



## EMC Test Data

Client:	Pace Americas Inc	Job Number:	JD102271
Model:	BGW210-700	T-Log Number:	T102846
Contact:	Mark Rieger	Project Manager:	Irene Rademacher
Standard:	FCC 15.B, 15.247, 15.407	Project Coordinator:	-
		Class:	N/A

### Maximum Permissible Exposure

#### Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 3/14/2017

Test Engineer: Mark Hill

#### General Test Configuration

Calculation uses the free space transmission formula:

$$S = (PG)/(4 \pi d^2)$$

Where: S is power density ( $W/m^2$ ), P is output power (W), G is antenna gain relative to isotropic, d is separation distance from the transmitting antenna (m).

#### Summary of Results

Device complies with Power Density requirements at 22cm separation:	Yes
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#### Modifications Made During Testing

No modifications were made to the EUT during testing

#### Deviations From The Standard

No deviations were made from the requirements of the standard.



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### FCC MPE Calculation

Use: General  
 Antenna: 8.3dBi for 2.4GHz (Aggregate directional gain)  
 6.5dBi for UNII1 (Directional TxBF gain)  
 6.9dBi for UNII2a (Directional TxBF gain)  
 7.1dBi for UNII2c (Directional TxBF gain)  
 6.5dBi for UNII3 (Directional TxBF gain)

Worse case mode: n20, TxBF for 2.4GHz  
 n20, TxBF for UNII1  
 n40, TxBF for UNII3

### Assessment of individual radio operation

Freq. MHz	EUT Power dBm	Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 22 cm mW/cm <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>
<b>2.4GHz radio operation</b>							
2437	27.7	588.8	0	8.3	27.7	3981.07	0.655
<b>5GHz radio operation</b>							
5200	26.7	467.7	0	6.5	26.7	2089.30	0.344
5300	22.7	186.2	0	6.9	22.7	912.01	0.150
5580	22.7	186.2	0	7.1	22.7	954.99	0.157
5795	26.2	416.9	0	6.5	26.2	1862.09	0.306

Simultaneous transmission calculation using worse case (as a % of MPE limit @ 22cm) of 2.4GHz and 5GHz operation

Freq. MHz	% of limit
2437	65.5
5200	34.4
Total:	99.9