

|                      |                               |
|----------------------|-------------------------------|
| Client: Avaya        | Job Number: J7865             |
| Model: AP 8120       | T-Log Number: T78130          |
|                      | Account Manager: Dean Eriksen |
| 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: 2/23/2010

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   |
| Power Density (mW/cm <sup>2</sup> )                                 | 0.719 |

### 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 Use  
 2.4GHz - 5.41dBi/5.15-5.25GHz - 5.91dBi/5.7-5.8GHz - 5.09dBi  
 Antenna: Effective Gain for Mimo: 8.41dBi/8.91dBi/8.09 dBi

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.

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 5.7GHz operation

| Band          | Mode | Output Power |         | Antenna gain (Max) | EIRP |       | Channels Available | Channels Used | Total EIRP |       |
|---------------|------|--------------|---------|--------------------|------|-------|--------------------|---------------|------------|-------|
|               |      | Peak         | Average |                    | dBm  | W     |                    |               | W          | dBm   |
| 2400 - 2483.5 | OFDM | 25.6         | -       | 8.4                | 34.0 | 2.518 | 11                 | 1             | 2.518      | 34.01 |
| 2401 - 2483.5 | CCK  | -            | 18.8    | 5.4                | 24.2 | 0.264 |                    |               |            |       |
| 5150 - 5250   | OFDM | -            | 13.5    | 8.9                | 22.4 | 0.174 | 4                  | 0             | -          | -     |
| 5725 - 5850   | OFDM | 22.3         | -       | 8.1                | 30.4 | 1.094 | 5                  | 1             | 1.094      | 30.39 |
| Totals:       |      |              |         |                    |      |       |                    | 2             | 3.612      | 35.58 |

One 2.4GHz and one 5.15-5.25GHz operation

| Band          | Mode | Output Power |         | Antenna gain (Max) | EIRP |       | Channels Available | Channels Used | Total EIRP |       |
|---------------|------|--------------|---------|--------------------|------|-------|--------------------|---------------|------------|-------|
|               |      | Peak         | Average |                    | dBm  | W     |                    |               | W          | dBm   |
| 2400 - 2483.5 | OFDM | 25.6         | -       | 8.4                | 34.0 | 2.518 | 11                 | 1             | 2.518      | 34.01 |
| 2401 - 2483.5 | CCK  | -            | 18.8    | 5.4                | 24.2 | 0.264 |                    |               |            |       |
| 5150 - 5250   | OFDM | -            | 13.5    | 8.9                | 22.4 | 0.174 | 4                  | 1             | 0.174      | 22.41 |
| 5725 - 5850   | OFDM | 22.3         | -       | 8.5                | 30.8 | 1.208 | 5                  | 0             | -          | -     |
| Totals:       |      |              |         |                    |      |       |                    | 2             | 2.692      | 34.30 |

### Worse Case Condition

| EIRP mW | Power Density (S) at 20 cm mW/cm <sup>2</sup> | MPE Limit at 20 cm mW/cm <sup>2</sup> |
|---------|---|---------------------------------------|
| 3612.00 | 0.719   | 1.000                                 |