1.1. Test Result of RF Exposure Evaluation

. Product: RangeMax Dual Band Wireless-N Modem Router

. Test Item: RF Exposure Evaluation Data

. Test site: OATSI-SD

. Test Mode: Normal Operation

1.1.1. Antenna Gain

Ant1: Printed antenna, 3.2 dBi (2.4GHz Band)
Ant2: Printed antenna, 1.6 dBi (2.4GHz Band)
Ant3: Printed antenna, 2.6 dBi (2.4GHz Band)
3.7 dBi (5GHz Band)
Ant5: Printed antenna, 2.1 dBi (2.4GHz Band)
3.8 dBi (5GHz Band)

1.1.2. EUT Operation condition

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

1.1.3. Output Power into Antenna & RF Exposure Evaluation Distance

Test Date: Dec. 14, 2008 Temperature: 25℃

Atmospheric pressure: 1020 hPa Humidity: 65%

Modulation Standard	Channel	Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm^2)
802.11b (11Mbps)	01	2412	20.44	0.046
	06	2437	20.57	0.047
	11	2462	20.04	0.042
802.11g (54Mbps)	01	2412	17.96	0.026
	06	2437	18.29	0.028
	11	2462	17.96	0.026
802.11n HT20 (130Mbps)	01	2412	19.60	0.033
	06	2437	19.62	0.033
	11	2462	19.60	0.033
802.11n HT40 (270Mbps)	03	2422	20.34	0.039
	06	2437	19.35	0.031
	09	2452	19.99	0.036

Test Date: Dec. 26, 2008 Temperature: 20℃

Atmospheric pressure: 1008 hPa Humidity: 60%

Modulation Standard	Channel	Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm^2)
802.11a (54Mbps)	149	5745	13.38	0.010
	157	5785	13.40	0.010
	165	5825	13.52	0.011
802.11an HT20 (130Mbps)	149	5745	16.08	0.019
	157	5785	16.10	0.019
	165	5825	16.24	0.020
802.11an HT40 (270Mbps)	151	5755	16.12	0.020
	159	5795	16.02	0.019

The MPE is calculated as 0.047mW / cm^2 < limit 1 mW / cm^2. So, RF exposure limit warning or SAR test are not required.

For 2412-2462 MHz, 5725-5825MHz, the EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47CFR2.1091 (b).

The RF Exposure Information page from the manual is included here for reference.