

Test Result of RF Exposure Evaluation

- . Product: High Power Wireless-N 500mW Directional USB Adapter
- . Test Item: RF Exposure Evaluation Data
- . Test site: OATS2-SD

Antenna Gain

Frequency Range: 2.412-2.462 GHz

ANT R

Antenna Type: PCB Antenna

Antenna Gain: 5.4 dBi

ANT L

Antenna Type: PCB Antenna

Antenna Gain: 5.4 dBi

EUT Operation condition

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

Output Power into Antenna & RF Exposure Evaluation Distance

Test Date: Jun. 01, 2012

Temperature: 25

Atmospheric pressure: 1020 hPa

Humidity: 65%

ANT R

Modulation Type	Channel	Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/Cm ²)
802.11b (11Mbps)	01	2412	23.54	0.156
	06	2437	23.62	0.159
	11	2462	23.66	0.160
802.11g (54Mbps)	01	2412	23.32	0.148
	06	2437	23.31	0.148
	11	2462	23.35	0.149
802.11n HT20 (130Mbps)	01	2412	23.35	0.149
	06	2437	23.42	0.152
	11	2462	23.28	0.147
802.11n HT40 (270Mbps)	03	2422	23.35	0.149
	06	2437	23.41	0.151
	09	2452	23.40	0.151

ANT L

Modulation Type	Channel	Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/Cm2)
802.11b (11Mbps)	01	2412	23.27	0.146
	06	2437	23.61	0.158
	11	2462	23.32	0.148
802.11g (54Mbps)	01	2412	23.42	0.152
	06	2437	23.60	0.158
	11	2462	23.48	0.154
802.11n HT20 (130Mbps)	01	2412	23.40	0.151
	06	2437	23.64	0.159
	11	2462	23.46	0.153
802.11n HT40 (270Mbps)	03	2422	23.49	0.154
	06	2437	23.65	0.160
	09	2452	23.46	0.153

ANT R + L

Modulation Type	Channel	Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/Cm2)
802.11b (11Mbps)	01	2412	---	---
	06	2437	---	---
	11	2462	---	---
802.11g (54Mbps)	01	2412	---	---
	06	2437	---	---
	11	2462	---	---
802.11n HT20 (130Mbps)	01	2412	26.39	0.601
	06	2437	26.54	0.622
	11	2462	26.38	0.599
802.11n HT40 (270Mbps)	03	2422	26.43	0.606
	06	2437	26.54	0.622
	09	2452	26.44	0.608

The MPE is calculated as $0.622 \text{ mW} / \text{cm}^2 < \text{limit } 1 \text{ mW} / \text{cm}^2$. So, RF exposure limit warning or SAR test are not required.