

Client:	Flextronics	Job Number:	J89632
Model:	WS-AP3710e	T-Log Number:	T89830
Contact:	George Fares	Account Manager:	Christine Krebill
Standard:	15.247, 15.407, 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: 2/19/2013

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/m²), 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.

EMC Test Data

Client:	Flextronics	Job Number:	J89632
Model:	WS-AP3710e	T-Log Number:	T89830
Contact:	George Fares	Account Manager:	Christine Krebill
Standard:	15.247, 15.407, RSS-210	Class:	N/A

Use: General
 Antenna: 2 dBi

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2400 - 2483.5	OFDM	-	24.1	6.8	30.9	1.224	11	1	1.224	30.9
2400 - 2483.5	CCK	-	24.0	6.8	30.8	1.199				
5725 - 5850	OFDM	-	21.8	6.8	28.6	0.720	5	1	0.720	28.6
Totals:								2	1.944	32.9

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2400 - 2483.5	OFDM	-	24.1	6.8	30.9	1.224	11	1	1.224	30.9
2400 - 2483.5	CCK	-	24.0	6.8	30.8	1.199				
5150 - 5250	OFDM	-	14.7	6.8	21.5	0.141	4	1	0.141	21.5
Totals:								2	1.364	31.3

Maximum eirp is calculated as follows:

Uses the average power for each channel (where given), otherwise uses the peak power

Worst case Total EIRP

Total EIRP	Power Density(S) at 20 cm	MPE Limit at 20 cm	Distance where
mW	mW/cm ²	mW/cm ²	S <= MPE Limit
1944	0.387	1.000	12.4cm

EMC Test Data

Client:	Flextronics	Job Number:	J89632
Model:	WS-AP3710e	T-Log Number:	T89830
Contact:	George Fares	Account Manager:	Christine Krebill
Standard:	15.247, 15.407, RSS-210	Class:	N/A

Antenna: 3 dBi (2400-2483.5 MHz), 4 dBi (5725-5850 MHz)

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2400 - 2483.5	OFDM	-	24.1	7.8	31.9	1.541	11	1	1.541	31.9
2400 - 2483.5	CCK	-	24.0	7.8	31.8	1.510				
5725 - 5850	OFDM	-	21.7	8.8	30.5	1.116	5	1	1.116	30.5
Totals:								2	2.656	34.2

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2400 - 2483.5	OFDM	-	24.1	7.8	31.9	1.541	11	1	1.541	31.9
2400 - 2483.5	CCK	-	24.0	7.8	31.8	1.510				
5150 - 5250	OFDM	-	13.1	8.8	21.9	0.155	4	1	0.155	21.9
Totals:								2	1.695	32.3

Maximum eirp is calculated as follows:

Uses the average power for each channel (where given), otherwise uses the peak power

Worst case Total EIRP

Total EIRP mW	Power Density(S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2	Distance where S <= MPE Limit
2656	0.528	1.000	14.5cm

EMC Test Data

Client:	Flextronics	Job Number:	J89632
Model:	WS-AP3710e	T-Log Number:	T89830
Contact:	George Fares	Account Manager:	Christine Krebill
Standard:	15.247, 15.407, RSS-210	Class:	N/A

Antenna: 5 dBi

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2400 - 2483.5	OFDM	-	24.1	9.8	33.9	2.442	11	1	2.442	33.9
2400 - 2483.5	CCK	-	24.0	9.8	33.8	2.392				
5725 - 5850	OFDM	-	19.6	9.8	29.4	0.868	5	1	0.868	29.4
Totals:								2	3.310	35.2

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2400 - 2483.5	OFDM	-	24.1	9.8	33.9	2.442	11	1	2.442	33.9
2400 - 2483.5	CCK	-	24.0	9.8	33.8	2.392				
5150 - 5250	OFDM	-	11.8	9.8	21.6	0.145	4	1	0.145	21.6
Totals:								2	2.586	34.1

Maximum eirp is calculated as follows:

Uses the average power for each channel (where given), otherwise uses the peak power

Worst case Total EIRP

Total EIRP mW	Power Density(S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2	Distance where S <= MPE Limit
3310	0.659	1.000	16.2cm