

## 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℃ Humidity: 60%

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

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

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

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )
<b>5180</b>	<b>7.26</b>	<b>5.3211</b>	<b>12.06</b>	<b>16.0694</b>	<b>0.017020</b>	<b>1</b>
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℃ Humidity: 60%

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

The worst data is calculated as **0.017336** mW/cm<sup>2</sup> < limit 1 mW/cm<sup>2</sup>. 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.