



EMC Test Data

Client:	Pace Americas	Job Number:	J87430
Model:	HR44	T-Log Number:	T89059
		Account Manager:	Michelle Kim
Contact:	Mark Rieger		
Standard:	FCC 15.247, 15E, RSS-210, 15B	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: 10/3/2012

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 20cm 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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Use: General
 Antenna: 2.4GHz Wifi - 3.3dBi (6.3dBi effective for MIMO modes)
 5GHz Wifi - 4.1dBi (7.1dBi effective for MIMO modes)
 802.15.4 - 4.9dBi

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2400 - 2483.5	OFDM	-	21.7	7.1	28.8	0.759	11			
2400 - 2483.5	CCK	-	19.7	3.3	23.0	0.200				
2400 - 2483.5	802.15.4	-	2.8	4.9	7.7	0.006	15	1	0.006	7.70
5150 - 5250	OFDM	-	15.6	7.1	22.7	0.186	2			
5250 - 5350	OFDM	-	22.0	7.1	29.1	0.813	4			
5470-5725	OFDM	-	21.9	7.1	29.0	0.794	8			
5725 - 5850	OFDM	-	22.1	7.1	29.2	0.832	2	1	0.832	29.20
Totals:								2	0.838	29.23

Worse case combination of 802.15.4 radio + wifi radio.

EIRP mW	Power Density (S) at 20 cm mW/cm ²	MPE Limit at 20 cm mW/cm ²
837.65	0.167	1.000

1. For 2.4GHz OFDM - 802.11n20 was worse case (highest eirp)
2. For 5.8GHz OFDM - 802.11n40 was worse case
3. For 5150-5250MHz OFDM - 802.11n40 was worse case
4. For 5250-5350MHz OFDM - 802.11n20 was worse case
5. For 5470-5725MHz OFDM - 802.11n20 was worse case

The 802.15.4 radio can transmit simultaneously with the wifi radio. The wifi radio can not transmit in the 2.4 and 5GHz bands simultaneously.