 2.412 GHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Function
	Rate	1 Mb Long									
2320	45	1	37.5	0.0	28.0	0.6	0.0	66.1	83.5	-17.4	pk
2320	45	1	25.1	0.0	28.0	0.6	0.0	53.7	63.5	-9.8	avg
2360	45	1	40.5	0.0	28.1	0.6	0.0	69.2	83.5	-14.3	pk
2360	45	1	24.9	0.0	28.1	0.6	0.0	53.6	63.5	-9.9	avg
2389	45	1	45.4	0.0	28.1	0.6	0.0	74.1	83.5	-9.4	pk
2389	45	1	24.6	0.0	28.1	0.6	0.0	53.3	63.5	-10.2	avg
	Rate	11 Mb Long									
2320	45	1	35	0.0	28.0	0.6	0.0	63.6	83.5	-19.9	pk
2320	45	1	24.5	0.0	28.0	0.6	0.0	53.1	63.5	-10.4	avg
2360	45	1	35.4	0.0	28.1	0.6	0.0	64.1	83.5	-19.4	pk
2360	45	1	24.6	0.0	28.1	0.6	0.0	53.3	63.5	-10.2	avg
2390	45	1	44.7	0.0	28.1	0.6	0.0	73.4	83.5	-10.1	pk
2390	45	1	24.6	0.0	28.1	0.6	0.0	53.3	63.5	-10.2	avg

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attn	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Function
	Rate	1 Mb Long									
2320	90	1	32.4	0.0	28.0	0.6	0.0	61.0	83.5	-22.5	pk
2320	90	1	21.3	0.0	28.0	0.6	0.0	49.9	63.5	-13.6	avg
2360	90	1	34.4	0.0	28.1	0.6	0.0	63.1	83.5	-20.4	pk
2360	90	1	22.1	0.0	28.1	0.6	0.0	50.8	63.5	-12.7	avg
2390	90	1	36.1	0.0	28.1	0.6	0.0	64.8	83.5	-18.7	pk
2390	90	1	22.3	0.0	28.1	0.6	0.0	51.0	63.5	-12.5	avg
	Rate	11 Mb Long									
2320	90	1	34	0.0	28.0	0.6	0.0	62.6	83.5	-20.9	pk
2320	90	1	21.4	0.0	28.0	0.6	0.0	50.0	63.5	-13.5	avg
2360	90	1	35.6	0.0	28.1	0.6	0.0	64.3	83.5	-19.2	pk
2360	90	1	22.3	0.0	28.1	0.6	0.0	51.0	63.5	-12.5	avg
2390	90	1	40.4	0.0	28.1	0.6	0.0	69.1	83.5	-14.4	pk
2390	90	1	22.2	0.0	28.1	0.6	0.0	50.9	63.5	-12.6	avg

TEST ENGINEER: ERIC LIFSEY

802.11b
Spurious Radiated Emissions Data Sheet
Transmit Mode
Adjacent Restricted Band 2483.5-2500 MHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	8 Sep 2006	FCC	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	High Channel 2.462 GHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector Function
	Rate	1 Mb Long									
2484	45	1	34.9	0.0	28.3	0.6	0.0	63.8	83.5	-19.7	pk
2484	45	1	22.8	0.0	28.3	0.6	0.0	51.7	63.5	-11.8	avg
2485	45	1	33.4	0.0	28.3	0.6	0.0	62.3	83.5	-21.2	pk
2485	45	1	22.6	0.0	28.3	0.6	0.0	51.5	63.5	-12.0	avg
2486	45	1	35.8	0.0	28.3	0.6	0.0	64.7	83.5	-18.8	pk
2486	45	1	22	0.0	28.3	0.6	0.0	50.9	63.5	-12.6	avg
	Rate	11 Mb Long									
2484	45	1	36.9	0.0	28.3	0.6	0.0	65.8	83.5	-17.7	pk
2484	45	1	22.5	0.0	28.3	0.6	0.0	51.4	63.5	-12.1	avg
2485	45	1	35.4	0.0	28.3	0.6	0.0	64.3	83.5	-19.2	pk
2485	45	1	22.4	0.0	28.3	0.6	0.0	51.3	63.5	-12.2	avg
2486	45	1	35.2	0.0	28.3	0.6	0.0	64.1	83.5	-19.4	pk
2486	45	1	22.2	0.0	28.3	0.6	0.0	51.1	63.5	-12.4	avg

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attn	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector Function
	Rate	1 Mb Long									
2484	90	1	31.6	0.0	28.3	0.6	0.0	60.5	83.5	-23.0	pk
2484	90	1	21	0.0	28.3	0.6	0.0	49.9	63.5	-13.6	avg
2485	90	1	32.3	0.0	28.3	0.6	0.0	61.2	83.5	-22.3	pk
2485	90	1	21	0.0	28.3	0.6	0.0	49.9	63.5	-13.6	avg
2486	90	1	32.7	0.0	28.3	0.6	0.0	61.6	83.5	-21.9	pk
2486	90	1	20.9	0.0	28.3	0.6	0.0	49.8	63.5	-13.7	avg
	Rate	11 Mb Long									
2484	90	1	33	0.0	28.3	0.6	0.0	61.9	83.5	-21.6	pk
2484	90	1	21.4	0.0	28.3	0.6	0.0	50.3	63.5	-13.2	avg
2485	90	1	32.7	0.0	28.3	0.6	0.0	61.6	83.5	-21.9	pk
2485	90	1	21.3	0.0	28.3	0.6	0.0	50.2	63.5	-13.3	avg
2486	90	1	32.3	0.0	28.3	0.6	0.0	61.2	83.5	-22.3	pk
2486	90	1	21	0.0	28.3	0.6	0.0	49.9	63.5	-13.6	avg

TEST ENGINEER: ERIC LIFSEY

802.11g
Spurious Radiated Emissions Data Sheet
Transmit Mode
Adjacent Restricted Band 2310-2390 MHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	8 Sep 2006	FCC	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Low Channel 2.412 GHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Function
	Rate	1 Mb Long									
2320	45	1	34.7	0.0	28.0	0.6	0.0	63.3	83.5	-20.2	pk
2320	45	1	23.7	0.0	28.0	0.6	0.0	52.3	63.5	-11.2	avg
2360	45	1	34.8	0.0	28.1	0.6	0.0	63.5	83.5	-20.0	pk
2360	45	1	24	0.0	28.1	0.6	0.0	52.7	63.5	-10.8	avg
2389	45	1	36.3	0.0	28.1	0.6	0.0	65.0	83.5	-18.5	pk
2389	45	1	24.2	0.0	28.1	0.6	0.0	52.9	63.5	-10.6	avg
	Rate	54 Mb									
2320	45	1	36	0.0	28.0	0.6	0.0	64.6	83.5	-18.9	pk
2320	45	1	24	0.0	28.0	0.6	0.0	52.6	63.5	-10.9	avg
2360	45	1	39.4	0.0	28.1	0.6	0.0	68.1	83.5	-15.4	pk
2360	45	1	23.9	0.0	28.1	0.6	0.0	52.6	63.5	-10.9	avg
2390	45	1	47.8	0.0	28.1	0.6	0.0	76.5	83.5	-7.0	pk
2390	45	1	28	0.0	28.1	0.6	0.0	56.7	63.5	-6.8	avg

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Function
	Rate	1 Mb Long									
2320	90	1	33.3	0.0	28.0	0.6	0.0	61.9	83.5	-21.6	pk
2320	90	1	20.8	0.0	28.0	0.6	0.0	49.4	63.5	-14.1	avg
2360	90	1	32.2	0.0	28.1	0.6	0.0	60.9	83.5	-22.6	pk
2360	90	1	20.7	0.0	28.1	0.6	0.0	49.4	63.5	-14.1	avg
2386	90	1	33.6	0.0	28.1	0.6	0.0	62.3	83.5	-21.2	pk
2386	90	1	21.2	0.0	28.1	0.6	0.0	49.9	63.5	-13.6	avg
	Rate	54 Mb									
2320	90	1	33.3	0.0	28.0	0.6	0.0	61.9	83.5	-21.6	pk
2320	90	1	20.8	0.0	28.0	0.6	0.0	49.4	63.5	-14.1	avg
2360	90	1	33.6	0.0	28.1	0.6	0.0	62.3	83.5	-21.2	pk
2360	90	1	20.7	0.0	28.1	0.6	0.0	49.4	63.5	-14.1	avg
2390	90	1	40.5	0.0	28.1	0.6	0.0	69.2	83.5	-14.3	pk
2390	90	1	23	0.0	28.1	0.6	0.0	51.7	63.5	-11.8	avg

TEST ENGINEER: ERIC LIFSEY

802.11g
Spurious Radiated Emissions Data Sheet
Transmit Mode
Adjacent Restricted Band 2483.5-2500 MHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	8 Sep 2006	FCC	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	High Channel 2.412 GHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector Function
	Rate	1 Mb Long									
2484	45	1	33.8	0.0	28.3	0.6	0.0	62.7	83.5	-20.8	pk
2484	45	1	22.5	0.0	28.3	0.6	0.0	51.4	63.5	-12.1	avg
2485	45	1	34.4	0.0	28.3	0.6	0.0	63.3	83.5	-20.2	pk
2485	45	1	22.4	0.0	28.3	0.6	0.0	51.3	63.5	-12.2	avg
2486	45	1	33.2	0.0	28.3	0.6	0.0	62.1	83.5	-21.4	pk
2486	45	1	22.4	0.0	28.3	0.6	0.0	51.3	63.5	-12.2	avg
	Rate	54 Mb									
2484	45	1	46.2	0.0	28.3	0.6	0.0	75.1	83.5	-8.4	pk
2484	45	1	26.9	0.0	28.3	0.6	0.0	55.8	63.5	-7.7	avg
2485	45	1	42.4	0.0	28.3	0.6	0.0	71.3	83.5	-12.2	pk
2485	45	1	24.8	0.0	28.3	0.6	0.0	53.7	63.5	-9.8	avg
2486	45	1	42.5	0.0	28.3	0.6	0.0	71.4	83.5	-12.1	pk
2486	45	1	23.5	0.0	28.3	0.6	0.0	52.4	63.5	-11.1	avg
2494	45	1	39.4	0.0	28.3	0.6	0.0	68.3	83.5	-15.2	pk
2494	45	1	22.1	0.0	28.3	0.6	0.0	51.0	63.5	-12.5	avg

