

Client:	Broadcom Corporation	Job Number:	J72137
Model:	BCM94322HM8L (Dipole C2PC)	T-Log Number:	T72240_UNII
Contact:	Anna Liang	Account Manager:	Dean Eriksen
Standard:	FCC 15.E	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: 8/6/2008

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/No
Maximum Power Density (mW/cm^2)	0.139

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: Power measurements taken from original MPE calculations

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Run #1: MPE for 5150-5250 MHz - 802.11a Legacy

Use: General
Antenna: 5.54 dBi - Joymax Dipole

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm ²	mW/cm ²
5180	14.5	28.2	0	5.54	14.5	100.93	0.020	1.000
5200	14.7	29.5	0	5.54	14.7	105.68	0.021	1.000
5240	14.3	26.9	0	5.54	14.3	96.38	0.019	1.000

Run #2: MPE for 5250-5350 MHz - 802.11a Legacy

Use: General
Antenna: 5.54 dBi - Joymax Dipole

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm ²	mW/cm ²
5260	17.7	58.9	0	5.54	17.7	210.86	0.042	1.000
5300	18.0	63.1	0	5.54	18.0	225.94	0.045	1.000
5320	16.2	41.7	0	5.54	16.2	149.28	0.030	1.000

Run #3: MPE for 5470-5725 MHz - 802.11a Legacy

Use: General
Antenna: 5.15 dBi - Joymax Dipole

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm ²	mW/cm ²
5500	17.4	55.0	0	5.15	17.4	179.89	0.036	1.000
5600	18.1	64.6	0	5.15	18.1	211.35	0.042	1.000
5700	18.2	66.1	0	5.15	18.2	216.27	0.043	1.000

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Run #4: MPE for 5150-5250 MHz - 802.11n 20MHz CDD

Use: General

Antenna: Effective Gain 8.54 dBi

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm ²	mW/cm ²
5180	12.8	19.1	0	8.54	12.8	136.14	0.027	1.000
5200	12.8	19.1	0	8.54	12.8	136.14	0.027	1.000
5240	12.9	19.5	0	8.54	12.9	139.32	0.028	1.000

Run #5: MPE for 5250-5350 MHz - 802.11n 20MHz CDD

Use: General

Antenna: Effective Gain 8.54 dBi

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm ²	mW/cm ²
5260	18.6	72.4	0	8.54	18.6	517.61	0.103	1.000
5300	18.7	74.1	0	8.54	18.7	529.66	0.105	1.000
5320	16.8	47.9	0	8.54	16.8	341.98	0.068	1.000

Run #6: MPE for 5470-5725 MHz - 802.11n 20MHz CDD

Use: General

Antenna: Effective Gain 8.15 dBi

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm ²	mW/cm ²
5500	18.8	75.9	0	8.15	18.8	495.45	0.099	1.000
5600	19.6	91.2	0	8.15	19.6	595.66	0.119	1.000
5700	19.5	89.1	0	8.15	19.5	582.10	0.116	1.000

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Run #7: MPE for 5150-5250 MHz - 802.11n 40MHz CDD

Use: General

Antenna: Effective Gain 8.54 dBi

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm ²	mW/cm ²
5190	14.9	30.9	0	8.54	14.9	220.80	0.044	1.000
5230	15.3	33.9	0	8.54	15.3	242.10	0.048	1.000

Run #8: MPE for 5250-5350 MHz - 802.11n 40MHz CDD

Use: General

Antenna: Effective Gain 8.54 dBi

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm ²	mW/cm ²
5270	18.7	74.1	0	8.54	18.7	529.66	0.105	1.000
5310	16.2	41.7	0	8.54	16.2	297.85	0.059	1.000

Run #9: MPE for 5470-5725 MHz - 802.11n 40MHz CDD

Use: General

Antenna: Effective Gain 8.15 dBi

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm ²	mW/cm ²
5510	20.0	100.0	0	8.15	20.0	653.13	0.130	1.000
5590	20.3	107.2	0	8.15	20.3	699.84	0.139	1.000
5670	19.9	97.7	0	8.15	19.9	638.26	0.127	1.000