# Elliott

## EMC Test Data

|           | An UZAS company            |                  |                   |
|-----------|----------------------------|------------------|-------------------|
| Client:   | Summit Data Communications | Job Number:      | J76855            |
| Model:    | 802.11abgn Module          | T-Log Number:    | T76863            |
|           |                            | Account Manager: | Christine Krebill |
| Contact:  | Ron Seide                  |                  |                   |
| Standard: | FCC 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: 1/22/2010 Test Engineer: Mark Hill

#### General Test Configuration

Calculation uses the free space transmission formula:

Where: S is power density (W/m<sup>2</sup>), 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: |       |
|---|-------|
| Worse Case Power Density (mW/cm^2):                                 | 0.273 |

#### 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.

| Client                   | Elliott                            |               |                |            |               |                  | Job Number:              | Job Number: J76855 |  |  |
|--------------------------|------------------------------------|---------------|----------------|------------|---------------|------------------|--------------------------|--------------------|--|--|
| Client.                  | Client: Summit Data Communications |               |                |            |               |                  |                          |                    |  |  |
| Model:                   | 802.11ab                           | gn Modul      | е              |            | T-Log Number: |                  |                          |                    |  |  |
| -                        |                                    |               |                |            |               | Account Manager: | Christine Krebill        |                    |  |  |
|                          | Ron Seid                           |               |                |            |               |                  |                          |                    |  |  |
| Standard:                | ard: FCC 15.407, RSS-210           |               |                |            |               |                  | Class                    | N/A                |  |  |
|                          | <b>•</b> •                         |               |                |            |               |                  |                          |                    |  |  |
| Use:<br>Antonno:         | General                            |               | ffaativa 6d0   |            | Madaa) 6 5    |                  | (offective 0 EdDi for MI | (IO modee)         |  |  |
| Antenna:                 | SUDI IOI Z                         | 4GHZ (e       |                |            | would's), 0.5 |                  | (effective 9.5dBi for MI | vio modes)         |  |  |
| Only worse               | case frequ                         | iency froi    | m original fil | ina        |               |                  |                          |                    |  |  |
|                          |                                    |               |                |            |               |                  |                          |                    |  |  |
| 802.11a                  |                                    |               |                |            |               |                  |                          |                    |  |  |
|                          | EL                                 |               | Cable          | Ant        | Power         |                  | Power Density (S)        | MPE Limit          |  |  |
| Freq.                    | Pov                                | -             | Loss           | Gain       | at Ant        | EIRP             | at 20 cm                 | at 20 cm           |  |  |
| MHz                      | dBm                                | mW*           | dB             | dBi        | dBm           | mW               | mW/cm^2                  | mW/cm^2            |  |  |
| 5180                     | 14.3                               | 27.1          | 0              | 6.5        | 14.3          | 121.06           | 0.024                    | 1.000              |  |  |
| 5300                     | 17.8                               | 60.3          | 0              | 6.5        | 17.8          | 269.15           | 0.054                    | 1.000              |  |  |
| 5700                     | 18.2                               | 65.3          | 0              | 6.5        | 18.2          | 291.74           | 0.058                    | 1.000              |  |  |
|                          |                                    |               |                |            |               |                  |                          |                    |  |  |
| 802.11n20                |                                    | . <del></del> | 0.11           | A 1        |               | 1                |                          | MDELINI            |  |  |
| <b>F</b>                 | EU                                 |               | Cable          | Ant        | Power         |                  | Power Density (S)        | MPE Limit          |  |  |
| Freq.                    | Pov                                | -             | Loss           | Gain       | at Ant        | EIRP             | at 20 cm                 | at 20 cm           |  |  |
| MHz                      | dBm                                | mW*           | dB             | dBi        | dBm           | mW               | mW/cm^2                  | mW/cm^2            |  |  |
| 5180                     | 13.2                               | 20.8          | 0              | 9.5        | 13.2          | 185.35           | 0.037<br>0.147           | 1.000<br>1.000     |  |  |
| 5260                     | 19.2<br>20.2                       | 83.0<br>105.4 | 0              | 9.5<br>9.5 | 19.2<br>20.2  | 739.61           | 0.147                    | 1.000              |  |  |
| 5700                     | 20.2                               | 105.4         | 0              | 9.5        | 20.2          | 939.72           | 0.187                    | 1.000              |  |  |
|                          |                                    |               |                |            |               |                  |                          |                    |  |  |
| 802.11n40                |                                    |               |                |            |               |                  |                          |                    |  |  |
| 02.11140                 | EL                                 | JT            | Cable          | Ant        | Power         |                  | Power Density (S)        | MPE Limit          |  |  |
|                          | Pov                                |               | Loss           | Gain       | at Ant        | EIRP             | at 20 cm                 | at 20 cm           |  |  |
| Freq                     |                                    | mW*           | dB             | dBi        | dBm           | mW               | mW/cm^2                  | mW/cm^2            |  |  |
| Freq.<br>MH <del>z</del> |                                    |               | 0              | 9.5        | 7.0           | 44.67            | 0.009                    | 1.000              |  |  |
| MHz                      | dBm                                | 50            |                |            |               |                  |                          | 1.000              |  |  |
| •                        |                                    | 5.0<br>105.9  | 0              | 9.5        | 20.3          | 944.06           | 0.188                    | 1.000              |  |  |