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector Function
	Rate	1 Mb Long									
2484	90	1	32.5	0.0	28.3	0.6	0.0	61.4	83.5	-22.1	pk
2484	90	1	21	0.0	28.3	0.6	0.0	49.9	63.5	-13.6	avg
2485	90	1	32.2	0.0	28.3	0.6	0.0	61.1	83.5	-22.4	pk
2485	90	1	21	0.0	28.3	0.6	0.0	49.9	63.5	-13.6	avg
2486	90	1	32.6	0.0	28.3	0.6	0.0	61.5	83.5	-22.0	pk
2486	90	1	20.8	0.0	28.3	0.6	0.0	49.7	63.5	-13.8	avg
	Rate	54 Mb									
2484	90	1	42.5	0.0	28.3	0.6	0.0	71.4	83.5	-12.1	pk
2484	90	1	24.2	0.0	28.3	0.6	0.0	53.1	63.5	-10.4	avg
2485	90	1	40.3	0.0	28.3	0.6	0.0	69.2	83.5	-14.3	pk
2485	90	1	23	0.0	28.3	0.6	0.0	51.9	63.5	-11.6	avg
2486	90	1	39.1	0.0	28.3	0.6	0.0	68.0	83.5	-15.5	pk
2486	90	1	22	0.0	28.3	0.6	0.0	50.9	63.5	-12.6	avg
2499	90	1	34.5	0.0	28.3	0.6	0.0	63.4	83.5	-20.1	pk
2499	90	1	20.8	0.0	28.3	0.6	0.0	49.7	63.5	-13.8	avg

TEST ENGINEER: ERIC LIFSEY

802.11b
Spurious Radiated Emissions Data Sheet
Emissions 30 MHz … 1 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	24 July 2006	CISPR B	10 m	Bicon | Log	CISPR 120 kHz	1 MHz	As Noted

COMMENT	Transmitting 2.437 GHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
70	noise	floor	32.8	26.7	6.7	2.7	15.5	40	-24.5	pk
119.5	0	2	42.6	26.7	12.0	3.6	31.6	43.5	-11.9	qp
165.7	180	1	38.7	26.8	14.2	4.9	31.0	43.5	-12.5	qp
232.9	135	1	43.2	26.9	12.5	5.4	34.2	46	-11.8	pk
375	225	1	43.6	27.2	16.8	6.7	39.9	46	-6.1	qp
543.3	noise	floor	34.8	27.2	19.3	7.7	34.7	46	-11.3	qp
70	noise	floor	32.8	26.7	6.7	2.7	15.5	40	-24.5	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
80	noise	floor	35.8	26.7	6.9	2.9	19.0	40	-21.0	pk
130.3	180	1	38.2	26.8	11.1	4.2	26.6	43.5	-16.9	qp
190	noise	floor	34.7	26.8	17.0	4.8	29.7	43.5	-13.8	pk
233	noise	floor	34.6	26.9	12.5	5.4	25.7	46	-20.3	pk
375	45	1.5	39.6	27.2	16.8	6.7	35.9	46	-10.1	pk
405.2	0	1.3	34	27.4	17.3	6.8	30.6	46	-15.4	qp
438	0	1	34.4	27.4	17.9	7.2	32.1	46	-13.9	qp

TEST ENGINEER: ERIC LIFSEY

802.11g
Spurious Radiated Emissions Data Sheet
Emissions 30 MHz … 1 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	24 July 2006	CISPR B	10 m	Bicon | Log	CISPR 120 kHz	1 MHz	As Noted

COMMENT	Transmitting 2.462 GHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
60	noise	floor	32.9	26.7	8.7	2.6	17.5	40	-22.5	pk
122.4	0	2	41.8	26.7	11.9	3.7	30.7	43.5	-12.8	qp
166.7	180	1	35.5	26.8	14.4	4.9	28.0	43.5	-15.5	pk
232	135	1	42.6	26.9	12.5	5.4	33.6	46	-12.4	pk
375	225	1	43.9	27.2	16.8	6.7	40.2	46	-5.8	qp
600	noise	floor	32.6	27.1	19.7	8.1	33.3	46	-12.7	pk
60	noise	floor	32.9	26.7	8.7	2.6	17.5	40	-22.5	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
70	noise	floor	34.2	26.7	6.7	2.7	16.9	40	-23.1	pk
130.3	180	1	38.4	26.8	11.1	4.2	26.8	43.5	-16.7	qp
190	noise	floor	33.1	26.8	17.0	4.8	28.1	43.5	-15.4	pk
233	noise	floor	34	26.9	12.5	5.4	25.1	46	-20.9	pk
375	45	1.5	39.9	27.2	16.8	6.7	36.2	46	-9.8	pk
403	0	1.3	32.6	27.4	17.2	6.7	29.1	46	-16.9	qp
438	0	1.3	34.1	27.4	17.9	7.2	31.8	46	-14.2	qp

TEST ENGINEER: ERIC LIFSEY

802.11a UNII-1
Spurious Radiated Emissions Data Sheet
Emissions 30 MHz … 1 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	24 July 2006	CISPR B	10 m	Bicon | Log	CISPR 120 kHz	1 MHz	As Noted

COMMENT	Transmitting 5.200 GHz.

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
60	noise	floor	35.6	26.7	8.7	2.6	20.2	40	-19.8	pk
150	noise	floor	35.8	26.9	12.2	4.5	25.6	43.5	-17.9	pk
120.7	0	2	43.6	26.7	12.0	3.7	32.6	43.5	-10.9	qp
166.7	180	1	39.4	26.8	14.4	4.9	31.9	43.5	-11.6	qp
233	180	1	41.5	26.9	12.5	5.4	32.6	46	-13.4	pk
375	225	1	43.6	27.2	16.8	6.7	39.9	46	-6.1	qp

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
70	noise	floor	35.6	26.7	6.7	2.7	18.3	40	-21.7	pk
130.5	180	1	40.3	26.8	11.1	4.2	28.7	43.5	-14.8	pk
190	noise	floor	34.5	26.8	17.0	4.8	29.5	43.5	-14.0	pk
233	noise	floor	34.7	26.9	12.5	5.4	25.8	46	-20.2	pk
375	45	1.5	38.1	27.2	16.8	6.7	34.4	46	-11.6	qp
404	0	1.3	34.1	27.4	17.3	6.7	30.7	46	-15.3	qp

TEST ENGINEER: ERIC LIFSEY

802.11a UNII-2
Spurious Radiated Emissions Data Sheet
Emissions 30 MHz … 1 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	24 July 2006	CISPR B	10 m	Bicon | Log	CISPR 120 kHz	1 MHz	As Noted

COMMENT	Receiving 5.260 GHz.

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
60	noise	floor	36.5	26.7	8.7	2.6	21.1	40	-18.9	pk
150	noise	floor	32	26.9	12.2	4.5	21.8	43.5	-21.7	pk
118.7	225	2	47	26.7	12.1	3.6	36.0	43.5	-7.5	qp
375	270	1.5	45.2	27.2	16.8	6.7	41.5	46	-4.5	pk
600	noise	floor	31.5	27.1	19.7	8.1	32.2	46	-13.8	pk
900	noise	floor	31.8	26.1	24.2	10.1	40.0	46	-6.0	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
52	noise	floor	36.1	26.7	10.8	2.4	22.7	40	-17.3	pk
141	noise	floor	34.8	26.7	10.9	4.3	23.2	43.5	-20.3	pk
185	noise	floor	32.7	26.9	16.8	5.1	27.7	43.5	-15.8	pk
300	noise	floor	33.3	27.1	14.8	5.8	26.8	46	-19.2	pk
375	45	1.5	41.4	27.2	16.8	6.7	37.7	46	-8.3	pk
600	noise	floor	31.7	27.1	19.7	8.1	32.4	46	-13.6	pk

TEST ENGINEER: ERIC LIFSEY

802.11b
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	28 July 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	Peak

COMMENT	Receiving

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBµV/m)	Limit (dBµV /m)	Margin (dB)	Detector Function
1100	0	1	64.2	28.4	23.9	0.5	0.0	60.3	83.5	-23.2	pk
1556	90	1	58.8	33.1	25.5	0.5	0.0	51.7	83.5	-31.8	pk
2393	180	1	52	33.9	28.2	0.6	0.0	46.9	83.5	-36.6	pk
2437	noise	floor	46.2	33.8	28.2	0.6	0.0	41.2	83.5	-42.3	pk
4874	noise	floor	43.7	30.4	34.2	0.8	0.0	48.3	83.5	-35.2	pk
10000	noise	floor	47.1	28.9	38.1	1.5	0.0	57.8	83.5	-25.7	pk
12185	noise	floor	45.7	28.7	39.4	2.0	0.0	58.3	83.5	-25.2	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBµV/m)	Limit (dBµV /m)	Margin (dB)	Detector Function
1100	0	1	64.2	28.4	23.9	0.5	0.0	60.3	83.5	-23.2	pk
1556	90	1	58.8	33.1	25.5	0.5	0.0	51.7	83.5	-31.8	pk
2393	180	1	52	33.9	28.2	0.6	0.0	46.9	83.5	-36.6	pk
2437	noise	floor	46.2	33.8	28.2	0.6	0.0	41.2	83.5	-42.3	pk
4874	noise	floor	43.7	30.4	34.2	0.8	0.0	48.3	83.5	-35.2	pk
10000	noise	floor	47.1	28.9	38.1	1.5	0.0	57.8	83.5	-25.7	pk
12185	noise	floor	45.7	28.7	39.4	2.0	0.0	58.3	83.5	-25.2	pk

TEST ENGINEER: ERIC LIFSEY

802.11g
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	28 July 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	Peak

