

Test Result of RF Exposure Evaluation

- . Product: SMB Wireless N Gigabit VPN Router
- . Test Item: RF Exposure Evaluation Data
- . Test site: OATSI-SD

Antenna Gain

Frequency Range: 2.412-2.462 GHz, 5.725-5.825 GHz

ANT 1, 2, 3:

Antenna type: Dipole Antenna

Antenna Gain: 2 dBi (2.4GHz Band)

2 dBi (5GHz Band)

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: Feb. 11, 2010

Temperature: 22°C

Atmospheric pressure: 1022 hPa

Humidity: 61%

Modulation Standard	Channel	Frequency (MHz)	Output Power to Antenna (dBm)			Power Density (S) (mW/cm ²)		
			Ant 1	Ant 2	Ant 3	Ant 1	Ant 2	Ant 3
802.11b (11Mbps)	01	2412	18.15	18.06	18.08	0.021	0.020	0.020
	06	2437	18.02	18.07	18.36	0.020	0.020	0.022
	11	2462	17.92	18.35	18.01	0.020	0.022	0.020
802.11g (54Mbps)	01	2412	16.09	16.11	16.27	0.013	0.013	0.013
	06	2437	16.12	16.13	16.19	0.013	0.013	0.013
	11	2462	16.10	16.20	16.30	0.013	0.013	0.013
802.11n HT20 (130Mbps)	01	2412	17.31			0.017		
	06	2437	17.16			0.016		
	11	2462	17.28			0.017		
802.11n HT40 (27Mbps)	03	2422	16.23			0.013		
	06	2437	16.29			0.013		
	09	2452	16.23			0.013		

Test Date: Feb. 25, 2010

Temperature: 23°C

Atmospheric pressure: 1022 hPa

Humidity: 66%

Modulation Standard	Channel	Frequency (MHz)	Output Power to Antenna (dBm)			Power Density (S) (mW/cm ²)		
			Ant 1	Ant 2	Ant 3	Ant 1	Ant 2	Ant 3
802.11a (54Mbps)	149	5745	16.18	16.00	16.09	0.013	0.013	0.013
	157	5785	16.15	16.00	16.04	0.013	0.013	0.013
	165	5825	16.05	16.31	15.89	0.013	0.013	0.013
802.11an HT20 (130Mbps)	149	5745	12.65			0.006		
	157	5785	12.90			0.006		
	165	5825	13.89			0.008		
802.11an HT40 (27Mbps)	151	5755	12.69			0.006		
	155	5775	13.17			0.007		
	159	5795	13.76			0.008		

The MPE is calculated as $0.022 \text{ mW} / \text{cm}^2 < \text{limit } 1 \text{ mW} / \text{cm}^2$. So, RF exposure limit warning or SAR test are not required.