

Client:	Pace Americas, Inc.	Job Number:	JD100297
Model:	Wi-Fi Module 5 GHz (260-E255040)	T-Log Number:	T100356
Contact:	Mark Rieger	Project Manager:	Irene Radamacher
Standard:	FCC Part 15.407	Project Coordinator:	-
		Class:	N/A

Maximum Permissible Exposure / SAR Exclusion

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: 4/5/2017

Test Engineer: David Bare

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 20cm separation:	Yes
If not, required separation distance (in cm):	-
If co-located with PGR2G4360M then separation (in cm) is:	23.9

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.

Note: The highest ERP for operation under 15.407 does not exceed 3W therefore the device is categorically excluded from routine evaluation.

EMC Test Data

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FCC MPE Calculation

Use: General
 Antenna: 7.9 dBi Effective Gain

Freq. MHz	EUT Power		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm ²	MPE Limit at 20 cm mW/cm ²
5180	23.0	199.5	0	7.9	23.0	1221.6	0.243	1.000
5200	25.9	391.9	0	7.9	25.9	2399.4	0.477	1.000
5240	25.8	380.2	0	7.9	25.8	2327.7	0.463	1.000

For the cases where S > the MPE Limit

Freq. MHz	S @ 20 cm mW/cm ²	MPE Limit mW/cm ²	Distance where S <= MPE Limit
5180	0.243	1.000	9.9cm
5200	0.477	1.000	13.8cm
5240	0.463	1.000	13.6cm

Antenna: 7.9 dBi Effective Gain

Freq. MHz	EUT Power		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm ²	MPE Limit at 20 cm mW/cm ²
5270	22.0	159.8	0	7.9	22.0	996.0	0.198	1.000
5310	19.7	94.4	0	7.9	19.7	588.1	0.117	1.000

For the cases where S > the MPE Limit

Freq. MHz	S @ 20 cm mW/cm ²	MPE Limit mW/cm ²	Distance where S <= MPE Limit
5270	0.198	1.000	8.9cm
5310	0.117	1.000	6.8cm

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Antenna: 8.0 dBi Effective Gain

Freq. MHz	EUT Power		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm ²	MPE Limit at 20 cm mW/cm ²
5510	20.9	122.1	0	8.0	20.9	765.9	0.152	1.000
5550	21.5	142.3	0	8.0	21.5	892.7	0.178	1.000
5710	22.0	160.3	0	8.0	22.0	1005.4	0.200	1.000

For the cases where S > the MPE Limit

Freq. MHz	S @ 20 cm mW/cm ²	MPE Limit mW/cm ²	Distance where S <= MPE Limit
5510	0.152	1.000	7.8cm
5550	0.178	1.000	8.4cm
5710	0.200	1.000	8.9cm

Antenna: 8.4 dBi Effective Gain

Freq. MHz	EUT Power		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm ²	MPE Limit at 20 cm mW/cm ²
5755	27.0	501.2	0	8.4	27.0	3467.37	0.690	1.000
5795	27.0	496.8	0	8.4	27.0	3437.16	0.684	1.000

For the cases where S > the MPE Limit

Freq. MHz	S @ 20 cm mW/cm ²	MPE Limit mW/cm ²	Distance where S <= MPE Limit
5755	0.690	1.000	16.6cm
5795	0.684	1.000	16.5cm

**NTS**

WE ENGINEER SUCCESS

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When co-located in a host product with FCC ID: PGR2G4360M (General use, worst case)

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2400 - 2483.5	OFDM	-	27.6	8.1	35.7	3.715	11	1	3.715	35.70
5725 - 5850	OFDM	-	27.0	8.4	35.4	3.467	5	1	3.467	35.40
Totals:								2	7.183	38.56

S for combined EIRP @

20 cm	MPE Limit mW/cm ²	Distance where S ≤ MPE Limit
mW/cm ²		
1.429		