

EMC Test Data

	An ANA company		
Client:	Avaya	Job Number:	J81820
Model	AP 8120 with 2 external Antenna (Class II Permissive change)	T-Log Number:	T82013
wodei.	AP 0120 With 2 external Antenna (Class II Pennissive Change)	Account Manager:	Christine
Contact:	Vipin Naik		
Standard:	FCC 15.247	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: 6/15/2011 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/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:	NA
Power Density (mW/cm ²) @ 20cm:	1.548
If not, required separation distance (in cm):	24.9

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

	An ZCZZ company		
Client:	Avaya	Job Number:	J81820
Model:	AD 9120 with 2 external Antonna (Class II Dermissive change)	T-Log Number:	T82013
	AP 8120 with 2 external Antenna (Class II Permissive change)	Account Manager:	Christine
Contact:	Vipin Naik		
Standard:	FCC 15.247	Class:	N/A

Run #1: Two channel operation, one 2.4GHz and 5GHz channel, worse case

General Use Use:

2.4GHz - 8dBi, 5GHz - 10.7dBi

Antenna:

Effective Gain for Mimo: 2.4GHz - 11dBi, 5GHz - 13.7dBi

The system allows for one radio to operate in the 2.4GHz band and one radio to operate in the 5GHz bands simultaneously. It prevents both radios operating in the same band at the same time. Below calculations include worse case from original filing and this C2PC.

Maximum eirp is calculated as follows:

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

Used for Multiple Transmitters

One 2.4GHz and one 5.15-5.25GHz operation

			ut Power	Antenna	E	IRP	Channels	Channels	Total	EIRP
Band	Mode	Peak	Average	gain (Max)	dBm	W	Available	Used	W	dBm
2400 - 2483.5	OFDM	24.9	-	11.0	35.9	3.890	11	1	3.890	35.90
2401 - 2483.5	CCK	-	18.8	8.0	26.8	0.479	111	•	5.050	55.50
5150-5250	OFDM	-	9.0	13.7	22.7	0.186	4	1	0.186	22.70
5250-5350	OFDM	-	9.1	13.7	22.8	0.191	4	0	-	-
5470-5725	OFDM	-	15.9	13.7	29.6	0.912	4	0	-	-
5725 - 5850	OFDM	22.2	1	13.7	35.9	3.890	5	0		-
	•		•	•	•		Totals:	2	4.077	36.10

One 2 4GHz and one 5 25-5 35GHz operation

One 2.4GHz	One 2.4GHz and one 5.25-5.35GHz operation									
Band	Mode	Output Power		Antenna	EIRP Cha		Channels	Channels Channels	Total EIRP	
		Peak	Average	gain (Max)	dBm	W	Available	Available Used	W	dBm
2400 - 2483.5	OFDM	24.9	-	11.0	35.9	3.890	11	1	3.890	35.90
2401 - 2483.5	CCK	1	18.8	8.0	26.8	0.479	11	'	3.090	55.30
5150-5250	OFDM	ı	9.0	13.7	22.7	0.186	4	0	-	-
5250-5350	OFDM	ı	9.1	13.7	22.8	0.191	4	1	0.191	22.80
5470-5725	OFDM	ı	15.9	13.7	29.6	0.912	4	0	ı	-
5725 - 5850	OFDM	22.2	-	13.7	35.9	3.890	5	0	-	-
Totals									4.081	36.11

	Elli	Ot WAS com	t					EM	IC Test	t Data
	Avaya		ipany	Job Number: J81820						
Model:	AP 8120 v	with 2 ex	ternal Anter	nna (Class II F	T-Log Number: T82013					
	Vipin Naik				Accour	nt Manager:	Christine			
	FCC 15.2			Class: N/A						
010	-								1.	
One 2.4GHz and one 5.4-5.7GHz operation										
Band	Mode	Output Power		Antenna		Channels	Channels	Total	EIRP	
	111000	Peak	Average	gain (Max)	dBm	W	Available	Used	W	dBm
2400 - 2483.5	OFDM	24.9	-	11.0	35.9	3.890	11	1	3.890	35.90
2401 - 2483.5	CCK		18.8	8.0	26.8	0.479		, '		22.00
5150-5250	OFDM				0.0	0.001	4	1	0.001	0.00
5250-5350	OFDM	 	9.1	13.7	22.8	0.191	4	0	-	-
5470-5725	OFDM	-	15.9	13.7	29.6	0.912	4	1	0.912	29.60
5725 - 5850	OFDM	22.2	-	13.7	35.9	3.890	5	0		-
							Totals:	3	4.803	36.82
2 4011										
One 2.4GHz	z and one	1	GHz operatio out Power			IRP	Τ.	<u> </u>	Total	EIRP
Band	Mode		ı	Antenna gain (Max)	ĺ	Ī	Channels Available	Channels Used		1
0400		Peak	Average	gaili (ivian)	dBm	W	Avaiiabio	Useu	W	dBm
2400 - 2483.5	OFDM	24.9	-	11.0	35.9	3.890			2 222	35.00
2401 - 2483.5	CCK	-	18.8	8.0	26.8	0.479	11	1	3.890	35.90
5150-5250	OFDM	-			0.0	0.001	4	0	-	-
5250-5350	OFDM	-	9.1	13.7	22.8	0.191	4	0	-	-
5470-5725	OFDM	-	15.9	13.7	29.6	0.912	4	0	-	-
5725 - 5850	OFDM	22.2	-	13.7	35.9	3.890	5	1	3.890	35.90
							Totals:	2	7.781	38.91
Worse Case	e Condition	<u></u> n								
	Power De	ensity (S)		Limit		ce where	7			
EIRP		at 20 cm at 20 cm S <= MPE Limit								
mW 7780.9	mW/c 1.54			/cm^2 000		cm 24.9	4			
7700.0		10	1	100			_			