

Client:	Summit Data Communications	Job Number:	J78403
Model:	SDC-MSD40NBT (1x1 802.11abg + BT 2.1)	T-Log Number:	T83195
		Account Manager:	Christine Krebill
Contact:	Ron Seide		
Standard:	FCC 15.247/RSS-210	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: 2/28/2012

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: 2dBi for 2GHz, 5dBi for 5GHz

802.11b

Freq. MHz	EUT Power		Cable 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	15.7	37.2	0	2	15.7	59.02	0.012	1.000
2437	15.9	39.1	0	2	15.9	61.94	0.012	1.000
2462	10.1	10.2	0	2	10.1	16.22	0.003	1.000

802.11g

Freq. MHz	EUT Power		Cable 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	14.7	29.7	0	2	14.7	47.10	0.009	1.000
2437	14.1	25.7	0	2	14.1	40.74	0.008	1.000
2462	10.7	11.6	0	2	10.7	18.41	0.004	1.000

802.11n20

Freq. MHz	EUT Power		Cable 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	14.2	26.3	0	2	14.2	41.69	0.008	1.000
2437	11.6	14.3	0	2	11.6	22.70	0.005	1.000
2462	10.0	10.1	0	2	10.0	15.96	0.003	1.000

802.11a

Freq. MHz	EUT Power		Cable 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	15.7	37.2	0	5	15.7	117.49	0.023	1.000
5785	15.5	35.5	0	5	15.5	112.20	0.022	1.000
5805	15.8	38.0	0	5	15.8	120.23	0.024	1.000

802.11n20

Freq. MHz	EUT Power		Cable 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	15.7	37.2	0	5	15.7	117.49	0.023	1.000
5785	15.4	34.7	0	5	15.4	109.65	0.022	1.000
5805	15.3	33.9	0	5	15.3	107.15	0.021	1.000

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UNII Bands

802.11a

Freq. MHz	EUT Power		Cable 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*						
5180	9.8	9.5	0	5	9.8	30.06	0.006	1.000
5200	10.0	9.9	0	5	10.0	31.41	0.006	1.000
5240	10.8	11.9	0	5	10.8	37.58	0.007	1.000
5260	12.8	19.0	0	5	12.8	60.12	0.012	1.000
5300	14.2	26.0	0	5	14.2	82.22	0.016	1.000
5320	10.5	11.2	0	5	10.5	35.48	0.007	1.000
5500	15.0	31.3	0	5	15.0	99.08	0.020	1.000
5580	13.5	22.3	0	5	13.5	70.47	0.014	1.000
5700	8.1	6.4	0	5	8.1	20.28	0.004	1.000

802.11n20

Freq. MHz	EUT Power		Cable 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*						
5180	8.6	7.3	0	5	8.6	23.07	0.005	1.000
5200	8.9	7.7	0	5	8.9	24.27	0.005	1.000
5240	9.7	9.3	0	5	9.7	29.38	0.006	1.000
5260	11.9	15.6	0	5	11.9	49.43	0.010	1.000
5300	13.2	20.7	0	5	13.2	65.61	0.013	1.000
5320	8.5	7.1	0	5	8.5	22.39	0.004	1.000
5500	13.2	20.9	0	5	13.2	66.07	0.013	1.000
5580	12.6	18.2	0	5	12.6	57.54	0.011	1.000
5700	10.7	11.7	0	5	10.7	37.07	0.007	1.000