COMMENT	Receiving

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBµV/m)	Limit (dBµV /m)	Margin (dB)	Detector Function
1034	90	1	63.3	27.6	23.7	0.5	0.0	59.9	83.5	-23.6	pk
1097	90	1	61	28.3	23.9	0.5	0.0	57.1	83.5	-26.4	pk
1862	180	1	54.9	33.8	26.9	0.6	0.0	48.6	83.5	-34.9	pk
2498	90	1	50.1	33.8	28.3	0.6	0.0	45.2	83.5	-38.3	pk
4874	noise	floor	43.7	30.4	34.2	0.8	0.0	48.3	83.5	-35.2	pk
10000	noise	floor	47.8	28.9	38.1	1.5	0.0	58.5	83.5	-25.0	pk
12185	noise	floor	46.5	28.7	39.4	2.0	0.0	59.1	83.5	-24.4	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBµV/m)	Limit (dBµV /m)	Margin (dB)	Detector Function
1036	180	1	63.6	27.6	23.7	0.5	0.0	60.2	83.5	-23.3	pk
1097	180	1	61.7	28.3	23.9	0.5	0.0	57.8	83.5	-25.7	pk
2136	180	1	52.1	34.0	27.8	0.6	0.0	46.5	83.5	-37.0	pk
2437	noise	floor	47.5	33.8	28.2	0.6	0.0	42.5	83.5	-41.0	pk
4874	noise	floor	45.8	30.4	34.2	0.8	0.0	50.4	83.5	-33.1	pk
10000	noise	floor	48.2	28.9	38.1	1.5	0.0	58.9	83.5	-24.6	pk
12185	noise	floor	46.6	28.7	39.4	2.0	0.0	59.2	83.5	-24.3	pk

TEST ENGINEER: ERIC LIFSEY

802.11a UNII-3
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	28 July 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Receiving 5765 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBµV/m)	Limit (dBµV /m)	Margin (dB)	Detector Function
1032	90	1	64.4	27.6	23.7	0.5	0.0	61.0	83.5	-22.5	pk
1099	90	1	62.2	28.3	23.9	0.5	0.0	58.3	83.5	-25.2	pk
1198	180	1	61.7	29.5	24.2	0.5	0.0	56.9	83.5	-26.6	pk
2006	90	1	54.8	34.1	27.6	0.6	0.0	48.9	83.5	-34.6	pk
5765	noise	floor	42	31.0	35.2	1.0	0.0	47.1	83.5	-36.4	pk
10520	noise	floor	46.7	29.3	38.3	1.6	0.0	57.3	83.5	-26.2	pk
15780	noise	floor	51.4	24.8	38.8	2.1	0.0	67.4	83.5	-16.1	pk
15780	noise	floor	39.6	24.8	38.8	2.1	0.0	55.6	63.5	-7.9	avg

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Attenuator	Corrected Level (dBµV/m)	Limit (dBµV /m)	Margin (dB)	Detector Function
1032	90	1	64.4	27.6	23.7	0.5	0.0	61.0	83.5	-22.5	pk
1099	90	1	62.2	28.3	23.9	0.5	0.0	58.3	83.5	-25.2	pk
1198	180	1	61.7	29.5	24.2	0.5	0.0	56.9	83.5	-26.6	pk
2006	90	1	54.8	34.1	27.6	0.6	0.0	48.9	83.5	-34.6	pk
5765	noise	floor	42	31.0	35.2	1.0	0.0	47.1	83.5	-36.4	pk
10520	noise	floor	46.7	29.3	38.3	1.6	0.0	57.3	83.5	-26.2	pk
15780	noise	floor	51.4	24.8	38.8	2.1	0.0	67.4	83.5	-16.1	pk
15780	noise	floor	39.6	24.8	38.8	2.1	0.0	55.6	63.5	-7.9	avg
1032	90	1	64.4	27.6	23.7	0.5	0.0	61.0	83.5	-22.5	pk

TEST ENGINEER: ERIC LIFSEY

802.11b
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 25 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	28 July 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	Peak

COMMENT	Transmitting 2412 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	45	1	49	34.9	29.2	3.6	47.0	83.5	-36.5	pk
4824	260	1	52.5	31.3	34.1	3.8	59.1	83.5	-24.4	pk
7236	noise	floor	46.7	31.0	36.8	4.4	56.9	83.5	-26.6	pk
9648	noise	floor	46.9	30.9	37.8	4.5	58.3	83.5	-25.2	pk
12060	noise	floor	47.1	30.4	39.2	5.0	60.9	83.5	-22.6	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	270	1	46.6	34.9	29.2	3.6	44.6	83.5	-38.9	pk
4824	350	1	49.6	31.3	34.1	3.8	56.2	83.5	-27.3	pk
7236	noise	floor	45.9	31.0	36.8	4.4	56.1	83.5	-27.4	pk
9648	noise	floor	47.8	30.9	37.8	4.5	59.2	83.5	-24.3	pk
12060	noise	floor	46.6	30.4	39.2	5.0	60.4	83.5	-23.1	pk

TEST ENGINEER: ERIC LIFSEY

802.11b
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 25 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	28 July 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	Peak

COMMENT	Transmitting 2437 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	90	1	48.8	34.9	29.2	3.6	46.8	83.5	-36.7	pk
4873	225	1	53.8	31.2	34.2	3.8	60.6	83.5	-22.9	pk
7311	noise	floor	46.7	30.9	36.9	4.4	57.1	83.5	-26.4	pk
9748	noise	floor	47.6	30.9	37.9	4.5	59.1	83.5	-24.4	pk
12185	noise	floor	48.9	30.4	39.4	5.0	62.8	83.5	-20.7	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	90	1	46.3	34.9	29.2	3.6	44.3	83.5	-39.2	pk
4873	260	1	51.5	31.2	34.2	3.8	58.3	83.5	-25.2	pk
7311	noise	floor	43.5	30.9	36.9	4.4	53.9	83.5	-29.6	pk
9748	noise	floor	47.3	30.9	37.9	4.5	58.8	83.5	-24.7	pk
12185	noise	floor	44.9	30.4	39.4	5.0	58.8	83.5	-24.7	pk

TEST ENGINEER: ERIC LIFSEY

802.11b
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 25 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	28 July 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	Peak

COMMENT	Transmitting 2462 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	45	1	49.8	34.9	29.2	3.6	47.8	83.5	-35.7	pk
4924	225	1	54.5	31.1	34.3	3.8	61.6	83.5	-21.9	pk
7386	noise	floor	45.8	30.9	37.0	4.4	56.3	83.5	-27.2	pk
9848	noise	floor	47.9	30.8	38.0	4.5	59.5	83.5	-24.0	pk
12310	noise	floor	46.7	30.5	39.5	4.9	60.7	83.5	-22.8	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	90	1	48.4	34.9	29.2	3.6	46.4	83.5	-37.1	pk
4924	225	1	53.1	31.1	34.3	3.8	60.2	83.5	-23.3	pk
7386	noise	floor	45.2	30.9	37.0	4.4	55.7	83.5	-27.8	pk
9848	noise	floor	46.6	30.8	38.0	4.5	58.2	83.5	-25.3	pk
12310	noise	floor	46.3	30.5	39.5	4.9	60.3	83.5	-23.2	pk

TEST ENGINEER: ERIC LIFSEY

802.11g
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 25 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	16 Aug 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Transmitting 2412 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	45	1	54.9	34.9	29.2	3.6	52.9	83.5	-30.6	pk
4824	225	1	55.5	31.3	34.1	3.8	62.1	83.5	-21.4	pk
7236	135	1	43.7	31.0	36.8	4.4	53.9	83.5	-29.6	pk
9648	135	1	45.5	30.9	37.8	4.5	56.9	83.5	-26.6	pk
12060	noise	floor	29.6	30.4	39.2	5.0	43.4	63.5	-20.1	avg

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	180	1	53.9	34.9	29.2	3.6	51.9	83.5	-31.6	pk
4824	350	1	50.1	31.3	34.1	3.8	56.7	83.5	-26.8	pk
7236	190	1	44	31.0	36.8	4.4	54.2	83.5	-29.3	pk
9648	225	1	45.8	30.9	37.8	4.5	57.2	83.5	-26.3	pk
12060	noise	floor	29.8	30.4	39.2	5.0	43.6	63.5	-19.9	avg

TEST ENGINEER: ERIC LIFSEY

802.11g
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 25 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	16 Aug 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Transmitting 2437 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	45	1	55.2	34.9	29.2	3.6	53.2	83.5	-30.3	pk
4873	225	1	56.5	31.2	34.2	3.8	63.3	83.5	-20.2	pk
7311	180	1	47	30.9	36.9	4.4	57.4	83.5	-26.1	pk
9748	225	1	45.7	30.9	37.9	4.5	57.2	83.5	-26.3	pk
12185	noise	floor	30	30.4	39.4	5.0	43.9	63.5	-19.6	avg

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	270	1	54.4	34.9	29.2	3.6	52.4	83.5	-31.1	pk
4873	350	1	56.3	31.2	34.2	3.8	63.1	83.5	-20.4	pk
7311	180	1	43.6	30.9	36.9	4.4	54.0	83.5	-29.5	pk
9748	135	1	45.9	30.9	37.9	4.5	57.4	83.5	-26.1	pk
12185	noise	floor	30	30.4	39.4	5.0	43.9	63.5	-19.6	avg

TEST ENGINEER: ERIC LIFSEY

802.11g
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 25 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	28 July 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Transmitting 2462 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	45	1	55.6	34.9	29.2	3.6	53.6	83.5	-29.9	pk
4924	225	1	56.2	31.1	34.3	3.8	63.3	83.5	-20.2	pk
7386	225	1	52.3	30.9	37.0	4.4	62.8	83.5	-20.7	pk
9848	135	1	44.1	30.8	38.0	4.5	55.7	83.5	-27.8	pk
12310	noise	floor	29.6	30.5	39.5	4.9	43.6	63.5	-19.9	avg

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
2688	45	1	54.5	34.9	29.2	3.6	52.5	83.5	-31.0	pk
4924	305	1	55.6	31.1	34.3	3.8	62.7	83.5	-20.8	pk
7386	225	1	49.3	30.9	37.0	4.4	59.8	83.5	-23.7	pk
9848	225	1	43.7	30.8	38.0	4.5	55.3	83.5	-28.2	pk
12310	noise	floor	29.6	30.5	39.5	4.9	43.6	63.5	-19.9	avg

