

3.0 OUTPUT POWER MEASUREMENTS

Hammerhead X ^{TREME} Tablet PC with Intel Pro 2915ABG WLAN							
Mode		Freq. (GHz)	Channel	Average Conducted Power		Data Rate	
				dBm	Watts	Mbps	
802.11b		2.412	1	15.2	0.0331	1	
		2.442	7	17.1	0.0513	1	
		2.462	11	17.1	0.0513	1	
802.11g		2.412	1	15.3	0.0339	6	
		2.442	7	15.0	0.0316	6	
		2.462	11	14.6	0.0288	6	
802.11a	UNII-1	5.18	36	11.8	0.0151	6	
		5.20	40	11.7	0.0148	6	
		5.22	44	11.8	0.0151	6	
		5.24	48	11.8	0.0151	6	
	UNII-2	5.26	52	16.3	0.0427	6	
		5.28	56	16.1	0.0407	6	
		5.30	60	15.9	0.0389	6	
		5.32	64	16.2	0.0417	6	
	UNII-3	5.745	149	17.0	0.0501	6	
		5.765	153	17.1	0.0513	6	
		5.785	157	17.2	0.0525	6	
		5.805	161	17.0	0.0501	6	
		5.825	165	17.0	0.0501	6	
	Hammerhead Tablet PC with Intel Pro 2915ABG WLAN						
	Mode		Freq. (GHz)	Channel	Average Conducted Power		Data Rate
dBm					Watts	Mbps	
802.11b		2.442	7	17.0	0.0468	1	
802.11a	UNII-2	5.260	52	16.2	0.0417	6	
	UNII-3	5.785	157	17.2	0.0525	6	

Notes:

1. Average conducted output power measurements were made in the test frequency channel configurations specified in FCC OET "SAR Measurement Procedures for 802.11a/b/g Transmitters" (see reference [7]) for the Hammerhead X^{TREME} Tablet PC with aluminum housing and nylon case (fixed to the housing) providing a 0.8 cm gap from the bottom side of the LCD display to the planar phantom. The Hammerhead Tablet PC with magnesium housing and rubber bumpers contains a nylon hand-strap with plastic d-rings which provided a 1.5 cm gap from the bottom side of the LCD display to the planar phantom. Based on the Hammerhead Tablet PC having the greater separation distance it was measured for output power in the worst-case output power channels from the Hammerhead X^{TREME} Tablet PC measurements to report a comparison between the two Tablet PC models.
2. Conducted output power measurements were also made at the higher data rates and the power levels were not > 0.25 dB than the power levels measured at the lowest data rate. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than ¼ dB higher than those measured at the lowest data rate (per FCC OET "SAR Measurement Procedures for 802.11a/b/g Transmitters" - see reference [7]).
3. The average conducted output power levels were measured using a spectrum analyzer according to 15.247(b) (KDB Publication #558074 - Power Output Option 2, Method 1). The RBW was set to 1 MHz and the VBW was set to 3 MHz.



AEGIS LABS INC.

Peak Transmit Power (Continued)

Mode	Channel	Frequency (MHz)	Rate (Mbps)	Average Power (dBm)	Average Power (mW)	Peak Power (dBm)	Peak Power (mW)
802.11a	149	5745	6	17.10	51.29	22.90	194.98
802.11a	157	5785	6	17.05	50.70	23.10	204.17
802.11a	165	5825	6	17.15	51.88	23.20	208.93
802.11b	1	2412	1	15.05	31.99	17.40	54.95
802.11b	6	2437	1	16.80	47.86	18.95	78.52
802.11b	11	2462	1	17.10	51.29	19.20	83.18
802.11g	1	2412	6	15.40	34.67	24.00	251.19
802.11g	6	2437	6	15.30	33.88	23.80	239.88
802.11g	11	2462	6	15.35	34.28	23.90	245.47

NOTE: The output power measurement is conducted.



AEGIS LABS INC.

Peak Transmit Power (Continued)

Mode	Channel	Frequency (MHz)	Rate (Mbps)	Average Power (dBm)	Average Power (mW)	Peak Power (dBm)	Peak Power (mW)
802.11a	36	5180	6	11.45	13.96	16.98	49.89
802.11a	51	5240	6	12.05	16.03	16.90	48.98
802.11a	52	5260	6	16.15	41.21	21.30	134.90
802.11a	64	5320	6	16.10	40.74	20.70	117.49

Note: Power was measured conducted.