



EMC Test Data

Client:	Intel Corporation	Job Number:	J93358
Model:	PBA5001	T-Log Number:	T93372
Contact:	Steve Hackett	Project Manager:	Christine Krebill
Standard:	FCC Part 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: 10/22/2013

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):	-

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: PIFA antenna system – SkyCross, Inc.

Bluetooth

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
	dBm	mW*						
2402	4.2	2.6	0	3.2	4.2	5.50	0.001	1.000
2441	5.0	3.2	0	3.2	5.0	6.61	0.001	1.000
2480	5.6	3.6	0	3.2	5.6	7.59	0.002	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
2402	0.001	1.000	0.7cm
2441	0.001	1.000	0.7cm
2480	0.002	1.000	0.8cm

Wi-Fi

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
	dBm	mW*						
2412	19.4	87.3	0	3.2	19.4	182.39	0.036	1.000
2437	20.7	117.5	0	3.2	20.7	245.47	0.049	1.000
2462	20.3	106.2	0	3.2	20.3	221.82	0.044	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
2412	0.036	1.000	3.8cm
2437	0.049	1.000	4.4cm
2462	0.044	1.000	4.2cm

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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	15.2	33.0	0	3.6	15.2	75.68	0.015	1.000
5200	16.3	42.3	0	3.6	16.3	96.83	0.019	1.000
5230	16.6	46.0	0	3.6	16.6	105.44	0.021	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	0.015	1.000	2.5cm
5200	0.019	1.000	2.8cm
5230	0.021	1.000	2.9cm

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
5260	17.0	50.5	0	3.7	17.0	118.30	0.024	1.000
5300	17.0	50.6	0	3.7	17.0	118.58	0.024	1.000
5320	16.4	44.1	0	3.7	16.4	103.28	0.021	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
5260	0.024	1.000	3.1cm
5300	0.024	1.000	3.1cm
5320	0.021	1.000	2.9cm

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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
	dBm	mW*						
5500	15.0	31.7	0	4.8	15.0	95.72	0.019	1.000
5580	17.9	61.0	0	4.8	17.9	184.08	0.037	1.000
5670	16.7	46.4	0	4.8	16.7	140.15	0.028	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
5500	0.019	1.000	2.8cm
5580	0.037	1.000	3.8cm
5670	0.028	1.000	3.3cm

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
	dBm	mW*						
5745	20.9	121.9	0	5.0	20.9	385.48	0.077	1.000
5785	20.9	123.4	0	5.0	20.9	390.12	0.078	1.000
5825	20.9	121.9	0	5.0	20.9	385.48	0.077	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
5745	0.077	1.000	5.5cm
5785	0.078	1.000	5.6cm
5825	0.077	1.000	5.5cm

Note 1: Should Bluetooth transmit at the same time as Wi-Fi, it does not increase the distance where S <= MPE Limit above the values shown above for Wi-Fi alone.