TEST ENGINEER: ERIC LIFSEY

802.11a UNII-1
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 40 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	28 July 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Transmitting 5180 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Filter Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
10360	190	1	39.7	29.2	38.2	1.6	1.0	51.3	63.5	-12.2	avg
10360	190	1	51.4	29.2	38.2	1.6	1.0	63.0	83.5	-20.5	pk
15540	190	1	31.5	24.5	38.6	2.0	1.0	48.6	63.5	-14.9	avg
15540	190	1	43.6	24.5	38.6	2.0	1.0	60.7	83.5	-22.8	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Filter Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
10360	180	1	37.8	29.2	38.2	1.6	1.0	49.4	63.5	-14.1	avg
10360	180	1	50.4	29.2	38.2	1.6	1.0	62.0	83.5	-21.5	pk
15540	190	1	31.3	24.5	38.6	2.0	1.0	48.4	63.5	-15.1	avg
15540	190	1	43.6	24.5	38.6	2.0	1.0	60.7	83.5	-22.8	pk

TEST ENGINEER: ERIC LIFSEY

802.11a UNII-1
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 40 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	28 July 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Transmitting 5240 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Filter Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
10480	180	1	39.4	29.3	38.3	1.6	1.0	51.0	63.5	-12.5	avg
10480	180	1	49.7	29.3	38.3	1.6	1.0	61.3	83.5	-22.2	pk
15720	190	1	35.8	24.7	38.7	2.0	1.0	52.9	63.5	-10.6	avg
15720	190	1	46.8	24.7	38.7	2.0	1.0	63.9	83.5	-19.6	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Filter Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
10480	135	1	40.1	29.3	38.3	1.6	1.0	51.7	63.5	-11.8	avg
10480	135	1	51.9	29.3	38.3	1.6	1.0	63.5	83.5	-20.0	pk
15720	135	1	35.4	24.7	38.7	2.0	1.0	52.5	63.5	-11.0	avg
15720	135	1	48.1	24.7	38.7	2.0	1.0	65.2	83.5	-18.3	pk

TEST ENGINEER: ERIC LIFSEY

802.11a UNII-3
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 40 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	15 Aug 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Transmitting 5745 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Filter Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
11490	135	1	48.6	29.2	39.8	1.8	1.0	62.0	63.5	-1.5	avg
11490	135	1	58.7	29.2	39.8	1.8	1.0	72.1	83.5	-11.4	pk
17235	190	1	34.1	24.5	43.8	2.1	1.0	56.5	63.5	-7.0	avg
17235	190	1	47.4	24.5	43.8	2.1	1.0	69.8	83.5	-13.7	pk

ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Filter Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
11490	190	1	44.7	29.2	39.8	1.8	1.0	58.1	63.5	-5.4	avg
11490	190	1	55.1	29.2	39.8	1.8	1.0	68.5	83.5	-15.0	pk
17235	170	1	36.3	24.5	43.8	2.1	1.0	58.7	63.5	-4.8	avg
17235	170	1	48.6	24.5	43.8	2.1	1.0	71.0	83.5	-12.5	pk

TEST ENGINEER: ERIC LIFSEY

802.11a UNII-3
Radiated Emissions Data Sheet
Harmonics & Spurious > 1 GHz up to 40 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
07144-10	15 Aug 2006	CISPR B	1 m	Horn	1 MHz	3 MHz	As Noted

COMMENT	Transmitting 5805 MHz

ANTENNA POLARIZATION: Horizontal

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Filter Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
11610	135	1	49.2	29.1	39.6	1.8	1.0	62.6	63.5	-0.9	avg
11610	135	1	61.1	29.1	39.6	1.8	1.0	74.5	83.5	-9.0	pk
17415	190	1	33.4	22.6	45.0	2.0	1.0	58.8	63.5	-4.7	avg
17415	190	1	46.3	22.6	45.0	2.0	1.0	71.7	83.5	-11.8	pk

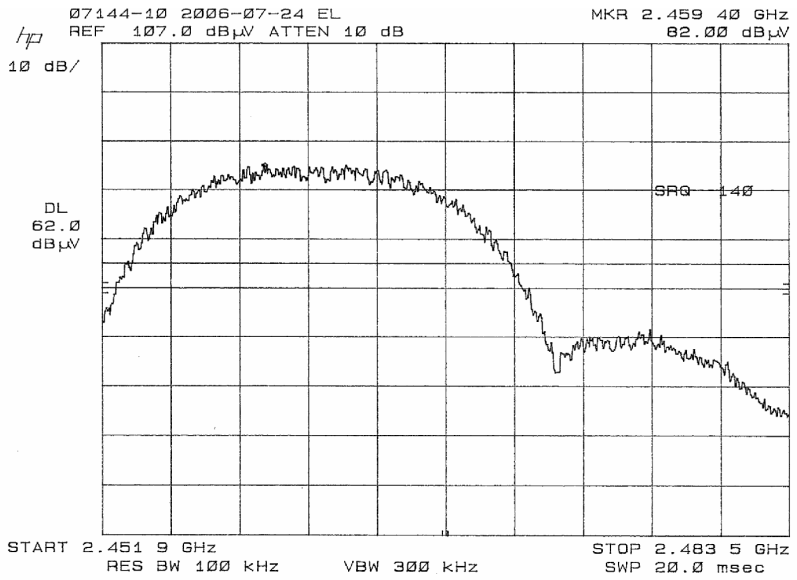
ANTENNA POLARIZATION: Vertical

Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBµV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Filter Loss (dB)	Corrected Level (dBµV /m)	Limit (dBµV /m)	Margin (dB)	Detector Function
11610	315	1	45.6	29.1	39.6	1.8	1.0	59.0	63.5	-4.5	avg
11610	315	1	56.4	29.1	39.6	1.8	1.0	69.8	83.5	-13.7	pk
17415	170	1	35.3	22.6	45.0	2.0	1.0	60.7	63.5	-2.8	avg
17415	170	1	47.4	22.6	45.0	2.0	1.0	72.8	83.5	-10.7	pk

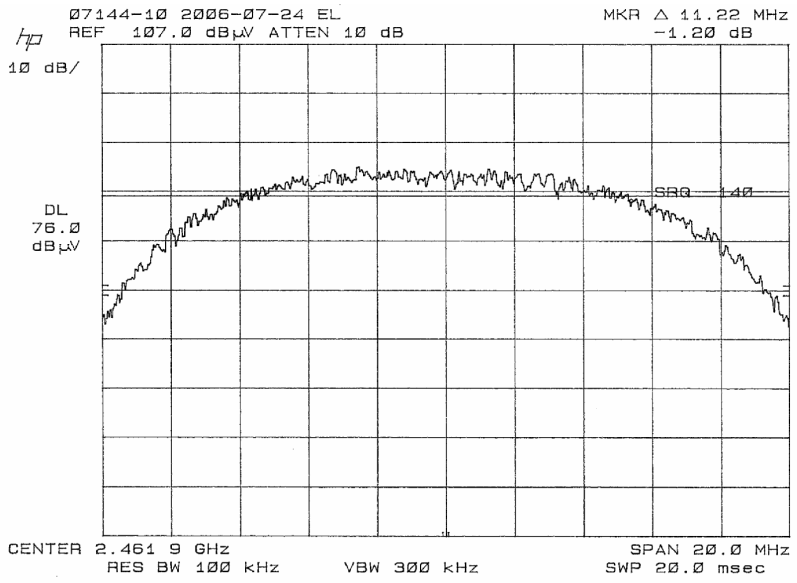
TEST ENGINEER: ERIC LIFSEY

801.11b Band Edge & Bandwidth Plots

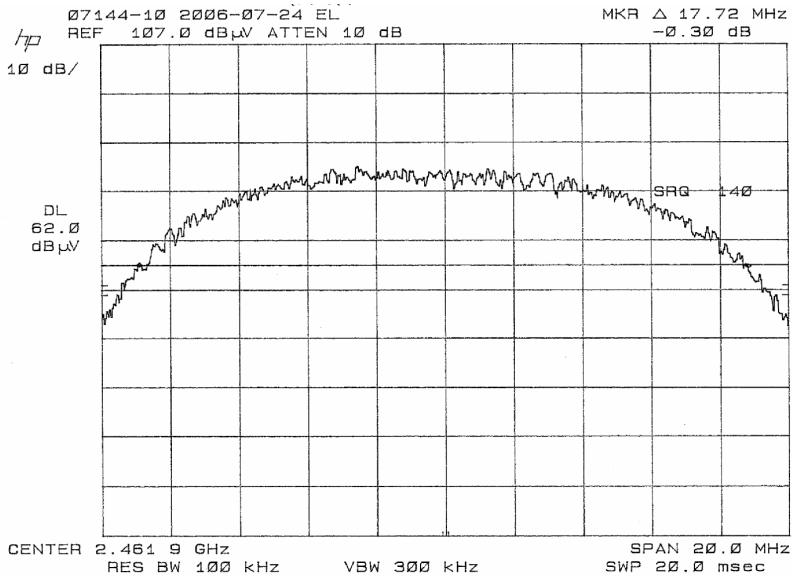
802.11b: High Channel, Band Edge



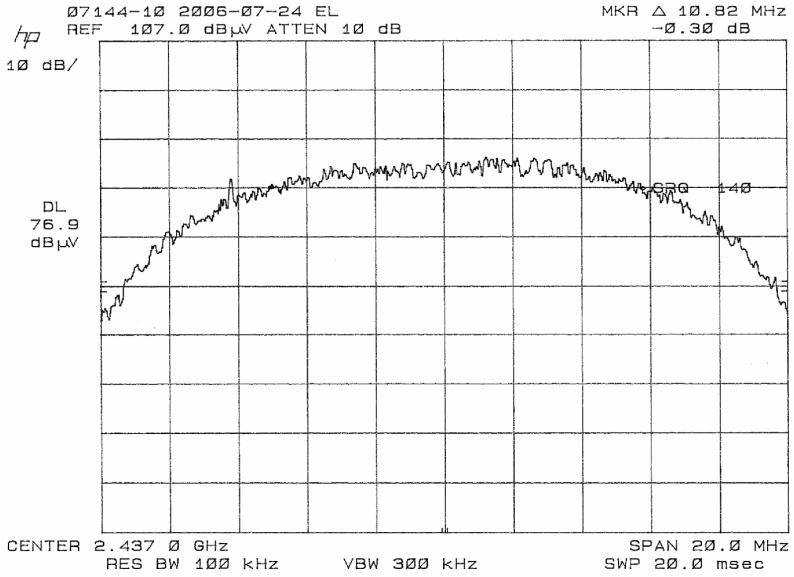
802.11b: High Channel, Occupied Bandwidth 6 dB



