

1.1. Test Result of RF Exposure Evaluation

. Product: BCM3380Z D3.0 Wireless eMTA

Test Item: RF Exposure Evaluation Data

. Test Mode: Normal Operation

1.1.1. Antenna Gain

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	WHA YU	C107-510733-A	Metal PIFA	U.FL	4.1dB@2.4G 4.1dB@5G
2	WHA YU	C107-510734-A	Metal PIFA	U.FL	4.1dB@2.4G 4.4dB@5G

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

1.1.4 Modulation Type: OFDM: BPSK, QPSK, 16QAM and 64QAM

MIMO: HT20 and HT40

802.11a CH36, CH40, CH 48 (ANT.2)

Test Date: Oct 20, 2010 Temperature: 24°C Humidity: 60%

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5180	4.4	2.7542	8.96	7.8705	0.004315	1
5200	4.4	2.7542	8.53	7.1285	0.003908	1
5240	4.4	2.7542	9.03	7.9983	0.004385	1

802.11n HT20 CH36, CH40, CH 48 (WITH COMBINER)

Test Date: Oct 20, 2010 Temperature: 24°C Humidity: 60%

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5180	7.26	5.3211	12.06	16.0694	0.017020	1
5200	7.26	5.3211	11.74	14.9279	0.015811	1
5240	7.26	5.3211	11.59	14.4212	0.015274	1

802.11n HT40 CH38, CH46 (WITH COMBINER)

Test Date: Oct 20, 2010 Temperature: 24°C Humidity: 60%

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5190	7.26	5.3211	12.03	15.9588	0.016902	1
5230	7.26	5.3211	12.14	16.3682	0.017336	1

The worst data is calculated as **0.017336** mW/cm² < limit 1 mW/cm². So, RF exposure limit warning or SAR test are not required.

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.