



EMC Test Data

Client: Pace Americas Inc	Job Number: JD102271
Model: BGW210-700	T-Log Number: T102846
	Project Manager: Irene Rademacher
Contact: Mark Rieger	Project Coordinator: -
Standard: FCC 15.B, 15.247, 15.407	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		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S)	MPE Limit
	dBm	mW*	Loss dB	dBi	dBm	mW	at 22 cm mW/cm ²	at 20 cm mW/cm ²
2.4GHz radio operation								
2437	27.7	588.8	0	8.3	27.7	3981.07	0.655	1.000
5GHz radio operation								
5200	26.7	467.7	0	6.5	26.7	2089.30	0.344	1.000
5300	22.7	186.2	0	6.9	22.7	912.01	0.150	1.000
5580	22.7	186.2	0	7.1	22.7	954.99	0.157	1.000
5795	26.2	416.9	0	6.5	26.2	1862.09	0.306	1.000

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