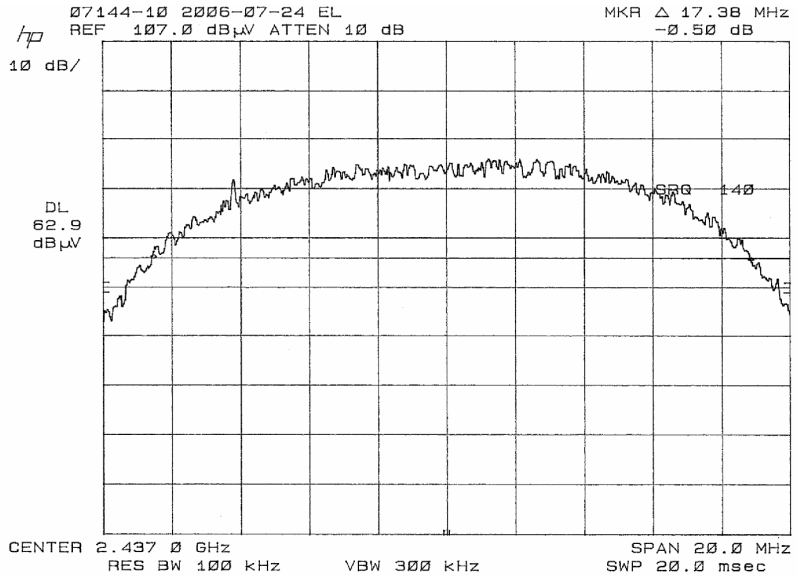
802.11b: High Channel, Occupied Bandwidth 20 dB



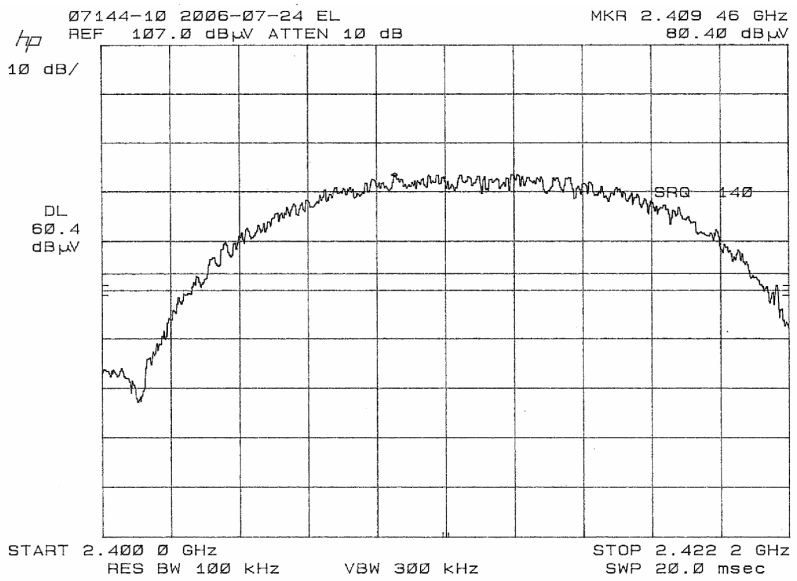
802.11b: Middle Channel, Occupied Bandwidth 6 dB



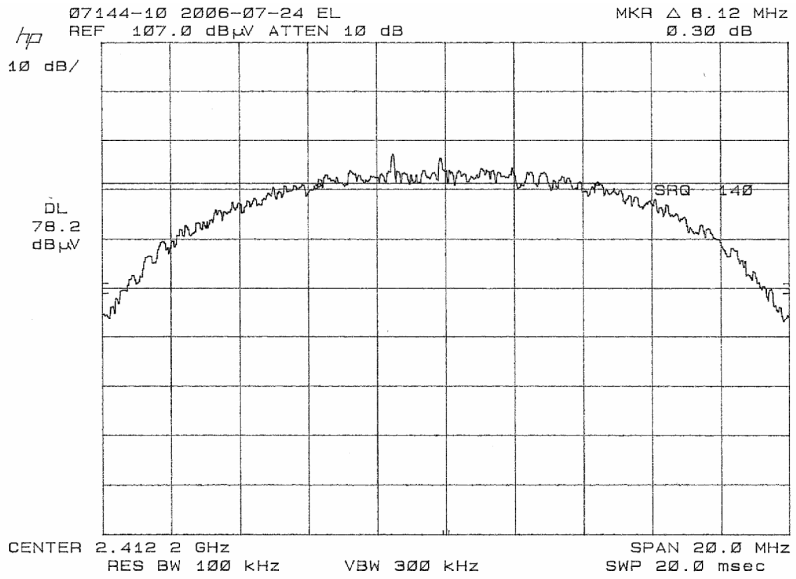
802.11b: Middle Channel, Occupied Bandwidth 20 dB



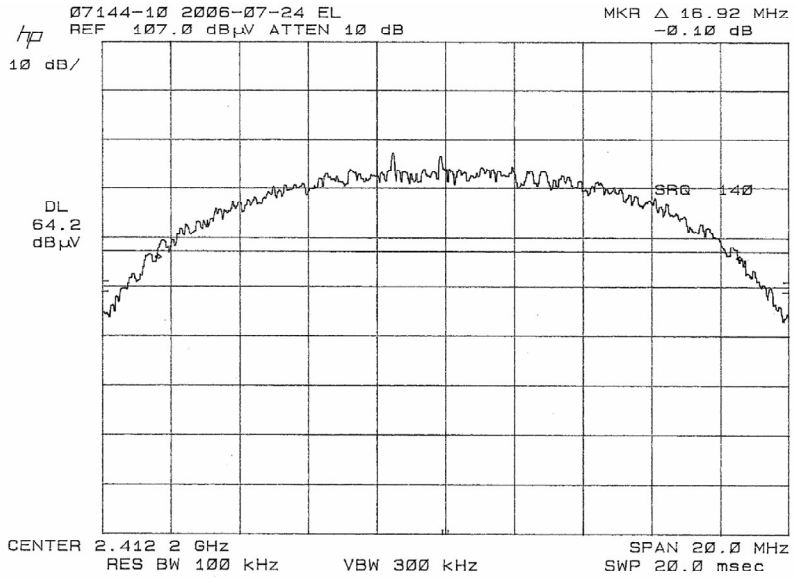
802.11b: Low Channel, Band Edge



802.11b: Low Channel, Occupied Bandwidth 6 dB

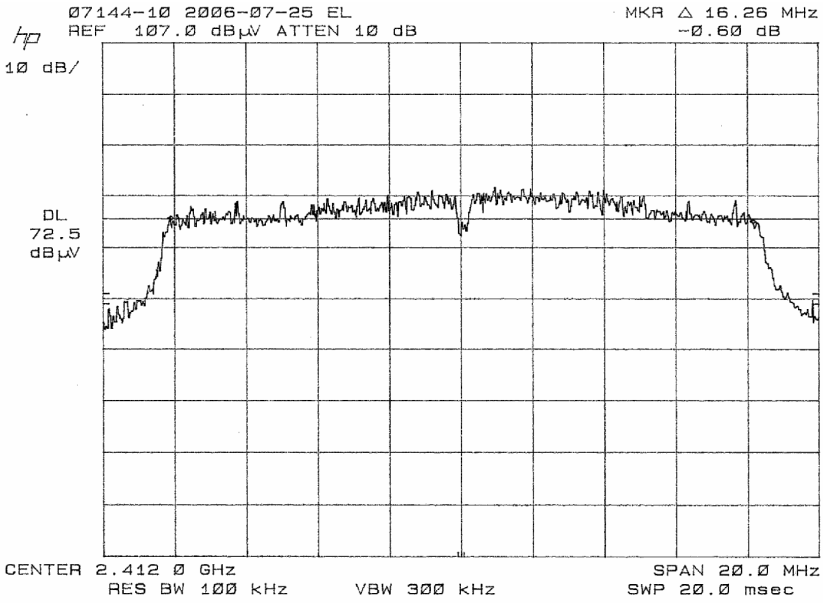


802.11b: Low Channel, Occupied Bandwidth 20 dB

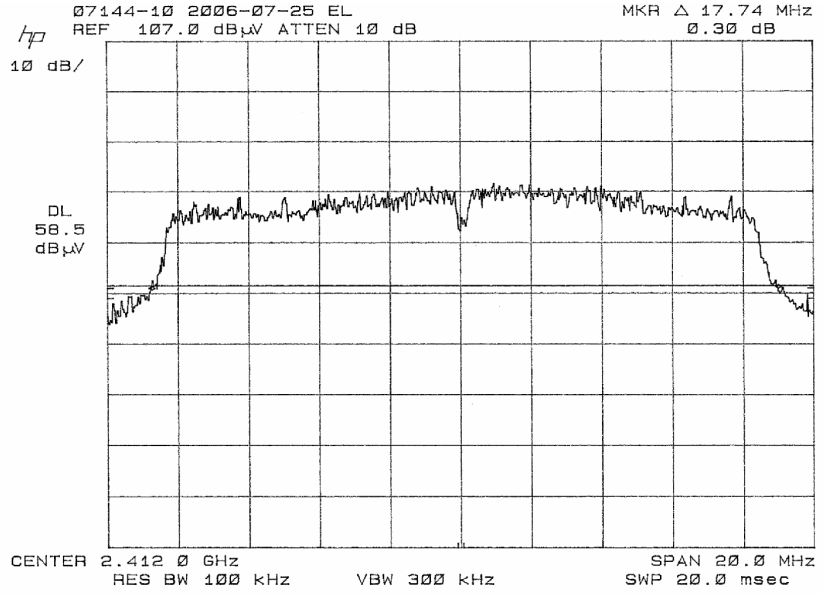


801.11g Band Edge & Bandwidth Plots

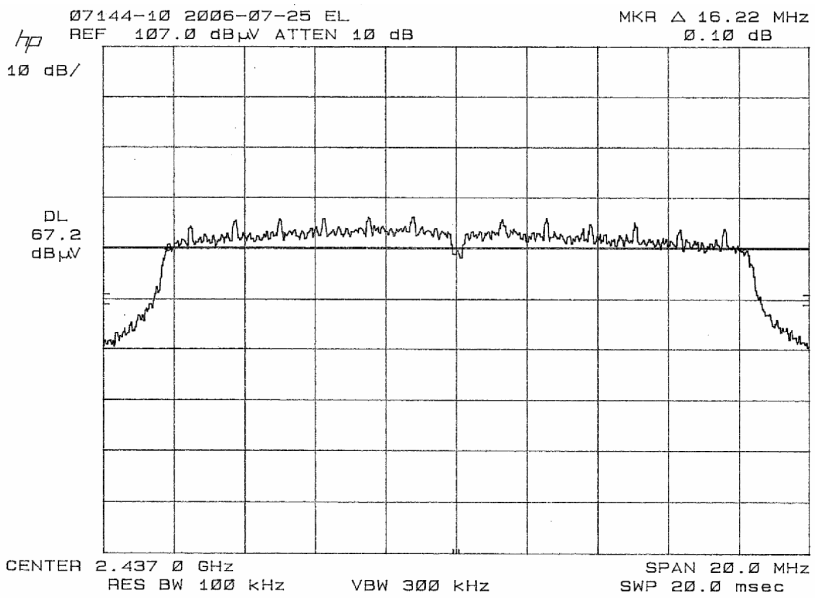
802.11g: Low Channel, Occupied Bandwidth 6 dB



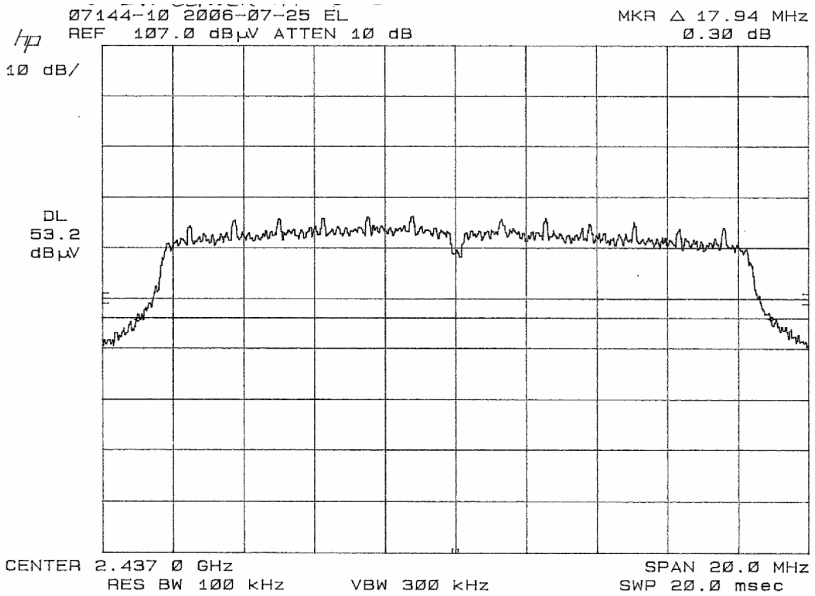
802.11g: Low Channel, Occupied Bandwidth 20 dB



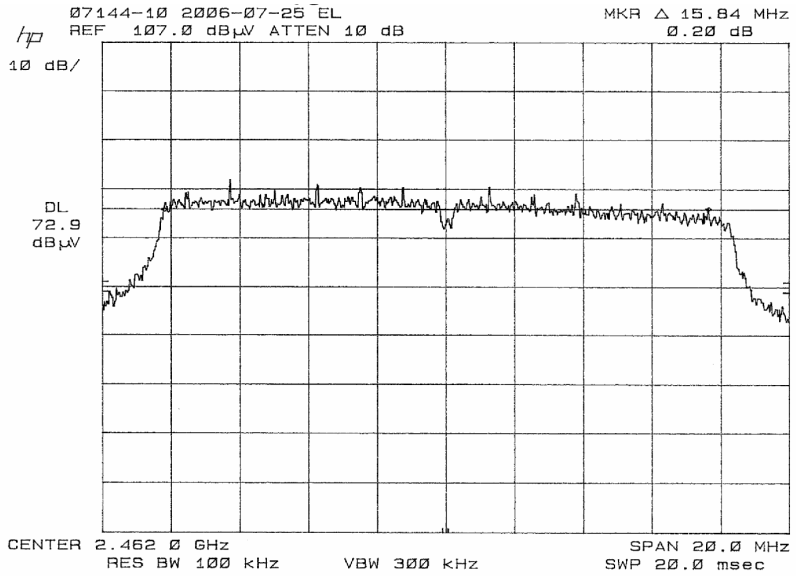
802.11g: Middle Channel, Occupied Bandwidth 6 dB



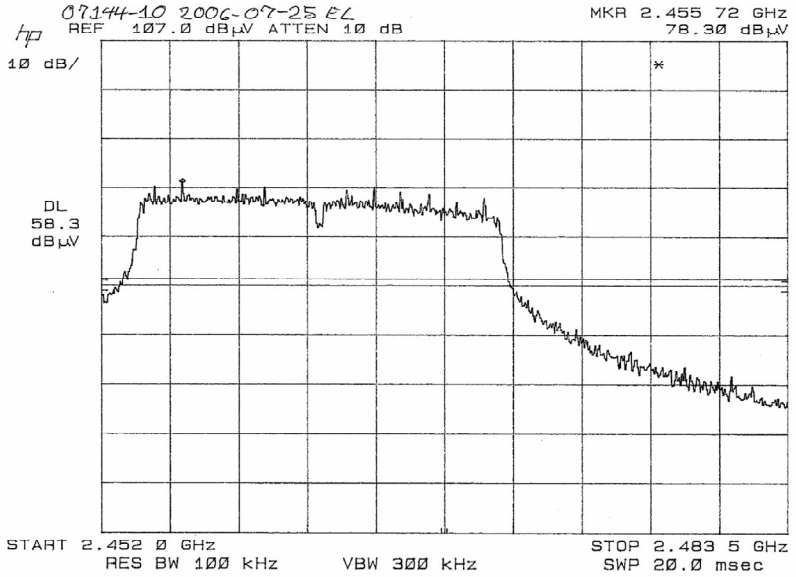
802.11g: Middle Channel, Occupied Bandwidth 20 dB



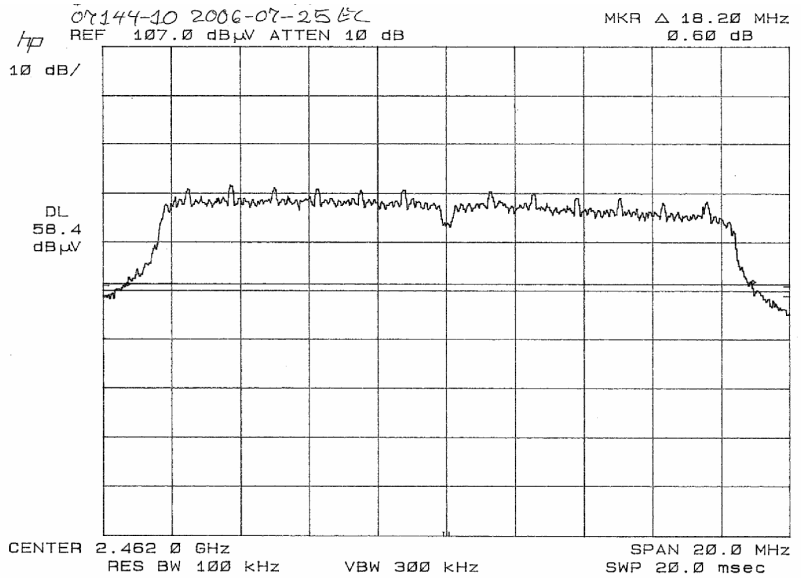
802.11g: High Channel, Occupied Bandwidth 6 dB



802.11g: High Channel, Band Edge

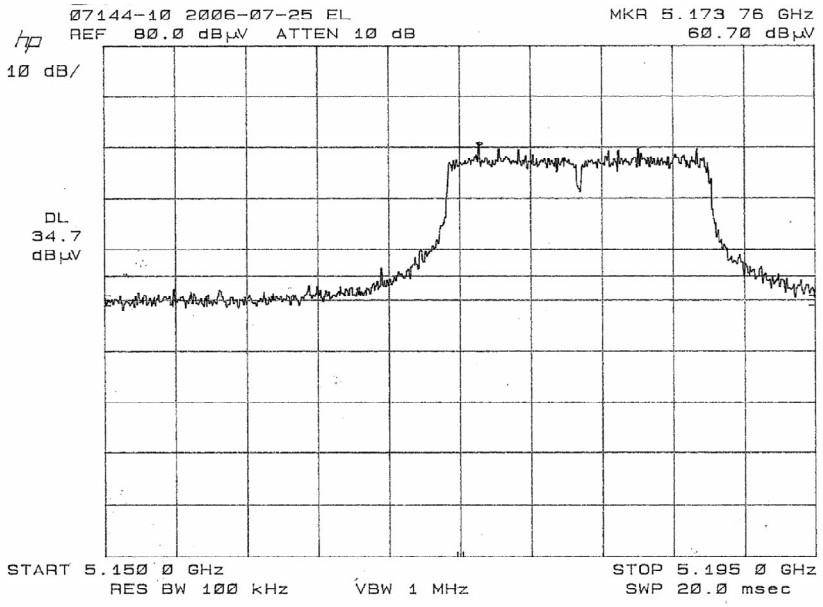


802.11g: High Channel, Occupied Bandwidth 20 dB

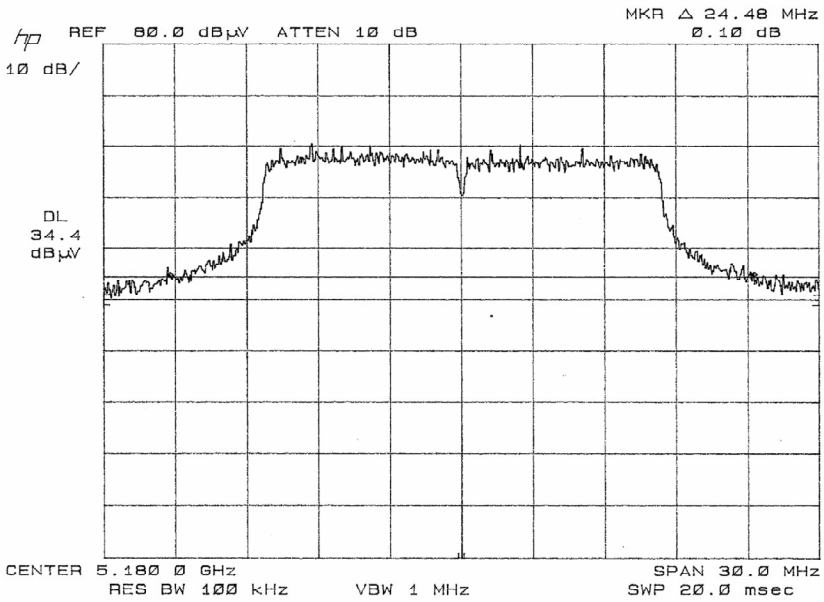


801.11a UNII-1 Band Edge & Bandwidth Plots

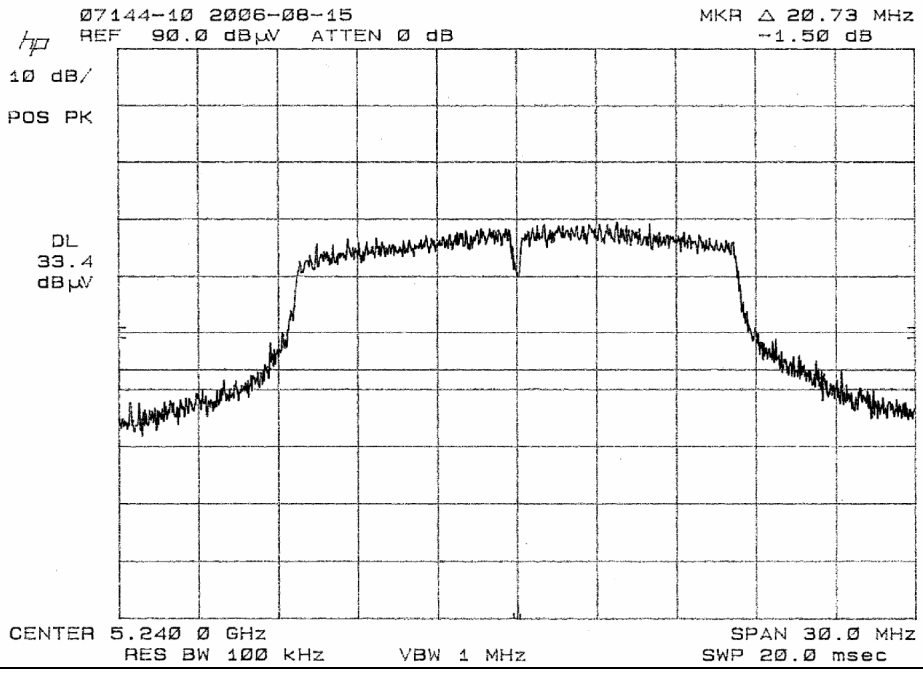
802.11a UNII-1: Low Channel, Band Edge



802.11a UNII-1: Low Channel, Band Width 26 dB



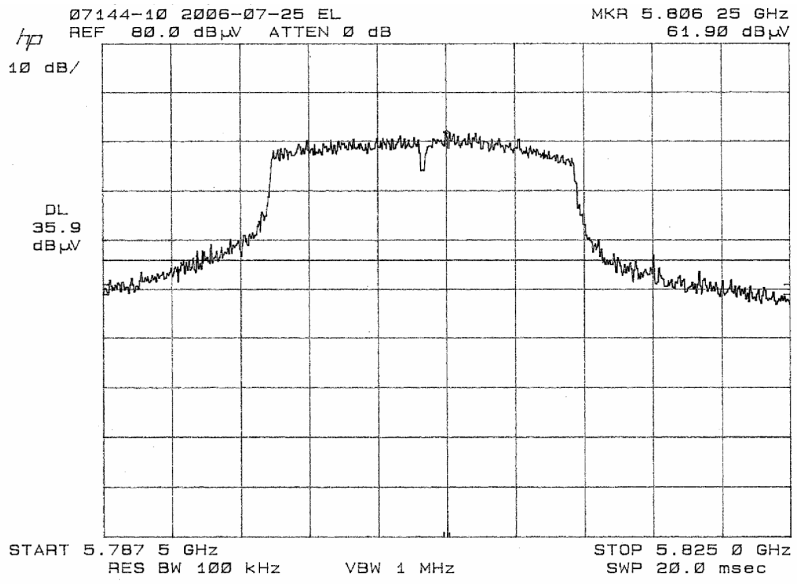
802.11a UNII-1: High Channel, Occupied Bandwidth 26 dB & Band Edge



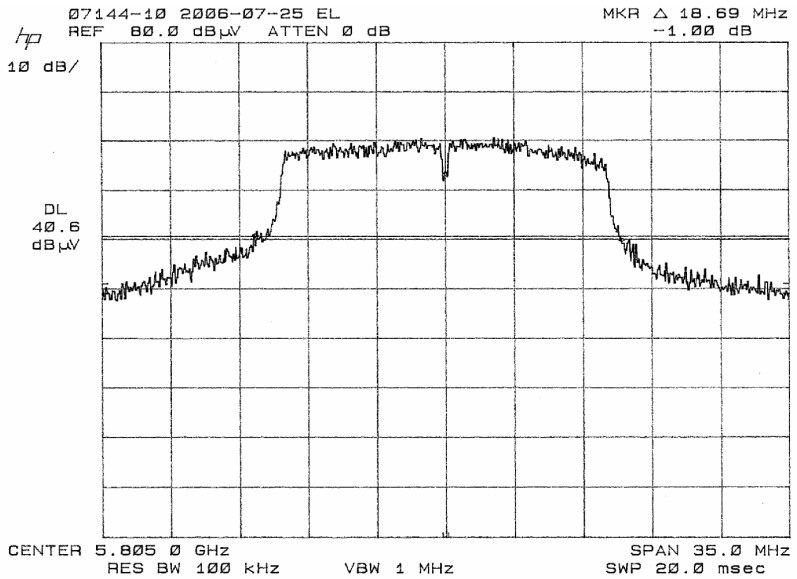
TEST ENGINEER: Eric Lifsey

801.11a UNII-3 Band Edge & Bandwidth Plots

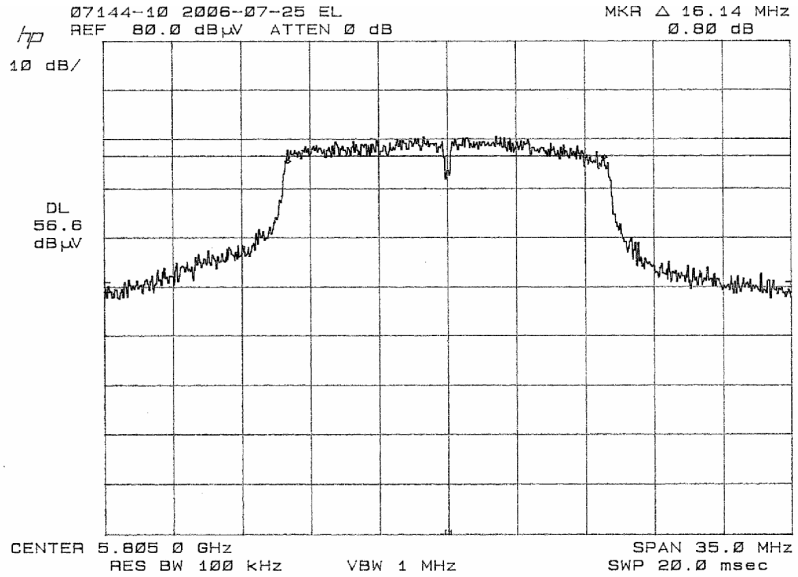
802.11a UNII-3: High Channel, Band Edge



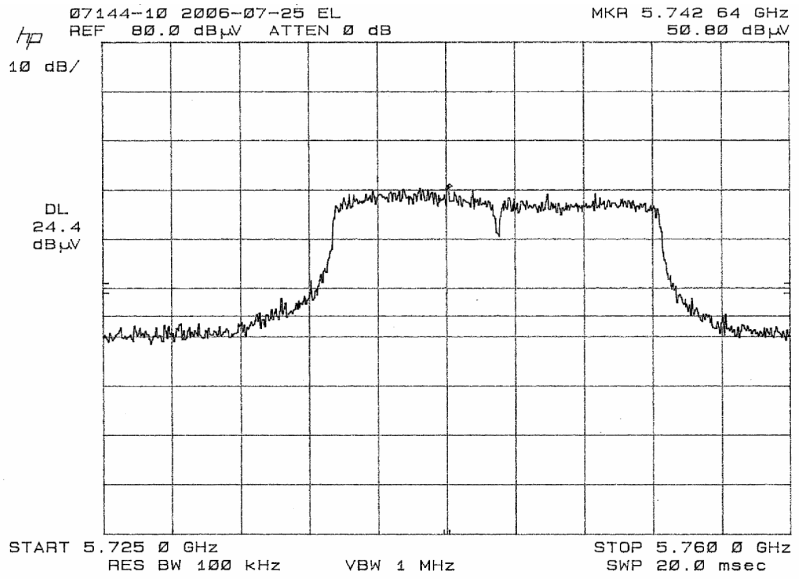
802.11a UNII-3: High Channel, Bandwidth 20 dB



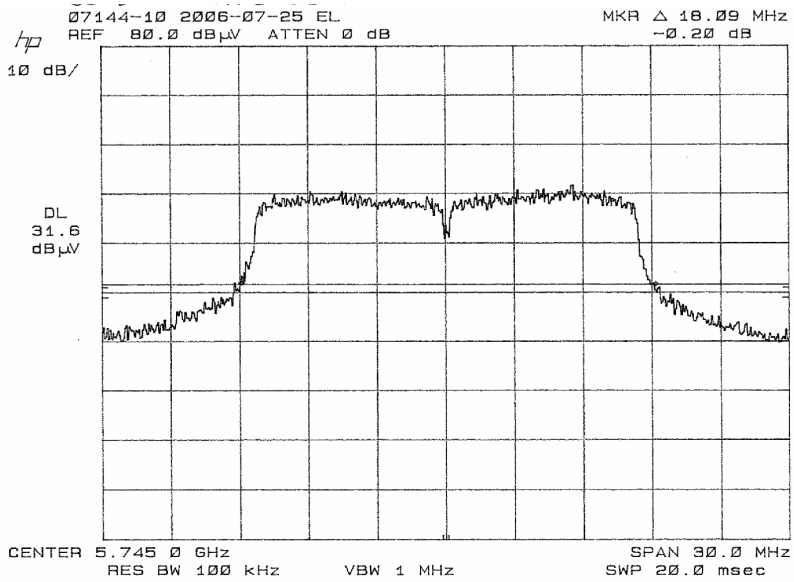
802.11a UNII-3: High Channel, Bandwidth 6 dB



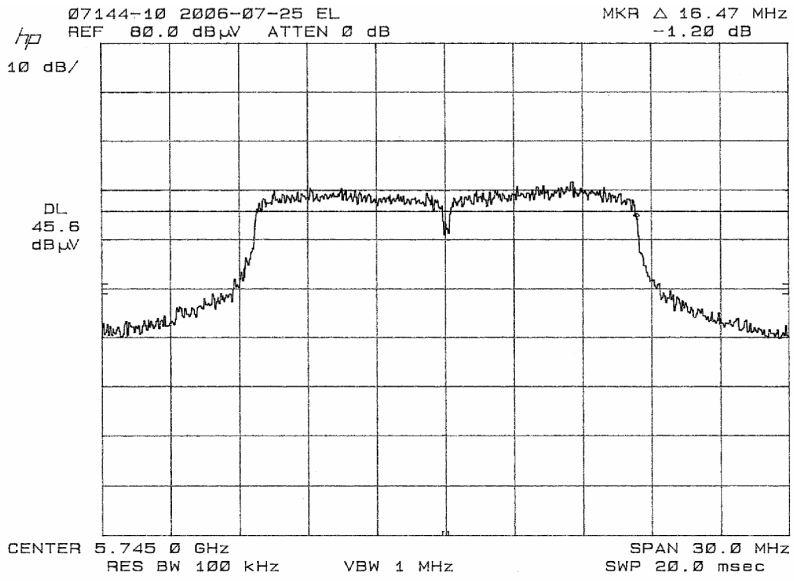
802.11a UNII-3: Low Channel, Band Edge



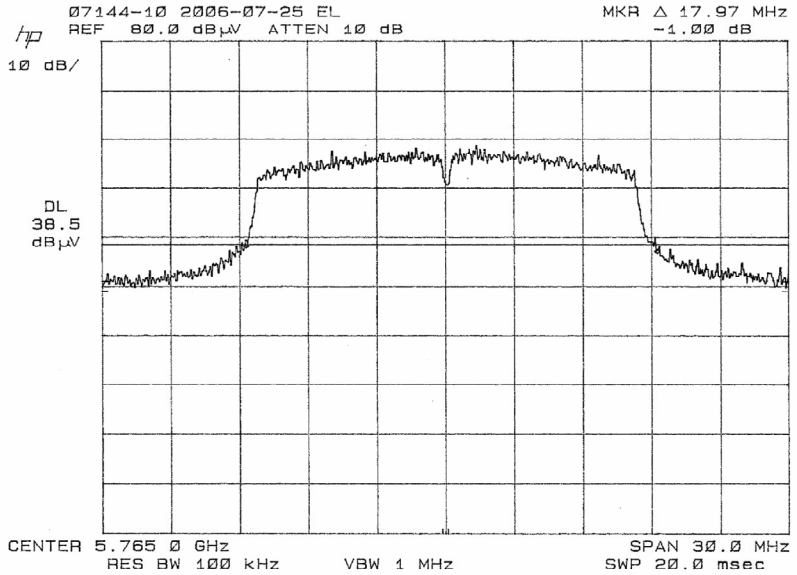
802.11a UNII-3: Low Channel, Bandwidth 20 dB



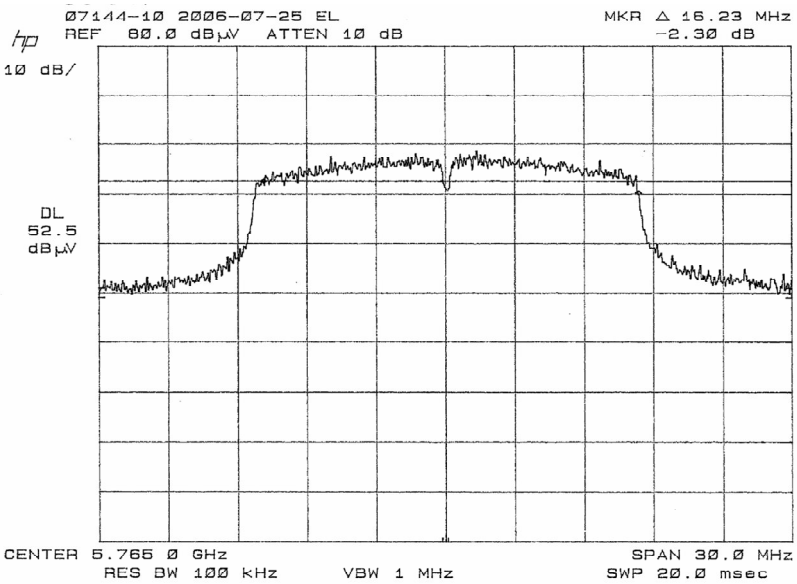
802.11a UNII-3: Low Channel, Bandwidth 6 dB



802.11a UNII-3: Middle Channel, Bandwidth 20 dB



802.11a UNII-3: Middle Channel, Bandwidth 6 dB



TEST ENGINEER: Eric Lifsey

Antenna Construction

This device utilizes integral antennas installed at the factory and has no provision for user modification. This design satisfies the antenna requirements.

Appendix C Policy, Rationale and Evaluation of EMC Measurement Uncertainty

All uncertainty calculations, estimates and expressions thereof shall be in accordance with NIST policy stated in Appendix E to NIST Technical Communications Program, Subchapter 4.09 of the Administrative Manual, as reproduced in Appendix C of NIST Technical Note (TN) 1297, 1994 Edition [1]1. The NIST policy is based on ISO Guide to the Expression of Uncertainty in Measurement [2] (herein after called the Guide), which shall take precedence in the event of disputes. The Guide is explained in TN 1297. Other notable explanations for the Guide are NAMAS Publications NIS 80 [3] and NIS 81 [4]; the latter being specifically for EMC measurements, and the easiest to understand. Since PTI operates in accordance with NIST (NVLAP) Handbook 150-11 [5], all instrumentation having an effect on the accuracy or validity of tests shall be periodically calibrated or verified traceable to national standards by a competent calibration laboratory. The certificates of calibration or verification on this instrumentation shall include estimates of uncertainty as required by NIST Handbook 150-11.

Rationale and Summary of Expanded Uncertainty.

Each piece of instrumentation at PTI that is used in making measurements for determining conformance to a standard (or limit), shall be assessed to evaluate its contribution to the overall uncertainty of the measurement in which it is used. The assessment of each item will be based on either a type A evaluation or a type B evaluation. Most of the evaluations will be type B, since they will be based on the manufacture's statements or specifications of the calibration tolerances or uncertainty will be stated along with a brief rationale for the type of evaluation and the resulting state uncertainties.

The individual uncertainties included in the combined standard uncertainty for a specific test result will depend on the configuration in which the item of instrumentation is used. The combination will always be based on the law of propagation of uncertainty discussed in TN 1297, NIS 81, and the Guide. Any systematic effects will be accommodated by including their uncertainties, in the calculation of the combined standard uncertainty; except that if the direction and amount of the systematic effect cannot be determined and separated from its uncertainty, the whole effect will be treated as uncertainty and combined along with the other elements of the test setup.

Type A evaluations of standard uncertainty will usually be based on calculating the standard deviation of the mean of a series of independent observations, but may be based on a least-squares curve fit or the analysis of variance for unusual situations. Type B evaluations of standard uncertainty will usually be based on manufacturer's specifications, data provided in calibration reports, and experience. The type of probability distribution used (normal, rectangular, a-priori, or u-shaped) will be stated for each Type B evaluation.

[1] Numbers in square brackets identify documents listed in the reference section.

In the evaluation of the uncertainty of each type of measurement, the uncertainty caused by the operator will be estimated. One notable operator contribution to measurement uncertainty is the manipulation of cables to maximize the measured values of radiated emissions. The operator contribution to measurement uncertainty is evaluated by having several operators independently repeat the same test. This results in a Type A evaluation of operator-contributed measurement uncertainty.

A summary of the expanded uncertainties of PTI measurements if shown is Table 1. These are the worst-case uncertainties considering all operative influence factors.

Table 1-1
Summary of Measurement Uncertainties

Type of Measurement	Frequency Range	Meas. Dist.	Expanded Uncertainty U, dB (k=2)
Conducted Emissions	150 kHz to 30 MHz	N/A	2.9
Radiated Emissions, Site #1	30 to 200 MHz	3 m	4.7
		10 m	4.4
	200 to 1000 MHz	3 m	4.6
		10 m	4.0
	1 to 2.5 GHz	1 m	2.5
	2.5 to 12.5 GHz	1 m	3.6
	12.5 to 18 GHz	1 m	4.0
Radiated Emissions, Site #2	30 to 200 MHz	3 m	3.5
		10 m	3.7
	200 to 500 MHz	3 m	3.5
		10 m	3.1
	500 to 1000 MHz	3 m	4.0
		10 m	3.9
Radiated Emissions, Site #3	30 to 200 MHz	3 m	3.9
	200 to 500 MHz	3 m	4.0
	500 to 1000 MHz	3 m	4.3